

TO: Board of Directors

FROM: Kevin Desmond, Chief Executive Officer

DATE: November 30, 2018

SUBJECT: Public Delegations at the October 4, 2018 Board of Directors Meeting

EXECUTIVE SUMMARY

The Board received five public delegations at its October 4, 2018 open Board meeting. Management followed up with each delegation after the meeting.

PURPOSE

The purpose of this report is to brief the Board on Management's response to topics raised by public delegations at the TransLink Board meeting on October 4, 2018.

BACKGROUND

On October 4, 2018, the TransLink Board of Directors received five public delegations on the following topics:

- **Dogs on Transit** – TransLink was asked to consider changing its current policy so that dogs would be permitted to travel on transit, during off-peak periods. This change could be subject to an initial pilot project. The speaker suggested that TransLink could impose additional conditions, or have dedicated trains and buses for passengers who have allergies.
- **Free Transit for Children and Youth** – A delegation suggested that TransLink address the issue of at-risk youth who incurred fare evasion debt and now face hurdles in obtaining drivers' licenses, student loans, and housing as a result of bad credit. They also urged TransLink to consider free transit for children and youth.
- **Use of Taxis for Passengers with Disabilities** - The speaker was of the view that the increased use of taxis to transport passengers with disabilities is not acceptable. He indicated that taxis have safety and reliability concerns.
- **Contracting Out Bus Services** – The speaker noted that Singapore contracts out bus services, and TransLink should consider a similar model. He also provided suggestions for suicide prevention measures on SkyTrain and Canada Line service levels.
- **Independent Transit Service Application** – Representatives of a company that sought approval to operate an independent transit service addressed the Board.

DISCUSSION

Management responded to each of the delegations on issues as follows:

- **Dogs on Transit** – Management noted that TransLink is currently undertaking a comprehensive review of the pet policy, and recommendations are expected to go forward to the Board by end of 2018.

- **Free Transit for Children and Youth** – Management advised the delegation that TransLink does not have the authority to subjectively forgive or reduce fare infraction ticketed amounts. However, one of the recommendations from TransLink’s fare review is to work with the Provincial Government to explore expanded discounts for low-income transit riders, children and youth.
- **Use of Taxis for Passengers with Disabilities** - Management noted that the use of taxis to deliver supplemental HandyDART trips is important to maintain the availability of service, particularly during peak periods of demand. The letter also mentioned the measures TransLink is undertaking to improve safety and reliability.
- **Contracting Out Bus Services** – Management responded in detail to each of the delegation’s suggestions. The letter noted that TransLink does contract out several of its community shuttle services, and sets out the considerations for deciding whether a service should be contracted out. With respect to SkyTrain platform screen doors, the letter noted that these would be difficult to implement because SkyTrain has a varied fleet with differing configurations and vehicle lengths.
- **Independent Transit Service Application** – Management advised the applicant in writing that the independent transit service was approved by the Board at the October 4 meeting, and listed the terms and conditions associated with this approval.

TransLink Strategic Priority: Improve Customer Experience and Public Support

BCRTC's corresponding business plan initiatives related to this strategic priority.

"Putting the needs of our customers first will be made possible with a new customer experience plan that sets standards of excellence for our system. We'll measure our progress with key performance indicators and data dashboards brought to life through our visual management centres."

Customer Experience

The Communications and Customer Service teams continue to work with several TransLink departments on a number of key customer facing projects. This work involves providing communications support, advice, and coordination for signage and notices to ensure internal and external clients are well informed of maintenance and capital projects that may affect their commute or business activities.

Projects supported this quarter include:

- BC Hydro Power Upgrades
- Elevator and Escalator repairs
- Rail pad and rail replacement
- Joyce–Collingwood West station house staircase closure and tiling work
- Celebration of Light which occurred on July 28, August 1 and 4
- Vancouver Pride Parade

Operations is demoing a smartphone app for SkyTrain Attendants that is essentially a "one-stop" shop for information that SkyTrain Attendants can use on a daily basis. To be fully released in Q4, this app will assist STAs with providing valuable customer information to our passengers by giving them access to real-time train location, trip planning, next train and next bus information, alerts, Google Maps, Google Translate and administrative procedures and policies.

Operations

In Q3, SkyTrain delivered 99.7% of scheduled service and had an on-time performance of 96.3%. These results are above the respective targets of 99.6% and 95.4%. WCE service delivery was on target at 99.9% and on-time performance was 96.9%, just below the target of 97.8%.

Extra service (26,973 train-km and 2,700 service hours) was operated to accommodate 11 special events including Canada Day, Celebration of Lights, Pride Parade, concerts, football, and soccer games.

The 2019 Winter Snow Operations Plan was reviewed and updated. Lessons learned have been implemented and the plan is in place to deal with wintry weather than may affect service.

Service Delivery

Customer Experience & Performance Reporting, Maintenance & Engineering, Operations, and Safety divisions continue to debrief on all major (>30 mins) service delays to recognize successes and identify gaps to enhance our response and resiliency. This quarter we had five incidents that resulted in seven follow-up action items raised. All seven were resolved.

TransLink Strategic Priority: State of Good Repair

BCRTC's corresponding business plan initiatives related to this strategic priority.

"Ensuring a state of good repair is essential. We're focused on introducing new guiding principles and standards, and building out longer-term maintenance plans with an eye to keeping our customers moving."

Business Effectiveness

An important part of the Rail business plan is to ensure the development of our teams and people. This quarter, Rail's Finance and Corporate Services department implemented the Knowledge Transfer in key areas of the company including Stores and Control Operations.

Safety

The safety department is on track with the development of a framework for the integrated management system which includes Safety, Environment, Risk, and Emergency/Security.

The merging of two current safety manuals (SMS and SSPPM) prior revising to ISO 45001 standard, has continued with 21 of 108 Safety programs being transferred over.

TransLink and its operating companies finalized the revisions to the Drug and Alcohol policy during Q3. BCRTC's policy was updated and communications were sent out to all staff prior to the change in legislation.

Training

The Training department is continuing to update training records, and providing records to departments to drive completion of the 2018 required training program. This includes regular bi-weekly meetings to design and deliver training solutions, developing curriculum to support departments, and implementing training dashboards to increase visibility on training data. This quarter, the Training department also delivered the first Supervising for Safety course in September.

Maintenance

Ensuring our railway is in a state of good repair is an essential component of our business plan. Where possible, most of our preventative and corrective repair activities are performed in our after-service maintenance window.

Railway infrastructure activities this quarter included:

- 39 kilometres of rail grinding
- 2,475 rail pads replaced in the Dunsmuir tunnel, and the outbound track between Waterfront and Granville Stations
- 4 full turnout (switch) replacement
- 21 Platform Intrusion Emergency System repairs
- 3 rail component replaced
- 14 rail plugs installed

Performance Reporting

The Performance Reporting team continues its outreach to several departments across the organization to create and produce monthly performance report and dashboards. The work the PR team is doing is helping to enhance each department to track performance, analyze and understand risks and performance related to their business. Dashboards have been created for Training,

Occupational Health, Maintenance, Operations and Customer Service.

TransLink Strategic Priority: Deliver Mayors' Plan

BCRTC's corresponding business plan initiatives related to this strategic priority.

"We'll maintain our progress on delivering agreed fleet, network and service enhancements. We are also committed to the 10-year transportation and mobility vision to serve the growing number of residents in our region."

System Expansion

BCRTC continues to support rail related projects contained in the Mayors' Council 10-year transit and transportation vision including the procurement of rail vehicles and supporting preliminary work for the Millennium Line Broadway Extension and the South of Fraser rapid transit project. Operations, and Engineering departments have assigned dedicated resources to the respective project teams.

Fleet Expansion and Renewal

The first of 14 new Mark III trains was shipped from Bombardier's Kinston testing facility and delivered to BCRTC's Operations and Maintenance Centre on September 13 and 14. Testing and Commissioning of this four-car train will continue in Q4, with an anticipated in-service date of late 2018.

Service Delivery

The 2019 annual service rail plan for Expo and Millennium Lines, Canada Line, and West Coast Express has been accepted by TransLink.

Key Performance Indicators – as of September 30, 2018	SkyTrain (excluding Canada Line)			West Coast Express (WCE)		
	September YTD Target	September YTD Actual	September YTD Last Year	September YTD Target	September YTD Actual	September YTD Last Year
Customer Satisfaction Survey – SkyTrain Service Overall (Q3 Results) ¹	8.1	8.3	8.1	8.5	8.9	8.4
Boarded Passengers (in thousands) ²	79,738	83,175	78,581	1,725	1,857	1,739
Customer Complaints (per million boarded passengers) ³	15.0	15.2	17.4	98.5	105.0	98.9
Major Passenger Injuries (per million boarded passengers) ⁴	1.1	1.0	1.2	0.3	1.6	1.7
On-Time Performance ⁵	95.4%	96.3%	95.2%	97.8%	96.9%	97.7%
Percentage of Scheduled Service Delivered ⁵	99.6%	99.7%	99.6%	99.9%	99.9%	100.1%
Service Delays 16 – 30 Minutes ⁵	-	34	50	-	-	-

Service Delays 30 Minutes or more ⁵	-	11	16	-	-	-
Employee Lost Time Frequency (per 200,000 hours worked) ⁶	3.0	5.4	5.9	0.0	0.0	0.0
Operating Cost per Vehicle km ⁷	\$3.19	\$3.18	\$2.96	\$14.92	\$13.62	\$13.93
Operating Cost per Capacity km ⁷	\$0.032	\$0.033	\$0.030	\$0.101	\$0.092	\$0.094
<p>¹ The TransLink Customer Satisfaction survey is completed quarterly for Expo/Millennium Lines and bi-annually for West Coast Express. The EM score dropped very slightly in Q3 (8.2 vs. 8.3 in the previous quarter), mostly due to the lower result in the 'Not Being Overcrowded' category. WCE improved over Q1 (8.9 vs. 8.8); in part due to higher scores in the 'Safe from Crime in Parking Lots' and 'Convenient Hours of Operation' categories.</p> <p>² EM Ridership continues to set new records. The 28.79M seen in Q3 is the highest quarterly total on record. Although WCE ridership in Q3 did not set any records, it did grow by 8.5% over Q3 2017.</p> <p>³ CVM complaints were included in the 2017 total, but were not in 2018. Excluding the CVM complaints, the quarterly EM Complaints rate over last year dropped 14.8%. As for WCE, its complaint rate dropped 3.1% over Q3 2017.</p> <p>⁴ Passenger Injuries were down in Q3 compared to last year (21 to 23). Slips, Trips and Falls continue to be the leading cause. There was one WCE Passenger injury, the same as last year.</p> <p>⁵ EM Q3 results for both On-Time Performance and Service Delivery were very positive, with both exceeding target for all three months for the first time during a quarter in 2018. Both Delay categories were below Q3 2017 results, mostly due to fewer delays caused by Manual Driving exercises and Track Intrusion alarms of unknown cause.</p> <p>Results were mixed for WCE. Service Delivery had perfect results for the quarter, and has been at 100% since February. OTP, however, came in at 96.73% for the quarter; 1.1% below target, and 1.8% below last year. This was mostly due to delays in September caused largely by freight train movements and signal issues.</p> <p>⁶ EM accepted Lost Time Accident claims rose sharply in Q3. There were 14 during the quarter, compared to 19 in the first six months of 2018. This also represents a 114.3% increase over Q3 2017, when there were only 7 Lost Time Accident claims. There were no Lost Time Accident claims for WCE in Q3 2018, the same as last year.</p> <p>⁷ Includes Allocated Costs; excludes 3rd Party Revenues and Depreciation.</p> <p>For the nine months ended September 30, 2018, Expo and Millennium operations was slightly unfavourable to budget primarily due to higher train and rail maintenance activities, insurance premiums, hydro propulsion expenses and labour costs driven by lower salary capitalization and higher overtime offset by temporary vacancies. Increased car kilometres from changes in fleet configuration and fewer service reductions for planned maintenance contributed to a slightly favourable operating cost per vehicle km.</p> <p>For the nine months ended September 30, 2018, West Coast Express was favourable to budget largely due to the timing of track maintenance which will occur in the 4th quarter and higher contractual performance discounts offset by higher fuel prices.</p>						



TransLink Strategic Priority: CUSTOMER EXPERIENCE AND PUBLIC SUPPORT

CUSTOMER EXPERIENCE

Double-decker Buses

- Representatives from CMBC and Alexander Dennis have begun pre-production meetings for the order of 32 double-decker buses (27 replacements and 5 expansion). Deliveries are expected to start in Q3 2019.

Introduction of Live Chat

- Live Chat, an instant messaging feature allowing customers to have real-time conversations with Customer Information, was launched on October 17. The aim is for it to improve the customer experience by providing one more communication option for customers, including those with hearing impairments, and enable us to capture more data on customer interactions and trends. Live Chat is currently available Monday to Friday from 8:30 a.m. to 5:30 p.m.

Transit Alert Management System

- The new Transit Alert Management System (TAMS) system was launched on October 10 to improve the way Transit Alerts are produced and delivered to customers and ensure they are easy to understand. Along with TAMS came a re-design for the Alerts webpage and the inclusion of all alerts – not just those regarding a major disruption. Since launching, Customer Information has entered an average of 200 alerts per day (versus 124 pre-launch). Currently, 147,000 subscribers are registered to receive alerts.

On-time Performance

- This year, the Early Leave Initiative and On-road Transit Supervisor work has produced improvements for on-time performance. We are also experiencing standard seasonal changes, and despite the usual decrease following Labour Day, Q3 2018 was one of the best quarters we have ever achieved.

Route 257 Update

- Effective September 1, CMBC took over operation of route 257 (Horseshoe Bay/Vancouver) and implemented a new service design with 20-30 minute headway using dedicated articulated buses. At the start of the new sheet, we provided additional support to ensure a smooth transition. We hired nine West Vancouver Transit Operators and developed a specialized 17-day program to bring them up-to-speed with CMBC's operational expectations and instruction on trolleybuses.

Winter Weather Preparedness & Snowy Weather Action Plan (SWAP)

- Transit Communications (TComm) will activate the Snowy Weather Action Plan based on weather conditions and other triggers. Maintenance will handle tire sock installation/removal.
- TComm reached out to all Metro Vancouver municipalities to ensure transit routes are on priority lists and confirmed the same priority corridors will be maintained as last year.
- All winter weather plans are up-to-date, meetings with subsidiaries have taken place, and weather station and contractor call-out system testing is complete.
- A HandyDART Adverse Weather Plan was developed in collaboration with First Transit to align with CMBC procedures and follow established essential services protocols. “Slippery Conditions” weather signs were provided to First Transit to post at all depots. In the fall newsletter, customers were reminded to keep driveways clean and clear of ice and snow.
- This winter, the use of tire socks will be expanded to two new routes in North Vancouver. On heavy snow days, 40’ conventional buses will be equipped with reinforced tire socks on Route 210 (Upper Lynn Valley) and Route 232 (Grouse Mountain), as well as the Burnaby Mountain routes tested last year.

HandyDART Transition to First Transit

- Continued efforts are being made to improve HandyDART on-time performance. Multiple stakeholder meetings have been held to build relationships, gather feedback, and a visit was arranged for the HandyDART Riders’ Alliance to sit with the Dispatch and Scheduling teams to increase awareness.

Travel Training

- Travel Training sessions have occurred nine times with seniors and people with *diversabilities* resulting in more than 1,000 participants receiving information about CMBC programs and services. The full program design is under review with the Access Transit Steering Committee.

Ewen Avenue Construction Complete – Route 410

- A road closure due to construction was in place along Ewen Avenue in the Queensborough area forcing CMBC to implement a detour on Route 410 for 11 months.
- The construction contractors approached CMBC in December 2017 for work scheduled to begin January 2018 and continue until fall 2018. This notice period was insufficient to manage the effect of the closure. Route 410’s detour resulted in delays, customer complaints, and significant cost. The detour was modified three times in attempts to improve the customer experience.
- On November 8, the contractors informed CMBC that construction was complete and Route 410 resumed regular service on November 12.

SAFETY

Safety Management System

- The Safety Management System (SMS) is transitioning from the OHSAS 18001 standard to the new ISO 45001. Our intention is to make a full transition, however we will not seek certification. A gap analysis is currently being completed by TransLink's Internal Audit team to help provide a road map for any necessary changes and is expected to be complete by the end of 2018.

Operator Protection Barriers

- New buses fitted with Operator Protection Barriers have begun to arrive and go into service at Surrey Transit Centre. The barriers are intended to provide protection to Transit Operators, part of CMBC's larger effort to reduce employee assaults. The barriers are now standard equipment on all new 40' and 60' conventional buses. The first phase of a retrofit program is scheduled to begin this winter and involves the installation of barriers on 208 air-conditioned New Flyer Xcelsiors. The second phase of the retrofit program business case – installation of barriers on trolleybuses – is currently being prepared for submission.

Distracted Driver Campaign

- As part of an internal distracted driving campaign, a "Say NO to Distracted Driving" brochure was created and will be distributed to Transit Operators.

ENVIRONMENTAL STEWARDSHIP

Low Carbon Fleet Strategy (LCFS)

- The second phase of the LCFS began with the selection of a consultant and a kick-off meeting on October 31. An in-depth analysis of charging stations, interdependencies and facility capacity/upgrades will be included in reports targeted for completion by July 2019.

CUTRIC Battery-electric Bus Pilot

- The CUTRIC Battery-electric Bus Pilot will begin in Q2 2019. Four battery-electric buses have been purchased to pilot the technology on route 100 (22nd Street/Marpole Loop). A proposal for the purchase of six additional battery-electric buses for the same route was recently approved by the Metro Vancouver Finance Committee.

Battery-electric Non-Revenue Vehicles

- The 2018 capital request for non-revenue pool vehicles includes two battery-electric vehicles. The vehicles will arrive in 2019 and the proposed location is the Sapperton office. Two new non-revenue charging stations will be installed at Hamilton Transit Centre by year-end, providing an opportunity to test their performance and determine a strategy for expanding to other sites.

Spills KPI Target

- As of September 30, the year-to-date spill KPI is 5.2 spills per million km of service. This rate continues to be well below CMBC's 2018 target of 7.9 (1% relative reduction from 2017).

OUR PEOPLE

Operator Resourcing

- To supplement Transit Operator hiring in preparation for the September 2019 B-Line expansion, the Transit Operator Resourcing and Training Committee ran an “Open House” recruitment event on October 27. Just over 1,000 applicants were invited to participate in an expedited pre-screen and interview process. Of those invited, 679 applicants attended and 359 passed to the next stage of our hiring process. More recruitment events are pending.
- Beginning in January 2019, the Transit Operator training delivery schedule and model will change to accommodate a significant increase in class sizes (from 16 to 24 per class).

Violent Incident Prevention Training for Transit Operators

- By the end of 2018, all active Transit Operators will have received Violent Incident Prevention (VIP) training through a three-year initiative.

Problematic Passengers Reports

- A proactive approach is now taken to help Transit Operators handle problem passengers. After a Transit Operator experiences a difficult situation, Transit Security Officers meet with the Operator on route. This approach is resulting in Operators receiving assistance more quickly and a decrease in the time spent to deliver wellness checks.

Bus Training Simulator

- CMBC representatives are attending Factory Acceptance Testing on December 5 and 6 in Ann Arbor, Michigan. They will assess the chosen bus training simulator for Transit Operator training, ensuring the configuration and performance meets expectations prior to delivery.

Mental Health First Aid Training

- Beginning in July, Occupational Health Specialists began delivering Mental Health First Aid (MHFA) training to frontline responders including First Aid Attendants, SeaBus employees, Transit Supervisors and Transit Security Officers. Sessions are offered twice a month and accommodate 25 per class. To date, 100 employees have been trained. Training will continue in 2019 to finish the four targeted groups and invite supervisors and interested employees to join.

Revisions to Drug and Alcohol Policy Regarding Legalization of Cannabis

- With the legalization of cannabis on October 17, CMBC worked with TransLink and the other operating companies to update our Drug and Alcohol Free Workplace Policy. Shortly before the legislation change, CMBC implemented the updated policy with an extensive communications plan to ensure employees and management understood the policy and its changes. CMBC is now developing a procedure for Post-incident and Reasonable Cause drug and alcohol testing.

Infrastructure Capital Projects

- A new CMBC capital project team under Infrastructure Engineering was created to manage infrastructure capital construction projects and assist various departments in identifying projects, scopes and budgets to address operational requirements. The team liaises with TransLink capital teams on all aspects of the projects from business case development to on-site presence during construction. Currently, the capital project team is involved in over 50 projects.

OUR ASSETS

SeaBus Terminal Upgrades and Escalator Update

- The South Terminal east berth – the last to be upgraded – is expected to finish in spring 2019.
- The design phase has begun for the new maintenance berth to accommodate a fourth SeaBus. A temporary berth will be constructed and completed in time for the arrival of the new vessel in spring 2019. The permanent maintenance berth is targeted for completion in 2020.
- A significant number of breakdowns of the 40-year-old SeaBus escalators have occurred since June 2018. Further delays have been caused by the manufacturer's lack of parts inventory (many must be fabricated from scratch due to the age of the escalators). Three of the four escalators are currently operating. The fourth unit will function as stairs until replacement is completed in 2019.

Commissioning of New Compressed Natural Gas (CNG) Buses

- Eighty of the 106 new CNG buses have been commissioned and are in service at Surrey Transit Centre. Decommissioning and disposal of buses being replaced is moving forward as scheduled.

Commissioning of New Nova/New Flyer Hybrid Buses

- Technology training for the new Nova/New Flyer BAE Hybrid system is ongoing at Vancouver and Burnaby Transit Centres. The first of the new buses were accepted in late October.

Camera Replacement Project

- Physical Security has assigned four exempt Security Investigators to pilot stage test two vendors for the bus camera replacement project. Each investigator will document the vendor meeting or not meeting the requirements as set out in the Request For Proposal.
- Bench testing was completed at the end of September 2018. A 10-bus pilot is running until December with TSI and SEON cameras. A vendor selection decision is expected in Q4 2018.

DOMS Project

- DOMS is a software system that manages sign-ups, vacation, absences, daily dispatching and wage records. At the end of 2020, our current version of DOMS will no longer be supported and will need to be replaced. A Request For Purchase went to market on October 9. We expect to be able to begin testing systems by the end of Q4 2018.

Bus Radio Replacement Project

- To outfit conventional buses for 2019 expansion, 67 INIT radio systems will be replaced on the non-revenue vehicle fleet starting in February 2019.

Preventive Maintenance Program (PMP)

- Implementation of the 8,000 km inspection interval is targeted for Q3 2019. New business processes are under development to support the PMP, including the Roadside Audit Program, drum brake stroke inspection and formalizing Transit Supervisor driver and gate check audits.

Financial Results

- Our 2018 Operating Costs year-to-date for October are \$6.5M favourable to plan. Access Transit Services is \$2M favourable and Contracted Transit Services is \$1.2M unfavourable for a combined total of \$7.3M favourable. This variance was driven primarily by employer paid benefit costs, salaries and wages, fuel and insurance.

BUS HIGHLIGHTS

Completing Phase One of the Mayors' Plan

- The final group of Phase One projects will be implemented in 2019:
 - Service improvements introduced as a result of expansion hours carried forward will enable us to adjust trip times to meet customer demand, improve frequency and lengthen span of service. Late night service, for example, has seen steady growth in demand and requires a low implementation cost at under 3,000 annual service hours.
 - Four new B-Line routes will improve travel time and reliability throughout the region.
 - 41st Avenue (Vancouver to UBC)
 - Fraser Highway (Surrey Central to Langley)
 - Lougheed Highway (Coquitlam Central to Maple Ridge)
 - Marine–Main (Dundarave to Phibbs Exchange)

Using high-capacity articulated buses, service frequency will be every 10 minutes in peak periods and every 15 at other times. Service will operate 6 a.m. to midnight every day. Buses will have distinctive liveries making them easily identifiable.

FLEET AND INFRASTRUCTURE

Bus Deliveries for Service Expansion

- 238 replacement buses are currently arriving and will continue until Q2 2019
- 105 expansion buses are arriving Q3 2018 through Q3 2019
- 4 battery-electric buses are arriving in March 2019
- 10 HandyDART vehicles arrived in mid-November
- We began to accept new Nova buses in late October after the manufacturer resolved an acoustic noise issue

New SeaBus Vessel

- Construction continues on the new vessel. The launch and christening ceremony is scheduled for late December 2018 or early January 2019 at the shipyard. Commissioning will occur in January 2019 followed by sea trials in the Netherlands.
- The vessel is expected to arrive in Vancouver in spring 2019. Prior to entering service, the new vessel will complete local sea trials, Transport Canada certifications, and crew training. SeaBus frequency will increase to every 10 minutes in peak periods when the new vessel enters service.

Farebox Replacement for Community Shuttles

- The project remains on schedule and on budget. TAG Canada farebox units and depot vaults are expected to arrive in January 2019. Installation will begin with First Transit garages in Langley and West Vancouver.

Silvertree/Marpole Transit Centre

- Functional design on the new transit centre has begun and will form the basis of the design work following in 2019.
- When complete, the facility will accommodate diesel/hybrid buses and include provisions to accommodate a battery-electric bus fleet. The transit centre is scheduled to open in Q4 2023.

KEY PERFORMANCE INDICATORS ¹	ANNUAL TARGET	SEPT YTD TARGET	SEPT YTD ACTUAL	SEPT YTD LAST YEAR
TransLink Customer Survey – Bus service overall	7.9	7.9	7.9	7.9
Scheduled Service Delivered ²	99.5%	99.5%	98.7%	99.4%
Customer complaints per million boarded passengers	105	105	103	106
Customer commendations per million boarded passengers	15	15	16	14
HandyDART Denial Rate – % of trips delivered	0.12%	0.12%	0.06%	0.12%
On-time Performance				
Bus Regularity – frequent service	78%	78%	76%	76%
Bus Punctuality – infrequent service	80%	80%	81%	78%
Spills per million Kms	7.9 ³	7.9	5.3	8.0
Preventable Collisions per million Kms ⁴	10.5 ⁵	10.5	9.8 ⁵	11.4
Employee Assaults per million boarded passengers	0.38 ⁵	0.37	0.33	0.40
Employee Lost Time Accident frequency (incidents per 200,000 hours worked)	8.3 ⁶	8.3	7.6	8.7
CMBC Operating Cost per Km (incl. fuel)	\$6.01	\$6.03	\$6.00	\$5.94
Access Transit Operating Cost per trip	\$41.69	\$41.64	\$40.82	\$42.06
METRICS				
Access Transit Trips Provided (thousands)				
HandyDART	1,233	920	874	841
Supplemental Taxi Service	102	76	106	93
Total Trips ⁶	1,335	996	980	934

¹ Performance measures are for CMBC business operations (Conventional Bus, Community Shuttle and SeaBus) and exclude contracted conventional transit and contracted community shuttle.

² As of April 2018, CMBC is using GPS technology to record and report cancellations (service not delivered due to operator availability, bus failure or availability, traffic or congestion.) Previous methodology relied heavily on human data entry thus one should exercise caution when comparing data.

³ 2018 target based on a 1% reduction from 2017 target of 8.0.

⁴ Data subject to change due to timing of final adjudications.

⁵ 2018 target based on a 5% reduction from 2017 annual actual.

⁶ Total trips delivered YTD are down when compared to budget primarily due to lower than expected demand for service.



METRO VANCOUVER TRANSIT POLICE REPORT FOR DECEMBER 2018 TRANSLINK BOARD MEETING

TransLink Strategic Priority: Customer First

- **Operation RailSafe Program**

The Transit Police is an active member of the international Operation RailSafe awareness program in coordination with the International Association of Chiefs of Police, (IACP) Police Advisory Group (PAG). On specified dates throughout the year, passengers will see increased 'high visibility' Transit Police presence on the transit system, along with Transit Security, Station Attendants, and jurisdictional police partners. The goal of this initiative is to enhance emergency readiness and the communication capacity of police and security officials who regularly work on or for rail related agencies. Two recent examples are:

- On October 22, 2018 from 6 am to 9 am, Transit Police Officers were deployed along the SkyTrain Line in high visibility vests to increase presence and safety to passengers and the public on the anniversary of the 2014 shooting of Canadian soldier, Cpl. Cirillo, in Ottawa. This initiative covered seven different SkyTrain Stations and involved 14 Constables, two Sergeants, and one Explosive Scent Detection Dog Team.
- In October 2018, Transit Police met up with CP Police in Maple Ridge for enforcement and presence at Maple Meadows West Coast Express Station, and some traffic enforcement was conducted in a school near a railway crossing in Maple Ridge. Between Transit Police and CP Police, 60 Violation Tickets were issued.



Transit Police Officers Braithwaite, Chung, Doyon and Blair were joined by CP Police for Rail Safety Week

- **Transit Police Officers Award Recipients**

Proudly, a number of Transit Police Officers were recipients of provincial and national policing and transportation awards this fall:

Canadian Urban Transportation Association (“CUTA”) Award – On November 21, 2018, Transit



Police Sergeant Wendy Hawthorne received the CUTA 2018 Individual Leadership Award for Excellence, for her leadership in implementing strategies to prevent graffiti on the public transit system and the jurisdictions where transit goes through. Sgt. Hawthorne has been involved in preventing crime and keeping passengers safe for 33 years, first as a Special Provincial Constable and then a Transit Police Officer since 2005. She has provided presentations on her work both provincially and nationally and is an eleven-time presenter at the Anti-Graffiti Symposium.

Order of Merit of Police Forces and 2018 Special Olympics Canada Rob Plunkett Law Enforcement Torch Run Award – In September in Ottawa, A/Chief Officer Barry Kross was

awarded a Member of the ‘Order of Merit of the Police Forces’ by Governor General of Canada - Her Excellency the Right Honourable Julie Payette. This honour is bestowed on police officers based on the highest qualities of citizenship, service to Canada, to the police community and to humanity at large. A/Chief Officer Kross also received (in November 2018 in Toronto), the 2018 Special Olympics Rob Plunkett Law Enforcement Torch Run Award for his significant contribution and dedication to the Law Enforcement Torch Run, including the displaying of integrity and exemplary conduct that captured the respect of many those within the Special Olympics in BC and across Canada.



BC Police Honors Awards – On November 22, 2018, three Transit Police Officers were recognized with prestigious awards at Government House in Victoria, as follows:

Award of Valour: Constable Ryan Morrison

Constable Morrison received an Award of Valour for his immediate action to ensure the safety of a child, while placing himself at substantial risk of serious injury, by jumping partially into a moving vehicle. The risk of falling under the vehicle was significant as the driver was taking physical action to push the Officer away from the steering wheel and gear shift, all while the vehicle was in continuous motion and he was being dragged.



Award of Meritorious Service: Constable Alexander Hamilton and Constable Kyle Prodanovic

Constables Hamilton and Prodanovic acted in a manner beyond the standard normally expected by placing themselves in considerable danger. They ran forward and grabbed a distraught woman before she fell from a considerable height and risked falling on the rail tracks themselves. Both Officers demonstrated exceptional bravery in the face of a significant risk.



- **Incident Highlights**

Transit Police perform a variety of policing duties on and around the transit system. Transit Police Officers receive a broad range of mandatory and specialized training in order to respond to diverse calls for service, protect vulnerable persons, and to prevent crime and public disorder. Some illustrations of incidents follows:

Protecting Transit Infrastructure – On October 6, 2018 at 12:44 am, a male entered the guideway at Surrey Central Station and started walking north on the track. The SkyTrain Control Centre powered down the track and notified Transit Police. Transit Police Officers quickly attended and entered the guideway; they intercepted the male and walked him back to the station, following which he was taken to hospital to be assessed. Trains were disrupted for approximately 25 minutes. Police records check revealed that the male was wanted on two outstanding New Westminster Police warrants for Break and Enter. Transit Police also pursued charges of mischief and breach of probation. The suspect was arrested and transported to jail.

Alert Officers Identify and Arrest a Suspect for Uttering Threats – The evening of October 9, 2018, at the Waterfront Canada Line Station, a young man was approached by another man asking for money because his car had been broken into. The first man refused, upon which the suspect threatened to knock him out and followed him through the station, yelling obscenities and racial slurs. The victim approached a Canada Line Station Attendant (“CLA”) who attempted to mediate the situation; however, the suspect then turned his hostilities on the Attendant. Fearing for safety of the victim and himself, the CLA contacted Transit Police. Transit Police were on patrol in the area but the man had fled before arrival. After quickly reviewing CCTV video, the Officers immediately recognized the suspect from previous interactions. They attended 29th Avenue SkyTrain Station, where the suspect was known to frequent. The Officers’ familiarity with their Community Service Area and the individuals they regularly deal with paid off, as the suspect was quickly spotted and arrested.

Preventing Sexual Offending – On September 19, 2018 at around 10 am, Transit Police Officers were on patrol at Langara Canada Line Station and recognized a male who was a known sex offender on public transit. A police records check by the Officers confirmed that the male was the subject of an outstanding warrant for sexual assault. When Officers conducted a search incidental to his arrest, a knife was found, which was contrary to the subject’s current recognizance of bail. The subject was subsequently arrested and transported to the jail.

Responding to Medical Emergencies – On October 6, 2018, Coast Mountain Bus Company contacted Transit Police about a male passed out on a bus at the Newton Exchange Bus Loop. Transit Police Officers responded and assessed the male, and found him not to be breathing. CPR was started and Naloxone was administered. Some ineffective breathing was observed and CPR was continued until Fire and BC Ambulance arrived and took over. Investigative measures were taken pending outcome of the situation. The unidentified male regained a pulse and was taken to hospital; he was in critical condition.

Warrant Arrest – On October 6, 2018, Transit Police Officers were conducting routine patrols of the Main Street SkyTrain Station when they checked a male loitering in the area. A police records check revealed an outstanding warrant from Vancouver Police for possession of weapon for dangerous purpose. The male was arrested on the warrant and transported to jail.



Mental Illness – Late night on October 24, 2018 at Stadium SkyTrain Station, a SkyTrain Attendant noticed a male causing a disturbance on a train and contacted Transit Police. Transit Police Officers attended and observed the male talking in a nonsensical manner onboard the train; he was also unable to identify himself and did not know where he was. The male was apprehended by Transit Police under the s. 28 of the *Mental Health Act* and transported to hospital. He was known to hospital staff and admitted for drug induced psychosis.

Missing Person – In the evening of September 19, 2018, Transit Police Officers responded to a call to assist Vancouver Police with a report of a missing elderly man. Officers conducted patrols around the South Fraser neighbourhood and were flagged down in the area of East 43rd Ave/Fraser St by a bus operator, who had the missing man on board. Officers spoke with the man and confirmed his identify, and coordination with Vancouver Police occurred. The elderly man was safely delivered home by Transit Police Officers.

TransLink Strategic Priority: State of Good Repair

- **Critical Incident on Bus Training**

In Q3 2018, Transit Police patrol Officers participated in a tactical training exercise related to responding to critical incidents on the bus system. There were two scenarios involved for this particular training: a suicidal person with knife on the bus and a person with a gun on a bus. A preparatory table top exercise for supervisors preceded the live exercise. The Immediate Rapid Response approach was incorporated and the principles of “CLEaR” and “STEP” were taught and applied. STEP is applied in setting containment within transit environments (Station, Train, Evacuate and Platform) and CLEaR is the applying of response strategies (Containment/eyes, Long guns and less lethal options, Evacuation and Reaction Plans). Live exercise training is a component of Transit Police professional



development and operational readiness, and it contributes to protection of the transit passengers, employees and infrastructure.

- **Performance Measurement Culture**

The Transit Police is an intelligence-led and data-driven police agency, and gathers comprehensive statistics in relation to crime and organizational performance. The Transit Police shares statistical and performance information with the public, TransLink and stakeholders through a variety of tools. A snapshot of key statistics for the January - September 2018 (“Q1/Q3”) period follows:

Transit Crime and Safety Statistics	2018 Q1/Q3	2017 Q1/Q3	% Change
Crimes Against Persons/100,000 Boarded Passengers <i>(primary and assists)</i>	0.470	0.460	2%
Crimes Against Property/100,000 Boarded Passengers <i>(primary and assists)</i>	0.599	0.610	-2%
Other Criminal Code Violations/100,000 Boarded Passengers <i>(primary and assists)</i>	0.660	0.582	13%
Provincial Violation Tickets (“VT”)	12,546	10,182	23%
Arrests - Warrants Executed (All)	727	623	17%
Arrests - New Charges¹	571	452	26%
Total S. 28 Mental Health Act Apprehension Files	146	131	11%
Sexual Offences <i>(primary and assists)</i>	204	210	-3%
SCBCTA Fare Bylaw Infractions	10,910	15,272	-29%

Arrests

Reducing crime and disorder on transit and the surrounding community is Strategic Objective #1 of the Transit Police. Of positive note for 2018 Q1/Q3 when compared to 2017 Q1/Q3, there was a 17% increase in the number of Transit Police arrests for outstanding criminal warrant arrests (includes RCMP, Municipal Police and Transit Police issued warrants from BC and elsewhere) and a 26% increase in arrests for new offences/charges.

In 2015, Transit Police Officers made 591 criminal warrant arrests and in 2017 - 837. Already in Q1 to Q3 2018, Transit Police made 727 warrant arrests, a notable increase. Many warrant arrests arise from on-view work of Transit Police Officers in their Hubs, calls for service, or confirming identity incidental to criminal arrest or during enforcement of a provincial statute offence (such as misuse of a fare gates). Transit Police Officers also familiarize themselves with offenders and criminals of concern or wanted through law enforcement intelligence sharing, regional ‘Be on the Look Out For’ and the Transit Police Offender Management Program.

Misuse of Fare Gates and Violation Tickets

There was a 29% decrease in Fare Infraction Notices (“FINs”), a TransLink bylaw, issued by the Transit Police for the 2018 Q1/Q3 when compared to the same period in 2017. However, there was an important offset with the 23% increase in both Provincial Violation Tickets (“VTs”) and

¹ Arrest means an actual arrest and all other cases where charges were recommended to Crown Counsel.

39% increase (9,464 compared to 6,826) in *Transit Conduct and Safety Regulation* (“*Regulation*”) files.

The majority of these increases are associated to Officers’ active observations and enforcement of the provincial offences regarding the misuse of fare gates². As well, there has been increased Officers’ attention to transit safety rule compliance issues (e.g., misuse of emergency exit, failure to obey a sign/rules, obstruction of a police officer). The enforcement of the *Regulation* positively contributes to TransLink’s efforts to strengthen public confidence in the transit system and transit passengers’ feelings of safety and security.

Of critical importance to the safety and security of transit customers and staff, and the general public, is how the process of confirming an offender’s identity allows Officers to learn whether there is a criminal record or conditions of release, and if there are any outstanding warrants to be executed. The FIN process does not allow this to occur. This also contributes positively to the work of Jurisdictional Police partners and their offender management and community safety efforts.

² The amended *Transit Conduct and Safety Regulation* came into effect March 2017. A person who commits an offence under the *Regulation* can be issued a violation ticket in the amount of \$173. The new offences are intended to focus on “disorderly behavior”, instead of the loss of fare revenue. Neither the Transit Police Officers nor the offender needs to be inside the **fare paid zone** to issue a ticket to a person who commits an offence under s. 8(4) of the *Regulation*. Because the person has committed an “offence”, the Officers has lawful authority to briefly detain the person outside of the fare paid zone. There is not a specific offence for the failure to “**tap in/tap out**”; however, persons who do not “tap in/tap out” will contravene section 8(4)(d) – “going through a fare gate that was not opened by that person.” Accordingly, Transit Police can issue a ticket on that basis.

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management and Engineering

DATE: November 15, 2018

SUBJECT: Broadway Subway Project Update

EXECUTIVE SUMMARY

On September 4, 2018, the Federal and Provincial governments announced approval of the Business Case and full funding for the Broadway Subway Project, formerly the Millennium Line Broadway Extension. The Province also announced that it will deliver the project and own the assets. TransLink and the Province signed a Memorandum of Understanding and Transfer Agreement effective October 31, 2018 to formally transfer the project to the Province and outline TransLink's future role. A more detailed Support Agreement is being negotiated.

The Broadway Subway Project 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 expected to further extend rapid transit to the University of British Columbia.

In addition to the Support Agreement, the next milestones being managed by the Province are formalizing project governance and the release of the Request for Qualifications.

BACKGROUND

Full capital funding confirmation for the Broadway Subway Project 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. As the delivery agency the Province assumes all responsibility for delivery risks, including cost and schedule overruns. A Memorandum of Understanding and Transfer Agreement was signed effective October 31, 2018 to formally transfer the project to the Province and outline TransLink's future role.

ON-GOING WORK

Ongoing work being managed by the Province includes identification of possible early works and reference design refinements as well as preparation of procurement documentation. Environmental, traffic, transit, and other studies are being finalized, and preparations are underway for public engagement events in early 2019. Negotiation of third-party agreements are in progress, including the Municipal Master Agreement and amendments to the Canada Line Agreement surrounding

modifications to Broadway City Hall Stations. TransLink staff and the Province commenced negotiation of the Broadway Subway Project Support Agreement to establish respective roles and responsibilities of each party in relation to the Project

UPCOMING MILESTONES

The following upcoming milestones are scheduled for the next quarter:

- The Request for Qualifications is expected to be issued.
- Project governance is expected to be finalized.
- A round of public engagement is expected to be conducted.
- The relocation of trolley overhead wires to accommodate bus route changes in support of construction is expected to commence.

CUSTOMER IMPACTS

None at this time. Any service impacts due to future trolley and other bus service changes will be communicated to customers in advance.

COMMUNICATIONS UPDATE

A robust communications strategy is in development to underpin project communications and to support project milestones that affect customers and residents. This strategy will be delivered in collaboration with the Province and City of Vancouver, and will be refined as required.

Attachment: Project Status Summary

BROADWAY SUBWAY PROJECT STATUS SUMMARY

Process	Risk	Status
Scope	●	Project is proceeding according to the approved scope. Meetings are ongoing with key stakeholders to finalize scope details.
Budget	●	Project is proceeding according the approved budget of \$2.83 billion.
Schedule	●	Project is proceeding according to the approved schedule. Procurement start: 2018 Construction start: 2020 Service start: 2025
Risks	●	<p>Management is actively tracking and mitigating the following risks:</p> <ul style="list-style-type: none"> • Achieving timely agreement with Canada Line for integration at Cambie Station • Securing necessary agreements with Thales, the SkyTrain automatic train control system provider • Ensuring the final design includes sufficient vertical circulation capacity • Finalizing the project governance structure • Finalizing the Project Support Agreement • Ensuring adequate TransLink resourcing to fulfil TransLink's accountabilities • Ensuring supportive projects and particularly the Expo and Millennium Line Upgrade Program (EMUP) are progressing on schedule • Maintaining the procurement schedule

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management & Engineering

DATE: November 15, 2018

SUBJECT: Pattullo Bridge Condition Monitoring Report

EXECUTIVE SUMMARY

This report provides an update on condition monitoring activities on the Pattullo Bridge. TransLink continues to closely monitor and inspect the condition of the Bridge and take corrective action where appropriate. Recent and on-going activities since the previous update to the Board include:

- *Condition Inspection* by the Ministry of Transportation and Infrastructure, Mott MacDonald, and WSP
- *Pattullo Bridge Railing Inspection* by COWI North America Ltd and Mainroad Contracting Ltd
- *Deck Condition Monitoring and Repairs* by Mainroad Contracting Ltd. and WSP
- *Pattullo Bridge Deck Cantilever Beams Load Capacity Evaluation* by COWI North America
- *2018 Freshet Monitoring and Survey* by Northwest Hydraulic Consultants
- Design of the *Wind and Seismic Warning System* project by PBX

PURPOSE

This recurring status report provides an update on condition monitoring activities on the Pattullo Bridge. The previous report was issued in September 2018.

BACKGROUND

The Pattullo Bridge is 80 years old. Most of the structural components have passed the predicted design life and are reaching the end of their useful life. Temperature fluctuation, rainfall, wind, river action, live traffic loads and the aging of the steel and concrete components all contribute to the condition of the bridge.

With responsibility for the safety and operations of the bridge, TransLink monitors the condition of the structure closely through regular inspections, and regularly consults with experienced bridge engineers. Management then performs the necessary maintenance and repairs in response to the inspection findings.

DISCUSSION

Recent and on-going inspection activities since the June 2018 update to the Board are listed in Table 1.

Table 1: September 2018 to November 2018 Pattullo Bridge Ongoing Inspections and Monitoring

REFERENCE	ACTIVITY	CONSULTANTS / PARTNERS	STATUS
1	Condition Inspection	Ministry of Transportation and Infrastructure (Ministry) Mott MacDonald (Mott) – structural experts WSP – deck experts	Inspection completed Q3 2018
2	Pattullo Bridge Railing Inspection	COWI North America Ltd. Mainroad Contracting Ltd.	Inspection completed Q3 2018 Railing repairs to be completed Q4 2018
3	Deck Condition Monitoring	Mainroad Contracting Ltd. WSP	Ongoing deck monitoring
4	Pattullo Bridge Deck Cantilever Beams Load Capacity Evaluation	COWI North America Ltd.	Analysis completed Q3 2018
5	2018 Freshet Monitoring Survey	Northwest Hydraulic Consultants	Next survey – December 2018
6	Wind and Seismic Warning System Implementation	PBX Engineering Ltd.	In Progress (in service by Spring 2019)

A summary of each of these activities is provided as follows:

1. Condition Inspection

Each year, the BC Ministry of Transportation and Infrastructure performs a condition inspection of the Pattullo Bridge with the aid of a snooper truck. The 2018 inspection was conducted between September 16 and September 18, 2018. To take advantage of the snooper truck, TransLink reserved the snooper truck for an additional two nights (September 19 and September 20) to enable TransLink's structural and deck consultants to complete inspections of select areas, specifically the south approach girder and cantilever beams, the through arch steel elements, and the soffit between pier 3 and pier 4, that were previously identified for follow-up investigation.

The focus of the 2018 inspection was to evaluate the progression of deterioration compared to the 2017 inspection, and to flag any components requiring urgent attention. Preliminary findings are as follows:

- The bridge deck between Piers 3 and 4 remains in sound and serviceable condition.
- The South Approach girders are generally considered to be in fair condition with deficiencies that are not anticipated to impact capacity.
- The South Approach cantilever beams are generally considered to be in fair to poor condition.
- There are no signs of extensive surface corrosion at the arch truss that makes up the main span of the Bridge.

TransLink is aware of deterioration in the South Approach concrete elements. A load evaluation was previously completed (item 4) to ensure sufficient load carrying capacity. Based on the inspection and the load evaluation, there are no capacity concerns at this time and immediate repairs are not required.

Given the expectation that the Bridge will be replaced by 2023, TransLink's consultants recommended that annual monitoring be continued, and that additional investigation be conducted if accelerated deterioration is detected. Reports summarizing the findings of the inspection from the Ministry and from TransLink's consultants will be submitted to TransLink in Q4 2018.

2. Pattullo Bridge Railing Inspection

In Q3 2018, COWI North America Ltd. (COWI) completed an inspection of the railings on both sides of the Bridge. A total of 606 railing posts were inspected and assigned deficiency ratings based on their observed conditions. Of the 606 posts inspected, 128 posts were classified as needing immediate repair or replacement.

Based on the findings of the inspection, documented in the *Pattullo Bridge Railing Inspection* report, TransLink is currently working with Mainroad Contracting Ltd. (Mainroad) to repair all railings requiring immediate attention. The work varies from repairing and replacing individual posts to replacing nuts and bolts at connections. Subject to weather, the railing repairs are expected to be completed by Q4 2018.

As the railings will continue to deteriorate over the remaining service life of the Bridge, TransLink will continue to monitor and repair or replace the railing posts as needed. A tracking spreadsheet is currently used to track the condition of each railing post on the structure.

3. Deck Condition Monitoring and Repairs

The reinforced concrete deck of the Pattullo Bridge is in an active and advanced state of deterioration, primarily due to corrosion of the reinforcing steel. While repairs to the north portion of the deck between Pier 0 and Pier 9 were completed in the summer of 2016, the risk of pothole formation still exists, particularly for the south approach of the Bridge (Pier 9 to Pier 29).

To ensure the entire deck is functional and safe for operations, bridge deck experts from WSP conduct bi-weekly walk-through inspections from the deck, ground and catwalk levels. Signs of pothole formation are monitored and flagged for future interventions during overnight lane closures or during full bridge closures. No new significant repair requirements have been identified, and repairs are not anticipated to be conducted in 2018.

In addition to the top surface of the deck, extensive corrosion-related damage is also occurring to the bottom surface (soffit). Debris netting is currently in place to protect the public and other infrastructure, including the railway tracks, from concrete falling from the deck soffit. WSP will continue to monitor the

condition of the deck soffit. A close proximity inspection was conducted on the Main Span by WSP using the Ministry's snooper truck in September 2018 (see Item 1).

4. Pattullo Bridge Deck Cantilever Beams Load Capacity Evaluation

COWI was tasked with completing a load evaluation of the cantilever beams supporting the east side of the deck to ensure the load carrying capacity is not comprised by the concrete delaminations in the soffit (see Item 3). The load capacity of the west side is a lesser concern as it supports lighter pedestrian and cyclist loadings.

Based on findings of the analysis, documented in the *Pattullo Bridge – Deck Cantilever Beam Loads Capacity Evaluation* report, COWI does not consider repairs to be immediately required. A follow-up inspection using the Ministry's snooper truck was conducted in September (see item 1) to assess whether the load carrying capacity of the beams have been affected by any progression in deterioration of those elements. The inspection confirmed that there are currently no capacity concerns and that annual monitoring should be continued. Additional investigation will be conducted if accelerated deterioration is detected.

5. 2018 Freshet Monitoring and Survey

The Pattullo Bridge is situated in the narrowest part of the river, which experiences large tidal fluctuations. This elevates the risk to the Bridge from scour and erosion. To proactively address risks arising from changing river hydraulics, Northwest Hydraulic Consultants Ltd (NHC) conducts bi-annual surveys at the Pattullo Bridge to monitor the condition of the pier protection and to identify whether any repairs are required. The 2018 freshet monitoring survey was conducted in June 2018, and the winter monitoring survey is scheduled for December 2018.

Based on results of the freshet survey, NHC considers the pier protection currently in place to be effective, and recommends on-going monitoring. NHC also recommends that more frequent surveys should be considered leading up to and during the construction of the new Pattullo Bridge. TransLink is working with the Pattullo Bridge Replacement team to monitor and manage the impacts of the planned project on the existing Pattullo Bridge. Monthly surveys are expected to begin in 2019.

6. Wind and Seismic Warning Systems

The Pattullo Bridge was not designed to meet current wind and seismic loading standards that would apply for a new bridge constructed today, and as a result, may be vulnerable in a seismic or hurricane-level wind event.

To improve safety for Bridge users, an advance warning and monitoring system is being designed and implemented. The wind warning system will monitor and measure wind speeds at the bridge, and a seismic warning system will sense an earthquake in progress and provide alerts up to one minute prior to damaging ground waves reaching the bridge. Both systems will provide opportunities to reduce risks to bridge users through warnings and closures. PBX Engineering Ltd. (PBX) has completed the detailed design and a contractor is being procured to install the system. The system is scheduled to be in service by spring 2019.

Customer Impact and Communications

The condition inspection with the snooper truck in September 2018 required directional closures on the Bridge. No other planned work in 2018 is expected to impact the public. Railing repairs are scheduled to occur during the standard nightly lane closures with no additional public impacts.

A robust communications plan has been developed to utilize all available channels in support of any ongoing inspection and maintenance work that is expected to have an impact on the public.

Financial Impacts

All monitoring, inspection, and repair work is being performed under existing approved operating and capital funds.

TO: Board of Directors

FROM: Rob Malli, Chief Financial Officer and Executive Vice President, Finance and Corporate Services

DATE: November 8, 2018

SUBJECT: 2019 Business Plan, Operating and Capital Budget

PROPOSED RESOLUTION

That the TransLink Board of Directors approves the 2019 Business Plan, Operating and Capital Budget attached to the November 8, 2018 report titled "2019 Business Plan, Operating and Capital Budget."

EXECUTIVE SUMMARY

The 2019 Business Plan, Operating and Capital Budget is focused on achieving the initiatives set out in the 2019 year of Phase Two of the 10-Year Vision and continues the work set out in Phase One of the 10-Year Vision. It has been developed with the following three main priorities for the enterprise: (1) Enhance Customer Experience; (2) Maintain a State of Good Repair and (3) Implement the Mayors' Vision. The 2019 Budget reflects increased on-going expenses of \$76.5 million compared to the 2018 budget on a Public Sector Accounting Board (PSAB) basis reflecting annualized impact of salaries and wages, contractual and labour increases, service expansion in 2019 and investments supporting corporate priorities. The 2019 budget results in a \$189.2 million surplus on a PSAB basis.

PURPOSE

The purpose of this report is to request the Board of Directors approve the 2019 Business Plan, Operating and Capital Budget.

BACKGROUND

The 2019 Business Plan prioritizes expenditures that expand the ability of our system to move more people, invest in the long-term reliability of the system and improve the customer experience while responsibly managing cost pressures. Funding for expansion of the system and major new capital projects has been secured as part of the 10-Year Mayors' Vision through the support of the Mayors' Council and the federal and provincial governments.

This Plan was prepared based on initiatives set out for the 2019 year in Phase Two Plan of the 10-Year Vision (2018-2027 Investment Plan) and carries forward Phase One Plan initiatives. Transportation improvements in 2019 include significant service increases and capital expansion, maintaining a state of good repair on existing assets and improving the customer experience. The assumptions used to develop the plan were presented to the Board in September 2018.

We have an excellent track record of managing well within our budget and looking for opportunities throughout the year to be more efficient in order to put as many dollars towards service and meeting customer demands.

DISCUSSION

With guiding principles of improving the quality of existing systems, improving quality of services and expanding the transit system, the 2019 Business Plan, Operating and Capital Budget is supported by three priorities aimed to enhance the customer experience, maintain a state of good repair and implement the Mayors' 10-Year Vision.

Enhance Customer Experience

With a customer first approach, we will build public trust and confidence in TransLink by focusing on growing ridership, engaging stakeholders and delivering the Mayors' Vision.

Maintain a State of Good Repair

We will proactively manage and maintain all assets in a state of good repair to ensure safety and reliability, optimize lifecycle costs, and enhance the customer experience.

Implement the Mayors' Vision

We will successfully deliver the capital projects, service expansion and policy initiatives necessary to mobilize the Mayors' Vision.

Key highlights of increased costs relating to the 2019 operating budget are:

- Service expansion across all modes of transportation;
- Contractual labour, inflation and fuel price & consumption increases;
- Increase of 27 corporate staff to support corporate priorities;
- Increase of 6 Transit Police staff to implement a tiered policing pilot, enhancing policing resources with the new Community Safety Officers (CSOs);
- Increase of 45 British Columbia Rapid Transit Company staff to support service expansion, customer experience and state of good repair (SOGR);
- Increase of 256 Coast Mountain Bus Company staff to support service expansion, customer experience and SOGR; and
- Increased one-time costs to support continued work on implementation of the 10-year Mayors' Vision.

The following table shows the increases for the 2019 budgeted expenditures for continuing operations. The 2019 Budget reflects increased on-going expenses of \$76.5 million compared to the 2018 budget on a PSAB basis. However, excluding amortization, interest and MRN contributions, the increase over 2018 is \$62.0 million. The following table shows the increases for the 2019 budgeted expenditures for continuing operations:

	\$millions
2018 Budget	1,230.3
2019 Budget	1,292.3
Increase	62.0
Adjustments to 2018 Budget	(15.3)
<i>Breakdown of increases:</i>	
Salaries, wages & benefits	27.1
Contractual increases (includes fuel and insurance)	24.2
Service Expansion	12.2
Investments in Priorities (additional asks, including licensing)	13.8
Total Increase	62.0

The One-time expenditures total \$70.6 million for 2019, consisting of the following items:

	2019 Budget \$millions
B-Line Program	39.6
Bus Speed and Reliability	2.0
Feasibility Studies	12.9
RTS Plan Development	4.0
Non-Capitalized items included in Capital Projects	2.1
South Fraser Rapid Transit SNG - Non-Capitalized items	2.0
CAPITAL-M Program Non-Capitalized items	1.7
Non-Capitalized items included in BTS Projects	1.5
New Mobility	1.0
Sustainability Commitments	0.5
Late Night Service Technical Study	0.2
Contingency - Corporate	2.0
Sub Total	69.5
Other Initiatives	1.1
Total Corporate One-Time	70.6

Total consolidated revenues for 2019 are budgeted to be \$2.0 billion, an increase of \$50.5 million over the 2018 budget. The movements in revenues for 2019 include:

- property tax increase;
- transit fare increase in July 2019 and ridership increase;
- higher interest income due to higher interest rates and balances;
- anticipated 3 per cent parking tax increase; and

- off-set by lower fuel tax revenues.

The Capital Program for 2019 is shown below based upon corporate priorities:

	\$millions
Improve Customer Experience	15.0
Ensure State of Good Repair	325.4
Support Mayor's Vision	355.1
Major Road Network / Bicycle Infrastructure	78.2
Surrey Newton Guildford LRT	1,585.0
Expo Millennium Upgrade Program	1,497.0
2019 New Capital Program	3,855.7

Risks associated with achieving budgeted results include:

- Recruiting, retaining and training staff,
- Collective bargaining agreements set to expire in 2019;
- Change in the newly elected Mayors' Council;
- Deployment of new rail fleet;
- Introduction of ride-hailing services;
- Implementation of new technology;
- Revenue assumptions, including taxable tax volumes;
- Timing of funding sources;
- Elasticity resulting from planned fare increase; and
- Capacity to deliver on planned service expansion and capital projects.

Corporate Contingency

TransLink's policy is to maintain a minimum budgeted contingency equal to 1% of the budgeted operating expenditures¹. Given the track record of managing costs within the budget with a low utilization of corporate contingency, it is proposed that the budgeted contingency be reduced to \$2.0 million in order to invest in the initiatives that are laid out in the Investment Plan.

ATTACHMENT: 2019 Business Plan – Operating and Capital Budget Summary

¹ Total budgeted expenditures, before the contingency, less interest expense, amortization of capital assets and municipal capital infrastructure contributions.



2019 Business Plan

OPERATING AND CAPITAL BUDGET SUMMARY



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Caution Regarding Forward-Looking Statements

From time to time, TransLink makes written and/or oral forward-looking statements, including in this document and in other communications, in addition, representatives of TransLink may make forward-looking statements orally to analysts, investors, the media and others.

Forward-looking statements, by their nature, require TransLink to make assumptions and are subject to inherent risk and uncertainties. In light of uncertainty related to financial, economic and regulatory environments, such risks and uncertainties, many of which are beyond TransLink's control and the effects of which can be difficult to predict, may cause actual results to differ materially from the expectations expressed in the forward-looking statements.

1. Business Plan Summary

More people than ever are using public transit in the Metro Vancouver region. Transit ridership grew to record levels for the third consecutive year in 2018 and the trend is expected to continue in 2019. The long-term trend is for even more demand for transit and transportation options as the region's population and economy grows. That's why TransLink's 2019 Budget is prioritizing expenditures that expand the ability of our system to move more people, invest in the long-term reliability of the system and improve the customer experience while responsibly managing cost pressures.

The 2019 Budget is focused on three priorities:

- Expanding SkyTrain, bus and other transit services throughout the region;
- Investing in critically-needed maintenance and repairs on the system for safety and reliability; and
- Improving the customer experience and information systems.

The earlier approval of Phase One of the Investment Plan and the approval of Phase Two in 2018 has enabled TransLink to deliver broad service improvement right across the region. TransLink was able to deliver these improvements, and meet this growing customer demand, because of the support of the region's Mayors as well as the support of the Province of British Columbia and the Government of Canada. The fully-funded Investment Plan has unleashed TransLink's ability to deliver even more service in the years ahead.

The people of the Metro Vancouver are embracing transit like never before. Ridership grew by 6.5 per cent in 2018 and 17 per cent over the last three years. Customer satisfaction levels reached a record-high 8.0 in the second quarter of 2018 and TransLink has been recognized the fastest-rising brand in British Columbia.

TransLink's plan is designed to keep this momentum going. Its 2019 Budget is designed to support the demand for more services while strategically investing in the long-term safety and reliability of the system. The budget will focus on:

More and Better Service Region-Wide

- Introducing 178 new buses (including 32 new double-deckers).
- Launching four new B-Line routes.
- Adding 56 new Mark III rail cars to the Expo and Millennium Lines.
- Taking delivery of a new SeaBus to move toward 10-minute peak period service between downtown and the North Shore.
- Providing the Province with technical support through the procurement process stage of the Millennium Line Broadway Extension.
- Working with the Mayors' Council to study and determine the best options for improving rapid transit south of the Fraser.

Smart, Long-Term Investments in Maintenance and Repair of the System for Safety & Reliability

- Implement repairs to SkyTrain's running rails and guideway.
- Updating and upgrading escalators and elevators throughout the system.
- Advancing a program of preventative and corrective maintenance of bridges in the region including the Knight Street Bridge.

Improving the Customer Experience and Information Systems

- Installing new Passenger Information Displays at 33 SkyTrain stations on the Expo and Millennium Lines.
- Replacing Public Address audio systems so people can hear timely information better at stations and on SkyTrain cars.
- Upgrading our TripPlanner digital tool.
- Implementing a new HandyDART reservation system.
- Designing and beginning the upgrades of Burrard Station and Phibbs Exchange and completing the upgrades for Joyce-Collingwood Station and Surrey Central Station.

While TransLink is strategically investing funds in new and expanded services, long-term reliability and better customer experience, it is also prudently managing cost pressures. The growing demand for more service means that TransLink needs to recruit 500 new bus drivers per year for each of the next three years to operate the expanded fleet of buses throughout the region as well as hiring the associated support staff such as mechanics, service people and on-the-ground supervisors. SkyTrain's Expo Line is more than 30 years old and requires maintenance and repairs to ensure it remains safe and reliable for the customers who rely on the system every day. Many of our information systems are outdated and require strategic investments now.

Funding for expansion of the system and major new capital projects has been secured through the support of the Mayors' Council and the federal and provincial governments. At the same time, TransLink continues to face a downward trend in motor fuel tax revenues. The Mayors' Council and the Province of BC have enabled new and expanded sources of revenue including Development Cost Charges, parking rights taxes and higher regional property taxes. Declining fuel tax continues to remain an issue; however, higher ridership means TransLink continues to benefit from increases in transit revenue. There remains a longer-term risk over the reliance on motor fuel tax revenues as consumers switch to electric vehicles.

The South Coast British Columbia Transportation Authority ("TransLink") is Metro Vancouver's regional transportation authority and its service region includes all the areas within the Greater Vancouver Regional District ("Metro Vancouver"), spanning 23 municipalities/electoral districts/First Nations areas in Metro Vancouver. TransLink delivers a wide range of services and programs to plan and provide for the transportation needs of Metro Vancouver residents and businesses. This includes bus, SkyTrain, SeaBus, HandyDART, West Coast Express and a policing unit. TransLink also shares responsibility for the Major Road Network and walking and cycling infrastructure with its local government partners.

2. Key Priorities

With guiding principles of improving the quality of existing systems, improving quality of services and expanding the transit system, the 2019 Business Plan, Operating and Capital Budget is supported by three priorities aimed to, implement the Mayors’ 10-Year Vision, maintain a state of good repair and enhance the customer experience.

Priority One: Implement the Mayors’ Vision <i>We will successfully deliver the capital projects, service expansion and policy initiatives necessary to implement the Mayors’ Vision.</i>	
➤	Implement four new Rapid-Service B-Line routes including: 41 st Avenue, Fraser Highway, Lougheed Highway and North Shore Marine Drive-Main Corridor.
➤	Receive and commission the third new SeaBus vessel as well as 178 new conventional buses aimed to replace existing aging fleet and expand service.
➤	Recruit and train transit operators and support staff to support the expanded service levels.
➤	Test, commission and deliver 56 new Mark III rail cars.
➤	Modernize the Expo and Millennium Lines infrastructure to increase capacity and accommodate growth.
➤	Provide technical support for into the design of the Millennium Line Broadway Extension.
➤	Construct new bus exchanges at Guildford.

Priority Two: Maintain a State of Good Repair <i>TransLink will proactively manage and maintain all assets in a state of good repair to ensure safety and reliability, optimize lifecycle costs and enhance the customer experience.</i>	
➤	Support the replacement of the Transit Management and Communications (TMAC) bus radio system and supporting technology.
➤	Implement the 8,000-kilometre internal Preventative Maintenance program at BCRTC in accordance with Commercial Vehicle Safety Enforcement requirements.
➤	Install new fareboxes on Community Shuttle fleet.
➤	Implement formal asset management plan and transform safety management system at British Columbia Rapid Transit Company Ltd. (BCRTC)
➤	Develop and implement Emergency Response Plan through the IT Disaster Recovery Program.
➤	Complete SkyTrain Noise Assessment Study and develop implementation plan.
➤	Upgrade existing infrastructure and conduct ongoing preventative and corrective maintenance of bridges.
➤	Implement a formal Safety Management System at TransLink Corporate.
➤	Implement a Health and Safety Software system across the enterprise.

Priority Three: Enhance Customer Experience

With a customer first approach, we will build public trust and confidence in TransLink by focusing on growing ridership, engaging stakeholders and implementing the Mayors' 10-Year Vision.

- Participate in the electric-battery bus demonstration and integration trial of the Canadian Urban Transit Research & Innovation Consortium (CUTRIC).
- Receive and commission 32 double decker buses.
- Implement new HandyDART travel training program and reservation system.
- Implement McNeil recommendations (Independent Review of SkyTrain Service Disruptions) and deliver McNeil capital projects at the end of 2019.
- Implement a tiered policing pilot utilizing Community Safety Officers (CSO) to enhance policing resources and improve efficiencies.
- Expand marketing campaigns of the "See Something, Say Something" text 87-77-77 service.
- Implement Passenger Information Displays on the SkyTrain system.
- Make improvements to bus exchanges and SkyTrain stations such as new bus shelters, lighting, wayfinding, drive isle layouts and increases in bus capacity.
- Support the implementation of the outcomes and Access Transit Service Delivery Review.
- Enhance the Compass Card website and vending machine functions to improve the overall customer experience and respond to customer feedback.

To deliver the priorities set in the **2019 Business Plan, Operating and Capital Budget**, funding will be obtained through various sources. Funding for capital projects include the Greater Vancouver Regional Fund (GVRF), Canada Line funding, Building Canada Fund, Public Transit Infrastructure Fund (PTIF) and Investing in Canada Infrastructure Program (ICIP). Funding sources supporting current operations as well as service expansion include property taxes, motor fuel taxes and transit revenues. The main risks associated with these funding sources include: timing of PTIF funding, higher fuel prices in the region driving lower fuel tax revenues, reaction from transit users resulting from the planned fare increase, as well as the capacity to deliver on service expansion and capital projects.

3. 2019 Financial and Operating Summary

CONSOLIDATED REVENUES AND EXPENSES					
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Revenue					
Taxation	821,333	855,072	874,526	19,454	2.3%
Transit	590,964	606,805	669,274	62,469	10.3%
Government transfers ¹	196,645	424,078	388,039	(36,039)	(8.5%)
Investment income	50,278	48,189	52,850	4,661	9.7%
Amortization of deferred concessionaire credit	23,274	23,337	23,337	-	-
Miscellaneous	7,009	6,036	5,655	(381)	(6.3%)
Sub Total Continuing Operations	1,689,503	1,963,517	2,013,681	50,164	2.6%
Gain/(Loss) on Disposal	(1,104)	(447)	(122)	325	(72.7%)
Total Revenue	1,688,399	1,963,070	2,013,559	50,489	2.6%
Expenditures					
Bus Operations	688,877	731,703	777,819	46,116	6.3%
Rail Operations	297,366	308,576	326,870	18,294	5.9%
Transit Police	37,179	38,765	40,845	2,080	5.4%
Corporate Operations	97,974	100,173	101,846	1,673	1.7%
Roads & Bridges	84,183	104,256	94,691	(9,565)	(9.2%)
Amortization of tangible capital assets	192,171	214,436	226,513	12,077	5.6%
Interest	181,766	179,267	185,118	5,851	3.3%
Sub Total Continuing Operations	1,579,516	1,677,176	1,753,702	76,526	4.6%
Corporate - one-time	12,640	32,755	70,636	37,881	115.6%
Total Expenditures	1,592,156	1,709,931	1,824,338	114,407	6.7%
Surplus for the year	96,243	253,139	189,221	(63,918)	(25.3%)

¹ 2017 Actual includes Golden Ears Bridge tolling revenue of \$29.7 million

2019 Budget Highlights

The 2019 budget results in a \$189.2 million surplus on a Public Sector Accounting Board (PSAB) basis. This represents a decrease of \$63.9 million or 25.3 per cent from the 2018 budget and is driven mainly by an increase in operating expenses related to service expansion in Bus and Rail, higher corporate one-time expenses and higher amortization of capital assets.

Revenues from Continuing Operations are budgeted to increase by \$50.2 million (2.6 per cent) compared to the 2018 budget. Taxation revenue is budgeted to increase by \$19.5 million (2.3 per cent) mainly due to the expected increase in property tax. Transit revenues are expected to increase by \$62.5 million (10.3 per cent) as a reflection of service expansion and growing ridership supported by a fare increase scheduled for July 1, 2019. Government transfers are budgeted at \$38.2 million (10.4 per cent) below 2018 levels due to the timing of capital projects funded by federal gas tax.

Expenditures for Continuing Operations are budgeted to increase \$76.5 million (4.6 per cent) compared to the 2018 budget. The increase is mainly due to higher operating costs resulting from contractual labour increases, service expansion across all modes, inflation and state of good repair maintenance initiatives.

In addition, amortization of capital assets is budgeted to increase by 12.1 million (5.6 per cent) as a result of completed capital projects.

Corporate one-time costs are budgeted at \$70.6 million and relate to continued investment in implementing the Mayors' Vision, including the B-Line expansion that has been re-prioritized and will follow an accelerated implementation schedule.

4. Key Performance Indicators and Drivers

Financial Indicators

FINANCIAL INDICATORS					
As at December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Unrestricted cash and investments ¹	484,961	364,855	474,155	109,300	30.0%
Capital assets	4,907,241	5,602,766	6,005,480	402,714	7.2%
Net direct debt ²	(2,220,714)	(2,479,340)	(2,653,871)	174,531	7.0%
Indirect P3 debt ³	(1,571,342)	(1,542,762)	(1,512,459)	(30,303)	(2.0%)
Total net direct debt and indirect P3 debt	(3,792,056)	(4,022,102)	(4,166,330)	144,228	3.6%
Gross interest cost as a % of operating revenue ⁴	12.2%	11.6%	11.4%	(0.2%)	(2.0%)

¹ Accumulated funding resources as calculated under the SCBCTA Act is the amount of resources available to fund future operations

² Includes bonds, debentures, capital leases, short-term debt net of sinking funds and debt reserve deposits

³ Includes Deferred concessionaire credit for Canada Line and Contractor liability for Golden Ears Bridge (GEB)

⁴ Operating revenue includes transit, taxation, operating transfers from Provincial government and miscellaneous income (2018 restated to include GEB tolling replacement revenue)

TransLink's unrestricted cash and investment balances reflecting accumulated funding resources available for supporting operations, are budgeted to increase by \$109.3 million (30.0 per cent) compared to the 2018 budget. The increase is mainly due to targeting higher liquidity levels as we embark on a major expansion in accordance with the Phase Two Plan of the Mayors' Vision.

Planned capital spending during 2019 is expected to result in a net increase of \$402.7 million (7.2 per cent) in capital assets. Significant projects include conventional bus replacements, rail fleet expansion, station upgrades, rail infrastructure projects including the Millennium Line Broadway Extension and the South of Fraser LRT rapid transit projects and B-Line developments.

Net direct debt is expected to increase by \$174.5 million (7.0 per cent) in comparison to the 2018 budget due to increased borrowing to finance planned capital spending net of senior government funding.

Indirect P3 debt relating to the Canada Line and Golden Ears contractor liability is expected to decrease by \$30.3 million (2.0 per cent) due to amortization and principal payments.

The gross interest cost as a percentage of operating revenues at 11.4 per cent is lower than the 2018 budget and is well below the policy level of 20 per cent.

Operating Indicators

OPERATING INDICATORS					
Twelve months ending December 31	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Scheduled Transit Service					
Overall Performance Rating (out of 10)	7.7	7.9	8.0	0.1	1.3%
Service Hours	6,692,165	6,874,038	6,994,799	120,761	1.8%
Operating Cost Recovery ¹	56.3%	54.5%	56.6%	2.1%	3.9%
Operating Cost per Capacity Km ²	\$0.083	\$0.086	\$0.088	\$0.002	2.3%
Complaints per million Boarded Passengers ³	93.4	86.9	87.5	0.6	0.7%
Access Transit Service					
Number of Trips	1,249,916	1,335,000	1,373,000	38,000	2.8%
Operating Cost per Trip	\$42.73	\$41.69	\$41.06	(\$0.63)	(1.5%)
Number of Trips Denied	1,362	1,602	1,648	46	2.9%
Operator Complaints as a percentage of trips	0.06%	0.05%	0.05%	-	-
Service Complaints as a percentage of trips	0.07%	0.10%	0.10%	-	-
Ridership (thousands)					
Boarded Passengers	408,237	416,641	443,731	27,090	6.5%
Journeys	247,821	251,592	267,653	16,061	6.4%
Average Fare per Journey	\$2.31	\$2.41	\$2.50	\$0.09	3.7%

¹ Includes operating costs of Bus, Rail, Transit Police and Corporate On-going (2017 restated to exclude Corporate One-Time & Feasibility Studies). Excludes amortization and interest expense.

² Includes operating costs of Bus, Rail, and Transit Police. Excludes amortization and interest expense.

³ Restated 2018 Budget to reflect updated boardings and number of projected complaints

Scheduled Transit Service

The targeted overall performance rating is to reach 8.0 for the full year of 2019.

Conventional system service hours are projected to increase by over 120 thousand hours across the region. This includes the annualized impact of 2018 service improvements and 2019 service expansion improvements to reduce congestion and increase service reliability.

Operating cost recovery is budgeted to increase to 56.6 per cent representing a 3.9 per cent increase compared to 2018. This reflects cost efficiency gains where increased ridership from service expansion and the planned fare increase for 2019 outpace the cost of increased service.

Operating cost per capacity kilometre is expected to increase by 2.3 per cent over the 2018 budget due to contractual labour increases, service expansion costs and higher fuel prices.

Complaints per million boarded passengers are budgeted to increase by 0.6 (0.7 per cent), a slight increase over the 2018 budget. While consistent with the expanded service levels and historical complaint records, this target embeds an improvement over the 2018 forecasted actual complaints. TransLink is committed to enhancing the customer experience as one of its key priorities and will continue to assess and improve on the level of customer complaints.

Access Transit Service

Since July 1, 2018, First Transit took over as the new HandyDART Service provider from MVT Canadian Bus. New standards tied to financial levers, more rigorous reporting and enhanced monitoring requirements will give greater oversight and accountability for HandyDART's operation.

Although there was a change in provider, the number of trips available in 2019 to the Access Transit customers remains the same as committed to in Phase One of the 10-Year Vision. This figure reflects an increase of 38 thousand trips (2.8 per cent).

The operating cost per trip is expected to decrease by \$0.63 (1.5 per cent) as a result of operational efficiencies as Access Transit is expected to deliver more trips in 2019 while maintaining overhead and fixed costs relatively consistent with 2018.

Ridership

Journeys represent a complete transit trip regardless of the number of transfers. For 2019, journeys are budgeted to be 2.4 per cent above the annual 2018 forecast as at the third quarter, which is 6.4 per cent higher than the 2018 budget.

Boardings represent each time a passenger enters a fare paid zone including transfers. Boardings are budgeted to be 2.4 per cent above the annual 2018 forecast as at the third quarter, which is 6.5 per cent higher than the 2018 budget.

The average fare per journey is expected to increase \$0.09 from \$2.41 to \$2.50 mainly due to the planned fare increase across products in July 2019 and projected product mix.

Key Drivers

Ridership

Ridership journeys are used in estimating the fare revenue. Journeys are assumed to grow by 2.4 per cent over the forecasted 2018 year end, based on increased ridership from service expansion and economic growth.

Households

Household projections are based on estimates from BC Stats. BC Stats provides annual household estimates for the Metro Vancouver region. The number of households in the Metro Vancouver region is expected to grow by 1.5 per cent in 2019 when compared to 2018. Household growth impacts both transit and taxation revenues.

Interest rates

Interest rates for the budget are based on forecasts from major Canadian chartered banks, the Ministry of Finance, BC Budget Fiscal Plan 2018-2019 to 2020-2021 and TransLink credit spread and issue costs. For 2019, all interest rates are expected to be higher than 2018 budgeted rates. Short-term borrowing rates are expected to be 0.9 percentage points higher and long-term borrowing rates are expected to be 0.05 to 0.3 percentage points higher than 2018 budgeted rates.

Inflation

The Consumer Price Index growth assumption for the 2019 budget is 2.0 per cent based on the BC Ministry of Finance.

Taxable fuel consumption

Fuel consumption volumes are used to estimate fuel tax revenue. Fuel volume projections are developed using a methodology referred to as Vehicle Fleet Trends which considers the relationship between the key drivers of gasoline and diesel sales: the number of registered vehicles, kilometers driven, fuel economy and leakage. Fuel volumes are forecasted to decrease by 9.0 per cent compared to the 2018 budget and 0.06 per cent compared to the 2018 forecast.

Hydro cost

BC Hydro sets out electricity rate increases which impact propulsion power for SkyTrain and Trolley Buses along with facility utility costs. Electricity rate increases take effect in April of every year. BC Hydro increased rates by 3.0 per cent in 2018 and a 3.0 per cent increase is planned for 2019.

Gasoline and Diesel prices

Fuel prices affect operating costs for buses as well as WCE trains. Fuel prices are estimated using US Energy Information Administration forecasts adjusted for Canadian prices, taxes and price differentials. Natural gas volumes and rates are hedged through to the fall of 2021. Diesel and gasoline purchases are not hedged.

Revenue Vehicle insurance

Bus fleet insurance rates are expected to increase by 16.4 per cent on April 1, 2019 based on claims experienced to date and the expected basic rate increase from ICBC.

Assumptions

The following table highlights the financial impact of changes in key assumptions used to develop the 2019 budget:

2019 BUDGET ASSUMPTIONS			SENSITIVITIES	
		RATE / VOLUME	Change	Impact (\$ millions)
Background Assumptions				
Real GDP Growth		2.00%		
Employment rate		1.00%		
Hydro Cost Increase		3.00%		
Population	thousands	2,653.0		
Households	thousands	1,055.0		
Operating Assumptions with Sensitivity Analysis				
Revenue				
Regional Fuel Consumption				
Gasoline	millions of litres	1,762.3	1 per cent +/-	3.1
Diesel	millions of litres	312.9	1 per cent +/-	0.6
Ridership	millions of journeys	267.7	1 per cent +/-	6.7
Expense				
Diesel cost	dollars per litre	1.50	\$0.10 +/-	3.4
Operational Diesel Use	millions of litres	33.85	1 per cent +/-	0.5
Gasoline cost	dollars per litre	1.59	\$0.10 +/-	0.5
Operational Gasoline Use	millions of litres	4.58	1 per cent +/-	0.1
Interest rate	Short term	2.80%	0.5 per cent +/-	0.6
	Long term	3.85%	0.5 per cent +/-	2.0
Inflation	General	2.00%	0.5 per cent +/-	0.4
	Materials	2.00%	0.5 per cent +/-	0.4
	Electricity	3.00%	0.5 per cent +/-	0.1

5. Consolidated Revenues

CONSOLIDATED REVENUES					
Twelve months ending December 31	2017	2018	2019	Change	
(\$ thousands)	ACTUAL	BUDGET	BUDGET	Incr/(Decr)	%
Taxation					
Fuel	373,780	388,409	368,904	(19,505)	(5.0%)
Property & Replacement	356,958	373,882	402,744	28,862	7.7%
Parking Rights	70,019	71,523	81,301	9,778	13.7%
Hydro Levy	20,576	21,258	21,577	319	1.5%
Transit	590,964	606,805	669,274	62,469	10.3%
Government transfers					
Senior Government Funding	148,270	366,212	327,967	(38,245)	(10.4%)
Golden Ears Bridge	18,632	57,866	60,072	2,206	3.8%
Golden Ears Bridge tolling	29,743	-	-	-	
Investment income	50,278	48,189	52,850	4,661	9.7%
Amortization of deferred concessionaire credit	23,274	23,337	23,337	-	0.0%
Miscellaneous	7,009	6,036	5,655	(381)	(6.3%)
Revenue Before Gain/(Loss) on Disposals	1,689,503	1,963,517	2,013,681	50,164	2.6%
Gain/(Loss) on Disposal	(1,104)	(447)	(122)	325	(72.7%)
Total Revenue	1,688,399	1,963,070	2,013,559	50,489	2.6%

TransLink receives its revenue mainly through taxation, transit fares and government transfers. Total consolidated revenues for 2019 are budgeted to be \$2.0 billion, an increase of \$50.5 million over the 2018 budget. This increase is mainly due to increased revenues from transit fares, property and replacement tax, parking rights and investment income, partly offset by lower fuel tax revenues and government transfers.

2019 Budget vs 2018 Budget

Taxation

Taxation Revenue is comprised of fuel tax, property and replacement tax, parking rights tax and hydro levy. It accounts for 51.9 per cent of total revenue, before loss on disposal and senior government funding.

Fuel tax revenue for 2019 is budgeted at \$19.5 million (5.0 per cent) below the 2018 budget. The decline is mainly due to persistent high gasoline prices observed in 2018 that is expected to continue in 2019 and drive lower gasoline consumption in the region. This decrease is partly offset by an expected \$0.015/litre increase in the tax by committed by the Provincial Government.

Property tax revenue is expected to be \$28.9 million (7.7 per cent) higher than the 2018 budget. This includes an annual 3.0 per cent increase in property tax revenue from existing properties, property tax revenue from development and construction growth estimated at 2.3 per cent and an additional \$10 million that was approved by the Mayors' Council in the Phase Two Investment Plan. The replacement tax portion remains at \$18.0 million.

Parking rights tax revenue is expected to be \$9.8 million (13.7 per cent) higher than the 2018 budget. This reflects the increase in the 2018 forecast of 3.3 per cent over the 2018 budget, expected growth in parking volumes and an anticipated increase in the parking tax rate from 21 per cent to 24 per cent in 2019.

Transit

Transit Revenue makes up 39.7 per cent of total revenues before loss on disposal and senior government funding. Transit revenue includes fare revenue, program revenue and other transit revenue. Fare revenue consists of cash fares, discounted Stored Value, as well as DayPass and Monthly Pass products. Program revenue includes Government of BC Bus Pass and U-Pass BC revenue. Other transit revenue includes advertising, property rentals, parking lot fees and fare infractions.

Total transit revenue is expected to increase by \$62.5 million (10.3 per cent) from the 2018 budget. The 2019 Budget is \$34.7 million (5.5 per cent) higher than the 2018 forecast. For 2019, journeys are budgeted to be 2.4 per cent above the annual 2018 forecast, which is 6.4 per cent higher than the 2018 budget. Fare revenues are expected to increase due to a continued increase in ridership from service expansion, high employment levels and a planned increase in fares on July 1, 2019. The fare increase is 5 to 25 cents for Single Use and Stored Value products, 25 cents for DayPass and \$2.00 to \$3.00 for Monthly Pass products.

Government Transfers

Government transfers include funds received from GVRF, Canada Line funding, Building Canada Fund, PTIF, ICIP and other miscellaneous programs. Revenue from senior government funding is expected to be \$38.2 million (10.4 per cent) lower than the 2018 budget levels mainly due to a reduction in the number of projects for which federal gas tax revenue is recognized as a result of the cyclical nature of some projects. Also included in 2019 government transfers is the contribution from the Province of BC for foregone toll revenues.

Investment Income

Investment income is budgeted above 2018 levels by \$4.7 million (9.7 per cent). The increase is mainly due to income earned on cash received, offset by lower Municipal Finance Authority (MFA) of BC Sinking Fund balances and the expected reduction in the outstanding loan receivable related to the sale of the Oakridge Transit Centre in 2016.

Risks and Challenges

Risks related to transit fare revenue include achieving ridership targets and predicting consumer behaviour for the purchase of various fare products. With annual proposed fare increases in July, there is a risk of reduced ridership. With the potential introduction of ride-hailing services, there is an additional risk that ridership will decline resulting in a loss of transit revenue. TransLink continues to closely monitor any external factors that may impact ridership.

Fuel tax volumes are unpredictable as suppliers have up to 48 months to recover tax paid on exempt volumes for fuel resold outside the transit region. Market changes in the price of crude oil, the USD/CAD exchange rate and the cost of transportation can also impact the amount of fuel tax collected and remitted to TransLink.

The property tax revenue includes revenue from new development and construction growth; the rate for 2019 is estimated at 2.3 per cent. If the actual rate for 2019 is lower than 2.3 per cent, a lesser amount of incremental property tax revenue will be received.

TransLink has limited influence on the operations of our partners that remit our parking rights tax revenue. An increase in rates, change in service or change in consumer behavior could negatively impact this stream of revenue.

6. Consolidated Expenses by Segment

CONSOLIDATED EXPENSES BY SEGMENT					
Twelve months ending December 31					
(\$ thousands)	2017	2018	2019	Change	
	ACTUAL	BUDGET ¹	BUDGET	Incr/(Decr)	%
Bus Operations	688,877	731,703	777,819	46,116	6.3%
Rail Operations	297,366	308,576	326,870	18,294	5.9%
Transit Police	37,179	38,765	40,845	2,080	5.4%
Corporate Operations	97,974	100,173	101,846	1,673	1.7%
Roads & Bridges	84,183	104,256	94,691	(9,565)	(9.2%)
Amortization of tangible capital assets	192,171	214,436	226,513	12,077	5.6%
Interest	181,766	179,267	185,118	5,851	3.3%
Sub Total Continuing Operations	1,579,516	1,677,176	1,753,702	76,526	4.6%
Corporate - one-time	12,640	32,755	70,636	37,881	115.6%
Total Expenses by Segment	1,592,156	1,709,931	1,824,338	114,407	6.7%

TransLink is responsible for delivering transit services, operating five bridges and providing operating and capital funding for the MRN and cycling in Metro Vancouver. With the continued service expansion across all modes, operating costs will increase accordingly.

Total expenses from continuing operations are expected to increase \$76.5 million (4.6 per cent) over the 2018 Budget. The increase is mainly due to higher operating costs resulting from contractual labour increases, service expansion, inflation and state of good repair maintenance initiatives. Additionally, amortization of capital assets is expected to increase as a result of capital projects being completed.

Corporate one-time costs are budgeted at \$70.6 million, which includes \$39.6 million for the B-Line expansion project and other one-time initiatives related to implementing the Mayors' Vision.

Bus Operations

Coast Mountain Bus Company (CMBC) oversees the operations of Conventional and Community Shuttle bus service, SeaBus and Access Transit. By the end of 2019, CMBC is expected to operate a fleet of approximately 1,640 Conventional and Community Shuttle vehicles. Bus Operations will span 107 million service kilometers, 5.4 million service hours and provide 1.3 million Access Transit trips in 2019.

Initiatives

Priority One: Implement the Mayors' Vision

The 2019 budget includes the following strategic activities to support the 10-Year Vision:

- Implement the planned service expansion and scheduling changes for 2019 including 4 new Rapid-Service B-Line Routes;
- Complete trolley overhead work (remove and install new infrastructure to "bypass" Broadway) to minimize customer impacts during Millennium Line Broadway Extension construction;
- Recruit and train transit operators and support staff including mechanics, service people, other associated trades, supervisors and SeaBus staff to support the expanded service levels;

- Defer retirement and refurbish older buses to increase bus capacity for expanded service, which will result in costs to repair, maintain and operate these vehicles until they can be retired later in 2019;
- Receive and commission 178 new replacement and expansion conventional buses;
- Take delivery, complete licensing and commissioning and run sea trials on the third new SeaBus in Q2 2019 for 10-minute service;
- Participate in the management and delivery of the PTIF investment program for bus facilities, equipment and related projects; and
- Begin preparing for the construction of a new operating Transit Centre in Vancouver.

Priority Two: Maintain a State of Good Repair

In 2019, CMBC will undertake the following initiatives to ensure safe and secure operations and keep the transit infrastructure in a state of good repair:

- Continue to retrofit transit operator protection barriers on the post-2012 Conventional fleet;
- Continue ongoing Power Smart initiatives to reduce cost, extend facility life and provide better staff working conditions, including energy and natural gas savings through retrofit projects;
- Maintain and improve major technologies;
- Participate in CUTRIC's Pan-Canadian Electric Bus Demonstration and Integration Trial where TransLink will be the first transit agency in this trial with the deployment of four quick charge battery electric buses and two overhead chargers;
- Support implementation of a new Enterprise Resource Planning System for integrated asset management, financials and supply chain functions;
- Support the replacement of the TMAC bus radio system and supporting technology;
- Participate in the Daily Operations Management System replacement project and updating the Trapeze suite of applications;
- Implement the 8,000-kilometre internal Preventative Maintenance program in accordance with Commercial Vehicle Safety Enforcement requirements; and
- Install new fareboxes on Community Shuttle fleet.

Priority Three: Enhance Customer Experience

In 2019, CMBC will undertake the following initiatives in support of the customer experience:

- Participate in CUTRIC's electric-battery bus demonstration and integration trial;
- Continue to implement the recommendations from the Custom Transit Service Delivery Model Review;
- Continue with the implementation and expansion of content for the employee Learning Management System;
- Participate in Real Time Transit Information Committee to improve wayfinding signage and schedules to provide customers with quicker and easier information access;
- Continue TMAC system and supporting technology upgrades to provide timely and accurate information to customers; and
- Receive and commission 32 double decker buses.

Risks and Challenges

CMBC has many transit operators eligible for retirement. The 2019 service expansion requires hiring and training operators in addition to normal attrition. Attracting, hiring and training operators on a timely basis will require a wider variety of staff resources.

The 2019 service will continue to require using retired, or scheduled-to-be-retired, buses until new buses arrive. These older buses have a higher risk of failure and will require higher maintenance costs that could exceed the estimated costs that were budgeted in 2019.

CMBC will be receiving 178 new expansion and replacement buses in 2019. Commissioning a significant portion of the existing fleet, refurbishing older buses, along with starting the CUTRIC battery electric bus pilot could adversely impact maintenance resources or result in delays and extra costs.

The Energy Storage System batteries in hybrid buses are a high cost component and battery life may be impacted by driving conditions, distances and recharging cycles. The expected life of these batteries ranges from seven to nine years. In 2009, 180 40-foot and 60-foot hybrid buses were purchased. These batteries began reaching the end of their useful lives in 2017. The 2019 budget includes the remainder of battery replacement work started in 2018.

CMBC has a proactive fuel management strategy to help mitigate market price changes and achieve budget stability. This includes active monitoring, predictive modelling and the ability to enter into fixed price hedging agreements.

Abnormal inclement winter weather conditions could result in snow clearing, salting and other vehicle maintenance costs significantly beyond the budgeted expenditure which is based on long-range average annual events and costs. Winter conditions also results in increased motor vehicle accident damage and employee and customer injuries such as slips and falls.

2019 Budget vs 2018 Budget

BUS OPERATIONS BY CATEGORY					
Twelve months ending December 31	2017	2018	2019	Change	
(\$ thousands)	ACTUAL	BUDGET ¹	BUDGET	Incr/(Decr)	%
Administration	15,482	18,813	20,210	1,397	7.4%
Contracted Services	74,910	78,081	77,689	(392)	(0.5%)
Fuel and Power	49,435	53,563	63,543	9,980	18.6%
Insurance	17,278	18,632	22,629	3,997	21.5%
Maintenance, Materials and Utilities	72,445	75,520	73,154	(2,366)	(3.1%)
Professional and Legal	3,321	2,841	3,923	1,082	38.1%
Rentals, Leases and Property Tax	12,882	13,844	15,624	1,780	12.9%
Salaries, Wages and Benefits	443,124	470,409	501,047	30,638	6.5%
Total Expenses by Category	688,877	731,703	777,819	46,116	6.3%

The Bus Operations 2019 operating budget is expected to be \$46.1 million (6.3 per cent) higher than the 2018 budget. This consists of increases in CMBC costs to operate conventional service, Community Shuttle and SeaBus \$42.1 million (7.0 per cent), Access Transit \$0.8 million (1.4 per cent), allocated costs \$4.2 million (8.1 per cent) largely relating to Information Technology (IT) as all CMBC staff including field

workers will have access to enterprise licenses starting in 2019, partly offset by a decrease in other contracted bus services \$1.0 million (4.2 per cent).

The CMBC 2019 operating budget increase is primarily due to contractual labour and economic increases, increased fuel prices and insurance rates and additional staffing related to the 2019 service expansion plus the full year impact of 2018 service changes.

- Salaries, wages and benefits is expected to increase by \$30.6 million, which mainly includes \$12.4 million of contractual increases and other step and merit pay progression increases, \$10.5 million for additional operator and other staff wages and salaries related to service expansion and \$7.6 million for new Employer Health tax. The employee future benefit reduction due to lower Medical Service Plan premiums partly offset other benefit increases.
- Fuel and power cost is expected to increase \$10.0 million mainly due to price increases.
- Insurance premiums are expected to increase \$4.0 million mainly due to rate increases.
- Maintenance, materials and utilities are expected to be \$2.1 million lower mainly due to the 2009 hybrid bus fleet's Energy Storage System battery replacements in 2018 that are not recurring, partly offset by one-time road worthy repair and operating costs to retain older buses for expansion until new buses arrived and reduction of bus component usage on new fleet.

Access Transit is expected to be \$0.8 million higher than 2018 budget mainly due to higher fuel costs as a result of providing more trips and higher fuel prices as well as increased property rental costs. Contracted Transit Services is expected to be \$1.0 million lower than 2018 budget mainly due to some West Vancouver conventional service being transferred to CMBC Operations, reducing labour and maintenance costs, partly offset by contractual rate increases and additional service hours for Contracted Community Shuttle.

Service Assumptions

With the approval of the Mayors' 10-Year Vision, service levels at CMBC Operations are expected to increase as follows:

BUS OPERATIONS					
Twelve months ending December 31	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
SERVICE HOURS					
CMBC Operations	4,865,232	5,050,622	5,185,937	135,315	2.7%
Conventional Bus	4,353,024	4,507,657	4,616,916	109,259	2.4%
Community Shuttle	500,323	530,690	555,972	25,282	4.8%
SeaBus	11,885	12,275	13,049	774	6.3%
Contracted Transit Services	253,268	256,875	236,312	(20,563)	(8.0%)
West Vancouver	136,118	142,384	113,922	(28,462)	(20.0%)
Contract Community Shuttle	117,150	114,491	122,390	7,899	6.9%
Conventional Transit Service Hours	5,118,500	5,307,497	5,422,249	114,752	2.2%
SERVICE KILOMETRES					
CMBC Operations	94,718,577	99,134,029	101,842,807	2,708,778	2.7%
Conventional Bus	84,099,995	87,923,442	90,093,422	2,169,980	2.5%
Community Shuttle	10,457,936	11,044,635	11,572,968	528,333	4.8%
SeaBus	160,646	165,952	176,417	10,465	6.3%
Contracted Transit Services	5,483,628	5,535,253	5,139,769	(395,484)	(7.1%)
West Vancouver	2,829,120	2,947,350	2,420,848	(526,502)	(17.9%)
Contract Community Shuttle	2,654,508	2,587,903	2,718,921	131,018	5.1%
Conventional Transit Service Kilometres	100,202,205	104,669,282	106,982,576	2,313,294	2.2%

ACCESS TRANSIT					
Twelve months ending December 31	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Service Kilometres	9,285,018	9,920,000	10,240,000	320,000	3.2%
Access Transit Trips					
Trips - HandyDART	1,120,365	1,233,000	1,271,000	38,000	3.1%
Trips - Taxi Supplement	129,551	102,000	102,000	-	-
Total Access Transit Trips	1,249,916	1,335,000	1,373,000	38,000	2.8%

The 2019 budget is the third year in Phase One of the 10-Year Vision. Year over year conventional transit services are expected to increase 2.2 per cent and HandyDART is funded for an additional 38 thousand trips (3.1 per cent) increase.

The major impacts to service include:

- Full year impacts of the service improvements, changes and expansion implemented in 2018; and
- 2019 service expansion improvements across the region including four new B-Lines, one new SeaBus vessel with sailings every 10 minutes during peak periods and every 15 minutes during

non-peak, an additional 6 hours of SeaBus sailing per week, improved service on different bus routes and running time adjustments to address service reliability.

Rail Operations

BCRTC on behalf of TransLink, maintains and operates two of the three SkyTrain lines in Metro Vancouver, the Expo and Millennium Lines and the WCE commuter rail service. In addition, BCRTC also manages the agreement with InTransit BC for the operation and maintenance of the Canada Line. Ongoing investment in the rail network over the coming years will enable us to continue to meet the needs and expectations of customers and ensure the railway is operating safely and reliably.

The Rail Operations is committed to its employees, the ongoing improvement of customer service and supporting TransLink's critical role of planning and managing the region's transportation network. Over the next few years, BCRTC will complete the ongoing investments in existing rail services and support the rail-related projects contained in the Mayors Council's 10-Year Vision for Metro Vancouver Transit and Transportation.

The Rail Operations 2018-2020 business plan has aligned its focus areas and objectives with those of TransLink to support an integrated approach to meet the ever-expanding needs of people in the Metro Vancouver region.

Initiatives

Priority One: Implement the Mayors' Vision

BCRTC will provide the rail elements required to deliver the regional transportation priorities:

- Test, commission and deliver 56 new Mark III rail cars;
- Complete condition assessments to support fleet and asset renewal; and
- Modernize the Expo and Millennium Lines infrastructure to increase capacity and accommodate growth.

Priority Two: Maintain a State of Good Repair

In 2019, BCRTC will continue to focus on the following areas to continually improve the current record of safe and secure operations and invest in the future of rail services:

- Implement formal asset management plan and transform safety management system;
- Gather asset information data, including condition assessments and failure analyses;
- Update existing IT platforms and processes;
- Develop formal training plans and curriculum;
- Space optimization; and
- Succession and workforce planning.;

Priority Three: Enhance Customer Experience

In 2019, BCRTC will continue to focus on the following areas in support of the customer experience:

- Re-energize customer experience and liaise closely with TransLink;
- Implement McNeil recommendations; and

- Conduct SkyTrain Attendant customer service training.

Risks and Challenges

With a rapid transit system that is over 30 years old in several sections, the Rail Operations faces numerous risks and challenges from a maintenance and operational standpoint. The Rail Operations has identified the following risks and challenges:

- Aging infrastructure;
- Time consuming asset renewal;
- Outdated systems and processes;
- Deploying new assets;
- Growing and expanding needs of the customer base;
- Training and developing of workforce; and
- Potential retirement of a significant portion of the workforce.

BCRTC will continue to monitor these risks through various steering committees, asset management tools and regular reporting to senior management.

2019 Budget vs 2018 Budget

RAIL OPERATIONS BY CATEGORY					
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Administration	6,738	7,757	7,033	(724)	(9.3%)
Contracted Services	120,048	123,515	126,649	3,134	2.5%
Fuel and Power	16,085	16,245	16,997	752	4.6%
Insurance	5,237	4,430	5,467	1,037	23.4%
Maintenance, Materials and Utilities	43,912	44,584	44,836	252	0.6%
Professional and Legal	2,967	3,398	4,953	1,555	45.8%
Rentals, Leases and Property Tax	1,859	2,070	2,226	156	7.5%
Salaries, Wages and Benefits	100,520	106,577	118,709	12,132	11.4%
Total Expenses by Category	297,366	308,576	326,870	18,294	5.9%

The Rail Operations 2019 operating budget of \$326.9 million is expected to be \$18.3 million (5.9 per cent) higher than the 2018 budget.

- Salaries, wages and benefits are expected to increase by \$12.1 million, which include \$5.0 million in resources to support peak service increases, maintenance, capital project delivery, customer service training and safety management; \$3.6 million in IT support services; and \$3.5 million in contractual labour and benefit increases including \$1.6 million for the new Employer Health Tax, partly offset by savings in employee future benefits due to the reduction in Medical Service Plan premiums;
- Contracted services are expected to increase by \$3.1 million mainly related to contractual increases in the Canada Line concessionaire agreement;
- Professional and Legal costs are expected to increase by \$1.6 million mainly for asset condition assessments to support maintenance plans for ongoing state of good repair;
- Insurance is expected to increase by \$1.0 million due to premium increases; and

- Fuel and power costs are expected to increase by \$0.8 million mainly due to diesel and hydro price increases offset by a reduction in PST on hydro costs.

Service Assumptions

With the approval of the Mayors' 10-Year Vision, service levels are expected to increase as follows:

RAIL OPERATIONS					
Twelve months ending December 31	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
SERVICE HOURS					
Expo & Millennium Lines	1,334,786	1,327,448	1,333,091	5,643	0.4%
Canada Line	202,390	202,470	202,836	366	0.2%
WCE	36,489	36,622	36,622	-	-
Rail Operations Service Hours	1,573,665	1,566,540	1,572,549	6,009	0.4%
SERVICE KILOMETRES					
Expo & Millennium Lines	53,791,888	53,496,154	53,723,552	227,398	0.4%
Canada Line	6,516,908	6,519,505	6,531,344	11,839	0.2%
WCE	1,374,391	1,380,019	1,380,019	-	-
Rail Operations Service Kilometres	61,683,187	61,395,678	61,634,915	239,237	0.4%

In 2019, Expo and Millennium Lines revenue service levels will see increases due to additional service using existing fleet in the Mayors' Vision, made up of three peak service increases throughout the year. In addition, the arrival and introduction of more new Mark III rail cars are expected throughout the year.

The new 4-car Mark III trains provide 10.8 per cent higher capacity than 6-car Mark I trains, while running 30 per cent fewer service kilometres, therefore, although budgeted service kilometres will increase by 0.4 per cent, with the new cars, budgeted capacity kilometres will increase by 3.6 per cent. The Canada Line will see morning peak increases using existing fleet and WCE will remain consistent with 2018 service levels.

Police Operations

Mandated by the Minister of Public Safety and Solicitor General as a Designated Policing Unit, the Metro Vancouver Transit Police ("Transit Police") preserves and protects the public peace throughout the transit system. Working with local police services, each officer aims to prevent crime and offences against the law, aid in the administration of justice and enforce the laws of British Columbia. The Province established Transit Police in 2005 as the first dedicated transit police service in Canada.

Initiatives

In 2019, Transit Police will continue to implement its 2016-2020 Strategic Plan, its commitment to demonstrate excellence in public transit policing and focus on the following three strategic goals:

- Build a safe and secure transit system;
- Deliver confidence in the use of public transit; and
- Provide regional services that enhance local policing and community safety.

In supporting the TransLink priority of enhancing the customer experience, Transit Police proposes to work with the Police Services Division of the Solicitor Generals Office and other stakeholders to establish a new cost-efficient peace officer pilot program called Community Safety Officers (CSO). It is proposed that the CSO team would supplement regular police officers by taking on a range of duties, including providing enhanced officer visibility at the major transit hubs, guarding crime scenes, tagging property, fare enforcement and engaging with passengers. This program will positively impact perceptions of safety on transit and free up regular police resources to focus on responding to calls for service and conducting investigative follow-up. The CSO team would additionally assist in managing the continued increase in police workload created by the Evergreen Extension of the Millennium Line and provide additional visible resources and officer presence at special events.

Additionally, Transit Police will expand the system-wide use of “See Something, Say Something” text 87-77 service advertisements and promote anti-sex offence ads in line with the four Transit Police operational priorities. Transit Police will continue to monitor its achievements against its Strategic Plan by observing 14 key performance indicators grouped by the following five themes:

- Reducing Crime;
- Strengthening Partnerships;
- Improving Safety;
- Increasing Productivity; and
- Maintaining a Healthy and Diverse Organization.

Risks and Challenges

Maintaining sworn officer staffing levels in response to attrition and injury continues to be a challenge. In the policing environment, a casual pool of sworn officers does not exist to fill vacant and injured positions. Hiring replacement officers is a lengthy process with the availability of suitable candidates varying greatly month to month. Unforeseen delays in hiring could lead to additional operational overtime costs. As ridership increases, stakeholder demands for transit policing services evolve and preparations for future transit system expansion continues; Transit Police must be proactive in developing and acquiring the necessary human resources and associated operational civilian support.

2019 Budget vs 2018 Budget

POLICE OPERATIONS BY CATEGORY					
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET ¹	2019 BUDGET	Change	
				Incr/(Decr)	%
Administration	2,510	3,612	3,781	169	4.7%
Insurance	45	50	50	-	0.0%
Maintenance, Materials and Utilities	1,565	1,315	1,215	(100)	(7.6%)
Professional and Legal	473	410	374	(36)	(8.8%)
Rentals, Leases and Property Tax	1,908	1,960	2,193	233	11.9%
Salaries, Wages and Benefits	30,678	31,418	33,232	1,814	5.8%
Total Expenses by Category	37,179	38,765	40,845	2,080	5.4%

Police Operations expenditures is expected to increase by \$2.1 million (5.4 per cent) from the 2018 budget. The increase is mainly due to the following:

- Administration costs are \$0.2 million higher mainly due to the increase of IT Software Licensing and IT network infrastructure costs;
- Rental costs are \$0.2 million higher due to additional premise rent for added space at the Sapperton office; and
- Labour cost increases are \$1.8 million higher mainly due to contractual labour and economic increases in the new Collective Agreement and full year impact of additional police officers for the Evergreen Extension of the Millennium Line.

These increases are partly offset by lower Professional and legal fees and lower material costs.

Corporate Operations

Corporate Operations will continue to support the operating companies in 2019, with a focus on achieving enterprise priorities, including delivering on the commitments in the Phase Two Plan of the 10-Year Vision and ensuring procurement readiness for Rapid Transit projects. The strategic objectives of Corporate Operations are summarized below.

The Corporate Operations consists of the following areas: Transportation Planning and Policy, Infrastructure Management and Engineering, Human Resources, Business Technology Services, Strategic Sourcing and Real Estate, Legal, Customer Communications and Public Affairs, Financial Services and Compass Operations. To facilitate the upcoming major capital expansion, a new group, Major Project Delivery and Development, will be formed in 2019.

Initiatives

Priority One: Implement the Mayors' Vision

In 2019, Corporate Operations will support the achievement of regional transportation priorities with the following initiatives:

- Develop programs to attract and retain staff to ensure skilled resources are available;
- Provide technical input into design of Millennium Line Broadway Extension;
- Deliver the design and implementation of capital projects, such as the Expo and Millennium Upgrade Program (EMUP), SeaBus Terminal, existing and future bus depots and rail systems and facilities;
- Support the CUTRIC electric-battery bus trial;
- Develop a Regional Road Network Strategy to better define and manage performance of the region's road network; and
- Construct new bus exchanges at Guildford and Newton in advance of the South of Fraser LRT.

Priority Two: Maintain State of Good Repair

In 2019, Corporate Operations will continue to focus on the following areas to ensure a state of good repair:

- Upgrade existing infrastructure, such as trolley overhead and SkyTrain storage and conduct ongoing preventative and corrective maintenance of bridges;
- Implement CAPITAL-M enterprise asset management initiatives;
- Support major technology projects such as the Enterprise Asset Management (EAM) system and CMBC Safety Management System;
- Complete SkyTrain Noise Assessment and Late-Night Service Technical Studies; and
- Develop and implement Emergency Response Plan through the IT Disaster Recovery Program.

Priority Three: Enhance Customer Experience

Corporate Operations will continue to focus on the following areas in support of the customer experience:

- Implement Passenger Information Displays on the SkyTrain system as well as Public Announcement and Closed-Circuit Television equipment;
- Improvements to bus exchanges and SkyTrain stations such as new bus shelters, lighting, wayfinding, drive isle layouts and increases in bus capacity;
- Support the implementation of the outcomes and Access Transit Service Delivery Review;
- Enhance the Compass Card website and vending machine functions to improve the overall customer experience and respond to customer feedback;
- Increase further wireless carrier coverage to tunnels to enhance customer and employee safety and security while underground; and
- Begin implementation of the Customer Experience Action Plan.

Risks and Challenges

Recruitment and retention continue to be a challenge due to a competitive market and a shortage of experienced professionals. This may result in delays in meeting internal and external customer expectations. In addition, staff turnover is a risk that may lead to a loss of business knowledge and delays due to training of new staff.

Delays in the implementation of projects and initiatives are a risk due to challenges in finding suitable consultants and vendors on a timely basis. Additionally, the implementation cost of complex technical systems may be higher than anticipated.

The change in the newly elected Mayors' Council may result in delays to projects or an increase in project costs based on variations to the scope of projects.

The risks and challenges are continuously monitored through management oversight and project steering committees.

2019 Budget vs 2018 Budget

CORPORATE OPERATIONS BY CATEGORY					
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET ¹	2019 BUDGET	Change	
				Incr/(Decr)	%
Administration	16,926	18,112	19,024	912	5.0%
Contracted Services	11,231	13,380	14,043	663	5.0%
Insurance	286	173	201	28	16.2%
Maintenance, Materials and Utilities	2,752	2,155	1,595	(560)	(26.0%)
Professional and Legal	16,243	11,547	11,502	(45)	(0.4%)
Rentals, Leases and Property Tax	7,583	9,794	9,941	147	1.5%
Salaries, Wages and Benefits	41,774	45,012	45,540	528	1.2%
Provision for Asset Valuation	1,179	-	-	-	0.0%
Total Expenses by Category	97,974	100,173	101,846	1,673	1.7%

Corporate ongoing costs are expected to increase by \$1.7 million (1.7 per cent) compared to the 2018 budget. The increase in operating costs is primarily due to an expected increase in IT devices, services, software licenses and support, contractual costs related to Cubic as well as contractual and inflationary labour increases.

Roads and Bridges

ROADS & BRIDGES OPERATIONS BY CATEGORY					
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET	Change	
				Incr/(Decr)	%
Administration	58	149	122	(27)	(18.1%)
Capital infrastructure contributions	33,389	53,212	49,780	(3,432)	(6.4%)
Contracted Services	12,927	11,710	5,530	(6,180)	(52.8%)
Fuel and Power	-	-	-	-	0.0%
Insurance	979	1,224	1,224	-	0.0%
Maintenance, Materials and Utilities	27,404	33,671	34,850	1,179	3.5%
Professional and Legal	7,565	2,378	1,749	(629)	(26.5%)
Rentals, Leases and Property Tax	107	67	67	-	0.0%
Salaries, Wages and Benefits	1,754	1,845	1,369	(476)	(25.8%)
Total Expenses by Category	84,183	104,256	94,691	(9,565)	(9.2%)

The 2019 Roads and Bridges budget is expected to decrease \$9.6 million (9.2 per cent) over the 2018 budget. The decrease is mainly due to lower contracted services costs from the elimination of Golden Ears Bridge tolling and timing of capital infrastructure contributions to municipalities. The decrease is partly offset by higher maintenance costs due to extension of lane kilometres in the MRN program.

The Roads and Bridges 2019 budget will support the MRN and Bike Program, Regional Goods Movement Strategy and will deliver Greater Vancouver Urban Freight priorities yield to the following outcomes:

- Provide the tools to monitor and manage the road network's performance;
- Administer the municipal funding programs for roads, cycling, walking and structured infrastructure projects with the additional funding approved in the 10-Year Vision;
- Improve regional coordination between public and private sector partners on issues of intra-regional goods movement;

- Develop a Regional Road Network Strategy to better define and manage performance of the region's road network;
- Improve regional road network operations including improvement of freight wayfinding and trip planning tools, loading zone operations and incident response;
- Reach municipal agreement on harmonizing vehicle weights and dimensions limits with provincial and national standards; and
- Make progress towards implementing a regional permit system for oversize-overweight vehicles.

Amortization

The 2019 budget for amortization expense increased \$12.1 million (5.6 per cent) in comparison to the 2018 budget. Major attributes for the additional amortization expense in 2019 include buses to be acquired in 2019.

Interest

Interest expense is expected to increase by \$5.9 million (3.3 per cent) in comparison to the 2018 budget mostly due to higher outstanding gross debt.

Corporate – One-time

Corporate one-time costs in the 2019 budget are \$70.6 million, mainly consisting of the B-Line expansion (\$39.6 million), feasibility studies (\$12.9 million), Regional Transportation Strategy program (\$4.0 million), South of Fraser Rapid Transit (\$2.0 million), Bus speed and reliability project (\$2.0 million), contingency provision (\$2.0 million), CAPITAL-M initiatives (\$1.7 million), business technology operating project (\$1.5 million), new mobility initiatives (exploring and implementing innovative ways to improve mobility) (\$1.0 million), mobility pricing (\$0.9 million) and other one-time projects (\$3.0 million).

7. Investment in Capital Assets

Summary of Capital, by Program (\$ thousands)	Total Project Budget			2019 Capital Cash Flow		
	Gross Cost	Less: Funding *	Net Cost	Gross Cost	Less: Funding *	Net Cost
2019 New Capital Program						
Equipment	90,372	-	90,372	19,415	-	19,415
Facilities	32,571	-	32,571	11,491	-	11,491
Infrastructure	174,480	(11,800)	162,680	91,114	(1,224)	89,890
Technology	71,190	-	71,190	16,967	-	16,967
Vehicles	154,968	(136,422)	18,546	421	(209)	212
Major Construction	3,248,142	(1,934,526)	1,313,616	376,781	(105,421)	271,360
Contingency	10,000	-	10,000	6,000	-	6,000
2019 New Capital Program Total	3,781,723	(2,082,748)	1,698,975	522,189	(106,854)	415,335
Active/Approved in Principle (AIP) Capital						
Equipment	126,469	(46,537)	79,932	72,338	(37,151)	35,187
Facilities	105,186	(49,518)	55,668	46,673	(19,845)	26,828
Infrastructure	654,876	(283,457)	371,419	281,894	(128,489)	153,405
Technology	55,068	-	55,068	25,491	-	25,491
Vehicles	958,507	(850,116)	108,391	406,749	(396,558)	10,191
Major Construction	478,902	(33,000)	445,902	8,002	(11,333)	(3,331)**
Active/Approved in Principle (AIP) Capital Total	2,379,008	(1,262,628)	1,116,380	841,147	(593,376)	247,771
Total Capital						
Equipment	216,841	(46,537)	170,304	91,753	(37,151)	54,602
Facilities	137,757	(49,518)	88,239	58,164	(19,845)	38,319
Infrastructure	829,356	(295,257)	534,099	373,008	(129,713)	243,295
Technology	126,258	-	126,258	42,458	-	42,458
Vehicles	1,113,475	(986,538)	126,937	407,170	(396,767)	10,403
Major Construction	3,727,044	(1,967,526)	1,759,518	384,783	(116,754)	268,029
Contingency	10,000	-	10,000	6,000	-	6,000
Total Capital Total	6,160,731	(3,345,376)	2,815,355	1,363,336	(700,230)	663,106
Capital Infrastructure Contributions						
2019 New Program	75,001	-	75,001	23,340	-	23,340
Active and Approved in Principle	297,919	-	297,919	38,116	-	38,116
Capital Infrastructure Contributions Total	372,920	-	372,920	61,456	-	61,456
All Projects	6,533,651	(3,345,376)	3,188,275	1,424,792	(700,230)	724,562

* The funding sources include Federal Gas Tax, Build Canada Fund, PTIF, ICIP and City of Vancouver

**The 2019 capital cash flows from Senior Government funding are expected to exceed 2019 gross cash flows due to a timing difference of when the funding is received. In certain instances, the 2019 funding cash flows include recoveries for expenditures incurred in 2018 and 2019

Overview

TransLink's capital program is aligned with our current priorities of enhancing customer experience, ensuring a state of good repair and implementing the Mayors' Vision. The current capital program ensures assets provide the most efficient and effective infrastructure required to serve customers and stakeholders and continues to support the delivery of the 10-Year Vision. Capital projects have been planned and prioritized through an integrated review process across the enterprise that measures impact on strategy, customer experience, stakeholder value, business effectiveness and other factors.

The table above highlights capital projects grouped into asset categories and includes capital infrastructure contributions as per TransLink's current mandate of addressing regional MRN needs. The budget for the 2019 new capital program is \$3.8 billion.

The projected 2019 cash flow for all projects is \$1.4 billion, with \$522.2 million for the 2019 New Capital Program, \$841.1 million for existing capital programs and \$61.5 million for Capital Infrastructure Contributions. The net cash impact in 2019 after senior government funding is \$724.6 million.

2019 New Capital Program

The 2019 New Capital Program is intended to continue the delivery of the Mayors' Vision, as well as deliver key milestones for major projects. The program is also intended to improve customer experience and keep the overall system in a state of good repair.

Capital Projects supported by the Public Transit Infrastructure Fund (PTIF) and Investing in Canadian Infrastructure Program (ICIP) total \$3.2 billion and include Expo and Millennium Upgrade Program (EMUP), Millennium Line Broadway Extension and South of Fraser rapid transit projects, rail and bus vehicle purchases and further improvements to rail and bus infrastructure. Bus fleet expansion and replacement projects funded by the GVRF total \$155.0 million. Anticipated senior government contributions total \$2.1 billion and the net capital spending for the 2019 capital program is currently forecasted at \$415.3 million.

Table 1: 2019 New Capital Program (\$ thousands)

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Equipment							
CMBC Onboard Computer Update and Voice Radio Replacement	Replacement of end-of-life onboard Computer Update and Voice Radio.	36,000	-	36,000	5,592	-	5,592
Automatic Train Control (ATC) Existing Equipment Replacement - Stage 4	Replace end-of-life ATC equipment and add redundancy to maintain a state of good repair and improve reliability.	27,480	-	27,480	4,534	-	4,534
2019 Expo Line Traction Power Equipment Upgrade	Replace substation traction power equipment on Expo Line.	10,200	-	10,200	2,862	-	2,862
Replacement of Rotary Grinder #2	Replace rail grinding equipment to ensure timely scheduled grinding under the maintenance program.	6,500	-	6,500	3,996	-	3,996
Replacement of Hegenscheidt Underfloor Lathe	Replace the Hegenscheidt Wheel Lathe that has reached the end of its service life.	4,710	-	4,710	371	-	371
Fare Gates Capacity Increase - Priority Stations	Install nine additional fare gates at four priority stations (Waterfront, Richmond-Brighouse, Surrey Central and King George) to meet adequate level of service thresholds for existing peak demands.	1,902	-	1,902	713	-	713

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
CMBC Facilities Camera Replacement (2019)	Replace end-of-life security camera and surveillance systems at CMBC facilities, SeaBus and vessels.	1,600	-	1,600	401	-	401
Hoist Replacements - 2019	Replace three hoists identified at the Surrey Transit Centre (STC) to align with Sandwell Hoist Replacement Program.	800	-	800	10	-	10
SeaBus Shore Base Emergency Back-up Generators and Transfer Switches	Replace existing emergency power back-up generators and switches at SeaBus North and South Terminals due to end of service life.	610	-	610	366	-	366
CMBC Asset Purchases 2019	Replace key assets at Fleet Overhaul (FOH) Building and Gateway facilities.	570	-	570	570	-	570
Equipment Total		90,372	-	90,372	19,415	-	19,415
Facilities							
SeaBus Terminals Interior Refurbishment - Implementation	Implementation of improvements to passenger environment in North and South SeaBus Terminals.	14,000	-	14,000	1,532	-	1,532
Bus Facility Customer Amenities Improvement Program - Year 1	Upgrade and maintenance for customer amenities at TransLink's bus facilities and infrastructure.	6,573	-	6,573	1,579	-	1,579
Richmond Transit Centre (RTC) Facility Upgrades to accommodate double decker Buses - Phase 2	Continued facility upgrades at RTC for double decker buses and increased capacity for logistics activities.	5,350	-	5,350	4,834	-	4,834
SeaBus Facility Upgrades	Upgrade essential auxiliary spaces and equipment, including the installation of an elevator within SeaBus North Terminal.	2,805	-	2,805	357	-	357
Transit Center Upgrades to Support Facility Growth and Safety	Design and implementation of upgrades at CMBC facilities. Facilities, including Burnaby Transit Centre (BTC), STC and Vancouver Transit Centre have identified upgrades required to support the growth and expansion of service and ensure WorkSafe compliance.	2,340	-	2,340	1,688	-	1,688
Metro Vancouver Transit Police (MVTP) - Sapperton Facilities Expansion & Renovation	Expansion and renovation of existing office facilities to accommodate additional workplace requirements of the MVTP.	1,003	-	1,003	1,003	-	1,003
TOH Rectifier Building Roof and Envelope Replacement - 2019	Replace roof membranes at the Hastings East and Highbury Rectifier Stations to ensure membrane warranty remains intact for critical equipment.	500	-	500	498	-	498
Facilities Total		32,571	-	32,571	11,491	-	11,491

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Infrastructure							
Investments in Transit Priority on Priority B-Line Corridors - Phase 1	Implement transit priority measures, upgrades to bus stops, terminals and depot improvements to accommodate service for four new B-Lines.	42,035	-	42,035	34,879	-	34,879
Expo Line Escalator Program	Increased specifications for escalator replacement program which reflect more robust, durable and reliable units, to improve reliability and operating life.	36,000	-	36,000	18,000	-	18,000
Investments in Transit Priority on Priority B-Line Corridors - Phase 2	Implement transit priority measures, upgrades to bus stops, terminals and depot improvements to accommodate service for two new B-Lines.	28,000	(11,200)	16,800	1,816	(726)	1,090
Bus Daily Operations Management System (DOMS) Replacement - Design and Development	Migrate the DOMS to the vendor's next-generation software product, OPS, to ensure that CMBC can maintain reliable conventional bus service delivery.	23,250	-	23,250	2,514	-	2,514
Operations & Maintenance Centre (OMC) 1 Traction Power and Capacity Upgrades	Replace obsolete traction power equipment at OMC 1 and increase power capacity to support EMUP expansion to 2045.	10,400	-	10,400	10,369	-	10,369
Running Rail Replacement at Other Expo Sections	Replace running rail that have reached the end of service life.	8,850	-	8,850	8,607	-	8,607
TOH Pole Replacement - 2019	Continue the State of Good Repair multi-year program to replace 90-100 TOH poles per year and associated above and below ground equipment on a priority basis.	4,775	(600)	4,175	3,964	(498)	3,466
TransLink Owned Bicycle Infrastructure	Rehabilitate and upgrade regional cycling routes, bike parking at transit facilities and install bike counters across the region.	3,200	-	3,200	2,335	-	2,335
New Simon Fraser University (SFU) Exchange Contribution	Construct a new transit exchange and layover facility at SFU to support mutually agreed upon vision for the SFU Town Centre and integrated transit hub.	3,185	-	3,185	628	-	628
Burnaby Mountain Gondola Transit - Project Development	Further design, planning and partner engagement for a potential gondola from the Millennium Line to SFU Burnaby campus.	3,000	-	3,000	1,500	-	1,500
Bus Speed and Reliability (Phase 1)	Provide funding to municipalities to improve bus speed and reliability infrastructure.	2,000	-	2,000	2,000	-	2,000
Knight Street Bridge Rehabilitation Project	Rehabilitate of Knight Street Bridge deck to maintain optimal structural condition ahead of corrosion and modernize the sidewalks.	2,000	-	2,000	658	-	658

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Roof Replacement at various SkyTrain Stations	Replacement of deteriorated roof membranes at two BCRTC SkyTrain Stations.	1,950	-	1,950	1,944	-	1,944
Elevator Refurbishment - system wide	Upgrade or replace 20 Expo Line elevators, including WCE and OMC yard, as prioritized in the Escalators and Elevators Condition Assessment Services.	1,935	-	1,935	123	-	123
PowerSmart Upgrades - 2019	Implement all energy conservation measures to reduce energy consumption and costs and greenhouse gas emissions.	1,200	-	1,200	226	-	226
Westham Island Bridge Rehabilitation	Implement scour protection rehabilitation at Westham Island Bridge.	1,000	-	1,000	745	-	745
University of British Columbia (UBC) Extension - Project Development	Continued work on a multi-phase study to evaluate rapid transit service options in the Broadway corridor between Commercial Drive and UBC.	1,000	-	1,000	500	-	500
Bus Loop Park & Ride Various Condition Repairs - 2019	Rehabilitate end of service life driving and parking surfaces at CMBC's transit centres and loops as part of Annual Pavement Rehabilitation program.	700	-	700	306	-	306
Infrastructure Total		174,480	(11,800)	162,680	91,114	(1,224)	89,890
Technology							
BCRTC Enterprise Resource Planning Project	Implementation of asset management practices for BCRTC with associated processes, data and organizational change management.	33,240	-	33,240	4,685	-	4,685
Bus Security Camera System Replacement (BSCSR) - Retrofit and Expansion	Procure and implement an updated security camera and video management system, to new and existing buses in the conventional fleet.	20,000	-	20,000	3,845	-	3,845
IT Infrastructure Refresh (2019)	Ongoing computer systems and infrastructure lease renewals and replacement.	6,200	-	6,200	3,072	-	3,072
TransLink Software Application Renewal Program 2019	Renewal and replacement of software applications as per the Lifecycle Management and Renewal program.	3,000	-	3,000	1,138	-	1,138
Access Transit Trapeze PASS - Additional Modules	Implement additional Trapeze PASS modules: Itinerary Planning Assistant, Web Booking (PASS-WEB) and Operational Performance Monitoring/Reporting (ViewPoint).	2,000	-	2,000	800	-	800
Customer Digital Services Program (2019)	Implement prioritized digital technology improvement projects to deliver digital information and services that improve the customer experience.	2,000	-	2,000	59	-	59

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Data Warehouse/Business Intelligence Program 2019	To provide ridership and congestion information and analytics to support BCRTC to optimize network performance through improved planning and operations.	1,500	-	1,500	1,185	-	1,185
OMC 1 3rd Floor Server Room Upgrade	Upgrade and expansion to the Video Cassette Recorder room at OMC.	1,250	-	1,250	207	-	207
TransLink Mobile App	Improve our customers' digital experience by creating a mobile app for essential customer interactions and information.	1,000	-	1,000	976	-	976
Enterprise Content Management Implementation Project	Implementation of standardize information management practices to ensure compliance with regulatory requirements and improve information access and retention.	1,000	-	1,000	1,000	-	1,000
Technology Total		71,190	-	71,190	16,967	-	16,967
Vehicles							
2020 Conventional Bus Expansion	Purchase 68 expansion conventional buses required to implement Phase 2 service expansion.	109,000	(98,100)	10,900	-	-	-
2020 Conventional Bus Replacements	Replacement of end-of-life 2001 Orion Highway coaches with 25 replacement buses.	32,316	(29,084)	3,232	41	-	41
2020 HandyDART Vehicle Replacement	Replacement of 42 end-of-life HandyDART vehicles with equivalent capacity HandyDART vehicles to maintain service levels.	6,450	(5,800)	650	-	-	-
CMBC TOH Replacement - Phase 2	Purchase three TOH wire maintenance aerial tower trucks to replace three trucks in the TOH fleet.	2,400	-	2,400	-	-	-
Community Shuttle Vehicles Expansion	Purchase nine Community Shuttle vehicles to expand community service throughout Metro Vancouver as per Phase 2 of the Mayors' 10-Year Vision.	2,220	(1,998)	222	232	(209)	23
2020 HandyDART Vehicle Expansion	Purchase ten HandyDART vehicles for service expansion throughout Metro Vancouver as per Phase 2 of the Mayors' 10-Year Vision.	1,600	(1,440)	160	-	-	-
2019 CMBC Service Support Vehicles Replacement	Replace and introduce 16 SSV into service for CMBC.	982	-	982	148	-	148
Vehicles Total		154,968	(136,422)	18,546	421	(209)	212

2019 New Capital Program, Project Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Major Construction							
South of Fraser Rapid Transit*	Detailed design and construction of the South of Fraser Rapid Transit.	1,585,720	(483,000)	1,102,720	217,506	(14,753)	202,753
Expo and Millennium Line Upgrade Program - Fleet	Upgrading Expo and Millennium Line stations, OMC, auxiliary systems and fleet expansion to address shortfalls in capacity for the existing rapid transit network.	931,600	(931,600)	-	-	-	-
Expo and Millennium Line Upgrade Program - Infrastructure	Upgrading Expo and Millennium Line stations, OMC, auxiliary systems and fleet expansion to address shortfalls in capacity for the existing rapid transit network.	565,800	(360,904)	204,896	124,123	(56,116)	68,007
TransLink and BCRTC services to MLBE	TransLink and BCRTC support to the construction and operation of the Millennium Line Broadway Extension.	135,022	(135,022)	-	32,152	(32,152)	-
Surrey-Langley Rapid Transit - Project Development	Design and development of the proposed Surrey-Langley LRT project to connect the Surrey Central Station to the Langley City Centre.	30,000	(24,000)	6,000	3,000	(2,400)	600
Major Construction Total		3,248,142	(1,934,526)	1,313,616	376,781	(105,421)	271,360
Contingency							
Capital Contingency	Capital contingency.	10,000	-	10,000	6,000	-	6,000
Contingency Total		10,000	-	10,000	6,000	-	6,000
Grand Total		3,781,723	(2,082,748)	1,698,975	522,189	(106,854)	415,335

*Subject to change. Project direction under review by TransLink Mayors' Council and Board.

Active and Approval in Principle (AIP) Projects Underway

Capital projects already approved and underway have a total budget of \$2.4 billion. Anticipated senior government contributions total \$1.3 billion, leaving the net cost forecasted at \$1.1 billion. Spending forecast in 2019 is \$841.1 million with senior government funding of \$593.4 million for net spending of \$247.8 million. The majority of the spending is for bus vehicle purchases and SkyTrain fleet expansion forecasted at \$406.7 million for 2019.

Table 2: Active and Approved in Principle (AIP) Projects Underway (\$ thousands)

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Equipment							
ATC Existing Equipment Replacement - Phase 2	Replace ATC equipment to improve system reliability and maintain state of good repair.	5,100	(4,500)	600	14	(12)	2
ATC Existing Equipment Replacement on Expo Line	Replace ATC equipment to improve system reliability and maintain state of good repair.	13,470	-	13,470	4,407	-	4,407
B-Line Passenger Information Displays (PIDS)	Implementation of PIDs for five new B-Line routes.	3,950	-	3,950	3,422	-	3,422
CCTV Camera System Upgrade on Expo and Millennium Lines	Replace cameras, equipment and coax cable.	11,615	(7,830)	3,785	3,763	(6,714)	(2,951)**
ML Fire Life Safety System	Installation of Fire Safety system in Millennium Line.	9,250	-	9,250	7,036	-	7,036
Operator Protection Barrier Retrofit	Installation of barrier retrofit to protect bus operators from assaults.	1,630	-	1,630	1,362	-	1,362
PA Speakers installed at station entrance area	Update existing Public Address (PA) speakers at station entrance areas.	9,825	(5,617)	4,208	5,807	(5,514)	293
Passenger Address (PA) System Quality Improvement	Update existing PA speakers and install emergency speakers at stations and in some SkyTrain vehicles.	14,500	(12,300)	2,200	9,876	(8,989)	887
Railborne Equipment Replacement	Replace five BCRTC rail borne equipment vehicles nearing end-of-life used heavily for inspections, maintenance and capital project support.	3,000	-	3,000	89	-	89
SkyTrain Advanced Radio System - Phase 1 (Design)	Conceptual design work to replace the existing SkyTrain Radio System.	1,360	(1,360)	-	863	(1,360)	(497)**
SkyTrain Physical Security System Project	Security Enhancements.	7,704	(7,704)	-	4,591	(7,354)	(2,763)**
Replace Rail Rotary Grinder 1 (including Dust Collection System)	Replace rail grinding equipment to ensure timely scheduled grinding under the maintenance program.	7,300	-	7,300	4,604	-	4,604
CMBC Farebox Expansion and Replacement	Replacement of the fare box on all in-service fleet vehicles.	1,900	-	1,900	1,787	-	1,787
BCRTC Vehicle Support Shop - primary Lathe (Lacfer CR-3) Replacement	Replacement of the primary Lacfer CR-3 lathe at the BCRTC vehicle support shop.	400	-	400	15	-	15
Bus Security Camera System Replacement	Bus Security Camera System Replacement	1,708	-	1,708	871	-	871
Expo Line Traction Power Equipment Replacement	Replace & recondition traction power equipment to current technology for 15 substations.	5,617	-	5,617	4,043	-	4,043

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Transit Management and Communications (TMAC) Radio Replacement	Upgrade TMAC Mobile Automated Vehicle Location radio system.	25,600	(4,863)	20,737	18,243	(4,862)	13,381
Mark III Vehicle Lifting Jacks	Purchase of additional lifting jacks to support maintenance of MK III SkyTrain vehicles.	2,540	(2,363)	177	1,545	(2,346)	(801)**
Equipment Total		126,469	(46,537)	79,932	72,338	(37,151)	35,187
Facilities							
2018 Facilities-MVTP Hub Offices	Acquisition of a front facing hub office space at the MVTP Bridgeport location.	450	-	450	1	-	1
2018 Transit Centre Infrastructure to Support Expansion	Moving from hybrid to diesel buses requires changes to existing infrastructure.	2,500	-	2,500	2,354	-	2,354
Fir and Bodwell Rectifiers - Roof Replacement	Replace end-of-life roofs at Fir Street and Bodwell Rectifier Stations to maintain a state of good repair.	632	-	632	632	-	632
Leasehold Improvement #1	Upgrade of the fit-out Sapperton building eighth floor to meet existing building standards for corporate use.	5,225	(1,936)	3,289	3,694	-	3,694
Marpole Transit Centre Silvertree Site - Pre-Design Services	Provides for a detailed environmental study, functional programming requirements and other pre-design work.	3,002	-	3,002	463	-	463
OMC Perimeter Security Upgrade	Design and development of the perimeter security upgrade at the OMC.	1,990	-	1,990	1,990	-	1,990
PowerSmart Upgrades - 2017	Implement all energy conservation measures to reduce energy consumption and costs and greenhouse gas emissions.	2,700	(1,350)	1,350	168	(1,005)	(837)**
Replace Mission and Waterfront Yard Trailers	Replacement of five WCE modular trailers and upgrades to security at the Mission maintenance and storage yard.	734	(543)	191	71	(210)	(139)**
RTC Facility Upgrades to accommodate double decker Buses	Retrofits required at RTC for double decker buses purchased.	4,000	-	4,000	3,590	-	3,590
RTC Maintenance Office Renovations	Expansion and renovation of existing staff amenities to meet WorkSafe requirements and additional positions.	230	-	230	1	-	1
SeaBus Crew Facilities Rehabilitation	Renovation of end-of-life SeaBus crew facilities to ensure a state of good repair for work crews.	1,680	(840)	840	1,547	(831)	716
SeaBus Maintenance Dock Expansion	Expand maintenance dock from 2 to 3 berths to accommodate a new SeaBus vessel purchase.	10,000	-	10,000	6,996	-	6,996
SeaBus Terminals Interior Refurbishment	Detailed design phase for upgrades to passenger environment in North and South SeaBus Terminals.	1,867	-	1,867	371	-	371

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
SeaBus Transformer Replacement	Replace end-of-life electrical components and systems at SeaBus terminals to maintain a state of good repair.	480	-	480	97	-	97
BTC South Seismic Upgrade - Design	Design phase of the upgrades to the BTC South structure to ensure it meets current Building Code seismic standards.	9,277	(4,666)	4,611	7,190	(4,007)	3,183
Canada Line Fleet Expansion - Infrastructure	Infrastructure portion of OMC system upgrades as required to meet updated ridership forecasts and capacity on the Canada Line.	49,734	(38,941)	10,793	9,114	(12,649)	(3,535)**
BTC South Garage Roof Replacement	Replace the garage building roof that is over 20 years old and has had numerous leak problems in the last 3 years.	2,505	(1,242)	1,263	1,108	(1,143)	(35)**
BTC South FOH Building Garage Doors Replacement	Replace end-of-life garage doors at the BTC South FOH to maintain a state of good repair.	180	-	180	67	-	67
OMC 1 & 2 Space Optimization and Modernization	Renovation to optimize and modernize BCRTC's workplace and facilities.	8,000	-	8,000	7,219	-	7,219
Facilities Total		105,186	(49,518)	55,668	46,673	(19,845)	26,828
Infrastructure							
22nd Street Exchange - Lighting and Passenger Safety Compliance	Upgrade and replacement of paved areas and lighting systems at the 22nd Street Exchange to improve safety, reliability and power efficiency.	2,800	-	2,800	1,545	-	1,545
BC Hydro Upgrades	Upgrade of BC Hydro Facility.	17,000	(17,000)	-	3,973	(15,175)	(11,202)**
Bear Creek Replacement	Bridge upgrade as part of early works for the South of Fraser Transit improvements.	23,531	(11,391)	12,140	3,873	(9,837)	(5,964)**
Fibre Optic System Upgrade Stage 3	Extension of the geographic reach of the fibre optic system to additional Millennium Line stations.	4,400	-	4,400	21	-	21
Bike Monitoring Program	Development of a program to monitor regional bicycle use throughout Metro Vancouver.	467	-	467	69	-	69
Brentwood SkyTrain Station and Bus Facilities Upgrade Phased Design and Implementation	Upgrade to improve the weather protection, amenities and elevator at Brentwood SkyTrain station's rail and bus facilities.	7,372	-	7,372	6,323	-	6,323
Bus stop infrastructure for new routes	Implementing bus stop infrastructure to improve transit travel times and speeds for new routes.	750	-	750	750	-	750
Canada Line Bus Loops	Design and construction of improvements to Canada Line bus loops.	14,498	-	14,498	262	(1,994)	(1,732)**

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
CMBC SeaBus Emergency Exit Ramps Replacement	Replace end-of-life SeaBus emergency exit ramps and safety systems to ensure compliance and a good state of repair.	1,000	-	1,000	1,000	-	1,000
Evergreen Extension Station bicycle Parkades	Design and construction of new bicycle parkades at the Evergreen Extension Station.	5,344	(3,250)	2,094	3,421	(3,155)	266
Expo Line Station Escalators - Stage 4	Replace the existing escalators to reduce high maintenance cost and meet safety requirements.	15,893	-	15,893	15,893	-	15,893
Expo Line Tunnel Ventilation System Condition Assessment Feasibility Study	Condition assessment and design of tunnel ventilation systems requiring repair and upgrade on for the Expo Line.	6,165	(3,095)	3,070	2,140	(2,355)	(215)**
Expo Line Upgrade Strategy - Burrard station: Design & Implementation	Design and upgrade Burrard Station for capacity and passenger flow.	60,700	(54,763)	5,937	56,000	(2,405)	53,595
Guideway Intrusion System Upgrade	Upgrades to the Platform Intrusion Emergency Stop (PIES) on the Expo Line and Guideway Intrusion Emergency Stop (GIES) on the Millennium Line, which have reached the end of their service lives.	9,800	(5,800)	4,000	5,050	(4,800)	250
Guildford Exchange	Guildford Exchange upgrades as part of early works for the South of Fraser transit improvements.	14,000	(7,000)	7,000	7,730	(6,769)	961
Hoist Replacements - 2017	Replacement of end-of-life hoists at the BTC to align with Sandwell Hoist Replacement Program.	5,163	(2,550)	2,613	2,934	(2,207)	727
Investments in Transit Priority on Priority B-Line Corridors	Implementation of transit priority measures, stop upgrades, termini and depot improvements to accommodate service for four new B-Line routes.	3,770	-	3,770	1,483	-	1,483
Joyce-Collingwood Station Upgrade Design	Design of upgrades to the Joyce-Collingwood Station to improve capacity and passenger flow.	47,578	(37,033)	10,545	2,050	(15,599)	(13,549)**
Knight Street Bridge Rehabilitation-Detailed Design	Knight Street Bridge structural assessment and detailed design.	2,100	-	2,100	925	-	925
Lonsdale Quay bus loop and SeaBus terminal upgrade	Design and implementation of improvements to passenger environment in bus loop and North SeaBus Terminal.	8,000	(4,000)	4,000	7,410	(3,917)	3,493
Metrotown Bus Loop Refurbishment	Refurbish Metrotown Bus Loop.	5,000	(5,000)	-	2,854	(2,245)	609
Newton Exchange	Upgrade Newton Exchange.	1,474	(760)	714	1,711	(760)	951
Pattullo Bridge Rehabilitation Phase 2 Design	Design for structural seismic upgrade work on the Pattullo Bridge.	55,000	-	55,000	8,390	-	8,390

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Phibbs Exchange Upgrade	Upgrade Phibbs bus exchange for safety and customer and vehicle capacity.	23,190	(20,750)	2,440	19,960	-	19,960
Propulsion Power Substation Redundant Incomers a 3 Locations	Replace sections of running rail in Phase I of Expo Line (Burnaby/New West) that are in poor condition.	7,172	-	7,172	5,046	-	5,046
Rapid Transit Noise Migration Design	Implementation of noise mitigation measures for rapid transit lines.	1,000	-	1,000	956	-	956
Replace Platform LEDs System	Procurement and replacement of all Platform LEDs and Station Entrance Emergency Information Panels at Expo and Millennium stations.	26,450	(6,250)	20,200	18,530	(6,250)	12,280
Roofing Replacements (#1&2)	Roof replacements of facilities along the Expo Line rail network.	7,575	(7,575)	-	5,889	(5,840)	49
Running Rail Replacement	Replace running rail that have reached the end of service life.	7,128	(7,127)	1	3,438	(6,962)	(3,524)**
SeaBus South Seawall and Skywalk Seismic Design	Design and development of seismic upgrades to the SeaBus South terminals to withstand a major earthquake.	17,501	(4,175)	13,326	3,847	(3,947)	(100)**
SeaBus Terminals and Admin Building Envelope Upgrades- Design Stage	Upgrade SeaBus Terminals and Admin Building Envelope.	12,443	-	12,443	2,119	-	2,119
TOH Metrotown Group Rectifier Replacement	Design and construct rectifier station replacements at Central Park, Willingdon East and Willingdon West rectifier stations.	5,765	(4,725)	1,040	2,151	(1,488)	663
TOH Pole Replacement - 2018	State of Good Repair multi-year program to replace 100 TOH poles per year based on a priority basis.	2,500	(500)	2,000	577	(271)	306
Transit Centre Paving Replacement	Pavement rehabilitation at transport centres, including BTC North, Maple Meadows Way Exchange and Braid Station Loop.	950	-	950	848	-	848
Transit Plan for M-Line Broadway Extension Construction	To order 37 diesel buses to replace some of the trolley fleet and to build bypass TOH infrastructure for others during construction.	8,950	-	8,950	3,032	-	3,032
TransLink Owned Bicycle Infrastructure	Maintain and improve current level of service, safety and reliability.	6,624	-	6,624	2,554	-	2,554
TransLink owned Investment in Cycling Infrastructure	Maintain and improve current level of service, safety and reliability.	2,300	-	2,300	2,300	-	2,300
Two Bus Exchange Upgrades	Improve bus exchanges as part of region-wide transit facility upgrades.	10,000	(5,000)	5,000	4,546	(2,340)	2,206
Westham Island Bridge Structural Assessment and detailed design	Construction and Implementation of the Westham Island Bridge Rehabilitation.	2,320	-	2,320	477	-	477
Surrey Central Station Upgrades Design	Upgrade SkyTrain station facilities to increase capacity.	24,268	(10,075)	14,193	2,314	-	2,314

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Expo Line Escalators Replacement Accelerated Program-Phase 1 Design	Accelerated design for escalator replacements on the Expo Line.	15,428	(14,517)	911	4,955	(5,825)	(870)**
Expo and Millennium Line Signage and Station Fixture Replacement	Expo and Millennium Line Signage and Station Fixture Replacement	9,750	(3,240)	6,510	315	-	315
Pattullo Bridge Wind Monitoring & Seismic Warning Systems Detailed Design	Detailed research and design of wind monitoring and seismic warning systems for the Pattullo Bridge.	5,595	-	5,595	3,091	-	3,091
WCE Stations & Carvolth Exchange bicycle Parkades	Design and construction of new bicycle parkades at WCE Stations and the Carvolth Exchange.	3,272	(2,000)	1,272	1,090	(2,000)	(910)**
BTC North Garage Replacement - Design	Design of a replacement garage for the BTC North.	8,620	(4,310)	4,310	527	(4,291)	(3,764)**
SkyTrain OMC Upgrades	Install new ATC wayside hardware and modify existing ATC related software and hardware.	50,000	-	50,000	25,342	-	25,342
Edmonds OMC Capacity Upgrades	Improvements to the SkyTrain OMC at Edmonds.	9,000	(9,000)	-	5,101	(7,370)	(2,269)**
BCRTC Yard Track Reconditioning (including OMC 2 Track Connection Rework)	Feasibility study to explore reconditioning the existing yard tracks and track switches and determine options to restore storage lane to full functionality at OMC 1.	3,000	-	3,000	2,553	-	2,553
Power System Upgrades for SkyTrain at OMC	Improve power supply and distribution reliability at OMC.	7,565	(3,390)	4,175	3,970	(3,540)	430
ATC System Recovery and Operation Improvements	Improve ATC system to reduce the occurrence of SkyTrain disruptions and the time needed to recover the disruptions.	5,320	-	5,320	2,657	-	2,657
Main Street SkyTrain Station Upgrade - Construction	Main Street SkyTrain Station Upgrade - Construction	36,934	(21,031)	15,903	200	-	200
SkyTrain Storage - Coquitlam Vehicle Storage Facility Expansion	Expansion of the SkyTrain vehicle system storage capacity with the construction of additional storage track capacity at the Coquitlam Vehicle Storage Facility OMC 3.	21,250	(8,150)	13,100	16,803	(7,147)	9,656
UBC Diesel Bus Terminal TransLink Related Infrastructure	UBC Diesel Bus Terminal TransLink related Infrastructure.	1,201	-	1,201	899	-	899
Infrastructure Total		654,876	(283,457)	371,419	281,894	(128,489)	153,405

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Technology							
BCRTC Enterprise Asset Management Implementation	Implement an EAM system to enable the effective control of SkyTrain system and maintenance processes.	11,760	-	11,760	7,359	-	7,359
BCRTC Modernization 2017	Replacing end-of-life permit control application to improve efficiency and document management.	500	-	500	500	-	500
BTS Infrastructure, Applications, Projects - Run	Ensure software technology assets are maintained in a state of good repair and updated to fully-supported versions.	2,939	-	2,939	1,647	-	1,647
Bus Simulator	Design and implementation of a bus simulator to improve driver training and provide a safer service to customers.	750	-	750	7	-	7
Health and Safety System Implementation	Implementation of an enterprise health and safety system for consistent, automated and accurate reporting of incidents and improved management practices.	500	-	500	500	-	500
IT Infrastructure Program 2018	Continued investment in technology infrastructure to renew capital leases, replace owned assets, accommodate new headcount & provide for growth.	5,966	-	5,966	3,416	-	3,416
SkyTrain Public Announcement System	Replacement of Integrated Alarm Notification System at all Expo Line passenger stations, Expo Line propulsion power stations and the SkyTrain OMC.	6,375	-	6,375	428	-	428
TransLink Enterprise Asset Management	Provide a strategic-level investment decision-support tool for enterprise assets.	6,603	-	6,603	2,194	-	2,194
Vulnerability Management System	Implementation of an automated vulnerability management system to address cyber security risks.	1,115	-	1,115	999	-	999
Enterprise Payroll Services - Onboarding BCRTC & WCE	Modernizing BCRTC and WCE payroll systems through transition to the Enterprise Payroll Services.	1,500	-	1,500	1,500	-	1,500
Financial System Replacement Implementation	Replace SmartStream and the other financial systems throughout the TransLink enterprise.	4,000	-	4,000	3,485	-	3,485
IT Infrastructure Program 2017	The ongoing provisioning of technology infrastructure requires regular investment to ensure the continued availability of systems, services and communications in a cost-effective manner. Includes lease renewals and replacement of owned assets.	5,235	-	5,235	200	-	200
Bus Scheduling and Trip Planner System Update	Update to the Trapeze Software as it has reached end of vendor support.	3,490	-	3,490	2,091	-	2,091

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
Data Warehouse/Business Intelligence Program	Implementation of Enterprise Data Warehouse and Business Intelligence solutions that ensure timely and cost-effective service.	860	-	860	280	-	280
Bus DOMS Replacement	DOMS primarily manages \$240M a year in operator wages and is the system that enables the management of day-to-day activities.	2,981	-	2,981	653	-	653
BCRTC Modernization - System Management Center (SMC) Tape Analysis Reporting (STAR)	Update the STAR application to improve functionality and reduce business continuity risks.	494	-	494	232	-	232
Technology Total		55,068	-	55,068	25,491	-	25,491
Vehicles							
100-400 Series MK I Refurbishment Project	Refurbish the original 114 MK I SkyTrain cars to extend service lives by another 15 years.	35,294	(24,360)	10,934	4,860	(4,380)	480
2016 Conventional Bus Replacement	This project is to replace 111 conventional 40ft and 60ft buses that reached end of useful service lives with 25-40ft CNG, 60-40ft diesel and 26-60ft diesel buses.	94,730	(82,624)	12,106	31,535	(30,156)	1,379
2017 Conventional Bus Replacement (54-40G and 52-60H)	Replace 52 articulated buses and 54 standard buses reaching end of useful service life in fall 2017.	115,750	(105,985)	9,765	58,999	(52,792)	6,207
2018 BCRTC NRV Expansion Project	Acquisition of additional NRV to provide transportation for staff and equipment used for regular functions and emergency response.	1,070	-	1,070	130	-	130
2019 Conventional Bus Expansion	Purchase 54 conventional buses required to implement the 2019 service expansion as per the Mayors' Vision.	82,742	(73,800)	8,942	80,266	(73,800)	6,466
Bus-Vehicles Conventional 40	Procure new Conventional 40-foot buses.	94,500	(85,584)	8,916	10,600	(5,064)	5,536
Bus-Vehicles Conventional 60	Procure 11 new Conventional 60-foot buses.	17,000	(16,999)	1	16,628	(16,330)	298
Community Shuttle Vehicles	Procure 12 new Community Shuttles.	2,240	(2,016)	224	115	(83)	32
CUTRIC Battery Electric Bus Trial	Participation in the CUTRIC trial of high speed battery electric buses to evaluate viability and impact on the low-carbon fleet strategy.	10,000	(8,592)	1,408	1,459	(1,313)	146
NRV Fleet Life Cycle Management	Replacement of five additional NRV which have reached the end of their service lives.	217	-	217	30	-	30
WCE Fleet Expansion	Procure train cars for expanding service on the WCE rail network.	21,967	(20,750)	1,217	16,085	(20,747)	(4,662)**
2017 HandyDART Vehicle Replacement	Replace 35 HandyDART buses expected to reach end of useful lives by 2017.	4,900	(4,696)	204	121	(90)	31

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
2018 Conventional Bus Replacement	Replacement of 92 - 40-foot buses that have reached the end of their useful service lives.	70,000	(61,925)	8,075	26,770	(21,325)	5,445
2018 HandyDART vehicle Replacement	Replacement of 40 HandyDART vehicles that have reached the end of their useful service lives.	5,620	(5,508)	112	236	(200)	36
2018 Community Shuttle Vehicle Replacement	Replacement of 20 Community Shuttle buses.	4,100	(3,830)	270	182	(73)	109
TOH Truck Replacement	Replacement of six end-of-life TOH trucks to support overhead network maintenance, repair and construction.	2,424	-	2,424	813	-	813
2019 Conventional Bus Replacement	Replacement of 27 end-of-life 40-foot high floor conventional buses with 27 double-decker low-floor buses.	33,922	(30,000)	3,922	33,922	(30,000)	3,922
2019 HandyDART Vehicle Replacement	Replacement of 40 end-of-life HandyDART vehicles with 40 new HandyDART vehicles.	5,750	(5,200)	550	5,484	(5,200)	284
2019 Community Shuttle Vehicle Replacement	Replacement of 49 end-of-life Community Shuttle vehicles with 49 new low-floor Community Shuttles.	12,000	(10,800)	1,200	10,940	(10,475)	465
2nd Replacement SeaBus	2nd Replacement SeaBus	21,183	(19,697)	1,486	500	-	500
Non-Revenue Vehicles (NRV) - Replacements	Replacement of 23 SSV at the end of their service lives.	1,300	-	1,300	1,126	-	1,126
Canada Line Fleet Expansion - Fleet	Fleet portion to meet updated ridership forecasts and capacity on the Canada Line.	74,600	(58,412)	16,188	31,115	(18,974)	12,141
Expansion SeaBus Vessel	Procure a new SeaBus.	29,000	(16,100)	12,900	9,661	(7,756)	1,905
PTIF Mark III Vehicle Procurement - Phase 1	Purchase of 28 MK III SkyTrain vehicles to address crowding and service expansion needs.	113,115	(112,000)	1,115	20,051	(31,641)	(11,590)**
PTIF Mark III Vehicle Procurement - Phase 2	Purchase of 28 MK III SkyTrain vehicles to address crowding and service expansion needs.	101,633	(98,000)	3,633	43,529	(64,729)	(21,200)**
HandyDART Vehicles	Purchase 13 HandyDART vehicles for service expansion throughout Metro Vancouver as per the Mayors' 10-Year Vision.	1,900	(1,888)	12	81	(80)	1

Active and Approved in Principle (AIP) Capital Program Details		Total Project Budget			2019 Capital Cash Flow		
Classification and Project Name	Description	Gross Cost	Less: Funding	TransLink Net Cost	Gross	Less: Funding	TransLink Net
2019 HandyDART Vehicles Expansion	Purchase ten HandyDART vehicles required to implement the 2019 service expansion as per the Mayors' Vision.	1,550	(1,350)	200	1,511	(1,350)	161
Vehicles		958,507	(850,116)	108,391	406,749	(396,558)	10,191
Major Construction							
Evergreen Line - TransLink Contribution	TransLink monetary and in-kind contributions to the design and construction of the Evergreen Line by the Province.	398,526	-	398,526	1,170	-	1,170
MLBE Procurement Readiness	Final procurement preparation for the design and construction of Millennium Line Broadway Extension.	39,627	(23,000)	16,627	1,476	(10,433)	(8,957)**
South of Fraser LRT Project Procurement Readiness	Final procurement preparation for the design and construction of South of Fraser Rapid Transit.	40,749	(10,000)	30,749	5,356	(900)	4,456
Major Construction Total		478,902	(33,000)	445,902	8,002	(11,333)	(3,331)**
Grand Total		2,379,008	(1,262,628)	1,116,380	841,147	(593,376)	247,771

**The 2019 capital cash flows from Senior Government funding are expected to exceed 2019 gross cash flows due to a timing difference of when the funding is received. In certain instances, the 2019 funding cash flows include recoveries for expenditures incurred in 2018 and 2019.

Capital Infrastructure Contributions

TransLink provides capital infrastructure contributions each year to the Metro Vancouver municipalities to fund rehabilitation and minor capital work on the MRN and bike pathways. TransLink is increasing spending in 2019 for MRN upgrades and structure rehabilitation along with additional spending for expanding the regional bike network. Work related to the program will begin in 2019, invoicing will occur approximately one year after completion. TransLink is budgeting capital contribution funding of \$75.0 million to municipalities for road and bike infrastructure. Projects already approved and underway have a budget of \$297.9 million, which with the 2019 capital infrastructure contributions, total \$372.9 million. None of these projects are eligible for senior government funding.

Table 3: Capital Infrastructure Contribution Projects Planned for 2019 (\$ thousands)

Classification and Project name	Description	Total Project Budget	2019 Capital Cash Flow
2019 New Program			
MRN and Bike Capital Program 2019	2019 contribution program to member municipalities for pavement rehabilitation.	23,551	23,340
2019 MRN and Bike Upgrade Funding Program	2019 additional contribution to member municipalities for upgrades to the road network.	20,000	-
2019 Bicycle Infrastructure Capital Cost Share (BICCS) Funding Program	2019 funding for the expansion of the cycling network in the region.	13,450	-
2019 MRN Structures Rehabilitation & Seismic Upgrade Funding Program	2019 additional contribution to member municipalities for seismic road network rehabilitation.	13,000	-
BICCS Sharing Program - 2019	2019 funding for the expansion of the walking infrastructure network in the region.	5,000	-
Grand Total		75,001	23,340

Table 4: Capital Infrastructure Contribution Projects Currently Underway (\$ thousands)

Classification and Project name	Description	Total Project Budget	2019 Capital Cash Flow
Active and Approved in Principle			
2014 MRN and Bike Capital Program	Provide funding to municipalities for pavement rehabilitation.	23,503	852
2015 MRN and Bike Capital Program	2015 contribution program to member municipalities for pavement rehabilitation and road and bike infrastructure upgrades.	24,214	1,906
2016 MRN and Bike Capital Program	2016 contribution program to member municipalities for pavement rehabilitation and road and bike infrastructure upgrades.	23,784	5,912
2017 MRN and BICCS Capital Program	2017 funding for the upgrades to the road network and the expansion of the cycling network in the region.	20,555	9,903
2017 Walking Infrastructure to Transit (WITT) Funding Program	Provide funding to municipalities for expansion and upgrades of the walking infrastructure network.	2,500	851
2018 BICCS Funding Program	2018 funding for the expansion of the cycling network in the region.	15,148	7,620
2018 MRN and Bike Upgrade Funding Program	2018 additional contribution to member municipalities for upgrades to the road network.	21,404	6,699
2018 MRN Structures Rehabilitation & Seismic Upgrade Funding Program	2018 additional contribution to member municipalities for seismic road network rehabilitation.	19,500	1,332
2018 WITT Funding Program	2018 funding for the expansion of the walking infrastructure network in the region.	5,000	3,041
2007 - 2018 Various MRN Projects	2007 - 2018 Various MRN Projects that has no expected future cash flows in year 2019 and onwards which are anticipating formal project closure	142,311	-
Grand Total		297,919	38,116

8. Changes in Financial Position

Consolidated Statement of Financial Position			
As at December 31 (\$ thousands)	2018 BUDGET ¹	2019 BUDGET	Change Incr/(Decr)
Cash and cash equivalents	303,874	412,488	108,614
Accounts receivable	166,218	138,631	(27,587)
Loan receivable	250,734	190,009	(60,725)
Restricted cash and cash equivalents and investments	606,198	703,714	97,516
Investments	60,981	61,667	686
Debt reserve deposits	33,577	27,940	(5,637)
Financial Assets	1,421,582	1,534,449	112,867
Accounts payable and accrued liabilities	209,786	307,890	98,104
Debt	2,767,097	3,020,180	253,083
Deferred government transfers	1,034,535	1,128,957	94,422
Golden Ears Bridge contractor liability	1,040,378	1,033,348	(7,030)
Deferred concessionaire credit	502,384	479,111	(23,273)
Employee future benefits	138,231	141,608	3,377
Deferred revenue and deposits	61,782	55,605	(6,177)
Deferred lease inducements	12,172	14,197	2,025
Liabilities	5,766,365	6,180,896	414,531
Net Debt	(4,344,783)	(4,646,447)	(301,664)
Tangible capital assets	5,602,766	6,005,480	402,714
Supplies inventory	66,183	73,363	7,180
Prepaid expenses	18,655	23,596	4,941
Non-Financial Assets	5,687,604	6,102,439	414,835
Accumulated Surplus	1,342,821	1,455,992	113,171

¹ Restated to reflect Deferred revenue and deposits previously grouped under Accounts payable and accrued liabilities

Financial Assets

Loan receivable represents outstanding proceeds from the 2016 sale of the Oakridge Transit Centre, receivable in annual installments until 2022.

The restricted cash and investments primarily represent unspent government transfers and internally restricted amounts related to self-administered sinking funds, land reserve funds and funds segregated for Transportation Property and Casualty Co. Inc., TransLink's wholly owned captive insurance company. The purpose of the land reserve funds is to allow proceeds from the disposition of real property to be invested back into real property.

Liabilities

Deferred government transfers represent the receipt of capital funding offset by the amortization and revenue recognition for government funding.

The Golden Ears Bridge contractor liability to finance the construction of the Golden Ears Bridge is payable over the term ending June 2041.

Deferred concessionaire credits represent the funding provided by the Canada Line Concessionaire. This balance is amortized to income on a straight-line basis over the operating term of the concessionaire agreement, which will expire in July 2040.

The expected increase in employee future benefits, which represent post-retirement and post-employment benefits, is due to the annual estimated current service cost and related interest. The post-retirement portion of this liability will draw down upon retirement of the employees.

Non-Financial Assets

Planned capital spending during 2019 is expected to result in a net increase of \$402.7 million (7.2 per cent) in capital assets. Significant projects include conventional bus replacements, rail fleet expansion, station upgrades, rail infrastructure projects including the Millennium Line Broadway Extension, the South of Fraser LRT and B-Line developments.

9. Liquidity and Capital Resources

Cash Flows and Liquidity

Unrestricted cash and investments are expected to increase by \$108.6 million compared to the 2018 budget. The increase is mainly as a result of a decision to target higher liquidity levels as we embark on a major expansion in accordance with the Phase Two Plan of the Mayors' Vision.

The following table shows TransLink's unrestricted cash and investments.

UNRESTRICTED CASH AND INVESTMENTS			
As at December 31 (\$ thousands)	2018 BUDGET	2019 BUDGET	Change Incr/(Decr)
Cash and cash equivalents	303,874	412,488	108,614
Investments	60,981	61,667	686
Total Unrestricted cash and investments	364,855	474,155	109,300

Restricted Funds

The unspent government transfers are used to fund qualifying capital expenditures.

RESTRICTED CASH AND INVESTMENTS			
As at December 31 (\$ thousands)	2018 BUDGET	2019 BUDGET	Change Incr/(Decr)
Unspent government transfers	150,104	309,684	159,580
TPCC's investments	22,630	25,907	3,277
Restricted proceeds of real estate sales	179,284	29,754	(149,530)
Self administered sinking funds	254,180	338,369	84,189
Total Restricted cash and investments	606,198	703,714	97,516

Net Debt

TransLink currently has three main sources of financing its assets: net direct debt, indirect P3 debt and senior government contributions. The latter is represented on the balance sheet as deferred government transfers.

Net direct debt is expected to increase by \$174.5 million due to the issuance of debt, partly offset by sinking fund contributions. The issuance of new debt in 2019 is used to help finance budgeted capital spending net of senior government contributions.

Although the net direct debt and indirect P3 debt is expected to be \$144.2 million higher than the 2018 budget and remains high, the amount is reflective of the high capital-intensive nature of the organization and rapid growth to meet the transportation needs of region. The projected net debt ratio of 256.7 per cent is within the debt to revenue policy limit of 300 per cent for the 2019 budget.

FINANCING			
As at December 31 (\$ thousands)	2018 BUDGET	2019 BUDGET	Change Incr/(Decr)
Debt	2,767,097	3,020,180	253,083
Less: Self-administered sinking funds	(254,180)	(338,369)	(84,189)
Less: Debt reserve deposits	(33,577)	(27,940)	5,637
Net Direct Debt	2,479,340	2,653,871	174,531
Golden Ears Bridge contractor liability	1,040,378	1,033,348	(7,030)
Deferred concessionaire credit	502,384	479,111	(23,273)
Indirect P3 Debt	1,542,762	1,512,459	(30,303)
Subtotal Net Direct Debt and Indirect P3 Debt	4,022,102	4,166,330	144,228
Deferred Government Transfers	1,034,535	1,128,957	94,422
Accounts payable and accrued liabilities	271,568	363,495	91,927
Employee future benefits	138,231	141,608	3,377
Deferred lease inducements	12,172	14,197	2,025
Less: Accounts receivable	(166,218)	(138,631)	27,587
Less: Loan receivable	(250,734)	(190,009)	60,725
Other Financing	5,019	190,660	185,641
Total Financing	5,061,656	5,485,947	424,291
Less: Other restricted cash and investments	(352,018)	(365,345)	(13,327)
Less: Unrestricted cash and investments	(364,855)	(474,155)	(109,300)
PSAB Net Debt	4,344,783	4,646,447	301,664

Appendix I – Consolidated Financial Statements

The following statements are presented in accordance with Canadian Generally Accepted Accounting Principles for local governments, as recommended by the Public Sector Accounting Board of the Chartered Professional Accountants of Canada.

Consolidated Statement of Financial Position

Consolidated Statement of Financial Position			
as at December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET ¹	2019 BUDGET
Cash and cash equivalents	424,010	303,874	412,488
Accounts receivable	120,852	166,218	138,631
Loan receivable	310,197	250,734	190,009
Restricted cash and cash equivalents and investments	780,240	606,198	703,714
Investments	60,951	60,981	61,667
Debt reserve deposits	32,754	33,577	27,940
Financial Assets	1,729,004	1,421,582	1,534,449
Accounts payable and accrued liabilities	269,057	209,786	307,890
Debt	2,462,731	2,767,097	3,020,180
Deferred government transfers	1,149,696	1,034,535	1,128,957
Golden Ears Bridge contractor liability	1,045,557	1,040,378	1,033,348
Deferred concessionaire credit	525,785	502,384	479,111
Employee future benefits	130,902	138,231	141,608
Deferred revenue and deposits	46,412	61,782	55,605
Deferred lease inducements	12,486	12,172	14,197
Liabilities	5,642,626	5,766,365	6,180,896
Net Debt	(3,913,622)	(4,344,783)	(4,646,447)
Tangible capital assets	4,907,241	5,602,766	6,005,480
Supplies inventory	65,293	66,183	73,363
Prepaid expenses	21,403	18,655	23,596
Non-Financial Assets	4,993,937	5,687,604	6,102,439
Accumulated Surplus	1,080,315	1,342,821	1,455,992

¹ Restated to reflect Deferred revenue and deposits previously grouped under Accounts payable and accrued liabilities

Consolidated Statement of Operations

Consolidated Statement of Operations			
Twelve months ending December 31	2017	2018	2019
(\$ thousands)	ACTUAL	BUDGET ¹	BUDGET
Revenue			
Taxation	821,333	855,072	874,526
Transit	590,964	606,805	669,274
Golden Ears Bridge tolling	29,743	-	-
Government transfers	166,902	424,078	388,039
Amortization of deferred concessionaire credit	23,274	23,337	23,337
Investment income	50,278	48,189	52,850
Miscellaneous revenue	7,009	6,036	5,655
Loss on disposal of tangible capital assets	(1,104)	(447)	(122)
	<u>1,688,399</u>	<u>1,963,070</u>	<u>2,013,559</u>
Expenses			
Bus operations	688,878	731,703	777,819
Corporate	110,613	132,928	172,482
Rail operations	297,366	308,576	326,870
Roads and bridges	84,183	104,256	94,691
Transit Police	37,179	38,765	40,845
Sub-total Expenses, before Amortization and Interest	<u>1,218,219</u>	<u>1,316,228</u>	<u>1,412,707</u>
Amortization of tangible capital assets	192,171	214,436	226,513
Interest	181,766	179,267	185,118
	<u>1,592,156</u>	<u>1,709,931</u>	<u>1,824,338</u>
Surplus for the year	96,243	253,139	189,221
Accumulated surplus, beginning of year	984,072	1,089,682	1,266,771
<u>Accumulated surplus, end of year</u>	<u>1,080,315</u>	<u>1,342,821</u>	<u>1,455,992</u>

¹ Restated to reflect budget transfers

Consolidated Statement of Changes in Net Debt

Consolidated Statement of Changes in Net Debt			
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET
Surplus for the year	96,243	253,139	189,221
Acquisition of tangible capital assets	(234,568)	(789,646)	(906,645)
Amortization of tangible capital assets	192,171	214,436	226,514
Loss on disposal of tangible capital assets	1,104	447	122
Net proceeds from disposal of tangible capital assets	869	-	-
Write-down of tangible capital asset	1,179	-	-
	(39,245)	(574,763)	(680,009)
Change in supplies inventory	(3,462)	-	(4,153)
Change in prepaid expense	(9,746)	6,806	(1,124)
	(13,208)	6,806	(5,277)
Decrease (increase) in net debt	43,790	(314,818)	(496,065)
Net debt, beginning of year	(3,957,412)	(4,029,965)	(4,150,382)
Net debt, end of year	(3,913,622)	(4,344,783)	(4,646,447)

Consolidated Statement of Cash Flows

Consolidated Statement of Cash Flows			
Twelve months ending December 31 (\$ thousands)	2017 ACTUAL	2018 BUDGET	2019 BUDGET
Surplus for the year	96,243	253,139	189,221
Non-cash changes to operations	45,951	(155,440)	(104,720)
Changes in non-cash operating working capital	70,975	89,011	73,783
Net changes in cash from operating transactions	213,169	186,710	158,284
Purchase of tangible capital assets	(226,907)	(789,646)	(906,645)
Net proceeds from disposal of tangible capital assets	869	-	-
Net changes in cash from capital transactions	(226,038)	(789,646)	(906,645)
Decrease (increase) in restricted cash and investments	(275,945)	128,846	169,040
Decrease in investments	19,966	-	-
Decrease in debt reserve deposits	2,295	-	1,445
Net changes in cash from investment transactions	(253,684)	128,846	170,485
Debt proceeds	200,000	350,000	400,000
Issue costs on financing	(1,469)	-	-
Repayments of debt	(90,880)	(71,473)	(61,706)
Repayments of Golden Ears Bridge contractor liability	(3,464)	(5,180)	(7,030)
Lease inducements received	-	-	1,653
Government transfers received for tangible capital additions	333,940	214,805	259,403
Net changes in cash from financing transactions	438,127	488,152	592,320
Increase in cash and cash equivalents	171,574	14,062	14,444
Cash and cash equivalents, beginning of year	252,436	289,812	398,044
Cash and cash equivalents, end of year	424,010	303,874	412,488

Appendix II – Allocated Costs between Operating Companies

TransLink’s methodology for allocating costs to benefitting business units is equitable and consistent with leading practices. TransLink allocates costs to business units (CMBC, Access Transit, SkyTrain, WCE and Transit Police) which directly benefit or consume the services or costs.

Business units may be allocated 100 per cent of a cost if it is the only unit benefitting or consuming that cost, or costs can be shared across multiple business units which benefit or consume the cost based on an allocation factor (e.g. head count, square foot). The charges that are allocated to the business units include: administration, human resources, insurance, rent and property taxes and information technology.

The main drivers for increased allocated costs compared to the 2018 budget are an increase in IT software licensing, network infrastructure costs and additional labour costs related to delivering shared services. The cost of insurance, property taxes and rent is higher due to rate increases in 2019. In addition, BCRTC’s IT services will be transferred and centralized within Corporate Operations and allocated accordingly in 2019. This results in a notable increase in shared services allocated to SkyTrain – Expo and Millennium Lines.

Allocated Cost Breakdown					
Twelve months ending December 31	2017	2018	2019	Change	
(\$ thousands)	ACTUAL	BUDGET ¹	BUDGET	Incr/(Decr)	%
Shared Services					
Bus Operations	27,240	34,067	36,460	2,393	7.0%
Access Transit	744	-	111	111	100.0%
SkyTrain - Expo and Millenium Lines	2,330	3,166	7,551	4,385	138.5%
West Coast Express	84	142	144	2	1.4%
Transit Police	1,883	3,231	3,266	35	1.1%
Roads & Bridges	9,239	4,214	2,740	(1,474)	(35.0%)
Corporate	(41,520)	(44,820)	(50,272)	(5,452)	(12.2%)
Total Shared Services allocated	-	-	-	-	-
Costs Administered by TransLink and allocated to operating companies					
Bus Operations	16,530	17,682	19,480	1,798	10.2%
SkyTrain - Expo and Millenium Lines	5,177	5,018	5,730	712	14.2%
SkyTrain - Canada Line	2,107	1,998	2,441	443	22.2%
West Coast Express	892	533	436	(97)	(18.2%)
Transit Police	1,831	1,862	2,086	224	12.0%
Total Costs Administered by TransLink allocated	26,537	27,093	30,173	3,080	11.4%
Total costs allocated to operating companies from TransLink					
Bus Operations	43,770	51,749	55,940	4,191	8.1%
Access Transit	744	-	111	111	100.0%
SkyTrain - Expo and Millenium Lines	7,507	8,184	13,281	5,097	62.3%
SkyTrain - Canada Line	2,107	1,998	2,441	443	22.2%
West Coast Express	976	675	580	(95)	(14.1%)
Transit Police	3,714	5,093	5,352	259	5.1%
Total costs allocated to operating companies from TransLink	58,818	67,699	77,705	10,006	14.8%

¹ Restated to reflect budget transfers

TO: Board of Directors

FROM: Rob Malli, Chief Financial Officer and Executive Vice-President, Finance and Corporate Services

DATE: November 19, 2018

SUBJECT: Imposing Development Cost Charges for Regional Transportation - Bylaws

PROPOSED RESOLUTION:

That the TransLink Board of Directors:

- A. Reconsiders and finally adopts the *South Coast British Columbia Transportation Authority Bylaw Number 124-2018: A Bylaw to Impose Development Cost Charges*, attached to this report as Attachment 1;
- B. Introduces and reads a first, second and third time the *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing*, attached to this report as Attachment 2; and
- C. Reconsiders and finally adopts the *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing*, attached to this report as Attachment 2.

EXECUTIVE SUMMARY

DCC Bylaw

The *South Coast British Columbia Transportation Authority Bylaw Number 124-2018: A Bylaw to Impose Development Cost Charges* (“DCC Bylaw”) was introduced and read a first, second and third time at the October 24, 2018 TransLink Board meeting.

The DCC Bylaw had since been submitted to, and received approval from, the Inspector of Municipalities (“Inspector”), and is ready to be reconsidered and finally adopted by the Board.

DCC Waiver or Reduction Bylaw

A draft *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing* (“DCC Waiver or Reduction Bylaw”) was previously presented to the Board at the June 21, 2018 meeting for informational purposes.

The draft DCC Waiver or Reduction Bylaw does not need Inspector approval and was consistent with the DCC Framework approved by the Mayors’ Council and the Board, to align its housing definitions and waivers with the Greater Vancouver Sewerage and Drainage District’s (“GVS&DD”) DCC bylaws to the extent appropriate for ease of implementation and administration.

On October 26, 2018, the Metro Vancouver Board amended its GVS&DD DCC bylaws to reduce GVS&DD DCC for student rental housing by 50%.

Accordingly, Management has revised the accompanying DCC Waiver or Reduction Bylaw to be conceptually consistent with GVS&DD’s affordable housing waiver bylaw to allow a 50% reduction in the DCC for student rental housing.

Additionally, Management is recommending that TransLink’s DCC Waiver or Reduction Bylaw expands the definition of student rental housing to allow, in addition to post-secondary institutions, government business enterprises (wholly owned by the post-secondary institution) to be eligible for the 50% reduction in the DCC for student rental housing as requested by University of British Columbia (“UBC”) and supported by other post-secondary institutions.

PURPOSE

The purpose of this report is to adopt:

- the *South Coast British Columbia Transportation Authority Bylaw Number 124-2018: A Bylaw to Impose Development Cost Charges*; and
- the accompanying *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing*.

DISCUSSION

DCC Bylaw

The DCC Bylaw was introduced and read a first, second and third time at the October 24, 2018 Board meeting.

Management has worked with Ministry staff in supporting their review of the DCC Bylaw and has subsequently obtained the Inspector's approval of the DCC Bylaw. The DCC Bylaw will be in effect on January 15, 2019, and the first DCCs will be collected by municipalities and other designated collection entities on January 15, 2020.

DCC Waiver or Reduction Bylaw

The accompanying DCC Waiver or Reduction Bylaw is not subject to the Inspector approval process, and was last presented to the Board on June 21, 2018 for information purposes to facilitate inclusion in the Phase Two Investment Plan.

The DCC Framework approved by the Mayors' Council and the Board stated the intent to align its housing definitions and waivers with the GVS&DD's DCC bylaws to the extent appropriate for ease of implementation and administration by municipalities and other designated collection entities.

Accordingly, the DCC Waiver or Reduction Bylaw has been since revised to account for a 50% reduction in the DCC for student rental housing, as reflected in the blackline copy attached to this report as Attachment 3, and summarized as follows:

a. Metro Vancouver's October 26, 2018 Changes to the GVS&DD DCC Bylaw

On October 26, 2018, Metro Vancouver's board adopted amendments to its GVS&DD DCC bylaw to provide a reduction in DCCs to eligible student rental housing developments. GVS&DD's management recommended providing a 50% reduction in DCCs to eligible student rental housing considering:

- Most dormitory student housing is already exempted under DCC-related legislation as they are no larger than 29 square metres, and any reduction would only apply to larger student residences;
- Student housing lessens demand on existing rental housing stock that is then available for other residents;
- On campus student housing also lessens impact on demand for transportation and therefore also has a positive impact on the associated greenhouse gas emissions; and
- Student housing may be rented at or below market rents, which is distinctly different from affordable housing that supports low income households and that is eligible for a 100% waiver of DCCs.

The "Not-for-Profit Student Housing" that is eligible a 50% DCC reduction is defined by the GVS&DD bylaw as:

"...Residential Use Development or Combination Development that is:

- (9) Owned and operated by a Post-Secondary Institution at the time of any application for, or issuance of, a reduction of Development Cost Charges;

- (10) Purpose built to provide rental housing for students attending that institution;
- (11) Operated on a cost recovery basis; and
- (12) Governed by the terms of a covenant with Greater Vancouver Sewerage and Drainage District confirming the use of the Development is restricted for a period of 60 years to the purpose of providing rental housing for students attending that institution, that the housing will be operated by the Post-Secondary Institution or its designated agent; and will be operated on a cost recovery basis;"

Management agrees with the overall intent of the GVS&DD's reasons for providing a 50% reduction in DCCs for eligible student rental housing and recommends aligning its DCC Waiver or Reduction Bylaw to provide a similar reduction – reflected in Attachment 2.

b. *Inclusion of Government Business Enterprises (Wholly Owned by the Post-Secondary Institution) to be Eligible for the 50% Reduction in the DCC for Student Rental Housing*

Management received concerns from UBC, that its student rental housing owned through a proposed wholly owned government business enterprise ("GBE") would not be eligible for the 50% reduction in the DCC for student rental housing – as the GBE is considered a separate legal entity.

Based on brief consultations with various post-secondary institutions involved in the GVS&DD consultations, the institutions supported extending the reduction to student rental housing owned and operated by a GBE that is wholly owned by a post-secondary institution and providing student rental housing on behalf of the post-secondary institution.

Accordingly, Management agrees that GBEs – which are wholly owned by the post-secondary institution – should be eligible for the 50% reduction in the DCC for student rental housing, as reflected in Attachment 2.

Management is not expecting any negative impact to forecasted DCC revenues from its recommendation to reduce DCCs by 50% for eligible not-for-profit student rental housing because the forecasts had excluded student housing projects from its development forecasts, as most of these developments are usually exempted due to the units being less than 29 square metres.

ATTACHMENTS:

Attachment 1 – *South Coast British Columbia Transportation Authority Bylaw Number 124-2018: A Bylaw to Impose Development Cost Charges*

Attachment 2 – *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing*

Attachment 3 – Blackline of draft DCC Waiver or Reduction Bylaw presented to Board on June 21, 2018 compared to Attachment 2 – *South Coast British Columbia Transportation Authority Bylaw Number 125-2018: A Bylaw to Establish a Waiver or Reduction of Development Cost Charges for Not-for-Profit Rental Housing*

**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 124-2018**

A BYLAW TO IMPOSE DEVELOPMENT COST CHARGES

Effective January 15, 2019

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**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 124-2018**

WHEREAS:

A. Pursuant to Part 3.1 of the Act, the Authority may, by bylaw, impose development cost charges on every person who obtains approval of a Subdivision or a Building Permit authorizing the construction, alteration or extension of a building or structure that is within the Transportation Service Region;

B. Development cost charges provide funds to assist the Authority to pay the Capital Costs of Eligible Projects to service, directly or indirectly, the Development for which the charge is being imposed;

C. Pursuant to the Act, development cost charges are not payable in certain circumstances and the Authority may waive or reduce development cost charges for eligible developments; and

D. In setting development cost charges under this Bylaw, the Authority has taken the following into consideration:

- (a) future land use patterns and development;
- (b) the phasing of works and services;
- (c) how development designed to result in a low environmental impact may affect the Capital Costs of an Eligible Project;
- (d) whether the charges are excessive in relation to the Capital Costs of prevailing standards of service in the Transportation Service Region;
- (e) whether the charges will, in the Transportation Service Region:
 - (i) deter development;
 - (ii) discourage the construction of reasonably priced housing or the provision of reasonably priced serviced land; or
 - (iii) discourage development designed to result in a low environmental impact;

NOW THEREFORE the Board of Directors of the South Coast British Columbia Transportation Authority enacts as follows:

1. CITATION

1.(1) The official citation for this Bylaw is “South Coast British Columbia Transportation Authority Bylaw No. 124-2018”.

1.(2) This Bylaw may be cited as the “Development Cost Charge Bylaw”.

2. INTERPRETATION

2.(1) Definitions. In this Bylaw (including the recitals hereto):

“**Act**” means the South Coast British Columbia Transportation Authority Act, SBC 1998, c. 30;

“**Authority**” means the South Coast British Columbia Transportation Authority continued under the Act;

“**Apartment Dwelling Unit**” means a Dwelling Unit in a building or structure that consists or may consist of two or more storeys and contains or may contain four or more Dwelling Units, whereby the building or structure has a principal exterior entrance used in common for access to the Dwelling Units. Apartment Dwelling Unit does not include Dwelling Units that are Townhouse Dwelling Units;

“**Building Permit**” means any permit required by a Collection Entity that authorizes the construction, alteration or extension of a building or structure that is within the Transportation Service Region;

“**Capital Costs**” has the same meaning as in the Act;

“**Coach/Laneway House**” has the meaning given to such term in the applicable zoning bylaw of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means a detached building or structure containing one Dwelling Unit and constructed in the yard of a site on which is situate a Single Family Dwelling;

“**Collection Entity**” has the same meaning as in the Act;

“**Combination Development**” means any Development that comprises two or more of the following uses:

- (a) Single Family Dwelling;
- (b) Duplex;
- (c) Townhouse Dwelling Unit;
- (d) Apartment Dwelling Unit;
- (e) Retail/Service Use;
- (f) Office Use;
- (g) Institutional Use; and

(h) Industrial Use;

“Community Charter” means the *Community Charter*, SBC 2003, c. 26;

“Development” means:

- (a) a Subdivision; or
- (b) the construction, alteration or extension of a building or structure for which a Building Permit is obtained;

“Duplex” means a building or structure that contains or may contain two Dwelling Units, each of which Dwelling Units has a direct exterior entrance and may contain one Secondary Suite, but neither of which Dwelling Units is itself a Secondary Suite;

“Dwelling Unit” means one or more rooms comprising a self-contained unit that is used or intended to be used for living and sleeping purposes and for which is provided cooking facilities, or the facilities for installation of cooking facilities, and one or more bathrooms having a sink or wash-basin, a water closet, and a shower or bath;

“Effective Date” means the date on which the Board of Directors determine this Bylaw shall come into force and take effect;

“Eligible Project” has the same meaning as in the Act;

“Floor Area” means:

- (a) the floor area of the building or structure (measured from the outside edge of all exterior walls of the building or structure), less the number of square feet of the floor area of the building or structure that is used or is intended to be used for the parking of motor vehicles and the storage of bicycles; or
- (b) in the case of an alteration or extension of less than the entire building or structure, the portion of the building or structure to which the Building Permit applies (measured from the outside edge of any exterior walls in such portion of the building or structure), less the number of square feet of the floor area of the building or structure that is used or is intended to be used for the parking of motor vehicles and the storage of bicycles;

“Industrial Use” has the meaning given to such term in the applicable zoning bylaw of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means a use providing for the manufacture, processing, fabrication, assembly, storage, transportation, distribution, wholesale, testing, service, repair, wrecking, recycling or salvaging of goods, materials or things for direct use or resale to business customers, and not for the general public but does not include Office Use, except to the extent administrative, clerical, management, professional or technical services are ancillary to such Industrial Use;

“Institutional Use” has the meaning given to such term in the applicable zoning bylaw of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means a use providing for public functions including:

- (a) schools, and colleges and universities operated by duly incorporated federal or provincial societies exclusively as non-profit, charitable organization;
- (b) hospital;
- (c) community centre;
- (d) courts, police stations and jail;
- (e) libraries and museum; and
- (f) buildings or structures associated with public parks, public playgrounds, cemeteries and works yards;

but does not include Office Use, except to the extent administrative, clerical, management, professional or technical services are ancillary to such Institutional Use.;

“In-stream” has the same meaning as in the Act;

“Issuing Entity” has the same meaning as in the Act;

“Land Title Act” means the *Land Title Act*, RSBC 1996, c.250;

“Local Government Act” means the *Local Government Act*, RSBC 2015, c. 1;

“Municipal Charges” means development cost charges, infrastructure impact charges, or similar charges imposed by a Collection Entity under the Local Government Act, the Community Charter, the Vancouver Charter or the University Act, as the case may be;

“Non-Residential Use” means Retail/Service Use, Institutional Use, Office Use and Industrial Use;

“Office Use” has the meaning given to such term in the applicable zoning bylaw of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means a use providing for the provision of administrative, clerical, management, professional or technical services, but excludes such use(s) where they are ancillary to an Industrial Use, Institutional Use or Retail/Service Use;

“Parcel” means any lot, block or other area in which land is held or into which land is legally subdivided and for greater certainty, without limiting the foregoing, includes a strata lot under the Strata Property Act;

“Precursor Application” has the same meaning as in the Act;

“Rate Schedule” means the schedule of development cost charge rates that is attached as Schedule A to this Bylaw;

“Reserve Fund” means the reserve fund established pursuant to Section 5.(1), to which development cost charges are to be deposited pursuant to this Bylaw;

“Residential Use” means Single Family Dwelling, Duplex, Townhouse Dwelling Unit and Apartment Dwelling Unit;

“Retail/Service Use” has the meaning given to such term in the applicable zoning bylaw of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means a use providing for the sale or rental of goods or services, personal services, or the servicing and repair of goods and includes:

- (a) entertainment and recreation facilities;
- (b) commercial schools, including, without limitation, facilities which include instruction in the arts, sports, business, self-improvement, academics and trades;
- (c) service stations;
- (d) tourist accommodations and facilities’;
- (e) adult or child day-care centres;
- (f) Sleeping Units;
- (g) community care and congregate housing and care;
- (h) any use permitted as a commercial use;
- (i) uses ancillary to any commercial use located on the same Parcel that serves or enhances the commercial use;

but does not include Office Use, except to the extent administrative, clerical, management, professional or technical services are ancillary to such Retail/Service Use;

“Secondary Suite” has the meaning given to such term in the applicable bylaws of the Collection Entity in whose area of jurisdiction the relevant building or structure is located or, in the absence of such a definition, means an accessory Dwelling Unit within a building of residential occupancy containing no more than two principal Dwelling Units;

“Single Family Dwelling” means a detached building or structure that contains one principal Dwelling Unit and may contain one Secondary Suite;

“Sleeping Units” means one or more rooms that do not contain cooking facilities used for the lodging of persons;

“Strata Property Act” means the *Strata Property Act*, SBC 1998, c. 43;

“Subdivision” means:

- (a) the division of land into two or more Parcels, whether by plan, apt descriptive words or otherwise under the Land Title Act; and
- (b) a subdivision under the Strata Property Act;

and includes the consolidation of two or more Parcels, and phased strata plans;

“Townhouse Dwelling Unit” means a Dwelling Unit in a building or structure that contains or may contain three or more Dwelling Units, each of which Dwelling Unit has a direct exterior entrance;

“Transportation Service Region” has the same meaning as in the Act;

“University Act” means the *University Act*, RSBC 1996, c. 468; and

“Vancouver Charter” means the *Vancouver Charter*, SBC 1953, c. 55.

3. DEVELOPMENT COST CHARGES

3.(1) Application of Development Cost Charges. Subject to Section 3.(4), every person who obtains from the applicable Collection Entity:

- (a) approval of a Subdivision that is in the Transportation Service Region; or
- (b) a Building Permit;

must pay to that Collection Entity on behalf of the Authority, before or at the time of the approval of the Subdivision or the issuance of the Building Permit, the applicable development cost charges at the rates effective as at the date of the approval of the Subdivision or the issuance of the Building Permit, as the case may, all as set out in this Bylaw.

3.(2) No Exemption. Without limiting the generality of Section 3.1, a Building Permit in Section 3.1(b) includes a permit authorizing the construction, alteration or extension of any building or structure that will, after the construction, alteration, or extension, contain one or more Dwelling Units and be put to no other use than the Residential Use in those Dwelling Units.

3.(3) Secondary Suites. Notwithstanding anything to the contrary contained in this Bylaw, development cost charges are not payable under this Bylaw for the construction, alteration or extension of one Secondary Suite in a Single Family

Dwelling or Duplex or for the construction, alteration or extension of a Coach/Laneway House.

3.(4) Exemptions from Development Cost Charges. A development cost charge is not payable:

- (a) in relation to a Development authorized by a Building Permit that authorizes the construction, alteration or extension of a building or part of a building that is, or will be, after the construction, alteration or extension, exempt from taxation under any of the following:
 - (i) section 220(1)(h) of the Community Charter;
 - (ii) section 224(2)(f) of the Community Charter;
 - (iii) section 15(1)(d) of the *Taxation (Rural Area) Act*, RSBC 1996, c. 448;
 - (iv) section 396(1)(c)(iv) of the Vancouver Charter; or
 - (v) a law of a treaty first nation that provides for an exemption similar to an exemption under paragraphs (i) to (iv) of this subsection;
- (b) if a development cost charge has previously been paid for the same Development unless, as a result of further development, additional Capital Cost burdens will be imposed on the Authority;
- (c) if the Development does not impose additional Capital Cost burdens on the Authority;
- (d) in relation to the construction, alteration or extension of self-contained Dwelling Units in a building authorized by a Building Permit if:
 - (i) each unit is no larger in area than 29 square metres (312.153 sq. ft.), and
 - (ii) each unit is to be put to no use other than the Residential Use in those Dwelling Units; or
- (e) in relation to a Development authorized by a Building Permit if the value of the work authorized by the permit does not exceed \$50,000.

3.(5) Calculation of Development Cost Charges. Development cost charges imposed under this Bylaw will be calculated in accordance with the rates set out in the Rate Schedule.

3.(6) Combination Development. Without restricting the generality of Section 3.(5), the development cost charges for a Combination Development will be calculated

separately for the portion of the Combination Development attributable to each Residential Use and Non-Residential Use and will be the sum of the development cost charges for each such use, calculated according to the Rate Schedule.

- 3.(7) Timing of Payment of Development Cost Charges. Development cost charges imposed under this Bylaw must be paid to the Collection Entity approving the Subdivision or issuing the Building Permit, as the case may be, as follows:
- (a) at the same time as any Municipal Charges as may be levied on the Development under a bylaw of the Collection Entity are payable to that Collection Entity; or
 - (b) if no Municipal Charges will be levied on the Development under a bylaw of the Collection Entity, as follows:
 - (i) where an application is made only for Subdivision, then prior to the issuance of the approval of the Subdivision by the Collection Entity;
 - (ii) where an application is made only for a Building Permit, then prior to the issuance of the Building Permit by the Collection Entity; or
 - (iii) where application is made for both Subdivision and for a Building Permit, then only prior to the issuance of the Building Permit by the Collection Entity.
- 3.(8) Payment of Development Cost Charges by Instalments. The development cost charges imposed under this Bylaw may not be paid by instalments unless a regulation under subsection 34.21(5) of the Act applies to the Development and authorizes the payment of development cost charges in instalments.

4. COLLECTION AND REMITTANCE OF DEVELOPMENT COST CHARGES.

- 4.(1) Collection of Development Cost Charges by Collection Entities. Subject to Section 7.(1), each Collection Entity must:
- (a) collect the development cost charges imposed on a Development under this Bylaw; and
 - (b) must not issue approval of a Subdivision or issue a Building Permit for any Development unless the development cost charges imposed under this Bylaw have been paid;

in accordance with Section 3.

- 4.(2) Separate Account. Subject to Section 7.(1), each Collection Entity must establish and maintain a separate account for the development cost charge monies collected under this Bylaw and deposit and hold such monies in that

separate account, in trust for the Authority, until the monies are remitted to the Authority under Section 4.(3).

- 4.(3) Remittance of Development Cost Charges by Collection Entities. Each Collection Entity, within 30 days after June 30 and December 31 of each year, must remit to the Authority the total amount of development cost charges collected by the Collection Entity under this Bylaw during the six month period immediately preceding such date, or an amount equal to such development cost charges if the Collection Entity did not collect development cost charges under this Bylaw, together with the statement referred to in Section 4.(4).
- 4.(4) Statements. Each Collection Entity must provide statements to the Authority, for every six month period comprising January 1 to June 30 and July 1 to December 31, setting out:
 - (a) the number and type of use of all Residential Use Parcels or Dwelling Units on which development cost charges were levied or otherwise payable by it under this Bylaw;
 - (b) the aggregate Floor Area of each type of Non-Residential Use buildings or structures on which development cost charges were levied or otherwise payable by it under this Bylaw (calculated in accordance with the Rate Schedule);
 - (c) the legal description and civic address of each Parcel on which development cost charges were levied or otherwise payable by it under this Bylaw, and whether such development cost charges were levied or otherwise payable in respect of a Subdivision or a Building Permit;
 - (d) the date and amount of each payment of development cost charges levied or otherwise payable by it under this Bylaw and where Section 3.(8) applies to permit development cost charges levied under this Bylaw to be paid by instalments, the amount of instalment payments remaining to be paid to it and the dates for payment of such remaining instalments;
 - (e) the total amount of all development cost charges levied or otherwise payable by it under this Bylaw and, where applicable, the total amount of all remaining instalment payments;
 - (f) the number, legal description, civic address and type of use of all Parcels in respect of which Subdivisions were approved where no development cost charges were levied by it under this Bylaw; and
 - (g) the number and type of use of all Dwelling Units and the aggregate Floor Area of each type of Non-Residential Use buildings or structures (calculated in accordance with the Rate Schedule) in respect of which Building Permits were required where no development cost charges were levied by it under this Bylaw.

- 4.(5) Records. Each Collection Entity shall retain, for a period of four years, sufficient records to support the statements and payments referred to in Sections 4.(3) and 4.(4).
- 4.(6) Inspection and Review of Collection Entity Records. The Authority may, at any time, subject to first giving reasonable notice to any Collection Entity, inspect any and all records of the Collection Entity relating to the information required under Section 4.(4), the calculation, collection and remittance by the Collection Entity of development cost charges levied under this Bylaw, and the calculation and remittance by the Collection Entity of any payments required under Section 4. Each Collection Entity shall permit any employee or agent of the Authority to inspect the records referred to above and to make and take away copies of those records.

5. RESERVE FUND AND USE OF DEVELOPMENT COST CHARGES

- 5.(1) Establishment of Reserve Fund. The Reserve Fund is hereby established.
- 5.(2) Amounts Received. Amounts received by the Authority under Section 3.(1) or Section 7.(1) must be deposited in, or be credited to, the Reserve Fund.

6. EFFECTIVE DATE AND TRANSITION.

- 6.(1) Transitional regarding Subdivision Applications. This Bylaw has no effect for a period of 12 months after the Effective Date with respect to:
- (a) a Subdivision of land located within a municipality if, before the Effective Date, the application for such Subdivision has been submitted to a designated municipal officer in accordance with the applicable procedures established by the Collection Entity and the applicable subdivision fee has been paid;
 - (b) subject to paragraph (c), a Subdivision of land located outside a municipality if, before the Effective Date, the application for such Subdivision has been submitted to a district highway manager in a form satisfactory to that official; or
 - (c) a Subdivision of land in respect of a parcel of treaty lands of a treaty first nation if, before the Effective Date, the application for such Subdivision has been submitted to the approving officer and the applicable subdivision fee has been paid.
- 6.(2) Agreement with Applicant for Subdivision. Section 6.(1) does not apply if the applicant for that Subdivision agrees in writing that this Bylaw should have effect.
- 6.(3) Transitional regarding Building Permit Applications. This Bylaw has no effect with respect to the construction, alteration or extension of a building or structure if:

- (a) the Building Permit authorizing that construction, alteration or extension is issued within 12 months after the Effective Date; and
 - (b) a Precursor Application in relation to that Building Permit is In-stream on the Effective Date.
- 6.(4) Agreement with Applicant for Building Permit. Section 6.(3) does not apply if the applicant for that Building Permit agrees in writing that this Bylaw should have effect.

7. REPLACEMENT OF DEVELOPMENT COST CHARGES

- 7.(1) Collection Entity Agreements. Despite any other provision of this Bylaw, the Authority may, in accordance with section 34.31 of the Act, enter into an agreement or agreements with any Collection Entity under which:
- (a) all, some or some portion of the development cost charges under this Bylaw that would otherwise apply are not required to be collected and remitted by the Collection Entity; and
 - (b) the Collection Entity agrees to pay to the Authority an amount equal to the development cost charges that the Collection Entity would have collected under this Bylaw but for such an agreement, in the manner and at the times set out in the agreement, or otherwise in the same manner and at the same times that development cost charges would otherwise have been payable.
- 7.(2) Failure to Remit Development Cost Charges. If a Collection Entity fails, for any reason, other than under an agreement under Section 7.(1), to collect any development cost charges payable under this Bylaw or to remit to the Authority any development cost charges collected by it, the Collection Entity must pay to the Authority on demand an amount equal to the development cost charges that the Collection Entity should have collected or remitted under this Bylaw.

8. INTERPRETATION

- 8.(1) Severability. If a portion of this Bylaw is held to be invalid it shall be severed and the remainder of the Bylaw shall remain in effect.
- 8.(2) Schedule. Schedule A is attached to and forms part of this Bylaw.

READ A FIRST, SECOND AND THIRD TIME this 24th day of October, 2018

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018

Lorraine Cunningham, Board Chair

Gigi Chen-Kuo, Corporate Secretary

SCHEDULE A
DEVELOPMENT COST CHARGE BYLAW
RATE SCHEDULE

Type of Development	Rates effective January 15, 2019	Rates effective January 15, 2020	Rates effective January 1, 2021
Single Family Dwelling	\$0 per Dwelling Unit	\$2,100 per Dwelling Unit	\$2,975 per Dwelling Unit
Duplex	\$0 per Dwelling Unit	\$1,900 per Dwelling Unit	\$2,470 per Dwelling Unit
Townhouse Dwelling Unit	\$0 per Dwelling Unit	\$1,900 per Dwelling Unit	\$2,470 per Dwelling Unit
Apartment Dwelling Unit	\$0 per Dwelling Unit	\$1,200 per Dwelling Unit	\$1,545 per Dwelling Unit
Retail/Service	\$0 per sq. ft. of Floor Area*	\$1.25 per sq. ft. of Floor Area*	\$1.25 per sq. ft. of Floor Area*
Office	\$0 per sq. ft. of Floor Area*	\$1.00 per sq. ft. of Floor Area*	\$1.00 per sq. ft. of Floor Area*
Institutional	\$0 per sq. ft. of Floor Area*	\$0.50 per sq. ft. of Floor Area*	\$0.50 per sq. ft. of Floor Area*
Industrial	\$0 per sq. ft. of Floor Area*	\$0.30 per sq. ft. of Floor Area*	\$0.30 per sq. ft. of Floor Area*

*Calculated as the rate multiplied by the number of square feet of Floor Area

**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 125-2018**

**A BYLAW TO ESTABLISH A WAIVER OR REDUCTION OF DEVELOPMENT COST
CHARGES FOR NOT-FOR-PROFIT RENTAL HOUSING**

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**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 125-2018**

WHEREAS:

A. Pursuant to Section 34.21 of the Act, the Authority has imposed a Development Cost Charge pursuant to South Coast British Columbia Transportation Authority Bylaw Number 124-2018;

B. Pursuant to Section 34.24 of the Act, the Authority may, by bylaw, waive or reduce a Development Cost Charge imposed by bylaw pursuant to Section 34.21 of the Act for an “eligible development”; and

C. It is deemed desirable to establish requirements and conditions for a waiver or reduction of Development Cost Charges for Not-for-Profit Rental Housing, including affordable rental housing and student housing;

NOW THEREFORE the Board of Directors of the South Coast British Columbia Transportation Authority enacts as follows:

1. CITATION

1.(1) The official citation for this Bylaw is “South Coast British Columbia Transportation Authority Bylaw No. 125-2018”.

1.(2) This Bylaw may be cited as the “Development Cost Charge Waiver or Reduction Bylaw”.

2. INTERPRETATION

2.(1) Definitions. In this Bylaw (including the recitals hereto):

“**Act**” means the *South Coast British Columbia Transportation Authority Act*, SBC 1998, c. 30;

“**Authority**” means the South Coast British Columbia Transportation Authority continued under the Act;

“**BC Housing**” means the British Columbia Housing Management Commission;

“**CMHC**” means Canada Mortgage and Housing Corporation;

“**Development Cost Charge**” means a development cost charge payable by a person to a Collection Entity on behalf of the Authority pursuant to the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018;

“**Effective Date**” means the date this Bylaw comes into force and takes effect;

“Eligible Affordable Rental Housing Development” means a Development containing Not-for-Profit Affordable Rental Housing;

“Eligible Student Rental Housing Development” means a Development containing Not-for-Profit Student Rental Housing;

“Eligibility Criteria” means criteria established by a Not-for-Profit Society, BC Housing, CMHC, a Non-Profit Municipal Housing Corporation or a Registered Charity or any authorized designate of any of the foregoing entities, used to determine eligibility of a person to occupy a Dwelling Unit within a Not-for-Profit Rental Housing Development;

“Government Business Enterprise” means a person that:

- (a) is a Wholly-Owned Subsidiary of a Post-Secondary Institution; and
- (b) carries on, pursuant to authority delegated to it by that Post-Secondary Institution, the business of providing Not-for-Profit Student Rental Housing for and on behalf of that Post-Secondary Institution;

“Group Home” means staffed residential housing for those with a level of disability that requires continual assistance to complete daily tasks of living (such as taking medication, dressing or bathing);

“Non-Profit Municipal Housing Corporation” means a non-profit housing corporation established at the initiative of a municipality or regional district;

“Not-for-Profit Affordable Rental Housing” means a Residential Use Development, Combination Development or Supportive Living Housing Development comprising housing that is:

- (a) owned, leased or otherwise held by a Not-for-Profit Society, BC Housing, CMHC, a Non-Profit Municipal Housing Corporation or a Registered Charity at the time of any application for, or issuance of, a waiver of Development Cost Charges;
- (b) operated as rental housing for, and made available to, people who meet Eligibility Criteria, in exchange for Rent; and
- (c) governed by the terms of an agreement and/or covenant with the Province of British Columbia, BC Housing, CMHC or a municipality regarding the operation of the housing and stipulating how the Dwelling Units will be occupied and managed;

but not including:

- (d) a community care facility under the *Community Care and Assisted Living Act*, SBC 2002, c. 75;

- (e) a continuing care facility under the *Continuing Care Act*, RSBC 1996, c. 70;
- (f) a public or private hospital under the *Hospital Act*, RSBC 1996, c. 200;
- (g) a Provincial mental health facility, an observation unit or a psychiatric unit designated under the *Mental Health Act*, RSBC 1996, c. 288; or
- (h) a housing-based health facility that provides hospitality support services and personal health care;

“Not-for-Profit Rental Housing” means Not-for-Profit Affordable Rental Housing and Not-for-Profit Student Rental Housing;

“Not-for-Profit Student Rental Housing” means a Residential Use Development or Combination Development that is:

- (a) owned and operated by a Post-Secondary Institution or by a Government Business Enterprise on behalf of such Post-Secondary Institution at the time of any application for, or issuance of, a reduction of Development Cost Charges;
- (b) purpose built to provide rental housing for students attending that Post-Secondary Institution;
- (c) operated on a cost recovery basis; and
- (d) governed by the terms of an agreement:
 - (i) made with Greater Vancouver Sewerage and Drainage District pursuant to the Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing Bylaw No. 314, 2018 and confirming that the use of the Development is restricted for a period of 60 years for the purpose of providing rental housing for students attending that Post-Secondary Institution, that the housing will be operated by the Post-Secondary Institution or its designated agent, and will be operated on a cost recovery basis – a copy of which agreement is submitted as part of any application pursuant to this Bylaw; or
 - (ii) made with the Authority and confirming that the use of the Development is restricted for a period of 60 years for the purpose of providing rental housing for students attending that Post-Secondary Institution, that the housing will be operated by the Post-Secondary Institution or a Government Business Enterprise of that Post-

Secondary Institution, and will be operated on a cost recovery basis;

“Not-for-Profit Society” means a society registered under the *Societies Act*, SBC 2015, c. 18, in respect of which:

- (a) the society’s bylaws’ or constitution’s stated purpose is to provide affordable housing for low (or low and moderate) income households, or another similar purpose consistent with the type of services being provided;
- (b) the society’s bylaws provide that the society’s directors may not be remunerated in any capacity, nor may the directors serve as employees;
- (c) the society’s bylaws provide that upon dissolution, or wind up of the society, the society’s assets will be disposed of to an organization(s) with a similar not-for-profit purpose of providing affordable housing;
- (d) items addressed in paragraphs (a), (b) and (c) must be unalterable or otherwise restricted in accordance with the applicable legislation or regulation, or require the prior written consent of the Authority to alter; and
- (e) the society’s rules of conduct must be in accordance with the society’s purposes and applicable legislation;

“On-Site Support Services” means services to support independent daily living that are physically offered in the building’s office or common areas, and include but are not limited to:

- (a) health and mental health services;
- (b) health and community support referrals;
- (c) addiction services;
- (d) employment and education services;
- (e) job and life skills training;
- (f) assistance with meal preparation or housekeeping; and
- (g) counselling and outreach services;

but not including personal continual assistance services such as bathing, dressing or medication assistance, as offered in a Group Home;

“Post-Secondary Institution” means an “institution” or “university”, as each such term is defined in the *College and Institute Act*, RSBC 1996, c. 52;

“Registered Charity” means a charitable foundation or a charitable organization as defined in the *Income Tax Act*, R.S.C. 1985, c. 1;

- (a) the registered charity’s bylaws’ or constitution’s stated purpose is to provide affordable housing for low (or low and moderate) income households, or another similar purpose consistent with the type of services being provided;
- (b) the registered charity’s bylaws provide that the society’s directors may not be remunerated in any capacity, nor may the directors serve as employees;
- (c) the registered charity’s bylaws provide that upon dissolution or wind up of the society, the society’s assets will be disposed of to an organization(s) with a similar charitable purpose;
- (d) items addressed in paragraphs (a), (b) and (c) must be unalterable or otherwise restricted in accordance with the applicable legislation or regulation, or require the prior written consent of the Authority to alter; and
- (e) the registered charity’s rules of conduct must be in accordance with the charity’s purposes and applicable legislation;

“Rent” means money paid or agreed to be paid, or value or a right given or agreed to be given, by or on behalf of a tenant to a landlord in return for the right to rent a Dwelling Unit, for the use of common areas and for services or facilities and includes any and all strata fees, regardless of whether such fees are paid directly to the landlord, but does not include any of the following:

- (a) a security deposit;
- (b) a pet damage deposit;
- (c) a fee prescribed under section 97 (2) (k) of the Residential Tenancy Act;

“Residential Tenancy Act” means the *Residential Tenancy Act*, SBC 2002, c. 78;

“Supportive Living Housing” means housing, not including a Group Home, that integrates Dwelling Units for persons who were previously homeless or who are at risk of homelessness, who may also:

- (a) have a mental illness;
- (b) have or be recovering from drug or alcohol addictions; or
- (c) experience other barriers to housing;

with On-Site Support Services that are available to the residents of the Dwelling Units, where occupancy is not restricted to less than 90 days; and

“**Wholly-Owned Subsidiary**” has the same meaning given to that term in the *Business Corporations Act*, S.B.C. 2002, c. 57.

- 2.(2) **Same Meaning.** Terms defined in the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124- 2018, have the same meaning in this Bylaw.
- 2.(3) **References to an Enactment Include Its Amendments.** References in this Bylaw to an enactment include the enactment as it may be amended or replaced from time to time.

3. WAIVER OR REDUCTION OF DEVELOPMENT COST CHARGES

- 3.(1) Waiver of Development Cost Charges for Eligible Not-for-Profit Affordable Rental Housing Development. Notwithstanding Section 3.(1) of the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018, and subject to Section 3.(3) of this Bylaw, the Authority will, for an Eligible Affordable Rental Housing Development, waive to the applicable Collection Entity on behalf of the registered owner, Development Cost Charges that are otherwise payable in respect of:
- (a) all Dwelling Units within the Development, if at least thirty percent of such Dwelling Units are to be occupied by households with incomes at or below housing income limits for the corresponding size of housing unit, as set out in the current “Housing Income Limits” (HILs) table published by the BC Housing, or equivalent publication; or
 - (b) only those Dwelling Units within the Development that are to be occupied by households with incomes at or below housing income limits for the corresponding size of housing unit, as set out in the current HILs table, or equivalent publication, if less than thirty percent of all of the Dwelling Units are to be occupied by such households.
- 3.(2) Reduction of Development Cost Charges for Eligible Not-for-Profit Student Housing Development. Notwithstanding Section 3.(1) of the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018, and subject to Section 3.(3) of this Bylaw, the Authority will, for an Eligible Student Rental Housing Development, reduce by 50% the Development Cost Charges that are otherwise payable to the applicable Collection Entity by the registered owner, in respect of all Dwelling Units within the Development that are to be occupied by students attending the Post-Secondary Institution.

- 3.(3) Application for Waiver. No waiver pursuant to Section 3.(1) or reduction pursuant to Section 3.(2) shall be granted unless a registered owner's application for a waiver or a reduction, as the case may be, of Development Cost Charges in respect of an Eligible Not-for-Profit Affordable Rental Housing Development or Eligible Not-for-Profit Student Housing Development, as applicable, has been submitted to, and approved by the Authority as fulfilling all of this Bylaw's eligibility requirements and conditions for a waiver or a reduction, as applicable, of Development Cost Charges.

4. RECORD KEEPING AND REPORTING

- 4.(1) Statements. Each Collection Entity must provide statements to the Authority, for every six month period comprising January 1 to June 30 and July 1 to December 31, setting out:

- (a) the registered owner or lessee; and
- (b) the number and type of use

of all Dwelling Units (calculated in accordance with the Rate Schedule set out in the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018) in respect of which Building Permits were required where Development Cost Charges were waived or reduced under this Bylaw.

- 4.(2) **Reports**. Authority staff will report annually to the Board of Directors of the Authority, and any time upon the request of the Board, the number and cost of Development Cost Charge waivers or reductions granted under this Bylaw.

5. EFFECTIVE DATE

- 5.(1) Effective Date. The effective date of this Bylaw is the date of adoption by the Board of Directors of the Authority.

6. INTERPRETATION

- 6.(1) Severability. If a portion of this Bylaw is held to be invalid it shall be severed and the remainder of the Bylaw shall remain in effect.

READ A FIRST, SECOND AND THIRD TIME this 6th day of December, 2018

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018

Lorraine Cunningham, Board Chair

Gigi Chen-Kuo, Corporate Secretary

**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 125-2018**

**A BYLAW TO ESTABLISH A WAIVER OR REDUCTION OF DEVELOPMENT COST
CHARGES
FOR AFFORDABLE~~ENOT-FOR-PROFIT RENTAL~~ HOUSING**

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**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
BYLAW NUMBER 125-2018**

WHEREAS:

A. Pursuant to Section 34.21 of the Act, the Authority has imposed a Development Cost Charge pursuant to South Coast British Columbia Transportation Authority Bylaw Number 124-2018;

B. Pursuant to Section 34.24 of the Act, the Authority may, by bylaw, waive or reduce a Development Cost Charge imposed by bylaw pursuant to Section 34.21 of the Act for an “eligible development”; and

C. It is deemed desirable to establish requirements and conditions for a waiver or reduction of Development Cost Charges for Not-for-Profit Rental Housing, including affordable rental housing and student housing;

NOW THEREFORE the Board of Directors of the South Coast British Columbia Transportation Authority enacts as follows:

1. CITATION

1.(1) The official citation for this Bylaw is “South Coast British Columbia Transportation Authority Bylaw No. 125-2018”.

1.(2) This Bylaw may be cited as the “Development Cost Charge Waiver or Reduction Bylaw”.

2. INTERPRETATION

2.(1) Definitions. In this Bylaw (including the recitals hereto):

“**Act**” means the *South Coast British Columbia Transportation Authority Act*, SBC 1998, c. 30;

“**Authority**” means the South Coast British Columbia Transportation Authority continued under the Act;

“**BC Housing**” means the British Columbia Housing Management Commission;

“**CMHC**” means Canada Mortgage and Housing Corporation;

“**Development Cost Charge**” means a development cost charge payable by a person to a Collection Entity on behalf of the Authority pursuant to the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018;

“**Effective Date**” means the date this Bylaw comes into force and takes effect;

“Eligible Affordable Rental Housing Development” means a Development containing Not-for-Profit Affordable Rental Housing;

“Eligible Student Rental Housing Development” means a Development containing Not-for-Profit Student Rental Housing;

“Eligibility Criteria” means criteria established by a Not-for-Profit Society, BC Housing, CMHC, a Non-Profit Municipal Housing Corporation or a Registered Charity or any authorized designate of any of the foregoing entities, used to determine eligibility of a person to occupy a Dwelling Unit within a Not-for-Profit Rental Housing Development;

“Government Business Enterprise” means a person that:

- (a) is a Wholly-Owned Subsidiary of a Post-Secondary Institution; and
- (b) carries on, pursuant to authority delegated to it by that Post-Secondary Institution, the business of providing Not-for-Profit Student Rental Housing for and on behalf of that Post-Secondary Institution;

“Group Home” means staffed residential housing for those with a level of disability that requires continual assistance to complete daily tasks of living (such as taking medication, dressing or bathing);

“Non-Profit Municipal Housing Corporation” means a non-profit housing corporation established at the initiative of a municipality or regional district;

“Not-for-Profit Affordable Rental Housing” means a Residential Use Development, Combination Development or Supportive Living Housing Development comprising housing that is:

- (a) owned, leased or otherwise held by a Not-for-Profit Society, BC Housing, CMHC, a Non-Profit Municipal Housing Corporation or a Registered Charity at the time of any application for, or issuance of, a waiver of Development Cost Charges;
- (b) operated as rental housing for, and made available to, people who meet Eligibility Criteria, in exchange for Rent; and
- (c) governed by the terms of an agreement and/or covenant with the Province of British Columbia, BC Housing, CMHC or a municipality regarding the operation of the housing and stipulating how the Dwelling Units will be occupied and managed;

but not including:

- (d) a community care facility under the *Community Care and Assisted Living Act*, SBC 2002, c. 75;

- (e) a continuing care facility under the *Continuing Care Act*, RSBC 1996, c. 70;
- (f) a public or private hospital under the *Hospital Act*, RSBC 1996, c. 200;
- (g) a Provincial mental health facility, an observation unit or a psychiatric unit designated under the *Mental Health Act*, RSBC 1996, c. 288; or
- (h) a housing-based health facility that provides hospitality support services and personal health care;

“Not-for-Profit Rental Housing” means Not-for-Profit Affordable Rental Housing and Not-for-Profit Student Rental Housing;

“Not-for-Profit Student Rental Housing” means a Residential Use Development or Combination Development that is:

- (a) owned and operated by a Post-Secondary Institution or by a Government Business Enterprise on behalf of such Post-Secondary Institution at the time of any application for, or issuance of, a reduction of Development Cost Charges;
- (b) purpose built to provide rental housing for students attending that Post-Secondary Institution;
- (c) operated on a cost recovery basis; and
- (d) governed by the terms of an agreement:
 - (i) made with Greater Vancouver Sewerage and Drainage District pursuant to the Greater Vancouver Sewerage and Drainage District Development Cost Charge Waiver or Reduction for Not-for-Profit Rental Housing Bylaw No. 314, 2018 and confirming that the use of the Development is restricted for a period of 60 years for the purpose of providing rental housing for students attending that Post-Secondary Institution, that the housing will be operated by the Post-Secondary Institution or its designated agent, and will be operated on a cost recovery basis – a copy of which agreement is submitted as part of any application pursuant to this Bylaw; or
 - (ii) made with the Authority and confirming that the use of the Development is restricted for a period of 60 years for the purpose of providing rental housing for students attending that Post-Secondary Institution, that the housing will be operated by the Post-Secondary Institution or a Government Business Enterprise of that Post-Secondary Institution, and will be operated on a cost recovery basis;

“Not-for-Profit Society” means a society registered under the *Societies Act*, SBC 2015, c. 18, in respect of which:

- (a) the society’s bylaws’ or constitution’s stated purpose is to provide affordable housing for low (or low and moderate) income households, or another similar purpose consistent with the type of services being provided;
- (b) the society’s bylaws provide that the society’s directors may not be remunerated in any capacity, nor may the directors serve as employees;
- (c) the society’s bylaws provide that upon dissolution, or wind up of the society, the society’s assets will be disposed of to an organization(s) with a similar not-for-profit purpose of providing affordable housing;
- (d) items addressed in paragraphs (a), (b) and (c) must be unalterable or otherwise restricted in accordance with the applicable legislation or regulation, or require the prior written consent of the Authority to alter; and
- (e) the society’s rules of conduct must be in accordance with the society’s purposes and applicable legislation;

“On-Site Support Services” means services to support independent daily living that are physically offered in the building’s office or common areas, and include but are not limited to:

- (a) health and mental health services;
- (b) health and community support referrals;
- (c) addiction services;
- (d) employment and education services;
- (e) job and life skills training;
- (f) assistance with meal preparation or housekeeping; and
- (g) counselling and outreach services;

but not including personal continual assistance services such as bathing, dressing or medication assistance, as offered in a Group Home;

“Post-Secondary Institution” means an “institution” or “university”, as each such term is defined in the *College and Institute Act*, RSBC 1996, c. 52;

“Registered Charity” means a charitable foundation or a charitable organization as defined in the *Income Tax Act*, R.S.C. 1985, c. 1;

- (a) the registered charity's bylaws' or constitution's stated purpose is to provide affordable housing for low (or low and moderate) income households, or another similar purpose consistent with the type of services being provided;
- (b) the registered charity's bylaws provide that the society's directors may not be remunerated in any capacity, nor may the directors serve as employees;
- (c) the registered charity's bylaws provide that upon dissolution or wind up of the society, the society's assets will be disposed of to an organization(s) with a similar charitable purpose;
- (d) items addressed in paragraphs (a), (b) and (c) must be unalterable or otherwise restricted in accordance with the applicable legislation or regulation, or require the prior written consent of the Authority to alter; and
- (e) the registered charity's rules of conduct must be in accordance with the charity's purposes and applicable legislation;

“Rent” means money paid or agreed to be paid, or value or a right given or agreed to be given, by or on behalf of a tenant to a landlord in return for the right to rent a Dwelling Unit, for the use of common areas and for services or facilities and includes any and all strata fees, regardless of whether such fees are paid directly to the landlord, but does not include any of the following:

- (a) a security deposit;
- (b) a pet damage deposit;
- (c) a fee prescribed under section 97 (2) (k) of the Residential Tenancy Act;

“Residential Tenancy Act” means the *Residential Tenancy Act*, SBC 2002, c. 78; **and**

“Supportive Living Housing” means housing, not including a Group Home, that integrates Dwelling Units for persons who were previously homeless or who are at risk of homelessness, who may also:

- (a) have a mental illness;
- (b) have or be recovering from drug or alcohol addictions; or
- (c) experience other barriers to housing;

with On-Site Support Services that are available to the residents of the Dwelling Units, where occupancy is not restricted to less than 90 days-; **and**

“Wholly-Owned Subsidiary” has the same meaning given to that term in the *Business Corporations Act*, S.B.C. 2002, c. 57.

2.(2) Same Meaning. Terms defined in the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124- 2018, have the same meaning in this Bylaw.

2.(3) References to an Enactment Include Its Amendments. References in this Bylaw to an enactment include the enactment as it may be amended or replaced from time to time.

3. WAIVER OR REDUCTION OF DEVELOPMENT COST CHARGES

3.(1) Waiver of Development Cost Charges for Eligible Not-for-Profit Affordable Rental Housing Development. Notwithstanding Section 3.(1) of the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018, and subject to Section 3.(23) of this Bylaw, the Authority will, for an Eligible Affordable Rental Housing Development, waive ~~or refund~~ to the applicable Collection Entity on behalf of the registered owner, Development Cost Charges that are otherwise payable in respect of:

- (a) all Dwelling Units within the Development, if at least thirty percent of such Dwelling Units are to be occupied by households with incomes at or below housing income limits for the corresponding size of housing unit, as set out in the current “Housing Income Limits” (HILs) table published by the BC Housing, or equivalent publication; or
- (b) only those Dwelling Units within the Development that are to be occupied by households with incomes at or below housing income limits for the corresponding size of housing unit, as set out in the current HILs table, or equivalent publication, if less than thirty percent of all of the Dwelling Units are to be occupied by such households.

3.(2) Reduction of Development Cost Charges for Eligible Not-for-Profit Student Housing Development. Notwithstanding Section 3.(1) of the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018, and subject to Section 3.(3) of this Bylaw, the Authority will, for an Eligible Student Rental Housing Development, reduce by 50% the Development Cost Charges that are otherwise payable to the applicable Collection Entity by the registered owner, in respect of all Dwelling Units within the Development that are to be occupied by students attending the Post-Secondary Institution.

3.(3) Application for Waiver. No waiver ~~or refund~~ pursuant to Section 3.(41) ~~or reduction pursuant to Section 3.(2)~~ shall be granted unless a registered owner’s application for a waiver ~~or a reduction, as the case may be,~~ of Development Cost Charges in respect of an Eligible Not-for-Profit Affordable Rental Housing Development or Eligible Not-for-Profit Student Housing Development, as applicable, has been submitted to, and approved by the Authority as fulfilling all of this Bylaw’s eligibility

requirements and conditions for a waiver or refunda reduction, as applicable, of Development Cost Charges.

4. RECORD KEEPING AND REPORTING

4.(1) Statements. Each Collection Entity must provide statements to the Authority, for every six month period comprising January 1 to June 30 and July 1 to December 31, setting out:

- (a) the registered owner or lessee; and
- (b) the number and type of use

of all Dwelling Units (calculated in accordance with the Rate Schedule set out in the South Coast British Columbia Transportation Authority Development Cost Charge Bylaw No. 124-2018) in respect of which Building Permits were required where Development Cost Charges were waived or reduced under this Bylaw.

4.(2) **Reports**. Authority staff will report annually to the Board of Directors of the Authority, and any time upon the request of the Board, the number and cost of Development Cost Charge waivers or reductions granted under this Bylaw.

5. EFFECTIVE DATE

5.(1) Effective Date. The effective date of this Bylaw is the date of adoption by the Board of Directors of the Authority.

6. INTERPRETATION

6.(1) Severability. If a portion of this Bylaw is held to be invalid it shall be severed and the remainder of the Bylaw shall remain in effect.

READ A FIRST, SECOND AND THIRD TIME this 6th day of December, 2018

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018

Lorraine Cunningham, Board Chair

Gigi Chen-Kuo, Corporate Secretary

To: Board of Directors

From: Rob Malli, Chief Financial Officer and Executive Vice President, Finance & Corporate Services

Date: November 14, 2018

Subject: Parking Rights Tax - Bylaw for Rate Change to 24%

PROPOSED RESOLUTION:

That the TransLink Board of Directors:

- A. Introduces and reads a first, second and third time the *South Coast British Columbia Transportation Authority Parking Rights Tax Bylaw Number 127-2018*, attached to the report dated November 14, 2018 titled “Parking Rights Tax – Bylaw for Rate Change to 24%” as Attachment 1, effective July 1, 2019; and
 - B. Reconsiders and finally adopts the *South Coast British Columbia Transportation Authority Parking Rights Tax Bylaw Number 127-2018*.
-

EXECUTIVE SUMMARY

TransLink’s parking rights tax rate is currently set at what has been the maximum allowable rate of 21% under the *South Coast British Columbia Transportation Authority Act* (the “Act”). On November 8, 2018 the Province enacted the *South Coast British Columbia Transportation Authority Amendment Act (No. 2), 2018* (the “Amending Act”), which increased the maximum allowable parking rights tax rate to 24% effective November 8, 2018.

The Board can now adopt the attached bylaw cited as “*South Coast British Columbia Transportation Authority Parking Rights Tax Bylaw Number 127-2018*” to approve a change in the parking rights tax rate charged by TransLink from 21% tax to 24% effective July 1, 2019. This change will permit TransLink to generate additional revenues to help fund the Phase Two of the 10-Year Vision: 2018-2027 Investment Plan (the “Phase Two Investment Plan”).

By adopting the proposed parking rights tax bylaw amendment in 2018, this will give Management and parking vendors time to plan for this change.

PURPOSE

The purpose of this Report is to recommend the amendment of the effective parking rights tax rate from 21% to 24% effective July 1, 2019 by adopting the Bylaw attached in Attachment 1. Previously, the “parking rights tax” was referred to as “parking sales tax”.

BACKGROUND

Legislative status:

Prior to the enactment of the Amending Act, section 30.1 of the Act permitted TransLink to charge a parking rights tax rate of up to 21% tax on parking rights purchased in the TransLink transportation service region. Through Bylaw Number 61-2009 "A Bylaw imposing Parking Sales Tax", the parking tax rate was set at 21%. In order to provide additional revenue to TransLink to fund the Phase Two Investment Plan, the Province of British Columbia has enacted the Amending Act to increase the maximum allowable parking rights tax rate in section 30.1 of the Act to 24%. The Amending Act received royal assent on November 8, 2018, with the changes to the Act having immediate effect.

Management is seeking the Board's approval of the proposed Bylaw now in order to give both Management and parking vendors time to plan for this change in the parking rights tax rate, which is proposed to become effective July 1, 2019.

Funding Magnitude:

In the 2017 year, parking rights tax generated \$70 million in revenue for TransLink. Based on the Phase Two Investment Plan which was approved on June 28, 2018, the rate increase of 3% is estimated to generate an additional \$89 million in parking rights tax revenue from 2019-2027, to help fund the planned transit expansion set out in the Phase Two Investment Plan.

RECOMMENDATION

It is recommended that the Board approve and adopt the attached Bylaw cited as "*South Coast British Columbia Transportation Authority Parking Rights Tax Bylaw Number 127-2018*" effective July 1, 2019.

ATTACHMENT

Attachment 1: Bylaw Number 127-2018

SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY

BYLAW NUMBER 127-2018

A Bylaw imposing Parking Rights Tax

SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY

BYLAW NUMBER 127-2018

A Bylaw imposing Parking Rights Tax

WHEREAS pursuant to the *South Coast British Columbia Transportation Authority Act* (the "Act"), the Authority must manage and operate the regional transportation system and generate and manage funds for that purpose.

AND WHEREAS pursuant to section 30.1 of the Act, the Authority may, by bylaw, set, as the rate of tax payable under Part 7.1 of the Act, a rate of tax on the purchase price of the parking right in respect of which the tax is paid.

NOW THEREFORE the Board of Directors of the South Coast British Columbia Transportation Authority enacts as follows:

1. This Bylaw may be cited as the "South Coast British Columbia Transportation Authority Parking Rights Tax Bylaw Number 127-2018."
2. The rate of tax payable on the purchase price of parking rights under Part 7.1 of the Act shall be 24%.
3. This Bylaw repeals Bylaw Number 61-2009 "A Bylaw imposing Parking Sales Tax" passed by the South Coast British Columbia Transportation Authority.
4. This Bylaw comes into force and takes effect on July 1, 2019.

READ A FIRST, SECOND AND THIRD TIME this 6th day of December, 2018.

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018.

Lorraine Cunningham, Chair

Gigi Chen-Kuo, Corporate Secretary

TO: Board of Directors

FROM: Sany Zein, Vice President, Infrastructure Management and Engineering

DATE: November 15, 2018

SUBJECT: TransLink Public Art Policy

PROPOSED RESOLUTION:

That the TransLink Board of Directors adopt the Public Art Policy (attached as Appendix 1 to the report dated November 15 2018 titled TransLink Public Art Policy) to define TransLink’s vision for public art and guide the commissioning, implementation and maintenance of public art on the TransLink system.

EXECUTIVE SUMMARY

As the region prepares to further expand transit service and deliver high profile capital projects, a Public Art Policy that is clear, consistent with best practices and workable is necessary to ensure that TransLink’s Public Art Program meets the region’s needs.

TransLink’s Public Art Policy (attached to this report) formalizes the vision, strategic direction, principles and program structure with respect to the procurement and display of public art on transit.

PURPOSE AND CONTEXT

TransLink has featured public artworks on its system since the opening of the Millennium Line in the early 2000s. TransLink’s first Public Art Policy was adopted by Management in 2013, and served to formalize the procedures by which public art is funded, procured and maintained on TransLink’s assets.

During the plebiscite campaign in 2015, the Public Art Policy was revised to mandate financial partnerships with outside agencies and cap funding for individual artwork investments. The 2015 update was inconsistent with best practice; lacked support in the local art community; and provided insufficient guidance for the procurement of artwork for upcoming capital projects.

In anticipation of upcoming investments, in 2016 and 2017 Management consulted with stakeholders in the art community including municipal art program managers, and researched peer agency practices. Management subsequently drafted an update to TransLink’s Public Art Policy to better align with best practice; provide guidance for capital projects; and establish a governance and funding model linked to capital project value.

Management consulted with committees of the Board on this update in March and May 2018. Board members suggested several important improvements, including improved references to governance; artwork classification and integration; and the addition of “up to” provisions within the funding framework. Management edited the Policy accordingly and is now recommending that the Public Art Policy be adopted by the Board.

Attached to this report are:

TRANSLINK'S PUBLIC ART POLICY (2018) clean version for adoption.



PUBLIC ART POLICY

1. PURPOSE

- 1.1 This policy formalizes the vision, strategic direction, principles and program structure with respect to the procurement and display of public art by the South Coast British Columbia Transportation Authority (“TransLink”) and its operating subsidiaries.

2. VISION

- 2.1 TransLink provides high quality, innovative, and creative art throughout our system that enhances the customer experience by surprising and delighting customers every day.

3. STRATEGIC DIRECTION

- 3.1 Regional
As stipulated by the *Regional Growth Strategy*, the *Regional Transportation Strategy*, and the *South Coast British Columbia Transportation Authority Act*, TransLink is mandated to create a welcoming and safe environment for customers, integrate transportation into the community and support sustainable transportation choices. Public art is an important tool for meeting these requirements.
- 3.2 TransLink
TransLink is committed to investing in public art that:
- enhances the customer experience,
 - improves perceptions of public transit and transportation, and
 - encourages positive engagement between customers and the services and programs delivered by TransLink.

4. PROGRAM PRINCIPLES

- 4.1 TransLink’s Public Art Program adheres to the following guiding principles:
- **Diversity:** TransLink’s Public Art Program supports the vibrant local arts community within Metro Vancouver. TransLink will commission artwork in a variety of forms and from a range of artists, including projects led by established artists, emerging artists, local artists, international artists, community-based art, permanent and temporary art in any media.

- **Commitment:** TransLink is committed to providing the necessary internal capacity and funding required to implement and manage its Public Art Program. A clear funding approach will be used to ensure projects and programs of all sizes include public art opportunities.
- **Partnerships:** Where possible, TransLink will seek to collaborate with external parties to advance the provision of public art in the transportation environment.
- **Open Processes:** The Public Art Program will be conducted with transparent and consistent processes for all parties involved. Community and employee engagement is a crucial element.
- **Fairness:** TransLink will negotiate intellectual property rights agreements that value the role and rights of the artist(s). TransLink will always pay artists fairly for their work.
- **Asset Preservation:** TransLink acknowledges its role as the steward of transportation assets, including artwork. Public art selection, maintenance and deaccessioning processes will be guided by criteria that preserve the value of the art assets and the integrity of the artworks in conjunction with the operation and maintenance of the transportation system.

5. PROGRAM STRUCTURE

5.1 Public Art Classifications

5.1.1 Permanent Artwork

Permanent artwork is any artwork intended to be displayed for ten years or more. Permanent artworks are expected to require limited maintenance to reach their ten year lifespan.

5.1.2 Semi-Permanent Artwork

Semi-permanent artwork is any artwork intended to be displayed for more than two and less than ten years.

5.1.3 Temporary Artwork

Temporary artwork is any artwork displayed for two years or less. Temporary artwork is an excellent venue for community art, collaborative projects and experimental artwork.

5.2 Governance

This Policy is governed at the project and program levels. The Procedures and Guidelines Manual outlines project-level governance for the three public art classifications (Section 5.1). Program level governance is provided by Management with input from art professionals.

6. PROCUREMENT PRACTICES

6.1 Funding Mechanism

- 6.1.1 Renovation or construction of public-facing fixed facilities with net implementation costs over \$1 million will trigger up to a 1% allocation of the net implementation budget at Specific Project Approval (SPA) for the incorporation of public art on that site. Net implementation costs include all Work Breakdown Structure (WBS) capital project codes with the exception of land acquisition, project management costs and vehicles, which are excluded. Significant changes in overall project

scope and budget after SPA may be reflected in an updated public art budget provided the artwork detailed design process has not begun at the time of the project changes.

Public-facing fixed facilities include all facilities used by the public, such as bus and rail stations, platforms, exchanges and terminals. Public-facing fixed facilities *may* also include facilities that are not used by the public if these facilities are highly visible to the public, such as certain depots. The Procedures and Guidelines Manual outlines the detailed decision-making criteria for determining which facility construction or renovation projects will include public art.

The budget will include the artist's fee, design, fabrication and may include installation and other costs. Generally, projects with costs over \$5 million will commission at least one permanent artwork per site. In some cases, projects with costs under \$5 million may include only temporary art or public art budgets may be pooled with other projects in the same municipality.

- 6.1.2 For major capital investments with total project budgets of \$100 million or more, a project-specific public art plan will be developed in coordination with all project funding partners to identify art opportunities and funding mechanisms.

Major capital investments with budgets over \$100 million will have a minimum public art budget of up to 1% of net implementation costs on the first \$100 million, and up to 0.5% of net implementation costs from the portion of the project budget from \$101 million to \$500 million. Over \$500 million, additional public art may be funded at up to 0.25% of net implementation costs, to be determined on a case-by-case basis. Net implementation costs are defined in 6.1.1.

Public art budgets for major capital investments will consider the scale of the project and resources required to deliver appropriately scaled artworks, as well as community requirements and local contributions for the public art.

- 6.1.3 Temporary artwork may be commissioned through construction processes or through operating funds.

6.2 Selection Process

- 6.2.1 Permanent artwork must be commissioned through a competitive selection process in which an artist or an artwork is selected by a unique jury assembled for a given opportunity. Juries assembled for artwork selection processes have an important responsibility of quality adjudication and will follow recognized best practices for public art selection. Jury members will include art professionals, defined as artists or curators meeting Canada Council for the Arts definitions of those fields. Artists participating in the juried process may be put forward by a curator, consultant or jury members and/or may apply through a public call.

6.3 Collaborative Art Opportunities

Collaborative artwork is any public artwork developed and delivered as a joint effort between TransLink and local government, First Nations, non-profit organizations, educational institutions, private developers, or other community associations. All collaborative public art projects must be governed by an agreement signed by all partners at the beginning of the project that details financial and project management responsibilities, selection process, ownership of the completed artwork and maintenance responsibilities.

6.4 Externally Proposed Public Art

Donated public art may be considered on a case-by-case basis. All potential public art donations will undergo rigorous technical review, including consideration of installation and maintenance costs, and will be reviewed for aesthetic merit and appropriateness for the transit environment.

7. OPERATIONS AND MAINTENANCE

7.1 A fund will be established for general purposes, through the approved annual budget and base plan, to cover program-wide expenses such as:

- overall management, administration and promotion of public art
- acquiring and displaying temporary art
- accommodating art opportunities in facilities not slated for renovation
- setting up and maintaining an Artwork Registry
- art maintenance and conservation, with regular maintenance included in cost estimates prepared by the operating companies at the time the project budget is approved
- maintaining TransLink's *Public Art Procedures and Guidelines Manual* that includes further information on program structure, funding, selection, partnerships, implementation, procurement, contracting, stakeholder and media relations, maintenance and deaccessioning.

7.2 Outreach

TransLink recognizes that outreach activities are important for giving customers the information they need to fully appreciate individual public artworks and the Public Art Program as a whole. TransLink will engage in public art communications, education and outreach.

TO: Board of Directors

FROM: Geoff Cross, Vice President, Planning and Policy

DATE: November 27, 2018

SUBJECT: Customer Washrooms on Transit Policy Review

PROPOSED RESOLUTIONS

That the TransLink Board of Directors:

1. Adopt the Customer Washroom on Transit Policy (attached as Appendix A to the November 19, 2018 report entitled "Customer Washrooms on Transit Policy Review") to increase the availability of customer washrooms along the regional transit system and to guide TransLink decisions on the provision of suitable facilities and services in support of this objective; and
2. Direct management to utilize the Customer Washroom on Transit Policy to prepare an implementation strategy that would include options for an approach, budget and timeline for providing customer washrooms, with an emphasis on partnerships, for consideration by the Board in 2019.

EXECUTIVE SUMMARY

This review has determined that access to washrooms is important to customers and efforts to expand the availability of these facilities are warranted at key locations, through a combination of actions, including partnerships. A policy has been developed to guide TransLink decisions and actions. Subject to Board endorsement of the policy, an implementation strategy will be developed in 2019 to identify options for an approach, costs, and timeline for providing washrooms that meet the objectives and criteria in the policy with available resources.

PURPOSE

The purpose of this report is to summarize the outcomes and findings of the Customer Washrooms on Transit policy review, outline a policy framework to guide TransLink decisions and actions, and identify next steps.

BACKGROUND

TransLink currently provides customer washrooms within Fare Paid Zones at both SeaBus terminals and on West Coast Express trains, as required by federal transportation regulations. Currently, no formal policy exists to provide direction on TransLink's expectations for provisions for customer washrooms along the system beyond these locations. The limited availability of a broader set of washrooms accessible to transit users on the transit system is a long-standing and high-profile customer and stakeholder issue.

DISCUSSION

This review set out to address the following questions:

1. What are the key trends in providing washrooms for transit customers and the public?
2. Is having easy access to washrooms while using transit important for TransLink customers?
3. If yes, where should access to washrooms be provided?
4. By what means should access to washrooms be provided?

Key activities undertaken to support this review included: a peer agency scan, a TransLink Listens Panel survey, workshops with internal stakeholders and external partners, estimating the level of demand for washrooms using Compass data, and identification of initial capital and operating cost ranges for providing washrooms at TransLink facilities.

Question 1: What are the key trends in providing washrooms for transit customers?

A review of peer North American transit agencies identified a mixed approach to the provision of washrooms for customers. Some agencies – including those in Toronto (TTC), Boston (MBTA) and Edmonton (ETS) – provide washroom facilities for customers. Other agencies – including Washington DC (WMATA), Los Angeles (LA Metro), and Chicago (CTA) – provide no facilities. In some locations, washrooms may be required by regulation (e.g., building code requirements for stations) or have existed for a number of years. Common reasons cited by agencies for not providing washrooms for customers include safety and security risks, high costs, and maintenance challenges.

Two other significant trends are noteworthy. In the private sector, Starbucks's new "Use of the Third Place Policy" now allows any customer to use a Starbucks washroom facility regardless of whether a purchase is made. Several countries including Germany, Switzerland and the U.K. have Community Toilet Networks where municipalities pay participating businesses to make their washrooms available to the public. These initiatives underscore that washroom availability is increasingly important for the public and the latter indicates that partnerships can be a cost effective way of increasing availability.

Question 2: Is having easy access to washrooms while using transit important for TransLink customers and the public?

A TransLink Listens Panel survey was undertaken in February 2018 to gather input on the level of support for and potential impacts of increasing the availability of washrooms along the transit system. A total of 2,071 responses were received and weighted to reflect regional socio-demographics (see attached). Key findings from this survey include:

- 72% of respondents indicated that greater availability of washrooms would improve their transit experience.
- Over 20% of daily transit users who responded indicated that they adjust their transit travel behaviour at least weekly due to lack of availability of washrooms.
- About 25% of respondents indicated they would use the transit system more often if more washrooms were available.

These results indicate that access to washrooms along the transit system is a self-reported priority for TransLink customers and the public and that the presence of washrooms may contribute to increasing ridership over time.

Question 3: If access to washrooms is important, where should access to washrooms be provided?

The regional transit network is extensive and includes a range of passenger facilities like SkyTrain stations, bus loops and exchanges, and park and ride lots. Customer washrooms along the network should be provided in a manner that makes facilities available to the most number of persons at key points along their transit journey, while balancing the need for coverage and finite budget resources. The following criteria have been identified to assist in determining locations where access to washrooms should be prioritized, regardless of who provides these facilities:

1. Major transfer or connection point for a high number of transit passengers;
2. High levels of passengers experiencing long elapsed journey times on the transit network; and,
3. Contributes to developing a network of relatively evenly spaced washrooms in terms of travel time on the system.

Question 4: By what means should access to washrooms be provided?

Three approaches to providing increased access to washrooms along the transit system at priority locations were considered:

1. Washrooms primarily provided by TransLink
2. Washrooms primarily provided by third-parties
3. Washrooms provided through a combination of TransLink and in partnership with third-parties

Key objectives considered in evaluating these options included maximizing the customer experience, maximizing safety and security for customers, minimizing costs and minimizing risks. Option 1 is anticipated to have the highest costs to TransLink but support the highest benefits to customers through providing TransLink greater control over the location and design of all washroom facilities. Option 2 would have the lowest costs to TransLink but there would be less control over facility standards and less convenience for customers and may be perceived as unfair by partners. Option 3 strikes a balance between the objectives and is identified as the preferred direction for policy development.

Proposed Policy Framework

This review has determined that access to washrooms is important to customers and efforts to expand the availability of these facilities are warranted at key locations through a combination of actions. A policy framework outlining the process and considerations to guide TransLink decisions and actions has been developed (see attached). The policy acknowledges that TransLink has a role in delivering and supporting the provision of washrooms for customers, alongside other amenities, at passenger facilities in order to provide an exceptional experience for customers. The framework outlines key objectives, criteria to identify priority locations for washrooms, potential actions to deliver and operate washrooms, and considerations to guide development of an implementation strategy.

Implementation and Monitoring

If endorsed by the TransLink Board, the policy framework will be used to develop an implementation strategy. The implementation strategy will identify options for a network of washrooms at priority passenger facilities, assess available actions, identify costs, and outline a timeline for washroom facility expansion. It should be developed in consultation with key TransLink business units, including Transit Police and the operating companies, as well as partners, the public, and user groups. The policy framework may be refined following development of the implementation strategy to capture any material changes to high-level guidance. The implementation strategy will be brought to the Board for consideration in 2019.

Financial Impacts

A full assessment of financial impacts associated with increasing the availability of washrooms for customers will be determined through the development of a policy implementation strategy. Costs are expected to vary depending on the extent of washrooms provided, whether provided by TransLink or third-parties, and the nature of the actions taken. The cost to TransLink of providing washrooms should be considered alongside the non-financial impacts on our customers that the lack of washrooms currently imposes.

Public and Stakeholder Input

Staff consulted with key external stakeholders including local government partners, TransLink's User Advisory Committee, Vancouver Coastal Health, and Fraser Health as part of the review and policy development process. These groups have all indicated strong support for action to increase the availability of washrooms along the regional transit system. Public input received through a TransLink Listens Panel survey completed in February 2018 (results summarized above) noted general support for increased washroom access. Respondents noted that clean, well-stocked, and well-lit facilities would contribute to feeling safe and comfortable when using a washroom facility.

Operations Input

Staff consulted with key TransLink operating units like Transit Police, Coast Mountain Bus Company, and British Columbia Rapid Transit Company as part of the review and policy development process. These groups acknowledged the importance of customer washrooms along the transit system but indicated the need for proper execution to ensure risks and facility design are managed for optimal customer experience. No risks to system efficiency were identified. This feedback was used to develop the objectives for the proposed policy framework which will in turn inform the implementation strategy.

NEXT STEPS

Pending direction from the Board, an implementation strategy outlining options for the most appropriate approaches at priority facilities, costs and timelines for increasing access to washrooms along the system will be developed.

ATTACHMENTS

- A) Customer Washrooms on Transit Policy (November 2018)
- B) Washrooms on Transit TransLink Listens Panel Survey Final Report (March 2018)

CUSTOMER WASHROOMS ON TRANSIT POLICY

Date: November 2018

1. PURPOSE

The purpose of this policy is to outline the process and considerations that will guide TransLink actions to increase the availability of washrooms for transit riders at key transit passenger facilities along the network.

2. OVERARCHING POLICY STATEMENT

TransLink is committed to increasing the availability of safe, clean, well-maintained and accessible washrooms for transit riders at key transit passenger facilities in ways that are affordable and effectively manage risks as part of on-going efforts to enhance customer experience and facilitate movement throughout Metro Vancouver.

3. OBJECTIVES

TransLink will determine the appropriate action for establishing and maintaining washrooms at transit passenger facilities by evaluating opportunities and available alternatives against the following objectives:

- **Increase the availability of washrooms for customers towards a long-term network:** increase opportunities for most customers to have a washroom available as part of their transit journey.
- **Maximize accessibility:** washrooms should be universally accessible and inclusive for transit riders of all ages, abilities and identities.
- **Foster safety and security:** washrooms should be designed and delivered to foster safety and security for customers and staff who use or work at the washrooms.
- **Foster cleanliness, comfort and convenience:** these key customer needs and expectations should be a focus of provision, operation and maintenance decisions.
- **Be affordable:** washrooms should be provided and operated in the manner that meets the objectives and other guidelines through the most cost effective approach available.
- **Keep risks manageable:** risks should be identified, considered and managed for both TransLink and our operating companies.

4. POLICIES AND DIRECTION

A. **Priority Locations for Washroom Access**

TransLink will continue to provide washroom facilities for transit riders where it is required by provincial or federal regulations. Currently, these locations include SeaBus terminals at both Waterfront Station and Lonsdale Quay, and on-board West Coast Express trains.

In addition to these locations, TransLink will seek to enable access to washrooms for transit riders at, adjacent to, or in close proximity of key transit passenger facilities across the regional transit network that demonstrate all of the following criteria:

1. Are, or are expected to be, a **major transfer or connection** point for a **high** number of transit passengers connecting between multiple transit services or connecting between transit and other modes, throughout the service day;
2. Have, or are expected to have, high levels of passengers experiencing **long elapsed journey times** on the transit system (including considering time to get to/from transit); and
3. Contributes to developing a network of transit passenger facilities with washroom access that are relatively **evenly spaced** in terms of travel time on the system.

Where an existing adequate publicly accessible washroom facility is readily available for transit riders located in close proximity to a transit passenger facility, this will be considered in terms of the design of the network and the desire to have a relatively evenly spaced system. A network of washrooms accessible to transit riders that meet these criteria provides opportunities for the greatest number of customers with the most need to have a washroom available as part of their journey.

TransLink will monitor opportunities at transit passenger facilities not meeting all of these criteria and encourage partners or other providers to provide access to washrooms at these locations. TransLink will not independently pursue the provision of washrooms at locations that do not meet the above criteria.

B. Potential Actions

Transit passenger facilities across the region are subject to differing opportunities and constraints due to unique design, layout, siting and other factors. This diversity requires that TransLink consider a variety of potential actions for washroom access depending on individual facility contexts. Siting, design and layout of facilities will be subject to applicable standards, the guidance contained in the *Transit Passenger Facility Design Guidelines* and other industry best practices. TransLink will work over time and as financial resources allow towards increasing the availability of washrooms available to transit riders at priority locations identified using this policy through a combination of the following actions:

Actions to support the provision of washroom facilities:

- **Activating** or **repurposing** existing underutilized or vacant opportunity spaces within a passenger facility footprint to allow for a washroom facility.
- **Delivering** washroom facilities within the passenger facility footprint as part of comprehensive station or transit exchange upgrade projects or the development of new passenger facilities.
- **Partnering** with developers, municipalities, or private commercial parties to deliver or provide access to a washroom facility adjacent, or in close proximity, to the passenger facility footprint through the Adjacent and Integrated Development program or other initiatives and opportunities.

As part of the above decision making processes, TransLink will give **high priority** to washrooms for customers in space allocation decisions for existing, upgraded or new passenger facilities.

Actions to support the operation and maintenance of washroom facilities:

- **Developing** protocols and procedures to provide consistency of experience and keeping the washrooms open to users, safe, clean, well-functioning and properly stocked as well as establish work safe procedures for staff or contractors where a TransLink operating company is the washroom operator or oversees a contractor.

- **Establishing** agreements with third party operators to operate and maintain washroom facilities available to transit riders provided by TransLink or in partnership with other parties. These agreements will address requirements and expectations for operation and maintenance protocols like hours of operation, cleaning and upkeep, attendants, and other considerations to foster a positive and consistent customer experience.
- **Developing** and tracking performance indicators to ensure both the availability and quality of washroom facilities accessible to transit riders that are provided by TransLink or in partnership with other parties meet acceptable standards for quality, cleanliness and safety.

Actions to increase rider awareness of washrooms along the transit network:

- **Providing** consistent wayfinding, maps and supporting information to direct customers to available and readily-accessible washrooms located within, adjacent, or in close proximity to passenger facilities.

4. IMPLEMENTATION

TransLink will develop an implementation strategy in consultation with partners for the purposes of identifying a network of passenger facilities that meet the criteria for actions to increase the availability of washrooms outlined in this policy. The implementation will focus on delivering a program that is sustainable over time, within available resources, enhances the customer experience and is done well. The implementation strategy should identify and address:

- A network of priority locations for washrooms accessible to transit riders
- Identification of most appropriate action of each location
- Design, layout and siting guidelines and related considerations to support achieving a consistent customer experience
- Phasing of implementation, timelines and costs
- Guidance for wayfinding, operations and maintenance
- Monitoring program to track progress and adjust implementation as needed

5. MONITORING AND REPORTING

TransLink will regularly monitor the demand for washrooms, progress towards implementation of actions, and the use of available washrooms to identify and understand risks, opportunities, and challenges. TransLink will review this policy as needed in consultation with partners or as directed for potential changes.



TransLink Listens Washrooms on Transit Survey

Prepared for:
TransLink

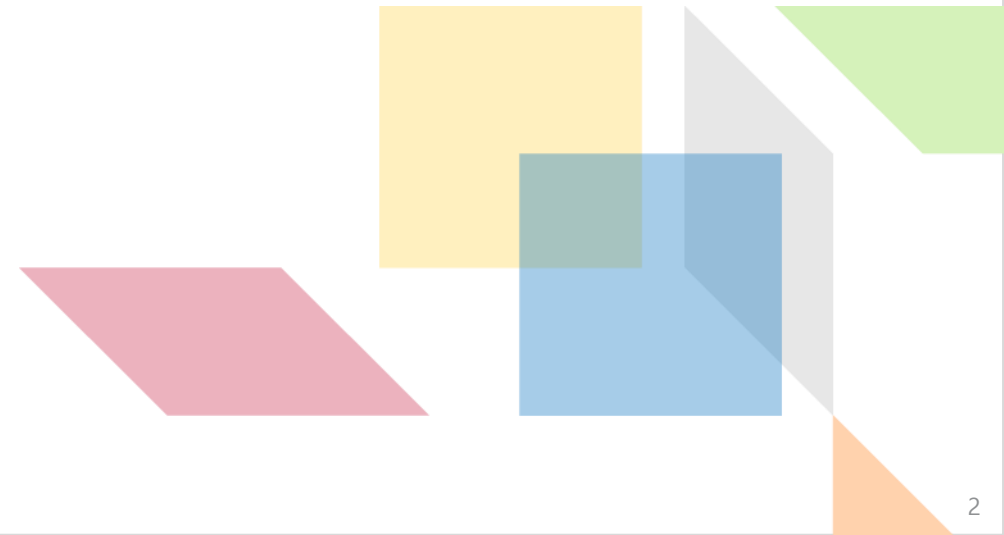
March 16, 2018 [FINAL]



A stylized 3D cube icon with a green top face and a grey bottom face, identical to the one in the header.

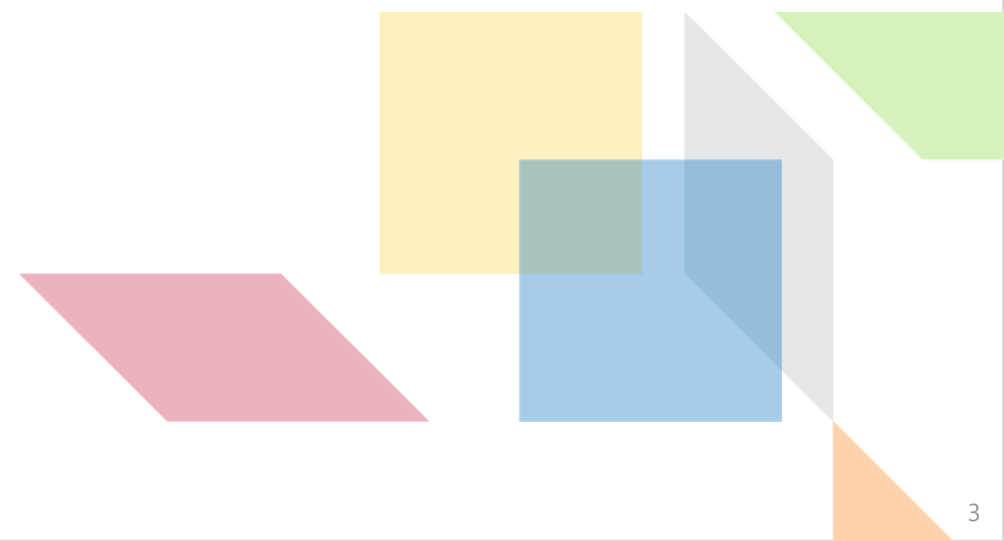
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- [03]** Background, Objectives & Methodology
- [06]** Summary
- [09]** Survey Findings
- [18]** Appendix



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Background, Objectives & Methodology



Background & Objectives

TransLink is considering possible improvements to the transit system. The Washrooms on Transit Survey assesses the priority that transit users place on increasing the availability of washrooms as well as how increased washroom availability would impact transit use and the user experience.

The survey measures the following:

- › Preferences for possible improvements that could be made to the transit system
- › Expected impact of increasing the availability of washrooms on:
 - Overall satisfaction with the transit experience
 - Frequency of transit use
- › Current impact of the unavailability of washrooms on travel behaviour
- › Factors that contribute to feeling safe when using public washrooms

Survey Design & Data Collection

The survey was designed by TransLink and administered to members of TransLink’s online member panel – TransLink Listens (TLL). All Metro Vancouver panelists 19+ qualified for the survey.

Survey Dates	2017
Survey soft launch	Feb 13 (AM)
Survey full launch	Feb 13 (PM)
Reminder email sent	Feb 18
Survey closed	Feb 20

Participation Statistics	#
# Invites sent	3,136
# TLL panelists completing the survey	2,051
Completion rate	65%

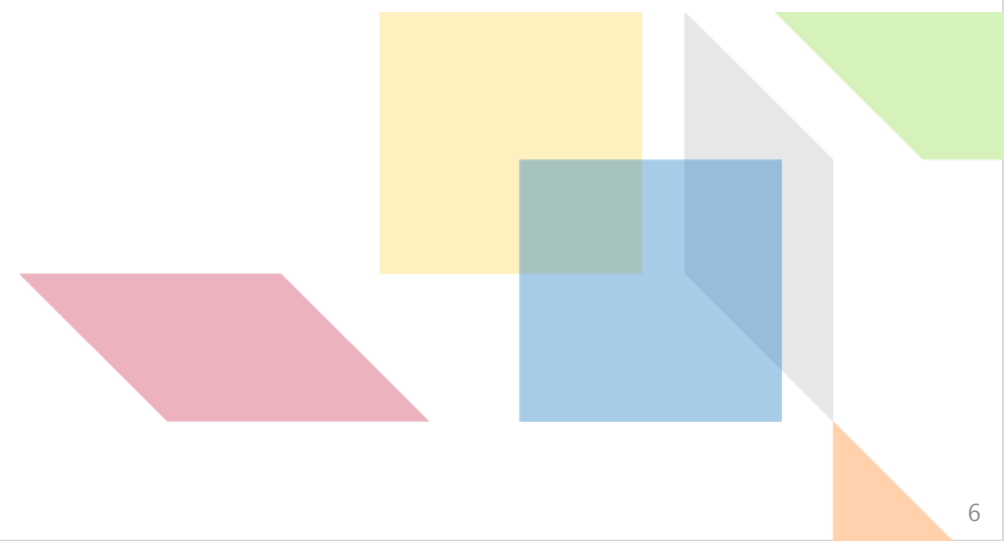
The dataset was weighted to reflect the Metro Vancouver population with respect to region, age, gender and main mode of transportation.

NOTE: TransLink Listens panelists’ responses may differ from random population surveying, even with weighting, because of their deeper engagement with transit and transportation.



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Summary



- › Out of four potential improvements to the transit system (increasing service to minimize overcrowding and pass-ups, increasing washroom availability, improving the cleanliness of trains, buses and stations, and having more staff available at stations), just over half (53%) of panelists selected increasing washroom availability among their top two priorities. Only increasing service to minimize overcrowding and pass-ups was selected more often at 79%.
- › Three-quarters of panelists (74%) indicated that having washrooms on the transit system would make them more satisfied with their transit experience. This includes 31% who would be much more satisfied.
- › Just under one-quarter of panelists (23%) indicated that they would use transit more often if washrooms were available. This includes 16% who indicated that they would use transit more often and 7% who indicated that they would use it much more often (7%).
- › Results indicate that the current unavailability of washrooms has not had a major impact on most people's use of transit, but it has had some impact. Half of panelists indicated that they have rarely or never have had to adjust their travel behaviour because washrooms were not available on the transit system. Overall, 22% of panelists indicated that they have had to adjust their travel behaviour approximately once a year and another 15% indicated that they have had to adjust it about once a month.
- › When it comes to the factors that contribute to feelings of safety when using a public washroom, it is most important that it is clean and well-stocked and has good lighting (selected by 87% and 82%, respectively).

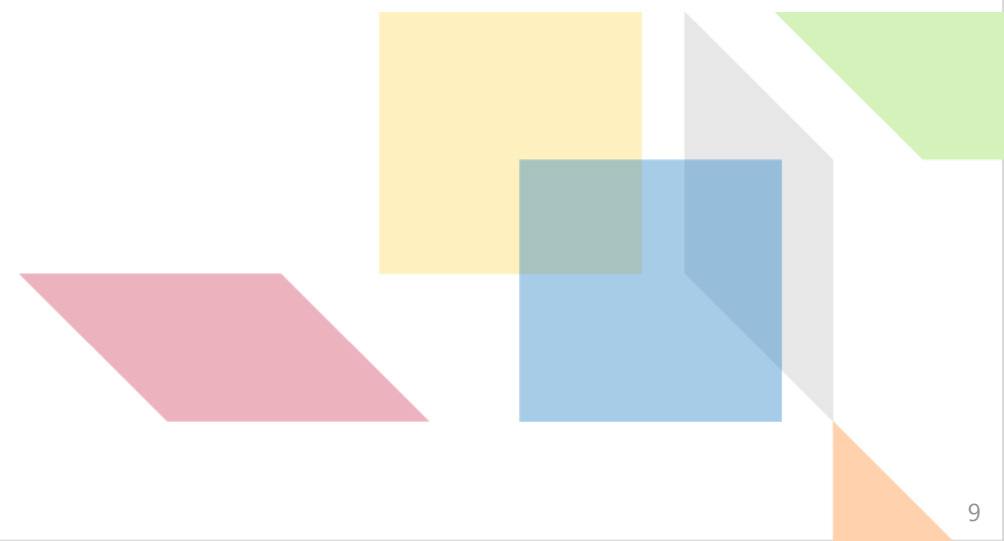
- › Increasing washroom availability is most important and impactful for two key groups – those 65+ and especially those with a disability that makes taking transit difficult. Relative to other groups, these two groups are more likely to:
 - › Consider increasing washroom availability a top transit priority
 - › Expect to be more satisfied with their transit experience if washrooms were available
 - › Report that they would take transit more often if washrooms were available
 - › Report having to adjust their travel behaviour more frequently because washrooms were unavailable (those with a disability only)

	Total	65+	Have a Disability
Increasing the availability of washrooms on the transit system is a top priority	53%	65%	65%
Would be more satisfied with transit experience if there were more washrooms available	74%	80%	81%
Would use transit more often if more washrooms were available	23%	31%	46%
Have had to adjust travel behaviour due to unavailability of washrooms <u>in the past year</u>	50%	46%	67%
<i>At least once per month</i>	37%	25%	46%
<i>Weekly or more often</i>	13%	12%	31%



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Survey Findings

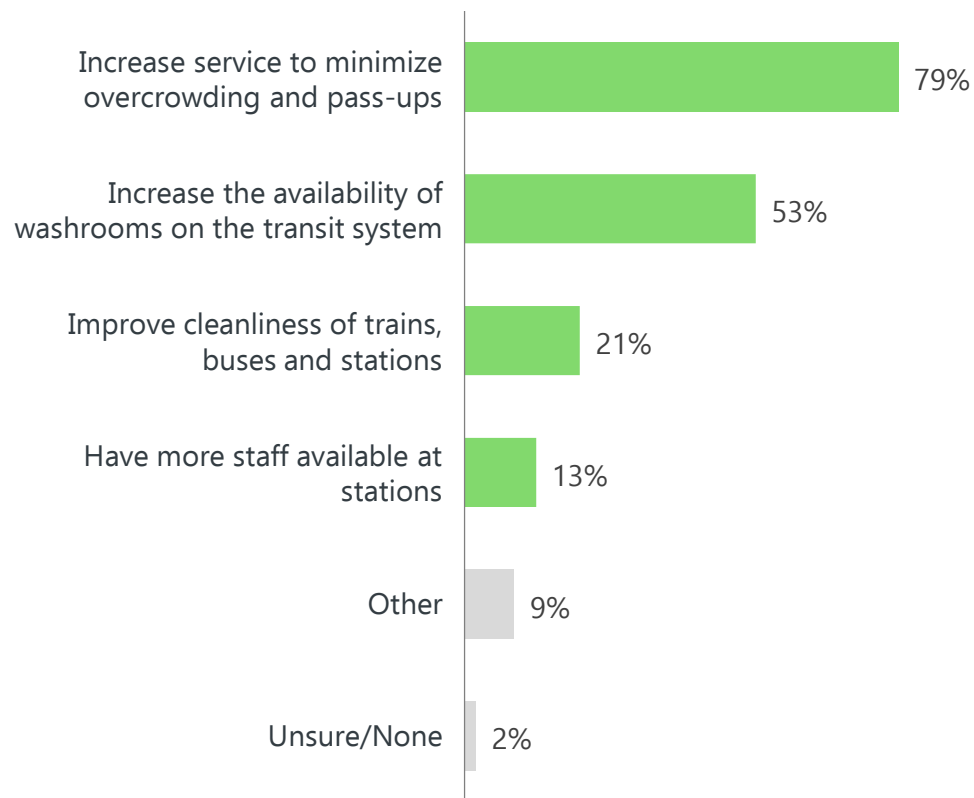


Preferences for TransLink Priorities

TLL panelists were given a list of four possible improvements that could be made to the transit system and were asked to select up to two that they feel TransLink should prioritize.

- › The large majority of panelists (79%) indicated that increasing service to minimize overcrowding and pass-ups should be a top priority.
- › Just over half (53%) selected increasing the availability of washrooms on the transit system as one of their top two priorities.
- › Panelists were much less likely to place a priority on the other two options - improving cleanliness of vehicles and stations and increasing staff presence were only selected by 21% and 13%, respectively.

Preferences for TransLink Priorities



Base: (2,051)

QA. The following are possible improvements that could be made to the transit system. Which of these do you think TransLink should prioritize?
Select your top two priorities. [RANDOMIZE ORDER IMPROVEMENTS]

Preferences for TransLink Priorities by Age

- › Increasing service to minimize overcrowding and pass-ups was the most frequently selected priority with each age group. However, there were differences in priorities between age groups.
- › The youngest panelists (aged 19 to 34), were the most likely to place a priority on improving the cleanliness of trains, buses and stations.
- › Panelists aged 34 to 44 were the most likely to place a priority on increasing service to minimize overcrowding and pass-ups, and were the least likely to place a priority on increasing washroom availability.
- › Panelists aged 55 and older were the most likely to place priority on having more staff available at stations.
- › Seniors (aged 65+) were the most likely to place a priority on increasing washroom availability.

Preferences for TransLink Priorities	Total	19-34	35-44	45-54	55-64	65+
Base:	(2,051)	(301)	(319)	(422)	(484)	(525)
Increase service to minimize overcrowding and pass-ups	79%	82%	87%	81%	76%	69%
Increase the availability of washrooms on the transit system	53%	50%	45%	52%	55%	65%
Improve cleanliness of trains, buses and stations	21%	32%	24%	19%	14%	15%
Have more staff available at stations	13%	10%	11%	12%	17%	16%
Other	9%	9%	8%	11%	10%	7%

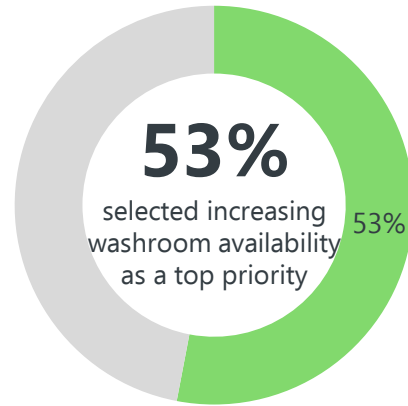
■ Significantly higher or lower than the total
■

QA. The following are possible improvements that could be made to the transit system. Which of these do you think TransLink should prioritize?
Select your top two priorities.

Increasing the Availability of Washrooms

- > In addition to those aged 65+, there were two other groups that placed a higher priority on increasing the availability of washrooms.
- > These groups included:
 - > Those with a disability that makes taking transit difficult
 - > Weekly transit users

% Selecting Washroom Availability Overall



(Base: 2,051)

■ Selected increasing availability of washrooms on the transit system among top 2 priorities

% Selecting Washrooms Among Top 2 Priorities by Subgroup

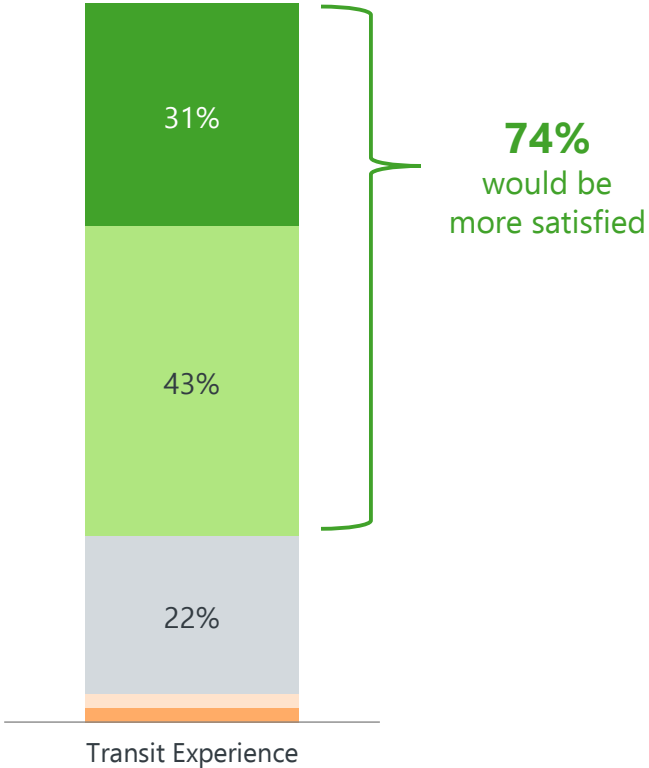
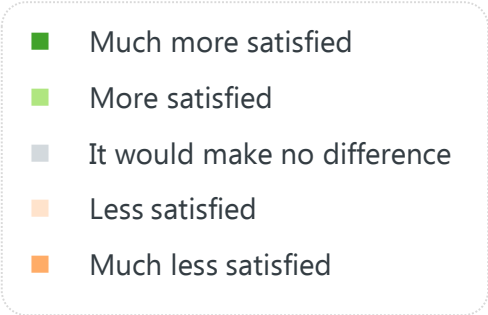
Age	19-34	35-44	45-54	55-64	65+
	50%	45%	52%	55%	65%
Gender	Male		Female		
	52%		55%		
Region	Vancouver	Burnaby/ New West	South of Fraser	Northeast	North Shore
	56%	56%	52%	51%	50%
Disability	Yes		No		
	65%		52%		
By Frequency of Transit Use	Daily	Weekly	Monthly or less		
	51%	60%	51%		
Main Mode of Transport	SOV	Rideshare	Transit	Bike/Walk	
	53%	52%	53%	56%	

QA. The following are possible improvements that could be made to the transit system. Which of these do you think TransLink should prioritize? *Select your top two priorities.*

Expected Impact of Washroom Availability on Transit Experience

- > Three-quarters of panelists indicated that they would be more satisfied with their transit experience if washrooms were available on the transit system. Only 22% indicated that increasing washroom availability would have no impact on their transit experience.
- > Consistent with the higher priority that seniors (65+) and those with disabilities place on increasing washroom availability, these two groups were the most likely to indicate that adding more washrooms would make them more satisfied with their transit experience (80% and 81% would be more satisfied, respectively).

Expected Change in Satisfaction with Transit if Washrooms Were Available



Base: (1,975)

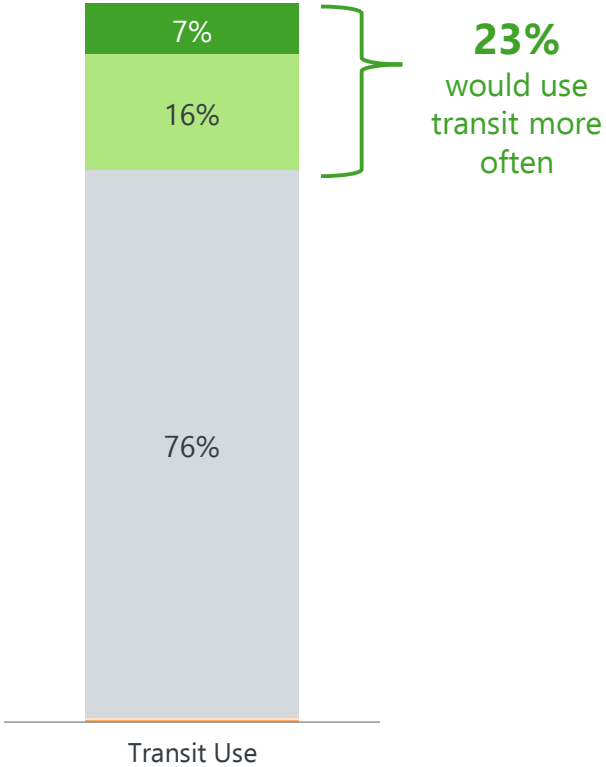
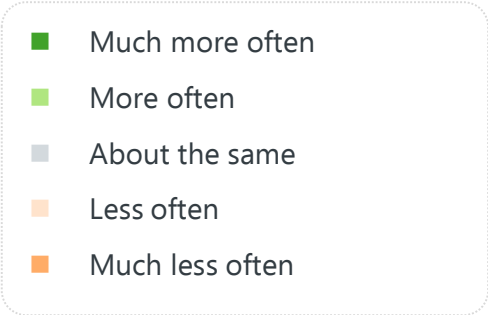
Note: Base is among those offering an opinion (excludes Unsure/Not applicable).

Q1. Would you be more or less satisfied with your transit experience if washrooms were available on the transit system? (For example, at key transit exchanges.)

Expected Impact of Washroom Availability on Future Transit Use

- > Three-quarters of panelists indicated that increasing the availability of washrooms would not impact how often they use transit. One-quarter (23%) indicated that having washrooms available would increase their usage of transit.
- > Seniors (65+) and panelists with disabilities were the most likely to indicate that they would use transit more often if there were washrooms available (31% and 46%, respectively).
- > Among weekly transit users, 31% indicated that they would use transit more often if there were washrooms available on the system.
- > Only 18% of panelists who use transit as their main mode of transportation would increase their transit use if more washrooms were available - likely because they already use transit for most of their transportation needs.

Expected Change in Transit Usage if Washrooms Were Available



Base: (2,009)

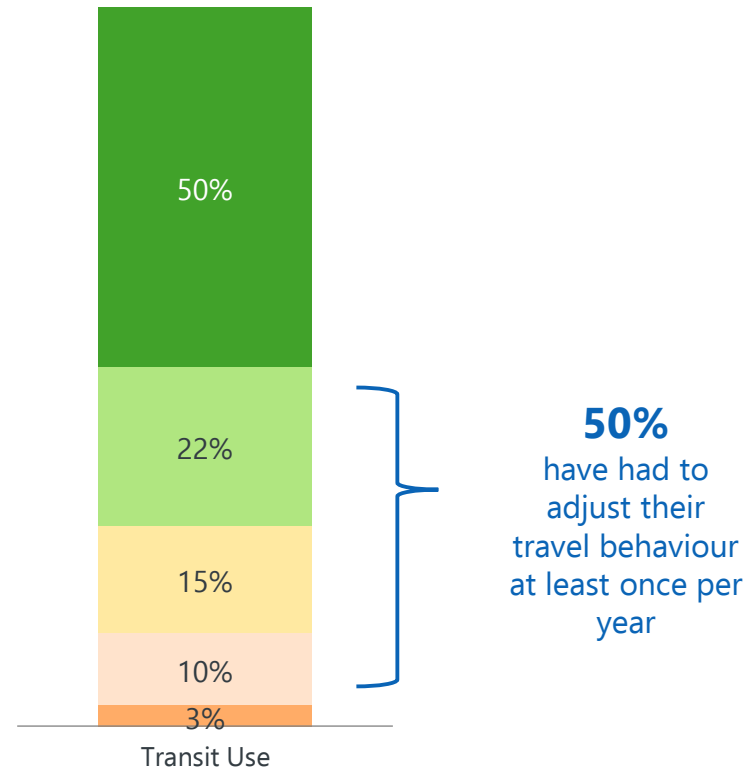
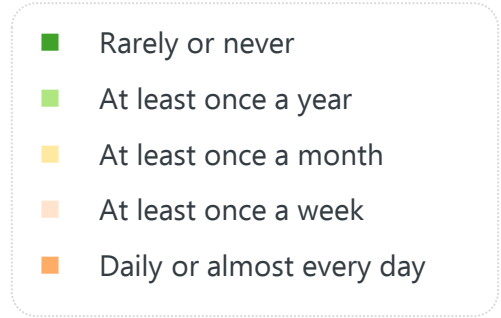
Note: Base is among those offering an opinion (excludes Unsure/Not applicable).

Q2. If there were washrooms available to use on the transit system, would it affect how often you use transit?

Impact of Washroom Unavailability on Transit Use

- > Overall, half of panelists indicated that they have had to adjust their travel because washrooms were not available on the transit system.
- > Most commonly, panelists have had to adjust their travel behaviour approximately once a year (22%) or once a month (15%).
- > There are a number of groups that were particularly likely to report adjusting their travel behaviour at least once a year due to washrooms not being available on the transit system. These include:
 - > Panelists aged 19 to 34 (59%) – (this group has the highest frequency of transit usage.)
 - > Women (53% vs. 48% among men)
 - > Daily transit users (60%)
 - > Those whose main mode of transport is transit (60%) or walking, biking, etc. (57%)
 - > Those with a disability (67%). Further, among this group, 31% indicated adjusting their travel behaviour weekly or more often.

Frequency Adjusting Travel Behaviour Due to Unavailability of Washrooms



Base: (2,051)

Q3. Have you ever adjusted your travel behaviour due to the unavailability of washrooms along the transit system? (For example, had to leave the transit system, delay a trip, avoid using transit etc.)

Feelings of Safety in Public Washrooms

- > Panelists indicated that clean, well-stocked washrooms and good lighting are the two factors that contribute most to their feelings of safety when using public washrooms (selected by 87% and 82%, respectively) This is followed by washrooms being free of vandalism (60%) and being located in a high-traffic area (54%).
- > Having single-user washroom facilities and staff attendants present were the two factors perceived to have the least impact on feelings of safety.
- > However, staff attendants are more likely to contribute to feelings of safety among seniors 65+ (42%) and those with disabilities (48%).
- > The presence of others nearby is a more important factor among women.
 - > Washrooms located near people walking by makes 61% of women feel safer (vs. 48% of men).
 - > Staff attendants make 40% of women feel safer (vs. 33% of men).
- > Women also consider single-user washroom facilities to be a more important factor than men do (46% vs. 36% among men).



Base: (2,051)

Q4. What factors contribute to your feeling of safety when using a public washroom? (Please select as many as apply.) [RANDOMIZE ORDER FACTORS]

Final Comments

- > Among panelists leaving a comment about washrooms on transit, the most common mentions are that there is a need for more of them in stations (26%) and that they should be kept cleaned and well stocked (20%).
- > Another 18% comment that they don't think washroom availability should be a priority and that TransLink should focus on other issues instead.
- > The availability of washrooms for specific groups (e.g., seniors, children, etc.) was another common theme (16%).
- > Concerns about the washrooms being subject to drug use, vandalism and crime was also raised (15%).
- > A few suggested charging a fee or restricting access to Compass Card holders (13%).

Final Comments about Washrooms

Top Final Comments (among those leaving a comment related to washrooms)	
Base	599
There is a need for more washrooms in stations	26%
Washrooms should be cleaned / well-maintained and stocked	20%
Should not waste money on washrooms / focus on making transit better	18%
Washrooms are needed for seniors / children / people with medical conditions	16%
Concerned about drug use / homeless / vandalism / crime in bathrooms	15%
Washrooms should be safe / secure	15%
Users should pay a fee / use their Compass Card to tap in	13%
Washrooms should be wheelchair accessible	5%
Washrooms needed in major stations only	4%
Make genderless / unisex washrooms; single-person washrooms	4%
Place washrooms in a fare-paid zone	3%

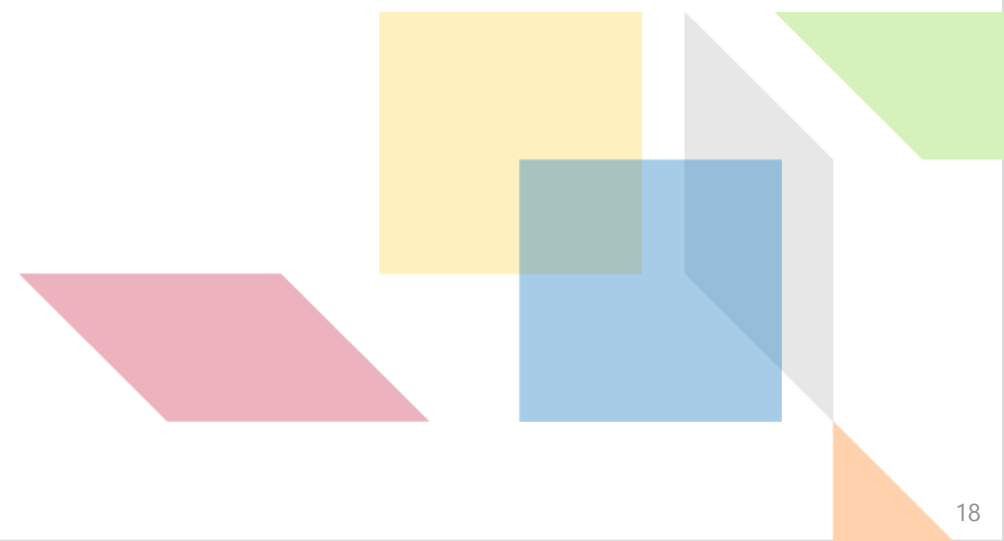
Base: (2,051)

QFeedback. Just before we finish, is there anything else you would like to share with us on any of the topics covered in this survey?

A small version of the 3D cube icon, with a green top face and a grey bottom face.

Appendix

Respondent Profile



Respondent Profile

Gender

Age

Region

Household Size

Disability

	Total
Base	2,051
%	
Gender	
Male	48
Female	49
Age	
19-24	5
25-34	19
35-44	16
45-54	25
55-64	17
65+	19
Region	
Vancouver	30
Burnaby/ New Westminster	14
South of Fraser	34
Northeast	13
North Shore	8
Household Size	
1	21
2	39
3	16
4	15
5	5
6 or more	3
Disability that makes taking transit difficult	
Yes	9
No	89


Respondent Profile




Employment Status



Household Income



Education

	Total
Base	2,051
	%
Employment	
Employed full time	58
Employed part time	10
Student	5
Not employed	5
Homemaker	3
Retired	18
Household Income	
<\$20,000	4
\$20,000 to <\$40,000	9
\$40,000 to <\$60,000	10
\$60,000 to <\$80,000	12
\$80,000 to <\$100,000	10
\$100,000 or more	33
Prefer not to say	19
Education	
Some high school or less	1
Graduated high school	7
Vocational/ college/ technical	22
Some university	13
Graduated university	57

Respondent Profile

Transit Use

Transport

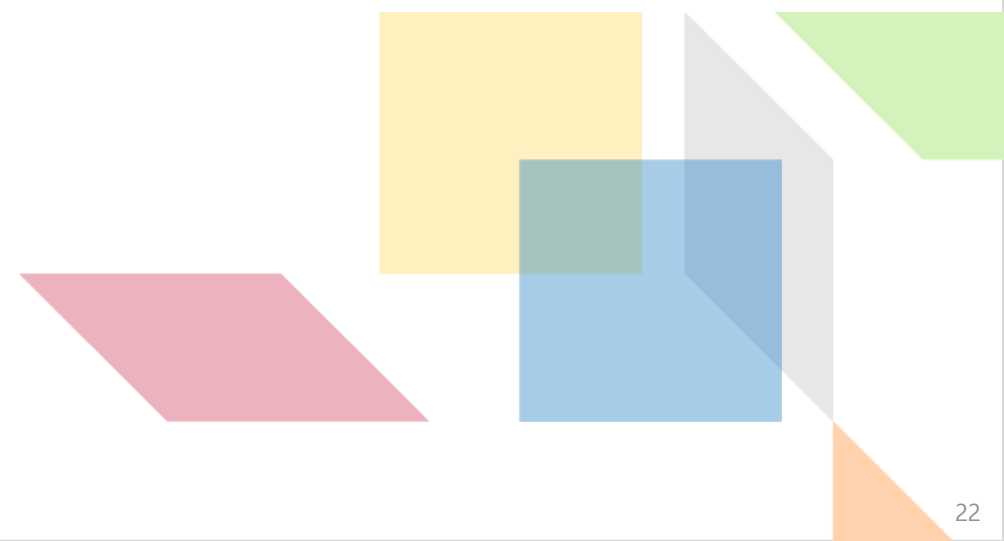
Access to Vehicle

	Total
Base	2,051
	%
Frequency of Transit Use	
Daily or almost every day	28
Weekly	26
Monthly	27
Yearly or less	19
Never	1
Main Mode of Transportation	
Drive alone (single occupancy vehicle)	52
Take public transit	23
Travel in private vehicle with at least one other person	15
Walk	6
Bicycle	3
Other	1
Regular Access to Car, Van or Truck	
Yes	83
No	17

A stylized 3D cube icon with a green top face and a grey bottom face, identical to the one in the header.

Appendix

Questionnaire



Washrooms Survey Draft Final

2018-02-09

QA. The following are possible improvements that could be made to the transit system. Which of these do you think TransLink should prioritize? Select your top two priorities. [RANDOMIZE ORDER IMPROVEMENTS] [ALLOW R'S TO SELECT UP TO TWO ANSWERS]

- Increase the availability of washrooms on the transit system
- Increase service to minimize overcrowding and pass-ups (pass-ups occur when the transit vehicle is too full for you to board)
- Improve cleanliness of trains, buses, and stations
- Have more staff available at stations
- Other – Please specify: _____
- Unsure [EXCLUSIVE]
- None [EXCLUSIVE]

Q1. Would you be more or less satisfied with your transit experience if washrooms were available on the transit system? (For example, at key transit exchanges.)

1. Much more satisfied
2. More satisfied
3. It would make no difference
4. Less satisfied
5. Much less satisfied
6. Unsure
7. Not applicable

Q2. If there were washrooms available to use on the transit system, would it affect how often you use transit? I would use transit ...

1. Much more often
2. More often
3. About the same
4. Less often
5. Much less often
6. Unsure

Q3. Have you ever adjusted your travel behaviour due to the unavailability of washrooms along the transit system? (For example, had to leave the transit system, delay a trip, avoid using transit etc.)

1. Daily or almost every day
2. At least once a week
3. At least once a month
4. At least once a year
5. Rarely or never

Q4. What factors contribute to your feeling of safety when using a public washroom? (Please select as many as apply) [RANDOMIZE]

- Good lighting
- Located near people walking by
- Clean and well-stocked
- Single-user washroom facilities
- No evidence of vandalism (i.e., graffiti)
- Staff attendants
- Other: _____
- Have no comment (EXCLUSIVE)

Q5. How often do you use transit in Metro Vancouver?

1. Daily or almost every day
2. At least once a week
3. At least once a month
4. At least once a year
5. Rarely
6. Never

[SOFT LAUNCH ONLY]

QSoft. Was there anything about the questionnaire that you found confusing or difficult to answer? (Optional) [OPEN-ENDED QUESTION]

[ALL PARTICIPANTS]

QFeedback.

Just before we finish, is there anything else you would like to share with us on any of the topics covered in this survey? (Optional) [OPEN-ENDED QUESTION]

Closing Screen.

Those are all our questions. Thank you for participating, your input is appreciated!

You may now close this browser window.

Sincerely,

TransLink Listens

TO: Board of Directors

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

DATE: November 27, 2018

SUBJECT: Pets on Transit Policy Review

PROPOSED RESOLUTIONS

That the TransLink Board of Directors:

1. Endorse management's recommendation to maintain TransLink's current Pets on Transit policy that allows small pets on transit if they are in a fully enclosed handheld carrier that can fit on their handler's lap; and
2. Direct management to continue to monitor industry trends and public sentiment to determine if adjustments to TransLink's Pets on Transit policy are needed into the future.

EXECUTIVE SUMMARY

The Pets on Transit policy review has led management to their view that TransLink's current policy strikes a reasonable balance of providing an option for customers travelling with pets while minimizing risks of potentially unreasonable impacts to other passengers and staff. Management is recommending the current policy be maintained, with efforts made to continue to monitor industry trends and public sentiment to determine if future adjustments are needed.

PURPOSE

The purpose of this report is to summarize the outcomes and findings of the Pets on Transit policy review, provide a recommendation for the Board's consideration, and outline next steps.

BACKGROUND

Current TransLink policy allows small pets on transit if they are in a fully enclosed handheld carrier that can fit on their handler's lap. Provincially-certified service animals are allowed on transit at all times. Some pet dog owners find the current policy too restrictive and have made multiple requests to the TransLink Board of Directors since 2014 that it be amended to allow increased access. The intent of this review is to assess TransLink's current Pets on Transit policy and determine whether permitting increased access is appropriate at this time.

DISCUSSION

This review utilized a peer review, a TransLink Listens panel survey, focus groups, consultation with stakeholders and operating companies, and a risk assessment process to help assess TransLink's current policy and identify and evaluate alternative policy approaches.

Peer Agency Scan

A review of pet policies at transit agencies throughout Canada and the United States identified that TransLink's current policy is considered common practice (see attached report). Of the 25 larger transit agencies scanned, 19 (76%) have policies identical to our current policy. Six agencies (24%) have policies that permit more expanded access. Of note, Metrolinx is currently undertaking a pilot to allow uncaged dogs on board vehicles during off-peak times. The majority of agencies with policies of expanded access for pets have had them in place for many years. Staff interviews and media scans have identified that incidents of pet attacks or other impacts on passengers and other animals on board vehicles do occur from time-to-time at these agencies.

Potential Customer Impacts

TransLink completed a survey of TransLink Listens panel members in February 2018 to gather input on the level of support for and potential impacts of allowing expanded access for customers travelling with pet dogs (see attached report). A total of 1,665 responses were received and weighted to represent the socio-demographic characteristics of the region. Findings from the survey are:

- When asked if they support the *concept* of allowing uncaged dogs on transit with restrictions, 49% of respondents said they are supportive of the policy and 34% said they are opposed.
- However, when asked *specific* questions about how the policy would affect their own experience on transit, 41% of respondents said that expanding access for dogs with restrictions would negatively impact their transit experience while 22% said it would positively impact their transit experience.
- Additionally, 19% of respondents said they would use transit less often, while 10% said they would use transit more often.
- Approximately 30% of respondents indicated they are the primary caretaker of a dog.

Stakeholder Consultation and Public Input

Meetings with key internal stakeholders, including CMBC, BCRTC, and Transit Police, along with TransLink's User Advisory Committee were held to seek input on TransLink's current pet policy and potential issues and opportunities to consider with expanding access. All groups acknowledged the potential benefits of allowing expanded access for those who would like to travel with their pet. However, many key issues and challenges were raised, including: resource needs to manage additional maintenance and administrative impacts, increased risk of space management issues on board vehicles, conflicts with certified service animals, and managing impacts on customers and staff who are allergic to, or afraid of, animals. TransLink's User Advisory Committee has submitted a letter (see attached) outlining their position on expanding access for pets on transit.

Potential Financial Impacts

Expanding access for pets creates a potential risk of decreased fare revenue, if ridership declines as suggested in the TransLink Listens Survey. It also creates a potential increase in claims and liability. Minor cleaning and maintenance impacts would be covered by existing staff and processes but moderate to major cleaning and maintenance impacts would result in a proportionate increase in cost. Staff estimated that the one-time cost to transition to a policy that would allow expanded access for customers traveling with pets is anticipated to be within the range of \$125,000 - \$975,000 depending on

the complexity of the policy, the requirements on staff, and the degree of customer outreach required. The transition includes costs to develop proper protocols, train and prepare front-line staff, consult with labour representatives, develop a customer information campaign, and establish monitoring and reporting processes.

Analysis of Alternatives

The following options were considered in this review:

1. *Maintain status quo*: Continue with the current policy of allowing pets on transit in fully-enclosed, handheld crates or carriers that can fit on their handler’s lap.
2. *Provide expanded access, with restrictions*: Adjust policy to allow customers to transport certain pets – like dogs – without requiring a cage or carrier but with restrictions that may include: requiring a leash and/or muzzle, being permitted during off-peak hours only, a limit of one pet per customer, and other similar restrictions.

Input and information gathered from the activities outlined previously in this report and others was used to populate a multiple account evaluation of the options considered. Each option was assessed against a number of objectives and criteria and relative to the status quo – maintaining the current policy. The outcomes of this analysis are summarized in the table below.

Table 1: Assessment of policy options

Objective	Criteria	Option 1: Current Policy	Option 2: Expanded Access
Support regional objectives	Impact on supporting transit-oriented communities, lifestyles and convenience of transit for more people	No change	Better than today Option will allow more pet owners to travel easily throughout Metro Vancouver without relying on a private vehicle or other means.
Maximize customer experience	Impacts on customers travelling with pets	No change	Much better than today Option likely to result in increase in customer experience for riders needing to travel with pets.
	Impacts on customers travelling without pets	No change	Worse than today Option increases likelihood for a negative customer experience for a potentially large portion of riders, which may impact ridership over time.
Maximize safety and well-being of passengers and staff	Exposure to allergens, smells, potential for conflicts between pets or pets and passengers/staff	No change	Worse than today Option increases likelihood for customer and staff exposure to allergens and smells, potential decrease in overall cleanliness, possibility of conflicts between pets, passengers, and/or staff, and exclusion of customers afraid of dogs or other pets.

Maintain system efficiency	Potential for increased crowding, space management issues on board vehicles, service disruptions, and other similar impacts	No change	Worse than today Option increases likelihood for space management and crowding issues on board vehicles, possible rider displacement, increased dwell time, and inability of automated train system to rapidly respond to loose dogs or other pets on tracks.
Minimize administrative costs	Administrative costs and effort required to implement & deliver, impact on claims, etc.	No change	Worse than today Option will incur additional costs to implement and manage to support staff training, maintenance, communication, and other administrative requirements.

Permitting expanded access for customers travelling with pets, even with restrictions like requiring a leash or restricting travel to off-peak times, would help reduce mobility barriers for those customers needing to travel with pets and contribute to supporting a transit-oriented region. However, the magnitude of these benefits is likely to be outweighed by the potential negative impacts that expanded access would have on other customers who make up a larger segment of the riding population. Additionally, the assessment indicates that by allowing expanded access – even with restrictions – the likelihood of issues with and impacts on considerations like safety and well-being, system efficiency and others is at a level that is greater than under the existing policy.

RECOMMENDATION

Based on available information, management’s review suggests that TransLink’s current policy is aligned with industry practice and strikes an optimal balance of providing an option for customers travelling with pets to use transit, without unreasonable negative impacts on other transit riders, staff, and the transit system. Management recommends that the current policy be maintained, with efforts made to continue to monitor industry trends and public sentiment to determine if adjustments are needed into the future.

ATTACHMENTS

- A) Pets on Transit Policies – Peer Agency Scan (as of August 2018)
- B) Pet Dogs on Transit TransLink Listens Panel Survey Final Report (March 2018)
- C) Letter from TransLink’s User Advisory Committee (November 2018)

PETS ON TRANSIT POLICIES – PEER AGENCY SCAN

Last Updated: August 2018

City/Region	Agency (*)	Pet dog permitted on vehicle	Pet dog permitted in carrier	Pet dog permitted on leash	Pet dog permitted during off-peak only	Pet dog requires valid fare	Consistent with TransLink Policy
Atlanta, GA	MARTA	Yes	Yes	No	No	No	Yes
Boston, MA	MBTA	Yes	Yes	Yes	Yes	No	No – less restrictive
Calgary, AB	Calgary Transit	Yes	Yes	Yes	No	No	No – less restrictive
Chicago, IL	CTA	Yes	Yes	No	No	No	Yes
Cleveland, OH	RTA	Yes	Yes	No	No	No	Yes
Dallas, TX	DART	Yes	Yes	No	No	No	Yes
Denver, CO	RTD	Yes	Yes	No	No	No	Yes
Edmonton, AB	ETS	Yes	Yes	No	No	No	Yes
Los Angeles, CA	LA Metro	Yes	Yes	No	No	No	Yes
Minneapolis, MN	Metro Transit	Yes	Yes	No	No	No	Yes
Montreal, QC	STM	Yes	Yes	No	No	No	Yes
New York, NY	MTA	Yes	Yes	No	No	No	Yes
Oakland, CA	BART	Yes	Yes	No	No	No	Yes
Ottawa, ON	OC Transpo	Yes	Yes	No	No	No	Yes
Phoenix, AZ	Valley Metro	Yes	Yes	No	No	No	Yes
Portland, OR	Tri-Met	Yes	Yes	No	No	No	Yes
Sacramento, CA	SRTD	Yes	Yes	No	No	No	Yes
Salt Lake City, UT	UTA	Yes	Yes	No	No	No	Yes
San Francisco, CA	SFMTA Muni	Yes	Yes	Yes	Yes	No	No – less restrictive
Seattle, WA	King County Metro	Yes	Yes	Yes	No	Yes	No – less restrictive
Seattle, WA	Sound Transit	Yes	Yes	No	No	No	Yes
Toronto, ON	TTC	Yes	Yes	Yes	Yes	No	No – less restrictive
Toronto, ON	GO Transit (**)	Yes	Yes	Yes	Yes	No	No – less restrictive
Victoria, BC	BC Transit	Yes	Yes	No	No	No	Yes
Winnipeg, MB	Winnipeg Transit	Yes	Yes	No	No	No	Yes

Notes:

(*) All agencies listed here allow certified service and guide animals on board vehicles at all times.

(**) Metrolinx is currently undertaking a pilot to allow leashed dogs on board vehicles during off-peak periods. The pilot will run between July 20 and October 15, 2018.



Pet Dogs on Transit Survey Final Report

March 2018

Prepared by:
NRG Research Group



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Vancouver, BC V6E 4A6

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Background

- TransLink conducted a survey with residents of Metro Vancouver who belong to the TransLink Listens panel. The purpose of the survey was to gather feedback on potentially amending TransLink's pet policy to allow uncaged dogs on transit, in contrast to the current policy which allows certified assistance animals, as well as small pets in secure hand-held carriers that can fit on their handler's lap.
- The specific research objectives were as follows:
 - Determine the incidence of dog ownership among passengers as well as the incidence and frequency of passengers taking animals on board transit under the current policy regarding pets on transit.
 - Collect feedback on possible restrictions that might be put in place if uncaged dogs were allowed on transit.
 - Gauge the impacts of this potential change in policy, including levels of support or opposition as well as likelihood to change ridership patterns with or without a pet.
 - Understand how perspectives on this issue vary by demographic group and types of transit usage.
- The survey was conducted using the *TransLink Listens** online panel from January 29 through February 5, 2018. The results were weighted to reflect the known age, gender, region, and main mode of transportation parameters of the Metro Vancouver region.**

*Note: TransLink Listens panelists' responses may differ from random general population surveying, even with weighting, because of their deeper engagement with transit and transportation.

**Known from a combination of census data and prior demographic studies.

Current Use of Transit and Dog Ownership

- Three in ten participants (29%) are either the primary or partial caretaker of a dog, consistent with a previous study conducted by TransLink in 2015.
- One in ten participants (11%) have ever taken a pet on board a transit vehicle in Metro Vancouver, while nine in ten (89%) have never done so.
- Among those who have taken a pet on board a transit vehicle, most travel by transit very infrequently with a pet. Three-quarters (75%) rarely or never take a pet on transit, and another two in ten (18%) travel with a pet on transit at least yearly but not as often as monthly. Only 1% report traveling by transit with a pet weekly or more often.

Opinions on Potential Changes to the Pets on Transit Policy

- Just over one-half (53%) of participants believe that their transit use would not change if uncaged dogs were allowed on transit. One-quarter (26%) think that they would use transit less frequently, while 9% believe that they would use transit more often if uncaged dogs were permitted on transit vehicles.
- However, when asked to consider the impact on their transit use of allowing uncaged dogs on transit *with the policy restrictions of their choice*, two-thirds (66%) of participants said that their use of transit would not change, 10% would use transit more and 19% would use transit less.

Opinions on Potential Changes to the Pets on Transit Policy (continued)

- Restrictions that are supported by some participants include:
 - **Restraints** such as a leash (81%), muzzle (39%), or dog jacket (13%)
 - **Limits on numbers of dogs** whether a limited number of uncaged dogs per handler (65%) or a limited number of uncaged dogs per transit vehicle (45%)
 - **Limits on times or vehicles** such as only when vehicle has extra space (51%), in a designated dog area such as a dedicated SkyTrain car (43%), during off-peak times (38%), on SkyTrain only (7%), or on bus only (4%)
 - **Other restrictions** such as requiring a fare for uncaged dogs (28%) or proof of completed training (23%)
- One-half (49%) of participants would support a pet policy allowing uncaged dogs on transit with their chosen restrictions in place, with 28% supporting and 21% strongly supporting this policy. On the other hand, one-third (34%) would oppose this policy even with their chosen restrictions in place, with 14% opposing and 20% strongly opposing.
 - Key reasons for support include ease of travel with pets to venues such as the veterinarian or dog park (26%) and encouraging dog owners to use transit instead of private vehicles (12%). Some reasons for support also include a note of concern about the impact of allowing dogs, such as aggravation of passengers' allergies or concerns about the dog's behaviour or hygiene.
 - Commonly-cited reasons for opposition include concerns about the unpredictability of dog behaviour including the possibility for aggression (32%), as well as worries about allergies (28%) or fears of dogs (18%), and concerns about dog owners being irresponsible (20%).

Opinions on Potential Changes to the Pets on Transit Policy (continued)

- Two-thirds (68%) of participants say it would not change their likelihood of travelling with a pet if the pet policy was amended to allow uncaged dogs with some restrictions; two in ten (20%) would be more likely to travel with a pet, while 6% would be less likely to travel with a pet.
- Four in ten participants (41%) believe that they would be less satisfied with their transit experience if uncaged dogs were permitted on transit with some restrictions. Just over two in ten (22%) say they would be more satisfied, while one-third (32%) say the policy change would have no impact on their satisfaction with their transit experience and 5% are unsure about the impact.
- More than four in ten participants (43%) would support a change to the pet policy allowing uncaged assistance dogs such as emotional support or therapy dogs even though these animals do not obtain provincial certification in the manner of guide dogs. One-third (34%) would oppose a policy change allowing uncaged uncertified assistance dogs, while one-quarter (23%) would neither support nor oppose such a change.

Method

Data Collection & Weighting

Participants

- Active TransLink Listens panelists were invited to complete a survey regarding a review of TransLink's policy regarding pets on transit.
- A soft launch was conducted on Monday, January 29, 2018 with 400 panelists. The full launch began later the same day. In all, 2,967 panelists were sent an invitation to participate.
- One reminder email was sent on Thursday, February 1. The survey was open until the morning of Monday, February 5.
- Out of the 2,967 panelists who were invited to participate, 1,665 completed the survey (for a final completion rate of 56%).
- The data in this study were weighed to more closely represent the age, gender, and region profile of Metro Vancouver residents as well as main mode of transportation. The weighting methodology is described in the Appendix on Weighting.

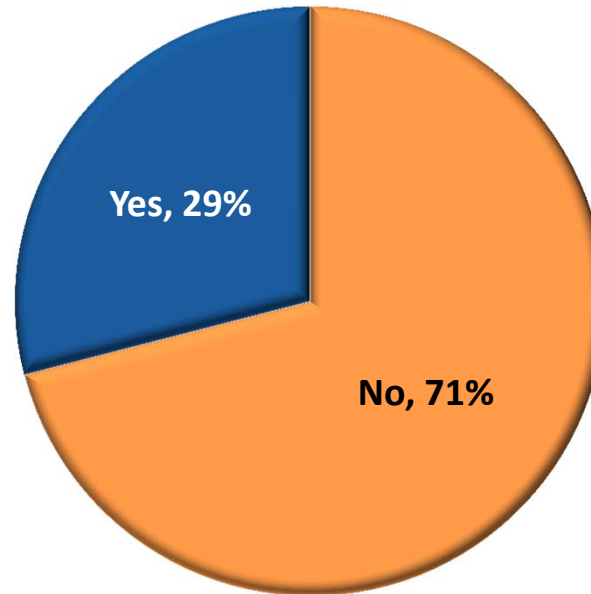
Results

Current Pet Dog Ownership and Use of Transit

Note: In some cases, the summary statistics (e.g., the total percent agree) when compared to the sum of the individual percentages may differ by +/- 1 percentage points. These differences are due to rounding.

Dog Caretakership

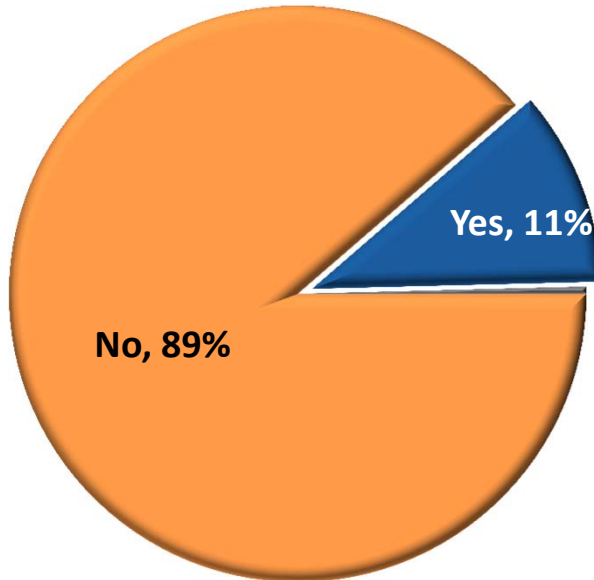
Q1. Are you the partial or primary caretaker of a dog?
(n=1,665)



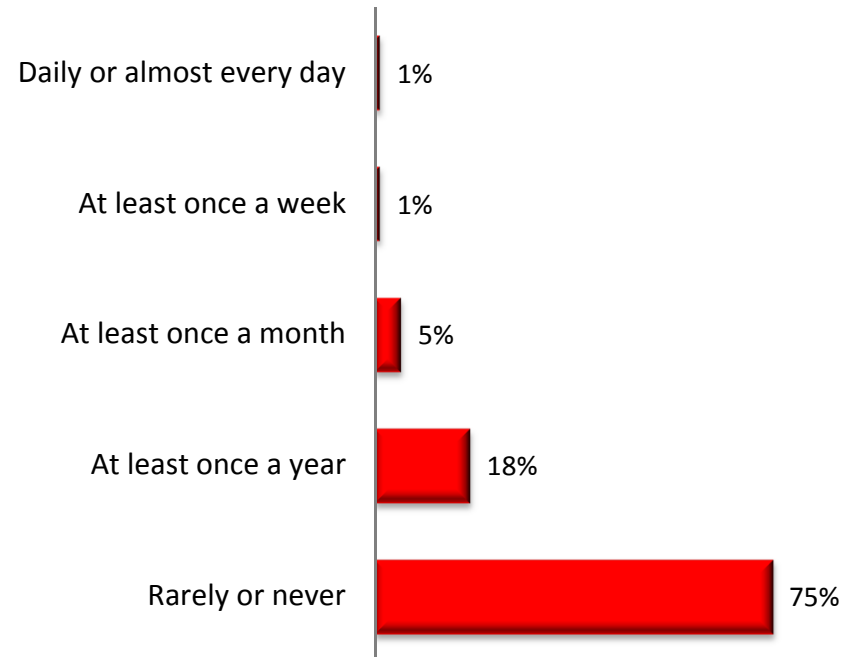
- Roughly three in ten (29%) are the caretaker of a dog, either on a primary or partial basis.
- Those whose main mode of transportation is transit are notably less likely to have a dog (18%) than those who use any other mode (e.g., Single Occupant Vehicles, 34%). Similarly, those with access to a private vehicle (31%) are more likely than those without vehicle access (19%) to be caretaker to a dog.

Travel with Pet Dog Under Current Pet Policy

Q2a. Have you ever taken a pet on board a transit vehicle in Metro Vancouver? (n=1,665)



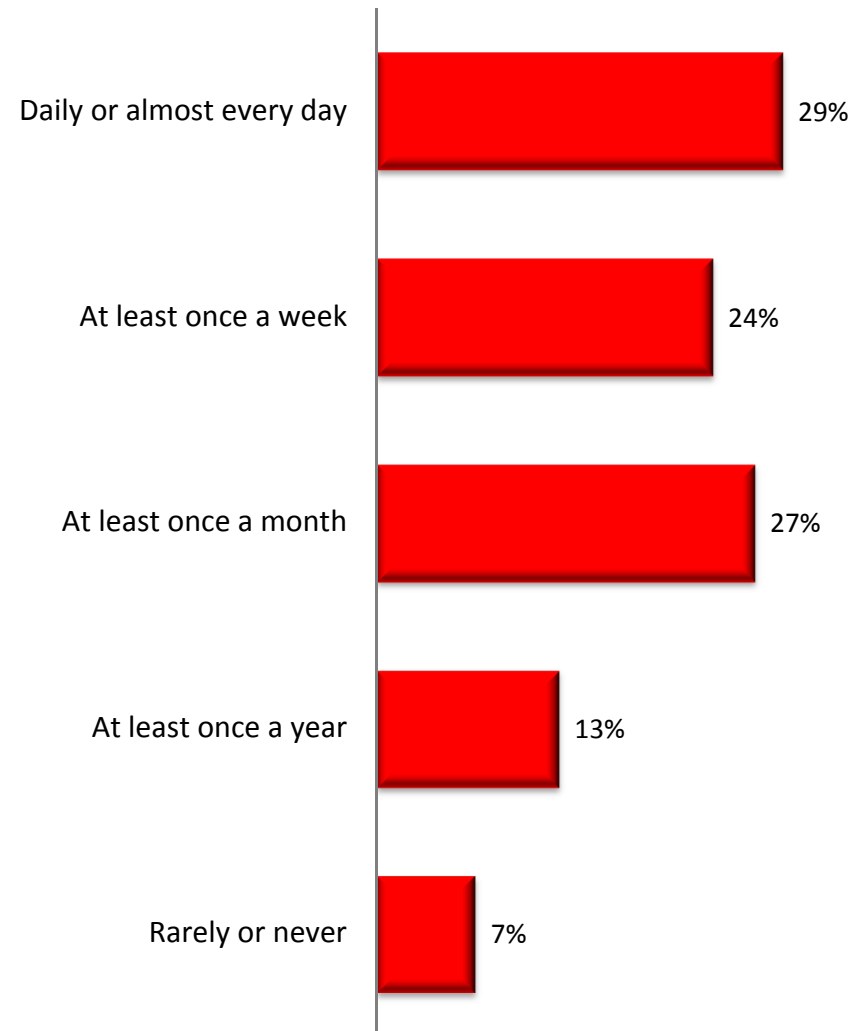
Q2b. How often do you take a pet on board a transit vehicle in Metro Vancouver? (n=217)



- About one in ten (11%) say they have taken a pet on board a transit vehicle in Metro Vancouver.
- Perhaps not surprisingly, those who use transit as their main mode of transportation (18%) are more likely than those using private vehicles (8%) to have taken a pet on board a transit vehicle, as are those who do not have access to a private vehicle (20%) as compared to those who do have access to a vehicle (9%).
- Among those who have ever taken a pet on board a transit vehicle in Metro Vancouver, most do so very infrequently.
- Most (75%) say they rarely or never take a pet on board a transit vehicle, while most of the rest (18%) do so less than monthly.

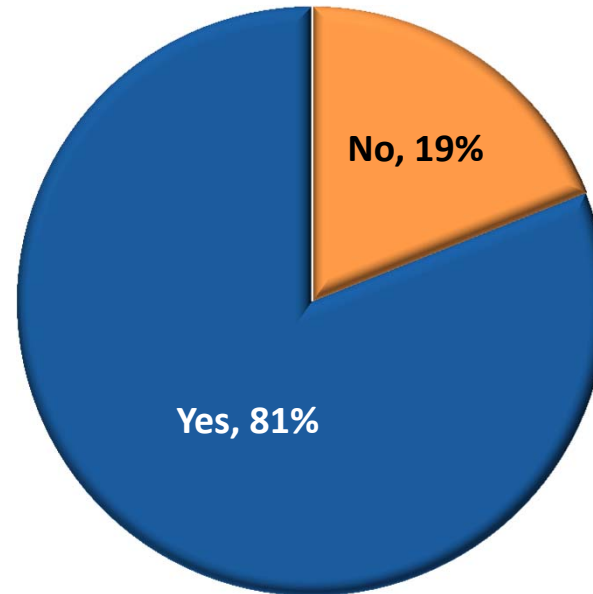
Q10. How often do you use transit? (n=1,665)

- Most of the study participants are at least moderately frequent transit users.
- Three in ten (29%) use transit daily or almost every day, while one-quarter (24%) use transit at least weekly and another one-quarter (27%) use transit at least monthly.



Access to Private Vehicle

Q11. Do you have access to a vehicle for your own use on a regular basis? (n=1,665)



- Most residents (81%) have access to a private vehicle on a regular basis for their own use, while two in ten (19%) do not.
- Of note, those *without* access to a private vehicle are more likely to have taken a pet on board a transit vehicle than those with access (20% versus 9%).

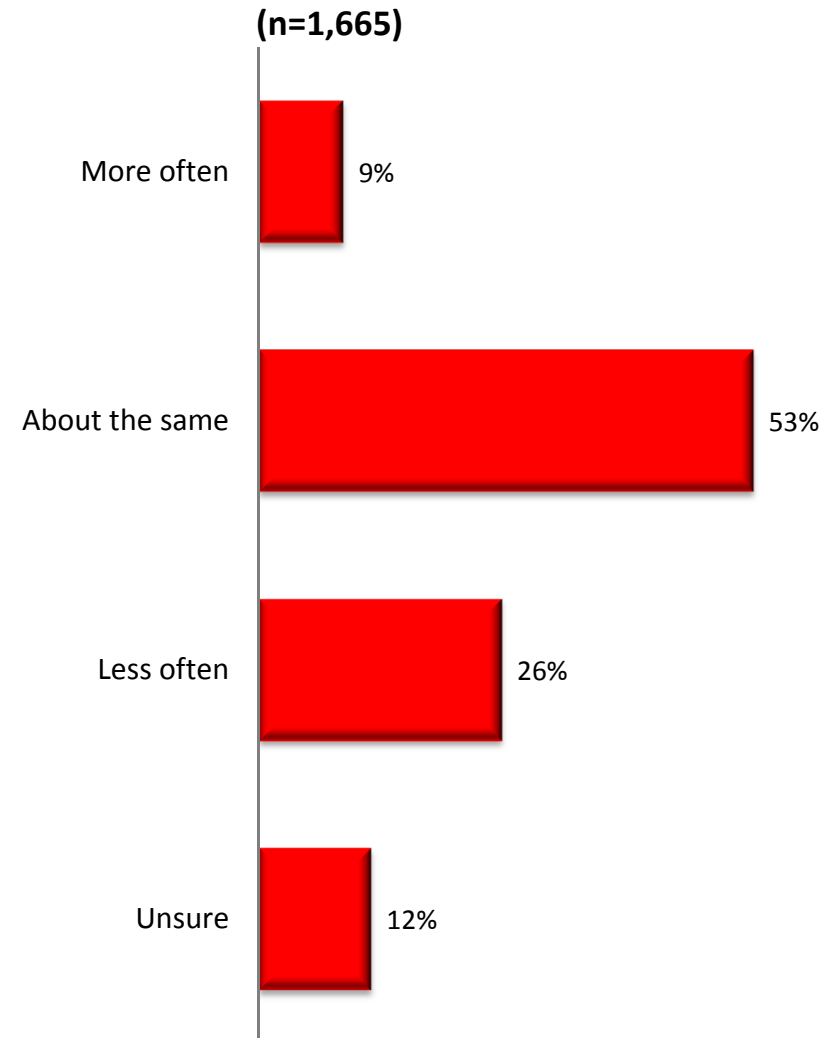
Results

Impacts and Opinions Regarding Potential Changes to Pet Policy

Anticipated Impact of Uncaged Dogs on Frequency of Transit Use

- More than one-half of panelists (53%) say that a change in pet policy allowing uncaged dogs would not change their frequency of transit use.
- About one-quarter (26%) say they would use transit less often if uncaged dogs were allowed, whereas one in ten (9%) say they would travel by transit more often if uncaged dogs were permitted. Another one in ten (12%) are unsure whether this policy change would impact their transit usage.
- Dog caretakers (22%) are more likely than non-caretakers (4%) to say they would travel by transit more frequently if uncaged dogs were allowed. Those without dogs (32%), on the other hand, are more likely than dog owners (14%) to say this would decrease their transit usage.

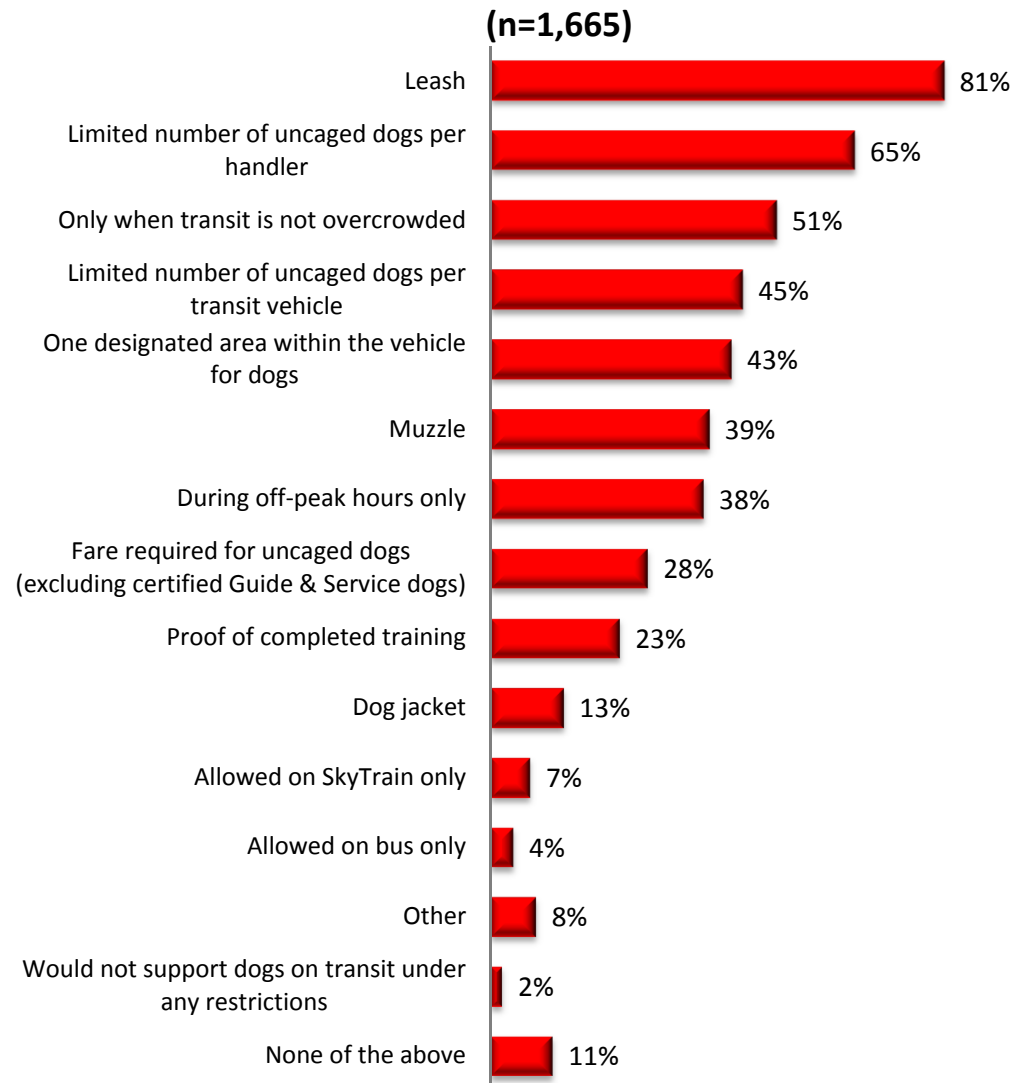
Q3. If dogs not contained in a hand-held carrier (“uncaged dogs”) were allowed on transit, would it affect how often you use transit? I would use transit...



Support for Potential Restrictions on Uncaged Dogs on Transit

- If uncaged dogs were to be allowed on transit, eight in ten (81%) would support a rule mandating that all dogs be on a leash.
- Other commonly supported restrictions include a limit on the number of uncaged dogs, whether per handler (65%) or per transit vehicle (45%). One-half (51%) support restricting uncaged dogs to vehicles that are not already overcrowded, and 43% would support restricting uncaged dogs to a designated dog area (such as a dedicated SkyTrain car or a section of the bus).
- Roughly four in ten each would support mandatory muzzles (39%) or restricting uncaged dogs to off-peak hours only (38%).
- About three in ten (28%) would support a mandatory fare for uncaged dogs other than certified Guide and Service dogs, and nearly one-quarter (23%) would support a restriction requiring proof of completed training.
- About three in ten (28%) would support a mandatory fare for uncaged dogs other than certified Guide and Service dogs, and nearly one-quarter (23%) would support a restriction requiring proof of completed training.
- About one in ten (11%) would not support any of the restrictions, and 2% specifically added that they would not support pet dogs on transit regardless of any restrictions.

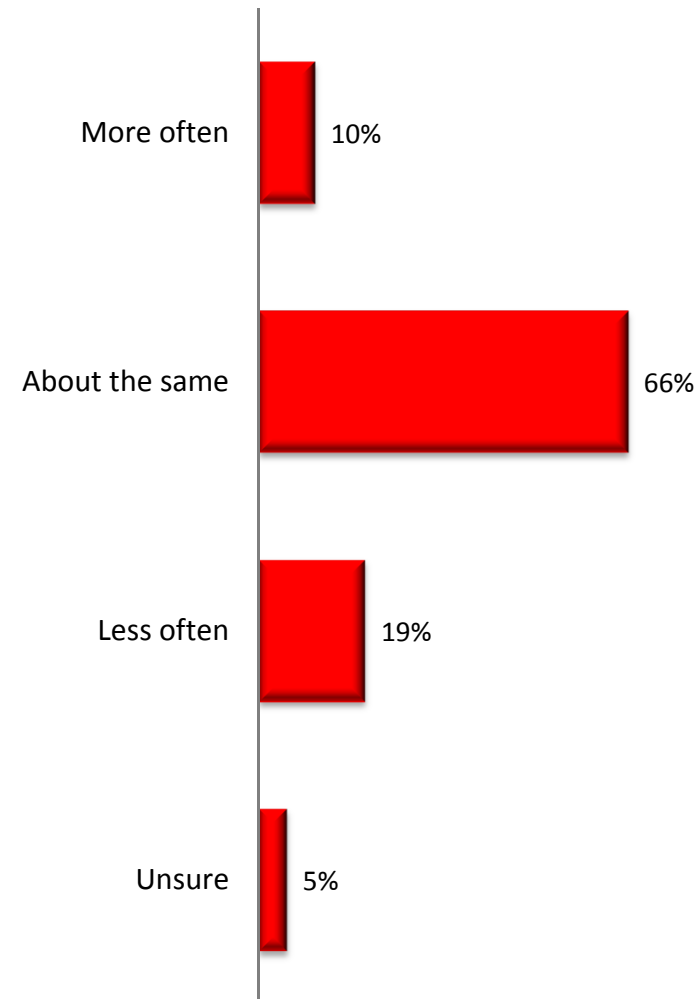
Q4. If uncaged dogs were allowed on transit, which of the following restrictions would you support?



Anticipated Impact of Uncaged Dogs on Frequency of Transit Use

- Adding restrictions to an uncaged dog policy appears to lessen the impact of a policy change on transit ridership, with two-thirds (66%) saying their transit use would stay about the same if uncaged dogs were allowed on transit with the restrictions they support, compared with 53% under an unrestricted policy.
- Two in ten (19%) still say they would be likely to use transit less often, down from the 26% who gave the same response assuming there would not be restrictions on a policy allowing uncaged dogs on transit.
- Those who have a dog in their care are more likely than those without a dog say they would travel more frequently (25% versus 4%); those without a dog are more likely to say they would take transit less often (21% versus 13% of dog owners).

Q5. If uncaged dogs were allowed on transit *with the restrictions you support*, would it affect how often you use transit? I would use transit... (n=1,665)

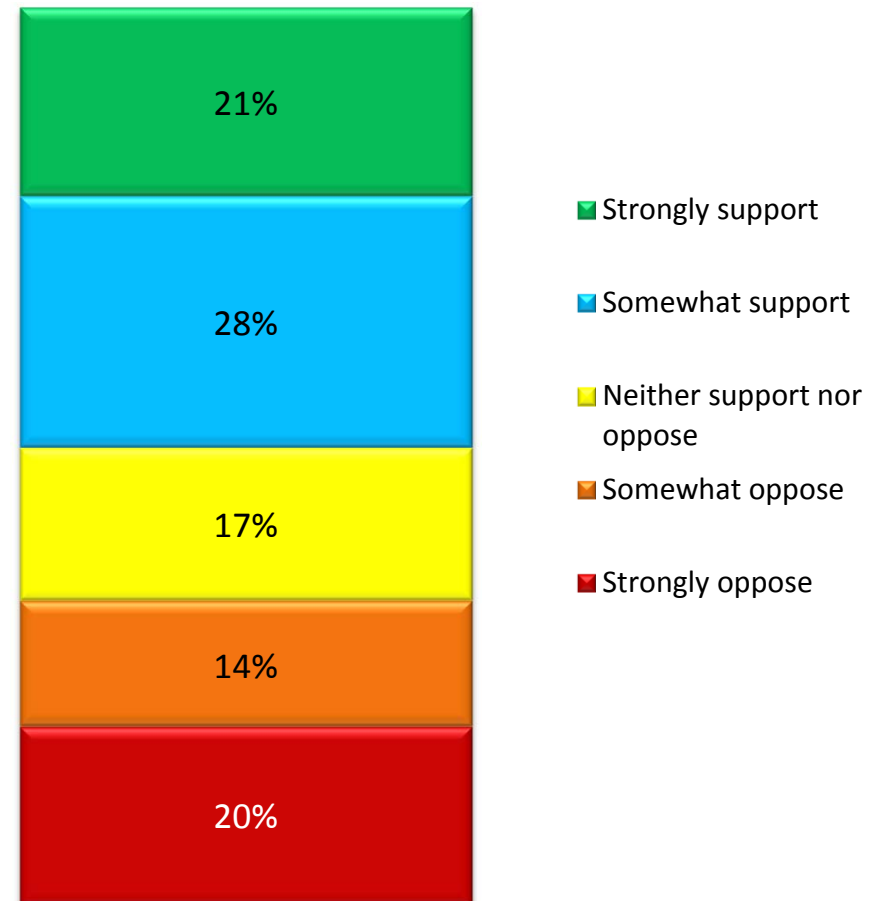


Support or Opposition to Potential Change to Pets on Transit Policy

- In all, roughly one-half (49%) would support allowing uncaged dogs on transit with the restrictions that they deem appropriate.
- On the other hand, one-third (34%) would oppose such a policy even with their chosen restrictions.
- Another 17% would neither support nor oppose allowing uncaged dogs on transit with restrictions.
- Those who use transit daily are more likely than less frequent riders to express strong feelings one way or another (24% strongly support and 27% strongly oppose).
- Dog caretakers (72%) are far more likely to support allowing uncaged dogs on transit with restrictions than those who do not take care of a dog (40%).

Q6a. Do you support or oppose allowing uncaged dogs on transit with the restrictions in place that you support? (n=1,665)

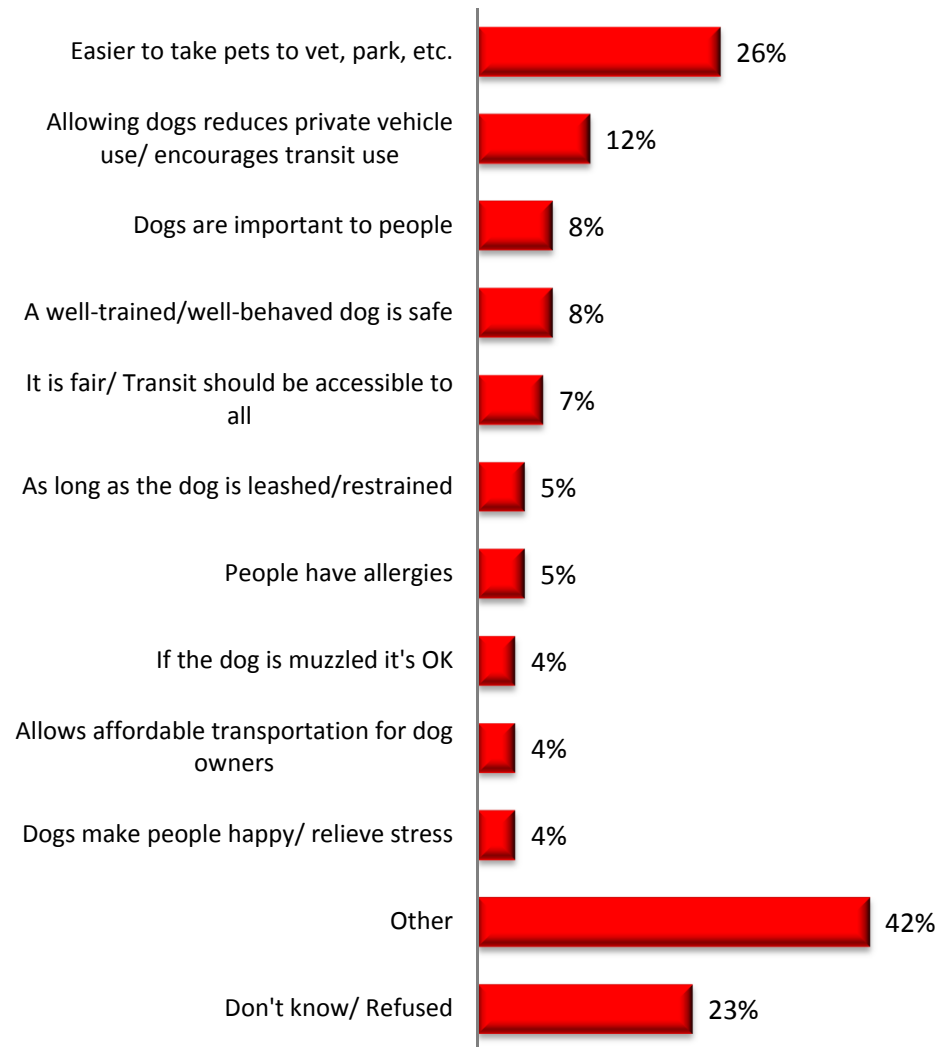
Total Support: **49%**
Total Oppose: **34%**



Reasons for Support of Uncaged Dogs on Transit

- Among those who support a potential policy allowing uncaged dogs on transit, one-quarter (26%) say that the policy would make it easier to take pet dogs to pet-friendly venues such as the vet or the park.
- One in ten (12%) would support such a policy because they believe that allowing dogs would reduce private vehicle use and encourage transit use.
- Other common reasons are that dogs are important to people (8%), that a well-trained and well-behaved dog does not pose any hazard (8%), and that transit should be accessible to all including dog owners and their pets (7%).
- Five percent reiterate that leashes or similar restraints would make this policy feasible, and 4% make a similar comment regarding muzzles.
- A number of comments made in support of the potential policy include a potential concern; for instance, despite being supportive of the policy change 5% mention a concern for passengers with allergies.

Q6b. Why do you feel this way? – Support or Strongly Support (n=765)

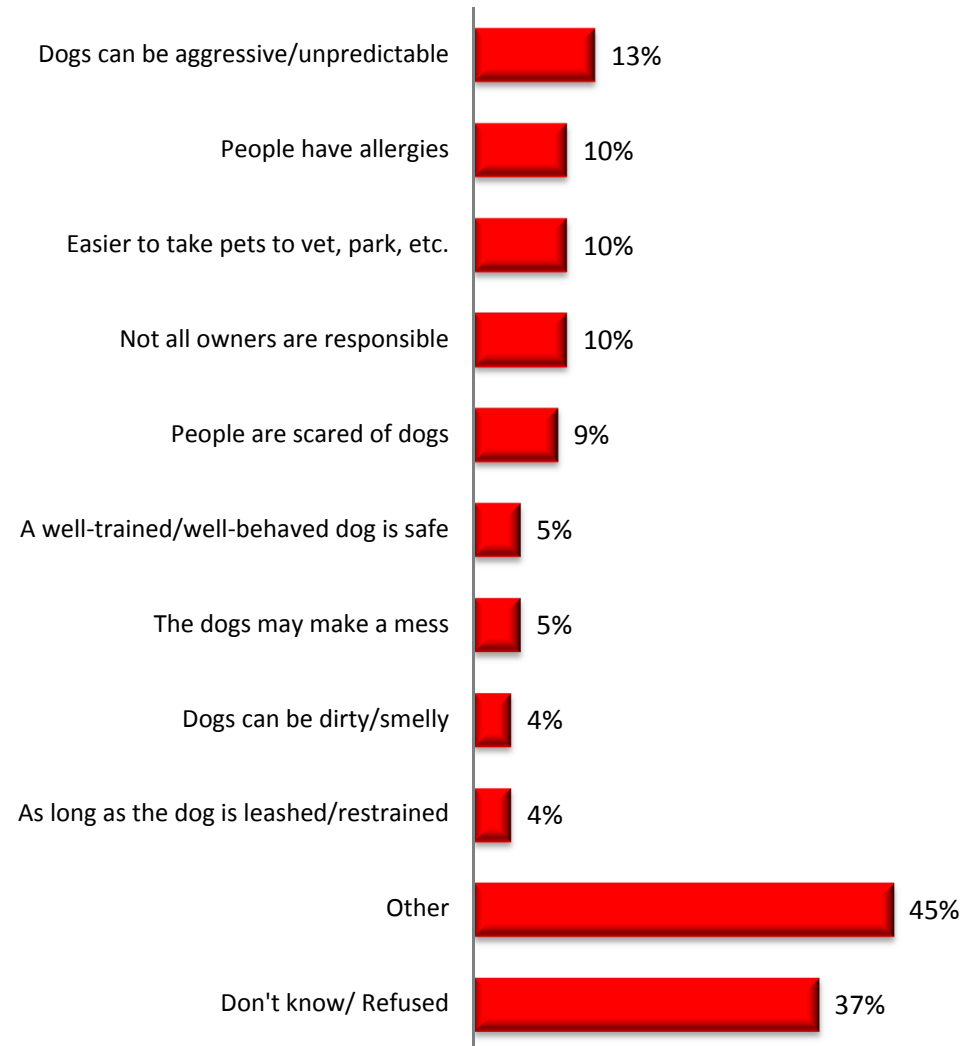


Base: Those who support or strongly support allowing uncaged dogs on transit
 Those reasons mentioned by fewer than 4% are included in "other" category
 Note: Multiple mentions allowed; percentages may not add to 100%

Reasons for Neither Supporting nor Opposing Uncaged Dogs on Transit

Q6b. Why do you feel this way? – Neither Support nor Oppose (n=317)

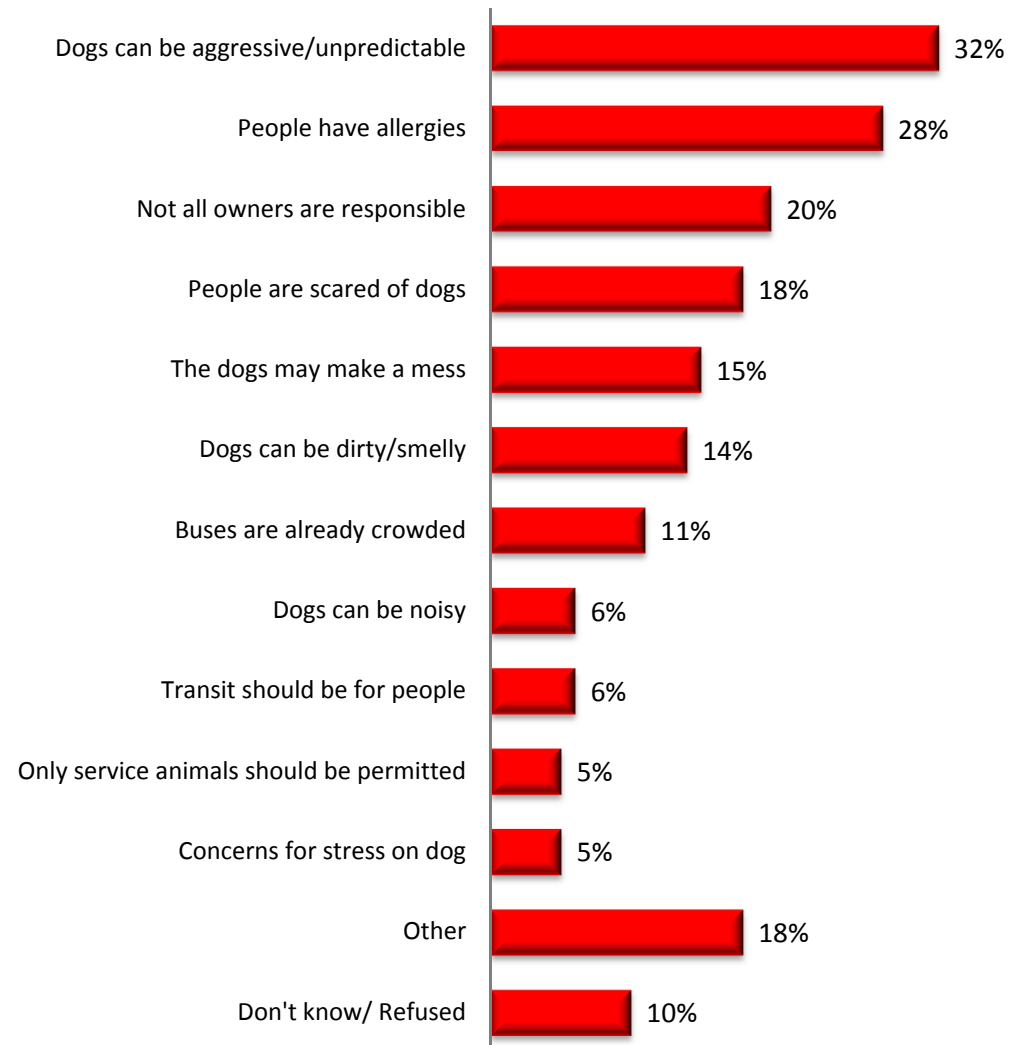
- Responses tend to be quite varied when it comes to those who neither support nor oppose the potential policy change allowing uncaged dogs. These comments often include possible benefits as well as possible drawbacks to allowing uncaged dogs on transit vehicles.
- The most common reasons shared for being neutral to the proposed policy change are that dogs can be unpredictable or aggressive (13%), concern for people with allergies (10%), that the policy would make it easier to take pet dogs to places like the vet or the park (10%), and a concern that not all pet owners can be trusted to be responsible (10%).



Reasons for Opposition to Uncaged Dogs on Transit

- The two most common reasons shared for opposing such a policy include a concern that that dogs can be unpredictable or aggressive (32%) and a concern for people with allergies (28%).
- Two in ten (20%) are worried that not all pet owners will be responsible enough, and nearly the same proportion (18%) are concerned for passengers who are afraid of dogs.
- Dog hygiene is also a concern of note, with 15% worrying that dogs may make a mess or have an accident on the transit vehicle, and 14% saying that dogs can be dirty or smelly.
- Concerns about space for human passengers are also fairly common, with 11% saying that buses are already crowded and 6% believing that transit should be for people rather than animals.

Q6b. Why do you feel this way? – Oppose or Strongly Oppose (n=583)

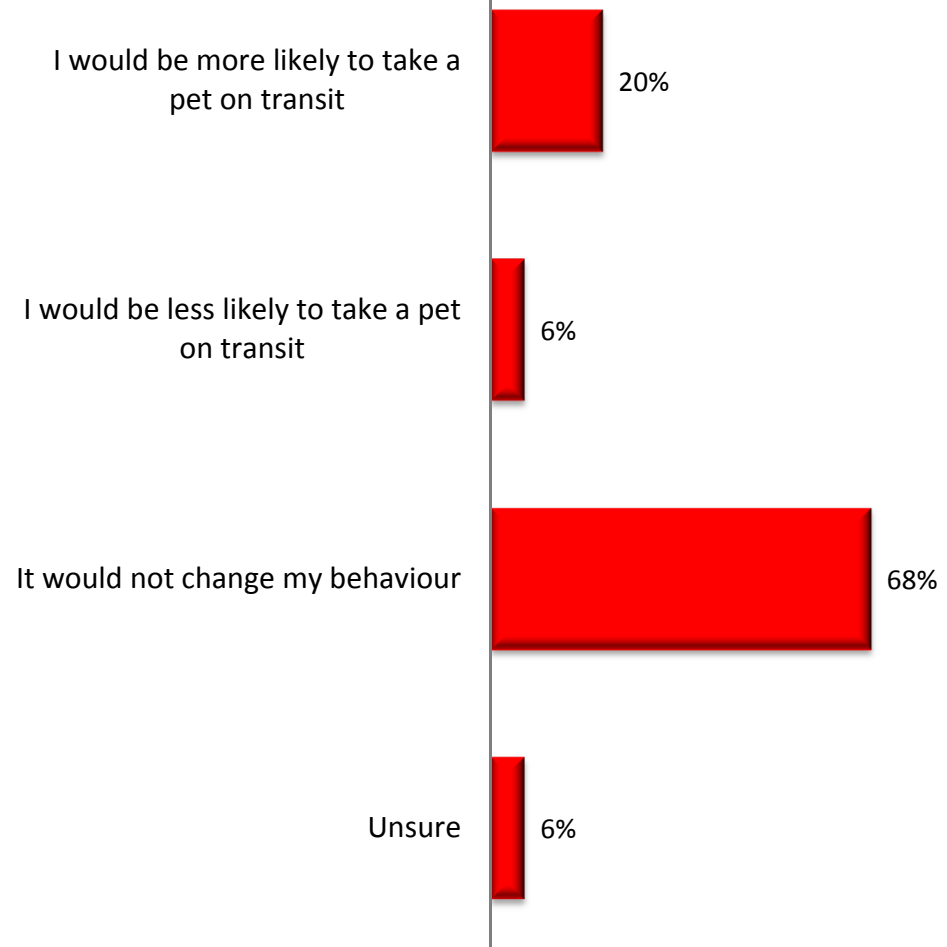


Anticipated Impact of Uncaged Dogs on Likelihood to Travel with Pet on Transit

Q7. If TransLink's pet policy was amended to allow uncaged dogs with some restrictions, would it impact your likelihood of travelling with a pet on transit?

(n=1,665)

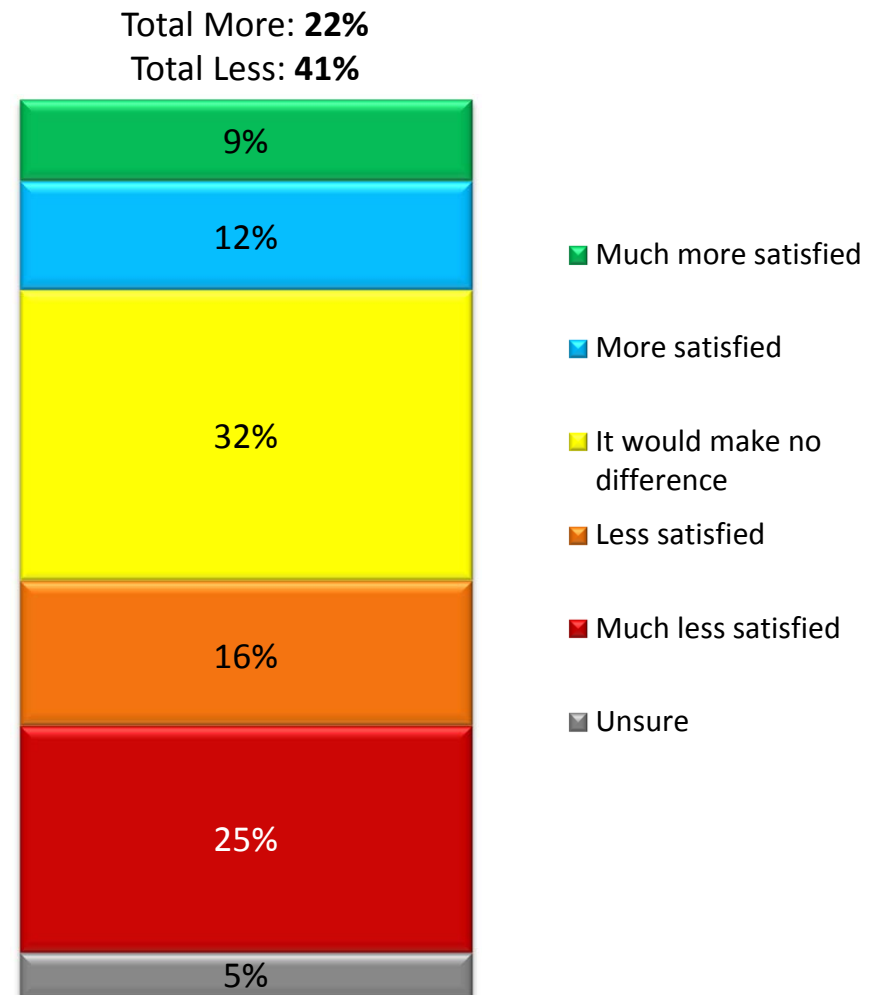
- Two-thirds (68%) would be neither more nor less likely to travel with a pet on transit if uncaged dogs were to be permitted on transit with some restrictions.
- Two in ten (20%) say they would be more likely to travel with a pet, while 6% would be less likely to take a pet on transit if uncaged dogs were allowed.
- Not surprisingly, those who take care of a dog (47%) are much more inclined to say they would be more likely to take a pet on transit than those without a dog (9%).



Anticipated Satisfaction with Transit Experience if Uncaged Dogs Permitted

- Despite moderate levels of support for a policy allowing uncaged dogs, four in ten (41%) say that they would be less satisfied with their transit experience if uncaged dogs were permitted on transit.
- One-third (32%) do not anticipate a change in their satisfaction levels, while just over two in ten (22%) believe they would be more satisfied with their transit experience should uncaged dogs be allowed on transit with some restrictions.
- Dog caretakers are more likely to say they would be more satisfied than those who do not care for a dog (43% versus 13% more satisfied). Similarly, those who are not caretakers of a dog are more likely to say they would be less satisfied than those who are caretakers of a dog (49% versus 20% less satisfied).

Q8. Would you be more or less satisfied with your transit experience if uncaged dogs with some restrictions were allowed on transit? (n=1,665)

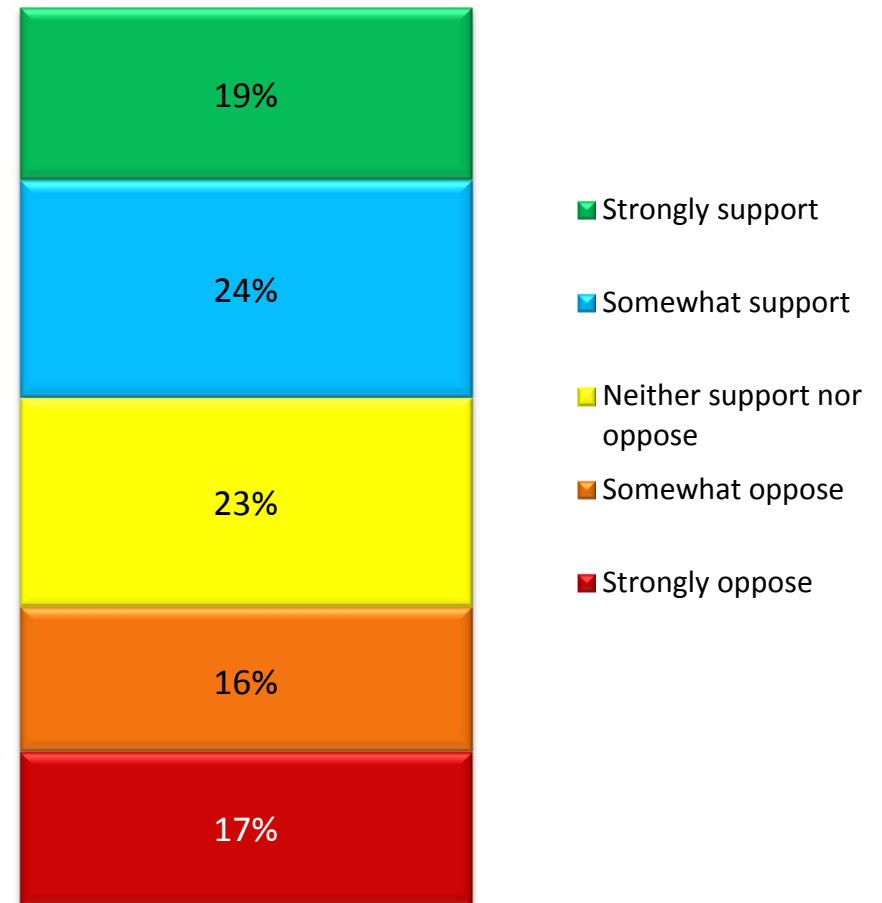


Support or Opposition to Allowing Uncaged Uncertified Service Dogs

- Upon confirmation that service animals such as emotional support or therapy dogs do not obtain provincial certification and are therefore subject to the current pet policy, 43% would support a change to allow uncertified service animals to travel on transit outside of a cage and 34% are opposed.
- Another one-quarter (23%) would neither support nor oppose such a policy change.
- Dog caretakers (61%) are far more likely to support such a policy change than those without a dog (36%).

Q9. Do you support or oppose changing the policy to allow uncertified Service Dogs on transit outside of a cage? (n=1,665)

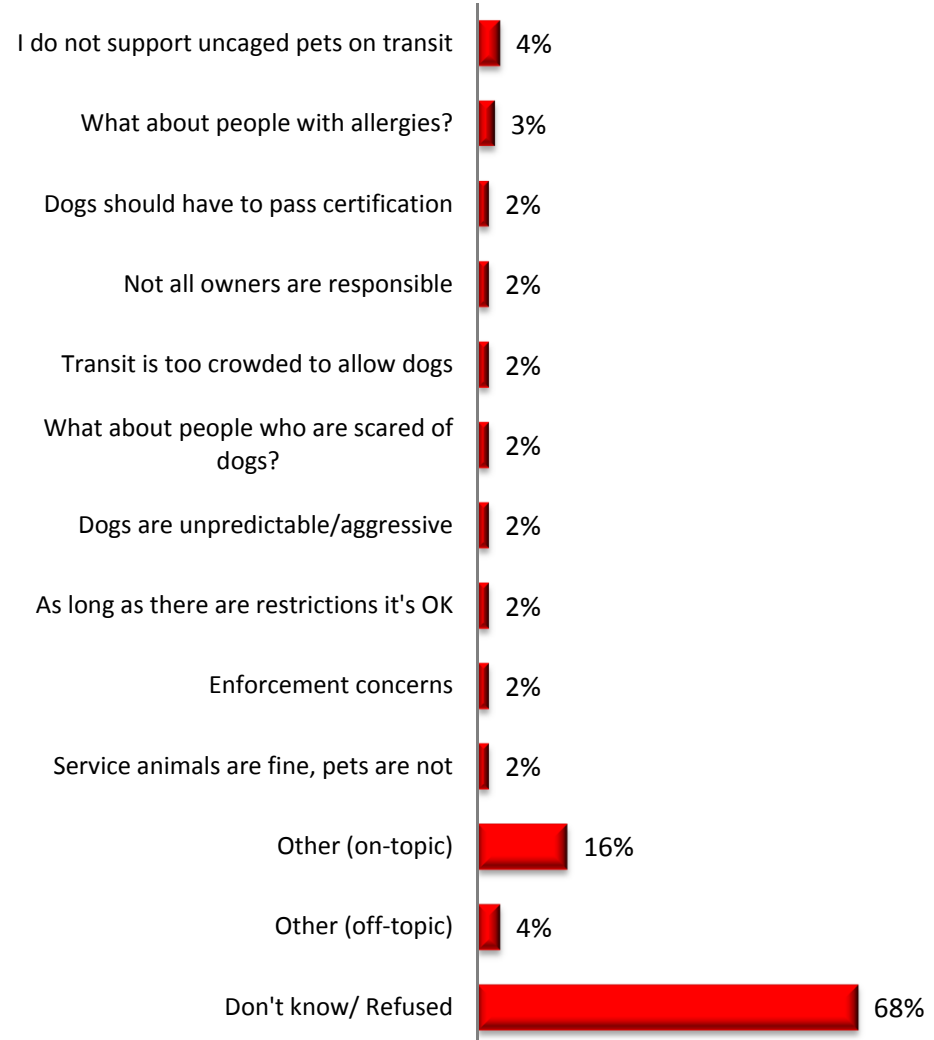
Total Support: **43%**
Total Oppose: **34%**



Other Comments Regarding Pet Policy on Transit

- The majority (68%) have no further comment on any of the topics covered in the survey.
- Among the comments shared, the two most common are a statement of opposition to a policy allowing uncaged pets on transit (4%) and a concern for people with allergies (3%).
- A number of other comments have to do with possible restrictions to an uncaged dog policy, such as passing certification (2%), or comments that such a policy would be acceptable with restrictions (2%).
- A few others express concerns about the impact of allowing uncaged dogs on transit, such as irresponsible owners (2%) or crowding on transit (2%).

QFeedback. Just before we finish, is there anything else you would like to share with us on any of the topics covered in this survey? (n=1,665)



Appendix

Demographics

Appendix – Demographics

Main Mode of Transportation	Unweighted (n=1,665) %	Weighted (n=1,665) %
Single-Occupancy Vehicle	23	49
Rideshare	10	18
Transit	52	26
Other (including walk, cycle, etc.)	15	7

Region	Unweighted (n=1,665) %	Weighted (n=1,665) %
City of Vancouver (including UEL)	36	27
Burnaby/ New Westminster	15	13
South of Fraser	27	38
Northeast	12	13
North Shore	8	8
Outside Metro Vancouver (including Abbotsford and Mission)	1	1

Appendix – Demographics

Gender	Unweighted (n=1,665) %	Weighted (n=1,665) %
Male	53	49
Female	45	49
Transgender	<1	<1
Other	<1	<1
Refused	2	2

Age	Unweighted (n=1,665) %	Weighted (n=1,665) %
19-24	3	5
25-34	10	21
35-44	15	16
45-54	21	24
55-64	24	16
65 or older	27	19

Appendix

Weighting

Rim Weighting (iterative proportional fitting)

- Weight parameters were developed for the entire dataset of completed surveys.
- A multi-step process called Rim Weighting (or iterative proportional fitting) was employed to ensure that weighting by four separate factors (i.e., age, gender, region, and main mode of transportation) results in as close a representation of the age, gender, region, and main transportation mode profile of Metro Vancouver residents as possible.
- In this process, weights are applied to bring the distribution of the first data parameter (age) in line with those in the target parameter. A second weight is then applied to correct for the second data parameter (gender), followed by corrections for the remaining parameters (region and main mode of transportation). This process is repeated until the distributions of each factor is in line with the target parameters.
- Details of the four weight factors can be found on the next slide.

Census Gender, Age, and Region weights

- Using data from the most recent census, the appropriate target proportions were determined for residents of Metro Vancouver pertaining to:
 - Gender (male and female)
 - Age groups (19-34, 35-54, and 55+)
 - Regions (Vancouver, North Shore, North East, Burnaby/New Westminister, and South of Fraser).
- The obtained proportions for those same parameters were then calculated based on the survey results.
- By dividing the obtained proportions into the parameter proportions, weights for each group were obtained. Each case was up- or down-weighted in accordance with its under- or over-representation in the sample.

Correcting for Main Mode of Transportation

- Parameters for Main Mode are obtained using the results of a prior omnibus study, based on residents in the Metro Vancouver region as a whole.
- Using these parameters, weighting factors are calculated for each mode after the other three weights by gender, age, and region have been applied.
- Because of the over-representation of transit users on *TransLink Listens*, and the under-representation of vehicle users, particularly those whose main mode is to drive alone (SOV), this is an important correction to make when extrapolating to all residents of Metro Vancouver.

Appendix

Survey Document

Dogs on Transit: TLL Survey Final

Introduction

TransLink's current pet policy allows pets on transit if they are in a fully enclosed cage or container that can fit on their handler's lap. This policy grants access for complying cats, dogs, and other small pets.

Pet dogs that are too large to fit in an enclosed container on their handler's lap are not permitted on transit. Some dog owners find the current policy too restrictive and have requested it be amended to grant greater access.

Guide and Service dogs that are certified by the *British Columbia Guide Dog and Service Dog Act* are allowed on TransLink's services at all times. To receive certification, dogs must be trained by an accredited school and assist an individual who is blind (guide dog) or disabled and requiring a dog for daily living (service dog). Other service animals, such as emotional support or therapy dogs, are not eligible for certification and are allowed on transit only when they comply with TransLink's current pet policy.

The questions in this survey seek to explore the implications of amending the current policy by gathering input on what potential impacts changing the policy would have on current and future transit riders. This survey should take approximately three-to-five minutes to complete.

Q1. Are you a partial or primary caretaker of a dog?

1. Yes
2. No

Q2A. Have you ever taken a pet on board a transit vehicle in Metro Vancouver? (e.g., dog, cat or other small pet)

1. Yes
2. No
3. Unsure

Q2B. IF YES to Q2A, How often do you take a pet on board a transit vehicle in Metro Vancouver?

1. Daily or almost every day
2. At least once a week
3. At least once a month
4. At least once a year
5. Rarely or never

Draft: 2018-01-22

Q3. If dogs not contained in a hand-held carrier (“uncaged dogs”) were allowed on transit, would it affect how often you use transit?

I would use transit ...

1. More often
2. About the same
3. Less often
4. Unsure

Q4. If uncaged dogs were allowed on transit, which of the following restrictions would you support? (Please select as many as apply) [RANDOMIZE ORDER]

1. Leash
2. Muzzle
3. Dog Jacket
4. During Off-Peak hours only (6pm and later on weekdays, all day on weekends & statutory holidays)
5. Only when transit is not overcrowded (e.g., standing room only) and there is extra space available
6. Limited number of uncaged dogs per transit vehicle
7. Limited number of uncaged dogs per handler
8. Allowed on Bus only
9. Allowed on SkyTrain only
10. One designated SkyTrain car for dogs outside of a carrier
11. Proof of completed training
12. Fare required for uncaged dogs (*excluding certified Guide & Service Dogs*)
13. Other (Please specify: _____)
14. None of the above

Q5. If uncaged dogs were allowed on transit *with the restrictions you support*, would it affect how often you use transit?

I would use transit...

1. More often
2. About the same
3. Less often
4. Unsure

Draft: 2018-01-22

Q6A. Do you support or oppose allowing uncaged dogs on transit with the restrictions in place that you support?

1. Strongly support
2. Support
3. Neither support nor oppose
4. Oppose
5. Strongly oppose

Q6B: Why do you feel this way? (Optional)

[open-ended]

Q7. If TransLink's pet policy was amended to allow uncaged dogs with some restrictions, would it impact your likelihood of travelling with a pet (dog or other small pet) on transit?

1. I would be more likely to take a pet on transit
2. I would be less likely to take a pet on transit
3. It would not change my behaviour
4. Unsure

Q8. Would you be more or less satisfied with your transit experience if uncaged dogs with some restrictions were allowed on transit?

1. Much more satisfied
2. More satisfied
3. It would make no difference
4. Less satisfied
5. Much less satisfied
6. Unsure

Q9. Service Animals, such as emotional support or therapy dogs, that do not obtain Provincial Certification are allowed on transit only when they comply with TransLink's current pet policy. Do you support or oppose changing the policy to allow uncertified Service Dogs on transit outside of a cage?

1. Strongly support
2. Support
3. Neither support nor oppose
4. Oppose
5. Strongly oppose

Draft: 2018-01-22

Q10. How often do you use transit?

1. Daily or almost every day
2. At least once a week
3. At least once a month
4. At least once a year
5. Rarely or never

Q11. Do you have access to a vehicle for your own use on a regular basis?

1. Yes
2. No

[SOFT LAUNCH ONLY]

~~QSoft.~~ Was there anything about the questionnaire that you found confusing or difficult to answer?
(Optional)

[ALL PARTICIPANTS]

~~QFeedback.~~

Just before we finish, is there anything else you would like to share with us on any of the topics covered in this survey? (Optional)

Closing Screen.

Those are all our questions, thank you for participating.

You may now close this browser window.

Sincerely,

TransLink Listens

Draft: 2018-01-22



November 5, 2018

Dear TransLink Board,

RE: Access Transit Users' Advisory Committee's position on changes to the TransLink Pet Policy

On behalf of TransLink's Access Transit Users' Advisory Committee (UAC), I urge you to maintain TransLink's current pet policy that requires all pets on transit to be contained in a fully enclosed carrier. The members of the UAC oppose any change to the pet policy that would allow uncertified service dogs on transit without a carrier.

Allowing pet dogs on transit without a carrier poses new risks to people with physical, sensory and cognitive disabilities that could impact their ability to access the transit system. Dogs that are not well behaved or trained often have an agitating or disruptive effect on certified guide and service dogs, with negative impacts on the service dogs' ability to provide vital services to their handler. Larger dogs also take up limited space on board, which makes it challenging for those who use mobility aids or have sight loss to effectively maneuver through the bus or train.

We feel the current pet policy preserves access for those of us who depend on certified guide and service dogs and that a change in the pet policy would be a step backwards in the accessibility of TransLink's system.

Sincerely,

A handwritten signature in blue ink, appearing to read "Jake Anthony", on a white background.

Jake Anthony
Chair, Access Transit Users' Advisory Committee

TO: Board of Directors

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

DATE: November 19, 2018

SUBJECT: Major Road Network (MRN) Expansion Process and MRN Bylaw Amendment

PROPOSED RESOLUTION:

That the TransLink Board of Directors:

1. Approve the addition of 236 lane-km to the Major Road Network (MRN), as shown on the recommended updated MRN map (attached to the November 19, 2018 report titled “Major Road Network (MRN) Expansion Process and MRN Bylaw Amendment” as Appendix D), consistent with the 10% expansion included in the Investment Plan.
2. Introduces and reads for a first, second, and third time the *South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 128-2018*, attached to the November 19, 2018 report titled “Major Road Network (MRN) Expansion Process and MRN Bylaw Amendment” as Appendix A; and
3. Reconsiders, passes, and adopts *South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 128-2018*.

EXECUTIVE SUMMARY

Phase One of the 10-Year Vision includes a one-time 10% expansion of the Major Road Network (MRN) in 2018, the first significant increase of the network since its inception in 1998. TransLink staff is submitting this report to the TransLink Board detailing the expansion process and recommended additions for consideration. As part of TransLink’s multimodal mandate, the MRN consists of arterial roads across the region that carry the majority of the region’s commuter, transit, and truck traffic. While most of the MRN is owned by municipalities, TransLink is responsible for establishing performance standards and providing funding to municipalities to operate, maintain, and rehabilitate the MRN.

This expansion will support regional needs to facilitate increased access, goods movement, and safety for all modes. TransLink undertook an extensive engagement process with municipalities within Metro Vancouver to develop and apply a performance-based approach for determining the road segments to be added to the existing MRN. This Bylaw amendment includes the recommended additions as per the 2018 MRN expansion process, endorsed by municipalities in September 2018.

PURPOSE

The purpose of this report is to seek the Board's approval for the 10% expansion of the Major Road Network and to provide a summary of the process undertaken to produce this recommendation, fulfilling a commitment made in the Mayors' Council 10-Year Vision.

BACKGROUND

The MRN was established in 1998 through the work of regional and municipal staff during the formation of TransLink. Supporting the safe and efficient movement of people and goods across the region, the MRN includes more than 600 kilometres (2,370 lane-km) of major arterial roads that carry commuter, transit, and truck traffic. TransLink is responsible for establishing performance standards and providing funding for the on-going operation, maintenance, and rehabilitation of the MRN. However, ownership and operational responsibility for the MRN remains with the respective municipalities.

Since 1998, modifications have been made to the network; however, this is the first significant expansion since its inception. Appendix B highlights the effective changes to Schedule A of the MRN Bylaw. Appendix C includes the list of MRN Bylaw amendments with the corresponding bylaw numbers.

As committed in Phase One of the 10-Year Vision, funding has been allocated beginning in the 2018 budget to expand the lane-km of the MRN by 10%. Funding will go to the annual operations, maintenance, and rehabilitation (OMR) of the MRN and includes a one-time expansion to the length of the MRN by 237 lane-km. Funding will be distributed to municipalities based on the number of lane-km in their jurisdiction. New roads were selected in collaboration with the Regional Transportation Advisory Committee (RTAC)¹ for MRN designation through a performance-based process.

DISCUSSION

Delivering the Mayors' Vision

The MRN Bylaw amendment as detailed in this report delivers on the Mayors' Vision, where the Investment Plan allocates funding for a one-time expansion to the length of the MRN by 10% in 2018. This expansion will support regional needs in terms of facilitating increased access, goods movement and safety for all modes.

2018 MRN Expansion Process

MRN additions were selected through a performance-based evaluation process, aligned with policy guidance set out in the Regional Transportation Strategy Strategic Framework. This includes direction to improve safety, increase local and regional connectivity, and improve goods movement. Our process established evaluation criteria informed by MRN objectives, used to prioritize candidate MRN segments.

¹ RTAC is the primary forum for Metro Vancouver municipalities and other agencies with a transportation-related mandate to discuss and provide input at a strategic level on multi-modal transportation-related matters of regional significance. The level of representation at RTAC is typically at the senior managerial level responsible for strategic multi-modal transportation decisions.

The recommended network is aligned with these objectives, in particular:

- Facilitates intra-regional travel of people and transportation of goods.
- Connects regionally significant destinations.
- Forms an interconnected and complete network.
- Moves high volumes of general purpose vehicles, transit passengers and / or trucks.

Figure 1 illustrates the recommended updated MRN. A larger version of this map is included as Appendix D.

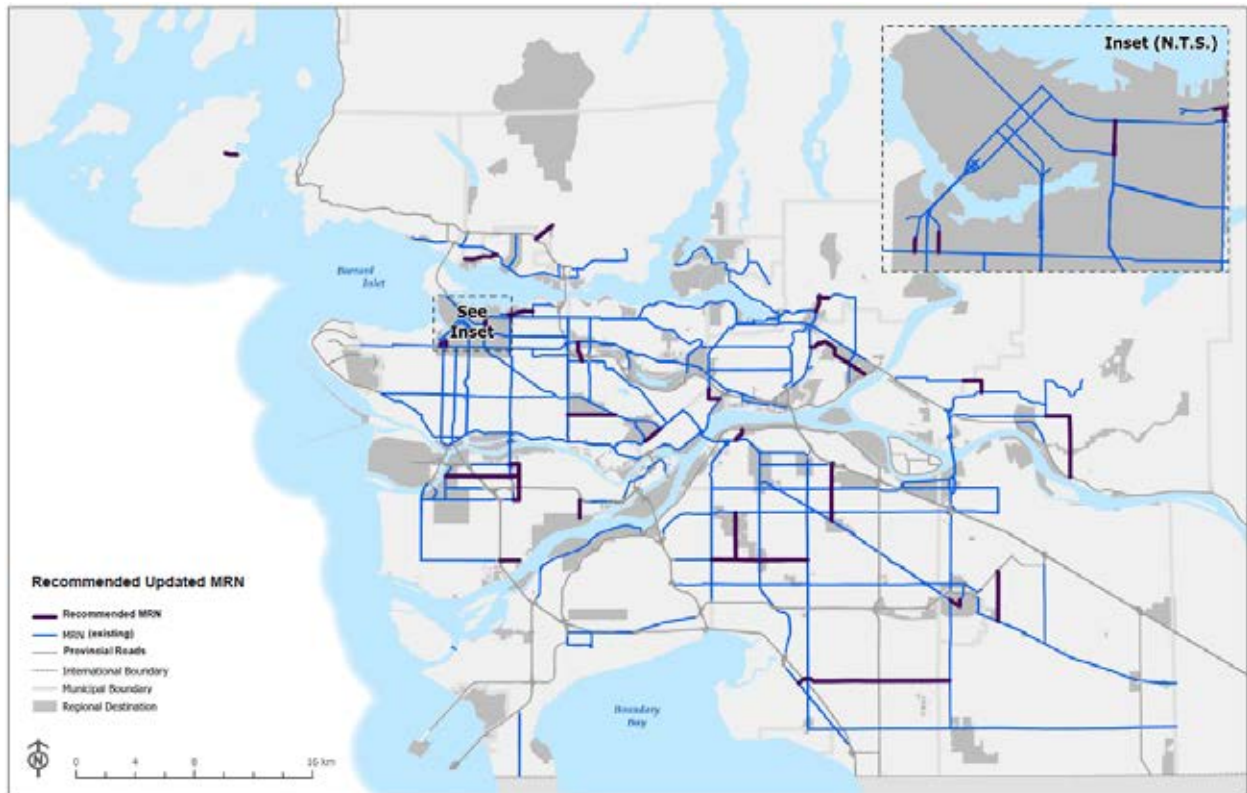


Figure 1: Recommended Updated MRN

Beginning in November 2017, extensive engagement with local government staff through RTAC resulted in a performance-based evaluation of candidate segments. Municipalities submitted 159 candidate MRN requests, approximately 900 lane-km of roadway, for consideration in the MRN expansion process. These requests included both built and planned roadways that serve various regionally significant roles. The 2018 expansion allows for the inclusion of 237 lane-km, approximately 25% of the requested lane-km, further rationalizing the need for the evaluation of MRN candidates to be performance based. See Appendix E for letters providing municipal consent for MRN additions.

Regional Transportation Advisory Committee Engagement

RTAC's perspective and involvement was fundamental in developing the proposed 2018 MRN. RTAC has endorsed the MRN objectives, criteria, evaluation process and recommended updated network. Key steps in the planning process included:

- Beginning in late 2017, municipalities (through RTAC) were provided with the opportunity to review and verify historical MRN expansion requests, and submit their updated proposed list of expansion candidates. Municipalities were asked to ensure that the MRN additions they propose are consistent with community needs and preferences and would likely be supported by municipal Councils if shortlisted.
- Since early 2018, RTAC was involved in developing and finalizing a set of updated MRN objectives, screening and evaluation criteria, as well as the weighting scenario for the relative importance of each criterion used to evaluate and rank the candidate MRN segments.
- In June 2018, RTAC endorsed the updated MRN objectives, screening and evaluation criteria. See Appendix F for the criteria used for the 2018 MRN expansion process.
- In September 2018, RTAC selected a preferred weighting scenario to evaluate MRN candidates. The results were presented to RTAC during their September 27, 2018 meeting.
- At the September 27, 2018 RTAC meeting, it was MOVED and SECONDED THAT the recommended candidate MRN additions be endorsed to bring to the TransLink Board for approval and implementation. The motion carried. The resulting recommended MRN additions and associated updated network is detailed in this Bylaw amendment. See Appendix G for sub-regional maps of all segments being added to the MRN.

Updated MRN Objectives

When established in 1998, the MRN had five objectives intended to guide decisions and performance monitoring. Working with RTAC, these objectives were reviewed and updated as part of the 2018 MRN expansion process, to reflect current regional policy direction, including the 2014 Regional Transportation Strategy (RTS), 2017 Regional Goods Movement Strategy (RGMS), and the Mayors' Vision.

The updated MRN objectives are:

1. Facilitates intra-regional travel of people and transportation of goods.
2. Connects regionally significant destinations.
3. Forms an interconnected and complete network.
4. Moves high volumes of general purpose vehicles, transit passengers and / or trucks.
5. Maximizes safety of travel.
6. Maintains road and bridge structure conditions in a state of good repair to support all modes.
7. Minimizes adverse impacts to adjacent neighbourhoods.
8. Expands over time to meet the needs of a growing population and economy.

These objectives reflect elements of the original MRN goals² and ensure that the MRN can be expanded to support regional needs in terms of facilitating increased access, goods movement, and safety for all modes. The first four updated objectives apply to the screening and evaluation of new MRN, while the final four updated objectives apply to the expected performance of the MRN. Specific screening and evaluation criteria were developed with RTAC to evaluate the MRN candidates relative to the updated objectives and to guide the evaluation process and subsequent decision making.

Candidate MRN Evaluation Process

Once the MRN expansion process was endorsed by RTAC, TransLink proceeded with the evaluation of the MRN candidate segments through the summer of 2018. An initial screening minimally reduced the candidates to be evaluated. Following the screening, evaluation criteria were used to evaluate the performance of the remaining MRN candidates. Following evaluation, minor network additions were included to ensure the final recommended MRN formed a complete and connected network.

Results of MRN Expansion

The final recommended MRN additions and associated updated network was unanimously endorsed by RTAC at the September 2018 RTAC meeting. As a result of this process, not all municipalities within Metro Vancouver received additional MRN segments as part of the expansion process. However, all candidate requests have been documented and will be retained for future potential MRN expansion processes.

Financial Implications

Funding for the MRN expansion is scaled to fit within the ongoing funding approved in Phase One of the 10-Year Vision and TransLink's 2018 budget and represents a new investment of \$4,777,920 in the operations, maintenance, and rehabilitation of regional roads.

ANALYSIS OF ALTERNATIVES

If the Board does not support the Bylaw amendment as proposed, TransLink would continue to work with municipal staff on a revised network based on the Board recommendations. This would have financial implications to municipalities – the rehabilitation portion of the funds could be held over to 2019 but TransLink would not be able to provide operations and maintenance funds to municipalities for 2018.

CONCLUSION

It is recommended that the Board approve the 2018 MRN expansion set out above in this Report and adopt and approve the *South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 128-2018*.

² The original MRN goals include the following: 1. Facilitates intra-regional transportation of people & goods; 2. Connects designated regional town centres and major trip generators; 3. Capacity is optimized for efficient movement of people & goods; 4 Travel is safe and reliable 5. Supports regional land use objectives.

Attachments:

- Appendix A: South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 128-2018, including Schedule A.
- Appendix B: Effective changes to Schedule A of the Major Road Network Bylaw.
- Appendix C: Schedule of Amendments to the MRN.
- Appendix D: Map illustrating the updated network.
- Appendix E: Letters from all affected municipalities receiving additional MRN segments.
- Appendix F: Objectives and Criteria used for the 2018 MRN expansion process.
- Appendix G: Sub-regional maps of all segments being added to the MRN.

Appendix A

SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY MAJOR ROAD NETWORK BYLAW NUMBER 128-2018

A bylaw to replace the “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018.”

WHEREAS the Board of the South Coast British Columbia Transportation Authority has adopted “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018,” which designates the roads forming the Major Road Network;

AND WHEREAS the Board of the South Coast British Columbia Transportation Authority wishes to add and delete road segments to and from the Major Road Network and replace “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018” with a new bylaw;

NOW THEREFORE the Board of the South Coast British Columbia Transportation Authority enacts as follows:

1. “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018” is hereby replaced by this Bylaw.
2. The attached Schedule “A” (Major Road Network) is part of this Bylaw.
3. This bylaw shall be cited as “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 128-2018”.

READ A FIRST, SECOND AND THIRD TIME this 6th day of December, 2018.

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018.

Lorraine Cunningham, Chair

Gigi Chen-Kuo, General Counsel and Corporate Secretary

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Anmore		
1 Avenue	Sunnyside Road	Port Moody/Anmore border
Bedwell Bay Road	Port Moody/Anmore border	Port Moody/Anmore border
Sunnyside Road	1 Avenue	park access road at Buntzen Lake recreation area
East Road	Sunnyside Road	Port Moody/Anmore border
Bowen Island		
Bowen Island Trunk Rd	Bowen Island ferry terminal	Mt Gardner Road
Belcarra		
Bedwell Bay Road	Port Moody/Belcarra border	Midden Road
Burnaby		
10 Avenue	Griffiths Drive	McBride Boulevard
Austin Road	Lougheed Highway	North Road (Coquitlam/Burnaby border)
Barnet Road	Inlet Drive (near Bayview Drive)	Port Moody/Burnaby border
Boundary Road	Hastings Street	Marine Way
Broadway	Gaglardi Way	North Road (Coquitlam/Burnaby border)
Burnaby Mountain Parkway	Hastings Street (near Dalla-Tina Avenue)	Gaglardi Way
Byrne Road	Marine Way	Meadow Avenue
Canada Way	Boundary Road (Vancouver/Burnaby border)	west of Willingdon Avenue
Canada Way	east of Willingdon Avenue	west of Kensington Avenue
Canada Way	east of Kensington Avenue	10 Avenue (New Westminster/Burnaby border)
Gaglardi Way	Burnaby Mountain Parkway	north of Highway 1 (south abutment of Stormont Avenue overpass)
Gilmore Diversion	Canada Way	Gilmore Avenue
Gilmore Ave	Gilmore Diversion	Lougheed Highway
Griffiths Drive	Kingsway	10 Avenue (New Westminster/Burnaby border)
Hastings Street	Boundary Road (Vancouver/Burnaby border)	Burnaby Mountain Parkway (near Dalla-Tina Avenue)
Imperial St	Boundary Road (Vancouver/Burnaby border)	Kingsway
Inlet Drive	Hastings Street	Barnet Road (near Bayview Drive)
Kensington Avenue	Lougheed Highway	north of Sprout Street
Kingsway	Boundary Road (Vancouver/Burnaby border)	10 Avenue (New Westminster/Burnaby border)
Lougheed Highway	Boundary Road (Vancouver/Burnaby border)	North Road (Coquitlam/Burnaby border)
Marine Way	Boundary Road (Vancouver/Burnaby border)	New Westminster/Burnaby border (west of Queensborough Bridge)
North Road	Clarke Road	New Westminster/Burnaby border
Southridge Drive	Griffiths Drive	Meadow Avenue
Willingdon Avenue	Hastings Street	north of Highway 1 (near Still Creek)
Willingdon Avenue	south of Canada Way	Kingsway
Coquitlam		
Austin Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
Barnet Highway	Port Moody/Coquitlam border	Lougheed Highway / Pinetree Way
Brunette Avenue	north of Highway 1 (near Bernatchy Street)	Lougheed Highway
Clarke Road	Port Moody/Coquitlam border (Ingersoll Avenue)	North Road (Burnaby/Coquitlam border)
Coast Meridian Road	David Avenue	Victoria Drive (Port Coquitlam/Coquitlam border)
Como Lake Avenue	Lougheed Highway	Westwood Street (Port Coquitlam/Coquitlam border)
Como Lake Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
David Avenue	Pinetree Way	Coast Meridian Road
Guildford Way	Port Moody/Coquitlam border	Pinetree Way
King Edward Street	Lougheed Highway	United Boulevard
Lougheed Highway	North Road (Burnaby/Coquitlam border)	east of Schoolhouse Street
Lougheed Highway	West of Colony Farm Road	Westwood Street (Port Coquitlam/Coquitlam border)
Mariner Way	Barnet Highway	United Boulevard
North Road	Clarke Road (near Cottonwood Avenue)	New Westminster/Coquitlam border
Pinetree Way	David Avenue	Barnet Highway/Lougheed Highway
Pitt River Road	Lougheed Highway	Port Coquitlam/Coquitlam border (Coquitlam River)
United Boulevard	King Edward Street	south of Mary Hill By-Pass
United Boulevard	north of Lougheed Highway	Mariner Way
Westwood St	Como Lake Avenue	Kingsway Avenue
Delta		
56 Street	south of Highway 17	Canada / United States border
64 Avenue / Kittson Parkway	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Avenue	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Street	Ladner Trunk Road	Churchill Street
80 Street	Ladner Trunk Road	Churchill Street
Churchill Street	72 Street	80 Street
Highway 91 Connector	River Road	south of BNSF rail crossing
Ladner Trunk Road	east of 72 Street	south of Highway 99
Ladner Trunk Road	north of Highway 99	west of Highway 91
Nordel Way	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
River Road / 62B Street	east of Highway 99 / Highway 17	west of 96 Street / Hwy 91 Connector
Scott Road (120 Street)	96 Avenue (Surrey/Delta border)	north of Highway 10
Langley City		

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
200 Street	south of Langley By-Pass (Highway 10)	Langley Township/Langley City border
203 Street	Fraser Highway	Logan Avenue
204 Street	Langley Township/Langley City border (62 Avenue)	Logan Avenue
Fraser Highway (west)	east of Langley By-Pass (Highway 10)	203 Street
Fraser Highway (east)	Langley By-Pass	Langley Township/Langley City border
Langley By-Pass	east of Glover Road / Highway 10	Fraser Highway

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Langley Township		
16 Avenue	Surrey/Langley Township border (196 Street)	west of Highway 13
16 Avenue	east of Highway 13	Abbotsford/Langley Township border (276 Street)
32 Avenue	196 Street (Surrey/Langley Township border)	200 Street
64 Avenue	196 Street (Surrey/Langley Township border)	204 Street
88 Avenue	Surrey/Langley Township border (west of 196A Street)	west of 200 Street (Highway 1)
88 Avenue	east of 200 Street (Highway 1)	216 Street
96 Avenue	Surrey/Langley Township border	216 Street
199A Street	End of SB bridge exit ramp	200 Street
200 Street	north of 88 Avenue (Highway 1)	199A Street
200 Street	south of 88 Avenue (Highway 1)	62 Avenue (Langley City/Langley Township border)
200 Street	Langley City/Langley Township border	16 Avenue
201 Street	200 Street	Start of NB bridge entrance ramp
204 Street	62 Avenue	64 Avenue
216 Street	88 Avenue	96 Avenue
216 Street	Fraser Highway	Highway 10
232 Street	Fraser Highway	Highway 10
Fraser Highway (west)	196 Street (Surrey/Langley Township/City border)	west of Langley By-Pass (Highway 10)
Fraser Highway (east)	Langley City/Langley Township border	west of Highway 13
Fraser Highway (east)	east of Highway 13	Abbotsford/Langley Township border (276 Street)
Mufford Crescent	204 Street	62 Avenue
Mufford Crescent (Overpass)	62 Avenue	west of Glover Road
Maple Ridge		
128 Avenue	210 Street	Abernethy Way
132 Avenue	232 Street	Fern Crescent
132 Avenue	Sharpe Road	210 Street
210 Street	132 Avenue	128 Avenue
232 Street	132 Avenue	Dewdney Trunk Road
240 Street	Dewdney Trunk Road	Lougheed Highway
Abernethy Way	128 Avenue	232 Street
Dewdney Trunk Road	east of Lougheed Highway	240 Street
Fern Crescent	132 Avenue	south of Golden Ears Park Gate
Lougheed Highway	east of Haney By-Pass (near 222 Street)	west of Haney By-Pass (near 232 Street)
New Westminster		
10 Avenue	Twentieth Street	McBride Boulevard
Boyd Street	Boundary Road (Richmond/New Westminster border)	Derwent Way
Braid Street	East Columbia Street	Brunette Avenue
Brunette Avenue	south of Highway 1 (south abutment of BNR overpass)	Columbia Street E
Columbia Street	Stewardson Way / 12 Street	Royal Avenue
Columbia Street E	Brunette Avenue	McBride Boulevard
Derwent Way	Boyd Street	Annacis Island moveable bridge (north abutment)
East Columbia Street	Coquitlam / New Westminster Border	Braid Street
McBride Boulevard	10 Avenue (Burnaby/New Westminster border)	Columbia Street E / Pattullo Bridge (north abutment)
Royal Avenue	Columbia Street	McBride Boulevard
Stewardson Way	6 Avenue	Columbia Street / 12 Street
North Vancouver City		
3 Street	Marine Drive (at Bewicke Avenue)	Forbes Avenue
Cotton Road	Low Level Road	North Vancouver District/City border
Esplanade	Forbes Avenue	Low Level Road
Forbes Avenue	3 Street	Esplanade
Lonsdale Avenue	south of Highway 1	Esplanade
Low Level Road	Esplanade	Cotton Road
Marine Drive	North Vancouver District/City border (near Mackay Road)	3 Street (at Bewicke Avenue)
West 1 Street	West 2 Street / Fell Avenue	North Vancouver District/City border
West 2 Street	West 3 Street	West 1 Street / Fell Avenue
North Vancouver District		
Capilano Road	south of Highway 1	Marine Drive
Dollarton Highway	west of bridge over Seymour River	Riverside Drive (East)
Lynn Valley Road	Highway 1	Mountain Highway
Main Street	North Vancouver City/District border	west of Mountain Highway
Marine Drive	West Vancouver/North Vancouver District border	North Vancouver City/District border (near Mackay Road)
Mountain Highway	Keith Road	north of Main Street
Mount Seymour Parkway	Seymour Creek IR Boundary	Mount Seymour Road
Mount Seymour Road	Anne Macdonald Way	Mount Seymour Parkway
Riverside Drive (East)	Mount Seymour Parkway	Dollarton Highway
West 1 Street	District of North Vancouver / City of North Vancouver Border	Garden Ave
Pitt Meadows		
Old Dewdney Trunk Road	Lougheed Highway	Harris Road
Harris Road	Old Dewdney Trunk Road	Old Dewdney Trunk Road

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Old Dewdney Trunk Road	Harris Road	Neaves Road (Pitt Meadows/Maple Ridge border)
Port Coquitlam		
Kingsway Avenue	Mary Hill Bypass	Westwood Street
Lougheed Highway	Coquitlam/Port Coquitlam border (Westwood Street)	east of Ottawa Street
Coast Meridian Road	Kingsway Avenue	Victoria Drive (Coquitlam/Port Coquitlam border)
Broadway Street	Mary Hill Bypass	Kingsway Avenue

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Port Moody		
1 Avenue	Bedwell Bay Road / Sunnyside Road	Anmore/Port Moody border
1 Avenue	Anmore/Port Moody border	loco Road
Barnet Highway (west)	Burnaby/Port Moody border	St. Johns Street (at Clarke Road / Albert Street)
Barnet Highway (east)	St. Johns Street (at Dewdney Trunk Road)	Coquitlam / Port Moody border
Bedwell Bay Road	Belcarra/Port Moody border	Anmore/Port Moody border
Bedwell Bay Road	Anmore/Port Moody border	1 Avenue
Clarke Road	St. Johns Street	Coquitlam/Port Moody border (Ingersoll Avenue)
Clarke Street	Barnet Highway	Moody Street
Guildford Way	loco Road	Coquitlam/Port Moody border
loco Road	1 Avenue	Barnet Highway (east)
Moody Street	Murray Street	St. Johns Street
Murray Street	Moody Street	loco Road
St. Johns Street	Clarke Road (at Albert Street / Barnet Highway (west))	Barnet Highway (east) (at Dewdney Trunk Road)
Richmond		
No. 2 Road	Inglis Drive	Steveston Highway
No. 3 Road	south of Sea Island Way	Westminster Highway
Alderbridge Way	No. 3 Road	west of Highway 91 (near Shell Road)
Bridgeport Road	St. Edwards Drive	No. 6 Road
Cambie Road	No. 3 Road	No. 6 Road
Gilbert Road	Dinsmore Bridge (south abutment)	Westminster Highway
Knight Street	Knight Street Bridge (south abutment)	north of Highway 91
Knight Street	south of Highway 91	Westminster Highway
Nelson Road	Westminster Highway	Blundell Road
No. 6 Road	Bridgeport Road	Westminster Highway
Steveston Highway	No. 2 Road	west of Highway 99
Steveston Highway	east of Highway 99	No. 6 Road
Westminster Highway	No. 2 Road	west of Highway 99
Westminster Highway	east of Highway 99	No. 6 Road
Westminster Highway	east of Nelson Road	south of Highway 91
Westminster Highway	north of Highway 91	New Westminster/Richmond border (Boundary Road)
Surrey		
16 Avenue	152 Street	160 Street (White Rock/Surrey border)
16 Avenue	160 St (White Rock/Surrey border)	west of Highway 15 (176 Street)
16 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
32 Avenue	King George Highway	196 Street
64 Avenue	Scott Road/120 Street (Delta/Surrey border)	west of Highway 15 (176 Street)
64 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
72 Avenue	120 Street	152 Street
88 Avenue	Nordel Way	west of Highway 15 (176 Street)
88 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
96 Avenue (west)	Scott Road/120 Street (Delta/Surrey border)	west of 176 Street
96 Avenue (east)	96 Avenue Connector Road	Langley Township/Surrey border
96 Avenue Connector Road	Golden Ears Bridge "mainline"	96 Avenue (east)
104 Avenue	King George Highway	south of Highway 1
108 Avenue	King George Highway	Townline Diversion
128 Street	88 Ave	72 Ave
152 Street	south of Highway 1 (near Lincoln Drive)	north of Highway 10 (56 Avenue)
152 Street	south of Highway 10 (56 Avenue)	16 Avenue (White Rock / Surrey border)
160 Street	Highway 1	Fraser Highway
Bridgeview Drive	Highway 17	King George Highway
Fraser Highway	King George Highway	west of Highway 15 (176 Street)
Fraser Highway	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
King George Highway	Pattullo Bridge (south abutment)	north of Highway 10 (56 Avenue)
King George Highway	south of Highway 10 (56 Avenue)	north of Highway 99
King George Highway	south of Highway 99 (near Crescent Road)	west of Highway 99 (north of 8 Avenue)
Nordel Way	Scott Road/120 Street (Delta/Surrey border)	88 Avenue
Scott Road	King George Highway	96 Avenue (Delta/Surrey border)
Scott Road (120 Street)	96 Avenue (Delta/Surrey border)	north of Highway 10
Townline Diversion	108 Avenue	west of 152 Street

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Vancouver		
1 Avenue	Clark Drive	Boundary Road (Burnaby/Vancouver border)
10 Avenue	Blanca Street	Alma Street
41 Avenue	SW Marine Drive	Joyce Street
70 Avenue	SW Marine Drive (at Cornish Street)	SW Marine Drive (between Heather and Ash Streets)
Alma Street	Broadway	10 Avenue
Boundary Road	Hastings Street	Marine Way
Broadway	Alma Street	Rupert Street
Cambie Bridge	North abutment (including ramps)	South abutment (including ramps)
Cambie Street	Cambie Bridge (south abutment)	SW Marine Drive
Clark Drive	Powell Street	Knight Street
Cordova Diversion	East of Hawks Avenue	Powell Street
Dundas Street	Semlin Drive	Nanaimo Street
Fir Street	Granville Bridge Fir Street offramp	Broadway
Georgia Street	Highway 99/1A (near Chilco Street)	Georgia Viaduct
Georgia Viaduct	Georgia Street	Main Street
Grandview Highway	Nanaimo Street	Boundary Road (Burnaby/Vancouver border)
Granville Bridge	North abutment (including ramps)	South abutment (including ramps)
Granville Street	Granville Bridge (south abutment)	SW Marine Drive
Hastings Street	Howe Street	Boundary Road (Burnaby/Vancouver border)
Hemlock Street	Granville Bridge Hemlock Street onramp	Broadway
Howe Street	Hastings Street	Granville Bridge
Joyce Street	41 Avenue	Kingsway
Kingsway	Main Street	Boundary Road (Burnaby/Vancouver border)
Knight Street	Clark Drive	Knight Street Bridge (north abutment)
Lougheed Highway	Rupert Street	Boundary Road (Burnaby/Vancouver border)
Main Street	Hastings Street	Kingsway
SW Marine Drive	Camosun Street	70 Avenue (at Cornish Street)
SW Marine Drive	Granville Street	Ontario Street
SE Marine Drive	Ontario Street	Marine Way
Marine Way	SE Marine Drive	Boundary Road (Burnaby/Vancouver border)
McGill Street	Nanaimo Street	west of Highway 1 (near Bridgeway Street)
Nanaimo Street	McGill Street	Hastings Street
Nanaimo Street	Broadway	Grandview Highway
Nelson Street	Howe Street	Cambie Bridge
Oak Street	Broadway	Highway 99 (near 71 Avenue)
Powell Street	East of Hawks Avenue	Semlin Drive
Seymour Street	Granville Bridge	Hastings Street
Smithe Street	Cambie Bridge	Howe Street
West Vancouver		
Marine Drive	21 Street	Highway 99/1A (near Taylor Way)
White Rock		
North Bluff Road	Johnston Road	Stayte Road (Surrey/White Rock Border)
TransLink-Owned Assets		
Golden Ears Way, incl. Golden Ears Bridge	east of 176 Street (Surrey)	210 Street (Maple Ridge)
Knight Street Bridge	North abutment (Vancouver)	South abutment (Richmond)
Pattullo Bridge	North abutment (New Westminster)	South abutment (Surrey)
Westham Island Bridge	West Abutment (Westham Island)	East Abutment (Delta)

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Anmore		
1 Avenue	Sunnyside Road	Port Moody/Anmore border
Bedwell Bay Road	Port Moody/Anmore border	Port Moody/Anmore border
Sunnyside Road	1 Avenue	park access road at Buntzen Lake recreation area
East Road	Sunnyside Road	Port Moody/Anmore border
Bowen Island		
Bowen Island Trunk Rd	Bowen Island ferry terminal	Mt Gardner Road
Belcarra		
Bedwell Bay Road	Port Moody/Belcarra border	Midden Road
Burnaby		
10 Avenue	Kingsway Griffiths Drive	McBride Boulevard
Austin Road	Lougheed Highway	North Road (Coquitlam/Burnaby border)
Barnet Road	Inlet Drive (near Bayview Drive)	Port Moody/Burnaby border
Boundary Road	Hastings Street	Marine Way
Broadway	Gagardi Way	North Road (Coquitlam/Burnaby border)
Burnaby Mountain Parkway	Hastings Street (near Dalla-Tina Avenue)	Gagardi Way
Byrne Road	Marine Way	Meadow Avenue
Canada Way	Boundary Road (Vancouver/Burnaby border)	west of Willingdon Avenue
Canada Way	east of Willingdon Avenue	west of Kensington Avenue
Canada Way	east of Kensington Avenue	10 Avenue (New Westminster/Burnaby border)
Gagardi Way	Burnaby Mountain Parkway	north of Highway 1 (south abutment of Stormont Avenue overpass)
Gilmore Diversion	Canada Way	Gilmore Avenue
Gilmore Ave	Gilmore Diversion	Lougheed Highway
Griffiths Drive	Kingsway	10 Avenue (New Westminster/Burnaby border)
Hastings Street	Boundary Road (Vancouver/Burnaby border)	Burnaby Mountain Parkway (near Dalla-Tina Avenue)
Imperial St	Boundary Road (Vancouver/Burnaby border)	Kingsway
Inlet Drive	Hastings Street	Barnet Road (near Bayview Drive)
Kensington Avenue	Lougheed Highway	north of Sprout Street
Kingsway	Boundary Road (Vancouver/Burnaby border)	10 Avenue (New Westminster/Burnaby border)
Lougheed Highway	Boundary Road (Vancouver/Burnaby border)	North Road (Coquitlam/Burnaby border)
Marine Way	Boundary Road (Vancouver/Burnaby border)	New Westminster/Burnaby border (west of Queensborough Bridge)
North Road	Clarke Road	New Westminster/Burnaby border
Southridge Drive	Griffiths Drive	Meadow Avenue
Willingdon Avenue	Hastings Street	north of Highway 1 (near Still Creek)
Willingdon Avenue	south of Canada Way	Kingsway
Coquitlam		
Austin Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
Barnet Highway	Port Moody/Coquitlam border	Lougheed Highway / Pinetree Way
Brunette Avenue	north of Highway 1 (near Bernatchy Street)	Lougheed Highway
Clarke Road	Port Moody/Coquitlam border (Ingersoll Avenue)	North Road (Burnaby/Coquitlam border)
Coast Meridian Road	David Avenue	Victoria Drive (Port Coquitlam/Coquitlam border)
Como Lake Avenue	Lougheed Highway	Westwood Street (Port Coquitlam/Coquitlam border)
Como Lake Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
David Avenue	Pipeline Road Pinetree Way	Coast Meridian Road
Guildford Way	Port Moody/Coquitlam border	Pinetree Way
King Edward Street	Lougheed Highway	United Boulevard
Lougheed Highway	North Road (Burnaby/Coquitlam border)	east of Schoolhouse Street
Lougheed Highway	West of Colony Farm Road	Westwood Street (Port Coquitlam/Coquitlam border)
Mariner Way	Barnet Highway	United Boulevard
North Road	Clarke Road (near Cottonwood Avenue)	New Westminster/Coquitlam border
Pinetree Way	Guildford Way David Avenue	Barnet Highway/Lougheed Highway
Pitt River Road	Lougheed Highway	Port Coquitlam/Coquitlam border (Coquitlam River)
United Boulevard	King Edward Street	south of Mary Hill By-Pass
United Boulevard	north of Lougheed Highway	Mariner Way
Westwood St	Como Lake Avenue	Kingsway Avenue
Delta		
56 Street	south of Highway 17	Canada / United States border
64 Avenue / Kittson Parkway	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Avenue	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Street	Ladner Trunk Road	Churchill Street
80 Street	Ladner Trunk Road	Churchill Street
Churchill Street	72 Street	80 Street
Highway 91 Connector	River Road	south of BNSF rail crossing
Ladner Trunk Road	east of 72 Street	south of Highway 99
Ladner Trunk Road	north of Highway 99	west of Highway 91
Nordel Way	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
River Road / 62B Street	east of Highway 99 / Highway 17	west of 96 Street / Hwy 91 Connector
Scott Road (120 Street)	96 Avenue (Surrey/Delta border)	north of Highway 10
Langley City		

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
200 Street	south of Langley By-Pass (Highway 10)	Langley Township/Langley City border
203 Street	Fraser Highway	Logan Avenue
204 Street	Langley Township/Langley City border (62 Avenue)	Logan Avenue
Fraser Highway (west)	east of Langley By-Pass (Highway 10)	200 Street 203 Street
Fraser Highway (east)	Langley By-Pass	Langley Township/Langley City border
Langley By-Pass	east of Glover Road / Highway 10	Fraser Highway

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Langley Township		
16 Avenue	Surrey/Langley Township border (196 Street)	west of Highway 13
16 Avenue	east of Highway 13	Abbotsford/Langley Township border (276 Street)
32 Avenue	196 Street (Surrey/Langley Township border)	200 Street
64 Avenue	196 Street (Surrey/Langley Township border)	204 Street
88 Avenue	Surrey/Langley Township border (west of 196A Street)	west of 200 Street (Highway 1)
88 Avenue	east of 200 Street (Highway 1)	216 Street
96 Avenue	Surrey/Langley Township border	216 Street
199A Street	End of SB bridge exit ramp	200 Street
200 Street	north of 88 Avenue (Highway 1)	199A Street
200 Street	south of 88 Avenue (Highway 1)	62 Avenue (Langley City/Langley Township border)
200 Street	Langley City/Langley Township border	16 Avenue
201 Street	200 Street	Start of NB bridge entrance ramp
204 Street	62 Avenue	64 Avenue
216 Street	88 Avenue	96 Avenue
216 Street	Fraser Highway	Highway 10
232 Street	Fraser Highway	Highway 10
Fraser Highway (west)	196 Street (Surrey/Langley Township/City border)	west of Langley By-Pass (Highway 10)
Fraser Highway (east)	Langley City/Langley Township border	west of Highway 13
Fraser Highway (east)	east of Highway 13	Abbotsford/Langley Township border (276 Street)
Mufford Crescent	204 Street	62 Avenue
Mufford Crescent (Overpass)	62 Avenue	west of Glover Road
Maple Ridge		
128 Avenue	210 Street	Abernethy Way
132 Avenue	232 Street	Fern Crescent
132 Avenue	Sharpe Road	210 Street
210 Street	132 Avenue	128 Avenue
232 Street	132 Avenue	Dewdney Trunk Road
240 Street	Dewdney Trunk Road	Lougheed Highway
Abernethy Way	128 Avenue	232 Street
Dewdney Trunk Road	east of Lougheed Highway	232 Street-240 Street
Fern Crescent	132 Avenue	south of Golden Ears Park Gate
Lougheed Highway	east of Haney By-Pass (near 222 Street)	west of Haney By-Pass (near 232 Street)
New Westminster		
10 Avenue	Kingsway Twentieth Street	McBride Boulevard
Boyd Street	Boundary Road (Richmond/New Westminster border)	Derwent Way
Braid Street	East Columbia Street	Brunette Avenue
Brunette Avenue	south of Highway 1 (south abutment of BNR overpass)	Columbia Street E
Columbia Street	Stewardson Way / 12 Street	Royal Avenue
Columbia Street E	Brunette Avenue	McBride Boulevard
Derwent Way	Boyd Street	Annacis Island moveable bridge (north abutment)
East Columbia Street	Coquitlam / New Westminster Border	Braid Street
McBride Boulevard	10 Avenue (Burnaby/New Westminster border)	Columbia Street E / Pattullo Bridge (north abutment)
Royal Avenue	Columbia Street	McBride Boulevard
Stewardson Way	6 Avenue	Columbia Street / 12 Street
North Vancouver City		
3 Street	Marine Drive (at Bewicke Avenue)	Forbes Avenue
Cotton Road	Low Level Road	North Vancouver District/City border
Esplanade	Forbes Avenue	Low Level Road
Forbes Avenue	3 Street	Esplanade
Lonsdale Avenue	south of Highway 1	Esplanade
Low Level Road	Esplanade	Cotton Road
Marine Drive	North Vancouver District/City border (near Mackay Road)	3 Street (at Bewicke Avenue)
West 1 Street	West 2 Street / Fell Avenue	North Vancouver District/City border
West 2 Street	West 3 Street	West 1 Street / Fell Avenue
North Vancouver District		
Capilano Road	south of Highway 1	Marine Drive
Dollarton Highway	west of bridge over Seymour River	Riverside Drive (East)
Lynn Valley Road	Highway 1	Mountain Highway
Main Street	North Vancouver City/District border	west of Mountain Highway
Marine Drive	West Vancouver/North Vancouver District border	North Vancouver City/District border (near Mackay Road)
Mountain Highway	Keith Road	north of Main Street
Mount Seymour Parkway	Seymour Creek IR Boundary	Mount Seymour Road
Mount Seymour Road	Anne Macdonald Way	Mount Seymour Parkway
Riverside Drive (East)	Mount Seymour Parkway	Dollarton Highway
West 1 Street	District of North Vancouver / City of North Vancouver Border	Garden Ave
Pitt Meadows		
Old Dewdney Trunk Road	Lougheed Highway	Harris Road
Harris Road	Old Dewdney Trunk Road	Old Dewdney Trunk Road

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Old Dewdney Trunk Road	Harris Road	Sharpe Road Neaves Road (Pitt Meadows/Maple Ridge border)
Port Coquitlam		
Kingsway Avenue	Mary Hill Bypass	Westwood Street
Lougheed Highway	Coquitlam/Port Coquitlam border (Westwood Street)	east of Ottawa Street
Coast Meridian Road	Kingsway Avenue	Victoria Drive (Coquitlam/Port Coquitlam border)
Broadway Street	Mary Hill Bypass	Kingsway Avenue

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Port Moody		
1 Avenue	Bedwell Bay Road / Sunnyside Road	Anmore/Port Moody border
1 Avenue	Anmore/Port Moody border	loco Road
Barnet Highway (west)	Burnaby/Port Moody border	St. Johns Street (at Clarke Road / Albert Street)
Barnet Highway (east)	St. Johns Street (at Dewdney Trunk Road)	Coquitlam / Port Moody border
Bedwell Bay Road	Belcarra/Port Moody border	Anmore/Port Moody border
Bedwell Bay Road	Anmore/Port Moody border	1 Avenue
Clarke Road	St. Johns Street	Coquitlam/Port Moody border (Ingersoll Avenue)
Clarke Street	Barnet Highway	Moody Street
Guildford Way	loco Road	Coquitlam/Port Moody border
loco Road	1 Avenue	Barnet Highway (east)
Moody Street	Murray Street	St. Johns Street
Murray Street	Moody Street	loco Road
St. Johns Street	Clarke Road (at Albert Street / Barnet Highway (west))	Barnet Highway (east) (at Dewdney Trunk Road)
Richmond		
No. 2 Road	Inglis Drive	Steveston Highway
No. 3 Road	south of Sea Island Way	Westminster Highway
Alderbridge Way	No. 3 Road	west of Highway 91 (near Shell Road)
Bridgeport Road	St. Edwards Drive	Knights Street No. 6 Road
Cambie Road	No. 3 Road	No. 6 Road
Gilbert Road	Dinsmore Bridge (south abutment)	Westminster Highway
Knights Street	Knights Street Bridge (south abutment)	north of Highway 91
Knights Street	south of Highway 91	Westminster Highway
Nelson Road	Westminster Highway	Blundell Road
No. 6 Road	Bridgeport Road	Westminster Highway
Steveston Highway	No. 2 Road	west of Highway 99
Steveston Highway	east of Highway 99	No. 6 Road
Westminster Highway	No. 2 Road	west of Highway 99
Westminster Highway	east of Highway 99	Knights Street No. 6 Road
Westminster Highway	east of Nelson Road	south of Highway 91
Westminster Highway	north of Highway 91	New Westminster/Richmond border (Boundary Road)
Surrey		
16 Avenue	152 Street	160 Street (White Rock/Surrey border)
16 Avenue	160 St (White Rock/Surrey border)	west of Highway 15 (176 Street)
16 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
32 Avenue	King George Highway	196 Street
64 Avenue	Scott Road/120 Street (Delta/Surrey border)	west of Highway 15 (176 Street)
64 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
72 Avenue	120 Street	152 Street
88 Avenue	Nordel Way	west of Highway 15 (176 Street)
88 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
96 Avenue (west)	Scott Road/120 Street (Delta/Surrey border)	west of 176 Street
96 Avenue (east)	96 Avenue Connector Road	Langley Township/Surrey border
96 Avenue Connector Road	Golden Ears Bridge "mainline"	96 Avenue (east)
104 Avenue	King George Highway	south of Highway 1
108 Avenue	King George Highway	Townline Diversion
128 Street	88 Ave	72 Ave
152 Street	south of Highway 1 (near Lincoln Drive)	north of Highway 10 (56 Avenue)
152 Street	south of Highway 10 (56 Avenue)	16 Avenue (White Rock / Surrey border)
160 Street	Highway 1	Fraser Highway
Bridgeview Drive	Highway 17	King George Highway
Fraser Highway	King George Highway	west of Highway 15 (176 Street)
Fraser Highway	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
King George Highway	Pattullo Bridge (south abutment)	north of Highway 10 (56 Avenue)
King George Highway	south of Highway 10 (56 Avenue)	north of Highway 99
King George Highway	south of Highway 99 (near Crescent Road)	west of Highway 99 (north of 8 Avenue)
Nordel Way	Scott Road/120 Street (Delta/Surrey border)	88 Avenue
Scott Road	King George Highway	96 Avenue (Delta/Surrey border)
Scott Road (120 Street)	96 Avenue (Delta/Surrey border)	north of Highway 10
Townline Diversion	108 Avenue	west of 152 Street

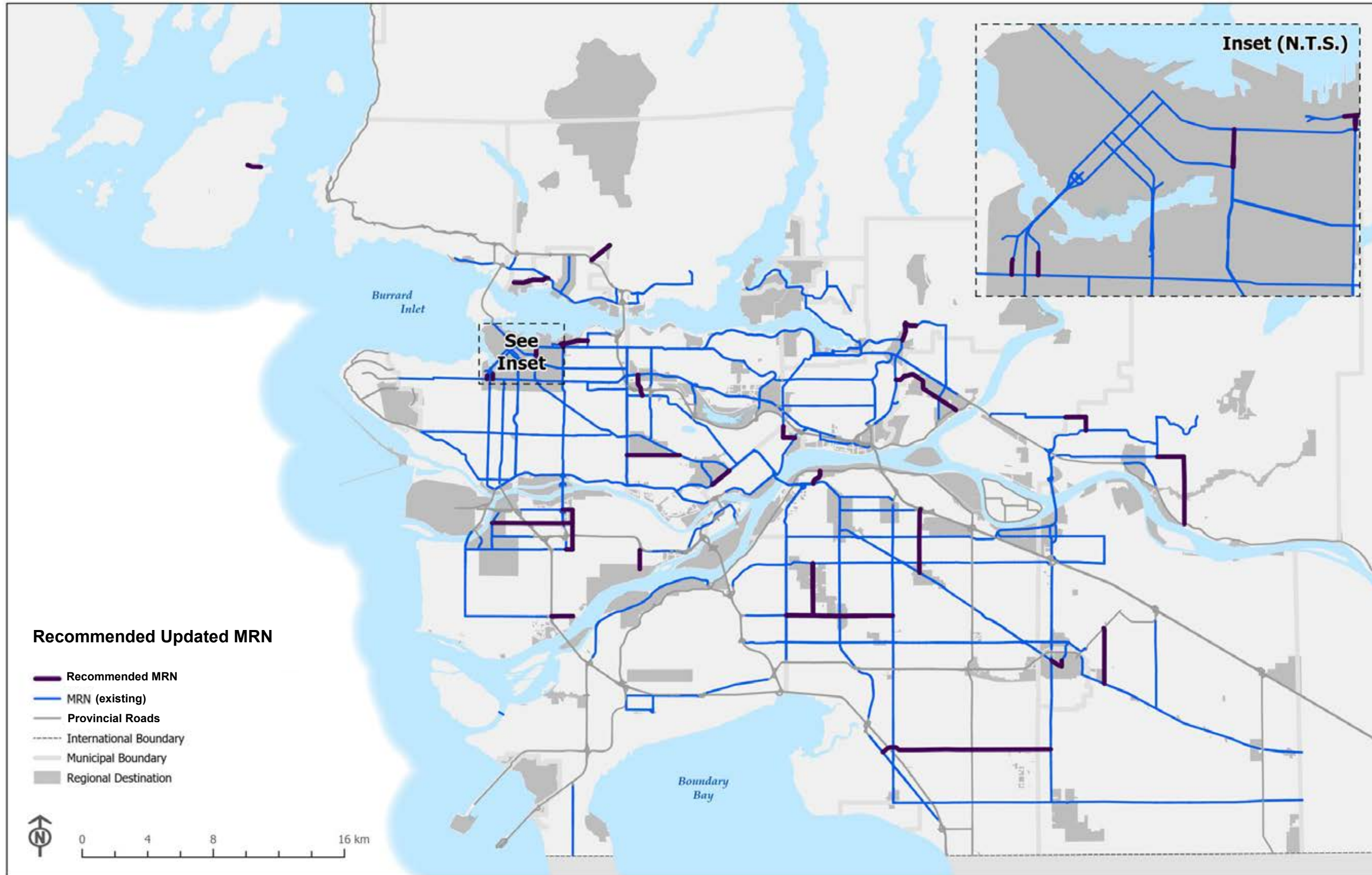
**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Vancouver		
1 Avenue	Clark Drive	Boundary Road (Burnaby/Vancouver border)
10 Avenue	Blanca Street	Alma Street
41 Avenue	SW Marine Drive	Joyce Street
70 Avenue	SW Marine Drive (at Cornish Street)	SW Marine Drive (between Heather and Ash Streets)
Alma Street	Broadway	10 Avenue
Boundary Road	Hastings Street	Marine Way
Broadway	Alma Street	Rupert Street
Cambie Bridge	North abutment (including ramps)	South abutment (including ramps)
Cambie Street	Cambie Bridge (south abutment)	SW Marine Drive
Clark Drive	Hastings Street Powell Street	Knight Street
Cordova Diversion	East of Hawks Avenue	Powell Street
Dundas Street	Semlin Drive	Nanaimo Street
Fir Street	Granville Bridge Fir Street offramp	Broadway
Georgia Street	Highway 99/1A (near Chilco Street)	Georgia Viaduct
Georgia Viaduct	Georgia Street	Main Street
Grandview Highway	Nanaimo Street	Boundary Road (Burnaby/Vancouver border)
Granville Bridge	North abutment (including ramps)	South abutment (including ramps)
Granville Street	Granville Bridge (south abutment)	SW Marine Drive
Hastings Street	Howe Street	Boundary Road (Burnaby/Vancouver border)
Hemlock Street	Granville Bridge Hemlock Street onramp	Broadway
Howe Street	Hastings Street	Granville Bridge
Joyce Street	41 Avenue	Kingsway
Kingsway	Main Street	Boundary Road (Burnaby/Vancouver border)
Knight Street	Clark Drive	Knight Street Bridge (north abutment)
Lougheed Highway	Rupert Street	Boundary Road (Burnaby/Vancouver border)
Main Street	Georgia Viaduct Hastings Street	Kingsway
SW Marine Drive	Camosun Street	70 Avenue (at Cornish Street)
SW Marine Drive	Granville Street	Ontario Street
SE Marine Drive	Ontario Street	Marine Way
Marine Way	SE Marine Drive	Boundary Road (Burnaby/Vancouver border)
McGill Street	Nanaimo Street	west of Highway 1 (near Bridgeway Street)
Nanaimo Street	McGill Street	Hastings Street
Nanaimo Street	Broadway	Grandview Highway
Nelson Street	Howe Street	Cambie Bridge
Oak Street	Broadway	Highway 99 (near 71 Avenue)
Powell Street	East of Hawks Avenue	West of Clark Drive Semlin Drive
Seymour Street	Granville Bridge	Hastings Street
Smithe Street	Cambie Bridge	Howe Street
West Vancouver		
Marine Drive	21 Street	Highway 99/1A (near Taylor Way)
White Rock		
North Bluff Road	Johnston Road	Stayte Road (Surrey/White Rock Border)
TransLink-Owned Assets		
Golden Ears Way, incl. Golden Ears Bridge	east of 176 Street (Surrey)	210 Street (Maple Ridge)
Knight Street Bridge	North abutment (Vancouver)	South abutment (Richmond)
Pattullo Bridge	North abutment (New Westminster)	South abutment (Surrey)
Westham Island Bridge	West Abutment (Westham Island)	East Abutment (Delta)

Appendix C – MRN Amendments via Bylaw

- **Greater Vancouver Transportation Authority Major Road Network Bylaw Number 26-2002:**
This bylaw combined and corrected errors and omissions in Bylaws No. 1 and No. 2, and added two newly constructed road segments in Delta (Nordel Way) and Surrey (South Fraser Way) and one existing road segment in Surrey (River Road) to the MRN. These road segments “were always intended to form part of the MRN,” but were held back pending completion of construction.
- **Greater Vancouver Transportation Authority Major Road Network Amendment Bylaw Number 34-2004:**
This bylaw added a new road segment in Burnaby (i.e., Southridge Drive / Byrne Road) and replaced a segment in North Vancouver (i.e., new Dollarton Highway alignment) that had been constructed with capital funding from TransLink.
- **Greater Vancouver Transportation Authority Major Road Network Bylaw Number 39-2005:**
This bylaw added/extended two existing road segments in Anmore (i.e., East Road and Sunnyside Road) to the MRN in response to the municipality’s request “due to the volume of regional traffic utilizing certain non-MRN roads in the Village to access the Buntzen Lake recreation area and the Village of Belcarra.”
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 54-2008:**
This bylaw added new road segments associated with the 204 Street Overpass project in the City of Langley and the David Avenue Connector project in the City of Coquitlam. In addition, this bylaw added/deleted road segments in the City of Surrey that were completed early and handed over to the City of Surrey as part of the Golden Ears Bridge project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 59-2009:**
This bylaw added/removed road segments in the Township of Langley and added new road segments in the District of Maple Ridge, both associated with completion of the Golden Ears Bridge.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 64-2010:**
This bylaw added road segments in the City of Port Coquitlam to reflect MRN changes associated with completion of the Coast Meridian Overpass project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 68-2010:**
This bylaw added road segments in the City of Coquitlam to provide continuity between MRN additions approved as part of the David Avenue Connector and Coast Meridian Overpass projects.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 69-2010:**
This bylaw added two road segments in the City of Vancouver (Powell Street and Cordova Diversion) associated with the Powell Street Overpass project.

- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 79-2012:**
 This bylaw removed three road segments: two segments in the City of Surrey (River Road from Delta/Surrey border to South Fraser Way; and South Fraser Way, from River Road to Old Yale Road) associated with the South Fraser Perimeter Road project; and one segment in the City of Richmond (Westminster Highway from Knight Street to east of Nelson Road) associated with the Nelson Road Interchange project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 80-2012:**
 This bylaw removed the portions of North Road, Austin Road, Lougheed Highway, and Broadway that have been transferred to the Province as part of the Evergreen Line project, in the City of Burnaby.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 88-2013:**
 This bylaw removed segments of River Road between West of Highway 91 and the Surrey-Delta border, in the Corporation of Delta associated with the completion of the South Fraser Perimeter Road (SFPR) project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 95-2014:**
 This bylaw added road segments in the Township of Langley associated with completion of the Golden Ears Bridge (GEB) project, and the terms set out in the GEB Master Municipal Agreement (MMA).
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 97-2014:**
 This bylaw added a short Lougheed Highway section in the City of Coquitlam to rectify an administrative oversight from 1999.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 100-2015:**
 This bylaw added and deleted road segments in the Corporation of Delta associated with completion of South Fraser Perimeter Road (SFPR) project and Corporation of Delta's truck route network changes.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 104-2015:**
 This bylaw added road segments in the Corporation of Delta associated with completion of South Fraser Perimeter Road (SFPR) project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016:**
 This bylaw added and removed road segments in the Township and City of Langley associated with completion of Mufford Crescent Overpass project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018:**
 This bylaw reinstated road segments in the City of Burnaby associated with the completion of the Millennium Line Evergreen Extension Project.



Appendix E: Municipal Consent Letters

BOWEN
ISLAND
Municipality

October 31, 2018

Matt Craig
Manager, System Plans
TransLink
#400 - 287 Nelson's Ct.
New Westminster, BC
V3L 0E7

Dear Mr. Craig,

I am writing to confirm that Bowen Island Municipality endorses the Major Road Network candidate segment on Bowen Island:

Bowen Island Trunk Rd. from the Snug Cove ferry terminal to Mount Gardner Rd.

This candidate has been endorsed through the Bowen Island Transportation Plan (element A6) and Council resolution #18-18.

Kind regards,



Kathy Lalonde
Chief Administrative Officer
Bowen Island Municipality



Office of the City Clerk

K. O'Connell, City Clerk
B. Zeinabova, Deputy City Clerk

2018 November 20

TransLink
Attn: Mr. Matt Craig
Manager, Systems Plans
400 – 287 Nelson's Court
New Westminster, BC V3L 0E7

Sent via e-mail to: matt.craig@translink.ca

Dear Mr. Craig:

Subject: Expansion of TransLink's Major Road Network
(Item 7(1), Council Meeting 2018 November 19)

Burnaby City Council, at the Open Council meeting held on 2018 November 19, received a report from the Director Planning and Building recommending addition to TransLink's Major Road Network, and adopted the following recommendations contained therein:

1. **THAT** Council endorse the addition of parts of Gilmore Avenue / Diversion, Imperial Street, Tenth Avenue, and Willingdon Avenue to TransLink's Major Road Network, as described in this report.
2. **THAT** Council forward a copy of this report to TransLink.

As per recommendation #2, a copy of the staff report is enclosed for your information.

Yours truly,

Blanka Zeinabova
Deputy City Clerk

Copied to: Director Planning and Building
Director Engineering



Item
Meeting.....2018 Nov 19

COUNCIL REPORT

TO: CITY MANAGER **DATE:** 2018 November 13
FROM: DIRECTOR PLANNING AND BUILDING **FILE:** 94000 20
Reference: TransLink
SUBJECT: EXPANSION OF TRANSLINK’S MAJOR ROAD NETWORK
PURPOSE: To advance the addition of certain City streets to TransLink’s Major Road Network.

RECOMMENDATIONS:

- 1. **THAT** Council endorse the addition of parts of Gilmore Avenue / Diversion, Imperial Street, Tenth Avenue, and Willingdon Avenue to TransLink’s Major Road Network, as described in this report.
- 2. **THAT** Council forward a copy of this report to TransLink.

REPORT

1.0 INTRODUCTION

TransLink’s Major Road Network (MRN) consists of municipally-owned arterial streets spanning the region, as agreed to by TransLink and the individual municipalities. It carries the majority of the region’s commuter, transit, and truck traffic. TransLink provides operation, maintenance, and rehabilitation funding and contributes to capital improvements for MRN streets. In return, the municipality agrees not to reduce the people-carrying capacity of MRN streets without TransLink approval.

The MRN has changed little since it was first established, but TransLink now has funding based on the Mayors’ Council 10-Year Vision for a one-time expansion of 10% to the network. This report explores the applicability of that expansion to Burnaby.

2.0 POLICY FRAMEWORK

The recommendations in this report support the following goals and sub-goals of the City’s *Corporate Strategic Plan*:

- **A Safe Community**
 - Transportation safety –
Make City streets, pathways, trails and sidewalks safer
- **A Connected Community**
 - Geographic connection –
Ensure that people can move easily through all areas of Burnaby, using any form of transportation

To: City Manager
 From: Director Planning and Building
 Re: Expansion of TransLink's Major Road Network
 2018 November 13..... Page 2

- A Dynamic Community
 - City facilities and infrastructure –
Build and maintain infrastructure that meets the needs of our growing community
- A Thriving Organization
 - Financial viability –
Maintain a financially sustainable City for the provision, renewal and enhancement of City services, facilities and assets

3.0 BACKGROUND

The MRN has almost 2,400 lane-kilometres¹ of roadways, of which about 300 are in Burnaby. The existing MRN streets in Burnaby are shown² in blue in *Figure 1*. They correspond roughly to the City's arterial street network. Burnaby received from TransLink \$6.35 million in 2017 for the operation, maintenance, and rehabilitation of Burnaby's MRN roads.

TransLink's 10-Year Vision approved by the Mayors' Council, included a one-time 10% increase to the MRN. TransLink established a process to identify viable candidates for additions to the MRN. Each municipality put forward various street segments for consideration, based on the following MRN criteria:

- Facilitates intra-regional travel of people and transportation of goods;
- Connects regionally significant destinations;
- Forms an interconnected and complete network; and
- Moves high volumes of general purpose vehicles, transit passengers and / or trucks.

Figure 1 shows those street segments put forward by City staff for consideration in TransLink's process (in red, yellow and green). All proposed segments met the above requirements for inclusion in the MRN. However, the sum of region-wide requests exceeded the available funding for new MRN streets, and TransLink therefore needed to identify which segments were of higher priority for inclusion. With municipal input, TransLink evaluated the degree to which each proposed segment was consistent with the above criteria. As a result of that evaluation, upon Council endorsement, TransLink staff are proposing to take the following to their Board for MRN inclusion (shown in green in *Figure 1*):

- Gilmore Avenue / Diversion between Lougheed Highway and Canada Way;
- Imperial Street between Boundary Road and Kingsway; and
- Tenth Avenue between Griffiths Drive and Kingsway.

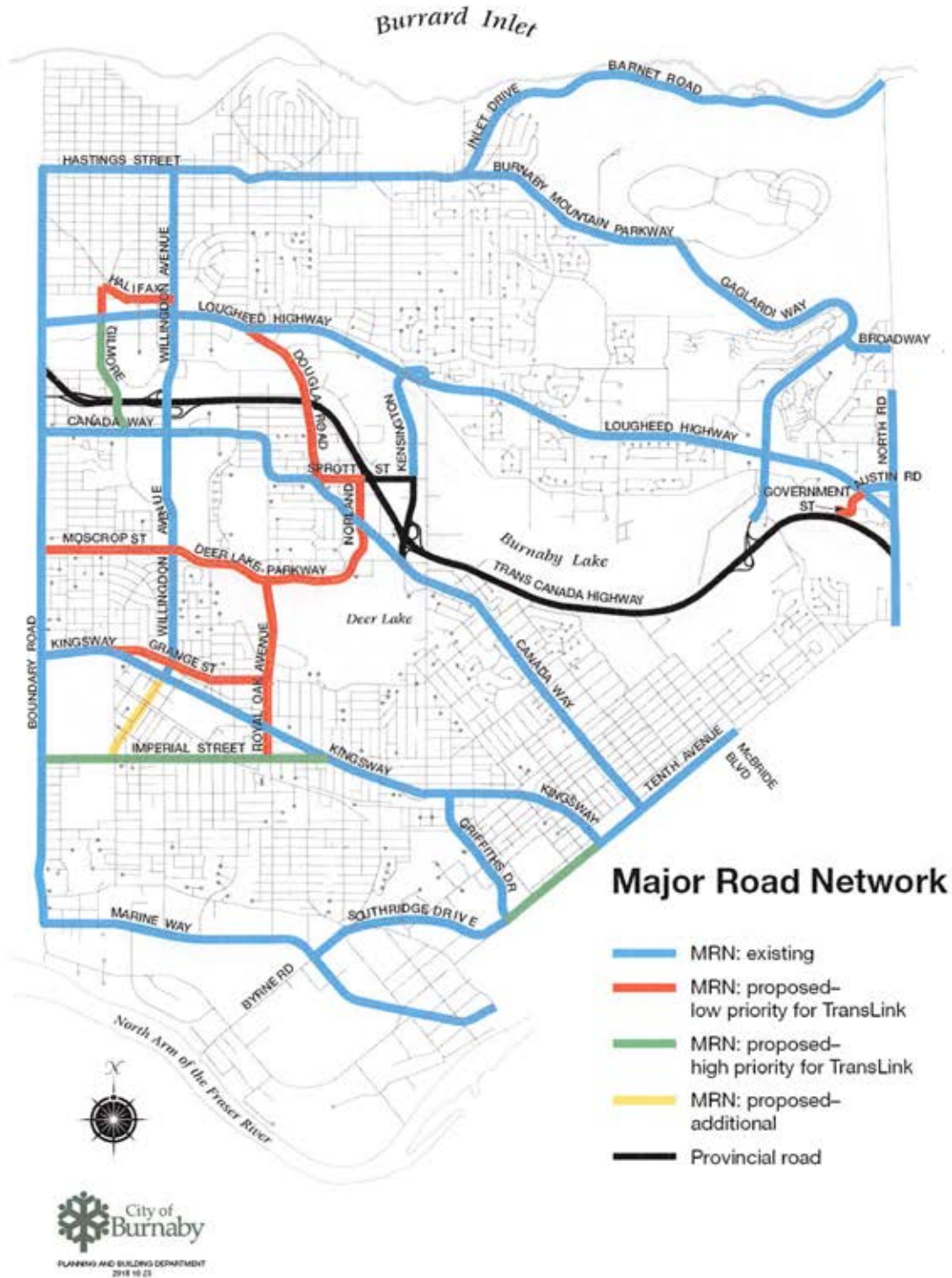
These would comprise an addition of about 20 lane-kilometres to Burnaby's portion of the MRN. TransLink's current annual funding contribution is \$20,610 per lane-kilometre, thus generating an annual payment increase to the City of about \$410,000 if these street segments became part of the MRN. If approved this year by Council and the TransLink Board, the first payment would be for 2018.

¹ The network is measured in "lane-kilometres" so that funding is allocated on the basis of both street length and width.

² The "existing" MRN streets include certain streets in Lougheed Town Centre that were approved by Council on 2018 October 1 for MRN inclusion, but which have not yet been approved by the TransLink Board.

To: City Manager
From: Director Planning and Building
Re: Expansion of TransLink's Major Road Network
2018 November 13 Page 3

Figure 1: Existing and Proposed MRN Roads



To: City Manager
 From: Director Planning and Building
 Re: Expansion of TransLink's Major Road Network
 2018 November 13..... Page 4

4.0 DISCUSSION

As noted above, the City benefits by receiving funding from TransLink for MRN roads, with the only constraint being that TransLink approval would be required if the City later wished to reduce the people-carrying capacity of these streets. Reduced people carrying capacity could take a variety of forms, such as elimination of a lane, introduction of on-street parking, or installation of a new traffic signal. For such proposals, the City must provide TransLink a technical analysis of the probable impacts. TransLink's review is comprehensive and they look at whether the reduction is justifiable on the basis of achieving other important transportation goals such as improved safety or creation of better facilities for active transportation. To date, the TransLink review has not been an onerous requirement and has not prevented any MRN changes that the City has proposed.

Staff recommend that Council endorse four street proposals for inclusion in the MRN:

- **Tenth Avenue** between Griffiths Drive and Kingsway is designated as a Primary Arterial in the *Burnaby Transportation Plan*. It is currently a two-lane street with on-street parking, and there are no plans to reduce the number of lanes. Tenth Avenue is partly in New Westminster, and its inclusion in the MRN would be predicated on their support. A decision from their Council is pending.
- **Imperial Street** between Boundary Road and Kingsway is also designated as a Primary Arterial. It currently has four travel lanes, with the outer lanes used for parking at off-peak times. There are no plans to reduce the capacity.
- **Gilmore Avenue / Diversion** between Lougheed Highway and Canada Way is designated as a Secondary Arterial and has already been built to the full standard. It is a four-lane street with no on-street parking. The City has encouraged the Province to replace the 50-year-old Gilmore overpass across Highway 1 and include a multi-use path as part of the project.
- **Willingdon Avenue** between Kingsway and Imperial Street (shown in yellow in *Figure 1*) is designated as a Secondary Arterial and has already been built to that standard. It met the criteria for inclusion in the MRN, but through TransLink's process, was found to be less of a priority for inclusion than streets elsewhere in the region. However, it is a busy four-lane street (unlike the above section of Tenth Avenue which has only two lanes), has unusually heavy bus service (serving Metrotown SkyTrain station), provides access to a regionally-significant destination (downtown Burnaby) and connects two other MRN streets (Kingsway and the proposed Imperial Street). It is therefore recommended that Council request the TransLink Board to include this section of Willingdon Avenue in the MRN.

Staff recommend all four segments be included in the MRN. If TransLink does not agree, and only wishes to include three segments, staff recommend the Willingdon segment be prioritized over the subject section of Tenth Avenue, which is a comparatively minor street.

The *Burnaby Transportation Plan* is currently being updated, as part of which street classifications will be reviewed. While a classification change is possible for any street, it is not considered likely that any of these street segments would be reduced to a classification that is lower than the standard to which they are currently constructed. As such, the new *Plan* is unlikely to trigger reduced widths below existing conditions for these street segments. Therefore, the MRN designation would not impact the City's use or plans for these streets.

It is therefore recommended that Council endorse the addition of the four street segments to the MRN.

To: City Manager
From: Director Planning and Building
Re: Expansion of TransLink's Major Road Network
2018 November 13..... Page 5

5.0 CONCLUSION

TransLink has a one-time funding opportunity to expand the MRN. Staff have reviewed TransLink's funding criteria and the City's road network and recommend the addition of the subject street segments, set out in Section 4.0 of this report, to the Major Road Network. Council is requested to endorse these additions to the MRN, and upon Council recommendation the report will be forwarded to TransLink for consideration by their Board.


Lou Pelletier, Director
PLANNING AND BUILDING

SR:sla:sa

cc: Director Engineering
City Clerk

R:\Long Range Clerical\DOCSSR\Council Reports\2018\Expansion of TransLinks Major Road Network (2018.11.19).docx



2018 November 20
Our File: 16-8690-01/000/2018-1
Doc #: 3157569.v1

Mr. Matt Craig, Manager, Systems Plans
TransLink
400 - 287 Nelson's Court
New Westminister, BC V3L 0E7

Dear Mr. Craig:

RE: 2018 Major Road Network (MRN) Expansion

Thank you for working with the City of Coquitlam and other Lower Mainland Municipalities on the review and proposed expansion of the Major Road Network. The list of recommended candidate MRN Additions within the City of Coquitlam include the following:

- Pinetree Way from Guildford Way to David Avenue,
- David Avenue from Pinetree Way to Pipeline Road,
- Como Lake Avenue from Lougheed Highway to Westwood Street, and
- Westwood Street from Como Lake Avenue to Kingsway Avenue.

Coquitlam staff presented a report to Council at the Regular Meeting of November 19, 2018 at which time Council unanimously endorsed the staff recommendation that these segments be advanced to the TransLink Board meeting on December 6, 2018 for inclusion into the MRN. Council also endorsed a staff recommendation that the Mayor's Council consider funding opportunities in the next 10-year Transportation Plan to further expand the MRN.

If you require any further information or clarification, I can be contacted directly at 604-927-4324 or at dmooney@coquitlam.ca

Yours truly,



Dan G. Mooney, ASCT
Transportation Manager

c – Jozsef Dioszeghy, P. Eng , General Manager Engineering & Public Works
Jay Gilbert, City Clerk

November 5, 2018

Matt Craig
Manager, System Plans
400-287 Nelson's Court
New Westminster, BC
V3L 0E7

Subject: Endorsement of MRN Expansion


Dear Mr. Craig,

This confirms the City of Langley's endorsement of the additions to the Major Road Network at the following locations:

- Fraser Highway, 200 Street to 203 Street
- 203 Street, Fraser Highway to Logan Avenue

Please contact Rick Bomhof, Director of Engineering, Parks & Environment if you have any questions.

Yours truly,



Francis, Cheung, P.Eng.
Chief Administrative Officer



November 5, 2018

File No. 0400-67-001

Matt Craig, Manager, Systems Plans
TransLink
400-287 Nelson's Court
New Westminster, BC V3L 0E7

Dear Mr. Craig:

Re: 2018 MRN Expansion Recommendations

Thank you for working with the Township of Langley (the Township) and other lower mainland municipalities on the review and proposed expansion of the Major Road Network (MRN) and potential expansion. The list of recommended candidate MRN additions within the Township include the following:

- 216 Street from Highway 10 to Fraser Highway
- 32 Avenue from 196 Street to 200 Street

Township staff advised Mayor and Council of the potential MRN additions in a memorandum dated February 15, 2018 that included the above noted sections. Mayor and Council did not raise any concern or objections with the proposed additions. As such, the Township confirms that it endorses the proposed MRN additions noted above.

If you require any further information or clarification, I can be contacted at 604.533.6183 or at pcordeiro@tol.ca

Yours truly,

A handwritten signature in blue ink, appearing to read 'Paul Cordeiro', is written over a light blue horizontal line.

Paul Cordeiro, P.Eng.
MANAGER, TRANSPORTATION ENGINEERING

Copies to: Mayor and Council
Mark Bakken, Chief Administrative Officer
Ramin Seifi, P.Eng, General Manager, Engineering & Community Development

November 20, 2018

Matt Craig
Manager, System Plans
TransLink
400-287 Nelson's Court
New Westminster BC V3L 0E7

Dear Mr. Craig:

RE: Major Road Network (MRN) Process - Municipal Consent Requirements
Our File No: 16-8330-01

TransLink went through an iterative process to expand the Major Road Network (MRN) by 237 lane-km in 2018 as part of the Mayor's 10-Year Vision through which the following road segments in the City of Maple Ridge were identified for inclusion:

- Dewdney Trunk Road from 232 Street to 240 Street
- 240 Street from Dewdney Trunk Road to Lougheed Highway
- 210 Street from 128 Avenue to 132 Avenue
- 132 Avenue from Sharpe Road to 210 Street

This letter provides municipal consent and confirmation that the City of Maple Ridge concurs with the recommendation to include the roads noted above into the expanded MRN as part of TransLink's 2018 MRN expansion process.

Furthermore, the City would like to take this opportunity to thank TransLink and all participating municipalities for this collaborative process.

Should you have any questions, please contact the undersigned at 604-467-7359.

Yours truly,



Frank Quinn, MBA, PEng.
General Manager Public Works & Development Services

November 19, 2018

File No.: 16.3217.08

Matt Craig
Manager, Systems Plans
TransLink
400-287 Nelsons Court
New Westminster, BC V3L 0E7

Dear Mr. Craig:

Re: Council Endorsement of Major Road Network (MRN) Expansion

The City is appreciative of the collaborative approach that TransLink is taking to review and expand the Major Road Network as part of the Mayors' 10-year Vision for Regional Transportation.

At a Closed meeting held on November 19, 2018, Council resolved to add the following three road segments to the Regional Major Road Network:

- Braid Street, from Brunette Avenue to East Columbia Street
- East Columbia Street, from Braid Street to North Road
- Tenth Avenue, from Twentieth Street to Twelfth Street

If you require any further information or clarification, please contact Lisa Leblanc, Manager of Transportation at 604.515.3786 or lleblanc@newwestcity.ca

Yours Sincerely,



Jim Lowrie, Eng. L., MBA
Director of Engineering Services

cc: Lisa Leblanc, Manager of Transportation



ENGINEERING, PARKS & ENVIRONMENT DEPARTMENT
CITY OF NORTH VANCOUVER T 604 983 7333
141 WEST 14TH STREET F 604 985 8439
NORTH VANCOUVER ENG@CNV.ORG
BC / CANADA / V7M 1H9 CNV.ORG

November 19, 2018

Translink
87 Nelson Court #400
New Westminster, BC V3L 0E7
Attn: Matt Craig, Manager System Plans

Dear Mr. Craig, *Matt*

I am writing to confirm that the City of North Vancouver endorses the MRN expansion at the following locations:

- West 2nd Street from West 3rd Street to the intersection of West 1st Street and Fell Avenue,
- West 1st Street from the intersection of West 2nd Street and Fell Avenue to the Municipal boarder with the District of North Vancouver.

Thank you for working with the City of North Vancouver in helping to achieve these additions to the Major Road Network.

Sincerely,

Douglas T. Pope, P. Eng.
City Engineer



File: 16.8310.00/000.000

November 20, 2018

Matt Craig, Manager, Systems Plans
TransLink
400-287 Nelson's Court
New Westminster, BC V3L 0E7

Dear Mr. Craig:

Re: 2018 Major Road Network Expansion Recommendations

Thank you for working with the District of North Vancouver (DNV) on the proposed Major Road Network (MRN) expansion program. Under the proposed expansion program, we understand that MRN candidate road segments within the DNV include:

- Lynn Valley Rd from Hwy 1 to Mountain Hwy (6.4 lane-km)
- W 1st St from CNV border to Garden Ave (3.2 lane-km)

DNV Transportation submitted a Report to Council on Oct 29, 2018 recommending endorsement of the proposed 2018 MRN expansion. On Nov 19, 2018 DNV Mayor and Council unanimously endorsed the recommended candidate Major Road Network (MRN) additions listed above for TransLink staff to bring to the TransLink Board for approval and implementation.

Please let me know if you require any further information or documentation regarding the 2018 MRN expansion recommendation.

Sincerely,

David Stuart
Chief Administrative Officer
District of North Vancouver

Copies to: Mayor and Council
Gavin Joyce, General Manager Engineering Parks and Facilities



City of Pitt Meadows

CERTIFICATION

I, **KAREN ELRICK**, Deputy Corporate Officer, for the City of Pitt Meadows,

HEREBY CERTIFY that the following is a true and exact copy of the Resolution passed by the Municipal Council at its Regular Meeting of the Pitt Meadows City Council held on Tuesday, November 13, 2018:

THAT Council:

Endorse the Major Road Network Expansion to include Old Dewdney Trunk Road from Sharpe Road to Neaves Road to complete the MRN network within the City of Pitt Meadows.

CARRIED.

DATED at the City of Pitt Meadows, in the Province of British Columbia, this 20th day of November, 2018.

Karen Elrick
Deputy Corporate Officer
City of Pitt Meadows

November 14, 2018

Sarah Ross
Director, System Planning
TransLink
South Coast British Columbia Transportation Authority
400 - 287 Nelson's Court
New Westminster, BC V3L 0E7

Dear Ms. Ross,

Re: 2018 MRN Expansion Process and Recommended MRN Additions

The City of Port Coquitlam has been actively engaged by TransLink through the Regional Transportation Advisory Committee (RTAC) regarding the Major Road Network (MRN) expansion process. We believe that the MRN expansion, as part of the 10-Year Mayors Vision, is an important investment in the region's transportation network and provides valuable funding to municipalities to operate, maintain and rehabilitate MRN roads.

As part of the performance based evaluation of candidate selections, we recognize the MRN expansion objectives to:

- Facilitate intra-regional travel of people and transportation of goods.
- Connect regionally significant destinations
- Form an interconnected and complete network.
- Move high volumes of general purpose vehicles, transit passengers and / or trucks.

The City of Port Coquitlam presently has three MRN roads (Coast Meridian Road, Lougheed Highway and Broadway Street) and submitted a list of MRN candidates for consideration in the 10% network expansion in 2018 (a total of 237 lane-km). As a result of the evaluation process, it is acknowledged that the following request is being submitted to the TransLink Board for approval as an addition to the network: Kingsway Avenue from Mary Hill Bypass to Westwood Street.

A report outlining the MRN expansion and selection process was brought to City Council on November 13, 2018. The City of Port Coquitlam fully supports the addition of Kingsway Avenue from Mary Hill Bypass to Westwood Street to the MRN.

November 14, 2018

Page 2

Thank you for the opportunity to participate in the process. We look forward to continuing work with TransLink on future projects in the City of Port Coquitlam.

Sincerely,

A handwritten signature in blue ink, appearing to read "F. Smith", with a long horizontal flourish extending to the right.

Forrest Smith, P.Eng.
Director of Engineering & Public Works
City of Port Coquitlam



November 16, 2018
File: 01-0154-04/2018-Vol 01

Planning and Development Division
Transportation

Via e-mail

Matt Craig, Manager, System Plans
TransLink (South Coast British Columbia Transportation Authority)
400 - 287 Nelson's Court
New Westminster, BC V3L 0E7

Dear Matt:

Re: City of Richmond Endorsement of Major Road Network (MRN) Expansion

As requested, please find attached copies of the relevant Council resolutions and supporting staff reports that confirm Council endorsement of the roadway segments in Richmond proposed to be added to the Major Road Network (MRN). Council endorsement was provided at two separate meetings as outlined in the table below.

Council Meeting Date	Council Resolution	Roadway Segment Endorsed for Addition to MRN		
		Road Name	From Location	To Location
June 25, 2012	R12/11-5	Steveston Hwy	Highway 99	No. 6 Road
		Westminster Hwy	Knight Street	No. 6 Road
		Nelson Road	Westminster Hwy	Blundell Road
		Bridgeport Road	Knight Street	No. 6 Road
		No. 6 Road	Bridgeport Road	Westminster Hwy
November 13, 2018	R18/19-4	Cambie Road	No. 6 Road	No. 3 Road

We appreciate TransLink's collaborative approach with all Greater Vancouver municipalities to achieve this milestone expansion of the MRN.

Yours truly,

Victor Wei, P. Eng.
Director, Transportation

VW:jc
Att. 1
pc: Larry Ford, Manager, Roads and Construction Services



Regular Council Meeting

Monday, June 25, 2012

Time: 7:00 p.m.
Place: Council Chambers
Richmond City Hall
Present: Mayor Malcolm D. Brodie
Councillor Chak Au
Councillor Linda Barnes
Councillor Derek Dang
Councillor Evelina Halsey-Brandt
Councillor Ken Johnston
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves
Acting Corporate Officer – Gail Johnson
Call to Order: Mayor Brodie called the meeting to order at 7:00 p.m.

RES NO. ITEM

MINUTES

- R12/11-1 1. It was moved and seconded
That:
- (1) *the minutes of the Regular Council Meeting held on Monday, June 11, 2012, and*
 - (2) *the minutes of the Regular Council Meeting for Public Hearings held on Monday, June 18, 2012,*
- each be adopted as circulated.*

CARRIED



**Regular Council Meeting
Monday, June 25, 2012**

RES NO. ITEM

AGENDA ADDITIONS & DELETIONS

R12/11-2 It was moved and seconded
*That a verbal update on the RCMP Contract be added to the Council
Agenda as Item No. 16A.*

CARRIED

PRESENTATION

2012 Climate Change Showdown

Margot Daykin, Manager, Sustainability, noted that the Climate Change Showdown is an interactive program that engages elementary school children across Richmond in taking action against climate change by reducing greenhouse gas emissions. She further noted that over 1300 students participated in the 2012 Climate Change Showdown, and by undertaking various initiatives over a 4-week period, these students and their families achieved a greenhouse gas emission reduction of over 690 tonnes. Ms. Daykin concluded by noting that the winning class achieved the best per person reduction with an average of 1.4 tonne per student.

Valeriya Svichkar, student spokesperson for the grade 6/7 winning class, offered a few remarks about the Climate Change Showdown experience prior to being presented with a certificate from Mayor Brodie.

COMMITTEE OF THE WHOLE

R12/11-3 2. It was moved and seconded
*That Council resolve into Committee of the Whole to hear delegations on
agenda items (7:08 p.m.).*

CARRIED



Regular Council Meeting
Monday, June 25, 2012

RES NO. ITEM

3. Delegations from the floor on Agenda items:

Item No. 14 – Proposed Changes To TransLink’s Taxisaver Program

Vince Miele, Chair, Richmond Centre for Disability (RCD), spoke in support of the proposed recommendation, but asked Council to choose stronger wording that would condemn TransLink for the proposed elimination of the TaxiSaver Program. Mr. Miele expressed his opinion that TransLink had tried to eliminate the program from the Metro Vancouver region without any consultation, and stated that he had not found any other organization that was in support of the proposal to eliminate the program. He noted that the TaxiSaver Program does not face elimination anywhere else in the province as it is still run by BC Transit. Mr. Miele further noted that in order to be heard on the matter, members of the RCD had to attend TransLink’s Annual General Meeting. In conclusion he reiterated that TransLink should be asked to enhance the HandiDart service and not eliminate the TaxiSaver Program.

R12/11-4 4. It was moved and seconded
That Committee rise and report (7:26 p.m.).

CARRIED

CONSENT AGENDA

R12/11-5 5. It was moved and seconded
That Items 6 through 14 be adopted by general consent.

CARRIED

6. **COMMITTEE MINUTES**

That the minutes of:

- (1) *the Community Safety Committee meeting held on Tuesday, June 12, 2012;*
- (2) *the Planning Committee meeting held on Tuesday, June 19, 2012;*
- (3) *the Public Works & Transportation Committee meeting held on Wednesday, June 20, 2012;*



Regular Council Meeting
Monday, June 25, 2012

RES NO. ITEM

**12. APPLICATION BY PENTA BUILDERS GROUP FOR A HERITAGE
ALTERATION PERMIT AT 3531 BAYVIEW STREET**

(File Ref. No. HA 12-610486) (REDMS No. 3531833)

That a Heritage Alteration Permit be issued to authorize the demolition of structures and associated infrastructure at 3531 Bayview Street, on a site zoned Light Industrial (IL), including:

- (a) the demolition and removal of the building;*
- (b) the excavation and removal of associated infrastructure;*
- (c) the temporary storage of existing concrete as milled granular fill adjacent to and even in height with the raised area along the Bayview Street edge of the property. The fill will be re-used in future redevelopment;*
- (d) the securing of the site; and*
- (e) the installation of new fencing (if needed) with a landscape buffer.*

ADOPTED ON CONSENT

**13. PROPOSED ROAD SECTIONS IN RICHMOND TO BE ADDED TO
TRANSLINK'S MAJOR ROAD NETWORK**

(File Ref. No. 10-6360-12-01) (REDMS No. 3516106)

That the map of road sections proposed to be added to TransLink's Major Road Network, as shown in Attachment 1 and described in Table 3 of the staff report dated May 24, 2012 from the Director, Transportation, be endorsed.

ADOPTED ON CONSENT

14. PROPOSED CHANGES TO TRANSLINK'S TAXISAVER PROGRAM

(File Ref. No. 01-0154-04/2012-Vol 01) (REDMS No. 3550714)

That City Council demand that TransLink:

- (1) maintain the TaxiSaver Program;*
- (2) conduct full consultation, particularly with the Richmond Seniors Advisory Committee and the Richmond Centre for Disability; and*



City of Richmond

Report to Committee

To: PWT Mtg. June 20, 2012

To: Public Works and Transportation Committee

Date: May 24, 2012

From: Victor Wei, P. Eng.
Director, Transportation

File: 10-6360-12-01/2011-
Vol 01

Re: PROPOSED ROAD SECTIONS IN RICHMOND TO BE ADDED TO
TRANSLINK'S MAJOR ROAD NETWORK

Staff Recommendation

That the map of road sections proposed to be added to TransLink's Major Road Network, as shown in Attachment 1 and described in Table 3 of the report dated May 24, 2012 from the Director, Transportation, be endorsed.

Victor Wei, P. Eng.
Director, Transportation
(604-276-4131)

Att. 1

REPORT CONCURRENCE			
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER	
Roads & Construction Engineering	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>		
REVIEWED BY TAG SUBCOMMITTEE	INITIALS: <i>VE</i>	REVIEWED BY CAO	INITIALS: <i>GD</i>

Staff Report

Origin

TransLink initiated a review of the management and funding of its Major Road Network (MRN) in 2010. One component of the package of changes, approved by the TransLink Board at its May 2012 meeting, is a process to increase the size of the MRN by up to 10 per cent in lane-kilometres annually based on requests from member municipalities. This report seeks Council endorsement for new road sections in Richmond proposed to be added to the MRN via this process.

Analysis

1. Current Major Road Network

At its founding in 1998, TransLink was unique among North American transportation agencies as having not only a fully integrated transit system across all modes but also responsibility for a network of major arterial roads that connect many of Metro Vancouver's 22 municipalities. While ownership of and operational responsibility for the MRN remains with each municipality, TransLink provides funding for the operations, maintenance and rehabilitation of the MRN, and shares in the cost of eligible capital improvements.

1.1 Richmond Roadway Components of MRN

The current MRN comprises over 2,300 lane-kilometres, including 130.5 lane-kilometres (approximately five per cent) in Richmond as shown in Table 1. It should be noted that Westminster Highway between Knight Street and Nelson Road was removed from the MRN effective January 2012 following the opening of the Highway 91-Nelson Road Interchange.

Table 1: Richmond Roadway Sections in the MRN

Roadway	Between
No. 2 Road and Bridge	Russ Baker Way and Steveston Highway
Steveston Highway	No. 2 Road and Highway 99
Westminster Highway	No. 2 Road and Knight Street / Nelson Road and Boundary Road
Alderbridge Way	No. 3 Road and Shell Road
Bridgeport Road	Highway 99 and Knight Street
Knight Street Corridor	Westminster Highway and south end of the Knight Street Bridge
No. 3 Road	Sea Island Way and Westminster Highway
Gilbert Road	Westminster Highway and Dinsmore Bridge

At its inception, a roadway was included in the MRN if it:

- provides intra-regional access to pre-defined regional activity centres; and
- carries:
 - minimum 70 per cent of trips longer than 10 kilometres in the peak hour and peak direction and total peak hour, peak direction traffic volume greater than 800 vehicles per hour; or
 - minimum of 10 through buses in the peak hour and peak direction; or
 - minimum of 800 trucks per day; and
- meets an overall check for reasonableness and completeness.

1.2 Existing Funding for MRN

In accordance with TransLink's *2012 Supplemental Plan*, funding available to municipalities for operations, maintenance and rehabilitation (OMR) of the MRN is \$14,355 per lane-km with no requirement for municipalities to provide any proportion of matching funding. In addition, a total of \$20 million has been allocated to support capital upgrades, which are cost-shared 50-50 between TransLink and each municipality. Of the \$20 million, Richmond is eligible to receive up to \$1,849,500 based on the allocation criteria of the percentage of MRN lane-kilometres in the municipality, and the municipal share of population, employment and regional travel growth over the 1999-2006 period. In November 2011, Council endorsed the submission of four (4) road improvement capital projects that, if approved by TransLink, will fully assign Richmond's allocation for 2012.¹

2. Scope of Major Road Network Review

In 2010, TransLink initiated a review of MRN funding criteria with the objective of aligning MRN capital funding with the MRN goals to:

- establish an MRN that facilitates intraregional transportation of people and goods, and provides links to provincial highways and other inter-regional transportation modes;
- establish an MRN that connects designated regional town centres and major trip generators;
- optimize the capacity of the MRN for efficient movement of people and goods; and
- provide travel on the MRN that is safe and reliable.

This work included the completion in 2011 of sub-regional MRN reviews in cooperation with municipal staff (with Richmond forming one sub-region) that included the identification of possible MRN additions and deletions, and the identification and prioritization of future minor and major capital MRN projects. Key issues raised by municipalities during the sub-regional review process included the need for:

- increased operations, maintenance and rehabilitation funding;
- a process to add roads to the MRN to reflect new infrastructure/activity centres and changes in traffic patterns and goods movement;
- greater flexibility in funding guidelines and eligible projects to reflect the varying needs of sub-regions, which differ depending on how "built out" is the MRN within the municipality;
- ensuring continuity across municipal boundaries as well as connections across the MRN, particularly for cyclists and pedestrians; and
- recognition and consideration of non-motorized modes.

The outcomes of the sub-regional MRN reviews are being used to update the criteria that define major roads, funding program criteria and MRN operational and maintenance guidelines. In turn, this work will inform the development of a new long-range MRN plan to be integrated with TransLink's *Transport 2045* plan process.

¹ The four projects are: (1) Westminster Hwy widening (Nelson Rd-McMillan Way); (2) Westminster Hwy pedestrian and bicycle improvements (Gilley Rd-Fraserside Gate); (3) Gilbert Road improvements (Lansdowne Road-30 m south of former CP Rail); and (4) installation of video detection cameras at five MRN intersections.

3. Proposed Changes to MRN Funding Programs

In response to the concerns raised by municipalities regarding the funding levels and flexibility of MRN programs, TransLink is proposing changes to be effective in 2013 that:

- increase the amount of operations, maintenance and rehabilitation funding (i.e., the amount provided per lane-km);
- introduce greater flexibility in the use of pavement rehabilitation funding (i.e., ability to use up to 50 percent of the funds for capital projects provided the municipality provides 50 per cent matching funds);
- allocate a proportionally greater amount of capital upgrade funding to “higher growth” municipalities, which includes Richmond;
- combine the capital upgrade funding for MRN and bicycle infrastructure improvements (BICCS program); and
- keep the overall program envelope the same as the 2012 *Base Plan* with the result being that the total combined amount of funding available for MRN and bicycle infrastructure capital upgrades is reduced.

Table 2 identifies the effect of the proposed changes for Richmond by comparing the existing 2012 and proposed 2013 funding allocations. Note that to ensure direct comparison between the two (2) years, the funding available for capital upgrades assumes a total envelope of \$10 million, which is the original amount identified in the 2012 *Base Plan* (versus the actual \$20 million available this year as a result of the one-time approval of the 2012 *Supplemental Plan*).

Table 2: Impact of Proposed Changes to MRN and BICCS Funding

Category	Existing 2012	Proposed 2013	Change
Operations, Maintenance & Non-Pavement Rehabilitation	\$1,092,938 (\$8,375 / lane-km)	\$1,453,770 (\$11,140 / lane-km)	\$360,833 (+33.0%)
Pavement Rehabilitation	\$780,390 (\$5,980 / lane-km)	\$1,038,780 (\$7,960 / lane-km)	\$258,390 (+33.1%)
Sub-total OMR Funding	\$1,870,718 (\$14,335 / lane-km)	\$2,492,550 (\$19,100 / lane-km)	\$619,223 (+33.1%)
Capital Upgrade MRN Allocation	\$924,750	\$856,000	-
Capital Upgrade Bicycle Infrastructure Allocation	\$140,600		
Sub-total Capital Upgrade Funding	\$1,065,350	\$856,000	-\$209,350 (-19.7%)
Total	\$2,938,678	\$3,348,550	\$409,873 (+14.9%)

The effect of the proposed changes is that Richmond would receive a lower amount of base funding for capital upgrades for the MRN and bicycle facilities, which is more than off-set by increased funding for OMR such that the City would be eligible to receive up to an additional \$410,000 in annual funding under the proposed changes. Moreover, up to 50 per cent of the increased pavement rehabilitation funding (i.e., up to \$519,390) can be used towards capital upgrades. Thus, the City would have the flexibility to increase the proposed lower base amount of capital upgrade funding as desired.

Staff support the proposed funding changes as:

- the net effect is that the City is eligible for up to an additional \$410,000 in annual funding;

- the City has greater flexibility in the allocation of the total funding between capital upgrades and OMR; and
- the increased funding available for OMR is appropriate as Richmond's MRN roadway sections are approaching ultimate build-out and, as such, a greater proportion of funding will be required to maintain the infrastructure as it ages.

4. Proposed Roadway Sections in Richmond to be Added to the MRN

In the upcoming review of MRN additions to be submitted by municipalities, TransLink proposes that the network could increase by up to 10 per cent in lane-kilometres (i.e., approximately 230 lane-kms) each year based on municipal requests. The criteria for the inclusion of a roadway in the MRN will comprise the existing criteria (as listed in Section 1) plus a new criterion yet to be defined that measures the people moving capacity of the roadway to provide consistency of the collective criteria with the provincial legislation that governs TransLink.

As noted in Section 2, staff identified a number of possible MRN additions as part of the sub-regional MRN review and, in preparation for TransLink's process for such additions, staff are now seeking formal Council endorsement of the list of proposed roadway sections. Table 3 below identifies each proposed road section and the rationale for its inclusion in the MRN, which typically is related to goods movement and/or transit service. See **Attachment I** for a map of the proposed additions.

Table 3: Richmond Roadway Sections Proposed for Addition to the MRN

Roadway		Between	Est. Lane-Km	Rationale for Inclusion
Knight St-Hwy 91-Crestwood Loop	Bridgeport Road	Knight Street and No. 6 Road	3.00	<ul style="list-style-type: none"> • high traffic volumes in peak hour and peak direction • connection to Knight Street truck route • access to Crestwood business parks • connection to Highway 91 • eliminate gap in MRN via connection between Knight Street and No. 6 Road
	No. 6 Road	Bridgeport Road and Westminster Hwy	2.50	
	Westminster Highway	Knight Street and No. 6 Road	1.60	
Riverport Industrial Area	Steveston Highway	Highway 99 and No. 6 Road	3.20	<ul style="list-style-type: none"> • high truck traffic volumes • access to industrial land uses (Fraser Wharves and Fraserport)
	No. 6 Road	Triangle Road and Steveston Hwy	0.70	
	Triangle Road	No. 6 Road and east end of roadway	2.20	
Fraserport Industrial Area	Nelson Road	Westminster Hwy and Blundell Road	5.20	<ul style="list-style-type: none"> • high truck traffic volumes • access to industrial land uses (Fraserport) • connection to Highway 91
	Blundell Road	Nelson Road and No. 7 Road	6.90	
Brighthouse Station	No. 3 Road	Westminster Hwy and Granville Ave	3.30	<ul style="list-style-type: none"> • high transit traffic volumes • access to future Brighthouse transit exchange

Roadway		Between	Est. Lane-Km	Rationale for Inclusion
No. 5 Road Institutions	No. 5 Road	Westminster Highway and Steveston Highway	16.00	<ul style="list-style-type: none"> high traffic volumes in peak hour and peak direction access to institutions that are regional destinations
Bridgeport Station	Great Canadian Way	River Road and Sea Island Way	2.60	<ul style="list-style-type: none"> high transit traffic volumes access to Bridgeport transit exchange and park-and-ride access to existing and future bus only lanes on Highway 99 access to industrial riverfront
	River Road	Great Canadian Way and No. 3 Road	0.40	
	No. 3 Road	Sea Island Way and River Road	0.40	
Frequent Transit	Springmont Drive	Williams Road and Steveston Highway	1.80	<ul style="list-style-type: none"> high transit traffic volumes
Connection to Future Hwy 99-Blundell Rd Interchange	No. 6 Road	<i>Westminster Hwy and Blundell Road</i>	3.30	<ul style="list-style-type: none"> <i>high traffic volumes in peak hour and peak direction</i> <i>high truck traffic volumes</i> <i>road connections to future Highway 99 / Blundell Road Interchange</i> <i>access to industrial land uses (Fraserport)</i>
	Blundell Road	No. 2 Road and No. 6 Road	23.00	
		No. 6 Road and No. 7 Road	3.30	
	No. 3 Road	<i>Granville Ave and Blundell Road</i>	3.20	
Total Proposed Additional Lane-Kms			49.90	
Total Proposed Additional Lane-Kms upon Completion of Future Road Improvements			32.80	

Note: Roadway sections in *italics* would be requested to be added upon completion of future road improvements (i.e., Highway 99/Blundell Road Interchange and extension of Blundell Road from No. 6 Road to No. 7 Road).

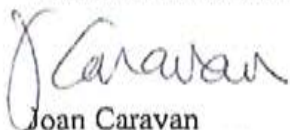
TransLink is anticipated to initiate the process to consider MRN additions and deletions in Summer 2012. At this time, it is not known when the City may receive approval for any roadway sections requested to be added to the MRN.

Financial Impact

None. Should any requested roadway sections be added to the MRN, the additional funding from TransLink will be reflected in future operating budgets.

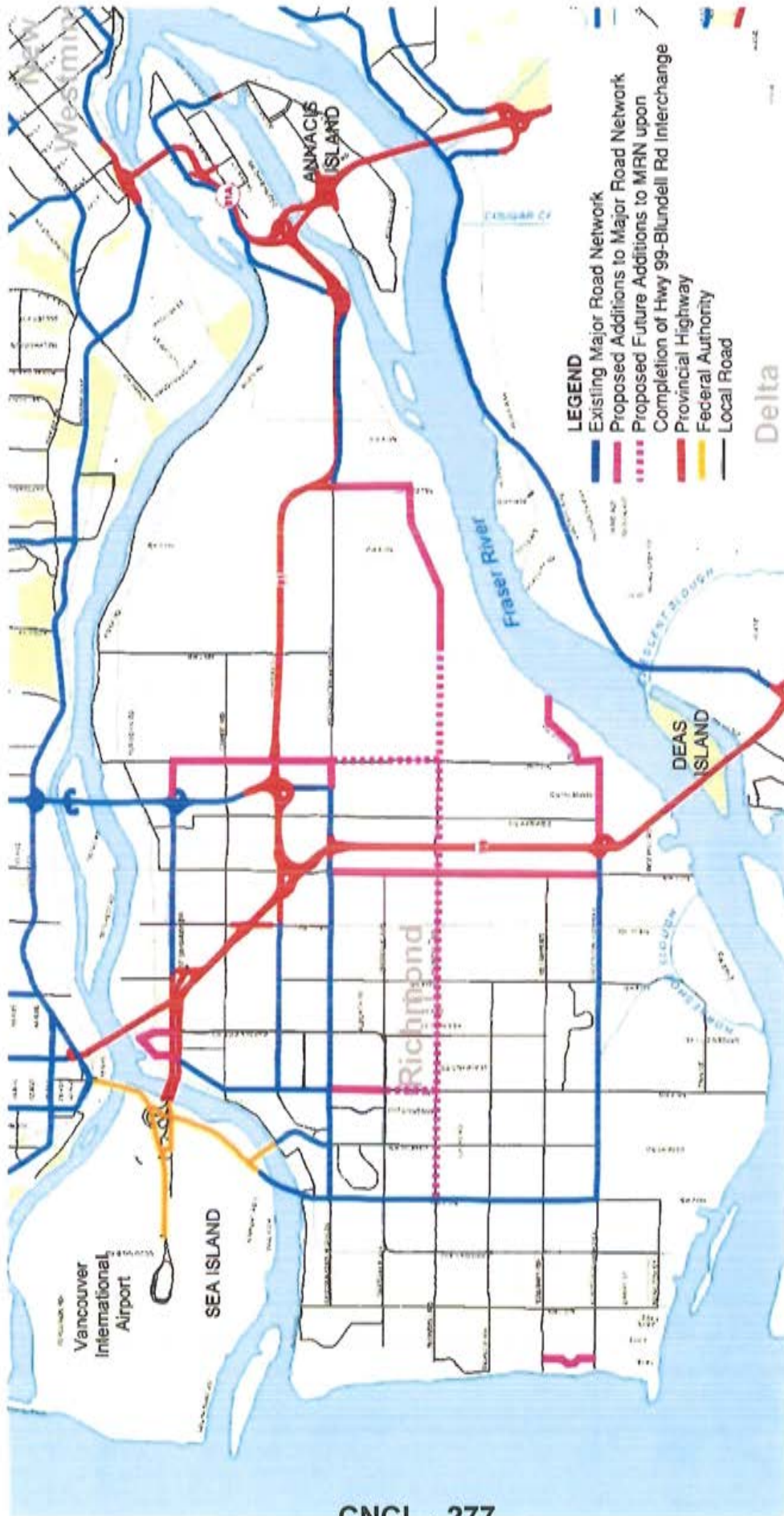
Conclusion

TransLink has approved changes to the management and funding of its Major Road Network (MRN), which include a new process to increase the size of the MRN by up to 10 percent in lane-kilometres annually based on requests from member municipalities. As part of the MRN review process, staff identified a number of new roadway sections to be added to the MRN. To facilitate TransLink's forthcoming process to consider additions to the MRN, staff are now seeking formal Council endorsement of the identified road sections in Richmond for future inclusion in the MRN.



Joan Caravan
 Transportation Planner
 (604-276-4035)

Existing and Proposed Major Road Network Roadway Sections in Richmond





Regular Council

Tuesday, November 13, 2018

Place: Council Chambers
Richmond City Hall

Present: Mayor Malcolm D. Brodie
Councillor Chak Au
Councillor Carol Day
Councillor Kelly Greene
Councillor Alexa Loo
Councillor Bill McNulty
Councillor Linda McPhail
Councillor Harold Steves
Councillor Michael Wolfe

Corporate Officer – David Weber

Call to Order: Mayor Brodie called the meeting to order at 7:00 p.m.

RES NO. ITEM

MINUTES

- R18/19-1 1. It was moved and seconded
That:
- (1) *the minutes of the Regular Council meeting held on October 22, 2018, be adopted as circulated;*
 - (2) *the minutes of the Inaugural Council meeting held on November 5, 2018, be adopted as circulated;*
 - (3) *the minutes of the Special Council meeting held on November 6, 2018, be adopted as circulated; and*
 - (4) *the Metro Vancouver 'Board in Brief' dated October 26, 2018, be received for information.*

CARRIED

1.



Regular Council
Tuesday, November 13, 2018

- R18/19-3 4. It was moved and seconded
That Committee rise and report (7:13 p.m.).

CARRIED

CONSENT AGENDA

- R18/19-4 5. It was moved and seconded
That Items No. 6, 7, 9, 11, 12 and 14 be adopted by general consent.

CARRIED

6. COMMITTEE MINUTES

That the minutes of:

(1) *the General Purposes Committee meeting held on November 6, 2018;*
and

(2) *the Planning Committee meeting held on November 7, 2018;*
be received for information.

ADOPTED ON CONSENT

7. FEEDBACK ON THE ORGANIC MATTER RECYCLING
REGULATION (OMRR) INTENTIONS PAPER 2018

(File Ref. No. 10-6175-02-01; 10-6370-10-05) (REDMS No. 5972541 v. 7)

That the comments in the report titled "Feedback on the Organic Matter Recycling Regulation (OMRR) Intentions Paper 2018" from the Senior Manager, Sustainability and District Energy, dated October 3, 2018 be forwarded to the BC Minister of Environment and Climate Change Strategy.

ADOPTED ON CONSENT



Regular Council
Tuesday, November 13, 2018

8. **WESPAC TILBURY MARINE JETTY PROJECT- APPLICATION COMMENTS FOR THE BRITISH COLUMBIA ENVIRONMENTAL ASSESSMENT PROCESS**

(File Ref. No. 10-6125-30-007) (REDMS No. 6004736 v. 3; 6006027)

Please see page 6 for action on this item.

9. **PROPOSED ROAD SECTION TO BE ADDED TO TRANSLINK'S MAJOR ROAD NETWORK**

(File Ref. No. 01-0154-04) (REDMS No. 6017892)

That the section of Cambie Road between No. 3 Road and No. 6 Road be added to TransLink's Major Road Network as described in the report titled "Proposed Road Section to be Added to TransLink's Major Road Network" dated October 31, 2018 from the Director, Transportation.

ADOPTED ON CONSENT

10. **MINORU PLACE ACTIVITY CENTRE PROGRAM OPTIONS AS ARTS SPACE**

(File Ref. No. 06-2050-20-MP; 11-7140-20-HSCE1) (REDMS No. 5848811 v. 17; 6026845)

Please see page 8 for action on this item.

11. **2019 COUNCIL MEETING SCHEDULE**

(File Ref. No. 01-0105-01) (REDMS No. 5927023 v. 2)

That the 2019 Council and Committee meeting schedule as shown in Attachment 1 to the staff report dated October 18, 2018, from the Director, City Clerk's Office, be approved with the following revisions as part of the regular August meeting break and December holiday season:

- (1) *That the Regular Council meetings (open and closed) of August 12, August 26, and December 23, 2019 be cancelled; and*
- (2) *That the August 19, 2019 Public Hearing be rescheduled to September 3, 2019 at 7:00p.m. in the Council Chambers at Richmond City Hall.*

ADOPTED ON CONSENT



City of Richmond

Report to Committee

To: General Purposes Committee

Date: October 31, 2018

From: Victor Wei, P. Eng.
Director, Transportation

File: 01-0154-04/2018-Vol
01

Re: Proposed Road Section to be Added to TransLink's Major Road Network

Staff Recommendation

That the section of Cambie Road between No. 3 Road and No. 6 Road be added to TransLink's Major Road Network as described in the report titled "Proposed Road Section to be Added to TransLink's Major Road Network" dated October 31, 2018 from the Director, Transportation.

Victor Wei, P. Eng.
Director, Transportation
(604-276-4131)

Att. 1

REPORT CONCURRENCE		
ROUTED TO:	CONCURRENCE	CONCURRENCE OF GENERAL MANAGER
Engineering Roads & Construction	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO

Staff Report

Origin

At the June 25, 2012 Council meeting, Council endorsed a number of road segments proposed to be added to TransLink's Major Road Network (MRN). This report seeks endorsement for an additional road segment, Cambie Road between No. 3 Road and No. 6 Road, proposed to be added to the MRN.

This report supports Council's 2014-2018 Term Goal #3 A Well-Planned Community:

Adhere to effective planning and growth management practices to maintain and enhance the livability, sustainability and desirability of our City and its neighbourhoods, and to ensure the results match the intentions of our policies and bylaws.

3.3. *Effective transportation and mobility networks.*

This report supports Council's 2014-2018 Term Goal #5 Partnerships and Collaboration:

Continue development and utilization of collaborative approaches and partnerships with intergovernmental and other agencies to help meet the needs of the Richmond community.

5.2. *Strengthened strategic partnerships that help advance City priorities.*

Analysis

Expansion of MRN

Established in 1999, the MRN consists of approximately 600 road-km (2,300 lane-km) of arterial roads and bridges stretching across the region that carry the majority of the region's commuter, bus transit and truck traffic. While ownership of and operational responsibility for the MRN remains with each municipality, TransLink provides funding for the operations, maintenance and rehabilitation of the MRN, and shares in the cost of eligible capital improvements.

TransLink initiated a review of the management and funding of its Major Road Network (MRN) in 2010. One component of the package of changes, approved by the TransLink Board at its May 2012 meeting, was a process to increase the size of the MRN by up to 10% in lane-kilometres based on requests from member municipalities. At that time in June 2012, Council endorsed a number of road segments to be added to the MRN (see green lines in Attachment 1), which did not include Cambie Road between No. 3 Road and No. 6 Road.

Subsequently, Phase One of the Mayors' Vision 10-Year Investment Plan included a 10% expansion of the total MRN lane-km, which will result in approximately 237 lane-km of new MRN, to be selected through a performance-based evaluation process. Through working group sessions for this process over the past year, staff put forward an additional road segment in Richmond, Cambie Road between No. 3 Road and No. 6 Road, upon learning this segment would meet the updated eligibility criteria (see pink line in Attachment 1).

Vis-à-vis other municipalities, Richmond's proportion of the MRN expansion is greater than 10%, which reflects the relatively high level of regional significance and multi-modal activity on the proposed roadway segments including frequent bus service and truck traffic as well as general purpose traffic.

Richmond currently has 131 lane-km in the MRN and receives a total of \$2.73 million in annual maintenance-related funding payments from TransLink comprised of:

- Operation and Maintenance: \$12,025 per lane-km or \$1.58 million; and
- Rehabilitation: \$8,585 per lane-km or \$1.15 million.

The additional roadway segments in Richmond proposed to be added to the MRN total approximately 37.6 lane-km. On that basis, the City would be eligible for annual additional payments of approximately \$452,000 in operations and maintenance funding, and \$323,000 in rehabilitation funding for a total of \$775,000.

TransLink's approval process requires Council endorsement of the proposed road segments to be added to the MRN prior to TransLink staff presenting a report to the TransLink Board for approval of MRN expansion in December 2018.

Financial Impact

None. Should any requested roadway sections be added to the MRN, the additional annual funding from TransLink, estimated at \$775,000, will be reflected in future operating budgets.

Conclusion

TransLink intends to increase the size of the MRN by up to 10% in lane-kilometres. As part of the MRN evaluation process, an additional road segment in Richmond, Cambie Road between No. 3 Road and No. 6 Road, is eligible to be added to the MRN. To facilitate TransLink's approval process and secure annual funding to the City for for the operations, maintenance and rehabilitation of the MRN, staff seek formal Council endorsement of the Cambie Road segment for inclusion in the MRN.

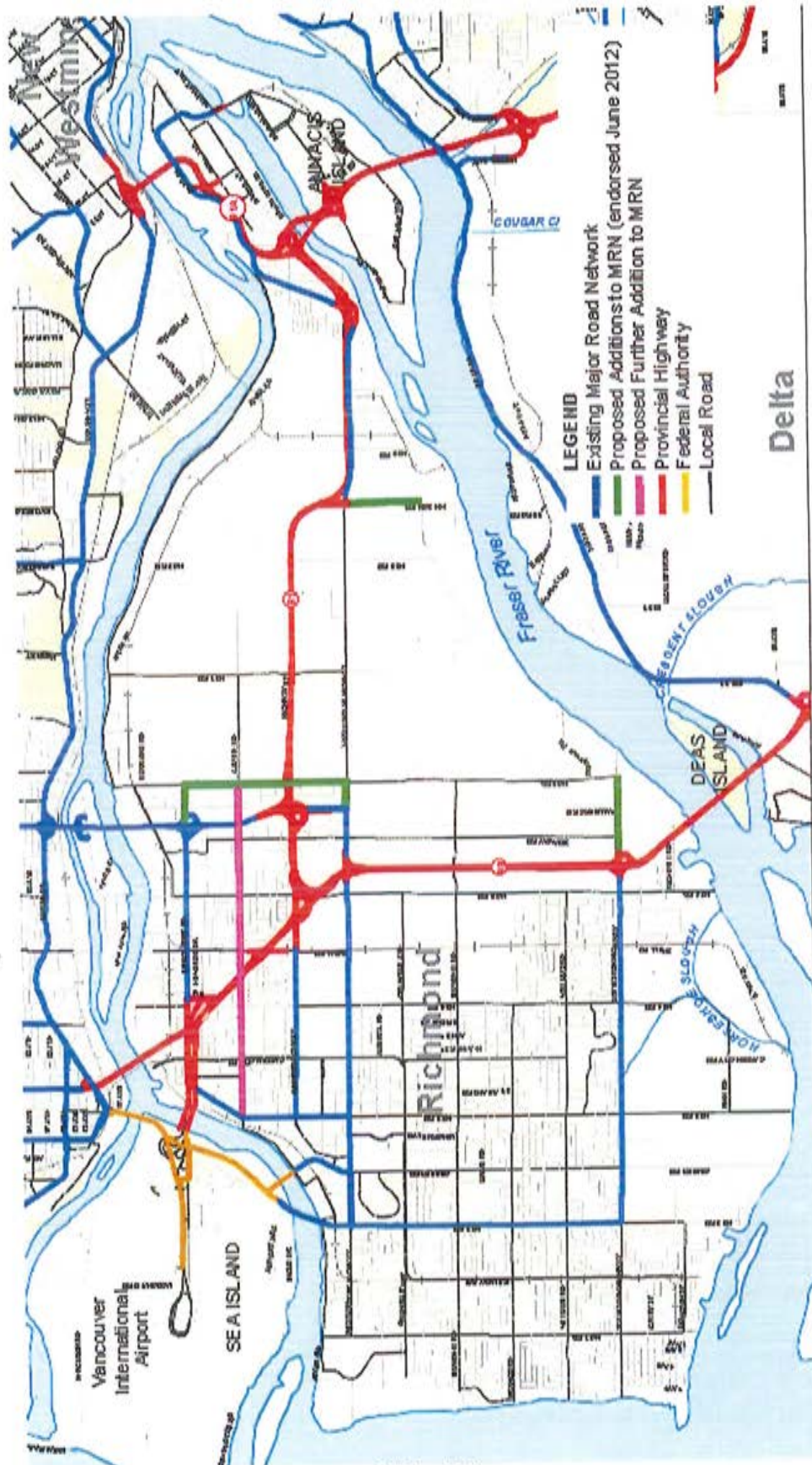


Joan Caravan
Transportation Planner
(604-276-4035)

JC:jc

Att. 1: Existing and Proposed MRN Roadway Sections in Richmond

Existing and Proposed Major Road Network Roadway Sections in Richmond



November 20, 2018

File: 0500-01

Via E-mail

REPLY TO: Transportation Division
ATTENTION: Jaime Boan, P.Eng.

TransLink (South Coast British Columbia Transportation Authority)
#400 – 287 Nelson’s Court
New Westminster, B.C. V3L 0E7

Attention: Matt Craig, Manager, Systems Plans


Re: City of Surrey Endorsement of the 2018 Major Road Network (MRN) Expansion

As requested, this is confirmation that at the November 19, 2018 Council Meeting, Surrey Council approved the attached Corporate Report No. 223 (R223; 2018) which provides Surrey consent to the addition of the following roadway segments into the Major Road Network (“MRN”).

Municipality	Road Name	From Location	To Location
Surrey	Bridgeview Drive	Highway 17 (SFPR)	King George Boulevard
Surrey	160 Street	Highway 1	Fraser Highway
Surrey	32 Avenue	King George Boulevard	152 Street
Surrey	128 Street	88 Avenue	72 Avenue
Surrey	32 Avenue	Highway 15	200 Street
Surrey	72 Avenue	120 Street	152 Street
Surrey	32 Avenue	152 Street	Highway 15

We appreciate TransLink’s collaborative approach with all Greater Vancouver municipalities and utilization of an evidence and performance based evaluation process to achieve this milestone expansion of the MRN.

Yours truly,



Jaime Boan, P.Eng.
Manager, Transportation

JB/ggg
Attachment

c.c. - Fraser Smith, General Manager, Engineering



CORPORATE REPORT

NO: *R223*

COUNCIL DATE: *November 19, 2018*

REGULAR COUNCIL

TO: **Mayor and Council**

DATE: **November 15, 2018**

FROM: **General Manager, Engineering**

FILE: **0500-01**

SUBJECT: **Surrey Additions to the TransLink Major Road Network (MRN)**

RECOMMENDATION

The Engineering Department recommend that Council:

1. Receive this report for information;
2. Approve the recommended additions discussed in this report to the TransLink Major Road Network; and
3. Authorize staff to notify TransLink regarding consent of the additions pursuant to the requirements in the South Coast British Columbia Transportation Act [SBC 1998].

INTENT

The intent of this report is to obtain Council approval for the addition of arterial road segments into the TransLink Major Road Network ("MRN"). The report also provides background on the MRN, details the 10% MRN expansion across the Metro Vancouver region funded under Phase One of the 10-Year Vision Investment Plan, and summarize the selection process for candidate corridors to be included in the MRN expansion.

BACKGROUND

What is the TransLink Major Road Network ("MRN")?

The MRN is a regional network of arterial roads and bridges, about 600 road-kilometres (2,300 lane-kilometres) long that stretches across Metro Vancouver and carries the majority of the region's commuter, bus transit, and truck traffic. The MRN was established in 1999 as part of TransLink's multimodal mandate to establish an integrated system of transportation corridors that serve the Metro Vancouver region. It was driven in part by the Ministry of Transportation and Highways ("MOTI") decision to download much of the alternate arterial highway network to the municipalities. This included roads such as Scott Road, King George Highway (Highway 99A) and Fraser Highway (Highway 1A) in Surrey. Metro Vancouver municipalities identified that these roads, as well as other non-Ministry roads, functioned with a more regional nature and

should form part of a common network. This led to the MRN being included as part of the creation of TransLink. Appendix "I" illustrates the existing TransLink MRN.

How does the MRN benefit Surrey?

The vast majority of the MRN is vested/owned by municipalities to operate and manage, with Golden Ears Way being the notable exception in Surrey, which is owned and operated by TransLink. TransLink is responsible for establishing performance standards and, most importantly, providing 100% funding to a defined standard for municipalities to operate, maintain, and rehabilitate the MRN. This Operations, Maintenance and Rehabilitation ("OMR") funding is to keep the MRN in a good state of repair, ensuring that people and goods can move efficiently and safely across the region. It pays for work performed by Engineering on these roads such as street cleaning, snow removal, maintaining streetlights, traffic signals, signage, patching potholes, repaving and traffic signal rebuilds.

The MRN is measured in lane-kilometres and is currently approximately 2,370 lane-kms throughout the region. Each year, Surrey receives OMR funding from TransLink proportionate to the number of MRN lane kilometres within the city. Surrey currently has 509.3 lane kilometres of MRN and thus has been receiving approximately \$10.5 million in OMR funding for the.

Under the TransLink funding program, municipalities also receive 50% cost sharing up to an annual maximum funding to upgrade MRN roads to the ultimate multi-modal standard. This funding is based on population and employment and thus is not affected by additions to the MRN. However, the inclusion of additional roads provides more opportunity for cost sharing under the TransLink funding program.

DISCUSSION

Expanding the MRN by 10%

The MRN is fundamentally important to the movement of people and goods throughout the region. Due to the significant urban growth since the MRN was first established in 1999, allocation of funding for expanding the network was required. This was first identified in the Mayors' Council Regional Transportation Investment Vision in 2014 and funding was ultimately approved and included in the Phase One 10-Year Vision investment plan in 2017. The plan identifies funding for an expansion of the MRN by 10% with annual 1% increases to keep pace with network changes. The 10% expansion of the MRN is equivalent to approximately 237 lane-km throughout the region.

How were projects evaluated and prioritized?

The municipal requests for MRN additions far exceed the available funding. As a result, selection of new road additions to the MRN has been determined through a competitive, evidence and performance-based process. TransLink worked closely with municipalities across Metro Vancouver, including Surrey, to define, evaluate and prioritize additions to the MRN.

To narrow down, and ultimately select additions, the requested locations were evaluated against a number of relevant screening criteria, generally categorized as follows:

- i. Facilitates the **Intra-regional** travel of people and transportation of goods through longer trip lengths and acting as a designated truck route;
- ii. **Connects** regionally significant destinations including town centres, Frequent Transit Development Areas, and significant employment areas; and
- iii. Moves higher **volumes** of general purpose vehicles, transit passengers and trucks.

The criteria had a number of different measures to help evaluate and prioritize locations across the region. This evidence-based approach looked at items such as total vehicle volumes (including trucks), total transit passenger volumes, road classification, importance for regional goods movement and proximity to existing parallel MRN corridors and highways. This generated a recommended list of MRN additions which was endorsed by the municipal Regional Transportation Advisory Committee (RTAC) in October 2018.

As MRN additions are solely based on technical criteria/merit they will have no impact to the travelling public, but will benefit the City of Surrey by increasing the operation, maintenance and rehabilitation (OMR) funding from TransLink by approximately \$1.72 Million per year starting in 2018.

What are the MRN Candidate Corridors for Surrey?

There are five recommended candidate additions to the MRN in Surrey as shown in the attached Appendix "II": MRN Candidate Corridor Additions in Surrey. The five corridors are identified below with a brief explanation as to how they met the MRN evaluation criteria:

1. **32 Avenue from King George Boulevard to 196 Street (200 Street in Township of Langley):** An existing designated truck route that connects two regional Highways (99 and 15), the existing MRN corridors of King George Boulevard, 152 Street, and 200 Street, and the Campbell Heights employment lands. It carries between 15,000 – 20,000 vehicles per day and is expected to increase with future growth in the Grandview Heights area as well as planned road widening.
2. **72 Avenue from 120 Street to 152 Street:** It serves multiple transit routes including Surrey's busiest frequent transit network (FTN) transit corridor (route 319 Scott Road Station/Newton Exchange) which has over 5 million annual boardings. It is an existing designated truck route with between 18,000 and 30,000 vehicles per day. It provides connections between existing MRN corridors of 120 Street, King George Boulevard, and 152 Street and services the Newton Town Centre.
3. **128 Street from 72 Avenue to 88 Avenue:** It is an existing designated truck route with the existing transit route 323 Surrey Central Station/Newton Exchange and serves approximately 27,000 vehicles per day. It connects the candidate 72 Avenue MRN corridor with 88 Avenue through the heart of the Newton employment lands, and the Central Newton Commercial Cultural District.

4. **160 Street from Highway 1 to Fraser Highway:** It is an existing designated truck route and provides for transit route 335 Surrey Central Station/Newton Exchange. It connects Highway 1 and the MRN corridors of 104 Avenue, 96 Avenue, 88 Avenue, and Fraser Highway into the Fleetwood Town Centre. It serves approximately 18,000 vehicles per day which is expected to increase with future growth and provides an important connection to future rapid transit on Fraser Highway.
5. **Bridgeview Drive from Highway 17 (SFPR) to King George Boulevard:** It is an existing designated truck route, with over 20,000 vehicles per day that provides a critical link to connect Highway 17 to King George Boulevard, the Pattullo Bridge, South Westminster and Surrey City Centre.

Surrey's recommended MRN additions scored highly across all categories. The recommended additions above will increase the MRN in Surrey by approximately 83.6 lane kilometres, directly benefiting Surrey residents through approximately \$1.72M in increased funding from TransLink for operations, maintenance and rehabilitation in 2018 for a new total funding value of approximately \$12.2 million.

Request Council Approval

The South Coast British Columbia Act [SBC 1998] under Part 2 Section 18 (4) requires that TransLink

".. must have the consent of each municipalities within which a major road is located before designating that major road as being part of the major road network ..."

As a result, Council approval of the recommended additions to the MRN is required. TransLink has indicated that notification of the consent can be done through a formal letter indicating that Council approval was received with specification to the resolution as required. TransLink is intending to implement this 2018 expansion so that municipalities can receive additional OMR funding in the 2019 fiscal year. In order to achieve this, an amendment to the MRN Bylaw must be adopted by the TransLink Board at the December 6, 2018 Board Meeting.

SUSTAINABILITY CONSIDERATIONS

The recommended additions to the Major Road Network (MRN) in Surrey support the objectives of the City's Sustainability Charter 2.0 and will help the following Desired Outcomes ("DO")

1. **Economic Prosperity and Livelihoods:** DO6 Efficient land use and well-managed transportation infrastructure are in place to attract businesses and support a thriving economy;
2. **Infrastructure:** DO1: City facilities and infrastructure systems are well managed, adaptable and long lasting, and are effectively integrated into regional systems; and Infrastructure: DO14: Goods movement throughout the city is efficient, and minimizes environmental and community impacts.

CONCLUSION

The addition of the recommended roads into the MRN will have no impact to the travelling public, but will benefit the City of Surrey by increasing the operation, maintenance and rehabilitation (OMR) funding from TransLink by approximately \$1.72 M per year starting in 2018.

Based on the discussion above, the Engineering Department recommends that Council:

1. Receive this report for information;
2. Approve the recommended additions discussed in this report to the TransLink Major Road Network; and
3. Authorize staff to notify TransLink regarding consent of the additions pursuant to the requirements in the South Coast British Columbia Transportation Act [SBC 1998].



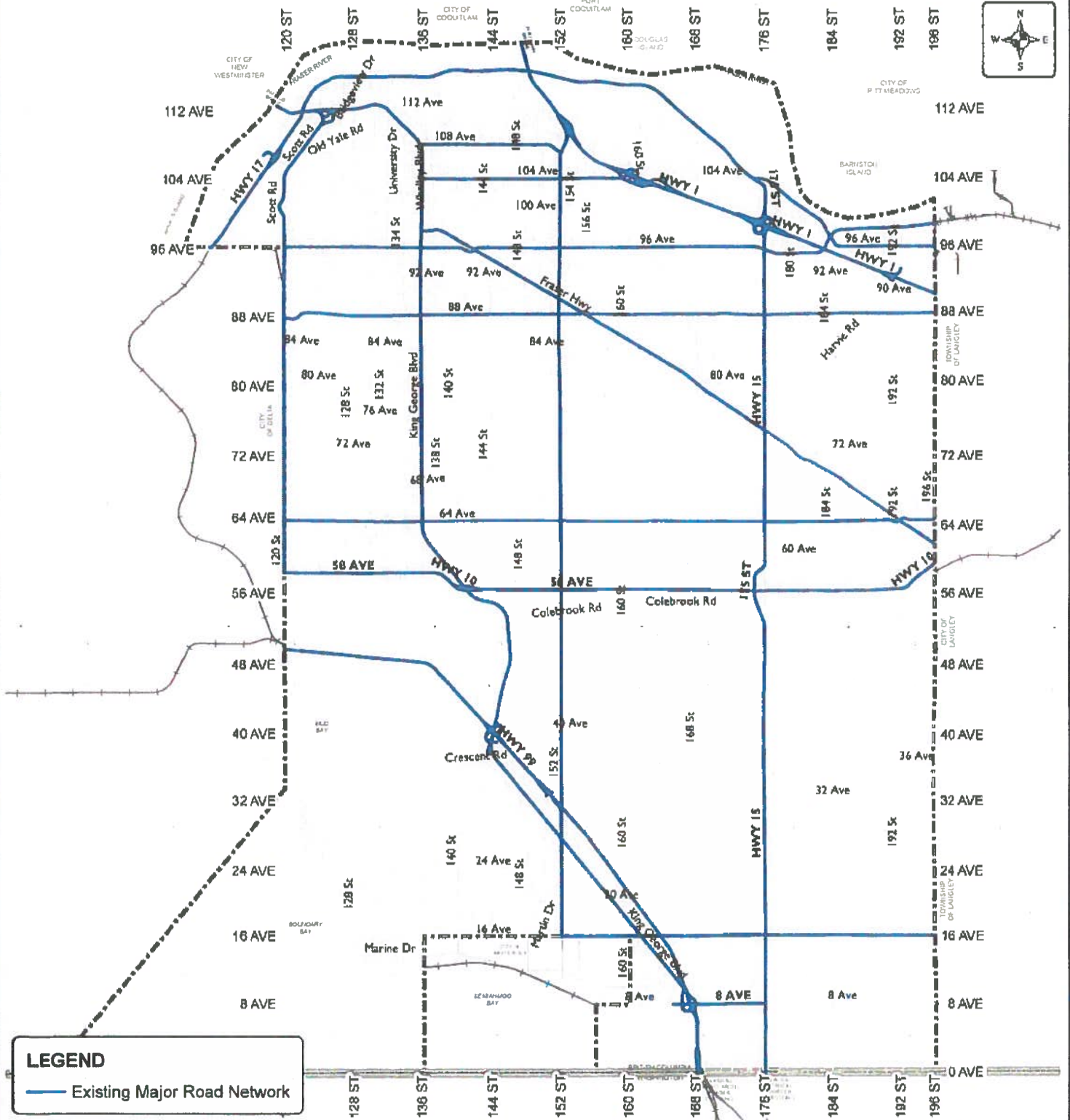
Fraser Smith, P.Eng, MBA
General Manager, Engineering

JB/DM/PK/jma

Appendix I: Existing TransLink MRN Map

Appendix II: MRN Candidate Corridor Additions in Surrey.

APPENDIX "I"



LEGEND

— Existing Major Road Network

Produced by GIS Section: 07-Nov-2018, C9W

Scale: 1:125,000 0 1,000 M

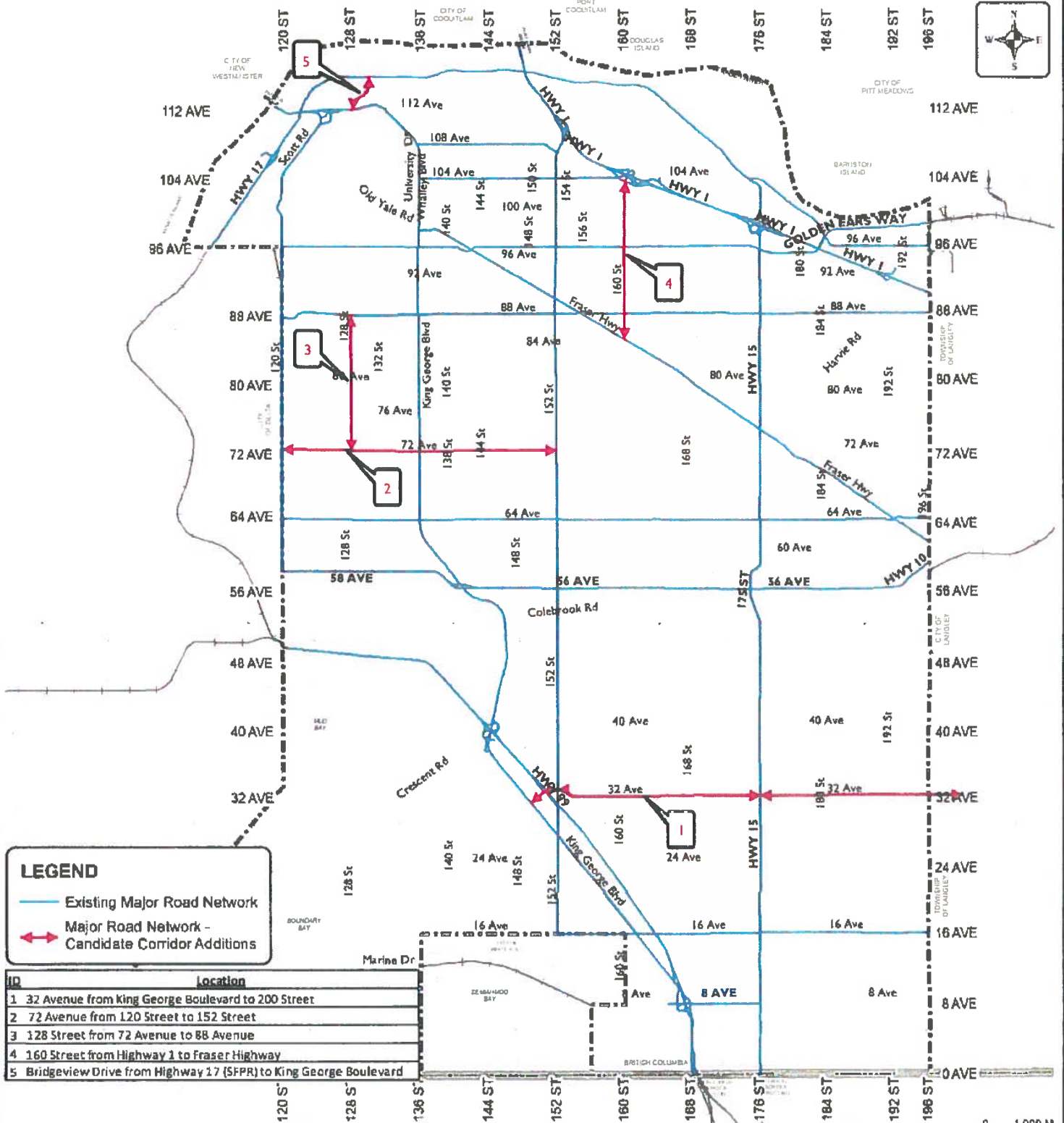


Existing Major Road Network

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and is NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, legal descriptions and encumbrances must be confirmed at the Land Title Office.

APPENDIX "II"



LEGEND

- Existing Major Road Network
- Major Road Network - Candidate Corridor Additions

ID	Location
1	32 Avenue from King George Boulevard to 200 Street
2	72 Avenue from 120 Street to 152 Street
3	128 Street from 72 Avenue to 88 Avenue
4	160 Street from Highway 1 to Fraser Highway
5	Bridgeview Drive from Highway 17 (SFPR) to King George Boulevard

Produced by GIS Section: 07-Nov-2018, C9W

Scale: 1:125,000 0 1,000 M



Major Road Network - Candidate Corridor Additions

ENGINEERING DEPARTMENT

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.

November 21, 2018

Matt Craig
Manager, System Plans
TransLink
South Coast British Columbia Transportation Authority

Dear Mr. Craig:

RE: 2018 Expansion of Major Road Network

This letter confirms that the City of Vancouver endorses TransLink's list of recommended candidate Major Road Network (MRN) additions as part of the 2018 expansion, including:

- Clark Drive from Powell Street to Hastings Street
- Main Street from Prior Street to Hastings Street
- Powell Street from Vernon Drive to Semlin Drive
- Dundas Street from Semlin Drive to Nanaimo Street
- Hemlock Street from West 6 Avenue to West Broadway
- Fir Street from West 8 Avenue to West Broadway

Vancouver City Council provided the overarching approval for most of these routes (along with other recommendable segments) as part of the *Transportation 2040 Plan*¹ in 2012, many of which had previously been endorsed by Council in earlier stand-alone reports. Council also specifically approved staff to work with TransLink to secure strategic additions to the regional MRN (Action M 1.2.2. on pages 41, 83, and 84 of *Transportation 2040*).

The plan specifically identified the routes on Main Street, Powell Street and Dundas Street. The routes on Clark Drive, Hemlock Street and Fir Street are not specifically identified within the plan, but fall within the overarching Council approval for strategic additions as extensions of existing routes to complete the connectivity of the existing MRN. With authority as the City Engineer, I endorse the aforementioned routes for addition to the Major Road Network.

I appreciate TransLink's consultation with municipalities through the Regional Transportation Advisory Committee on this work. Given several other Council-approved routes were not included as part of the 2018 MRN expansion, I look forward to continuing conversation with TransLink on adding other Council approved candidate routes, such as Burrard Street, to the MRN in the nearest possible future.

¹ The Transportation 2040 Plan as adopted by Council on October 31, 2012, can be found online: [https://vancouver.ca/files/cov/Transportation 2040 Plan as adopted by Council.pdf](https://vancouver.ca/files/cov/Transportation%202040%20Plan%20as%20adopted%20by%20Council.pdf)

If you have any further questions on this matter, please contact Lon LaClaire at 604-829-7336 or lon.laclaire@vancouver.ca

Sincerely,



Jerry W. Dobrowolny, P.Eng., MBA
General Manager, Engineering Services

604.873.7331 | jerry.dobrowolny@vancouver.ca

Screening Criteria

Objective 1: Facilitates intra-regional travel of people and transportation of goods.

Criteria	Measure	Measurement
Built before 2018	Confirm construction complete before end of 2018	Yes – Retain for Evaluation (if not screened by #1 criteria) No – Screen from consideration

AND

Objective 2: Connects regionally significant destinations.

Criteria	Measure	Measurement
Connects regionally significant destinations – including Metro Centres, City Centres, Town Centres, Special Employment Areas, Frequent Transit Development Areas, gateways, ports, significant industrial areas and other regionally significant trip generators (including parks & recreation destinations)	Confirm connections to regional destination.	Yes – Retain for Evaluation (if not screened by #1 criteria) No – Screen from consideration (if #3 below not met)

OR

Objective 3: Forms an interconnected and complete network.

Criteria	Measure	Measurement
Connects with a highway, gateway or another MRN road corridor.	Confirm connections to key corridors.	Yes – Retain for Evaluation (if not screened by #1 criteria) No – Screen from consideration (if #2 above not met)

Evaluation Criteria

Objective 1: Facilitates intra-regional travel of people and transportation of goods.

Criteria	Measure
Regional Serving Function	Average vehicle trip length (km) per segment
Has no truck restrictions OR is a designated truck route (with time, weight, size or speed restrictions)	Degree to which trucks are restricted.
SUMMARY RATING	Average assigned to each candidate link.

Objective 2: Connects regionally significant destinations.

Criteria	Measure
Minimize unnecessary duplication and overlap of other nearby MRN roads connecting same destinations	Proximity to existing parallel MRN corridor.

Objective 3: Forms an interconnected and complete network.

Criteria	Measure
Is it the only MRN serving the community (municipality)?	Confirmation of whether candidate MRN is the only MRN serving community?

Objective 4: Moves high volumes of general purpose vehicles, transit passengers and / or trucks.

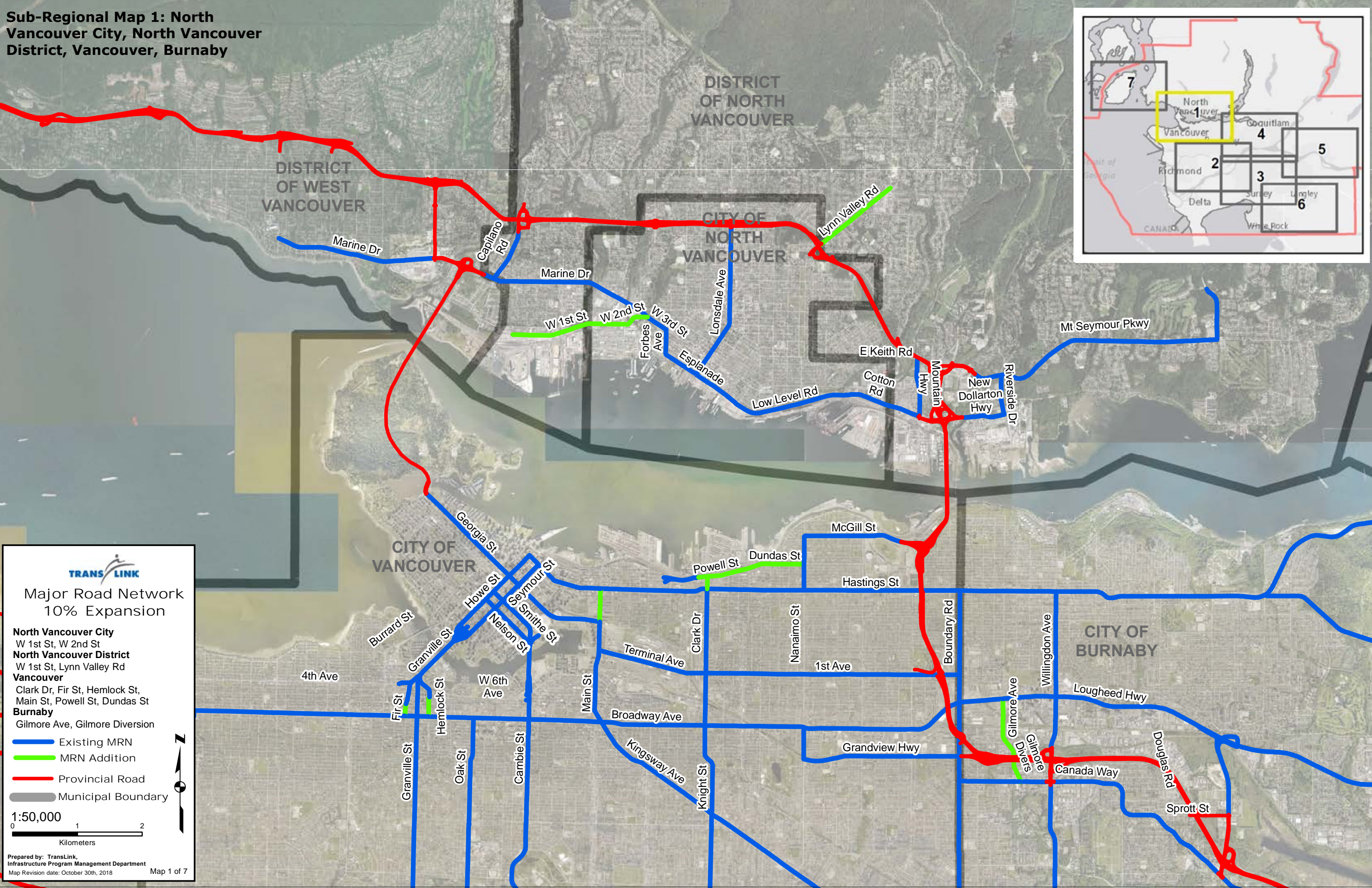
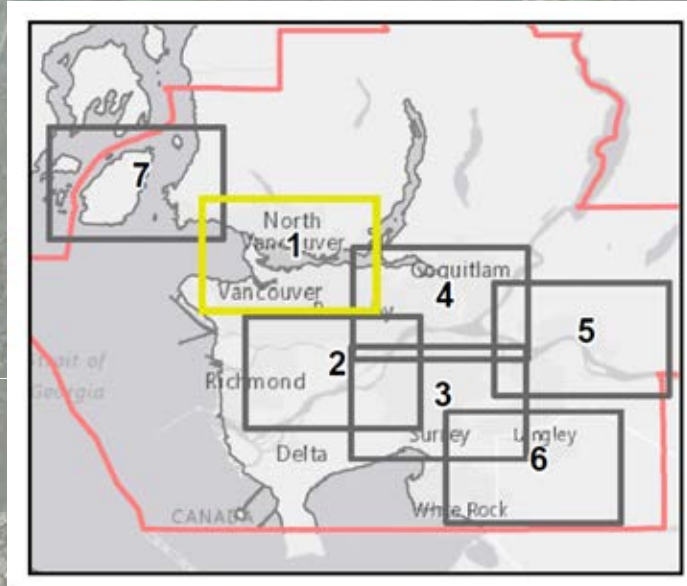
Criteria	Measure
Carry a high volume of vehicles.	Sum of two-way traffic volume on corridor segment.
Carry a high volume of transit passengers.	Sum of two-way transit passenger volume on corridor segment.
Carry a high volume of trucks.	Sum of two-way truck volume on corridor segment.
Provides dedicated facilities for active transportation.	Presence of dedicated bike and/or pedestrian facility
SUMMARY RATING	Average assigned to each candidate link.

Overall Evaluation

Criteria	Measure
SUMMARY RATING	Sum the ratings OR the average for each criterion with multiple indicators.

Appendix G: Sub-regional maps of all segments being added to the MRN.

Sub-Regional Map 1: North Vancouver City, North Vancouver District, Vancouver, Burnaby



TRANS LINK

**Major Road Network
10% Expansion**

North Vancouver City
W 1st St, W 2nd St

North Vancouver District
W 1st St, Lynn Valley Rd

Vancouver
Clark Dr, Fir St, Hemlock St,
Main St, Powell St, Dundas St

Burnaby
Gilmore Ave, Gilmore Diversion

— Existing MRN
— MRN Addition
— Provincial Road
 Municipal Boundary

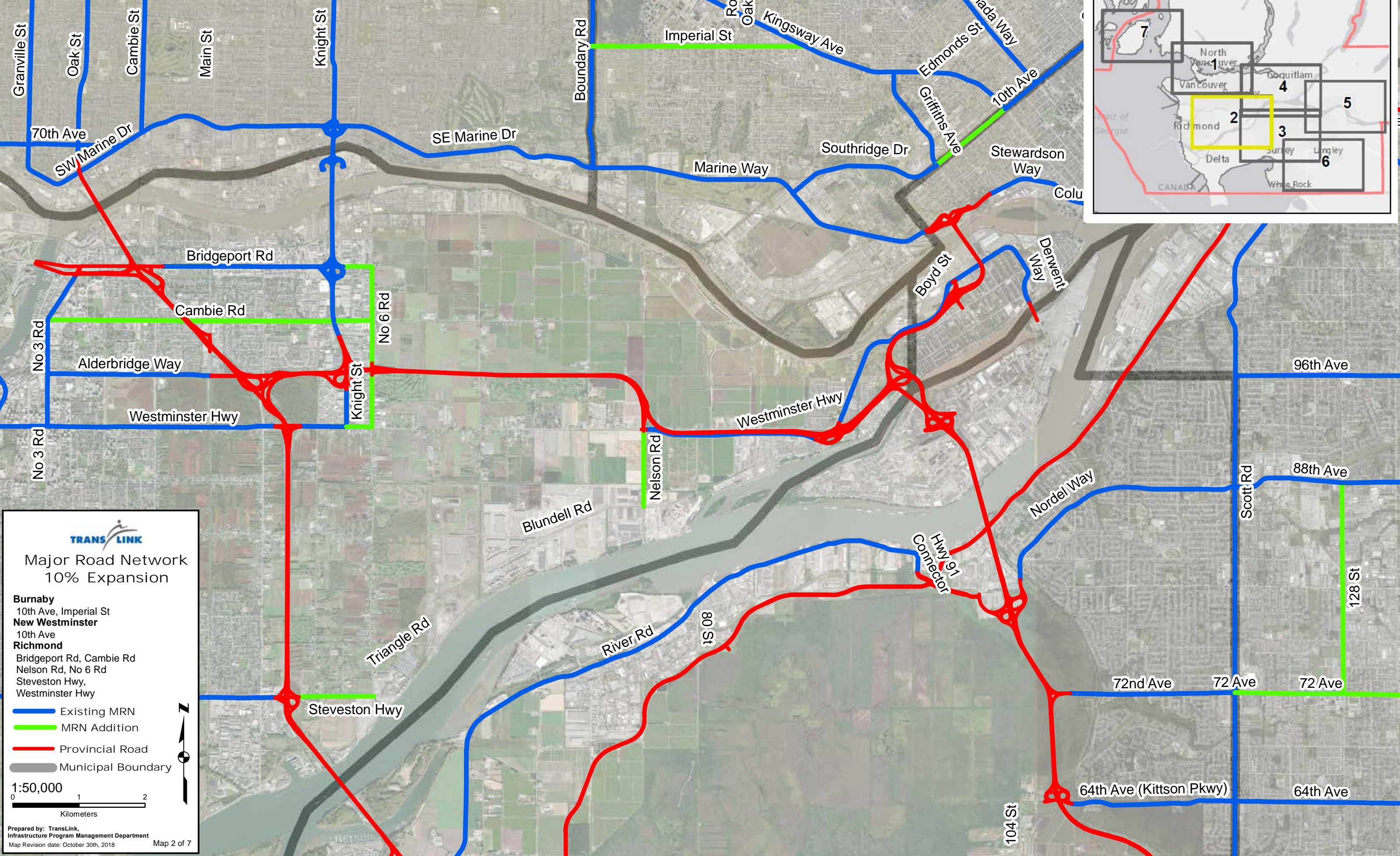
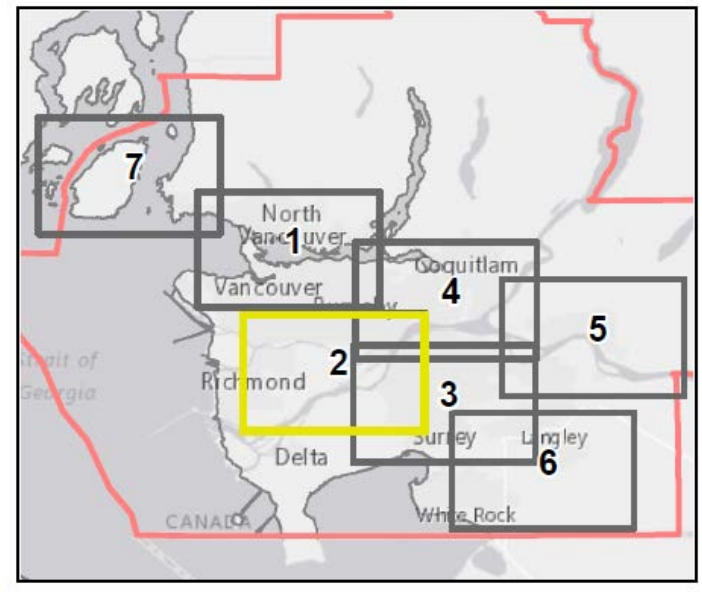
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Kilometers

Prepared by: TransLink,
Infrastructure Program Management Department
Map Revision date: October 30th, 2018

Map 1 of 7

Sub-Regional Map 2: Burnaby, New Westminster, Richmond



TRANS LINK

**Major Road Network
10% Expansion**

Burnaby
10th Ave, Imperial St

New Westminster
10th Ave

Richmond
Bridgeport Rd, Cambie Rd
Nelson Rd, No 6 Rd
Steveston Hwy,
Westminister Hwy

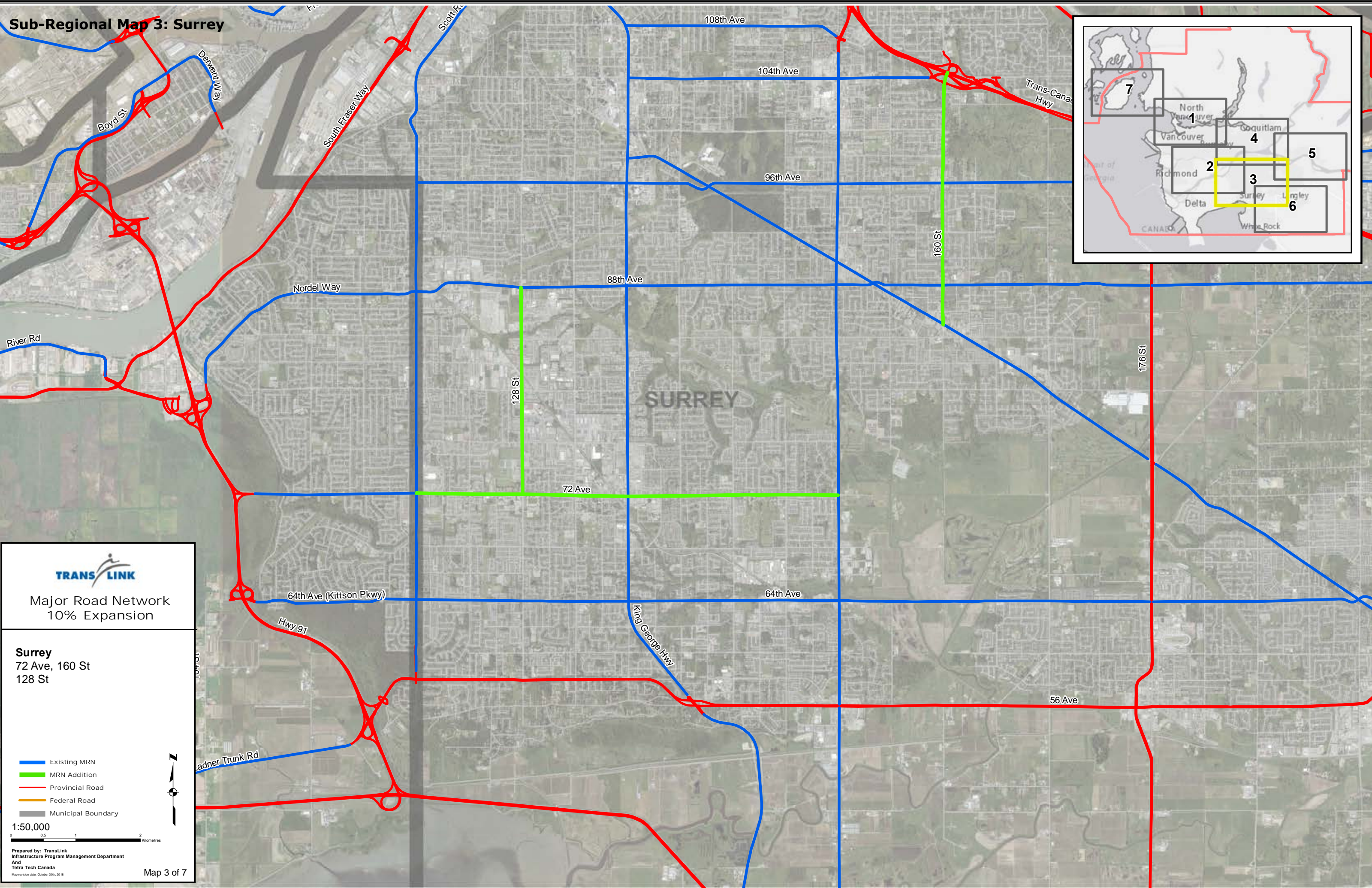
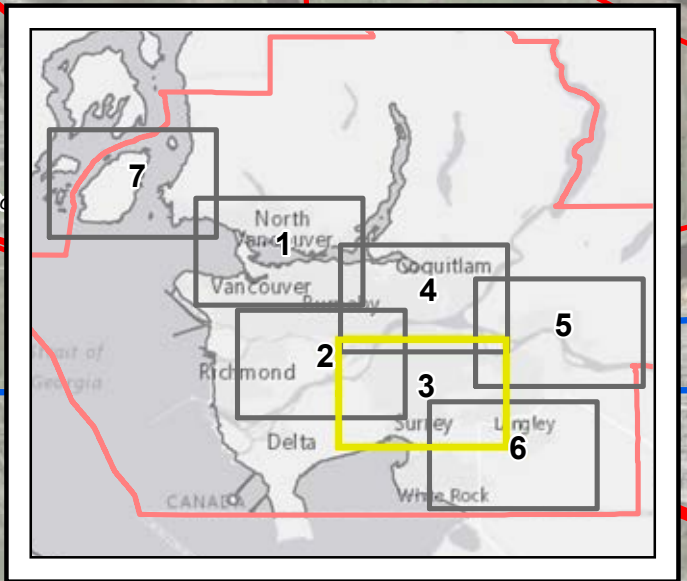
- Existing MRN
- MRN Addition
- Provincial Road
- Municipal Boundary

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Kilometers

Prepared by: TransLink,
Infrastructure Program Management Department
Map Revision date: October 30th, 2018
Map 2 of 7

Sub-Regional Map 3: Surrey



TRANS LINK

Major Road Network
10% Expansion

Surrey
72 Ave, 160 St
128 St

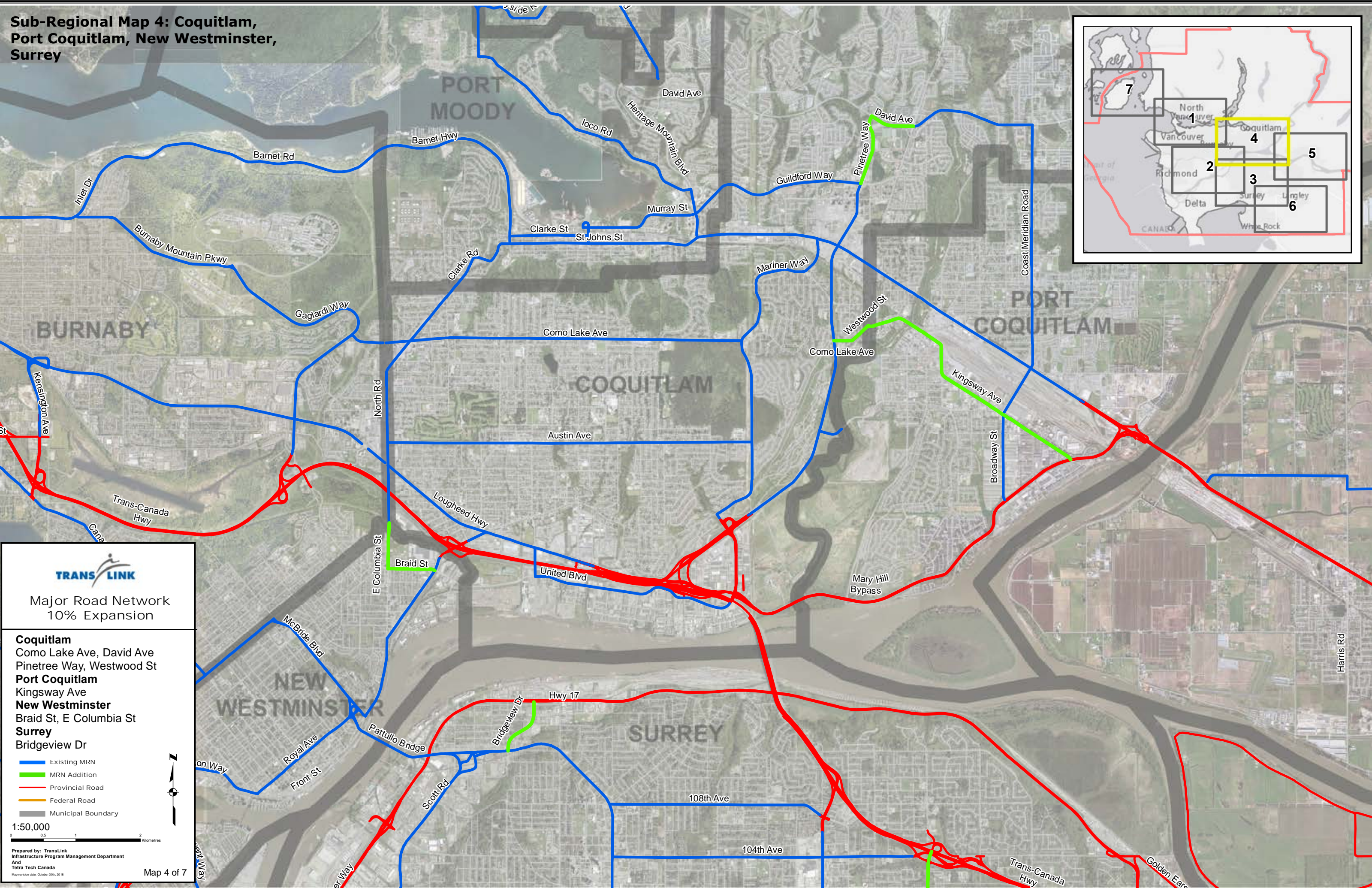
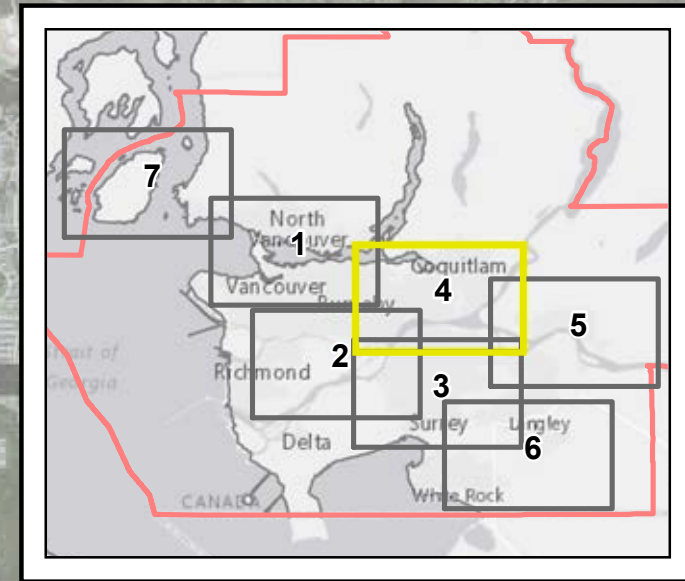
- Existing MRN
- MRN Addition
- Provincial Road
- Federal Road
- Municipal Boundary

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Prepared by: TransLink
Infrastructure Program Management Department
And
Tetra Tech Canada

Map 3 of 7

Sub-Regional Map 4: Coquitlam, Port Coquitlam, New Westminster, Surrey



TRANS LINK

Major Road Network
10% Expansion

Coquitlam
Como Lake Ave, David Ave
Pinetree Way, Westwood St

Port Coquitlam
Kingsway Ave

New Westminster
Braid St, E Columbia St

Surrey
Bridgeview Dr

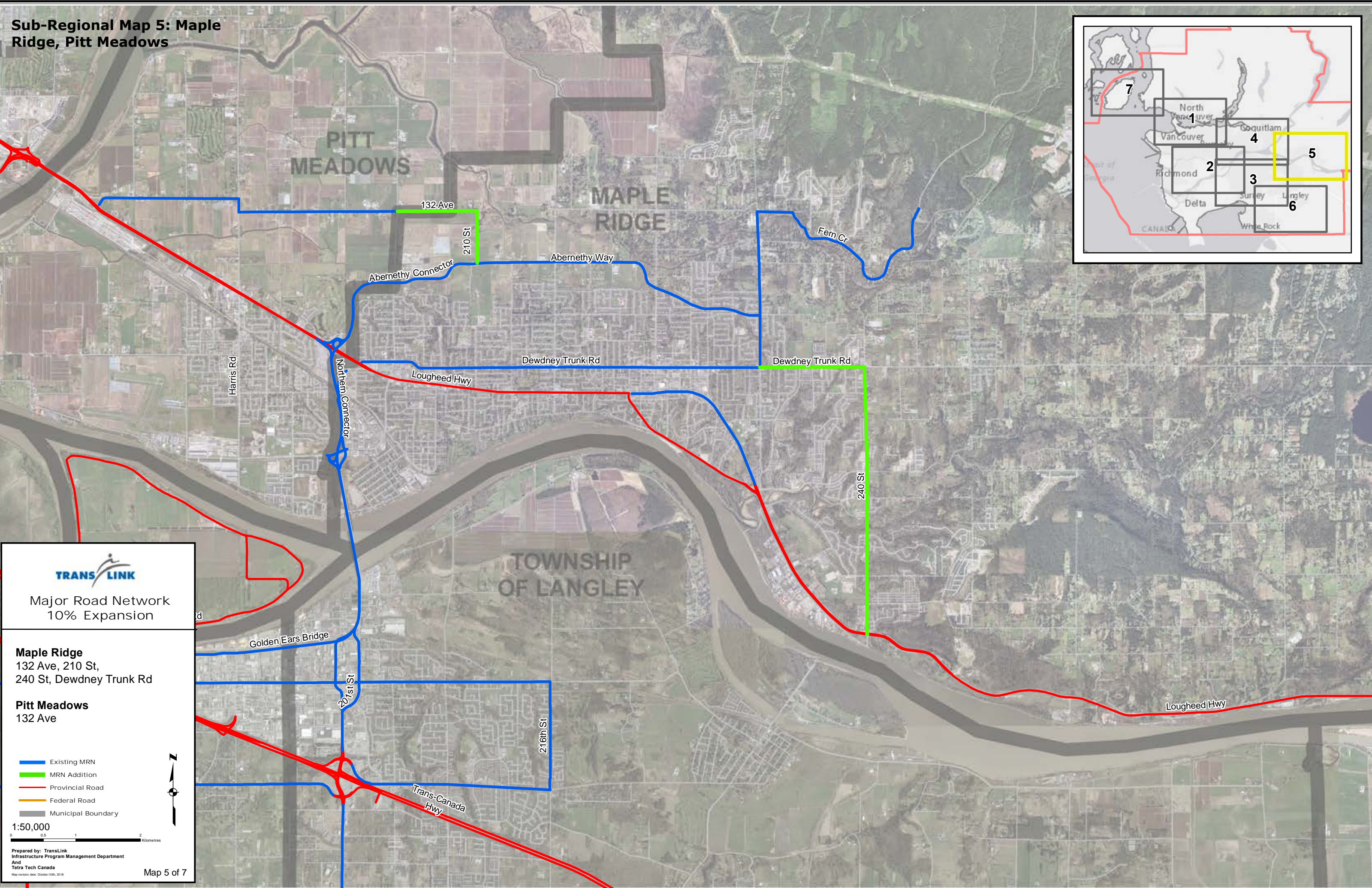
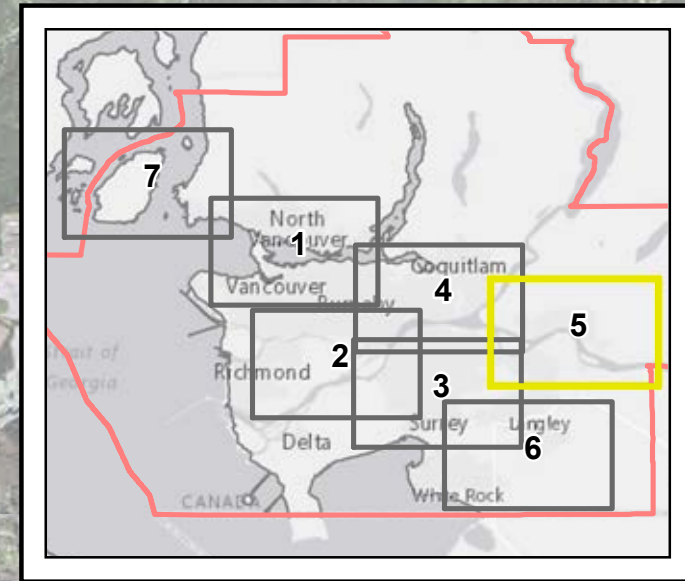
- Existing MRN
- MRN Addition
- Provincial Road
- Federal Road
- Municipal Boundary

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Prepared by: TransLink
Infrastructure Program Management Department
And
Tetra Tech Canada
Map revision date: October 30th, 2018

Map 4 of 7

Sub-Regional Map 5: Maple Ridge, Pitt Meadows



TRANS LINK

Major Road Network
10% Expansion

Maple Ridge
132 Ave, 210 St,
240 St, Dewdney Trunk Rd

Pitt Meadows
132 Ave

- Existing MRN
- MRN Addition
- Provincial Road
- Federal Road
- Municipal Boundary

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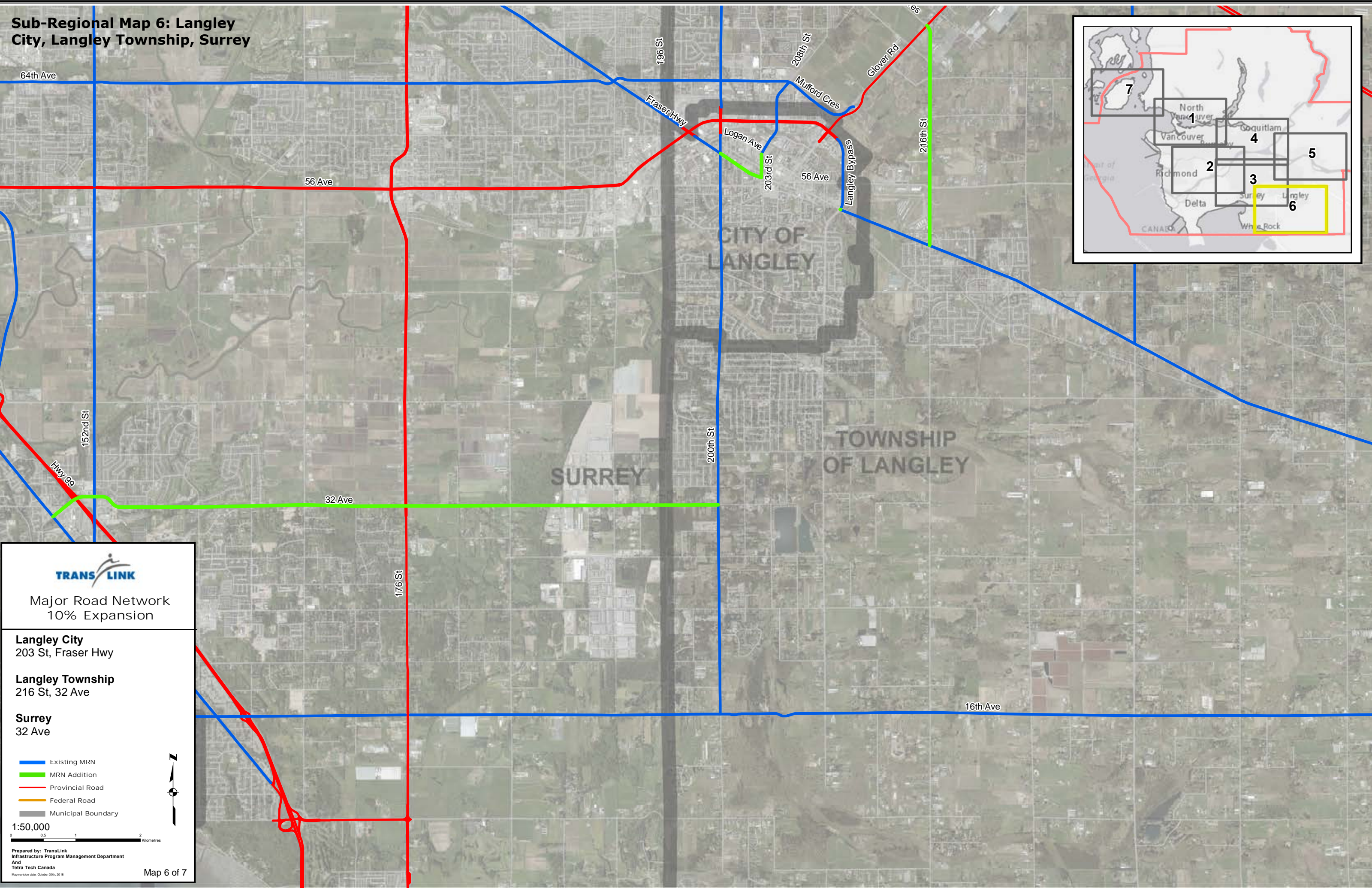
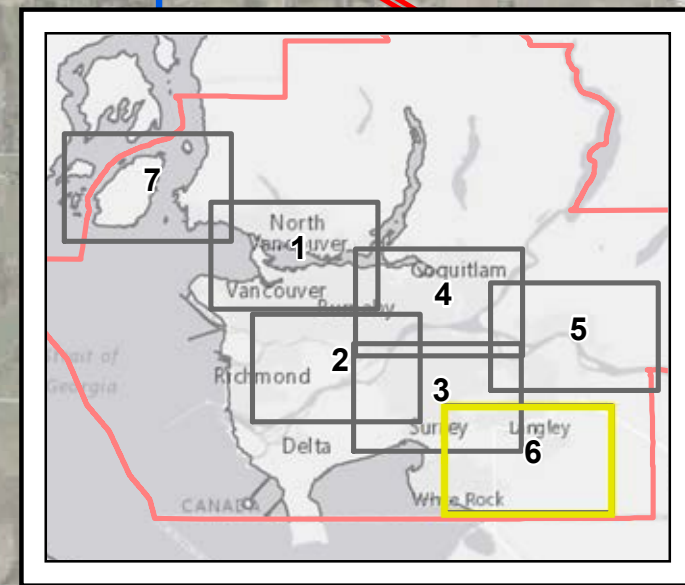
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Prepared by: TransLink
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And
Tetra Tech Canada

Map revision date: October 30th, 2018

Map 5 of 7

Sub-Regional Map 6: Langley City, Langley Township, Surrey



TRANS LINK

Major Road Network
10% Expansion

Langley City
203 St, Fraser Hwy

Langley Township
216 St, 32 Ave

Surrey
32 Ave

- Existing MRN
- MRN Addition
- Provincial Road
- Federal Road
- Municipal Boundary

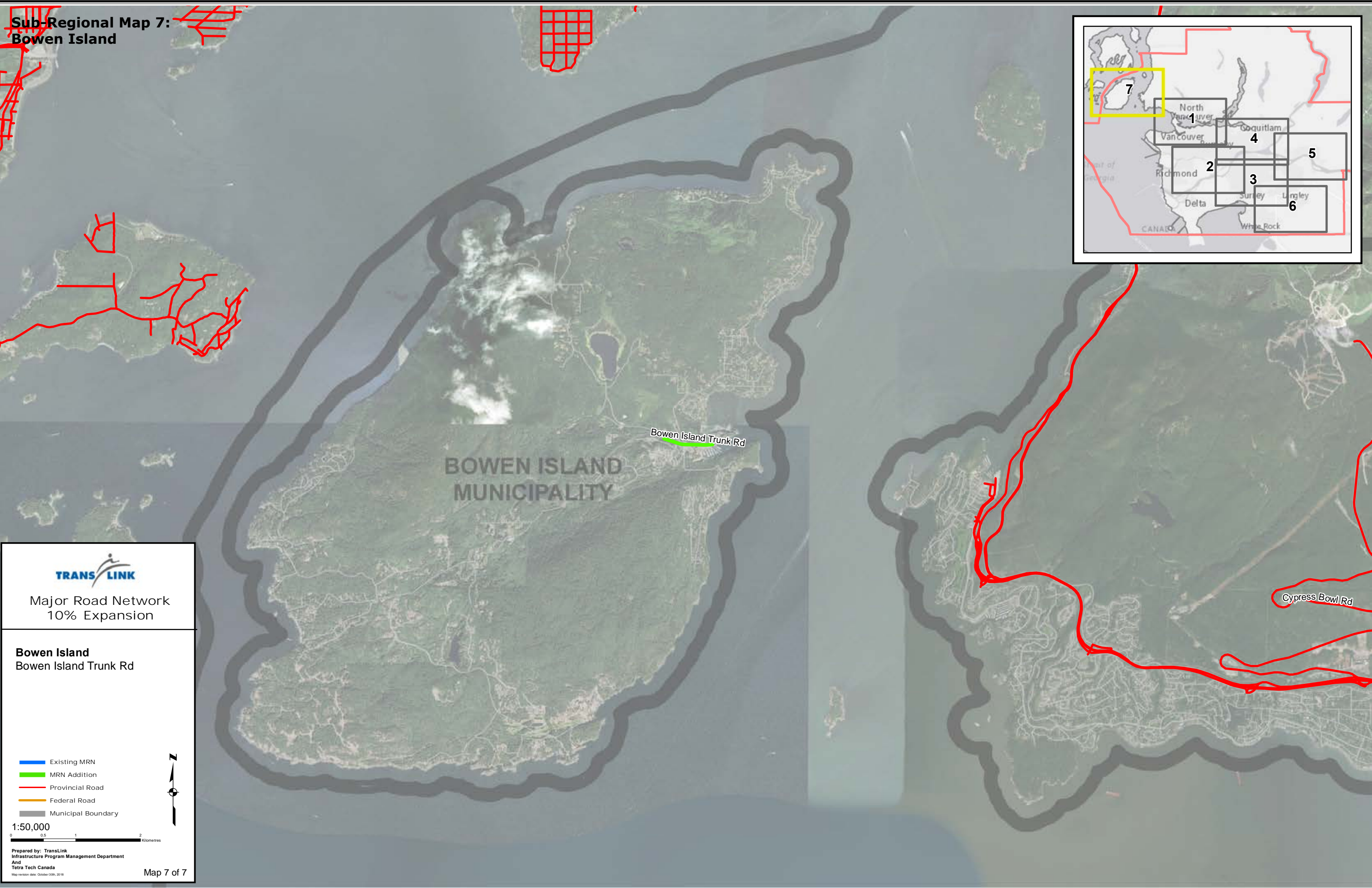
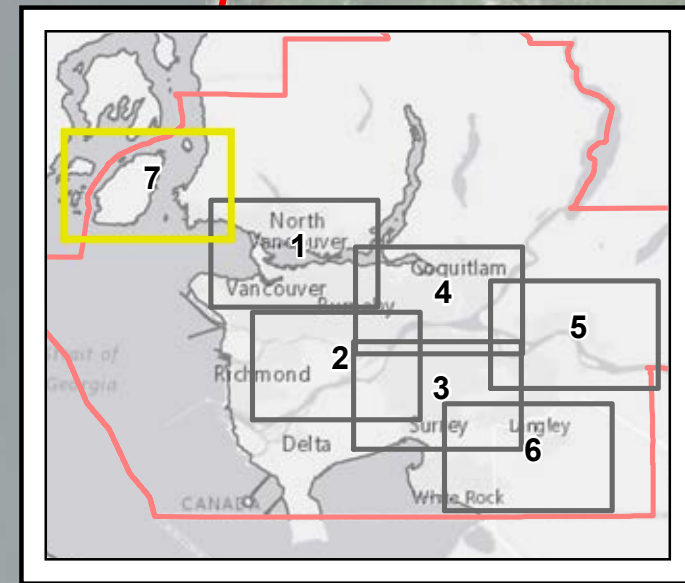
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Prepared by: TransLink
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And
Tetra Tech Canada
Map revision date: October 30th, 2018






Map 6 of 7

**Sub-Regional Map 7:
Bowen Island**



Major Road Network
10% Expansion

Bowen Island
Bowen Island Trunk Rd

-  Existing MRN
-  MRN Addition
-  Provincial Road
-  Federal Road
-  Municipal Boundary



1:50,000
0 0.5 1 2 Kilometres

Prepared by: TransLink
Infrastructure Program Management Department
And
Tetra Tech Canada
Map revision date: October 30th, 2018

To: Board of Directors
From: Geoff Cross, Vice President, Transportation Planning and Policy Division
Date: November 7, 2018
Subject: Major Road Network (MRN) Amendment Bylaw – Reinstatement of Burnaby Roads

PROPOSED RESOLUTIONS:

That the TransLink Board of Directors:

1. Introduce and read for a First, Second, and Third time the “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018”, attached to this report as Appendix A; and
2. Reconsider, pass, and adopt “South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018”.

EXECUTIVE SUMMARY

The purpose of this Major Road Network (MRN) Amendment Bylaw Report is to reinstate segments of roads in the City of Burnaby (North Road, Austin Road, Lougheed Highway and Broadway) to the MRN. These road segments were part of the MRN before construction of the Millennium Line Evergreen Extension project by the Province. Road ownership was transferred from the City of Burnaby to the Province during the Evergreen Extension construction, removing these roads from the MRN. Following completion of the Evergreen Extension, the City of Burnaby resumed ownership of the noted road segments along with maintenance responsibilities. In September 2018, the City of Burnaby submitted a formal request to TransLink to reinstate the noted road segments to the MRN. As part of this reinstatement, 8.92 lane-km would be added to the MRN in the City of Burnaby and Operation, Maintenance and Rehabilitation (OMR) Program funding to the City of Burnaby would be adjusted based on this change. TransLink staff have reviewed this request and it is recommended that the Board approves the MRN Amendment Bylaw Report to instate the noted road segments in the City of Burnaby.

PURPOSE

The purpose of this report is to advise the Board of a recommended change to the Major Road Network (MRN) and to seek the Board’s approval to replace the *South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016* with a new bylaw.

Management recommends that the Board review and amend the MRN, as described in this report, by approving the attached MRN bylaw Number 123-2018. The purpose of this bylaw is to reinstate roads to the MRN: the portions of North Road, Austin Road, Lougheed Highway, and Broadway that have been transferred back to the City of Burnaby associated with the completion of the Evergreen Extension. Refer to Appendix B that highlights the effective changes to Schedule A of the Major Road Network Bylaw.

BACKGROUND

The Major Road Network (MRN) was established in 1998 through the work of regional and municipal staff. Various road segments proposed by municipalities for inclusion in the MRN were reviewed by the Major Roads and Transportation Advisory Committee (MRTAC).

The TransLink Board originally adopted the MRN through *Greater Vancouver Transportation Authority Major Road Network Bylaw No. 1-1998, and Bylaw No. 2-1999*. Since then, there have been a number of amendments to the MRN enacted via bylaw. The list of amendments along with the corresponding bylaw numbers is attached in Appendix C.

During the construction of the Millennium Line Evergreen Extension project, the ownership of the noted road segments was transferred from the City of Burnaby to the Province. After the completion of the Evergreen Extension, the City of Burnaby resumed ownership of the noted road segments along with the maintenance responsibility for these roads. A letter from the Province, dated December 5, 2016, confirmed the noted road segments have been returned to the City of Burnaby. The letter is attached as Appendix D.

DISCUSSION

This bylaw proposes to reinstate the following City of Burnaby road segments onto the Major Road Network (as illustrated in Figure 1 and attached in Table 1):

- North Road (southbound) from Clarke Road to south of Lougheed Highway;
- Austin Road from Lougheed Highway to North Road;
- Lougheed Highway (westbound) from North Road to west of Austin Road;
- Lougheed Highway (eastbound) from west of Austin Road to east of Austin Road;
- Lougheed Highway (eastbound) from west of North Road to North Road; and
- Broadway from west of North Road to North Road.

On September 26, 2018, the City of Burnaby submitted a formal request to TransLink (Appendix E) to reinstate the noted road segments to the MRN in City of Burnaby.

Table 1: Proposed Road Segments Reinstatement to MRN in Burnaby

Road	From	To	Lane-km¹
North Road (southbound)	Clark Road	South of Lougheed Highway	+ 4.44
Austin Road	Lougheed Highway	North Road	+ 2.42
Lougheed Highway (westbound)	North Road	West of Austin Road	+ 1.21
Lougheed Highway (eastbound)	West of Austin Road	East of Austin Road	+ 0.39
Lougheed Highway (eastbound)	West of North Road	North Road	+ 0.23
Broadway	West of North Road	North Road	+ 0.23
Total			+ 8.92

Note:

¹ The lane kilometer measures have been calculated by TransLink GIS system data, and are considered accurate for budget determination.

Link to Corporate Strategic Priorities

The Mayors' Council Strategic Framework outlines TransLink's commitment to maintaining and investing in the regional road network to improve safety, continuity, local access and goods movement. The road segments proposed for reinstatement by the City of Burnaby is part of a direct route that performs a regional function and carries high truck volume.

Risk Assessment

Management does not anticipate significant financial or reputational risks from the recommendation.

Financial Implications

Once this new bylaw comes into effect, Operation, Maintenance and Rehabilitation (OMR) Program funding to the City of Burnaby will be adjusted based on their net change in MRN lane-km. Furthermore, the adjustment date will coincide with the Board approval date of December 6, 2018.

For 2018, MRN funding towards the annual Operations, Maintenance and Rehabilitation is paid out to the municipalities at a unit rate of \$20,610 per lane-km.

Using the 2018 OMR unit rate, the 2018 pro-rated cost to TransLink is approximately \$12,600 which comprises of \$7,300 of annual Operation, Maintenance and General Rehabilitation (O&M) funding allocation and \$5,300 of annual Pavement Rehabilitation (R) funding allocation, and annual amounts thereafter. The amounts showing in 2019 have been included in TransLink's budgets in anticipation of the Bylaw adoption.

Sustainability Implications

The recommendation to reinstate the noted road segments to the MRN is in accordance with the TransLink Sustainability policy direction as stated below:

- Provide a diversity of transportation services and pursue operation and design innovations that maximize the benefits to society, the economy, and the environment while minimizing adverse impacts, locally and globally.
- Develop a resilient transportation system that can adapt to the region's changing needs and foster our capacity to respond in challenging or exceptional situations.

Communications

A robust communications plan will be developed to promote this information as part of the annual MRN funding commitment announcement in the spring. Management will inform the City of the Board's decision.

Analysis of Alternatives

1. The TransLink Board could deny the MRN change requests from the City. However, the MRN changes are administrative in nature and maintain continuity of the MRN. Therefore, management does not support this alternative.
2. The TransLink Board could delay the City of Burnaby's MRN reinstatement request, so that the change coincides with the 2019 Budget. However, there is minimal financial impact to proceeding in 2018 and there is reputational risk to TransLink for delaying the City of Burnaby's request. Therefore, management does not support this alternative.

Attachments

Appendix A: South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018, including Schedule A.

Appendix B: Effective changes to Schedule A of the Major Road Network Bylaw.

Appendix C: Schedule of Amendments to the MRN

Appendix D: December 05, 2016 letter from the Lieutenant Governor of the Province of British Columbia.

Appendix E: September 26, 2018 letter from the City of Burnaby requesting MRN reinstatement.

Figure 1: MRN Changes Related to North Road, Austin Road, Lougheed Road, and Broadway.

**SOUTH COAST BRITISH COLUMBIA TRANSPORTATION AUTHORITY
MAJOR ROAD NETWORK BYLAW NUMBER 123-2018**

A bylaw to replace the "South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016."

WHEREAS the Board of the South Coast British Columbia Transportation Authority has adopted "South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016," which designates the roads forming the Major Road Network;

AND WHEREAS the Board of the South Coast British Columbia Transportation Authority wishes to add and delete road segments to and from the Major Road Network and replace "South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016" with a new bylaw;

NOW THEREFORE the Board of the South Coast British Columbia Transportation Authority enacts as follows:

1. "South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016" is hereby replaced by this Bylaw.
2. The attached Schedule "A" (Major Road Network) is part of this Bylaw.
3. This bylaw shall be cited as "South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 123-2018".

READ A FIRST, SECOND AND THIRD TIME this 6th day of December, 2018.

RECONSIDERED, PASSED AND FINALLY ADOPTED this 6th day of December, 2018.

Lorraine Cunningham, Chair

Gigi Chen-Kuo, General Counsel and Corporate Secretary

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Anmore		
1 Avenue	Sunnyside Road	Port Moody/Anmore border
Bedwell Bay Road	Port Moody/Anmore border	Port Moody/Anmore border
Sunnyside Road	1 Avenue	park access road at Buntzen Lake recreation area
East Road	Sunnyside Road	Port Moody/Anmore border
Belcarra		
Bedwell Bay Road	Port Moody/Belcarra border	Midden Road
Burnaby		
10 Avenue	Kingsway	McBride Boulevard
Austin Road	Lougheed Highway	North Road (Coquitlam/Burnaby border)
Barnet Road	Inlet Drive (near Bayview Drive)	Port Moody/Burnaby border
Boundary Road	Hastings Street	Marine Way
Broadway	Gaglardi Way	North Road (Coquitlam/Burnaby border)
Burnaby Mountain Parkway	Hastings Street (near Dalla-Tina Avenue)	Gaglardi Way
Byrne Road	Marine Way	Meadow Avenue
Canada Way	Boundary Road (Vancouver/Burnaby border)	west of Willingdon Avenue
Canada Way	east of Willingdon Avenue	west of Kensington Avenue
Canada Way	east of Kensington Avenue	10 Avenue (New Westminster/Burnaby border)
Gaglardi Way	Burnaby Mountain Parkway	north of Highway 1 (south abutment of Stormont Avenue overpass)
Griffiths Drive	Kingsway	10 Avenue (New Westminster/Burnaby border)
Hastings Street	Boundary Road (Vancouver/Burnaby border)	Burnaby Mountain Parkway (near Dalla-Tina Avenue)
Inlet Drive	Hastings Street	Barnet Road (near Bayview Drive)
Kensington Avenue	Lougheed Highway	north of Sprott Street
Kingsway	Boundary Road (Vancouver/Burnaby border)	10 Avenue (New Westminster/Burnaby border)
Lougheed Highway	Boundary Road (Vancouver/Burnaby border)	North Road (Coquitlam/Burnaby border)
Marine Way	Boundary Road (Vancouver/Burnaby border)	New Westminster/Burnaby border (west of Queensborough Bridge)
North Road	Clarke Road	New Westminster/Burnaby border
Southridge Drive	Griffiths Drive	Meadow Avenue
Willingdon Avenue	Hastings Street	north of Highway 1 (near Still Creek)
Willingdon Avenue	south of Canada Way	Kingsway
Coquitlam		
Austin Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
Barnet Highway	Port Moody/Coquitlam border	Lougheed Highway / Pinetree Way
Brunette Avenue	north of Highway 1 (near Bernatchy Street)	Lougheed Highway
Clarke Road	Port Moody/Coquitlam border (Ingersoll Avenue)	North Road (Burnaby/Coquitlam border)
Coast Meridian Road	David Avenue	Victoria Drive (Port Coquitlam/Coquitlam border)
Como Lake Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
David Avenue	Pipeline Road	Coast Meridian Road
Guildford Way	Port Moody/Coquitlam border	Pinetree Way
King Edward Street	Lougheed Highway	United Boulevard
Lougheed Highway	North Road (Burnaby/Coquitlam border)	east of Schoolhouse Street
Lougheed Highway	West of Colony Farm Road	Westwood Street (Port Coquitlam/Coquitlam border)
Mariner Way	Barnet Highway	United Boulevard
North Road	Clarke Road (near Cottonwood Avenue)	New Westminster/Coquitlam border
Pinetree Way	Guildford Way	Barnet Highway/Lougheed Highway
Pitt River Road	Lougheed Highway	Port Coquitlam/Coquitlam border (Coquitlam River)
United Boulevard	King Edward Street	south of Mary Hill By-Pass
United Boulevard	north of Lougheed Highway	Mariner Way
Delta		
56 Street	south of Highway 17	Canada / United States border
64 Avenue / Kittson Parkway	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Avenue	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Street	Ladner Trunk Road	Churchill Street
80 Street	Ladner Trunk Road	Churchill Street
Churchill Street	72 Street	80 Street
Highway 91 Connector	River Road	south of BNSF rail crossing
Ladner Trunk Road	east of 72 Street	south of Highway 99
Ladner Trunk Road	north of Highway 99	west of Highway 91
Nordel Way	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
River Road / 62B Street	east of Highway 99 / Highway 17	west of 96 Street / Hwy 91 Connector
Scott Road (120 Street)	96 Avenue (Surrey/Delta border)	north of Highway 10
Langley City		
200 Street	south of Langley By-Pass (Highway 10)	Langley Township/Langley City border
204 Street	Langley Township/Langley City border (62 Avenue)	Logan Avenue
Fraser Highway (west)	east of Langley By-Pass (Highway 10)	200 Street
Fraser Highway (east)	Langley By-Pass	Langley Township/Langley City border
Langley By-Pass	east of Glover Road / Highway 10	Fraser Highway

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Langley Township		
16 Avenue	Surrey/Langley Township border (196 Street)	west of Highway 13
16 Avenue	east of Highway 13	Abbotsford/Langley Township border (276 Street)
64 Avenue	196 Street (Surrey/Langley Township border)	204 Street
88 Avenue	Surrey/Langley Township border (west of 196A Street)	west of 200 Street (Highway 1)
88 Avenue	east of 200 Street (Highway 1)	216 Street
96 Avenue	Surrey/Langley Township border	216 Street
199A Street	End of SB bridge exit ramp	200 Street
200 Street	north of 88 Avenue (Highway 1)	199A Street
200 Street	south of 88 Avenue (Highway 1)	62 Avenue (Langley City/Langley Township border)
200 Street	Langley City/Langley Township border	16 Avenue
201 Street	200 Street	Start of NB bridge entrance ramp
204 Street	62 Avenue	64 Avenue
216 Street	88 Avenue	96 Avenue
232 Street	Fraser Highway	Highway 10
Fraser Highway (west)	196 Street (Surrey/Langley Township/City border)	west of Langley By-Pass (Highway 10)
Fraser Highway (east)	Langley City/Langley Township border	west of Highway 13
Fraser Highway (east)	east of Highway 13	Abbotsford/Langley Township border (276 Street)
Mufford Crescent	204 Street	62 Avenue
Mufford Crescent (Overpass)	62 Avenue	west of Glover Road
Maple Ridge		
128 Avenue	210 Street	Abermethyl Way
132 Avenue	232 Street	Fern Crescent
232 Street	132 Avenue	Dewdney Trunk Road
Abermethyl Way	128 Avenue	232 Street
Dewdney Trunk Road	east of Lougheed Highway	232 Street
Fern Crescent	132 Avenue	south of Golden Ears Park Gate
Lougheed Highway	east of Haney By-Pass (near 222 Street)	west of Haney By-Pass (near 232 Street)
New Westminster		
10 Avenue	Kingsway	McBride Boulevard
Boyd Street	Boundary Road (Richmond/New Westminster border)	Derwent Way
Brunette Avenue	south of Highway 1 (south abutment of BNR overpass)	Columbia Street E
Columbia Street	Stewardson Way / 12 Street	Royal Avenue
Columbia Street E	Brunette Avenue	McBride Boulevard
Derwent Way	Boyd Street	Annacis Island moveable bridge (north abutment)
McBride Boulevard	10 Avenue (Burnaby/New Westminster border)	Columbia Street E / Pattullo Bridge (north abutment)
Royal Avenue	Columbia Street	McBride Boulevard
Stewardson Way	6 Avenue	Columbia Street / 12 Street
North Vancouver City		
3 Street	Marine Drive (at Bewicke Avenue)	Forbes Avenue
Cotton Road	Low Level Road	North Vancouver District/City border
Esplanade	Forbes Avenue	Low Level Road
Forbes Avenue	3 Street	Esplanade
Lonsdale Avenue	south of Highway 1	Esplanade
Low Level Road	Esplanade	Cotton Road
Marine Drive	North Vancouver District/City border (near Mackay Road)	3 Street (at Bewicke Avenue)
North Vancouver District		
Capilano Road	south of Highway 1	Marine Drive
Dollarton Highway	west of bridge over Seymour River	Riverside Drive (East)
Main Street	North Vancouver City/District border	west of Mountain Highway
Marine Drive	West Vancouver/North Vancouver District border	North Vancouver City/District border (near Mackay Road)
Mountain Highway	Keith Road	north of Main Street
Mount Seymour Parkway	Seymour Creek IR Boundary	Mount Seymour Road
Mount Seymour Road	Anne Macdonald Way	Mount Seymour Parkway
Riverside Drive (East)	Mount Seymour Parkway	Dollarton Highway
Pitt Meadows		
Old Dewdney Trunk Road	Lougheed Highway	Harris Road
Harris Road	Old Dewdney Trunk Road	Old Dewdney Trunk Road
Old Dewdney Trunk Road	Harris Road	Sharpe Road (Pitt Meadows/Maple Ridge border)
Port Coquitlam		
Lougheed Highway	Coquitlam/Port Coquitlam border (Westwood Street)	east of Ottawa Street
Coast Meridian Road	Kingsway Avenue	Victoria Drive (Coquitlam/Port Coquitlam border)
Broadway Street	Mary Hill Bypass	Kingsway Avenue

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Port Moody		
1 Avenue	Bedwell Bay Road / Sunnyside Road	Anmore/Port Moody border
1 Avenue	Anmore/Port Moody border	loco Road
Barnet Highway (west)	Burnaby/Port Moody border	St. Johns Street (at Clarke Road / Albert Street)
Barnet Highway (east)	St. Johns Street (at Dewdney Trunk Road)	Coquitlam / Port Moody border
Bedwell Bay Road	Belcarra/Port Moody border	Anmore/Port Moody border
Bedwell Bay Road	Anmore/Port Moody border	1 Avenue
Clarke Road	St. Johns Street	Coquitlam/Port Moody border (Ingersoll Avenue)
Clarke Street	Barnet Highway	Moody Street
Guildford Way	loco Road	Coquitlam/Port Moody border
loco Road	1 Avenue	Barnet Highway (east)
Moody Street	Murray Street	St. Johns Street
Murray Street	Moody Street	loco Road
St. Johns Street	Clarke Road (at Albert Street / Barnet Highway (west))	Barnet Highway (east) (at Dewdney Trunk Road)
Richmond		
No. 2 Road	Inglis Drive	Steveston Highway
No. 3 Road	south of Sea Island Way	Westminster Highway
Alderbridge Way	No. 3 Road	west of Highway 91 (near Shell Road)
Bridgeport Road	St. Edwards Drive	Knight Street
Gilbert Road	Dinsmore Bridge (south abutment)	Westminster Highway
Knight Street	Knight Street Bridge (south abutment)	north of Highway 91
Knight Street	south of Highway 91	Westminster Highway
Steveston Highway	No. 2 Road	west of Highway 99
Westminster Highway	No. 2 Road	west of Highway 99
Westminster Highway	east of Highway 99	Knight Street
Westminster Highway	east of Nelson Road	south of Highway 91
Westminster Highway	north of Highway 91	New Westminster/Richmond border (Boundary Road)
Surrey		
16 Avenue	152 Street	160 Street (White Rock/Surrey border)
16 Avenue	160 St (White Rock/Surrey border)	west of Highway 15 (176 Street)
16 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
64 Avenue	Scott Road/120 Street (Delta/Surrey border)	west of Highway 15 (176 Street)
64 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
88 Avenue	Nordel Way	west of Highway 15 (176 Street)
88 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
96 Avenue (west)	Scott Road/120 Street (Delta/Surrey border)	west of 176 Street
96 Avenue (east)	96 Avenue Connector Road	Langley Township/Surrey border
96 Avenue Connector Road	Golden Ears Bridge "mainline"	96 Avenue (east)
104 Avenue	King George Highway	south of Highway 1
108 Avenue	King George Highway	Townline Diversion
152 Street	south of Highway 1 (near Lincoln Drive)	north of Highway 10 (56 Avenue)
152 Street	south of Highway 10 (56 Avenue)	16 Avenue (White Rock / Surrey border)
Fraser Highway	King George Highway	west of Highway 15 (176 Street)
Fraser Highway	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
King George Highway	Pattullo Bridge (south abutment)	north of Highway 10 (56 Avenue)
King George Highway	south of Highway 10 (56 Avenue)	north of Highway 99
King George Highway	south of Highway 99 (near Crescent Road)	west of Highway 99 (north of 8 Avenue)
Nordel Way	Scott Road/120 Street (Delta/Surrey border)	88 Avenue
Scott Road	King George Highway	96 Avenue (Delta/Surrey border)
Scott Road (120 Street)	96 Avenue (Delta/Surrey border)	north of Highway 10
Townline Diversion	108 Avenue	west of 152 Street

Appendix A - "SCHEDULE A"

Major Road Network

ROAD SEGMENT	FROM	TO
Vancouver		
1 Avenue	Clark Drive	Boundary Road (Burnaby/Vancouver border)
10 Avenue	Blanca Street	Alma Street
41 Avenue	SW Marine Drive	Joyce Street
70 Avenue	SW Marine Drive (at Cornish Street)	SW Marine Drive (between Heather and Ash Streets)
Alma Street	Broadway	10 Avenue
Boundary Road	Hastings Street	Marine Way
Broadway	Alma Street	Rupert Street
Cambie Bridge	North abutment (including ramps)	South abutment (including ramps)
Cambie Street	Cambie Bridge (south abutment)	SW Marine Drive
Clark Drive	Hastings Street	Knight Street
Cordova Diversion	East of Hawks Avenue	Powell Street
Georgia Street	Highway 99/1A (near Chilco Street)	Georgia Viaduct
Georgia Viaduct	Georgia Street	Main Street
Grandview Highway	Nanaimo Street	Boundary Road (Burnaby/Vancouver border)
Granville Bridge	North abutment (including ramps)	South abutment (including ramps)
Granville Street	Granville Bridge (south abutment)	SW Marine Drive
Hastings Street	Howe Street	Boundary Road (Burnaby/Vancouver border)
Howe Street	Hastings Street	Granville Bridge
Joyce Street	41 Avenue	Kingsway
Kingsway	Main Street	Boundary Road (Burnaby/Vancouver border)
Knight Street	Clark Drive	Knight Street Bridge (north abutment)
Lougheed Highway	Rupert Street	Boundary Road (Burnaby/Vancouver border)
Main Street	Georgia Viaduct	Kingsway
SW Marine Drive	Comosun Street	70 Avenue (at Cornish Street)
SW Marine Drive	Granville Street	Ontario Street
SE Marine Drive	Ontario Street	Marine Way
Marine Way	SE Marine Drive	Boundary Road (Burnaby/Vancouver border)
McGill Street	Nanaimo Street	west of Highway 1 (near Bridgeway Street)
Nanaimo Street	McGill Street	Hastings Street
Nanaimo Street	Broadway	Grandview Highway
Nelson Street	Howe Street	Cambie Bridge
Oak Street	Broadway	Highway 99 (near 71 Avenue)
Powell Street	East of Hawks Avenue	West of Clark Drive
Seymour Street	Granville Bridge	Hastings Street
Smithe Street	Cambie Bridge	Howe Street
West Vancouver		
Marine Drive	21 Street	Highway 99/1A (near Taylor Way)
White Rock		
North Bluff Road	Johnston Road	Stayle Road (Surrey/White Rock Border)
TransLink-Owned Assets		
Golden Ears Way, incl. Golden Ears Bridge	east of 176 Street (Surrey)	210 Street (Maple Ridge)
Knight Street Bridge	North abutment (Vancouver)	South abutment (Richmond)
Pattullo Bridge	North abutment (New Westminster)	South abutment (Surrey)
Westham Island Bridge	West Abutment (Westham Island)	East Abutment (Delta)

Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network

ROAD SEGMENT	FROM	TO
Anmore		
1 Avenue	Sunnyside Road	Port Moody/Anmore border
Bedwell Bay Road	Port Moody/Anmore border	Port Moody/Anmore border
Sunnyside Road	1 Avenue	park access road at Buntzen Lake recreation area
East Road	Sunnyside Road	Port Moody/Anmore border
Belcarra		
Bedwell Bay Road	Port Moody/Belcarra border	Midden Road
Burnaby		
10 Avenue	Kingsway	McBride Boulevard
Austin Road	Lougheed Highway	North Road (Coquitlam/Burnaby border)
Barnet Road	Inlet Drive (near Bayview Drive)	Port Moody/Burnaby border
Boundary Road	Hastings Street	Marine Way
Broadway	Gaglardi Way	west of North Road North Road (Coquitlam/Burnaby border)
Burnaby Mountain Parkway	Hastings Street (near Dalla-Tina Avenue)	Gaglardi Way
Byrne Road	Marine Way	Meadow Avenue
Canada Way	Boundary Road (Vancouver/Burnaby border)	west of Willingdon Avenue
Canada Way	east of Willingdon Avenue	west of Kensington Avenue
Canada Way	east of Kensington Avenue	10 Avenue (New Westminster/Burnaby border)
Gaglardi Way	Burnaby Mountain Parkway	north of Highway 1 (south abutment of Stormont Avenue overpass)
Griffiths Drive	Kingsway	10 Avenue (New Westminster/Burnaby border)
Hastings Street	Boundary Road (Vancouver/Burnaby border)	Burnaby Mountain Parkway (near Dalla-Tina Avenue)
Inlet Drive	Hastings Street	Barnet Road (near Bayview Drive)
Kensington Avenue	Lougheed Highway	north of Sprott Street
Kingsway	Boundary Road (Vancouver/Burnaby border)	10 Avenue (New Westminster/Burnaby border)
Lougheed Highway	Boundary Road (Vancouver/Burnaby border)	west of Austin Road North Road (Coquitlam/Burnaby border)
Lougheed Highway (eastbound)	east of Austin Road	west of North Road
Marine Way	Boundary Road (Vancouver/Burnaby border)	New Westminster/Burnaby border (west of Queensborough Bridge)
North Road	south of Lougheed Highway Clarke Road	New Westminster/Burnaby border
Southridge Drive	Griffiths Drive	Meadow Avenue
Willingdon Avenue	Hastings Street	north of Highway 1 (near Still Creek)
Willingdon Avenue	south of Canada Way	Kingsway
Coquitlam		
Austin Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
Barnet Highway	Port Moody/Coquitlam border	Lougheed Highway / Pinetree Way
Brunette Avenue	north of Highway 1 (near Bernatchy Street)	Lougheed Highway
Clarke Road	Port Moody/Coquitlam border (Ingersoll Avenue)	North Road (Burnaby/Coquitlam border)
Coast Meridian Road	David Avenue	Victoria Drive (Port Coquitlam/Coquitlam border)
Como Lake Avenue	North Road (Burnaby/Coquitlam border)	Mariner Way
David Avenue	Pipeline Road	Coast Meridian Road
Guildford Way	Port Moody/Coquitlam border	Pinetree Way
King Edward Street	Lougheed Highway	United Boulevard
Lougheed Highway	North Road (Burnaby/Coquitlam border)	east of Schoolhouse Street
Lougheed Highway	West of Colony Farm Road	Westwood Street (Port Coquitlam/Coquitlam border)
Mariner Way	Barnet Highway	United Boulevard
North Road	Clarke Road (near Cottonwood Avenue)	New Westminster/Coquitlam border
Pinetree Way	Guildford Way	Barnet Highway/Lougheed Highway
Pitt River Road	Lougheed Highway	Port Coquitlam/Coquitlam border (Coquitlam River)
United Boulevard	King Edward Street	south of Mary Hill By-Pass
United Boulevard	north of Lougheed Highway	Mariner Way
Delta		
56 Street	south of Highway 17	Canada / United States border
64 Avenue / Kittson Parkway	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Avenue	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
72 Street	Ladner Trunk Road	Churchill Street
80 Street	Ladner Trunk Road	Churchill Street
Churchill Street	72 Street	80 Street
Highway 91 Connector	River Road	south of BNSF rail crossing
Ladner Trunk Road	east of 72 Street	south of Highway 99
Ladner Trunk Road	north of Highway 99	west of Highway 91
Nordel Way	east of Highway 91	Scott Road/120 Street (Surrey/Delta border)
River Road / 62B Street	east of Highway 99 / Highway 17	west of 96 Street / Hwy 91 Connector
Scott Road (120 Street)	96 Avenue (Surrey/Delta border)	north of Highway 10
Langley City		
200 Street	south of Langley By-Pass (Highway 10)	Langley Township/Langley City border
204 Street	Langley Township/Langley City border (62 Avenue)	Logan Avenue
Fraser Highway (west)	east of Langley By-Pass (Highway 10)	200 Street
Fraser Highway (east)	Langley By-Pass	Langley Township/Langley City border
Langley By-Pass	east of Glover Road / Highway 10	Fraser Highway

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Langley Township		
16 Avenue	Surrey/Langley Township border (196 Street)	west of Highway 13
16 Avenue	east of Highway 13	Abbotsford/Langley Township border (276 Street)
64 Avenue	196 Street (Surrey/Langley Township border)	204 Street
88 Avenue	Surrey/Langley Township border (west of 196A Street)	west of 200 Street (Highway 1)
88 Avenue	east of 200 Street (Highway 1)	216 Street
96 Avenue	Surrey/Langley Township border	216 Street
199A Street	End of SB bridge exit ramp	200 Street
200 Street	north of 88 Avenue (Highway 1)	199A Street
200 Street	south of 88 Avenue (Highway 1)	62 Avenue (Langley City/Langley Township border)
200 Street	Langley City/Langley Township border	16 Avenue
201 Street	200 Street	Start of NB bridge entrance ramp
204 Street	62 Avenue	64 Avenue
216 Street	88 Avenue	96 Avenue
232 Street	Fraser Highway	Highway 10
Fraser Highway (west)	196 Street (Surrey/Langley Township/City border)	west of Langley By-Pass (Highway 10)
Fraser Highway (east)	Langley City/Langley Township border	west of Highway 13
Fraser Highway (east)	east of Highway 13	Abbotsford/Langley Township border (276 Street)
Mufford Crescent	204 Street	62 Avenue
Mufford Crescent (Overpass)	62 Avenue	west of Glover Road
Maple Ridge		
128 Avenue	210 Street	Abermethyl Way
132 Avenue	232 Street	Fern Crescent
232 Street	132 Avenue	Dewdney Trunk Road
Abermethyl Way	128 Avenue	232 Street
Dewdney Trunk Road	east of Lougheed Highway	232 Street
Fern Crescent	132 Avenue	south of Golden Ears Park Gate
Lougheed Highway	east of Haney By-Pass (near 222 Street)	west of Haney By-Pass (near 232 Street)
New Westminster		
10 Avenue	Kingsway	McBride Boulevard
Boyd Street	Boundary Road (Richmond/New Westminster border)	Derwent Way
Brunette Avenue	south of Highway 1 (south abutment of BNR overpass)	Columbia Street E
Columbia Street	Stewardson Way / 12 Street	Royal Avenue
Columbia Street E	Brunette Avenue	McBride Boulevard
Derwent Way	Boyd Street	Annacis Island moveable bridge (north abutment)
McBride Boulevard	10 Avenue (Burnaby/New Westminster border)	Columbia Street E / Pattullo Bridge (north abutment)
Royal Avenue	Columbia Street	McBride Boulevard
Stewardson Way	6 Avenue	Columbia Street / 12 Street
North Vancouver City		
3 Street	Marine Drive (at Bewicke Avenue)	Forbes Avenue
Cotton Road	Low Level Road	North Vancouver District/City border
Esplanade	Forbes Avenue	Low Level Road
Forbes Avenue	3 Street	Esplanade
Lonsdale Avenue	south of Highway 1	Esplanade
Low Level Road	Esplanade	Cotton Road
Marine Drive	North Vancouver District/City border (near Mackay Road)	3 Street (at Bewicke Avenue)
North Vancouver District		
Capilano Road	south of Highway 1	Marine Drive
Dollarton Highway	west of bridge over Seymour River	Riverside Drive (East)
Main Street	North Vancouver City/District border	west of Mountain Highway
Marine Drive	West Vancouver/North Vancouver District border	North Vancouver City/District border (near Mackay Road)
Mountain Highway	Keith Road	north of Main Street
Mount Seymour Parkway	Seymour Creek IR Boundary	Mount Seymour Road
Mount Seymour Road	Anne Macdonald Way	Mount Seymour Parkway
Riverside Drive (East)	Mount Seymour Parkway	Dollarton Highway
Pitt Meadows		
Old Dewdney Trunk Road	Lougheed Highway	Harris Road
Harris Road	Old Dewdney Trunk Road	Old Dewdney Trunk Road
Old Dewdney Trunk Road	Harris Road	Sharpe Road (Pitt Meadows/Maple Ridge border)
Port Coquitlam		
Lougheed Highway	Coquitlam/Port Coquitlam border (Westwood Street)	east of Ottawa Street
Coast Meridian Road	Kingsway Avenue	Victoria Drive (Coquitlam/Port Coquitlam border)
Broadway Street	Mary Hill Bypass	Kingsway Avenue

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Port Moody		
1 Avenue	Bedwell Bay Road / Sunnyside Road	Anmore/Port Moody border
1 Avenue	Anmore/Port Moody border	loco Road
Barnet Highway (west)	Burnaby/Port Moody border	St. Johns Street (at Clarke Road / Albert Street)
Barnet Highway (east)	St. Johns Street (at Dewdney Trunk Road)	Coquitlam / Port Moody border
Bedwell Bay Road	Belcarra/Port Moody border	Anmore/Port Moody border
Bedwell Bay Road	Anmore/Port Moody border	1 Avenue
Clarke Road	St. Johns Street	Coquitlam/Port Moody border (Ingersoll Avenue)
Clarke Street	Barnet Highway	Moody Street
Guildford Way	loco Road	Coquitlam/Port Moody border
loco Road	1 Avenue	Barnet Highway (east)
Moody Street	Murray Street	St. Johns Street
Murray Street	Moody Street	loco Road
St. Johns Street	Clarke Road (at Albert Street / Barnet Highway (west))	Barnet Highway (east) (at Dewdney Trunk Road)
Richmond		
No. 2 Road	Inglis Drive	Steveston Highway
No. 3 Road	south of Sea Island Way	Westminster Highway
Alderbridge Way	No. 3 Road	west of Highway 91 (near Shell Road)
Bridgeport Road	St. Edwards Drive	Knight Street
Gilbert Road	Dinsmore Bridge (south abutment)	Westminster Highway
Knight Street	Knight Street Bridge (south abutment)	north of Highway 91
Knight Street	south of Highway 91	Westminster Highway
Steveston Highway	No. 2 Road	west of Highway 99
Westminster Highway	No. 2 Road	west of Highway 99
Westminster Highway	east of Highway 99	Knight Street
Westminster Highway	east of Nelson Road	south of Highway 91
Westminster Highway	north of Highway 91	New Westminster/Richmond border (Boundary Road)
Surrey		
16 Avenue	152 Street	160 Street (White Rock/Surrey border)
16 Avenue	160 St (White Rock/Surrey border)	west of Highway 15 (176 Street)
16 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
64 Avenue	Scott Road/120 Street (Delta/Surrey border)	west of Highway 15 (176 Street)
64 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
88 Avenue	Nordel Way	west of Highway 15 (176 Street)
88 Avenue	east of Highway 15 (176 Street)	Langley Township/Surrey border
96 Avenue (west)	Scott Road/120 Street (Delta/Surrey border)	west of 176 Street
96 Avenue (east)	96 Avenue Connector Road	Langley Township/Surrey border
96 Avenue Connector Road	Golden Ears Bridge "mainline"	96 Avenue (east)
104 Avenue	King George Highway	south of Highway 1
108 Avenue	King George Highway	Townline Diversion
152 Street	south of Highway 1 (near Lincoln Drive)	north of Highway 10 (56 Avenue)
152 Street	south of Highway 10 (56 Avenue)	16 Avenue (White Rock / Surrey border)
Fraser Highway	King George Highway	west of Highway 15 (176 Street)
Fraser Highway	east of Highway 15 (176 Street)	Langley Township/Surrey border (196 Street)
King George Highway	Pattullo Bridge (south abutment)	north of Highway 10 (56 Avenue)
King George Highway	south of Highway 10 (56 Avenue)	north of Highway 99
King George Highway	south of Highway 99 (near Crescent Road)	west of Highway 99 (north of 8 Avenue)
Nordel Way	Scott Road/120 Street (Delta/Surrey border)	88 Avenue
Scott Road	King George Highway	96 Avenue (Delta/Surrey border)
Scott Road (120 Street)	96 Avenue (Delta/Surrey border)	north of Highway 10
Townline Diversion	108 Avenue	west of 152 Street

**Appendix B - Effective changes to Schedule A of the Major Road Network Bylaw
SCHEDULE "A"
Major Road Network**

ROAD SEGMENT	FROM	TO
Vancouver		
1 Avenue	Clark Drive	Boundary Road (Burnaby/Vancouver border)
10 Avenue	Blanca Street	Alma Street
41 Avenue	SW Marine Drive	Joyce Street
70 Avenue	SW Marine Drive (at Cornish Street)	SW Marine Drive (between Heather and Ash Streets)
Alma Street	Broadway	10 Avenue
Boundary Road	Hastings Street	Marine Way
Broadway	Alma Street	Rupert Street
Cambie Bridge	North abutment (including ramps)	South abutment (including ramps)
Cambie Street	Cambie Bridge (south abutment)	SW Marine Drive
Clark Drive	Hastings Street	Knight Street
Cordova Diversion	East of Hawks Avenue	Powell Street
Georgia Street	Highway 99/1A (near Chilco Street)	Georgia Viaduct
Georgia Viaduct	Georgia Street	Main Street
Grandview Highway	Nanaimo Street	Boundary Road (Burnaby/Vancouver border)
Granville Bridge	North abutment (including ramps)	South abutment (including ramps)
Granville Street	Granville Bridge (south abutment)	SW Marine Drive
Hastings Street	Howe Street	Boundary Road (Burnaby/Vancouver border)
Howe Street	Hastings Street	Granville Bridge
Joyce Street	41 Avenue	Kingsway
Kingsway	Main Street	Boundary Road (Burnaby/Vancouver border)
Knight Street	Clark Drive	Knight Street Bridge (north abutment)
Lougheed Highway	Rupert Street	Boundary Road (Burnaby/Vancouver border)
Main Street	Georgia Viaduct	Kingsway
SW Marine Drive	Comosun Street	70 Avenue (at Cornish Street)
SW Marine Drive	Granville Street	Ontario Street
SE Marine Drive	Ontario Street	Marine Way
Marine Way	SE Marine Drive	Boundary Road (Burnaby/Vancouver border)
McGill Street	Nanaimo Street	west of Highway 1 (near Bridgeway Street)
Nanaimo Street	McGill Street	Hastings Street
Nanaimo Street	Broadway	Grandview Highway
Nelson Street	Howe Street	Cambie Bridge
Oak Street	Broadway	Highway 99 (near 71 Avenue)
Powell Street	East of Hawks Avenue	West of Clark Drive
Seymour Street	Granville Bridge	Hastings Street
Smithe Street	Cambie Bridge	Howe Street
West Vancouver		
Marine Drive	21 Street	Highway 99/1A (near Taylor Way)
White Rock		
North Bluff Road	Johnston Road	Stayle Road (Surrey/White Rock Border)
TransLink-Owned Assets		
Golden Ears Way, incl. Golden Ears Bridge	east of 176 Street (Surrey)	210 Street (Maple Ridge)
Knight Street Bridge	North abutment (Vancouver)	South abutment (Richmond)
Pattullo Bridge	North abutment (New Westminster)	South abutment (Surrey)
Westham Island Bridge	West Abutment (Westham Island)	East Abutment (Delta)

Appendix C – MRN Amendments via Bylaw

- **Greater Vancouver Transportation Authority Major Road Network Bylaw Number 26-2002:**
This bylaw combined and corrected errors and omissions in Bylaws No. 1 and No. 2, and added two newly constructed road segments in Delta (Nordel Way) and Surrey (South Fraser Way) and one existing road segment in Surrey (River Road) to the MRN. These road segments “were always intended to form part of the MRN,” but were held back pending completion of construction.
- **Greater Vancouver Transportation Authority Major Road Network Amendment Bylaw Number 34-2004:**
This bylaw added a new road segment in Burnaby (i.e., Southridge Drive / Byrne Road) and replaced a segment in North Vancouver (i.e., new Dollarton Highway alignment) that had been constructed with capital funding from TransLink.
- **Greater Vancouver Transportation Authority Major Road Network Bylaw Number 39-2005:**
This bylaw added/extended two existing road segments in Anmore (i.e., East Road and Sunnyside Road) to the MRN in response to the municipality’s request “due to the volume of regional traffic utilizing certain non-MRN roads in the Village to access the Buntzen Lake recreation area and the Village of Belcarra.”
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 54-2008:**
This bylaw added new road segments associated with the 204 Street Overpass project in the City of Langley and the David Avenue Connector project in the City of Coquitlam. In addition, this bylaw added/deleted road segments in the City of Surrey that were completed early and handed over to the City of Surrey as part of the Golden Ears Bridge project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 59-2009:**
This bylaw added/removed road segments in the Township of Langley and added new road segments in the District of Maple Ridge, both associated with completion of the Golden Ears Bridge.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 64-2010:**
This bylaw added road segments in the City of Port Coquitlam to reflect MRN changes associated with completion of the Coast Meridian Overpass project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 68-2010:**
This bylaw added road segments in the City of Coquitlam to provide continuity between MRN additions approved as part of the David Avenue Connector and Coast Meridian Overpass projects.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 69-2010:**
This bylaw added two road segments in the City of Vancouver (Powell Street and Cordova Diversion) associated with the Powell Street Overpass project.

- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 79-2012:**
 This bylaw removed three road segments: two segments in the City of Surrey (River Road from Delta/Surrey border to South Fraser Way; and South Fraser Way, from River Road to Old Yale Road) associated with the South Fraser Perimeter Road project; and one segment in the City of Richmond (Westminster Highway from Knight Street to east of Nelson Road) associated with the Nelson Road Interchange project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 80-2012:**
 This bylaw removed the portions of North Road, Austin Road, Lougheed Highway, and Broadway that have been transferred to the Province as part of the Evergreen Line project, in the City of Burnaby.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 88-2013:**
 This bylaw removed segments of River Road between West of Highway 91 and the Surrey-Delta border, in the Corporation of Delta associated with the completion of the South Fraser Perimeter Road (SFPR) project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 95-2014:**
 This bylaw added road segments in the Township of Langley associated with completion of the Golden Ears Bridge (GEB) project, and the terms set out in the GEB Master Municipal Agreement (MMA).
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 97-2014:**
 This bylaw added a short Lougheed Highway section in the City of Coquitlam to rectify an administrative oversight from 1999.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 100-2015:**
 This bylaw added and deleted road segments in the Corporation of Delta associated with completion of South Fraser Perimeter Road (SFPR) project and Corporation of Delta's truck route network changes.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 104-2015:**
 This bylaw added road segments in the Corporation of Delta associated with completion of South Fraser Perimeter Road (SFPR) project.
- **South Coast British Columbia Transportation Authority Major Road Network Bylaw Number 105-2016:**
 This bylaw added and removed road segments in the Township and City of Langley associated with completion of Mufford Crescent Overpass project.



December 5, 2016

His Worship Mayor Derek Corrigan
City of Burnaby
4949 Canada Way
Burnaby, BC V5G 1M2

Dear Mayor Corrigan,

RE: Evergreen Line Rapid Transit Project (ELRT) – City of Burnaby – Cancellation of Designation of Municipal Highways

The Province has completed the construction of works for, and associated with, the ELRT Project within the Municipality of Burnaby.

I am writing to advise you that the Lieutenant Governor in Council signed a Cessation of Arterial Highway Order (Order in Council No. 815) on November 30, 2016 which cancels highway designated as arterial highway in section 3 of OIC 203/2012 and OIC 204/2012.

The Order of the Lieutenant Governor in Council is now complete and in force, and a copy of the Order is attached for your information.

If you have any questions please do not hesitate to contact me at 604-664-7378.

Yours truly,

David Chang
Associate Project Director

cc: Lou Pelletier, City of Burnaby

Encl: Order in Council 815

PROVINCE OF BRITISH COLUMBIA

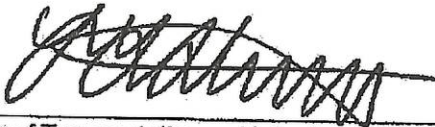
ORDER OF THE LIEUTENANT GOVERNOR IN COUNCIL

Order in Council No. 815 , Approved and Ordered November 30, 2016


Lieutenant Governor

Executive Council Chambers, Victoria

On the recommendation of the undersigned, the Lieutenant Governor, by and with the advice and consent of the Executive Council, orders that the attached Cessation of Arterial Highways Designation Order is made.



Minister of Transportation and Infrastructure



Presiding Member of the Executive Council

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: Transportation Act, S.B.C. 2004, c. 44, s. 45 (1) (b)

Other: OIC 203/2012; 204/2012

November 21, 2016

CESSATION OF ARTERIAL HIGHWAY DESIGNATION ORDER

Definitions

1 In this order:

“Act” means the *Transportation Act*;

“applicable plans” means the plans deposited in the New Westminster Land Title Office set out in Schedule A.

Cessation of arterial highway designation

2 On the recommendation of the minister responsible for the administration of the Act, the following cease to be an arterial highway:

(a) the highway designated as an arterial highway in section 3 of OIC 203/2012;

(b) the highway designated as an arterial highway in section 3 of OIC 204/2012;

(c) the highway that is dedicated as an arterial highway under section 44.1 of the Act and is shown outlined in bold on the applicable plans excluding, in relation to the highway shown outlined in bold on PLAN EPP10720, that part of the highway shown on Plan EPP41241 deposited in the New Westminster Land Title Office.

SCHEDULE A

EPP10715

EPP10716

EPP10719

EPP10720

EPP10721

EPP10749

EPP18930

EPP18931

EPP18932

EPP18933

EPP19035



Item.....
Meeting..... 2018 Oct 1

COUNCIL REPORT

TO: CITY MANAGER **DATE:** 2018 September 26

FROM: DIRECTOR PLANNING AND BUILDING **FILE:** 94000 20
Reference: TransLink

SUBJECT: REINSTATEMENT OF CITY STREETS TO TRANSLINK'S MAJOR ROAD NETWORK

PURPOSE: To advance the reinstatement of certain City streets to TransLink's Major Road Network.

RECOMMENDATIONS:

1. **THAT** Council endorse the reinstatement of certain street segments to TransLink's Major Road Network, as described in this report.
2. **THAT** Council forward a copy of this report to TransLink.

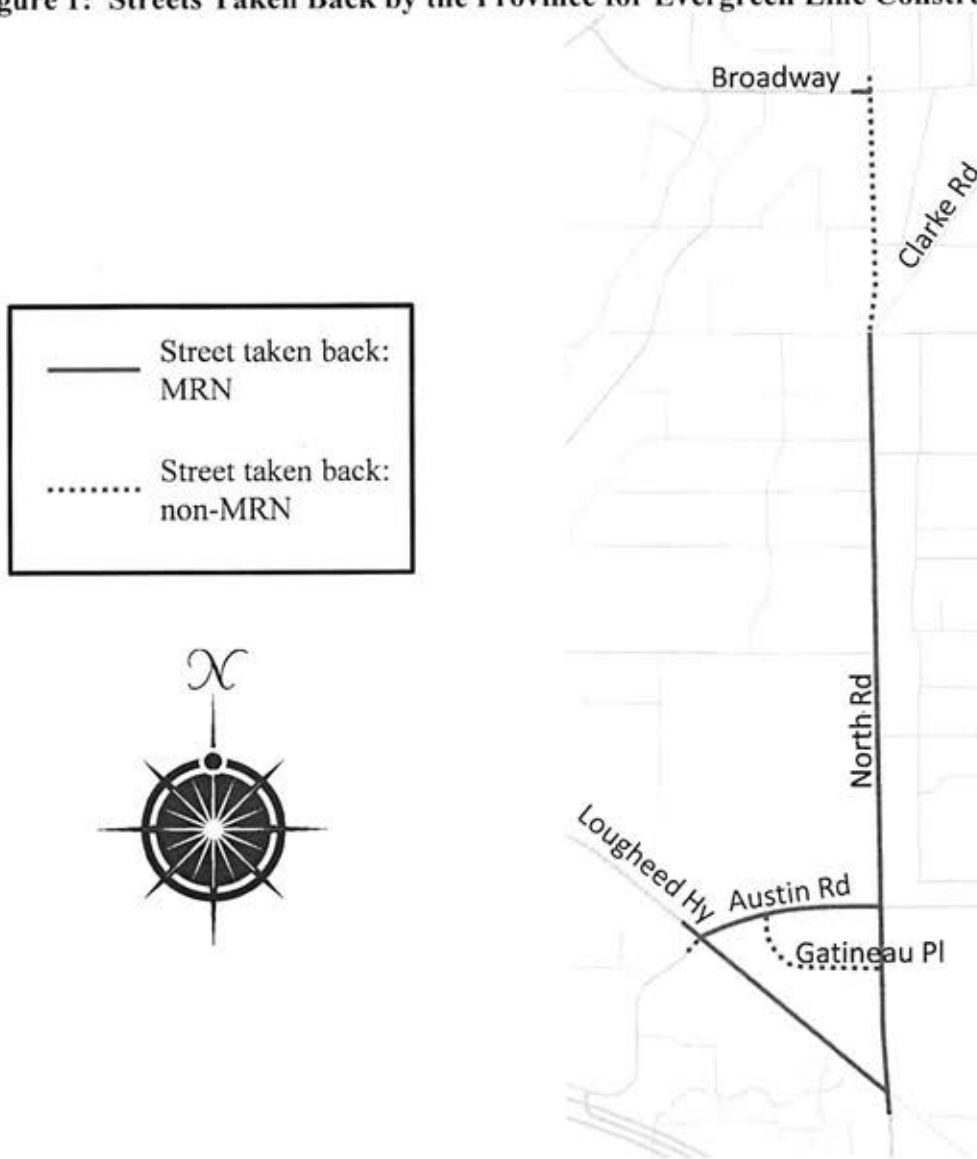
REPORT**1.0 INTRODUCTION**

On 2012 November 5, Council endorsed the terms of an agreement between the City and Province on matters of mutual interest related to construction of the Evergreen SkyTrain Extension from Lougheed Town Centre to Coquitlam Town Centre. The agreement was subsequently executed and implemented by both parties.

It was clear that the project would entail significant disruption to City infrastructure and the travelling public over a period of years. In particular, there would be lane and street closures on parts of Broadway, North Road, Lougheed Highway, Austin Road, and Gatineau Place. For clarity of operational matters and to minimize liability, ownership¹ and maintenance of the subject streets was taken under Provincial jurisdiction for the duration of the project. This was implemented by two Provincial Orders in Council. The affected street segments are shown in *Figure 1*.

¹ The Province used section 35(8) of the *Community Charter* to "resume" its interest in the streets.

Figure 1: Streets Taken Back by the Province for Evergreen Line Construction



As shown in *Figure 1*, some of the subject streets were included in TransLink's Major Road Network. The MRN consists of municipally-owned streets for which the municipality and TransLink have agreed that there is a regional interest. TransLink provides maintenance funding and contributes to capital improvements for MRN streets. In return, the municipality agrees not to reduce the people-carrying capacity of the MRN without the approval of the TransLink Board.

When the subject streets were taken over by the Province in 2012, they ceased to be municipal streets and were therefore no longer eligible for inclusion in the MRN. As such, they were deleted from the MRN by the TransLink Board. This applied to segments of Broadway, North Road, Lougheed Highway, and Austin Road.

On 2016 November 30, a further Order in Council returned all the street segments to Burnaby. However, those that had previously been in the MRN were not automatically reinstated to that status by the TransLink Board, as inclusion in the MRN requires the joint consent of Burnaby Council and the TransLink Board. The purpose of this report is to seek Council's endorsement to reinstate the identified streets to the MRN now that they have been returned to the City.

2.0 POLICY FRAMEWORK

The recommendations in this report support the following goals and sub-goals of the City's *Corporate Strategic Plan*:

- A Safe Community:
 - Transportation safety
- A Connected Community:
 - Geographic connection
- A Dynamic Community:
 - City facilities and infrastructure
- A Thriving Organization:
 - Financial viability

3.0 DISCUSSION

During the period that the subject streets were owned by the Province, Council adopted the *Lougheed Core Area Master Plan* which focused on Lougheed Mall and adjoining lands. Among other things, the *Plan* proposed changes to the street network that entailed:

- Strengthening the street network with the creation of new local streets;
- Improving pedestrian and cyclist facilities and connections;
- Changing Austin Road from six through lanes to four, plus an eastbound bus lane;
- Introducing a new traffic signal on North Road at Cross Creek (170 metres north of Austin Road);
- Shifting the Austin / Gatineau intersection eastward by about 70 metres; and
- Introducing a new pedestrian signal on Lougheed Highway at the SkyTrain station.

The planned changes to the street network in this area would be implemented gradually over a period of years. The most recent step towards implementation of some of these measures was taken when Council gave Final Adoption to the Phase 1 rezonings for Lougheed Mall on 2018 July 23.

Due to the potential for the changes to affect the MRN's people-carrying capacity, City staff have engaged in technical discussions with TransLink staff. The outcome is that, in consideration of the proposed changes identified in the *Lougheed Core Area Master Plan*, they would be supportive of reinstatement of the subject street segments to the MRN.

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From: Director Planning and Building
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When the streets were taken by the Province, this triggered a reduction of 8.9 lane-kilometres to Burnaby's portion of the MRN. It is anticipated that reinstatement would reinstate a similar length, subject to roadway changes made in the intervening years. TransLink's current funding contribution is \$20,610 per lane-kilometre. This would equate to an annual payment to the City of about \$180,000 if MRN status is reinstated for these street segments.

4.0 CONCLUSION

It is recommended that Council support the reinstatement of the subject street segments to the Major Road Network, and that a copy of this report be sent to TransLink.


Lou Pelletier, Director
PLANNING AND BUILDING

SR:sla

cc: Director Engineering
City Clerk

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Figure 1- MRN Changes Related to North Road, Austin Road, Loughheed Highway, and Broadway

