



COUNCIL AGENDA

Date: July 9, 2018 Item: 7.



DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

7.

COUNCIL REPORT

Date:	June 14, 2018
From:	Raymond Fung, Director, Engineering & Transportation
Subject:	B-Line Implementation
File:	3210 -01

RECOMMENDATION

THAT

1. The District support TransLink's proposed B-Line from Dunderave to Phibbs Exchange; and
2. Following the development and presentation of the detailed design to the public, staff be authorized to work with TransLink to implement B-Line transit priority measures as follows:
 - mitigate impacts to through traffic and parking, to the extent possible;
 - achieves B-Line or better standards for opening day service in September, 2019, provided that any efficiency gains resulting from transit priority measures are reinvested into additional local bus services;
 - takes advantage of available TransLink B-Line project funding to advance required upgrading/improvements; and
 - subsequent to opening day, make adjustments and implement further measures to improve transit priority and traffic functioning.

1.0 Purpose

The purpose of this report is to seek Council's endorsement of TransLink's B-Line service from Dunderave to Phibbs Exchange.

2.0 Legislation/Bylaw/Policy

The provincial *South Coast British Columbia Transportation Authority Act* is the enabling legislation that established TransLink in 1999. Marine Drive from Taylor Way to 21st Street is designated as part of the Major Road Network. As such, TransLink has some authority over the people-moving capacity of the corridor, although the municipality remains the road authority.

At a local level, prioritizing transit is supported by a number of policy documents:

- District's Strategic Transportation Plan, 2010
- District's Community Energy and Emissions Plan, 2016
- Metro Vancouver's/TransLink's Marine – Main Frequent Transit Corridor Study Final Report, 2017
- District's Official Community Plan (proposed), 2018
- Integrated North Shore Transportation Planning Project (draft), 2018

3.0 Background

In September, 2016, TransLink's Mayors Council approved Phase 1 of the 10 Year Investment Plan. Phase 1 funds the implementation of four new B-Line routes, including one from Dunderave to Phibbs Exchange running predominantly along Marine Drive in West Vancouver to Main Street in North Vancouver. Since that time, TransLink has been working with municipal staff to refine the service proposal and to move towards detailed design of the B-Line works to support this bus service, which is set to launch in September, 2019.

3.1 Previous Decisions

At the March 12, 2018 Regular Meeting, Council passed the following motion:

THAT the delegation from TransLink regarding B-Line or Better: Service Levels and Local Service Changes be received for information, with thanks.

At the June 11, 2018 Regular Meeting, Council passed the following motion:

THAT the presentation regarding B-Line Consultation be received for information, with thanks.

3.2 History

Not applicable.

4.0 Analysis

4.1 Discussion

Key information and messages provided by TransLink from the June 11, 2018 presentation to Council (**Appendix A**) can be summarized as follows.

Objectives emerging from the Integrated North Shore Transportation Planning Project are supportive of B-Line implementation including:

- improve person travel time reliability;
- improve transit customer experience and usability (e.g., reliability, efficiency and connections);
- enhance coordination of land use and transportation;
- encourage/facilitate shifts in sustainable travel modes and behaviour; and
- manage road demand to make best use of existing capacity for people and local goods movement.

Features of the B-Line (or better) service include:

- frequency of every 8 minutes during peak hours and 10 – 15 minutes at other times;
- limited stops through West Vancouver on Marine Drive at 24 Street, 21 Street, 14 Street, and at Park Royal.
- improved speed and reliability offered by high-capacity articulated buses, all-door boarding, and streets redesigned to improve travel time;
- distinct brand and identity with buses and stops having a different look, stops featuring Next Bus digital signage, and route information shown on bus interiors; and
- service all day, every day from 6:00am to 1:00am.

At present, the Marine Drive-Main Street route is one of the slowest transit corridors on the North Shore. Critical to the success of the B-Line is the need for speed and reliability measures related to re-configuration of the roadway. Conceptual at this point, transit priority measures being considered and assessed across the entire corridor include:

- Bus Priority Lanes, including Bus Only or Business Access & Transit lane configurations;
- queue jumpers, turn restrictions, and transit signal priority; and
- bus bulges.

Traffic modelling suggests that implementation of comprehensive transit priority measures would cut travel time along the corridor by 30 minutes or more each way. A more efficient corridor may also have benefit for through auto traffic. Further, all-day, Bus Priority lanes would have a significant benefit, not only for B-Line buses, but also local bus service provided by West Vancouver Transit that use the corridor.

The Phase 1 Investment Plan includes \$57 million for delivery of the four B-Lines. Supporting infrastructure investments will be made on a cost/benefit basis at 100% to be paid by TransLink. Staff from the District,

as well as the District and City of North Vancouver believe a strong business case can be made for significant upgrades/improvements along the Marine Drive-Main Street corridor to be funded by TransLink and implemented by September, 2019.

4.2 Sustainability

Amongst other policy documents, the proposed Official Community Plan (OCP) reflects the community's long-term sustainability vision and presents a framework for actions required to maintain and enhance quality of life. More specifically, policies in the proposed OCP (2018) that support transit mobility and regional connections include:

- work with partners, including TransLink, to improve transit infrastructure, service area, frequency and efficiency (Policy 2.4.7); and
- support the expansion of frequent transit services, prioritizing connections between Park Royal and Dundarave by expanding bus priority measures and transit-supportive road treatments along Marine Drive to improve reliability and speed of transit service, and to facilitate future rapid bus service (Policy 2.4.8).

4.3 Public Engagement and Outreach

During the spring of this year, TransLink conducted a public consultation process on the B-Lines, including the Dundarave to Phibbs Exchange route. Specific feedback on this route included over 100,000 reached through media, eight North Shore events held and 1,725 survey responses received. With respect to the stop locations, there was over 87% support (or strong support). Further, 79% support (or strongly support) changes to streets to make the B-Line faster and more reliable. Beyond engagement and outreach to the general public, TransLink is seeking municipal endorsement of the B-Line and associated transit priority concepts.

4.4 Other Communication, Consultation, and Research

Starting with the Marine-Main Frequent Transit Corridor Study initiated by Metro Vancouver, TransLink has been working closely with the District of West Vancouver, District of North Vancouver and City of North Vancouver through a staff working group on B-Line implementation. Further, municipal representation has comprised both Engineering & Transportation and Planning & Development Services Divisions. At present, the staff working group is supporting a consultant design team engaged by TransLink to deliver the B-Line service for September, 2019. Over the next several months, transit priority concepts will be further assessed and modelled, with specific measures being advanced to detailed design, including costing, project delivery considerations and procurement, as appropriate. This work will also include presentation of the detailed design to the public.

5.0 Options

5.1 Recommended Option

Supported by District policy and given the significant amount of work conducted to date involving staff from the three North Shore municipalities, confirmation of municipal Council support through the following resolution is recommended:

That the District endorses implementation of TransLink's B-Line from Dundarave to Phibbs Exchange.

At this point, while support is recommended, much work remains to be done to advance transit priority measures to detailed design. Certainly, streets redesigned to improve transit travel time is the objective, however transit priority measures, such as Bus Priority Lanes, queue jumpers, turn restrictions, transit signal priority and bus bulges all need to be carefully considered and balanced with potential impacts to through auto traffic and parking. While it is possible that transit person travel time reliability may necessarily result in auto person delay, through traffic and parking impacts should be mitigated to the extent possible. In this regard, continuation of TransLink's consultation process will include presentation of the detailed design to the public and Council.

While generally supportive of the east-west B-Line, Council expressed a need to further support north-south transit movements. Therefore, it is proposed that efficiency gains resulting from transit priority measures are reinvested into additional local bus services, which predominately run in the north-south direction.

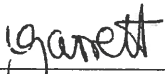
Further, as Phase 1 of the Mayors Investment Plan is fully funded, it is recommended that the District take advantage of this funding to advance required upgrading/improvements required to support B-Line implementation.

Finally, given the relatively short time to implement the B-Line service in September 2019, it is recommended that an adaptive approach be taken to monitor the effectiveness of transit priority measures. Adjustments and further measures should be undertaken to address transit priority and through traffic and parking impacts, as necessary.

5.2 Considered Options

A stronger resolution of support regarding specific implementation measures was considered by staff but is not recommended. Staff are of the opinion that at this point, there is a lack of detail regarding analysis, design and costing of specific transit priority measures to justify an unqualified resolution of support from Council. While an initial reach out has been made to the local merchant community regarding the B-Line proposal, more specific consultation, for example, with ADBIA as a stakeholder, should be made to address concerns regarding impacts to through traffic and parking.

Author:



Raymond Fung, M.Eng., P.Eng., Director, Engineering & Transportation

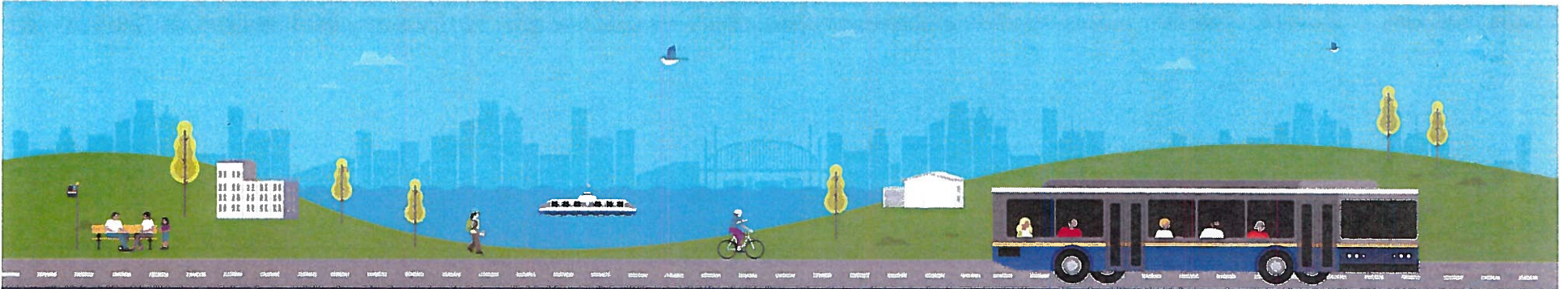
Concurrence



Jim Bailey, Director, Planning & Development Services

Appendices:

Appendix A, Marine-Main B-Line: Consultation Results & Transit Priority,
June 11, 2018



Marine-Main B-Line: Consultation Results & Transit Priority

District of West Vancouver Council
June 11, 2018

APPENDIX A

Follow up from March 12 B-Line Presentation

Recap from March

- Presented Marine-Main B-Line service proposal
- Requested input on consultation approach

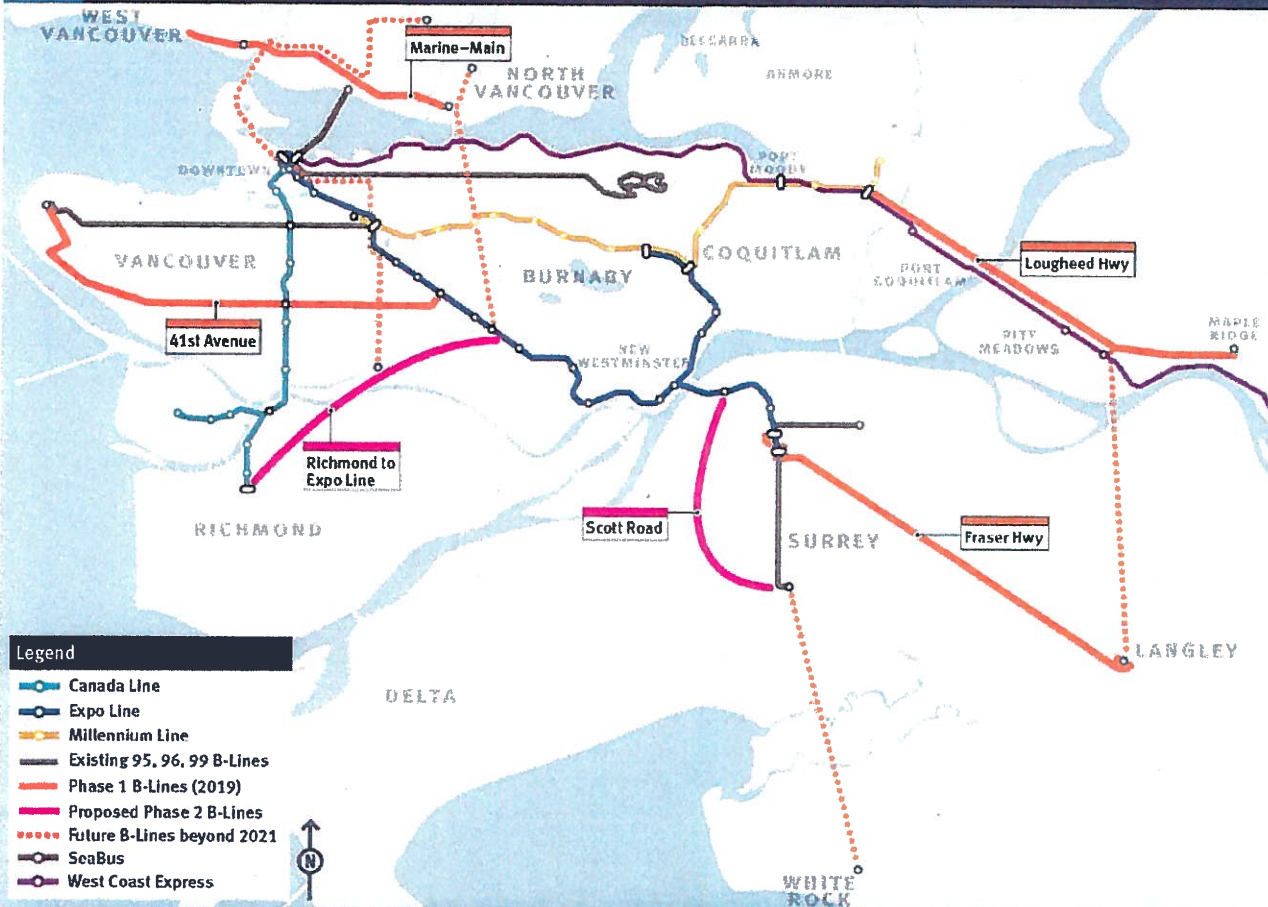
Purpose of today's presentation:

- Report back on consultation results for proposed B-Line
- Discuss transit priority

Integrated North Transportation Planning Project (INSTPP) Objectives

- Improve person travel time reliability
- Improve transit customer experience and usability (e.g., reliability, efficiency and connections)
- Enhance coordination of land use and transportation
- Encourage/facilitate shifts in sustainable travel modes and behaviour
- Manage road demand to make best use of existing capacity for people and local goods movement

T Future Rapid Transit and B-Line Network



4 New B-Lines launch Fall 2019

- Construction required to begin Winter 2018/19

Successful launch requires:

- Additional service
- Improved passenger experience
- Faster and more reliable service

Marine-Main B-Line brings improved bus service to the North Shore

Proposed Elements:



Frequent

- 8 minutes in peak times
- 10-15 minutes at other times



Improved speed and reliability

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



Distinct brand and amenities

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



Available all day, every day

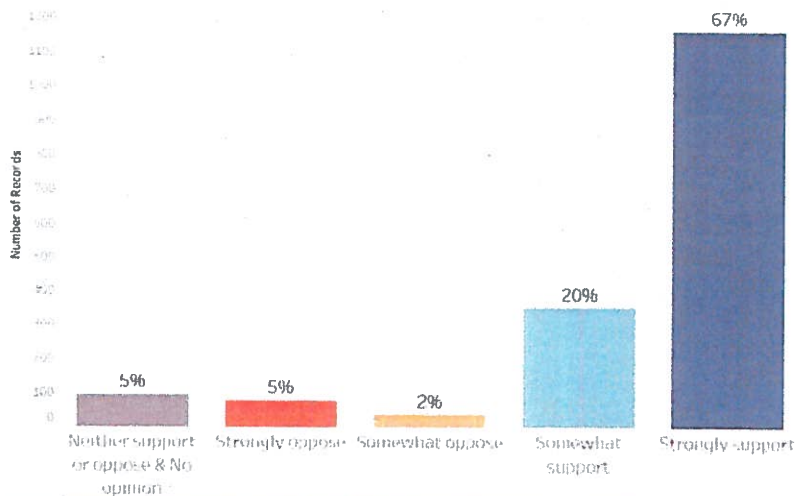
- Service from 6 a.m. to midnight, or better



Public support for the B-Line is strong

87% support or strongly support proposed B-Line stops

- Over **100,000** reached through media and **8 North Shore events**
- **1725** survey responses on the Marine-Main B-Line



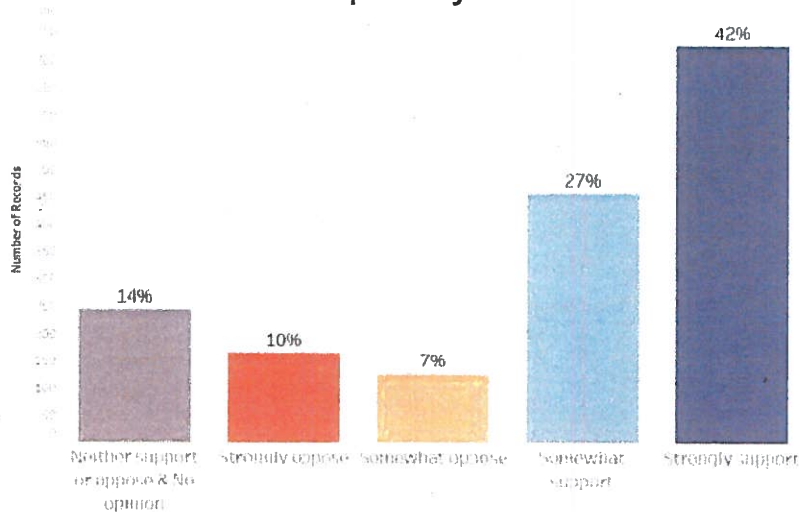
“Thank you for proposing this! We have needed an East to West North Shore route. I’m hoping it will encourage more people to get out of their cars, like I will be doing. A step in the right direction.”

— Survey Respondent

Local route changes are supported with suggested changes

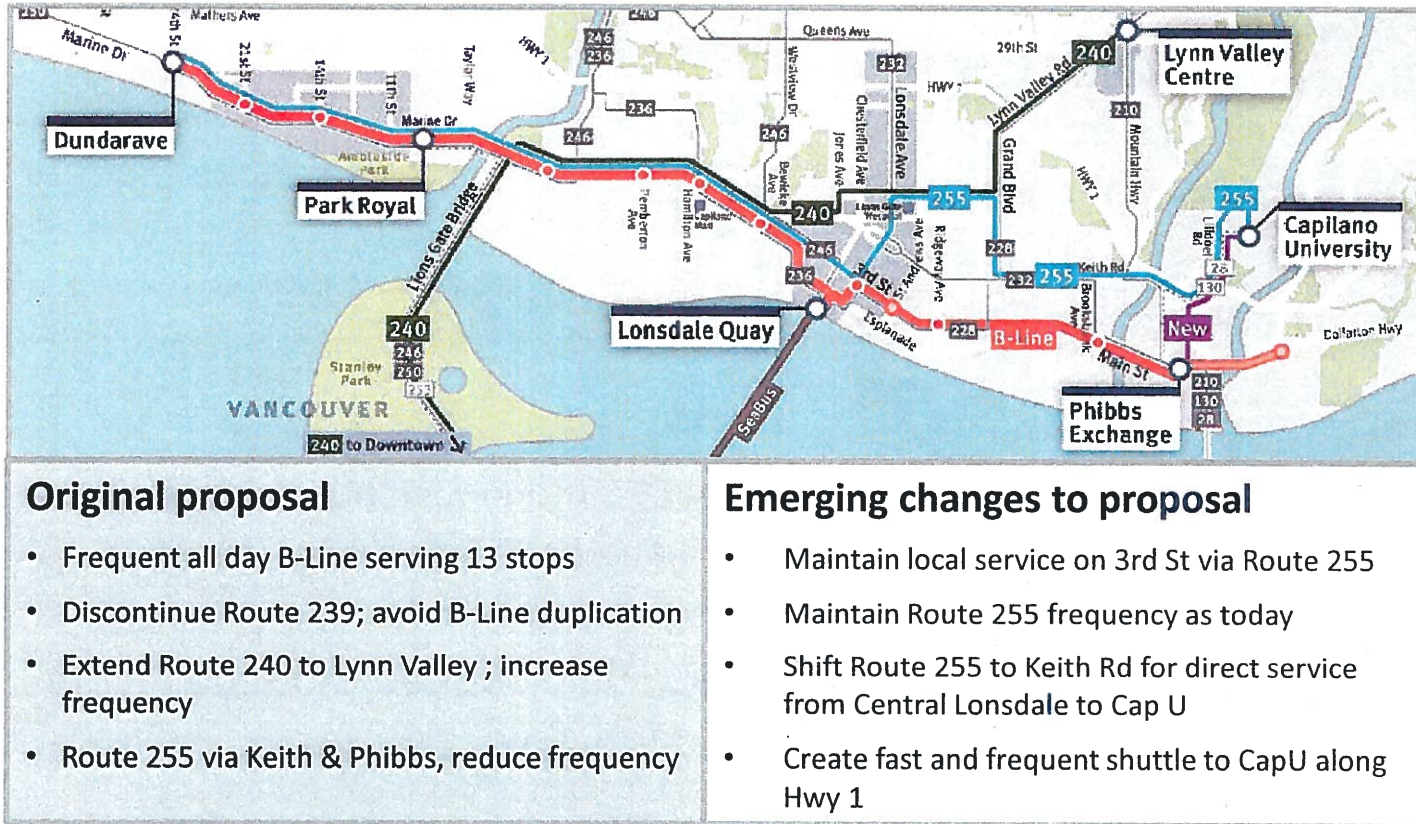
69% support or strongly support proposed changes to local routes

- Most common feedback includes:
 - Maintain and improve connections to CapU
 - Maintain local access to transit currently provided by 239 (esp. on W 3rd St.)
 - Maintain frequency of route 255



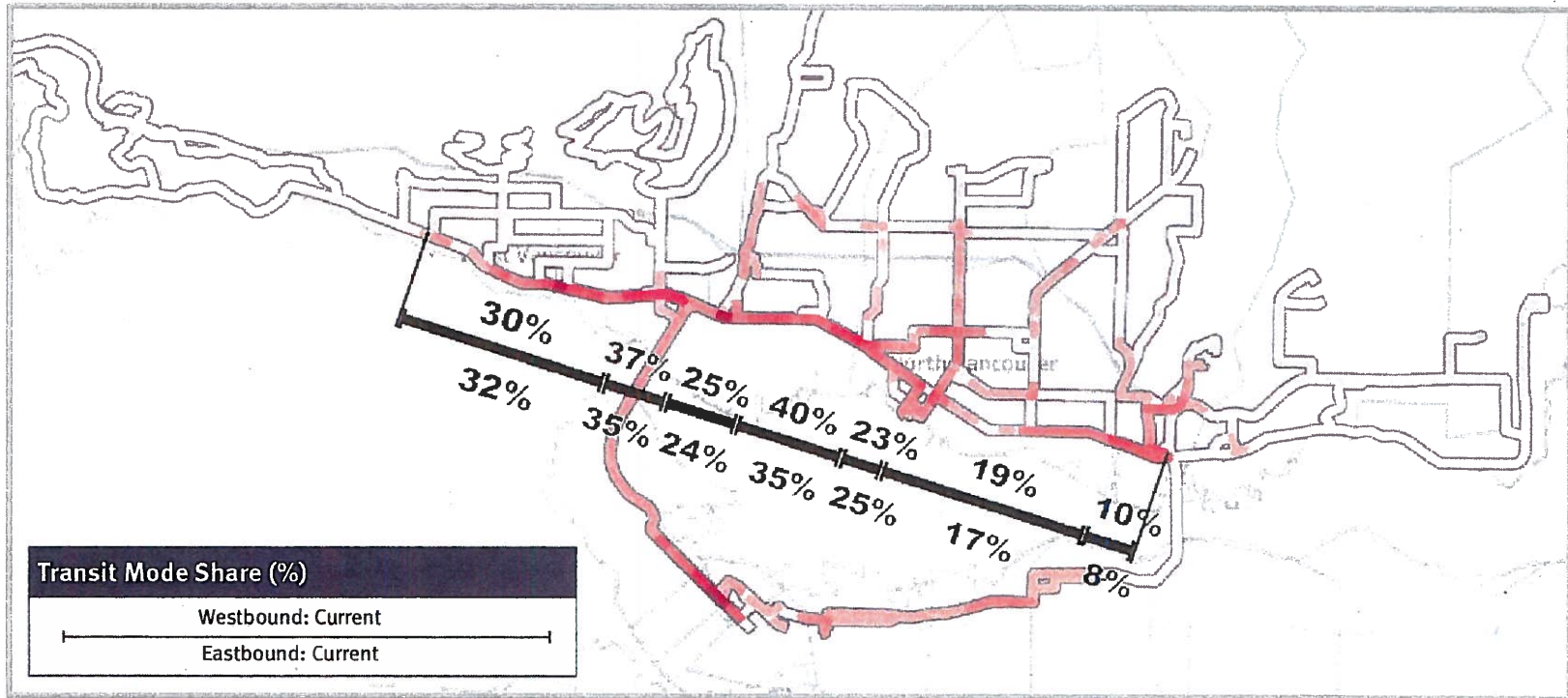
“Frequency of Route 255 should be maintained at its current rate. Many elderly residents living in West Vancouver need a direct, frequent bus line to Lions Gate Hospital as well as central Lonsdale.”
— Survey Respondent

Public feedback: proceed w/ proposed service, but with changes



North Shore Transit Customer Delay concentrated on Marine-Main

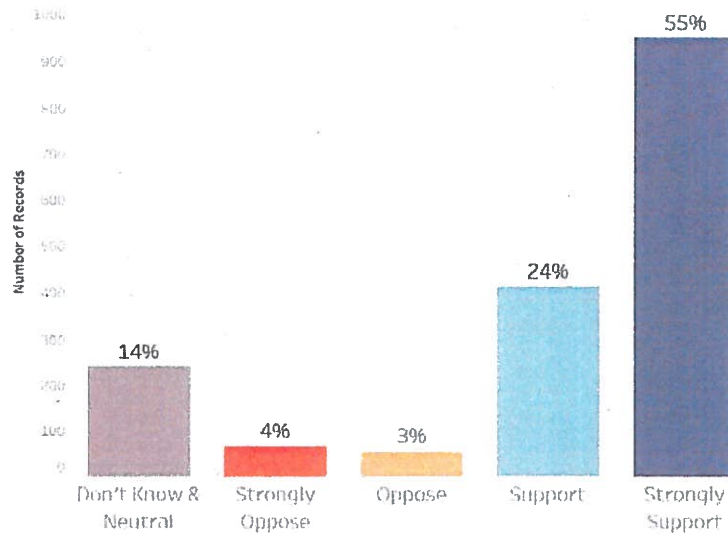
Transit carries 30- 40% of people during peak periods for much of the corridor



Average delay in person hours/km (Jan – Apr 2018)

Public desire for transit priority along Marine-Main is strong

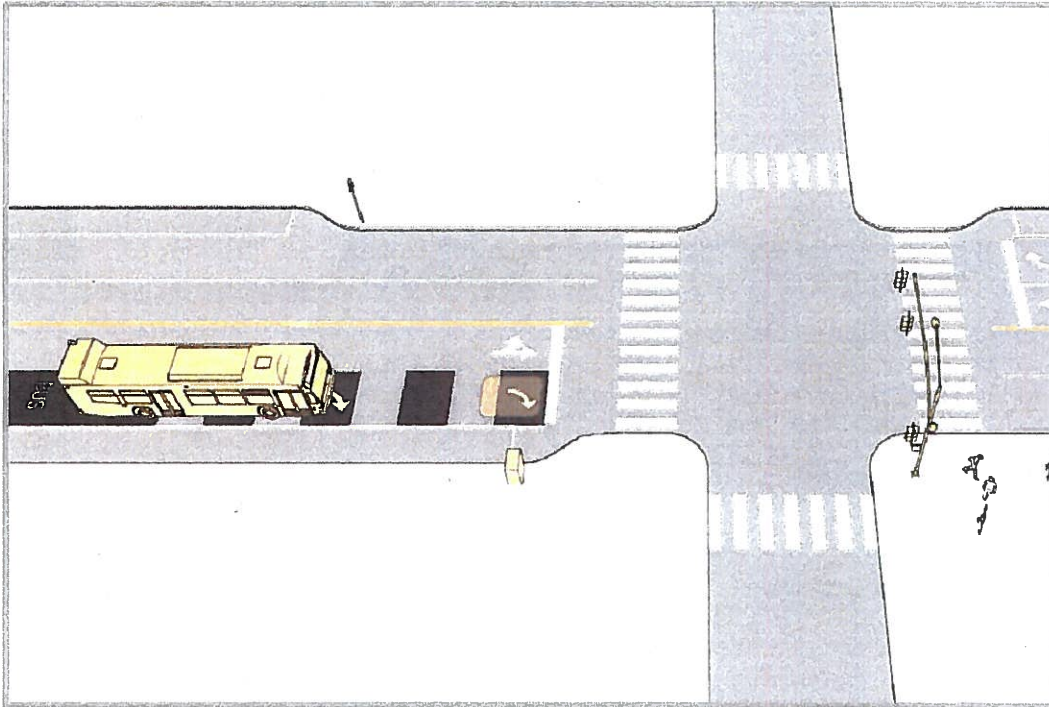
- **79% support or strongly support** changes to streets to make B-Line faster and more reliable
 - Support consistent across all demographics including age, gender and transit use



“Unless dedicated transit lanes are implemented, this will do little to encourage people to leave the comfort of their cars. It will only be slower at peak times than the already slow traffic.”

— Survey Respondent

Example of Changes to Intersections



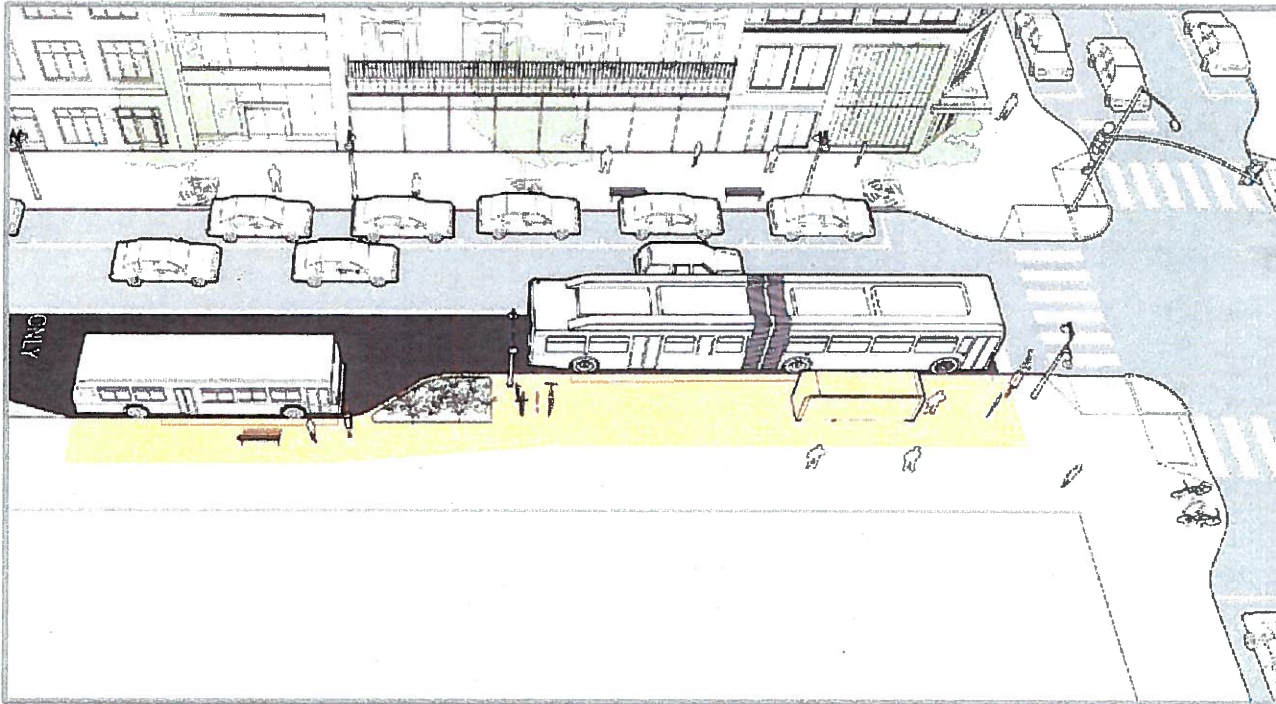
Queue jump & right turn lanes

- Through buses share right turn lane
- Buses enter intersection ahead of traffic flow

Other intersection treatments possible:

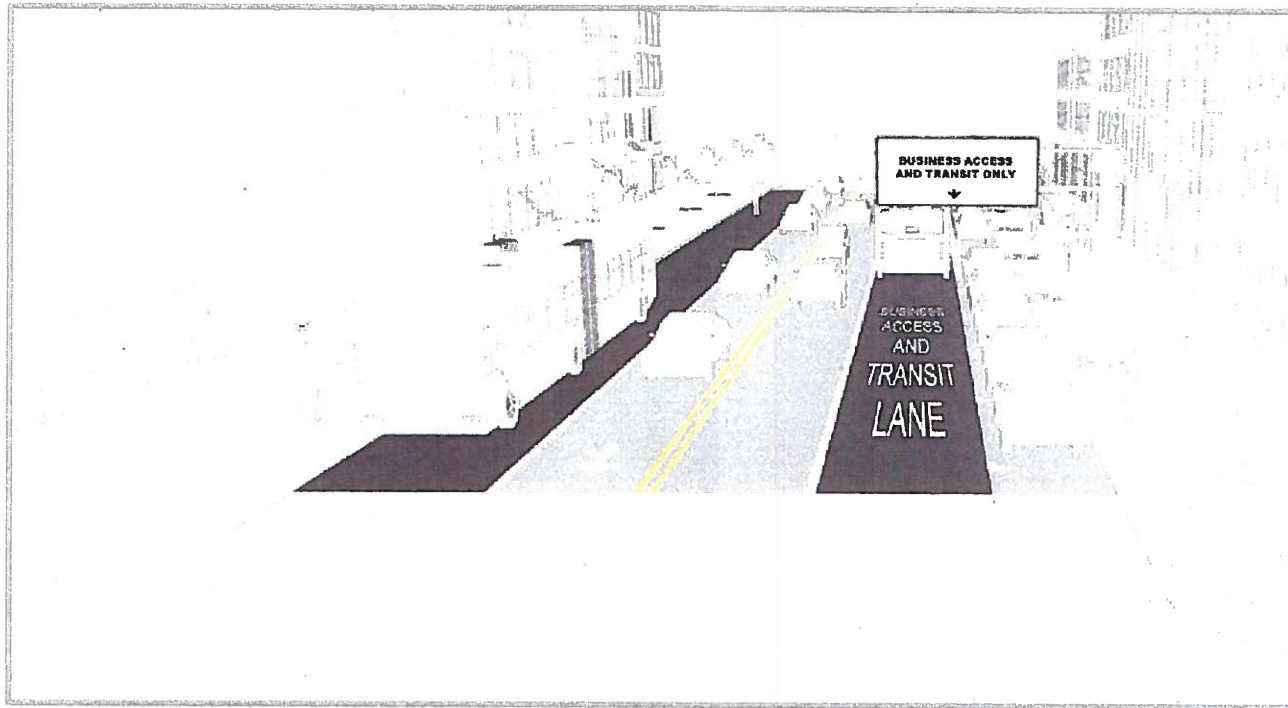
- Improved signal timing & coordination
- New or upgraded traffic signals
- Transit signal priority
- Turn restrictions (e.g. rush hour only)

Example of Bus Bulge



- Improves speed and reliability
- Creates space for shelter & passenger queuing
- Focal point for improved public space (street furniture, bike parking, pedestrian amenities, street lighting)

Example of Bus Priority Lane



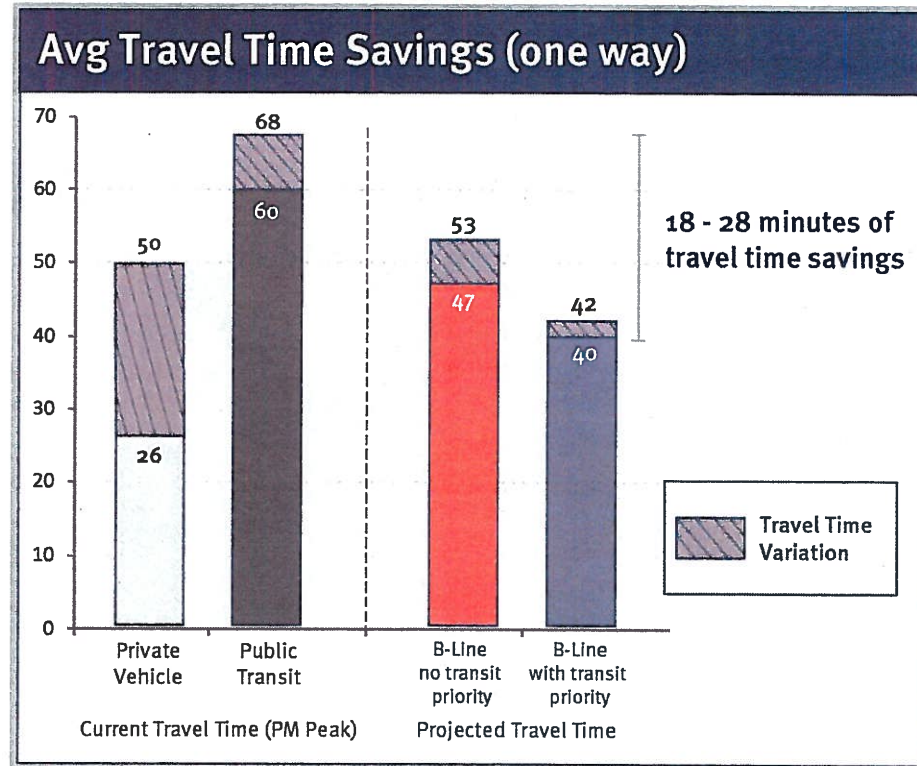
- High level of bus priority
- Most effective at improving speed & reliability

Possible configurations include:

- Bus only
- Business Access & Transit
- Peak period

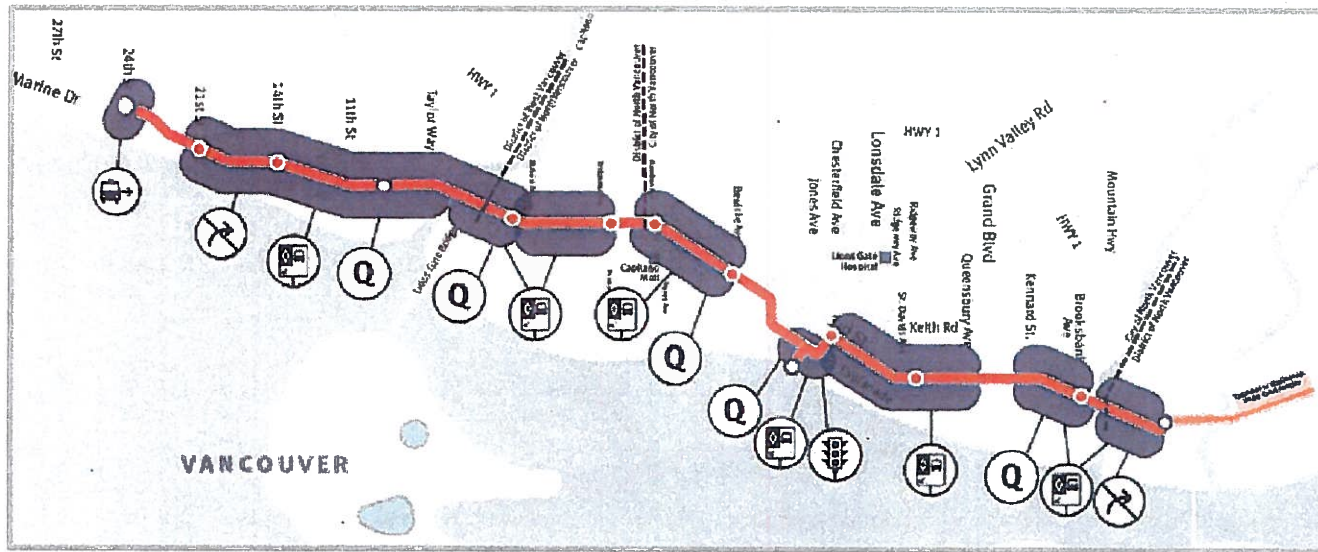
Transit priority under consideration for B-Line launch

B-Line with transit priority could cut transit travel along corridor by nearly 30 min each way by 2019



Transit priority under consideration for B-Line launch

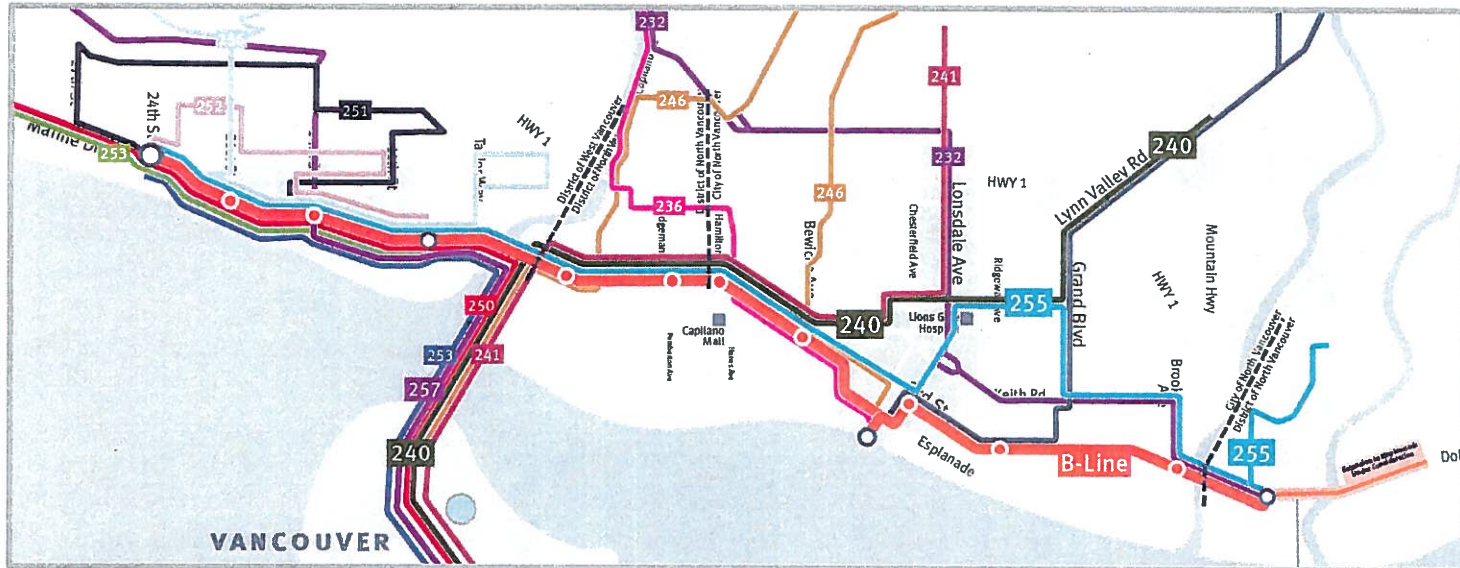
B-Line with transit priority could cut transit travel along corridor by nearly 30 min each way by 2019



-  Bus priority lane
-  Bus bulge
-  New traffic signal
-  Turn restriction
-  Queue jump

- Transit priority initial concepts identified with municipal staff input
- Further design, project development, analysis and costing required

Marine-Main transit priority benefits all North Shore transit



- All West Vancouver buses (except 262 Caulfeild) travel on Marine Dr.; **20,800 passengers/day**
- TransLink working with Vancouver on bus priority on Georgia St.
- Travel time savings can be reinvested into improved service
 - e.g. Route 250 – if save 7.5 min can increase peak service by 12% at no cost

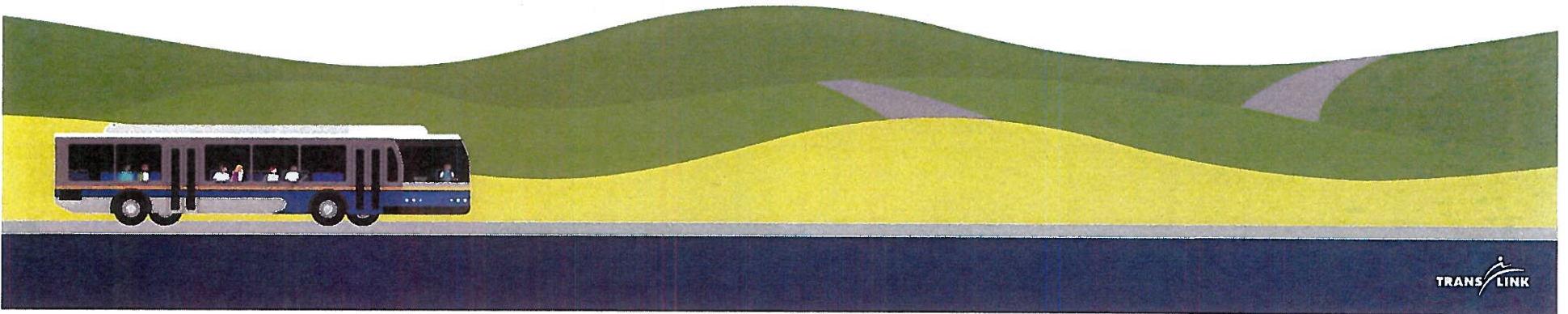
Regional funding available deliver successful B-Lines

- **Phase 1 Plan: \$57M for B-Line infrastructure**
 - ~75% for transit priority (rest for real-time info, wayfinding, terminus)
 - TransLink funding 100% of opening day infrastructure
- **Phase 2 Plan: \$6M/yr cost-shared funding with muni match, 2020-27**
- **Funding not allocated by corridor; projects to be funded to achieve greatest benefit**
- Considerations for project funding:
 - Cost effectiveness, in terms of transit travel time savings
 - Benefits & impacts (safety, traffic, public realm, etc.)
 - Deliverability for launch
 - Municipal support

Timeline to 2019 Launch

Spring 2018	Public Consultation Identification of transit priority concepts deliverable by 2019
June 2018	Confirm municipal endorsement of B-Line and associated transit priority concepts
Summer - Fall 2018	Advance design and project development, incl. costing and analysis
Fall 2018	Determine projects to proceed to delivery Determine who will deliver projects (TL vs muni), and undertake procurement
Winter 2018 - Summer 2019	Construction/ implementation
Fall 2019	Launch of new Phase 1 B-Lines

Thank You



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