

NO: **R015**

COUNCIL DATE: **February 10, 2020**

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **February 6, 2020**

FROM: **General Manager, Engineering**

FILE: **8740-40**

SUBJECT: **Surrey-Langley SkyTrain Update**

RECOMMENDATION

The Engineering Department recommends that Council receive this report for information.

INTENT

The purpose of this report is to provide an update on the Surrey-Langley SkyTrain (“SLS”) project and present the Business Case Summary attached to this report as Appendix “I”.

BACKGROUND

Throughout 2019, TransLink completed design of the SLS project along Fraser Highway. By December 2019, TransLink finalized a Reference Concept Design and Business Case for the project which includes: 16 kilometres of SkyTrain; eight new stations; and an Operation and Maintenance Centre in the City of Langley.

TransLink has confirmed that a SkyTrain extension to Langley can be built for a budget of \$3.1 billion, with very favourable ridership forecasts and a benefit-cost-ratio. The Business Case includes completing the project in two stages: Stage 1 from King George Station to 166 Street within the current \$1.6 billion funding; and Stage 2 between 166 Street to Langley Centre, which will be built once additional funding is secured.

On January 30, 2020, TransLink’s Business Case Summary, attached to this report as Appendix “I”, was approved by the Mayors Council, and will now be submitted to both the Provincial and Federal Governments for their respective approvals and confirmation of their funding commitments for Stage 1. TransLink anticipates approval from both levels of government will be secured by late Spring 2020, after which time the project will then seek final approval of the regional investment share from the Mayors’ Council in June 2020 before proceeding to procurement.

Between now and June 2020, the City will be working with TransLink on finalizing the reference design and project specifications.

DISCUSSION

Surrey–Langley SkyTrain Project Update

Reference Design

TransLink’s current conceptual reference design includes 16 kilometres of two-way, elevated guideway between King George Station to Langley Centre. Between Whalley Boulevard and 150 Street, the guideway is generally centre-median running, and east of 150 Street the guideway is north-side running. The north-side running alignment has minimal impacts to Fraser Highway and is aligned with the City’s long-range strategic plan by which the City has been protecting lands along the corridor.

Through Green Timbers Urban Forest (“GTUF”) and the Agricultural Land Reserve (“ALR”), TransLink and City staff have successfully designed the project to be entirely within the road allowance; thus, there is no impact within the GTUF nor agricultural lands.

Station Locations

A total of eight stations are proposed between Surrey and Langley:

- 140 Street (Jim Pattison Outpatient);
- 152 Street;
- 160 Street;
- 166 Street (Surrey Sport and Leisure Recreation Centre);
- 184 Street;
- 190 Street/192 Street;
- 196 Street; and
- 203 Street (City of Langley).

Transit Integration and Travel Time

SkyTrain along Fraser Highway is designed as an extension of the existing Expo Line. In order to maintain service levels throughout the Expo Line in Surrey, New Westminister, Burnaby and Vancouver, one of every two trains crossing the Fraser River is expected to continue to Langley, while the second train is designed to stop at 140 Street and return towards City Centre/north of the Fraser.

This operational scenario would ensure that residents and businesses within the City Centre, up to the proposed 140 Street Station, will be provided with the same high-frequency rapid transit and level of service that the Expo Line currently provides.

TransLink is estimating the travel time for SkyTrain between King George Station and Langley Centre as 22 minutes, as compared to a peak hour vehicle trip of 40-60 minutes and bus trip of 50-60 minutes. The significant reduction in transit travel time is anticipated to generate many “new transit” riders.

Benefit–Cost Ratio

TransLink has estimated the project benefit-cost ratio to be 1.24, which is very favourable and closely matches the Canada Line and Evergreen Line projects. The benefit-cost ratio, quantified using the Province’s methodology employed on other major transportation projects, is based on “year of expenditure” costs which is reasonable for the project.

Public and Stakeholder Engagement

In 2019, TransLink and the City held a series of public engagement events regarding the SLS project and future rapid transit on King George Boulevard and 104 Avenue. These events had a record number of participants, with over 3,000 open house attendees and 30,000 survey responses. TransLink’s Phase 2 Engagement Summary Report is attached as Appendix “II”. Overall, the results indicated a very high level of public support at over 80%. Key priorities from the respondents are summarized as follows:

Key Feedback Areas	Respondent Feedback / Priorities
Objectives	<ul style="list-style-type: none"> • System to provide predictable travel times • Demonstrate an efficient use of public money • Be a comfortable and safe experience
Stations	<ul style="list-style-type: none"> • Station and connecting bus stops to have shelters • Station and bus shelters to be well lit • Adequate wayfinding signage and maps
Connections	<ul style="list-style-type: none"> • Efficient and convenient bus connections and pedestrian walkways • Pickup/drop-off and park-and-ride facilities

Stage 1 Project Schedule and 2020 Milestones

The project continues to progress on schedule. The following table summarizes the anticipated project milestone dates for Stage 1:

Project Milestone	Anticipated Milestone
Business Case to Mayors’ Council	January 30, 2020 (approved)
Senior Government Project Approval	February to May 2020
Phase 3 Public Engagement	Spring/Summer 2020
Mayors’ Council Final Approval	June/July 2020
Procurement (RFQ and RFP)	July 2020 to Fall 2021
Construction	Early 2022 to Late 2025

Between February and June 2020, TransLink and City staff will be finalizing the reference design and project specifications. As part of this, City staff are proposing to integrate Coordinated Works (utility and roadworks from the City’s 10-Year Servicing Plan) into the SLS project, such that all infrastructure is delivered simultaneously in a coordinated effort to reduce capital costs and impact on residents, business and traffic.

Throughout 2020, the Mayors’ Council and TransLink will continue seeking additional funding from the Provincial and Federal governments to extend the SLS project (Stage 2) to at least Clayton.

SUSTAINABILITY CONSIDERATIONS

The Mayors' Council approval of the SLS project supports the objectives of the City's Sustainability Charter 2.0. In particular, this project relates to the Sustainability Charter 2.0 themes of Built Environment and Neighbourhoods, and Infrastructure. Specifically, the road widening supports 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 all-ages-and-abilities transportation infrastructure; 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.

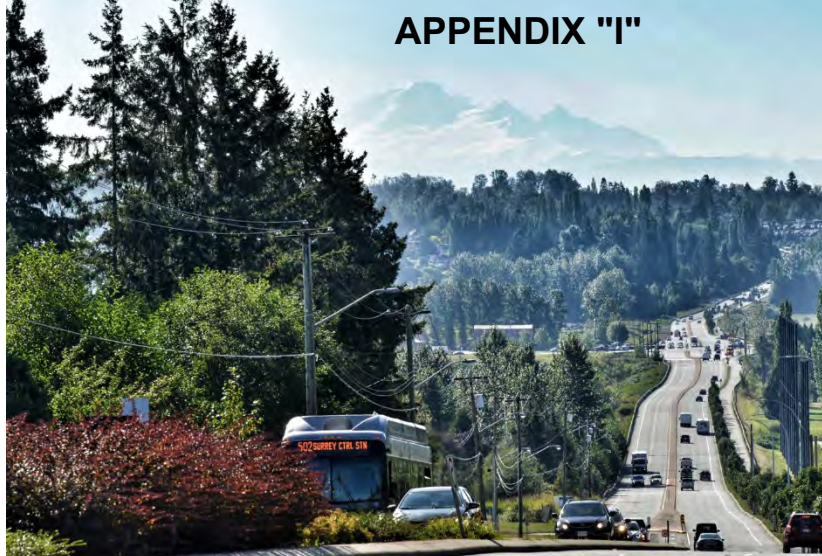
CONCLUSION

The SLS project has reached a major milestone with the Mayors' Council approving the Business Case on January 30, 2020, and TransLink forwarding the Business Case to the Provincial and Federal governments.

Scott Neuman, P.Eng.
General Manager, Engineering

SBN/MD/cc

Appendix "I" – Surrey-Langley SkyTrain Business Case Summary
Appendix "II" – Surrey-Langley SkyTrain Phase 2 Engagement Summary Reports



Surrey Langley SkyTrain

Business Case Summary

January 2020

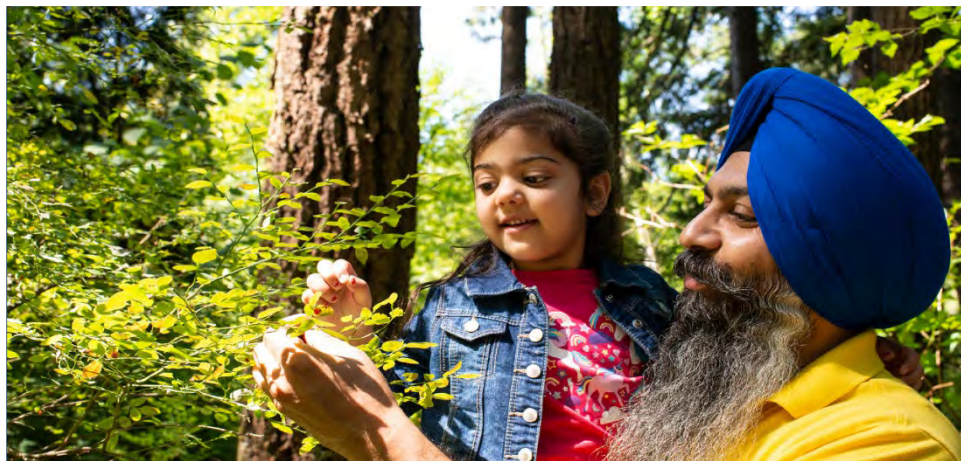


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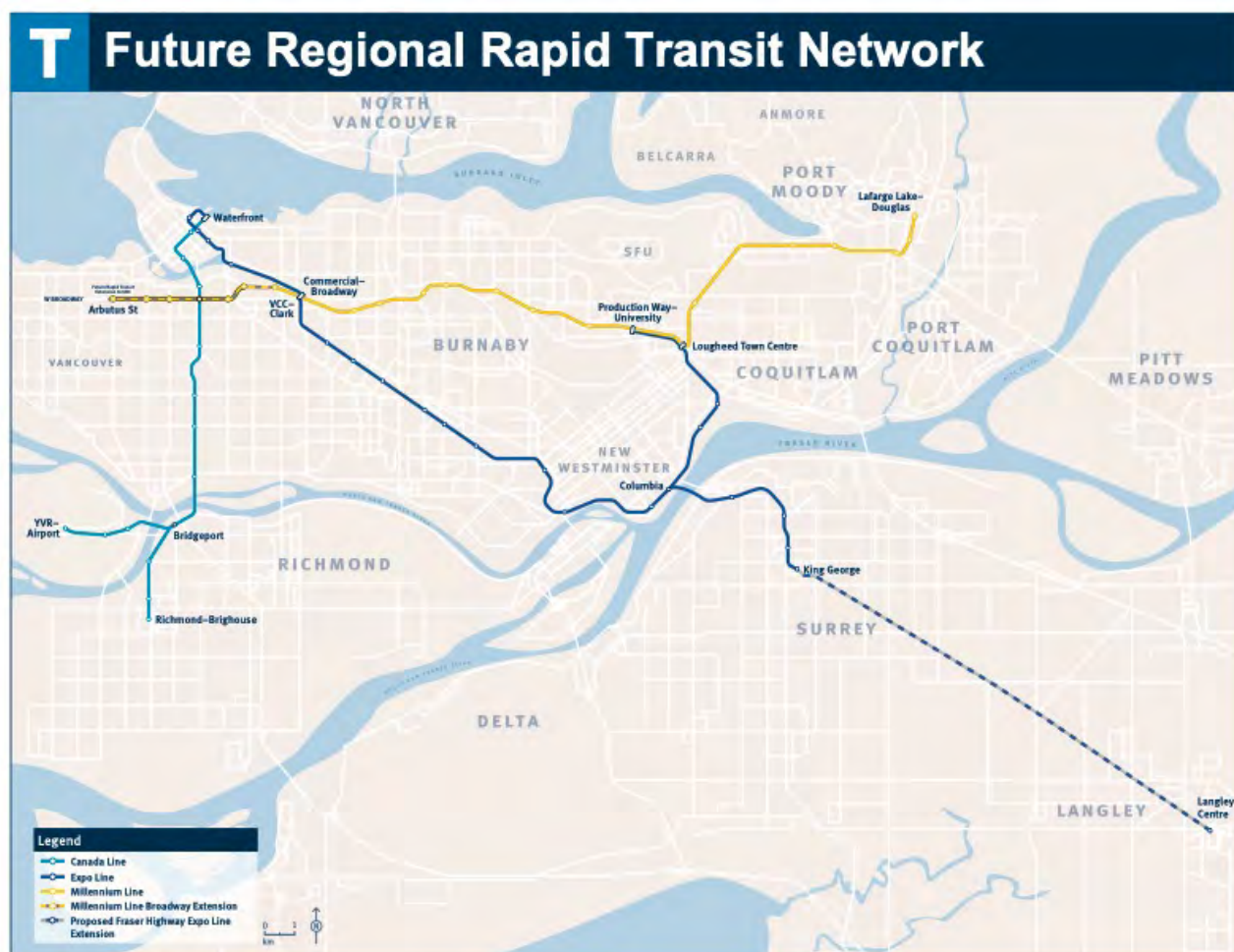
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Purpose

This Business Case Summary for the proposed Surrey Langley SkyTrain project (“the project”) highlights the need to further invest in rapid transit south of the Fraser and confirms the benefits of project implementation.

The project would improve the transit customer experience by providing a fast, frequent and reliable means of transit; attract new riders; improve regional accessibility to jobs, post-secondary education, and affordable housing; reduce vehicle kilometres travelled and greenhouse gas emissions; support economic development; and deliver value for public money.

This document provides an overview of the project background, need, and benefits. It also describes timing of next steps, including further public engagement and construction.



Background

In 2014, the regional mayors' 10-Year Vision identified three priority corridors for a 27-kilometre network of rapid transit in Surrey and Langley: 104 Avenue, King George Boulevard, and Fraser Highway.

In June 2016, the federal and provincial governments announced funding for development of the first phase of this network - a 10.5-km light rail transit project to connect Surrey Centre with Guildford and Newton - "the SNG LRT Project." Full approval and \$1.63 billion in funding by all levels of government was announced on September 4, 2018. In November 2018, Surrey's newly-elected Mayor and City Council withdrew support for the SNG LRT Project and requested that TransLink instead work on extending SkyTrain along Fraser Highway.

On December 13, 2018, the Mayors' Council directed TransLink to suspend work on the SNG LRT Project and proceed with planning and project development for a SkyTrain on Fraser Highway, and concurrently, initiate a planning process to refresh the South of Fraser Rapid Transit Strategy, consistent with the 10-Year Vision of building 27-kilometres of rapid transit on the three corridors.

In July 2019, following cost updates, initial technical work, and a first round of public engagement, the Mayors' Council directed TransLink to complete a Surrey Langley SkyTrain project Business Case, develop a staged construction plan, and prepare for procurement, based on available funding of \$1.63 billion.



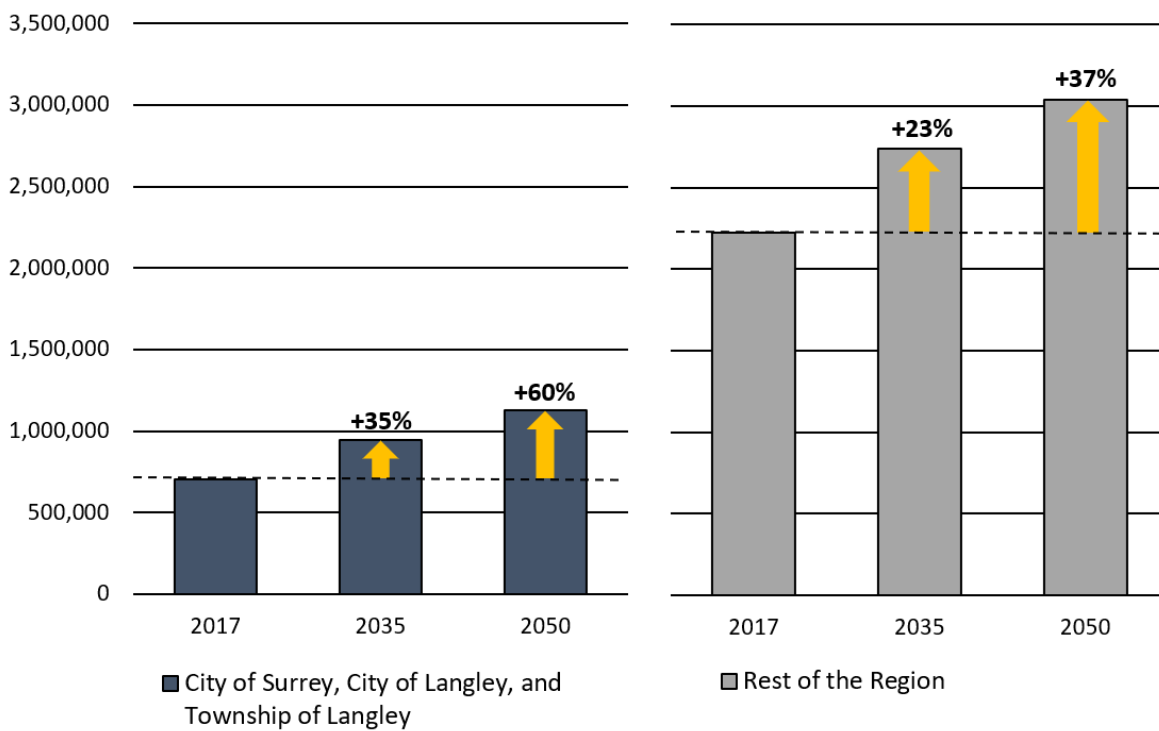
Photo credit: TransLink

Project Need

A growing region

Metro Vancouver continues to grow. It is projected that by the year 2050, the region will welcome 1,200,000 additional residents and create 500,000 new jobs. The area south of the Fraser River is one of the fastest-growing in the region, and it is expected that by 2050, the City of Surrey, City of Langley, and Township of Langley will welcome 420,000 new residents and 147,000 new jobs. This area has been identified as a priority for rapid transit improvements to help address current challenges and support planned future growth. Projected population growth is shown in Figure 1:

Figure 1: Projected population growth



Transportation system challenges

Demand for transit in Metro Vancouver is growing. In 2018 alone, system-wide ridership grew 7.1%, led by the South of Fraser region, which experienced growth of more than 15%. Over the years, TransLink has responded to demand growth by increasing bus service. More than 125,000 annual service hours have been added since transit expansion restarted with approval of the Phase One Investment Plan (2016). Bus routes have been augmented with higher capacity vehicles, including additional articulated buses and new double-decker buses. Yet, crowding continues to pose a challenge. Route 502 on Fraser Highway experiences overcrowding during more than 27% of its service hours and ranks as the fourth most-crowded of TransLink’s bus services.

Growth management and affordability

Growth management is an important priority for transportation investment. Urban development is managed in partnership between municipal governments, Metro Vancouver, and other governments through the Regional Growth Strategy. The strategy designates urban centres for concentrations of housing, jobs and services and calls on TransLink to connect these centres with frequent, reliable transit. The existing Expo Line, opened in 1986, provides a rapid transit connection from the Surrey Metro Core to the rest of the region. Plans for rapid transit through the 10-Year Vision include connections to Newton, Guildford, Fleetwood, and Langley City Centre as shown in Figure 2.

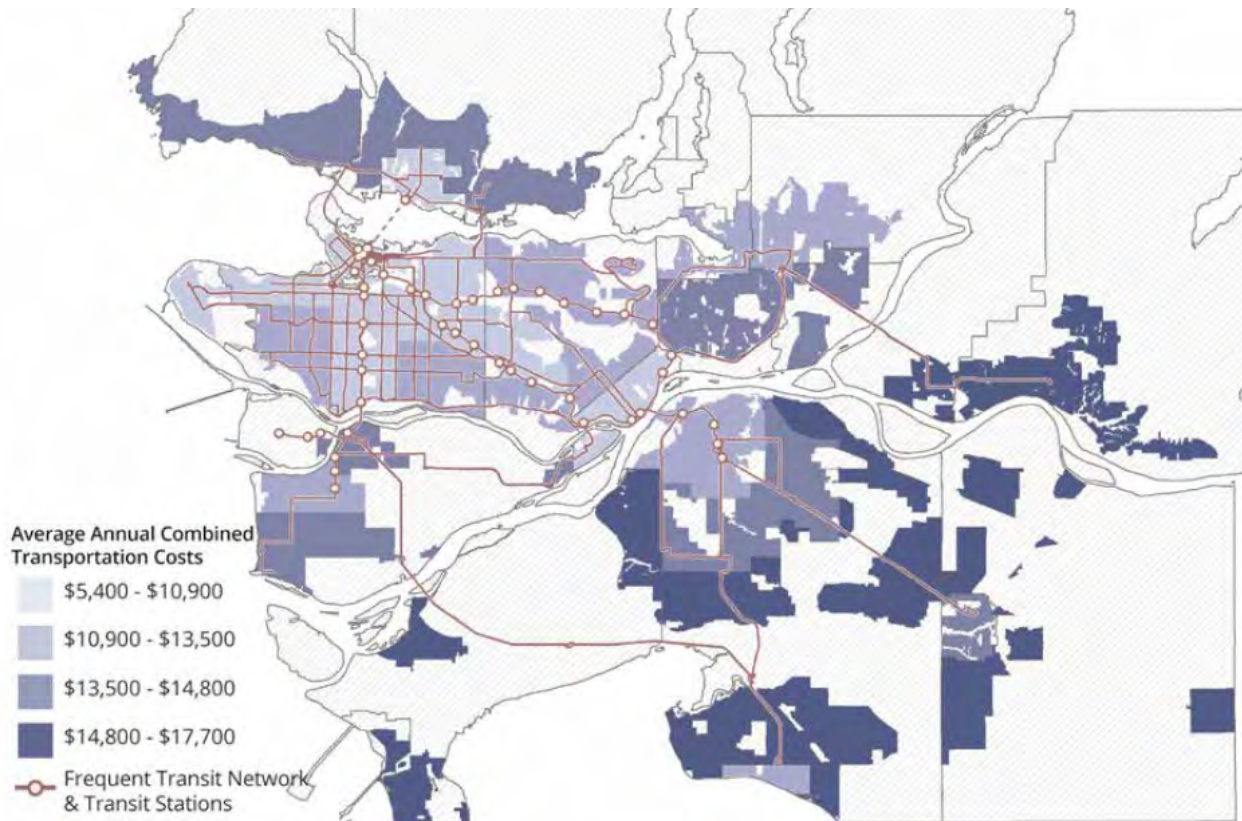
Figure 2: Metro Vancouver Urban Land Use Designations



Metro Vancouver's lack of affordable and diverse housing options challenges the region's success and prosperity. Rental vacancies are at record lows, housing prices hover at many multiples of the median income, and many people struggle to find affordable places to live. Metro Vancouver's Regional Affordable Housing Strategy projects a demand for 18,000 additional housing units per year, of which 5,500 are rental units.

Surrey and the surrounding municipalities offer some of the most affordable housing in the region. However, a 2011 study by Metro Vancouver found that while housing costs are relatively low, household transportation costs are above average due to a lack of affordable options and long, travel distances required to reach to jobs and other services (see Figure 3). As a result, the combined burden of housing and transportation costs makes this part of the region amongst the least affordable, consuming 42% of subregional median income for working households.

Figure 3: Average Annual Combined Transportation Cost for Working Households



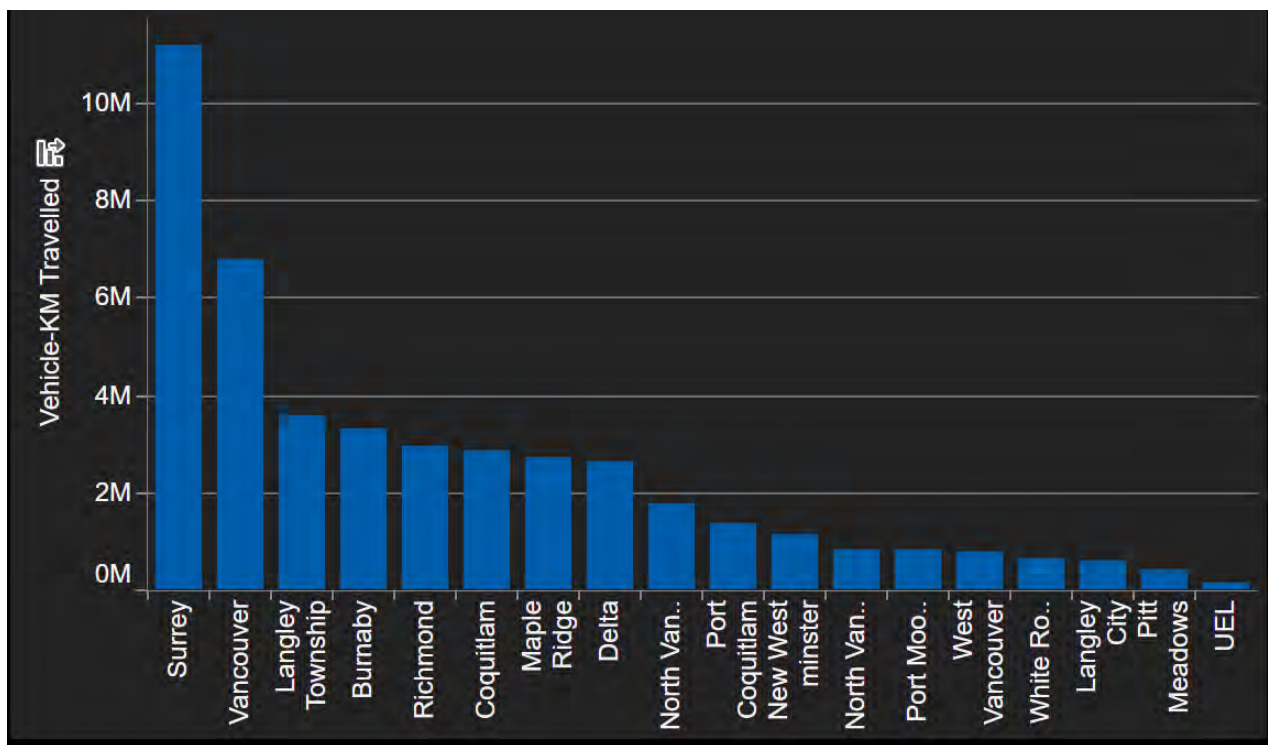
Source: The Metro Vancouver Housing and Transportation Cost Burden Study, 2015

Addressing global climate change

Governments at all levels are taking action to address the challenge of greenhouse gas pollution and its impact on our climate. In British Columbia, automobiles and light trucks are the largest source of greenhouse gas emissions -- at 31%. For its part, TransLink adopted targets to reduce greenhouse gas emissions from its operations by 80% by the year 2050, and to utilize 100% renewable energy in all operations by 2050. TransLink's operations represent a small share of overall regional emissions. More significant greenhouse gas reductions can be achieved by meeting the goals of the Regional Transportation Strategy, which calls for an increase to 50% of trips by sustainable travel modes by the year 2045 (from 28% today), and to reduce the average distance driven per person by one third.

The relatively long distances driven and higher use of automobiles for travel result in Surrey residents driving more than 11 million kilometres daily -- more than any other municipality in Metro Vancouver -- and 64% more kilometres than Vancouver (in second place) despite Surrey's population as three-quarters the size. Similar patterns exist in other South of Fraser municipalities, as illustrated in Figure 4.

Figure 4: Daily automobile vehicle kilometres traveled by municipality

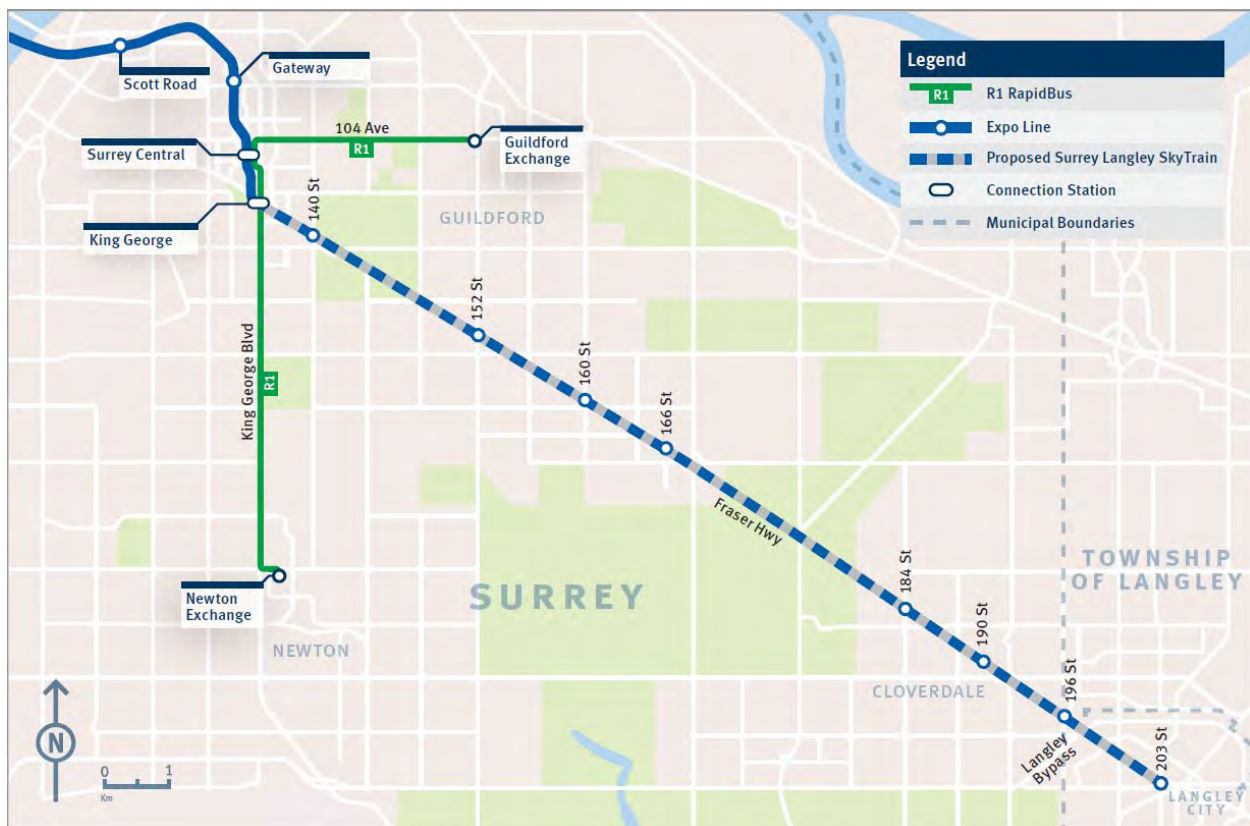


Source: TransLink 2017 Trip Diary

Project Overview

The Surrey Langley SkyTrain project would extend the Expo Line from King George SkyTrain Station to Langley City Centre along Fraser Highway. The project includes 16-kilometres of elevated guideway with 8 stations (see map below), 3 bus exchanges, and park-and-ride spaces. It requires 55 additional SkyTrain vehicles and a new Operations and Maintenance Center (OMC) to serve the expanded Expo and Millennium Line network.

The project would connect Surrey Centre, the emerging second core for the Metro Vancouver region, with the growing communities of Fleetwood, Clayton, Willowbrook, and Langley City. It would connect key destinations, including Kwantlen Polytechnic University's Surrey Center and Langley campuses, Surrey Memorial Hospital, Jim Pattison Outpatient Care and Surgery Centre, RCMP E-Division headquarters, Fortis BC's Surrey office, Green Timbers Urban Forest, the Surrey Sport and Leisure Complex, and Willowbrook Shopping Centre. Proposed stations would be located at arterial streets where bus connections, cycle and pedestrian paths would provide access to more South of Fraser and Fraser Valley communities.



The Case for SkyTrain

Project Objectives

The objectives of the project are to:

- Provide a great transportation user experience;
- Provide fast, frequent, reliable, and convenient transit across the region;
- Increase access to employment, schools, housing, and services;
- Support healthy communities and a healthy environment; and
- Advance local and regional prosperity.

All while:

- Spending wisely; and
- Implementing prudently.

Project Benefits

If delivered, the project will:



Improve Transportation Options

Improve transit service by reducing travel times, increasing capacity and reliability. This will attract additional transit users, and improve road safety through a reduction in auto vehicle kilometres travelled and an increase in sustainable mode share.

The project is forecasted to serve 62,000 average weekday boardings in 2035. Nearly 20,000 person-trips will be made by transit that would otherwise take place by car, increasing the sustainable mode share in the South of Fraser region by 1 percentage point.

Travel times will be 22 minutes from Langley Centre to the existing King George SkyTrain Station with trains departing every few minutes. By the year 2035, transit users will save nearly 900,000 hours of travel time annually as time savings grow.

SkyTrain will provide capacity to move 6,800 passengers per hour per direction - more than 10 times the capacity of bus service today - with the ability to add further capacity to address future growth.



Increase Access to Opportunities and Housing

Improve regional accessibility and promote social and community cohesion by connecting Surrey Metro Centre, Fleetwood Town Centre, and Langley City Centre with rapid transit. Outcomes will include better connections to more housing, employment, schools, and services, and higher-density, mixed-use development around SkyTrain stations.

In the year 2035, Langley City Centre will connect to more than 380,000 jobs and 23,000 post-secondary education spaces within a 60-minute commute by transit. This is more than twice as many jobs and almost 10 times as many educational opportunities reachable in the same time without the project.

By 2035, it is projected that 80,000 residents will live within 800 metres of the project's new stations. The municipalities along the corridor are updating their respective land use plans to accommodate this growth.



Support Healthy Communities and Environment

Reduce greenhouse gas emissions through fewer vehicle kilometres travelled, which will replace diesel bus service with electric SkyTrain service, reduce congestion-related idling, and support compact, walkable development. Greenhouse gas reductions are estimated at 17,000 tonnes annually.

Most transit trips involve walking or cycling at the start and end of journeys. Active transportation supports improved public health outcomes and is associated with reductions in obesity, diabetes, and heart disease. The project is estimated to increase the number of trips by active transportation modes by more than 25 million annually in the year 2035.



Support Economic Development

Support economic development by improving access to employment and educational opportunities, improving efficiencies for businesses to get their goods to market, increasing business access to the region's labour force, and driving innovation by an increase in competition among companies. Project construction will result in 3,000 direct jobs annually. Once in operation, the value of enhanced economic productivity over the life of the project is estimated at \$255 million.

Funding

The estimated capital cost of the Surrey Langley SkyTrain – from King George SkyTrain Station to Langley City Centre – is \$3.1 billion. This estimate includes:

- Design and project management
- Property acquisition
- Construction
- New SkyTrain vehicles
- Operations and maintenance system upgrades
- Testing and commissioning
- Financing costs during construction.

The cost of these activities and assets increases with time. This estimate includes a projection of inflation over the life of the project and assumes that implementation commences in mid-2020 with the project built in one stage.

Currently, there is approximately \$1.63 billion in available funding, which is enough to construct the project to 166 Street and Fraser Highway in Fleetwood. It is proposed that funding for the first stage of the project come from the Investing in Canada Infrastructure Program, a partnership between Canada, British Columbia, and the region. Under the program, the federal government will contribute 40% of eligible capital costs, the provincial government will contribute 40% of capital costs, and TransLink will fund the remainder, including the cost of operations and maintenance over the life of the project. The City of Surrey will contribute \$39 million to the first stage of the project.

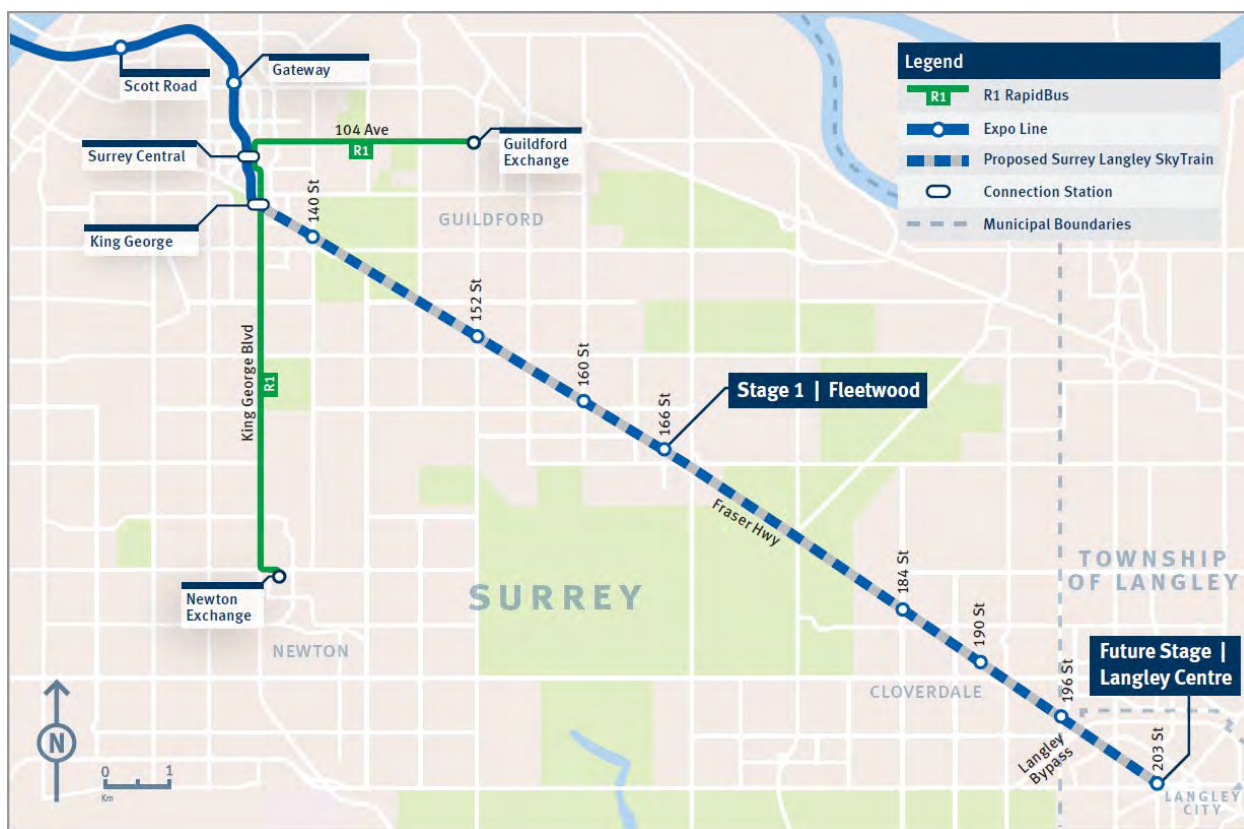


Photo credit: TransLink

Staging

Based on available funding, TransLink plans to deliver the project in stages. The first stage - from King George SkyTrain Station to 166 Street and Fraser Highway in Fleetwood - could be constructed within five-and-a-half years from the project approval date. The anticipated opening date for passenger service on this first stage is late 2025. Simultaneously, TransLink is completing planning and design work for the second stage - from 166 Street to Langley City Centre - to enable construction as soon as funding is secured.

The region's share of the first stage project costs was secured through an Investment Plan to deliver Phase Two of the 10-Year Vision, approved by the Mayors' Council on Regional Transportation in June 2018. An update to this plan replacing the SNG LRT Project with the Surrey Langley SkyTrain project (first stage) will be brought forward in 2020.



Procurement

With the assistance of Partnerships BC, TransLink assessed a range of procurement models for the project. The objective is to select a model that manages key project risks, maximizes competition, allows for innovation and efficiency, complies with procurement policies and standards, and provides cost and schedule certainty. The procurement model recommended for the first stage of the project is a Design Build Finance model. Under this model, a portion of the construction costs will be financed privately, with repayment upon project completion. TransLink will be responsible for project delivery and own the project at its completion. Operations and maintenance will be performed by BC Rapid Transit Company, the TransLink subsidiary responsible for operations and maintenance of the existing Expo and Millennium Lines.

Benefit-Cost Analysis

A Benefit-Cost Ratio (BCR) summarizes the overall value for money of a major project. A BCR is the ratio of the benefits of a project, expressed in dollar amounts, relative to its costs, also expressed in dollar amounts. The benefit-cost analysis compares user, environmental, and wider economic benefits with project costs over a 30-year period. The higher the BCR, the better the investment. All major projects undergo this form of analysis to determine whether an investment represents good value.

The BCR of the Surrey Langley SkyTrain project is 1.24, which is comparable to previous SkyTrain business cases: the Canada Line (1.25) and Evergreen Extension (1.27).



Photo credit: TransLink

Alternatives Considered

A Multiple Account Evaluation was developed to assess the proposed project against a Business as Usual (BAU) scenario, defined as the Fraser Highway RapidBus service, as well as a Light Rail Transit (LRT) alternative. The results of this assessment are summarized in Figure 5.

Figure 5: Multiple Account Evaluation BAU, LRT, SkyTrain

Account	Alternative		
	BAU	Light Rail Transit	Above-Grade SkyTrain
Customer Service / User Experience	✓✓✓	✓✓✓✓	✓✓✓✓✓
Transportation	✓✓✓	✓✓✓✓	✓✓✓✓✓
Urban Development	✓✓✓	✓✓✓✓✓	✓✓✓✓
Social, Community, and Environment	✓✓✓	✓✓✓✓	✓✓✓✓✓
Economic Development	✓✓✓	✓✓✓✓	✓✓✓✓✓
Financial	✓✓✓	✓✓	✓✓✓✓
Deliverability	✓✓✓	✓✓	✓✓✓✓

SkyTrain performs similarly to or better than the BAU and LRT options on all evaluation accounts, including customer service/user experience, transportation, urban development, social community and environment, economic development, financial, and deliverability and acceptability. Accordingly, a SkyTrain extension is recommended as the preferred option for the Fraser Highway corridor.

Engagement

Engagement is a key component of rapid transit planning. Robust public, stakeholder, and First Nations engagement has been undertaken on this project, which has resulted in record-level interest and response, including approximately 30,000 survey responses and over 3,000 attendees at nine open houses. Regular interactions with diverse community groups and business associations have taken place since project inception and are ongoing. Support for the project is high throughout Metro Vancouver. Feedback is helping the project team refine the project design and confirm the scope of the Environmental Screening Review. An overview of engagement efforts to date follows:

Phase 1 Engagement (Spring 2019)

Between April 4th and 26th, TransLink conducted a first round of public engagement on the Surrey Langley SkyTrain project.

To ensure broad access to information and to maximize public participation, the three-week engagement period included:

- A robust print, radio, digital and in-transit multilingual marketing campaign
- Online opportunities, including a survey in English and Punjabi
- In-person opportunities, including four open houses, a stakeholder workshop, and promotions at major transit hubs in Surrey and Langley
- Outreach to diverse communities, including attendance at Surrey's Party for the Planet and Vaisakhi Parade, and a presence at local temples.

This resulted in record-level public participation with more than 21,000 survey responses and 1,000+ attendees at open houses.

Survey results indicate widespread support for improved transit in Surrey and Langley, generally, and the proposed Surrey Langley SkyTrain, specifically. In Surrey and Langley, 85% of respondents support the proposed project, and in the rest of the region, support lies at 84%. The following is a breakdown of support:

- Surrey – 82%
- City of Langley – 90%
- Township of Langley – 92%
- Rest of Metro Vancouver – 84%

Survey respondents noted that the most important considerations for rapid transit south of the Fraser are predictable transit travel times, efficient use of public money, a comfortable and safe transit experience, and increased transportation options.

To augment feedback on rapid transit south of the Fraser, TransLink commissioned a market research survey to help obtain statistically-representative responses. Findings were consistent with the public engagement survey.

Phase 2 Engagement (Fall 2019)

A second round of public engagement was held between November 1st and 17th, during which stakeholders and members of the public provided feedback on the proposed SkyTrain alignment and station locations, access to SkyTrain and integration with other modes of transportation (walking, cycling, buses, and private vehicle), the Environmental Screening Review (ESR), and rapid transit on 104 Avenue and King George Boulevard.

Similar to the first round of public engagement, there was significant interest in the project with:

- 2,000 attendees at the five open houses
- 8,000 survey responses
- 5,000 participants in a live Telephone Town Hall with the Surrey Langley SkyTrain project director.

The engagement revealed:

- General support for the SkyTrain extension, especially for it to be built in one stage and on an expedited basis
- Agreement that identified factors were sufficiently thorough in helping to determine placement of the guideway
- Shelter, lighting, maps and signage, bus connections and pedestrian walkways, and pickup/dropoff and park-and-ride spaces are key to new stations and the surrounding areas
- Agreement (93%) that the ESR process is sufficiently thorough.

Once again, TransLink commissioned a market research survey to help obtain statistically representative responses. Findings were consistent with the public engagement survey and, additionally, found that the level of support for the project remains high at 77%.

Environmental Screening Review (ESR)

TransLink is committed to delivering the project in a manner that respects the environment and considers all project-related effects, including both natural and human. As such, the public, First Nations, government agencies, and stakeholders have been invited to provide feedback on the Environmental Screening Review. The ESR studies the potential effects of the project's construction and operation, and determines mitigation measures, as required. Results of the ESR will inform the final project design and set quality and performance standards for construction and operation. A complete list of the effects being assessed is available at surreylangleyskytrain.ca.

First Nations Engagement

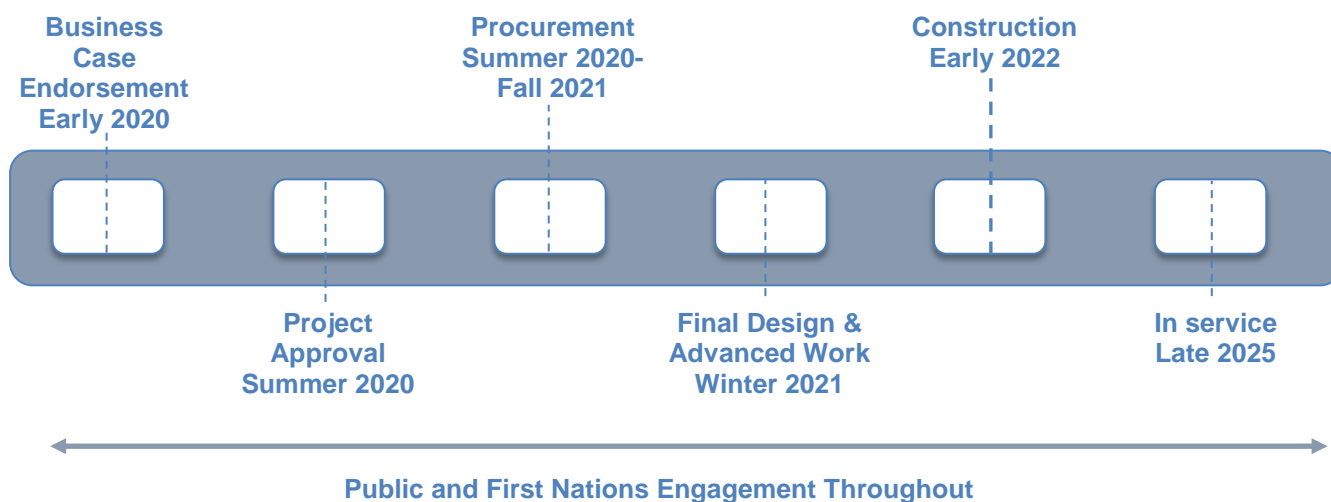
First Nations engagement is a key component of rapid transit planning with input helping to inform decision-making, including project development, and design work. Upon direction from the Mayors' Council to proceed with planning for a Surrey Langley SkyTrain, TransLink initiated an engagement process with First Nations that have territorial interests in the project. The project development phase provides a number of opportunities for First Nations engagement, including the Environmental Screening Review and related field studies.

Future Engagement

Through 2020 and beyond, we will continue to engage with the public, stakeholders and First Nations on how to minimize impacts on residents, businesses, and commuters during the construction and operation phases of the project.

Next Steps

The following diagram illustrates the project's next steps:



Conclusion

The Surrey Langley SkyTrain project is a necessary infrastructure project to help meet current and future transit demand in the fast-growing South of Fraser region, and contribute to the long-term prosperity of the region. Project will:

- Improve Transportation Options
- Increase Access to Opportunities and Housing
- Support Healthy Communities and Environment
- Support Economic Development

A solid Benefit-Cost Ratio of 1.24 confirms the benefit of the project, which has demonstrable public support across the region.

Current available funding of \$1.63 billion enables construction of Stage 1 from King George SkyTrain Station to 166 Street in Fleetwood beginning in Summer 2020. TransLink will pursue implementation of the remainder of the extension when additional funding is secured.



Photo credit: City of Surrey



SURREY LANGLEY SKYTRAIN, AND RAPID TRANSIT OPTIONS ON 104 AVENUE AND KING GEORGE BOULEVARD

PHASE 2 ENGAGEMENT SUMMARY REPORT

Prepared by: MODUS Planning, Design & Engagement
Prepared for: TransLink

January 2020



ENGAGEMENT SNAPSHOT

Promotional activities:



Project microsite



Print, radio, digital ads



Transit ads



Social media



eNewsletter



Telephone town hall



Direct outreach



Community events



8,600+ Survey Respondents



2,000 Open House Participants



5,000 Telephone Town Hall Participants

KEY THEMES

Comments Regarding SkyTrain Guideway Placement

- Support for the SkyTrain and the factors that contributed to placement of the guideway
- Concern about impacts on wildlife and plant life
- Concern about traffic impacts, notably during construction
- Importance of sufficient, accessible, and affordable parking near and around each station
- Need to integrate walking and cycling infrastructure and amenities
- Need for easy connections between different transportation modes, especially improved bus service

Design Features Outside the Stations

- Features related to travel by bus, HandyDART, and foot are of primary importance

Rapid Transit on 104 Avenue & King George Boulevard

- Concern about increased vehicle congestion
- Preference for SkyTrain or other transit technology over Bus Rapid Transit (BRT)
- Need for a high-frequency and high-capacity transit system to meet the needs of current and future users
- Perception that current bus service is sufficient

Environmental Screening Review (ESR) Process

- Vast majority (93%) indicated that the ESR process is sufficiently thorough
- Additional Review suggestions included a focus on safety and security, visual impacts, community health, and light pollution
- Concern that the ESR process might delay project delivery
- Reiteration of the need to consult with First Nations on the ESR process
- Concern about construction and operational impacts on Green Timbers Urban Forest
- Interest in how ESR results will contribute to decision-making
- Inclusion of environmental benefits of SkyTrain in the ESR

Other Comments

- Support for the SkyTrain and need for improved transit infrastructure south of the Fraser
- Desire for the Surrey Langley SkyTrain to be constructed in one stage
- Need for improved bus connections and service that integrates seamlessly with the SkyTrain
- Suggestions to plan for further expansions of the SkyTrain
- Concern about safety and security on and around public transit

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BACKGROUND

In 2014, regional mayors on the Mayors' Council identified 104 Avenue, King George Boulevard, and Fraser Highway as priority corridors for rapid transit south of the Fraser and decided to build 27 kilometers of Light Rail Transit (LRT) to meet growing and projected ridership demand in the sub-region.

In December 2018, based on a request from Surrey City Council, the Mayors' Council directed TransLink to suspend work on the Surrey-Newton-Guildford LRT and begin planning work for SkyTrain on Fraser Highway while updating rapid transit plans for 104 Avenue and King George Boulevard.

In April 2019, TransLink carried out a first phase of public engagement to:

- Inform the public about rapid transit planning work related to the Fraser Highway, 104 Avenue, and King George Boulevard corridors
- Gather feedback on opportunities, considerations, values, and level of support for rapid transit planning on these corridors
- Ensure broad access to information, maximizing opportunities to engage

Engagement activities attracted record-level response with feedback from more than 21,000 online survey respondents from across the region, and more than 1,000 open house attendees in Surrey and Langley.

Survey results indicated widespread support for the proposed Surrey Langley SkyTrain, including 85% of respondents in Surrey and Langley, and 84% in the rest of the region.

Survey respondents were asked to rank values for consideration in rapid transit planning, including the 104 Avenue and King George Boulevard corridors. They identified the following as their top values:

- Predictable transit travel time
- Efficient use of public money
- A comfortable and safe experience
- Increased transportation options that help me choose bus, SkyTrain, SeaBus, and HandyDART over private vehicle use

And, they noted the following as important factors in considering the impacts of the proposed Surrey Langley SkyTrain:

- Safety and security
- Increased transit connectivity through and within Surrey and Langley
- Minimizing impacts to residences and businesses
- Travel time and convenience

In July 2019, TransLink provided a mid-year update to Mayors' Council (including cost estimates; design requirements; an Environmental Screening Review, or ESR, process; and results of the first phase of public engagement), after which the Mayors' Council directed TransLink to:

- Complete a Surrey Langley SkyTrain project business case
- Develop a staged construction plan, based on available funding
- Explore transit options for 104 Avenue and King George Boulevard that stay within the \$3.55 billion overall funding envelope for the three rapid transit corridors

In November 2019, TransLink undertook a second phase of public engagement on the proposed Surrey Langley SkyTrain project and rapid transit on 104 Avenue and King George Boulevard. In this phase, TransLink sought feedback on:

- The proposed placement of the SkyTrain guideway and stations along Fraser Highway, and:
- Access to SkyTrain and integration with other modes of transportation
- The Environmental Screening Review (ESR) process
- Rapid transit on 104 Avenue and King George Boulevard

WHAT WE DID

PROMOTION

Website: The project microsite, launched in February 2019, remains the primary source for interested parties to access the most up-to-date information. During this round of public engagement, users could find links to the online survey, open house information boards, engagement opportunities, news coverage, and FAQs.

Digital ads: Digital ads were posted on the following sites:

- Facebook, Twitter, and Instagram platforms
- Google Search Network, Google Display Network and Gmail
- Surrey Now-Leader, Langley Advance Times, and Vancouver Sun
- Daily Hive and Vancouver is Awesome

Newspaper and radio ads: Multilingual ads were placed with print and radio outlets, including but not limited to: Star Metro, Red FM.

Op-ed: An op-ed promoting the public engagement opportunity was provided to local newspapers.

SMS NextBus alert ads: SMS messages were sent to customers using the NextBus service in Surrey and Langley.

eNewsletters: Notification of the engagement was sent to Surrey Langley SkyTrain eNewsletter subscribers as well as those who subscribe to the general TransLink eNewsletter.

Social media: Content about the public engagement opportunity was posted on Facebook and Twitter, including Facebook events for each open house.

Direct outreach: Elected officials, representatives of local businesses and community organizations, and government leaders were invited to participate in the engagement and asked to share information (i.e., physical posters or social media posts) about it with their constituents.

Community events: To help raise awareness about the public engagement, TransLink staff participated in local community events, including the Fleetwood Festival and Surrey Tree Lighting Festival.

Street teams: Street teams promoted the public engagement with transit users at bus exchanges, SkyTrain stations, and park-and-rides in Surrey and Langley. Street teams and TransLink staff also undertook outreach activities (i.e., pop-up booths) at malls, including Hillcrest Shopping Centre in Clayton.

Information boards: Throughout the public engagement period, large boards with details about the public engagement opportunity (i.e., how to get involved) were displayed at Surrey City Hall, Langley City Hall, and Township of Langley City Hall.

Transit ads: Ads were placed at bus shelters and SkyTrain stations, including Columbia, King George, Sapperton, and Braid.

Telephone Town Hall: A Telephone Town Hall attracted approximately 5,000 participants from across the region who had an opportunity to ask questions of TransLink staff about the proposed Surrey Langley SkyTrain project and rapid transit on 104 Avenue and King George Boulevard.

ENGAGEMENT OPPORTUNITIES

ONLINE SURVEY

An online survey was available between November 1 – 17, 2019.

TransLink sought specific feedback on:

- The proposed placement of the SkyTrain guideway and stations along Fraser Highway
- Access to SkyTrain and integration with other modes of transportation
- The Environmental Screening Review (ESR) process
- Rapid transit on 104 Avenue and King George Boulevard

The survey was translated into Punjabi and available at open houses or electronically, by request.

In total, there were 8,624 completed surveys. Respondents provided the first 3 letters of their postal code, which is the basis for the following geographic breakdown:

- 4,689 – City of Surrey
- 879 – Township of Langley
- 651 – City of Langley
- 2,405 – Rest of Metro Vancouver

OPEN HOUSES

Open house details including date, location, time, and attendants as follows:

- Thursday, November 7 – Langley City Hall (3 - 8pm) 262 attendees
- Tuesday, November 12 – Hope Community Church (3 - 8pm) 91 attendees
- Wednesday, November 13 – Surrey Sport and Leisure Complex (3 - 8 pm) 700 attendees
- Thursday, November 14 – Kwantlen Polytechnic University (1 - 6pm) 200 attendees
- Saturday, November 16 – Central City Shopping Centre (11am - 4pm) 700+ attendees

The open houses featured a series of information boards about the project that outlined background, funding, and timelines, etc. The boards are available at: surreylangleyskytrain.ca

At the open houses, a community mapping exercise provided attendees with an opportunity to highlight additional considerations regarding guideway placement.

TransLink and municipal staff were present at the open houses to answer questions in English, Punjabi and other languages.

iPads were available to complete the online survey. Paper copies of the survey (English and Punjabi) were also available.

WHAT WE HEARD

The following is a summary of what we heard from respondents to the online survey and participants at the open houses.

ADDITIONAL CONSIDERATIONS REGARDING SKYTRAIN GUIDEWAY PLACEMENT

Q: The following factors were considered in the decision-making process about where the guideway is placed:

- *Minimize footprint impacts to environmentally sensitive areas*
- *Minimize property impacts*
- *Minimize project-related costs while maximizing ease of construction*
- *Minimize the number of times the guideway crosses over Fraser Highway*
- *Minimize traffic impacts*

Is there anything else that we should consider in planning where the guideway is placed on the Fraser Highway?

General Support

There was general support for the SkyTrain extension. Many respondents supported the list of factors that TransLink considered regarding placement of the guideway.

Environmental Impact

Respondents identified environmental impacts that the SkyTrain would have on the surrounding area as an area of concern. The majority of those comments related to impacts to Green Timbers Urban Forest, wildlife habitat, and tree removal during construction. Some respondents suggested sustainable disposal of construction waste and minimizing the SkyTrain’s carbon footprint during operation. Others hoped that SkyTrain infrastructure would be resilient against seismic activity and natural debris that could potentially obstruct the guideway.

Traffic Impacts

Respondents expressed concern about increased vehicle traffic and the impact on local roads as a result of the SkyTrain development, particularly during daytime construction. Many suggested the widening of Fraser Highway to address current congestion and accommodate future increases in road users.

Parking Demand

Parking emerged as a key consideration. Respondents highlighted the importance of sufficient, accessible, and affordable parking near or around each station. Many expressed the need for park-and-ride facilities, and reserved spaces for car share services and electric vehicles.

Walking and Cycling Infrastructure

Respondents prioritized the need to integrate pedestrian and cycling infrastructure and amenities into new development. Many expressed a desire for future stations to be safe and easy to access for cyclists and pedestrians. Some of the specific considerations included:

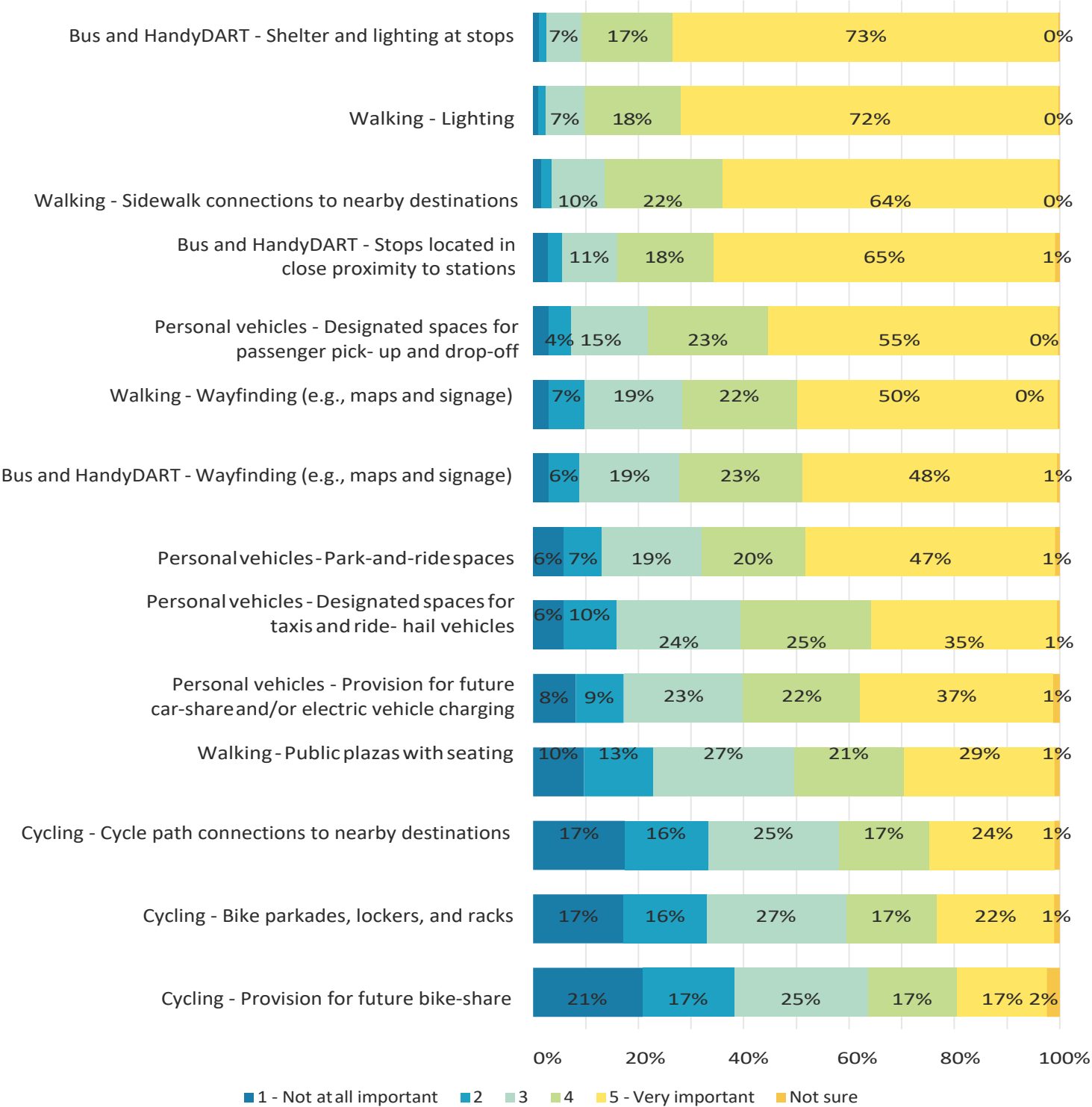
- Dedicated bike lanes and connections next to or underneath the guideway
- Pedestrian pathways and sidewalks around stations, including safety features such as lighting and designated pedestrian crossings at intersections
- Bike lockers, racks, future bikeshare, and bikes on trains
- Green spaces, community gardens, and landscaping along the guideway and around stations

Improved Bus Service and Connections

Easy connections between different transportation modes was an important consideration. Many respondents want improved bus service with increased frequency and better connectivity to areas not directly serviced by rapid transit, but that otherwise have potential demand. Other suggestions included implementing bus priority lanes, and bus exchanges at stations.

DESIGN FEATURES OUTSIDE THE STATIONS

Q: How important are each of the following to you?



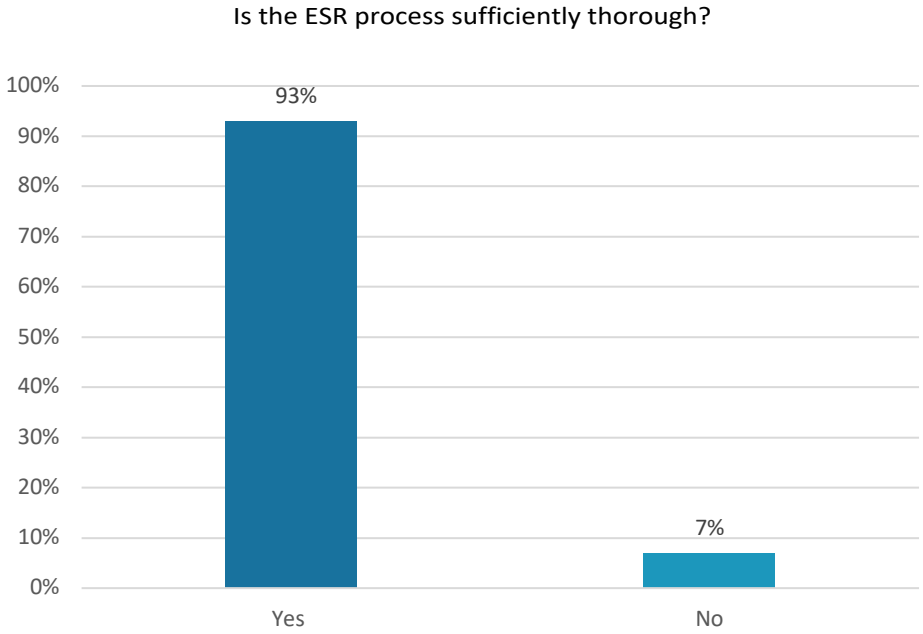
In general, respondents prioritized design features related to travel by bus, HandyDART, and foot. Design features related to cycling ranked the least important to respondents.

The majority of respondents (90%) consider shelter and lighting at bus and HandyDART stops to be key design features outside of future SkyTrain stations. Lighting for walking areas and sidewalk connections to nearby areas were equally important, with respondents (90% and 86%, respectively) responding with a 4 or 5.

ENVIRONMENTAL SCREENING REVIEW PROCESS THOROUGHNESS

Q: Is the proposed Environmental Screening Review (ESR) process sufficiently thorough with reviews as listed:

- Air Quality and Greenhouse Gases
- Agricultural Land
- Archaeology and Heritage
- Contaminated Sites
- Emergency Services
- Fisheries and Aquatics
- Land Use
- Noise and Vibration
- Traffic and Transportation
- Vegetation and Wildlife



The vast majority of survey respondents and open house attendees indicated that the ESR process is sufficiently thorough.

Q: Please feel free to elaborate

Comments from Both Yes and No Responses

The following themes emerged from respondents' comments, regardless of whether the respondent thought the ESR process was sufficiently thorough or not.

Additional Reviews

Respondents suggested that TransLink study the impacts of the SkyTrain on a number of additional areas, including surrounding neighbourhoods. Respondents cited the potential for the SkyTrain to impact housing affordability and cleanliness around stations. They also noted that the SkyTrain needs to help promote a stronger sense of place through urban design considerations. And, respondents suggested reviewing:

- Safety and security on and around the SkyTrain
- Visual impacts (i.e., obstructing views, casting shadows)
- Community health
- Light pollution

Potential Project Delays

Respondents were concerned that the ESR process might delay the project. Similar to comments expressed in the first phase of engagement, many respondents want the project built as quickly as possible.

Indigenous Consultation

Respondents were keen to know if Indigenous communities are being consulted on the ESR process.

Green Timbers Urban Forest

Respondents were concerned about construction and operational impacts on Green Timbers Urban Forest. Concerns included the number of trees that will be lost to development as well as the impacts of noise, light, and vibration on wildlife habitat.

Impacts on Decision-making

Respondents suggested that TransLink needs to ensure that the results of the ESR inform decision-making in a meaningful way, notably on minimizing impacts on all of the proposed topic areas. Some respondents were skeptical as to whether the ESR would have a meaningful impact on decision-making.

Yes, the Proposed ESR Process is Sufficiently Thorough

The following themes emerged from those who thought the ESR process is sufficiently thorough.

Environmental Benefits of SkyTrain

Respondents recognized that when the SkyTrain is built it will have many environmental benefits that should be considered as part of the ESR. For example, respondents cited several benefits of SkyTrain, which allows more people to choose transit over personal vehicle use, including:

- Lower emissions
- Improved air quality
- Reduced congestion
- Reduced need to widen roadways

Emphasizing Proposed Reviews

Respondents made specific mention of some of the proposed reviews that they are particularly interested in and consider notable to this project, including noise and vibration, and vegetation and wildlife.

No, the Proposed ESR Process is Not Sufficiently Thorough

The following themes emerged from respondents who thought the ESR process is not sufficiently thorough.

Insufficient Information or Lack of Expertise

Some respondents expressed a need for more information about the ESR (i.e., how it will be used) before they could provide informed feedback.

Other respondents cited their lack of expertise to provide informed feedback on the ESR process.

RAPID TRANSIT ON 104 AVENUE & KING GEORGE BOULEVARD

Q: What are your hopes and/or concerns about implementing BRT on 104 Avenue and King George Boulevard?

Impacts on Road Users

A large percentage of respondents expressed concern about increased congestion as a result of BRT implementation and operation. The majority of these comments highlighted the large volume of traffic that currently exists along both corridors and the fact that limited lane space would be re-allocated to a dedicated BRT lane. Concerns included:

- Construction-related delays
- Increased congestion for private vehicles
- Policing of the dedicated lane to ensure bus reliability
- Accidents between buses and personal vehicles
- Road users using the dedicated lane

Some respondents asked if a dedicated lane would be permanent or if it would only serve buses during peak hours, and some respondents suggested turning the dedicated lane into an HOV lane instead. Some respondents suggested widening the corridors to accommodate dedicated lanes and others suggested improving general traffic flow through better traffic light sequencing.

Safety and Security

Safety and security were concerns for many respondents, including a perception that the proposed SkyTrain and BRT lines would result in increased crime in Surrey and Langley. There was also concern that assaults and harassment on transit and around BRT stations at night would increase. Some respondents expressed a desire for greater policing around stations. Many respondents expressed the need for more adequate lighting to dissuade criminal activity.

Respondents also expressed concern about pedestrian safety, notably exiting and entering stations due to their proximity to vehicle traffic.

Preference for SkyTrain or Other Technology

Respondents expressed a preference for SkyTrain or other elevated transit technology as opposed to BRT. Specific concerns about BRT as an inferior technology (compared to SkyTrain) included:

- Potential accidents between buses and private vehicles
- Slower, less reliable service
- Increased congestion
- Inability to meet future ridership demands
- Other corridors were considered less important than Fraser Highway

Maintaining the Current Transit System

Some respondents thought that current bus service (96 B-Line/RapidBus) along the corridors was sufficient in terms of capacity and frequency and that BRT was not warranted. There was a general lack of understanding about the difference between the 96 B-Line/RapidBus and the proposed BRT system.

Frequency and Capacity

Respondents highlighted the need for a high-frequency, high-capacity transit system to meet the needs of current and future users. However, there was a discrepancy between how and where respondents wanted that transit service delivered. Some of the specific themes relating to transit connections included:

- An improved and better-connected public transit network in Surrey and Langley, especially for those who would prefer to drive less and take transit more often within their community
- Improved travel to and from Vancouver
- Improved rapid transit connections to municipalities further east (i.e., to Mission, Abbotsford, and Chilliwack)
- Improved rapid transit connections to municipalities further south (i.e., to South Surrey and White Rock).

OTHER CONSIDERATIONS

Q: Is there anything else you'd like to add about the Surrey Langley SkyTrain project or rapid transit on 104 Avenue and King George Boulevard?

When asked what else TransLink should consider in its planning work, respondents highlighted:

Urgency to Build Transit Infrastructure

The majority of respondents who answered this question were frustrated with how long it is taking to deliver rapid transit south of the Fraser and expressed the need to expedite the project timeline to begin construction as soon as possible. Some were concerned that a prolonged planning process would result in increased costs for the project.

General Support for Surrey Langley SkyTrain

There is general support for the Surrey Langley SkyTrain with many respondents expressing a need to prioritize this project over other rapid transit initiatives, including on 104 Avenue and King George Boulevard.

Build in One Stage

Respondents commented on the need to build the Surrey Langley SkyTrain in one stage to ensure that it reaches the City of Langley. Some suggested either building the entire guideway in one stage and adding stations over time or waiting until all of the funding is secure to begin construction on the full line.

Improved Bus Connections and Service

Respondents expressed a desire for seamless integration between future SkyTrain stations and existing public transit. Respondents

suggested new bus routes that would connect neighboring communities north and east of the proposed guideway, and some specifically requested a direct connection to the Carvolth Exchange. Respondents also indicated concern with current bus capacity and frequency and the need to enhance bus service to accommodate future demand.

Plan for Future Expansion

Respondents suggested planning for future expansions. They commented on the importance of building the guideway and stations to accommodate future growth and connect with additional transit lines, including future expansions west to Richmond and Vancouver International Airport as well as other municipalities, such as Maple Ridge, Abbotsford, and Chilliwack.

Safety and Security

Respondents were concerned about safety in and around transit stations and expressed fear that the introduction of SkyTrain would lead to higher crime rates in surrounding neighbourhoods. Suggestions to enhance a sense of safety included increasing:

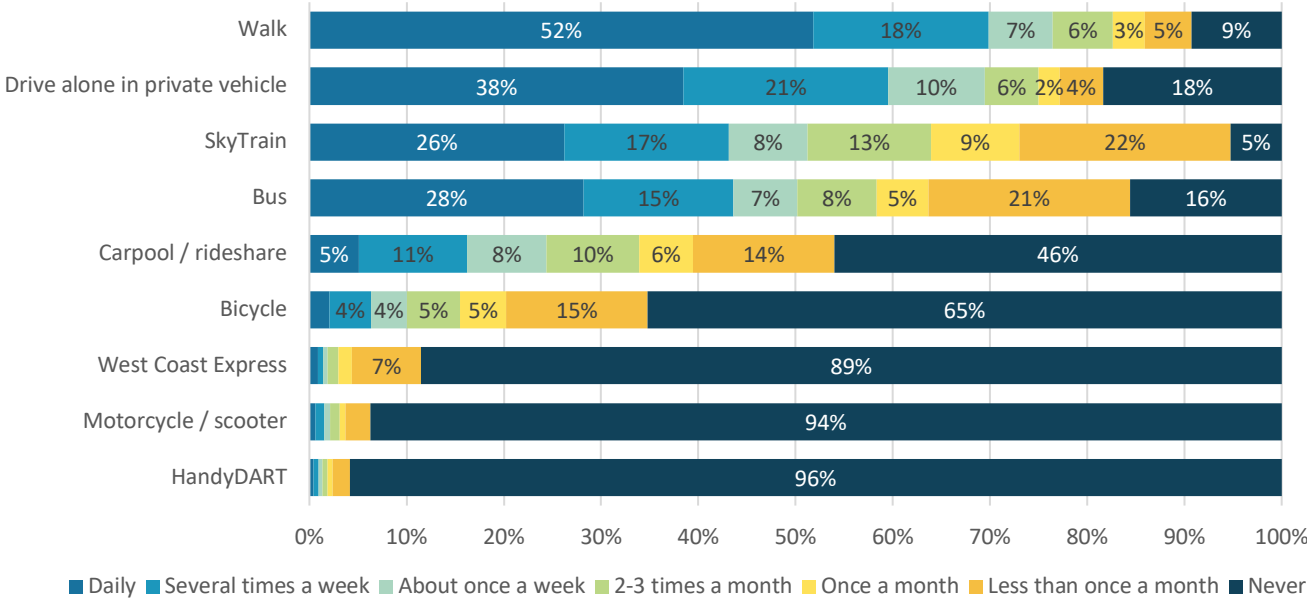
- CCTV coverage across the SkyTrain network
- Presence of Transit Security
- Lighting around SkyTrain stations

WHO WE HEARD FROM

The following is a summary of demographic information collected in the online survey.

Q: How often do you use each of the following modes of transportation?

Frequency of Transportation Mode Usage

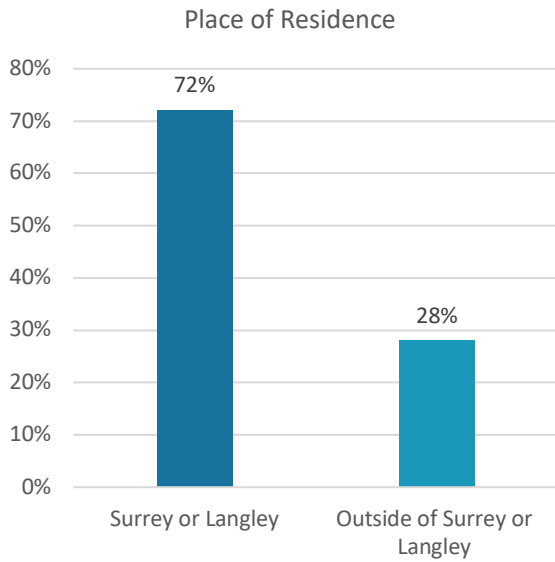


Many respondents ride the bus or take SkyTrain at least once a month.

Over two-thirds of survey respondents listed walking as a mode of transportation that they use either daily or several times a week. Driving alone in private vehicles and riding the SkyTrain were the next most frequently used modes of transportation, with over half of respondents indicating that they drive alone and just under half noting that they take SkyTrain daily or several times a week.

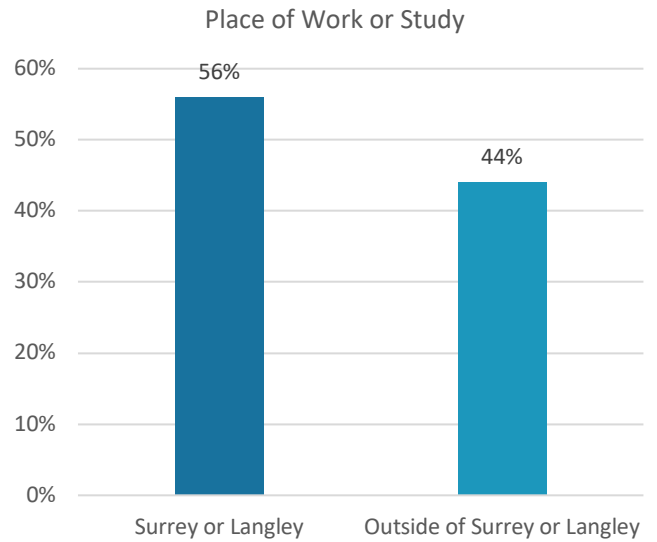
Notably, 18% of respondents never drive alone in private vehicles compared to 9% that never walk and only 5% that never ride the SkyTrain.

Q: What are the first 3 digits of your residential postal code?



Most of the respondents (72%) live in either Surrey or Langley, with the majority (54%) living in Surrey and 18% living in the City of Langley or the Township of Langley.

Q: Do you work or study in Surrey or Langley?



Just over half of the respondents (56%) either work or study in Surrey or Langley.

84% of respondents either live, work, or study in Surrey or Langley.

NEXT STEPS

The results of this public engagement will form part of the update to the Mayors' Council in January 2020.

A third round of public engagement will take place in 2020. Visit surreylangleyskytrain.ca to subscribe to the project's eNewsletter, which includes information about engagement opportunities.