

FEB 2 7 2014

Greg Moore, Chair Metro Vancouver Board 4330 Kingsway Burnaby BC V5H 4G8 Reference: 222120

Your file: CP-15-03-015

Dear Chair Moore:

Re: George Massey Tunnel Replacement Project

Thank you for your letter, and attachment, regarding the George Massey Tunnel (GMT) Replacement Project. Please accept my apologies for the lateness of this reply.

The ministry shares Metro Vancouver's vision of a sustainable region that offers residents a high quality of life and the opportunity to live in thriving urban centres linked by efficient and clean transportation options. Replacing the GMT with a new bridge that improves the existing transportation network in a manner supportive of Metro Vancouver's goals for a livable region and clean environment is a priority, and the new crossing will accommodate future Light Rapid Transit and improved access for cyclists and pedestrians.

The ministry has been engaged with stakeholders on these issues and remains committed to continued collaboration with all key stakeholders, including Metro Vancouver, TransLink, area municipalities, Port Metro Vancouver and Deas Island Regional Park staff, among others. We are also establishing an advisory group of marine users to provide input on the project with respect to the Fraser River.

Following ongoing meetings with TransLink and area municipalities about the regional transportation model, project staff will complete a draft project definition report, technical design and business case for the new bridge and associated Highway 99 corridor improvements for public discussion. Project staff have also initiated baseline environmental studies, with a view to beginning an environmental assessment review in 2014. This review will include a full assessment of the potential air quality effects of the new crossing. Metro Vancouver staff will be part of the review process, and I look forward to their participation.

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Please be assured that the ministry remains committed to working with all organizations and communities that depend on this critical component of our transportation network, and I welcome continued dialogue between our collective staffs going forward.

Should you have any further questions about the project development process, please do not hesitate to contact Geoff Freer, the ministry's Executive Project Director of the George Massey Tunnel Replacement Project. He can be reached by telephone at 604 660-6052 or by e-mail at Geoff.Freer@gov.bc.ca and would be pleased to assist you.

Thank you again for taking the time to write.

Sincerely,

Todd G. Stone

Minister

Copy to: Geoff Freer, Executive Project Director

George Massey Tunnel Replacement Project

NOV 1 9 2013

The Honourable Minister Todd Stone Ministry of Transportation and Infrastructure PO Box 9055 Stn Prov Govt Victoria, BC V8V 9E2

TODD

Dear Minister Stone:

Re Proposed Bridge to Replace the George Massey Tunnel

Office of the Chair Tel. 604 432-6215 Fax 604 451-6614

File: CP-15-03-015



At its meeting of October 25, 2013, the Metro Vancouver Board passed the following resolutions regarding the proposed bridge to replace the George Massey tunnel (see enclosed report):

That the Board:

- a) request the Minister of Transportation and Infrastructure to demonstrate how the project scope, design, and performance of the proposed bridge to replace the George Massey Tunnel takes into careful consideration the effects on the implementation of the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, and Regional Transportation Strategy, and that measures be included to support, and not detract from, regional objectives.
- b) request the TransLink Board provide Metro Vancouver with technical analysis and commentary on the potential transportation and emissions implications of expanding transportation capacity on the George Massey Tunnel corridor and effects with proximate Fraser River water crossings, including tolling and nontolling scenarios, and the degree of consistency and support the proposed bridge would have on the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, the Regional Transportation Strategy, and Regional Goods Movement Strategy.
- c) direct staff to investigate in relation to the George Massey Tunnel replacement project the following:
 - i. the business plan;
 - ii. the role of the port;
 - iii. the balance of phase 2 of the Gateway Program;
 - iv. the potential for an LRT.
- d) request the Corporation of Delta and other municipalities to provide Metro Vancouver with technical analysis and commentary on the work they have done on the matter.

The Board understands the priority of how improving the safety, efficiency, and reliability of the regional transportation system will benefit the movement of people and the movement of goods.

The Highway 99 corridor through the George Massey Tunnel suffers from congestion and reliability issues which affect people and goods travelling to and from the Canadian/US border, BC Ferries, port terminals, and industries on both sides of the Fraser River. However, technical information is missing that will help the region better understand how the proposed 10-lane bridge and associated works along Highway 99, in comparison to the current 4-lane tunnel, will interact with the rest of the region's transportation system and *Regional Growth Strategy*.

The Regional Growth Strategy sets out a vision of vibrant urban centres served by multiple transportation choices, agricultural lands that are protected and actively farmed, and industrial lands that serve port functions and other industrial uses. The Integrated Air Quality and Greenhouse Gas Management Plan sets out continuous improvements to air quality and ambitious targets to reduce greenhouse gas emissions. The TransLink Regional Transportation Strategy, which is under development by TransLink in consultation with municipalities and Metro Vancouver, is intended to set out the investment priorities in the medium and long-term that will fully integrate with land use and environmental objectives.

The Board is extremely interested in finding solutions that are integrated and synergistic, rather than individual solutions that may address one problem at the cost of creating or exacerbating other challenges within our region. The urgent need to understand the scope of the project and its implications is essential to the work that is now underway. We respectfully request that your Ministry provide the technical information required to demonstrate how the proposed bridge will support regional land use and environmental objectives set out in regional plans while also meeting Provincial priorities.

Yours truly,

Greg Moore

Chair, Metro Vancouver Board

GM/DL/rk

Encl: Report – dated October 15, 2013, "Comments on the Proposed Bridge to Replace the George Massey Tunnel" (#7945893)

To:

GVRD Board of Directors

From:

Transportation Committee

Date:

October 15, 2013

Meeting Date: October 25, 2013

Subject:

Comments on the Proposed Bridge to Replace the George Massey Tunnel

RECOMMENDATION

That the Board:

- a) request the Minister of Transportation and Infrastructure to demonstrate how the project scope, design, and performance of the proposed bridge to replace the George Massey Tunnel takes into careful consideration the effects on the implementation of the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, and Regional Transportation Strategy, and that measures be included to support, and not detract from, regional objectives.
- b) request the TransLink Board provide Metro Vancouver with technical analysis and commentary on the potential transportation and emissions implications of expanding transportation capacity on the George Massey Tunnel corridor and effects with proximate Fraser River watercrossings, including tolling and non-tolling scenarios, and the degree of consistency and support the proposed bridge would have on the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, the Regional Transportation Strategy, and Regional Goods Movement Strategy.
- c) direct staff to investigate in relation to the George Massey Tunnel replacement project the following:
 i) the business plan;

 - il) the role of the port; and
 - iii. the balance of phase 2 of the Gateway Program.

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At its October 9, 2013 meeting, the Transportation Committee considered the attached report titled "Comments on the Proposed Bridge to Replace the George Massey Tunnel", dated October 2, 2013. The Committee subsequently amended the recommendation as presented above.

Attachment:

Report titled "Comments on the Proposed Bridge to Replace the George Massey Tunnel", dated October 2, 2013.



ATTACHMENT

To:

Transportation Committee

From:

Ray Kan, Senior Regional Planner, Planning, Policy and Environment Department

Date:

October 2, 2013

Meeting Date: October 9, 2013

Subject:

Comments on the Proposed Bridge to Replace the George Massey Tunnel

RECOMMENDATION

That the Board:

- a) advise the Minister of Transportation and Infrastructure that the project scope, design, and performance of the proposed bridge to replace the George Massey Tunnel should take into careful consideration of the effects on the implementation of the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, and Regional Transportation Strategy, and that measures be included to support, and not detract from, regional objectives.
- b) request the TransLink Board provide Metro Vancouver with technical analysis and commentary on the potential transportation and emissions implications of expanding transportation capacity on the George Massey Tunnel corridor and effects with proximate Fraser River watercrossings, including tolling and non-tolling scenarios, and the degree of consistency and support the proposed bridge would have on the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, the Regional Transportation Strategy, and Regional Goods Movement Strategy.

PURPOSE

On September 20, 2013, the Premier of British Columbia announced a preferred alternative for the replacement of the George Massey Tunnel. A new bridge will replace the tunnel on approximately the same alignment. This report provides comments based on published information from the Province, and the consultation that was undertaken over the past year.

BACKGROUND

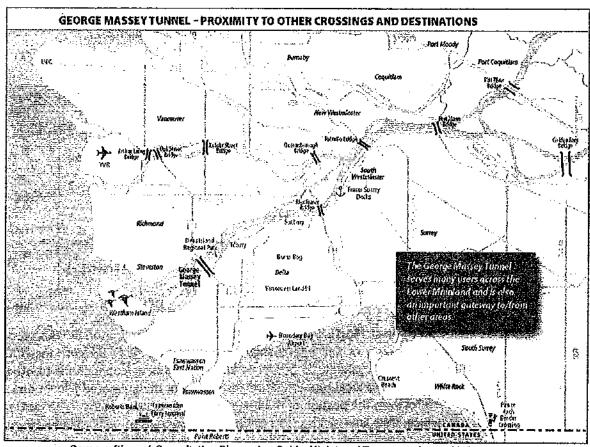
In fail 2012, the Province undertook Phase 1 consultation on the replacement of the George Massey Tunnel to solicit feedback from stakeholders on issues around the current tunnel. In spring 2013, the Province undertook Phase 2 consultation to solicit feedback on five scenarios for replacing the tunnel. Metro Vancouver staff participated in stakeholder sessions and attended public meetings in both phases. Two staff letters were sent to the Ministry of Transportation and Infrastructure (see Attachments 1 and 2).

There was a general understanding that the process to select a preferred alternative would take place after the provincial election, and after additional analysis have been completed and the results shared with stakeholders. The announcement by the Premier on September 20, 2013 was unexpected in light of the absence of technical information provided during consultation about the performance and other attributes of the alternatives.

DISCUSSION

Current Facility

The George Massey Tunnel is an important regional facility being one of five Fraser River crossings in the region. According to the Province, the George Massey Tunnel carried over 80,000 vehicles each day in 2011.



Source: Phase 1 Consultation Discussion Guide, Ministry of Transportation and Infrastructure

The existing capacity of the tunnel is close to or over capacity for most of the day, leading to long queues and travel times. The lack of capacity was identified by the Province as a key issue as both sides of the river is expected to experience growth in population, jobs, and travel. The Province also identified other issues with the tunnel such as not meeting modern seismic standards, aging operating systems, narrow lanes, the general lack of redundancy when traffic incidents occur, and no capacity for cyclists.

According to the Province, the modal share of vehicles traversing the tunnel in 2011 was:

- Single-occupant vehicles: 77%
- Multiple-occupant vehicles: 10%
- Heavy commercial trucks: 9%
- Light commercial trucks: 3%
- Buses: 1% (accounts for 26% of person throughput)

Proposed Bridge Concept

Only limited information has been provided by the Province about the proposed bridge. An animated flyover prepared by the Province depicts a facility with 5 lanes in each direction (4 general purpose lanes, plus one high-occupancy vehicle lane) and protected cycling/pedestrian lanes in each direction. In comparison, the current tunnel provides 3 lanes of travel in the peak direction (comprising a counterflow lane). The bridge concept represents an increase in vehicle travel capacity over the existing tunnel. Construction on the new bridge would start in 2017.

Table 1.	Capacity	of Proximate	Fraser River Cros	agings:
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Lanes per Direction	George Massey Tunnel	Proposed Bridge Concept	Alex Fraser Bridge	Queens- borough Bridge	Pattulio Bridge	Port Mann Bridge	Golden Ears Bridge
General Purpose	3 in peak direction; 1 in off-peak direction	4	3	2	2 (reduced to 1 at night)	4 (3 in service)	3
High- Occupancy Vehicles	0	1	0 -	0	0	1	0
Total	3 in peak direction; 1 in off-peak direction	5	3	2	2 (reduced to 1 at night)	5 (4 in service)	3

The geographic scope of the project remains unclear. In earlier consultation materials, the scope was stated to include consideration of "all interchanges within the Highway 99 corridor from Bridgeport Road in Richmond to the Canada/US border in Surrey, as well as connections to other provincial highways, and regional and local routes". From inspection of the animated flyover and a schematic provided by the Province, the portion of the bridge on Deas Island appears to be located on land owned by the Province. This land divides the east and west portions of Deas Island Regional Park. The Province has owned this land since before the Park was established in the early 1980's. It is likely that the Province will release a more complete description of the project in the near future, and staff's analysis will be updated as appropriate.

Considerations for a Regional Dialogue

The George Massey Tunnel was Identified by the Province as a longer-term gateway priority. With the Gateway Program nearing completion, the Province has elevated the watercrossing to be the next roadway expansion priority in the region. And much like the Gateway Program, the proposed bridge will engender debate and discussion about the way transportation projects are prioritized and the impacts of expanding road capacity on land use, air quality, transportation, and economic objectives.

A new bridge with expanded capacity provides opportunities to incorporate new measures that cannot be accommodated in the existing tunnel. These measures could include (subject to the release of detail project information by the Province):

- direct access for pedestrians and cyclists;
- a structure that meets modern seismic standards;
- lane widths that meet current guidelines;
- better lane allocation for trucks and high-occupancy vehicles;

Greater Vancouver Regional District - 23

- · better lane allocation for longer-distance through trips and shorter-distance trips; and
- a better match between capacity and current and future travel demands by commercial trucks, buses, and general purpose traffic.

Staff sees no objections to these measures. From a transportation performance and economic perspective, ensuring traffic runs safely and efficiently benefits commuters in passenger vehicles and buses, transit service providers, and trucks carrying goods to market. From an environmental perspective, reducing extensive periods of idling vehicles is beneficial for air quality, fuel consumption, and greenhouse gas emissions. These interests are aligned with the Regional Growth Strategy:

RGS Action 1.2.9(c): That TransLink and the province, as appropriate, work with municipalities to support the safe and efficient movement of people, goods, and service vehicles, to, from, and within Urban Centres and Frequent Transit Development Areas (e.g., by enhancing the design and operation of the road network), where appropriate.

RGS Action 2.1.5: That TransLink, the federal government and the province and their agencies develop and operate transportation infrastructure to support economic activity in Urban Centres, Frequent Transit Development Areas, Industrial, Mixed Employment areas and ports and airports.

The major objections are the missing perspective on the relationship between this corridor and the wider transportation network, and the absence of appropriate capacity and transportation demand management measures required to carefully align this facility with broader regional land use, environmental, and transportation objectives. There are some potential near-term and long-term consequences.

1. Potential for Induced Vehicle Travel and Emissions in the Near-Term

A new facility having expanded vehicle capacity could induce more vehicle trips. Inducing more vehicle trips runs counter to established regional objectives. TransLink's newly adopted Regional Transportation Strategy Framework establishes two regional targets:

- To make half of all trips by walking, cycling, and transit; and
- To reduce the distances people drive by one-third.

Metro Vancouver has established ambitious greenhouse gas reduction targets and air quality objectives.

An expanded facility might:

- unleash pent up travel demand (travelers who may be adverse to sitting in traffic may
 decide to take more trips in the future as a result of the improved travel times and
 safety),
- shift travelers from transit or carpooling to single-occupant vehicles, or
- change travel patterns (travelers who were used to taking an alternate route, such as the Alex Fraser Bridge, may switch over to the new facility via the South Fraser Perimeter Road).

An expanded facility without additional complementary measures to discourage single-occupant vehicles and to encourage carpooling, transit, and cycling would indeed be deficient and short-sighted. Unfettered access could easily result in a congested facility. Further, an expanded facility may simply move the "bottleneck" further downstream or upstream.

The Regional Growth Strategy anticipated that the current spate of road expansion projects would not be the last one. During consultation, Metro Vancouver advised the Ministry of the following actions in the Regional Growth Strategy:

RGS Action 5.2.6: That TransLink and the province, as appropriate, in collaboration with municipalities seek to minimize impacts from within-and-through passenger, goods, and service vehicle movement on the environment and public health affecting the region and areas within the Lower Fraser Valley Airshed.

RGS Action 5.2.7: That the TransLink and the Province, as appropriate, evaluate the following elements when contemplating future expansion of private vehicle capacity on major roads, highways, and bridges:

- a) Transportation demand management strategies as alternatives to, or as integral with, such capacity expansion;
- b) Impacts on the achievement of the Regional Growth Strategy and the Integrated Air Quality and Greenhouse Gas Management Plan, including potential cumulative impacts.

2. Potential for Unanticipated Land Use Changes in the Long-Term

Reducing travel time expands the catchment area for a given travel time budget. Improvements to accessibility are capitalized in land markets. The improved access to lands, be it residential, commercial, industrial, or agricultural, could have a distributional effect on shifting growth from one area to another. This is an uncertainty that the Regional Growth Strategy never explicitly considered in the population and employment forecasts. It is unclear what basic demographic assumptions the Ministry has been using to justify the proposed capacity on the bridge. It is also unclear what assumptions have been made about plans by Port Metro Vancouver to expand container throughput capacity at Roberts Bank, and to better utilize available marine terminal capacity at Fraser Surrey Docks.

3. Unclear Impacts on the Development of the Regional Transportation Strategy and Regional Goods Movement Strategy

The uncertainty around the new bridge puts into doubt the validity of the technical work being undertaken by TransLink for the Regional Transportation Strategy, the Regional Goods Movement Strategy, and the Pattullo Bridge Strategic Review Study. The development of the implementation Plan is crucial — priorities for new medium-term transportation investments will be deliberated and established. The uncertainty around the capacity of the new bridge and interactions with other components of the regional transportation system must be understood (i.e., whether the new bridge will be tolled). The effect on truck movement is unclear.

¹ In recent years, the Province has implemented transit-supportive measures along Highway 99, such as the expansion of the South Surrey Park and Ride, highway shoulder bus lanes, and queue jumpers.

ALTERNATIVES

- That the Board:
 - a) advise the Minister of Transportation and Infrastructure that the project scope, design, and performance of the proposed bridge to replace the George Massey Tunnel should take into careful consideration of the effects on the implementation of the Regional Growth Strategy, integrated Air Quality and Greenhouse Gas Management Plan, and Regional Transportation Strategy, and that measures be included to support, and not detract from, regional objectives.
 - b) request the TransLink Board provide Metro Vancouver with technical analysis and commentary on the potential transportation and emissions implications of expanding transportation capacity on the George Massey Tunnel corridor and effects with proximate Fraser River watercrossings, including tolling and non-tolling scenarios, and the degree of consistency and support the proposed bridge would have on the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, the Regional Transportation Strategy, and Regional Goods Movement Strategy.
- 2. That the Board receive for information the report titled, "Comments on the Proposed Bridge to Replace the George Massey Tunnel", dated September 25, 2013.

FINANCIAL IMPLICATIONS

Information about the project scope, design, performance, cost, procurement method, and tolling policy has yet to be released by the Province. The availability of provincial funding for other transportation priorities in the region may be affected by this decision. There may be potential impacts imposed by the bridge on Deas Island Regional Park and proximate ecologically sensitive areas — these impacts may have financial bearing on Metro Vancouver, and will be further analyzed and deliberated by the Environment and Parks Committee.

If the Board approves Alternative 1, then staff will continue to work with the Province to ensure that the land use and air quality/GHG implications of the new bridge be considered and integrated into the project scope, design, and performance.

If the Board chooses Alternative 2, then no further action will be taken at this time. Given the lack of information about the proposed bridge, it may be prudent for the Board to simply monitor and respond once the project definition report, or equivalent document, is released by the Province. At that point, staff would be able to clarify some or all issues identified in this report, and a more fulsome discussion could take place.

SUMMARY / CONCLUSION

On September 20, 2013, the Premier of British Columbia announced a preferred alternative for the replacement of the George Massey Tunnel. A new bridge will replace the tunnel on approximately the same alignment. This report provides comments based on published information from the Province, and the consultation that was undertaken over the past year. Providing for the safe and efficient movement of people and goods is one of many regional objectives. Staff recommends Alternative 1 to ensure that the project takes into careful consideration of the effects on the implementation of the Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, and Regional Transportation Strategy, and that measures are included to support, and not detract, from these regional objectives.

Further, the regional transportation authority has an important role to play in this process. In the newly adopted Regional Transportation Strategy Framework, TransLink commits to "work with the Province to ensure a replacement to the Massey Tunnel is integrated with the regional network in a way that is consistent with the Regional Growth Strategy and the Regional Transportation Strategy." Therefore, staff recommends Alternative 1 requesting that TransLink advise Metro Vancouver on the potential transportation implications of this bridge. This information will be useful to advance the regional dialogue, not only on the merit of the bridge itself, but also implications for investment priorities in the Regional Transportation Strategy.

Issues related to potential impacts that a new bridge may impose on Deas Island Regional Park and ecologically sensitive areas, and the appropriate mitigation and compensation, will be addressed by the Environment and Parks Committee.

Attachments:

- 1. Province of British Columbia News Release, "B.C. moves forward with bridge to replace Massey Tunnel", dated September 20, 2013. (Orbit doc # 7884824)
- 2. Letter to Geoff Freer, Executive Project Director, dated April 3, 2013, "Metro Vancouver Staff Comments on the George Massey Tunnel Replacement Project, Phase 2" (Orbit doc # 7882676)
- 3. Letter to Geoff Freer, Executive Project Director, dated December 19, 2012, "Metro Vancouver Staff Comments on the George Massey Tunnel Replacement Project" (Orbit doc # 7885026)



NEWS RELEASE

For Immediate Release 2013PREM0095-001430 Sept. 20, 2013

Office of the Premier Ministry of Transportation and Infrastructure

B.C. moves forward with bridge to replace Massey Tunnel

VANCOUVER – Today, Premier Christy Clark announced that the Government of British Columbia will move ahead on the project to replace the George Massey Tunnel, with construction of a new bridge on the existing Highway 99 corridor to begin in 2017.

"We are keeping our promise to replace the George Massey Tunnel and improve the Highway 99 corridor, starting in 2017," said Premier Christy Clark. "Congestion at the tunnel is frustrating for families and stalling the economy. A new bridge will improve travel times for transit, commuters and commercial users, and open the corridor up to future rapid transit options."

The first step in the project was to consult with the public and stakeholders about support for a new crossing and on crossing options. The findings were summarized in two reports, the second of which was released today. In addition to indicating public support for a new bridge on the existing Highway 99 corridor, other key findings include:

- Strong support for resolving the problem of congestion, safety and reliability at the Massey Tunnel.
- Strong desire for transit, cycling and pedestrian improvements, including protecting the Highway 99 corridor for future rapid transit.
- Doing nothing is not an option; strong opposition to only improving the existing tunnel.

With a consensus that people want a new bridge on the existing Highway 99 corridor, the next step in the project is the preparation of a more detailed project scope and business case.

"With the Port Mann Bridge open to traffic and the South Fraser Perimeter Road nearing completion, we're moving to fix the next of B.C.'s worst traffic bottlenecks," said Transportation and Infrastructure Minister Todd Stone. "Today, we're getting to work to develop a solution that will improve the movement of people and goods on a highway that is important to commuters, and vital to our Asia Pacific Gateway."

Engineering and technical work is now underway to develop a project scope and business case for the new bridge and associated Highway 99 corridor improvements. This work will be presented for public discussion next spring, ensuring that the project remains on track for construction to begin in 2017.

In the interim, the ministry will proceed immediately to lengthen the Steveston off-ramp on Highway 99 at the north end of the George Massey Tunnel. This will improve safety and reduce Highway 99 congestion for motorists at this location. The project will go to tender by the end of September.

"Traffic congestion at the George Massey Tunnel has been the number one concern for residents and businesses in Delta for well over a decade," said Corporation of Delta Mayor Lois Jackson. "Premier Christy Clark and the B.C. Government are to be commended for making the tunnel replacement a priority issue and for its timely commencement of public consultation to gauge community support. The tunnel replacement will form a critical part of the transportation infrastructure supporting the movement of people and goods; strengthening the local and regional economy as well as trade through the Asia-Pacific Gateway."

"Congestion at the George Massey Tunnel negatively impacts the safe and efficient movement of goods by truck, effectively slowing our economy," added BC Trucking Association President and CEO Louise Yako. "We support an improved crossing and I look forward to providing input from our association and membership as the project develops."

"The Province's continued commitment to improve and expand our highway infrastructure, like the replacement of the George Massey Tunnel, supports our economy," B.C. Road Builders & Heavy Construction Association President Jack Davidson said. "In addition to the good-paying construction jobs these projects create, there are long-term benefits to communities and for all road users."

The Ministry of Transportation and Infrastructure intends to open an office for the George Massey Tunnel Replacement Project on Steveston Highway near the tunnel, where the public can learn more about the project. The office will be open later this fall.

Consultations for the George Massey Tunnel Replacement Project were held in two phases between November 2012 and April 2013. There were more than 2,000 participants in the online engagement and at open houses in Delta, Richmond and Surrey.

Learn More:

Learn more about the George Massey Tunnel Replacement Project at www.masseytunnel.ca
The report on the second phase of consultations is available at: http://engage.gov.bc.ca/masseytunnel/information-centre/document-library/
A rendering of a bridge on the Highway 99 corridor is available at: http://ow.ly/p2aS3
An animated video flyover is available at: http://ow.ly/p2bix

A backgrounder follows.
Contacts:
Sam Oliphant
Office of the Premier
250 952-7252

Kate Trotter Government Communications and Public Engagement Ministry of Transportation and Infrastructure 250 356-8241

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BACKGROUNDER

Progress on Highway 1 improvements and other major projects

The B.C. government's commitment to invest \$650 million over 10 years into Highway 1 between Kamloops and the Alberta border was announced by Premier Christy Clark at the Union of B.C. Municipalities meeting in 2012.

This year, the government of British Columbia moved ahead with work to widen sections of the Trans-Canada Highway between Kamloops and the Alberta border, to improve safety and support goods movement, trade and tourism.

The ten-year Highway 1 Kamloops to Alberta Four-Laning Program will create an estimated 3,300 direct jobs.

Highway 1 projects underway in 2013:

- Phase 2 of the Monte Creek to Pritchard project, which will widen seven kilometres of Highway 1 to four lanes and construct an interchange at the community of Pritchard.
- Phase 1 of the Pritchard to Hoffman's Bluff project, which will widen three kilometres of Highway 1 to four lanes.
- Five other Highway 1 projects are invarious stages of development.

Cariboo Connector Phase 2:

- The \$200-million second phase to widen sections of Highway 97 to four lanes between Prince George and Cache Creek is well underway.
- Two of the nine projects have been completed.
- · Construction is nearing completion on another two projects.
- All nine will be completed or underway by 2017.
- This builds on 18 projects valued at \$240-million in Phase 1, completed in 2011.
- At the completion of Phase 2, almost 50 per cent of the 440 km highway between Cache Creek and Prince George will be either three or four lanes wide.

Other major four-lane improvement projects in B.C.:

- Highway 2: 8th Street to Rolla Road under construction. Value \$36.5 million.
- Highway 2: Tupper Creek to 192nd Road under construction. Value \$39.2 million.
- Highway 3: Friday Creek to Laidlaw under construction, Value \$10.9 million.
- Highway 97: Winfield to Oyama completed August 2013. Value \$77.9 million.

Contact:

Kate Trotter
Government Communications and Public Engagement
Ministry of Transportation and Infrastructure
250 356-8241

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Planning, Policy and Environment Department Fel. 604 432-6350 Fax 604 432-6296

File: CP-15-02

Mr. Geoff Freer
Executive Project Director
George Massey Tunnel Replacement Project
Ministry of Transportation and Infrastructure
c/o 7351 Vantage Way
Delta, BC V4G 3C9

Dear Mr. Freer:

Re: Metro Vancouver Staff Comments on the George Massey Tunnel Replacement Project, Phase 2

Metro Vancouver is pleased to provide the attached comments on the George Massey Tunnel Replacement Project. As part of the Phase 2 consultation, Metro Vancouver staff attended one of your community open houses, and the stakeholder meeting. In lieu of completing the feedback form, we are providing this fetter.

In Phase 1, Metro Vancouver provided comments from a broad perspective based on its plans: Regional Growth Strategy, Integrated Air quality and Greenhouse Gas Management, Regional Parks Plan, and Regional Food System Strategy. The attached comments identify which items have been addressed and which items remain outstanding. As the Phase 2 technical analysis proceeds through the summer, the Ministry should make every opportunity to consult with Metro Vancouver on the issues identified in this letter.

For further information, please contact Heather McNell, Regional Planning Division Manager, at 604.436.6813, or myself at 604.451.6615. Thank you.

Yours truly,

Delia Laglagaron, MPA

Deputy Commissioner/Deputy Chief Administrative Officer General Manager, Planning, Policy and Environment

OL/RK/mlt

cc: Bob Paddon, Executive Vice-President, Strategic Planning and Public Affairs, TransLink

Encl: Attachment I: Detailed Metro Vancouver Staff Comments on Phase 2
Attachment 2: Letter dated December 19, 2012, "Metro Vancouver Staff Comments on

George Massey Tunnel Replacement Project"

ATTACHMENT 1

George Massey Tunnel Replacement Project, Phase 2 Detailed Metro Vancouver Staff Comments

Multi-Modal Perspective

The draft project goals and evaluation criteria support a multi-modal perspective to a certain extent. One of the draft project goals is to support objectives for regional people movement, including increasing transit ridership and protecting the Highway 99 corridor for future rapid transit, and providing cyclist and pedestrian access. One of the evaluation criteria is pedestrian and cycling accessibility.

In our first letter, dated December 19, 2012, we suggested that the George Massey Tunnel Replacement Project should be recast as a multi-modal mobility project, where in transportation demand management and features to support walking, cycling, buses, rapid transit, and multiple-occupancy vehicles are built into the project definition rather added afterwards.

It is desirable for the project to respond to Action 5.2.7 in the Regional Growth Strategy requesting TransLink and the Province to evaluate the following elements when contemplating future expansion of private vehicle capacity on major roads, highways, and bridges:

- a) Transportation demand management strategies as alternatives to, or as integral with, such capacity expansion;
- b) Impacts on the achievement of the Regional Growth Strategy and the Integrated Air Quality and Greenhouse Gas Management Plan, including potential cumulative impacts.

Forecasting Considerations

We remain concerned about the absence of information about the basic assumptions being made about future population and employment projections and spatial allocations in the travel demand modeling work. We understand that there may two versions of the Regional Transportation Model being calibrated and deployed right now on two major infrastructure planning projects – the Massey Tunnel Replacement Project and the Pattullo Bridge Replacement Project. Both are truck corridors.

It is urgent that a meeting of provincial, TransLink, and Metro Vancouver staff be convened to set out the parameters for travel demand forecasting. Ministry staff committed to this at the stakeholder meeting. And we reiterate that if alternative land use scenarios or adjustments to land use assumptions are made that depart from current assumptions, the Ministry should coordinate with Metro Vancouver staff to ensure transparency and traceability of such work. Metro Vancouver will be happy to assist in such efforts.

Performance-Based Perspective

In our first letter we suggested clear outcomes should be identified so that alternative can be evaluated. We also offered some performance measures, which are consistent with regional objectives, to be included. The following tables shows to what degree our initial comments have been incorporated into the project definition. We respectively request that the Ministry incorporate the remaining elements of our comments.

Performance Measure	Included in Draft Project Goal	Included in Oraft Evaluation Criteria
Change in Mode Share for transit, multiple-occupant vehicles, cycling, walking, goods/service vehicles (net reduction of single-occupant vehicles required)	No	No
Change in vehicle kilometers travelled as a measure of transportation intensity and emissions (net reduction required)	No .	No
Change in greenhouse gas emissions (net reduction required)	No	No
Change in common air contaminants, including diesel particulates and road dust (net reduction required)	Yes	Yes
Travel time reliability for transit, and goods and service vehicles (net reduction in travel time for multiple-occupant vehicles and transit vehicles; same or increased travel time for single-occupant vehicles)	98 Yes 88 9	**************************************
Change in agricultural lands acreage (no net loss)	Yes	Yes
Change in parks acreage (no net loss)	Yes	No
Change in industrial lands acreage (no net loss)	No	No .
Change in environmental and natural assets (no net loss)	Yes	Yes

Corridor Perspective

In our first letter, we encouraged a broader outlook on the ultimate role of the corridor, and how a new crossing may have upstream or downstream implications along the Highway 99 corridor and adjacent lands. We appreciate the draft scope now "considers all interchanges within the Highway 99 corridor from Bridgeport Road in Richmond to the Canada/US border in Surrey, as well as connections to other provincial highways, and regional and local routes."

What remains to be articulated is consideration of the impacts on adjacent lands. Modifications to existing interchanges or new interchanges will have materials impacts on adjacent agricultural, parks, industrial, or general urban lands. These matters must be carefully quantified and evaluated for potential mitigation measures.

Network and Whole Systems Perspective

Related to the corridor perspective is the network and whole systems perspective. What is missing from the project scope of work is an awareness of other potential regional transportation investment priorities, the growth targets set out in the Regional Growth Strategy, and other established regional objectives. It would benefit the region, and the province, if major transportation investments are brought forward as part of the Regional Transportation Strategy process for evaluation and debate, as opposed to having a piecemeal process. Such a comprehensive process will help to establish the medium-term and long-term investment priorities and to confirm the funds that the region can generate locally and the funds that must be requested from senior governments to pay for these investments.

Environmental and Parks Considerations

As noted above, the impacts on parks acreage must be included in the evaluation framework.

Consideration should be made to prepare specific plans to reduce, mitigate, and compensate for impacts on Deas Island Regional Park and the immediate marine environment and associated habitats. For

example, it is unknown whether under Scenarios 2, 3, and 4 the construction will block public access to the west end of the park along the right of way, and what the construction and operations impacts will be. In addition, the project should ensure solid east-west recreational connectivity supportive of Experience the Fraser.

Agricultural Considerations

We reiterate from our first letter that agricultural impact assessments should be undertaken for each scenario alternative. We note that minimizing adverse agricultural impacts and access to/from agricultural areas are included as evaluation criteria.

Congestion

We note that the summary of the Phase 1 consultation identifies "congestion reduction" as the most important factor to consider in developing replacement options. We request that analysis be provided to indicate to what degree weekday and weekend congestion are caused by recurring or non-recurring congestion. Non-recurring congestion, whether caused by a stalled vehicle or collision, points to different types of solutions, such as ramp metering.

The region has adopted regional greenhouse gas reduction targets of 33 percent by 2020 and 80 percent by 2050. These are the same targets adopted by the Province. To make incremental steps towards these targets, the region (and Province) must recognize managing the growth, and even reversing, in vehicle kilometres travelled is crucial to reducing greenhouse gas emissions.

We recognize reducing idling and improving the overall flow of traffic will reduce emissions. But we also recognize that the region cannot build itself out of congestion solely through expanding roadways. Road pricing should be tested, not simply as a revenue source to pay off the construction and operating expenses, but to also manage existing and incremental private vehicle demand.

Regional Economy Considerations

The current discourse over expansion of highways and watercrossing capacities is missing a broader perspective on the regional economy. What assumptions are being made about the growth in containers and commodities as they relate to increased truck and rail traffic, and origins and destinations, for this region versus Prince Rupert? What is the correlation with specific road investments? Why are transportation demand management and system management measures, such as the deployment of technology and pricing, and smarter port logistics, not contemplated as part of these infrastructure proposals? What policy assumptions are being made about servicing goods movement as a priority over other economic, environmental, and social objectives? What policy assumptions are being made about prioritizing the reduction of delay for private vehicles versus the reduction of delay for transit customers? These questions need to be answered in a more holistic fashion long before investment decisions are made on capital-intensive and irreversible infrastructure. The assumptions must be made transparent and deliberated for their validity.

Conclusion

As Phase 2 progresses, we will remain engaged to better understand the performance benefits, costs, interactions with other parts of the regional transportation system, and implications to agricultural, industrial, and park lands.



Metropolitan Planning, Environment und Parks Department Tel: 604-432-6350 Fax: 604-432-6296

December 19, 2012

File: CP-07-01-016

Mr. Geoff Freer Executive Project Director George Massey Tunnel Replacement Project Ministry of Transportation and infrastructure c/o 7351 Vantage Way Delta, BC V4G 1C9

Dear Mr. Freer:

Metro Vancouver Staff Comments on the George Massey Tunnel Replacement Project Re:

Metro Vancouver is pleased to provide the attached comments regarding the George Massey Tunnel Replacement Project. The George Massey Tunnel is an important connection between people, Jobs and services in the region. Projects like the Massey Tunnel Replacement always hold the potential to transform. land use and traffic patterns locally. If it is carefully integrated with regional land use and transportation plans, a replacement crossing should also have a significant impact on reducing the number of singleoccupant vehicles, improving air quality and enhancing sustainability in the entire region.

Metro Vancouver is providing these preliminary comments from a broad perspective based on its plans: Regional Growth Strategy, Integrated Air Quality and Greenhouse Gas Management Plan, Regional Parks Plan, and Regional Food System Strategy.

Metro Vancouver staff attended two of your stakeholder meetings as part of the Phase 1 consultation titled "Understanding the Need". In lieu of completing the feedback form, we are providing this letter with our comments on key items for your consideration. As the Phase 2 consultation proceeds in 2013, Metro Vancouver will remain engaged and comment as appropriate to ensure that a broad regional perspective remains when identifying the project's problem statement and appropriate solutions.

Our staff comments in the enclosed attachment should be treated as preliminary and subject to revision and expansion as new information emerges. For further information, please do not hesitate to contact Raymond Kan, Senior Regional Planner, at 604.436.6991, or myself at 604.816.5399. Thank you.

Yours truly.

Gaëtan Royer, Manager

Metropolitan Planning, Environment and Parks

GR/RK/mft

Bob Paddon, Executive Vice-President, Strategic Planning and Public Affairs, TransLink

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ATTACHMENT George Massey Tunnel Replacement Project Detailed Metro Vancouver Staff Comments

Whole System Planning Considerations

Metro Vancouver's sustainability commitment is to achieve the highest quality of life embracing cultural vitality, economic prosperity, social justice and compassion, all nurtured by a beautiful and healthy environment within the region. Major infrastructure decisions are made by municipalities, Metro Vancouver, Translink, the Province, YVR, Port Metro Vancouver, and private entities. In order for these decisions to cumulatively move this region forward, it is necessary that these decisions be contemplated relative to the more comprehensive values and objectives established in the region. It is far too easy to make decisions which optimize only one particular objective, while weakening other important goals. The best way to reach a win-win solution is to ensure that the appropriate scope is established at the very outset of project conception to account for and to evaluate the costs, benefits, and legacy that these decisions may leave in the region for generations.

The proposed George Massey Tunnel Replacement Project will be a significant capital undertaking serving local, regional, provincial, and national interests. It also has implications for shaping travel demand, expanding travel choices, improving access to jobs and recreation, and enhancing the economic competitiveness of the region.

The project may also result in more vehicular traffic, harmful air emissions and loss of agricultural lands. Additional road capacity may attract more single occupancy vehicles and detract from achievements the region has made in shifting to more efficient transportation modes. It may also have implications for the future expansion of port facilities. For these reasons, it is necessary to consider this project within the total transportation infrastructure needs of the region. The George Massey Tunnel Replacement Project was considered using the following "whole system planning" approach.

1. Performance-Based Perspective

Taking a cue from TransLink's *Transport 2040*, the long-term transportation strategy for the region, public plans and investments should follow the rule of identifying the outcomes that the region should attain. For example, in *Transport 2040*, one of the goals is to have "most trips by transit, walking, or cycling by 2040". In other words, trips by private vehicles ought to be in the minority in the future. The actions required to achieve this outcome would necessarily be different than if the goal was to simply reduce travel time for single-occupant vehicles only, for example.

Clear outcomes should be identified so that alternatives can be evaluated. Metro Vancouver can provide assistance to Ministry of Transportation and Infrastructure staff in the preparation of an evaluation framework and associated desired outcomes so that established regional objectives are recognized early in the planning process. Metro Vancouver staff has been involved in depth in TransLink's transportation initiatives and through the preparation of the *Regional Growth Strategy*, which contains numerous performance measures.

in addition to identifying clear outcomes, the performance outputs stemming from the project alternatives should be evaluated. Some sample metrics, which are consistent with regional

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2. Corridor and Network Perspective

The George Massey Tunnel is one element of a regionally-significant corridor. And the Highway 99 corridor is part of an integrated network of highways and major roads serving the region. Related to having a performance-based perspective, there ought to be a broader outlook on the ultimate role of the corridor, and how a new crossing may have upstream or downstream implications along the Highway 99 corridor and adjacent lands.

A network perspective is also important for a different set of reasons. There are numerous transportation needs in the region. Whether that is expanding the Frequent Transit Network further into Surrey and Langley, or extending rapid transit along the Broadway corridor in Vancouver, there are pressing needs that have yet to be funded. Given the prospective problems that the George Massey Tunnel Replacement Project is expected to address (and solve), how do the benefits and costs compare to the other known needs around the region? Without this network perspective, public investment decisions may actually end up being sub-optimal and detract from broader regional objectives.

We acknowledge that doing nothing is not a viable option over the long-term. Knowing that the George Massey Tunnel Replacement Project was once included in the Gateway Program, but was subsequently removed due to re-prioritization, does not necessarily qualify this project as the region's next number one priority for transportation investment.

The merits of the George Massey Tunnel Replacement Project should be evaluated relative to Metro Vancouver's existing and planned transportation infrastructure as part of TransLink's new Regional Transportation Strategy process.

3. Multi-Modal Perspective

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Both the Regional Growth Strategy and Transport 2040 contemplate a future where growth is focused in Urban Centres and areas near the Frequent Transit Network, and that the reach and capacity of non-vehicular modes of transport are expanded.

Transit, multiple-occupancy vehicles, cycling, and walking all rank as higher priorities than single-occupant vehicles. Any new crossing should contemplate opportunities for pedestrians, cyclists, and transit vehicles to move safely, efficiently, and seamlessly to connections on either end of the facility (e.g., access to employment lands in Richmond and Delta, and to recreational opportunities in and around Deas Island Regional Park).

Ensuring viable recreational connections to the Experience the Fraser network of waterfront trails and amenities using non-vehicular modes is also paramount. Experience the Fraser is a collaborative concept led by the Province, Fraser Valley Regional District, and Metro Vancouver. It envisions a seamless, contiguous, and publicly-accessible network of multi-use trails on both sides of the Fraser River from Hope to the Salish Sea. Watercrossings are critical connectors. For example, based on input from Metro Vancouver, TransLink has incorporated connections to Experience the Fraser as a project objective for the Pattullo Bridge Replacement Project and plans to reinforce the integration of pedestrian and cycling connections into new Fraser River crossings.

This multi-modal perspective needs to be spelled out as part of the planning process, problem statement and desired performance outcomes. The need for pedestrian and cycling connections should be integrated at the outset during the project definition phase.

Further, the George Massey Tunnel Replacement Project should in essence be recast as a multi-modal mobility project, wherein transportation demand management and features to support walking, cycling, buses, rapid transit, and multiple-occupancy vehicles are built into the project definition rather than added afterwards. This is the true difference between responding to current travel patterns (i.e., 77% of vehicles traversing the tunnel being cars) versus purposefully shaping travel patterns based on a performance and outcomes-based approach.

The Regional Growth Strategy contains a key action (Action 5.2.7) requested of TransLink and the Province to evaluate the following elements when contemplating future expansion of private vehicle capacity on major roads, highways, and bridges:

- a) Transportation demand management strategies as alternatives to, or as integral with, such capacity expansion:
- b) Impacts on the achievement of the Regional Growth Strategy and the Air Quality Management Plan (Integrated Air Quality and Greenhouse Gas Management Plan), including potential cumulative impacts.

Metro Vancouver staff stands ready to provide appropriate technical and policy assistance to the Ministry to ensure a whole-systems planning approach and coordinated planning dialogue.

Corneasting Considerations

In consultation with municipal partners, Metro Vancouver is responsible for preparing the population and employment growth forecasts and geographic distribution as part of its regional growth management role. These forecasts support the travel demand modeling work of TransLink. In the past four years, Metro Vancouver has worked closely with TransLink to coordinate a consistent protocol for preparing the land use assumptions critical to travel demand forecasting. This protocol has been put into practice to great success in the UBC Line Rapid Transit Study and the Surrey Rapid Transit Alternatives Study, both of which are cosponsored by the Province and TransLink. Further, Metro Vancouver, upon request by TransLink, led the preparation of atternative land use scenarios to test the robustness of rapid transit alternatives.

To maintain the consistency of assumptions and methods, we would request Ministry staff to confirm with Motro Vancouver that the appropriate long-term land use assumptions are being used for the George Massey Tunnel Replacement Project. We also trust that Ministry staff is coordinating with TransLink's forecasting team to ensure the most current regional transportation model is being applied. In addition to existing major trip generators, such as the BC Ferries terminal, port terminals, and the Canada/United States border, assumptions about population and employment growth anticipated in Richmond, Delta, Tsawwassen First Nation, Surrey and the region as a whole need to be carefully accounted for. New proposed developments related to port logistics and industrial development will also require careful coordination with stakeholders, such as Port Metro Vancouver. If alternative land use scenarios or adjustments to land use assumptions are made that depart from current assumptions, we request that the Ministry contact and coordinate with Metro Vancouver staff to ensure transparency and traceability of such work. Metro Vancouver staff will be happy to assist in such efforts.

Interdependence with Port Metro Vancouver Initiatives

Beyond the immediate role of the George Massey Tunnel to facilitate trips across the Fraser River, the current crossing also plays a direct role in the facilitation of goods movement along the Fraser River. A replacement crossing, whether a deeper tunnel or a bridge, could facilitate the movement of much larger container vessels to Fraser Surrey Docks. It has been suggested that the ultimate capacity of Fraser Surrey Docks to handle container movements is underutilized by the current channel depth at the tunnel. If this "bottleneck" is removed, then it may unlock the potential at Fraser Surrey Docks and concurrently influence the business case to create a new Roberts Bank Terminal 2, a proposed new marine container terminal currently in the project definition phase. We recommend that the Province and Port Metro Vancouver work together to bring greater clarity about the interdependent relationship between these two initiatives and their land use implications.

Environment and Parks Considerations

Deas island Regional Park is a popular Metro Vancouver regional park which accommodates nearly 300,000 visits each year. Care should be taken when designing alternatives for the George Massey Tunnel Replacement project to identify the opportunities and impacts on the integrity of the park, both during construction and in operation. Deas Island Regional Park's recreational facilities include group picnic grounds and a group campground in the central "grassy meadow" area of Deas Island.

The perimeter of Deas Island consists of coastal flood plain forest and marshes of ecological importance. Most of the Deas Slough (south) side of Deas Island is coded red by the Fraser River Estuary Management Program (FREMP) indicating high productivity habitat. The red coding wraps around the western tip of Deas Island. Most of the north side of Deas Island is coded yellow, which indicates moderate productivity wildlife habitat. Metro Vancouver will share ecological sensitivity mapping for the Park with Ministry staff.

As part of the design process, consideration should be made to prepare specific plans to reduce, mitigate, and compensate for any impacts on Deas Island Regional Park and the immediate marine environment and associated habitats.

Further, the integrity of the Burns Bog Ecological Conservancy Area must be upheld with respect to any proposed alternative. Burns Bog and the Fraser River estuary have now been recognized as a "Ramsar Wetland of International Importance".

Agricultural Considerations

Alternative locations of a new crossing may have serious implications for the regional supply of farmland and the viability of agriculture. It will be important to provide an agricultural impact assessment for each alternative, particularly any bridge options.

The agricultural impact assessments should define what parcels of agricultural land may be permanently lost and describe other potential impacts related to farmland fragmentation, drainage and irrigation, farm traffic corridors and compatibility/incompatibility with adjacent nonfarm uses. It is also important to consider the impact of a new crossing on the future economic growth of the agri-food industry.

The cumulative impacts of the Massey Tunnel Replacement project, in addition to the other major infrastructure projects being contemplated in the south of the Fraser such as Roberts Bank Terminal 2, may be detrimental to the future viability of the agricultural industry and local food production needed for a growing metropolitan population. For this reason, any agriculture impact assessment should consider an Avoid – Mitigate – Compensate approach, whereby avoidance is the priority course of action and mitigation is considered only when negative impacts cannot be avoided.

In addition to consulting with the Agricultural Land Commission, we highly recommend that the Ministry consult with the City of Richmond, the Corporation of Delta, their respective Agricultural Advisory Committees, and the Tsawwassen First Nation directly regarding potential impacts on agriculture from the George Massey Tunnel Replacement Project.

Conclusion

Metro Vancouver staff, Committees and the Board are keenly interested in the careful integration of land use, transportation and economic development in the region. Projects like the Massey Tunnel Replacement always hold the potential to transform land use and traffic patterns locally. If it is carefully integrated with regional land use and transportation plans, a replacement crossing should also have a significant impact on reducing the number of single-occupant vehicles, improving air quality and enhancing sustainability in the entire region.



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December 19, 2012

File: CP-07-01-016

Mr. Geoff Freer
Executive Project Director
George Massey Tunnel Replacement Project
Ministry of Transportation and Infrastructure
c/o 7351 Vantage Way
Delta, BC V4G 1C9

Dear Mr. Freer:

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Yours truly,

Gaëtan Royer, Manager

Metropolitan Planning, Environment and Parks

GR/RK/mlt

cc: Bob Paddon, Executive Vice-President, Strategic Planning and Public Affairs, TransLink

ATTACHMENT

George Massey Tunnel Replacement Project Detailed Metro Vancouver Staff Comments

Whole System Planning Considerations

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The project may also result in more vehicular traffic, harmful air emissions and loss of agricultural lands. Additional road capacity may attract more single occupancy vehicles and detract from achievements the region has made in shifting to more efficient transportation modes. It may also have implications for the future expansion of port facilities. For these reasons, it is necessary to consider this project within the total transportation infrastructure needs of the region. The George Massey Tunnel Replacement Project was considered using the following "whole system planning" approach.

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