



transportation
investment
corporation

Monthly Status Report

Reporting Period

June 2024

1. Introduction

1.1 Project Overview

The Broadway Subway Project (“BSP” or “the Project”) is a 5.7-kilometre Advanced Light Rapid Transit (ALRT or SkyTrain) extension to the existing Millennium Line SkyTrain system from its current terminus at VCC-Clark Station to a new western terminus station at Arbutus Street and West Broadway. The Project scope includes:

- 700m of elevated guideway extending west from the existing VCC-Clark Station
- 5 km of underground tunnel
- 6 new underground stations:
 - Great Northern Way-Emily Carr Station;
 - Mount Pleasant Station;
 - Broadway-City Hall Station – designed to integrate with the Canada Line Broadway-City Hall Station;
 - Oak-VGH Station;
 - South Granville Station;
 - Arbutus Station – designed to allow for a future phase of investment to connect rapid transit to UBC.

The new line is expected to go into service in fall 2027.

Additional information and updates about the Project can be found on the Project’s website at <https://www.broadwaysubway.ca/>.

1.2 Project Delivery

Transportation Investment Corporation, a provincial Crown corporation, is delivering and overseeing this \$2.827 billion project. The Project is being delivered under B.C.’s Community Benefits Agreement and the skilled trades workforce will be provided by B.C. Infrastructure Benefits Inc.

Broadway Subway Project Corporation (BSPC) has been selected as the design-build contractor.








The Broadway Subway Project is a key part of the rapid transit program in Metro Vancouver’s Mayors’ Council 10-Year Vision. The Vision is funded by the governments of B.C. and Canada, TransLink, and City of Vancouver. Once constructed, the Broadway Subway will be integrated with the regional transit network and operated and maintained by TransLink.

1.3 Project Goals

Based on the mandate and results of consultation, seven primary goals have been identified for the Project:

- **Transportation:** Fast, reliable, and efficient service that meets current and future capacity needs and integrates with the regional transit network and other modes of transportation.
- **Financial:** Affordable and cost-effective.
- **Environment:** Attracts new riders and reduces vehicle kilometres travelled.
- **Urban Development:** Supports current and future land use development along the Broadway Corridor and integrates with the surrounding neighbourhoods through high-quality urban design.
- **Economic Development:** Creates jobs and facilitates the efficient movement of goods and services during operation.
- **Social and Community:** Safe, secure, and accessible service that improves access to rapid transit for all, while managing impacts on heritage and archaeology.
- **Deliverability:** Constructible and operable.

2. Project Dashboard

		Objectives	Project Status	Comments
Project Delivery	Scope	Project delivered within the approved scope.		<ul style="list-style-type: none"> The Project is being delivered within scope. The Project includes a primarily tunnelled extension of the existing Millennium Line SkyTrain system from VCC-Clark Station to a new station at Arbutus Street.
	Schedule	Project delivered within the approved schedule.		<ul style="list-style-type: none"> Revised schedule announced May 24, 2024. The new line is expected to go into service in fall 2027. Thorough schedule analysis is undertaken each month, including review of performance.
	Budget	Project delivered within the approved budget of \$2.827 billion.		<ul style="list-style-type: none"> The Project spending for the month of June 2024 was \$19.9 million. Total Project spending to date is \$1.55 billion. Total Federal Recoveries to date are \$498.9 million and City of Vancouver contribution is \$100.3 million. The Project is forecast to be delivered within budget. The budget pressures associated with the extended schedule are being managed within the current budget.
	Safety	Take every reasonable step to ensure that work is performed safely and in compliance with all applicable safety regulations, and in accordance with government policy.		<ul style="list-style-type: none"> The Project team monitored the implementation of the health and safety program and performed site visits. There have been 40 lost time injuries on the Project to date. The Lost Time Injury Frequency Rate (LTIFR) for the Project is 1.5 which is the same as the WorkSafeBC 2022 rate of 1.5* for heavy construction and less than 4.0* for mechanized tunnel. <p><i>*Injury rate data reflects Large Employer 100+ Person Years employer size.</i></p>
	Quality	Implement and maintain an effective Quality Management System.		<ul style="list-style-type: none"> Quality monitoring and auditing of select work activities and processes continues. Review of quality documentation submittals continues.
	Environmental	Ensure work is performed in an environmentally responsible manner.		<ul style="list-style-type: none"> Site-specific environmental workplans are being implemented. Weekly environmental monitoring is being completed with reports submitted by BSPC. Work to mitigate construction noise at all stations is ongoing. Province-led monthly monitoring of environmental programs continues, with ad-hoc site visits as required.
	Design and Construction	Provide design and technical oversight, coordinate and manage activities on site, and conduct compliance reviews.		<ul style="list-style-type: none"> Continued finalizing stations design and progressing systems design. Continued progress on excavation, piling, and utility work. Disassembly of both Tunnel Boring Machines (TBM) and supporting equipment continues. Ongoing construction of permanent works along the Elevated Guideway and at all six stations.

		Objectives	Project Status	Comments
	Community Benefits	Work collaboratively with BC Infrastructure Benefits Inc. (BCIB) to successfully implement the Community Benefits Agreement (CBA).	●	<ul style="list-style-type: none"> Ongoing coordination with BCIB on permitting requirements. Discussions regarding current and future Project workforce requirements continue.
Partners / Stakeholders	First Nations	Continue to build and maintain a positive collaborative working relationship.	●	<ul style="list-style-type: none"> Targets for Indigenous contracting opportunities have all been achieved and engagement continues with First Nations on further opportunities. Continued engagement with First Nations in relation to the Project and cultural recognition. Project-specific agreements with First Nations have been finalized.
	Third Parties	Continue to build and maintain positive relationships with Project Partners and other third parties.	●	<ul style="list-style-type: none"> Ongoing third-party engagement for successful Project implementation and integration. Discussions with TransLink regarding Operations and Control Centre (OCC2) and SkyTrain systems integration. Discussions with Canada Line regarding integration with Broadway-City Hall Station.
	Public and Stakeholder Engagement	Continue to build and maintain relationships with the community, provide information about Project activities and respond to stakeholder concerns related to construction.	●	<ul style="list-style-type: none"> Ongoing engagement with local businesses, stakeholders, residents, and the public. Continued contacting members of the community to provide updated information regarding the extended Project timeline announced on May 24, 2024.

Status	Description
●	Managing critical issues, negotiating resolution; action required immediately
●	Managing some issues, negotiating resolution; action required in the near term
●	Managing day to day operations

3. Project Documents and Achievements to Date

Project Delivery	Project Planning and Development	<ul style="list-style-type: none"> • Business Case released (2018). • Cost Report released (2018). • Project Overview released (2018). • Risk Report released (2018). • Strategic Options Whitepaper released (2018). • Executed Design-Build-Finance Agreement (August 2020).
	Environmental	<ul style="list-style-type: none"> • Environmental technical studies complete (2017-2018). • Environmental Socio-Economic Report complete (2020). • Environmental Workplans complete (2022). • 2023 annual environmental report submitted (January 2024). • BSPC Construction Environmental Management Plan update finalized (June 2024).
	Design and Construction	<ul style="list-style-type: none"> • Geotechnical studies complete (2016-2017). • Reference concept design complete (2018). • Traffic modelling complete (2017-2019). • Geotechnical Subsurface Baseline Report complete (2019). • Geotechnical investigations commenced (2020). • Building abatement complete (2021). • Building demolitions at station sites complete (2021). • Piling for traffic decks complete at Mount Pleasant (2021), Broadway-City Hall (2021), Oak-VGH (2022), South Granville (2022), and Arbutus stations (2022). • Traffic deck installation complete at Mount Pleasant (2022), Broadway-City Hall (2022), Oak-VGH (2022), South Granville (2022) and Arbutus (2023) stations. • Station box excavation complete at all stations: Great Northern Way-Emily Carr (2022), Mount Pleasant (2022), Broadway-City Hall (2023), Oak-VGH (2023), South Granville (2023) and Arbutus (2023). • Station box base slab complete at all stations: Great-Northern Way-Emily Carr (2022), Mount Pleasant (2022), Broadway-City Hall – including crossover box (2023), Oak-VGH (2023), South

		<p>Granville (2023) and Arbutus – including crossover box (2024).</p> <ul style="list-style-type: none"> • Elevated guideway pier and girder installation complete (2023). • Both TBMs launched (2022) and completed boring (2024).
	Province/Other Works	<ul style="list-style-type: none"> • TBM power – BC Hydro (2019). • Propulsion Power Substations including upgrade to dedicated power at VCC-Clark Station – BC Hydro (2019). • Utility relocate at Main Street – TELUS (2019). • Utility relocate at Great Northern Way – TELUS/FortisBC/BC Hydro (2019). • Civil construction and utility relocate at Arbutus and Cambie – TELUS (2020). • Trolley overhead relocations of bus routes 14, 16, and 17 – Coast Mountain Bus Company (2020). • Trolley overhead removals of trolley infrastructure on Broadway – Coast Mountain Bus Company (2020). • Utility relocate at Cambie – FortisBC (2020). • Electrical duct utility relocate at South Granville and Arbutus – City of Vancouver (2021). • 901 Great Northern Way building modification completed (2021).
	Community Benefits	<ul style="list-style-type: none"> • Community Benefits Agreement (July 2018). • BCIB-AIRCC Enabling Agreement (July 2019). • Project Definition: Broadway Subway Project (July 2019). • BCIB Health and Safety Program (March 2020). • BCIB-Contractor Agreement (August 2020). • BCIB-Subcontractor Agreement (August 2020).
Partners / Stakeholders	Third Parties	<ul style="list-style-type: none"> • Memorandum of Understanding – City of Vancouver (2017). • Memorandum of Understanding – TransLink (2018). • Canada–British Columbia Integrated Bilateral Agreement for the Investing in Canada Infrastructure Program – Government of Canada (2018). • Canada Line Amending Agreement – InTransit BC Phase 1 (2019). • South Granville Station Integration Agreement – PCI (2019).

		<ul style="list-style-type: none"> • Vancouver Municipal Agreement – City of Vancouver (2020). • Metro Vancouver Accommodation Agreement (2020). • Broadway Subway Project Support Agreement – TransLink (2020). • Canada Line Amending Agreement – InTransit BC Phase 2 (2020). • Integration Agreement – TransLink (2020). • Great Northern Way-Emily Carr Station Integration Agreement – PCI (2020).
	<p>First Nations</p>	<ul style="list-style-type: none"> • Capacity Agreement for the Environmental and Socio-Economic Review (2018). • Contracting and employment requirements finalized (2020). • Cultural recognition opportunities selected by First Nations (2021).
	<p>Public and Stakeholder Engagement</p>	<ul style="list-style-type: none"> • Phase 1 and 2 engagements (led by TransLink and City of Vancouver) <ul style="list-style-type: none"> ○ Phase 1 engagement (December 2016 – February 2017). ○ Phase 2 engagement (May 2017 – July 2017). • Broadway Subway Project Engagement (Province-led) <ul style="list-style-type: none"> ○ Local business survey (July 2019 – December 2019). ○ Community engagement (October 2019 – December 2019). ○ Opened Community Office (Fall 2019). ○ Established 24/7 construction information line (December 2019). • Station Design Advisory Process (BSPC-led) <ul style="list-style-type: none"> ○ First engagement occurred (November – December 2020). ○ First engagement summary report released (2021). ○ Second engagement (April – May 2021).

4. Monthly Highlights and Three Month Lookahead

4.1 Safety

<p>Scope:</p>	<ul style="list-style-type: none"> • Oversee and monitor health and safety: <ul style="list-style-type: none"> ○ Management plans and systems. ○ Goals, objectives, and performance metrics. ○ Roles and responsibilities. ○ Planning and coordination of major Project activities. ○ Compliance with WorkSafeBC, municipalities, and government agencies. ○ Continual improvement process. ○ Risk management. ○ Statistics and trends.
<p>Monthly Highlights:</p>	<ul style="list-style-type: none"> • Performed weekly site visits to observe compliance and areas of improvement. • Focused on monitoring the management of public safety. • Monitored compliance with the tunnelling work activities. • Received the reported Lost Time Injury Frequency Rate (LTIFR): <ul style="list-style-type: none"> ○ The Project to date LTIFR is 1.5, which is the same as the 2022 WorkSafeBC rate of 1.5* for heavy construction and less than 4.0* for mechanized tunnel. ○ <i>*Injury rate data reflects Large Employer 100+ Person Years employer size.</i> • Monitored compliance of the Safety Management Plan.
<p>Three Month Lookahead:</p>	<ul style="list-style-type: none"> • Continue to: <ul style="list-style-type: none"> ○ Provide health and safety support to involved parties. ○ Perform regular health and safety inspections at Project sites. ○ Oversee the health and safety planning and performance for tunnelling. ○ Monitor the management of public safety. • Perform regular health and safety spot audits on specific activities or elements of BSPC's safety plan.

4.2 Quality

<p>Scope:</p>	<ul style="list-style-type: none"> • Establish quality management Project objectives and performance measures. • Manage Project quality management activities. • Monitor relevant quality management performance metrics. • Outline relevant quality management processes and activities.
<p>Monthly Highlights:</p>	<ul style="list-style-type: none"> • Completed one (1) quality audit of BSPC's communication complaint processes. • Completed four (4) quality observation field visits related to BSPC's quality activities at the Mount Pleasant Station, Elevated Guideway, Great Northern Way-Emily Carr Station and Arbutus Tail Track Tunnel. • Initiated fourteen Non-Conformity Reports (NCRs) this month related to structural, electrical, mechanical, environmental, tunnel, and systems activities and processes. To date there have been a total of 418 NCRs (42 open and 376 closed).

Three Month Lookahead:	<ul style="list-style-type: none"> • Continue regular monitoring of quality activities by means of discipline specific field visits, meetings, and other review and communication processes. • Continue scheduled quality system audits, surveillance audits, and observation field visits. • Continue to review quality documentation submissions.
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4.3 Environmental

Scope:	<ul style="list-style-type: none"> • Oversee BSPC’s measures to manage and mitigate risks identified in the Environmental and Socio-Economic Review (ESR). • Review environmental submissions and reports. • Monitor Construction Environmental Management Plan (CEMP) implementation through review of weekly environmental monitoring reports, monthly audits and ad-hoc site inspections. • Support engagement with First Nations on CEMP implementation.
Monthly Highlights:	<ul style="list-style-type: none"> • Completed review of BSPC’s weekly and monthly reporting to monitor compliance with the CEMP. • Identified opportunities for improvement and successes from monthly audit and ad-hoc site inspections. • Continued focus on monitoring and mitigation of construction noise, especially as it relates to night and shoulder work.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue monthly and ad-hoc on-site environmental surveillance at all sites. • Continue monitoring refinements to noise mitigation/monitoring programs at all sites, especially as it relates to night and shoulder work. • Continue to focus summertime monitoring and surveillance on dust suppression and management.

4.4 Design and Construction

Scope:	<ul style="list-style-type: none"> • Provide technical input to the procurement processes. • Develop a design concept, technical requirements/specifications, and related technical studies for the Project. • Conduct Project-related traffic operations modelling, data collection, and other related engineering services. • Conduct compliance reviews of work by BSPC. • BSPC design and construction activities include: <ul style="list-style-type: none"> ○ Non-design ○ Systems design ○ Enabling works including site preparation, building demolitions and utility relocations ○ Construction of six (6) stations ○ Elevated Guideway construction ○ Underground guideway construction by TBM ○ Systems installation
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	<ul style="list-style-type: none"> ○ Testing and commissioning
<p>Monthly Highlights:</p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> • Finalizing mechanical, electrical, and architectural designs for all stations. • Finalizing tunnel fit-out (mechanical) design. • Continued systems design. <p><u>Traffic:</u></p> <ul style="list-style-type: none"> • Continued to monitor temporary parking reinstatement trial at select locations on Broadway outside of peak periods together with the City of Vancouver and TransLink. • Continued to implement temporary traffic diversions throughout the corridor to accommodate construction. • Routine traffic deck inspections and maintenance. <p><u>Tunnel:</u></p> <ul style="list-style-type: none"> • Continued removal of TBMs and supporting equipment. • Continued invert slab and track slab installation. <p><u>Elevated Guideway:</u></p> <ul style="list-style-type: none"> • Continued track slab construction. • Continued VCC-Clark Station tail track tie-in works. • Continued trackwork installation. <p><u>Great Northern Way-Emily Carr:</u></p> <ul style="list-style-type: none"> • Continued roof slab construction in the station box. • Continued headhouse construction. • Continued wall construction in headhouse, station box and U-Section. • Continued concourse slab construction in the station box. • Continued construction of the transition box and track slab. <p><u>Mount Pleasant:</u></p> <ul style="list-style-type: none"> • Commenced permanent utility relocation. • Commenced roof slab construction in the headhouse. • Continued column and wall construction in the station box and headhouse. • Continued concourse slab construction in the station box. • Continued construction of the vent shafts. <p><u>Broadway-City Hall:</u></p> <ul style="list-style-type: none"> • Preparation for constructing lower walls and invert slab in circulation shaft (west side of Cambie Street). • Continued excavation of the passenger connection to the Canada Line northbound platform. • Continued construction of the passenger connections between the Millennium Line and the Canada Line platforms. • Continued construction of lower walls and columns in station box. • Continued construction of concourse slabs in station box. • Continued excavation of headhouse. <p><u>Oak-VGH:</u></p> <ul style="list-style-type: none"> • Continued construction of station lower walls, columns, and preparations for platform level. • Commenced construction of headhouse upper-level walls. <p><u>South Granville:</u></p>

	<ul style="list-style-type: none"> Continued construction of station lower walls, columns, and preparations for platform level. Preparation for installing the headhouse escalator. <p><u>Arbutus:</u></p> <ul style="list-style-type: none"> Continued wall construction at the headhouse. Completed base slab construction at crossover section. Continued wall construction at station box. Continued concourse slab construction at station box. Continued tail track tunnel mining.
<p>Three Month Lookahead:</p>	<p><u>Design:</u></p> <ul style="list-style-type: none"> Continue finalizing Non-Systems design. Progressing Systems design. <p><u>Traffic:</u></p> <ul style="list-style-type: none"> Continue to implement temporary traffic diversions throughout the corridor to accommodate construction. Together with the City of Vancouver and TransLink, continue monitoring temporary parking reinstatement trial at select locations on Broadway outside of peak periods. Routine traffic deck inspections and maintenance. <p><u>Tunnel:</u></p> <ul style="list-style-type: none"> Complete removal of both TBMs and conveyor systems. Continue invert slab and track slab installation. Commence tunnel fit out, including lights and fire protection. Commence trackwork installation. <p><u>Elevated Guideway:</u></p> <ul style="list-style-type: none"> Complete track slab construction. Complete construction of the abutment. Complete VCC-Clark Station tail track tie-in works. Continue trackwork installation. <p><u>Great Northern Way-Emily Carr:</u></p> <ul style="list-style-type: none"> Continue wall construction at U-Section. Continue construction of the transition box, including track slab. Complete lower wall construction in the station box. Continue construction of columns in the station box. Continue concourse slab construction in the station box. Continue roof slab construction in the station box. <p><u>Mount Pleasant:</u></p> <ul style="list-style-type: none"> Continue permanent utility relocation. Continue roof slab construction in the headhouse. Continue column and wall construction in the station box and headhouse. Continue concourse slab construction in the station box. Continue construction of vent shafts. <p><u>Broadway-City Hall:</u></p> <ul style="list-style-type: none"> Continue construction of the circulation shaft (west side Cambie Street) walls and slab. Complete excavation of underpass structure beneath Canada Line station. Continue construction of both underpass structures beneath Canada Line.

	<ul style="list-style-type: none"> Continue construction of lower walls and columns in the station box. Continue construction of concourse slabs in the station box. Complete excavation of the headhouse. <p><u>Oak-VGH:</u></p> <ul style="list-style-type: none"> Continue construction of station lower walls, columns, and preparations for platform level. Continue headhouse concourse level construction. <p><u>South Granville:</u></p> <ul style="list-style-type: none"> Continue construction of station lower walls, columns, and preparations for platform level elements. Complete installation of the headhouse escalator. <p><u>Arbutus:</u></p> <ul style="list-style-type: none"> Continue wall construction. Continue concourse slab construction in the station. Continue tail track tunnel mining.
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4.5 First Nations

Scope:	<ul style="list-style-type: none"> Consultation and engagement with First Nations on Project materials and cultural recognition at stations.
Monthly Highlights:	<ul style="list-style-type: none"> Shared Project updates and materials with First Nations, including environmental management plans and reports, archaeological reports, and construction updates. Held discussions with First Nations on art and cultural recognition, including calls for artists and confirmation of selected opportunities. All Project-specific agreements with First Nations have been finalized.
Three Month Lookahead:	<ul style="list-style-type: none"> Continue sharing information, identifying, and resolving issues, and identifying Project-related opportunities for First Nations. Continue engagement with First Nations related to art and cultural recognition at stations, including supporting the selection of artists by First Nations. Work with First Nations to identify training programs that support Project employment and update labour forecasting.

4.6 Third Parties

Scope:	<ul style="list-style-type: none"> Engage with TransLink, the City of Vancouver, PCI, InTransit BC, and other third parties during the Project implementation phase. TransLink Agreement. <ul style="list-style-type: none"> Broadway Subway Project Support Agreement. Municipal Agreement. <ul style="list-style-type: none"> Vancouver Municipal Agreement with the City of Vancouver. Agreements with InTransit BC and TransLink for technical integration of the new Millennium Line Broadway-City Hall Station with the existing Canada Line Broadway-City Hall Station.
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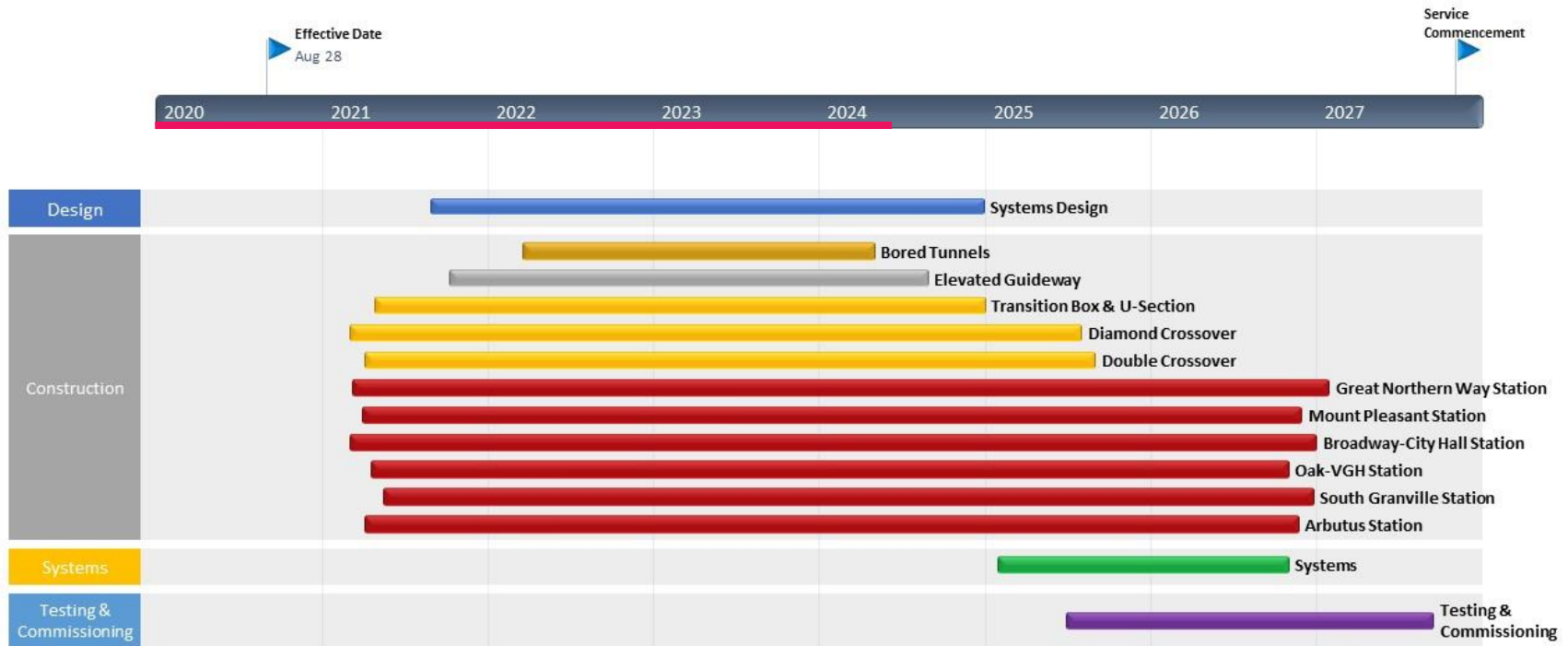
	<ul style="list-style-type: none"> ○ Canada Line Amending Agreement – InTransit BC Phase 1 (between TransLink and InTransit BC). ○ Canada Line Amending Agreement - InTransit BC Phase 2 (between TransLink and InTransit BC). ○ Integration Agreement with TransLink. • PCI Agreements. <ul style="list-style-type: none"> ○ South Granville Station Integration Agreement with PCI. ○ Great Northern Way-Emily Carr Station Integration Agreement with PCI. • Accommodation Agreement with Metro Vancouver.
Monthly Highlights:	<ul style="list-style-type: none"> • Held ongoing discussions with TransLink regarding OCC2 implementation. • Continued collaboration with Canada Line regarding design and construction integration with Broadway-City Hall Station; including construction activities for both underpasses and advancement of design deliverables and review.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue to engage third parties to ensure successful implementation of executed agreements. • Coordinate design and construction interface between BSPC and third parties.

4.7 Public and Stakeholder Engagement

Scope:	<ul style="list-style-type: none"> • Manage ongoing public and stakeholder communications, and community and business relations.
Monthly Highlights:	<ul style="list-style-type: none"> • Began summer outreach program with participation at the Mount Pleasant Elementary Day. • Continued direct outreach to businesses, Business Improvement Associations, property managers and other community members regarding the Project schedule change announced May 24. • Implemented a targeted communications outreach in advance of major concrete works. • Distributed notifications regarding track work at the Elevated Guideway, the next phase of construction at Great Northern Way-Emily Carr Station and night work at Mount Pleasant Station.
Three Month Lookahead:	<ul style="list-style-type: none"> • Continue summer outreach with pop-up neighbourhood information kiosks and attendance at other community events. • Develop additional mural panel to support the TransLink and Mobi Bike Share promotional campaign focused on the Broadway corridor. • Continue weekly business outreach walks and other frequent direct contact with businesses. • Conduct ongoing regular meetings with the Business Improvement Associations, Traffic Advisory and Arbutus Schools Traffic Liaison groups. • Continue regular interactions with residents and key stakeholders. • Provide progress updates on track installation, the elevated guideway, work inside the tunnels, and construction of stations. • Continue to distribute construction notifications and respond to public enquiries.

5. Schedule

The following schedule depicts estimated timelines from the contract effective date to the new line's in-service date, and reflects the updated schedule announced on May 24, 2024.



6. Project Photos



Figure 1: Elevated Guideway: Progressing with the connection to the existing elevated guideway at VCC-Clark Station.



Figure 2: Great Northern Way-Emily Carr Station: Progressing with the walls and track slab installation within the U-Section.



Figure 3: Mount Pleasant Station: Progressing with shoring for the roof slab in the headhouse.



Figure 4: Broadway-City Hall Station: Progressing with construction of the concourse-level floor in the station.



Figure 5: Oak-VGH Station: Progressing with construction of the track slab within the station box.



Figure 6: South Granville Station: Progressing with construction of the track slab within the station box.

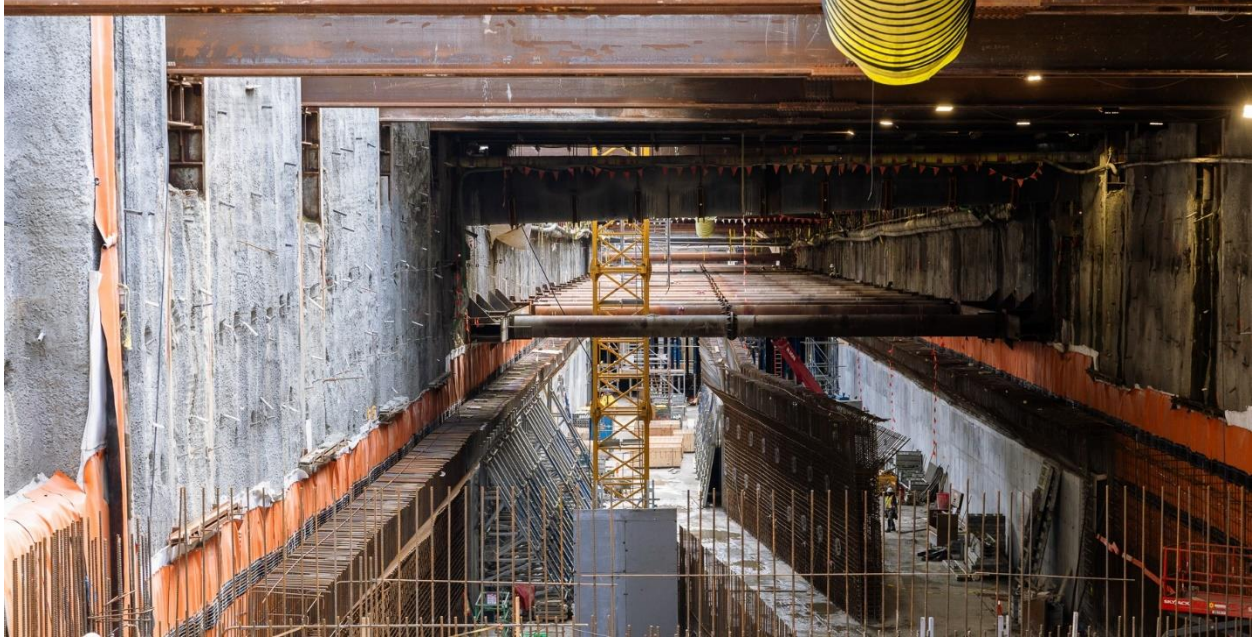


Figure 7: Arbutus Station: Progressing with construction of the interior walls and roof within the crossover box.