Summary report on the Cycling Connections Working Group for the George Massey Tunnel Replacement Project (GMTRP)

This working group was active in 2016 and 2017.

Summary report prepared by Jeff Leigh, HUB Cycling, June 2021

Background

Following many months of meetings with the GMTRP team, project engagement leads, MoTI staff, and eventually with Minister Stone, a joint working group on cycling connections for the GMTRP was established by MoTI.

Members of this Working Group were the project team (Joost Mayboom, Amber Standbridge, Erin Sept); HUB Cycling (Jeff Leigh, Arno Shortinguis); City of Richmond (Joan Caravan); City of Delta (Doreann Mayhew, Hon Yee); MoTI Lower Mainland District (Matthew Foley); and Translink (Rex Hodgson).

HUB Cycling letter of January 28, 2016, to MoTI

HUB Cycling letter of March 18, 2016, to MoTI

MoTI letter of May 22, 2016, establishing the GMT Cycling Working Group

Summary of Working Group activities

The HUB Cycling position was that as the GMTRP project had a defined scope from the Oak St Bridge to the Hwy 91 interchange (24 km), and the MoTI policy coverer including cycling infrastructure on all Ministry projects, that there was an MoTI obligation to provide a safe and comfortable active transportation route for the 24 km distance, and not just for the 3.5 km of bridge deck. The Ministry originally noted that cycling was not considered during planning or design for improvements to the corridor as cycling was not permitted on Hwy 99. No analysis was provided (as per the policy requirement). HUB Cycling maintained that the Ministry had an obligation, and it could make sense for some or all the route to be constructed outside the formal Hwy 99 ROW, but that MoTI had an obligation to fund this work and ensure that it was completed concurrent with the opening of the new crossing.

The Port Mann bridge project provided valuable lessons learned in terms of cycling connections. In that case, the project team relied on the cities of Surrey and Coquitlam to provide the connections, and established project-specific funding for each municipality to assist them in doing so. Surrey took advantage of that and built new connections to the bridge. Coquitlam did not do so, and this left the new Port Mann crossing, complete with a MUP to Coquitlam, without suitable connections on the Coquitlam side. This has been considered a failing by many parties. There was an interest in avoiding a repeat of this situation.

Some early decisions made by the working group were:

1) While the Oak Street Bridge was the northern project scope limit, it made sense to consider active transportation connections to the Canada Line Bridge, with a MUP to Vancouver, instead of the Oak Street Bridge.

2) While the project corridor ran to the Hwy 91 interchange, and this would support travel onwards to the US border (as an example), the BC Ferry terminal at Tsawwassen was a significant destination. The GMTR project would not include a connection to that destination but should consider the need for such a connection while considering alternate routes along the Hwy 99 corridor.
3) The Hwy 99 right of way (ROW) was established as the base case for purposes of evaluation. It was clearly understood that there were constraints related to the ALR, the width of the existing ROW, existing easements related to a YVR fuel pipeline and high-tension power lines, private property, and so on. That said, by scoring the base case the working group was able to establish targets.
4) HUB Cycling was represented by the Regional Advisory Committee (RAC), a HUB Cycling board committee, that assumed the responsibility of liaising with HUB Cycling local committees in Richmond and Delta, and other cycling advocacy organizations.

HUB Cycling maintains a Gap Priority List for cycling network gaps. HUB had developed a scoring system for assessing network gaps, considering utility (flatness, directness, local connections, regional connections, destinations, etc); safety (path width and surfacing, lighting, intersections, vehicle volumes and speeds, etc) and practicality (technical feasibility, cost, etc). This scoring method was adapted to allow the evaluation of route alternatives. This approach was later formalized in the MoTI Connections Project, with the development of an MoTI scoring methodology for active transportation gaps, based largely on the HUB Cycling system. In this case scoring was carried out by each Working Group member, drawing in input from others (such as the HUB Cycling local committees). Scores were summarized for a variety of potential routes, considering both north of the new crossing, and south of the new crossing.

After considering various alternatives, the evaluated routes for the Richmond (northern) section were:

R1: Hwy 99 ROW
R2: Garden City Road
R3: Shell Road
R4: Sidaway Road
R5: Transit Lane Connection
R6: Williams Road Connector

The evaluated routes for the Delta (southern) section were

D1: Hwy 99 ROW
D2: Ladner Trunk Road
D3: Burns Drive
D4: Arthur Drive
D5: Hwy 17A
D6: Hwy 17 (SFPR)
D7: 64th Street/Dike Trail
D8: 68th Street/River Road

These routes are further described on the following documents:

Static version of map of alternative routes north of the new bridge

Google Map for Richmond alternative routes north of the new bridge

Static version of map of alternative routes south of the new bridge

Google Map for Delta alternative routes south of the new bridge

Scoring Table Summary November 17, 2016 (Richmond) (consolidated input)

Scoring Table Summary November 17, 2016 (Delta) (consolidated input)

These maps and tables were reviewed by the Working Group on December 14th, 2016 (Richmond side) and January 10th, 2017 (Delta side).

The MoTI meeting notes for those sessions are linked here:

Working Group Meeting Notes Dec 14, 2016 (Richmond)

Working Group Meeting Notes Jan 10, 2017 (Delta)

Funding of the improvements

There was regular discussion during multiple meetings of the Working Group on how funding could be addressed. Municipal staff raised the issue that Bike BC funding, which was proposed at one point by the project team for any municipal improvements, was inappropriate given that it was short term (one year) and that this would not support the required planning and construction for a multi year project. Also, Bike BC funding is often oversubscribed. It was agreed in principle that the Bike BC funding mechanism could be utilized successfully for this project, if the terms of the grants were modified to suit the project, and the funds provided were over and above annual Bike BC funding grants.

Findings of the Working Group

At the Dec 14, 2016, meeting we agreed as a working group that the MoTI Hwy 99 ROW was optimum for directness and safety. It did not have the highest score for utility, as it is not as close to population centres which could put more volume on a route nearer those population centres. We agreed that beyond the Hwy 99 ROW, the best alternate route was along the Shell Road alignment. We also agreed that there are specific sections of the Hwy 99 ROW that are particularly advantageous for a more direct route (understanding the challenge in utilizing the Hwy 99 ROW for the full length, due to the ALR, space limitations, etc). The most critical piece north of the new bridge is to understand how to connect more efficiently at the north end, to the Canada Line bridge, then south from there to Shell Road. This would avoid the heavy traffic around the north end of Garden City Road. Richmond city staff noted they had plans to improve River Road, and that could form part of the solution. After agreement on the preferred route, the chief project engineer requested that City of Richmond staff prepare a price estimate. Staff agreed to have high level pricing available within several weeks. This would all be subject to municipal agreements, but we saw a pathway to a joint approach.

A key comment from the project team staff was that if we utilized the Shell Road alignment and addressed the low scoring parts (primarily the connections at the north end), this route would potentially have a higher score than the Hwy 99 ROW by itself. All agreed. That was then discussed in terms of a blended solution being better than individual routes that were being compared to each other.

A high-level summary of the recommended route through Richmond is:

- From the Canada Line Bridge, a new path under the Oak Street Bridge to get to Bridgeport, from place markers 1 to 2.
- Connect through to Shell where it crosses Hwy 99 (multiple options were available for evaluation), from place markers 2 to 3
- South on Shell to Williams
- Jogging over to Hwy 99 on Williams and Steveston Hwy

At the January 10, 2017, meeting we agreed that the MoTI Hwy 99 ROW south of the new bridge would be optimum for directness and safety, but that there were useful sections such as Burns Drive that should logically form part of the new route. We agreed to focus on what the optimum end to end route would look like, to reach the Hwy 91 interchange from the new bridge. Note that we did not focus on north south routes to Ladner and the ferry terminal. Those were outside of the project scope, but we considered them because we wanted to make sure that the improvements along Hwy 99 could connect efficiently to them. After agreement on the preferred route, the chief project engineer requested that City of Delta staff prepare a price estimate. Staff agreed to have high level pricing available within several weeks.

A high-level summary of the recommended route through Delta is:

- From River Road utilizing 60th Ave and 64th Street to reach Burns Drive. An alternative connection at the north end involves utilizing the Hwy 99 ROW and constructing a MUP on the south side of Hwy 99, from the new bridge to 64th Street, where a tunnel provides access to Burns Drive.
- Burns Drive to 96th
- Hornby Drive from 96th
- An extension of Hornby Drive from 112 to Hwy 91

To connect to the ferry terminal, the alternatives considered were Arthur Drive and 17A.

At this point, the GMTRP was suspended. The Working Group did not meet again. The Working Group's recommendations were not formally submitted. They are recounted here in the hope that the work done in 2016-2017 can inform decision making related to the George Massey Crossing project in terms of appropriate cycling connections, as the GMC project proceeds,