



PUBLIC MEETING AGENDA

Revised: September 29, 2020

October 1, 2020, 9:00AM to 10:30AM

Via Videoconference (live streamed to [Mayors' Council YouTube Channel](#))

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 YouTube channel](#).

8:50AM *Technology Test: Please connect to the meeting early, by 8:50AM, to provide time to trouble-shoot any connection problems.*

9:00AM **1. PRELIMINARY MATTERS**

 1.1. Adoption of agenda..... Page 1

 1.2. [Approval of Minutes \(July 30, 2020\)](#) 2

Report updated:

9:05AM 2. [PUBLIC DELEGATES](#)..... 7

9:15AM **3. REPORT OF TRANSLINK MANAGEMENT**

Report added: 3.1. [Update on Regional Transportation Trends](#)..... 10

Report added: 3.2. [Update on Safe Restart Funding](#) 13

9:50AM **4. REPORT OF THE JOINT NEW MOBILITY COMMITTEE**

 4.1. [T2050: Progress Report on COVID Impacts on Long-term Planning](#)..... 18

 4.2. [2020 Regional Road Performance Monitoring Report](#)..... 23

10:15AM **5. REPORT OF JOINT FINANCE AND GOVERNANCE COMMITTEE**

 5.1. [Update on Broadway Subway Project](#)..... 27

 5.2. [2019 Annual Report on Broadway Subway Supportive Policies Agreement](#)..... 31

10:30AM **6. OTHER BUSINESS**

 6.1. Next Meeting (via videoconference) – October 29, 2020

10:30AM **7. ADJOURN** to closed session

Note that Mayors' Council members and Public Delegates will be participating via Zoom videoconferencing. Zoom connection information sent separately via e-mail.

MEETING OF THE MAYORS' COUNCIL ON REGIONAL TRANSPORTATION DRAFT PUBLIC MEETING MINUTES

Minutes of the Public Meeting of the Mayors' Council on Regional Transportation (Mayors' Council) held Thursday, July 30, 2020 at 9:00 a.m. via videoconference.

PRESENT:

Mayor Jonathan Coté, New Westminster, Chair
Mayor Jack Froese, Langley Township,
Vice-Chair
Chief Ken Baird, Tsawwassen First Nation
Mayor Neil Belenkie, Belcarra
Mayor Malcolm Brodie, Richmond
Mayor Linda Buchanan, North Vancouver City
Councillor Craig Cameron, West Vancouver
(alternate)
Mayor Bill Dingwall, Pitt Meadows
Mayor George Harvie, Delta
Councillor Joe Keithley, Burnaby (alternate)
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
Mayor Kennedy Stewart, Vancouver
Mayor Richard Stewart, Coquitlam
Mayor Rob Vagramov, Port Moody
Mayor Val van den Broek, Langley City
Mayor Darryl Walker, White Rock
Mayor Brad West, Port Coquitlam

ALSO PRESENT:

Michael Buda, Executive Director, Mayors' Council on Regional Transportation Secretariat
Geoff Cross, Vice-President, Transportation and Planning, TransLink
Kevin Desmond, Chief Executive Officer, TransLink
Sarah Ross, Director, System Planning, TransLink

PREPARATION OF MINUTES:

Carol Lee, Recording Secretary, Mosaic Writing Group

CALL TO ORDER

Chair Jonathan Coté declared that a quorum was present, called the meeting to order at 9:00 a.m. and reviewed the process that will be used for voting during the virtual meeting.

1. PRELIMINARY MATTERS

1.1 Adoption of the Agenda

Draft agenda for the July 30, 2020 Public Meeting of the Mayors' Council on Regional Transportation, version dated July 23, 2020, was provided with the agenda material.

It was MOVED and SECONDED

That the agenda of the July 30, 2020 Public Meeting of the Mayors' Council on Regional Transportation be adopted, as presented.

CARRIED

1.2 Approval of Minutes (June 25, 2020)

Draft minutes of the June 25, 2020 Public Meeting of the Mayors' Council on Regional Transportation was provided with the agenda material.

It was MOVED and SECONDED

That the minutes of the June 25, 2020 Public Meeting of the Mayors' Council on Regional Transportation be adopted, as presented.

CARRIED

2. PUBLIC DELEGATION PRESENTATIONS

The following documents were provided on-table:

- *Report titled "Item 2 – Public Delegates: names, topics and presentations", dated July 29, 2020*
- *Report titled "Item 2 – Public Delegate Presentations", dated July 30, 2020.*

2.1 Joe Kunzler

Mr. Kunzler requested that the Mayors' Council take action on the bus priority projects to improve travel times for transit riders.

3. REPORT OF TRANSLINK MANAGEMENT

Presentation titled "2019 Transit Service Performance Review (TSPR)" was provided on-table.

3.1 COVID-19 Response and Recovery Update

Kevin Desmond, Chief Executive Officer, TransLink, provided an update on the COVID-19 response and recovery and noted:

- The federal and provincial governments announced operating assistance for transit agencies on July 16 and 23, 2020:
 - The announcements were the result of nation-wide efforts by individual transit agencies and the Canadian Urban Transit Association (CUTA)
- The recently executed Memorandum of Understanding (MOU) with the Province establishes the bi-lateral framework for the provision of financial aid to TransLink:
 - The quantum of the operating assistance will be determined in the next several weeks
 - The financial aid will remove the requirement to reduce services levels in 2021
- TransLink's future financial position remains uncertain and is dependent upon the pace of the return to pre-pandemic ridership levels.

Chair Coté commented on the positive development of the announcement of financial aid from the provincial and federal governments. Chair Coté thanked the members of the Mayors' Council that participated in the advocacy work that led to the announcements and the Province for its leadership in supporting British Columbia and transit agencies in advocating with the federal government for financial aid. TransLink is now in a position to focus on restoring public confidence and trust to rebuild its ridership without the fear of having to reduce transit service levels.

Mr. Desmond expressed gratitude to the leaders of the business community who advocated on the importance of the transit system to the provincial government.

Geoff Cross, Vice-President, Transportation and Planning, TransLink, led the review of the presentation that was provided on-table titled “2019 Transit Service Performance Review (TSPR)” and highlighted:

- 2019 was a record year for transit ridership growth in the Metro Vancouver region:
 - 452.9 million boardings (+3.6% over 2018)
 - Growth across all modes
- Almost all highest-growth bus routes had some investment in 2019
- Leading bus growth corridors:
 - Scott Road corridor has been identified as a future RapidBus corridor
 - Fraser Highway corridor is planned for a future SkyTrain line
 - 41st Avenue corridor has seen the highest growth in the region and the R4 was introduced in January 2020
- The TSPR's data will be instrumental in mapping out TransLink’s ridership recovery in 2020 and beyond.

Discussion ensued on:

- Whether there is any information from other jurisdictions on the correlation between mandatory wearing of masks and transit ridership increases
- Concern regarding the inability to demonstrate the potential rapid transit ridership when the service does not exist
- The need for express routes and rapid transit lines from residential areas to business and educational destinations.

It was MOVED and SECONDED

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

CARRIED

4. REPORT OF THE JOINT FINANCE AND GOVERNANCE COMMITTEE

4.1 Improving Travel Times for Bus Customers – Rapid Response Assessment

The following documents were provided with the agenda material:

- *Report titled “Item 4.1 – Improving Travel Times for Bus Customers: Bus Priority Rapid Response Assessment”, dated July 24, 2020*
- *Presentation titled “Improving Travel Times for Bus Customers, Bus Priority Rapid Response Assessment”, dated July 30, 2020.*

Sarah Ross, Director, System Planning, TransLink, led the review of the presentation provided with the agenda material and highlighted:

- The importance of improving travel times for bus customers
- The 20 corridors where passenger delay is most likely to occur
- Specific opportunities for quick deployment for four distinct types of bus priority:
 - Bus priority lanes:
 - TransLink is not proposing the removal of parking in retail areas
 - Bus bulbs
 - Intersectional tactical changes
 - Bus stop balancing
- Criteria for near-term bus priority

- Assessment of near-term bus priority opportunities:
 - A majority of the opportunities are in the City of Vancouver, as that is where the corridors with the most frequent instances of passenger delay occurs
 - Return on investment of near-term bus opportunities
- Engagement with municipalities and Ministry of Transportation and Infrastructure (MOTI), where appropriate
- Next steps.

In response to a question regarding whether the impact on bus speeds would impact the ability of municipalities to make temporary COVID-19 road reallocations permanent, It was noted that bus speeds are considered over the entire corridor rather than in a specific area.

It was MOVED and SECONDED

That the Mayors’ Council on Regional Transportation:

1. Request TransLink staff to report back to the Mayors’ Council on Regional Transportation and TransLink Board of Directors on the implementation status of rapid response bus priority projects, as well as outcomes such as passenger delay and operating cost savings; and
2. Receive the report for information.

CARRIED

5. REPORT OF THE JOINT REGIONAL TRANSPORTATION PLANNING COMMITTEE

5.1 Provincial Transportation Projects Update

Report titled “Item 5.1 – Regional Input to Provincial Infrastructure Projects and Studies”, dated July 6, 2020, was provided with the agenda material.

Mr. Cross referenced the report provided with the agenda material and commented on TransLink’s engagement with respect to provincial transportation projects across the region and highlighted:

- TransLink has a legislated requirement to be involved provincial transportation projects
- Longer term planning studies for areas extending east of TransLink’s service area will have an impact on TransLink’s services.

Discussion ensued on the need to include capacity for a future rapid transit corridor in the planning for the George Massey Tunnel Replacement.

It was MOVED and SECONDED

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

CARRIED

6. OTHER BUSINESS

6.1 Next Meeting

The next Public Meeting of the Mayors’ Council was scheduled for October 1, 2020 and will be held via videoconference.

7. ADJOURNMENT

There being no further business, the July 30, 2020 Public Meeting of the Mayors' Council on Regional Transportation was adjourned to a Closed Session at 9:51 a.m.

Certified Correct:

Mayor Jonathan X. Coté, Chair

Carol Lee, Recording Secretary
Mosaic Writing Group

TO: Mayors' Council on Regional Transportation
FROM: Gemma Lawrence, Coordinator, Mayors' Council Secretariat
DATE: September 22, 2020
SUBJECT: **ITEM 2 – Public Delegate Presentations** [see updated report below]

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 30 minutes is set aside at each open meeting 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 on table**. 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 policy governing Public Delegates can be [found online](#).

TO: Mayors' Council on Regional Transportation
FROM: Gemma Lawrence, Coordinator, Mayors' Council Secretariat
DATE: September 29, 2020
SUBJECT: **ITEM 2 (updated) – Public Delegates: names, topics and presentations**

RECOMMENDATION:

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

PURPOSE:

To provide a list of approved applications to speak to the Mayors' Council from public delegates received by the deadline of 8:00AM, two business days prior to the meeting, who indicated they intend to speak on matters that are within the authority of the Mayors' Council.

DISCUSSION:

The following applications from interested public delegates were approved.

Public delegates (in order of receipt):

Delegate	Stated presentation topic
1. Nathan Davidowicz	<p><i>I wish to speak before the Mayors' Council regarding:</i></p> <p>1. Return the service levels of Local Buses and SeaBus to pre-COVID Levels. 2. Printing Hard Copies of Timetables. 3. Using some of the Bail-Out Money to provide FREE TRANSIT for under 19yrs. 4. Mayors Council to suspend the Oct. 29,2020 meeting. (Use the savings to print timetables for seniors & others) 5. Millions of \$ wasted every year by CMBC redirect to improve service.</p> <p><i>The specific action I want the Mayors' Council to take is:</i></p> <p>Abide by the MOU with the Provincial Government dated 25.6.2020. i.e clause "C" read in part" TransLink agreed to suspend planned cost-cutting service reductions and associated staff layoff " Furthermore inform the Board of Directors that you appointed to implement items 1 2 3 5 of the above requests ASAP.</p>
2. Joe A. Kunzler	<p>The delegate is unable to attend the meeting to present, but has provided a short written submission about bus lanes, diversity of TransLink staff and the online format of Mayors' Council meetings.</p>

Each delegation will be given a maximum of three minutes to address the Mayors' Council. Generally, there are no questions or discussion between Council and delegates. Any written submissions or presentations provided by delegates have been distributed to the Mayors' Council.

Protocol for Public Delegates

The Council strongly supports the benefits that come from the opportunities to share ideas in a public forum and is committed to providing an environment that promotes the exchange of ideas and information in a respectful way. The Mayors' Council Chair will exercise discretion in maintaining a reasonable level of order and decorum. Participants are reminded that different points of view are respected, and discussions are kept above the level of personal confrontation, disruptive behaviour and profanity.



CEO REPORT

Kevin Desmond, TransLink, CEO
Item 3.1

Safe Operating Action Plan

Keeping the system clean

- Cleaning Pit Crews
- Daily cleaning and disinfecting
- Increasing bus and SeaBus disinfection

Managing physical space

- Limiting fare gate access at busy stations
- Installing two-metre spaced decals

More service

- Restoring service across all modes
- Monitoring passenger loads

Customer education

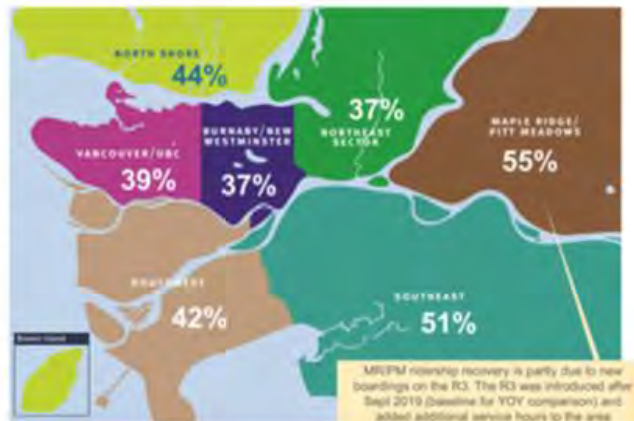
- Supporting healthy choices for our ridership

Ridership

Mode	Ridership Return (% of pre-COVID Ridership)
Bus	43%
Expo-Millennium Line	38%
Canada Line	31%
SeaBus	27%
WCE	17%
HandyDART	35%

2

Bus ridership recovery has varied across the region



3

Learn about the many ways we're working to help keep you safe.
translink.ca/covid19

DAILY CLEANING
One of the many ways we're working to help keep you safe.
translink.ca/covid19

MANDATORY MASKS
One of the many ways we're working to help keep you safe.
translink.ca/covid19

FLOOR DECALING
One of the many ways we're working to help keep you safe.
translink.ca/covid19

SANITIZING STATIONS
One of the many ways we're working to help keep you safe.
translink.ca/covid19

DAILY CLEANING
TRANS LINK

**BE KIND
BE CALM
BE SAFE**
Dr. Bonnie Henry
@compass TRANS LINK

Fall ridership campaign

4

T Together all the way

Coast Mountain Bus Company TRANSIT POLICE EDMONDSON PRESS SkyTrain TRANS LINK

We've enhanced daily cleaning and disinfecting schedules across the system.

Senior government funding

6

T Together all the way

Coast Mountain Bus Company TRANSIT POLICE EDMONDSON PRESS SkyTrain TRANS LINK

TransLink COVID-19 Relief and Recovery

Mayors' Council Meeting
October 1, 2020

SUMMARY: Senior Government Relief Funding

The Challenge

- Lower travel demand has significantly reduced TransLink's revenues
- As an essential service with reduced vehicle capacities, TransLink will deliver 100% pre-COVID service hours through 2021 to support BC Restart Plan
- After TransLink cost reductions, additional net funding required was about \$600-\$700M for 2020 + 2021 period

Relief Funding

- **\$644M** contribution from Province and Federal Governments confirmed to come to TransLink within 2020/21 Government Fiscal Year (to March 31, 2021)
- Buys time to continue collaboration under TransLink-Province MOU to identify new revenue and investment level solutions for additional COVID-related operating losses in 2022 and beyond

Province – TransLink collaboration under MOU

Secure immediate funding relief; commit to developing sustainable funding approaches for near-medium term COVID impacts; continue dialogue on medium to longer term structural challenges.

July to Sept 2020
Immediate funding relief

Oct 2020 to June 2021
Post-COVID investment plan

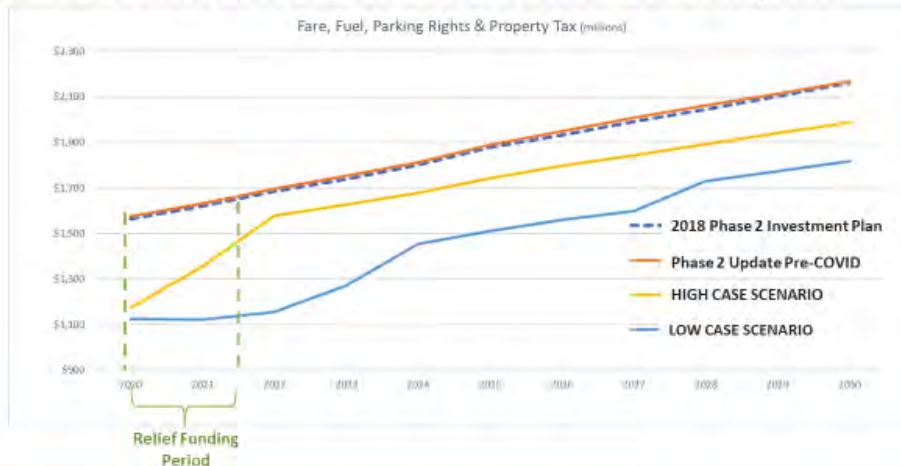
July 2021 onwards
Investment plan updates at least every 3 years



T Together all the way



Relief addresses most acute period of losses: 10-year Outlook will be challenging as ridership recovers COVID-19 revenue losses of ~\$2B - \$4.5B over ten years



T Together all the way



Although planned service expansion was cancelled, 100% pre-COVID service will operate in 2021

5

- Transit acknowledged as essential service; so maintaining service at pre-pandemic levels
- This level is needed to meet upper-range of plausible ridership demand, given reduced vehicle capacity

For 2021 service plan, prepared for maximum likely ridership and continued vehicle capacity limitations.

70%

Pre-COVID
Ridership
Systemwide

Limited Capacity

2/3 Bus, SeaBus, WCE

1/2 SkyTrain

1/3 HandyDART
(2-4 per vehicle)

TransLink Reducing 2020-21 Costs by \$136M to Close Remaining Gap

6



Debt-service savings from deferring some capital projects



Reducing 2020 Major Road Network operations, maintenance, rehab funding

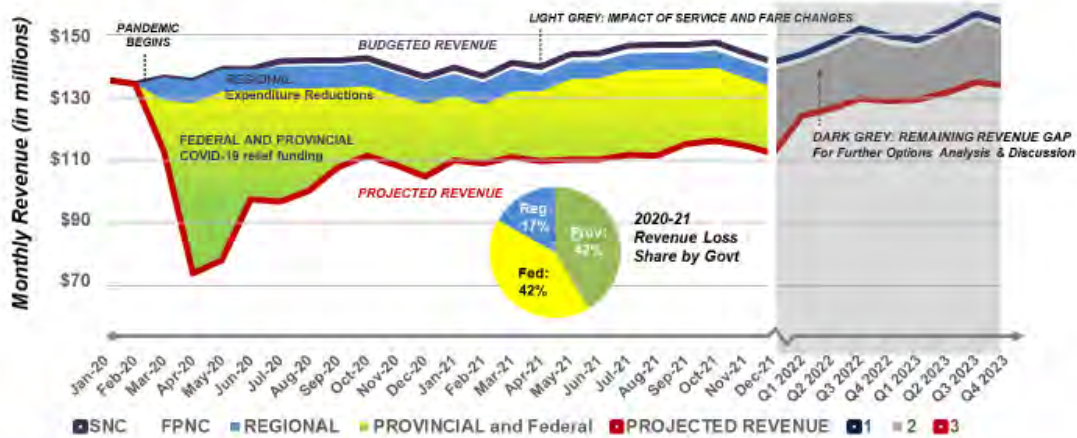


Scaling down non-service operating expenditures



Deferring service expansion planned for 2020 and 2021 for a future rebalanced Investment Plan

Combined Contributions Close the 2020-21 Gap in our Medium Scenario



T Together all the way



Relief Funding Buys Time



- Without relief, liquidity risk was high by 2021-2022
- Senior government relief helps TransLink's immediate 2020 and 2021 budgets to maintain services and moves potential liquidity drawdown measures out by about 2 years
- Also buys time for TransLink and Province to work on near to longer term regional funding options.

T Together all the way



QUESTIONS

TO: Mayors' Council on Regional Transportation

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

DATE: September 15, 2020

SUBJECT: **ITEM 4.1 – Transport 2050: Progress Report on COVID-19 Impacts and Opportunities on Long-term Planning**

RECOMMENDATIONS:

That the Mayors' Council on Regional Transportation:

1. Ask management to continue to explore and advance all the near-term actions identified within this report as part of the TransLink 2021 budgeting process
 2. Receive this report for information.
-

PURPOSE:

To provide an update to a report presented to the Mayors' Council in June 2020 titled "Transport 2050: COVID-19 Impacts and Opportunities" identifying more specific work items for endorsement by the Mayors' Council on Regional Transportation.

BACKGROUND:

In June 2020, the Mayors' Council received a report titled "Transport 2050: COVID-19 Impacts and Opportunities" which described the impact that COVID-19 has had on the region's transportation and land use objectives. This report highlighted the need to proactively seize this temporary window of openness to change to accelerate the positive pandemic impacts that support our region's long-held city-building and sustainable transportation objectives and to mitigate the negative impacts that run counter to our region's goals.

Over the summer, TransLink staff have been identifying possible near-term actions which are achievable within the next one to three years and which support the goals of TransLink's long-range strategic plan (Transport 2050). Municipal staff, through the Regional Agency Advisory, participated in a workshop as part of this process, to provide their input and ideas, many of which are captured in this report.

DISCUSSION:

This report outlines six key observations on the impact of the pandemic on the way we move in this region and identifies possible concrete actions for TransLink to consider in the near term.

These six observations are:

1. Reduced transit ridership
2. Increased walking and cycling
3. Increased driving
4. Increased remote work and remote learning
5. Increased e-commerce
6. Increased unemployment & household financial strain

Rebuilding transit ridership

Transit ridership is down due to physical distancing guidance / proximity anxiety, increase in work-from-home, higher unemployment, and less overall travel & activity. While ridership is slowly returning, some factors may have long-lasting impacts.

A Customer Experience Action Plan 2.0 is currently being developed by TransLink which will identify key actions to rebuild ridership over the next year.

Additionally, since June, TransLink has assessed near-term opportunities for improving travel times for bus customers, as a way to ensure that bus travel times are competitive with cars and to mitigate the impacts of increased driving and congestion that's observed during the pandemic. A report titled "Improving Travel Times for Bus Customers: Bus Priority Rapid Response Assessment" was presented to the Mayors' Council on July 31. The assessment identified dozens of near-term opportunities to reduce delay for bus customers, using bus priority measures such as: bus priority lanes, bus bulbs, tactical street or intersection changes, and bus stop balancing. All identified opportunities are deemed to be technically feasible and appropriate considering the local context. The opportunities include many potential win-wins to benefit bus customers while increasing space for walking, parking, or other potential street uses such as patios that support public health objectives and the vitality of local businesses.

Since the June report, TransLink staff has worked with municipal partners to advance the opportunities identified in the Bus Priority Rapid Response Assessment and several projects are planned to be delivered in 2020.

Further work is currently underway with municipal partners and expected to be complete in 2021, including further bus stop balancing initiatives, pending the results of the pilot, and delivering the remaining near-term bus priority opportunities.

Supporting Walking and Cycling

As more people work from home, discretionary trips are easier to make locally on foot or bicycle and is encouraged as a safe, physically distanced activity. This has led to record bike sales across Canada, mostly fueled by novice cyclists. This creates an opportunity to create new habits of using active modes for transportation in a new segment of the population. Near-term initiatives to support this could include:

- **Build out infrastructure for active modes:** Infrastructure is key to uptake of active modes, and at this critical period, there is likely to be greater support for building out cycling and walking networks. Some near-term actions could include:
 - Supporting municipalities (through funding, increased cost-share, and planning/design support) to rapidly deploy slow streets through tactical urbanism.
 - Creation of 3-5 cycling showcases in the region. This action would involve rapid deployment of separated bikeway networks and bike parking within three to five Urban Centres in the region.
 - Identifying 3-5 Major Bikeway Network corridors that are "low hanging fruit" for completing, and fund rapid deployment to complete segment with either permanent or temporary (tactical) infrastructure.
 - Increasing BICCS/WITT funding (or cost share percentage) and promote awareness of funded projects.

- Funding for pedestrian safety improvements addressing worst intersections for pedestrian collisions within Urban Centres.
- Advocating to the Province for new funding to build more cycling infrastructure, such as AAA routes, secured bike parking, e-bike charging, and tactical (low-cost) interventions. In particular, funding to support infrastructure for students and youth walking and cycling to school and other destinations is critical post-pandemic.
- Coordinate with municipalities on deploying more slow speed zones in urban centres across the region.
- **E-bike training, sharing and incentives:** E-bikes offer a commuting solution which is physically distanced. Actions to grow e-bike use could include:
 - Provide e-bike training and education. As a new technology, many residents will have not experienced e-bikes. Although delivering in-person training may not be possible, other forms of marketing or awareness building campaigns could be introduced. This action should be co-delivered with municipalities and non-profit organizations.
 - Advocate for BC Clean Energy Vehicle (CEV) rebate program to be expanded to include e-bikes. This program currently provides point of sale rebates for electric vehicles. Consider advocating to the Province for a program that supports low income residents to access e-bikes.
 - Facilitate e-bike/e-scooter sharing across the region through active coordination of municipal initiatives to introduce e-bike and e-scooter sharing systems. Coordination could include elements such as data standards, boundary conditions, operating rules, and pricing/cost.
- **Invest in data collection** to track use of active modes.

Tackling Increased Driving

Driving has and will likely continue to experience an uptick as people return to work but are concerned about health and safety. Some former transit riders are bringing insured vehicles out of storage or buying vehicles for commuting; and this has raised significant concerns of new habits which will be hard to break, particularly once a capital investment has been made. The outcome could be increased congestion and emissions in the recovery period, as more workers return to work. Actions to address this trend may be grouped into several categories:

- **Increase access to a vehicle without needing to own one:** Vehicle ownership is strongly correlated with high vehicle kilometers travelled; whereas shared vehicle ownership or access (such as through car share, taxis or ride-hailing) naturally limits use due to the pay per use model. Metro Vancouver already has a long-standing car share industry, a growing ride-hailing market, plus a longstanding taxi sector. However, this solution might not be currently accessible to everyone in the region. Some potential actions to support these sectors as an alternative to owning a vehicle include:
 - Partner with industry to co-promote solutions and increase access to membership (e.g., for non-English speakers, newer drivers, etc.).
 - Work with municipalities to allocate more free or low-cost on-street parking for car share vehicles, particularly in neighborhoods that are underserved.
 - Advance digital solutions that allow for easy transition between modes (such as expanding TransLink's mobility-as-a-service pilot).
 - Increase availability of vanpool and carpools. Build upon the work already initiated by TransLink through its vanpool program and through a carpool campaign to reach more riders as an alternative to driving a personal vehicle.

- **Support vehicle electrification:** Once a vehicle is purchased, it has an active lifetime of close to fifteen years. To support climate goals, it is important to encourage new vehicles entering the fleet to be as low emissions as possible. Some near-term actions to support this include:
 - Advocate for provincial zero emissions vehicle (ZEV) mandate to be accelerated and expanded to include more vehicle classes (namely, medium and heavy-duty vehicles). Currently, the ZEV mandate requires ZEVs for 10% of light-duty vehicle sales by 2025, 30% by 2030, and 100% by 2040. In Q3 of 2019, ZEV sales already reached 10% in BC, indicating that accelerating the timelines for 2025 and 2030 may be achievable.
 - Advocate for Provincial right-to-charge legislation which guarantees fair access to electric vehicle charging for condo-dwellers, who make up about half of Metro Vancouver residents.
 - Explore electric vehicle charging at TransLink Park and Rides.
- **Create financial disincentives to drive in peak conditions:** Low gas prices and changes to insurance premiums, may make driving potentially more attractive. A number of North American cities are exploring new pricing mechanisms to discourage driving in peak high traffic conditions. A near-term action may be to:
 - **Partner with a municipality to undertake a voluntary pilot to understand impacts and effectiveness of mobility pricing, or a Low Emissions Zone.** As mobility pricing is a relatively new concept, a pilot or demonstration project can play an important role in providing a proof-of-concept and identifying implementation and design issues which would need to be addressed before a broader policy could be advanced.
- **Work with municipalities to develop a regional approach to on-street parking allocation and pricing.**

Supporting Remote Work and Remote Learning Post-Pandemic

Physical distancing guidance has rapidly accelerated digital and remote work technologies, cultural acceptance, and policies resulting in less commuting. Although telecommuting is proving to be effective today, there is work to do today to ensure that it continues post-pandemic. Some near-term initiatives could include:

- **Address policy barriers to supporting remote work:** Identify policy barriers to remote work and advocate to the appropriate governing bodies to address those. For example, there may be barriers within WorkSafe policies, Canadian and Provincial Tax Codes, etc.
- **Create incentives to encourage remote work:** Advocate for tax credits, grants or other forms of incentives can support employers by offsetting costs associated with underutilized office space and increased expenses to support employees working from home.
- **Work with employers to encourage remote work:** Undertake an info campaign on employer cost savings of employees working remotely, and societal savings of people working remotely.
- **Gather spatial data on remote work patterns** to support transit service allocation and manage negative impacts (e.g., empty office buildings).
- **Work with cities to expand free public Wi-Fi network** across the region.

Ensuring e-commerce is delivered smartly and with less impact

Physical distancing guidance has rapidly accelerated e-commerce – which has the potential to reduce overall trips if effective regulations (e.g. road usage charging) are in place. Absent effective regulation, e-commerce may increase overall trips and contribute to continued decline of brick-and-mortar retail. A number of initiatives could take place today to better understand the impact of e-commerce and mitigate some of the negative effects.

- **Work with municipalities to regulate the urban freight delivery sector through street and traffic bylaws**, in lockstep with regulations on ride-hailing, to support goals such as congestion mitigation, incentivizing low emissions and right-sized deliveries, and better curb management.
- **Increase access to urban freight deliveries by biking, walking or transit**, through efforts such as increasing the number of Pigeon Boxes at TransLink stations.
- **Pilot, with municipalities or at TransLink stations, digitally managed curbs** across the region. A pilot can inform needs of both the physical and digital realm.
- **Pilot an e-freight hub with industry and municipality** where vehicles can transfer to low emissions, right-sized or active mode delivery vehicles for last mile distribution.

Mitigating the effects of unemployment

Physical distancing requirements over the past few months have led to a significant slowdown in consumer spending (particularly in service-oriented sectors), which is anticipated to have long lasting economic impacts in this region. As of July 2020, unemployment in BC was at 11%; significantly higher than the same time last year (4.4%). Depending on the duration of the pandemic, BC could experience another recession / depression over the next few years. A key impact of high unemployment will be greater difficulty accessing transportation for many of the region's residents. Near-term initiatives which can address the challenges created by high levels of unemployment include:

- **Ensuring that transit remains affordable.** TransLink has already deferred a fare increase planned for July 2020 and the Mayors' Council will consider further deferment on October 1. Beyond deferring fare increase, ensuring that transit has a more sustainable funding source that does not depend as heavily on fare revenues is critical, particularly if there remains a need to keep transit vehicle occupancy levels low due to COVID-19.
- **Advocate to the province for free or discounted transit passes for low income individuals.** These could potentially be distributed through partners, such as non-profits or BC Housing. Consider linking free or discounted transit passes to other programs, such as Canada Emergency Response Benefit (CERB) or provincial or federal employment program. A more comprehensive system that involves Universal Basic Mobility coverage could be explored with the Province.
- **Prioritize quick-build transit infrastructure projects** to support economy recovery in the region.

CONCLUSION:

In June 2020, the Board received a report titled "Transport 2050: COVID-19 Impacts and Opportunities" which described the impact that COVID-19 has had on the region's transportation and land use objectives. Since that report, TransLink staff have developed a proposed list of concrete actions for TransLink to consider in the near-term. All the near-term actions identified within this report are consistent with TransLink and regional policy objectives. Management seek endorsement from the Mayors' Council to continue to advance all these near-term actions as part of the TransLink 2021 budgeting process, or, alternatively, focus on a subset of these actions based on Mayors' Council input. Management recommend that all the near-term actions identified within this report should be explored and advanced further.

TO: Mayors' Council on Regional Transportation
FROM: Geoff Cross, Vice President, Transportation Planning and Policy
DATE: September 16, 2020
SUBJECT: **ITEM 4.2 – 2020 Regional Road Performance Monitoring Report**

RECOMMENDATION

That the Mayors' Council receive this report for information.

PURPOSE

The purpose of this report is to update the Mayors' Council on the first Regional Road Performance Monitoring (RRPM) report. The 2020 RRPM report was endorsed by the Regional Transportation Advisory Committee at their July 2020 meeting and will be publicly released in coordination with the October 1st, 2020 Mayors' Council meeting.

BACKGROUND

As part of TransLink's multimodal transportation mandate, we monitor and report on the performance of different modes.

This includes monitoring and reporting on the performance of transit through the *Transit Service Performance Review*. In 2019, we completed our first effort at reporting on bus speed and reliability through the *2019 Bus Speed and Reliability Report* and cycling through the *Benchmarking the State of Cycling in Metro Vancouver*. In addition, TransLink started monitoring the performance of regional roads and are now reporting out on that performance through the *Regional Road Performance Monitoring (RRPM)* report, fulfilling a commitment from the *Regional Goods Movement Strategy*, by developing a performance-monitoring regime to support effective decision-making.

Regional roads are important for moving people and goods, connecting regional destinations and gateways, essential to the livability and economic success of the region.

Although regional roads enable the economy and contribute to the health and quality of life of everyone in Metro Vancouver, there is no single authority for all the region's roadways. Instead, different roadways fall under different jurisdictions. Because of this, the region's roadways have historically been planned and managed as a series of discrete but connected networks.

Strong inter-jurisdictional partnerships are critical to delivering a regional road network that works for the whole region.

Through substantial partner engagement, TransLink established a defined Regional Road Network (RRN). The RRN is made up of a complex set of overlapping jurisdictions and road authorities. As illustrated in **Figure 1**, the RRN includes Federal Roads, Provincial Highways, the Major Road Network, and other regionally significant arterial roads owned by the Province and local governments.

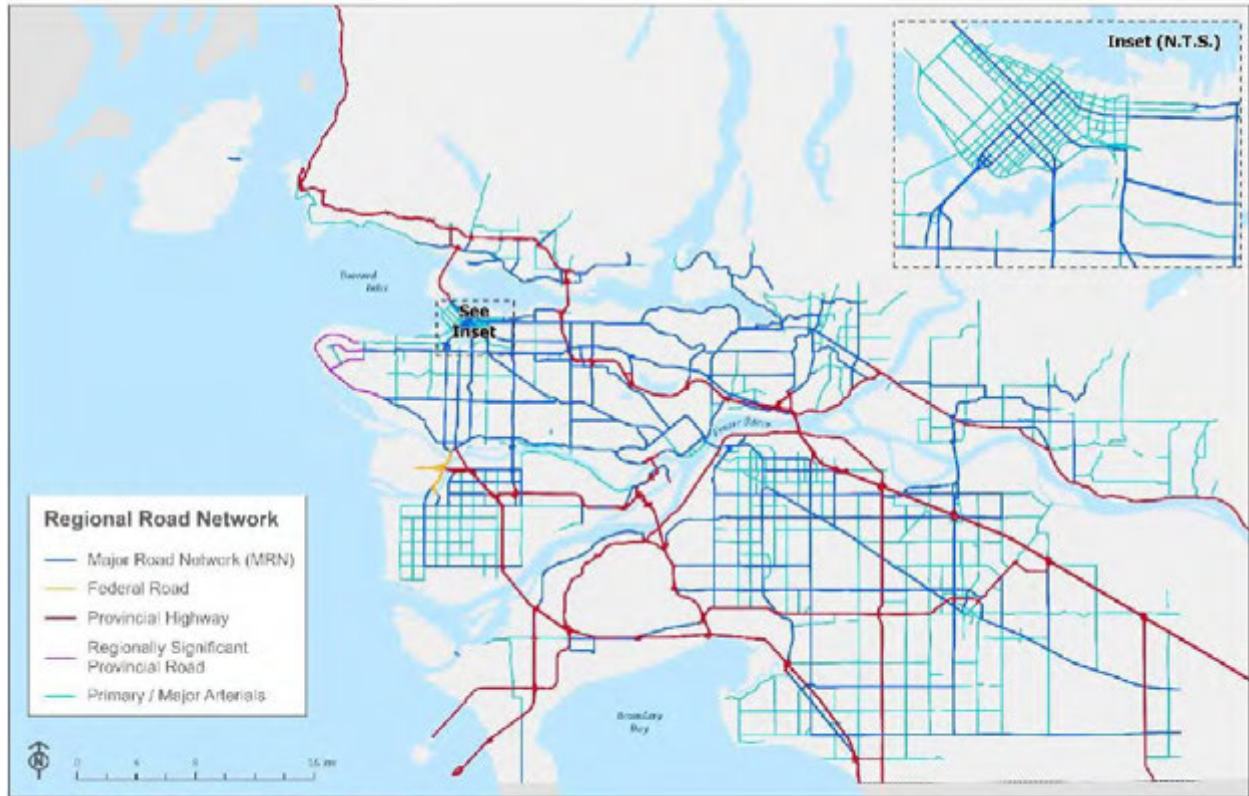


Figure 1: Regional Road Network

Monitoring the RRN is part of a broader approach to identifying, prioritizing, and addressing needs.

Performance monitoring builds an understanding of the location and scale of challenges. When performance monitoring is done consistently over time, it shows how changes – like population growth, new policies, new technology, and road improvements – can improve or worsen conditions. The RRPM report will enable the identification of issues and challenges on the RRN. Once issues and challenges are understood, then agencies can work towards developing, evaluating, and implementing solutions.

DISCUSSION

Through extensive engagement with partner agencies, TransLink has developed a RRPM report to inform transportation management and investment decisions in Metro Vancouver.

Data in three key areas has been collected, analyzed, and endorsed by staff at road authorities across the region and include:

- safety (collision frequency and severity),
- mobility (delay, reliability, and travel time), and
- asset condition (roughness and pavement condition).

Data is presented on a regional, sub-regional, and corridor level. There are many other indicators that are important, but are currently more difficult to measure consistently across the region. Future iterations of the annual report will include other measures, such as livability, as reliable indicators are developed.

An online dashboard informs the material found within the RRPM report, both of which will be accessible through the TransLink website as of October 1, 2020. The RRPM dashboard provides an online interactive

tool that allows viewers to explore how the regional roads are performing at different levels of detail. The dashboard will be of interest to all people who use the RRN, including commuters, people moving goods, and industry.

Based on the outcomes of the RRPM dashboard, the RRPM report provides a platform to present, document, and visualize a unified and consistent set of data that describes how the regional road network operates, how it is maintained, and how it impacts the movement of people throughout the region. It can be used to help track progress towards regional goals, objectives and targets established through Transport 2050 (the update to TransLink's Regional Transportation Strategy) and will allow for consistent and objective conversations on identifying and responding to issues on the RRN.

The RRPM report includes the following:

- Describes how the Regional Road Network (RRN) functions, including the role of road authorities across multiple jurisdictions
- Outlines the importance of the RRN for efficiency and livability of the region
- Reviews existing demographic and transportation conditions in the region that impact the RRN
- Offers observations about the performance of the RRN, including common patterns on regional roadways and corridor observations. A detailed look at ten unique regional roads within Metro Vancouver represent a cross-section of corridors with different geography, classification, characteristics and role, land use, jurisdiction and performance
- Provides next steps for the RRPM Program, including response strategies to issues and challenges facing the RRN and continuous improvement opportunities for the Program

Substantial stakeholder engagement has resulted in support for the 2020 RRPM report.

Since late 2017, TransLink has engaged the following stakeholders on development of the RRPM report:

- The Regional Transportation Advisory Committee (RTAC)
- RTAC subcommittees (Operations, Maintenance and Rehabilitation subcommittee; Transportation Planning Subcommittee; and, Analytics Working Group)
- Greater Vancouver Urban Freight Council

This is the first annual RRPM report.

In previous years, data has been shared privately and individually with road authorities; however, it will now be made public on a regional level and available to the public, decision-makers, and provincial, regional, and municipal staff. This will help facilitate informed, performance-based decision making and allow for consistent and objective conversations between authorities on how and when to address challenges on the RRN.

As this is the first time that this type of data has been collected and presented at a regional level, there is limited opportunity to compare to previous years to understand the direction or scale of change. The information in the 2020 RRPM report is a snapshot in time and these indicators are expected to change as transportation patterns and networks in the region evolve. The information summarized in this report will be a baseline that can be used for comparison in future years.

NEXT STEPS

This year's report will create a baseline that will allow each of the performance metrics to be monitored over time in order to identify where conditions of concern are changing the most. The baseline will also

serve as an existing conditions assessment, identifying current performance challenges across the regional road network from a safety, mobility, asset condition and livability lens.

TransLink plans on publishing the RRPM report annually or every two years. Future editions will include additional indicators, as agreed to by regional partners.

ATTACHMENTS:

- 2020 Regional Road Performance Monitoring Report, dated July 2020, will be posted on the Translink website on October 1, 2020

TO: Mayors' Council on Regional Transportation
FROM: Simon Tang, Vice President, Major Projects
DATE: September 14, 2020
SUBJECT: **ITEM 5.1 - Broadway Subway Project (BSP) Status Update**

RECOMMENDATION:

That the Mayors' Council receive this report for information.

PURPOSE

The purpose of this report is to provide an update of the current progress and upcoming milestones relating to the Broadway Subway Project (BSP), including reporting back on the status of the City of Vancouver Contribution Agreement to this project.

BACKGROUND

The BSP will be an approximately six-kilometre extension to the Millennium Line SkyTrain from VCC-Clark Station to Arbutus Street via a primarily underground alignment beneath the Broadway corridor. The Project will include six new stations. A future phase of investment is required to further extend rapid transit to the University of British Columbia.

Full capital funding confirmation for the BSP was announced on September 4, 2018 by the Federal and Provincial governments. The Province was announced as the delivery agency for the \$2.83 billion project and will own the assets upon completion. TransLink will operate and maintain the extension similar to the rest of the SkyTrain system. The Province as the delivery agency assumes all responsibility for delivery risks, including cost and schedule overrun. A Memorandum of Understanding and Transfer Agreement was signed and was effective October 31, 2018 to formally transfer the Project to the Province and outline TransLink's future role.

DISCUSSION

Ongoing Works

BSP Support Agreement (SA)

TransLink's scope on BSP SA includes:

1) Ensure a successful and seamless system integration with the region's SkyTrain service, 2) ensure a safe and reliable service launch, 3) operations and maintenance of the SkyTrain system, 4) provisions of bus services during construction, 5) customer access and notification including smart card and fare installation, as well as system wayfinding and, 6) coordination with InTransit BC for the Canada Line integration at Broadway-City Hall station.

The parties (Province and TransLink) have entered into a SA on June 5, 2020 and includes provisions documenting the roles and responsibilities of the Province and TransLink and relevant funding details.

BSP Integrated Broadway-City Hall Station with Canada Line

The Canada Line Concession Agreement Amendment (CAA) No 14 has been executed. This was done with InTransit BC to confirm the acceptability of the BSP technical requirements for the integrated Broadway-City Hall station. The corresponding commercial terms are addressed in CAA No 16, which was executed in August 2020. The Integration Agreement for the Canada Line Broadway-City Hall Station between the Province and TransLink was also signed in August. As a result, the three major agreements with InTransit BC are now completed.

Latest Progress and Upcoming Milestones

BSP Preferred Proponent

The Province issued the RFP for the BSP Engineering, Procurement, Construction/Management (Project Co) in June 2019. The technical and financial portions of the RFP have been closed and the preferred proponent was announced on July 17, 2020. Formal execution of the Project Agreement was signed in August 2020 with public announcement on September 3, 2020.

TransLink Concurrent Works

1. **BC Hydro Early Works**
2. **Trolley Overhead (TOH) Infrastructure Relocation**
3. **System Level Safety and Management Plans**
4. **Fibre Optic Cable**
5. **AEER Phase 3 – Construction of the New Computer Room at Operations Maintenance Center 1 (OMC 1) and Vehicle Control Computer (VCC) Upgrades** is now forecasting to be completed in September 2020.
6. **New Operation Control Centre (OCC 2)**

Integrated Station Developments

The integrated station developments are subject to negotiations between the Province, the developer, and the City of Vancouver. TransLink has been provided with the available preliminary designs for comments on the maintenance and operation boundaries. Progress on the three developments are as follows:

1. South Granville

Construction has begun on site by the developer, PCI Development, with the demolition of the Royal Bank building. Both the 60 per cent design and final design packages were issued by the Province to TransLink in May 2020 for review and are pending final approval before work will begin on the headhouse shell of the future South Granville station.

2. Great Northern Way

Progress on the Great Northern Way station design and development, by PCI Development, has been delayed due to COVID-19. The delay has no impact to the BSP. The next design submittal from the Province to TransLink is expected to be in Q4 2021.

3. **Broadway City Hall**

Progress on the Broadway City Hall station design and development is pending on the conclusion of the BSP selected proponent. Design development is expected to commence in Q3 2020. It will take 12 to 18 months for the design submittal to be available for TransLink's review.

Current Issues and Mitigations

Arbutus Transit Exchange

The St Augustine School raised concerns about the planned Arbutus Transit Exchange (a key component of the BSP) regarding its proximity to the school premise. The Province's project team continues to lead all the stakeholder and public engagement, with TransLink and the City of Vancouver supporting, as appropriate. TransLink is actively working to address the group's considerations and proposed mitigations.

SkyTrain Advanced Radio Systems (STARS)

The STARS project was initiated to replace the existing SkyTrain radio system which is reaching its end-of-life. Some of the existing network parts were also found to be obsolete. The existing network will continue to be used until the STARS technology is in place which will likely be after completion of BSP. As such, TransLink has sourced, procured, and received reconditioned parts for BSP.

New Operation Control Centre (OCC 2)

The Province is concerned that if the OCC 2 were delayed, the BSP testing, commissioning and operation could be impacted. Currently, it is assumed that BSP would need 18 months for testing and commissioning prior to the opening. A mitigation plan is now in place to implement a temporary OCC at the Operations Maintenance Center 2 (OMC 2) for BSP testing and commissioning. The OCC 2 is being closely monitored and a weekly meeting between TransLink and the Province is set up to track and report progress.

SkyTrain Customer and Operations Telecommunications (SCOT)

SCOT consists of equipment and software to manage and transmit voice and data communication between the Operations and Maintenance Centres, trains and stations. In the event that the voice and data communication component of SCOT is not ready for BSP testing and commissioning, the current fallback plan is to continue using the existing Train Radio Information Management System (TRIMS) extension from the existing OCC to OCC 2 for BSP testing and commissioning.

City of Vancouver Contribution Agreement to BSP

The BSP was formally approved in the June 2018 Phase Two Investment Plan, which included an executed project Partnership Agreement between the City of Vancouver and TransLink. That Partnership agreement contains two components: a Supportive Policy Agreement on land use and planning efforts; and, a Contribution Agreement on the commitments by the City of Vancouver towards the project. At the July Mayors' Council meeting a request was made to get an update on what is contained in the contribution agreement. A separate report is included on the October 1, 2020 Mayors' Council agenda, on the progress made on the Supportive Policies Agreement.

The City of Vancouver contribution includes \$99.8 M in contributions of in-kind property and rights-of-way required for the Broadway Subway Project (and are included in the \$2.83 billion budget. Additionally, commercial opportunities worth an additional \$2.5M per year are included which is the equivalent of \$50 million in capital debt financing for TransLink, bringing the estimate of their total contribution to \$149.8M.

Finally, the City of Vancouver proposed that TransLink and the City commit to exploring additional revenue opportunities in the corridor such as joint development for properties.

The incremental commercial opportunities include:

- TransLink customer-related commercial activities associated with transit operations and City of Vancouver assets
- TransLink non-customer-related commercial activities associated with City of Vancouver assets such as fibre optics and filming rights.

The transfer of the CoV property rights to BSP is proceeding as envisioned. The commercial rights activities include a long-term ramp up in revenue projections, with minimum thresholds set out annually for 2019 through 2024, growing by inflation for 2025 and beyond. The provision of rights by the City of Vancouver to TransLink has been advancing as envisioned. The revenue estimates are subject to the market demand and TransLink advancements. 2019 was the first year with targets specified. TransLink will report back on later in the year on 2019 performance.

COMMUNICATIONS

TransLink is working closely with the Province's project team and the City of Vancouver to support a number of communications initiatives, including media announcements and early works activities in the lead-up to construction. Focus remains on notifying nearby residents, businesses and transit customers of updates through media coverage, notifications, websites, and social media.

TO: Mayors' Council on Regional Transportation
FROM: Geoff Cross, Vice President, Transportation Planning and Policy
DATE: September 1, 2020
SUBJECT: **ITEM 5.2 - Broadway Subway Supportive Policies Agreement – 2019 Annual Report**

RECOMMENDATION:

That the Mayors' Council receive this report for information.

PURPOSE:

The purpose of this report is to provide the Mayors' Council with the 2019 Broadway Subway SPA Annual Report.

BACKGROUND:

Monitoring of SPAs is an important tool for the region to hold partners accountable for ensuring the success of major regional investments. SPA monitoring is focused on both (1) the SPA commitments, for which a tracking framework has been developed and (2) the related outcomes, for which performance measures and indicators have been developed.

In January, the Mayors' Council received an update on Broadway Subway SPA implementation and monitoring, which discussed the planned approach to reporting on the SPA. In light of timing for data presented in this report, and feedback from SPA partners on the need to streamline process, the previously planned approach was adapted. Reporting to decision-makers on the SPA commitments and outcomes will occur in the fall of each year, beginning this year, via either an Annual Report or 5-Year Performance Report. The key differences between the two reports are the level of analysis, with deeper analysis in the 5-Year Performance Reports, and with the 5-Year Performance Reports generally timed to align with Census data releases, to utilize that updated data for population and employment.

The Broadway Subway SPA Monitoring Committee has approved the 2019 Broadway Subway SPA Annual Report, included here as Attachment 1. This Committee is comprised of one or more senior representatives from TransLink, the City of Vancouver, the Province of British Columbia, and Metro Vancouver, and is chaired by TransLink's Vice President of Transportation Planning and Policy.

DISCUSSION

The Broadway Subway SPA is the first SPA to be implemented in Metro Vancouver and thus encompasses work that is novel to the region. While the COVID-19 pandemic has impacted processes for some SPA related projects, commitments remain largely on track with timing as outlined in the SPA.

Collaboration between the SPA partners has been a key focus of SPA implementation, with successful applications of new levels of, and formats for, multi-agency collaboration. The 2019 data presented in this Annual Report provides an important foundation for long-term monitoring of the SPA corridor, recognizing that the COVID-19 pandemic will have significant impacts on the data in the years to come; however, having this long-term view is critical to the objectives for this work.

Working collaboratively to advance the SPA

SPA partners have been meeting regularly to work together to implement, review and monitor compliance with the commitments set out in the SPA. New formats for working together have also allowed for effective inter-agency collaboration, with a key focus to date being on the development of the Broadway Plan. In November 2019, the City of Vancouver hosted the first of three planned housing workshops which will inform the affordable housing strategy component of the Broadway Plan. SPA partners are also working together on the Plan's transportation-related initiatives involving street design and network planning along the corridor. The first of three planned workshops was held in July 2020, with the next session planned for the fall.

SPA commitments on track for SkyTrain-supportive land use and transportation planning

The key land use and transportation commitments in the SPA include: the development of the Broadway Plan, including specific transit-supportive policies related to population and employment growth, affordable housing, and active transportation; bus priority and bus integration planning; and the development of an Area Transportation Plan covering medium to long-term active modes, transit, road network objectives and travel demand management.

The timing for these core SPA commitments is on track, with minor refinements for a small number of initiatives. These refinements include:

- City Core 2050 Plan - replaced by Vancouver Plan, to be completed by the end of 2022 rather than end of 2021;
- Vancouver Employment Lands Study - now referred to as Vancouver Employment Lands and Economy Review (ELER), to be completed by the end of 2020 rather than end of 2019. The results of the ELER will feed into the Vancouver Plan;
- Bus Priority and Integration Plan – Bus Network Integration Plan to be completed as close to Subway opening day as possible to allow effective integration, rather than end of 2019.

The Monitoring Committee has reviewed and discussed the above refinements and supported the update of this information, which is reflected in the 2019 Annual Report's 'Initiatives Tracker.'

Baseline established for consistent monitoring of SPA related outcomes

To consistently track SPA related land use and transportation outcomes over time, the following have been defined as part of SPA implementation:

- A range of *performance measures and indicators*, to which forecasts for population and employment as well as housing targets will be added in the future once they have been developed as part of the Broadway Plan;
- An approximate 800 meter *SPA Geography*, to be used for data collection on the defined performance measures indicators.

This first Annual Report establishes the baseline to which future Broadway Subway SPA reports can be compared. The Report presents 2019 City and TransLink data, as well as data from the most recent Census (2016). 2019 was chosen as the base case year given the mid-2018 approval of the Subway Project in a funded investment plan.

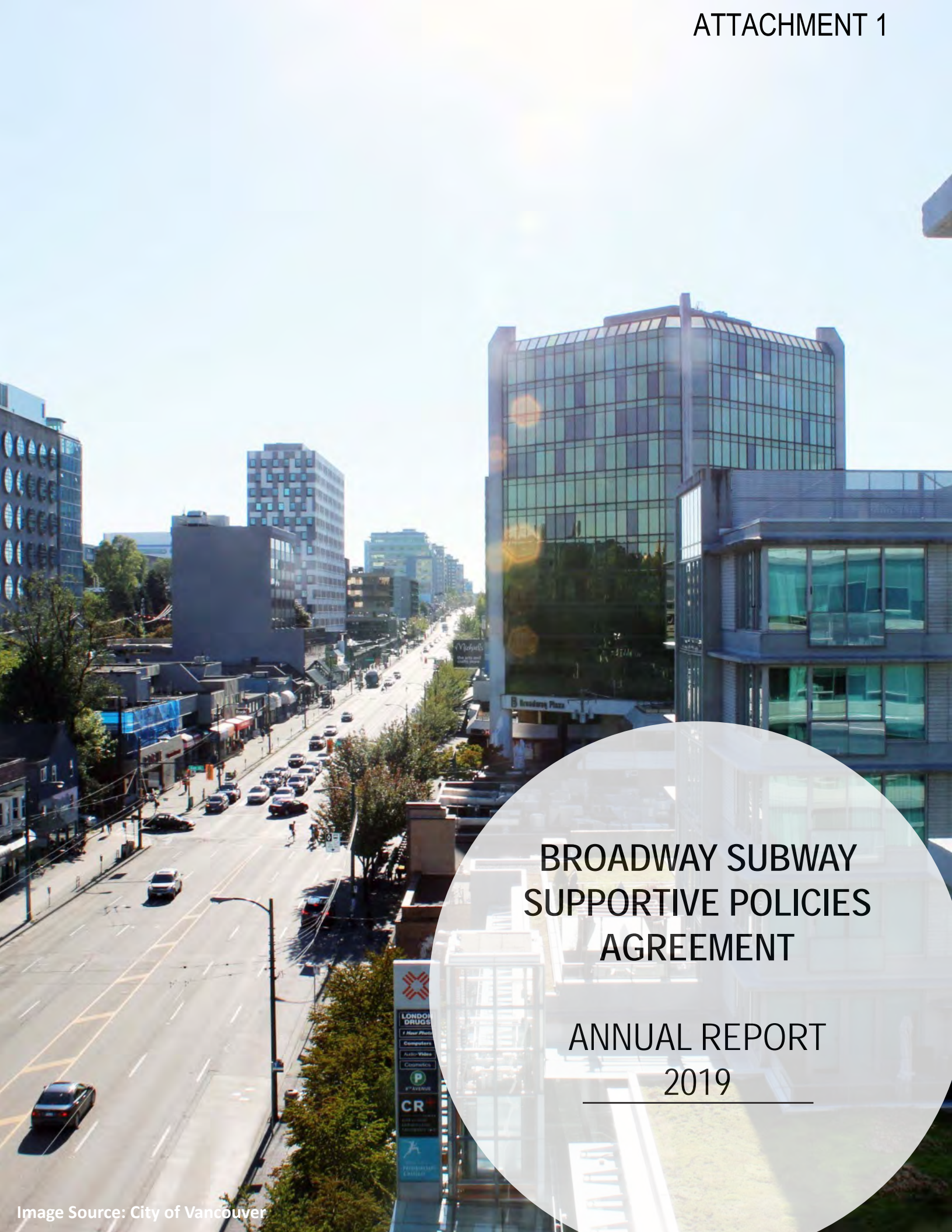
Due to the COVID-19 pandemic, comparability issues for certain indicators will need to be addressed in future reporting years. As we collectively face a new set of circumstances in 2020 and the years to come, the data contained in this Annual Report will be instrumental as we track future trends and pandemic recovery within the Broadway SPA corridor, while continuing to work together towards shared goals.

Next Steps

SPA partners will continue to work together to advance the SPA commitments, some of which have initiatives planned for completion or initiation in 2021. Senior partner agency staff on the Monitoring Committee will continue to meet to review progress on the commitments. The next SPA Annual Report will be presented to the Mayors' Council and TransLink Board in fall 2021, with the first 5-Year Performance Report (with updated Census data) to be presented in fall 2024.

ATTACHMENTS

2019 Broadway Subway SPA Annual Report



**BROADWAY SUBWAY
SUPPORTIVE POLICIES
AGREEMENT**

**ANNUAL REPORT
2019**

EXECUTIVE SUMMARY	4
BACKGROUND	5
<i>The Call for Major Project Agreements</i>	<i>5</i>
<i>Collaborating to Implement and Report on the Broadway Subway SPA</i>	<i>6</i>
REPORT PURPOSE & STRUCTURE	7
MONITORING SPA COMMITMENTS	8
<i>Broadway Subway SPA Initiatives Tracker</i>	<i>9</i>
MONITORING SPA RELATED OUTCOMES	13
<i>Performance Measures Framework</i>	<i>13</i>
<i>Broadway Subway SPA Geography</i>	<i>15</i>
<i>Data Collection and Analysis</i>	<i>15</i>
<i>Performance Measures 1 & 2: Population & Employment</i>	<i>16</i>
<i>Performance Measure 3: Housing Supply</i>	<i>18</i>
<i>Performance Measure 4: Sustainable Transportation</i>	<i>21</i>
CONCLUSION AND NEXT STEPS	28
<i>Progress Overview</i>	<i>28</i>
<i>Future Reporting</i>	<i>28</i>

LIST OF ABBREVIATIONS

APC – Automatic Passenger Count
ATP – Area Transportation Plan
PLF – Peak Load Factor
SPA – Supportive Policies Agreement
UBC – University of British Columbia
VGH – Vancouver General Hospital

LIST OF FIGURES

Figure 1: Broadway Subway Project	5
Figure 2: Broadway Subway SPA Timeline	8
Figure 3: Broadway Subway SPA Geography	15
Figure 4: Job Space Approved by Station Area	17
Figure 5: New Housing Approvals January 1, 2019 to December 31, 2019 by Housing Type	20
Figure 6: Weekday Pedestrian Counts by Station Area	24
Figure 7: Cycling Counts	26
Figure 8: Transportation Mode Split (Journey to Work)	27

LIST OF TABLES

Table 1: SPA Reporting Deliverables	6
Table 2: Population and Employment in the Broadway Subway SPA Geography	16
Table 3: New Housing Approvals in Broadway Subway SPA Geography	19
Table 4: Average Daily Station Activity	21

LIST OF APPENDICES

APPENDIX A - BROADWAY SUBWAY SPA IMPLEMENTATION AND MONITORING TIMELINE	30
APPENDIX B - DATA SUMMARY TABLE	31
APPENDIX C - JOBS BY INDUSTRY	32
APPENDIX D - DEFINITIONS OF HOUSING TYPES FOR BROADWAY SUBWAY SPA MONITORING	33
APPENDIX E - 2019 NEW AFFORDABLE HOUSING UNITS BY HOUSEHOLD INCOMES SERVED	34
APPENDIX F - BEHIND GATE TRANSFER BOARDINGS AT COMMERCIAL-BROADWAY STATION	35
APPENDIX G - AVERAGE DAILY BUS BOARDINGS AND ALIGHTINGS	36
APPENDIX H - DEFINITIONS OF PASSENGER COMFORT	38
APPENDIX I - PEAK LOAD FACTORS BY MODE	39
APPENDIX J - PEDESTRIAN COUNT LOCATIONS	41
APPENDIX K - PEDESTRIAN COUNTS BY STATION AREA	42
APPENDIX L - BIKE COUNTER LOCATIONS	43
APPENDIX M - RATES OF CAR OWNERSHIP BY STATION AREA	44

EXECUTIVE SUMMARY

In 2014, the 10-Year Vision for Metro Vancouver Transit and Transportation called for the first time in the region's history for major projects to have a Partnership Agreement between TransLink and the project's host municipality. One key component of this agreement was aimed at actions beyond the direct scope of a project yet key to its success - in particular, actions related to land use planning.

In 2018, the City of Vancouver and TransLink executed the Broadway Subway Supportive Policies Agreement (SPA), which committed the City and TransLink to a range of specified actions related to land use, housing, transit, transportation demand management, cycling and walking. A key intent of the SPA was also to ensure collaboration between the City, TransLink, and other relevant agencies, to help achieve the best possible land use/transportation outcomes related to the project.

The purpose of this report is to track progress on the commitments made by the City of Vancouver and by TransLink in the Broadway Subway SPA, as well as to confirm the performance measures that have been developed to gauge the SPA related land use and transportation outcomes.

The report has been developed through the Broadway Subway SPA Monitoring Committee, a group of senior staff officials from the SPA partner agencies, i.e. the City of Vancouver, TransLink, Metro Vancouver, and the Province, per the Monitoring Committee commitments stated in the SPA.

Reporting to decision-makers on the SPA commitments and outcomes will take place in the fall of each year with either an Annual Report (as is the case for the current year) or every five years with a 5-Year Performance Report. The 5-Year Performance Reports will provide more comprehensive analysis of the SPA performance

measures outcomes and, where appropriate, recommendations to decision-makers if progress on commitments and/or outcomes is not tracking as expected. Timing for the 5-Year Performance Reports is set to align with the release of Census updates for the most current population and employment data, and will commence in 2024, the year before the Subway opening.

This first Annual Report for the Broadway Subway SPA documents:

- That the SPA partner agencies have, since the execution of the SPA in 2018, been collaborating in new ways to advance the commitments made in the SPA, and to support aligned land use/transportation planning;
- That the SPA initiatives are largely on track, with limited and minor refinements which are generally administrative in nature; and
- The 2019 baseline data against which future reports can compare the transportation and land use performance measures for the SPA corridor; these performance measures include indicators related to population and employment, housing supply and sustainable transportation.

With the current uncertainties created by the COVID-19 pandemic, it is more important than ever for agencies at all levels to work together to advance the development of sustainable communities. This report documents a new approach our SPA partners have taken for the first SPA implementation in our region and is the beginning of a long-term dialogue for years to come.

BACKGROUND

Developed by the Mayors' Council in 2014, the 10-Year Vision for Metro Vancouver Transit and Transportation (the “10-Year Vision”) identifies as a regional priority rapid transit between Commercial Drive and the University of British Columbia (UBC) along the Broadway Corridor. The 10-Year Vision includes delivery of the first phase of this rapid transit connection (Figure 1), an approximately 5.7 kilometre extension of the Millennium Line from its current terminus at VCC-Clark Station to a new western terminus at Arbutus Street (the “Broadway Subway Project”).

The Call for Major Project Agreements

The 10-Year Vision calls on parties to enter into one or more Project Partnership Agreements whenever the region is making a major investment involving significant cost and risk, the success of which depends on higher degrees of

coordination, collaboration and mutually supportive actions by multiple partners. Per the Vision, the Project Partnership Agreements are to be signed and held between TransLink and the project host municipality and are required prior to funding approval for major projects.¹

Each Project Partnership Agreement is implemented via multiple project agreements, with a key component being the Supportive Policies Agreement (SPA). The key objective of a SPA is to provide surety that the host municipality and TransLink will fulfill defined actions which are outside the direct scope of a project but have significant influence on the project's success. SPA commitments are intended to demonstrate that all parties involved consider support for the transportation investment and its shared objectives to be a top priority.

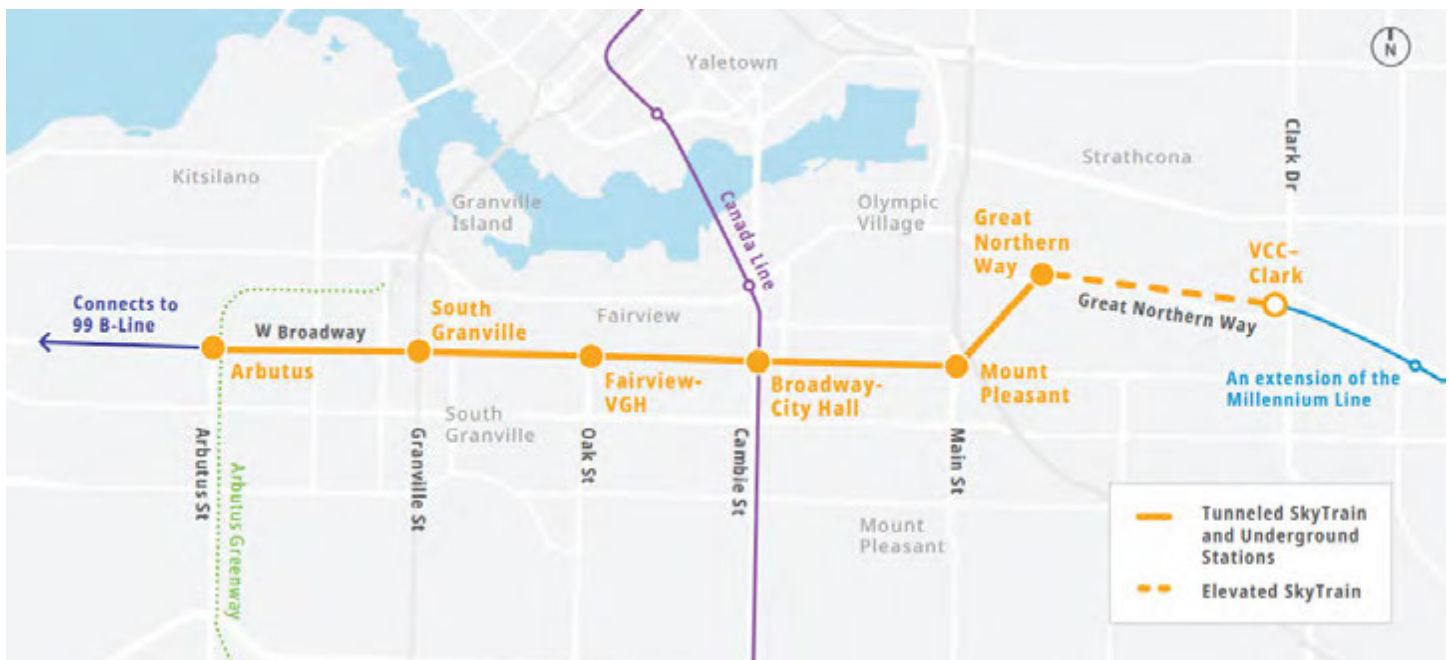


Figure 1: Broadway Subway Project

Source: Government of British Columbia. (2019, October). Broadway Subway Project Brochure. Retrieved March 2, 2020, from <https://engage.gov.bc.ca/app/uploads/sites/396/2019/11/Broadway-Subway-Project-Brochure.pdf>.

¹ With the evolution of the SPAs executed since the 10 Year-Vision, these agreements have come to play an increasingly important role in the senior government funding approval process, including most recently forming a condition of the project's business case approval from the Treasury Board.

Collaborating to Implement and Report on the Broadway Subway SPA

In June 2018, TransLink and the City of Vancouver executed a SPA for the Broadway Subway Project (the “**Broadway Subway SPA**”). In December 2018, TransLink and the City established a multi-stakeholder committee (the “**Monitoring Committee**”) to: (i) review the performance of land use and transportation outcomes for the Broadway Subway Corridor and (ii) monitor compliance by each party with the commitments and responsibilities set out in the Broadway Subway SPA. The Monitoring Committee consists of senior representatives from TransLink, City of Vancouver, the Province of British Columbia and Metro Vancouver, and is chaired by TransLink’s Vice President of Transportation Planning and Policy. A working group comprised of staff from the agencies represented on the Monitoring Committee (the “**Working Group**”) was also established. This Working Group reports to the Monitoring Committee and supports its duties and responsibilities.

Since the execution of the SPA in 2018, partner staff have been working together to

advance the SPA commitments and develop an implementation and monitoring process, which includes defining a structure for reporting to decision-makers (i.e. Mayors’ Council, TransLink Board, City Council, and senior Provincial officials). Through these discussions and building off the direction in the SPA, it was agreed that the two key reporting deliverables would be the “**Annual Report**” and the “**5-Year Performance Report**”, which are described in Table 1.

An implementation and monitoring timeline (the “**Broadway Subway SPA Implementation and Monitoring Timeline**”) has been developed to track the progress of key SPA commitments and delineate when and how SPA reporting will occur, noting that the SPA commits to ongoing reporting until 20 years after Opening Day, or 2045 (whichever is later). The Implementation and Monitoring Timeline can be found in Appendix A. As noted in the table below, SPA monitoring is focused on both the: (i) SPA commitments and (ii) associated outcomes, for which a performance measures framework has been established (the “**Broadway Subway SPA Performance Measures Framework**”).

Table 1: SPA Reporting Deliverables

<i>SPA Reporting to decision-makers every September, via Annual Report OR 5-Year Performance Report:</i>		
	ANNUAL REPORT	5-YEAR PERFORMANCE REPORT
Timing	Every Sept., except in 5-Year Performance Report years; first Annual Report in 2020	Sept. every five years; first 5-Year Performance Report in 2024 (pre-Subway opening) Timed to align with availability of updated Census data
SPA commitments tracking	Tracks progress on all SPA commitments	Tracks progress on all SPA commitments
SPA outcomes tracking	Provides most current data on all SPA performance measures (outcomes) collected on an annual basis	Provides most current data on all SPA performance measures (outcomes) collected on an annual basis, as well as updated Census data
Level of analysis	Provides base analysis of the outcomes monitored, intended as annual progress ‘snapshot’	Provides comprehensive analysis of the outcomes monitored (based on Census update), and may recommend actions if outcomes not tracking as expected

REPORT PURPOSE & STRUCTURE

This report is the first Annual Report for the Broadway Subway SPA and is intended to provide:

- Baseline data to which future SPA reports can be compared, including both Annual Reports and 5-Year Performance Reports (the first 5-Year Performance Report being released in 2024);
- Updates on the progress and status of each of the SPA commitments, including how the SPA partners are working together to collaborate where relevant; and
- The next steps for SPA implementation and monitoring moving forward.

This report is organized into three primary sections, addressing the objectives identified above.

- Monitoring SPA commitments – describes the status of both City led and TransLink led initiatives, providing an overview of the work completed to date, upcoming work and summarizing any refinements to scope and timing.
- Monitoring SPA related outcomes – describes how SPA outcomes will be monitored, including the performance measures, the geographic scope of monitoring, and the approach to data collection and analysis.
- Conclusion and next steps – provides an overview of how SPA commitments are tracking overall, discusses some of the key upcoming initiatives for the next year and describes the approach to future reporting.

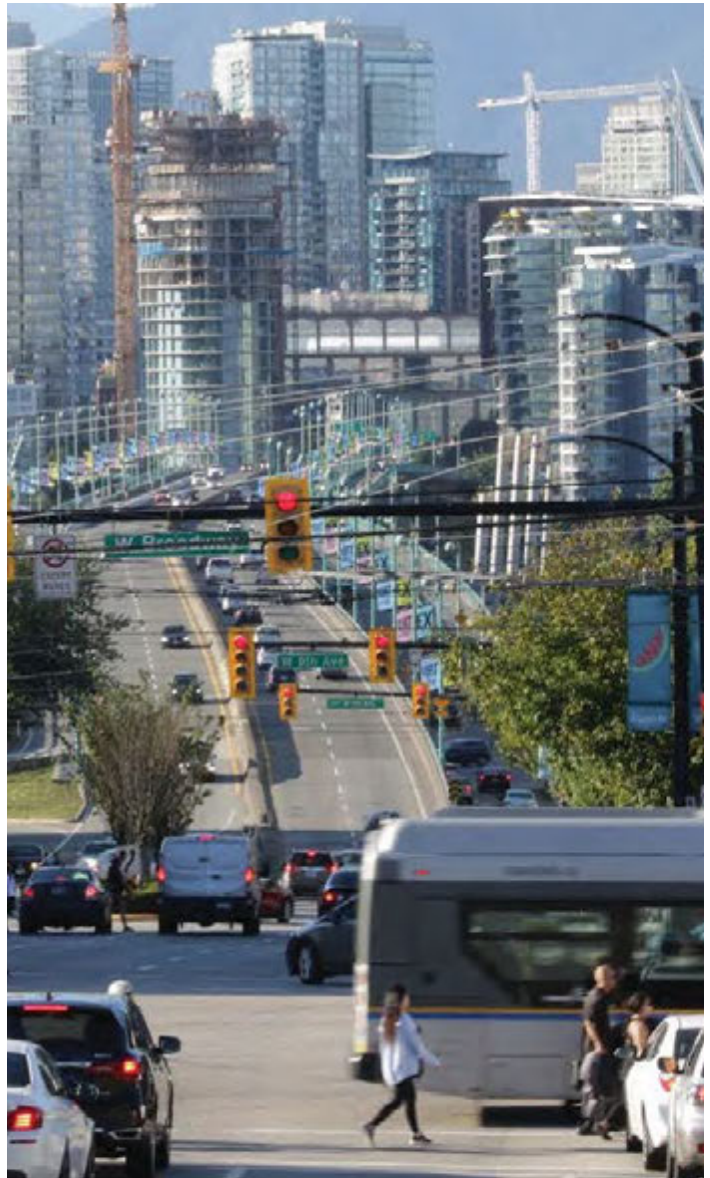


Image source: City of Vancouver

MONITORING SPA COMMITMENTS

A number of City led and TransLink led initiatives were identified in the SPA, most with associated completion dates ranging from 2018 to Broadway Subway ‘Opening Day’ (currently planned for 2025). Monitoring and reporting on the implementation of SPA commitments and performance measures begins with this report and will continue until 20 years after the Broadway Subway Opening, or 2045, whichever is later (see Figure 2).

SPA. That being said, the COVID-19 pandemic has impacted all SPA partner agencies and respective project timelines, in particular delaying the Broadway Plan process due to impacts to public engagement. As of now, however, the expectation remains that the core commitments in the SPA can be met according to SPA timelines. Given the continuously evolving situation, partner staff will work closely to keep each other informed of potential timing impacts if/when they arise.

The Initiatives Tracker on the next four pages provides a summary of the respective City and TransLink led initiatives committed to in the SPA. The implementation of SPA initiatives is overall on track with the listed completion dates in the



Figure 2: Broadway Subway SPA Timeline

Broadway Subway SPA Initiatives Tracker

City-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
Prepare and adopt Vancouver Plan	5.1(a)(i)	2022	City committed to preparing City Core 2050 Plan in SPA, which has since been replaced by the Vancouver Plan	ENDORSED - July 14, 2020	Currently in first phase of Plan process
Prepare and adopt Broadway Plan	5.1(a)(ii)	2021	SPA referred to this as Broadway Planning		Currently in second phase of Plan process
Complete Vancouver Employment Lands and Economy Review	5.1(a)(iii)	2020	SPA referred to this as the Vancouver Employment Lands Study, which was to be completed by end of 2019	ENDORSED - July 14, 2020	Final phase of process on track for completion fall 2020
Collaboration between City, TransLink and Province on the development of land use plans	5.1(c)	Per Plan timing			Collaboration through Broadway Subway SPA Working Group & Monitoring Committee
City will monitor the progress of the Land Use Plans through the Regional Context Statement process	5.2	Per Plan timing			Future initiation
Complete analysis of public land holdings (all levels of government and Crown corporations) for land use opportunities, and the estimated compensation required to each level of government for use of such opportunities	5.3	2021	Analysis to be completed as part of Broadway Plan, as opposed to by end of 2018	ENDORSED – December 12, 2018	Review of public land holdings complete Analysis to be completed as part of Broadway Plan
Parking Bylaw review and update	9.1	Timing not specified			Parking Bylaw update effective January 1, 2019

Legend

	On track		Adjustment from SPA Commitment; endorsed by Monitoring Committee		Not tracking to SPA Commitment, and no Monitoring Committee endorsement
--	----------	---	--	---	---

Broadway Subway SPA Initiatives Tracker (cont'd)

City-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
<i>Broadway Plan – Initiatives to be addressed in the Plan</i>					
Develop forecasts for population, dwelling units and employment for years 2025, 2035, 2040 and 2045	5.1(b)	2021			Currently in second phase of Plan process
City will collaborate with TransLink and the Province on the development of the Affordable Housing Strategy (as part of Affordable Housing Strategy: purpose-built rental housing program/policy development, non-market housing needs analysis)	6.1(b)	2021			SPA Intergovernmental Housing Workshops
Existing Affordable Housing Stock Analysis (Rental Housing Stock ODP review, approaches to preservation/replacement of existing stock, mitigation of tenant displacement)	6.2	2021			On track
Provide opportunities for retail and entertainment uses at appropriate locations	6.5	2021			On track
Identify opportunities for office, institutional and industrial uses	6.6	2021			On track
Identify opportunities for community services and amenities	6.7	2021			On track
Street Connectivity and Major Road Network Review and Analysis	7.2	2021			On track
Develop a Cycling Strategy	7.3	2021			On track
Develop a Pedestrian Strategy	7.4	2021			On track
Develop Urban Design Guidelines	8.1	2021			Future initiation
Develop a Public Realm and Streetscape Plan (including Project station areas)	8.2	2022			Future initiation

Broadway Subway SPA Initiatives Tracker (cont'd)

TransLink-Led Initiatives	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
Identify opportunities for washroom access, including at stations, as part of system-wide review of customer washroom facilities	6.7(b)(ii)	2018			Customer Washrooms on Transit Policy adopted (2018) Accommodations for customer accessible washrooms to be provided at Broadway City-Hall and Arbutus stations Implementation Strategy development in progress
Identify opportunities to maintain or enhance bus travel times and reliability	7.1(a)	2019	SPA referred to this as a consolidated 'Bus Priority and Integration Plan'		Bus Speed and Reliability Report completed - provides technical findings and resources for bus priority (2019)
Prepare a Bus Network Integration Plan	7.1(a)	By Opening Day	SPA referred to this as a consolidated 'Bus Priority and Integration Plan'	ENDORSED - July 14, 2020	Future initiation
Provide cost-sharing opportunities for transit priority measures based on approved regional transportation plans and funding	7.1(d)	Timing not specified			Cost-share opportunities provided
Use TravelSmart to encourage alternate modes during and immediately after project construction	7.1(e)	During constrn. & at opening			Future initiation
Update the Vancouver Area Transportation Plan	7.1(f)	2023			Future initiation

Broadway Subway SPA Initiatives Tracker (cont'd)

Monitoring and Reporting	SPA Section	Timing (end of)	Adjustment from SPA	Monitoring Committee (Adjustment)	Progress
The City and TransLink will establish a multi-stakeholder committee (the "Monitoring Committee")	10.1	2018			Completed
The Monitoring Committee will provide City Council, the Mayors' Council, TransLink Board and officials from the Province with an annual dashboard outlining the progress of the Performance Measures and the commitments of each Party as set out in this SPA	10.3(e)	Timing not specified	Rename 'Annual Dashboard' to 'Annual Report'	ENDORSED - July 14, 2020	Annual Report released fall 2020
The City and TransLink will work jointly and cooperatively to prepare a comprehensive report every three to five years	11.1(a)	Timing not specified	Rename 'Comprehensive Report' to '5-Year Performance Report'	ENDORSED - July 14, 2020	5-Year Performance Report to be released in fall 2024
Data collection geographies (400m, 800m, Central Broadway, traffic zones)	5.1(b) & 11.3	N/A	Remove Central Broadway and replace traffic zones with block-level data	ENDORSED - December 12, 2018	
			Streamline data collection to 800m (snapped to city blocks)	ENDORSED - July 14, 2020	

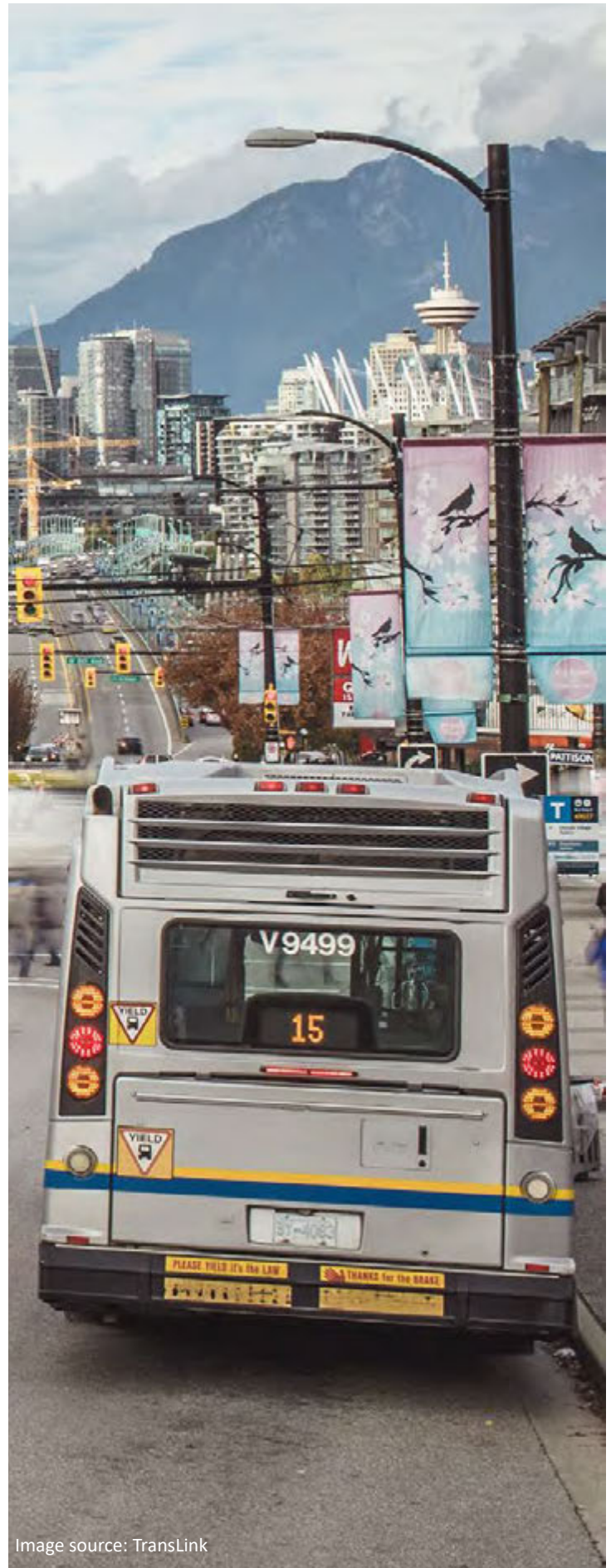
MONITORING SPA RELATED OUTCOMES

Performance Measures Framework

To track the performance of land use and transportation outcomes, partner staff developed the Broadway Subway SPA Performance Measures Framework which identifies a number of indicators associated with the four key areas of SPA monitoring interest:

- Population;
- Employment;
- Housing supply; and
- Sustainable transportation

For each of these four categories, the Performance Measures Framework shown on the following page identifies specific indicators which will be tracked over time, beginning with the 2019 data² provided in the current report. A key responsibility of the Monitoring Committee is to define and refine, as and when needed, the performance measures. The Performance Measures Framework represents a refinement of what the SPA originally identified as “performance measures” and is the product of partner discussions and consensus by both the SPA Working Group and Monitoring Committee.



² 2019 chosen in order to begin reporting in first full data year following Broadway Subway Project funding approval (June 2018).

Image source: TransLink

Broadway Subway SPA Performance Measures Framework

Measure	Indicator	Collection	
		Annually	5 Years
Increase in population	Number of people		✓
	Number of jobs		✓
Increase in jobs	Jobs by industry (using NAICS definitions)		✓
	Amount of non-residential space approved (job space)	✓	
	Number of purpose-built market rental units approved ²	✓	
Increase in affordable housing supply ¹	Number of social and supportive housing units approved	✓	
	Number of condo units approved	✓	
	Number of laneway housing units approved	✓	
	Number of coach house units approved	✓	
	Number of townhouse units approved	✓	
	Rates of car ownership		✓
Increase in sustainable transportation	Transit Performance		
	<ul style="list-style-type: none"> Total annual ridership for Broadway Subway Extension 	✓	
	<ul style="list-style-type: none"> Average daily boardings, alightings, (and line-to-line transfers) by station 	✓	
	<ul style="list-style-type: none"> Average daily bus boardings and alightings 	✓	
	<ul style="list-style-type: none"> Peak load factors by mode³ 	✓	
	Cycling counts	✓	
	Pedestrian counts		✓
	Journey to work mode split		✓

Monitor for potential new metrics to be defined via:

City Parking Bylaw⁴

✓

Broadway Plan's Renter Protections Objectives

✓

Notes

All metrics will be part of Annual Report, but 5-year metrics will only be updated every 5 years e.g. census data

1. First Annual Report housing indicators include existing stock, with subsequent reporting to provide new units approved

2. Rental units will be reported by incomes served and outline the number of units secured at below-market rates

3. Modes include: buses and SkyTrain for Broadway Subway extension once operational

4. Changes to the City's Parking Bylaw to be reviewed with any feasible indicators to be added

Following completion of the Broadway Plan, metrics to be determined for the following (collaboratively developed between City, TransLink and Province): Forecasts for population, dwelling units, and jobs (set years) per 5.1(b) and affordable housing targets per 6.1(a)

Broadway Subway SPA Geography

To consistently track outcomes over time, a defined geography has been established for data collection and outcomes monitoring on the defined performance measures indicators (the “**Broadway Subway SPA Geography**”). The SPA Geography is delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Project stations (see Figure 3).

There are a number of blocks within an 800 metre radius of each station that are not included in the identified buffer such as:

- Blocks that are not within an 800 metre walk from the station due to existing physical barriers (i.e. rail yards in the False Creek Flats area)
- “Superblocks” in Southeast False Creek that have yet to be broken up by an internal street network and with most of the superblock located outside of the 800 metre radius
- Granville Island is outside the City’s jurisdiction

Future changes to the walking network could bring additional areas within an 800 metre walk

of the stations. When these changes happen, the Monitoring Committee will agree on whether or not to add or modify blocks to be included in the SPA Geography. If additional blocks are added at some point by the Monitoring Committee, the Annual Report or 5-Year Performance Report that followed that change would also contain updated data for the previous Annual or (if applicable) 5-Year Performance Report, based on the revised SPA Geography. This would allow for comparable monitoring over time.

Data Collection and Analysis

The City of Vancouver, TransLink, and Metro Vancouver provided the data for this report. All data included in this report are updated either on an annual or five-year basis and are aligned to the SPA Geography, including the Census data, for which a custom dataset was prepared. A full list of the data sources can be found in Appendix B.

While the current report is providing the first year of monitoring data and a description of the performance measures and indicators, future year reports will include data comparisons and analysis related to observed trends over time.

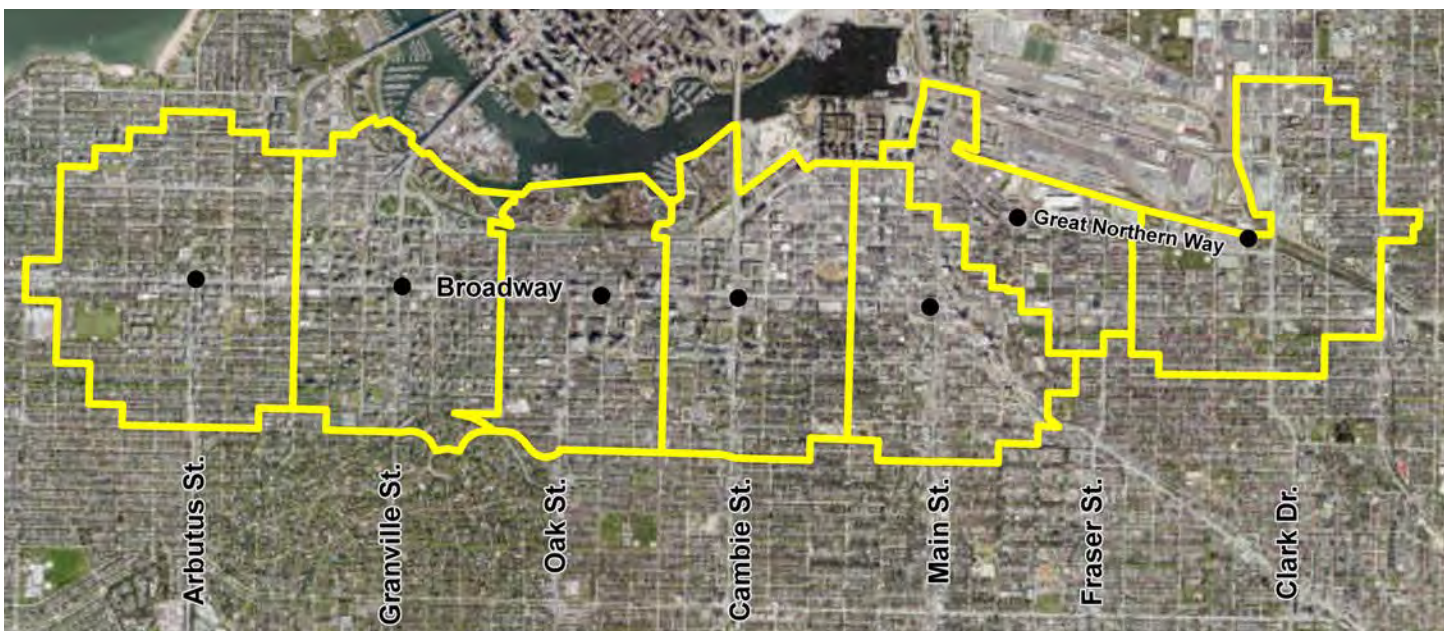


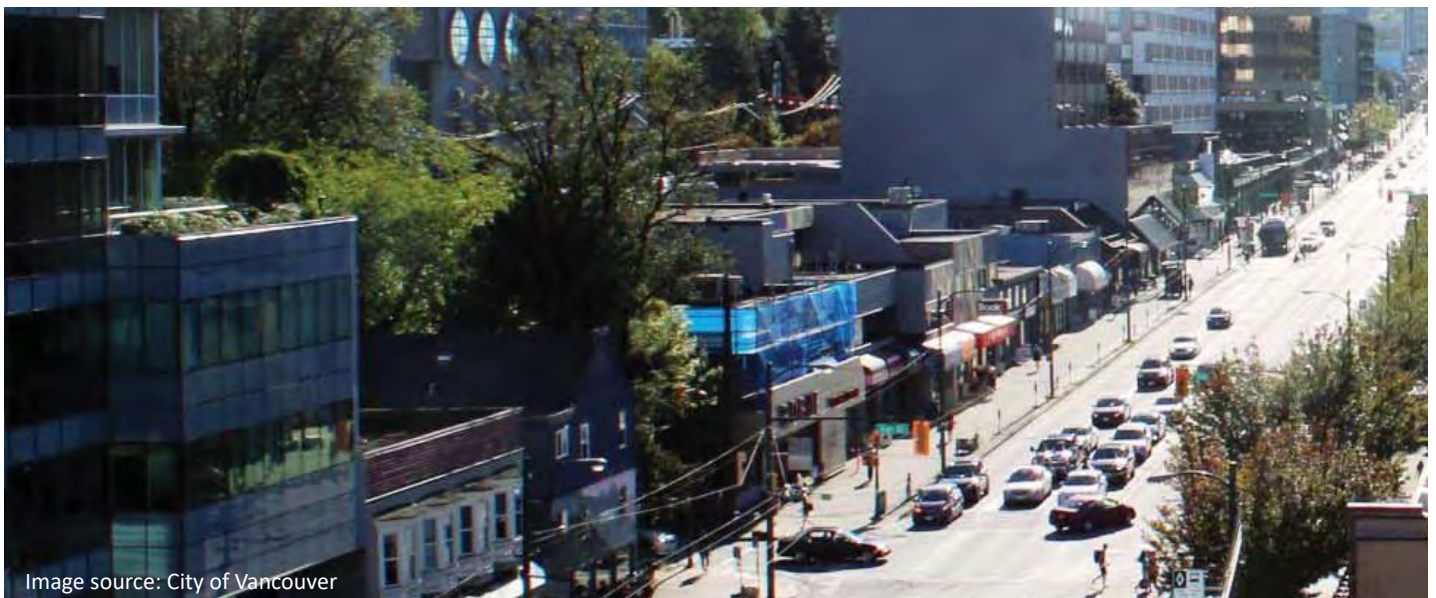
Figure 3: Broadway Subway SPA Geography

There are four indicators reported under the population and employment categories (see Table 2). The number of people, number of jobs and jobs by industry are derived from the most recent (2016) Census.³ Appendix C contains a full breakdown of the jobs by industry.

The amount of job space approved is provided by the City of Vancouver and is based on 2019 data. Through the Broadway Plan, the City commits to preparing population and employment forecasts for set years,⁴ which will be added to SPA monitoring.

Table 2: Population and Employment in the Broadway Subway SPA Geography

Indicator	Total	Source	Year
Number of people	94,000	Statistics Canada	2016
Number of jobs	88,000	Statistics Canada	2016
Jobs by industry ⁵			
• Healthcare & social assistance	16,960	Statistics Canada	2016
• Prof., scientific & technical services	10,120		
• Retail trade	9,080		
• Accommodation & food services	6,000		
• Information & cultural industries	5,870		
Job space approved	763,000 sq. ft. (gross)		
• Office	356,600 sq. ft.	City of Vancouver	2019
• Commercial	178,900 sq. ft.		
• Industrial	166,600 sq. ft.		
• Institutional	60,900 sq. ft.		



3 Jobs by industry numbers are from 2016 Census without undercount. For more information regarding Census undercount, please reference the Statistics Canada webpage.

4 Years include: 2025, 2030, 2035, 2040 and 2045.

5 The five industries with the most jobs in the SPA geography; full breakdown of jobs by industry, using the North American Industry Classification System (NAICS), is shown in Appendix C.

A breakdown of the types of job space approved⁶ by station area is shown in Figure 4. Station area is defined as an approximate 800 metre walk, using existing walking networks, from the various Project stations.

The Great Northern Way station area had the largest proportion of job space approved in 2019, with a total of 416,600 square feet approved. The majority of this added job space was office space, followed by commercial space (retail and hotel). No job space was approved in the South Granville station area.



Image source: City of Vancouver

Job Space Approved by Station Area (2019)

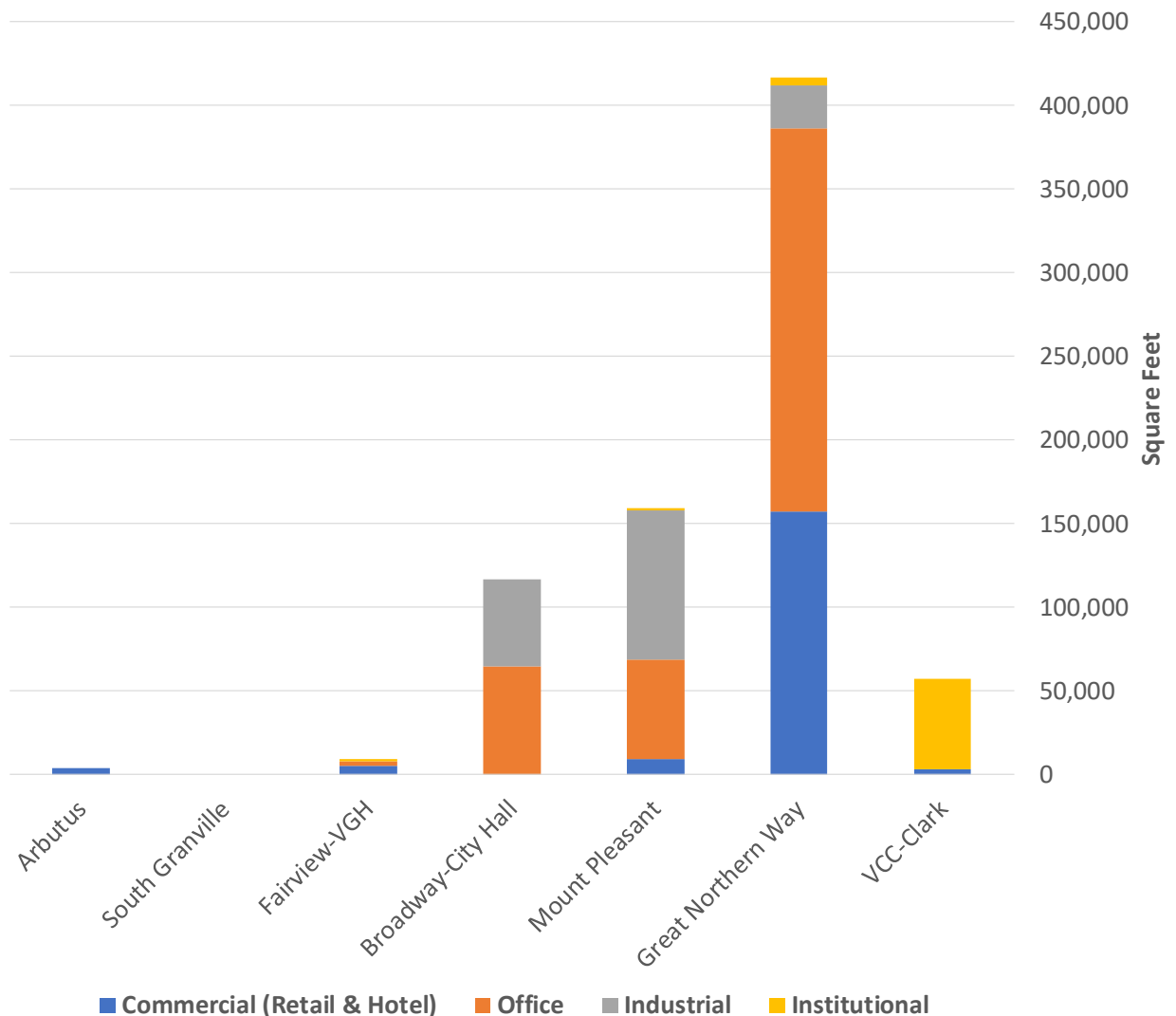


Figure 4: Job Space Approved by Station Area

⁶ For projects enabled under a rezoning process 'approved' refers to when the project is approved at public hearing, and for projects enabled under a development permit process 'approved' refers to when the project has been issued a development permit.

Key housing related objectives of the SPA include both residential densities appropriate for SkyTrain as well as housing affordability, recognizing that reductions to a household's transportation costs lower that household's overall housing and transportation cost burden.⁷ Matching affordable housing supply with demand, particularly in transit-oriented locations such as the Broadway corridor, is an important component of the transit and affordable housing connection.

The housing supply category consists of six indicators that include both affordable and ownership tenures, and which are defined in Appendix D:

- Purpose-built market rental units approved
- Social and supportive housing units approved
- Condo units approved
- Laneway housing units approved
- Coach house units approved
- Townhouse units approved



Image source: City of Vancouver

⁷ Metro Vancouver. (2015). [The Metro Vancouver Housing and Transportation Cost Burden Study: A New Way of Looking at Affordability.](#)

The following table (Table 3) provides data on the new housing approvals in the Broadway Subway SPA Geography for 2019, based on the indicators listed on the previous page.

As part of the Broadway Plan, the City will outline affordable housing targets by location, housing type, target income and tenure. These targets will be added to SPA monitoring. Consideration of policy direction for family-sized housing units will also be a part of the Broadway Planning process.

Table 3: New Housing Approvals in Broadway Subway SPA Geography

Housing Type	Existing 2018*		New 2019*		Total 2019	
	# buildings	# units	# buildings	# units	# buildings	# units
<i>Affordable housing stock</i>						
Purpose-Built Market Rental Housing	1,486	20,463	3	72	1,489	21,952
Social/Supportive Housing	113	5,167	1	90	114	5,281
Total	1,599	25,630	4	162	1,603	27,233
<i>Other housing stock</i>						
Laneway Housing	14	14	2	2	16	16
Condominiums			6	361		
Coach Houses	2,041	26,616	10	10		
Townhouses			0	0		
Total	2,055	26,630	18	373		

Not available due to data collection methods (see notes below)

Notes:

- 'Existing 2018' refers to existing, approved and under construction buildings/units as of December 31, 2018. 'New 2019' refers to new buildings/units approved for the period January 1, 2019 to December 31, 2019. For projects which require a rezoning 'approved' refers to when the project is approved at public hearing, and for projects which do not require a rezoning and are enabled under existing zoning 'approved' refers to when the project has been issued a development permit.
- Data is drawn from City of Vancouver permit systems and Provincial BC Assessment data. Due to discrepancies between the Provincial historic data collection of strata ownership units and municipal tracking systems, 'Existing 2018' baseline building and unit numbers for strata ownership units are estimates and not able to be further broken down by housing type (e.g. townhouse). This is why for annual reporting, new approved condominium units, coach houses and townhouses are reported, but the baseline housing stock numbers are combined for all of those housing types.
- 'New 2019' condominium and townhouse approval numbers are gross rather than net unit counts due to data gaps in municipal tracking systems; purpose-built market rental housing, social/supportive housing, coach houses and laneway housing are net unit counts. 'New 2019' approvals numbers for condominiums, coach houses and townhouses cannot be added to 'Existing 2018' numbers as this would not be an accurate total as the gross approval numbers do not account for units lost through redevelopment.
- For the purposes of the SPA reporting, affordable housing is considered to include purpose-built market rental as well as social and supportive units, recognizing that affordability is a relative measure of the price or cost of housing relative to household income. The social/supportive housing category includes co-operative housing units.
- Secondary suites, defined as an additional unit within a principle residence; including basement suites in detached houses and lock-off suites in townhouses or apartments, are not reported here as the currently available data on this housing type is not sufficient to report accurately on the number of secondary suites within the SPA geography.

While it is difficult to draw definitive conclusions on development trends from a single year of housing approvals, monitoring the change in housing stock year over year will be important to identify emerging trends and assess relative impacts of policy decisions.

total income before taxes. Therefore, in addition to the above SPA indicators for Housing Supply, Appendix E provides additional information on the SPA Geography's 2019 net new affordable housing (social and supportive and purpose-built market rental) by household income served.

Housing affordability is a measure of the price or cost of housing relative to household income with housing commonly considered affordable when it comprises 30 percent or less of a household's

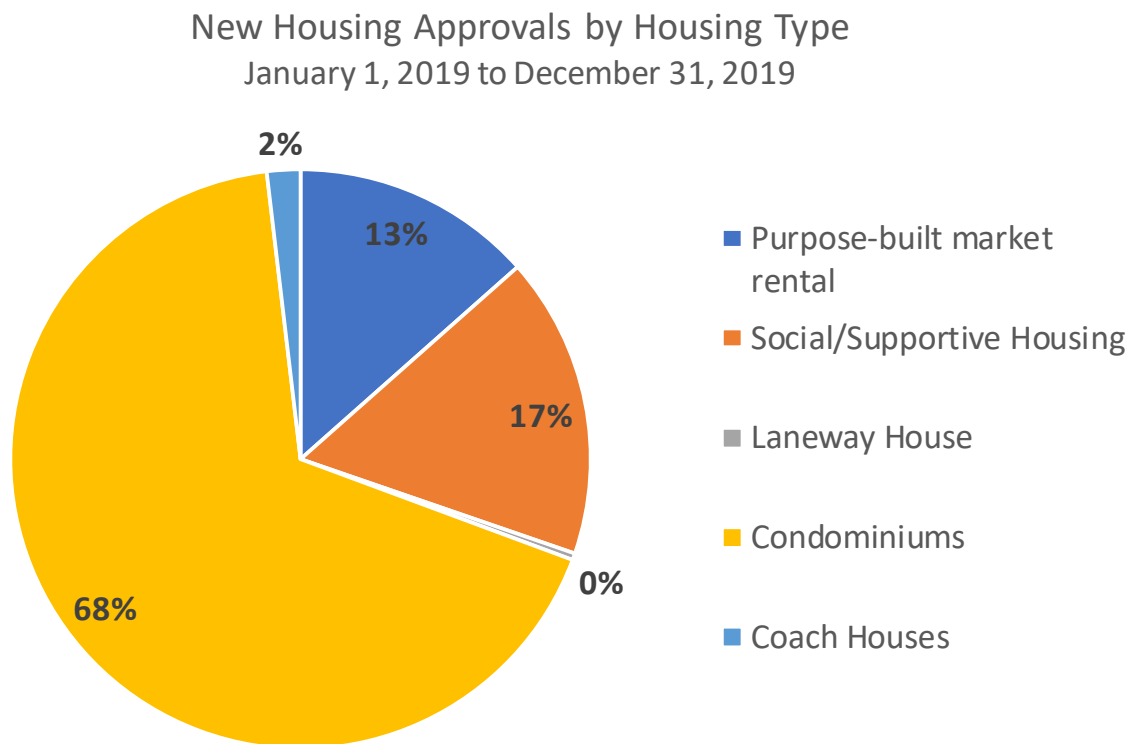


Figure 5: New Housing Approvals January 1, 2019 to December 31, 2019 by Housing Type



Performance Measure 4: Sustainable Transportation

Sustainable transportation for the purposes of SPA monitoring includes walking, cycling, SkyTrain and bus in the SPA Geography, recognizing that these modes are part of the broader City and regional transportation network. A total of seven transportation indicators are included in this report:

- Average daily boardings and alightings by station
- Average daily bus boardings and alightings
- Peak Load Factors by Mode
- Pedestrian Counts
- Cycling Counts
- Journey to Work Mode Split
- Rates of car ownership
- Total annual ridership for Broadway Subway extension⁸



Image source: TransLink

Average Daily Boardings and Alightings by Station

The Broadway Subway Project connects seven stations, two of which are existing as part of the Millennium Line (VCC-Clark station) and Canada Line (Broadway-City Hall station). A Broadway Subway platform will be added to the existing Broadway-City Hall station. The SPA also identifies Commercial-Broadway station as of interest, given that it is a key transfer station on the Millennium

Line and thus station activity for this station will be included in SPA monitoring and reporting.

Average daily boardings and alightings for the various day types in 2019 are provided in Table 4. Data for boardings and alightings is collected through Compass card taps at station fare gates (entries/exits). Behind gate transfer boardings for Commercial Broadway station are provided in Appendix F.

Table 4: Average Daily Station Activity

Station	Activity	Mon-Fri	Sat	Sun	All Day Types
Broadway-City Hall	Boardings	15,000	10,100	7,800	13,300
	Alightings	15,300	10,200	8,400	13,000
Commercial-Broadway	Boardings	25,100	18,300	13,900	23,000
	Alightings	26,000	18,600	14,500	22,200
VCC-Clark	Boardings	3,800	1,300	900	2,600
	Alightings	3,400	1,000	700	2,900

Note: The above figures are rounded values based on TransLink's 2019 Compass data.

⁸ This indicator will be added once the Broadway Subway is operational.

Of the three stations, Commercial-Broadway, which is the third busiest station in the system, had the highest average daily boardings (23,000) and alightings (22,000) for all day types. VCC-Clark station had significantly lower average daily boardings (2,600) and alightings (2,900). Once the Broadway Subway is operational, average daily boardings and alightings will be reported for the following additional stations: Great Northern Way, Mount Pleasant, Fairview-VGH, South Granville and Arbutus.

Average Daily Bus Boardings and Alightings

A total of 18 bus routes operate in the SPA Geography. Seven of these routes also operate a late-night 'NightBus' service. Average daily boardings and alightings for these routes on weekdays (Monday to Friday) in 2019 are provided in Appendix G.

The average daily boardings for those routes operating in the SPA Geography was 90,037 with the average daily alightings being 92,698.⁹ The 99 B-Line (UBC / Commercial-Broadway) had the highest average daily boardings (30,382) and average daily alightings (31,867) in the SPA Geography.



Images source: TransLink

⁹ These data are specific to the bus stops in the SPA Geography and derived from the automated passenger count (APC) data reported in the 2019 Transit Service Performance Review (TSPR).

Peak Load Factors by Mode

Passenger load is a key indicator of transit vehicle occupancy and passenger level of comfort. It is measured using the peak load factor (PLF), which is calculated by dividing the average load on a transit vehicle at its busiest point by the number of spaces (seats plus standing space) provided on each trip. Definitions of load factors for passenger comfort are described in Appendix H.

The three time ranges of interest for this report are the AM Peak (06:00 – 09:00), Midday (09:00–15:00) and PM Peak (15:00 – 18:00). PLFs for the 18 routes operating in the SPA Geography are shown in Appendix I. Once the Broadway Subway is operational, peak load factors for the SkyTrain extension will also be reported.

PLFs that are between 84% and 99% are defined as instances of crowding, with PLFs of 100% and above as instances of overcrowding. Instances of overcrowding are of key interest. Six of the 18 routes (33%) in the SPA Geography exhibited instances of overcrowding in at least one direction and during at least one time range (as defined above). The 99 B-Line (UBC / Commercial-Broadway), which is the busiest bus route in the system, exhibited the most significant instances of overcrowding with PLFs as follows: 134% in the westbound direction during the AM peak, 111% in the westbound direction during midday, and 125% in the eastbound direction during the PM peak.

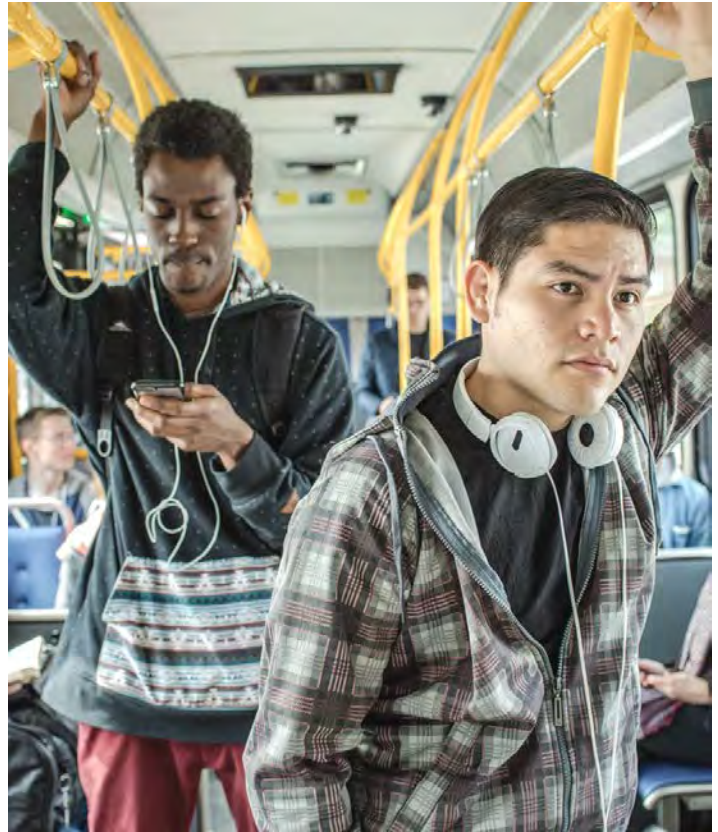


Image source: TransLink

Pedestrian Counts

Given that a key objective of the SPA is to support the success of the Broadway Subway Project, pedestrian counts are significant information, as all transit trips begin and end with some level of pedestrian activity. Tracking pedestrian activity in the SPA Geography further assists the City's efforts to right-size pedestrian infrastructure and respond to street use applications (e.g. sidewalk patios, etc.).

The City of Vancouver conducts a city-wide pedestrian study every 5 years. The most current data on walking in the SPA Geography stems from a pedestrian study done in 2018.¹⁰ The counts are taken between 10am and 6pm on weekdays. The locations for the pedestrian counts within the SPA Geography are shown in Appendix J. As noted earlier, the SPA Geography is delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Project stations. Arbutus and South Granville

station areas each have four blocks counted, Fairview-VGH station area had two blocks counted and Broadway-City Hall and Mount Pleasant station areas each had three blocks counted.

Total daily pedestrian counts for five of the seven station areas are provided in Figure 6. No values for VCC-Clark station and Great Northern Way station areas were collected, as the City does not currently monitor low pedestrian volume streets. That said, it is possible that counts might be undertaken in the future around all Broadway Subway stations; if so, those supplemental counts could be added to future SPA reporting. A detailed breakdown of the pedestrian counts by location and direction for each station area is provided in Appendix K.

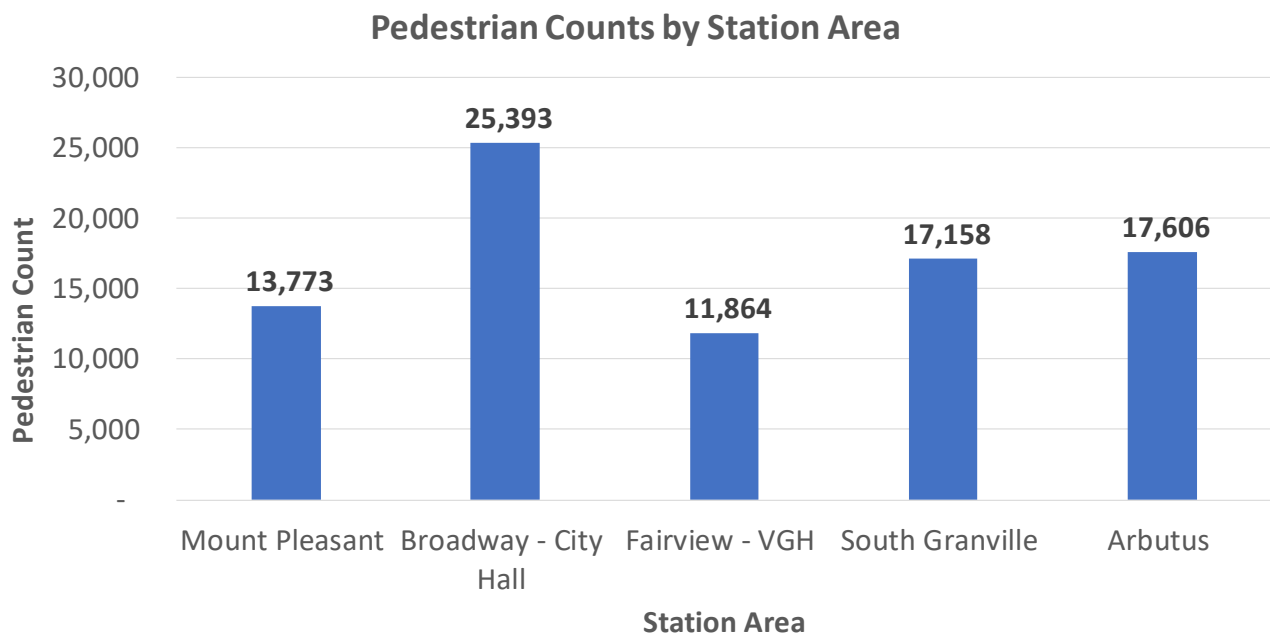


Figure 6: Weekday Pedestrian Counts by Station Area

Note: Counts taken between 10am and 6pm on weekdays.

¹⁰ The City of Vancouver's 2018 pedestrian count data includes people using: motorized/manual wheelchairs or scooters, rollerblades, skateboards, and baby strollers.

In total, there were 85,794 pedestrian counts in the Broadway Subway SPA Geography. The busiest blocks were observed around the area of Broadway-City Hall Station. To put these pedestrian counts in context, the following are the average block pedestrian counts for key streets in the City:

- Robson St. – 14,300
- Granville St. (downtown only) – 17,000
- Commercial Drive – 7,000
- West 4th Ave. – 4,600
- W. Broadway/W. 10th Ave (west of Yew) – 2,400

On average, the pedestrian counts within the Broadway Subway area are comparable with other key streets outside of Downtown (Commercial Drive, West 4th Avenue, and West Broadway/West 10th Avenue west of Yew Street). The exception is the area around Broadway–City Hall Station where the busiest blocks have

pedestrian volumes that rival volumes on some of the busier Downtown streets.

It is important to note that the total values shown represent a limited sample of pedestrian activity in the area, and that the primary interest is in the magnitude of change over time, with the objective being that counts increase in future reporting years with the opening of the Broadway Subway.

Cycling Counts

As with walking, cycling will likewise be an important mode for customers accessing the Broadway Subway, and increased cycling activity over time will be an indication of the SPA Geography’s continued evolution as a community designed to support the SkyTrain investment and sustainable transportation generally.



Image source: TransLink

A total of approximately 3.3 million cycling counts were reported from all day (24 hours) January 1 through December 31, 2019 (see Figure 7). Cycling counts were taken from four permanent bike counters (see Appendix L) located at:

- Burrard Street near Cornwall Avenue (closest to future Arbutus Station)
- E 10th Avenue near Clark Drive (closest to VCC-Clark Station)
- Ontario Street near 11th Avenue (closest to Broadway-City Hall Station)
- Seawall at Creekside Community Centre (closest to future Great Northern Way and Mount Pleasant stations)



Image source: City of Vancouver

The highest number of cycling counts was observed at the Burrard and Cornwall location, with a total of nearly 1.4 million counts in 2019. The location with the least cycling counts was Ontario and 11th Avenue with a total of just under 501,000 counts for the year. While the location-specific numbers provide detailed insight, the key objective is to see the overall number of bike counts increase in future years.

Cycling Counts (2019)

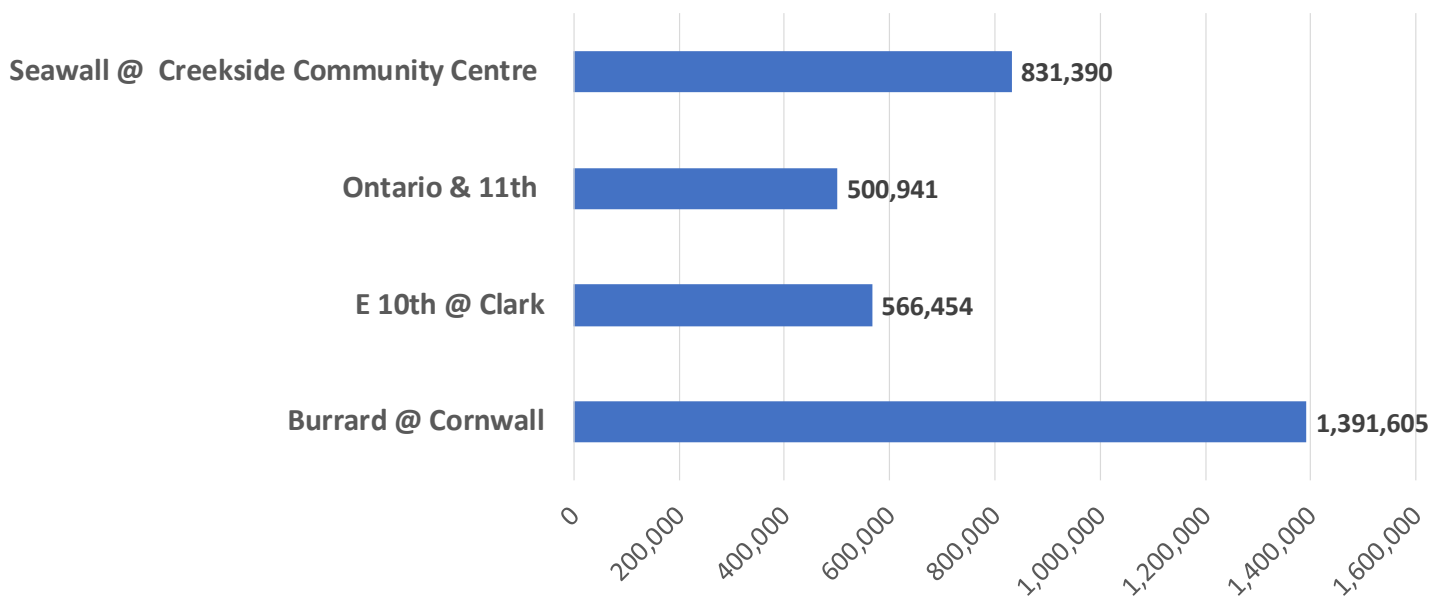


Figure 7: Cycling Counts

Journey to Work Mode Split

Figure 8 shows the main mode of commuting for the employed labour force (aged 15+) residing in private households in the SPA Geography, and who have a usual place of work.^{11, 12} Drivers (car, truck or van) comprised the largest mode share at approximately 48%, followed by public transit (30%), walking (11%) and cycling (6%). In comparison to the city as a whole, the share of sustainable modes (i.e. transit, walking and cycling) in the SPA Geography was notably higher.

Rates of Car Ownership

Rates of car ownership in the Broadway Subway SPA Geography is a useful indicator to track, given the SPA's focus on sustainable modes of

transportation. By providing more sustainable transportation options, the Broadway Subway and related SPA initiatives offers the potential for many to reduce the need for automobile ownership as well as overall household transportation costs. In 2019, the rate of insured vehicles per licensed driver was 0.76, which increased slightly over the previous four years. A detailed breakdown of the 2019 rates by station area can be found in Appendix M. The key objective to tracking rates of car ownership is to observe the rate decrease in future years as the use of sustainable modes increases.

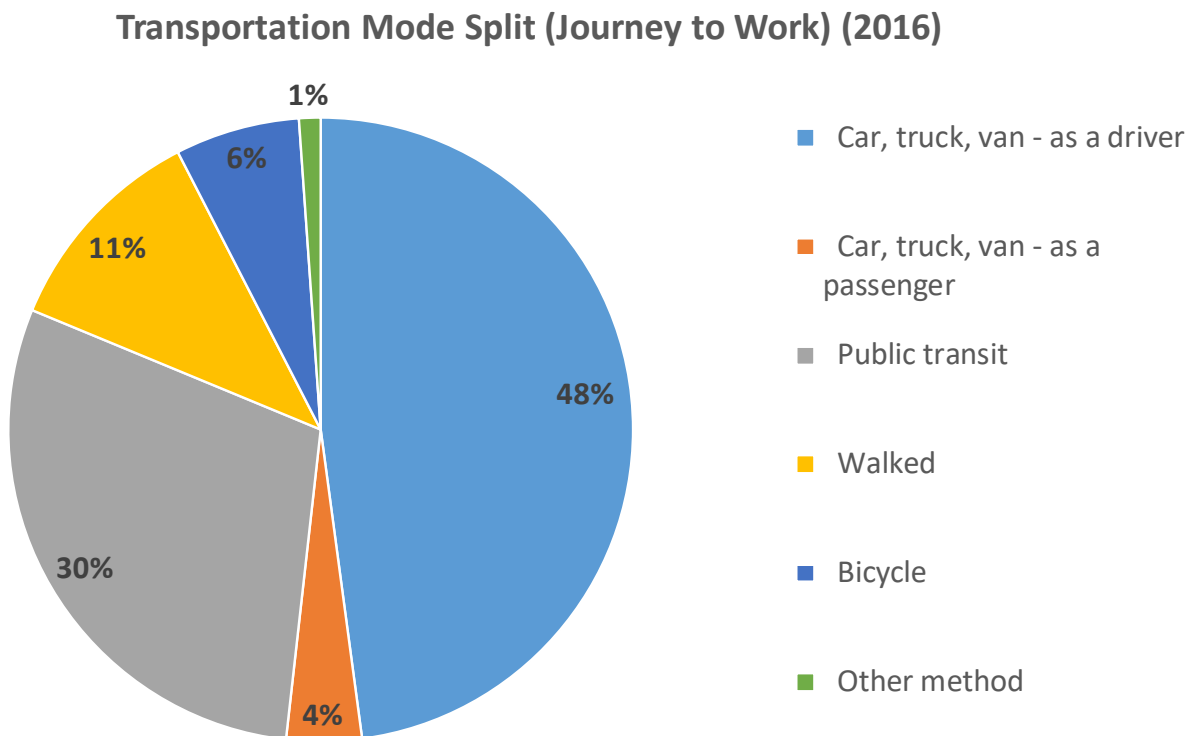


Figure 8: Transportation Mode Split (Journey to Work)

¹¹ Mode share numbers are from the 2016 Census without undercount. For more information regarding Census undercount, please reference the Statistics Canada webpage.

¹² Please reference the Statistics Canada webpage for a detailed definition of usual place of work.

CONCLUSION AND NEXT STEPS

Progress Overview

The implementation of SPA initiatives is overall on track, with minor refinements made to a small number of initiatives which are largely administrative in nature, and which make sense in light of Broadway Subway timing.

The global outbreak of the COVID-19 virus in early 2020 had a marked impact on the timing of the Broadway Plan process due to restrictions on large gatherings, and the associated impacts on public engagement. Prior to the pandemic, the intent was to take the draft Plan for consideration at the December 2020 City Council meeting, one year ahead of the timing listed in the SPA. Despite this pandemic-related setback, the Broadway Plan is still on track to meet the timing listed in the SPA (end of 2021), with City staff planning to bring a draft of the Broadway Plan to City Council for consideration by mid 2021.

Looking to the remainder of 2020 and the next year of SPA monitoring, a number of initiatives are planned for initiation and completion:

Completion by the end of 2020

- The Vancouver Employment Lands and Economy Review
- The Implementation Strategy for the Customer Washrooms on Transit Policy

Initiation in 2021

- TDM initiatives during construction of the Broadway Subway

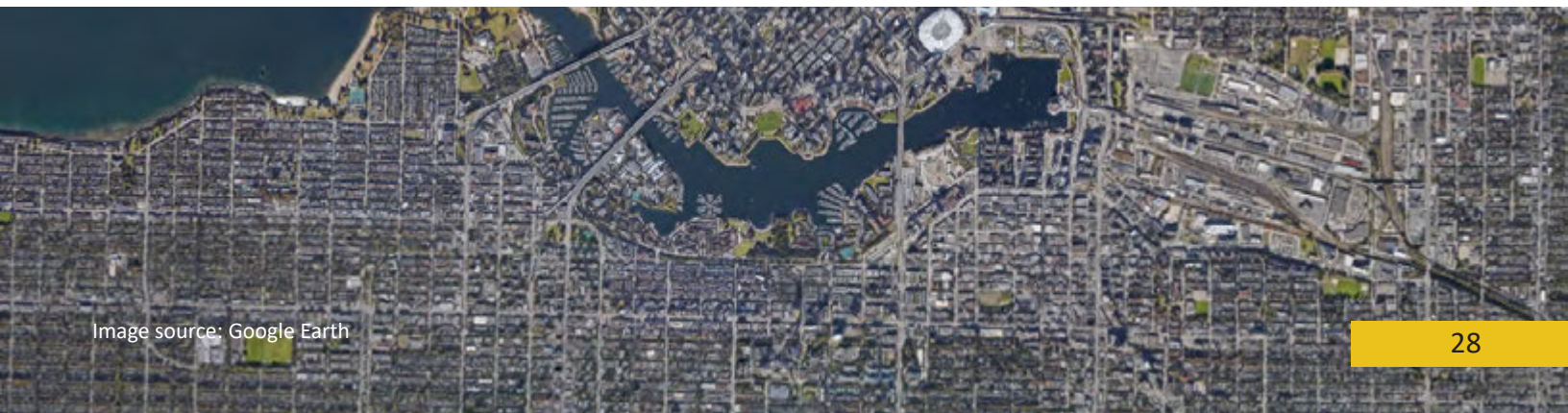
Completion in 2021

- Broadway Plan and related initiatives (e.g. Analysis of Public Land Holdings, Affordable Housing Strategy, etc.)

In terms of the Performance Measures Framework, this first Broadway Subway SPA report establishes the foundation against which the SPA-related outcomes will be compared in the years to come. Due to the COVID-19 pandemic, comparability issues for certain indicators will need to be addressed in future reporting years. As we collectively face a new set of circumstances in 2020 and the years to come, the data contained in this Annual Report will be instrumental as we track future trends and recovery (in the case of transit ridership) within the Broadway SPA corridor, while continuing to work together towards shared goals.

Future Reporting

The next reporting deliverable, the 2020 Annual Report, is planned for release in September 2021. Data from the 2016 Census will not be updated until the next 5-Year Performance Report but will be included in all Annual Reports as context in the interim. The next 5-Year Performance Report will be released in 2024, as the 'pre-Project' case with the first 'post-Project' case to be released in 2029.



GLOSSARY

10-Year Vision – The 10-Year Vision for Metro Vancouver Transit and Transportation, developed by the Mayors' Council in 2014.

Broadway Subway Project – An approximately 5.7 kilometre extension of the Millennium Line from its current terminus at VCC-Clark Station to a new western terminus at Arbutus Street.

Broadway Subway Supportive Policies Agreement (SPA) – The Supportive Policies Agreement for the Broadway Subway Project, executed by the City of Vancouver and TransLink in June 2018.

Monitoring Committee – A multi-stakeholder committee formed by TransLink and the City in December 2018 to: (i) review the performance of land use and transportation outcomes for the Broadway Subway Corridor and (ii) monitor compliance by each party with the commitments and responsibilities set out in the Broadway Subway SPA.

Working Group – A multi-stakeholder staff working group from the agencies represented on the Monitoring Committee that reports to the Monitoring Committee and supports its duties and responsibilities.

Broadway Subway SPA Implementation & Monitoring Timeline – A timeline developed to track the progress of key SPA commitments and delineate when and how SPA reporting will occur.

Annual Report – One of the two primary SPA reporting deliverables; published on an annual basis to provide a high-level snapshot of progress on SPA commitments and outcomes.

5-Year Performance Report – One of the two primary SPA reporting deliverables; published on a 5-Year basis to provide a comprehensive analysis of progress on SPA commitments and outcomes, and may recommend actions if outcomes not tracking as expected.

Performance Measures Framework – A framework developed by partner staff to track the performance of land use and transportation outcomes associated with the four key areas of SPA monitoring interest (population, employment, housing supply and sustainable transportation).

Broadway Subway SPA Geography – A defined geography that will be used for data collection and outcomes monitoring; delineated by city blocks and constitutes an approximate 800 metre walk, using existing walking networks, from the Broadway Subway Project stations.

APPENDIX A - BROADWAY SUBWAY SPA IMPLEMENTATION AND MONITORING TIMELINE



NOTES:
 The Monitoring Committee will be responsible for meeting and creating the Performance Report until 20 years after opening day, or 2045, whichever is later, per section 11.1(d).

APPENDIX B - DATA SUMMARY TABLE

Indicator	Data Source	Data Year for this Report	Next Update of Data ¹	Partner Agency Obtaining Data
Number of People	Statistics Canada	2016	2021	Metro Vancouver
Number of Jobs	Statistics Canada	2016	2021	Metro Vancouver
Jobs by Industry	Statistics Canada	2016	2021	Metro Vancouver
Job Space	City of Vancouver	2019	2020	City of Vancouver
Number of purpose-built market rental units approved	City of Vancouver	2019	2020	City of Vancouver
Number of social and supportive housing units approved	City of Vancouver	2019	2020	City of Vancouver
Number of condo units approved	City of Vancouver	2019	2020	City of Vancouver
Number of laneway housing units approved	City of Vancouver	2019	2020	City of Vancouver
Number of coach house units approved	City of Vancouver	2019	2020	City of Vancouver
Number of townhouse units approved	City of Vancouver	2019	2020	City of Vancouver
Rates of car ownership	ICBC	2019	2024	City of Vancouver
Total annual ridership for Broadway Subway extension	TransLink	-	2025	TransLink
Average daily boardings and alightings by station ²	TransLink	2019	2020	TransLink
Average daily bus boardings and alightings ³	TransLink	2019	2020	TransLink
Peak Load Factors by Mode	TransLink	2019	2020	TransLink
Cycling Counts	City of Vancouver	2019	2020	City of Vancouver
Pedestrian Counts	City of Vancouver	2018	2023	City of Vancouver
Journey to Work Mode Split	Statistics Canada	2016	2021	Metro Vancouver

NOTES:

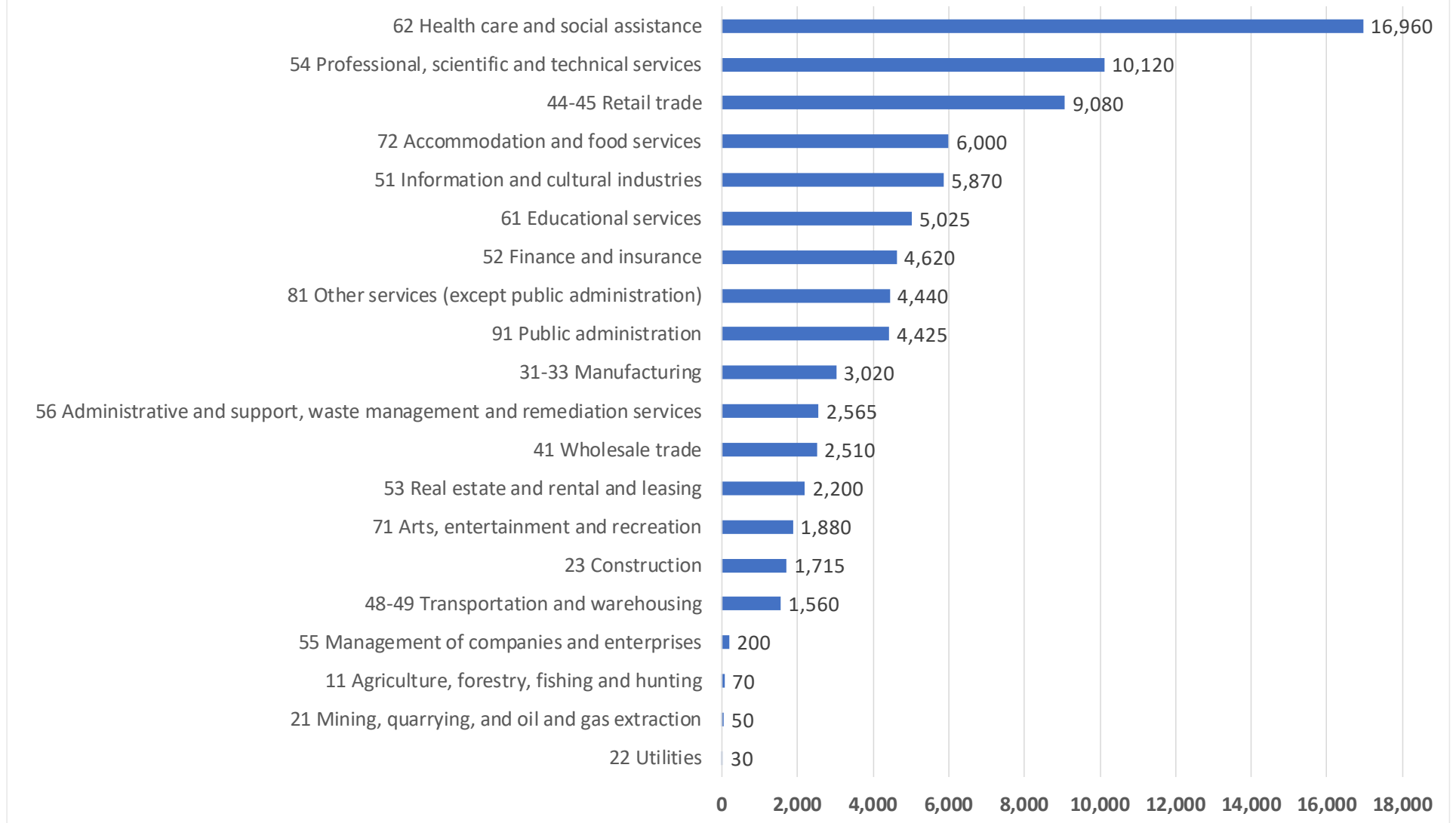
¹ Data collected through the Census is generally released one year following the collection year, with additional time needed for the custom Census data order required for SPA reporting.

² For stations connected by the Broadway Subway Project.

³ For all routes operating in Broadway Subway SPA Geography.

APPENDIX C - JOBS BY INDUSTRY

Jobs by Industry (2016)



NOTE:

Numbers before job sector titles indicate the industry's North American Industry Classification System (NAICS) code.

APPENDIX D - DEFINITIONS OF HOUSING TYPES FOR BROADWAY SUBWAY SPA MONITORING

Source: City of Vancouver Housing Vancouver Strategy & supporting documents

Purpose-Built Market Rental: Multi-family housing built with the intent to be rented in the private market. Includes rental housing secured by legal agreement (i.e. Secured market rental housing guaranteed through a legally binding covenant or housing agreement registered on title).

Social Housing: From City of Vancouver Zoning & Development By-Law which defines as rental housing:

- In which at least 30 per cent of the dwelling units are occupied by households with incomes below housing income limits, as set out in the current “Housing Income Limits” table published by BC Housing
- Which is owned by a non-profit corporation, by a non-profit co-operative association, or by or on behalf of the city, the Province of British Columbia, or Canada
- Is secured by a housing agreement or other legal commitment

Supportive Housing: Subsidized housing with supports that help individuals to maintain housing stability. Supports help tenants stabilize their lives, enhance their independent living skills, and reconnect with their communities. The services provided to tenants are flexible and vary from building to building. Some services are provided by on-site staff, and some services are delivered through outreach programs.

There are several forms of supportive housing available:

- Buildings where all of the units are supportive (dedicated)
- Social housing buildings where some of the units are supportive (mixed)
- In scattered market apartments with rent supplements

Condominium Apartment (“condo”): Units within apartment buildings that are separately strata-titled and can be owned and sold independently or may be rented to a non-owner household. Condominium buildings generally include common amenity areas which are jointly owned and maintained by the strata corporation.

Laneway House: A small, detached home built on a low-density lot at the lane. Laneway homes are permitted in addition to a secondary suite in the main house, and like secondary suites, are for rental or family occupancy only and cannot be strata titled.

Coach House: A small, detached home typically built at the rear of the site adjacent to the lane. The coach house may be strata-titled (sold separately from the main house) unlike laneway homes which are always rental.

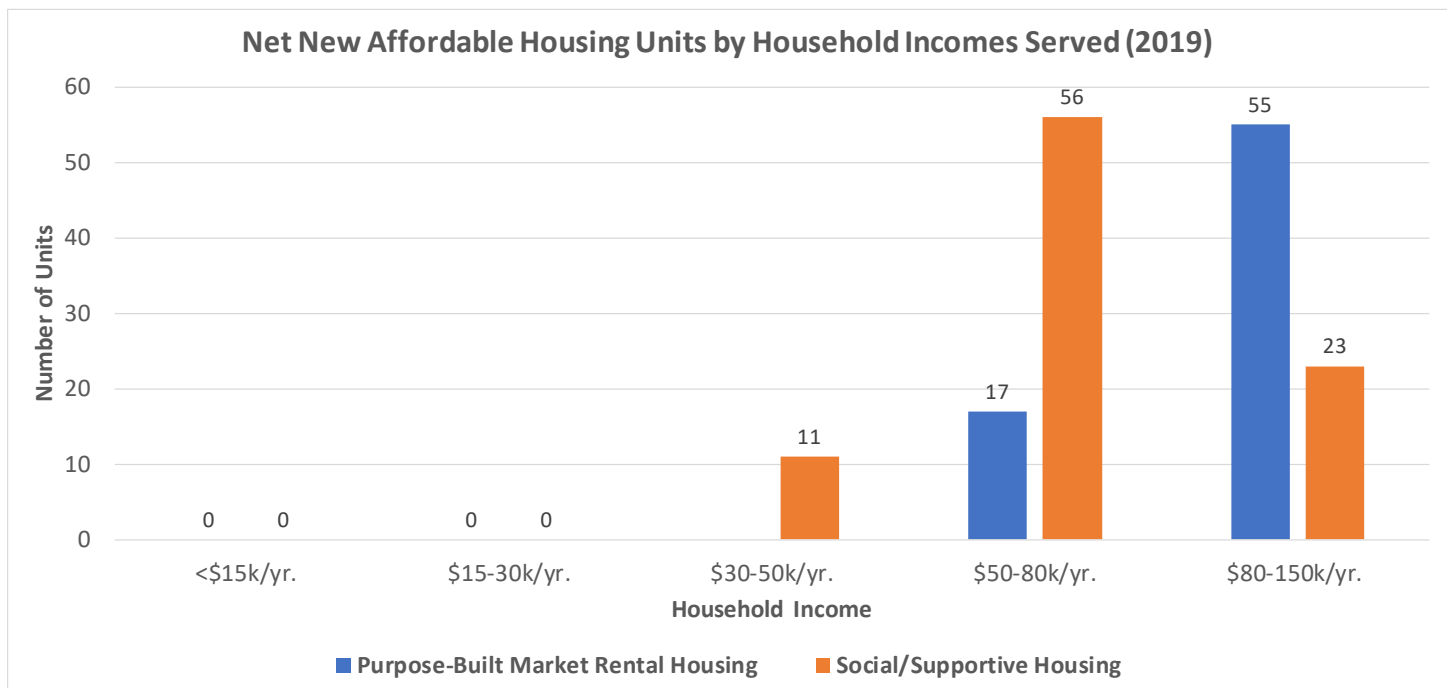
Townhouse: Ground-oriented, multi-family homes which can be a combination of side-by-side and top-and-bottom (‘stacked’) units or a single or double row of attached units with individual entrances from the street or courtyard. Private outdoor space is provided at the ground level and on roof decks.

APPENDIX E - 2019 NEW AFFORDABLE HOUSING UNITS BY HOUSEHOLD INCOMES SERVED

Housing affordability is a relative measure of a household's ability to pay for housing – it relates the price or cost of housing to household income. Housing is considered to be affordable when it comprises 30 per cent or less of a household's total income before taxes. Households paying over 30 per cent of their total income on housing costs are considered to be 'housing cost burdened.' This is particularly relevant for low and moderate income households whose household expenses take a higher overall share of their monthly budgets, whereas higher-income households may be able to absorb higher housing costs.

As noted in the report above, the Metro Vancouver Housing and Transportation Cost Burden Study (2015) also emphasizes the importance of understanding how proximity to transportation alternatives can reduce transportation costs, and therefore the overall household cost burden. Transit choices are especially important for renter households, as demonstrated in Metro Vancouver's Transit-Oriented Affordable Housing Study (Phase 1, 2017), which indicates that renter households, especially those with lower incomes, are more likely to use transit.

The following chart shows net new purpose-built market rental and social/supportive housing units by incomes served – how many units are affordable to a particular household income where that household pays no more than 30 per cent of total income on rent.



The majority of new purpose-built market rental housing approvals in 2019 were affordable to households earning over \$80,000 per year. The majority of new social/supportive housing approvals were affordable to households earning between \$50,000 and \$80,000 per year.

APPENDIX F - BEHIND GATE TRANSFER BOARDINGS AT COMMERCIAL-BROADWAY STATION

Average Daily Boardings at Commercial-Broadway Station (2019)

	Weekday		Saturday		Sunday	
	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>	<i>First-Boardings</i>	<i>Behind-Gate Transfer Boardings</i>
Expo Line	18,900	15,700	14,100	10,500	10,800	7,300
Millennium Line	6,200	14,700	4,000	9,200	3,100	6,800

NOTES:

First boardings: Estimated number of vehicle entries made by customers, immediately after tapping in at this station.

Behind-gate boardings: Estimated number of vehicle entries made by customers after alighting a vehicle at this station, without exiting the gates between that alighting and this boarding (i.e. transferring).

APPENDIX G - AVERAGE DAILY BUS BOARDINGS AND ALIGHTINGS

Route Number	Average Daily Boardings in SPA Geography			Average Daily Alightings in SPA Geography		
	EB	WB	Total	EB	WB	Total
99 UBC / Commercial Broadway	16,705	13,677	30,382	14,155	17,712	31,867
84 UBC / VCC-Clark Station	3,333	5,396	8,729	5,669	3,383	9,052
44 UBC / Downtown	508	196	704	209	666	875
33 UBC / 29 th Avenue Station	442	603	1,045	536	578	1,114
22 Downtown / Knight	1,025	849	1,874	714	1,177	1,891
19 Stanley Park / Metrotown Station	1,013	1,012	2,025	1,200	968	2,168
17 Oak / Downtown	1,782	1,870	3,652	1,754	1,715	3,469
16 29 th Avenue Station / Arbutus	1,895	1,208	3,103	1,182	1,847	3,029
14 UBC / Hastings	1,794	860	2,654	946	1,677	2,623
9 UBC / Alma / Commercial-Broadway / Boundary	9,960	4,850	14,810	6,703	8,590	15,293
8 Fraser / Downtown	1,618	1,317	2,935	1,804	1,548	3,352
7 Nanaimo Station / Dunbar	1,003	470	1,473	469	1,071	1,540
4 Powell / Downtown / UBC	980	544	1,524	609	1,036	1,645
N19 Downtown / Surrey Central Stn NightBus	33	5	38	19	4	23
N17 Downtown / UBC NightBus	5	9	14	10	12	22
N9 Downtown / Coquitlam Central Stn NightBus	48	15	63	38	19	57
N8 Downtown / Fraser NightBus	25	13	38	27	8	35

Route Number	Average Daily Boardings in SPA Geography			Average Daily Alightings in SPA Geography		
	NB	SB	Total	NB	SB	Total
50 Waterfront Station / False Creek South	1,639	648	2,287	657	1,492	2,149
20 Victoria / Downtown	-	3,497	3,497	-	3,181	3,181
15 Cambie / Olympic Village Station	417	839	1,256	741	555	1,296
10 Granville / Downtown	2,192	1,205	3,397	1,168	2,284	3,452
3 Main / Downtown	2,381	2,109	4,490	1,938	2,551	4,489
N20 Downtown / Victoria NightBus	-	25	25	-	46	46
N15 Downtown / Cambie NightBus	4	2	6	3	4	7
N10 Downtown / Richmond NightBus	2	14	16	11	12	23
ALL ROUTES IN SPA GEOGRAPHY	Average Daily Boardings		90,037	Average Daily Alightings		92,698

NOTES:







Data is specific to the bus stops in the SPA Geography and derived from the automated passenger count (APC) data reported in the 2019 Transit Service Performance Review (TSPR).

Data is weighted per stop/line.

Data is drawn from the SEPT19 truncated sheet (September 2 to December 15, 2019).

APPENDIX H - DEFINITIONS OF PASSENGER COMFORT

Source: TransLink Transit Service Guidelines (2018)

LOAD FACTOR (% OF CAPACITY UTILIZED)	RAPID SERVICE TYPE	ALL OTHER SERVICE TYPES
 100% or higher	<ul style="list-style-type: none"> » All seats are full and all standing space is occupied. » The vehicle is overcrowded, and accessing the doors may be difficult for many passengers. » Standing passengers will need to step off the bus to let others exit. » Pass-ups are likely at some stops. 	
 84% to 99%	<ul style="list-style-type: none"> » All seats are full and most standing space is occupied. » The vehicle is crowded, and accessing the doors may be difficult for some passengers. » Standing passengers will need to shift position as other passengers board/exit. 	
 67% to 83%	<ul style="list-style-type: none"> » All seats are occupied, and half of the passengers are standing. » Some passengers will have to move around for others to board or exit the train. 	<ul style="list-style-type: none"> » All seats are occupied, and several passengers are standing. » Some passengers may have to move around for others to board or exit the bus.
 51% to 66%	<ul style="list-style-type: none"> » All seats are occupied, and about one-third of all passengers are standing. » Boarding or exiting the train occurs without difficulty. 	<ul style="list-style-type: none"> » Most seats are occupied, and a few passengers are standing. » Boarding or exiting the bus occurs without difficulty.
 34% to 50%	<ul style="list-style-type: none"> » All seats are occupied, and about one-quarter of all passengers are standing. » Boarding or exiting the train occurs without difficulty. 	<ul style="list-style-type: none"> » Most seats are occupied, and people need to sit next to each other if they want a seat. » Passengers standing are doing so by choice, not necessity.
 0% to 33%	<ul style="list-style-type: none"> » Seats may be available for some boarding passengers. » A few passengers will choose to stand. 	<ul style="list-style-type: none"> » Half of the seats (or less) are occupied, and no passengers are standing. » Few passengers need to sit next to someone. » Passengers have some freedom in where they can sit.

Note: The load factor range may change as the number of seats on a vehicle changes. Descriptions of load factors for passenger comfort are adapted from the Transit Capacity and Quality of Service Manual.

APPENDIX I - PEAK LOAD FACTORS BY MODE

Route Number	Time Period	Peak Load Factors	
		EB	WB
99 UBC / Commercial Broadway	AM Peak	55%	134%
	Midday	91%	111%
	PM Peak	125%	76%
84 UBC / VCC-Clark Station	AM Peak	64%	90%
	Midday	71%	60%
	PM Peak	94%	65%
44 UBC / Downtown	AM Peak	86%	56%
	Midday	67%	53%
	PM Peak	103%	72%
33 UBC / 29 th Avenue Station	AM Peak	25%	70%
	Midday	50%	46%
	PM Peak	50%	31%
22 Downtown / Knight	AM Peak	22%	91%
	Midday	64%	81%
	PM Peak	80%	39%
19 Stanley Park / Metrotown Station	AM Peak	51%	87%
	Midday	65%	60%
	PM Peak	95%	59%
17 Oak / Downtown	AM Peak	59%	62%
	Midday	56%	53%
	PM Peak	72%	50%
16 29 th Avenue Station / Arbutus	AM Peak	105%	57%
	Midday	72%	60%
	PM Peak	82%	81%
14 UBC / Hastings	AM Peak	102%	68%
	Midday	66%	57%
	PM Peak	103%	83%
9 UBC/Alma/Commercial-Broadway/Boundary	AM Peak	60%	80%
	Midday	52%	68%
	PM Peak	84%	55%
8 Fraser / Downtown	AM Peak	26%	53%
	Midday	33%	27%
	PM Peak	53%	28%
7 Nanaimo Station / Dunbar	AM Peak	92%	30%
	Midday	56%	42%
	PM Peak	80%	72%
4 Powell / Downtown / UBC	AM Peak	90%	46%
	Midday	70%	48%
	PM Peak	89%	67%

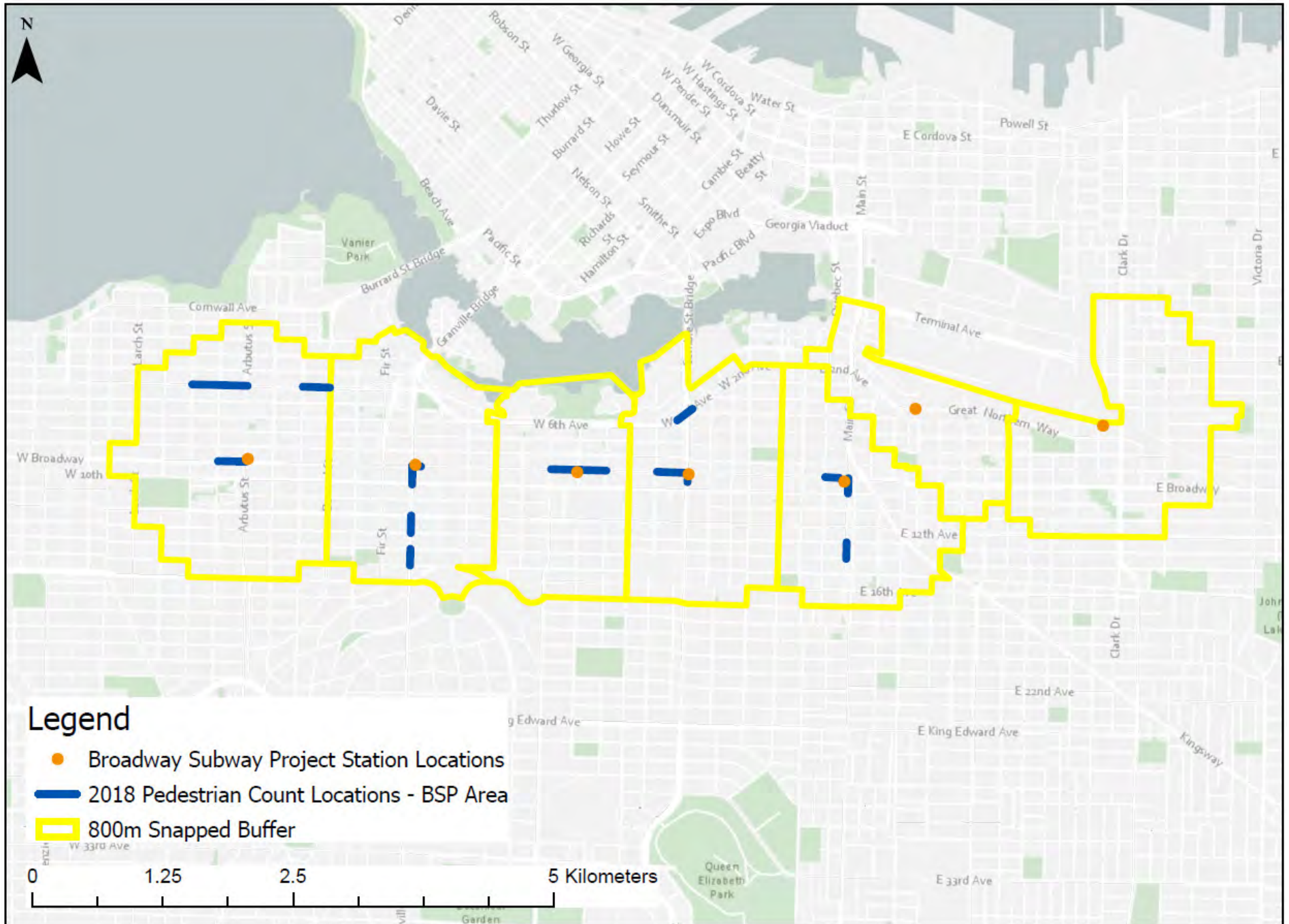
Route Number	Time Period	Peak Load Factors	
		NB	SB
50 Waterfront Station / False Creek South	AM Peak	51%	51%
	Midday	68%	47%
	PM Peak	90%	43%
15 Cambie / Olympic Village Station	AM Peak	35%	34%
	Midday	21%	34%
	PM Peak	33%	71%
10 Granville / Downtown	AM Peak	71%	28%
	Midday	43%	40%
	PM Peak	59%	71%
3 Main / Downtown	AM Peak	70%	33%
	Midday	43%	50%
	PM Peak	43%	73%

NOTES:

Data is specific to the SPA Geography.

Data is based on weekdays (Mon. - Fri.) and all year 2019.

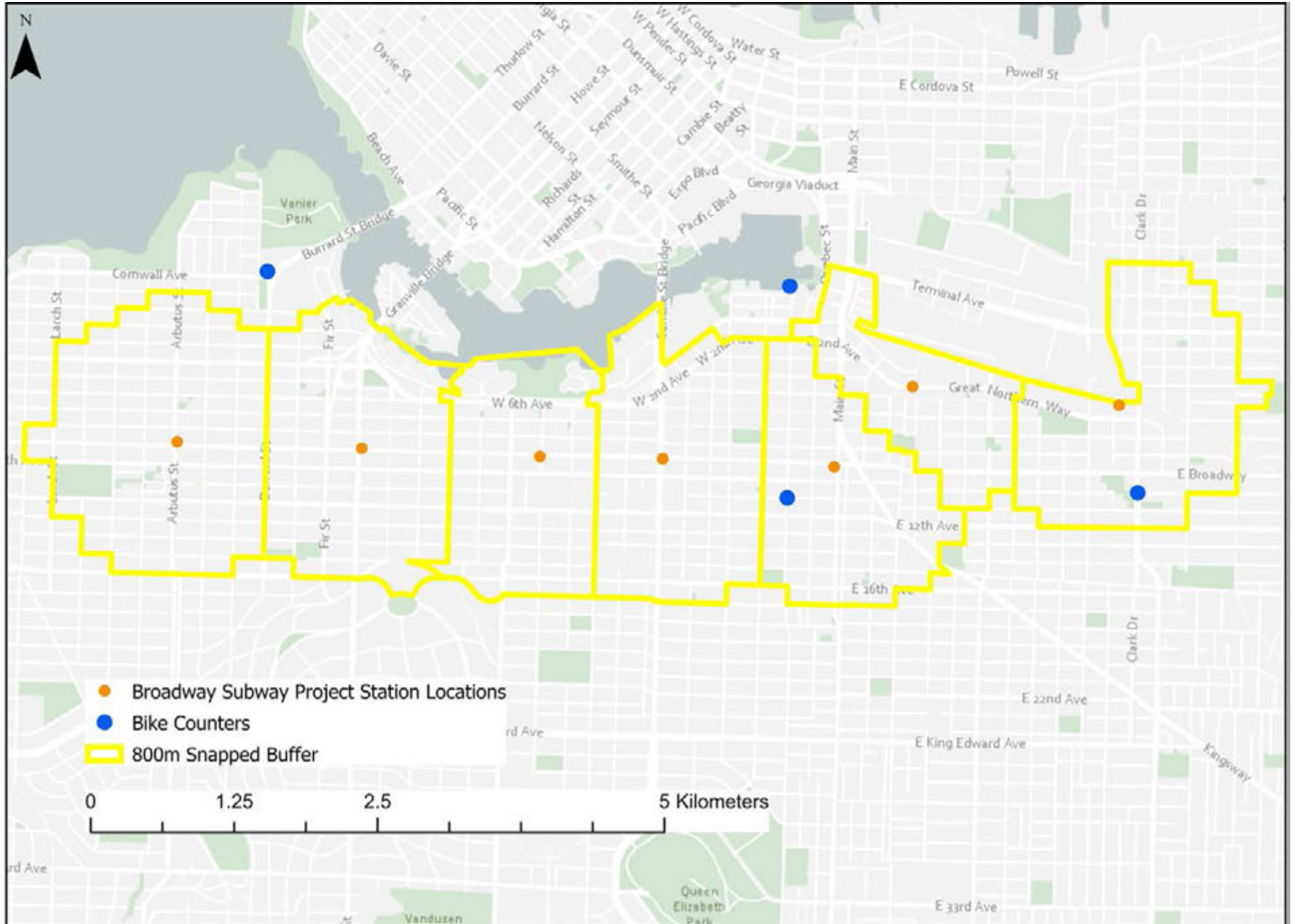
APPENDIX J - PEDESTRIAN COUNT LOCATIONS



APPENDIX K - PEDESTRIAN COUNTS BY STATION AREA

Station Area	Address	North Sidewalk		South Sidewalk		West Sidewalk		East Sidewalk		Total	Station Area Total
		From East	From West	From East	From West	From North	From South	From North	From South		
Mount Pleasant	2900 Main St					1,105	860	1,084	1,161	4,210	
	2500 Main St					1,234	1,037	913	1,011	4,195	13,773
	100 E Broadway	2,147	1,619	621	981					5,368	
Broadway - City Hall	500 W 2nd Ave	970	1,158	93	137					2,358	
	2500 Cambie St	2,068	2,174	1,696	2,632					8,570	25,393
	500 W Broadway	4,660	4,573	2,142	3,090					14,465	
Fairview - VGH	900 W Broadway	1,508	1,650	569	609					4,336	
	800 W Broadway	2,712	2,501	937	1,378					7,528	11,864
South Granville	2800 Granville St					1,074	866	1,065	1,157	4,162	
	3000 Granville St					469	509	516	620	2,114	
	2500 Granville St					1,563	1,284	1,413	1,862	6,122	17,158
	1400 W Broadway	1,358	1,015	1,178	1,209					4,760	
Arbutus	2100 W Broadway	892	540	1,111	1,304					3,847	
	1800 W 4th Ave	801	591	552	710					2,654	17,606
	2200 W 4th Ave	1,401	1,403	935	961					4,700	
	2100 W 4th Ave	1,746	1,488	1,620	1,551					6,405	

APPENDIX L - BIKE COUNTER LOCATIONS



APPENDIX M - RATES OF CAR OWNERSHIP BY STATION AREA

Station Area	Number of Licensed Drivers	Number of Insured Vehicles	Rate of Insured Vehicles per Licensed Driver
Arbutus	14,741	10,118	0.69
Broadway - City Hall	7,406	7,729	1.04
Fairview - VGH	9,632	7,154	0.74
Great Northern Way	5,166	3,532	0.68
Mount Pleasant	8,367	5,675	0.68
South Granville	12,280	9,272	0.76
VCC – Clark	7,666	6,300	0.82
TOTAL	65,258	49,780	0.76

NOTES:

Data provided by Insurance Corporation of British Columbia and aligned to the SPA Geography.

Counts are as of December 31, 2019.

Vehicle counts include all vehicle types (e.g. passenger, commercial, motorcycles, motor homes, and trailers) and policy types (Autoplan, temporary and storage).

Vehicles are categorized into geographic boundaries based on customers' postal codes and are based on mailing address which may not necessarily represent where the vehicle is used or parked.

