Welcome!

MILLENNIUM LINE BROADWAY EXTENSION

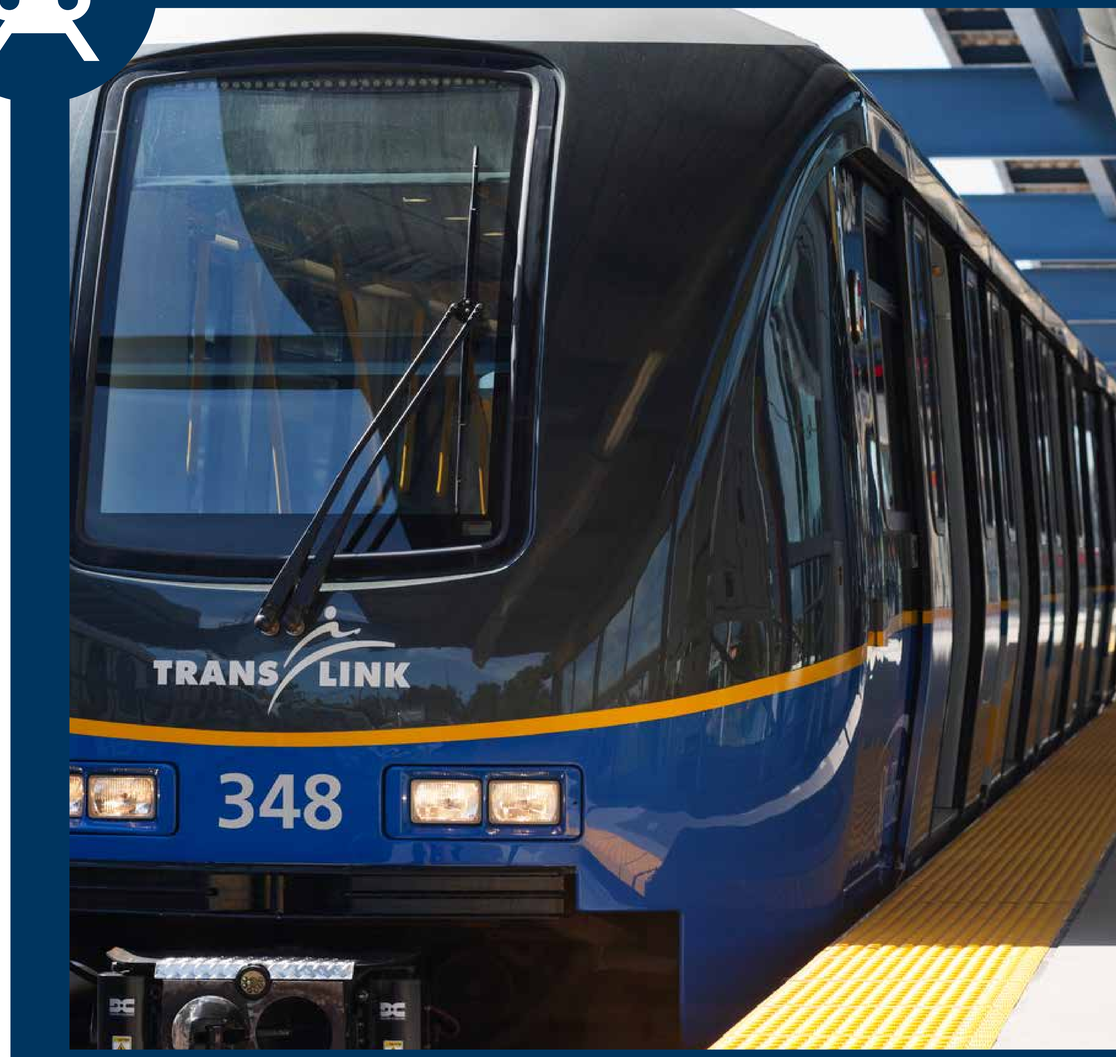
Over the next 30 years, Metro Vancouver will welcome 1 million new residents and 600,000 new jobs.

The Broadway Corridor is home to the second largest employment centre in B.C. and the largest hospital and university in Western Canada. The corridor is home to the 99 B-Line, the busiest bus route in Canada and the United States, and Commercial-Broadway Station, the biggest transit bottleneck in the region.

Rapid transit along this busy corridor will ensure that our region stays connected, efficient, and economically strong.

The Millennium Line Broadway Extension was prioritized in the 10-Year Vision created by the Metro Vancouver Mayors' Council on Regional Transportation. The Broadway Extension is the City of Vancouver's number one transportation priority, and one of the most significant infrastructure investments for the region's future.

As a direct extension of the existing Millennium Line SkyTrain service, the Broadway Extension will start at VCC–Clark on an elevated guideway for 800 metres, then travel approximately 5 km beneath Broadway to six new stations, ending at Arbutus Street.



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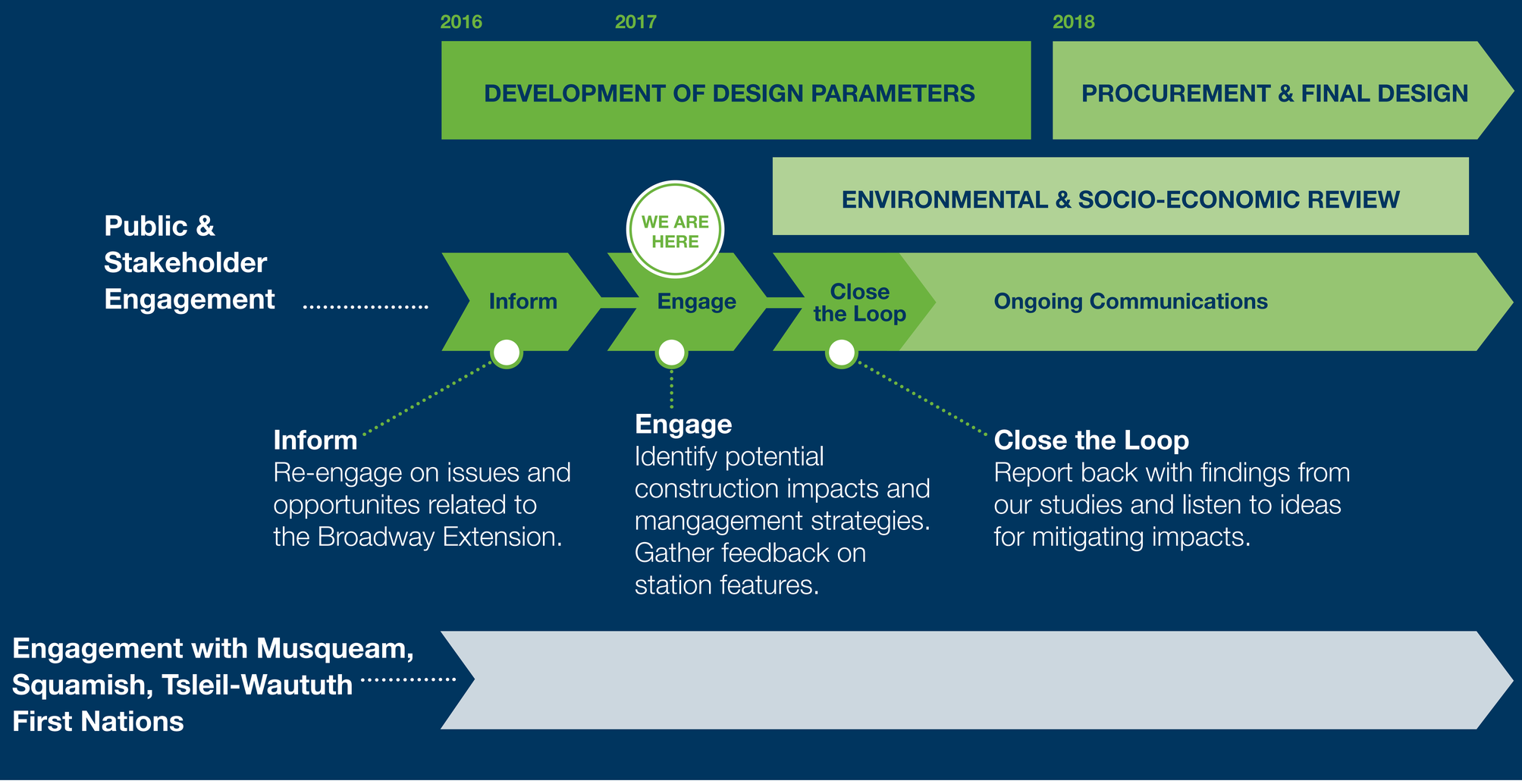
In fall 2016, the Mayors' Council approved Phase One of the 10-Year Vision for Metro Vancouver Transit and Transportation, including funding to advance planning and design work for the Broadway Extension.



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KEY FACTS

Broadway Extension

- 6 km extension primarily tunneled under Broadway.
- 6 underground stations near major intersections.
- Will take 10 minutes from Commercial-Broadway Station to Arbutus, half the time of the B-Line today.
- Serves Central Broadway jobs.
- Gets through most congested part of Broadway.
- Direct underground connection between Canada Line and Millennium Line: improved connectivity between YVR/Richmond with Burnaby and the Northeast Sector.
- Expandable capacity to serve the long-term needs of the corridor.
- Underground SkyTrain is the most reliable transit service and has the lowest operating costs, compared to other options considered.

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What we've heard so far

In January and February 2017, we engaged with stakeholders and the community to raise awareness about the Broadway Extension.

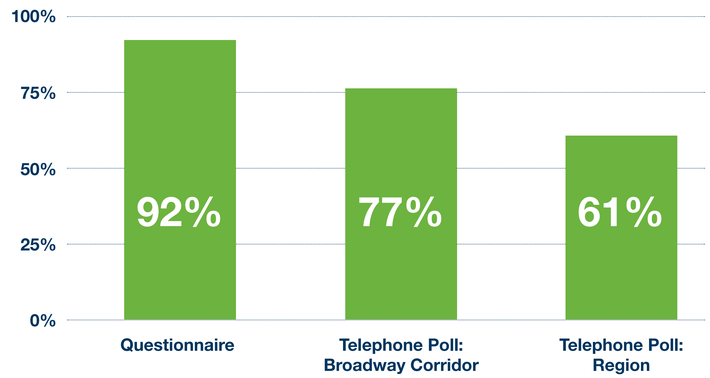
4200
questionnaires

70+
workshop attendees

400+
open house attendees

800+
independent telephone poll

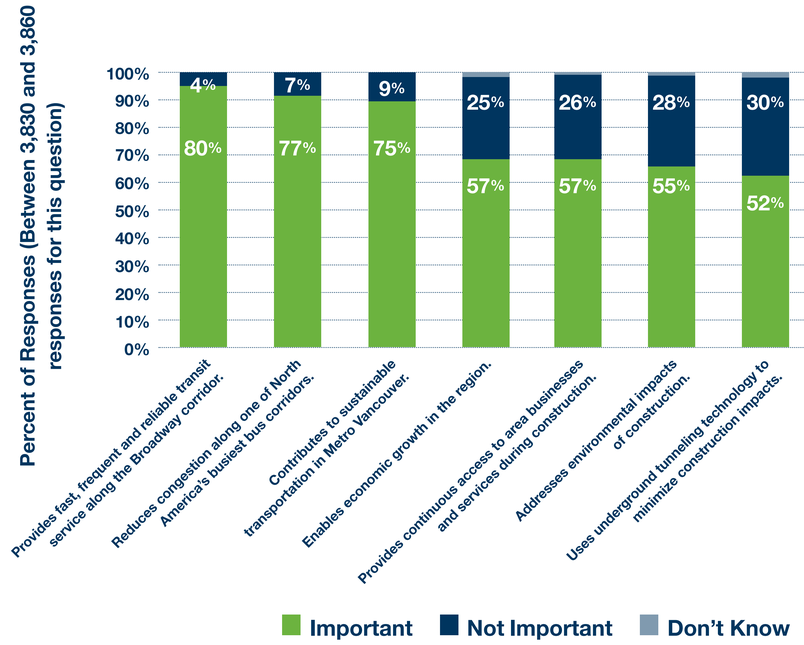
STRONG SUPPORT FOR THE BROADWAY EXTENSION



KEY THEMES

- Construction methods and impacts
- Project route (including an interest to extend to UBC) and station design
- Quick completion of project
- Cost and funding sources
- Lessons learned from Canada Line
- Cycling and walking integration
- Land use and housing on Broadway Corridor

THE PROJECT BENEFITS MOST IMPORTANT TO QUESTIONNAIRE RESPONDENTS INCLUDED:



Please refer to **translink.ca/broadwayextension** for more information on previous consultation on this project, including findings from the UBC Line Rapid Transit Study.

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What we learned from Canada Line construction

- Ensure business access and visibility.
- Set up a Business and Community Liaison Office early with dedicated staff and ongoing community engagement.
- Develop and implement plan to address impacts of dust.
- Ensure security and adequate lighting around construction.
- Develop and implement parking and loading strategies for businesses.
- Avoid long-term open excavations through commercial, congested, or confined right-of-way.
- Work with community and businesses to leverage opportunities for programming and events.

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Stay involved!

In spring 2017, the Federal and Provincial governments each committed to support transit investment in Metro Vancouver, including the Broadway Extension.

The Mayors' Council is in discussions to determine the regional funding source by late 2017 or early 2018.

Once all funding is secured for the Broadway Extension, the project team will begin the procurement process to select a qualified contractor to complete the final design and construction of the extension.

Construction could begin as early as 2019, with an expected duration of 5 to 6 years.

Visit **translink.ca/broadwayextension** to stay involved.

There will be more opportunities to get involved:

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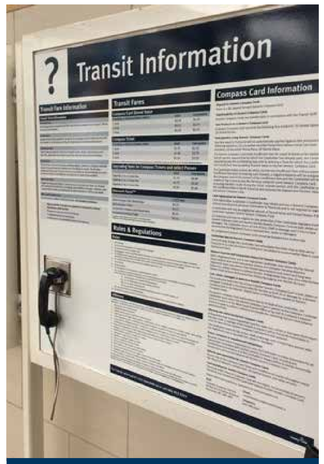
Inside the Stations

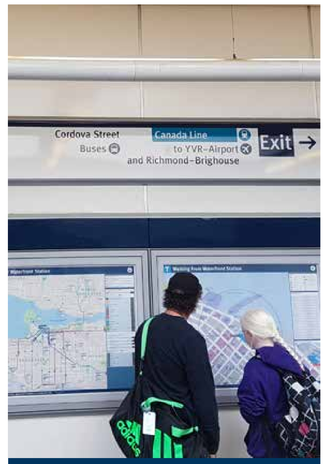
The following features will inform design and construction inside the stations. What do you think?

Up and down escalators

Accessible platforms and surfaces



Easy to access information



Clear wayfinding and passenger information

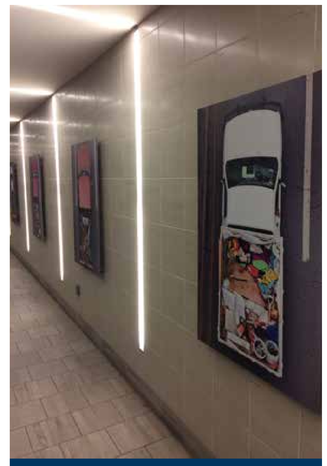
Plan stations to accommodate long-term passenger volumes

Open, transparent design to maximize visibility and safety

Well lit stations

Provision for future washrooms

Retail opportunities



Public art integrated inside stations

Did we miss anything?

Please use a sticky note to describe...

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Outside the Stations

To help us inform the design of stations, tell us what you think of the following considerations. Please use one sticky dot per item.

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

Secure bike parking

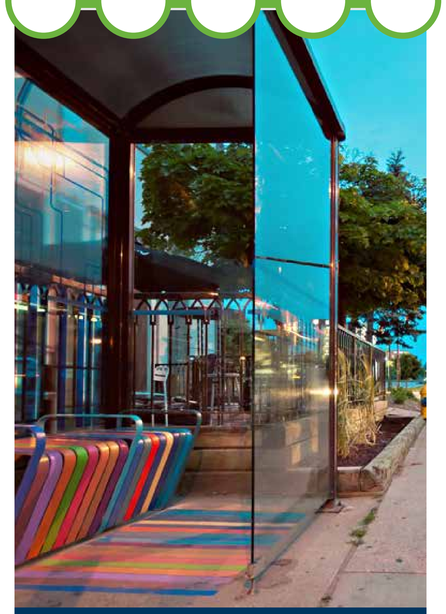
NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

Public bike share station

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

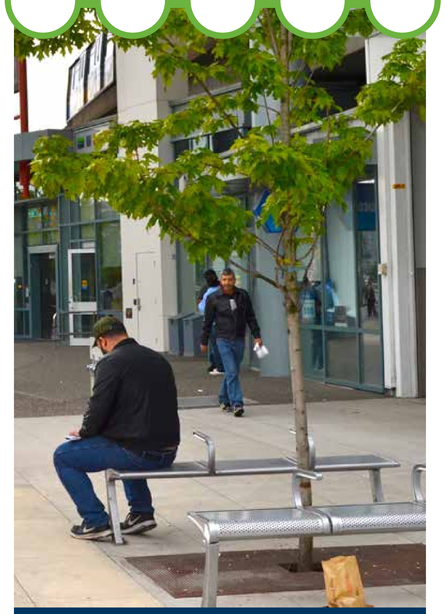
Use public art to reflect neighbourhood character

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT



Waiting space with weather protection

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT



Street furniture, like waste & recycling bins and benches

Did we miss anything?

Please use a sticky note to describe...

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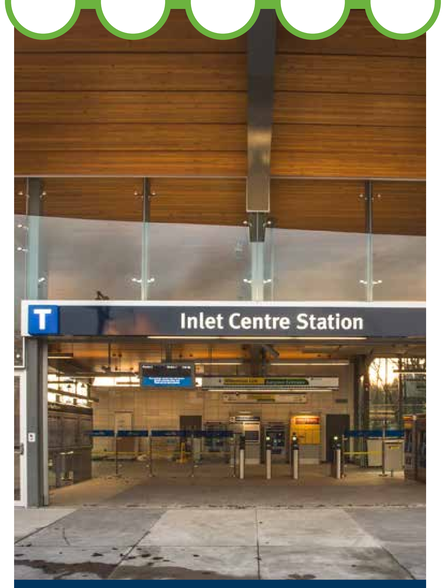
Outside the Stations

To help us inform the design of stations, tell us what you think of the following considerations. Please use one sticky dot per item.

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT



Recognizable as a rapid transit station

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

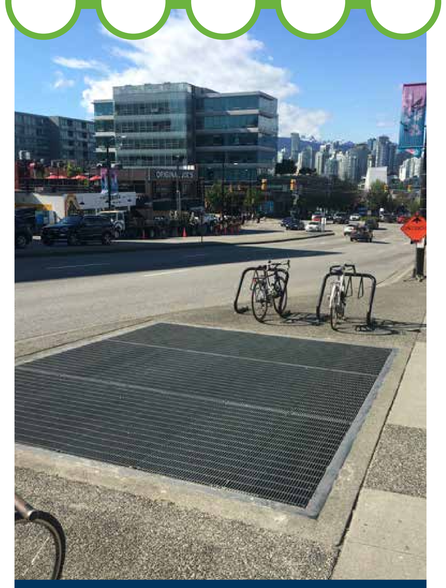
Include public space opportunities at each station

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

- Walking
- Cycling
- Transit
- Shared Vehicle
- Private Vehicle

Prioritize access to stations considering the City's hierarchy for moving people & the needs of local communities & businesses

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT



Locate station features such as vents and emergency exits to minimize impacts on sidewalks and public space

NOT IMPORTANT AT ALL | SOMEWHAT UNIMPORTANT | NEUTRAL | SOMEWHAT IMPORTANT | VERY IMPORTANT

Integrate with the existing and planned walking & cycling network

Did we miss anything?

Please use a sticky note to describe...

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What might construction be like?

TIMEFRAME

- Construction will take 5 to 6 years.
- Construction will begin once full funding is in place and a contractor is selected through the procurement process.

MINIMIZING IMPACTS

- Work with businesses and residents early to ensure that they know about impacts in advance, and address the impacts with the contractor.
- TransLink, the City, and the contractor will work to minimize disruption during construction.
- Detailed traffic management plans will be completed to maintain traffic flow, alert people to changes in travel patterns, ensure business access, and to adapt quickly when needed.

CONSTRUCTION

- **TUNNELS** – most of the project is planned to be bored tunnel to reduce disruption.
  - Start of Tunnel (Great Northern Way Area): Activities will include launching the tunneling equipment, removal of soils, and the staging of construction equipment and materials.
  - End of Tunnel (Arbutus Area): Activities will include removing the tunneling equipment and staging.
- **STATIONS** – Construction will occur at the six station sites. Some construction will take place at night. Business access, pedestrian needs, bike lanes, traffic flow, and noise will be planned for and managed to mitigate impacts.

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Transportation

We think that the following construction management strategies will help to manage transportation disruptions during construction. What do you think?

Minimize impacts to traffic flow and access on Broadway

Maintain Broadway's function as a truck route

Prioritize Broadway transit service

Minimize detours to bike and pedestrian routes

Ensure pedestrian safety and security around construction zones

Maintain predictable transit routes and minimize route detours

Ensure dedicated staff to respond to traffic issues as they arise by adapting traffic management plans

Use proactive, positive communications on websites, radio, and signage to provide advance warning of traffic changes

Develop strategies to manage neighbourhood parking and traffic impacts

How effective do you think these strategies will be in managing transportation impacts?

Use one sticky dot on the scale below to tell us.

- **COMPLETELY INEFFECTIVE**
- **SOMEWHAT INEFFECTIVE**
- **NEUTRAL**
- **SOMEWHAT EFFECTIVE**
- **VERY EFFECTIVE**

Did we miss anything?

Please use a sticky note to describe...

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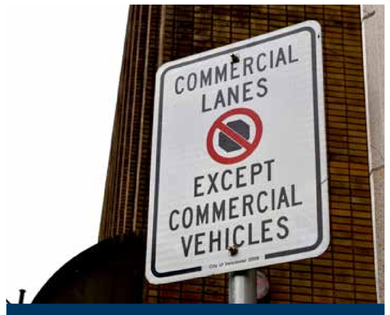
Supporting Business Access & Addressing Community Needs

The following construction management strategies are intended to support business access and address other community needs:

Establish a Business and Community Liaison Office to manage the impact of construction

Provide continuous and predictable access to homes and businesses, including safe sidewalks & pedestrian crossings

Develop strategies to minimize and manage dust (eg. regular window cleaning)



Coordinate with businesses to ensure access to loading and parking

Develop strategies to minimize and manage noise and vibration

Maintain business visibility and access for customers

Travel Smart

Work with residents, business owners and stakeholders in the community to share information and promote alternative travel choices during construction

Coordinate when (time of day) construction happens to reduce impacts on business and the community whenever possible

How effective do you think these strategies will be in managing business access and addressing community needs during construction?

Use one sticky dot on the scale below to tell us.

- COMPLETELY INEFFECTIVE
- SOMEWHAT INEFFECTIVE
- NEUTRAL
- SOMEWHAT EFFECTIVE
- VERY EFFECTIVE

Did we miss anything?

Please use a sticky note to describe...

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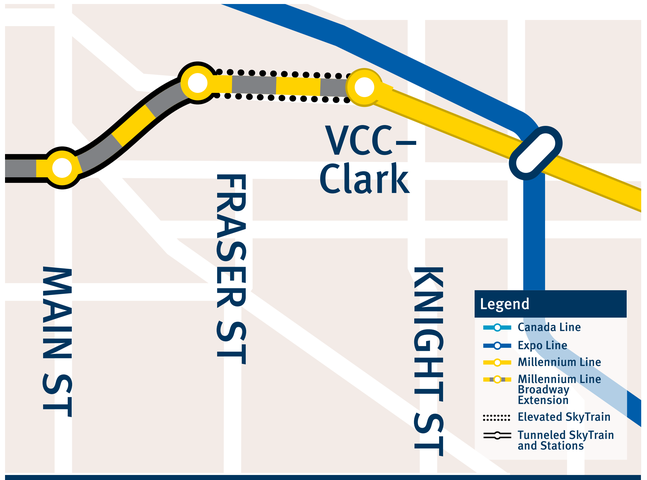
Great Northern Way Area

The Great Northern Way area is a unique part of the Millennium Line Broadway Extension. In this area, the extension will have an elevated guideway, a portal where the guideway goes underground, and a station on the Great Northern Way Campus.

Detailed decisions about the design and construction of the Broadway Extension have not been made. The construction impacts are anticipated to be greater at Great Northern Way than other stations, in order to facilitate construction staging and tunneling equipment.



What do we need to consider about the Great Northern Way area to guide the construction management strategies and design considerations?

Contruction

- Great Northern Way will be the launch site for the tunneling equipment and will remain active throughout construction.
- Removal of excavated soil and staging of construction materials typically occur near the launch site.
- Other equipment and activity may include tunnel ventilation and storage of tunnel segments.

Design Considerations

- An 800 metre section of elevated guideway will extend from VCC–Clark Station to the future Great Northern Way Station.
- The design will consider:
  - Current and future transportation links.
  - The configuration of the guideway and relationship to adjacent land uses.
  - The design of the tunnel portal.
  - Integration with the Central Valley Greenway and Great Northern Way Campus.

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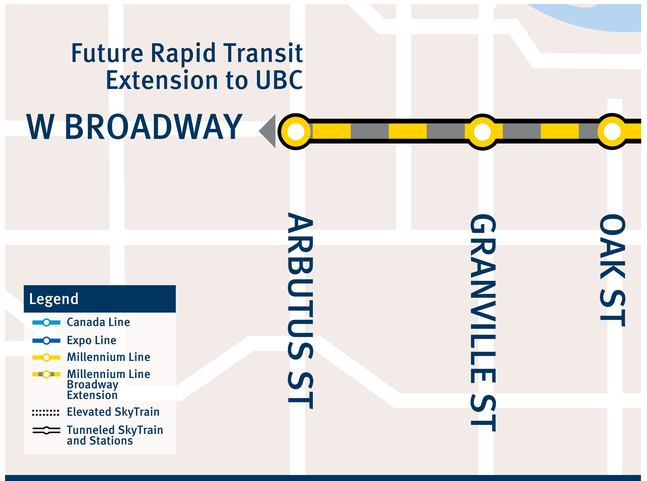
Arbutus Street Area

Arbutus Station will be the terminus station for this phase of the Broadway Extension. Passengers at this station will transfer between the Millennium Line and the B-Line bus service operating between Arbutus and UBC. While we expect a similar number of 99 B-Line buses to serve the Arbutus area in the future compared to today (approximately 20 per hour), we anticipate shorter queues compared to Commercial–Broadway Station.

Detailed decisions about the design and construction of the Broadway Extension have not been made. However, construction impacts are anticipated to be greater at Arbutus than most stations. Special consideration must be given to the design of the bus exchange and integration with the Arbutus Greenway.



What do we need to consider about the Arbutus area to guide the construction management strategies and design considerations?

Contruction

- The removal of tunneling equipment is expected to take place here, which will require excavation.
- Staging of materials and equipment may take place here.
- Construction of infrastructure to facilitate the terminus of the extension will occur here.
- Pedestrians and cyclists using the all-ages-and-abilities Arbutus Greenway are expected to be affected by detours.

Design Considerations

- Bus storage and turnarounds are anticipated to be located on station property.
- The design will consider:
  - How the bus exchange space could be used in the future when rapid transit to UBC is complete and the bus exchange is no longer needed.
  - Future Arbutus Greenway all-ages-and-abilities pedestrian and bike pathway, which may include a future streetcar service.

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