

Broadway is Open

Overview of Construction, Traffic Flow and Access

Arbutus Station Area

Fall 2021



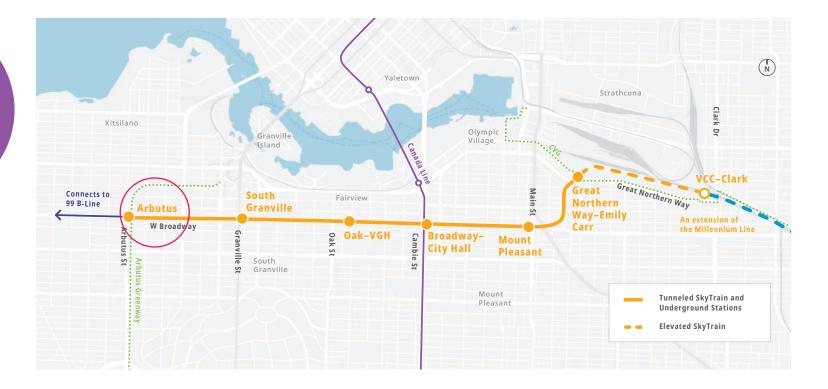
broadwaysubway.ca

Broadway Subway Project Overview

The Broadway Subway Project is a 5.7 km extension of the Millennium Line, from VCC-Clark Station to Broadway and Arbutus. It will provide fast, frequent and convenient SkyTrain service to B.C.'s second largest jobs centre, world-class health services, and emerging innovation and research hub, and growing residential communities.

- 700 metres will be elevated, extending from VCC-Clark Station to a tunnel portal near Great Northern Way.
- Five kilometres will be tunneled below the Broadway Corridor from Great Northern Way to Arbutus Street.
- Six underground stations will connect communities and the region, including a direct underground connection to the Canada Line at Cambie Street.
- The 99 B-Line bus service will connect from Arbutus Street to the University of British Columbia.

The project is on schedule for the new line to open in 2025.





Our Commitments to You



Safety

Keep the public and our crews on and adjacent to our worksites safe



Mobility

Keep pedestrians, cyclists, buses, vehicles, and emergency vehicles moving along Broadway



Access

Ensure all-ability access to businesses, residences, educational institutions and health services across the alignment



Engagement

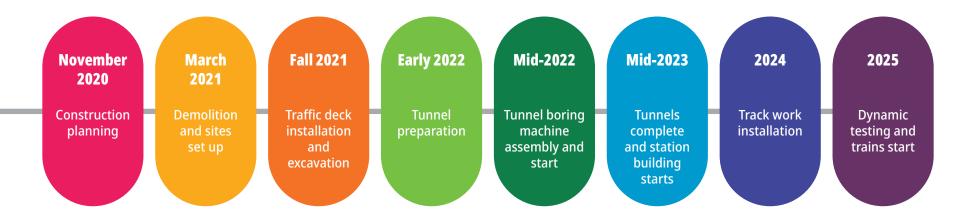
Communicate transparently, clearly and consistently in advance of construction activities with the public, residents, businesses and stakeholders



Mitigate impacts

Minimize traffic and construction impacts wherever possible and manage the transmission of dirt, dust, light, noise and vibration

Project Construction Schedule (subject to change)



Construction Phasing

Construction began first at Great Northern Way–Emily Carr station to the east, then moved west to the other stations. There will be periods when all stations are under construction simultaneously.



Arbutus Station

The station entrance will be located on the northeast corner of Broadway and Arbutus Street, adjacent to the Arbutus Greenway.

Once complete, Arbutus Station will connect passengers with B-Line bus service between Arbutus and UBC, as well as serve the people, schools, businesses, services and jobs in the area.







Traffic Decking

Keeping Broadway moving through innovative engineering.

Broadway is open

Broadway will remain open throughout construction. During construction, four lanes of traffic will be maintained except for short-term lane closures for utility relocation.

Sidewalks will remain open on the south side of Broadway, with portions closed on the north side in construction areas. North-side businesses will remain accessible.

What is traffic decking?

Traffic decking is a platform built in the first stages of construction to maintain an at-grade road above the excavation work. This innovation ensures that traffic moves safely throughout construction activities on Broadway.

Stages of traffic decking construction at Arbutus

The traffic decking will be installed in five stages:

- 1. Drilling and installation of traffic deck supports on south side of Broadway
- 2. Installation of traffic deck on south side of Broadway
- 3. Drilling and installation of traffic deck supports on north side of Broadway
- 4. Installation of traffic deck on north side of Broadway
- 5. Fully-installed traffic deck provides four lanes for duration of construction period, while construction activities continue underground

For Arbutus Station, it is anticipated that four lanes will be operational while traffic decking is installed and throughout construction.

Lanes open

4





Getting Around Broadway—Traffic, Parking and Access

Traffic

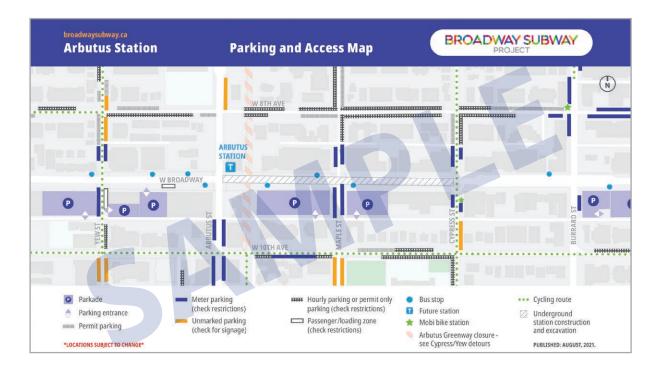
Traffic will continue to flow while work continues underground by using innovative traffic decking to cover excavations at future station locations.

Between station blocks, parking lanes on each side of Broadway will become a priority lane for buses and emergency vehicles. West of Yew Street, lanes will remain in their usual configuration.

Parking and Access Map

In collaboration with key partners, the Broadway Subway Project has developed parking and access maps for the station areas along the Broadway corridor. Listed locations, including bus stops, are subject to change.

Maps will be regularly updated and available at broadwaysubway.ca/construction/maps/



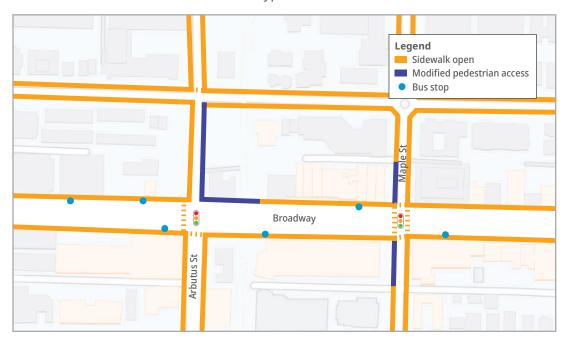


Getting Around Broadway—Pedestrians, Cyclists and Transit

Pedestrian and Cyclist Access

Here are some of the ways we are ensuring that pedestrians and cyclists can continue to move through the Broadway Corridor.

- Sidewalk on the south side of Broadway will be maintained
- Cross-walks on Broadway will be maintained
- Pedestrians will be detoured around the site with signage
- Flaggers will be available to direct pedestrians
- Wayfinding signs will inform pedestrians how to access businesses
- Cycling routes will be maintained on 10th Avenue and Cypress Street
- Between 10th Ave and 8th Ave the Arbutus Greenway is closed, with alternate routes available on Yew Street and Cypress Street



Transit Access

Access to transit service along Broadway will be available throughout construction, with some changes to bus stops near future stations.

- Buses along Broadway will continue to run throughout construction
- Bus stops on Broadway between Arbutus and Cypress will be relocated during construction
- Buses along Arbutus will continue to run throughout construction

Know before you go

You can check **translink.ca/trip-planner/** for up-to-date information before your trip

Arbutus Greenway Detours

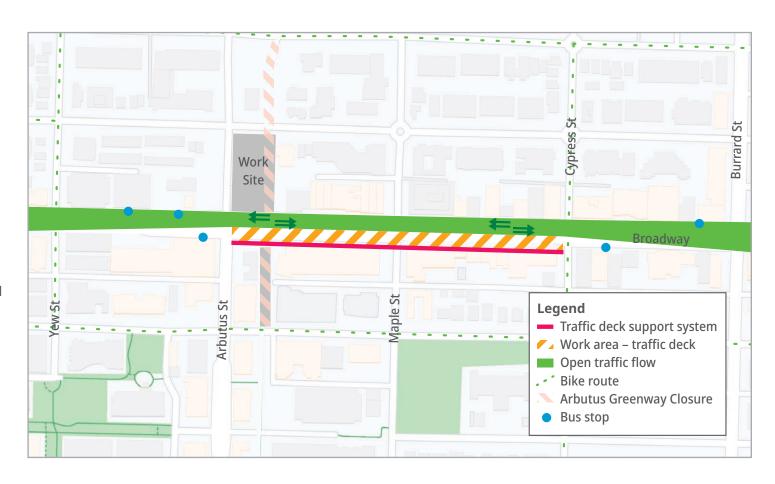




The following pages provide an overview of how traffic patterns will change in the early months of construction, until the traffic deck is installed and four lanes are open for the duration of construction.

South Side Traffic Deck Installation and Excavation: Fall-Winter 2021

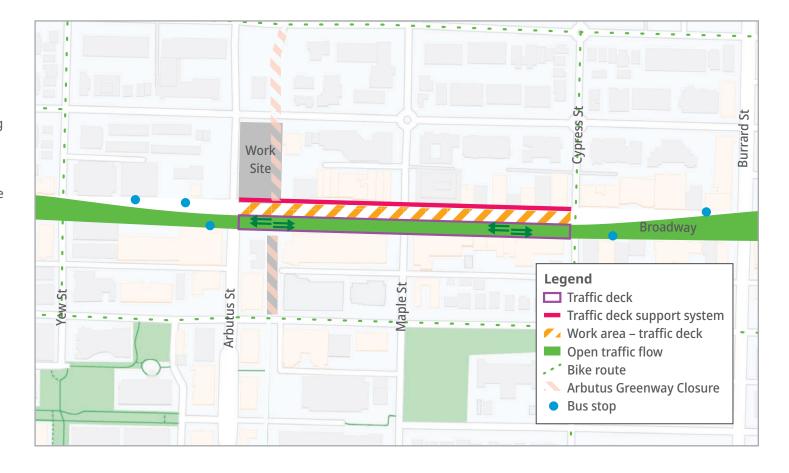
- Stage 1: Lanes on the south side of Broadway will be closed to traffic while drilling takes place
- Stage 2: Lanes on the south side of Broadway will remain closed to traffic while the traffic deck is being built
- For Arbutus Station, it is anticipated that four lanes will be operational while traffic decking is installed and throughout construction.
- Some turning movements onto Arbutus and Maple will be restricted





North Side Traffic Deck Installation and Excavation: Early 2022

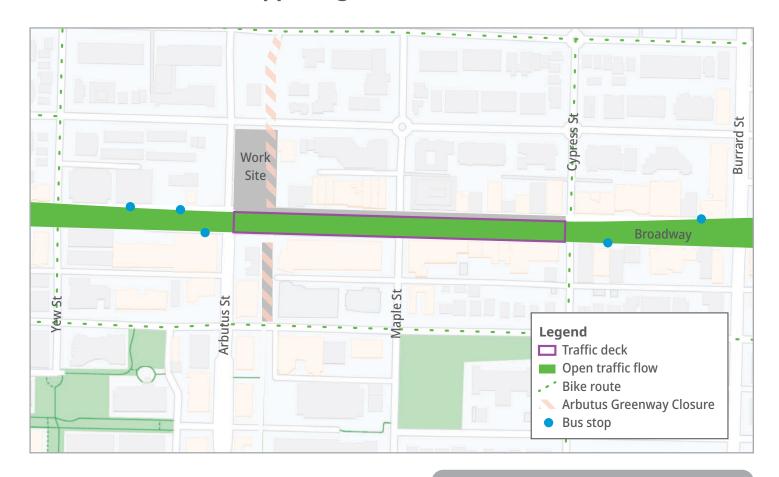
- Stage 3: Lanes on the south side of Broadway will be closed to traffic while drilling takes place
- Stage 4: Lanes on the south side of Broadway will remain closed to traffic while the traffic deck is being built





Traffic Deck Fully Installed: Spring 2022

- Stage 5: Traffic will open in a steady state, with four lanes (two in each direction) open for the remainder of underground construction
- Underground excavation will continue



Preparation for Tunnel Boring Machines

Once traffic decking is in place, excavation for the underground station will begin under Broadway to prepare for platform construction and the arrival of the Tunnel Boring Machines (TBMs) which will connect the stations.



Tunnel Boring Machine Preparation and Underground Station Construction: Summer 2022

- Concrete will be poured to prepare the excavation to receive the tunnel boring machine (TBM), 18m below street-level
- TBMs arrive at Arbutus after boring a tunnel from the South Granville Station location
- Four lanes of traffic will be maintained above this work

Station Construction: 2023–2024

- Construction of below-ground and above-ground station
- Four lanes of traffic will be maintained throughout this work



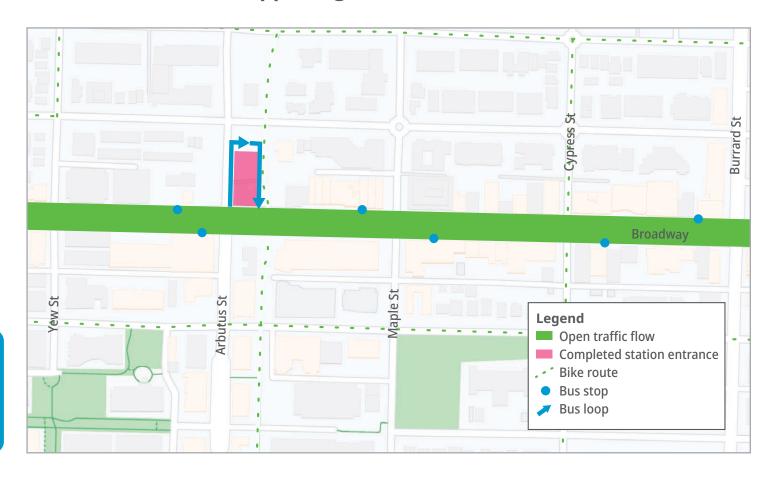


Surface Restoration: 2024–2025

- The underground station will be backfilled
- The traffic deck will be removed and the road will be repayed
- Permanent utility lines will be restored

Arbutus Station Bus Loop

A new bus loop at Arbutus Station will allow for convenient connections to the 99 B-Line bus service along Broadway.



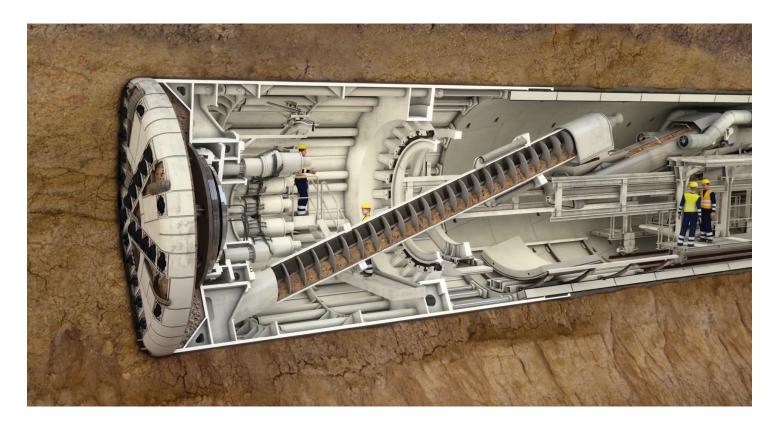


Tunnel Boring: Summer 2022–2023

Tunnel Boring Machines

Two TBMs will be used to build the eastbound and westbound train tunnels at the same time. Both machines will enter the ground just west of Great Northern Way–Emily Carr Station in summer 2022.

These machines grind up earth and stabilize the tunnels with concrete panels as they move along. Earth from the tunnels will be removed at Great Northern Way.





TBM Disassembly:

Late 2023

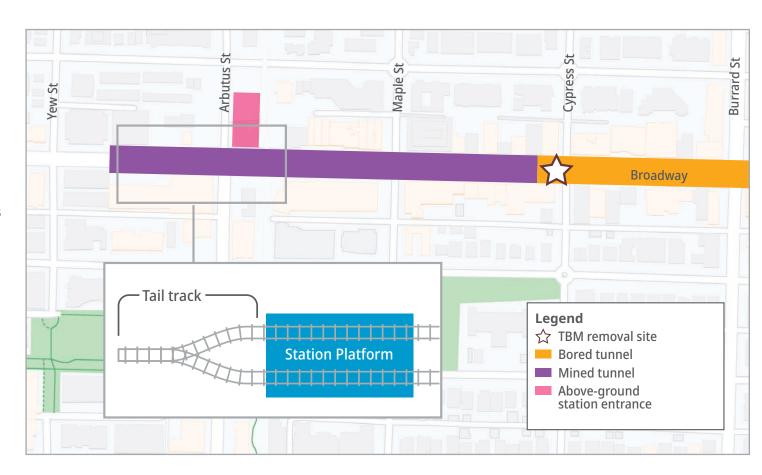
When tunnel boring is complete, the TBMs will be removed at Cypress Street, east of Arbutus Station.

Tunnel Completion and Mining of Tail Track: Late 2023

Once the Tunnel Boring Machines are removed, the final stretch of the tunnel between Cypress and Arbutus will be excavated with mining equipment.

A tail track that extends underground west of Arbutus Street will also be mined. The tail track allows trains to park off the main line and switch to the opposite side of the track.

This work will be completed entirely underground.





Train Track Construction: 2024



Underground track construction works will begin

Train Testing: 2025



- Underground dynamic train testing will take place along the tracks
- Trains will be operational



Timely and Regular Communication

The Project will maximize predictability and manage disruption as much as possible through:

- Timely information about construction, traffic and parking
- Notifications by email, newsletter, website and direct contact
- Clear signage at point of construction activities
- Where possible, mitigating construction impacts and manage issues as they arise
- Communicating transparently, clearly and consistently in advance of construction activities with the public, residents, businesses and stakeholders

Mitigation Measures

The Project is taking care to mitigate the impacts of construction activities on neighbourhoods, businesses and the public along Broadway.

Vibration Management

The Project will adhere to guidelines related to vibration and will monitor vibration levels.

Activities for which you may expect some vibration include:

- Demolition of structures and pavement
- Shoring works for future station and tunnel
- Tunnel boring
- Building the traffic deck

Noise Management

When possible, efforts will be made to carry out construction activities that generate the most noise during core hours.

Night work—from 8p.m. to 5a.m.—will be required for some activities.

Dust Control

The Project will work to manage dust dispersion during construction with plans to implement the following mitigation measures:

- Water spray to reduce generation of dust during dry seasons
- Sweep and clean paved surfaces to minimize build-up of sand and dirt

Light Management

Overnight lighting may be required at construction sites. The Project will manage light pollution by implementing the following mitigation measures:

- Task-specific lighting will be used, large area lighting will be minimized
- Physical barriers (temporary sound walls and site hoardings) will limit light spills
- Existing street lighting conditions will be maintained for traffic





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Call: 24/7 phone line **1-844-815-6114**



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