

NO: R040

COUNCIL DATE: April 3, 2023

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## REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **March 27, 2023**

FROM: **General Manager, Engineering**

FILE: **8630-20 (Hwy 99)**

SUBJECT: **Surrey Recommendations for Revised Fraser River Tunnel Project Scope**

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## RECOMMENDATION

The Engineering Department recommends that Council:

1. Receive this report for information; and
2. Authorize the Mayor to send a letter to:
  - a. The Ministry of Transportation and Infrastructure requesting new and upgraded Highway 99 interchanges at 24 Avenue and 152 Street be funded as part of the Fraser River Tunnel Project (the “F RTP”), or to be completed concurrent to the F RTP; and
  - b. Metro Vancouver’s George Massey Crossing Task Force and TransLink’s Mayors’ Council requesting new and upgraded Highway 99 interchanges at 24 Avenue and 152 Street be funded as part of the F RTP.

## INTENT

The purpose of this report is to seek authorization from Mayor and Council to send a letter to the Ministry of Transportation and Infrastructure (“MoTI”), Metro Vancouver’s George Massey Crossing Task Force, and TransLink’s Mayors’ Council to fund Highway 99 interchange improvements at 24 Avenue and 152 Street as part of, or concurrent with, the F RTP.

## BACKGROUND

The F RTP, also known as the George Massey Crossing, is a MoTI project to replace the existing four-lane George Massey Tunnel with a new eight-lane immersed tube tunnel. The project scope includes four travel lanes in each direction (three general purpose travel lanes and one dedicated bus-only travel lane) and a multi-use pathway.

The City has a significant interest in the F RTP, as many South of Fraser River and Surrey residents utilize Highway 99 to travel through the George Massey Tunnel and will continue to use the new tunnel in the future.

## DISCUSSION

On April 1, 2019, MoTI appeared as a delegation to Council-in-Committee to provide an update on the FRTP. At the meeting, MoTI requested Council's input and feedback on the draft project goals and objectives. The City was generally supportive of MoTI's proposed project goals and objectives but noted the scope of the project only extended to the border of Surrey/Delta. The City was concerned the new tunnel would generate more traffic at already over-capacity Highway 99 interchanges in South Surrey.

The City recommended, as part of the FRTP, MoTI realize the full benefit of this significant investment and assess the entire Highway 99 corridor within Metro Vancouver. This would include funding for new and upgraded Highway 99 interchanges in South Surrey at 24 Avenue, 32 Avenue, and 152 Street. A Corporate Report on this issue was received by Council on April 15, 2019 (Corporate Report No. Ro67; 2019 attached as Appendix "I") and a letter, signed by five Mayors and two Chiefs, was sent to the Province (attached as Appendix "II").

Since 2019, the City has worked collaboratively with MoTI on the Highway 99 South Corridor Study (the "Study"), which was "draft final" in December 2021. The Study included recommendations for:

1. A twinned overpass of 152 Street over Highway 99; and
2. Highway 99 northbound on-ramp and southbound off-ramp at 24 Avenue.

Interchange improvements at Highway 99 and 32 Avenue were advanced to construction in 2022. Despite this conclusive Study and the unified concern over this issue from project stakeholders, funding for new 24 Avenue and upgraded 152 Street interchanges were not included in the project scope.

The City of Delta has recently expressed concerns with the FRTP scope and has advocated to the Province for a secondary access to and from Ladner via a new River Road overpass crossing Highway 99. Staff recommend the 24 Avenue/Highway 99 and 152 Street/Highway 99 interchange improvements either be added to the FRTP or delivered concurrently by MoTI, particularly with the City recently commencing with \$45 million improvements to 152 Street north of Highway 99.

## CONCLUSION

The revised FRTP scope should include improvements to existing Highway 99 interchanges in South Surrey at 24 Avenue and 152 Street, or MoTI should deliver these improvements concurrent to FRTP so the Highway 99 improvements are constructed prior to opening of the new FRTP.

Scott Neuman, P.Eng.  
General Manager, Engineering

RV/PK/cc

Appendix "I" – Corporate Report No. Ro67; 2019  
Appendix "II" – Letter from Mayors and Chiefs to Province

## CORPORATE REPORT

NO: R067

COUNCIL DATE: April 15, 2019

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**REGULAR COUNCIL**

TO: Mayor &amp; Council

DATE: April 11, 2019

FROM: General Manager, Engineering

FILE: 8630-20 (Hwy 99)

SUBJECT: George Massey Crossing Project  
Goals and Objectives

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**RECOMMENDATION**

The Engineering Department recommends that Council:

1. Receive this report for information;
2. Endorse these additional/modified objectives for the George Massey Crossing project:
  - a. Assess and implement necessary improvements along the entire Highway 99 corridor within Metro Vancouver;
  - b. Include two lanes dedicated for transit priority to enhance transit speed and reliability and accommodate future rapid transit expansion; and
  - c. Integrate with regionally significant regional plans and strategies.
3. Authorize staff to share this report with the Ministry of Transportation and Infrastructure and continue to work with the Ministry on this project.

**INTENT**

The purpose of this report is to inform Council and seek endorsement of Ministry of Transportation and Infrastructure ("MOTI") goals and objectives, with recommended changes.

**BACKGROUND**

MOTI appeared as a delegation to Council at the April 1, 2019 Council-in-Committee meeting to provide an update on the George Massey Crossing project. The update included a target schedule and proposed next steps. MOTI requested Council input and feedback on the draft project goals and principles. MOTI also sought to obtain Council support to work directly with City staff on developing and evaluating potential crossing options, as well as interim solutions to existing safety concerns.

The Province is seeking input on four preliminary goals/objectives:

1. Support sustainability of South of Fraser Communities:
  - Improve safety for all modes of travel;
  - Improve access to residential, commercial, educational and employment centres;
  - Manage congestion on the corridor;
  - Respect the cultural values of communities;
  - Enhance connections between communities;
  - Minimize impacts to agricultural land; and
  - Acknowledge the sense of urgency to move forward.
2. Facilitate an increased share of sustainable modes of transport:
  - Enhance transit convenience and facilitate future expansion;
  - Provide safe and convenient options for pedestrians and cyclists; and
  - Encourage higher occupancy modes of travel.
3. Enhance regional goods movement and commerce:
  - Improve reliability of travel for business and regional goods movements;
  - Enrich the BC tourism industry; and
  - Protect the Fraser River for fishing and transportation.
4. Support a healthy environment:
  - Minimize loss of habitat for fish, wildlife, birds and marine mammals;
  - Improve habitat quality and protect water quality;
  - Enhance land and marine-based recreation; and
  - Reduce greenhouse gas emissions and other air contaminants.

The Province will be confirming goals and objectives at the regional level at the TransLink Joint Planning Committee (held April 5, 2019), Metro Vancouver Finance and Intergovernmental Committee (held April 10, 2019), TransLink Mayors' Council (April 25, 2019) and Metro Vancouver Board (April 26, 2019).

## **DISCUSSION**

Staff agree a new George Massey Crossing is needed to facilitate the efficient movement of people and goods across the region and are generally supportive of MOTI's proposed goals and objectives. Staff have recommendations for the objectives which are aimed at acknowledging the broader impacts of this infrastructure improvement while addressing current and future needs for improved transit.

### **Expand the Project Scope to Include South Surrey Interchanges**

The scope of the original Reference Concept extended to the border of Delta/Surrey. The scope did not include any facility upgrades on Highway 99 east of Highway 91. Staff are concerned an expanded crossing will generate more traffic at already congested interchanges on Highway 99 in South Surrey, particularly at 32 Avenue.

Staff suggest, as part of the project, the Province realize the full benefit of this significant investment and assess the entire Highway 99 corridor within Metro Vancouver. This would include assessment of additional lanes through Delta and Surrey, as well as potential funding for new and upgraded interchanges at 32 Avenue, 152 Street and 24 Avenue.

### **Include Dedicated Transit Priority Lanes with Accommodation for Future Rapid Transit**

Staff are concerned about the loss of the transit/HOV lanes on the bridge. The population of Metro Vancouver will continue to grow. In order to remain a successful and sustainable region, transit will need to capture a growing share of regional travel. Transit speed and reliability are key to growing ridership. Staff suggest the new crossing should include two lanes dedicated for transit priority, with an option to convert these lanes to rapid transit in the future.

### **Integrate with Key Regional Plans and Strategies**

Staff believe any solution to the George Massey Crossing should be consistent with Metro Vancouver's Regional Growth Strategy and TransLink's Regional Transportation Strategy. Integration with these plans will ensure a holistic approach to regional mobility and goods movement. An integrated approach will also support the regional conversation about the future of mobility pricing, which can help manage traffic demand on the new crossing.

To address these concerns, staff recommend the proposed project goals and objectives be strengthened as follows:

1. To address concerns about congestion in South Surrey, add a new objective under the goal of "Support sustainability of South of Fraser Communities" to "Assess and implement necessary improvements along the entire Highway 99 corridor within Metro Vancouver".
2. To ensure transit speed and reliability is maintained and enhanced, modify the objective under the goal of "Facilitate increased share of sustainable modes of transport the objective" from "Enhance transit convenience and facilitate future expansion" to "Include two lanes dedicated for transit priority to enhance transit speed and reliability and accommodate future rapid transit expansion".
3. To ensure a holistic approach to regional mobility, add a new objective under the goal of "Facilitate increased share of sustainable modes of transport" to "Integrate with regionally significant plans and strategies".

### **Feedback to MoTI from Mayors of Affected Municipalities and First Nations**

The Mayors of Delta, Richmond, Surrey, White Rock and Vancouver along with the Chiefs of the Musqueam Indian Band and Tsawwassen First Nation met to discuss the technical report on the George Massey Crossing and reached consensus on a number of issues which they conveyed back to Premier Horgan in a letter dated March 29, 2019. The letter is attached as Appendix I.

## SUSTAINABILITY CONSIDERATIONS

The works of the George Massey Crossing project, including new and upgraded interchanges on Highway 99 in South Surrey within the scope of the George Massey Crossing, providing infrastructure to support transit speed and reliability, accommodating future rapid transit, and ensuring integration with regionally significant plans and strategies supports the objectives of the City's Sustainability Charter 2.0. In particular, these works relate to the Sustainability Charter 2.0 theme of Infrastructure. Specifically, these objectives support the following Desired Outcomes ("DO"):

- Transportation DO<sub>11</sub>: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations; and
- Transportation DO<sub>14</sub>: Goods movement throughout the City is efficient and minimizes environmental and community impacts.

## CONCLUSION

MOTI has requested Council input and feedback on the draft project goals and principles for the new George Massey Crossing. Staff are generally supportive of MOTI's proposed goals and objectives and suggest the following additions/modifications as described in this report to acknowledge the broader impacts of this infrastructure improvement including capacity concerns with the South Surrey interchanges and address current and future needs for improved transit:

- Assess and implement necessary improvements along the entire Highway 99 corridor within Metro Vancouver;
- Include two lanes dedicated for transit priority to enhance transit speed and reliability and accommodate future rapid transit expansion; and
- Integrate with regionally significant regional plans and strategies.

Staff recommend endorsing MOTI's goals and objectives, with the proposed changes, and that staff work collaboratively with MOTI to develop and evaluate potential crossing options, as well as identify interim solutions to existing safety concerns.



Fraser Smith, P.Eng., MBA  
General Manager, Engineering

JB/PK/cc

Appendix "I" – Letter from Lower Mainland Mayors on George Massey Crossing Project

**Note: Appendix available upon request**



CITY OF DELTA  
Office of The Mayor, George V. Harvie



March 29, 2019

The Honourable John Horgan  
Premier of British Columbia  
PO Box 9041 STN PROV GOVT  
Victoria, BC V8W 9E1

Dear Premier,

**Re: George Massey Tunnel Replacement Project**

Following the release of the independent technical review of the George Massey Tunnel Replacement Project late last year, the Province referred the issue back to regional municipalities and First Nations to come up with a solution that could be supported as a region. We very much appreciate the opportunity to comment on this critical project, and to take advantage of the opportunity to have it align with current regional transportation plans.

We are pleased to report on the outcome of a meeting of key Metro Vancouver Mayors and First Nation Chiefs held on February 21, 2019. During this meeting, there was agreement that the Province should take immediate action to solve the traffic congestion problem at the George Massey Tunnel. With the timelines currently being contemplated by the Province, construction on a new crossing may not be completed before 2030 – a delay that greatly impacts the lives of tens of thousands of residents who make use of the tunnel each day, and the overall liveability of our region.

With respect to a replacement crossing, consensus was reached on the following issues:

- The project should address First Nation concerns regarding in-river works and fisheries impacts.
- The project should not create additional potentially costly, lengthy or prohibitive environmental challenges or reviews.
- The project should address the City of Richmond and Delta's concerns regarding local impacts at interchanges or access points, as well as minimize impacts on agricultural land.

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- To fully realize the benefit of this significant investment, the entire Highway 99 corridor should be evaluated for improvements as part of the crossing project including the existing congestion at the South Surrey interchanges.
- The project should address the City of Richmond and Vancouver's concerns regarding excess capacity, the risk of increasing vehicle kilometres travelled, and the potential to worsen congestion at the Oak Street Bridge and along the Oak Street corridor.
- The crossing should be designed to serve the needs of the region to at least 2100.
- The crossing should include six lanes for regular traffic including goods movement and two lanes dedicated for rapid transit bus, with dedicated facilities for cyclists and pedestrians, and include immediate access to enhanced rapid transit capacity at opening. It should also have the potential for conversion to rail in the future, including consideration for potential high speed rail.
- As it is now, all utility infrastructure, including BC Hydro power transmission lines, should be constructed underground in conjunction with the tunnel.
- Any solution must address the matter in a timely manner, hopefully with construction completed by 2025-2026.

Any solution that addresses these issues should also be consistent with Metro Vancouver's Regional Growth Strategy (Metro 2040) and TransLink's Regional Transportation Strategy, both of which promote sustainable transportation choices. The Regional Transportation Strategy update is currently underway and can provide the opportunity to further integrate the crossing as regional priority, as well as consider transportation demand management strategies to address municipal concerns.

Our communities are those most directly impacted by tunnel congestion, and we have been successful in finding a solution that we can all support, including achieving consensus on the scale and defining parameters of the crossing. We believe only tunnel options, including a cost-effective deep bored tunnel if possible, should be considered. This is a solution that may satisfy all the aforementioned concerns, and any solution should address the matter in a timely manner.

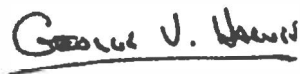
Transport Canada is currently accepting applications through the National Trade Corridors Fund for projects such as this – we should be taking advantage of this significant funding opportunity for the new crossing.



As an interim measure to address the immediate traffic congestion at the tunnel, we request the Provincial government work with TransLink through Phase 3 of the Mayors' Council plan to provide additional funding for higher-frequency transit services to encourage people to leave their cars at home. We understand that curb improvements for more buses on Highway 99 have already been made, for example.

The Province of British Columbia will need to decide one way or another if it can support any proposal involving in-river works, given the First Nation and environmental concerns. That will set the direction for us to work collaboratively to find a solution to what is now one of the worst traffic bottlenecks in Canada.

Yours sincerely,



Mayor George V. Harvie  
City of Delta



Mayor Malcolm Brodie  
City of Richmond



Mayor Doug McCallum  
City of Surrey



Chief Wayne Sparrow  
Musqueam Indian Band



Mayor Kennedy Stewart  
City of Vancouver



Mayor Darryl Walker  
City of White Rock



Chief Bryce Williams  
Tsawwassen First Nation

cc: Hon. Claire Trévena, Minister of Transportation and Infrastructure  
Sav Dhaliwal, Chair, Metro Vancouver Board of Directors