PUBLIC MEETING AGENDA

Version: September 13, 2019

September 20, 2019, 9:00AM to 10:30AM

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.

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, July 25, 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 Mary-Ann Booth, West Vancouver
Mayor Malcolm Brodie, Richmond
Mayor Linda Buchanan, North Vancouver City
Mayor Bill Dingwall, Pitt Meadows
Mayor Jack Froese Langley Township
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 John McEwen, Anmore
Mayor Ron McLaughlin, Lions Bay
Mayor Mike Morden, Maple Ridge
Councillor Alison Morse, Bowen Island
   (alternate)
Mayor Richard Stewart, Coquitlam
Mayor Val van den Broek, Langley City
Mayor Darryl Walker, White Rock
Mayor Brad West, Port Coquitlam

REGRETS:

Mayor Kennedy Stewart, Vancouver

ALSO PRESENT:

Mike Buda, Executive Director, Mayors' Council Secretariat
Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink
Kevin Desmond, Chief Executive Officer, TransLink
Jeff Busby, Director, Surrey Langley SkyTrain (SLS) Project Development, TransLink
Sany Zein, Vice-President, Infrastructure Management and Engineering, TransLink

PREPARATION OF MINUTES:

Megan Krempel, Recording Secretary, Raincoast Ventures Ltd.

CALL TO ORDER

A quorum being present, Chair Coté called the meeting to order at 9:01 a.m. and acknowledged the traditional territories on which the meeting was being held.

1.   PRELIMINARY MATTERS
1.1   Adoption of Agenda
        Draft Agenda for the July 25, 2019 Public Meeting of the Mayors' Council on Regional Transportation, revised July 22, 2019.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the agenda for its Public meeting scheduled July 25, 2019, revised July 22, 2019.

CARRIED

1.2   Approval of Minutes (June 27, 2019)
Draft Minutes of the Public Meeting of the Mayors' Council on Regional Transportation held June 27, 2019.

Chair Coté advised that the minutes had been amended to correct two typographical errors.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation adopts the minutes of its Public meeting held June 27, 2019, as amended.

CARRIED

2.   PUBLIC DELEGATION PRESENTATIONS
Report dated July 16, 2019, from Mike Buda, Executive Director, Mayors' Council Secretariat, titled "Item 2 – Public Delegates".

Terry Senft
Is opposed to light rapid transit (LRT) on arterial roads and does not favour the SkyTrain alternative; is concerned the $3.55 billion budget is not be sufficient to connect Surrey to Langley; proposed the project should connect Surrey Centre to Newton and Guildford, and that Surrey Langley SkyTrain (SLS) project is not part of the Mayors' 10-Year Vision and should be rejected.

Roderick Louis
Referenced his submission dated July 23, 2019; requested that TransLink staff provide a report that identifies the benefits of the SLS project as both a public and private partnership; and that staff seeks funding from the federal government to assist with the SLS project funding shortfall.

Navjot Sanghera
Represents Simon Fraser University as an External Relations Coordinator and is a graduate student; supports the Burnaby Mountain Gondola project as an environmentally sustainable solution to address overcrowding and unreliable bus service; suggested the gondola would allow unused buses to be used for servicing other routes within Metro Vancouver.

Theresa Burley
President of the SFU Community Association and SFU resident; supports advancing the Burnaby Mountain Gondola project to the public engagement phase; suggested the project would represent a critical and sustainable shift in transit; reduce traffic congestion, noise and GHG emissions; provide an alternate route for evacuating the mountain; and support local businesses by increasing traffic to the area.

Greg Pepitas
Presents the benefits of alternate technology to the linear induction motor (LIM) used by SkyTrain; cited the Calgary LRT as an example of an effective transit model which has double the capacity as SkyTrain.

Daryl Dela Cruz
A third year SFU student and part of a campaign supporting the SLS; noted the population growth in Surrey and Langley resulting in an increase in vehicle registration; suggested the SLS project would encourage residents to shift to using transit; offered that SkyTrain delivers significant time savings and a positive benefit cost ratio and would shift the transportation culture in the region and reduce congestion.

Anita Huberman
The Chief Executive Officer (CEO) of the Surrey Board of Trade; supports LRT in Surrey and the Mayors' 10-Year Vision and transportation plan; commented that joining Surrey and Langley by LRT would be the most effective means to connect the town centres and create more walkable and livable communities.

Mayor Mary-Ann Booth arrived at 9:26 a.m.

3.   REPORT OF THE CHAIR

3.1   Next Steps on South of Fraser Rapid Transit
Report dated July 19, 2019, from Jonathan Coté, Chair, Mayors' Council on Regional Transportation, titled "Item 3.1 – Next Steps on South of the Fraser Rapid Transit".

Chair Coté informed that the single recommendation being presented incorporated recommendations from both the Joint Regional Transportation Planning Committee and the Joint Finance and Governance Committee.

Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, and Jeff Busby, Director, Surrey Langley SkyTrain Project Development, TransLink, referenced referred to the report providing an update on the south of the Fraser refresh strategy and the SLS project. The three corridors of priority are: 104Th Avenue, King George Boulevard and Fraser Highway; and the total project is $3.55 billion. Delivering SkyTrain from Surrey to Langley would cost approximately $3.12 billion; $1.65 billion was allocated from the previous Surrey LRT project.

With reference to a series of presentation slides, highlights included: SLS project work to date; potential alignment scenarios; public engagement findings; quantifying objectives; technology alternatives; and environmental studies. Staff is suggesting that SkyTrain would be the optimal transit mode due to: travel time reliability, higher ridership, and reduced adverse impacts on other transit systems.

Discussion ensued on:
• Concern the project would not address the needs of other parts of the south of Fraser that are in need of improved transit services
• Concern that funding may be lacking for other communities

- Need for project plans to be in place, costed, and advanced in priority
- Suggestion to evaluate the project on its ability to facilitate the needs of the region
- Indication that, when average commutes become longer, the efficiency of the transit system is failing
- Suggestion that continually easing transit flow to downtown Vancouver prevents business and employment centres from expanding in Surrey and Langley
- View that having a separate transit system in Surrey would accommodate economic growth in the area
- Need to ensure that all regions are being considered
- Suggestion to analyze alternatives to SkyTrain
- Concern the 27 kilometres within the $3.55 billion envelope cannot be achieved with SkyTrain
- View that without the extension to Langley, the utility of a line from Surrey to Fleetwood is debatable.

In response to questions, staff discussed:
- Any SLS extension projects that exceed the $3.55 billion envelope would be placed with other regional priorities for future consideration
- Approximately 2.5 kilometres of the SLS system would cross the Agricultural Land Reserve (ALR); an environmental assessment will identify potential impacts
- Some activities on the ALR may require a permit but no stations are proposed on ALR land
- Travel time from King George Station to Langley by SkyTrain would be eight minutes faster than by LRT
- No substantial transit investments have been identified for the Highway 99 corridor; however, interim measures have been developed to ease congestion
- Both the timeline to build the entire line to Langley or a segment thereof will require five years to complete.

The recommendation in the report was Moved and Seconded.

Discussion ensued on the Main Motion:
- Suggestion that parts 2a) and 2b) be voted on separately
- Staff proposes the Memorandum of Understanding (MOU) be signed by the Mayor of Surrey and by TransLink's Chief Executive Officer (CEO) upon endorsement by Mayors' Council
- Suggestion the MOU be endorsed by the Joint Finance and Governance Committee and the Joint Regional Transportation Planning Committee
- Working within the $3.55 billion would not shift any other priorities in the 10-Year Vision
- $1.63 billion would achieve a SkyTrain line from King George to Fleetwood with the remaining lines sequenced depending on funding availability.

Discussion ensued on proposed amendments to the Main Motion:
- Concern the SkyTrain technology is twice the cost of LRT
- View that SLS introduces unnecessary complications to accelerating Phase 3 funding
- Only with the support of the Mayors' Council will the funding be sought for the $3.55 billion
- Phase 3 funding includes significant additions to bus service and other rapid transit solutions that would support the region and its communities as per the 10-Year Vision
- The proposed amendment does not alter staff's interpretation of its intent

- Removal of the word "*limit*" sends a better message to government that all areas of the region are being considered
- Staff is confident SkyTrain to Langley can be achieved within the $3.55 billion envelope, but estimates approximately $60 million in costs for each year the project is delayed
- An exceedance of the $3.55 billion envelope could impact other south of Fraser projects.

Discussion resumed on the Main Motion as amended, and there was a call for division of the question:
- SkyTrain is the better technology but the project must occur in phases
- Density must support the need for a transit system and this is not reflected in the report
- TransLink is working with host municipalities on partnership agreements which include projected employment and population projections
- New funding solutions are being explored by the Joint Finance and Governance Committee
- Surrey working with TransLink on land use plans on Fraser Highway to support Skytrain
- Public consultation in Langley demonstrated a strong desire for SkyTrain
- The government should provide funding through the *Cure Congestion* campaign to support transit development and reduce the reliance on cars
- There would be 60% less ridership with LRT over SkyTrain due to travel time and convenience
- Ensure that as rail transportation is expanded density is either in place or in the plan in those areas where the stations are.

Main Motion

It was MOVED and SECONDED

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.

Amendment to the Main Motion

It was MOVED and SECONDED

That the Main Motion be amended to:
o   Part 5, replace "*Limit*" with "*Start with*"
o   Include *"That the Mayors' Council endorse the MOU and authorize its execution by TransLink staff"*
o   Part 5 be replaced with *"Start with funding available for the first phase of the SLS project with the $1.63 billion already secured through the Phase Two Plan of the 10-Year Vision; and further continue the process to secure funding from provincial and federal sources, to complete the 10-Year Vision to ensure SLS is fully constructed to Langley City within the $3.55 billion envelope in the 10-Year Vision"*

DEFEATED

Amendment to the Main Motion

It was MOVED and SECONDED

The proposal to include as Item 7, "The Mayors' Council endorse the MOU attached as Appendix 1 to the report and authorize execution by the TransLink Chief Executive Officer".

CARRIED

Main Motion – Division of the Question

There was agreement to consider parts 1, 3-8 of the Main Motion (renumbered sequentially) and to vote on the original Parts 2(a) and 2(b) separately.

It was MOVED and SECONDED

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.   Prepare an implementation strategy that allows the sequencing of rapid transit south of the Fraser consistent with available and anticipated funding.
3.   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.
4.   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;
5.   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;
6.   The Mayors Council endorse the MOU attached as Appendix 1 to the report and authorize execution by the TransLink Chief Executive Officer
7.   Receive this report.

CARRIED

The Mayors' Council then considered Main Motion Part 2(a) as originally put.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation concurrent with completing the Surrey Langley SkyTrain project business case, complete a refresh of the south of Fraser rapid transit strategy, that considers combinations of alternatives within the $3.55 billion funding envelope and assesses the consequences of providing less than 27 kilometres of rapid transit.

CARRIED

The Mayors' Council then considered Main Motion Part 2(b) as originally put.

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation concurrent with completing the Surrey Langley SkyTrain project business case, complete a refresh of the south of Fraser rapid transit strategy, that 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.

DEFEATED

3.1   ANNEX A – Preliminary Business Case for Surrey Langley SkyTrain Project
Report dated July 18, 2019, from Sany Zein, Vice-President, Infrastructure Management and Engineering, TransLink, and Jeff Busby, Director, Surrey Langley SkyTrain Project Development, TransLink, titled "Item 3.1, Annex A – Update on the Surrey Langley SkyTrain Project".

RECOMMENDATIONS BY THE JOINT REGIONAL TRANSPORTATION PLANNING COMMITTEE

It was MOVED and SECONDED

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

CARRIED

RECOMMENDATION BY THE JOINT FINANCE AND GOVERNANCE COMMITTEE

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation:
1.   Direct staff to:
     a.   Limit funding available for the first phase of the Surrey Langley SkyTrain (SLS) project to the $1.63 billion already secured;
     b.   Update Section 9(a) of the Memorandum of Understanding (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 a MOU with the Township of Langley and the City of Langley to be considered at the same time as the final business case; and

2. Receive this report.

CARRIED

3.1 ANNEX B – South of Fraser Rapid Transit Strategy Refresh

Report dated July 18, 2019, from Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, titled "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

It was MOVED and SECONDED

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

CARRIED

Mayors Booth and Harvie departed the meeting.

4. REPORT OF THE REGIONAL TRANSPORTATION PLANNING COMMITTEE

4.1 Transport 2050: Transportation Network Concept Development

Report dated July 10, 2019, from Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, titled "Item 4.1 – Transport 2050 Long-Term Transportation Network Concept Development".

It was MOVED and SECONDED

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

CARRIED

4.2 Burnaby Mountain Gondola

Report dated July 15, 2019, from Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, titled "Item 4.2 – Burnaby Mountain Gondola Next Steps".

G. Cross and Matt Craig, Senior Manager, Systems Planning, TransLink, referred to a series of presentation slides, which highlighted: technologies considered; multiple alignment options; and operating costs. Burnaby City Council supports the Burnaby Mountain Gondola project and would commence with public consultation upon endorsement by the Mayors' Council. TransLink staff would present findings of the public consultation along with the technical benefits of the system and alignment preference at a future Mayors' Council meeting. The project would be funded through the Green Infrastructure Fund and not compete with any other transit project funding.

Discussion ensued on pursing provincial and federal funding for 80% of project costs and potentially a partner, such as Simon Fraser University, to offset the remaining funding needs.

It was MOVED and SECONDED

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; and
2. Receive this report for information.

CARRIED

Agenda Varied

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation defer remaining agenda items to its meeting on September 20, 2019.

CARRIED

4.3   UBC SkyTrain
Report dated July 10, 2019, Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, titled "Item 4.3 – Arbutus to UBC SkyTrain Update".

4.4   George Massey Crossing Project Update
Report dated July 28, 2019, from Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, titled "Item 4:4 – Update on George Massey Crossing Project, Phase Two".

5.   REPORT OF THE FINANCE AND GOVERNANCE COMMITTEE

5.1   Completing the Vision and Next Investment Plan
Report dated July 9, 2019, from the Geoff Cross, Vice-President, Transportation Planning and Policy, TransLink, and Christine Dacre, Chief Financial Officer, TransLink, titled "Item 5.1 – Completing the Vision and Next Investment Plan".

5.2   10-Year Vision Implementation Update – B-Lines
Report dated July 18, 2019, from Sarah Ross, Director, System Planning, TransLink, titled "Item 5.2 – B-Line Update".

6.   REPORT OF TRANSLINK MANAGEMENT

7.   OTHER BUSINESS
7.1   Next Meeting
The next Mayors' Council on Regional Transportation meeting is scheduled September 20, 2019.

8. **ADJOURN**

It was MOVED and SECONDED

That the Mayors' Council on Regional Transportation Public Meeting held July 25, 2019 be now adjourned.

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CARRIED
(11:51 a.m.)
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Certified Correct:

_____   _____
Mayor Jonathan X. Coté, Chair   Megan Krempel, Recording Secretary
                                       Raincoast Ventures Ltd.

TO: Mayors' Council on Regional Transportation

FROM: Mike Buda, Executive Director, Mayors' Council Secretariat

DATE: September 12, 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 <u>on table</u>**. 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: Steve Vanagas, Vice President Communications, Marketing & Public Affairs

DATE: September 5, 2019

SUBJECT: ITEM 3.1 – Transport 2050: Phase 1 Engagement Report

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RECOMMENDATIONS

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

PURPOSE

To provide an overview of Transport 2050 (T2050) public engagement activities to date.

DISCUSSION

T2050 engagement has consisted of the following activities: marketing, engagement, communications, a special event focus at the PNE, and an intergovernmental forum.

MARKETING

TransLink delivered two in-market campaigns during Phase 1. Through an extensive marketing campaign using numerous print, mobile and digital tools, on the transit system, billboards and other means, information pertaining to T2050 has been seen approximately, 280 million times. Wave 1 executions took

place in early May and generated project interest by asking fun and provocative questions. Wave 2 executions focused on consultation participation as well as driving people to the Transport 2050 Expo at the PNE Fair.

Creative marketing appeared across the region in traditional newspapers and radio ads, on the transit system and as out-of-home executions, via SMS to NextBus customers, and in geo-targeted online adverts on social media and key websites. For the first time, there was a significant focus on reaching non-English-speaking residents through targeted newspapers adverts in Chinese and Punjabi newspapers (30 insertions) and radio stations (529 ad spots). Digital marketing was expanded beyond TransLink's service area to reach adjacent communities within the commuter shed.

To support engagement, marketing also created five videos sharing the T2050 story and encouraging people to get involved. On YouTube alone, these videos have been viewed more than 34,000 times. The videos were also shared with Chinese and Punjabi subtitles – a first for TransLink.

ENGAGEMENT

Public - online

A Transport2050.ca landing page introducing people to the project and driving visitors to an online engagement portal has been viewed over 130,000 times.

By late September more than 26,000 surveys were completed by participants from every municipalities within Metro Vancouver and beyond. Surveys are available online in English, Punjabi, Simplified and Traditional Chinese.

The ideas board has received more than 2,000 ideas to date, ranging from expanding service to incentivising active transportation. 14,800 'likes' and 1,800 comments related to other people's ideas have been shared.

Public – advisory group
In May, NRG recruited 35 regional residents of varied ages, ethnicities, genders, income levels and primary modes of transportation to a workshop focusing on the Phase 1 survey questions. This qualitative input will serve to supplement the public survey results.

Public – community outreach
From May until the end of the engagement period, the Transport 2050 team attended an unprecedented 42 community events, reaching every municipality within our region and commuter shed, sharing T2050 information with a significant number of people throughout the region.
To do this, the TransLink engagement bus was rewrapped and retrofitted to support Transport 2050 engagement at large-scale, annual events, including Surrey Canada Day (120,000 attendees); Vancouver Khatsahlano Festival (160,000 attendees); and Richmond World Festival (50,000 attendees). Other events were attended by staff using tents and community centre pop-ups.

To ensure diverse groups could be engaged, TransLink worked with EmPower Me to reach multicultural communities in six languages. EmPower Me mentors attended seven community events on TransLink's behalf, spoke with seniors and New Canadians, and will deliver in-language digital outreach campaigns in September.

TransLink also partnered with City Hive to establish a 20-member Youth Council, which will run its own engagement events in September to canvas the views of people under the age of 30. Finally, TransLink worked with the BC Poverty Reduction Coalition to gather input from organisations that work with people with lower incomes.

Employee engagement
Throughout the month of April, prior to any public engagement, Transport 2050 staff visited every enterprise operations maintenance site and office to share information about the project with frontline staff and provide them with an opportunity to share their thoughts and ideas. These tours resulted in 650+ conversations and 600+ project survey completions.

Stakeholder engagement
TransLink presented to a range of stakeholder groups and provided stakeholders with multiple opportunities to participate.

The Regional Agency Advisory Group
Municipal planning and regional agency staff continued to meet to support the development of technical background materials for the project and were invited to present network concepts in response to the Call for Ideas.

Local Stakeholder Groups
Almost 700 local stakeholder groups, including BIAs and neighbourhood associations, were invited to attend five sub-regional workshops to learn about the project and how to participate. 43 representatives attended the five workshops. An additional 200+ regional stakeholder groups, including professional associations and post-secondary institutions, were invited to an early June workshop, hosted in partnership with Metro Vancouver and the Province, 49 representatives from 43 organizations attended. The event provided in-depth information about current challenges and opportunities, and attendees were asked to provide formal submissions into this process.

First Nation engagement
TransLink shared a project backgrounder with the nine First Nations with reserve lands within Metro Vancouver and presented information to the Kwantlen First Nation and Musqueam Indian Band. TransLink has reached out to regional First Nations offering to host community meals, share information about the project and facilitate discussions about each community's values and transportation ideas.

Elected official engagement

TransLink hosted four sub-regional workshops around Metro Vancouver attended by over 40 elected officials from three levels of government. Key themes emerging included the need to expand services to keep up with demand, finding a model to improve equity in service levels between urban and suburban communities, securing a sustainable funding mechanism and ensuring affordable development occurred around transit investments.

Information on Transport 2050 has also been shared with all elected officials across Metro Vancouver for their awareness and to share with their constituents.
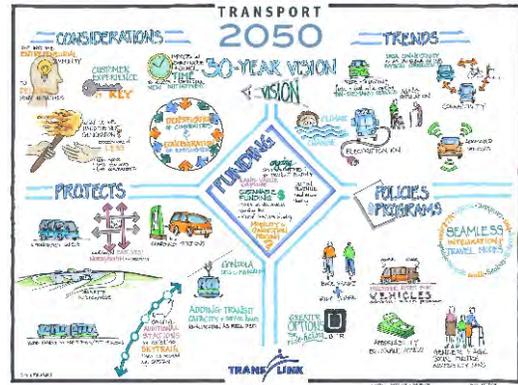
COMMUNICATIONS

Following a successful launch event, TransLink continued to promote engagement through multiple platforms and events.

At the TransLink AGM in June, Kevin Desmond invited the region to participate in Transport 2050 where the engagement bus was unveiled to attendees, including the ELMTOTs transit enthusiast group.

In July, TransLink hosted a sell-out presentation on Mobility as a Service. In addition to the 300 in attendance, the event

was viewed 6,800 times on Periscope and LinkedIn Live. For the first time, TransLink featured sign-language interpreters at the event. In addition to these events, TransLink has shared regular updates about participation at community events and the progress of the survey and ideas board. In addition, six Buzzer Blog posts have been viewed more than 2,700 times.

Transport 2050 has continued to be featured in local media, with 10 publications in traditional print outlets such as Surrey Now and digital publications such as the DailyHive. Recently, the Media team has focused on in-language opportunities, completing a Punjabi interview with Red FM; and Hindi interviews with Zee TV, OMNI TV and Spice Radio.

TRANSPORT 2050 EXPO AT THE PNE FAIR

TransLink's summer efforts culminated in its first ever expo at the PNE Fair from Aug. 17 to Sept. 2. By working with partners, TransLink was able to present the future of mobility through interactive experiences of new modes (double-decker buses, e-scooters), a 3D MicroCity animated model of the region and an immersive virtual reality experience.

Over the 16 days of the fair, 150,000+ people visited the Transport 2050 activation zone, 60,000+ people boarded each of the four buses and 2,300+ ideas were submitted. TransLink's unique, engaging, experiential presence at the PNE was a major contribution to the reach of Transport 2050, and a great opportunity for staff from across the enterprise to volunteer together.

TRANSPORT 2050 POLICYMAKERS COORDINATION FORUM (PCF)
The PCF is composed of the Chairs of the Mayors' Council on Regional Transportation, TransLink Board of Directors, and Metro Vancouver Board of Directors; Minister of Municipal Affairs & Housing; and Parliamentary Secretary for TransLink. It meets around key Transport 2050 milestones so that regional and provincial governments can share information, coordinate, and align policy to improve livability, prosperity and affordability.

APPENDIX | SAMPLE IDEAS

Ideas to…	Sample ideas received:
Improve user experience (i.e. choice, convenience, comfort, safety/security)	• Cover cycle paths to shield cyclists from rain • Explore sensory experience e.g. station-specific scents
Expand or upgrade the transit network	• Increase capacity by expanding the double-decker fleet • Consider expanding transit on our waterways • Reduce the number of stops on bus routes for more efficient service
Expand or upgrade the road network	• Widen highway; build 3rd crossing bridge • Remove parking on major roads
Expand or upgrade cycling and walking network	• Focus on improving bike/walk connections to existing rapid transit • Introduce pedestrian-only zones in city centres
Expand or upgrade regional goods movement	• Transfer containers to the port on mini electrified trains
Deliver new mobility services	• Introduce fare products that can be used across transit and private, shared modes • Use autonomous vehicles to provide door-to-rapid-transit service • Promote micro urban vehicles
Improve planning and funding	• Utilise the Canadian Infrastructure Bank to fund future expansion • Increase TransLink's share of development fees

PNE delivered impressive results

- **150,000+** people visited the T2050 exhibition
- **3,000+** visitors PER DAY through Transport 2050 engagement bus
- **2000+** additional ideas submitted
- Boost to survey numbers from across the region
- And more to come…

TRANSPORT 2050
Shape the future of how we move. And live.

TRANS/LINK

What's next for Transport 2050?

Reporting what we heard and maintaining momentum
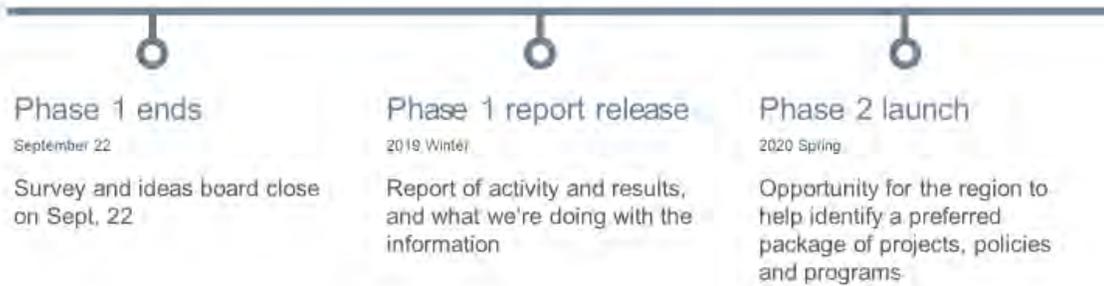
Phase 1 ends
September 22

Survey and ideas board close on Sept. 22

Phase 1 report release
2019 Winter

Report of activity and results, and what we're doing with the information

Phase 2 launch
2020 Spring

Opportunity for the region to help identify a preferred package of projects, policies and programs

TRANSPORT 2050 | Shape the future of how we move. And live.

TRANS/LINK

TO: Mayors' Council on Regional Transportation

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

DATE: September 12, 2019

SUBJECT: **ITEM 3.2** – **Micromobility Guidelines for Metro Vancouver - version 1.0**

RECOMMENDATION

That the Mayors' Council on Regional Transportation receive the report entitled "Micromobility Guidelines" for information.

PURPOSE

The purpose of this report is to update the Committee on the Micromobility Guidelines for Metro Vancouver (version 1.0) that were prepared collaboratively between TransLink and municipal staff at the bequest of RTAC. This version was endorsed by RTAC at their August 2019 meeting and formally released for use by municipal staff in early September.

BACKGROUND

These guidelines were completed thanks to funding from the Phase 1 Investment Plan that enabled a new stream of work at TransLink under the banner of "New Mobility." The program is intended to help TransLink and the region's municipalities navigate a future defined by rapid technological change in the transportation landscape, through policy development, new partnerships, and experiments with new service concepts related to automated, connected, electric and shared-use mobility that advance our region's objectives.

Shared micromobility refers to services that enable the use of a bicycle, scooter, or other low-speed mode on a shared-use, short-term, as-needed basis. Station-based bike-sharing, where a bicycle is picked-up from and returned to a secure dock in one of many designated stations, began in the mid-

Figure 1 - Scooter sharing services[1]

2000s in France and has slowly and steadily expanded to most large cities around the world. Most have required some combination of public subsidy or third-party sponsorship. Vancouver's Mobi system, launched in 2016, is an example of station-based bike-sharing.

In 2017, with the proliferation of smart phones and low-cost GPS, there was a global explosion of a new wave of venture capital-backed companies offering cities dockless bike-sharing where bikes can be located and accessed via an app and returned to any location within a defined geography. In 2017, these

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Public Meeting of the Mayors' Council on Regional Transportation
AGENDA PACKAGE, September 20, 2019

companies introduced e-bikes to their dockless fleets and in 2018 they were joined by electric push scooters – both of which have been exceptionally popular in hundreds of cities around the world.

More than twice as many trips – 84 million – were taken on shared micromobility in the US in 2018 as compared to 2017. As shown in figure 2, this record growth is owing, in particular, to the rapid uptake of scooter-sharing services.

Figure 2 - 84 million trips on shared micromobility in the US in 2018[1]
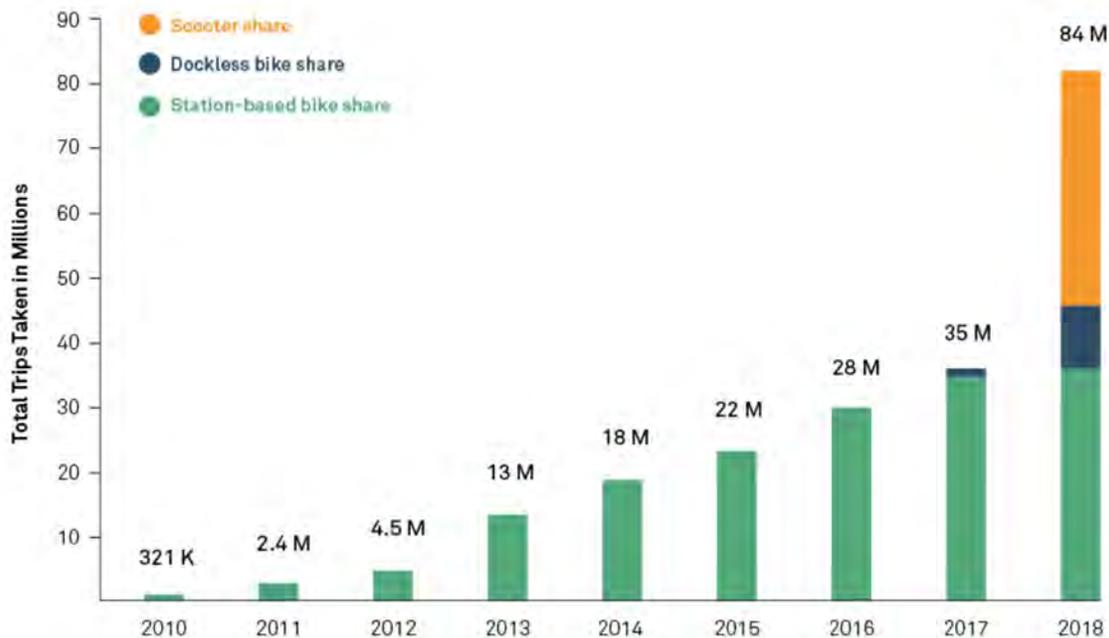
The continued growth of shared micromobility has the potential to offer our region an array of benefits including improved access and mobility for more residents in more parts of the region, and increased use of active and non-automotive modes that can help reduce car usage and improve health, environmental and economic outcomes.

However, cities have also experienced challenges especially with respect to parking the bikes and scooters in ways that don't negatively impact the safe circulation of other road users, especially people on foot and those with disabilities. The dockless vehicles, as they are easy to pick up and move around, have been subject to high rates of theft and vandalism. The durability and quality of the vehicles has also been criticized, with life-spans that average only a few months to a year. One recent study[2] concluded that the substantial embodied energy and emissions going into the vehicles' production, combined with the logistics involved in collecting, charging, and redistributing them each day results in more GHG emissions per kilometre travelled than by average bus or moped kilometre. In the last 2 years, a number of companies have gone bankrupt, leaving the city to round up and dispose of their

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[1] NACTO 2018 (nacto.org/shared-micromobility-2018)
[2] Hollingsworth et al 2019. Are e-scooters polluters? IOP Science.

vehicles. In order to better manage all of these issues, cities have requested better data from the companies, with mixed success in some cases.

To ensure that this region is able to fully leverage the potential benefits of shared micromobility while mitigating against the potential negative impacts described above, the Regional Transportation Advisory Committee recommended that TransLink collaborate with municipalities to develop a consistent and coordinated regional approach to welcoming, managing and regulating shared micromobility services in Metro Vancouver. The attached guidelines represent the first step in this collaboration.

DISCUSSION

The *Guidelines* were endorsed by the Regional Transportation Advisory Committee (RTAC) in August. They are intended to help staff across all 23 local government authorities within Metro Vancouver take a more consistent and coordinated approach when implementing shared micromobility services in their communities so that we, collectively:

- Provide a consistent and familiar user experience for people across the region;
- Minimize the regulatory burden for micromobility providers; and
- Establish a solid foundation to enable seamless operations across municipal boundaries.

The *Guidelines* cover six topic areas:

1. **Data sharing** to achieve four key public sector objectives: retrospective transportation planning and analysis, dynamic system management in the event of incidents and system issues, auditing and enforcement of license conditions, and enabling of third-party Mobility-as-a-Service platforms that offer integrated trip planning, booking, payment, and ticketing for all modes and services;

2. **Payments and price structures** that are financially sustainable and have the potential to adapt to integrated payment options in a secure manner;

3. **System planning and design** to strive for a fair balance between innovation and public interests while providing solutions to transportation needs;

4. **Right-of-way management** to identify and manage risks when devices are being used and stored within the public realm;

5. **System operations** to ensure service providers are held accountable for their day-to-day operations and have an appropriate level of risk management for operational risks; and

6. **Permit structure and conditions** to provide short-term and long-term permit structure recommendations and future considerations.

These non-binding *Guidelines* are intended to be reviewed, refined and updated
The micromobility industry, their businesses and operational models are constantly innovating and adapting; making best practices for regulating, managing and evaluating outcomes an ongoing exercise. These *Guidelines* are intended to be reviewed as-needed and it is anticipated they will be updated to include experiences and lessons learned both locally and abroad and to reflect any further steps the

region may have made towards greater coordination of permitting, regulating and managing these services.

The *Guidelines* are a living document and are expected to be updated in 2020. The next version is meant to address the issues flagged by the RTAC, include input from Mayor's Council, and incorporate experiences and findings from municipalities as the industry develops in Metro Vancouver. This update will consider:

- **Input provided by RTAC**: Two key issues were flagged by the RTAC committee in July and will be incorporated in the next version of the *Micromobility Guidelines*: Right-of-Way Management and Data and Data Sharing. Right-of-Way (ROW) Management requires additional work to determine the level of risk to ROW accessibility for people with mobility challenges and options to mitigate such risks. Data and Data Sharing needs to include a reference to the Freedom of Information and Protection of Privacy Act.
- **Input from Mayor's Council**: The *Micromobility Guidelines* will be presented to the Mayor's Council on September 20th. Any feedback received from the Mayor's Council will be included in the next version of the *Micromobility Guidelines*.
- **Update and future engagement from municipalities *is crucial for future versions of the guidelines:*** TransLink will engage the RTAC New Mobility Subcommittee to actively share research and experiences with shared micromobility as the industry develops in Metro Vancouver. TransLink intends to incorporate lessons learned and best practices in future versions of the *Micromobility Guidelines*.
- **Industry evolution**: This nascent industry is ever-evolving. TransLink will incorporate new learnings and best practices from elsewhere around the world as the industry evolves and matures.

Staff intends to bring a revision of the *Micromobility Guidelines* to RTAC for input and consideration in 2020.

The *Micromobility Guidelines* can serve as an initial step towards creating a general framework
These guidelines are carving out new territory and there is still much work to be done to understand their usefulness on the ground in our region. Currently, the first examples of these services in our region (e.g. Vancouver, UBC, Richmond, Coquitlam) have all been introduced through a competitive procurement process to engage private sector companies through contracts for service within a single municipality. The three North Shore municipalities are all currently collaborating to procure a single provider to deliver dockless e-bike sharing on the North Shore – representing the first case of cross-boundary inter-municipal coordination. TransLink has provided some seed funding to support the North Shore pilot and encourage this early effort at regional coordination.

As with the conversation around local regulation of Transportation Network Service operators, a more efficient approach to ensure inter-operability, efficient local management, and maximum choice for both the customers and the companies, may be to adopt a regional licensing or inter-municipal business license (IMBL) system. Such a regime, for both ride-hailing and micromobility, would need to consider issues of data management, space management, and accessibility to residents

Each municipality could opt-in and welcome multiple providers (who have been vetted and qualified at the regional level) to operate in their jurisdiction rather than continue to procure a single provider in

each city but who cannot cross municipal boundaries. Ultimately, a single regional Inter-Municipal Business License (IMBL) and a single regional data warehouse owned collectively by all Metro Vancouver municipalities but administered and managed regionally is an idea that RTAC will explore further over the coming year. In the meantime, the first draft of these guidelines will help municipalities in Metro Vancouver roll out these services in a consistent and coordinated way to the ultimate benefit of the user.

ATTACHMENTS:
- TransLink's *Micromobility Guidelines*, dated July 2019

Shared Micromobility Guidelines

A Coordinated Approach to Enabling and Managing Shared Micromobility Services in Metro Vancouver

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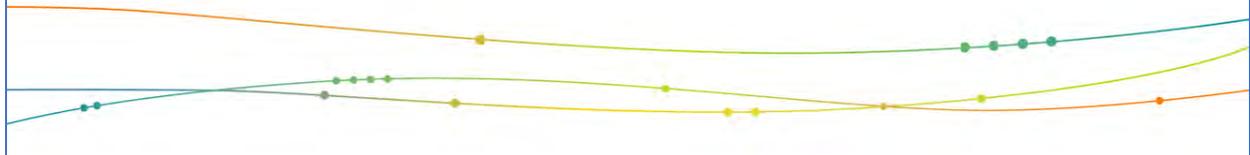
Shared Micromobility Guidelines

- Five areas of opportunities for permitting shared mobility:

    - A Legislative Framework for Micro-mobility
    - Uniform Data Standards
    - Interoperability
    - Build Transportation Resilience
    - Performance-based Permit Conditions

- There is a need for increased regional coordination

- The guidelines can serve as an initial step towards creating a general framework

Shared Micromobility Guidelines

Six Focus Areas:

- DATA AND DATA SHARING
- PAYMENTS AND PRICE STRUCTURES
- SYSTEM PLANNING AND DESIGN
- RIGHT OF WAY
- SYSTEM OPERATIONS
- PERMIT STRUCTURE AND CONDITIONS

The Guidelines are:

- Reference guide for municipalities

- Living document intended to be reviewed and updated (2020)

Shared Micromobility Guidelines

Future work includes:

- Address the issues flagged by the RTAC
- Include Mayor's Council input
- Incorporate experiences and findings from municipalities as the industry develops

Update and future engagement from municipalities is crucial for future versions

- TransLink will engage RTAC New Mobility Subcommittee to actively share research and experiences
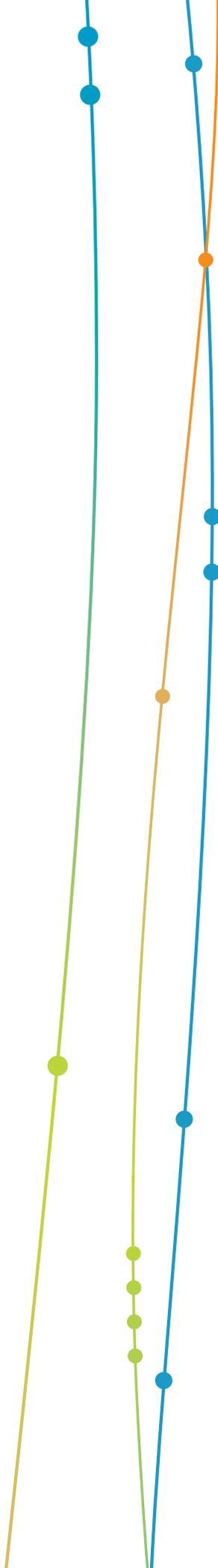
SHARED MICROMOBILITY GUIDELINES

A coordinated approach to enabling and managing shared micromobility services in Metro Vancouver

JULY 2019

Foreword

New modes of transportation including electric-assisted bikes and scooters as well as ride-hailing Transport Network Companies (TNCs) have emerged in recent years to supplement public transit, and the pace of innovation is high. The municipalities of Metro Vancouver are increasingly interested to pilot demonstrations of these new modes in order to determine if they show promise in providing residents with more convenient and reliable options to move around. Several of the new modes and service models are shared and electric which could support the region in reaching its sustainability goals. The need for a more unified approach to piloting requirements has led to the recent development of these Shared Micromobility Guidelines by TransLink in close collaboration with local municipalities.

The current piloting, even of similar services, is to a large extent local in nature. Criteria for data sharing, safety, and allowed usage of road-space including parking vary between each responsible municipality. The municipalities' processes to shape sought-after standards for the new transportation modes and operators show overlaps of work and lack of comparing best-practices - which could set up the region for "islands of mobility" rather than "seamless mobility" across modes and municipal borders.

Public agencies have traditionally engaged private sector innovators via a Request for Proposals (RFP) process in which typically one bid is selected to operate under strict contract of conditions. However, perhaps a more progressive approach may be to develop a general framework for operation standards based on policy initiative goals for the region, under which municipalities may distribute licenses to private operators with the option of adding on more specific criteria such as fleet sizes, zone-based pricing schemes, curbside management and more. Under this general framework, municipalities could welcome new mobility services with the assurance of regional coordination, while instituting their own local stipulations to more specifically cater to unique contexts and needs – balancing incentives and regulations for new mobility operators which could also hold potential for revenue generation and reallocation to improve services.

We now see an opportunity for increased coordination to ensure proper oversight, while creating a unified and efficient system across a region, that encourages rather than stifles innovation and private investment toward public good. The Micromobility Guideline is a first step toward achieving these goals, and we are looking forward to reviewing the lessons learned from early piloting of micromobility services to better understand how they may be formally incorporated to provide innovative new mobility options for the region.

Table of Contents

Executive Summary

The Metro Vancouver municipalities and TransLink have a key role in shaping what life is like in Metro Vancouver. We are committed to creating affordable, sustainable, and seamless transportation as part of our efforts to create a prosperous region. The Regional Transportation Strategy adopted in 2013 sets a target for 50% of all journeys to be made by walking, cycling or using public transport by 2045. To achieve this, Metro Vancouver municipalities and TransLink must work together to make our communities a place where people choose active and sustainable transportation options more often.

Micromobility, such as dockless bike sharing, electric scooters, and on-demand shuttles, is part of a mosaic of new and emerging services that will bring us closer to achieve this vision. Many municipalities in Metro Vancouver are experimenting with these services and micromobility is becoming a growing share of trips in the region. However, this growth is leading to new opportunities and challenges.

The Micromobility industry, their business and operational models, are constantly innovating and adapting; making best practices for regulating, managing and evaluating outcomes an ongoing pursuit.

The constant innovation and adaptation make it difficult to weigh the costs and benefits of new shared-use services that people enjoy. It is also a challenge to provide these services while ensuring an orderly and accessible public right-of-way.

International examples of unregulated rollouts of micromobility devices have exhibited a number of issues, including unsustainable business models and haphazard parking of devices obstructing access on right of ways.

TransLink, in close collaboration with the Metro Vancouver municipalities, has created these guidelines to proactively manage issues of regional significance. It is meant to provide timely information to municipal planning and engineering staff as a consideration during the procurement and licencing of micromobility services.

The Guidelines also provide an initial "roadmap" for the municipalities and TransLink to develop issue-specific actions to be administered and/or coordinated at the local and regional level.

The Guidelines focus on six areas:

1. Data and Data Sharing

2. Payments and Price Structures

3. System Planning and Design

4. Right of Way Management

5. System Operations

6. Permit Structure and Conditions

Each area has several proposed recommendations based on best practices and the interests expressed through consultations by Metro Vancouver municipalities.

These recommendations are further classified into five areas of opportunities for permitting shared micromobility (see table in page 6-7):

1. *A Legislative Framework for Micromobility* to provide consistency across municipalities and standardize procedures

2. *Uniform Data Standards* to facilitate compliance costs and non-compliance enforcement

3. *Interoperability* to improve customer experience and enable seamless integrated travel across municipalities

4. *Build Transportation System Resilience and Sustainability* by increasing transportation options

5. *Performance-based Permit Conditions* to provide flexible permit conditions to operators

Discussions with the Metro Vancouver municipalities while crafting these guidelines has indicated that further coordination is needed to:

• Create a consistent set of standards across the region for shared mobility services;

• Support municipalities in their decision-making to allow shared mobility service providers to operate through better coordination;

• Support shared mobility service providers by providing guidance through regional standards and helping them through municipal approval processes; and

• In the long term, work towards a regional license system for shared mobility

As a next step following up on the Guidelines, we propose a joint effort this fall between TransLink and the Metro Vancouver municipalities to implement policy measures on new shared mobility services also including ride-hailing, and car-sharing.

This Regional Shared Mobility Framework could draw from existing as well as new policy levers available to local government in this region to regulate new shared mobility services. As a first step, more applied research is urgently needed including local considerations such as policy mechanisms, regulatory authority, governance framework, compliance and enforcement mechanisms, and staffing and resourcing requirements.

This analysis should be followed by active consultations with key regional stakeholders, including municipalities, impacted industry and user groups or representatives of user groups, to identify existing/anticipated issues as well as objectives and priorities with respect to shared mobility regulation, compliance and enforcement.

Opportunities for Permitting Shared Micromobility in Metro Vancouver

Key Opportunities	Rational	Guideline Items
A Legislative Framework for Micromobility	A legislative framework with the potential to standardize one or more of the following aspects of micromobility at a regional or provincial level: 1. Device operational standards 2. Consumer rights when devices are in use 3. Defining when, where and under what specific circumstances devices can and cannot be used 4. Ensuring third parties have statutory protections against reckless user behaviour 5. Reducing investment risk for operators through clear and uniform 'rules of engagement' Key benefits: • Consistent operating rules for operating devices across municipal boundaries • Potential for additional statutory consumer protections in relation to payment and liability • Device-based regulations that would apply equally to all devices and not rely as heavily on individual, operator-by-operator, permit-based agreements	6.4 Long-term Regulatory Framework 6.5 Regional Key Performance Indicators (KPIs) 6.6 Service Area Expansion and Dynamic Fleet Cap
Uniform Data Standards	Mandate uniform standards at a regional level to: 1. Assist operators with compliance costs 2. Allow municipalities to gain useful insights into use and availability including enforcement mechanisms for non-compliance that can be applied across the region	1.1 Base Uniform Data Standards 1.2 Data Format 1.3 Data Validation 1.4 Real-time Position Data 1.5 Data Warehousing and Privacy

Key Opportunities	Rational	Guideline Items
Interoperability	A cooperative policy framework between Metro Vancouver municipalities offers the best opportunity to increase the potential for interoperability over time	2.1 Payment System(s) 2.2 Product and Service Innovation 2.3 Payment Security Procedures and Processes 2.4 Interoperability Capabilities
Build Transportation System Resilience and Sustainability	Shared micromobility provides municipalities and the region with a chance to increase the number of transportation options, improve transportation equity and build a more sustainable and resilient transportation system. Safety risks to both users and non-users must be identified and addressed	3.1 Long-term Fleet Objectives 3.2 Fleet Information 3.3 Device Technical Specifications (including mandatory hardware) 3.4 Supplementary Technology (optional hardware) 3.5 Parking 3.6 Equitable Distribution and Access 3.7 Safety and Education Program 3.8 Staffing 5.1 Helmet Plan
Performance-based Permit Conditions	There is an opportunity to adopt flexible permit conditions that allow operators into the operating areas, and determine the kind of devices permitted, the number of devices permitted ('device caps') and the length of a permit	4.1 Operating Parking Concept 5.2 Rebalancing Plan 5.3 Rechargeable Electric Devices 5.4 Parking Incentives and Penalties 5.5 Safety Checks 5.6 Complaints Management System 5.7 Compliance Management System 5.8 Bank Guarantee 6.1 Standardized Permit Process and Conditions 6.2 Permit Length Determination 6.3 Administration and Cost Recovery

Introduction

The new mobility landscape incorporates shared mobility as a component that can support regional objectives such as reducing greenhouse gas emissions and vehicle kilometers traveled (VKT).

Cities around the world have observed the emergence of shared micromobility services changing the way people move. These services are an alternative option to complete the first/last-mile to transit stations that also promote safe, healthy, clean and compact communities.

Coordination between TransLink, the municipalities and operators is essential to respond to these trends and ensure the greatest benefit of shared micromobility is captured for the cities and the public.

The *Shared Micromobility Guidelines* ('The Guidelines') is a project led by TransLink on behalf of Metro Vancouver municipalities and other organizations currently involved in shared micromobility in the Lower Mainland.

It is meant to act as a reference guide to inform municipalities of the relevant considerations for permitting shared micromobility devices within their jurisdictions.

The objectives of the guidelines are to:

• Provide a set of recommendations for municipalities and prospective operators interested in conducting a shared micromobility pilot and inform the wider community.

• Provide local governments, and other relevant organizations in Metro Vancouver with a common set of considerations to improve planning, management and operations of shared micromobility devices.

Although municipalities are expected to be the primary users of the Guidelines, prospective shared micromobility operators will also be able to benefit from the potential for increased municipal coordination on permit conditions, reducing the permit compliance burden for operators.

The Guidelines have been drafted with the following principles in mind:

1. **'Device agnostic'**; i.e. they are intended to be applicable to all devices and are not targeted – for the most part – at any specific type of micromobility device.

2. The need to strike a **fair balance** between managing the barriers to enter the shared micromobility market and protecting the public interest for safe, sustainable and efficient transportation through sensible and reasonable permit conditions.

3. Allowing for a degree of **flexibility** for local government to determine the permit conditions that are most appropriate for their municipality.

4. **Future-oriented**: The Guidelines are cognisant of recent shared mobility trends however they are not intended as legal requirements. Instead, they act as a starting point to help municipalities determine the most appropriate arrangements for their jurisdiction.

The Guidelines provide the basis for TransLink and municipalities to implement coordinated permit systems in the absence of a legislative framework with specific statutory requirements for micromobility. The Guidelines also discuss, explore and outline the potential for voluntary incentives and cooperation in the shared micromobility space.

These guidelines are intended to be reviewed and updated on an as-needed basis as the micromobility landscape continues to change. Consistent with other agencies operating in this space, it is anticipated that they will be updated within six to twelve months of being released to include experiences and lessons learned both locally and abroad in Metro Vancouver.

CURRENT STATUS OF ROLLING OUT MICROMOBILITY IN NORTH AMERICAN CITIES

To date, most jurisdictions in North America have elected to regulate at the local government level, and on a case-by-case basis, individual operators. In several locations (e.g. Los Angeles, Washington DC, Seattle), micromobility operators have sought to launch at a regional level. In some instances (e.g. Brisbane, Santa Monica), a few 'rogue' operators have sought to launch with no permits and subsequently faced cease and desist notices or fines. These operators either withdrew from service or sought post-deployment permission to operate.

Most permit regimes are short term in nature (1-2 years). Many jurisdictions have informally stated they prefer a short-term permit to periodically revisit and adjust permit requirements. Partnership models remain popular; however, recent experience strongly suggests that the flexibility offered by shared dockless devices, and the relatively short lifespan of many devices, has changed the financial motives of many operators.

There is an emerging consensus that the desire to capture short-term market share, and revenues, makes shared dockless devices less attractive for long term partnerships when compared to conventional docked bikeshare. Generally, docked shared devices require a greater level of commitment and infrastructure on the street to support the docking process.

APPLICATION IN METRO VANCOUVER

In Metro Vancouver, many operators have entered into individual agreements with municipalities. To the extent cooperation exists, it has been through a local permit regime with relatively wide discretion on the interpretation of assessment criteria for the awarding of permits.

The Shared Micromobility Guidelines aim to provide local governments and other relevant organizations in Metro Vancouver a common set of considerations to improve planning for, day-to-day management and operations of shared micromobility devices within public rights of way and other public spaces (e.g. UBC).

The Guidelines focus on six areas:

1. The collection of **Data** to measure the success of micromobility providers in the community and Data Sharing to improve short- and long-term planning, research and analysis.

2. **Payments and Price Structures** that are financially sustainable and have the potential to adapt to integrated payment options in a secure manner.

3. **System Planning and Design** to strive for a fair balance between innovation and public interests while providing solutions to transportation needs

4. **Right-Of-Way (ROW) Management** to identify and manage risks when devices are being used and stored within ROW

5. **System Operations** to ensure service providers are held accountable for their day-to-day operations and have an appropriate level of risk management for operational risks.

6. **Permit Structure and Conditions** to provide short-term and long-term permit structure recommendations and future considerations

The Guidelines are intended to help guide individual municipalities based on the currently available technologies and business models.

SHORT NOTE ON TERMINOLOGY

The term 'shared mobility' continues to be contested, particularly where it relates to vehicles intended to be legally used by one person at a time. There is currently a wide variety of terminology and vehicle classifications in use.

- Transportation/economic model centric terminology: 'Shared mobility'.

- Operating model and economic model centric terminology: 'Dockless on-demand personal mobility' (LADOT terminology).

- Device-centric terminology: 'innovative vehicles' (Australia), 'scooter share', 'bike share' ('bike share' has since become common parlance in the English language in the last 10-15 years).

- User-centric terminology: 'Personal Mobility Devices' (Singapore Land Transport Authority).

- Hybrid terminology: 'Dockless Sharing Vehicles' (Washington DC DDOT).

- Geographic scale and transportation-based terminology: 'micromobility'.

There is still a slowly emerging consensus around use of the term 'shared micromobility' which will be the preferred choice in these guidelines.

PROCESS

The Guidelines have been developed by WSP and TransLink, with input from the Metro Vancouver municipalities and other organizations within the region responsible for approving the use of shared mobility devices within their local jurisdictions.

- TransLink and WSP hosted two stakeholder workshops (mid-October and late November 2018).

  1. The first workshop was a scoping exercise to generate a list of common stakeholder issues concerning shared micromobility.

  2. The second workshop was developed around five common themes, developed with input from TransLink, that responded to the issues raised in the first workshop.

- The Guidelines were prepared and finalized during winter and spring of 2018/19.

SHARED MICROMOBILITY GUIDELINES
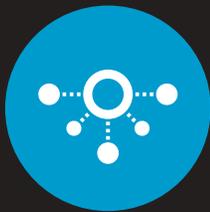
**DATA AND
DATA SHARING**

**PAYMENTS
AND PRICE
STRUCTURES**

**SYSTEM
PLANNING AND
DESIGN**

**RIGHT
OF WAY**
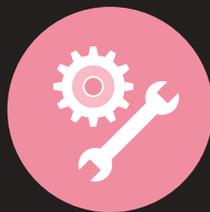
**SYSTEM
OPERATIONS**

**PERMIT
STRUCTURE AND
CONDITIONS**

1.0 DATA AND DATA SHARING

PREMISE FOR TOPIC

» **Data** is defined as 'factual information (such as measurements or statistics) used as a basis for reasoning, planning, discussion, or calculation.'

» **Data sharing** is defined as 'the practice of making data available to others for planning, research or analysis purposes.'

» Shared mobility concepts rely on one or more source(s) of data and some degree of data sharing to be able to demonstrate their level of success to the community.

» Given that shared micromobility providers are expected to operate across the Metro Vancouver region, municipalities and other agencies will require some level of access to data to gauge success, both in terms of understanding historical trends as well as data analysis to identify potential future trends.

• Local municipalities indicated that capturing device usage and location data is of critical importance. Access to data is a key part of evidence-driven policy.

» In the absence of a regulatory framework mandating uniform data standards across the region, it is assumed that data sharing arrangements will likely initially be governed and enforced at the municipal level.

» These guidelines are an attempt to outline desirable and consistent data requirements that municipalities can require as part of their individual permit arrangements.

» The decision to share data with third parties (i.e. the region, the public via open data) is likely to be contractual obligation within the permitting arrangement.

PROPOSED OBJECTIVES

» Uniform data standards to minimize compliance costs on operators and non-compliance enforcement mechanisms from municipalities.

» Data sharing is essential to help inform and shape the development of micromobility and achieve regional goals in Metro Vancouver.

• In the short term, data sharing agreements would assist municipalities to gain a better understanding of current-day usage patterns and identification of immediate issues. Low-cost, high impact operational changes that help to optimise the existing network.

• In the long term, the municipalities and the region will have the ability to make more informed decisions about transportation network development, including policy changes and regulatory frameworks (Refer to **6.0 Permit Structure and Conditions**).

RELEVANT PRINCIPLES

» Government and the community have a reasonable expectation of **quality data** that will be **provided in a timely manner**.

» Operators need to act as **responsible** custodians of all data generated.

» Municipalities can use their existing regulatory powers to ensure data is **provided** while still **respecting** commercial sensitivities from operators around sharing data.

» Balance public appetite for **Open Data** with end-user **privacy concerns**.

RISKS (IF STATUS QUO IS MAINTAINED)

» Fractured, incomplete data from individual operators which may not be easily accessed by municipalities or comply with open data requirements.

» More resources required to capture and estimate latent demand for services.

» Likely to be more difficult to plan for future Shared Micromobility services.

In the current context, there seem to be two competing perspectives on data sharing: non-aggregated, open data (i.e. Mobility Data Specification, or MDS) and pre-aggregated, encrypted data (i.e. SharedStreets platform).

The Open Mobility Foundation (OMF) was founded in support of the MDS, which includes details such as mobility vehicle trips and their routes; as well as the location and status (e.g. 'available,' 'in use,' or 'out of service') of each vehicle. This granular level data could help cities assess equity goals by ensuring micromobility in underprivileged communities, establish caps on the total number of vehicles, and collect specific trip information that could inform transportation improvements. Originating from work at the LADOT, municipal members now include: Austin, Chicago, Los Angeles, Louisville, Miami Dade, Minneapolis, New York City DOT, New York City Taxi and Limo Commission, Philadelphia, Portland, San Francisco, San Jose, Santa Monica, Seattle, and Washington DC.

However, serious user privacy concerns have been raised around this detailed level of information by Transport Network Companies (TNC), as well as the American Civil Liberties Union (ACLU). In California, the state legislature is currently proposing a bill (AB 1112) that could restrict cities from collecting individual trip data, allowing them access only to aggregated data from micromobility companies.

As an alternative, cities and transit agencies may rely on third party platforms developed to warehouse and analyze data, thereby providing the information needed to measure micromobility impacts while maintaining privacy of information. SharedStreets is a non-profit organization that offers such services to cities – founded by NACTO and Bloomberg Philanthropies, and endorsed by Ford, Uber and Lyft. Several city agencies are using this platform including: SFMTA, DDOT, and Toronto. Other third party service providers include Remix (who support MDS), Populus, and Ride Report to name a few.

Coordination of the regional policy framework with local municipalities will be essential for regulating TNCs data sharing agreements, and a balanced approach should be considered to maintain user privacy but also gain the information needed to measure impacts and inform mobility policy and projects moving forward.

1.0 DATA AND DATA SHARING

ID	Topic	Proposed Permit Application Requirement	Details
1.1	Base Uniform Data Standard	The uniform data standards should be: • Required as a permit condition of operation • Subject to validation (possibly through a third party) • Contain a combination of real-time and historical data • Performance-based, in terms of: • Completeness, as determined by through validation (see Guideline item 1.3); • Compliance with a data provision timeline (see Guideline item 1.4); • Stipulate penalties for non compliance and a mechanism for enforcing these penalties	*Operators should be required to retain accredited firms to conduct periodic audits of operators to confirm that data security best practices are being upheld.* *Based on informal feedback from stakeholders, it is anticipated that compliance with data standards is likely to emerge as an issue without strict and readily enforceable standards.* *NACTO's Guidelines for the Regulation and Management of Shared Active Transportation recommend using the General Bike Share Feed Specification (GBFS) for real-time, read-only data, as adopted by North American Bikeshare Association (NABSA) in 2015.* *There are existing guidelines on what data to publish and its format.*
1.2	Data Format	The most recent DDOT data reporting format consists of three tables with data categories and fields 1. Summary Table a. Operator b. Date c. Trips d. Bicycles (Devices) e. Reports f. Maintenance 2. Trip Table a. Identification b. Date c. Location 3. Event Table a. Identification b. Date c. Location	*The DDOT data format has evolved out of technologies and data capabilities that form part of the latest generation of shared micromobility devices. Furthermore, DDOT is one of the few agencies that has been able to publicly demonstrate how this data can be analysed to respond to both short-term and long term planning needs.* *Mandating compliance with this interim standard should increase the overall level of compliance with permit requirements until new emerging standards such as MDS have been given an opportunity to prove themselves in the marketplace.*

1.0 DATA AND DATA SHARING

ID	Topic	Proposed Permit Application Requirement	Details
1.3	Data Validation	Validation Accreditation (e.g. from a Regionally-endorsed third party) firm: • Data security standards	*Validation accreditation to operate in the Region subject to privacy requirements and house the data exclusively within Canada without needing to transfer it outside of Canada.*
1.4	Real-time Device Position Data	Key Requirements: • Real-time GBFS stream when devices not in use • Provision of GBFS-stream to consumers when devices not in use • Provision of GBFS-stream to municipalities when devices not in use	*NACTO's Guidelines for the Regulation and Management of Shared Active Transportation recommend using the General Bike Share Feed Specification (GBFS) for real-time, read-only data. The GBFS was adopted by North American Bikeshare Association (NABSA) in 2015 and appears to be the most common standard among shared micromobility operators / regulators for real time device data.* *The GBFS specification is not intended for historical or archival data such as trip records. The spec is used to publish public information intended for bikeshare users. It has since been expanded to other devices.*
1.5	Data Warehousing and Privacy	Operators should be required to provide: • A commitment to archive historical trip data within Canada for a defined time period as part of data warehousing arrangements (e.g. three years) • Demonstrate ongoing compliance with Canadian and provincial privacy laws	*Canadian Privacy Law requires employers to train employees and other staff about the management of Personal Information as defined in The Personal Information Protection and Electronic Documents Act, (SC 2000, c 5). The permit application process should require demonstrable evidence of how an operator proposes to comply with existing privacy law as well as how they propose to warehouse data.*

2.0 PAYMENTS AND PRICING STRUCTURE

PREMISE FOR TOPIC

» Shared micromobility services require an ongoing source of revenue to be financially sustainable and operate successfully.

» To the extent that these services rely on user fees to generate revenue for their day-to-day operations, it is in the public interest to ensure that the fees paid by users can be clearly understood, set and collected in a fair and transparent manner.

» Existing provincial consumer protections, administered by Consumer Protection BC, may not be enough to deal with the full range of consumer issues that micromobility devices are likely to present.

» Payment and pricing issues are likely to be further complicated by the bundled nature of Mobility-as-a-Service (MaaS) style services underlying price structures that accompany many of these shared economy services. The nature of shared micromobility service and the way they are used is likely to change and evolve over time.

» It has been assumed that operators rely on robust and secure payment systems to capture and process payments and secure their revenue streams, however there are several precedents that warrant additional attention to this focus area.

» While existing operators already use a wide range of payment systems, common payment platforms for services are still only gradually emerging.

» There will be a need to continually assess what kind of other regulatory interventions may be necessary once a permit system is in place (Refer to **6.0 Permit Structure and Conditions**).

PROPOSED OBJECTIVES

» Payments and pricing structures planned for fare integration with transit and interoperability with other devices and services.

» Consistency in payments and pricing structures in the absence of formal regulation.

RELEVANT PRINCIPLES

» Encourage adoption of **payment system** core attributes: reliable, innovative, secure and interoperable with other mobility services.

RISKS (IF STATUS QUO IS MAINTAINED)

» Unreliable payment systems: both municipalities and operators are likely to receive a higher level of complaints about access to services.

» Without a comprehensive, integrated payment system and fare structure in place, the full potential of integrated mobility will either not be realised or take much longer to be realised.

2.0 PAYMENTS AND PRICING STRUCTURE

ID	Topic	Proposed Permit Application Requirement	Details
2.1	Payment system(s)	Operators to demonstrate evidence of: 1. A payment system that offers a greater level of options for users (e.g. low income) 2. A payment option that includes cash/non-credit card option	*Municipalities should recognise in the permit development process that cash handling costs have the potential to create higher transaction and operating costs and give consideration as to how those higher costs are likely to be spread across all users.* *A price structure with service options that include a low-income payment option.*
2.2	Product and Service Innovation	Operators to demonstrate evidence of: 1. Support for established payment technologies: does the service offering leverage existing technologies or lower existing barriers to access devices by making use of existing consumer devices (such as mobile phones) 2. Support for and encouragement of new payment systems and technologies, including how these systems increase convenience of payment and offer lower transaction costs for users when compared to existing offerings 3. Rewards and incentives the operator is prepared to offer to increase feeder trips to transit	*Application requirements based on preferences expressed at the stakeholder sessions, including level of voluntary regional cooperation.*
2.3	Payment Security Procedures and Processes	Operators to demonstrate evidence of: 1. Level of compliance with the Payment Card Industry Data Security Standard (PCI DSS) 2. Demonstrate consumer protections with respect to cash transactions and ensuring any fees paid are tracked and not lost to fraud	*Application requirements based on outcomes from the stakeholder sessions and existing industry norms.*
2.4	Interoperability Capabilities	Operators to demonstrate evidence of: 1. Current and future level of interoperability capabilities with TransLink Compass Payment System and/or a MaaS payment platform Operators to demonstrate their willingness to be part of: 2. Future Compass System program expansions for MaaS services	*Application requirements based on outcomes from the stakeholder sessions and the findings of Dutch bikeshare interoperability study including Amsterdam, The Hague, Rotterdam, Utrecht in The Netherlands.*

3.0 SYSTEM PLANNING AND DESIGN

PREMISE FOR TOPIC

» This section describes considerations for the licensing authority and the service provider as they work together to plan, design and permit the proposed service. Transparency and consistency is important to ensure a level playing field for all potential service providers and ensure that the proposed service meets public objectives.

» This section is intended to assist the licensing authority and the shared micromobility providers:

1. Determine the commercial feasibility of the proposed deployment during the permit period.

2. Identify potential pathways for scaling up their operations over time.

3. Streamline pre-implementation planning and design considerations across the Region.

» Notwithstanding the considerations outlined here which are intended to build a common baseline across the Metro Vancouver region, individual municipalities may elect to impose additional requirements, both in terms of one-off pre-implementation requirements and/or ongoing long-term (operational) requirements. Micromobility providers will need to acquaint themselves with these arrangements prior to applying for the necessary permit(s).

» Some of the key system planning and design topics of high interest within the Metro Vancouver region include clarifying the public objectives for the service, specifying fleet sizes and a plan for scaling that fleet over time, requirements or incentives around locking and securing the micromobility device, solutions for improved safety and environmental performance, and opportunities for interoperability between services and across jurisdictional boundaries.

» There are important legislative compliance aspects to System Planning and Design: Micromobility devices will be required to demonstrate ongoing compliance with the Motor Vehicle Act, Motor Vehicle Regulations (BC), Motor Assisted Cycle Regulation, BC Reg 151/2002 and any applicable local by-laws.

PROPOSED OBJECTIVES

» System planning and design that strikes a **fair balance** between encouraging innovation, mobility opportunity and protecting public safety.

» Encouragement of **win-win solutions** where a micromobility provider can demonstrate their proposed solution fills an existing gap in current regional or local transportation needs.

RELEVANT PRINCIPLES

» Implementation of micromobility services with **equitable distribution, access, safety and environmental sustainability**.

» **Interoperability** and ability to incorporate new technologies.

RISKS (IF STATUS QUO IS MAINTAINED)

» System planning and design that is fractured and uncoordinated.

» System planning and design that does not take account of risks or unfairly apportions level of risk.

» More frequent complaints are likely and increased municipal administrative burden.

» Potential for regulatory burden/compliance issues that prevent operators from launching devices.

3.0 SYSTEM PLANNING AND DESIGN

ID	Topic	Proposed Permit Application Requirement	Details
3.1	Long-term Fleet Objectives	Demonstrated ability to: 1. Appropriately plan for an initial deployment and outline a clear plan for sustainably scaling up operations over time 2. Contribute to Metro Vancouver urban transportation and sustainability goals over the life of the permit	*Operators to demonstrate:* *1. Evidence of their ability to plan and implement an initial deployment of devices, including clear long-term goals and objectives.* *2. A proposed pathway to achieving those goals and objectives based on unambiguous performance metrics and triggers.* *3. Evidence of how their proposed deployment of devices (particularly the location and number of devices) contribute to achieving Metro Vancouver sustainable mobility goals.*
3.2	Fleet Information	1. Types of devices 2. Minimum and maximum number of devices proposed for initial deployment by municipality 3. Proposed rides per device per day trigger points commencing within the municipality for expanding fleet size at 3 months, 6 months and 12 months (assuming permit were to be extended beyond 12 months)	*A summary table indicating the minimum and maximum number of each type of devices that are proposed to be part of the operator's fleet at opening day, 3, 6 and 12 months.*
3.3	Device Technical Specifications (including mandatory hardware)	1. Demonstrate statutory compliance with Motor Assisted Cycle Regulation (BC) 151/2002 2. Speed regulator 3. Tethering mechanism 4. Speedometer	*Outline statutory compliance with existing regulations as well as proposed device characteristics that will form part of an operator's permit to operate*

Table within 3.2 Details:

For rides originating in a Metro Van municipality	Proposed Trigger (rides per device per day)	Device 1		Device 2, etc.	
		Min	Max	Min	Max
Opening Day	E.g.: 1.7				
Three months	3.0				
Six months	3.3				
12+ months (assuming permit is extended)	>4				

3.0 SYSTEM PLANNING AND DESIGN

ID	Topic	Proposed Permit Application Requirement	Details
3.4	Supplementary Technology (optional hardware)	1. Lock to requirement 2. On board GPS 3. GPS Accuracy 4. GPS sample rate 5. Vehicle Display information 6. Tip over alert technology	*Providers to demonstrate how the 'lock to requirement' forms part of their parking concept (refer to Guideline item **3.5**) and operations (refer to **5.0 System Operations**).* *Outline the level of GPS accuracy as well as any proposed future improvements and a timeline for implementing improvements.* *Outline what information will be displayed on the vehicle display (speed in km/h, battery charge, length of rental).* *Outline any tip over technologies and the process for notifying operators when a device has tipped over (refer to **5.0 System Operations**).*
3.5	Parking	1. Parking Concept' (refer to Guideline item 4.1) 2. Statutory compliance with local parking rules 3. Details of proposed agreements with private land holders for parking	*Outline the proposed parking concept for the devices. Demonstrate how the proposed parking concept is either:* *1. Compatible with existing parking by-laws of municipalities in which devices are intended to operate.* *2. By-law or other regulatory exemptions that would be needed to operate under the proposed parking concept.* *Outline the term of proposed agreements with private landholders and mechanism for extending and ending arrangements.*

3.0 SYSTEM PLANNING AND DESIGN

ID	Topic	Proposed Permit Application Requirement	Details
3.6	Equitable Distribution and Access	1. Rental fee structure, including changes to fees 2. Proposed Area of Operation (within individual municipalities) 3. BC Social Income Pass offerings 4. Support for other languages 5. Additional Features for Persons with Disabilities	*Outline the rental fee structure in terms of starting fee, cost per minute, per 15 mins, per 30 mins per 60 mins.* *Outline proposed notification process and timeline for changing fees.* *Outline how (which medium) and at what points in time during rental that fees will be indicated to users.* *Outline any volume or any proposed membership discounts.* *Outline proposed area of operation within the municipality (refer to* **5.0 System Operations** *for any proposed geofencing technologies to be used).* *Outline proposed offerings for holders of the BC Social Income Pass and any other proposed low-income initiatives and eligibility criteria.* *Outline support for languages other than English during signup process and when using devices.* *Outline any additional accessibility features for persons with disabilities.*

3.0 SYSTEM PLANNING AND DESIGN

ID	Topic	Proposed Permit Application Requirement	Details
3.7	Safety and Education Program	1. Delivery method (in person, online, both) 2. Proposed provider 3. Program content 4. Cost recovery 5. Quarterly Reporting	*Municipalities are encouraged to require that operators commit to a safety and education program as a condition of their municipal permit to operate. This is considered especially relevant for emerging devices with new operating characteristics.* *It is recommended that municipalities consider requesting operators submit details of:* *1. Delivery method of the program.* *2. Who is proposed to provide the program?* *3. Incentives for taking part (discounts to rides for example or ride credit).* *4. Program content, including key road safety messages from the Motor Vehicle Act, Criminal Code of Canada and other RoadSafetyBC, ICBC and local road safety messages.* *5. Any cost recovery mechanisms to ensure costs of a program delivery are fairly apportioned.* *6. Quarterly Reporting of results in terms of number of users who have attempted the program and successfully completed it.* *7. How they believe a successful safety and education program should be considered as part of any future permit application(s) after the end of the current permit period.*

3.0 SYSTEM PLANNING AND DESIGN

ID	Topic	Proposed Permit Application Requirement	Details
3.8	Staffing	1. Staffing plan 2. Staff and contractor skills training 3. Local workforce	*It is recommended that municipalities require as part of their permit process:* *1. A staffing plan in terms of day-to-day management of all devices residing within the municipality at any point in time, including 24-hour contacts.* *2. Any proposed staff and contractor skills training pre and post-deployment.* *3. An organizational hierarchy, including a contractual obligation for these plans to be updated within 10 business days of any changes during the permit period.* *4. The number of persons proposed to be employed within the local and non-local workforce, included subcontractors.* *5. If there are no proposed staff to be based within the municipality, details of the location of those staff within the region should be outlined.*

4.0 RIGHT OF WAY MANAGEMENT

PREMISE FOR TOPIC

» There are existing restrictions on the types of micromobility devices that can legally be used within the ROW in BC and in Canada at present.

» A key issue for any shared micromobility service is the question of how to identify and manage risks when devices are being used and stored within the ROW.

» Effective and enforced management of shared micromobility devices within the public ROW and public spaces are key to positive public buy-in and long-term acceptance of devices within the community.

» The lack of regulation for dockless shared micromobility devices in many jurisdictions around the world is negatively affecting public perception and acceptance of these devices.

» The permit process is an opportunity to:

1. Identify desirable user behaviours, particularly with respect to parking devices.

2. Ensure that operators are obliged to communicate desirable behaviours to users in an understandable manner, including promoting the responsible use of devices within the ROW.

3. Require operators to consider rewarding desirable behaviours as well as penalizing undesirable behaviours as part of their business model.

4. Seek formal commitments from operators to proactively manage public safety risks and nuisance impacts from improperly parked devices.

» There is a trend toward municipalities only granting ROW access to commercial operators with legally binding commitments to a formal compliance framework to address issues in a timely manner as they arise.

» International experience to date demonstrates that there are two key bargaining chips for municipalities to improve ROW management within a permit system:

1. The granting of an initial 'level of access' to the ROW through the granting of a permit.

2. Ensuring that any subsequent increases in the 'level of access' to the ROW during the permit period is conditional on ongoing compliance with permit conditions.

» Where devices are proposed to be stored on private property, there is also a need to consider limitations of how permit system interact with private property rights.

» **6.0 Permit Structure and Conditions** examines the limitations of what can be expected to be achieved under current arrangements and profiles several different regulatory models for future consideration.

PROPOSED OBJECTIVES

» **Clear identification** of issues that can be expected to be managed, as well as those issues that are best dealt with outside of the permitting process (refer to **6.0 Permit Structure and Conditions**).

» ROW management that makes access and storage of devices in the ROW conditional on **implementation of** and **ongoing compliance** with a **responsible parking concept (Refer to 5.0 System Operations** for details).

» Communication strategy to assist with educating the public on **ROW responsibilities** and to help build confidence in the role of shared micromobility in the transportation system over time.

RELEVANT PRINCIPLES

» Implement regulation for dockless shared micromobility devices to influence positiviely public perception and acceptance of these services while maximizing safety in a mixed environment.

RISKS (IF STATUS QUO IS MAINTAINED)

» Potential for unauthorized rogue operators and private persons to use public ROWs and private property to operate and store devices.

» Uncoordinated response to complaints.

» Limited ability to identify improper behaviours, hold operators (and users) to account and take enforcement action.

» Without deliberate and effective ROW management, the public perception of shared micromobility in the Metro Vancouver area may quickly become a negative one, reducing future opportunities to implement new technologies.

4.0 RIGHT OF WAY MANAGEMENT

ID	Topic	Proposed Permit Application Requirement	Details

4.1	Operator Parking Concept	Proactive ROW management:
		1. Confirmation of the proposed operating model and basic parking needs:
		a. Station-based
		b. Dockless
		  i. Lock To
		  ii. Wheel-Lock
		c. Hybrid
		(e.g. combination of physical stations and/or geofenced hubs)
		2. Proposed areas to park and store devices within the ROW when not in use
		a. The use of visual markings to designate parking within the ROW:
		  i. Street Painting
		  ii. Signage provisions
		b. Non-visual
		  i. Location within the ROW
		    1. Curb Zone
		    2. Buffer Zone
		    3. Roadbed/Parking Lane
		  ii. Use of technology such as GPS to designate appropriate parking locations, including any geofencing provisions
			*Refer Guideline Item 3.5 for proposed **planning requirements** for parking.*
			
			The Parking Concept should place onus on the operator to develop a coherent and comprehensive plan. In addition, it should define clear responsibilities for operators and users.
			
			The Parking Concept has three components. Operators should detail each component and show the relationships between the components:
			
			1.System planning and design (Guideline item 3.5)
			  a. Statutory Compliance
			  b. Innovation
			
			2. Proactive ROW Management (Guideline item 4.1)
			  a. Parking Needs for the chosen Operating Model
			  b. Areas within ROW to park/store devices
			
			3. Responsive System Operations for Parking (Guideline items 5.2, 5.3, 5.4 and 5.7)
			  a. Rebalancing Plan
			  b. Timeline for daily removal of devices from the street
			  c. Parking Incentives and Penalties
			  d. Compliance Management Framework

5.0 SYSTEM OPERATIONS

PREMISE FOR TOPIC

» Stakeholders are looking for operators to demonstrate a high level of accountability for their day-to-day operations.

» Key issues raised by municipalities included:

1. Ongoing provision of helmets

2. Rebalancing

3. Interoperability

» Multiple actors (such as dockless). Whoever is operating in Vancouver or Burnaby – could potentially operate in the other.

» Further discussion of this topic as it related to specific permit conditions of operation **are discussed further in 6.0 Permit Structure and Conditions**.

PROPOSED OBJECTIVES

» A high level of **ongoing compliance** with the storage/parking concept advanced in **4.0 ROW Management** with this being a central feature of any permit to operate.

» **Appropriate level of risk management for operational risks**, including system failure/unexpected withdrawal.

RELEVANT PRINCIPLES

» Shared micromobility operators should be held **accountable** for their day-to-day operations through the permit process.

» **Operational efficiency** including rebalancing and interoperability.

» **Long term financial viability** and contingency planning for failure.

» Effectively managed services to improve **customer experience** and enable **integrated travel** in Metro Vancouver.

RISKS (IF STATUS QUO IS MAINTAINED)

» Operators may seek to pursue a 'minimal operational resourcing' model without proper resourcing to maximize revenue and commercial viability.

» A higher level of nuisance issues and complaints to municipalities can be expected.

» Poor risk management of hazards and safety issues expected.

» Municipality resources could be misused to assist with commercial operations; potential for additional costs on municipalities.

5.0 SYSTEM OPERATIONS

ID	Topic	Proposed Permit Application Requirement	Details
5.1	Helmet Plan	Require operators to: 1. Provide bicycle helmets that meet safety standards (CSA, ANSI, ASTM or SNELL B-95	*Demonstrate how the operator will take all reasonable efforts to ensure users ongoing compliance with existing BC helmet laws.*
5.2	Rebalancing Plan	Rebalancing plans, including: 1. Level of resourcing by day of week and time of day; 2. Who will be responsible for the rebalancing; 3. What is the proposed threshold for triggering a rebalancing; 4. Any User incentives to undertake rebalancing (discounts, how the information will be conveyed); 5. Timeline until completion	*Require operators to submit a 'rebalancing plan' as part of an application to operate.* *Invite operators to offer incentives for users to undertake rebalancing.*
5.3	Rechargeable Electric Devices	Timeline for removal of devices from the street for rechargeable electric devices	*For each day of the week of operation, outline the proposed timetable for removing devices that will need to be charged from the street.*
5.4	Parking Incentives and Penalties	To facilitate compliance, incentives and penalties, visible device ID number and company's contact information are recommended.	*Outline applicable incentives and fees for good and bad parking behaviour, including graduated fines and how this is proposed to be measured.*
5.5	Safety Check	Require operators to: 1. Check for signs of wear on helmets 2. Maintain components and structure of devices in working order (e.g. Brake maintenance, structural inspections)	*Commit to periodic safety checks of all devices based on usage as recorded in the data specification outlined in **1.0 Data and Data Sharing**.*

5.0 SYSTEM OPERATIONS

ID	Topic	Proposed Permit Application Requirement	Details
5.6	Complaints Management System	Complaints Management System that includes: 1. Faulty devices 2. Improperly parked devices 3. Missing equipment (e.g. helmets, warning devices) 4. Other complaints	*Outline a Complaints Management System process for responding to complaints, including:* *1. How the operator can be contacted* *2. What action will be taken with respect to the four categories of complaints* *3. Timelines for responding*
5.7	Compliance Management Framework	Tracking and reporting of ongoing level of compliance with: 1. Helmet Plan 2. Rebalancing Plan 3. Removal of devices from the street 4. Response to customer complaints	*Tracking and reporting process outlined to comply with the previously mentioned items on an agreed period of time.*
5.8	Bank Guarantee	Require operators to agree to lodge a bank guarantee/performance bond as part of an application to operate.	*A bank guarantee would provide the City with the ability to access an agreed cash amount in the event of operator unexpected failure/withdrawal from the market. The amount would only be accessed in the event of system failure/withdrawal. As it would be a set amount, it does not lend itself to being used for day-to-day operational compliance purposes.* *The bank guarantee could be returned at the end of the permit period (Refer to **6.0 Permit Structure and Conditions**).* *There is an opportunity for municipalities to cooperate so that operators would only be required to supply one bank guarantee for the Region instead of one guarantee per municipality.*

5.0 PERMIT STRUCTURE AND CONDITIONS

The Permit Structure and Conditions provides an overview of key terminology and regulatory approaches currently supporting shared micromobility permits and conditions being used in cities. It also provides high-level recommendations for regulating shared devices in the future, including pathways to transition from a vendor-based permit process to a comprehensive regulatory framework for shared micromobility in Metro Vancouver.

PREMISE FOR TOPIC

'Guidelines', 'Permits' and 'Licences'

» To understand the difference between guidelines, permits and licences, their purpose and structure, it is useful to contrast the definitions for each term:

   1. A **Guideline** is defined as 'information intended to advise people on how something should be done or what something should be'

   2. A **Permit** is defined as the 'granting of authorization or consent to someone (be it a person or legal entity) to do something'

   3. A **Licence** is defined as 'a permit from an authority to own or use something, do a particular thing, or carry on a trade'.

» The fact that the word permit is used to define the term licence results in a circular definition. Although the distinction between the two is subtle, within the transportation context, a permit is most often associated with granting permission to a business to operate a particular type of transportation service, especially with specific vehicles. For instance, many freight vehicles need vehicle permits to be legally allowed to operate on public roadways. The vehicle and the purpose for which it is being used are two factors that often determine whether a permit is required.

» A licence is more commonly associated with the granting of permission to an individual operator to a particular type of vehicle, either for private or commercial use. For instance, until 2018 a driver's licence was technically called an 'Operator's Licence' in Alberta. People seeking to operate a vehicle must undertake a testing process for a particular class of vehicle to be able to use that vehicle legally on public roadways.

Definitions of the above terms can be interchangeable and vary on culture and context. For instance, the Land Transport Authority (LTA) in Singapore regulates device sharing operators through what it calls a licensing framework. This stated purpose of the LTA's licensing framework is to 'manage the size of each operator's fleet, exercise stronger regulatory levers to require operators to manage indiscriminate parking and ensure response user behaviour'.

'Permit conditions'

» **'Permit conditions'** are based on the idea that the authorization to issue a permit is explicitly tied to set of conditions for the permit holder.

» **'Conditions'** are defined as 'a state of affairs that must exist or be brought about before something else is possible or permitted'.

» It is common for permit conditions to contain enforcement provisions that allows the issuer of the permit (i.e. a municipality) to take a prescribed – but usually limited – set of actions against a permit holder if they do not comply with these conditions.

» To understand how to set permit conditions regarding their intended purpose, it is helpful to understand the conditions and experiences of municipalities that have experimented with shared use micromobility services. These experiences can be applied to the permit application process for micromobility services by defining the risks these service's devices have demonstrated (such as rates of injuries, poor vehicle parking behaviours, malfunctioning device mechanics, etc.). By doing so, a municipality can:

1. Broadly define risks within the permit process by anticipating harm and requiring operators to outline how the operator proposes to minimize that harm

2. Give some level of consideration to economic cost, technical and administrative feasibility for implementing the measures proposed to minimize harm when assessing permit applications.

» Assuming multiple operators would be invited to apply in the permit process and likely devise a variety of ways to respond to the permit application requirements to meet their own commercial needs; there must be transparency and accountability for the determination of whether an applicant ultimately receives a permit or not.

» To summarize, it is important to recognise:

1. A permit process has inherent limitations; it cannot be devised a purely 'black and white' process.

2. There must be a relatively large amount of discretion in the determination of who does and does not receive a permit, which complicates the application of risk assessment and uncertainty in a uniform manner to all operators.

'Regulation'

» The Canadian Policy on Regulatory Development notes that **"regulations** have binding legal effect and usually set out rules that apply generally rather than to specifically to persons or situations".

» After an initial period of no regulation and self-regulation in some cities, many cities in North America are now moving to different variants of regulation to protect the public interest.

» Stakeholders expressed regional coordination is an important issue necessary to determine the opportunities that exist to create the greatest benefit to community. This includes determining permit vs. regulation approaches, through subsequent updates to the guidelines and rules associated with micromobility.

» If a permit/licence regulated arrangement is ultimately preferred, device caps will be a key consideration within the permit process. Specifically:

1. Whether caps are set at a municipal or regional level

2. Use of incentives to try and encourage rebalancing through users (refer to **1.0 Data and Data Sharing** and **5.0 Systems Operations**)

PROPOSED OBJECTIVES

» Greater understanding of the short-term options available to municipalities and other key stakeholders to influence shared micromobility behaviour through guidelines and a permit system.

» Greater understanding of long-term regulatory options and arrangements for shared micromobility at a regional level including next steps on how to ensure any future regulation fulfills the 'greatest net benefit' objective, particularly in relation to the protection of public safety.

RELEVANT PRINCIPLES

» Minimize risk, protect public interest and safety, and create the greatest benefit to the community.

» Provide base entry requirements to enter the Metro Vancouver micromobility market.

» The assignment of a permit should be transparent and accountable

RISKS (IF STATUS QUO IS MAINTAINED)

» Operators are likely to place additional pressure on different levels of government to intervene and force implementation in an uncoordinated manner.

» Expect continued uncertainty and difficulty in a coordinated approach to the planning and regulating to plan for future Personal Active Shared Mobility (PASM) services.

6.0 PERMIT STRUCTURE AND CONDITIONS

ID	Topic	Proposed Permit Application Requirement	Details
6.1	Standardized Permit Process and Conditions	1. Determine a permit application process, including timelines and eligible organizations 2. Adopt standardized and defined terminology in permit application process 3. Determine and clearly distinguish between municipal recommended and mandatory requirements in application process 4. Determine specific permit conditions	*Operators to demonstrate evidence of:* *1. Their ability to plan and implement an initial deployment of devices, including clear long-term goals and objectives and a proposed pathway to achieving those goals and objectives based on unambiguous performance metrics and triggers* *2. How their proposed deployment of devices (particularly the location and number of devices) contribute to achieving Metro Vancouver sustainable mobility goals.*
6.2	Permit Length Determination	1. Determine the intended length of the permit, including start and end dates	*Seattle was one of the first jurisdictions to recommend that micromobility permits for dockless vehicles be limited to one year in duration.* **Most jurisdictions have since followed this precedent**. *Washington DC conducted a trial of different devices and has now also followed this approach. The monthly cost per device permit is seasonal i.e. it varies by time of year and estimated demand.* *Annual, Competitive Process – permits are time limited* *Iterative – continual revision of permit* *Flexible – allows for adjustments in caps*

6.0 PERMIT STRUCTURE AND CONDITIONS

ID	Topic	Proposed Permit Application Requirement	Details
6.3	Administration and Cost Recovery	1. Determine permit fees in accordance with the estimated resources required for the entirety of the permit period • Include set up and administration costs 2. Consider variable, seasonal permit fees	*The more flexible the requirements, the greater potential for change in permit conditions resulting in more city-resources to administer. Cities should adopt a full cost recovery target, including estimating the costs of compliance enforcement.* *Washington DC varies its permit fees based on the time of month and number of devices that are actively deployed at any point in time.*
6.4	Long term Regulatory Framework	• TransLink to investigate most appropriate long-term regulatory model for shared micromobility devices, liaise with municipalities and recommend model to province	*Each of the regulatory options involves a deliberate and targeted approach to regulation, however, depending on the chosen model, the day-to-day responsibilities of regulators and operators will vary. This is likely to have an impact on micromobility providers and their commercial business model. Municipalities expressed a desire to not have to dedicate a disproportionate amount of resources to administer the oversight of micromobility service providers and their fleets with devices. It also has the benefit of allowing municipalities to liaise with a membership organization (one central point) to encourage improvements in standards for all operators.*

6.0 PERMIT STRUCTURE AND CONDITIONS

ID	Topic	Proposed Permit Application Requirement	Details
6.5	Regional Key Performance Indicators (KPIs)	• KPIs set at a local or regional level to measure compliance with permit conditions and take enforcement action against non-compliant operators, where necessary	*Municipalities could mandate KPIs to assist them with setting penalties for those operators who fail to meet requirements.* *Examples of applicable performance indicators for data sharing include:* *a. High level percentage availability of real-time data over a given period (>95%)* *b. Data release in accordance with the pre-determined timetable with warning and then penalty for non-compliance* *c. A 'data completeness of accuracy' requirement* *Scaled penalties would apply to non-compliant operators.* *Key Question: This could create significant resourcing issues for monitoring and enforcement as well as drive up compliance costs for operators: who, when, where and how would this be monitored by municipalities? Recommend a more detailed consideration as part of setting permit costs and determining exact requirements.*
6.6	Service area Expansion and Dynamic Fleet Cap	• Determine an appropriate trade off between service	*Service Area Expansions and Dynamic Fleet Caps provide the opportunity to generate additional incentives for proposed operators to comply with requirements.* *This will require further planning (for example a risk assessment and spatial demand analysis) of whether devices have the potential to become a nuisance for residents and council.*

KEY QUESTIONS FOR FUTURE CONSIDERATION

The decision whether to administer permits, licences and regulations of micromobility devices is closely linked to the question whether devices should be regulated at the **operator** level, the **end-user** level, a **whole-of-industry** level, or a combination of the above.

- To achieve public policy objectives, it is also relevant to consider the extent to which a short-term permit process can be expected to achieve desired outcomes to long-term issues.

- If a comprehensive regulatory model is to be pursued, consideration must be given to issues such as:

  1. Which **Level(s) of government** is/are best placed to pass appropriate laws

  2. How to **identify, apportion** and **mitigate** risks within a regulatory framework

  3. The structure of the regulatory framework: **when** and **how** to apply and use regulation

  4. **Level of resources** required to administer the regulatory framework on a day-to-day basis and use of cost-recovery mechanisms to reduce cost impacts on the government and the public

- The experiences of other cities to date suggests that many of the issues discussed here could benefit from a combination of a coordinated approach at a regional level. Stakeholders indicated a preference for a regional approach. Given a regional regulatory framework already exists for air quality protection with powers delegated from the province, it is reasonable to consider the issues associated with shared micromobility devices warrant an equivalent level of consideration and oversight. These and other issues could be explored through a **Regulatory Impact Analysis Statement (RIAS)**, tailored for the level of government it is intended to apply to. The RIAS would seek to justify the proposed regulations, demonstrate how the proposed framework results in a **net benefit to the community** while allowing competition and fair access to the shared micromobility market.

TransLink
Tomorrow

TO: Mayors' Council on Regional Transportation

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

DATE: September 12, 2019

SUBJECT: ITEM 3.3 - **Translink Tomorrow Update**

RECOMMENDATION:

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

PURPOSE

The purpose of this report is to provide an update on key initiatives within the New Mobility program.

BACKGROUND

TransLink's New Mobility program is tasked with developing and testing new transportation service concepts and new product offerings that, if effective, might one day be incorporated into TransLink's regular offerings. There are three stages to this experimentation:

1. *Prototyping:*
   This phase is intended to conceptualize, develop, implement, and refine (through multiple iterations) a minimal viable product where the core component parts are functioning, and the necessary processes and protocols are put in place. This phase involves a small user group of testers whose main function is to help resolve glitches and to refine the user touch points in order to ensure we're providing a good customer experience. Timing can last from several weeks up to a year.

   At the end of this phase, the TransLink Tomorrow Executive Steering Committee will review an assessment report and decide whether to advance to the piloting phase.

2. *Piloting:*
   This phase is intended to roll the concept out on a larger scale and test the demand and likely market uptake across multiple user groups for the purposes of assessing its likely performance when rolled out at scale.

   At the end of this phase, the TransLink Tomorrow Executive Steering Committee will review an assessment report and decide whether to scale the pilot into an ongoing service offering.

3. *Scaling into Ongoing Service:*
   This phase is intended to set up the new teams, budgets, and processes required to continue to deliver the product as part of TransLink's ongoing service offering.

DISCUSSION

Three new service concepts (vanpool, on-demand micro-transit, integrated mobility account) are in the prototyping phase with lessons learned from continuous system monitoring and user feedback being applied to iterate, improve and refine the product offering.

Vanpool Prototype at UBC

After a long period of effort to develop the concept, procure a service delivery partner, and an unsuccessful first attempt to recruit any interested participants at an initial worksite on the North Shore, Management turned its effort towards finding a test site at a larger employer with more willing employees.

In February 2019, TransLink began prototyping a new vanpool service with maintenance staff in three departments at the University of British Columbia (UBC Building Operations, Student Hospitality and Housing Services) as the user group.

Administration and marketing of the service is TransLink's responsibility. UBC has provided support for staff outreach and parking arrangements. TransLink has procured the vehicles and vehicle-related services (e.g. insurance, maintenance, and emergency assistance) from Modo, a local car-share organization. Outside of vanpool hours, the Modo vans are available for access by other Modo car-share members. If successful, this model will have the additional benefit of helping to more quickly promote the spread of car-sharing to more parts of the region – especially lower density areas further from the downtown Vancouver core that may not otherwise have been candidates for car-sharing.

This prototyping phase is running from January 2019 until January 2020 for a total of twelve months and is now at the maximum capacity contractually agreed to with Modo for this phase, with 10 vanpools and 50 participants. The geographic spread of this test user group ranges from Burnaby to Abbotsford (see map).
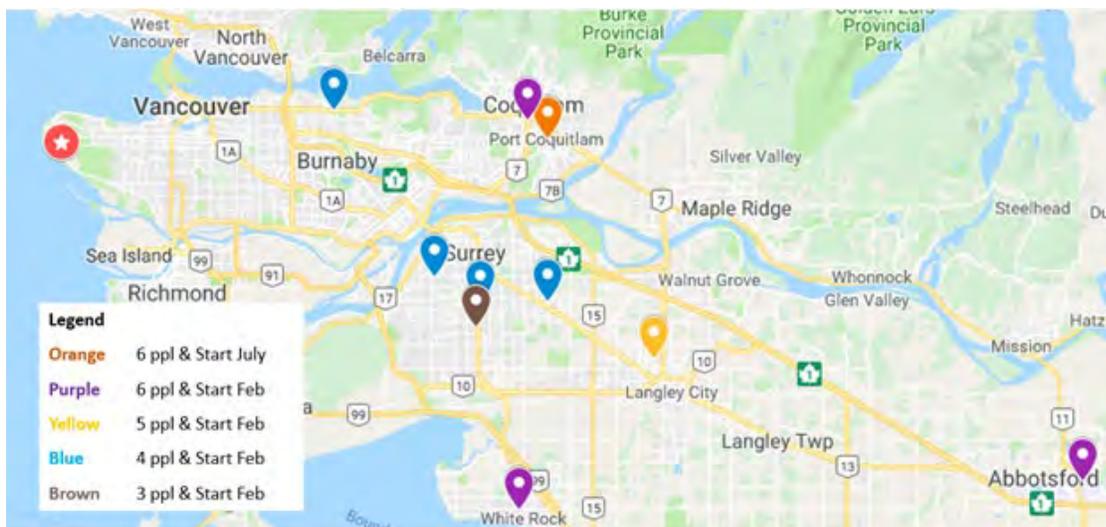
Several of these vanpools were pre-existing, having previously made use of the now defunct Jack Bell rideshare service, and so were easy to recruit as early adopters. Recruiting new additional pools was

initially slow but was bolstered by the introduction of an attractive pricing model (e.g. lower rates, inclusion of 3-zone transit pass, additional discounts for the primary driver) and new program elements (e.g. guaranteed ride home).

Participants pay a monthly fee based on the distance their vanpool is travelling by purchasing an equivalent Compass monthly pass. Their Compass pass can be used outside of the vanpool program encouraging participants to opt for transit for their other travel after work and during the weekend. During this prototyping phase, participants are required to activate their monthly pass at the beginning of each month by tapping their Compass Card at a bus or SkyTrain station Compass validator. This ad-hoc approach works reasonably well at transit-rich UBC and for a small test user group, however it requires a fair amount of manual follow-up and is not transferable to less transit-rich locations or at larger volumes of riders. Accordingly, in advance of moving into the pilot phase, some investment in a technology or business process solution will be required to handle payment on a larger scale. Currently, Management is working on an assessment report of this prototype in order to seek approval to expand to a larger-scale pilot with more vans and more work sites. While this prototyping at UBC has allowed Management to work out a workable and attractive product concept with a small test group of early adopters, a larger scale pilot in the next phase will test the broader applicability, consumer interest, and potential ridership, revenue, and costs of a region-wide program.

Work is already underway to confirm additional interested departments at the University of British Columbia and other interested employers in the region with concentrations of workers that a) travel from longer distances; and b) have consistent regular work hours. Work is also underway to go to market to procure a service provider partner that can help us deliver the pilot phase and then, if desired, also seamlessly scale to deliver an ongoing service moving forward.

 On-Demand Microtransit Protoype on Bowen Island

On-Demand Microtransit has the potential to improve the transit customer experience by expanding the traditional public transport offer, and providing a more convenient, personalized, responsive service in lower-density, lower-demand areas than could be achieved through conventional fixed-route service.

This prototype phase is designed to understand how an online, app-based ride-hailing service can be used in our transit operations as a means of customer interaction and provision of on-demand transit services. TransLink procured the on-demand software from TapRide and we are working with First Transit, the existing provider of contracted shuttle service on Bowen, to hire and train the drivers and deliver the service to the general public.

This phase is intended to help us learn about and develop appropriate solutions for communications and customer information, the customer-facing app, the driver-facing interface, the fleet manager interface, and a host of other logistical, procedural, and data management issues.

A first stage of prototyping focused on early beta-testing (December 2018 – May 2019), with a group of 10 users who helped us identify and resolve glitches and improve the customer interface. The second stage of this prototyping started on July 15th and will end on September 15th. The second stage is open to the general public in real-world conditions and includes two extra community shuttles to exclusively service on-demand requests booked through the TapRide app. No alteration to the fixed-route service has

been made during this period to ensure service reliability, especially for ferry connections, while we develop and refine the on-demand service.

This prototyping phase is experimenting with two different on-demand concepts: 1) one-to-many and 2) many-to-many:

1. **One-to-Many: evening service (Mon-Fri, 4.30 PM - 9.45 PM)** – Riders are picked up at the ferry terminal and can be dropped off at a destination of their choice. This is a curb-to-curb service, meaning people might need to walk a short distance to their final destination once they are dropped off. Currently, one bus is providing this service.

2. **Many-to-Many: weekend Service (Sat, Sun, Holidays, 10AM-5.30PM)** – Riders can request a ride and be picked up anywhere within a geofenced area on the island and dropped off anywhere within this area. This will also be a curb-to-curb service. Two buses are dedicated for this service to ensure reasonable waiting times.

Riders can book their trips through the smartphone app, the web, or by calling a dedicated phone number. Payment is made using regular forms of payment (Compass, credit card, or cash) when they board the bus as no payment option is available through the app.

The population of Bowen Island is about 3,700 people and transit ridership in summer averages about 6,200 boarding's per month. Preliminary results show that 1,300 accounts were created over the first 38 days of service. Approximately 1,200 riders completed 750 boarding's (July 15th to August 21, 2019). This represents an average of approximately 3.3 passenger boarding's per hour on weekdays evening and 4.3 on weekends. 1 in every 5 taps was in the on-demand shuttle during the on-demand operating hours on weekdays according to Compass tap data. On weekends (10AM to 6PM) this number increases to almost 36% of all taps.

User feedback collected through the app shows a very positive attitude towards the service. Average rating for the reliability of the service was 4.8 (out of 5), for app usability was 4.2 (out of 5), and for the overall customer experience 4.8 (out of 5).

These learnings and this applied operational experience will help in transitioning to the next phase where Management will be able to more competently assess and procure the best third-party service providers in what is now a very crowded on-demand marketplace. The next phase will need to asses the relative effectiveness (cost, wait time, journey time, ridership, revenue) of flexible on-demand Microtransit service in different contexts compared to conventional fixed route service.

Integrated Mobility Account Prototype with Modo, Evo and Mobi

Residents and businesses in British Columbia enjoy a wide range of mobility options today. However, for the most part, these options operate in isolation of each other. While people can put together a multi-modal trip, they must interact with each service provider separately. In an effort to provide a more seamless experience, TransLink partnered with Modo Car Share, Evo Car Share, and Mobi by Shaw Go to develop a new integrated mobility account. The intent of this product offering   is to reduce the friction and barriers to using the many different active and shared modes of transportation, and so to help people shift away from personally-owned vehicle travel.

This prototyping effort emerged out of proposals from Open Innovation Call #1. It was announced in January 2019 and shortly thereafter a four-party project steering committee and project working groups were established to begin the process of researching, scoping and then developing a prototype for an integrated mobility account that allows an individual to register for all four transportation services at once, to access the vehicles for all four transportation services by tapping a single Compass Card, and to receive and view invoices and provide payment to all four transportation services at once through a single integrated account.

In March 2019, the first stage of this prototyping was to undertake market research among businesses and consumers to understand the perceived demand for more seamless mobility across modes. The survey results showed a good level of interest in an easier multi-modal solution, especially for business travel. The second stage of this prototyping is underway with a technical working collaborating to develop the necessary back-office systems and processes to enable a small-scale prototype.

The output of this stage will result in a Shared Mobility Compass Card that we will offer to approximately 100 employees from about 10 businesses located in the Metro Core who we have recruited to participate in this prototyping phase. The Shared Mobility Compass Card will allow these employees to unlock, use, and pay for an Evo, Modo, Mobi or public transit for work-related travel. This phase will run for six months, from mid-October 2019 to March 2020. Employers will benefit from a simple and streamlined expense reporting process with consolidated charges at the end of each month. Employees will benefit from seamless access to and payment for any of the four transportation services.

Ultimately, this prototyping is relying on manual work-arounds making use of employer accounting departments and dedicated TransLink administrative staff to simulate a seamless Mobilty-as-a-Service environment for the employees. To move into a larger scale pilot phase where this capability was available to the general public would require investment in upgrading our Compass system to Account-Based Processing. The findings from this early prototyping work will help to inform the business case for this investment.

Open Innovation Call

In March 2019, TransLink launched the 2nd Open Call for Innovation. This Call had a challenge statement centered around improving the customer experience: *How can we make the customer experience at TransLink's stops, stations and exchanges more enjoyable?*

The Call closed April 30, 2019 and attracted 43 eligible submissions. The most common submissions related to customer-facing smartphone apps and physical amenities.

An evaluation panel of TransLink staff from across the enterprise short-listed seven proposals for further consideration. The short-listed proponents were invited for in-person interviews and discussions.

The concepts behind these seven proposals were:
- 2 umbrella-share services (amenity)
- 1 beverage refill station (amenity)
- 1 locker boxes for e-commerce delivery (amenity)

- 1 sensory bus shelter (amenity)
- 1 text-based game for your wait (app)
- 1 parking spot locator service and app (misc)

Management is aiming to short-list three proposal that would each have an internal TransLink project sponsor.

These proposals will be co-presented by TransLink project sponsors and project proponents to the TransLink Tomorrow Executive Steering Committee on October 22, 2019. Project partnerships that are approved through this stage will be announced publicly at the New Mobility Forum on January 14, 2020.
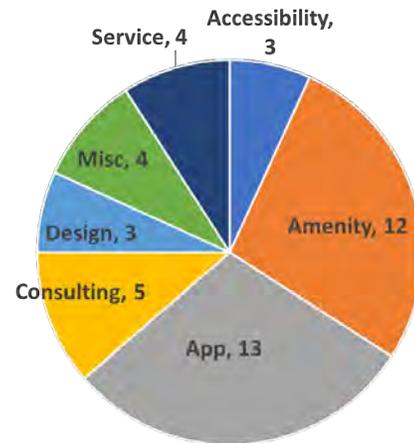
TO: Mayors' Council on Regional Transportation

FROM: Sarah Ross, Director, System Planning

DATE: July 18, 2019

SUBJECT: **Item 4.1 (Unfinished Business from July 25, 2019 meeting) -- B-Line Update**

RECOMMENDATION

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

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.

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., 3rd 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	41st Ave	Joyce-Collingwood Stn. to UBC, via Joyce St., 41st 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)

R2: Marine Dr Transit Priority Projects

R3: Lougheed Hwy Transit Priority Measures
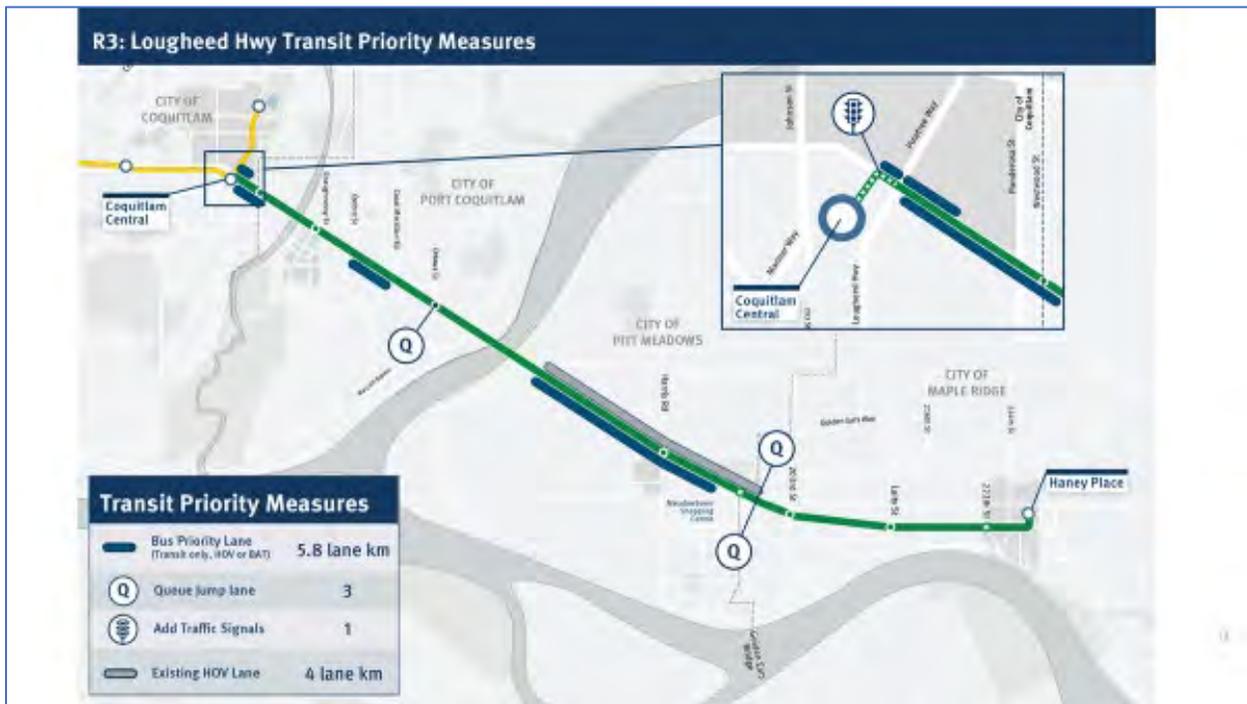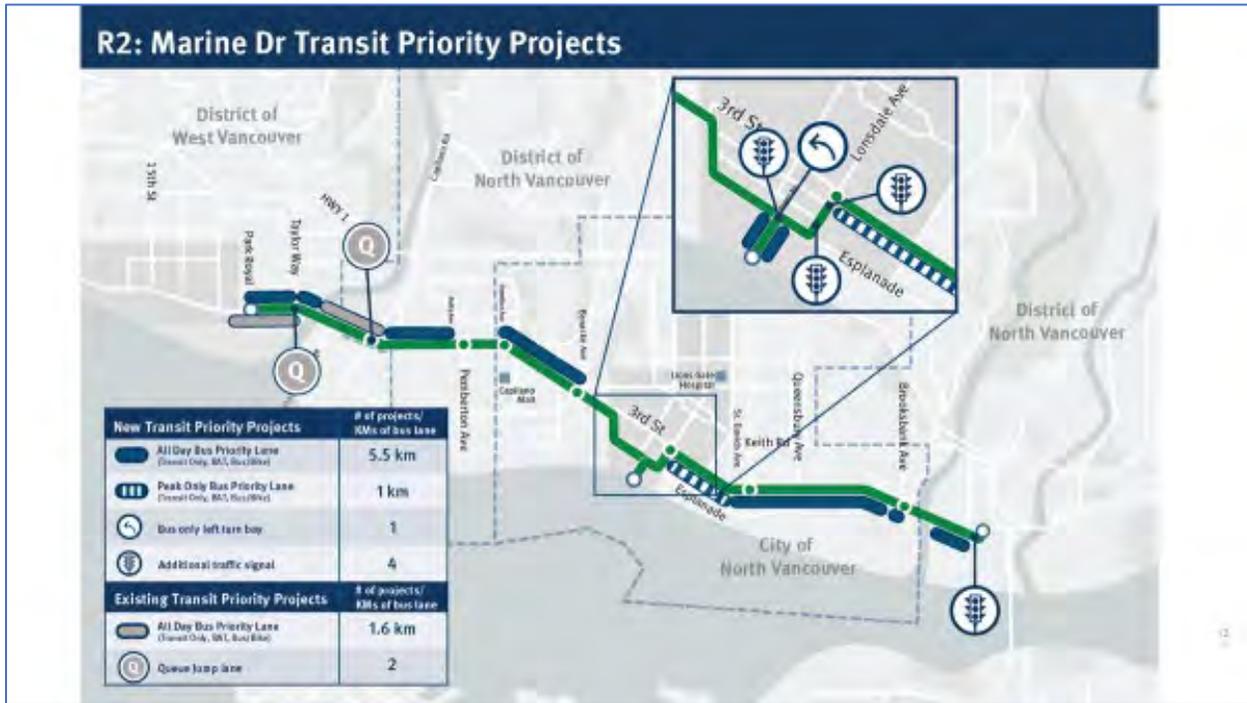
R4: 41st Ave Transit Priority Measures

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

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

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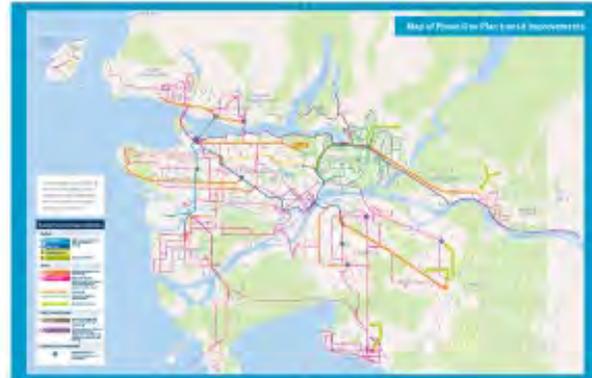
Scope & schedule

- **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

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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)
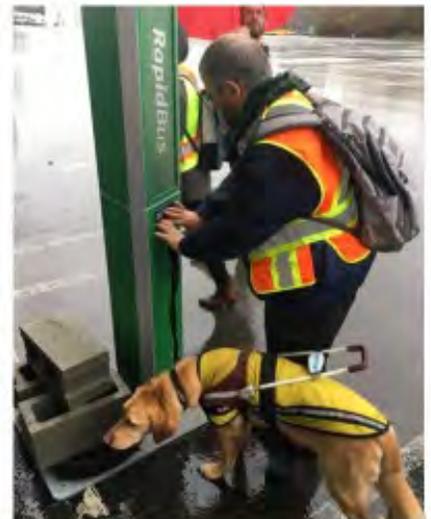
Phase 1 Construction

- 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

R2: Marine Dr Transit Priority Projects

New Transit Priority Projects	# of projects/ KMs of bus lane
All Day Bus Priority Lane (Transit Only, BAT, Bus/Bike)	5.5 km
Peak Only Bus Priority Lane (Transit Only, BAT, Bus/Bike)	1 km
Bus only left turn bay	1
Additional traffic signal	4

Existing Transit Priority Projects	# of projects/ KMs of bus lane
All Day Bus Priority Lane (Transit Only, BAT, Bus/Bike)	1.6 km
Queue jump lane	2

R3: Lougheed Hwy Transit Priority Measures

Transit Priority Measures

▬	Bus Priority Lane (Transit only, HOV or BAT)	5.8 lane km
Q	Queue Jump lane	3
🚦	Add Traffic Signals	1
▭	Existing HOV Lane	4 lane km

R4: 41st Ave Transit Priority Measures

Transit Priority Measures

▭	Transit Only Lane (In effect Zone - 7am to 9am)	13 lane km
▬	Transit Only Lane (Peak Only)	1 lane km
P	Parking Regulation Changes (on-street parking not permitted 7am - 9pm)	4.5 lane km
↰	Left Turn Bays	6
Q	Queue Jump Lane	1
🚦	Add Traffic Signals	3
⊕	Intersection changes	1
⊗	Crosswalk Removal	1
	*indicates 2020 completion post launch	

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

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

Next Steps

- 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
  - 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

TRANSLINK

TO: Mayors' Council on Regional Transportation

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

DATE: July 10, 2019

SUBJECT: **Item 4.2 (Unfinished Business from July 25, 2019 meeting)** **– 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.
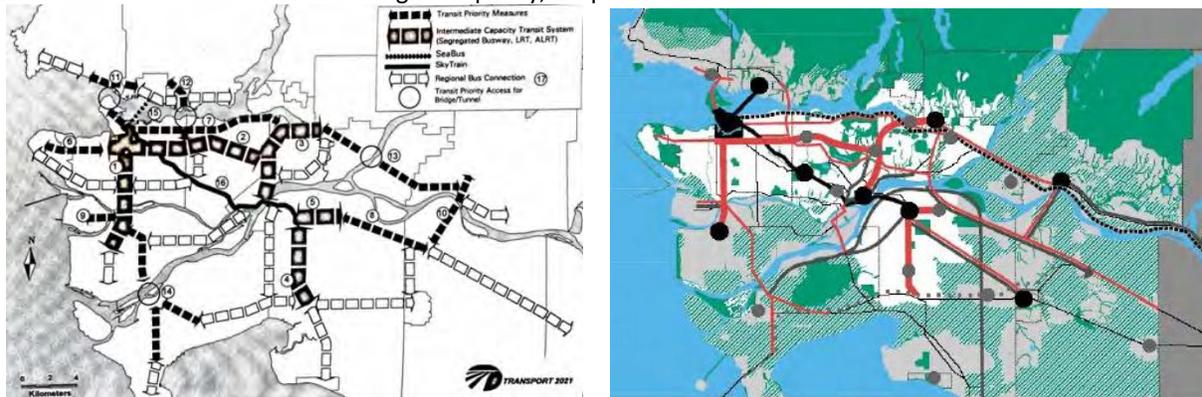
A new long-term network concept is expected to be a map illustrating the region's proposed approach to managing and investing in both existing components of the regional transportation system, like roads and transit, along with new elements like shared mobility services and others, and key corridors 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
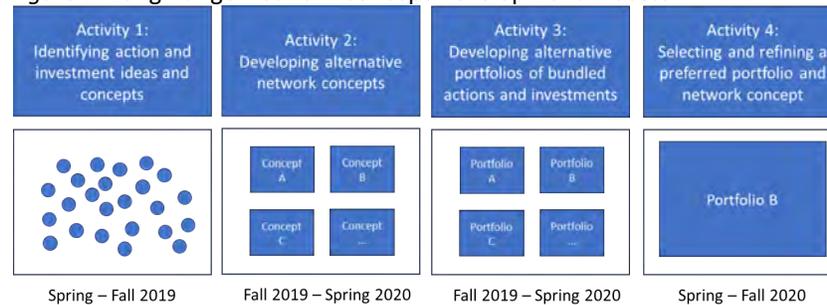
Activity 1: Ideas for new long-range network investments will be identified and developed using three sources of input

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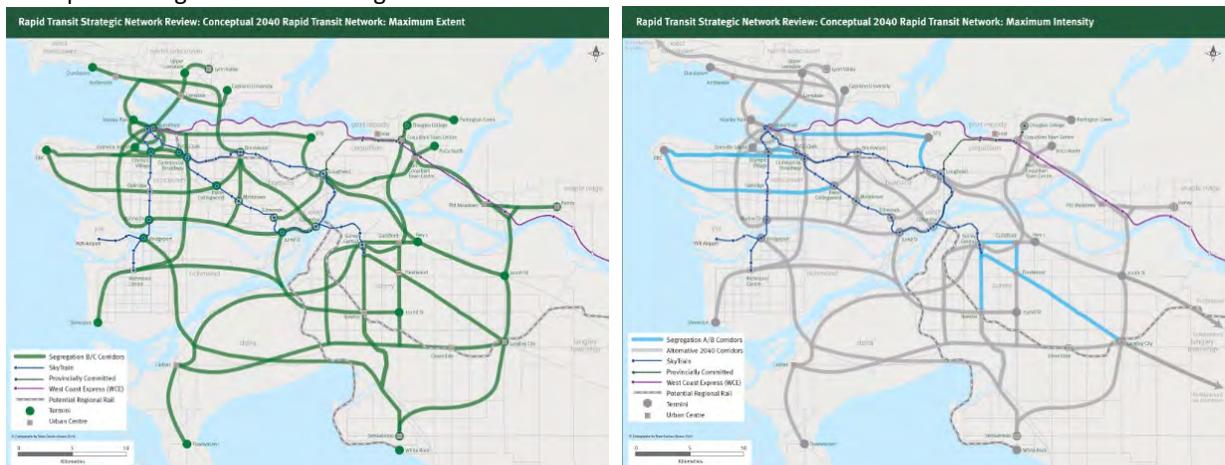
Long-range network concepts will be developed together with parallel strategies and actions. This recognizes the inter-relationship between infrastructure investment, land use, and demand management. Further, regional objectives and potential weighting of objectives, as established by decision makers,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

DATE: July 10, 2019

SUBJECT: **ITEM 4.3 (Unfinished Business from July 25, 2019 meeting)** **– 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 (Unfinished Business from July 25, 2019 meeting)** – **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.