

To: CAO for the Regional and Corporate Services Committee

Date: 2019-07-09

From: Alison Stewart, Manager of Strategic Planning

File No: 8330-02-03

Subject: Future Rail Transit in the Fraser Valley

RECOMMENDATION

THAT the Fraser Valley Regional District Board remain focused on its priority of strongly encouraging the province to expedite the widening of Highway 1 to support HOV/bus lanes as a means of improving the viability of transit, improving public safety and supporting the broader Fraser Valley economy;

AND THAT the Fraser Valley Regional District Board request that TransLink directly engage the Fraser Valley Regional District, member municipalities, BC Transit and the province on those aspects of the *Transport 2050* Plan that consider inter-regional linkages and policies that may impact this Region.

STRATEGIC AREA(S) OF FOCUS

Support Environmental Stewardship
Foster a Strong & Diverse Economy
Support Healthy & Sustainable Community
Provide Responsive & Effective Public Services

BACKGROUND

At the June 11, 2019 Regional and Corporate Services Committee meeting, representatives from the South Fraser Community Rail initiative attended as a delegation to discuss the reactivation of the Interurban Corridor for passenger rail service utilizing hydrogen technology. The Committee resolved “THAT the proposal provided by South Fraser Community Rail with respect to Community Rail South of the Fraser on the Interurban Corridor be referred to staff to report back for further discussion at an upcoming Board meeting.”

DISCUSSION

With congestion issues on Highway 1, the concept of introducing passenger rail service south of the Fraser River has received a lot of attention recently. South Fraser Community Rail has proposed reactivating the Interurban line between Surrey and Chilliwack at a stated cost of \$12.5 million kilometre (km) or \$1.25 billion.

The FVRD recognizes the efficiency and effectiveness of rapid transit, but the immediate need for Highway 1 improvements should not be overshadowed by the long-term potential for rapid transit. The FVRD and member municipalities are actively engaging the province on urgently needed improvements to Highway 1 to address congestion issues that are increasing economic, social and public safety costs throughout the Fraser Valley. The FVRD's priority remains focussed on the need for the province to expedite its commitments of expanding Highway 1 to include HOV/Bus lanes from 264th to Whatcom Road, and ultimately to Chilliwack.

The broader economic impacts of Highway 1 congestion cannot be ignored. While traffic delays are an inconvenience to commuters, there is a broader economic impact associated with delays. Regular traffic delays can increase the costs of commercial transport, which can translate into increased prices of goods and services. Research has shown that goods transport has less flexibility than commuting in terms of choosing the times and route of travel. This makes it difficult for businesses and truckers to meet delivery schedules and increases business costs. Workers and independent contractors in the Trades also find it increasingly difficult to provide their services to clients in western portions of the Lower Mainland. This is especially relevant to the FVRD where the transportation and construction sectors are significant employers. It is unclear how reintroducing the Interurban line will address these concerns given the nature of this region's labour force and commuting patterns.

Reintroducing passenger rail to the Interurban corridor between Surrey and the City of Chilliwack is not a new proposal. The most recent proposal involves reactivating the Interurban corridor using new hydrogen powered trains currently being implemented in Germany. The \$12.5 million per kilometer "all in" cost provided by the proponents is based on a 2010 Leewood Engineering study and equates to a total of \$1.25 billion for the 100 km route. While the June 11 presentation (Appendix C) stated a number of times that the reactivation of the Interurban passenger rail corridor will be "at NO Cost for its use" in terms of rail access fees, other costs will be involved and it is unclear if the new proposal takes into account annual operating and debt servicing costs or updated land acquisition and infrastructure upgrade costs.

Annual operating costs do not appear to be included in the presentation, but for context, in 2017 TransLink estimates of annual operating costs for the proposed light rail and SkyTrain routes along the Fraser Highway corridor (Surrey-Langley) were projected to be \$18.3 million and \$25.6 million respectively. While not necessarily a representation of potential annual operating costs for the community rail proposal, it does provide some context. More detailed financial analysis, including annual operating cost estimates are needed to fully understand the financial and tax implications of the proposal.

Interurban Rail Line Route and Potential Station Locations



Source: Strategic Review of Transit in the Fraser Valley, 2010

While hydrogen powered rail is new, reinstating the Interurban rail line is not. It is important to consider the proposal in context of analysis undertaken as part of the “*Strategic Review of Transit in the Fraser Valley*”, (Strategic Review) a 2010 initiative led by the Ministry of Transportation and Infrastructure (MOTI), in partnership with the FVRD, BC Transit and TransLink. This study led to the development of the 2012-2013 Transit Future Plans for Chilliwack and Central Fraser Valley transit systems. At the time of the *Strategic Review* the FVRD was not directly involved in the provision of transit.

In relation to rail, the study assessed:

- Extension of West Coast Express to Abbotsford
- Inter-urban rail line.

The high level cost assessment included:

- Track upgrades (for Interurban, based on 2006 DRL Solutions study)
- Operating costs (operator wages, vehicle maintenance, fuel, administration and other relevant costs)
- Rolling stock
- Cost per ride
- Cost per service hour

The *Strategic Review* concluded that while expanded rail remains a possible feature of the transit system in the Fraser Valley for the long-term, costs were prohibitive in the foreseeable future. The route summary and comparative costs from the Strategic Review report are presented below. Note that this analysis pre-dates the planning and implementation of the Fraser Valley Express.

**Inter-Urban Corridor Summary Features
(Surrey to Chilliwack)**

Feature	Assumption
Route Length	100 km
Line Time	90 min
Operating Performance	Max operating speed = 60 kph Accel/decel rate = 4 kph/s Station dwell time = 30 sec
Stations	5 between Scott Rd and Langley City 4 between Langley City and Abbotsford Downtown Chilliwack
Frequency	30 min (peak period only) 30 min (60 min off peak)
Annual Service Hours	Peak Period Service - 5,200 hours Daily Service - 13,000 hours
Vehicle Types	Peak Period Service – Diesel multiple unit, heavy rail Daily Service – Diesel multiple unit, light rail

**Economic Evaluation of the Inter-Urban Line
(Chilliwack to Surrey)**

Corridor Connection	Type of Vehicle	Route Length	Peak Transit Travel Time	2031 Daily Boards	Peak Frequency (off-peak)	Annual Service Hours	Ann Op & Veh Cost	Ann Cap Cost	Cost/Ride (\$)	Cost/Serv Hour
Units		(km)	(min)	(#psgr)	(min)	(hours)	(2031 mil)	(2031 mil)	(2031 \$)	(2031 \$)
Inter-urban Line <i>Chilliwack – Surrey Scott Road Station</i>	Heavy DMU	100	90	3,900	30 (none)	5,200	\$10.3	\$101	\$110	\$21,500
	Light DMU	100	90	6,800	30 (60)	13,000	\$11.5	\$165	\$100	\$13,600
Highway 1 <i>Abbotsford-North Surrey 200th St</i>	Express Coach Bus	30	35	4,000	10 (20)	25,600	\$3.6	\$3.3	\$5.75	\$270
Fraser Hwy <i>Abbotsford-Langley</i>	Express Coach Bus	32	40	3,800	10 (20)	31,600	\$4.6	\$0.3	\$4.30	\$155
Highway 1 <i>Chilliwack – Abbotsford</i>	Express Coach Bus	30	30	800	30 (60)	7,600	\$1.0	\$0.1	\$4.30	\$135

Among other things, the findings estimated that the cost per service hour for a commuter rail service would be significantly higher than most alternatives considered, including a premium bus service in a dedicated lane on Highway 1. It also found that:

“Significant investment is required in the Fraser Valley just to get a desirable level of local, regional and inter-regional transit to move from a \$10 million per year system to almost \$90 million in 2031. The 2031 annual operating and debt service cost for a commuter rail service along the inter-urban line between Abbotsford and Surrey of approximately \$68.9 million would almost equal that of the entire investment required to achieve the [Strategic Review] Vision.”

It is not the intent of this report to judge the merits of the various studies that have been undertaken by government agencies and project proponents. Whatever its form, rapid transit within Metro Vancouver will require support from TransLink. TransLink is currently implementing the Mayor's Council's Vision, which includes rapid transit between Surrey and Langley. At the request of the City of Surrey TransLink is moving away from rail (in this case, light rail) within Surrey and updating the South of Fraser rapid transit strategy to incorporate Sky Train service along the Fraser Highway to the City of Langley.

It is agreed that congestion along Highway 1 is a serious issue and rapid transit in one form or another will be necessary to accommodate future population growth in the Fraser Valley in the long term. For rail transit along the Interurban route to become a reality, a number of questions must be answered:

- Does TransLink support the initiative? It is not currently included in the Mayors' 10 year vision and related investment plans (Note: June 12, 2019 TransLink report does not indicate support).
- Does CP Rail agree with the interpretation of the "Master Agreement" mentioned in the presentation?
- Who would design/build/operate the service?
- Beyond grants from senior governments, how will construction and operation of the service be funded given the FVRD's comparatively small tax base and limited taxing authority? What are the tax implications?
- How would this proposal impact existing and planned municipal conventional transit services in the Fraser Valley?
- What share of FVRD commuters would be served (where people work) and, based on commuting patterns, how many passenger vehicles would be diverted from Highway 1?
- What does the "all-in" cost of \$12.5 million per km include? Does this include land acquisition costs, infrastructure improvements (stations, upgraded crossings, upgraded rail bed/rails, hydrogen production/storage facilities etc), rolling stock (approximately \$8.6 million per unit), annual operating & debt servicing costs?
- Is the Interurban the most efficient and effective route? With Sky Train eventually serving the City of Langley, would continuation of Sky Train to Abbotsford along the Fraser Highway and then on to Chilliwack on either Hwy 1 or the Interurban RoW be a better solution? Are there other solutions, (rail or non-rail) along the Hwy 1 corridor or an extension of the WCE or others?
- How proven is the technology? Are there other, less expensive technologies, or other new technologies on the horizon (eg. autonomous public transit) that can meet the region's needs?

Given these questions, a detailed and up-to-date business case is required to verify the technical requirements and full costs required to build and operate such a system.

The FVRD and local governments recognize the efficiency and effectiveness of rapid transit and are taking steps to realize this long term goal. With FVRD and BC Transit services already interfacing with TransLink services the FVRD is regularly engaged on regional transit issues, including long range planning. The current RGS and draft RGS update supports a region wide transit network that is affordable and convenient. Transit growth in the FVRD, including rail, can be facilitated by the following priorities:

- Expansion of Highway 1 to include HOV/Bus lanes from 264th to Whatcom Road, and ultimately to Chilliwack, creating streamlined transit connections to Skytrain services in Burnaby.

- Work with BC Transit, TransLink, and other regional partners to establish and expand a reliable, accessible and affordable regionally integrated public transit system that links communities both within and outside the region.
- Work with local governments and other stakeholders to set transportation standards and priorities, identify core transit corridors, protect transportation rights of way and explore funding options.
- Encourage the integration of existing railway infrastructure and waterway transportation systems into regional plans.

South Fraser Community Rail Delegation Request

The South Fraser Community Rail delegation has asked that the FVRD Board of Directors by resolution to request that BC Transit Boards of Directors and separately the TransLink Mayor's Council be directed to participate in the South Fraser Community Rail's public engagement process, specifically on the reactivation of the Interurban rail line. In its submission, South Fraser Community Rail has specifically asked:

- "By resolution of the FVRD Board of Directors to meet or write to the B.C. Transit Directors requesting a Public Engagement Process with respect to the Reactivation of the Interurban Corridor specifically. That the community is involved in the makeup of this process so that this process and results will be respected by the communities it serves."
- "By resolution of the FVRD Board of Directors to meet or write to TransLink's Mayor's Council requesting that they become actively involved in this process. If rejected by TransLink that B.C. Transit and the FVRD move forward on an independent Public Engagement Process."

BC Transit does not have a mandate to pursue commuter rail in the Fraser Valley at this time and TransLink has indicated in its June 12, 2019 "*Interurban Passenger Rail*" report that it does not support the South Fraser Community Rail proposal. TransLink has indicated that it will consider the Interurban corridor as part of its *Transport 2050* plan. Rather than supporting the delegation's request it is more appropriate for the FVRD to directly engage TransLink through its *Transport 2050* planning process. Ultimately TransLink and Metro Vancouver communities will bear the majority of the significant costs of such a service.

BC Transit was involved in and supported the findings of the *Strategic Review of Transit* initiative in 2010, which included the fore mentioned assessment of reactivating the Interurban Corridor. Since then BC Transit has undertaken two Transit Future Plans in the region (2012-13) and is currently undertaking Transit Future Action Plans in 2018-2019. Public engagement has been part of that process which has generated conversations about a wide range of transit issues, including for the long term need for rapid transit in the region including the possibility of rail. At this time BC Transit does not have a mandate from the province to pursue rail in the Fraser Valley and any public engagement on such a specific proposal would be premature and will not have been budgeted for.

From a TransLink perspective, on June 12, 2019 TransLink publicly released a report titled “*Interurban Passenger Rail*” providing a high-level assessment of the South Fraser Community Rail proposal. In short, TransLink does not support the proposal as a replacement for already approved rapid transit investments in Metro Vancouver. However, according to the report:

“The concept of using existing rail corridors and infrastructure in the rapidly-growing Lower Mainland is one that TransLink will be exploring through the update to the long-range strategy, *Transport 2050*. *Transport 2050* will examine the long-term demand for improved inter-regional connections between the Metro Vancouver region and the Fraser Valley and examine what corridors could viably serve that demand. TransLink staff have met with proponents of the idea twice in lengthy meetings to hear the proposal and have shared with the group that management will be recommending that the Interurban concept be considered through the *Transport 2050* process.”

Passenger rail service south of the Fraser is desired by many, but it will require very considerable investment by provincial, federal and local governments in both Metro Vancouver and the Fraser Valley to be achieved within the timeframe of current plans. Endorsing a specific transit option without a full assessment of costs (capital and operating), benefits and alternative routes and technologies is not a prudent approach. Long term planning for rapid transit south of the Fraser is necessary and should be undertaken in collaboration with the Province, BC Transit and TransLink.

TransLink’s *Transport 2050* plan was recently initiated with a completion date set for late 2020. While the FVRD, BC Transit and municipalities may be invited to participate in the *Transport 2050* planning process in some capacity, the level of staff or political engagement in the planning process is not clear. TransLink is holding public engagement sessions in several FVRD communities this summer (Appendix B attached), but given the importance of this issue it may be appropriate for the region to formally request that TransLink directly engage the FVRD and member municipalities (and BC Transit) on those aspects of the Plan that could potentially impact FVRD communities.

COST

No cost at this time

CONCLUSION

Passenger rail service south of the Fraser is desired by many, but it will require very considerable investment by provincial, federal and local governments in both Metro Vancouver and the Fraser Valley to be achieved within the timeframe of current plans. The more immediate need to expand Highway 1 to include HOV/Bus lanes from 264th to Whatcom Road, and ultimately to Chilliwack, is a priority.

TransLink has indicated that it will consider the Interurban corridor as part of its *Transport 2050* plan. Rather than supporting the delegation's request it is more appropriate for the FVRD, BC Transit and others to directly engage TransLink through its *Transport 2050* planning process.

What this proposal does bring to light however is that a more comprehensive review of longer-term inter-regional connections is required, but widening Highway 1 remains a priority. Understanding the longer-term potential of alternative means of connecting the Fraser Valley and Metro Vancouver may be addressed by directly engaging with TransLink as part of their *Transport 2050* planning process.

COMMENTS BY:

Stacey Barker, Director of Regional Services: Reviewed and supported.

Mike Veenbaas, Director of Financial Services: Not available for comment.

Jennifer Kinneman, Acting Chief Administrative Officer: Reviewed and supported.

APPENDIX A: June 12, 2019 TransLink staff *Interurban Passenger Rail* report

APPENDIX B: June 25, 2019 e-mail to FVRD regarding *Transport 2050* public engagement sessions in several FVRD communities.

APPENDIX C: June 11, 2019 materials provided to FVRD Board by South Fraser Commuter Rail delegation.

OTHER INFORMATION:

The *Strategic Review of Transit in the Fraser Valley* report and foundation papers can be found at: <https://www2.gov.bc.ca/gov/content/transportation/transportation-reports-and-reference/reports-studies/transit#fraservalleytransit>.

The rail discussion can be found in: [Foundation Paper #4 Exploring the Possibilities for the Fraser Valley \(PDF, 7MB\)](#) starting on Page 53.

Surrey Rapid Transit Alternatives Analysis: Assessment of the Interurban Corridor, TransLink / MoTI, January, 2012 (attachment to June 12, 2019 TransLink [Interurban Passenger Rail](#) report)