

# R6 RapidBus Scott Road-Newton





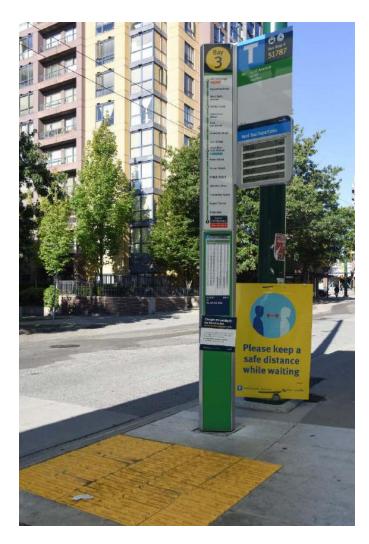
## **Background on the R6 RapidBus Project**

## In this document:

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### What is RapidBus?

- R6 RapidBus customers will enjoy a service that's **at least 20% faster** than local bus service. Time-savings will be achieved by introducing bus priority on roadways, such as dedicated bus lanes, signal priority, street redesigns, all-door boarding, and less frequent stops.
- There are already **five RapidBus routes** across the region. R1 serves customers along the King George corridor in Surrey, R2 along Marine Dr from West Vancouver, to North Vancouver, R3 along Lougheed Hwy from Maple Ridge to Coquitlam, R4 along 41st Ave in Vancouver and R5 along Hastings St in Vancouver.
- RapidBus routes run **at least every 10-minutes** during peak times and 15-minutes during off-peak. They're available every day of the week from 6 a.m. to midnight. Stops are spaced approximately one kilometre apart and customers can board through all doors.
- RapidBus features **better customer amenities** such as more sheltered stops, real time information and cushier seats! Where permitted, customers also have accessibility features, such as text-to-audio functionality of the digital bus-arrival information and tactile pads.









### What is the R6 Scott Road RapidBus?

#### **Corridor context**

- Scott Rd is the busiest transit corridor south of the Fraser and the second fastest growing route in the region. The current 319 route was the 4th busiest bus route in Metro Vancouver in 2020.
- We know congestion is increasing in our region. A roundtrip on the 319 was 10% slower in 2019 than it was in 2015.
- Buses along Scott Rd. compromise of 1-2% of all vehicles on the corridor yet move 24-42% of the people.



#### **Route selection**

The route was carefully selected to ensure they met demand, provide convenient access to key destinations and make convenient connections to other busses along the corridor.

This route connects Surrey and Delta residents to the SkyTrain, to commercial areas on Scott Road and in Newton, and to schools such as Kwantlen Polytechnic University.

#### **Stop selection**

The R6 is a limited-stop service, making it faster than local services. The R6 will stop about every 800 meters to reduce travel times. That means that destinations on the corridor are no more than a five-minute walk from an R6 stop.



Route 319 will remain in place to to provide frequent local service and will benefit from the street changes we're making and experience increased travel times. The 12 other routes that run on a portion of the corridor will also benefit from proposed transit priority measures.

#### **Connecting between RapidBus and other transit services**

RapidBus will connect directly with many other transit services at Scott Road SkyTrain station and at Newton Exchange, as well as at shared or nearby stops in between.

The proposed R6 RapidBus route will travel straight down Scott Road to 72 Avenue, instead of entering Scottsdale Exchange. This will provide a more direct service, and faster and more reliable travel times. Customers can still connect easily to other local routes at other shared stops on Scott Road and 72nd Avenue.

By stopping at 72nd and Scott Road instead of Scottsdale Exchange, RapidBus will also provide convenient access to major destinations close to that intersection, such as the Guru Nanak Gurdwara or the Scottsdale Centre mall as well as Strawberry Hill.



## **Guiding Principles**

Scott Road is a busy corridor, with lots of people using it in different ways. This includes walking, rolling, biking, driving, and riding. The R6 will also be making changes to the street to support:

## Safety for all road users

We want to improve safety on the corridor for all road users. This means adding new pedestrian crosswalks, supporting safer driving speeds, and making intersections safer.

## Pedestrian & cycling comfort and convenience

Where possible, we're making walking and cycling better. This means new paths, new crosswalks, and improved sidewalks and lighting.

## **Bus travel time savings**

To make the RapidBus faster, we're making changes to the streets to improve travel times. This includes bus lanes, queue jumps, and in-lane bus stops.



#### Traffic flow and goods movement

Scott Road is an important driving connection for personal vehicles, for goods movement and industrial vehicles. The street designs we've developed present minimal impact to drivers. In some cases, we even improve traffic flow and travel times for people in motor vehicles.

#### Access to businesses and residences

Scott Road is an important commercial corridor, with accesses to businesses throughout. While some driveways may need to be adjusted, the majority of property accesses are unchanged.

## **Safety**

Safety is a critical priority on this corridor. Some of the highest traffic-related injury locations in Surrey and Delta are in and around Scott Road and 72nd Avenue. The R6 RapidBus corridor is being designed to improve safety and security for all road users.

#### Here are some of the key safety features we're implementing to reduce traffic related injuries:

- New signalized pedestrian crossing on Scott Road between 72 and 75a Ave.
- New signalized pedestrian crossing on 72 Ave. in front of KPU (Kwantlen Polytechnic University)
- Improved lighting around bus stops
- Reducing current extra-wide lane widths to standard widths to encourage safer driving
- Relocating the northbound bike lane on Scott Rd between 104 Ave and Old Yale Road to a new off-street multi-use path, connecting with the existing off-street path

R6 design refinements will also be informed by the outcome of a Road Safety Audit currently underway for Scott Road, led by the City of Surrey as part of their Vision Zero strategy, with participation from the City of Delta and TransLink.

#### **Transit Priority**

We're making changes along Scott Road and 72 Avenue to make the bus faster and more reliable, to improve safety for all road users, and support traffic flow. Most transit priority can be summed up primarily into two new features: bus lanes and in-lane stops.





R6 transit priority. Note: All R6 stops will be accessible for people using mobility devices.

R6 transit priority measures can also be used by other buses on the corridor.

#### **Bus lanes**

Bus lanes make journeys faster and more reliable for people travelling by bus. However, when proposing a new bus lane, it's important to consider other types of traffic also.

In the proposed R6 designs, where there are curbside bus lanes, in most cases they can also be used by any vehicles making right turns. This maintains traffic flow and access to businesses on the corridor.

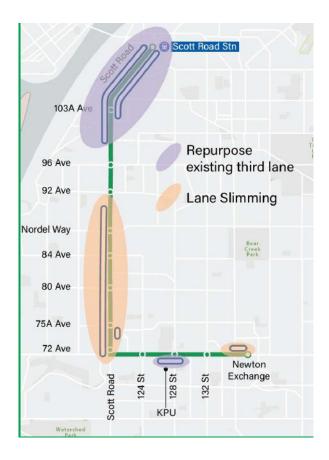
Importantly, throughout the corridor, we've maintained two lanes of traffic in each direction for cars.

There are two ways we've done this while still adding a bus lane:

- **Repurposing an existing lane,** where there are now three lanes in the same direction
- **Slimming existing lanes** to make space for a new bus lane

At certain pinch points, we'll widen the road slightly to make sure the bus lanes are continuous.





#### Repurposing an existing third lane to accommodate a new bus lane

Where there are already three lanes in the same direction for general-purpose traffic, and peak traffic volumes could be accommodated in two lanes, the curb lane can be designated for buses and right-turning vehicles. This helps create faster and more reliable journeys for people travelling by bus, while maintaining traffic flow and business access.

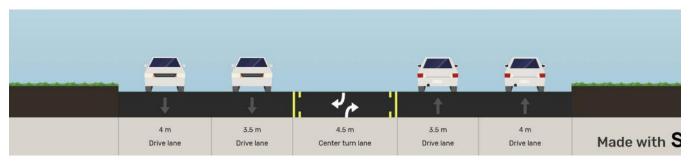
An example of this approach is described in the "Scott Road at Old Yale Road" section, below.

#### Lane slimming to accommodate a new bus lane

Currently along Scott Road between 75A and 92 Avenue, lanes are wider than regional road standards. The lanes will be narrowed to standard road widths, to provide space for an additional southbound lane for buses and right turning vehicles. This will mean a new lane for cars to turn right, increasing capacity and making traffic flow better.

Lane slimming can provide enough space for one bus lane only, which will be in the southbound direction as that is where buses currently experience more delay. However, to improve travel times and reliability for northbound bus travelers also, short bus lanes called "queue jumps" will be added at the northbound approaches to intersections, where space permits.





Current



**Proposed design** 

This approach is being used on Scott Road from 75A Avenue to 92 Avenue – see "Scott Road at Nordel Way" section below for an example.

#### In-lane bus stop

An in-lane stop is where the bus doesn't have to pull out of traffic to pick up and drop off customers. Without an in-lane stop, when buses along Scott Road need to merge in and out of traffic to serve a stop it causes delay to all our bus customers. In-lane stops also create more sidewalk space for buses to deploy ramps, meaning all R6 stops will be accessible.

## **Trees & Landscaping**

The RapidBus project will include landscaping elements along the Scott Road and 72 Avenue corridor. This includes identifying locations for additional trees, shrubs or other greenery as part of R6 construction. In the case where a tree has to be removed for construction, two trees will be planted to replace it. These are typically planted in the central median of the road, or in the planting strips beside the sidewalk.

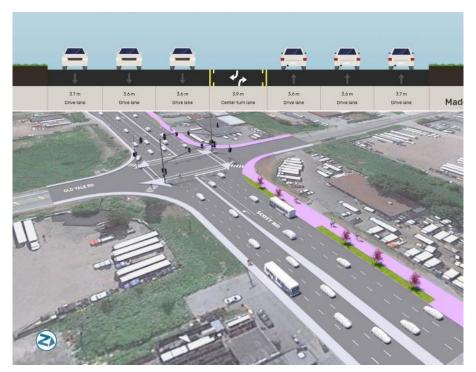
An overall corridor greening plan is being developed by Surrey, Delta and TransLink, which will guide tree planting and landscaping for this project as well as future municipal projects on the corridor

## **Specific location designs**

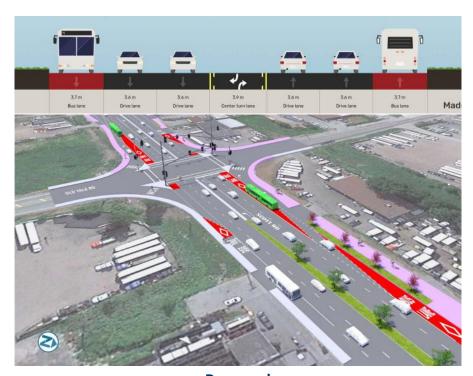
This section provides more detail on the proposed designs at specific locations on the R6 corridor.

#### **Scott Road at Old Yale Road**

The area of Scott Road at Old Yale Road is an example of where a bus lane can be accommodated by repurposing an existing third lane (see "Repurposing an existing third lane to accommodate a bus lane", above).



**Current** 



**Proposed** 

KEY: Red = Bus lanes. Pink = Shared pedestrian and cycle path.

## **Scott Road at Nordel Way**

The intersection of Scott Road and Nordel Way is an example of where a new bus lane can be accommodated by slimming down existing travel lanes that are wider than standard (see "Lane slimming to accommodate a new bus lane", above).



**Current** 



**Proposed design** 

#### **Scott Road at 72 Avenue**

On Scott Road and 72 Avenue, the R6 RapidBus bus lane will run in the centre of the road, and southbound customers will board from an island-style stop. A centre-running bus lane here will help R6 Rapidbus to make the southbound left turn from Scott Road to 72 Avenue efficiently.

The centre -stop island will provide a large, comfortable and safe waiting area with more space for queuing, a bigger shelter, and railings for added safety and comfort. New signalized crosswalks will provide easy and safe access from both sides of Scott Road, and will also make crossing Scott Road safer and more convenient.

We're also improving traffic flow and safety. We're changing the intersection to include left-only signal phases s to reduce left-turn collisions. The southbound left turn bay will also be lengthened to improve traffic flow and safety.

Centre-running bus lanes and centre-stops are used across North America to provide faster transit and comfortable waiting environments, including in the following cities: Washington, DC, Seattle, Washington; San Francisco, California; and many others. In fact, this design was previously used in Metro Vancouver: before it was replaced by the Canada Line, the 98 B-Line used centre-running bus lanes and centre-stops in Richmond



Centre-running stop for the 98 B-Line in Richmond, early 2000s.









**Current** Proposed

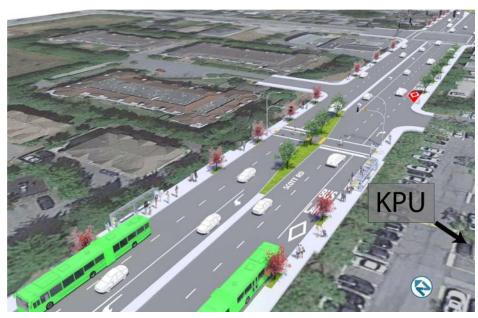
#### **Kwantlen Polytechnic University**

At Kwantlen Polytechnic University we're adding an eastbound bus lane by repurposing an existing third lane, creating a new stop closer to the "front door" of the KPU campus, and widening the road to make a queue jump.

The stop will be located on 72 Avenue between 126 and 128 Streets. The location was chosen to provide good accessibility to KPU, to other bus routes on 128 Street, and to Princess Margaret Secondary School

A new crosswalk will make it easy to reach the bus stop on the north side, and improve pedestrian safety.





**Proposed design**