

CORPORATE REPORT

NO: R120 COUNCIL DATE: June 24, 2019

REGULAR COUNCIL

TO: Mayor & Council DATE: June 20, 2019

FROM: Acting General Manager, Engineering FILE: 8740-01

SUBJECT: Future of Rapid Transit in Surrey

RECOMMENDATION

The Engineering Department recommends that Council:

- 1. Receive this report for information;
- 2. Endorse the principles attached as Appendix "I" to this report; and
- 3. Authorize staff to develop a Long-Range Rapid Transit Vision for input into TransLink's Transport 2050 plan.

INTENT

The intent of this report is to inform Council on TransLink's update of the Regional Transportation Strategy (now called Transport 2050), outline recommended principles for future rapid transit expansion in Surrey, and request support from Council for the development of a long-range rapid transit vision for Surrey's submission to TransLink for inclusion in the Transport 2050 plan development process.

BACKGROUND

The Success of Previous Regional Transportation Plans

Transportation and land use are integrally linked, as demonstrated by Metro Vancouver's long history of coordinating land use and transportation investments. Many of the first coordinated efforts to integrate transit and land use were identified as part of Metro Vancouver's (at that time known as Greater Vancouver Regional District or "GVRD") first "Livable Region Plan" that, in 1975, established an urban land use pattern aimed at focusing growth and development in compact urban centres supported by an integrated, multi-modal transportation network.

In 1993, prior to the creation of TransLink, the GVRD prepared "A Long-Range Transportation Plan for Greater Vancouver", known as Transport 2021. This plan was instrumental in identifying an end-state vision for transportation that included policies and capital improvements aligned with regional land use goals. The plan was bold and forward thinking, particularly the Long-Range Transportation System Concept as shown in Figure 1.

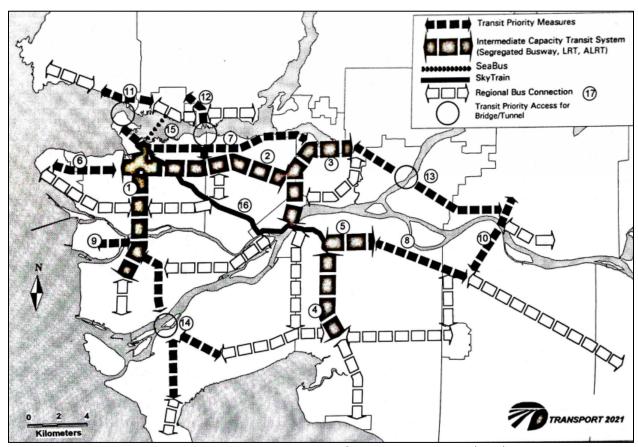


Figure 1. Long Range Transportation System Concept from Transport 2021 (1993)

Although the plan did not highlight project funding or implementation priorities, it is considered hugely successful as a visionary document that helped align land use and transportation throughout the region. By the end the of Mayors' 10 Year Plan, most of the priorities outlined in Transport 2021 will have been delivered.

In 2008, TransLink and Metro Vancouver began a process to update the Regional Growth Strategy and Regional Transportation Strategy. Both plans would address new challenges not contemplated by Transport 2021 and the Livable Region Strategic Plan of 1996 ("Transport 2040") which identified six major goals for 2040, including:

- Greenhouse gas emissions from transportation are aggressively reduced, in support of Federal, Provincial and regional targets;
- 2. Most trips are by transit, walking and cycling;
- 3. The majority of jobs and housing in the region are located along the Frequent Transit Network:
- 4. Traveling in the region is safe, secure and accessible for everyone;
- 5. Economic growth and efficient goods movement are facilitated through effective management of the transportation network; and
- 6. Funding for TransLink is stable, sufficient, appropriate and influences transportation choices.

The transit network concept for Transport 2040 built on the priorities identified in Transport 2021, refined with the concept of the Frequent Transit Network and rapid transit corridors, including new B-Line branded bus services. In 2013, TransLink updated Transport 2040 to include regional priorities for rapid transit as shown in the attached Appendix "II".

This plan and prioritization were instrumental in the development of the Mayors' Council Vision for Transportation and subsequent Phase 1 and 2 Investment Plans, which are funding the Surrey-Langley SkyTrain extension project, the first rapid transit expansion in Surrey since 1994.

DISCUSSION

TransLink is Updating the Regional Transportation Strategy - Transport 2050

Surrey is currently working with TransLink on delivering 27 kilometres of rapid transit in Surrey, including a SkyTrain extension along Fraser Highway from King George Station to Langley. At the same time, TransLink has started the process of updating the Regional Transportation Strategy (now branded as Transport 2050). Transport 2050 will again serve as a blueprint for the region and set out the vision, goals, strategies and key initiatives for Metro Vancouver for the next 30 years. New technology, shifts in the global economy, and the impacts of climate change will have a greater impact on mobility throughout the region, bringing new opportunities and challenges for consideration as part of the plan development.

In May 2019, TransLink began public engagement on Transport 2050, with the intention of gathering feedback from the community on vision, values and ideas for the future of transportation in the region. Alongside public engagement, TransLink is opening a "call for ideas" from local government and agency partners. The "call for ideas" will be an opportunity for local governments to tell TransLink what should be considered for inclusion in the plan. Agencies and stakeholders will be invited to present their ideas to the Mayors' Council and TransLink Board of Directors in Fall 2019. The "call for ideas" should address the following questions:

- What is the idea?
- Why is it a good idea?
- What are some of the challenges and opportunities?
- What changes or resources are needed to deliver this idea?"

The "call for ideas" will be a unique opportunity for Surrey to advise the update of Transport 2050 by clearly communicating our priorities for the future of transportation in Surrey and, in particular, a rapid transit plan for Surrey and the South of Fraser the region.

To prepare for the "call for ideas", staff have been gathering evidence for consideration in the development of a long-range rapid transit plan. Areas of focus include Surrey's projected future population and employment, transit ridership trends, trip patterns and insight on the efficiency and effectiveness of the current transit network. This background information will help develop principles and objectives for developing a long-range rapid transit vision as part of Surrey's submission to the Mayors' Council and TransLink Board of Directors.

Proposed Principles for Future Rapid Transit Expansion in Surrey

To inform the development of a long-range rapid transit vision, staff will review rapid transit networks in a number of peer cities across North America, Australia and Europe. Staff will look for cities of a similar size and population density to Surrey, both current and projected for the future. The City of Calgary, for example, is a city of 1,000,000 and plans to expand its 60 kilometre rapid transit network to about 150 kilometres in the future. For the City of Vancouver (with a projected population of 765,000 in 2041), the Transportation 2040 Plan visions 140-150 kilometres of rapid transit expansion along the arterial street grid by converting its grid-based network of high-frequency, high-productivity bus services to rapid transit. This local context, combined with examples from international peer cities, will offer a benchmark for the development of Surrey's long-range rapid transit vision.

Based on transit ridership trends, trip patterns of Surrey residents and the desire for a network that meets the future needs of Surrey residents, staff recommend the following principles to guide the development of the long-range rapid transit vision:

- Connect all communities and town centres with rapid transit;
- Provide rapid transit access to the majority of residents and jobs in Surrey;
- Serve both local and regional trips to enable freedom of movement for a diverse range of people making a wide variety of trips;
- Encourage smart growth along rapid transit corridors, at key connection points and stations;
- Ensure the system is simple to use, easy to understand, safe and accessible for all; and
- Define rapid transit services as operating in an exclusive or separated right-of-way.

These enhancements to the rapid transit network will bring more and better rapid transit access to Surrey residents, making it easier to travel around Surrey and across the region. While the nature of transportation may change as a result of micro-mobility, ride-sharing, electrification and automation, rapid transit will continue to be the most efficient way of moving thousands of people around the City on a daily basis.

Future Population of Surrey - A Collection of Cities

Surrey is growing rapidly and will continue to grow under Smart Growth principles. Metro Vancouver's Regional Growth Strategy projects the population of Surrey will exceed the City of Vancouver by 2041 and will be BC's largest city by population. Surrey will have communities larger than many major cities throughout Metro Vancouver. The following table highlights 2046 projected community populations, with comparable existing Metro Vancouver 2016 populations, as context.

Surrey Town Centres - 2046 Projected Population		Comparable Metro Vancouver City (2016 population)	
Newton	182,310	Richmond (198,000)	
Whalley / City Centre	170,430	Coquitlam and Port Moody (173,000)	
South Surrey	165,070	Langley Township & City and White Rock (163,000)	
Cloverdale	128,240	North Vancouver District & City (139,000)	
Guildford	93,730	Pitt Meadows and Maple Ridge (101,000)	
Fleetwood	75,360	New Westminster (71,000)	

Source: Metro Vancouver Census Bulletin

Trip Patterns - Where are Residents going in Surrey?

2016 census data indicates about 44% of Surrey residents work within the City. Information from TransLink's Trip Diary survey indicates over 77% of trips for all purposes by Surrey residents begin and end in the South of Fraser area (including Delta, White Rock, and the Langleys). For many years, the transit network in Surrey was designed to help riders travel from Surrey to other parts of Metro Vancouver during peak periods. This network supported commuter work trips and encouraged Surrey to function as a bedroom community to Vancouver.

Today Surrey residents travel locally and around the region on a daily basis for work, education, shopping and entertainment during both peak and off-peak periods. From the TransLink Trip Diary, it is apparent the vast majority of trips that start in Surrey stay in Surrey. Although there have been improvements to the transit network, the network is still oriented towards bringing people from Surrey into Vancouver. As a result, for many residents, it is faster to leave Surrey than get around within Surrey by transit. For example, it takes approximately:

- 37 minutes to travel from Scottsdale to Richmond Centre versus 90 minutes to travel from Scottsdale to Campbell Heights;
- 24 minutes to travel from Fraser Heights to New Westminster versus 60 minutes to travel from Fraser Heights to Cloverdale; and
- 39 minutes to travel from Surrey Central to Downtown Vancouver versus 49 minutes to travel from Surrey Central to Semiahmoo Town Centre.

Given the majority of trips that start in Surrey stay in Surrey, residents need a rapid transit network that enables local trips with the same ease and reliability as trips to other parts of the region. The proportion of internal trips taken by Surrey residents is expected to increase as Surrey densifies and diversifies with smart, compact, urban development centred around rapid transit.

How is our Transit Network Performing?

As presented in Corporate Report Rio8; 2019 which was presented to Council on June 10, 2019 (attached as Appendix "I"), transit ridership in Surrey is growing by unprecedented rates and demonstrates there is a significant demand for transit in Surrey. This growth is expected to continue as population and employment increases, rapid transit is extended in Surrey, new B-Line services are introduced, and the transit network grows to provide service in new neighbourhoods and along new corridors. Surrey will continue advocating to TransLink on the pressing need to address the longstanding undersupply of transit service South of the Fraser.

Defining Rapid Transit by the Type of Priority given on the Road

The most important feature that defines rapid transit is the priority transit vehicles are given on the road system. A new rail car or bi-articulated bus with a branded livery, attractive interior and advanced passenger amenities is rendered ineffective as rapid transit if stuck in traffic. Transit priority measures, like dedicated bus queue jumpers, help maintain transit speed and reliability, but transit vehicles are still required to interact with general purpose traffic at driveways, right-turn lanes and merge points, which diminishes their effectiveness.

Metro Vancouver has had significant success building its rapid transit network in phases, starting with frequent bus service and followed by B-Line service to build ridership demand and establish the locations of key stops. B-Line service is also a signal to the development community that a corridor is planned to be upgraded to rapid transit in the future. In this way, frequent buses and B-Line can help shape development and future ridership demand. While B-Line service is a good precursor to rapid transit, and B-Lines can be assisted by transit priority measures like bus queue jump lanes or dedicated transit lanes, B-Lines are not considered rapid transit as B-Line buses do not operate in an exclusive or separated right-of-way.

For the purpose of developing a long-range rapid transit network for Surrey, rapid transit should be defined as operating:

- In an exclusive right-of-way, where rapid transit vehicles are separated from general traffic by physical barriers; and/or
- In a grade-separated right-of-way, where rapid transit vehicles operate in a guideway either above or below grade.

With exclusive or separated lanes, rapid transit is effective and efficient regardless of vehicle type or propulsion technology.

What Type of Long-Range Rapid Transit Network is Right for Surrey?

More important than the technology of individual services is how rapid transit lines come together to form a network. The design of the overall rapid transit network is a powerful tool in shaping a city and serving the needs of its citizens. The most effective rapid transit networks are fully integrated into the community and other modes of transportation. Combined with B-Lines, frequent and local transit service, and other forms of transportation (like walking, cycling, ride share and car share), rapid transit can give people freedom to move within their city for a diverse range of trips.

One of the most efficient and effective network types is a grid network. Grid networks provide service to a high number of people and have the ability to attract many new riders because they are simple, direct, easy to understand and useful to a broad range of people making a wide variety of trips. A grid network works best in a city that has many places of origin and destination (sometimes called polycentric) and a grid-based arterial road network. Surrey has both a polycentric development pattern and a strong arterial grid-based road network. This makes a grid-based rapid transit network the right choice to serve existing development and help shape future development.

Grid networks typically require people to make connections between services to reach their destinations. The key to making easy connections is providing high frequency service to minimize wait times. Cities have an important role to play in ensuring safe and pleasant multi-modal facilities are in place for walking and cycling, in and around stops, so people have easy access to the rapid transit network.

Next Steps

Subject to Council approval, staff will develop and analyze a number of long-range rapid transit concepts using research and a data-led, evidence-based approach. The analysis will result in a recommended network concept. The recommended concept will include an overall rapid network and priorities for phased buildout. This network will be in addition to the 27 kilometres of rapid transit already outlined for Surrey in the Mayors' 10-Year Plan. The recommended concept will be presented to Mayor and Council at a future council meeting. Staff will refine the recommended concept after receiving input from Mayor and Council. The recommended concept will form the basis of Surrey's submission to TransLink as part of the Transport 2050 plan development process.

SUSTAINABILITY CONSIDERATIONS

A long-range rapid transit vision supports the objectives of the City's Sustainability Charter 2.0. In particular, this plan relates to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, and Infrastructure. Specifically, these projects support the following Desired Outcomes ("DO"):

- Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the
 rest of the region by fast and efficient public transit and active transportation infrastructure
 for all ages and abilities; and
- Transportation DO11: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

CONCLUSION

TransLink has started the process of updating the Regional Transportation Strategy, now branded as Transport 2050. As part of the Transport 2050 process, TransLink is opening a "call for ideas" from local government and agency partners. The "call for ideas" will be a unique opportunity for Surrey to advise the update of Transport 2050 by clearly communicating our priorities for the future of transportation in Surrey.

Based on transit ridership trends, trip patterns of Surrey residents and the desire for a network that meets the future needs of Surrey residents, staff recommend the following principles to guide the development of the long-range rapid transit vision:

- Connect all communities and town centres with rapid transit;
- Provide rapid transit access to the majority of residents and jobs in Surrey;
- Define rapid transit services as operating in an exclusive or separated right-of-way;
- Serve both local and regional trips to enable freedom of movement for a diverse range of people making a wide variety of trips;
- Encourage smart growth along rapid transit corridors, at key connection points and stations; and
- Ensure the system is simple to use, easy to understand, safe and accessible for all.

Subject to Council approval, staff will develop and analyze a number of rapid transit concepts using an evidence-based approach. The results of this analysis will result in a recommended rapid transit network concept. The recommended concept will be presented to Mayor and Council at a future council meeting and form the basis of Surrey's submission to TransLink as part of the Transport 2050 plan development process.

Jaime Boan, P.Eng. Acting General Manager, Engineering

DM/PK/cc

Appendix "I" – Principles for Future Rapid Transit in Surrey Appendix "II" – Corporate Report No. R108; 2019 Appendix "III" - RTS Strategic Framework Transit Network Concept

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Appendix 'I'

Principles for the future of Rapid Transit expansion in Surrey

- 1. Connect all communities and town centres with rapid transit;
- 2. Provide rapid transit access to the majority of residents and jobs in Surrey;
- 3. Serve both local and regional trips to enable freedom of movement for a diverse range of people making a wide variety of trips;
- 4. Encourage smart growth along rapid transit corridors, at key connection points and stations;
- 5. Ensure the system is simple to use, easy to understand, safe and accessible for all; and
- 6. Define rapid transit services as operating in an exclusive or separated right-of-way.





CORPORATE REPORT

NO: R108

COUNCIL DATE: JUNE 10, 2019

REGULAR COUNCIL

TO:

Mayor & Council

DATE: June 5, 2019

FROM:

Acting General Manager, Engineering

FILE: 8500-01

SUBJECT:

Bus Transit Service Improvements in Surrey (2019-2020)

RECOMMENDATION

The Engineering Department recommends that Council:

- Receive this report for information; and 1.
- Authorize Surrey staff to work with TransLink on the design and delivery of exclusive 2. bus-only lanes, dedicated business access and transit lanes, and bus queue jump lanes on King George Boulevard from Newton to Surrey Central Station to support the 96 B-Line.

INTENT

The intent of this report is to update Mayor and Council on the delivery of the Mayors' 10-Year Plan and provide information on significant transit ridership growth in Surrey. This report also seeks Council support for the installation of transit priority measures, including a business access and transit ("BAT") lane on King George Boulevard and bus queue jumpers at key locations on Fraser Highway to enhance bus speed and reliability.

BACKGROUND

Creating Transit Plans for Surrey

In 2007, TransLink completed an Area Transit Plan ("ATP") for the South of Fraser Area, which included the Cities of Surrey, Delta, White Rock, Langley and the Township of Langley. The ATP outlined a long-range transit vision to 2031 and included shorter-term plans for phasing and implementation of transit service improvements.

The ATP was focused on identifying future rapid transit corridors, expanding the Frequent Transit Network ("FTN"), and building a grid-based transit system in the South of Fraser. ATPs are not funded plans, therefore major investments outlined in the ATP (like the 96 B-Line on 104 Avenue and King George Boulevard, as well as FTN service on Scott Road, 72 Avenue, and Fraser Highway) were delivered through subsequent TransLink investment plans.

To deliver the much-needed transit service improvements identified in ATPs across Metro Vancouver, the Mayors' Council, working with TransLink and municipal staff, developed the Regional Transportation Investments "A Vision for Metro Vancouver" Plan in 2014. The plan included 27 kilometres of rapid transit for Surrey, significant investment for increased bus service, and identification of enhanced funding sources for delivery of service improvements. The Mayors' 10-Year Investment Plan, approved by the Mayors' Council in 2016, outlined how these service improvements would be delivered in three phases. Phase 1 (2017-2019) started with the rollout of approximately 500,000 annual service hours region-wide, including over 119,000 annual bus service hours for the South of Fraser (the South of Fraser currently has approximately 1,029,000 annual bus service hours). This represented about a quarter of the overall bus service expansion in Metro Vancouver - the largest expansion of bus service hours in the region.

Phase 1 transit investment was well-aligned with Surrey-specific needs and priorities, with a focus on relieving passenger overcrowding on corridors like Fraser Highway, Highway 1, Highway 99, Scott Road, 72 Avenue, King George Boulevard and 104 Avenue. Service was also extended to developing areas, such as Morgan Creek and Clayton Heights.

Phase 2 of the Mayors' 10-Year Plan is anticipated to begin in 2020. Phase 2 includes \$1.65 billion for extending SkyTrain along Fraser Highway (funding that was originally designated for LRT on 104 Avenue and King George Boulevard and reallocated to Fraser Highway based on the new Surrey Council's election platform and supported by the Mayors' Council in December 2018).

Bus service improvements in Phase 2 are focused on reducing customer wait times, extending hours of service, expanding the FTN, and introducing a new B-Line on Scott Road and 72 Avenue. New service is planned for east Fraser Heights and 68 Avenue in Newton, which are areas that currently have little to no access to transit.

DISCUSSION

Return on Transit Investment

Recent transit service investments in Phase 1 have supported phenomenal transit ridership growth in Surrey. Surrey had the largest percentage growth of annual transit passenger boardings in the region at 16.7% for 2018 versus 2017. That growth equates to 5.8 million new annual passenger boardings. Since 2010, the entire South of Fraser region (including Surrey, Delta, White Rock, and the City and Township of Langley) has had the largest increase in bus ridership in Metro Vancouver, with 21.1 million new annual passenger boardings per year (a 73% increase from 2010 ridership levels).

According to the TransLink 2018 Transit Service Performance Review three quarters of the bus routes in the South of Fraser had double digit percentage growth in 2018. This was led by bus route 319 Scott Road and 72 Avenue which grew by 1.2 million passenger boardings in 2018 and had the second largest growth in absolute ridership in Metro Vancouver. Surrey's top 5 busiest bus routes by Annual Passenger Boardings, and their rank across the region, are identified in Table 1 below.

Table 1: Top 5 Busiest Bus Routes in the South of Fraser

Bus Route	Annual Passenger Boardings	Surrey rank	System-wide rank
319 Scott Road and 72 Avenue	6,420,000	1	11
96 B-Line 104 Avenue and King George Boulevard	5,832,000	2	15
502 Fraser Highway	3,176,000*	3	28
321 King George Boulevard	2,906,000	4	31
335 108 Avenue, 160 Street and 72 Avenue	2,876,000	5	32

Transit ridership on Fraser Highway is currently constrained due to insufficient service capacity (resulting in significant overcrowding where buses are too full to pick up additional passengers) and traffic congestion (impacting bus speed and reliability). Staff expect transit ridership on Fraser Highway to grow significantly, as planned service improvements are delivered as a precursor to the SkyTrain extension. The Fraser Highway corridor also supports bus routes 320 (2,295,000 annual boardings), 395 (192,000 annual boardings) and 503 (740,000 annual boardings).

Increasing transit ridership in Surrey is not just related to population growth. Transit ridership per capita is also increasing, meaning more people in Surrey are making more trips on transit. In 2016, bus and SkyTrain annual boardings per capita were 79. By 2018, annual boardings per capita had increased to 95. This recent transit ridership growth is proof Surrey is established as a strong market for transit service in the region. Surrey will continue advocating to TransLink on the pressing need to address the longstanding undersupply of transit service south of the Fraser.

Upcoming Transit Service Improvements and Expansion

TransLink is proposing service improvements to bus routes in South Surrey, on Fraser Highway and on Scott Road and 72 Avenue to address issues of chronic overcrowding. TransLink is also planning on expanding service to new areas that currently have little to no access to transit. The following highlights some of the major network improvements, which are also illustrated in the attached Appendix "I":

Scott Road and 72 Avenue B-Line

Bus route 319 on Scott Road and 72 Avenue is the busiest bus route in the South of Fraser and 11th busiest in the Metro Vancouver region. TransLink is planning on introducing a new B-Line on Scott Road and 72 Avenue as part of Phase 2 of the Mayors' 10-Year Plan. The new Scott Road and 72 Avenue B-Line will operate between Scott Road Station, Scottsdale Exchange and Newton Exchange connecting to major destinations like Kwantlen Polytechnic University. TransLink and Surrey will work together to identify potential transit priority measures for this new B-Line to enhance bus speed and reliability for transit users along the corridor.

Double-Decker Buses in South Surrey

TransLink is proposing to assign new double-decker buses to bus route 351 Bridgeport/White Rock Centre. Bus route 351 received the second highest number of requests in 2018 to increase service capacity in order to reduce overcrowding. This service change will require splitting bus route 351 into two separate routes at White Rock Centre, located at the Surrey/White Rock boundary. Double-decker buses will be assigned to the route between White Rock Centre and Bridgeport (which has the highest ridership). A new community shuttle bus route will serve local stops between White Rock Centre and Crescent Beach, which is more appropriate for ridership on this route section.

Splitting bus route 351 has generated concern in the local community as some customers west of 152 Street will now have to transfer at White Rock Centre to continue their journey to Bridgeport Station. Based on boarding data, the number of people impacted by this change is comparatively low (approximately seven people per day) while the benefit of using double-decker buses on bus route 351 to reduce overcrowding is high. This change also removes the standard 12 metre (40 feet) long buses from operating in Crescent Beach which is a longstanding concern to local residents.

Fraser Highway Limited Stop Bus Service

As a precursor to the SkyTrain extension along Fraser Highway, that is currently in the project development phase and planned for a 2021 construction start, a high-frequency, limited stop service is planned to support ridership demand. This new limited-stop service (where buses only stop at key intersections and transfer points) will replace the B-Line planned for Fraser Highway. The new service will use 18 metre (60 feet) articulated buses to further increase capacity and reduce chronic overcrowding on Fraser Highway. Bus services on Fraser Highway are consistently among the most overcrowded in Metro Vancouver (ranking fourth region-wide in 2018 for overcrowding).

Surrey and TransLink are collaborating on transit priority measures (bus queue jumpers) at 140 Street, 96 Avenue and 148 Street to promote bus speed and reliability. Bus queue jumpers consist of an additional travel lane on the approach to a signalized intersection which allows the higher-capacity vehicles to cut to the front of the traffic queue, reducing the delay caused by the signal and improving the operational efficiency of the transit system. These transit priority measures can be achieved at low cost within existing road right-of-way (no trees will be impacted) and with a high benefit to transit passengers. Over 3.5 million transit passengers per year will benefit from this enhanced bus speed and reliability until the Surrey-Langley SkyTrain is in operation.

New Service Areas

New transit service is planned for Abbey Ridge in Fraser Heights and along 68 Avenue in Newton, both of which are areas that currently have little to no access to transit service. In Abbey Ridge, the new service will support this growing neighbourhood. Transit service will connect Abbey Ridge residents to Guildford Exchange, where they have access to jobs, shopping and entertainment and can transfer to other transit services (like the 96 B-Line).

In Newton, a new cross-town transit service is planned on 68 Avenue connecting Scottsdale Exchange to the Sullivan neighbourhood. This new service responds to numerous requests from residents for a connection to regional transit routes and major local destinations. Residents will be able to connect to the future Scott Road and 72 Avenue B-Line at Scottsdale Exchange and transfer to other bus routes connecting to Newton, Surrey Central Station, Scott Road Station and South Surrey.

Both the Abbey Ridge and 68 Avenue services will use neighbourhood-friendly community shuttle vehicles. Service will operate every 30 minutes, seven days a week, from the morning until the evening. The new services will provide or improve transit service to 46,000 people. Staff will work with TransLink on the road and bus stop improvements needed to support these new services.

Making Transit Faster and More Reliable

In support of increasing ridership on the 96 B-Line (and in advance of B-Line extension to South Surrey), Surrey staff are working with TransLink on designing and constructing dedicated business access and transit ("BAT") lanes on sections of the 96 B-Line route which experience high traffic congestion. BAT lanes are lanes dedicated for buses (through painted markings and signage) which restrict other vehicles from travelling within the lane except if the vehicle is making the next right turn or is entering a local business. BAT lanes are relatively new to Metro Vancouver and are used in cities across North America to enhance bus speed and reliability without restricting access to local businesses. Proposed locations for "BAT" lanes on King George Boulevard include:

- 72 Avenue between King George Boulevard and Newton Exchange;
- King George Boulevard between 72 Avenue and 74 Avenue;
- King George Boulevard between 96 Avenue and 102 Avenue; and
- 102 Avenue between King George Boulevard and the approach to Surrey Central Station.

The project scope includes re-alignment of existing travel lanes within the current road right-of-way (no property acquisition required) to accommodate the BAT lanes. The project will also investigate the feasibility of providing exclusive lanes (transit lanes where vehicles operate in an exclusive right-of-way independent of general traffic) through City Centre. These lanes would support the 96 B-Line, as well as other transit routes connecting to Surrey Central Station. Transit priority measures would be funded by TransLink through the \$34 million Bus Speed and Reliability Program. The attached Appendix "II" King George Boulevard Transit Priority Lanes illustrates the proposed scope of the BAT lanes on King George Boulevard.

SUSTAINABILITY CONSIDERATIONS

Transit service improvements support the objectives of the City's Sustainability Charter 2.0. In particular, these improvements relate to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, and Infrastructure. Specifically, these projects support the following Desired Outcomes ("DO"):

 Neighbourhoods and Urban Design DO2: Surrey is well-connected within the city and to the rest of the region by fast and efficient public transit and active transportation infrastructure for all ages and abilities; and • Transportation DO11: An integrated and multi-modal transportation network offers affordable, convenient, accessible and safe transportation choices within the community and to regional destinations.

FUNDING

All of the service improvements described in this report will be fully funded by TransLink.

CONCLUSION

Transit ridership in Surrey continues to grow at a phenomenal rate. In 2018, Surrey had the largest percentage growth of annual transit passenger boardings in the region at 16.7%. TransLink is responding by delivering the projects outlined in the Mayors' 10-Year Plan, which are well aligned with Surrey-specific needs and priorities. TransLink is also proposing changes to bus routes in South Surrey and on Fraser Highway to address issues of chronic overcrowding. In South Surrey, TransLink is proposing to assign double-decker buses to bus route 351 Bridgeport/White Rock Centre.

To enhance the speed and reliability of buses on key corridors, Surrey and TransLink are collaborating on transit priority measures (bus queue jumps) that can be achieved at low cost with a high benefit to transit passengers.

Jaime Boan, P.Eng.

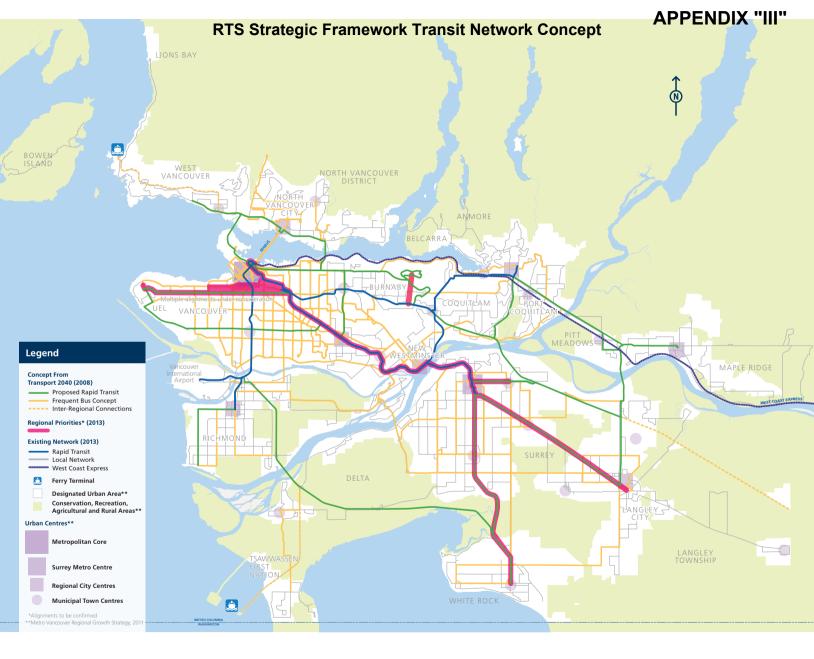
Acting General Manager, Engineering

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Appendix "I" - Upcoming Transit Service Improvements and Expansion Appendix "II" - King George Boulevard Transit Priority Lanes

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Note: Appendices available upon request



Note: Following completion of the Implementation Plan, these investment maps will be updated to show additional agreed-upon regional priorities.