



PUBLIC MEETING AGENDA

Revised: July 22, 2019

July 25, 2019, 9:00AM to 11:20AM

TransLink, Room 427/428, 400 – 287 Nelson’s Court, New Westminster, BC

Chair: Mayor Jonathan X. Coté **Vice-Chair:** Mayor Jack Froese

Note that times for each agenda item are estimates only. This meeting will be livestreamed and available afterwards on the Mayors’ Council’s [Facebook](#) page.

9:00AM	1. PRELIMINARY MATTERS	
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11:10AM	6. REPORT OF TRANSLINK MANAGEMENT	ORAL
11:20AM	7. OTHER BUSINESS	
	7.1. Next Meeting: September 20, 2019 at 9AM	
11:20AM	8. ADJOURN to closed session	

MEETING OF THE MAYORS' COUNCIL ON REGIONAL TRANSPORTATION

PUBLIC MEETING MINUTES

Minutes of the Public Meeting of the Mayors' Council on Regional Transportation (Mayors' Council) held Thursday, June 27, 2019 at 9:00 a.m. in Rooms 427/428, TransLink Head Office, 400 – 287 Nelson's Court, New Westminster, BC.

PRESENT:

Mayor Jonathan Coté, New Westminster, Chair
Chief Ken Baird, Tsawwassen First Nation
Mayor Neil Belenkie, Belcarra
Mayor Malcolm Brodie, Richmond
Mayor Linda Buchanan, North Vancouver City
Councillor Craig Cameron, West Vancouver
(alternate, arrived 9:11 a.m.)
Mayor Bill Dingwall, Pitt Meadows
Mayor George Harvie, Delta
Mayor Mike Hurley, Burnaby
Mayor Meghan Lahti, Port Moody
Mayor Mike Little, North Vancouver District
Mayor Doug McCallum, Surrey
Director Jen McCutcheon, Electoral Area A

Mayor Ron McLaughlin, Lions Bay
Councillor Chelsa Medus, Maple Ridge
(alternate)
Councillor Alison Morse, Bowen Island
(alternate)
Mayor Kennedy Stewart, Vancouver
Mayor Richard Stewart, Coquitlam
(arrived 9:15 a.m.)
Councillor Nathan Pachal, Langley City
(alternate)
Mayor Darryl Walker, White Rock
Councillor Blair Whitmash, Langley Township,
(alternate)
Mayor Brad West, Port Coquitlam

REGRETS:

Mayor John McEwen, Anmore

ALSO, PRESENT:

Mike Buda, Executive Director, Mayors' Council Secretariat
Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink
Kevin Desmond, Chief Executive Officer, TransLink
Sarah Ross, Director, System Planning, TransLink
Steve Vanagas, Vice-President Communications, TransLink

PREPARATION OF MINUTES:

Rae Ratslef, Recording Secretary, Raincoast Ventures Ltd.

CALL TO ORDER

A quorum being present, Chair Coté called the meeting to order at 9:03 a.m. and acknowledged the traditional territories on which the meeting was being held. The Chair welcomed recently elected Director McCutcheon, Electoral Area A to the Mayors' Council.

1. PRELIMINARY MATTERS

1.1 Adoption of Agenda

Draft Agenda for the June 27, 2019 Public Meeting of the Mayors' Council on Regional Transportation, revised June 24, 2019.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the agenda for its Public meeting scheduled June 27, 2019, revised June 24, 2019.

CARRIED

1.2 Approval of Minutes (May 23, 2019)

Draft Minutes of the Public Meeting of the Mayors' Council on Regional Transportation held May 23, 2019.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the minutes of its Public meeting held May 23, 2019.

CARRIED

2. PUBLIC DELEGATION PRESENTATIONS

Report dated June 20, 2019, from Mike Buda, Executive Director, Mayors' Council Secretariat, titled "Item 2 – Public Delegates".

Roderick Lewis

Referenced his distributed letter dated June 26, 2019 and requested that the Mayors' Council write the Minister of Infrastructure and Communities to request that Canada pay for: the \$1.3 billion committed funding shortfall for the Surrey Langley Skytrain; and at least one-third of design and construction costs for Massey Tunnel replacement.

Councillor Cameron arrived at the meeting.

Professor Patrick Condon

Referenced his distributed paper titled "Response from Fraser Valley Community Rail" and requested opportunity to provide a 30-minute presentation; tabled a detailed response to the staff report to highlight the main benefit of the proposal to restore the interurban service.

Mayor R. Stewart arrived at the meeting.

Greg Pepitas

Referenced a distributed binder from the South Fraser Community Rail Group; discussed origins of the name "Skytrain"; noted concerns with the capacity of Skytrain's Mark 1 cars; and urged the Mayors' Council to oppose the Surrey Fraser Highway Skytrain extension.

Anna Bui

Representing Metro Vancouver Alliance, spoke on the importance of HandyDART services to its member organizations and users; acknowledged recent passing of advocate Gary Brown; urged the Mayors' Council to write the Premier to remind him of his commitment to increase HandyDART by 5% for five years; and encouraged the Mayors' Council to match provincial contributions and to oversee the project.

Beth McKellar

Acknowledged the passing of advocate G. Brown, noted that more funding and improvements to HandyDART are essential; asked the Mayors' Council to follow up with the provincial government on its commitment to increase funding to HandyDART; advised of the establishment of the HandyDART Users Advisory Committee; suggested that bringing the service in-house would allow service to be increased without increased costs; and urged an audit of the HandyDART service.

3. REPORT OF THE REGIONAL TRANSPORTATION PLANNING COMMITTEE

Co-Chairs Mayor Richard Stewart, Coquitlam, and Director Larry Beasley, TransLink.

3.1 Late Night Transit Service Review

On-table report dated June 27, 2019, from Steve Vanagas, Vice-President Communications, titled "Item 3.1 – Late Night Skytrain and Services Review".

Kevin Desmond, Chief Executive Officer, TransLink, discussed the overarching objectives for the review, to better understand the needs for late night transit service, and to retain TransLink's commitment to ensuring reliable and safe Skytrain service. However, recognizing that Skytrain was not designed for 24-hour operation, the fundamental goal was to examine options for operating Skytrain late night while also allowing sufficient time for operations and maintenance.

Steve Vanagas, Vice-President Communications, TransLink, referred to a presentation titled "Late Night Service Review", and highlighted:

- Expert personnel involved in the review
- Background on the work, which included a stakeholder engagement process, a feasibility study, and exploration of options for late night service
- NightBus Hub and NightBus marketing campaign, which resulted in a 20% increase in use
- Findings that most cities do not offer late night rail services, with the exception of those with multiple rail lines
- Photos of the elevated Skytrain guideway system, which is a very constrained environment for maintenance and repairs
- Number of automated Skytrain systems and safety checks that require ongoing maintenance and capital projects on this 30-year old project
- 24/2 Ridership impact chart, which looked at 24-hour service on the weekend and extending service hours Monday-Thursday
- Summary of the technical study, which found there is a real risk in the delivery of projects and maintenance and would have a significant passenger impact overall
- Implementation of Phase 2 Improvements (funded), including additional service to UBC, additional service to meet last sailings, service extension to Port Coquitlam, YVR/Richard route simplification and new night service in Surrey
- Potential NightBus Express Network (unfunded)
- Summary of proposed late-night transit improvements.

In response to questions, staff provided information on:

- Necessity to support late night service with extra security
- Clarification that staff has not yet gone through a detailed planning process to expand the NightBus Express Network
- Objective of the NightBus Express Network to mimic Skytrain travel times

- Variety of options explored to extend Skytrain service, particularly on Friday/Saturday nights
- Expense of moving forward with a 24/2 option or any other
- Idea to retain the existing NightBus Express Network with the shadow system as an addition
- Expectation the NightBus Express Network will evolve with the needs of the region
- Notion of the shadow NightBus Express Network was raised many times in stakeholder engagement
- Need to work on first mile/last mile solutions
- Focus of discussions with stakeholders in the downtown core
- If there were interest to extend the NightBus Express Network there would be engagement throughout the region
- Proposal that the shadow service would include a single stop at the Lonsdale Quay
- Implementation of the Port Coquitlam extension will be next year.

Discussion ensued on:

- Appreciation for the efforts to find a workable solution for increasing late night transit service
- Support for the idea of a NightBus Express Network that follows the Skytrain route
- Interest in workable ride-hailing options to address the “last mile” service needs of residents
- Support to extend transit hours but concern with financial or route implications for other parts of the system
- Need for late night service to be provided across the region, throughout the system
- Recognition that the Mayors’ Council does not have decision-making power with regard to TransLink operations
- Concern regarding “dead-ends” in Richmond, Delta, Surrey and Tsawwassen, which are a public safety issue; there is need for the province to be a partner to come up with a solution
- Importance of communications around late night transit service
- Safety of operators and riders and need for increased police involvement
- Experience with the West Coast Express off-peak hours service, and support for the concept
- Concern that taxis are oversubscribed for late night service
- Support to address last mile needs of riders with the taxi and ride-hailing service providers
- Importance of looking at the system overall given the Interest in ensuring all residents in the region are able to safely return to their home communities
- Compliments to staff on the proposed direction, which is a good start
- Support to implement this as quickly as possible; and to look at the need for further expansion
- Need to also encourage people to carpool with designated drivers whenever possible
- Interest in expanding the service to the rest of the region, for the people who already have the most arduous journey late at night and are in need of the greatest assistance
- Support for providing a NightBus Express Service to the entire region
- Concern about adding another layer of unfunded service
- Importance of maintaining existing Skytrain service hours
- Support for the concept of a shadow night service to be incorporated as soon as possible
- Appreciation to staff for their efforts to find a solution for late transit night service and to provide information on the challenges and negative trade-offs of extending Skytrain hours
- Recognition that there have been continued improvements to the NightBus service, but there is interest to expand on that, and to continue the conversation on reliable last mile service.

A motion was introduced to develop a Shadow Skytrain Night Bus Service and to seek funding from the provincial and federal governments to assist with implementing this as soon as possible.

Discussion ensued on:

- Suggestion that this is a decision for the TransLink Board not the Mayors' Council
- Suggested amendment to request staff to look beyond the proposed express service map
- Inadequacy of the proposed solution
- Support for the motion to be expanded to include the entire region
- Inability of many residents to afford using a taxi for last mile service
- Interest in an expansion of service sooner rather than later
- Support to move forward with what is on the map and to explore the feasibility of providing broader links in the system
- Reminder that a key cornerstone of Transport 2050 is equity
- Support to seek funding from provincial and federal governments to fund the proposed extended NightBus service.

In response to questions, staff discussed:

- Pent up demand to improve transit service throughout the region all the time
- Whether the interest is to look at ways to further expand late night transit service, or to develop a shadow Skytrain NightBus service
- There is no contingency in the Phase 1 or 2 Plan; it would be necessary to look at reallocating services that have already been funded.

Proposals to amend the Main Motion included:

- To direct staff to continue working on enhanced NightBus service included in the report and based on the feedback from the Mayors' Council
- To direct that Night Bus service be considered a high priority in development of the next phases of the Plan
- To direct staff to develop a seven-days-a-week expanded overnight service for the entire region to be implemented as soon as possible and explore using contingency funds to expedite the project.

Discussion ensued on the proposed amendments:

- Concern that TransLink does not have the funds, and that other levels of government are unlikely to fund operating expenses
- Suggestion to amend the motion to include "subject to funding"
- Need to understand the entirety of the funding needed to close the last mile
- Concern regarding implications of the motion to already funded projects
- Interest in a staff report to explore opportunities to proceed under current or potential new funding
- Need to address the immediate public safety issue relating to late night service
- Rationale of staff to bring forward the Shadow Skytrain NightBus service on an existing network, which has an established demand set of characteristics; expectation that there would be sufficient demand to justify the expenditure.

Main Motion

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation:

1. Direct staff to develop a seven-days-a-week Shadow Skytrain Night Bus Service to be implemented as soon as possible and explore using contingency funds to expedite the project;
2. Write to the provincial and federal governments requesting funding to help bring this service online as soon as possible; and
3. Receive this report.

Motion to Refer

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation refer the Main Motion to staff to report back with a more detailed report on the proposed Skytrain Shadow Bus network and options for further expanding the NightBus service throughout the region.

CARRIED

(Mayors K. Stewart, McCallum and Lahti opposed)
(Mayor R. Stewart absent at the vote)

3.2 Ironworkers Bridge Express Service

Report dated June 4, 2019, from the Joint Regional Transportation Planning Committee, titled "Item 3.2 – Phase Two Investment Plan – Reallocation of Funds to Ironworkers Express".

Sarah Ross, Director, System Planning, TransLink, introduced the distributed report.

Discussion ensued on:

- Need to ensure there is efficient transportation between the North Shore and Burnaby
- Confirmation that staff has looked at introducing a new express service over the Ironworks Bridge and possible different alignments for a limited stop service.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation:

1. Endorse the reallocation of Mayors' Vision Phase Two Investment Plan funding from the 231 Harbourside route to a new priority identified in the Integrated North Shore Transportation Planning Project: a new express route connecting Phibbs Exchange across the Iron Workers Bridge to the Skytrain network.;
2. Receive this report.

CARRIED

(Mayor R. Stewart absent at the vote)

3.3 Update on Preliminary Report for Surrey Langley Skytrain

Report dated June 13, 2019, from the Joint Regional Transportation Planning Committee, titled “Item 3.3 – Update on Preliminary Report for Surrey Langley Skytrain”.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation receive this report.

CARRIED

(Mayor R. Stewart absent at the vote)

3.4 Interurban Passenger Rail

Report dated June 6, 2019, from the Joint Regional Transportation Planning Committee, titled “Item 3.4 – Interurban Passenger Rail”.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation receive this report.

CARRIED

(Mayor R. Stewart absent at the vote)

4. REPORT OF THE FINANCE AND GOVERNANCE COMMITTEE

Co-Chairs Mayor Malcom Brodie, Richmond, and Director Anne Giardini, O.C., Q.C., TransLink.

4.1 10-Year Vision Implementation: Road, Bike, & Walk and Cost Shared Funding

Report dated June 6, 2019, from the Joint Finance and Governance Committee, titled “Item 4.1 – Vision Implementation: Road, Bike and Walk Cost-share Funding”.

Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, introduced the report and referred to overhead slides. He discussed appetite for additional cost-share funding; and being responsive – considering the needs of smaller population municipalities.

Discussion ensued on:

- Potential to reallocate funds in the 2019 program year
- Importance of walking access to transit, particularly in communities that do not have a complete pedestrian network
- Over prescriptiveness of some of programs.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation receive this report for information.

CARRIED

5. REPORT OF THE NEW MOBILITY COMMITTEE

Co-Chairs Mayor Mike Morden, Maple Ridge, and Director Karen Horcher, TransLink.

5.1 Transport 2050 Update

Report dated June 21, 2019, from the Chairs of the Joint New Mobility Committee, titled “Item 5.1 – Transport 2050 Update”.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation receive this report.

CARRIED

5.2 Rail~Volution Conference

Report dated May 30, 2019, from the Joint New Mobility Committee, titled “Item 5.2 – Rail~Volution: Building Livable Communities with Transit”.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation receive this report.

CARRIED

6. OTHER BUSINESS

6.1 Next Meeting

The next Mayors’ Council on Regional Transportation meeting will be held on July 25, 2019.

7. ADJOURN

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation Public Meeting held June 27, 2019 be now adjourned.

CARRIED
(11:13 a.m.)

Certified Correct:

Mayor Jonathan X. Coté, Chair

Rae Ratslef, Recording Secretary
Raincoast Ventures Ltd.

TO: Mayors' Council on Regional Transportation
FROM: Mike Buda, Executive Director, Mayors' Council Secretariat
DATE: July 16, 2019
SUBJECT: **ITEM 2 – Public Delegate Presentations**

RECOMMENDATION:

That the Mayors' Council on Regional Transportation receive this report.

PURPOSE:

To introduce the objectives and process for hearing from public delegates.

BACKGROUND:

Public participation at meetings is valued by the Mayors' Council, and up to one hour is set aside at open meetings to receive public delegations. The Mayors' Council will only receive public delegations who intend to speak on matters that are within the authority of the Mayors' Council.

Individuals can apply to be a delegate by completing the online [Application Form](#) up until 8:00AM, two business days prior to the meeting. In situations where there isn't enough time to hear from everyone wishing to speak, the Mayors' Council encourages written submissions be sent to mayorscouncil@translink.ca.

The webpage for public delegates includes a Protocol for Public Delegates that notes:

- the Mayors' Council Chair will exercise discretion in maintaining a reasonable level of order and decorum;
- delegates and all meeting participants are reminded that different points of view are respected, and discussions are kept above the level of personal confrontation, disruptive behaviour and profanity.

DISCUSSION:

The deadline to apply to speak to the Mayors' Council is 8:00am two days prior to the meeting. At the time of this report, not all prospective speakers will have had a chance to complete applications. Accordingly, the **list of approved speakers, as well as any written submissions or presentations, will be provided on table**. Any presentations provided by delegates will also be provided to Mayors' Council members only, on table (up to 10-pages maximum).

Each delegation will be given a maximum of three minutes to address the Mayors' Council. As a general rule, there are no questions or discussion between Council and delegates. The pilot policy governing Public Delegates can be [found online](#).

TO: Mayors' Council on Regional Transportation
FROM: Chair Jonathan Cote
DATE: July 19, 2019
SUBJECT: **ITEM 3.1 – Next steps on South of Fraser Rapid Transit**

RECOMMENDATIONS:

That the Mayors' Council on Regional Transportation:

1. Complete the Surrey Langley SkyTrain (SLS) project business case to be ready for submission to senior government by January 2020.
2. Concurrently, complete a refresh of the south of Fraser rapid transit strategy, that:
 - a. Considers combinations of alternatives within the \$3.55 billion funding envelope and assesses the consequences of providing less than 27 kilometres of rapid transit.
 - b. Recommends preferred technologies for 104 Avenue and King George Boulevard, and assesses the consequences of exceeding the \$3.55 billion funding envelope, including impacts on a likely timeline to deliver those projects.
3. Prepare an implementation strategy that allows the sequencing of rapid transit south of the Fraser consistent with available and anticipated funding.
4. Prepare the procurement documents for a SkyTrain on Fraser Highway to be ready to initiate the procurement process following an approval of the business base and supportive investment plan.
5. Limit funding available for the first phase of the SLS project to the \$1.63B already secured through the Phase Two Plan of the 10-Year Vision;
6. Ask staff to negotiate an MOU with the Township of Langley and the City of Langley to be considered at the same time as the final business case;
7. Receive this report.

PURPOSE:

To provide a single set of recommendations on next steps on South of Fraser Rapid Transit that incorporate the recommendations provided separately by the Joint Regional Transportation Planning Committee and the Joint Finance and Governance Committee.

BACKGROUND:

Two reports on South of Fraser Rapid Transit (Annex A and B) were discussed by the Joint Regional Transportation Planning Committee and the Joint Finance and Governance Committee this month. These two reports were designed to provide context and staff advice to a decision by the Mayors' Council on whether to proceed to develop a full business case and prepare for procurement for a Surrey Langley SkyTrain.

Annex A provides a mid-year update to the Mayors' Council on the proposed Surrey Langley SkyTrain project. Annex B describes how the Surrey Langley SkyTrain is likely to perform against objectives, what alternatives might be available on the other two corridors identified in the 10-Year Vision for 27KM of rapid transit South of the Fraser, and what the major trade-offs are likely to be, assuming the implementation of the Surrey Langley SkyTrain.

DISCUSSION:

Given that the two committees approved slightly different recommendations on these two reports, the Chair has offered the above recommendations that reconcile the outputs of the two committees. The recommendations as approved by each committee are provided in the original reports in Annex A and B below.

TO: Mayors' Council on Regional Transportation

FROM: Sany Zein, VP, Infrastructure Management & Engineering
Jeff Busby, Director, Surrey Langley SkyTrain Project Development

DATE: July 18, 2019

SUBJECT: **ITEM 3.1, ANNEX A – Update on the Surrey Langley SkyTrain Project**

RECOMMENDATIONS BY THE JOINT REGIONAL TRANSPORTATION PLANNING COMMITTEE:

That the Mayors' Council on Regional Transportation receive this report.

RECOMMENDATIONS BY THE JOINT FINANCE AND GOVERNANCE COMMITTEE:

That the Mayors' Council on Regional Transportation:

1. Direct staff to:
 - a. Limit funding available for the first phase of the SLS project to the \$1.63B already secured;
 - b. Update Section 9(a) of the MOU to add reference to the June 27, 2019 recommendation of the Mayors' Council that directs further payment of \$5.4 million by City of Surrey if there is no decision to implement rapid transit along King George Boulevard by December 31 2021.
 - c. Add the following to the end of Section 9(b) of the Draft MOU: "per the conditions in the resolution by the Mayors' Council at the meeting on June 27, 2019 which directed staff to complete further analysis for final approval by the Mayors' Council on the means by which the City of Surrey could reimburse TransLink;"
 - d. Negotiate with Surrey to replace "may" with "will" in Item 11 of MOU;
 - e. Negotiate an MOU with the Township of Langley and the City of Langley to be considered at the same time as the final business case.

 2. Receive this report
-

PURPOSE:

This report provides a mid-year update to the Mayors' Council on the proposed Surrey Langley SkyTrain project.

BACKGROUND:

On December 13, 2018 the Mayors' Council endorsed a workplan for TransLink to proceed with planning and project development for a SkyTrain on Fraser Highway, and, concurrently, initiate a planning process to refresh the South of Fraser rapid transit strategy, consistent with the 10-Year Vision of building 27-kilometres of rapid transit on three corridors. The workplan included a mid-year update to the TransLink Board and Mayors' Council.

PROJECT CONTEXT:

The area south of the Fraser is one of the fastest growing areas in the region. The population of Surrey, Langley City and Langley Township is projected to increase by another 280,000 people by the year 2035, and a further 200,000 people by 2050. The Mayors’ Council’s 10-year Vision for Regional Transportation identifies three priority corridors for rapid transit in Surrey and Langley: 104 Avenue, King George Boulevard, and Fraser Highway. The proposed Surrey Langley SkyTrain (SLS) would advance the Vision by extending the Expo Line along Fraser Highway to Langley Centre.

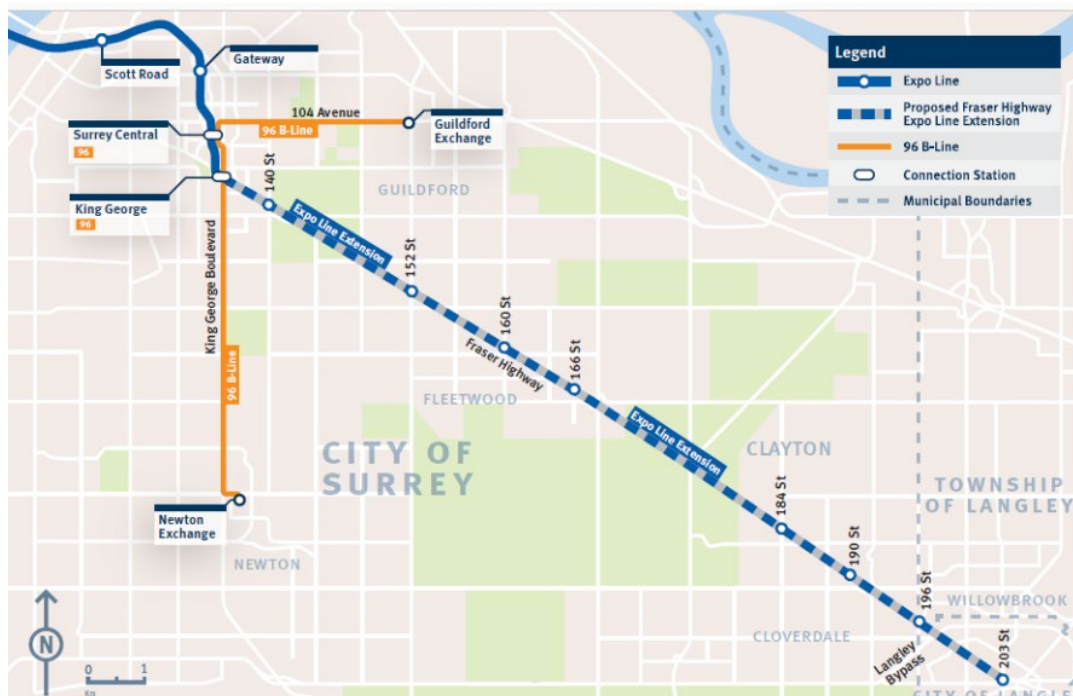
As part of the Phase Two Investment Plan approved in 2018, \$30M was allocated for project development on the Fraser Highway Corridor. Approximately \$1.6 billion in funding is available for the proposed SLS project subject to Business Case approval by funding partners and an enabling Investment Plan.

PROJECT OBJECTIVES:

The objectives of the proposed Surrey Langley SkyTrain project are to advance the Vision by providing fast, frequent, reliable and convenient transportation, with a great user experience; to increase access to employment, schools, housing and services; to support healthy communities and a healthy environment; to advance local and regional prosperity by facilitating movement of people and goods; and to invest and implement transit expansion wisely.

PROJECT DEFINITION:

The Surrey Langley SkyTrain project would extend the Expo Line 16.5 kilometres on an elevated guideway from King George Station to Langley City Centre along Fraser Highway. The proposed project includes eight stations, three bus exchanges, park and ride spaces, 55 SkyTrain vehicles, an operations and maintenance centre and supporting system upgrades.



Trains would operate every 4 to 5 minutes during peak periods and approximately every 10 minutes off-peak with one of three Expo Line trains serving the extension to Langley. Travel time by SkyTrain from Langley Centre to King George is projected to be approximately 22 minutes. This is more than 25 minutes faster than current local bus service, and more than 10 minutes faster than express bus service in the corridor.

PROJECT OUTCOMES:

In support of identified objectives for rapid transit, the proposed project is forecast to deliver the following benefits:

- Increasing transit capacity, reducing travel times, and improving reliability, and improving road safety and congestion by reducing automotive vehicle kilometers travelled;
- Improving regional accessibility by connecting Surrey Metro Centre, Fleetwood Town Centre, and Langley Regional City Centre with rapid transit, connecting people to more housing, employment, schools, and services, and encouraging higher-density uses around SkyTrain stations;
- Improving the environment by reducing greenhouse gas emissions through reductions in vehicle kilometres of travel and replacing diesel bus service with electric SkyTrain service; and
- Supporting economic development by improving efficiency and reliability for people to get to jobs, for businesses to get their goods and services to the market and improving access to the region’s labour force.

The quantified value of these benefits over the project lifecycle is more than \$2.9 billion. When compared to lifecycle capital and operating costs, project benefits exceed costs by a ratio of one to 1.24. While not quantified at this time, the proposed project is also anticipated to improve public health by encouraging use of active transportation modes.

The proposed extension is projected to serve 62,000 daily riders in the year 2035 growing to 71,200 in 2050. 24,000 to 30,000 of these trips will be made by those who switch to transit from other modes as set out in the table below:

Ridership		
Surrey Langley SkyTrain (King George Station to Langley City Centre)		
	Year 2035	Year 2050
Weekday boardings	62,000	71,200
New weekday transit trips	24,000	30,000

COST AND SCHEDULE:

TransLink and its advisors prepared an estimate of the project implementation cost and projections of annual operations and maintenance costs, as well as expected fare revenues. The project capital cost estimate includes anticipated inflation over the project implementation period and includes a contingency amount consistent with similar transportation projects to cover key project risks:

Surrey Langley SkyTrain * (King George Station to Langley City Centre)	
Capital Cost	\$3.12 billion (VOE)
Annual Operations & Maintenance Cost	\$31.7 million (2019\$)
Fare revenue	\$21.3 million (2019\$) in 2035

* For a project approved and implemented in a single stage

The indicated costs are for a project assumed to be approved in June 2020. Procurement would commence immediately following approval with contract award in late 2021 and service commencement in late 2025 as set out in the figure below:

Project Schedule	2020				2021				2022				2023				2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Complete Business Case																								
Project funding approval																								
RFQ Period																								
RFP Period																								
Notice to Proceed																								
Design																								
Construction																								
Testing & Commissioning																								
In-Service Date																								

For each month of delay in project approval, the estimated cost of the project increases by approximately \$5 million to account for cost escalation and project management costs. Management is working closely with senior government and the Mayors’ Council and believes the approval date of June 2020 is aggressive, but achievable.

STAGING SCENARIOS:

The project team developed three staging scenarios to complete the project should the \$3.12 billion not be available to complete the project in a single stage. Each scenario is operationally feasible and generates quantified benefits that exceed lifecycle costs. The scope, outcomes, cost, and schedule for each scenario is summarized in the table below

	Full Scenario: Single Stage from King George to Langley City Centre	Fleetwood Scenario : Stage 1 from King George to 166 St in Fleetwood*	Clayton Scenario: Stage 1 from King George to 184 St in Clayton**
Scope	16 km 8 stations 55 vehicles	7 km 4 stations 25 vehicles	11 km 5 stations 35 vehicles
Ridership	62,000 in 2035 71,200 in 2050	39,900 in 2035 44,200 in 2050	45,800 in 2035 51,500 in 2050
New transit trips	24,000 in 2035 30,000 in 2050	12,000 in 2035 14,000 in 2050	16,000 in 2035 19,000 in 2050
Benefit cost ratio	1.24	1.12	1.17
Capital cost (YO€)	\$3.12 billion	\$1.63 billion***	\$2.22 billion***
Annual O&M cost (2019\$)	\$32.4 million	\$17.0 million	\$20.4 million
Annual fare revenue in 2035 (2019\$)	\$21.3 million	\$10.2 million	\$13.8 million
In-service date	5.5 years from project approval	5.5 years from project approval	5.5 years from project approval

*Subsequent Stage 2 from Fleetwood to Langley City will follow when funding is secured.

** Subsequent Stage 2 from Clayton to Langley City will follow when funding is secured.

*** Stage 2 costs for project completion to Langley will increase with time.

As part of procurement readiness, Management will develop an agile implementation strategy to maximize delivery flexibility consistent with available and anticipated funding in the Investment Plan. For a project implemented in stages, the cost for the full project will increase with time due to escalation and on-going project management costs.

ENGAGEMENT:

TransLink identified the following engagement priorities for the proposed project:

- Directly engage key stakeholders including community groups, business associations, public institutions and elected representatives, to foster relations, raise awareness of the work at-hand, solicit feedback, and promote engagement opportunities. This work is ongoing.
- Conduct three rounds of public engagement over the fifteen-month project development stage. The first phase is complete.

The first phase of public engagement occurred from April 4 to 26. The engagement comprised an online survey, four open houses, participation in large-scale community events, and a presence at transit hubs in Surrey and Langley. The engagement resulted in 21,267 completed surveys, with nearly 17,000 of them from residents in Surrey and Langley, and over 1,000 attendees at the open houses in Langley, Fleetwood, Surrey City Centre, and Newton.

Public engagement results were presented to the Mayors' Council on May 23. The engagement revealed that the public is interested and engaged in rapid transit south of the Fraser, and there is strong support for improved transit in Surrey and Langley. Approximately 85% of respondents – both in Surrey and Langley, specifically, and in the region, generally - support the proposed Surrey Langley SkyTrain project. Pending further direction from the Mayors' Council, Management anticipate two additional rounds of public engagement to provide opportunities for input on the reference design and the Environmental Screening Review.

TransLink is engaging with a number of First Nations to introduce them to the project, solicit feedback, and invite representatives to join in environmental and archaeological field studies. First Nation permits have been sought for any necessary archeological studies, and engagement is taking place regarding the project's Environmental Screening Review (ESR), including the draft Terms of Reference document. Engagement to date has been conducted via introductory letters, updates via telephone and emails, and in-person meetings. TransLink will continue to engage First Nations to share information, including the proposed design, and collaborate on environmental and archaeological work.

ENVIRONMENTAL SCREENING REVIEW:

The federal and provincial governments both confirmed that the project does not trigger an environmental assessment. Nevertheless, as part of the project's development, TransLink will conduct an Environmental Screening Review (ESR) of the proposed alignment. The review of potential environmental effects will be informed by First Nations, public and stakeholder feedback, and will demonstrate TransLink's commitment to understand and effectively manage construction and operations-related environmental issues. The review will include assessment of potential impacts to traffic and transportation, archaeology and heritage, freshwater aquatics, vegetation and wildlife, noise and vibration, and land use. Field studies to understand baseline conditions are underway. A draft Terms of Reference of the Review is expected to be ready in fall for public and stakeholder review and

comment. The ESR report summarizing the review findings, including proposed mitigation measures and environmental management plans, is anticipated for spring 2020.

CITY OF SURREY AGREEMENTS:

Management developed a Memorandum of Understanding (MOU) with the City of Surrey to describe the project scope, objectives, and roles and responsibilities for TransLink and the City of Surrey. The MOU identifies the general scope and need for a supportive policies agreement and outlines the framework for reimbursement of certain funds expended on the Surrey Newton Guildford LRT project. A draft of the MOU is appended to this report.

NEXT STEPS:

To keep the project on schedule and on budget, Management intends to undertake the following work in the coming twelve months:

- Updates to the reference concept design to incorporate feedback from a second phase of public engagement;
- Confirmation of the project delivery agency, an agile implementation strategy, a procurement approach, and funding and financing strategy consistent with an enabling Investment Plan;
- Completion of the Environmental Screening Review;
- Completion of the business case and related senior government project approval requirements as well as the Request for Qualifications and Request for Proposals draft documents; and
- Development of supportive policy and contribution agreements with the City of Surrey (and Langley City and Langley Township as applicable);

APPENDIX 1

Final Draft: Surrey Langley SkyTrain Project MOU
[Includes amendments proposed by the Joint Finance and Governance Committee]

MEMORANDUM OF UNDERSTANDING

**South of Fraser Rapid Transit - Surrey Langley SkyTrain Project
(Portion within Surrey)**

between

**South Coast British Columbia Transportation Authority
("TransLink")**

and

**City of Surrey
("Surrey")**

Made as of the ____ day of _____, 2019

WHEREAS:

- A. TransLink, as the Regional Transportation Authority, has the mandate to plan, prioritize, secure funding and deliver transportation and transit projects and create an integrated transportation and transit system within the Greater Vancouver Regional District pursuant to the *South Coast British Columbia Transportation Authority Act*;
- B. In the 2014 Mayors' Council Regional Transportation Investments, a Vision for Metro Vancouver (the "**Mayors' Vision**"), the Mayors' Council identified a South of Fraser Light Rail Transit network (the "**LRT Project**") as a priority to ensure that the transportation needs of the region are met;
- C. Surrey has requested that the LRT Project be suspended and replaced with an extension of the existing SkyTrain Expo Line;
- D. TransLink and the Mayors' Council have agreed to suspend the LRT Project and instead move forward with planning and development of a 16-kilometre extension of the existing SkyTrain Expo Line from King George Station to Langley Centre along the Fraser Highway (the "**Proposed Extension**");
- E. The Proposed Extension will provide an alternative to traffic congestion and increase transit network capacity to help meet the transportation goals for the region;
- F. Surrey, as the host municipality of the Proposed Extension within the boundaries of the City of Surrey, has the mandate to provide good governance within its municipal boundaries pertaining to the exercise of powers and duties provided to it pursuant to the *Local Government Act*;
- G. The Mayors' Vision calls on the parties to enter into Project Partnership Agreements (the "**PPAs**") whenever the region is making a major investment involving significant cost and risk, the success of which depends on higher degrees of coordination, collaboration and mutually supportive actions by multiple partners;
- H. Both TransLink and Surrey have significant roles and responsibilities with respect to the portion of the Proposed Extension within the boundaries of the City of Surrey (such portion being referred to herein as the "**Project**"), the details of which will be included in a subsequent Supportive Policies Agreement (the "**SPA**") and Municipal Access Agreement (the "**Municipal Access Agreement**") to be entered into by TransLink and Surrey;
- I. Both TransLink and Surrey will enter into a Reimbursement Agreement (the "**Reimbursement Agreement**") whereby Surrey will reimburse TransLink for certain amounts expended by TransLink on the LRT Project prior to its suspension; and
- J. TransLink and Surrey are committed to implement the Project.

THEREFORE:

1. COMMITMENT:

TransLink and Surrey affirm their full public commitment to proceed in good faith and to act expeditiously and reasonably to facilitate, expedite and support the successful procurement, design, construction, operation and maintenance of the Project.

TransLink commits to funding, procuring and delivering the Project pursuant to an Investment Plan to be approved by the TransLink Board of Directors and the Mayors' Council.

Surrey commits to support TransLink in the procurement, delivery and implementation of the Project by, among other actions, minimizing and streamlining municipal approvals to ensure Project delivery timelines are achieved; publicly supporting the Project; and helping to manage expectations and mitigate impacts during Project construction.

Surrey further commits to take proactive steps to advance integrated land use and transportation planning along the Project corridor by promoting residential, business and institutional growth to maximize transit ridership in the short, medium and long terms. Surrey's commitment will be guided by its Official Community Plan, Sustainability Charter, Transportation Strategic Plan, and other relevant planning policies, reflecting generally accepted Transit-Oriented Communities Design Guidelines. Surrey also commits to advancing plans supportive of the goals and targets identified in the Regional Transportation Strategy.

TransLink and Surrey affirm they will continue to support and implement measures to prioritize transit services during Project construction.

TransLink and Surrey commit to developing the following: (a) the SPA, (b) the Reimbursement Agreement, and (c) the Municipal Access Agreement, which will together serve as the PPAs for the Project.

2. ASSIGNMENT OF COMMITMENT:

Until otherwise determined, TransLink will act as the Project delivery agent and the Project owner and operator, and will be responsible for all aspects of the Project's procurement, implementation and operations. In the event that another party replaces TransLink in all or part of this capacity, both parties agree to work cooperatively to maintain the commitments in this MOU and to support any necessary and mutually agreed assignment to a different party.

3. PROJECT OBJECTIVES:

The Project objectives, as fully supported by both TransLink and Surrey, are to:

- (a) provide fast, frequent, reliable and convenient transportation, together with a great user experience;
- (b) use public funds efficiently to maximize the span of the Project and ultimately the Proposed Extension, all in a manner that will result in a constructible and operable Project that is acceptable to the public;
- (c) provide a high-quality urban design that will support, and integrate with, current and future land uses along the Project corridor;
- (d) increase affordable access to various opportunities such as employment, schools, housing and services;
- (e) support healthy communities and a healthy environment by managing various Project impacts; and
- (f) advance local and regional prosperity by facilitating movement of people and goods.

TransLink and Surrey will work together to advance the above objectives and will jointly develop performance measures to quantify and measure the progress in achieving such objectives.

4. PROJECT SCOPE:

- (a) The Project will specifically include, among other things: (i) two-way elevated guideway (track) along Fraser Highway extending the SkyTrain Expo Line from King George Station toward Langley Centre, and (ii) SkyTrain stations along the Fraser Highway corridor.
- (b) In addition, the Proposed Extension will generally include, among other things: (i) additional SkyTrain vehicles for the SkyTrain system, (ii) a new or expanded facility to meet the increased SkyTrain operations and maintenance capacity (which facility may be located, or integrated with another facility, outside of the boundaries of the City of Surrey), and (iii) other associated infrastructure, works and ancillary buildings required for construction and operation purposes (which may or may not be located within the boundaries of the City of Surrey). For clarity, the parties anticipate that Project funding will include any incremental operations and maintenance facility upgrades that may be required to address capacity issues resulting from the Proposed Extension.
- (c) The Project will be fully integrated with TransLink's existing transit network and system including provision of integrated fare structures and utilization of the Compass automated fare payment and collection system.
- (d) The Project may be constructed and delivered in phases, and the procurement strategy will therefore be flexible to accommodate various funding timelines.

5. TRANSLINK'S ROLE AND GENERAL RESPONSIBILITIES:

TransLink will:

- (a) own the Project except for any infrastructure and assets currently owned or controlled by Surrey;
- (b) design, procure and construct the Project, and have responsibility for and control over scope, budget, and scheduling;
- (c) operate and maintain the Project as an integrated part of the region's transit system;
- (d) continue to provide transit operations within the Project corridor throughout Project construction;
- (e) develop and implement a bus integration plan to support the Project; and
- (f) complete a refresh and planning study to identify rapid transit options and costing for the 104th Avenue and King George Boulevard corridors, as the Mayors' Vision prioritized 27 kilometres of rapid transit South of the Fraser River.

6. SURREY'S ROLE AND GENERAL RESPONSIBILITIES:

Surrey will:

- (a) support and actively participate in the design and construction stages of the Project to expedite delivery and ensure municipal and regional objectives are met, and may provide input, assistance and suggestions to TransLink;
- (b) be responsible for the review, approval, inspection, and acceptance of any municipal road infrastructure modifications, utility relocation and upgrading works required in connection with the Project;
- (c) implement transit-oriented land use policies and provisions in any relevant municipal plans and permit approval processes, including mixed-use densification along the Project corridor, all as to be further detailed in the SPA;
- (d) permit connections to municipal utilities to accommodate and support Project facilities;
- (e) support TransLink's effective delivery of bus operations in the Project corridor during the Project construction period; and
- (f) work cooperatively with TransLink to implement traffic management strategies during the Project construction period.

7. JOINT ROLES AND RESPONSIBILITIES:

TransLink and Surrey will each work together to:

- (a) manage public engagement and communications, with TransLink taking the lead on all communications with respect to the Project and Surrey providing support to TransLink as required;
- (b) hold regular meetings, during Project planning and design, to discuss related inquiries including development permit applications, building permit applications and rezoning applications for properties fronting the Project, all for the purposes of: (i) coordinating development activities with Project infrastructure, (ii) ensuring public safety, and (iii) not adversely impacting the future constructability and operability of the Project;
- (c) advance integrated land use and transportation planning through the joint development, implementation and monitoring of the SPA as contemplated in Section 8;
- (d) jointly develop a Reimbursement Agreement as contemplated in Section 9; and
- (e) jointly develop a Municipal Access Agreement as contemplated in Section 10.

8. SUPPORTIVE POLICIES AGREEMENT:

The parties will work collaboratively to complete the SPA prior to both the inclusion of the Project in a funded Investment Plan approved by the TransLink Board of Directors and Mayors' Council and the issuance of the Request for Proposals in connection with the Project. The SPA will: (i) specify Project supportive land use and transportation policies, actions and investments to support Project objectives, and (ii) identify specific actions and policies to coordinate and integrate transportation and land use planning in the Project corridor. The parties anticipate that the SPA will address, among other things:

- (a) the completion by the City of Project corridor land use plan(s) and policies (the "**Corridor Plans**"), the process for which has already been initiated by the City, by 2021;
- (b) the inclusion in the Corridor Plans of Project supportive population and job densities that are generally aligned with Metro 2040 (Regional Growth Strategy) targets, as well as TransLink's Transit Service Guidelines and Transit-Oriented Communities Design Guidelines;
- (c) key policies relating to, without limitation, affordable housing, cycling, walking, urban design, parking, and transportation demand management; and
- (d) details of a SPA monitoring program similar to that which was agreed to in the Supportive Policies Agreement Surrey-Newton-Guildford Light Rail Transit Project made on June 12, 2018 between TransLink and Surrey.

9. REIMBURSEMENT AGREEMENT:

The parties will work collaboratively to complete the Reimbursement Agreement prior to both the inclusion of the Project in a funded Investment Plan approved by the TransLink Board of Directors and Mayors' Council and the issuance of the Request for Proposals in connection with the Project. The parties anticipate that the Reimbursement Agreement will address, among other things:

- (a) Surrey's reimbursement to TransLink of up to \$39 Million, pending final technical reconciliation of expenditures, being the sum unnecessarily expended by TransLink on the LRT Project prior to its suspension, and potential further reimbursement of \$5.4 million by City of Surrey if there is no decision to implement rapid transit along King George Boulevard by December 31, 2021;
- (b) the various means by which Surrey will reimburse TransLink, which may include all or any combination of the following, per the conditions in the resolution by the Mayors' Council at the meeting on June 27, 2019 which directed staff to complete further analysis for final approval by the Mayors' Council on the means by which the City of Surrey could reimburse TransLink:
 - (i) financial contributions;
 - (ii) in-kind property contributions of a permanent or temporary nature;
 - (iii) rights of way and/or road dedications;
 - (iv) certain commercial rights to TransLink in connection with any future use or access by TransLink of city streets or other city lands pursuant to the Municipal Access Agreement; and

- (v) reduction in costs through a transfer of scope elements;
- (c) timing of Surrey's reimbursement, which is dependent upon and subject to the final approval of the business case and the Project proceeding to the procurement and construction phases; and
- (d) any applicable valuation methodologies.

10. MUNICIPAL ACCESS AGREEMENT:

The parties will work collaboratively to complete the Municipal Access Agreement prior to the issuance of the Request for Proposals in connection with the Project. Pursuant to the Municipal Access Agreement, Surrey will provide TransLink with access to certain city streets or other city lands necessary for the construction, operation and day-to-day maintenance of the Project, for so as long as the Project is operated by TransLink, the Province or a related entity.

The Municipal Access Agreement will include various details on the collaborative relationship between Surrey and TransLink to ensure successful Project delivery and operations. The parties anticipate that the Municipal Access Agreement will address, among other things:

- (a) access to city lands and streets;
- (b) additional or outstanding financial matters;
- (c) design and construction approval process;
- (d) system operations and maintenance;
- (e) public realm;
- (f) public art;
- (g) road infrastructure and utilities;
- (h) traffic management;
- (i) dispute resolution; and
- (j) communications protocol.

11. CONTRIBUTION AGREEMENT:

The parties acknowledge that Surrey may want to increase the Project scope to include works above and beyond those included in any approved business case for the Project. If the parties agree to implement any scope increase requested by Surrey, they will enter into a Contribution Agreement to set out Surrey's financial contribution to such scope increase.

12. 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 and to illustrate the parties' mutual support of the Project for the purposes of funding approval. This MOU is intended to advance the development of the SPA, the Reimbursement Agreement and the Municipal Access Agreement.

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.

As governmental or public authorities, each of Surrey and TransLink are documenting their good faith commitments to each other to undertake the actions, cooperation and support described in this MOU in a diligent and timely manner to achieve the Project objectives.

As governmental or public authorities, each party acknowledges that it is governed by officials who are dutybound to enact by-laws and policies in accordance with the mandates stipulated in each party's governing legislation. As such, and despite any other term of this MOU to the contrary, the parties acknowledge and agree that this MOU is not intended to, and will not operate so as to, create legally binding rights and obligations nor to fetter the lawful discretion and powers of either party with respect to the subject matter of this MOU.

13. EXECUTION

Executed by the parties on the date written above.

**South Coast British Columbia Transportation
Authority (TransLink)**

The City of Surrey

Kevin Desmond
CEO

Doug McCallum
Mayor

TO: Mayors' Council on Regional Transportation

FROM: Geoff Cross, Vice President, Transportation Planning & Policy

DATE: July 18, 2019

SUBJECT: **ITEM 3.1, ANNEX B -- South of Fraser Rapid Transit Strategy Refresh**

RECOMMENDATIONS BY THE JOINT REGIONAL TRANSPORTATION PLANNING COMMITTEE AND THE JOINT FINANCE AND GOVERNANCE COMMITTEE:

That the Mayors' Council on Regional Transportation:

1. Complete the Surrey Langley SkyTrain (SLS) project business case to be ready for submission to senior government by January 2020.
 2. Concurrently, complete a refresh of the south of Fraser rapid transit strategy, that:
 - a. Considers combinations of alternatives within the \$3.55 billion funding envelope and assesses the consequences of providing less than 27 kilometres of rapid transit.
 - b. Recommends preferred technologies for 104 Avenue and King George Boulevard, and assesses the consequences of exceeding the \$3.55 billion funding envelope, including impacts on a likely timeline to deliver those projects.
 3. Prepare an implementation strategy that allows the sequencing of rapid transit south of the Fraser consistent with available and anticipated funding.
 4. Prepare the procurement documents for a SkyTrain on Fraser Highway to be ready to initiate the procurement process following an approval of the business base and supportive investment plan.
 5. Receive this report.
-

PURPOSE:

This report provides context to a decision by the Mayors' Council on whether to proceed to develop a full business case and prepare for procurement for a Surrey Langley SkyTrain. Using results from the report *Update on the Surrey Langley SkyTrain Project*, this report describes the consequences of such a decision for completing 27 kilometres of rapid transit on three corridors south of the Fraser River established in the 2014 Mayors' Vision, within a funding envelope of \$3.55 billion.

This report is based on preliminary findings from a refresh of the south of Fraser rapid transit strategy. The refresh was initiated following a suspension of work on the Surrey Newton Guildford Light Rail Transit project and direction to begin planning for a SkyTrain along Fraser Highway.

The preliminary analysis presented in this report is not intended to provide the basis for a decision on the preferred rapid transit technology for 104 Avenue and King George Boulevard. That will require more detailed assessment and public engagement.

BACKGROUND:

In 2014, the Mayors' Council on Regional Transportation identified 104 Avenue, Fraser Highway and King George Boulevard as priority corridors for rapid transit and decided to plan for 27 kilometres of Light Rail Transit (LRT), to support transportation and urban development objectives.

In December 2018, based on a request from the City of Surrey, the Mayors' Council directed TransLink to suspend work on the first phase of LRT on 104 Avenue and King George Boulevard, and instead begin planning for a SkyTrain along Fraser Highway. TransLink was also directed to initiate a planning process to refresh the south of Fraser rapid transit strategy, consistent with the 10-Year Vision of building 27 kilometres of rapid transit on the three corridors. The direction was for TransLink to conduct this work "subject to the City of Surrey's specific agreement to pay compensation no later than upon signing the MOU, all work plan costs unnecessarily expended to date." This condition has been met within the MOU attached to the SLS Project Update report which embeds the compensation amount approved by the Mayors' Council in June 2019.

South of Fraser Rapid Transit Strategy in the 10-Year Vision

Alternatives for rapid transit on one or more of the corridors from Surrey City Centre – along 104 Avenue to Guildford, Fraser Highway to Langley City and King George Boulevard to Newton – have been discussed in regional planning documents since at least the 1975 Livable Region Plan. Priorities between the corridors, as well as the type of technology considered, have varied considerably. The three corridors were first considered as a package in the South of Fraser Rapid Transit Alternatives Analysis Study, carried out between 2009 and 2012.

The Alternatives Analysis Study reviewed over 1,000 technology and route combinations to develop a shortlist of alternatives on the three corridors. The Study included intensive public and stakeholder engagement. From Study results, the Mayors' Council considered the trade-offs and, based in part on the preferences expressed at the time by the Surrey City Council around city-shaping and land use objectives, chose Light Rail Transit (LRT) as the preferred alternative. As a result, the 2014 Mayors' 10-Year Vision calls for 27 kilometres of LRT. The Surrey Newton Guildford (SNG) corridors were intended to be the first stage of the project, followed by LRT on Fraser Highway from Surrey to Langley.

Status of Funding for South of Fraser Rapid Transit

The Phase One and Phase Two Investment Plans of the 10-Year Vision were approved by the TransLink Board and Mayors' Council in November 2016 and June 2018. The Phase One Investment Plan included project development and preconstruction works on the SNG LRT, while the Phase Two Investment Plan approved \$1.65 billion for construction of the project. Phase 2 also included \$30 million to complete detailed project development and procurement readiness for the Surrey to Langley LRT line along Fraser Highway.

The Phase Three Investment Plan, scheduled to be brought forward in 2020/21, was to have included the Surrey to Langley LRT, estimated to cost \$1.9 billion.

In summary, the envelope of expenditures for 27 kilometres of rapid transit on the three corridors, as defined in the Vision is:

SNG LRT budget:	\$1.65 billion (approved through the Phase Two Plan)
Fraser Highway LRT project development:	\$30 million (approved through the Phase Two Plan)
Fraser Highway LRT budget:	\$1.9 billion (to be approved in the Phase Three Plan)
Total envelope for 27 km rapid transit:	\$3.55 billion

DISCUSSION

This report describes how the Surrey Langley SkyTrain is likely to perform against objectives, what alternatives might be available on the other two corridors, and what the major trade-offs are likely to be for the remaining 11 kilometres of rapid transit, assuming the implementation of the Surrey Langley SkyTrain.

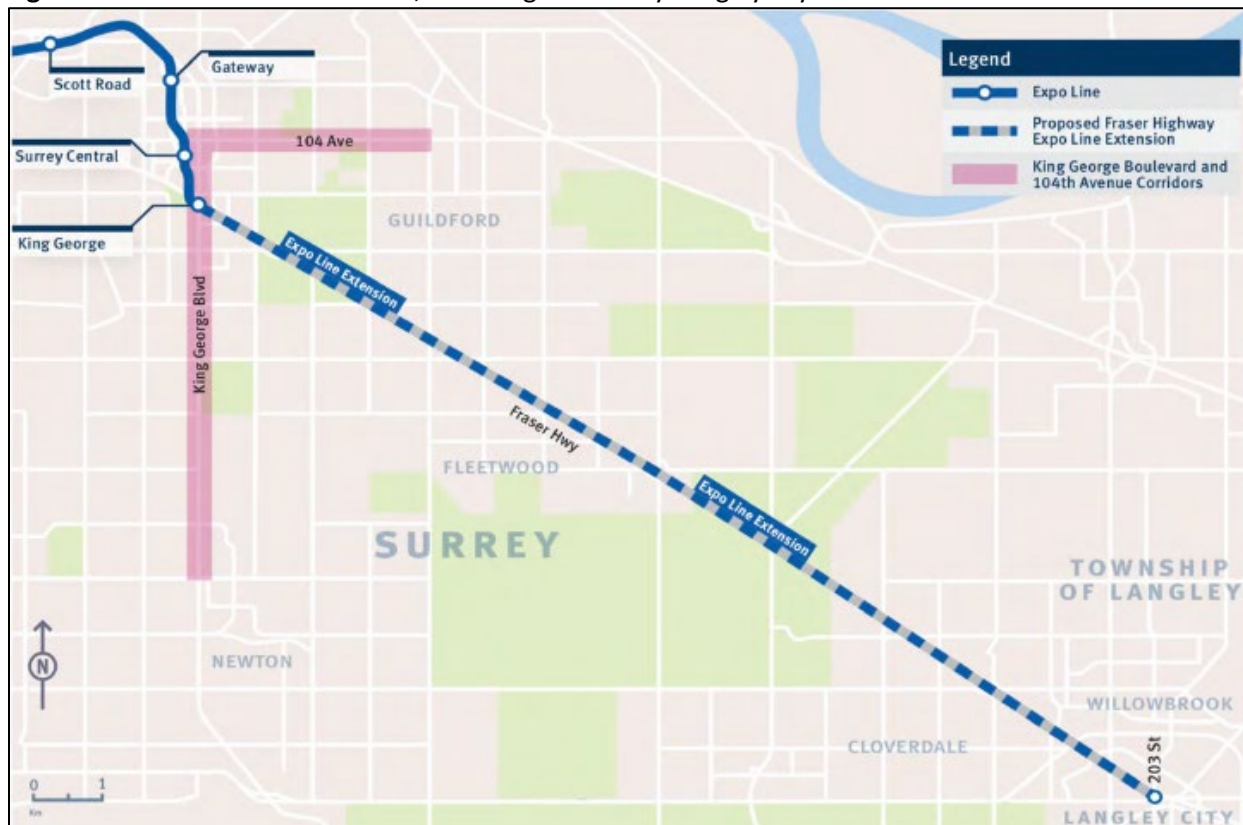
Refresh of the south of Fraser rapid transit strategy

Based on the Mayors' Council December 2018 direction, the starting point for work on a refresh of the south of Fraser rapid transit strategy is that:

1. A SkyTrain from Surrey to Langley along Fraser Highway is the priority corridor for rapid transit;
2. It is still the Mayors' Council's intention to provide 27 kilometres of rapid transit on the three corridors, 104 Avenue, Fraser Highway and King George Boulevard;
3. There is a *notional* funding envelope of \$3.55 billion to provide 27 kilometres of rapid transit on the three corridors.

Note that the funding envelope of \$3.55 billion is only a planning assumption at this stage, based on the projected cost of 27 kilometres of LRT. There is no secured funding beyond the \$1.65 billion in the approved investment plans. The Provincial Government has committed to a 40 percent contribution to the capital projects in the Mayors' 10 Year Vision and there are some remaining unallocated Federal funds that could be applied, pending a business case approval. This assumption does not commit the Mayors' Council to any expenditure or funding ask.

Figure 1: The corridors considered, including the Surrey Langley SkyTrain



Objectives for the south of Fraser rapid transit strategy

The first stage of the strategy refresh was to review the objectives used in previous south of Fraser rapid transit studies and confirm their relevance with the public and stakeholders (see appendix 1). The public were asked to indicate their level of support for thirteen values, reflecting the main components of the previously developed objectives. All values received high levels of public support and the following three were ranked the highest:

- “Predictable transit travel time that helps me get to my destination faster”
- “Efficient use of public money”
- “A comfortable and safe experience when I use transit.”

As a result of public engagement and further refinement of objectives, the following set of objectives have been developed for the south of Fraser rapid transit strategy and used when evaluating alternatives for rapid transit on Fraser Highway, 104 Avenue and King George Boulevard:

- Increase access to employment, schools, housing and services
- Provide a great transportation user experience
- Support healthy people and environment
- Advance local and regional prosperity

While

- Spending wisely
- Implementing prudently

Performance of the Surrey Langley SkyTrain against the strategy objectives

Many of the objectives would be supported by the introduction of any form of rapid transit on Fraser Highway; the specific technologies will play a less significant role. Based on the information provided in the report *Update on the Surrey Langley SkyTrain Project*, the proposed project is likely to perform better than other technologies in the following ways:

- Shorter and more reliable transit travel times
- More comfortable transit with sufficient capacity to minimize overcrowding
- Less adverse ongoing impacts on other road users
- Less greenhouse gas and criteria air contaminant emissions from transportation, consistent with regional and provincial targets

Other technologies are likely to perform better than the SkyTrain in the following ways:

- Visual impacts on adjacent properties
- Cost to build, operate and maintain

Based on this, and other information contained in the *Update on the Surrey Langley SkyTrain Project*, a SkyTrain on Fraser Highway would meet the objectives of the south of Fraser rapid transit strategy. This applies to all three staging scenarios outlined in that report.

Alternatives to complete 27 kilometres of rapid transit on all three corridors

At this stage in the strategy refresh, a limited number of alternatives on 104 Avenue and King George Boulevard have been considered at a high level to understand the consequences of a decision to proceed with a Surrey Langley SkyTrain. This evaluation is not intended to provide the basis for a decision on a preferred technology for future rapid transit on 104 Avenue and King George Boulevard. That will require more detailed assessment and public engagement.

Three alternatives, including combinations of Bus Rapid Transit (BRT), Light Rail Transit (LRT) and SkyTrain, have been considered for 104 Avenue and King George Boulevard. A “business as usual” (BAU) alternative, using B-lines on the two corridors, was also considered. See table 1 for alternatives considered and evaluated as part of the strategy refresh.

Table 1: Alternatives considered and evaluated in the first stage of the strategy refresh

	Business as Usual	Alternative 1	Alternative 2	Alternative 3
Fraser Highway	SkyTrain Surrey to Langley	SkyTrain Surrey to Langley	SkyTrain Surrey to Langley	SkyTrain Surrey to Langley
Cost for SkyTrain on Fraser Highway	\$3.12 billion	\$3.12 billion	\$3.12 billion	\$3.12 billion
104 Avenue	96 B Line (Surrey Centre to Guildford)	BRT (Surrey Central to Guildford)	LRT (Surrey Central to Guildford)	B Line (Surrey Centre to Guildford)
King George Boulevard	96 B Line (Surrey Central to Newton)	BRT (Surrey Central to Newton)	LRT (Surrey Central to Newton)	SkyTrain (King George to Newton)
Est. additional cost of rapid transit	-	\$0.7-0.9 billion	\$1.6-1.8 billion	\$1.2-1.4 billion
Estimated cost in excess of \$3.55B	-	\$0.28-0.48 billion	\$1.17-1.37 billion	\$0.77-0.97 billion

Note that alternative 3 does not provide 27 kilometres of rapid transit as B-lines are not considered rapid transit under the definition used in the previous Alternatives Analysis. Also, at this stage, no alternative considers a SkyTrain on 104 Avenue, for two reasons:

1. Ridership demand along 104 Avenue is the lowest of all three corridors and is well below that which might justify a SkyTrain, and;
2. It was determined that adding a further branch to the Expo Line would result in lower frequencies than is desirable on other branches.

Given the projected \$3.12 billion cost of the Surrey Langley SkyTrain, there are no alternatives that can result in 27 kilometres of rapid transit at a cost within \$3.55 billion total envelope.

Business as Usual

Only the business as usual alternative, with improved B-line service on King George Boulevard and 104 Avenue, is available within the \$3.55 billion funding envelope. B-line service is used as the baseline against which other alternatives are being assessed.

B-lines, with the planned and possible improvements to service and priority, provide a good service and meet many of the objectives described above to increase access, provide a good user experience and support health, environment and prosperity goals. They are, however, at more risk of being impacted by increasing traffic congestion than other alternatives because they predominantly operate in mixed-traffic. As such, speed and reliability could deteriorate unless measures are taken to increase transit priority. Well designed and implemented B-lines can achieve good value for money and can be quick and easy to implement, relative to other alternatives.

Forecasts show that ridership on the B-line will continue to increase to around 22-24 000 per day in 2050. With a 6-minute frequency, capacity would be sufficient to accommodate forecast demand, although demand for the B-line service would be lower than for the rapid transit alternatives.

Alternative 1: BRT on 104 Avenue and King George Boulevard

BRT is to some extent scalable. It could be possible to build BRT on some sections of the corridors but not all, with the same buses serving the full route. A fully realised BRT on the 104 Avenue and King George Boulevard corridors is estimated to cost up to \$900 million. Therefore, within the funding envelope, less than half of the corridor could be constructed as full BRT given the current estimates.

This alternative could also support most of the objectives described above. BRT would operate in its own lane, separated from other traffic and would therefore be able to offer a faster, more reliable journey than B-lines. Specially designed stops and vehicles could improve user experience, by providing increased comfort and deliver better accessibility and security. BRT roadway priority does, however, mean there would be some impacts to vehicle traffic, including goods movement. There is a perception that BRT does not support urban and economic development in the same way rail-based transit can, but TransLink has been unable to find enough empirical evidence to either confirm or refute this perception.

The higher speed, reliability and attractiveness of BRT compared to B-lines is forecast to generate an additional 16-30,000 transit trips per day in 2050 for a total of 40-45,000. With a 5-minute frequency, capacity would be sufficient on most of the two corridors, with the exception of a 2-kilometre section of

King George Boulevard closest to King George Station. This could be addressed through higher frequency, higher capacity vehicles or complementary bus service on parallel routes.

Alternative 2: LRT on 104 Avenue and King George Boulevard

LRT on 104 Avenue and King George Boulevard is essentially the same project as that suspended by the Mayors' Council in December 2018. It is included as a reference case, and in the event that policy-makers wish to revisit that decision in the future; however, TransLink would not pursue this alternative without the full support of the City of Surrey. The cost of that project was estimated in 2018 to be \$1.6 billion. It is likely this would rise due to increased construction costs and so a conservative estimate of \$1.6-1.8 billion has been used in this preliminary analysis.

Similar to business as usual and BRT, this alternative could also support most study objectives. LRT would perform similarly to BRT in many ways, including speed and journey time. LRT vehicles have greater capacity, meaning passenger comfort and accessibility are easier to guarantee than with BRT. Roadway priority would have similar impacts as BRT for other vehicle traffic. Because of its greater capacity and other perceived advantages LRT is forecast to have higher ridership than BRT, which could contribute to a somewhat slower growth in traffic congestion. There would be modest visual impacts from the overhead power cables. As discussed above, there is a perception that LRT would perform better in supporting urban and economic development than BRT, but the evidence is inconclusive. However, LRT has been successfully used in many cities to achieve urban and economic development goals based on significant improvements to the surrounding streetscape.

The higher speed, reliability and attractiveness of LRT compared to B-lines is forecast to generate an additional 21-33,000 transit trips per day in 2050, for a total of 45-55,000. With a 5-minute frequency, capacity would be more than adequate to meet demand on the two corridors.

Alternative 3: B-Line on 104 Avenue and SkyTrain on King George Boulevard

A SkyTrain on King George Boulevard, in combination with B-line on 104 Avenue, is estimated to cost in the region of \$1.2-\$1.4 billion. BRT rather than B-line on 104 Avenue would add roughly \$300 million to this cost range, although this has not been assessed in any detail at this point.

Similar to the B-Line and other alternatives noted above, this alternative could support many of the objectives. SkyTrain would be faster and more reliable than the other alternatives and would provide good comfort and accessibility. There would be a "one-seat" ride to more destinations, where other alternatives would require a transfer. There would be minimal impacts to other road users because SkyTrain would operate separately from traffic. SkyTrain's higher ridership could also contribute to a somewhat slower growth in traffic congestion. The elevated guideway would have more visual impacts than the other alternatives and could have greater noise and vibration impacts. SkyTrain contributes to urban and economic development in a different way than BRT or LRT, delivering faster access but a different kind of streetscape. A B-line on 104 Avenue would perform as described above (in the business as usual alternative).

The higher speed, reliability and attractiveness of SkyTrain on King George Boulevard compared to a B-line is forecast to generate an additional 33-38,000 transit trips per day in 2050, for a total of 55-60,000. Having three branches to the Expo Line (Production Way, Langley and Newton) would introduce some

operational constraints, customer experience issues and long-term capacity considerations. However, the 2050 demand forecasting shows more than sufficient capacity in this alternative on King George Boulevard, 104 Avenue and Fraser Highway.

No assessment has been made of the impacts of a further extension on the rest of the Expo Line. A detailed assessment of impacts would be needed to ensure that increased ridership on the sections from King George Station to Waterfront could be accommodated without significant negative impacts that could incur new costs.

Table 2: Summary of ridership metrics for the BAU and three alternatives studied

	BAU	Alternative 1 BRT	Alternative 2 LRT	Alternative 3 SkyTrain/B-line
2050 daily ridership	22-24000	40-50,000	45-55,000	55-60,000
2050 new daily transit trips	-	16-30,000	21-33,000	33-38,000

At this stage all four alternatives, including the business as usual alternative, are capable of contributing towards the study objectives to differing degrees and with different trade-offs. There is insufficient information for TransLink to make a recommendation for or against any alternative, and there may be further alternatives worth consideration. A full evaluation will be carried out over the coming months to provide a basis for further decision-making.

SUMMARY OF PRELIMINARY FINDINGS

- As described in the discussion above, the starting point for this assessment was:
 - SkyTrain from Surrey to Langley along Fraser Highway
 - 27 kilometres of rapid transit on three corridors
 - A *notional* funding envelope of \$3.55 billion
- Based on available information, a Surrey Langley SkyTrain appears to perform well against the strategy refresh objectives. However, given the \$3.12 billion cost estimate, it will not be possible to provide 27 kilometres of rapid transit including a Surrey Langley SkyTrain at a cost within \$3.55 billion total envelope.
- There are alternatives that include a Surrey Langley SkyTrain available within the \$3.55 billion envelope that appear to perform well against objectives, but do not provide 27 kilometres of rapid transit. There could be further combinations of alternatives that provide less than 27 kilometres of rapid transit at a cost within \$3.55 billion, that perform as well or better. These have not yet been identified or evaluated.
- There are alternatives that include a Surrey Langley SkyTrain that provide 27 kilometres of rapid transit and appear to perform well against objectives but come at a cost in excess of the \$3.55 billion total funding envelope. Total estimated costs range between \$3.8 and \$5.0 billion. Costs for any rapid transit in excess of \$3.55 billion would likely need to be set against other regional transportation investments to determine the relative priority of additional expenditure on these corridors. There is no reason to assume that these corridors would have any automatic priority.

Appendix 1: The development of south of Fraser rapid transit strategy refresh objectives

The South of Fraser Rapid Transit Alternatives Analysis Study, carried out between 2009 and 2012, used a set of objectives covering the following evaluation accounts: transportation, financial, environment, urban development, economic development, social and community, and deliverability. A 2017 Strategic Options Analysis, developed as part of the business case for the Surrey Newton Guildford LRT project, used a similar but refined set of objectives.

The first stage of the strategy refresh was to review both sets of objectives and confirm their relevance with the public and stakeholders. The objectives were formulated as thirteen “values”, and the public was asked to rate their level of support for each value during public engagement in April 2019, via a public survey online, at four public open houses and through a market research poll.

More than 21,000 surveys were completed by the public. All the values proved to be relevant, with even the lowest rated value being either “moderately” or “very” important to more than 85 percent of respondents. The following three values received the highest rating:

1. “Predictable transit travel time that helps me get to my destination faster”
2. “Efficient use of public money”
3. “A comfortable and safe experience when I use transit.”

Market research confirmed these results and gave the same top three values, in a slightly different order. Full results can be found on the Surrey Langley SkyTrain website at surreylangleyskytrain.ca/document-library.

The values were converted into the following set of objectives, with associated evaluation criteria, which have been used in the initial assessment of a Surrey Langley SkyTrain and the possible alternatives for 104 Avenue and King George Boulevard.

Values in the public survey	Objective
<ul style="list-style-type: none"> • Increased transportation options • Reliable driving time 	Increase access to employment, schools, housing and services
<ul style="list-style-type: none"> • Predictable transit travel time • Comfortable and safe experience 	Provide a great transportation user experience
<ul style="list-style-type: none"> • Pedestrian and cycling connections • Choices that limit climate change and exposure to air pollution • Protection of green space 	Support healthy people and environment
<ul style="list-style-type: none"> • Affordable and desirable community • Economic development and job growth • Reduce urban sprawl • Efficient movement of goods and services 	Advance local and regional prosperity
<i>While</i>	
<ul style="list-style-type: none"> • Efficient use of public money 	Spending wisely
<ul style="list-style-type: none"> • Access during construction 	Implementing prudently

Note: due to an editing error, the value “Pedestrian and cycling connections to transit services” was omitted from the online survey but was included in the market research poll.

TO: Mayors' Council on Regional Transportation

FROM: Geoff Cross, Vice-President, Transportation Planning and Policy

DATE: July 10, 2019

SUBJECT: **Item 4.1 – Transport 2050 Long-Term Transportation Network Concept Development**

RECOMMENDATIONS:

That the Mayors' Council on Regional Transportation receive this report.

PURPOSE

To provide the Committee with an overview of the process, general approach, roles and responsibilities in developing long-range transportation system and network concepts for consideration in the Regional Transportation Strategy update.

BACKGROUND

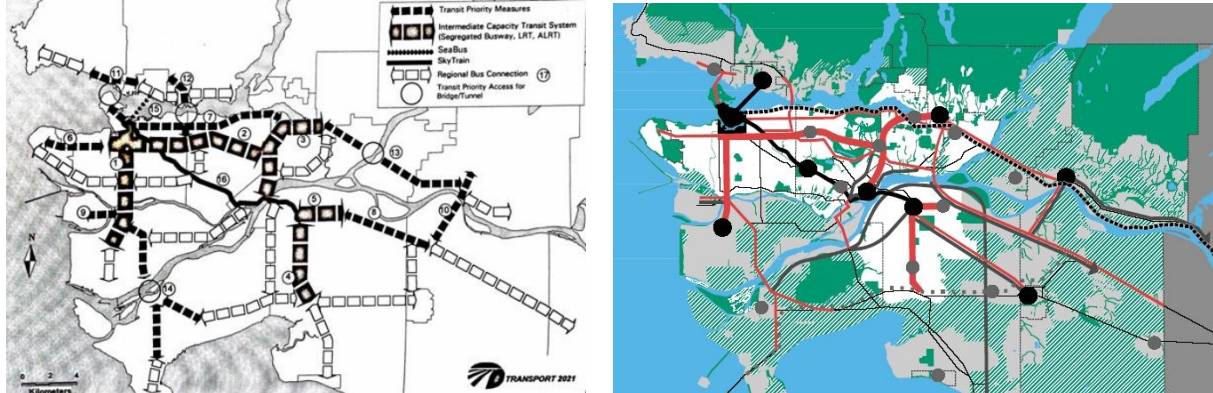
The Regional Transportation Strategy is Metro Vancouver's long-range policy and strategic plan for mobility. It establishes regional goals for transportation that support Metro Vancouver's regional growth strategy, and outlines the objectives, principles and a blueprint for long-range transportation policies, actions and investments needed to enable progress towards these goals. TransLink publicly launched an update to the Regional Transportation Strategy – referred to as Transport 2050 – in May 2019. The process will deliver a finalized strategy by late 2020.

DISCUSSION

A new long-term transportation network concept for the region will be developed through the Transport 2050 process

Metro Vancouver's current transportation network – including major roads and bridges, transit corridors, and cycling and pedestrian infrastructure – is a product of a long-range network vision established in Transport 2021 (see Figure 1), the region's first comprehensive long-range transportation strategy. Today, the region is on-track to delivering nearly on all key components of this long-range network. These include the Millennium Line and Evergreen Extension, Canada Line, Golden Ears Bridge, and significant increases in bus services and pedestrian and cycling infrastructure, among others. Given this progress, Transport 2050 provides an opportunity to develop a new long-range network concept to support the next phase of investments that will help position the region to advance progress towards our regional mobility goals.

Figure 1: Long-term transportation network concept adopted in early 1990s. First iteration (1993) in Transport 2021 (left) and second iteration (1996) in Livable Region Strategic Plan (right). In the map on the right, the solid red lines denote corridors identified for higher capacity, frequent transit.

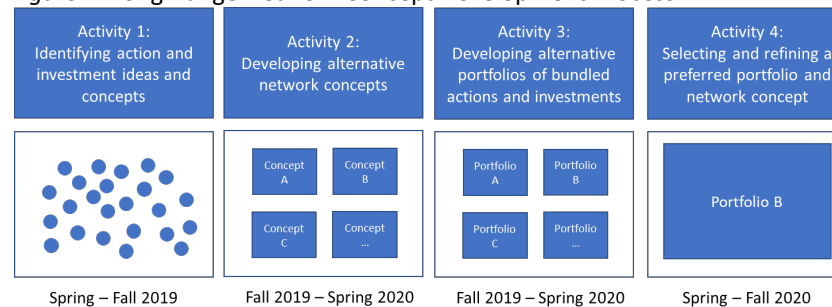


A new long-term network concept is expected to be a map illustrating the region’s proposed approach to managing and investing in both existing components of the regional transportation system, like roads and transit, along with new elements like shared mobility services and others, and key corridors where investments are needed. The long-term network will be a concept map, not a detailed system map showing routing or technology. It is intended to establish what the region is committed to delivering on and will support subsequent work to refine, design, prioritize and fund specific investments.

Alternative network concepts will be developed over four activities through early 2020

Figure 2 outlines the process for identifying a preferred long-range transportation network concept. A description of each activity is provided below, for discussion.

Figure 2: Long-Range Network Concept Development Process



Activity 1: Ideas for new long-range network investments will be identified and developed using three sources of input

- a) *Public input:* In Phase 1 of Transport 2050, the public is being asked to submit their ideas for new policies, actions, or investments that they would like TransLink to consider to address key transportation issues in their communities or across the region.
- b) *Partner and stakeholder input:* Local government and agency partners, along with stakeholders, are invited to submit their ideas for new policies, actions or investments through a formal ‘Call for Ideas’ that is now live and open until mid-September 2019.

- c) *Technical studies:* The Transport 2050 project team is actively identifying and undertaking analysis to estimate preliminary outcomes and costs of potential investments across multiple system components (like high capacity transit, inter-regional connections, roads and bridges, and others) based on common ideas received in previous years.

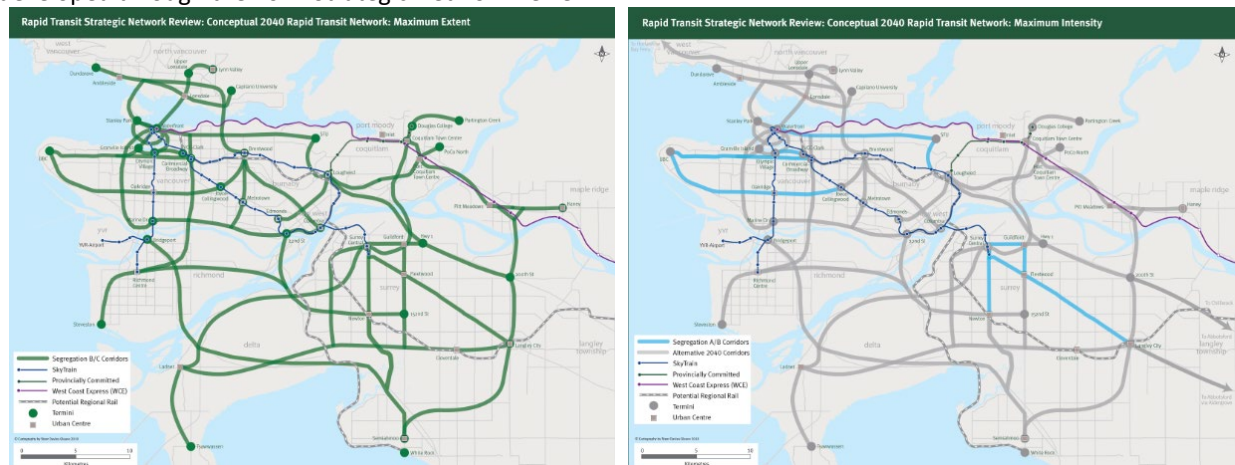
Activity 2: Long-range network concepts will be built around different approaches to how investments could be made

Ideas identified and received in Activity 1 will be compiled and filtered to identify those ideas that are regionally significant, have merit, and support key regional goals and objectives for mobility. These ideas will be used to develop different long-range network concepts. It is envisioned that the concepts will show different approaches to network investment and their estimated costs. Potential approaches may include:

- a **maximum intensity network**, where different types of investment in high capacity transit, pedestrian and cycling investments are focused on the most intensively utilized/highest demand corridors,
- a **maximum extent network**, where different types of investment in high capacity transit, pedestrian and cycling investments are focused on increasing the reach of the network to improve travel time competitiveness of non-auto modes across the region, and
- a **hybrid network** approach that combines the highest performing investment ideas in each category.

Example network maps illustrating the approach in concepts a) and b) above are provided in Figure 3. These maps were developed as part of the 2012 Strategic Network Review and are for illustration purpose only.

Figure 3: Illustrative maps showing maximum extent (left) and maximum intensity (right) network concepts developed through the 2012 Strategic Network Review.



Long-range network concepts will be developed together with parallel strategies and actions. This recognizes the inter-relationship between infrastructure investment, land use, and demand management. Further, regional objectives and potential weighting of objectives, as established by decision makers, influence the relative performance of investments.

Other parallel planning processes will be used as inputs to the development of network concepts. For example, a feasibility study of rapid transit connections to the North Shore being led by the Province is being completed to better understand what network connections are possible.

Activity 3: Incorporating long-range network concepts into alternative portfolios for public and stakeholder consultation

Different long-range network portfolios developed in Activity 2 will be incorporated into alternative portfolios of bundled policies, actions and investments and levels of investments/spending. The public and stakeholders will have an opportunity to provide input and feedback on these portfolios, including which they prefer and why, during Phase 2 of Transport 2050.

Activity 4: Selecting and refining a preferred portfolio and network concept

Using input from Phase 2 public consultation and technical analysis, a preferred network concept and portfolio will be identified and refined to form the foundation for the updated strategy. Network connections recommended in Transport 2050 will move towards implementation through further refined studies for decision maker considerations to understand the specific costs and benefits.

The Regional Transportation Planning Committee will provide direct oversight into the development of the network concepts and provide recommendations to the New Mobility Committee for consideration in Transport 2050

Mayors' Council oversight of the long-range network concept development and portfolio development processes will be shared by the Regional Transportation Planning Committee and New Mobility Committee.

The Regional Transportation Planning Committee will be responsible for advising on the development of long-range network concepts using the input received during Phase 1 of Transport 2050. The Committee will have an opportunity to review all technical work and public input on investment ideas, advise on what parameters to use to develop network concepts, and review modelled outcomes and network assessments.

The Regional Transportation Planning Committee will also be responsible for making recommendations to the New Mobility Committee on which long-range network concepts should be incorporated into alternative portfolios for Phase 2 consultation. The New Mobility Committee will have responsibility for developing the portfolios and identifying a preferred approach to include in the final Transport 2050 strategy.

TO: Mayors' Council on Regional Transportation
FROM: Geoff Cross, Vice-President, Transportation Planning & Policy
DATE: July 15, 2019
SUBJECT: **ITEM 4.2 – Burnaby Mountain Gondola Next Steps**

RECOMMENDATION:

That the Mayors' Council on Regional Transportation:

1. Endorse TransLink proceeding with project development of the Burnaby Mountain Gondola, starting with public engagement activities then proceeding to funding options and more technical design;
 2. Receive this report.
-

PURPOSE:

Ensure Mayors' Council members are briefed on the status of a potential gondola on Burnaby Mountain, including recent direction from the City of Burnaby.

BACKGROUND:

Transit service to Burnaby Mountain remains a significant challenge

Currently, the #145 bus route which is the primary bus service transporting students, staff, residents and visitors to Burnaby Mountain already experiences significant crowding and reliability issues throughout the year, including during winter weather events. Despite operating at very high frequencies (i.e. up to every 2-4 minutes) with high-capacity articulated buses, the existing route regularly carries full bus loads throughout the day, including both peak and midday, with regular pass-ups. The operational constraints of ground-based bus service mean that little can be done to improve capacity to meet the expected 60% growth in demand over the next 20 years.

Multiple alternatives have been examined to improve transportation to Burnaby Mountain

Providing an effective transit connection to the growing student, employment, and residential community at the top of Burnaby Mountain has been studied a number of times since 2009, with subsequent examinations in 2011 and 2018. These studies assessed different technologies, both ground-based (including bus, funicular, LRT, escalator) and aerial (fixed tram and four different gondola types). Five different alignments have also been evaluated, connecting different SkyTrain stations and landing areas at SFU. This included a new alternative examined in 2018 with a mid-route bend to more closely follow existing roadways and minimize travelling over residential areas. All assessments have determined that a straight-line, 3S gondola connecting Production Way-University Station to SFU Town Square is the preferred alternative to advance.

Substantial project benefits have been identified compared to continuing bus service

Replacing current bus service with a gondola connecting Burnaby Mountain to SkyTrain would:

- provide enough capacity to meet future demand, including travellers to SFU and the growing residential community
- resolve significant transit reliability issues related to the challenges of serving a mountaintop destination
- result in an over 60% improvement in travel times for students, employees, residents, and visitors – one of the main drivers of deciding to use transit
- require less annual operating costs than maintaining bus service, with potential cost savings increasing as demand continues to rise over time.

A high-capacity connection has already been identified as a regional priority

A high-capacity connection to Burnaby mountain has already been identified as a regional priority since the 2013 Regional Transportation Strategy, when it was included along with Expo Line upgrades, South of Fraser rapid transit on Fraser Highway, 104 Avenue and King George Blvd, and rapid transit on the Broadway corridor. Subsequently, the 2014 Mayors' Council 10-Year Vision noted that the existing and future demand to and from Burnaby Mountain may require a high-capacity connection to the nearest SkyTrain station, because the existing bus service is already near capacity despite operating at very high frequencies. The Vision indicated the gondola could advance subject to the business case, funding, partner contributions, and achievement of other initiatives contained in the Vision.

City of Burnaby's Support for Public Consultation

Support from the community and the City of Burnaby is critical to the success of further advancing the project. Burnaby City Council considered a report on the Burnaby Mountain gondola on May 27, 2019 and endorsed a recommendation that Council support, in principle, a gondola link from SkyTrain to the top of Burnaby Mountain, subject a number of conditions. This includes consideration of and consultation on a new alternative alignment (referred to as Option 3), connecting Lake City Way station with SFU. This option was conceived to minimize potential impacts on residents, riparian areas, and the Burnaby Mountain Conservation Area. This alignment was not considered in TransLink's 2011 or 2018 assessments as it is a longer distance connection and would require an additional transfer from the Expo Line. An assessment of this option will be undertaken and included in consultation.

The City of Burnaby staff report is attached to this report for information.

DISCUSSION:

Continuing gondola project development is consistent with delivering the Mayors' Council Vision

The Mayors' Council Vision identified conditions to proceed with action on the gondola. The status of these conditions are as follows:

Policy direction conditions	Status
Consultation	<ul style="list-style-type: none"> Phase 2 Investment Plan includes funding to support significant public and stakeholder engagement
Business case	<ul style="list-style-type: none"> 2018 feasibility study, funded by Phase 1 Investment Plan, confirmed transportation-related benefits of the project and positive benefit-cost ratio. A subsequent business case would be required to secure funding commitments, approval and proceed to construction
Funding	<ul style="list-style-type: none"> Phase 1 and 2 of Investment Plan committed funding to complete feasibility study and project development. No committed funding for construction
Partner contributions	<ul style="list-style-type: none"> No partner contributions have been confirmed. SFU has identified strong support for the project, including potential financial contributions. City of Burnaby has indicated support in principle (as described in June 12 Regional Planning Committee report)
Achievement of other Vision initiatives	<ul style="list-style-type: none"> Major initiatives have been approved and are proceeding, including rapid transit in South of Fraser, Broadway, and expansion on existing rapid transit and bus service

Project development would provide a more complete understanding of project benefits and trade-offs.

The Phase Two Investment Plan, approved in June 2018, does not include funding for construction of the Burnaby Mountain gondola project, but does include necessary funding to continue with additional project planning. Key elements of this additional project planning work include: exploring potential funding for the project, conducting further technical work and advancing the level of design, and engaging key partners and the public to assess support for the project.

NEXT STEPS

Partner and public engagement

Key partners to engage with include the City of Burnaby, Mayors’ Council, federal and provincial governments, SFU, SFU Community Trust, neighbouring residents and businesses, and SFU students and staff.

Significant engagement with residents and businesses most directly affected by the potential project would take place as part of the next steps, including significant engagement as input to the environmental and community impact assessment process that would support project development. Through this process we would seek to identify ways to mitigate any possible negative impacts associated with the potential project.

Potential project funding

Understanding whether there is a viable funding strategy for a potential gondola project is an important step and will influence the extent to which additional project planning activities are undertaken. It is expected that senior government funding would be required to support this project, but this funding

would not be gained at the expense of other priorities in the Mayors' Council 10-Year Vision. There is the potential that this project could be a candidate for federal green infrastructure funding, but this is not yet confirmed. Additionally, it is expected that financial impacts to TransLink should be neutral or positive. Further work is needed to confirm potential senior government funding contributions that might be available to support the project, as well as the regional contribution and potential contributions from other project partners (e.g. SFU). Without these financial conditions, the gondola would be considered to follow the 10-Year Vision and instead be considered together with other priorities identified in Transport 2050.

Design and technical work

Further technical work would be done to better define the potential project. This includes development of alternatives to be considered through public engagement, including the new alternative alignment proposed by the City of Burnaby. Subsequent to public engagement and further Mayors' Council direction to proceed, further technical work would focus on design development to support the environmental and community impact assessment process, refine the project design to mitigate impacts, and support the development of a final business case for funding consideration. While the recently completed Feasibility Study did advance some of the design work related to upper and lower terminals, to date project design has only progressed to the point of a Class 4 estimate of -30% to +50%. This additional design and technical work will provide increasing levels of certainty with regard to project costs.

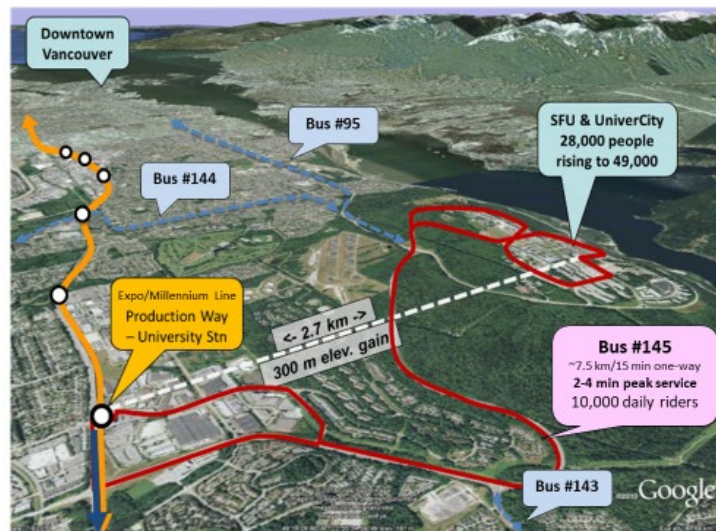
The Mayors' Council and TransLink Board will continue to be engaged through the project development phase. Importantly, if the further project development work enabled by the Phase Two Investment Plan continues to be supportive, public and partner support is secured, and a viable funding strategy is identified, then construction of the potential gondola project would still need to be authorized through a future investment plan.

Attachment: City of Burnaby report to Burnaby Council, May 22, 2019

Item 4.2 Burnaby Mountain Gondola

Geoff Cross, VP Transportation Planning & Policy

Context – existing service unable to meet future demand



Multiple technologies have been considered

14 different technologies...9 ground-based, 5 aerial transit solutions

Aerial Tram (Portland)



Aerial Tram (Vancouver)



Monocable Gondola (London)



3S Gondola (Whistler)



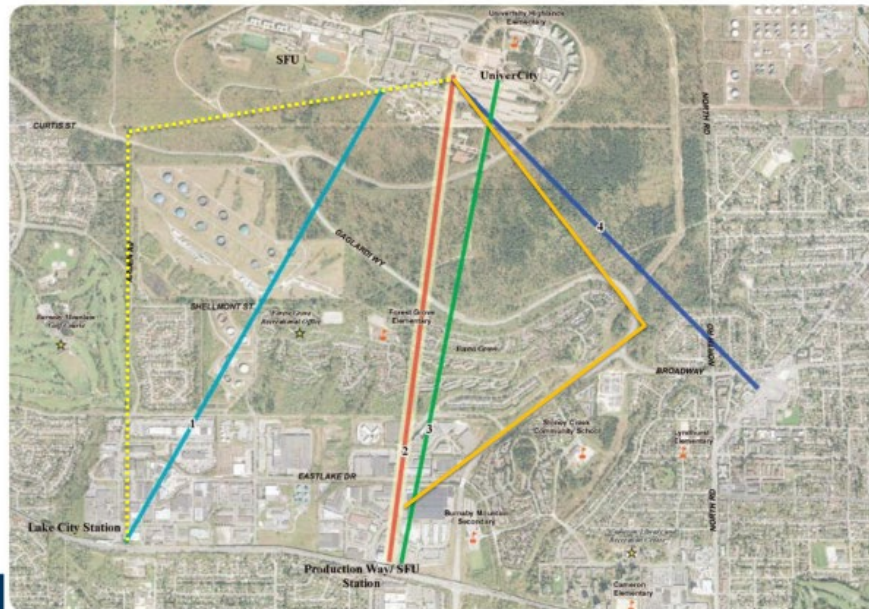
Funitel Gondola (Athens)



2S Gondola (Hong Kong)



Multiple alignments, including new idea to be considered



Next Steps

Fall 2019 to Spring 2020:

Engagement and Preferred Alignment Alternative

- Confirming the project definition and objectives
- Stakeholder engagement, including local residents
- Determining preferred alignment alternative
- Seeking more certainty around funding options
- Seek endorsement from Mayors' Council and Burnaby City Council

Future phases:

- Formal environmental and community impact assessments
- Refining project design to mitigate impacts
- Finalizing business case

5



TO: Mayors' Council on Regional Transportation
FROM: Geoff Cross, Vice-President Planning & Policy
DATE: July 10, 2019
SUBJECT: **ITEM 4.3 – Arbutus to UBC SkyTrain Update**

RECOMMENDATION:

That the Mayors' Council on Regional Transportation receive this report.

PURPOSE:

The purpose of this report is to provide an update for the Arbutus to UBC SkyTrain planning work, which is commencing to the next stage in project analysis and development.

BACKGROUND:

In February 2019 the Mayors' Council directed TransLink to advance a SkyTrain Millennium Line extension from Arbutus Street to UBC to the next stage of project development, including an assessment of alternative concept designs and preliminary business case inputs. This decision triggered commencement of Arbutus to UBC SkyTrain Design Development and Preliminary Cost-Benefit Estimate work.

For additional background and information on this decision and previous planning work, please see the [January](#) and [February](#) Mayors' Council board reports.

DISCUSSION:

Technical, strategic, and engagement streams of work

There are three streams of work to move forward the next stage of Arbutus to UBC SkyTrain planning work, including:

- Completing the technical analysis needed to get to a preferred concept design and cost-benefit estimate;
- Developing a strategic approach to relevant policy topics including land value capture, affordable housing, and land use; and
- Consulting with the public and stakeholders.

Each stream of work is described in more detail below.

Technical analysis

The technical work will involve developing concept design for SkyTrain between Arbutus and UBC as well as developing pre-business case inputs to estimate costs and benefits. This work will take place over the next 14-18 months, concluding in late 2020.

Key tasks in the technical analysis include:

- Assessing vertical and horizontal alignment options;
- Preparing detailed concept designs; and
- Developing pre-business case inputs by assessing costs and benefits.

The design development and preliminary cost-benefit estimate work, funded from the Phase Two Investment Plan, will result in a recommendation of a preferred concept design to carry forward into a reference case design (required to develop a business case) and procurement readiness program, which would need to be funded through a future investment plan.

This work will be completed with a consultant team and is currently in the RFP proposal process, with contract award expected by mid-August.

Strategic approach

The strategic approach stream of work includes analysis of policy questions related to rapid transit assessment, land-use planning, and funding. In an initial stage, this will be directly related to the design development and pre-business case work for an Arbutus to UBC SkyTrain, recognizing the potential regional application of this strategic review. Key questions and outcomes anticipated in this stream of work include:

- exploring the regional objectives that may be in tension such as Land Value Capture, density, and affordable housing;
- developing potential funding strategy options;
- synchronizing planning activities and engagement with partner processes on land use and development planning to get the best outcomes; and
- Ongoing coordination with partners – including City of Vancouver, First Nations (including the MST Development Corporation), UBC, UEL, and others – related to land use policy and supportive policy agreements.

This work will be completed by staff within TransLink with consultant support as needed.

Engagement

Community and stakeholder engagement will occur throughout this process and is expected to include three rounds, including:

- Round 1 (Oct 2019): Confirm previously stated project objectives, discuss principles to consider for station locations, and promote overall project education and awareness.
- Round 2 (Feb/Mar 2020): Report back on alignment analysis and key trade-offs
- Round 3 (Aug/Sep 2020): Report back on a preferred concept and benefit-cost estimates

This work will be completed by TransLink staff with consultant support as needed.

Partner agency and Mayors' Council coordination

Work on the Arbutus-UBC SkyTrain Design Development and Preliminary Benefit-Cost estimate will include three committees with government partners, including:

- A **partner working group** made up of project level staff;
- A **partner leadership team** made up of high-level managers or directors; and
- An **executive project board** made up of executive staff who report directly to decision makers.

TransLink is inviting potential government partners to participate in one or more of these committees. Government entities may include City of Vancouver, UBC, UEL, Government of BC Ministry of Transportation and Infrastructure, Government of BC Municipal Affairs and Housing, Musqueam Indian Band, Squamish Nation, and Tsleil-Waututh Nation. Participation on these groups will include working directly with the TransLink project team to inform and provide regular input throughout the project.

The TransLink Board and Mayors' Council will continue to be updated through the project development process, with critical decisions brought forward at key milestones. The project team intends to bring forward the following topics to the TransLink Board and Mayors' Council as part of the planning process:

- Values and objectives confirmation from community engagement and initial concepts identified for horizontal and vertical alignment (Fall 2019);
- Review of findings from options analysis for horizontal and vertical alignment (Winter 2020);
- Review draft concept design and benefit-cost estimate inputs (Summer 2020); and
- Final Preferred Concept (Fall 2020).

NEXT STEPS:

Immediate next steps will include finalizing the procurement process for selecting a consultant. Project kick-off is expected in mid-August and will begin with an assessment of vertical and horizontal alignment options and public engagement in the fall of 2019.

It is anticipated that early work from this process can be included as an input into development of Transport 2050.

TO: Mayors' Council on Regional Transportation

FROM: Geoff Cross, Vice President, Transportation Planning and Policy

DATE: June 28, 2019

SUBJECT: **ITEM 4.4 – Update on George Massey Crossing Project, Phase Two**

RECOMMENDATION:

That the Mayors' Council on Regional Transportation receive this report.

PURPOSE:

The purpose of this memorandum is to provide the Committee with information about the current Phase of the George Massey Crossing Project, including process expectations, the long list of options, key TransLink staff input, and Mayors' Council engagement on the Project.

BACKGROUND:

At the May 16, 2019 Joint Planning Committee, TransLink staff provided the Committee with an update on the Project principles and goals, the new Metro Vancouver George Massey Crossing Task Force, and the general scope of input TransLink expected to provide in the upcoming Project engagement process. Management committed to report back to the Mayors' Council in subsequent months with additional details on the Project's engagement plan and scope of TransLink staff's input to the process.

DISCUSSION:

The process for the Project: A three-phased approach to develop a business case is ongoing

Currently, the Province is in the second of a three-phase engagement process with Metro Vancouver, TransLink, municipalities, and First Nations:

Phase 1 – Development of Goals and Objectives	Phase 2 – Development of Crossing Options	Phase 3 – Development of Business Case
Engage with stakeholders to develop project goals and objectives.	Engagement with stakeholders to identify options and determine a preferred option that best meets Phase 1 goals and objectives.	Assessment to develop and finalize the business case for the preferred option identified in Phase 2. Stakeholders will be engaged as appropriate.
To be completed by April 2019	To be completed by end of 2019	To be completed by November 2020

Key TransLink staff input to the Project

As part of the Phase 1 engagement process, TransLink staff provided input on potential interim solutions as well as the Project goals and objectives. Throughout the second phase of engagement, the Ministry Project team has continued to work with Metro Vancouver and TransLink staff. The intent is to hold three staff workshops by the fall, with a Task Force meeting expected generally to occur a few weeks after each workshop. The goal is to update and receive feedback from the Task Force at each key step moving forward.

During the first staff workshop of Phase 2, held May 22, 2019, the Ministry Project team met with staff from TransLink, Metro Vancouver, City of Richmond, City of Delta, and Tsawwassen First Nation to garner input on the Phase 2 engagement plan, the crossing options development process, the evaluation framework as well as to discuss a preliminary draft long list of crossing options. The engagement process for Phase 2 includes additional staff workshops over the summer to present the results of the evaluation framework screening of the long list of crossing options, and then a preliminary short list of results.

TransLink staff have been pleased with the opportunity for input to date in addition to the Ministry Project team's responsiveness to suggestions and recommendations. The principles, evaluation framework, and analytical tools that have been developed and applied are generally consistent with the approach TransLink takes in TransLink-led project evaluation processes, and staff have relayed that support to the Project team.

The proposed evaluation framework, attached to this report, includes a number of indicators relevant to the performance of the regional transportation system. Examples include evaluation of the alternatives' forecasted sustainable mode share, travel time delay, impacts on goods movement, and comfort for pedestrians and cyclists. The Ministry Project Team will be using the most recent version of the Regional Transportation Model to forecast demand, with land use assumptions from Metro Vancouver.

TransLink staff will be involved in development of alternatives, including multimodal network considerations, transit priority, and implications on future potential rapid transit. Regional road pricing will be considered in evaluation as a sensitivity analysis.

Mayors' Council engagement and the Metro Vancouver Task Force

As noted in the Project update report to the May 16, 2019 Joint Planning Committee, the George Massey Crossing Task Force was struck as a standing committee of the Metro Vancouver Board, intended to provide Project related advice and recommendations to the Metro Vancouver Board's Finance and Intergovernmental Committee. While the Task Force membership specifies Mayor Coté as representing the Mayors' Council on Regional Transportation, the Ministry Project team has stated their willingness to engage directly with the Mayors' Council at any time.

The first meeting of the Task Force took place on June 27, 2019, during which the Ministry Project team sought feedback and comments on both the long list of options and the options screening process. The Project team also presented an overview of the updated evaluation framework for information, with further detail on this screening tool provided in the members' meeting reports. This framework was developed in alignment with the April 26, 2019 Metro Vancouver Board-approved Project goals and

objectives, and further refined based on the staff working group's input and recommendations from First Nations. The materials shared as part of the June 27 Task Force agenda are included as Attachments 1-3 with this report.

At the June 27th meeting, the Task Force was generally favourable in response to the long list of options and evaluation framework presented. There was also support to reiterate the request made in the March 29, 2019 letter to Premier Horgan (from Mayors Harvie, Brodie, McCallum, Stewart and Walker, and Chiefs Sparrow and Williams) that "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".

The second Task Force meeting is scheduled for July 24, 2019 with the intent to narrow down the long list of options and receive endorsement on a short list, which will then be taken for additional evaluation by the Ministry Project team. Support from the Task Force (with ultimate endorsement from the Metro Vancouver Regional District Board) will be sought again at this milestone, and the Mayors' Council may be interested in more direct engagement with the Project team at that point in the process (i.e. providing input on the short list of options). A follow-up Task Force meeting is expected in September, and it is anticipated that the distillation to a single preferred option will be determined at the end of this year.

NEXT STEPS:

Over the course of the coming month, the Ministry Project team will be in the process of selecting a preferred proponent for the technical analysis support, seeking endorsement from the Task Force on items discussed at the May 22, 2019 staff workshop, and holding the second staff workshop for Phase 2. The Project team is also still in the process of defining the interim solutions, which are solutions that could be accomplished at a relatively lower cost until a replacement project is confirmed. Management will continue to report back to the Mayors' Council in the coming months with more details on the short list of options, the screening process, and identified interim solutions.

TO: Mayors' Council on Regional Transportation

FROM: Geoff Cross, VP, Transportation Planning and Policy
Christine Dacre, Chief Financial Officer

DATE: July 9, 2019

SUBJECT: **ITEM 5.1 – Completing the Vision and next Investment Plan**

RECOMMENDATION:

That the Mayors' Council on Regional Transportation receive this report.

PURPOSE:

This report provides an overview of remaining investments to be implemented from the 10-Year Mayors' Vision, and the current path to develop a Phase Three Investment Plan.

BACKGROUND:

Developed and approved in 2014, the 10-Year Vision for Metro Vancouver Transit and Transportation (the 10-Year Vision) is a region-wide, multi-modal plan for expansion to support our 30-year Regional Transportation Strategy and Regional Growth Strategy. The 10-Year Vision outlines major investments in new bus, rapid transit, West Coast Express, Sea Bus service, and roads, walking and cycling infrastructure. The 10-Year Vision is being rolled out in phases through a series of Investment Plans. Each Investment Plan includes contribution commitments from the federal government and provincial government for capital projects along with regional revenues required to fund operating investments.

At the February 15, 2019 meeting, the Mayor's Council received an update on the implementation of the 10-Year Vision. From the resulting discussion, the Mayors' Council requested that TransLink accelerate planning of some Phase Three improvements for the next investment plan. Options for how that could be done were further discussed at the March 15, 2019 meeting.

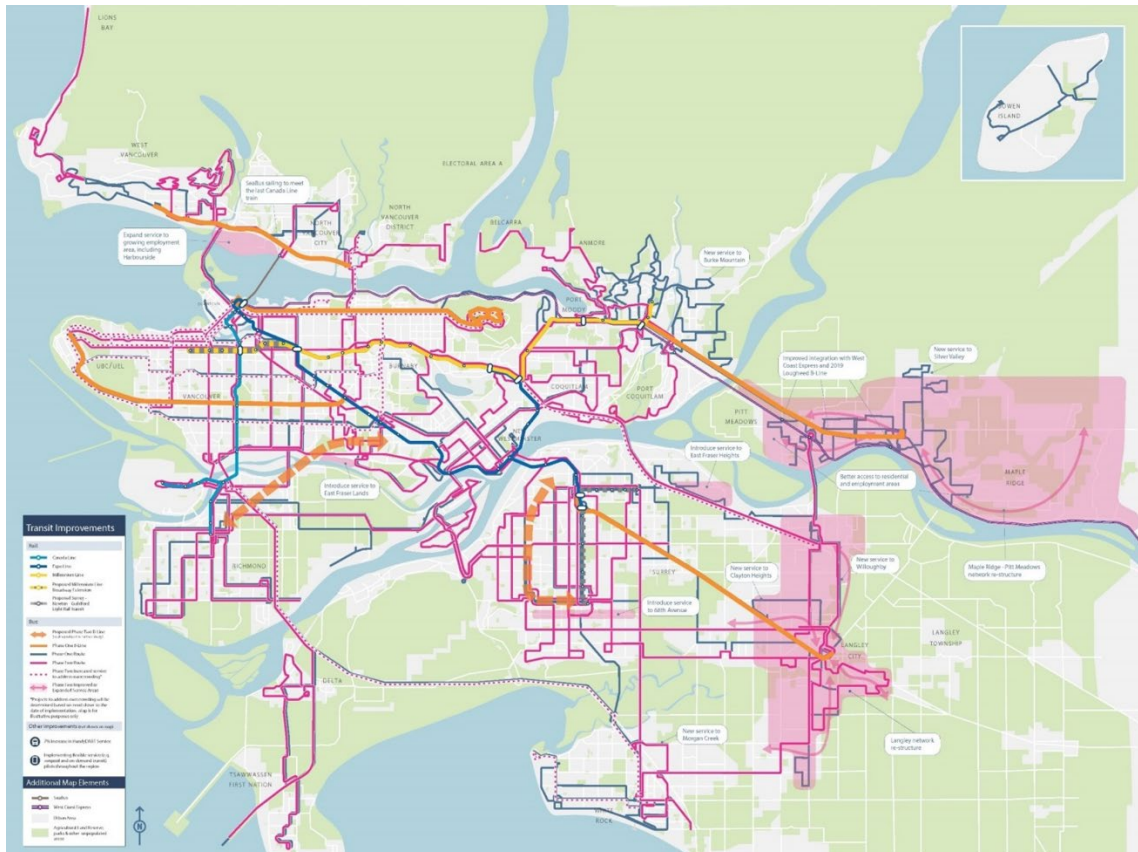
One of the key steps to developing an investment plan is work discussed at the June 27, 2019 Mayors' Council meeting to assess and confirm our financial starting point for the next investment plan. This starting point has a major bearing on the annual amount of regional funding that the Mayors' Council will be required to raise to fund the next Investment Plan which will in turn inform the scope of the next Investment Plan.

DISCUSSION:

TransLink is well underway in delivering the 10-Year Vision

The Phase One Plan funded approximately \$2 billion in expanded transit services, transit infrastructure and improvements for roads, cycling, and walking, beginning in 2017. The Phase Two Plan was approved in June 2018. It funds an estimated \$7.3 billion of transportation improvements, including two new rapid

transit projects. These two plans represent the largest investments in transit service improvement and expansion in the province’s history. TransLink has been steadily delivering expansion improvements across the region since January 2017.



Improvements approved through Phase 1 and Phase 2 Investment Plans

Many outstanding projects are remaining to implement the full Vision

The Vision was designed as a 10-year multi-modal plan. Improvements to be delivered over the first six years were funded and approved through Phases 1 and 2. To fully implement the entire Vision, there are many projects remaining to be funded and implemented. This includes:

- Implement 27km of rapid transit South of Fraser
- 7% increase in bus service
- 5 new B-Lines
- 2 new service areas
- 8% HandyDart service increase
- Upgrades to 9 transit exchanges
- Upgrades to Expo/Millennium and Canada Line stations
- 10 West Coast Express cars
- Upgrades to Canada Line systems
- Continued funding for Major Road Network, walk to transit and cycling cost-share programs

A summary of projects in the Vision and the projects is provided in Attachment A. Additional initiatives have been identified with the TransLink Board and Mayors’ Council since the approval Mayors’ Vision,

such as the low-carbon fleet strategy, the recommendations from the Transit Fare Review, additional improvements to Late Night Service, and an accelerated roll-out of bus-services to try and meet exceptionally high demand levels. In addition, other needs have emerged related to state of good repair on the system that will be part of the potential scope of the next Investment Plan.

These outstanding Vision projects are currently contemplated as the starting point for expansion in the next investment plan. By legislation, TransLink’s investment plan is required to identify planned transportation services, initiatives, and capital investments for the next ten years. In each year, planned expenditures must balance against established funding, revenues, and borrowing limits. As such, work presented in June 2019 to update forecasts for the 10-year plan period on anticipated revenues, expenditures and external economic condition is a critical step in assessing what is affordable to take on in terms of expansion.

The next investment plan will be developed through the Fall and early 2020

The various elements discussed above and in previous Mayors’ Council meetings will be brought together through the development of the next investment plan:










Summer 2019	<ul style="list-style-type: none"> TransLink is continuing project development work for a SkyTrain on Fraser Highway project. A new investment plan is required to approve funding and initiate construction on any major project over \$50M. As a result of this requirement, a new investment plan is needed to enable any part of Surrey-Langley SkyTrain instead of SNG.
Fall 2019	<ul style="list-style-type: none"> Work is continuing to update revenue forecasts identified in June in an affordability assessment. TransLink staff will bring information to this Committee as the work is completed. Based on the affordability analysis, and any direction on the staging of Surrey-Langley SkyTrain, this Committee and the full Mayors’ Council will be well positioned to consider and provide direction on prioritizing new investments and funding sources for the next investment plan. Hold service plan and investment workshops in October with Mayors’ Councils and CAOs to review potential service improvement projects across the region and begin prioritization.
Winter 2019	<ul style="list-style-type: none"> Priorities and funding sources identified through the Fall would be refined, in coordination with the Province, to develop a draft investment plan.
Spring 2020	<ul style="list-style-type: none"> Public consultation on the draft investment plan Anticipated presentation of the investment plan for approval in June 2020, concurrent with decision timing to proceed with construction of Surrey-Langley SkyTrain.

NEXT STEPS:

Management will continue to develop detail on both affordability/funding and expansion investments, to support decision-maker discussions through the Fall. Input from decision-makers is anticipated to be sought through a combination of Joint Finance and Governance Committee meetings, Mayors’ Council meetings, and workshops with members of the Mayors’ Council.

Appendix A

The following dashboard outlines the funding status of projects in the 10-Year Vision.

Completing the 10-Year Vision for Metro Vancouver Transit & Transportation				
ENTIRE 10-YEAR VISION		APPROVED/UNDERWAY FUNDED		REMAINING INVESTMENTS UNFUNDED
		Phase One	Phase Two	Phase Three
 BUS SERVICE	<ul style="list-style-type: none"> • 25% increase • 12 B-Lines • 10 new service areas 	<ul style="list-style-type: none"> • 10% increase • 5 new B-Lines • 5 new service areas 	<ul style="list-style-type: none"> • 8% increase • 2 new B-Lines • 3 new service areas + 4 additional service areas 	<ul style="list-style-type: none"> • 7% increase • 5 new B-Lines • 2 new service areas
 SEABUS SERVICE	<ul style="list-style-type: none"> • 1 new SeaBus • 10-minute peak frequency; 15-minute all day 	<ul style="list-style-type: none"> • 1 new SeaBus • 10 minute peak frequency; 15-minute all day 		
 HANDYDART SERVICE	<ul style="list-style-type: none"> • 30% increase 	<ul style="list-style-type: none"> • 15% increase 	<ul style="list-style-type: none"> • 7% increase 	<ul style="list-style-type: none"> • 8% increase
 SKYTRAIN & WEST COAST EXPRESS (WCE)	<ul style="list-style-type: none"> • 164 Expo/Millennium Line cars • 24 Canada Line cars • 10 WCE cars + new locomotive • Upgrades of power and control systems, stations 	<ul style="list-style-type: none"> • 56 Expo/Millennium Line cars • 24 Canada Line cars • 2 new + 6 refurbished WCE locomotives • Upgrades to Expo/Millennium & Canada Line Stations and systems 	<ul style="list-style-type: none"> • 108 Expo/Millennium Line cars (including Broadway Extension) • Upgrades to Expo/Millennium Stations and systems 	<ul style="list-style-type: none"> • Upgrades to Expo/Millennium Stations • 10 WCE cars • Upgrades to Canada Line Stations and systems
 MAJOR PROJECTS	<ul style="list-style-type: none"> • Millennium Line Broadway Extension • South of Fraser Rapid Transit (SOFRT) • Pattullo Bridge Replacement 	<ul style="list-style-type: none"> • Pre-construction of Broadway Extension • Pre-construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT) • Design for Pattullo Bridge replacement 	<ul style="list-style-type: none"> • Construction of Broadway Extension • Construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT) • Construction of Pattullo Bridge replacement (by the province) • Planning for Stage 2 of SOFRT (Surrey-Langley Line) • Planning for rapid transit to UBC Point Grey campus • Planning for a potential gondola to SFU Burnaby campus 	<ul style="list-style-type: none"> • Planning + construction of Stage 2 of SOFRT (Surrey-Langley Line)
 MAJOR ROADS NETWORK (MRN)	<ul style="list-style-type: none"> • MRN upgrades: \$200M • MRN seismic: \$130M • MRN expansion: 1% annual increase + one-time 10% increase 	<ul style="list-style-type: none"> • \$50M (25% of Vision) • \$32.5M (25% of Vision) • MRN expansion: 1% annual increase + one-time 10% increase 	<ul style="list-style-type: none"> • \$40M (20% of Vision) • \$26M (20% of Vision) 	<ul style="list-style-type: none"> • \$110M (55% of Vision) • \$71.5M (55% of Vision)
 WALKING & CYCLING	<ul style="list-style-type: none"> • Regional Cycling: \$97M • TransLink-owned Cycling: \$34M • Walking Access to Transit: \$35M 	<ul style="list-style-type: none"> • \$30M (31% of Vision) • \$12M (35% of Vision) • \$12.5M (36% of Vision) 	<ul style="list-style-type: none"> • \$24M (25% of Vision) • \$9M (27% of Vision) • \$10M (29% of Vision) 	<ul style="list-style-type: none"> • \$43M (44% of Vision) • \$13M (38% of Vision) • \$12.5M (36% of Vision)
 TRANSIT EXCHANGES	<ul style="list-style-type: none"> • 13 new or expanded transit exchanges 	<ul style="list-style-type: none"> • 4 updated transit exchanges 		<ul style="list-style-type: none"> • 9 upgraded transit exchanges
 MOBILITY INNOVATION	<ul style="list-style-type: none"> • Integrated travel planning + payment • New technologies + services 	<ul style="list-style-type: none"> • Vanpool pilot • Innovation Lab to explore mobility concepts 	<ul style="list-style-type: none"> • Pilot and field test flexible shared-use services 	<ul style="list-style-type: none"> • Scale flexible shared-use services

tenyearvision.translink.ca



DATE: July 18, 2019
TO: Mayors' Council on Regional Transportation
FROM: Sarah Ross, Director, System Planning
SUBJECT: **Item 5.2** B-Line Update

RECOMMENDATION

That the Mayors' Council on Regional Transportation receive this report for information.

PURPOSE

The purpose of this report is to update the Committee on the development of the B-Line program and the upcoming launch of the Phase One corridors.

BACKGROUND

The Mayors' Vision identified a dozen "B-Line or Better" fast, frequent bus routes, to be implemented across Metro Vancouver. These routes will provide all-day fast, frequent service, seven days a week.

As part of making these routes better than the existing B-Lines, the service will include many improved features and passenger amenities. Importantly, better travel time and reliability will be achieved through transit priority measures, which TransLink has agreed with close involvement and co-operation with local road authorities. The new services will also feature enhanced customer amenities, including real-time next-bus and other wayfinding information at stops, and improved accessibility features. A dedicated fleet of high-capacity articulated buses will operate on this route, with distinctive branding, additional exterior route signage, and more comfortable seats.

DISCUSSION

Phase 1 Scope and Schedule Update

In 2016, the approval of the Phase One Investment Plan provided funding to implement the first five of these new routes. Since that time, two major scope changes have occurred, affecting the Fraser Highway corridor, and the West Vancouver terminus location.

Fraser Highway. In December 2018, TransLink received direction from the Mayors' Council to stop advancing work on the Fraser Highway B-Line. We were directed instead to upgrade the existing 96 B-Line (Guildford to Newton via 104 Avenue, Surrey City Centre, and King George Boulevard) to the new RapidBus standard, and to invest in cost-effective transit priority and service increases along the Fraser Highway corridor.

West Vancouver. On the North Shore, as an outcome of public consultation, West Vancouver District council has confirmed that the western terminus of the Marine Drive as Park Royal for opening day. TransLink will continue to work with West Vancouver staff and council to explore options for possible future B-Line improvements in the District.

The updated scope of five Phase One routes is as follows:

- New routes
 - Marine Drive (Park Royal to Phibbs Exchange)
 - Lougheed Highway (Coquitlam to Maple Ridge)
 - 41st Avenue (Vancouver to UBC)

- Existing B-Lines to be upgraded
 - Hastings Street (Vancouver to SFU; current 95 B-Line route)
 - King George Boulevard (Guildford to Newton; current 96 B-Line route)

Service on Phase One routes is expected to launch for at least four of the five corridors in **January 2020**. For the Marine Drive route on the North Shore, work is underway with a target completion of January 2020; however, the complexity of the interventions and agreeing to final designs has impacted the schedule for critical works, potentially requiring several more months for completion in Q1 2020. TransLink is working to identify ways to accelerate the construction schedule, and will update this committee about the timing of service launch when it is certain.

Branding

The improved features and customer amenities beyond today's B-Line service (as outlined in the *Background* section above) represent a distinct service type and brand promise to customers. To reflect this, TransLink will rebrand these services as **RapidBus**. This brand will apply to the three new routes, the two existing B-Lines to be upgraded as part of Phase 1, and routes to be implemented in future phases. The 99 B-Line (Commercial-Broadway to UBC) will remain the sole B-Line-branded service and will largely be replaced by the Millennium Line Broadway Extension.

In addition to selecting RapidBus as the name for the new service type, TransLink has also examined each route to identify an appropriate public-facing name that is simple, logical, and meets operational constraints. In some cases, these have been identical to the working names for the routes; in other cases they have been modified slightly. The final list of routes is shown in the table below.

PHASE 1 RAPIDBUS ROUTES

Route #	Route Name	Routing	Notes
R1	King George Blvd	Guildford to Newton, via 104 Ave. and King George Blvd.	Upgraded 96 B-Line
R2	Marine Dr	Park Royal to Phibbs Exchange, via Marine Dr., 3 rd St. and Main St.	New route
R3	Lougheed Hwy	Coquitlam Central Stn. to Haney Place, via Barnet Hwy, Lougheed Hwy, 226 St.	New route
R4	41 st Ave	Joyce-Collingwood Stn. to UBC, via Joyce St., 41 st Ave., SW Marine Dr., Wesbrook Mall	New route
R5	Hastings St	Burrard Stn. to SFU, via Burrard St., Hastings St., Burnaby Mtn. Pkwy., Gaglardi Way	Upgraded 95 B-Line

TransLink will publicly announce the RapidBus brand, including the names of the routes, details about service and customer amenities, and the look-and-feel of the branded buses and stop amenities, scheduled for July 23rd, 2019. Marketing will be ramped up in fall of this year and continue after service launch in order to continue to develop ridership. Staff will distribute the final reveal materials to the TransLink Board and Mayors' Council on July 23rd.

RapidBus Posts

(Please refer to attached graphics of the RapidBus posts)

Each RapidBus stop will feature a distinctive triangular post, providing service branding, real-time next-bus countdown, and enhanced wayfinding information. At stops served by both RapidBus and local buses, real-time information will be provided for all routes serving that stop.

The real-time digital display will be backlit at night, and also available as an audio announcement at the push of a button, for the benefit of customers with impaired vision. Audio levels will be adjustable to suit the ambient conditions. This accessibility feature complements the tactile walking surface indicators (TWSIs) that will be installed at the front door boarding location, in municipalities where TWSIs are supported (currently all jurisdictions except Vancouver and Burnaby).

The real-time next-bus unit is powered by a self-monitoring three-year battery, instead of requiring conduit to a wired power source. This has enabled the project to deliver a flexible, cost-effective solution within the aggressive project schedule.

RapidBus information posts will begin to be installed on-street starting about September 2019. The poles will be under wraps until the launch in January. As with existing bus ID poles throughout the region, TransLink will install, monitor and maintain the new RapidBus posts.

Public Announcement and Promotion

TransLink will announce the RapidBus brand and service at a media event on July 23rd, 2019. In August, TransLink will have a significant presence at the PNE to further raise awareness. A marketing campaign will ramp up in fall 2019, leading up to the January 2020 launch. After the initial service launch, TransLink

will continue to promote the service and build ridership in 2020 through continued marketing and outreach.

Phase One Construction

TransLink is undertaking civil works for all RapidBus corridors, except in Vancouver on 41st Avenue (where the municipality will do so). Works include lengthening stops if needed to accommodate articulated buses, RapidBus posts and tactile walking surface indicators (where supported by the road authority), shelters if not already present (through local jurisdiction), and transit priority measures such as bus lanes, queue jump lanes, and signal works. Transit priority measures were agreed upon with our partners in May 2019.

Construction has begun on the three new corridors and will be initiated on the “upgraded” B-Line corridors in the coming weeks. Construction is expected to be complete on four of the corridors before the end of 2019, with construction on R2 Marine Drive possibly extending into Q1 2020. TransLink has worked with our counterparts at municipalities, MoTI and UBC to co-ordinate public and stakeholder communications about construction.

(Please refer to the attached maps showing locations of transit priority construction on the three new corridors)

Phase 2 RapidBus Initiatives

The Phase Two Investment Plan, approved in June 2018, includes funding for the following RapidBus initiatives:

- New route from Newton to Scott Road Station
- New route from Richmond-Brighouse Station to the Expo Line
- Cost share program for ongoing upgrades: \$6 million/year from 2020-2027

For the two new routes, work is underway to establish project governance, timeline, and process. Exact routing and timing will be confirmed through discussions with the relevant municipalities. The Phase Two Investment Plan identifies conceptual routings and targets a 2021 launch. It is essential that ample time is allotted for full public and stakeholder engagement, to ensure RapidBus planning and implementation can proceed smoothly and deliver a service that is both effective and welcomed by the community. TransLink will reach out to relevant municipalities later this summer to kick-off planning of routing, stop locations, and to identify locations where transit priority measures will be required to mitigate bus delay due to congestion or other factors.

The new cost share program funds will become available in 2020 and are intended to advance further transit priority or passenger amenities on RapidBus corridors. There is a ready pool of potential projects that could be considered for this program, as conceptual design was already been initiated through the collaborative Phase 1 work with municipalities and MoTI, but which were not included in Phase Two launch due to dependencies or timelines. TransLink will provide more information about this cost-share program in Q4 2019.

CONCLUSION

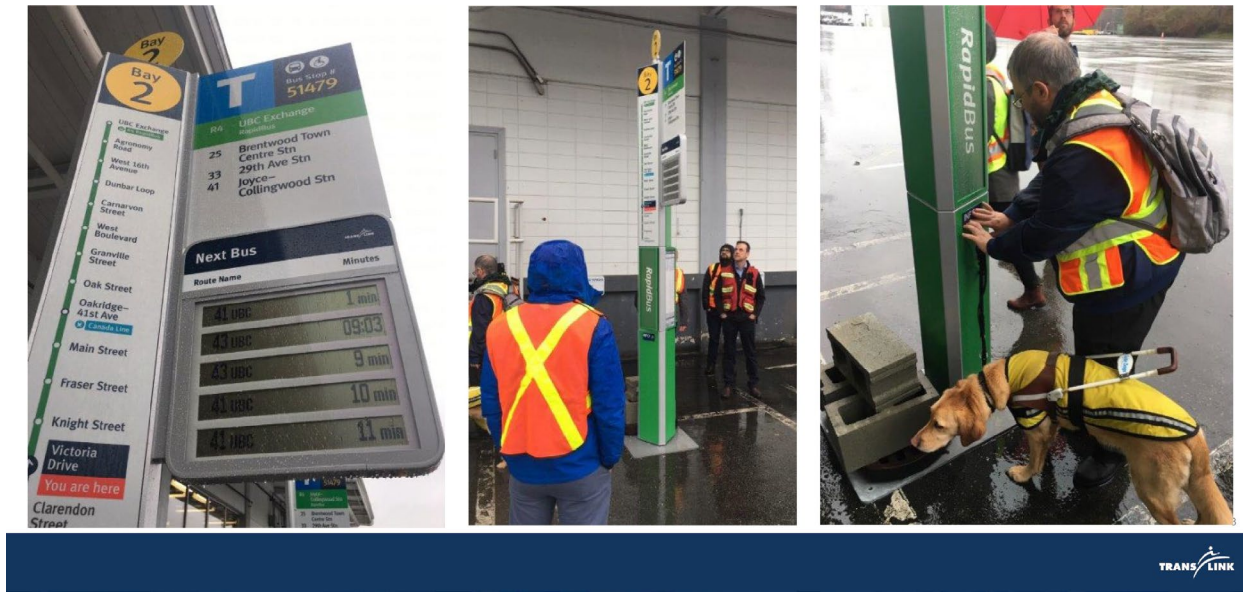
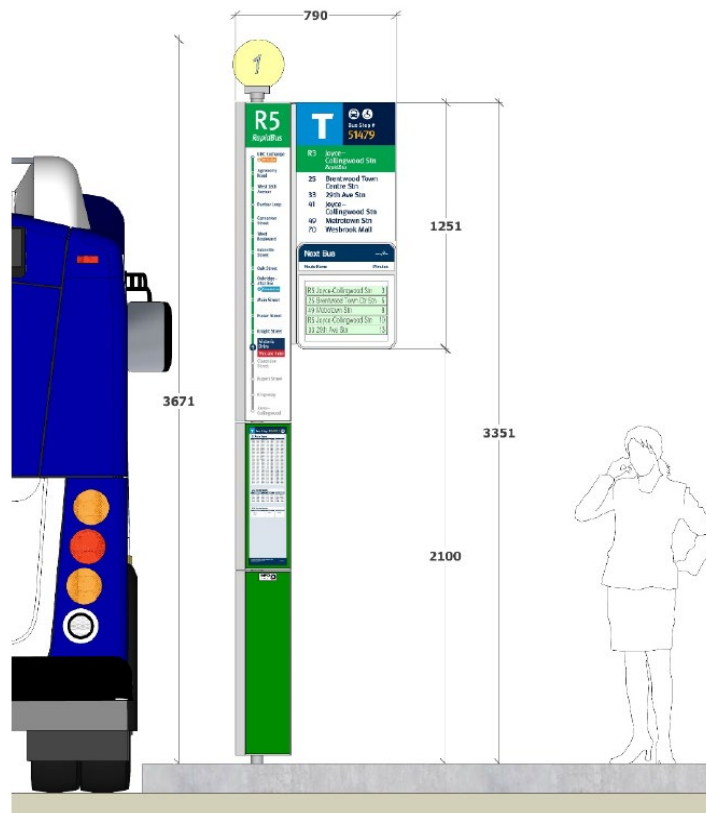
The key next steps leading up to RapidBus launch are as follows.

- Ongoing:
 - Continue to work with municipal, MoTI, UBC and SFU counterparts to co-ordinate construction communications through to launch
- July 23, 2019
 - Announce the RapidBus brand
- Summer 2019
 - Kick off the planning of Phase Two RapidBus routes with municipalities and MoTI
- Fall 2019:
 - Launch marketing campaign for Phase One routes
 - Return to this committee with an update on the Phase Two cost-share program
- January 2020
 - Launch the first new RapidBus services

Attachments:

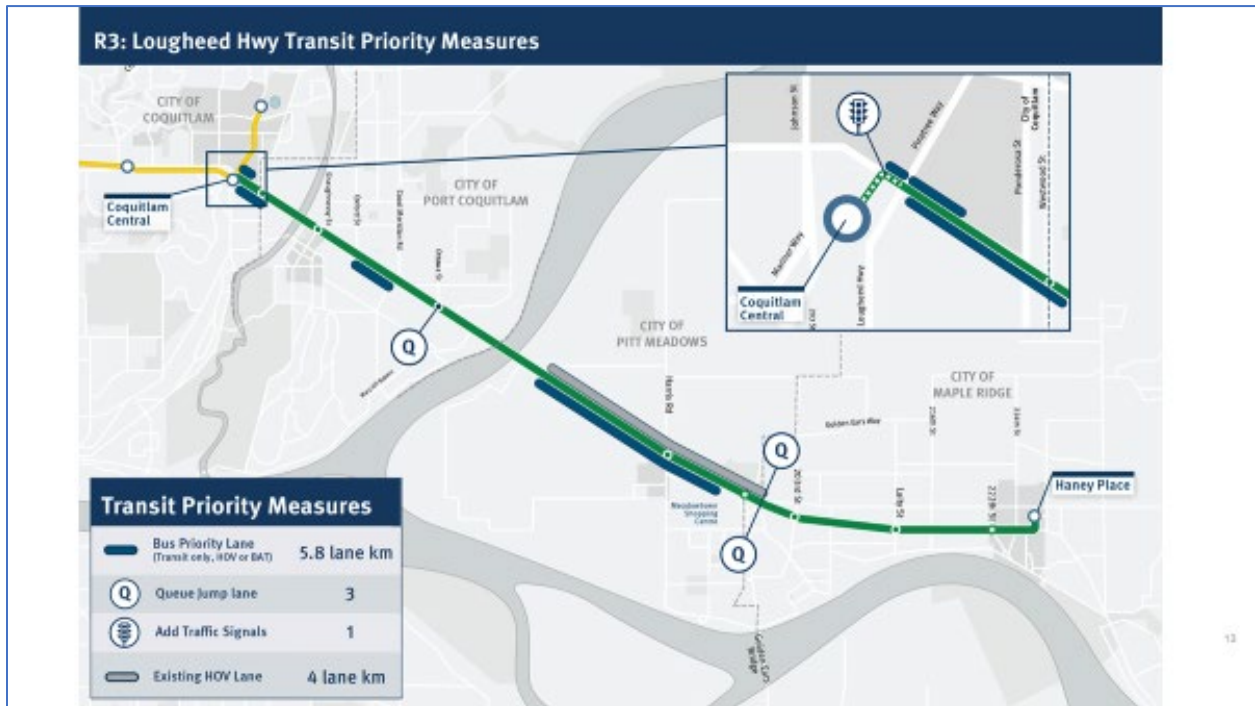
1. RapidBus posts – Illustrative graphics
2. Transit priority measures on new corridors – maps

Appendix A RapidBus Posts, Illustrative Graphic & Prototype



Appendix B

Transit Priority Measures on New Corridors (maps)



R4: 41st Ave Transit Priority Measures





B-Line update

Dan Freeman, Senior Manager, Bus Priority Programs
TransLink Mayors' Council Finance Committee
July 18, 2019

translink.ca



Purpose of today's presentation

Update on the TransLink B-Line program:

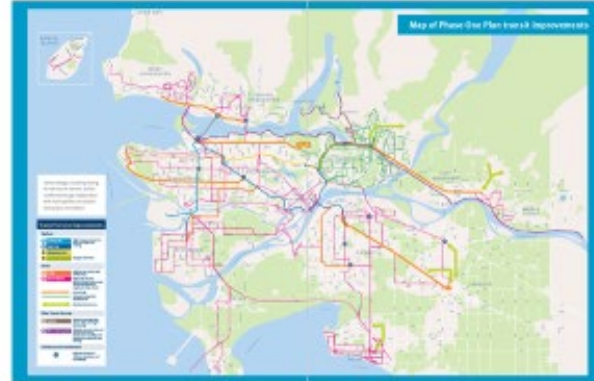
- Recap project background
- Phase 1 scope and schedule update
- Service brand and route names
- Design of posts that will identify stops and carry customer information
- Public announcement and promotion
- Phase 1 civil work construction
- Phase 2 look-ahead

2



Mayors' Vision for a *B-Line or Better* network

- Identified a dozen new corridors for “B-Line or Better” service
- Phase One investment plan identified five routes for first launch



Scope & schedule

- **Scope update**
 - Fraser Hwy changed to 104-KGB (Mayors' Council, December 2018)
 - Dundarave terminus changed to Park Royal (DWV Council, April 2019)
- **Schedule update**
 - Target to launch service: January 2020
 - Marine Drive poses some risk of later launch, due to complexity and delay in agreeing on scope

New brand for “B-Line or Better”

Mayors' Vision called for *B-Line or better*

- TransLink included several improvements in scope:
 - Better **travel time and reliability**
 - Transit priority and all-door boarding
 - Better **customer amenities** at stops
 - Real-time next-bus arrival
 - Improved wayfinding information at stops
 - Enhanced accessibility features
 - Dedicated **fleet**
 - High capacity articulated buses
 - Better signage, more comfortable seats
 - Branded to identify and promote the service

5



New brand for “B-Line or Better”

Mayors' Vision called for *B-Line or better*

- TransLink included several improvements in scope:
 - Better **travel time and reliability**
 - Transit priority and all-door boarding
 - Better **customer amenities** at stops
 - Real-time next-bus arrival
 - Improved wayfinding information at stops
 - Enhanced accessibility features
 - Dedicated **fleet**
 - High capacity articulated buses
 - Better signage, more comfortable seats
 - Branded to identify and promote the service

These improvements warrant a new service brand:

RapidBus



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T New RapidBus Routes in 2020



What is the proposed RapidBus service?



Frequent

- At least 10 minutes in peak times
- At least 15 minutes at other times



Improved speed and reliability

- All-door boarding
- Streets are redesigned to improve travel time
- High-capacity articulated buses



Distinct brand and amenities

- Buses and stops have a different look
- Stops have Next Bus digital signage
- Route information inside buses



Available all day, every day

- Service from 6 a.m. to midnight, or better

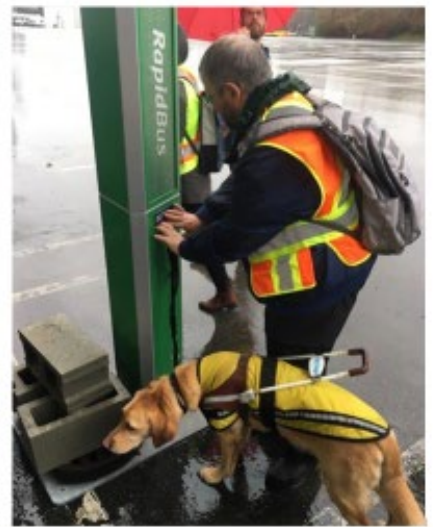


RapidBus posts



- Distinctive stop marker to promote service and make stops easy to find
- Real-time next bus information
 - With on-demand audio for visually impaired customers
- Enhanced wayfinding information

RapidBus Posts (prototype)



Phase 1 Construction

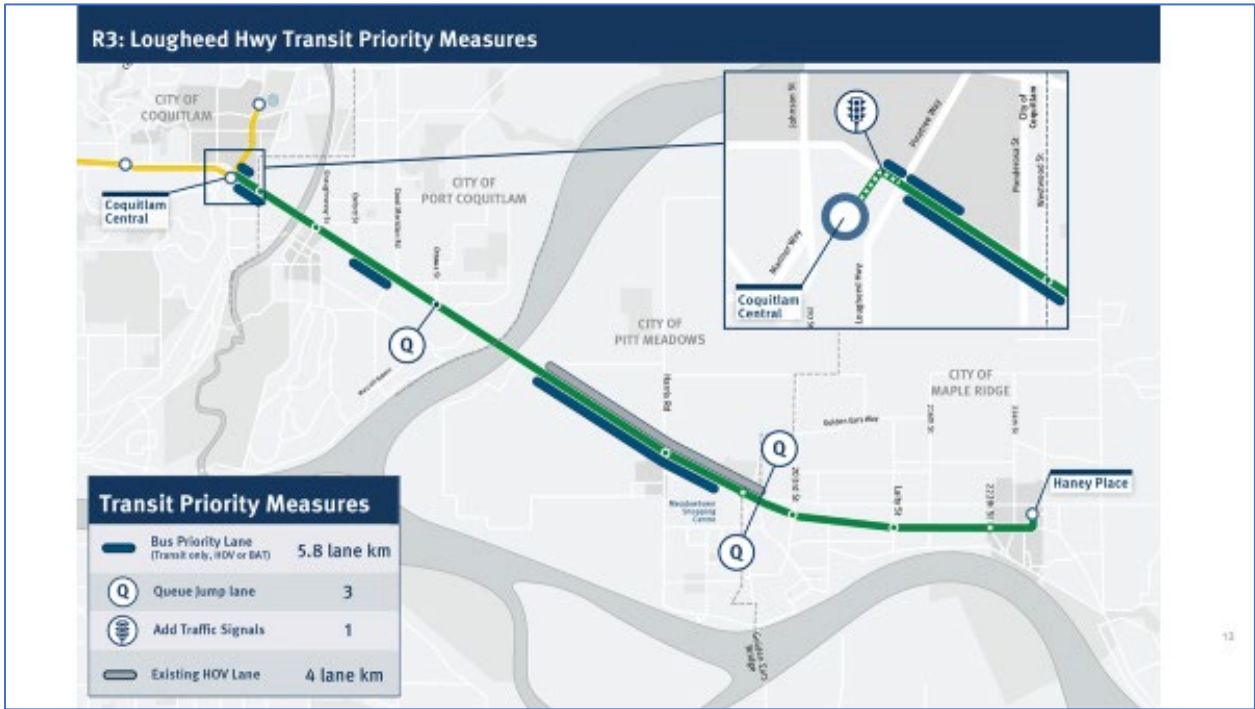
- Phase 1 construction includes:
 - Ensuring all stops can accommodate articulated buses
 - RapidBus posts
 - Tactile walking surface indicators (where supported by local jurisdiction)
 - Shelters if not already present (through local jurisdiction)
 - New or relocated stops
 - Transit priority measures (R2, R3, R4): Bus lanes, queue jumps, signal works
- Timing
 - New corridors (R2, R3, R4): Construction already started
 - Upgraded corridors (R1, R5): Construction to start summer 2019

The following slides show agreed scope of transit priority measures for each *new* corridor

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12



13



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Public announcement & promotion

- July 23, 2019
 - Brand announcement
- August 2019
 - PNE event (awareness & promotion)
- Fall 2019
 - Marketing campaign
- **January 2020 –RapidBus service launch**
- 2020
 - Continued service marketing & ridership development

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Phase 2 Investment Plan: RapidBus initiatives

- Two new routes:
 - Newton to Scott Road Station
 - Richmond to Expo Line
 - Project governance, exact routing, timing to be determined together with partners, and include appropriate public and stakeholder engagement
- Cost share:
 - \$6 million/year, 2020-2027
 - To upgrade RapidBus routes (transit priority, amenities, etc.)
 - Could include projects already concept-designed through corridor working groups, but not included in initial implementation scope
- Preliminary planning underway; TransLink will reach out to partners in the coming months with more information

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Next Steps

- Ongoing:
 - Continue to work with municipal, MoTI, UBC and SFU counterparts to coordinate construction communications through to launch
- July 23, 2019
 - Announce the RapidBus brand
- Summer 2019
 - Initiate conversations with municipalities and MoTI about new RapidBus routes in Phase 2
- Fall 2019:
 - Launch marketing campaign for Phase 1 routes
 - Return to this committee with an update on the Phase 2 cost-share program
- January 2020
 - Launch the first new RapidBus services

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