

NO: R048

COUNCIL DATE: March 7, 2016

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **March 3, 2016**

FROM: **General Manager, Engineering**

FILE: **5400-05**

SUBJECT: **Pattullo Bridge Replacement Project Development**

RECOMMENDATIONS

The Engineering Department recommends that Council:

1. Receive this report as information;
2. Authorize staff to execute the Memorandum of Understanding for the Pattullo Bridge Replacement project so that guidance can be provided to the parties for the collaboration needed to attain TransLink's procurement-readiness by fall 2017; and
3. Authorize staff to continue coordination with TransLink and the City of New Westminster in the negotiation and resolution on the criteria and timing for 6-laning the new bridge, and the integration of the bridge toll with an equitable regional mobility pricing plan.

INTENT

The purpose of this report is to provide an update on the Pattullo Bridge Replacement project (the Project) and to present to Council the Memorandum of Understanding (MOU) drafted by TransLink for Surrey and New Westminster's review and execution. The report outlines the key points of the MOU, with discussion on their implication, and seeks Council direction and authorization on the execution of the MOU.

BACKGROUND

General

The Pattullo Bridge, one of the oldest bridges in the Lower Mainland, was opened in 1937 as a provincial tolled bridge. In 1999, it became a regional facility under the full jurisdiction of TransLink. The Pattullo Bridge is currently a key element of the regional Major Road Network that fulfills a critical regional function by providing access and linkage to general purpose traffic and goods movements on both shores of the Fraser River.

Condition surveys of the bridge conducted by TransLink in the past few years have highlighted the dire need of an immediate deck and seismic rehabilitation, and ultimately, the replacement of the bridge as soon as possible. TransLink has recently announced that the deck rehabilitation will start on April 29, 2016 and design work for the replacement began in the fall of 2015.

Since the opening of the Port Mann Bridge, the traffic volume on the Pattullo Bridge had risen from the historical volume of 70,000 vehicles per day to the current volume of 80,000 per day. The majority of the traffic growth on the Pattullo Bridge has been attributed to the diversion of traffic avoiding the toll on the Port Mann Bridge. The phenomenon of traffic diversion between tolled and untolled bridges points to the need of a regional mobility pricing plan that will ensure user equity and facilitate demand management while meeting revenue goals. In late 2015, the Mayors' Council, in collaboration with TransLink, has begun the development of a regional mobility pricing plan.

Past Studies and Consultations

Since 2005, TransLink has conducted studies on the safety of the bridge and replacement options. Between 2011 and 2012, TransLink hosted a series of public open houses in Surrey and New Westminster to facilitate dialogue and input to the bridge replacement alternatives. In the fall of 2012, at the request of New Westminster, TransLink agreed to pause the replacement process and re-examine the premise between rehabilitation and replacement by conducting a comprehensive policy review and public consultation.

The delay on the bridge replacement process has significant cost implications on the maintenance of the bridge, particularly the bridge deck where the condition deteriorates substantially with each year of delay. The delays also increase the risks with respect to river scour on the piers. The delays have increased significantly maintenance costs for TransLink and the City's resources needed to accommodate the policy review instigated by New Westminster. TransLink will be expending \$10 million this year on redecking and maintenance works in order for the bridge to remain operational. The delay also increased consultant costs to all parties and created uncertainty in advancing the replacement in terms of securing senior government funding and support. Further, the delay has eroded public confidence that a timely decision and actions can be garnered to address the safety and deteriorating bridge conditions faced daily by the commuters and overall users.

In June 2013, TransLink held an initial phase of consultation with residents and businesses on the problem statement, the objectives for rehabilitation or replacement, and the screening of 25 alternatives. A second phase of consultation was planned for March of 2014 to review a shortlist of rehabilitation and replacement alternatives. The consultation was suspended in February 2014 to accommodate the Mayors' Council preparation of a 10-year investment plan in time for the plebiscite mandated by the Province.

Mayors' Council Adoption of Bridge Replacement

The Mayors' Council 10 Year investment plan adopted in June 2014 fully supported the replacement of the Pattullo Bridge. The mayors proposed to replace the Pattullo "as soon as possible with a new four-lane bridge that will have modern lane widths, better connections, a centre barrier and high-quality cycling and pedestrian facilities". The new bridge will be designed "not to foreclose the possibility of future expansion to six lanes". The general understanding is that the replacement bridge will be delivered as a full public-private partnership (P3) project. With respect to funding, it was anticipated that the federal and provincial governments will contribute to the capital cost and that tolls from the bridge operation (potentially collected by a concessionaire) would be available to meet both capital and operating expenses.

Round Seven P3 Canada Fund Application

In June 2015, TransLink applied for a 25 percent contribution of eligible capital cost from the federal P3 Canada Fund. In October 2015, TransLink was informed that the Pattullo replacement project was screened-in for further consideration. With a screened-in status, TransLink is now required to prepare a P3 business case for submission to P3 Canada by the end of March 2016.

Since October last year, TransLink has assembled a project team complete with designers and legal-financial advisors for its preparation of a P3 business case. TransLink has also initiated the environmental assessment process in support of the design and business case preparation. To date, TransLink has not announced the details of public consultation required for the P3 business case.

DISCUSSION

Key Considerations in the Replacement Project

The following are Surrey's key considerations for participating in the planning and design of the Pattullo replacement project:

- Connection to South Fraser Perimeter Road (SFPR);
- Business case evaluation of laning (including constructing a 6-lane bridge);
- Criteria and timing for expansion to a 6-lane bridge; and
- Tolling of the new bridge.

SFPR Connection: Without the provision of direct connections to the SFPR, external traffic, including truck movements, must be accommodated on King George Boulevard, Bridgeview Drive and Tannery Road. Traffic modelling work has demonstrated that this will result in congestion and disruption on the City road network. As such, Surrey has advised TransLink that we cannot support the bridge replacement project without the direct connections to the SFPR. Staff are currently working with TransLink to further develop the options associated with these direct connections.

Business Case: As a requirement to provincial and federal funding, a business case is required that will assess various laning options, including a 6-lane bridge. The absence of a business case comparison between a 4- and 6-lane bridge will not allow an evidence-based decision to be made on the laning of the replacement bridge. Stakeholders and public officials must fully understand the benefits and disbenefit of the laning decisions.

When and How - Expansion to Six Lane: According to the Mayors' Council investment plan, the design of the 4-lane bridge must accommodate future expansion to 6-lanes. The key consideration would include the development and agreement of criteria for expansion, and the timing of expansion once conditions are met for expansion and possible funding. It has been noted that future expansion of a bridge operated by a concessionaire could pose financial and design challenges.

Tolling of the New Bridge: Current indications point to a full P3 project for the new Pattullo Bridge. This will involve a design-build contract likely with private financing and an operation/maintenance contract over a concession period, with tolls collected by the concessionaire. For the past 10 years, Surrey had raised the issue of equity of tolled crossings of the Fraser River for South of Fraser residents and the need of an equitable regional transportation pricing scheme. It is expected that a project toll will be imposed when the new bridge opens six or seven years from now, and the planning challenge is on the implementation of an equity tolling scheme that will allow future integration into a regional mobility pricing plan. As an interim measure prior to the full implementation of mobility pricing, consistent tolling of all the Fraser River crossings may be considered to meet equity and demand management objectives.

The above key considerations will be in the forefront when staff begin to participate in TransLink's design process of the bridge replacement.

Memorandum of Understanding

Drafts of an MOU have been prepared by TransLink and reviewed by Surrey and New Westminster since August 2015. The current version of the Pattullo Bridge Replacement project MOU is attached as Appendix "I".

The discussions on the components of the MOU, with reference to the four key Surrey considerations: i) connection to SFPR; ii) business case evaluation; iii) the process of the expansion to 6-lanes; and iv) the tolling of the new bridge, are presented as follows:

Context: The MOU clearly stated TransLink's ownership and its lead role to deliver the project, and made specific reference to the Mayors' Council plan on the priority of the replacement to a 4-lane bridge with a design that will not foreclose potential future expansion to six lanes.

Project Timeline: It is understood that TransLink will be submitting a P3 business case in March 2016 as a requirement for the Round Seven application for P3 Canada Fund. As well, the MOU referred to procurement readiness by 2017, consistent with internal information to the TransLink Board for a commitment by October 2017. Procurement readiness would denote the completion of the necessary design, cost estimation and documentation that will allow TransLink to issue request for qualifications followed by request for proposals for the construction of a 4-lane bridge. Staff will seek confirmation of the project timeline and milestone within the context on the decision of bridge approach design and timing for the 6-laning of the replacement bridge.

Business Case for Different Bridge Laning Configurations: The MOU includes a commitment to prepare business cases for a 4-lane (tolled and untolled), 6-lane (tolled and untolled), a rehabilitated bridge, and no bridge solutions. The business cases are cited as requirements for provincial and federal funding deliberations. Staff fully support the preparation of the business cases to demonstrate benefits and performance of the laning options of the new bridge so that an evidence-based decision can be reached.

Bridge Approach Design: The MOU states that TransLink and Surrey will work jointly in 2016 to define and complete an analysis and approval process for the bridge connections on the south shore. Staff will participate in the design process to ensure direct and efficient connections will be made from the new bridge to SFPR.

Expansion to 6-Lane: The MOU reiterated the Mayors' Council expectation that future expansion to 6-lanes is subject to an all-party agreement and Mayors' Council approval, and that the parties agree to start work on development criteria for an all-party agreement for future expansion. Staff will negotiate with TransLink on the 6-laning of the bridge with considerations given to the bridge approach design and the business case comparison between a 4- and 6-lane bridge.

Bridge Toll and Regional Mobility Pricing: The MOU acknowledges road usage charges in the form of bridge specific point toll will fund the majority of the cost of the project. It is understood that over the longer term, mobility pricing in the form of time and distance based road tolls will be used to fund the project. The details of the initial bridge toll will likely be determined as a part of the P3 project agreement with the participation of the concessionaire. Staff will seek clarification on the timing and the mechanism that will integrate the regional mobility pricing into an existing bridge toll regime. Staff will also explore the agreement to a time limit in which a bridge toll is imposed on the new bridge.

Public and Stakeholder Consultation: This important aspect of the replacement project will be determined jointly, with TransLink, Surrey and New Westminster participation. Information sessions and open houses will be scheduled for the public and stakeholders. Staff will report back on the timeline and details of the consultation process.

SUSTAINABILITY CONSIDERATIONS

Progress toward the delivery of the Pattullo Bridge Replacement project advances the following actions items in the City's *Sustainability Charter*:

- EC3: Sustainable Infrastructure Maintenance and Replacement; and
- EN15: Sustainable Transportation Options.

CONCLUSION

In seeking partnership on the project, TransLink had prepared a project MOU for the City of Surrey and New Westminster's review and consideration so that guidance can be provided to the parties for the collaboration needed to attain procurement-readiness by fall 2017.

Council's authorization to staff to execute the project MOU will enable staff to continue their coordination efforts that will allow the negotiation of the following key project matters important to Surrey:

- Ensure direct and efficient connections between the new bridge and SFPR;
- Determine the criteria and timing for expanding the replacement bridge to a 6-lane bridge, vis-à-vis business case outcome for the 4- and 6-lane bridge options; and
- Identify and confirm how to integrate the near term bridge toll to the implementation of the longer term equitable regional time- and distance-based mobility pricing plan.

Staff will continue to update Council on the progress of the replacement project and the public consultation program details.

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

FS/JB/PL/clr

Appendix "I" – Revised Memorandum of Understanding, Pattullo Bridge Replacement Project -
draft version 5

g:\wp-docs\2016\admin\cr\02291345-pl (vl) 4.docx
CLR 3/3/16 12:02 PM

**REVISED MEMORANDUM OF UNDERSTANDING
PATTULLO BRIDGE REPLACEMENT PROJECT – draft version 5**

THIS MEMORANDUM OF UNDERSTANDING is dated as of the ____ day of ____, 2016.

AMONG:

South Coast British Columbia Transportation Authority (“TransLink”)

AND:

City of Surrey (“Surrey”)

AND:

City of New Westminster (“New Westminster”)

WHEREAS:

- A. TransLink is the owner of the Pattullo Bridge (the “Current Bridge”) that spans the Fraser River, connecting Surrey and New Westminster. The Current Bridge opened in 1937 and, as part of the Major Road Network, is a critical transportation link for the movement of people, goods and services in Metro Vancouver. The Current Bridge is aging and faces a number of challenges, including structural, capacity and pedestrian, cyclist and motor vehicle safety concerns.
- B. In the 2014 Mayors’ Council *Regional Transportation Investments, a Vision for Metro Vancouver* (the “Vision”), the Mayors’ Council identified the replacement of the Current Bridge as a priority to ensure that the transportation needs of the region are met. The Vision represents an interrelated package of regional transportation improvements. Significant investment in transit services south of the Fraser River and the introduction of mobility pricing in the region are other essential components of the package.
- C. Working with regional partners, TransLink is committed to all elements of the Vision, and is actively making progress on the design and financing for improved transit service south of the Fraser River, and laying the groundwork for the regional discussion on mobility pricing.
- D. As owner of the Current Bridge and as the regional transportation authority, TransLink is also leading a project (the “Project”) for the replacement of the Current Bridge with a new Pattullo Bridge (the “Replacement Bridge”). As the Replacement Bridge will be in substantially the same location as the Current Bridge, with the abutments and approaches located in Surrey on the South side and in New Westminster on the North side, the parties wish to work collaboratively in the development of the Project scope and advancing the Project to the procurement stage.

THIS MEMORANDUM OF UNDERSTANDING WITNESSES that in consideration of the premises, mutual covenants and agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by each of the parties hereto, the parties agree as follows:

1. PURPOSE

The purpose of this memorandum of understanding (“MOU”) among TransLink, Surrey and New Westminster is to provide guidance to the parties with respect to a collaborative approach to the development of the Project to the procurement-readiness stage by no later than fall 2017, including planning for associated changes to road access and connecting streets, sidewalks and bikeways, consistent with principles and objectives established through the collaborative Pattullo Bridge Review Consultation (2013-2014) and the Mayors’ Council on Regional Transportation Investments: A Vision for Metro Vancouver.

For greater certainty, the parties agree that this MOU does not govern the procurement and implementation of the Project, nor does this MOU impose any obligations on any party with respect to any matters outside of this MOU. Notwithstanding anything contained in this MOU, TransLink will retain ownership of the Replacement Bridge and any associated infrastructure.

2. PROJECT OWNERSHIP AND WORKING RELATIONSHIP

TransLink is the owner and delivery agent for the Project. TransLink will have the ultimate responsibility and decision-making authority for the Project and for the delivery of the Replacement Bridge, including as applicant of record for funding and for procurement processes.

The activities required to achieve procurement-readiness by 2017 will be led by TransLink. TransLink commits to work closely and collaboratively through technical committees with Surrey and New Westminster to define, address and resolve Project Scope issues related to procurement-readiness that affect the municipalities.

3. PROJECT SCOPE AND DEVELOPMENT

The parties agree that the following guiding principles will inform the Project scope and development:

3.1 Replacement Bridge Design Concept

- Consistent with the Mayors’ Vision, the Replacement Bridge is to be constructed as a tolled four lane bridge, but will be designed in a manner so as not to foreclose potential future expansion to six lanes.
- A potential future expansion to six lanes is subject to an all-party agreement and the Mayors’ Council approval. The parties agree to start work in 2016 on developing criteria for future expansion.
- Cycling and pedestrian facilities on the Replacement Bridge will meet applicable design guidelines and connect with established routes on both sides of the Fraser River.
- Measures that discourage suicides will be included in the design of the Replacement Bridge.

- The Replacement Bridge design will accommodate, where practicable, committed and future planned municipal, regional, provincial and federal infrastructure projects.

3.2 Approaches

- South shore: connections will consider movements to and from King George Boulevard, Scott Road, Highway 17, and other adjacent multi-modal transportation infrastructure. TransLink and Surrey will work jointly in 2016 to define and complete an analysis and approval process for the bridge connections on the south shore. This will include analyzing costs, benefits, impacts and technical feasibility; and engaging with the community as needed.
- North shore: connections will consider movements to and from Royal Avenue, Columbia Street, McBride Boulevard, and other adjacent multi-modal transportation infrastructure. TransLink and New Westminster will work jointly in 2016 to define and complete an analysis and approval process for the bridge connections on the north shore. This will include analyzing costs, benefits, impacts and technical feasibility; and engaging with the community as needed.
- Both shores: opportunities to increase livability, rationalize truck movements, and minimize the impact of the project on the community will be considered and analyzed.
- Both shores: At later stages in the Project, the parties will identify and determine responsibility for maintenance obligations with respect to the approaches and ancillary road works.

3.3 Road Works and Community Impacts

- Community concerns and input with respect to traffic and construction impacts will be considered, analyzed and addressed as part of the design and procurement readiness work.

3.4 Design Guidelines

- The Replacement Bridge will be designed to meet or exceed relevant TAC and municipal roadway guidelines for all modes.

3.5 Public and Stakeholder Consultation

- The Project will include public and stakeholder engagement at specified milestones.
- The parties wish to carry out the Project in a manner that respects the public and all stakeholders. The parties will work together to determine the scope, timing, and format of consultation, and will jointly participate in the development and coordination of any public and stakeholder consultation with respect to the Project, including information sessions and open houses.

- Public and stakeholder consultation will include a focus on integration of the Replacement Bridge and approaches into the specific urban contexts of Surrey and New Westminster.

3.6 Planning for Construction

- The parties agree to develop a construction approval process that ensures timely delivery of the Project.

4. PROJECT FUNDING

- Consistent with the Vision, the parties acknowledge that road usage charges will fund the majority of the cost of the Replacement Bridge. These charges can take several forms, from bridge-specific point tolls to broader time-and-distance based road tolls.
- The parties acknowledge that Project tolls are governed by the *South Coast British Columbia Transportation Authority Act* ("SCBCTA Act"), and as such need to be introduced and managed in accordance with the provisions of the SCBCTA Act.
- TransLink is committed to exploring opportunities to apply for provincial or federal funding for the Project. Business cases will be prepared and submitted in 2016 to meet the funding application requirements of the Provincial and Federal governments. The business case submission to the Province will include a comparative evaluation of various bridge solution options considered during the Strategic Review process (2012-2014),. The analysis will be completed to the satisfaction of the Province. TransLink may request that New Westminster and Surrey provide general letters of support for the project as part of the applications for senior government funding.

5. TIMING

All parties acknowledge that time is of the essence for delivering the Project. All parties are committed to collaborating in good faith and to resolving issues expediently, with the objective of advancing the Project to a procurement-ready stage by 2017.

6. COMMUNICATIONS PROTOCOL

The parties agree that TransLink will be the lead agency for any public communications (including social media and internet) relating to the Project.

The parties will ensure that all public messaging with respect to the Project is coordinated. As needed, the parties will collaborate to develop messaging in a timely manner.

7. GENERAL

The parties will revisit this MOU as is necessary to ensure the MOU continues to meet the Project needs.

This MOU is a statement of intent to summarize the collective wishes of the parties. This MOU is not intended to preclude future Project partnership agreements explicitly needed for Project delivery, and shall not bind the negotiation and execution of a formal partnership agreement for the Project. This MOU may be executed in counterparts and when counterparts have been executed by the parties, each originally executed counterpart, whether a facsimile, photocopy, PDF or original, will be effective as if one original copy had been executed by the parties.

The parties have executed this MOU on the date first set out above.

**South Coast British Columbia Transportation
Authority** by its authorized signatory

City of Surrey
by its authorized signatory

Cathy McLay
Acting CEO, TransLink

Vincent Lalonde
City Manager

City of New Westminster
by its authorized signatory

Lisa Spitale
Chief Administrative Officer