

## Pattullo Bridge Replacement Project

# Responses to public comments received during the June 26 – July 26, 2017 Environmental Assessment Public Comment Period on the Valued Components Selection Document

June 6, 2018

The Pattullo Bridge Replacement Project team would like to thank all of those who participated in, and submitted comments, during the June 26 – July 26, 2017 Environmental Assessment Public Comment Period on the Valued Components Selection document. Contained in this document are the public comments we received, along with our responses.

#### LIST OF ABBREVIATIONS

Abbreviation	Meaning
EA	Environmental Assessment
EAO	B.C. Environmental Assessment Office
GHG	Greenhouse Gas
IC	Intermediate Component
Mayors' Council	Mayors' Council on Regional Transportation
Mayors' Vision	Mayors' Council on Regional Transportation: A Vision for Metro
ΜΟΤΙ	Ministry of Transportation and Infrastructure
The Project	Pattullo Bridge Replacement Project
VC	Valued Component
VPFA	Vancouver Fraser Port Authority

Vancouver		

	COMMENT	RESPONSE	Associated Update to the VC Selection and Rationale Document
1	"An exit ramp from the bridge to Royal Avenue will be replaced with a signaled intersection." I have great concerns about the signaled intersection replacing the exit ramp because it will cause a huge back up of traffic in the exit lane on the bridge. Such backups usually result in drivers changing lanes that then create accidents. This will become a huge bottle neck that will slow or stop traffic on the bridge and along the Surrey side of the Pattullo approach. This is not what commuters want to deal with regardless of the time they travel. This same problem presently exists on other bridges in the lower mainland (i.e. Queensborough). Please learn from past errors.	The new bridge will improve safety and reliability for drivers, cyclists and walkers, as well as goods movement. The Project will also improve connections on both sides of the bridge that will lead to more efficient and safer traffic flow. In New Westminster, the bridge will continue to connect directly to McBride Boulevard and new direct ramps will connect the bridge to East Columbia Street. These new connections will reduce the reliance on local residential streets to access the bridge. As a result, traffic will likely reduce at the Royal and McBride intersection since vehicles will have a new exit ramp leading directly from the bridge to East Columbia Street. For more information about the Project, we encourage you to visit engage.gov.bc.ca/pattullobridge.	N/A
2	The biggest environmental and economic issues with the proposed bridge is the current location. The bridge will continue to dump traffic into a congested urban area. This will continue to lead to high emissions of greenhouse gasses from vehicles stuck in traffic throughout New Westminster on Royal Ave., McBride, and East Columbia. On the Surrey side traffic is stalled when transferring from the SFPR to enter the bridge. This congestion and increased commute times also has a large impact on economic impact as freight and commuters take more time to reach their destination and consume more fuel. The only solution with the best economic and environmental results would be to have a direct link between the SFPR and the Hwy 1. With the province of BC rebuilding the Brunette exchange it would make sense to incorporate bridge traffic. The SkyTrain track near the Burnette exchange has already has a dip to facilitate the bridge. Now would be the time for Translink and the Province of BC to demonstrate that they are visionaries in shaping the future of transportation in the Metro Vancouver area. For the sake of increasing economic activity and lowering environmental impact from traffic congestion the Sapperton Bar bridge location is the only one that makes sense. This location has proved to be a nightmare for commuters let's not make the same mistake for the next 80 years.	In 2013, a comprehensive joint technical review comprising the cities of New Westminster and Surrey, Metro Vancouver, the Ministry of Transportation and Infrastructure and TransLink, and extensive public and stakeholder consultation, explored 25 specific alternatives to the aging bridge. This study informed the Mayors' Council on Regional Transportation direction to TransLink to construct a new four-lane bridge within the current corridor, designed in a way that does not preclude potential future expansion to six lanes. In February 2018, it was announced that the Province of B.C. would fund and deliver the Pattullo Bridge Replacement Project. The new bridge will be owned, operated and maintained by the Province. The Project will also improve connections to regional road networks and cycling and walking paths on either side of the bridge. The new bridge will improve safety and reliability for drivers, cyclists and walkers, as well as goods movement. In Surrey, the bridge will continue to connect directly to King George Boulevard, and a new off ramp will continue to connect directly to McBride Boulevard and new direct ramps will continue to connect directly to McBride Boulevard and new direct ramps will continue to connect directly to McBride Boulevard and new direct ramps will connect the bridge to East Columbia Street. These new connections will reduce the reliance on local residential streets to access the bridge.	N/A

3	After reviewing the valued components, I strongly believe Translink and the EAO have clearly outlined any concerns in regards to the general public that may arise from the construction or service life of the new Pattullo Bridge. My only comment relates to the noise and vibration during construction, I do not anticipate the noise levels will increase during the bridge's service life compared with the existing bridge. However, the construction timeline of the Project is approximately four years and will involve loud activities such as pile driving, it would be ideal to know mitigation strategies for reduction of noise and vibrations during construction stage.	There is currently ambient noise in the bridge area, mainly from trains and from traffic on the Pattullo Bridge as well as connecting roadways. Marine vessels and various land-based industrial activities also contribute to ambient noise in and around the Project area. Construction noise levels will adhere to regulatory requirements (e.g. by meeting applicable restrictions on noise levels and/or construction hours) and by applying mitigation and best practices that have proven to be effective on other recent transportation infrastructure Projects. The contractor will be required to develop and implement a noise and vibration management plan that includes a full slate of mitigation measures. In addition, the Ministry of Transportation and Infrastructure or its contractor(s) will engage and communicate with local communities to provide advance notice of activities that could potentially result in elevated noise and vibration levels and to respond to inquiries. For more information about the Project, we encourage you to visit engage.gov.bc.ca/pattullobridge.	N/A
4	Pedestrian and cyclist comfort is greatly impacted by traffic noise. There is a need for sound barriers on the bridge deck to insulate the multi-use paths from motorized traffic noise. Considering how noise from motor traffic will impact active transportation users is very important as traffic noise can dissuade these users from using the facility.	One objective of the new bridge is to provide a safer crossing by increasing the physical separation between motorized vehicle traffic and pedestrians/cyclists as compared to the existing bridge. The increased physical separation will arise from greater distance between motorized traffic and pedestrians/cyclists (due to increased lane widths) as well as a barrier between vehicle lanes and pedestrian/cyclist paths on the bridge, where these are adjacent. For more information about the Project, we encourage you to visit engage.gov.bc.ca/pattullobridge.	N/A
5	Attention: Gerry Hamblin Re: Translink new Patullo Bridge Your engineers have rented Sapperton Old Age Pensioners Hall several times in the last eight or nine years, mostly about different locations and design of the new bridge. About two years ago they came up with a really sensible bridge and a real sensible off-and-on approach. This year they came up with the same bridge that they had previously shown except they added bike lanes and walk ways and four lanes of traffic, two each way. In your presentation this year you covered the environment very, very well from the pillars, fish, plants, wildlife, river hydraulics with a model, soil, noise, air pollution, etc. This environmental coverage was well done and the bridge looks very practical. The engineers and Translink have done their job and now it is up to I guess Translink to deal with the Federal Government, the Provincial Government and the Mayors. We in New Westminster, I am sure, will accept this last presentation and would request you put pressure on the above peoples to get the job done. Thank you for doing your part. I remain, W. Earl Marshall	<ul> <li>The Pattullo Bridge Replacement Project team has undertaken extensive technical work and public consultation in developing the reference concept for the new bridge. In February 2018, it was announced that the Province of B.C. would fund and deliver the Pattullo Bridge Replacement Project. The new bridge will be owned, operated and maintained by the Province.</li> <li>The Environmental Assessment (EA) process is underway with the B.C. Environmental Assessment Office and Vancouver Fraser Port Authority taking a harmonized approach to the EA, with the EAO taking the lead. We anticipate the EA to continue until the end of 2018. Construction is anticipated to begin in 2019, with the bridge anticipated to open in 2023. For more information about the Project, we encourage you to visit engage.gov.bc.ca/pattullobridge.</li> </ul>	N/A

6	Just about the heritage angle: the old Patullo was significant for the community and the Province. I hope there are some efforts made to keep bits of it for the New Westminster and Surrey museums. Perhaps parts can be re-utilized at Brownsville park or on the New Westminster side. Also, there was/is a garbage dump under the Patullo. It used to be visible a low tide, but I haven't seen it for a while. Perhaps the City of Surrey cleaned out the big bits. I imagine there may be a temptation to clean that out as part of the Project. This may not be a popular idea, but what if parts of that dump were somehow made available to view. There must be some didactic value in preserving not just the nice parts of history, and erasing the embarrassing bits, but also showing how it's been used through the years. Thanks.	As part of the Environmental Assessment, a heritage resource assessment included in the environmental studies. This information, along with othe will be shared in the second phase of the review for public comment. Th assessment will inform ongoing work by the Pattullo Bridge Replacement team in considering the heritage aspect in Project planning and design. F ongoing information about the Project, we encourage you to visit engage.gov.bc.ca/pattullobridge.
7	The new Pattullo Bridge must take into account future traffic demands and the proposed 4 lane bridge is insufficient and must be replaced with a larger bridge with more capacity. Bridge traffic is already a major deterrent to travelling within the area and those that can take transit or other methods of transportation will - however it is clear the demand for vehicle traffic already exceeds the existing and proposed inadequate infrastructure. One cannot engineer away a problem that already exists by constraining those that need or wish to use personal vehicles to travel by making delays even more inconvenient and thinking these people will suddenly start biking and taking the train or bus. There is the wishful theory of everyone taking mass transit, walking and cycling to work (I cycle to and from Burnaby to Delta every day) and then there is reality of vehicle usage which some wish to ignore. Engineering capital Projects to be inconvenient doesn't solve the transportation problem - it just makes those that will sit in traffic today and every other day miserable unless capacity is increased to real-world levels.	In 2013, a comprehensive joint technical review comprising the cities of Westminster and Surrey, Metro Vancouver, the Ministry of Transportation Infrastructure and TransLink, and extensive public and stakeholder consist explored 25 specific alternatives to the aging bridge. This study informed Mayors' Council's direction to TransLink to construct a new four-lane brit the current corridor, designed in a way that does not preclude potential expansion to six lanes. In February 2018, it was announced that the Prov would fund and deliver the Pattullo Bridge Replacement Project. The new be owned, operated and maintained by the Province. The aging Pattullo Bridge is 30 years past its design life and would be at re of a moderate earthquake, ship collision or high-wind event. The new br provide for a safer crossing with wider lanes, as well as improved commu connections in New Westminster and Surrey that will lead to more effici- safer traffic flow. For more information about the Project, we encourage engage.gov.bc.ca/pattullobridge.
8	I am very concerned that the initial size of the new bridge will only be four lanes. With a major long term investment of this type, both current and future capacity needs to be addressed. Although the most discussed aspects of the existing bridge are related to safety and longevity, congestion is also a major issue. Replacing a four lane bridge with another four lane bridge will not alleviate the congestion issue. The congestion not only costs the region economically, the extended idling of vehicles experiencing gridlock increases pollution. To deal with the regions economic and environmental issues a six bridge needs to be built as soon as possible.	In 2013, a comprehensive joint technical review comprising the cities of Westminster and Surrey, Metro Vancouver, the Ministry of Transportation Infrastructure and TransLink, and extensive public and stakeholder conse explored 25 specific alternatives to the aging bridge. This study informed Mayors' Council's direction to TransLink to construct a new four-lane bri the current corridor, designed in a way that does not preclude potential expansion to six lanes.
		In February 2018, it was announced that the Province of B.C. would fund the Pattullo Bridge Replacement Project. The new bridge will be owned, and maintained by the Province.
		The aging Pattullo Bridge is 30 years past its design life and would be at revent of a moderate earthquake, ship collision or high-wind event. The will provide a safer crossing with wider lanes, as well as improved comm connections in New Westminster and Surrey that will lead to more efficient.

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		safer traffic flow. For more information about the Project, we encourage engage.gov.bc.ca/pattullobridge.
9	My concern with a new bridge with increased capacity to the one we have is with respect to traffic that routes through New West. As someone who lives very close to the bridge I can say I see a lot of illegal maneuvers during rush hour just so people can access it. I am concerned about a larger bridge not being fully utilized due to the current lack of capacity on the New West roads. It would likely be a waste of public funding, better spent on increased mass transportation methods and or bicycle lanes.	In 2013, a comprehensive joint technical review comprising the cities of I Westminster and Surrey, Metro Vancouver, the Ministry of Transportatio Infrastructure (MOTI) and TransLink, and extensive public and stakeholde consultation, explored 25 specific alternatives to the aging bridge. This st informed the Mayors' Council's direction to TransLink to construct a new bridge within the current corridor, designed in a way that does not prech potential future expansion. Regarding the number of lanes on the bridge day, the Project is being assessed as a four-lane bridge in the Environmen Assessment Application. Potential future expansion of the bridge will be the regulatory review/assessment requirements of the time. In February 2018, it was announced that the Province of B.C. would fund the Pattullo Bridge Replacement Project. The new bridge will be owned, and maintained by the Province. The new bridge will improve safety and reliability for drivers, cyclists and well as goods movement. The Project will also improve connections to re networks and cycling and walking paths on either side of the bridge. The connections will reduce the reliance on local residential streets to access
10	I am wondering why moving the bridge so it connects directly to Marine Way hasn't been discussed as an option. The road structure is already in place in Surrey (Perimeter Road). This would cut traffic significantly in New Westminster. It sometimes takes me 20 minutes to go across the city in rush hour, I can't imagine what the traffic will be like when the new bridge is opened with 6 lanes instead of 4.	In 2013, a comprehensive joint technical review comprising the cities of I Westminster and Surrey, Metro Vancouver, the Ministry of Transportation Infrastructure and TransLink, and extensive public and stakeholder consu- explored 25 specific alternatives to the aging bridge. It looked at the vial several potential alignment alternatives, including a connection to Marin was determined that the current bridge corridor is the preferred alignment sides of the new bridge, a number of improvements will be made to the network and community connections that will lead to more efficient and movements. If you'd like more information on these improvements, pleat engage.gov.bc.ca/pattullobridge. Regarding the number of lanes on the bridge on opening day, the Project assessed as a four-lane bridge in the Environmental Assessment Applicat Potential future expansion of the bridge will be subject to the regulatory review/assessment requirements of the time.

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	Proceed with the new bridge ASAP but maintain the current Pattullo Bridge structure for pedestrians and cyclists. The old bridge has ongoing historic and cultural value. It can also promote environmentally sound movement of people and encourage people to be active and healthy. If a linear garden were created on the bridge it could become a major tourist attraction. This assumes that remediation of the structure is possible given a lighter load when no cars and trucks are using the bridge. New Westminster roads are already at maximum capacity and cannot accommodate more traffic from cars and trucks. The city is already built up with residences, hospital, businesses etc; there is no room to create a highway or larger roads through New Westminster. A six-lane bridge must never be built. Stopping and starting uses a lot of energy, creates additional pollution and noise so this Project should include the necessary tunnels or overpasses etc to allow continuous flow of traffic with minimal traffic lights.	The Pattullo Bridge Replacement Project, which includes planning and construction of a new bridge and connections and decommissioning of the current bridge, is currently undergoing a harmonized provincial-federal environmental assessment process, led by the BC Environmental Assessment Office and incorporating the Vancouver Fraser Port Authority's federal requirements. This assessment will include a review of any potential impacts on environment, economy, social, heritage and health including those related to the removal of the old bridge. The primary objective of the proposed Project is to replace the existing bridge which is now 30 years past its design life and would be at risk in the event of a moderate earthquake, ship collision or high-wind event. A regular maintenance regime has extended its lifespan, but escalating efforts to prolong its use are no longer cost effective. An assessment of maintenance needs has revealed that upgrading the bridge to meet modern safety standards would be extremely challenging, both technically and financially. The next phase of the Environmental Assessment (EA) Review includes a heritage resources assessment. This and other studies will be posted on the EAO Project Information and Collaboration website in the next phase of the EA Process for public review and comment. This assessment will inform ongoing work by the Pattullo Bridge Replacement Project team in considering the heritage aspect in planning and design. Regarding the number of lanes on the bridge on opening day, the Project is being assessed as a four-lane bridge in the Environmental Assessment Application. Potential future expansion of the bridge will be subject to the regulatory review/assessment requirements of the time. For more information about the Project and ongoing updates, we encourage you to visit engage.gov.bc.ca/pattullobridge.	N/A
17	The Dattulle bridge is isonic and supersymptys with New Westminster. It is under bredly one of the most	As part of the Environmental Assessment (EA) a horitage resource assessment will	
	<ul> <li>important heritage resources in New Westminster and is inextricably linked with the city's development and history. The replacement structure should reference (but not try to replicate) the original structure and should be iconic in its own right. For example, an orange and blue colour scheme or lightning should be considered.</li> <li>Further to this, the Project should preserve and repurpose portions of the original bridge. One idea would be to keep a portion of the bridge on the New Westminster side as a public space with panoramic views. Another idea would be repurposing some of the piers closest to the riverbank. They could be connected to a new floating pier, which would complement the Fraser River greenway Project.</li> </ul>	<ul> <li>be included in the environmental studies. This information will be shared in the second phase of the EA for public review and comment. This assessment will inform ongoing work by the Pattullo Bridge Replacement Project team in considering the heritage aspect in Project planning and design.</li> <li>We are coordinating the Pattullo Bridge Replacement Project work with the City of New Westminster's waterfront greenway design to ensure complementary designs and construction phasing.</li> <li>For more information about the Project and ongoing updates, we encourage you to visit engage.gov.bc.ca/pattullobridge.</li> </ul>	

13 NOTE: Please keep the attachment file confidential because it contains private information that should	The criteria mentioned in your letter is being studied as part of the ongoing	N/A
not be released into the public domain.	Environmental Assessment (EA) process. For example, our human health studies will	
	include both physical and social health components, as you've described. The EA	
Dear Environmental Assessment Office:	process will assess changes in visual quality from representative viewpoints on either	
	side of the river and construction-related noise and vibration, as well as propose	
As described by the attached letter (including a petition of residents) submitted to Translink in July 2016,	mitigation requirements. Identifying measures to mitigate potential effects is a key	
our condominium building will be dramatically impacted by the construction and operation of the	component of the EA process.	
proposed replacement Pattullo Bridge. Subsequent to this letter, we have continued to communicate		
with Translink through follow-up letters as well as committee meetings. However, we feel that there has	Through regular and ongoing discussions with the Eagle Crest Advisory Committee,	
been very limited progress on the environmental, economic, social, heritage, and health impacts that we	comprised of residents of your building and representatives of the Pattullo Bridge	
originally highlighted. Below is a summary of the replacement Pattullo Bridge impacts to our building	Replacement Project team with input from City of New Westminster staff, we have	
(value component stated in brackets):	made adjustments to the scope of the EA to reflect the expressed concerns and	
	interests of Eagle Crest residents.	
* Significant short and long term depreciation of our building's property values due to the factors below		
(social, economic);	With respect to the assessment of noise, we have installed noise monitoring devices	
* Loss of quality of life due to the factors below (social);	on all four sides of 38 Leopold Place and took measurements in September 2017.	
* Obstruction of natural light and our present views of the river, mountains, and landscape from	This noise monitoring will inform the noise section of the Environmental Assessment	
windows (social);	Application.	
* Loss of green space, heritage land/trees, and natural beauty in the area and neighbouring Queen's Park		
(social, environmental);	The Pattullo Bridge Replacement Project team has been consulting with the City of	
* Pollution, noise, dust, and other health issues during construction of the new bridge and connections	New Westminster on heritage issues including heritage trees/land and the City has	
(social, health);	identified protected heritage trees and specific landscaping requirements. The	
* Pollution, noise, and vibration caused by 100,000+ cars and trucks crossing the bridge daily and in very	Project team is working with City staff on related considerations.	
close proximity of our building, especially when the bridge is extended in the future (social, health); and		
* Congested vehicular access into and out of Leopold Place and Bushby Street, especially during rush	We are committed to ongoing engagement with Eagle Crest and will continue to be	
hours (social).	available to receive comments and questions.	
We would appreciate if your office can review these impacts in conjunction with our attachment file. We		
are available to provide further information if required.		

14 On behalf of Delta Council and the residents of our community, I am writing to provide input into the The Mayors' Council directed TransLink to construct a new four-lane brid proposed Valued Components considered during the Pattullo Bridge Replacement Project (the "Project") in a way does not preclude potential future expansion to six lanes. The pr **Environmental Assessment Process.** four-lane bridge will feature modern lane widths, and the Project will import road network and community connections on either side of the new brid Of greatest concern is that the proposed Project will not provide any additional capacity, which is supporting more efficient traffic flow. urgently needed to provide more efficient movement of people, goods and services throughout the region. We request that the proponent be required to review the provision of a six-lane bridge to replace In February 2018, it was announced that the Province of B.C. would fund the existing four-lane Pattullo Bridge. the Pattullo Bridge Replacement Project. The new bridge will be owned, and maintained by the Province. This has become even more critical as the new Provincial Government has indicated that it may reconsider the George Massey Tunnel Replacement Project. Delta is extremely concerned about the With respect to regional transportation, the Mayors' Council issued Region serious detrimental implications of a postponement, or even cancellation, of the George Massey Tunnel Transportation Investments: a Vision for Metro Vancouver in 2014. This Replacement Project and the lack of foresight the Pattullo Bridge Replacement Project has shown by not outlines a comprehensive plan for transportation investments throughout considering a six-lane replacement bridge to provide the required additional capacity currently needed. Vancouver, to meet the regional goal to increase the number of trips on cycling, walking, car-sharing and other means to reduce congestion and s The Pattullo Bridge accommodates approximately 77,000 vehicle crossings daily and is experiencing the occupant vehicle trips. highest rate of growth in truck volume of all the major river crossings in the Lower Mainland. It is an important link in the region's Major Road Network. The Environmental Assessment (EA) will consider the incremental effects quality that are attributable to the four-lane Pattullo Bridge Replacement On regular days, traffic congestion during peak periods is significant and queue lengths impact traffic Traffic modelling used to support the assessment of Project-related effect flows along the local road network. Accidents regularly cause extended delays which affect emergency reflect no tolls on the Golden Ears, Port Mann and Pattullo bridges. A det response and goods movement across the region. discussion on traffic modelling assumptions will be included in the Applic Due to traffic congestion at the Pattullo Bridge, commuters and commercial vehicles are detouring to We have revised the scope of the EA review to now include greenhouse alternate routes including the Alex Fraser Bridge in North Delta. The Alex Fraser Bridge accommodates EA. Water quality will also be studied. The new bridge design will require over 100,000 vehicles per day and has absorbed a significant amount of traffic demand growth regionally enclosed drainage system to prevent drainage or potential spills from ent over the last two decades. By not providing the required additional capacity and by adding tolling to the Fraser River. new Pattullo Bridge, traffic volumes at the Alex Fraser Bridge will increase. This will result in increased congestion, as well as reduced travel times and reliability for commuters, commercial vehicles and A cumulative effects assessment will also be completed as part of the EA tourists. Given that the Environmental Assessment process must ensure that the Project meets the goal consider past, present, and reasonably foreseeable Projects in the area. of economic and social sustainability before an Environmental Assessment Certificate may be issued, a full analysis of the traffic impact needs to be undertaken. Particular focus needs to be placed on A construction management plan will be required of the contractor to ad potential impacts on the Alex Fraser Bridge, with the proposed replacement bridge versus a six-lane risk of hazardous materials or construction impacts to agriculture downst replacement bridge. The analysis should also consider the impacts of tolling the Pattullo Bridge on the congestion levels at the Alex Fraser Bridge, and the associated regional impacts to air quality and human health. Enclosed are a number of specific comments on the draft Valued Components related to greenhouse gas emissions, agriculture, economics, common air contaminants and health impacts for consideration. We greatly appreciate the opportunity to provide input on the Valued Components considered during the Pattullo Bridge Replacement Project. Should you have any questions please contact Delta's Director of Engineering, Steven Lan, by email at slan@delta.ca or by telephone at (604) 946-3299. Greenhouse gases: Greenhouse gases are listed to be an excluded valued component subcomponent. TransLink has assumed that the Project will cause only negligible change in traffic volume and truck mix on a regional basis. However, it is unreasonable to assume that if additional capacity is not provided, that the long queues of idling vehicles will not have an impact on greenhouse gas emissions. Greenhouse gases should be included on both a local and regional scale, as decisions related to the Pattullo Bridge

lge designed roposed prove the ge	Table 3 (Rationale for Inclusion and Exclusion of Specific VC/IC Subcomponents) of the VC document has been updated to reflect inclusion of GHGs in the assessment.
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	capacity and tolling will impact all the Fraser River crossings. <b>Agriculture:</b> Agriculture is listed as an excluded valued component. Agriculture downstream of the Pattullo Bridge in Delta relies on water from the Fraser River for irrigation. Agriculture should be included in the context of potential impacts to water quality in the Fraser River, related to the initial construction and long-term operational impacts such as spills of hazardous materials on the Pattullo Bridge and the measures taken to prevent spills from entering the river. <b>Common Air Contaminants and Health Impacts:</b> Common air contaminants and health impacts are proposed to be assessed, but are to be limited to local impacts only. It is important that these components be reviewed at a regional scale, given the other Fraser River crossings are impacted by design and operating parameters of the Pattullo Bridge. <b>Economics:</b> Economics is listed as a valued component. However, this component should include analysis of the construction costs of building a six-lane bridge initially versus constructing additional lanes in the future, and impacts of not providing the needed capacity.	
15	The Pattullo Bridge Valued Components (VC) Selection document identifies a number of parameters and geographic areas for the study of probable effects of the Pattullo Bridge replacement. These effects may occur at any or all phases of the Project including design, construction, demolition, and operation. In identifying the VC's, the document outlines matters for inclusion and exclusion in the study as well as the intensity of the study to be undertaken. Here, the Local Service Area (LSA) is subject to greater scrutiny than the Regional Service Area (RSA). The New Westminster Chamber of Commerce is obviously interested in economic impacts of the proposed Pattullo Bridge as well as in the broader environmental, social, heritage, and health implications. Given that the VC Selection scopes areas for study/assessment, it is important that such scope be broad enough to be able to encompass foreseeable concerns but narrow enough to be achievable. The comments below are observations of the New Westminster Chamber of Commerce on the VC Selection Document and process.	The new Pattullo Bridge will be a four-lane bridge, built not to preclude p future expansion to six lanes. The Project is being assessed as a four-lane the Environmental Assessment Application. A potential future expansion bridge will be subject to the regulatory review/assessment requirements The Environmental Assessment studies are being conducted to better ur any potential impacts of the proposed reference concept and to identify appropriate mitigation measures. The EA assessment includes traffic mo the City of New Westminster and the City of Surrey, related to the propo four-lane Pattullo Bridge. Also, the traffic modelling considers the chang policy. The resulting studies will be available for the next phase of public input i Process.
	<ol> <li>Base Line Modelling:         <ul> <li>The base line models for impact assessment presume a potential 6 lane bridge and infrastructure to support this eventual capacity (access ramps). Nevertheless, the traffic models which will inform the VC study appear to be built on the following assumptions:</li></ul></li></ol>	

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#### • 6 lanes of traffic

- No tolls on any regional bridges
- Regional mobility pricing (regional tolls)

• Specific disclosure of the population assumptions driving the models

2. Land Use: The land use VC appropriately considers consistency with municipal plans, nuisance effects, traffic volumes, and infrastructure changes needed for pedestrian/cycling movement. Without adequate traffic and population modelling, such assessments would be conjectural. The base line assumptions currently being used (see above) are likely to understate traffic flows.

Further, the Local Study Area (LSA) being used for the assessment of primary impact (including traffic) excludes East Columbia Street past Brunette, the entirety of Brunette Avenue and all of Royal Avenue/Columbia Street west of 6th Avenue (see map 1). As such, no increased traffic on Brunette Avenue Braid Street, Columbia Street, Front Street, Royal Avenue, 8th Avenue nor 10th Avenue (beyond 6th Street) will be considered in the LSA as proposed.

Recommendation 2: The LSA for the Land Use VC in New Westminster (the area where traffic flows and consequential land use impact will occur) should cover the major arterial routes (Brunette Avenue, East Columbia Street, Braid Street, 8th and 10th Avenues, Royal Avenue, Columbia Street, Front Street, and Stewardson Way). Consequential amendments should be made to the remaining VC's (health, air quality, etc.).

#### 3. Economic Activity:

The economic activity VC identifies potential benefits through capital investment, employment, procurement, GDP, and reduced congestion. Impact on property values is also identified as a possible outcome. However, many of these impacts are explicitly excluded from analysis. During construction and demolition, both employment effects (both positive and crowding out) and business activity decreases presumably due to access issues are to be considered.

Recommendation 3.1: It is important to mitigate any business access issues and to appropriately plan for minimal traffic disruptions. Once completed, increases in business activity are contemplated again presumably due to changes in traffic. In both cases, it is important to ensure that the LSA is broadly inclusive of the areas of primary impact.

The Regional Study Area (RSA) is inclusive of both the cities on New Westminster and Surrey buy the Local Study Area (LSA) is limited to a 500m spatial buffer to "capture areas that may experience direct adverse economic effects from the proposed Project." In New Westminster, the LSA includes, in general, an area bordered by East Columbia Street at Richmond Avenue, McBride Blvd to past Blackberry Drive, and Columbia/Front Street to nearly 6th Street (see map 2). This LSA may or may not be broad enough depending on traffic disruptions during construction/demolition. Estimates of planned disruptions are not part of the VC document.

Recommendation 3.2: Planned and consequential disruptions due to construction and operation of the new Pattullo Bridge need to be modelled and estimated and communication and mitigation strategies developed.

Recommendation 3.3: Given the importance of access to local businesses, the design, construction, and demolition phases need to mitigate adverse economic effects and, to the extent possible, ensure:

• No road closures impeding access to Columbia Street, Front Street, Royal Avenue and adjacent businesses

• Minimum disruption of traffic flows via lane restrictions, detours, etc.

• Appropriate LSA modelling boundaries (including all Front Street, Columbia Street, Royal Avenue and adjacent businesses) which will be affected by any disruptions in traffic flows



	<ul> <li>Presuming increased traffic and reduced congestion once the new bridge is completed, the LSA identified is not likely broad enough to capture the potential benefit to business.</li> <li>Recommendation 3.4: Consideration should be given to expansion of the LSA to encompass the entire New Westminster Downtown Business Improvement Association, and potentially beyond.</li> <li>The impact on property values is omitted from the VC scoping. Such impacts will potentially be negative during construction/demolition and somewhat dependent on traffic disruptions. Further, the impact may well extend beyond the LSA and include residential development in Victoria Hill as well as downtown properties (residential and commercial).</li> <li>Recommendation 3.5: Consideration of property values within the (expanded) LSA should be examined as a possible addition to the list of valued components.</li> <li>4. Environmental, Heritage, Social, and Health The assessment of these VC's is, in some ways, dependent on adequate modeling of traffic. Stakeholder</li> </ul>	
	consultation is occurring and is worth emphasizing. Recommendation 4: Continued consultation with affected resident's associations, First Nations, heritage societies, and environmental groups needs to ensure that the VC's are properly scoped both in conceptual as well as in geographic coverage. Further, the design of the bridge itself will have some impact on visual quality, lighting, shading, etc. and is likely to be covered in design consultation.	
16	<ul> <li>I would like to comment on a few areas associated with the EA of this Project.</li> <li>1. Pedestrian/Cycling facilities are a significant enhancement over those on the current bridge. They can provide great community, health, economic values if implemented well. <ul> <li>unlike the existing network of roads for vehicles, the network of bike facilities is full of gaps. In order to make this new facility useful it will need to create connections to the greater bike network. (for example the 7th Ave Crosstown Greenway in New West). Creating the missing links needs to be part of this</li> <li>Project or the value of the new facilities will be muted. (see new bike lanes on Port Mann bridge which are very difficult to get to/from anywhere). Proponent should consider connections outside of normal scope of Project due to the well-known deficiencies in existing cycling networks and consider their impacts on attracting cyclists to the new bridge.</li> <li>The illustrations of one-way cycling traffic are fanciful and seem to represent "freeway thinking" applied</li> </ul> </li> </ul>	The new four-lane Pattullo Bridge will provide important improvements for using the bridge, including people who are driving, cycling or walking. The will also improve connections to regional road networks and cycling and w paths on either side of the bridge. The proposed concept for the new bridge includes multi-use paths on bot the bridge, separated from traffic with a barrier. Cyclists will travel in the direction as traffic on each side of the bridge, while pedestrians can trave direction. These multi-use paths will be consistent with engineering guide shared use facilities. The Project design will incorporate Crime Prevention Environmental Design considerations, and careful consideration to wayfin signage will also be included.
	to bike facilities. Most multi-use bike/ped facilities in the region are bi-directional, why make this one one-way only? The significantly sub-standard Queensborough Bridge has operated for almost a decade with bi-directional usage without significant incident (to my knowledge). The problem is that one-way facilities, if obeyed, can force cyclists significantly out of their way depending on where they are coming from and going to. This is a problem for a commuter who must do this every day, and will likely make scofflaws out of many cyclists, for what is seemingly an arbitrary rule. Also bi-directional cyclists will in	Key features of the connections to and from the new Pattullo Bridge inclu between the new Pattullo Bridge and the BC Parkway and Central Valley C giving local and regional cyclists a complete connection from Vancouver to well as improved way-finding for users of the BC Parkway and the Central Greenway.
	Tact add a level of calming for cyclists' speeds as they must slow down to negotiate on-coming cyclists. This is to the benefit of pedestrians. Uni-directional cycling will have the opposite effect. I would suggest placing signs and regulations on common courtesy, like yield to pedestrians and on-coming cyclists for the downhill direction. How will arbitrary rules make the facility more or less attractive/safe to use? - if there is any additional capacity for traffic on the new bridge this will ultimately infiltrate the surrounding road system and create greater hazards and risks for vulnerable road users. All efforts should be made to stem growth in traffic volumes on the new bridge as there is no road capacity in New Westminster to absorb new traffic. Even the 10% increase in capacity for 4 the lane bridge mentioned in	In regards to overall design and reflecting the bridge's history, a heritage assessment will be conducted as part of the Environmental Assessment. T information will be shared in the second phase of the review for public re input. This assessment will inform ongoing work by the Pattullo Bridge Re Project team in considering the heritage aspect in planning and design. W exploring landscaping and other related opportunities with municipalities interested parties.

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the report has the potential to bring the existing network to a standstill during rush hour sending rat runners into side streets where the bike routes are.

2. The existing facility is a landmark in New Westminster and this region of the lower mainland. It has been on our horizon for close to 80 years and offers an architectural feature which in somewhat unique in the world. It appears in art, photos and stories and has been part of our community and culture for all of our lifetimes. It will be a shame to lose this landmark. I think it will be really difficult to assess the loss of this feature in our community. It will be very important/valuable to add some gesture or element in the new facilities which can remind us of the bridge it is replacing, or to set the standards of architecture for the new facility such that it will be equally impressive and monumental in its own style. A vanilla cable-stay bridge will not replace what we will be losing.

**3.** Landscaping at the access to the new bridge should have a role to play in setting the tone for the users of the bridge. The access to the bridge should not look like a freeway on/off ramp and instead remind drivers that they are in an urban environment such that they need to set their speed and attentions accordingly. The Project should be challenged to use landscaping in creative ways to serve as traffic calming to recognize the interface between the bridge and the local urban road network. Is there an opportunity for community gardens?

**4.** In order to support its local connectivity role the bridge should provide amenities such as viewpoints for pedestrians and cyclists where they can stop and enjoy views of the City and the Fraser River. In this regard the facility becomes an attraction in itself and can provide some local economic potential and community amenity. This would also encourage new cycling/pedestrian users of the bridge so they can get out to enjoy the view points. Once out there, they may continue exploring the bridge and the routes on the other side.

**5.** Finally I'm very concerned about the potential for the new bridge to be converted from 4 lanes to 6 lanes. As long as tolls were to be placed on the new bridge I was pretty comfortable that the demand would not materialize to justify the lane increase. However now that the Province has mandated the removal of tolls from the local bridges I'm pretty confident that the new bridge will attract new trips that were previously being avoided since many people didn't want to drive over the rickety old bridge, or it was too congested at the time so they went somewhere else, or just avoided the trip altogether. This is what happens to all new untolled road space. (see the free parts of Hwy 1 every morning). There is no capacity for more traffic in New Westminster, there are already too many roads in New Westminster and the City has no plans to build new roads. The new traffic is unwelcome, especially when we're spending lots of money on new transit facilities such as Surrey LRT, Evergreen Line, more SkyTrain Cars, improved bus service (see above comment re. impacts of more traffic on cyclists). The EA really needs to look into how a 6 lane facility can be justified at all, and how this possibly fits into the local and regional traffic/transportation plans. McBride Blvd is not a freeway. TransLink doesn't get to spend \$1billion+ very often and they can't afford to do it in a way which does not complement all the other transit investments they are making.

In reference to potential future expansion the new four-lane bridge will be in a manner to not preclude a potential future expansion to six lanes. Any option to add lanes will be considered as a separate Project and will be su collaborative planning, analytical and consultative process between the P TransLink and municipalities. The Project is being assessed as a four-lane the Environmental Assessment Application. Potential future expansion of will be subject to the regulatory review/assessment requirements of the

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17 My recommendations and comments include: The Pattullo Bridge is a key connection between the communities of Surre **1**. Placing the cycling and walking under the bridge deck Westminster. The new four-lane Pattullo Bridge will provide important 2. Making the deck 4 lanes wide instead of 6 lanes to decrease construction GHG improvements for everyone using the bridge, including people who are d emissions and air pollution and to lower costs cycling or walking. The proposed concept has separated cyclist and pedes 3. Cycling and Walking Access to the bridge to reduce conflicts, improve safety and facilities on either side of the bridge, this is subject to refinements by the encourage walking and cycling proponent/contractor. The new bridge will need to meet navigational (m 4. Path Lighting clearance requirements under the bridge. 1. Cycling and Walking Paths Under the Bridge Deck We recognize and understand your comments regarding the directness o The possibility of placing the cycling and walking paths beneath the bridge deck as on the Canada Line proposed routes and pathways, which must be considered in addition to North Arm Bridge should be serious considered. Placing the paths underneath the bridge deck could for cyclist and pedestrian safety. The current reference concept reflects g have several advantages for cycling and walking safety, comfort and convenience and also maybe less separation, consistent with our focus on user safety. There may be additi expensive to build. This could encourage more people to refinements in this area as the final design is developed by the contractor cycle and walk leading to less traffic, pollution and GHG emissions. lighting will also be designed in to achieve relevant standards. 1. A. Less Exposure to Traffic Pollution and Noise: On the bridge deck, especially adjacent to uphill traffic, people cycling and walking will be exposed to unhealthy levels of traffic pollution including diesel In regard to the number of lanes, the scope of this Project is for a new for exhaust from trucks and other heavy vehicles. Users will also be exposed to significant traffic noise. Paths bridge, designed in a manner to not preclude a potential future expansio underneath the deck will expose users to much lower levels of noise and pollution. lanes. Any future option to add lanes will be considered as a separate Pro 1. B. Less Effort and Slower Downhill Speeds: As the path would be at a lower maximum elevation, the will be subject to a collaborative planning, analytical and consultative pro uphill climb will be shorter, require less effort and take less time. The downhill section will be shorter between the Province, TransLink and municipalities. The Project is being likely resulting in lower maximum speeds making the path safer for people walking and cycling. a four-lane bridge in the Environmental Assessment Application. Potentia **1. C. Better Visibility**: At night, as pedestrian traffic is proposed to be two-way on the bridge deck, expansion of the bridge will be subject to the regulatory review/assessme people walking against direction of traffic could easily be blinded by oncoming motor vehicle headlines. requirements of the time. As such, they could accidentally walk into the path of oncoming cyclists. As the speed of cyclists at the bottom of the climb on the Surrey side could be between 50 km/h and 60 km/h, a collision between a Regarding greenhouse gas emissions, we have revised the scope of our cyclist and a pedestrian could be very serious or fatal for both the cyclist and the pedestrian. Paths below environmental assessment to now include GHGs in addition to Criteria A Contaminants. the bridge deck will not have this issue. 1. D. Access and Separate Cycling and Walking Paths: Paths below the bridge deck can more easily pass underneath the off and on ramps potentially providing much more convenient access from either side. As such, pedestrian paths might not be needed on both sides of the bridge. Thus separated bike and pedestrian paths could be provided at a similar or lower cost than the proposed shared paths on both sides. This would be both safer and more convenient for people walking and cycling. Ideally, the bicycle path would be 4.5m clear to allow for faster cyclists to pass slower cyclists on the uphill climb without entering the path of downhill cyclists potentially resulting in serious head on collisions. **1. F. Weather Protection:** The paths underneath the deck will also protect users from the rain, snow, ice and sun helping to make cycling and walking over the bridge a year round everyday activity. On the Surrey side, much of the path is under the SkyTrain guideway along King George which also provides weather Projection. Covering the path between the bridge and the section under the SkyTrain guideway should be considered. Decreased Maintenance Costs, Air Pollution, GHG Emissions and Salt Use Covering the path will reduce or eliminate the need to salt the path to remove ice and plow the path for snow removal. This will decrease salt use and GHG emissions and air pollution from maintenance vehicles while reducing maintenance costs. 2. GHG Emissions, Project Cost and Opportunity Cost- Four Lane Deck Better The Table on the Environmental Pillar claimed that Greenhouse Gas (GHG) should be excluded from the review as the impact will be minimal at the regional level. While this may indeed be true at the regional

### Ministry of Transportation and Infrastructure

engage.gov.bc.ca/pattullobridge

Pattullo Bridge Replacement Project

ey and New Iriving, strian successful narine)	Table 3 (Rationale for Inclusion and Exclusion of Specific VC/IC Subcomponents) of the VC document has been updated to reflect inclusion of GHGs in the assessment.
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level, different options for the bridge should be evaluated to determine their GHG emissions during construction and operation so the options can be compared. The option being proposed is a 6 lane deck with 2 of the lanes being used for cycling and walking. This would allow the bridge to be expanded to 6 lanes of traffic at some point in the future. However, it is not apparent that two more lanes will be required in the future. Automated vehicles can potentially use significantly less space both allowing closer following distances and vehicles spaced closer together side by side. Two 3.5m lanes could potentially allow for three lanes of traffic with automated vehicles especially as automated goods movements would not require large trucks to be cost effective.

The new crossings of the Fraser, the Port Mann Bridge and the Golden Ears have been way overbuilt for current demand and this excess may never be used. Given the experience with these bridges, it would be prudent to not overbuild the Pattullo. The additional funding required to build a 6 lane Golden Ears arguably delayed the completion of the Evergreen Line by a decade. As discussed above, bicycle and pedestrian access could be accommodated below deck instead of on-deck. Thus the bridge deck could be built for just the four lanes of traffic currently required. This will result in significant cost savings and reductions in the concrete and steel required to build the bridge. As both concrete and steel are carbon intensive materials, this would result in significant less GHG emissions during construction and less air pollution as well. In addition, there is also an opportunity cost in overbuilding a bridge such as the Pattullo. As TransLink also funds transit and cycling, Spending less money on the bridge will enable TransLink to invest more in transit and cycling reducing regional greenhouse gas emissions and air pollution. This is a better use of limited resources rather than excess bridge capacity that may never be needed. This opportunity cost should be included in the evaluation of different bridge options especially as TransLink is an integrated multimodal transportation planning agency. If, at some point in the future, more capacity over the river is required, a new crossing could be built in a different location. This has the advantage of providing more efficient shorter connections for some cycling, walking and motor vehicle trips. Generally, it is better to provide more crossings with fewer lanes per crossing than fewer crossings with more lanes or traffic per crossings. Crossings with more lanes of traffic tend to overload the connecting road networks and require costly interchanges.

#### 3. Cycling and Walking Access to the Bridge

As with the motor vehicle access, the cycling access should be direct and efficient prioritizing longer distance trips in the direction of travel that most users are likely to make. As such, the cycling path should be generally straight with curves designed for safe higher speed cycling (40 to 50 km/h) with under or overpasses eliminating conflicts with motor vehicles. Destinations are far apart in this area of the region. Designs that increase the distance, time and effort required for cycling can significantly decrease destinations that can be reached in a given amount of time reducing the number of trips that people are willing to make by bicycle. These incremental increases in time and effort are cumulative with others along a route and collectively make cycling a less attractive option. Reducing GHG Emissions and Air Pollution

Providing more efficient access will encourage more people to cycle and walk instead of drive reducing GHG emissions and air pollution. In addition, providing all weather cycling and walking facilities will increase year around cycling and walking. This should be taking into account when comparing options and including in the overall Project impact on air pollution and GHG emissions. When evaluating options, walking and cycling travel times should be estimated to help chose the most efficient options. The comments below mainly will apply if the cycling and walking facilities are kept on deck. Cycling and walking paths under the deck will likely be easier to access from most directions. The access could even



#### be less expensive.

**3.a Surrey Side Access:** The path adjacent shown in the image above is significantly longer than the motor vehicle lanes. In addition, there are many curves and turns that further slow cycling. A straighter path closer to King George would be preferable. It also appears as if the path is designed to both access the SkyTrain and King George. Using separate path connecting to the main path along King George to access the station would be better. Ideally, separate cycling and walking paths would be provided to reduce conflicts and make cycling more efficient.

**3.b New Westminster Side Access:** On the New Westminster side, in Downtown New Westminster, the northbound bike lane heading towards the Bridge is on the river side (west) of Columbia. The design shown forces cyclists and pedestrians to wait at a light to cross Columbia then cross it again via a path on the on ramp. It would be better if the path continued on from the bike lane on the east side of Columbia then ramped directly up to the path on the bridge. That could save a minute or two of travel time. The access from the north side of the bridge towards downtown New West is rather long and convoluted. To access Downtown, a ramp could from the path coming off the bridge could ramp down to between Columbia and the motor vehicle onramp to the bridge. It could then continue along Columbia where the sidewalk is currently shown. The five leg path intersection is less than ideal. Users will have a hard time predicting where other users will go creating conflicts and increasing travel times. Several of the paths go out of their way to get to this intersection. Creating more paths that are more direct will provide faster access with fewer conflicts.

**4. Path Lighting**: The low level path lighting as shown on the rendering on the Project website (below) tends to be worse than nothing. It creates contrasting light and dark areas which the eyes have difficulty adapted to making visibility worse. In addition, the low level lighting is more likely to shine in the eyes of people walking and cycling making it more difficult for path users to see each other and hazards. Instead, the path lighting should be at the same level as the road lighting providing even constant lighting on the path instead of dark and light areas.

18 Dear Mr. Hamblin: Thank you for the opportunity to comment on TransLink's Pattullo Bridge Replacement Project (Project) Draft Valued Components as part of the Environmental Assessment Process. The BC Trucking Association (BCTA) is a member-based, non-profit, non-partisan organization dedicated to advocating for and representing the commercial road transportation industry in BC since 1913.

BCTA members include trucking companies hauling every type of freight, as well as charter and scheduled motor coach companies. BCTA represents over 1200 trucking and motor coach fleets that operate over 13000 commercial vehicles and employs over 26000 British Columbians. The commercial road transportation industry is both a significant contributor to the BC economy, generating approximately \$2.4 billion in revenue in 2016, and a critical service provider supporting the quality of life British Columbians expect. Approximately 90% of all consumer goods are transported by the trucking industry. BCTA is generally supportive of the value components [VCsl and intermediate components [ICsl outlined in Translink's Draft Valued Components as the basis for assessing the potential impacts of the Project on the commercial road transportation industry. However, BCTA recommends the Project's proposed assessment consider the impact of a 6-lane rather than a four-lane bridge.

Our recommendation is predicated on the results of the Phase 1 consultation input, which illustrates public support for a 6-lane bridge. This is consistent with BCTA's recommendation as outlined in our July 2016 submission to Translink [attached - SEE PDF TransLink (Cheung) 2016 07 (Pattullo Bridge Replacement - Community Connections Consultation).pdf].

Our primary concern is that a four-lane replacement bridge may not provide sufficient capacity to meet future demand. We urge Translink, the Mayor's Council, and individual City Councils to reconsider the decision to initially proceed with a four-lane replacement bridge with a potential future expansion to 6 lanes, and consistent with Phase 1 public input, commit to a 6-lane bridge on opening day instead. While the Draft Valued Components outlines that a "traffic assessment, including traffic assumptions and traffic modelling3" will be reported on in Part A of the Application and that a review of "neighbourhood, local and regional land use plans" will be conducted, it does not identify how Projects that have potential to impact road use within the study area, such as the Brunette Interchange Project, will be considered within this process. As referenced in the Brunette Avenue Interchange Functional Planning Study [updated November 2016] prepared for the Ministry of Transportation and Infrastructure [MoTI], there "is considerable overlap in the study areas, [and] the traffic models created for the Pattullo Bridge Replacement Project were adapted and used for the Brunette Avenue Interchange Functional Planning Study." BCTA recommends that Translink, either as part of this process, or otherwise, work with MoTI, the City of New Westminster, and the City of Surrey to cooperatively consider all existing and proposed Projects [e.g., Brunette Interchange Project, City of New Westminster's Sapperton Transportation Plan proposed improvements, etc.] to ensure efficient movement of goods and people within and around the study area. Thank you again for the opportunity to provide comments.

In 2013, a comprehensive joint technical review comprising the cities of N Westminster and Surrey, Metro Vancouver, the Ministry of Transportatio Infrastructure (MOTI) and TransLink, and extensive public and stakeholde consultation, explored 25 specific crossing alternatives to the aging bridge study informed the Mayors' Council's direction to TransLink to construct lane bridge designed in a way that does not preclude potential future exp six lanes.

In February 2018, it was announced that the Province of B.C. would fund the Pattullo Bridge Replacement Project. The new bridge will be owned, o and maintained by the Province. Any future option to add lanes will be co a separate Project and will be subject to a collaborative planning, analytic consultative process between the Province, TransLink and municipalities.

The primary objective of the Project is to replace the existing and aging b is now 30 years past its design life and would be at risk in the event of a n earthquake, ship collision or high-wind event. A regular maintenance regi extended its lifespan, but escalating efforts to prolong its use are no long effective. An assessment of maintenance needs has revealed that upgrad bridge to meet modern safety standards would be extremely challenging, technically and financially.

The design of the new bridge and improved community connections will lenhance and provide more direct movements for vehicles, including truck reducing the impact of truck travel in local communities. The new bridge wider lanes, providing trucks with more space and improving traffic flow. a number of large trucks straddle the center median due to the substandal lanes which impede traffic flow for both goods movers and other vehicles.

The new bridge will also support more direct traffic movements in both S New Westminster through a number of improvements to the road netwo community connections.

As you've recommended in your comments, the Project is coordinating it modelling work with MOTI's ongoing traffic modelling for the Brunette In Project and is considering interdependencies with the City of New Westm transportation and land use planning.

19	Dear Gerry, the following are my concerns and questions:	The Pattullo Bridge Replacement Project proposes a new four-lane bridg
		an existing and aging four-lane bridge. The Project is being assessed as a
	<b>1.</b> How will the new Pattullo bridge contribute to improving the environment when the increased traffic	bridge in the Environmental Assessment Application. Potential future exp
	{due to a bigger bridge with more lanes than the existing bridge) will lead to increased air quality	the bridge will be subject to the regulatory review/assessment requirem
	pollution from increased vehicle carbon emissions, especially for the areas close to the bridge?	time.

Pattullo Bridge Replacement Project

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<ol> <li>How will the new Pattullo bridge contribute to solving traffic congestion in New Westminster when increased traffic {due to more lanes than the existing bridge) will flow into and through the New Westminster roads which are at capacity?</li> <li>With the new Pattullo bridge and connecting road ramps locating close (next) to Leopold Place area, what will be done to mitigate the following impacts:         <ul> <li>A) increased air quality pollution, dust pollution and traffic noise pollution which affects health of residents close to the bridge, and social-economic values of their property.</li> <li>B) increased light pollution which would disrupt sleep patterns of residents affecting their health</li> <li>D) blockage of existing views for residents at the 38 Leopold Place building (for units with views facing the river and Surrey), creating adverse social-economic impact for the residents</li> <li>E) vibration to the Leopold Place buildings which affects health and safety of residents</li> <li>E) wibration to the Leopold Place buildings which affects health and safety of residents</li> <li>E) wibration to the Leopold Place buildings which affects health and safety of residents</li> <li>E) wibration to the Leopold Place buildings which affects health and safety of residents</li> <li>S. Why will McBride Blvd. be modified to curve closer to Leopold Place when it makes it more difficulty for large trucks to turn left from McBride Blvd. to E. Columbia, impacting road safety?</li> </ul> </li> </ol>	The new Pattullo Bridge will meet current seismic and road design standar provide a safe and reliable crossing for vehicles, pedestrians and cyclists. T bridge will feature modern lane widths and improved community connect New Westminster and Surrey, supporting more direct traffic movements. Westminster, the bridge will continue to connect directly to McBride Boul new direct ramps will connect the bridge to East Columbia Street. These n connections will reduce the reliance on local residential streets to access t The Environmental Assessment (EA) will consider any incremental effects quality that are attributable to the Project, including greenhouse gases (G have revised the scope of our EA to now include GHGs. The other potentia you mention are being studied as part of the EA and results of those studi shared in the Application phase of the EA review for public review and cor Through regular and ongoing discussions with the Eagle Crest Advisory Co comprised of building residents and representatives of the Pattullo Bridge Replacement Project team with input from City of New Westminster staff, made adjustments to the scope of the EA to reflect the expressed concern interests of Eagle Crest residents. With respect to the assessment of noise, we have installed noise monitori on all four sides of 38 Leopold Place and took measurements in Septembe will also undertake pre-construction condition surveys prior to constructio committed to ongoing engagement with Eagle Crest Advisory Committee is continue to be available for comments and questions. The proposed concept includes direct connections from the bridge to East Street. The alignment for lower McBride Boulevard in the proposed concert the need to accommodate the elevation gain while ensuring traffic on East could travel underneath McBride Boulevard. The design will be subject to refinements by the contractor to ensure speed, vertical grade and other to considerations meet engineering design standards.

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20 Overall the replacement of the Pattullo Bridge will improve conditions for cyclists compared to the existing Pattullo Bridge. The existing bridge provides for a single pathway on one side shared amongst cyclists and pedestrians with no barrier between users and traffic.

The bridge as proposed provides shared pathways with pedestrians on either side of the bridge and improves connections on both the Surrey and the New Westminster side of the bridge. However, the HUB Cycling Surrey White Rock committee recommends a number of improvements on the design for better safety, experience and convenience of all users.

The experience and safety for cyclists can be improved by moving the pathways under the bridge road deck. This prevents passing vehicles from stirring up dust and grit into trail users faces, a problem that is problematic on many bridges in the region. Pathway users of these bridges can often be seen wearing dust masks and eye glasses to mitigate this. Secondly, this prevents broken glass and debris from gathering on the pathways which Is a significant problem with the current bridge. Finally, placing the pathways under the bridge, similar to the configuration for the Canada Line Bridge, will also provide weather protection while lowering the elevation changes.

The proposed Project also combines cyclists and pedestrians into the same space of around 3 metre width. Best practices around the world separate pedestrians from cyclists; however, the width will need to be enough to allow cyclists to pass each other. With the current configuration cyclists will need to use the pedestrian space on the right to pass other cyclists. On downhill grades cyclists could achieve speeds of 40-50 kilometers per hour so separation from pedestrians is preferred to prevent serious injuries. It may also be necessary to sign the path so that it's clear that cyclists should pass on right only when safe.

Cyclists need to easily connect to New Westminster's Uptown and Queens Park area. The current pathway connection suggests that a future multi-use pathway be built on First Street. While this route is currently a route used by cyclists it is not desirable due to the very steep grades of ~13%. It is suggested that the sidewalk on McBride west of Royal Avenue be rebuilt to include a protected bikeway that connects to the existing overpass at Queens Park and continues to the existing multi-use path at 6th Avenue for westbound cyclists. For eastbound cyclists from First Street and the Parkside Trail it would be better if there was an underpass built under Royal Avenue on the south side of the on and off ramps connecting to the Agnes Street Greenway at the node point shown on page 21 of the Discussion Guide and Feedback Form from October 3-31, 2016. Both of these suggestions would lessen the elevation changes required and would have gentler grades.

Thanks,

Tim Yzerman HUB Cycling Surrey White Rock The proposed concept has separated cyclist and pedestrian facilities on e the bridge; however, cycling and walking paths will be subject to refinem contractor's final design. The bridge design will need to meet navigation clearance requirements.

The Ministry of Transportation and Infrastructure will be developing oper maintenance requirements to manage dust and debris on the bridge.

The new bridge will improve safety and reliability for drivers, cyclists and pedestrians. The Project design will include signage and wayfinding for cy pedestrians.

Thank you for your suggestions about how to connect cyclists with New Westminster's Uptown and Queens Park area. Amongst the many improved cycling and walking paths on either side of the bridge, the existing sideware east side of McBride Boulevard will be enhanced to a wider multi-use path between East Columbia Street and Royal Avenue, providing for an improve connection between the Central Valley Greenway and the pedestrian over Queen's Park. The other considerations, however, fall outside the scope of Project and would be more appropriate for the City of New Westminster' consideration.

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#### 21 Dear Mr. Hamblin, Subject: Pattullo Bridge EA - Valued Components (Five Pillars)

Transport Action BC wishes to comment on the Valued Components being established for the Environmental Assessment Process of the Pattullo Bridge Replacement Project. As advocates for sustainable modes of transportation, we recognize the value of balanced transportation choices favouring environmentally and community friendly modes, while reducing our current dependence on single occupant vehicles (SOV) and port-to-port trans-shipping on local roads via truck. This shift away from over-dependence on road-based transportation towards a diversity of transportation options including reducing the need to travel in the first place through progressive land use policies - is widely seen as the only way we will get a handle on the intractable congestion in our urban region, while maintaining quality of life and a vibrant economy. Indeed, in recognition of the need to promote mode shift, cities in the region are now adopting "no traffic growth" policies and encouraging the mobility of a growing population through other transportation options.

We do not think the proposed 5 pillars of the EA process adequately recognize the importance and value of a balanced transportation system for urban Metro Vancouver. The process, as currently formulated, cannot evaluate whether this Project will promote our region's evolution towards sustainable transportation networks, or whether it will further contribute to the dominance of motor vehicles and all the associated health, congestion, economic, affordability, and land use problems.

The bridge under consideration is an extremely expensive infrastructure Project. It is primarily intended to serve cars and trucks, in a corridor which has many options and diverse potential for moving people and goods; namely: transit, rail, and river barge (we recognize that the Project proposes new facilities for cyclists and pedestrians, but we do not expect these new facilities to significantly impact the current boundless demand for vehicle use on the new bridge). The willingness of the proponent to spend such a large sum of money on vehicle infrastructure, particularly one which has the potential to greatly increase the capacity for car and truck volumes, raises concerns about the impact of the proposed facility on the balance of traffic and transportation investments in our urban region.

According to the Mayors' Vision, the bridge is proposed to be built to 4 lanes (existing capacity) with the potential to expand to 6 lanes in the future. In their vision, the Project is to be funded primarily by user pricing. User pricing also serves as a mechanism for transportation demand management (TOM). To date all of the communication and planning for this Project has been based on this vision. The existence of TOM measures, in conjunction with other transportation investments and progressive land use changes, could preclude the need to ever expand the bridge beyond its existing 4 lanes. However, a recent change in Provincial policy has meant that tolls will come off the bridges in our region. This will drive a very different outcome for this Project from the one which the Mayors have been promoting.

The removal of tolls creates a fiscal problem for the proponent (Translink) and has the potential to impact the provision of transit services and investments throughout the region3 The lack of explicit TOM mechanisms (tolls) will result in induced demand for use of the new facility', and will quickly result in calls for expansion to 6 lanes (as was seen with the Alex Fraser Bridge). This has the potential to rapidly overwhelm the local road network, which is already beyond capacity during much of the day.

There is huge value in a balanced transportation network for Metro Vancouver - one where goods are moved not only by truck, and people commute not only in SOVs. Therefore, we believe that the EA

The primary objective of the Project is to replace the existing and aging b is now 30 years past its design life and would be at risk in the event of a r earthquake, ship collision or high-wind event. A regular maintenance reg extended its lifespan, but escalating efforts to prolong its use are no long effective. An assessment of maintenance needs has revealed that upgrad bridge to meet modern safety standards would be extremely challenging, technically and financially.

The proposal to build a new, four-lane bridge maintains vehicle capacity of adding separated cyclist and pedestrian facilities, which are currently inact the existing bridge. The proposal also includes new walking and cycling part new bridge to provide safe, comfortable connections to the bridge and to connect nearby neighbourhoods. The proposed Project also has a number improvements on both sides of the new bridge to improve traffic movem

As part of the Environmental Assessment (EA) review process, traffic mode forecasting will consider a new Pattullo Bridge along with the surrounding and road networks based on no tolling on any major bridges crossing the River. The EA studies will be informed by these updated traffic forecasts a reflect the no-toll scenario. This information will be shared in the Applica phase of the EA review.

bridge which moderate gime has ger cost ding the g, both	Table 3 (Rationale for Inclusion and Exclusion of Specific VC/IC Subcomponents) of the VC document has been updated to reflect inclusion of GHGs in the assessment.
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process must look at the following:

• How will the shift from user funding (tolls) to undefined regional funding impact the financial viability of transit services throughout the region?

• What is the potential for the new facility (under both 4 and 6 lane scenarios) to induce vehicle travel demand, thereby exacerbating congestion in areas beyond the Project study area? This should be evaluated for both near and long term and consider the local network's ability to absorb more traffic. In absence of tolls, what other TDM measures could be applied?

How does such a large investment – with the potential to service expanded car and truck movements – influence our region's ability to move toward a more sustainable and diverse transportation system?

How could an expanded, non-tolled facility impact viability of other nearby transportation investments such as Surrey LRT, Evergreen Line, or service improvements for SkyTrain/SkyBridge? Will it discourage people from using these effectively tolled systems? Will it discourage private investment in short sea shipping and local rail improvements, and hence encourage more trucks on our roads throughout the region? Will it encourage the Port of Metro Vancouver and trans-shipping companies to be overly dependent on public investments and locally supported infrastructure for their international operations?
Should the proponent consider a smaller 4 lane only option, with no possibility for expansion to 6

lanes, as a means to mitigate the financial risk and overall costs, while recognizing and supporting the evolution towards transportation diversity in our urban region?

• Will trends in transportation {i.e. driverless cars, car sharing, telecommuting, etc) and land use {greater mixed use development, densification) allow for a lower-traffic-volume solution to be implemented?

These studies should consider both the direct impact of this Project as well as its contribution to the general expansion of roads in our region, including whether the cumulative investments have any long term benefit for the movement of goods and people. We draw your attention to other metropolitan regions such as Seattle and Toronto, which have failed to deal with their congestion problems despite massive investments, primarily in road infrastructure, and have created even bigger problems for the movement of goods and people in those regions. We submit that the unique geographic constraints of Metro Vancouver make our region even more vulnerable to poorly considered transportation investments.

In conclusion we believe there is great value for our region to build towards a more sustainable - diverse, robust, environmental, affordable - transportation system. This is critical if we are to maintain a healthy economy, clean environment, safe and livable communities and tolerable congestion in our increasingly urban and densifying region. We do not think the proposed 5 pillars of the EA process adequately represent this value, and hence miss the opportunity to evaluate how this Project could enhance or detract from the evolution of our region's transportation networks towards greater balance and sustainability. We encourage the EA team to recognize the challenges and opportunities of building new transportation infrastructure in an urban setting and the impacts such infrastructure can have on how the transportation system evolves.

Thank you for the opportunity to participate in this public consultation process. Yours sincerely, Frederick Jelfs, Secretary, Transport Action British Columbia

