

NO: R243

COUNCIL DATE: December 20, 2021

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **December 13, 2021**

FROM: **General Manager, Engineering**

FILE: **8500-01**

SUBJECT: **R6 Scott Road RapidBus Update - Engagement Results & Design Update**

RECOMMENDATION

The Engineering Department recommends that Mayor and Council:

1. Receive this report for information; and
2. Endorse the R6 RapidBus Project principles as outlined in this report.

INTENT

The intent of this report is to provide Council an update on the R6 Scott Road RapidBus project (“R6 Project”) public engagement results and seek endorsement for transit priority measures, enhanced customer amenities and landscaping along the corridor.

BACKGROUND

The existing 319 transit route on Scott Road and 72 Avenue, between Scott Road SkyTrain Station and Newton Transit Exchange, as illustrated in Appendix “I”, is the top bus route in the South of Fraser region with 7.5 million passenger boardings in 2019. Prior to the COVID-19 pandemic it was one of the fastest growing transit routes and one of the top transit corridors in the region. The 319 is also recovering quickly from the pandemic and is currently the fourth busiest bus route in the region post-COVID.

Due to the high demand, TransLink is seeking to upgrade the 319 with a higher level of service RapidBus on Scott Road. The proposed R6 Scott Road RapidBus is identified in the Mayors’ Council on Regional Transportation 10 Year Vision. RapidBus is higher order transit service that provides frequent limited stop service, with improved customer amenities that is 20% faster than existing local service.

With the importance of the R6 Scott Road line, TransLink has been actively advancing the project in collaboration with City and City of Delta staff. The establishment of the R6 Project will help build ridership and encourage smart growth along Scott Road and 72 Avenue that supports ongoing land use planning for long-term Rapid Transit on the corridor.

DISCUSSION

TransLink is proposing to implement the R6 RapidBus and an overall target for RapidBus service is a 20% travel time savings as compared to the existing 219 bus route. In order to achieve a 20% travel time savings, transit priority measures are required along the corridor. In fall 2021, TransLink conducted public engagement to gather feedback on the R6 Project and related transit priority measures. The key outcomes of the engagement were to:

- Create awareness of the R6 RapidBus service 'brand' of higher order transit service;
- Receive input on the project design through the engagement process; and
- Inform the community of the benefits of the proposed transit improvements.

An online survey was conducted from September 20 to October 8, 2021. Two virtual open houses were also held (both attended by City staff). Awareness of the public consultation period was generated through physical and digital advertising, mail-outs and media releases. All public engagement materials were presented in both English and Punjabi. Public engagement on the R6 Project was targeted towards local businesses, community groups, Newton Business Improvement Association and Kwantlen Park University students and staff. In total, 29 different organizations were specifically contacted regarding the proposed project.

Public Engagement Results

TransLink received 1,044 responses to the on-line survey. 83% of those responses were from Surrey or Delta residents. The survey responses confirm strong support for all the proposed R6 transit priority measures, customer amenities and service design.

Support from Surrey residents for the transit priority measures was particularly strong, as outlined below:

- 90% of Surrey residents surveyed support or strongly support the proposed transit priority measures on the corridor; and
- Over 60% of the people surveyed who report never riding the bus still support the transit priority measures. Support for the transit priority measures was strongest among young people, new Canadians and commuters.

Traffic modelling shows the concept transit priority measures planned for the corridor do achieve the target 20% savings in bus travel time, as current travel time of 41 minutes from Scott Road Station to Newton Exchange will be reduced to 32 minutes, allowing for increased service hours. Many survey respondents requested even more transit priority measures on the corridor.

A Copy of TransLink's public engagement results and concept plan is included in Appendix "II".

Road Safety Audit

As part of the concept design process, a Road Safety Audit was conducted to ensure the concept design included Vision Zero principles. The Road Safety Audit was led by City staff in partnership with Delta and TransLink. TransLink will use the recommendations from the Road Safety Audit into the R6 RapidBus detailed design. Recommendations will include implementation of protected left turns at key intersections along the corridor, and minor geometric changes to

support pedestrian safety (curb letdowns, adjustments to crosswalk alignments to reduce walking distances, etc.).

Scott Road Design Principles

The next phase of the process is for the City, City of Delta and TransLink to collaborate on completing the detailed design and delivering the R6 Project. As part of the engagement process transit priority measures, customer amenities and service design concepts were prepared.

The transit improvements proposed for the R6 Project include transit priority measures such as business access and transit (“BAT”) lanes, bus queue jumps, bus only signals, bus stop infill and modifications to bus stopping positions. The location of the proposed transit priority measures is shown on Appendix “III”. Customer amenities include wider sidewalks, public art, shelters, lighting and landscaping.

City staff worked closely with TransLink on developing the initial parameters for introducing transit priority on Scott Road. The transit improvements and priority measures are intended to achieve an overall improved experience for users and a 20% reduction in bus travel times along the corridor which is critical to the success of the RapidBus.

City staff have identified key design principles for the R6 Project detailed design phase related to Surrey that will help both support the delivery of the R6 RapidBus project, while protecting the interests for all users of Scott Road. The key design principles are identified as follows:

- Maintain at least two lanes for general purpose traffic in each direction on the corridor;
- Maintain minimum lane widths complying to Surrey’s Engineering Design Criteria Manual;
- Minimize impacts and limit access changes to local businesses;
- Permit RapidBus stopping in curbside lane;
- Accommodate unique median RapidBus stop at the 72 Avenue stop, as illustrated in Appendix “IV”;
- Ensure the design incorporates outcomes of the Road Safety - Vision Zero Road Safety Audit of the corridor;
- Improve street lighting and sidewalk widths in areas where required; and
- Limit tree removal, if removed, replace trees at a 2:1 ratio, and develop a corridor landscaping plan for the R6 Project.

The design of the R6 RapidBus includes an innovative in-stream bus stop on Scott Road at 72 Avenue (see Appendix “IV”). This in-stream bus stop, situated in the centre of Scott Road, reduces crossing distances for pedestrians and promotes operational efficiency for buses. There is no impact to general traffic. The in-stream bus stop requires a minor modification to access local businesses in Delta on the west side of Scott Road. TransLink, Surrey and Delta consulted with, and received support from, these local businesses for this minor access modification.

Newton Layover Design Principles

The R6 Scott Road RapidBus will operate between Scott Road Station and Newton Exchange. Newton Exchange is the second busiest bus exchange in Surrey after Surrey Central Station. TransLink currently has a bus layover facility south of Newton Exchange where buses take recovery after their trip. This bus layover facility is overcapacity and cannot accommodate the

addition of the R6 RapidBus. TransLink is working with the City to design an expanded layover facility that can accommodate the R6 and supports the long-term vision for the ultimate road network in the neighbourhood.

The expanded bus layover will be designed according to the following principles:

- Provides adequate capacity to accommodate existing layover requirements and the addition of the R6 RapidBus;
- Allows for the future construction of the ultimate road network as outlined in the Newton Town Centre Plan;
- Allows for an active transportation facility along the project boundary to promote safe walking and cycling; and
- Includes lighting to ensure safety for transit operators and local residents.

CONCLUSION

TransLink in coordination with the City and the City of Delta conducted a comprehensive public engagement process for the R6 Scott Road RapidBus. The results indicated strong public and local business support for this project. Surrey staff recommend advancing the comprehensive transit improvements consisting of transit priority measures, customer amenities and service design to detailed design subject to meeting the conditions of the key project principles. Detailed design is set to begin in January 2022, with construction set to begin in spring 2023 for service in fall 2023.

Scott Neuman, P. Eng.
General Manager, Engineering

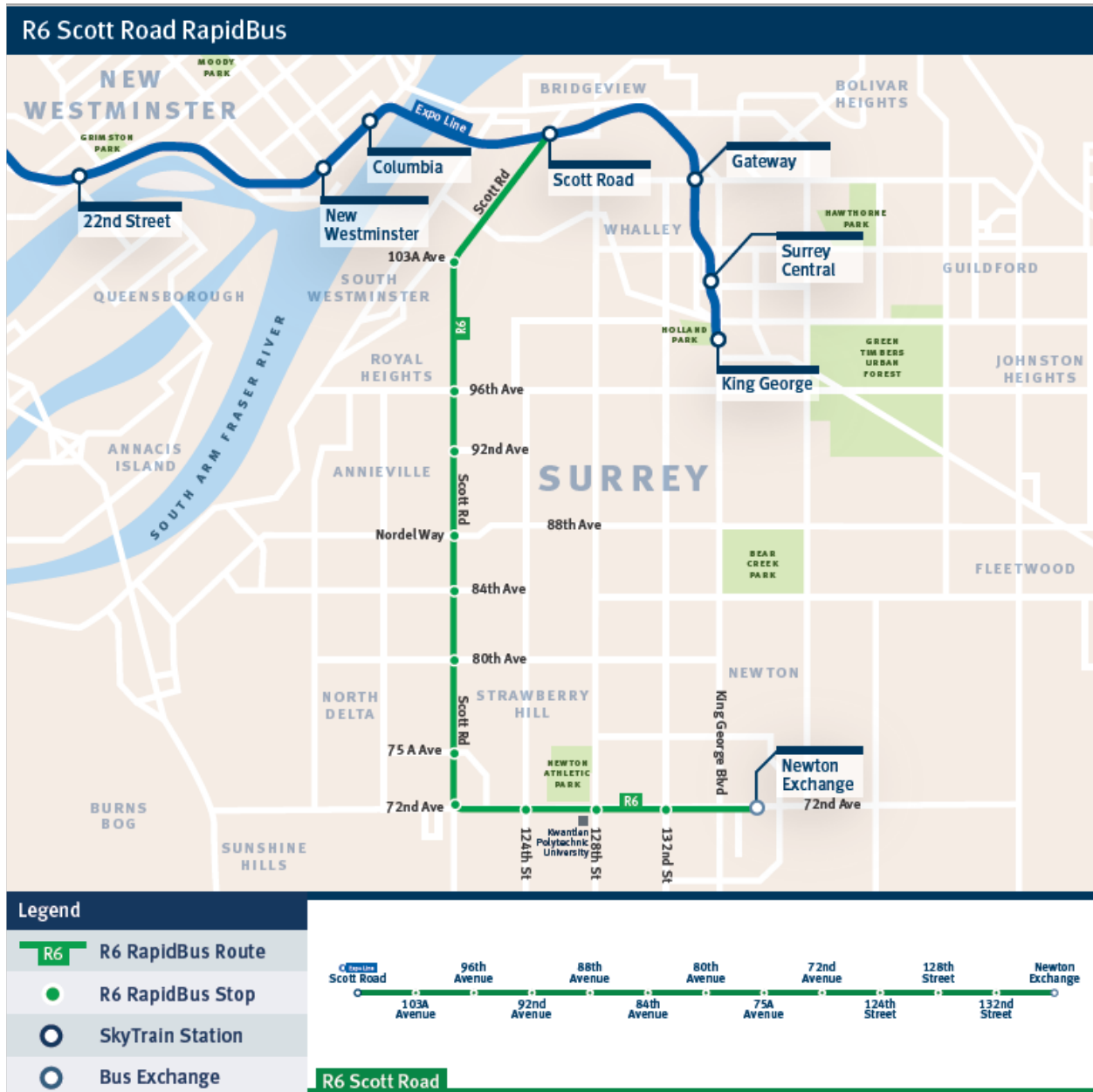
Appendix "I": Map of Alignment and Stops

Appendix "II": TransLink's R6 Scott Road Rapid Bus 100% Conceptual Design Update

Appendix "III": Map of Proposed Transit Priority Locations

Appendix "IV": Rendering 72 Avenue Stop

MAP OF ALIGNMENT AND STOPS



R6 Scott Road RapidBus 100% Concept Design update

RapidBus Expansion Program
TransLink Transportation Planning & Policy Division
Dec 1, 2021

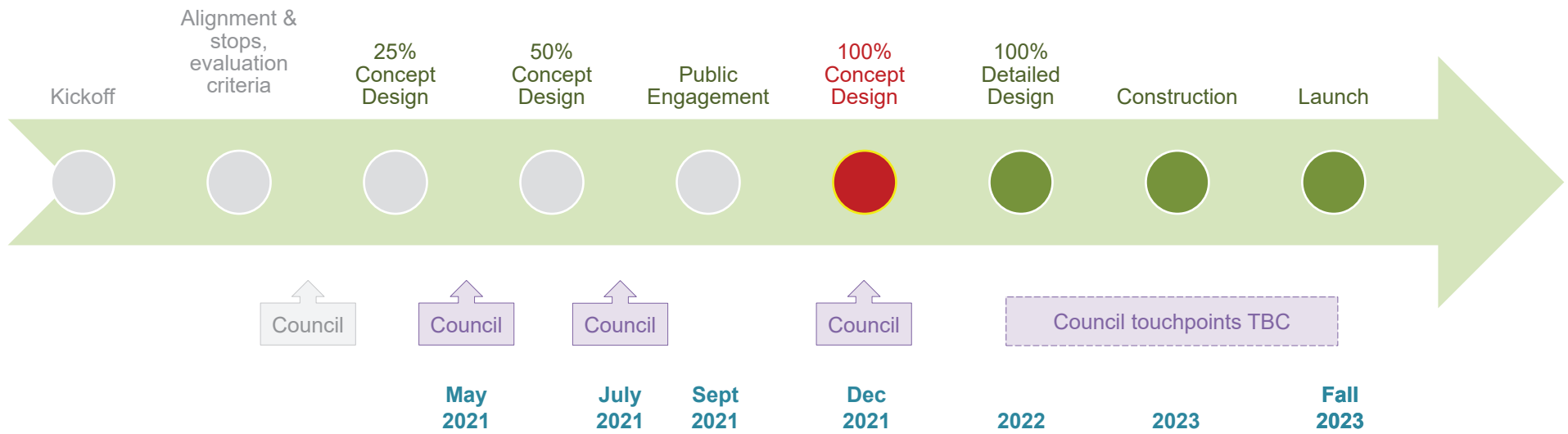
Contents

- 1 Project Schedule
- 2 Public Engagement results
- 3 Design scope
- 5 Next steps

R6 Scott Road RapidBus



Timing to launch



Public engagement: Supportive

- Broad consultation
- Strong support, including from drivers
- No warrant to change current designs



We consulted broadly

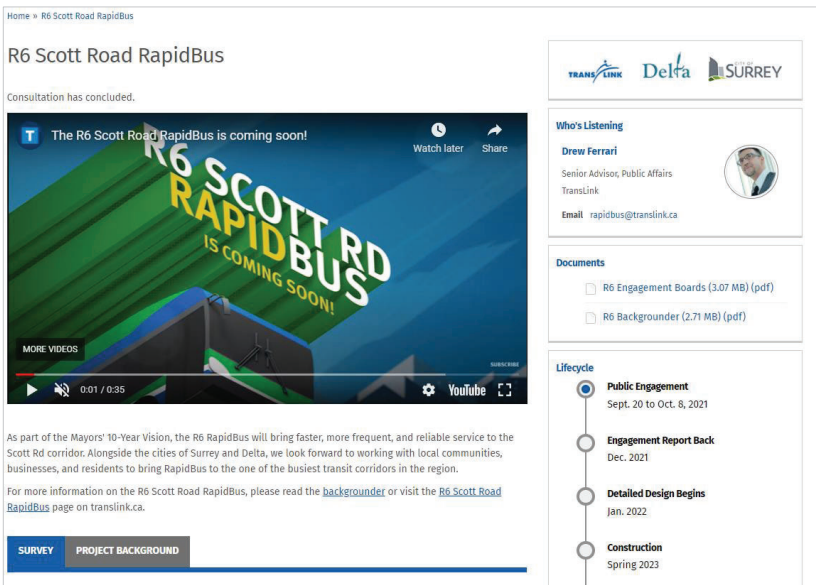
PUBLIC

- **Input**
 - Online survey Sept 20 – Oct 8
 - Online “open houses” (2)
- **Awareness**
 - Physical & digital advertising
 - Mail-outs
 - Media releases
 - English & Punjabi

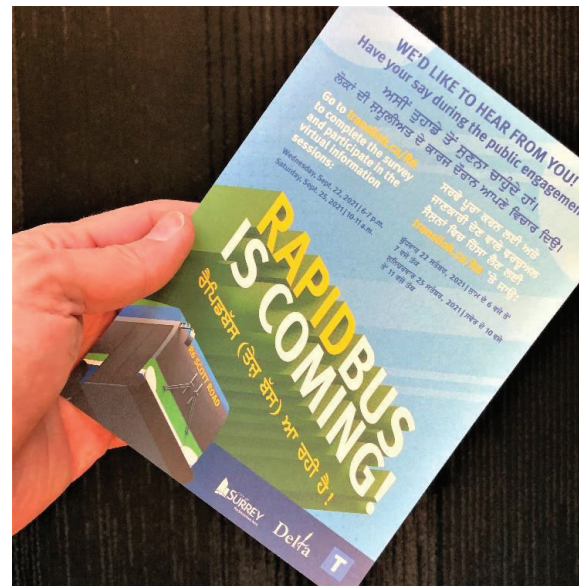
TARGETED STAKEHOLDERS

- **Who**
 - Business & community groups
 - Higher ed: KPU, SFU
 - 29 organizations
- **How**
 - 1:1 briefings
 - Tailored information packages
 - Online “open houses” (2)

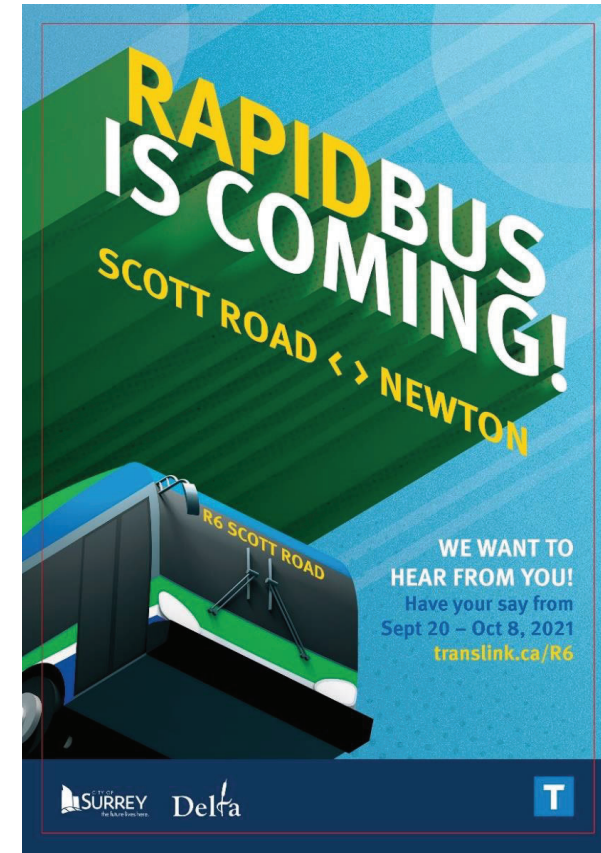
Physical and digital engagement materials



R6 engagement website



Bilingual postcard mailed to residents and businesses near the corridor



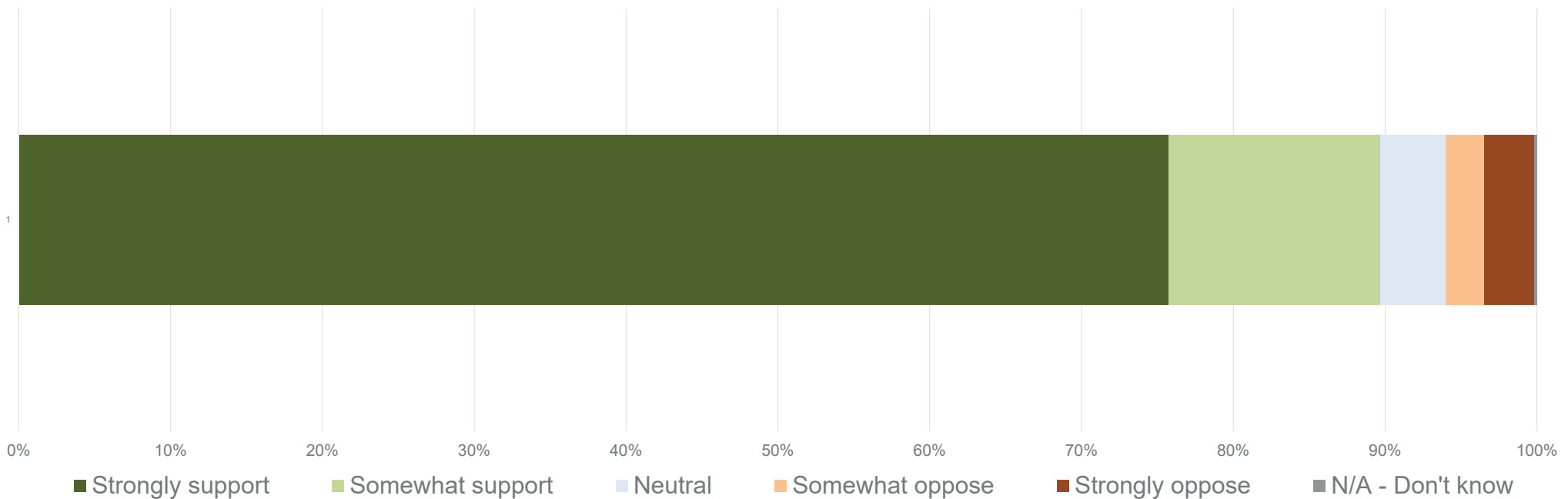
Outdoor advertising poster

Strong support for R6 concept design

- **1,044 survey responses**
 - 83% from Surrey or Delta
 - 27% speak a language other than English or French in the home
 - 17% identify as new Canadians
- **Strong support for all three areas we engaged on**
 - Customer amenities & experience
 - Wider sidewalks, public art, shelters, better lighting
 - Stop siting
 - Prefer combined local + R6 bus stops, where possible
 - Transit priority
 - Broad and strong support (see next slide for details)

R6 Transit Priority: 90% support or strongly support

Q2: What is your level of support for the proposed transit priority measures on the Scott Road corridor?

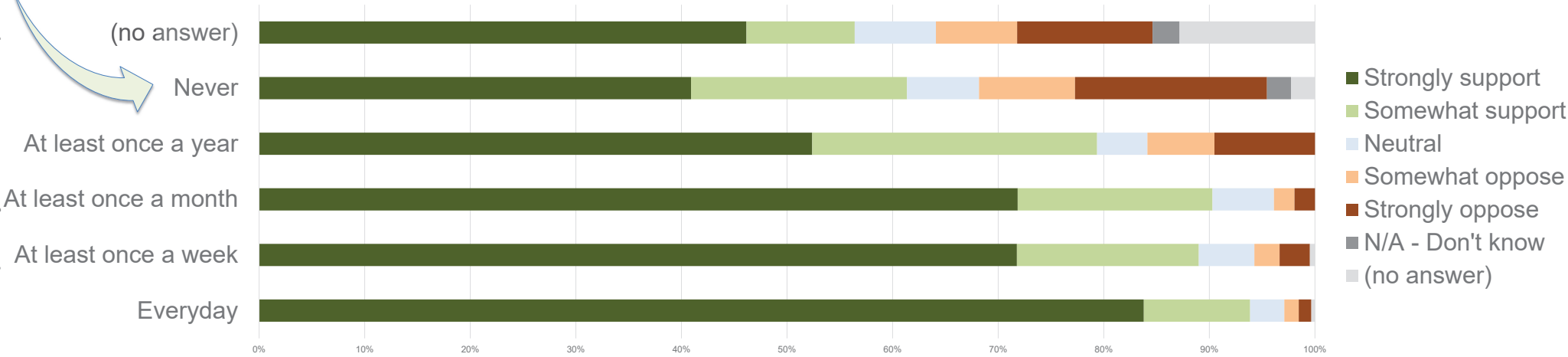


Strong support even from those who don't regularly ride the bus

- More than 60% of respondents who never ride the bus support the proposed transit priority
- Majority support holds across all age groups and identification categories.

Support for transit priority
by frequency of bus ridership

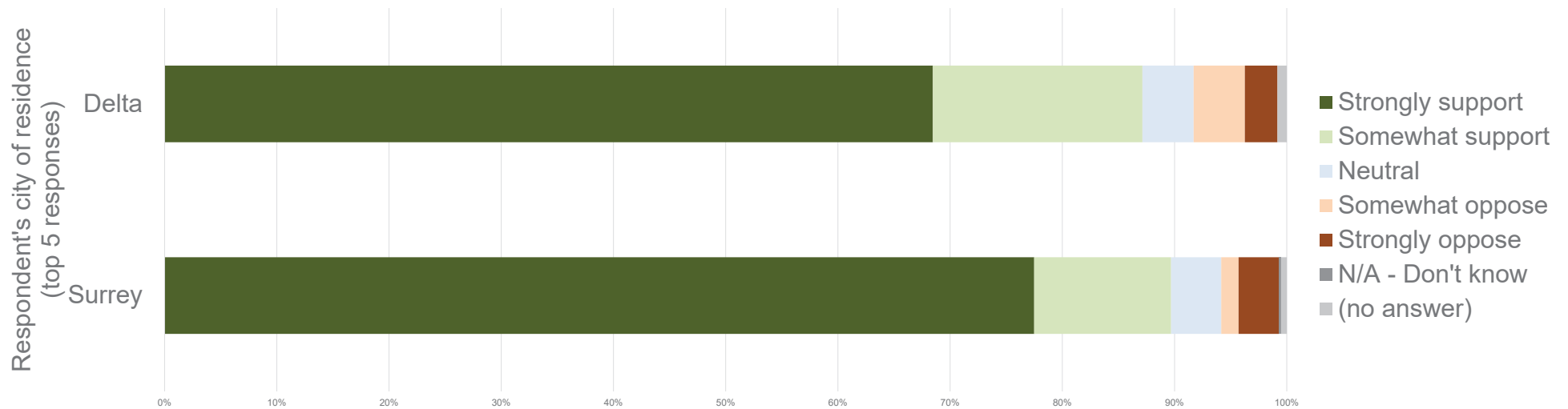
Frequency of bus ridership



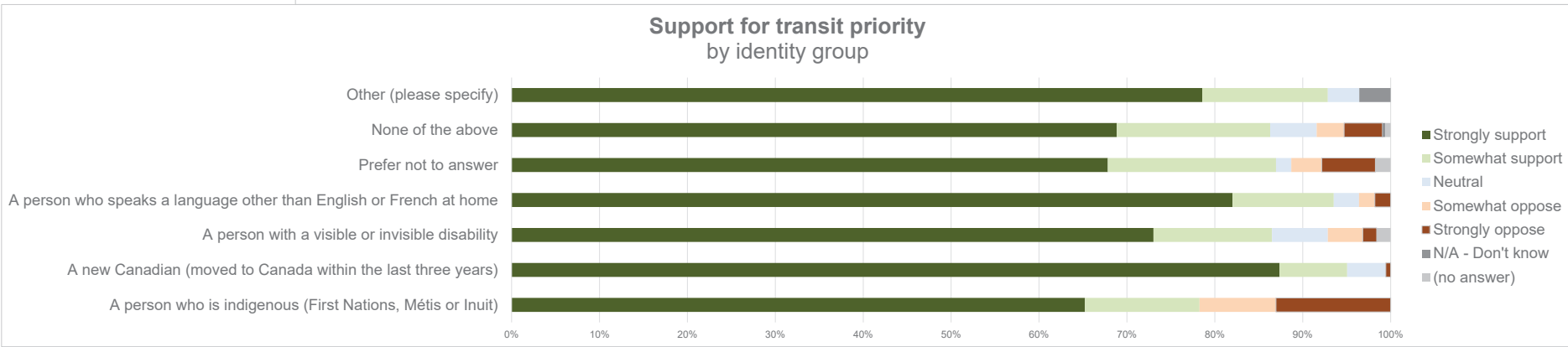
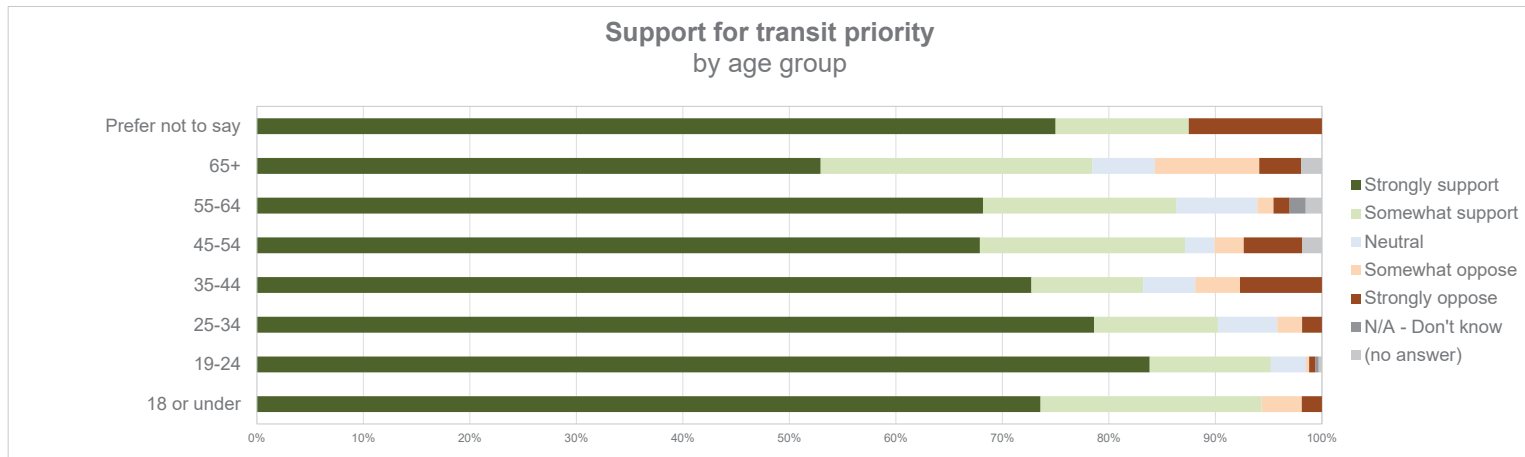
Strong support from Surrey and Delta residents

- 87% of Delta residents support or strongly support
- 90% of Surrey residents support or strongly support

Support for transit priority
by city of residence

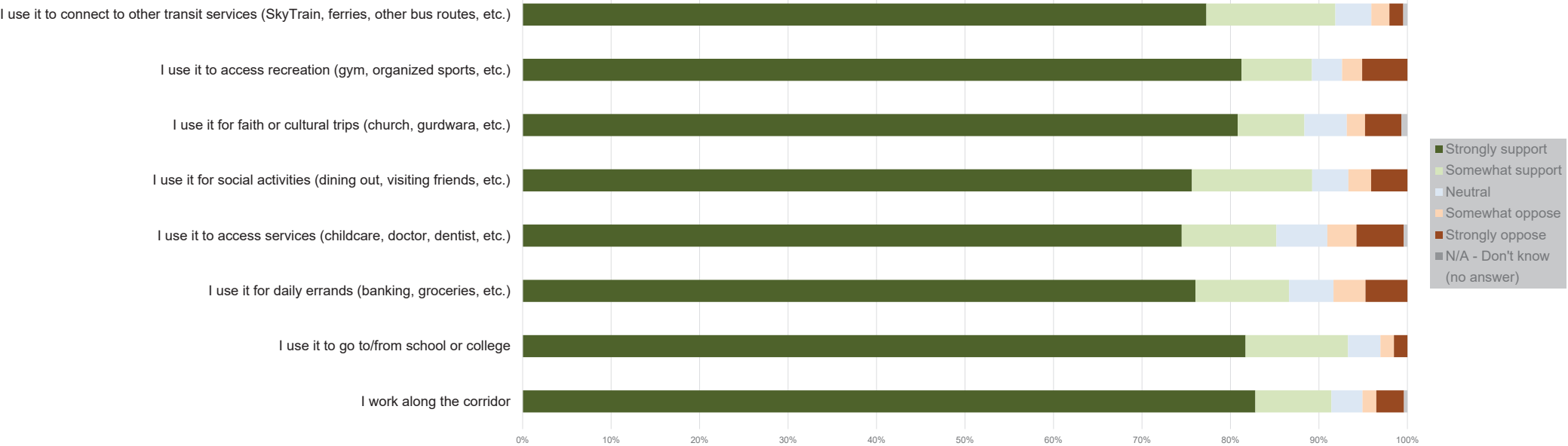


Strong support from all age and identity groups

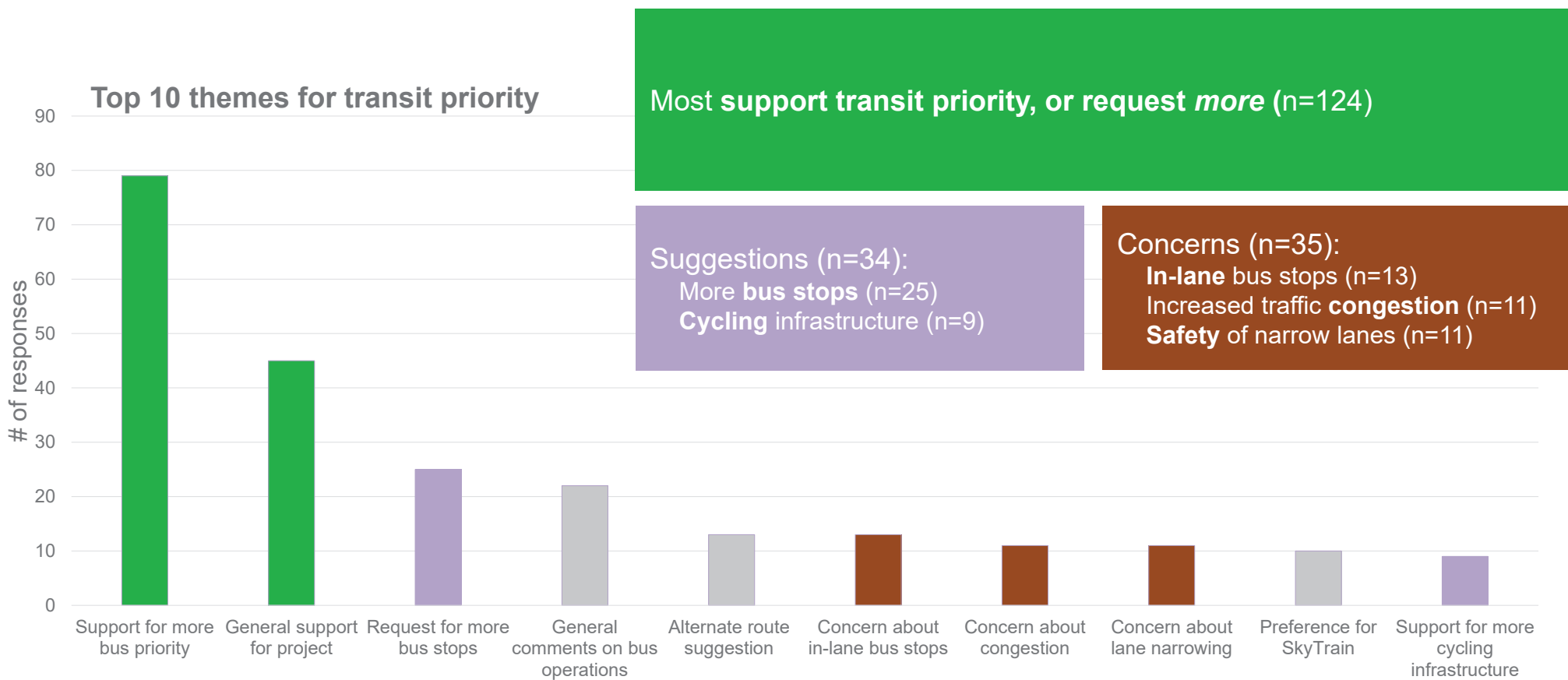


Strong support for all travel purposes

Support for Transit Priority
by purpose of travel on the corridor



We heard: Support, suggestions & concerns



Support and excitement for R6

"It took you so long to give us this. Please hurry! :-)"

"I'm glad that you are not requiring the buses to pull out of traffic."

"This is much needed.. please make it happen soon!"

"The more transit priority the better"

"I love this idea. The amount of times I've been on the 319 stuck in traffic... It's too many to count."

"This is just the start. This line should have full transit priority throughout."

"It will open up Scott rd as a more viable place to shop, go to restaurants etc. Currently it takes too long!"

"As a student, I know that this corridor is often very congested and I think that having transit priority measures will greatly help students get to and from school. I also love the accessibility measures in place."

How we're responding to public feedback

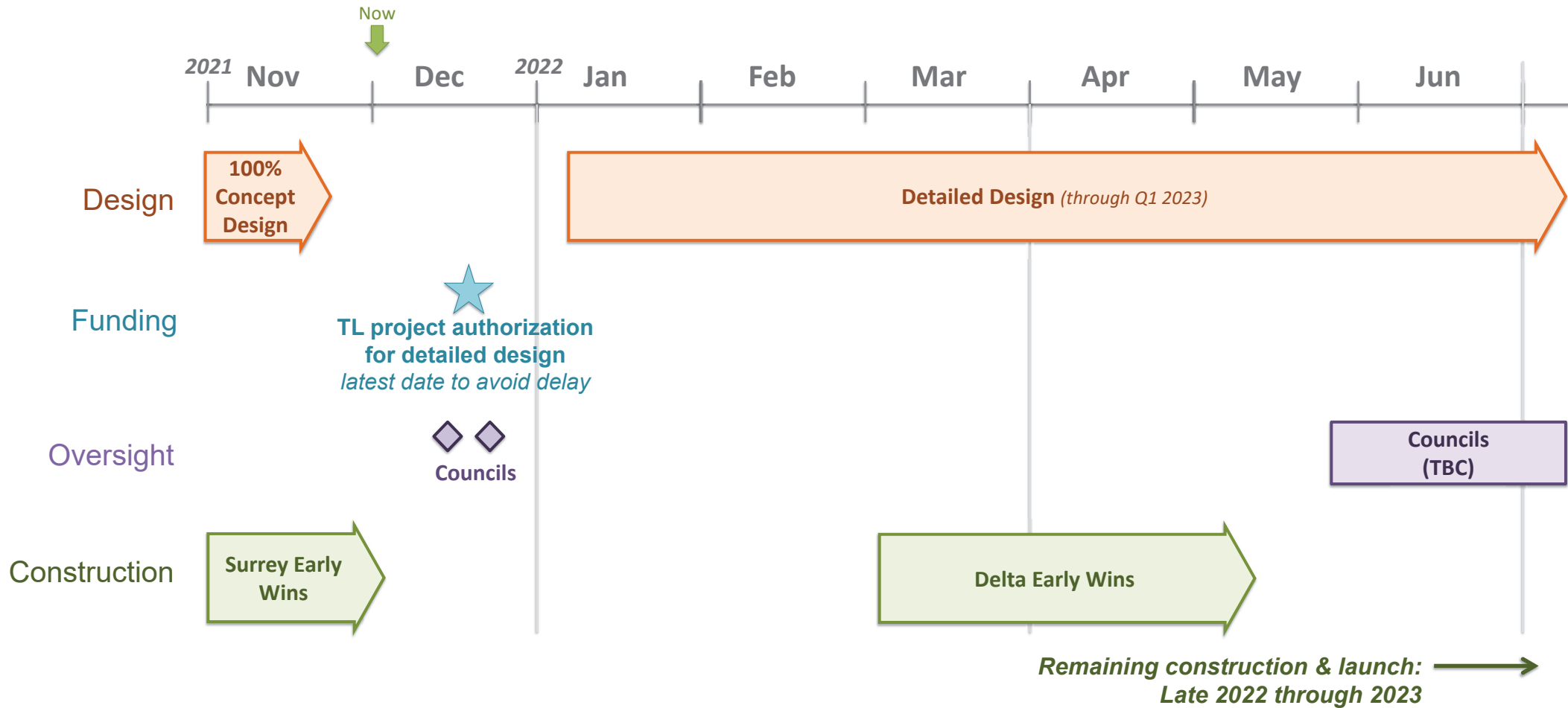
- ***Proceed with current design***
 - Warranted by strong support for project
 - More transit priority possible through future *upgrades*
- **Responding to concerns: Traffic impacts & safety**
 - Continue to *model traffic impact*, and adjust design if necessary
 - Continue with *Road Safety Audit*, incorporate recommendation as appropriate
 - Continue to maintain good *communication* throughout the project to demonstrate the benefits, and that we're taking concerns seriously

Next step: Detailed Design

- To date: Surrey, Delta & TransLink staff have been working collaboratively on planning and design
- All staff support the design concepts to advance to the Detailed Design stage
- 100% Concept Design package will include:
 - Bus stop, terminus and transit priority design
 - Corridor Landscaping Plan
 - Road Safety Audit recommendations
 - Lighting Study recommendations
- 100% Concept Design is the input into Detailed Design, which is preparation for construction
 - E.g. Finer details of physical design, tender drawings, signage & pavement marking plans, specific landscaping details, etc.

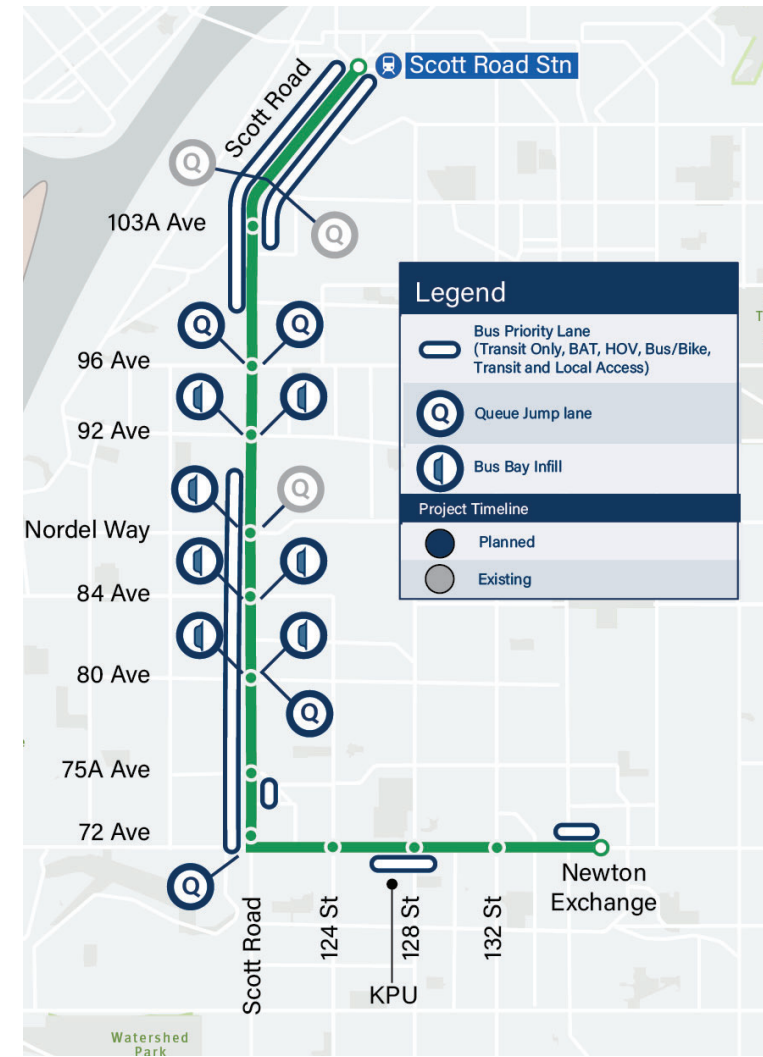


Concept Design to Detailed Design



Summary: R6 transit priority

- Overview
 - 9.4 km of bus lanes
 - 7 bus bay infills (including accessibility improvements)
 - 3 new queue jumps
- New bus lanes through narrowing or reallocation
 - Maintain two through traffic lanes throughout
 - Traffic impacts within agreed levels
 - Signal optimization throughout
- Other benefits
 - Safety, greenery, lighting improvements



R6 design reflects highest project priorities agreed by Surrey & Delta

1. Safety for all road users

- ✓ Bus priority measures improve safety for all road users
- ✓ RSA recommends reduce speed limit from 60 to 50 km/h

2. Pedestrian & cycling comfort and convenience

- ✓ Bus pullout infills improve accessibility
- ✓ Improve existing multi-use path
- ✓ Opportunities for better lighting, placemaking

3. Bus travel time savings (20% or better)

- ✓ Modelling hits this target

4. Traffic flow and goods movement

- ✓ Two general-purpose traffic through-lanes throughout
- ✓ Modeling shows impacts are within agreed limits
- ✓ Additional road capacity may improve general-purpose traffic flow in areas
- ✓ Designs accommodate trucks

5. Accesses to businesses and residences

- ✓ 2 access points converted to right-in/right-out

Early Wins

Opportunities for early construction, to bring benefits to existing bus customers before R6 launches

- Timing
 - Fall 2021/Spring 2022
- Scope
 - Bus + right turn lane (northbound 72 to 75A Ave)
 - Seven bus bay infills, including accessibility improvements
- Roles
 - Funded by TransLink
 - Delivered by Surrey and Delta

Remaining R6 construction: 2023



Corridor landscaping plan

Councils requested:

- Enhance trees on the corridor

R6 project commitment:

- Limit tree removal
- If removed, replace 2:1
- Develop **Corridor Landscaping Plan** for R6 corridor

Corridor Landscaping Plan

- Scope
 - *R6 opportunities*: Identify opportunities for additional trees/greenery, delivered with R6
 - *Future opportunities*: Provide a template for future trees/greenery on the corridor
 - Consider municipal aspirations for future road cross-section
- Timing
 - *R6 opportunities*: December 2021
 - *Future opportunities*: Dec/Jan



Road Safety Audit (RSA)

Analysis of road design and crash statistics

- Led by Surrey, input from Delta & TransLink

How R6 designs will respond:

- Recommendations will be incorporated in R6 Detailed Design
- Anticipated recommendations:
 - Speed limit reduction
 - Implementing protected lefts
 - Minor geometric changes

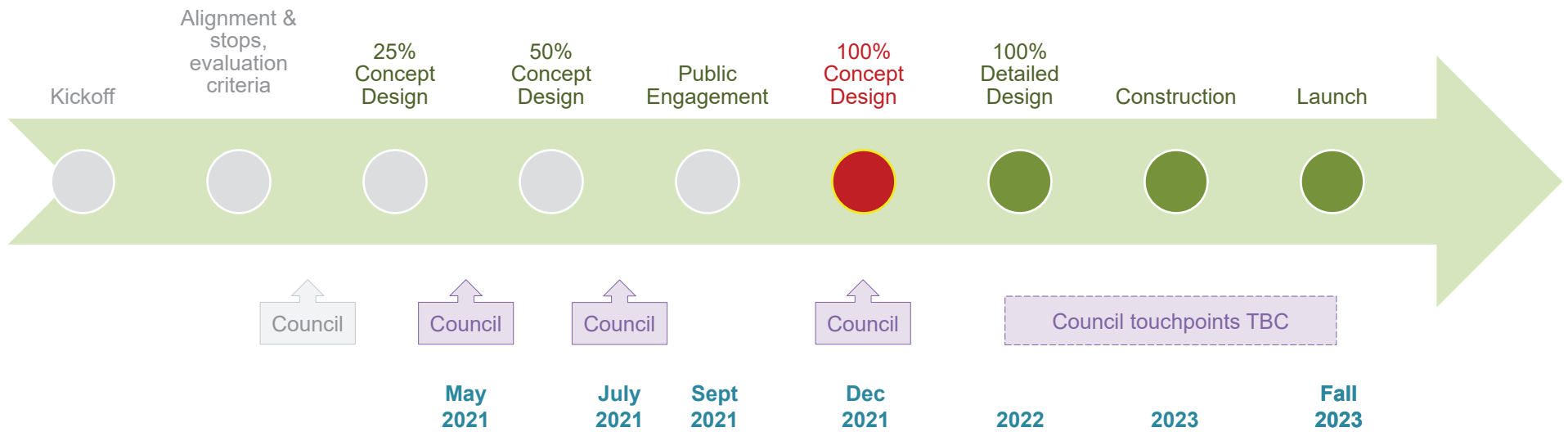
Lighting Study to improve safety and comfort

Scope: Survey lighting at stops, identify where lighting doesn't meet municipal standards, and recommend improvements

Recommended upgrades to be developed in collaboration with Delta/Surrey staff and incorporated in Detailed Design



Next steps

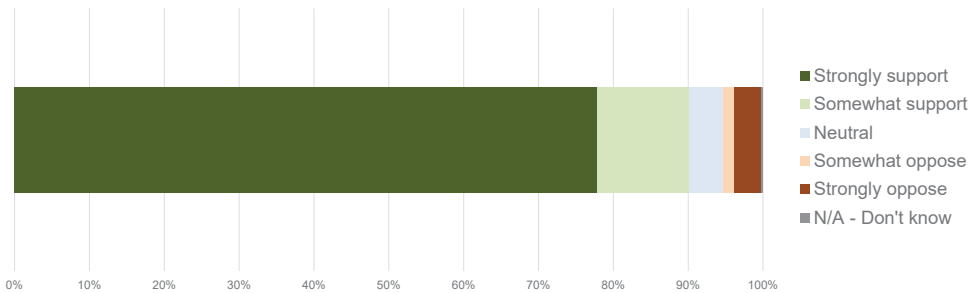


City-specific survey analysis

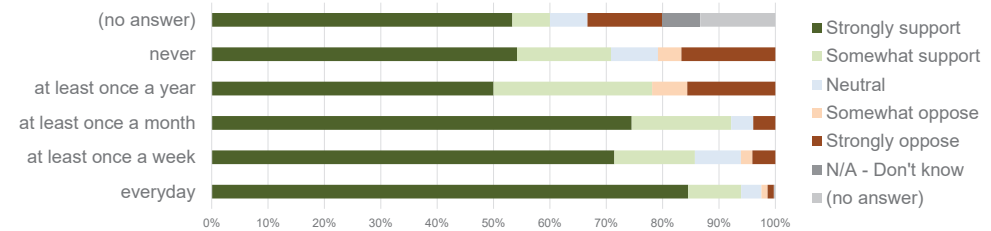


Surrey-specific engagement results

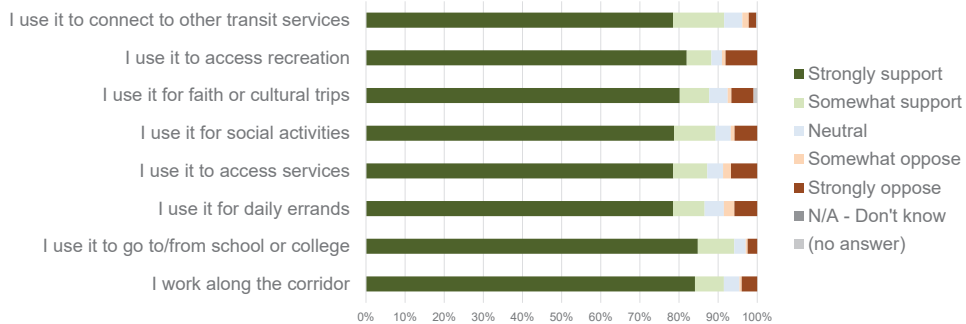
Surrey Residents: Support for transit priority



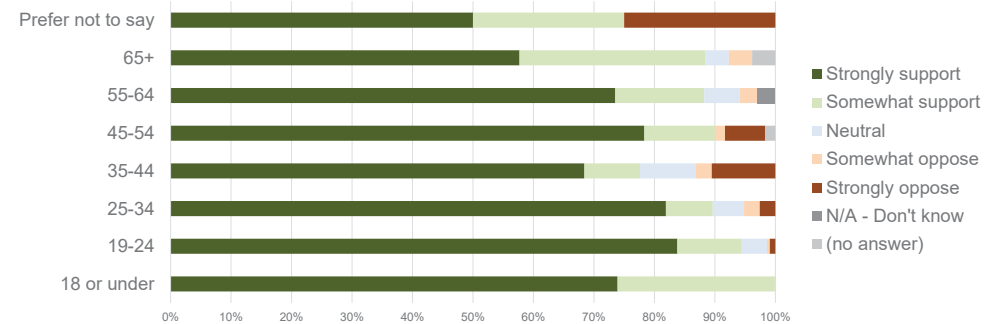
Surrey Residents: Support for transit priority by frequency of bus ridership



Surrey Residents: Support for transit priority by travel purpose

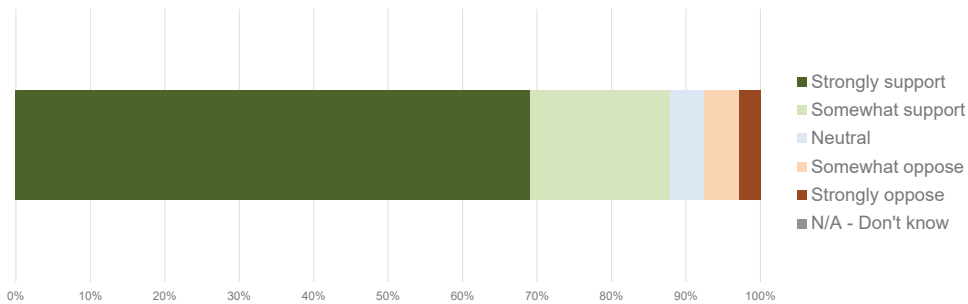


Surrey Residents: Support for transit priority by age group

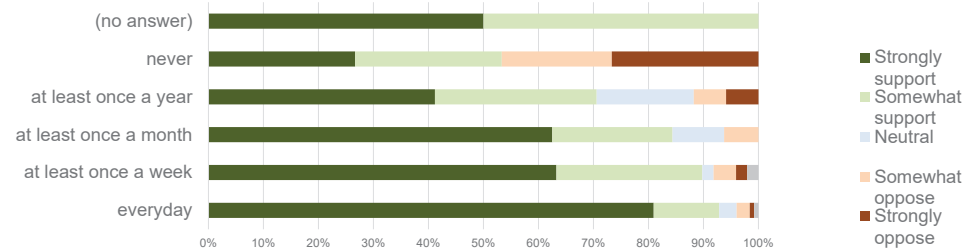


Delta-specific engagement results

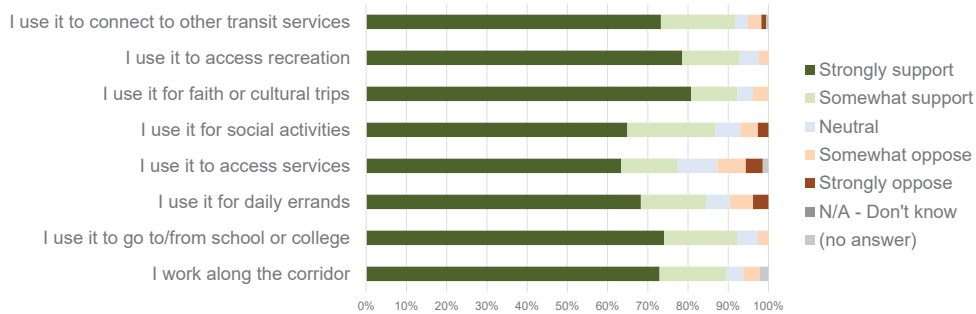
Delta Residents: Support for transit priority



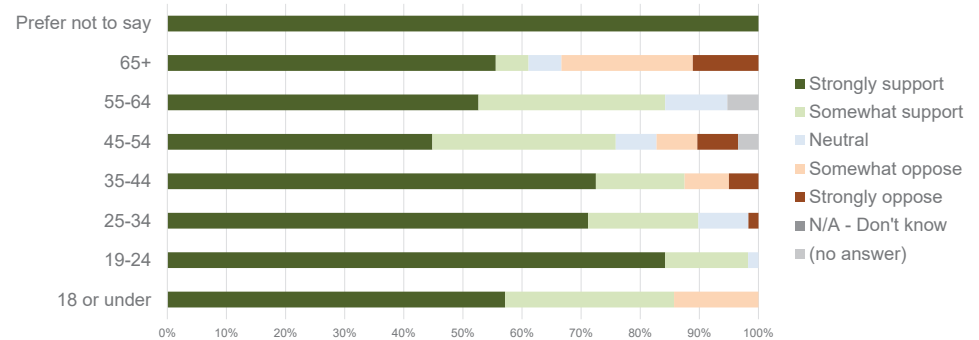
Delta Residents: Support for transit priority by frequency of bus ridership



Delta Residents: Support for transit priority by travel purpose



Delta Residents: Support for transit priority by age group



MAP OF PROPOSED TRANSIT PRIORITY LOCATIONS



Rendering of 72 Avenue Stop

