

## BRIDGEPORT RD




### Corridor Description

- This corridor connects south Vancouver with Richmond via the Knight Street Bridge.
- Three of the routes on this corridor (405, 407, 430) serve the Knight Street-Marine Drive bus exchange in South Vancouver. Route 430 connects Bridgeport Station on the Canada Line with Metrotown Station on the Expo Line.
- Destinations along the corridor are a combination of commercial and light industrial.


### Quick Facts

<b>Length</b>	6.3 km
<b>Subregions</b>	Southwest, Vancouver/ UBC
<b>Primary Routes</b>	407, 430
<b>All Routes</b>	311, 351, 352, 354, 403, 405, 407, 412, 430, 601, 602, 603, 604, 620, 900


Note: Corridor ranked #40 for person-delay per km in Fall 2021. Profile area includes extensions on Great Canadian Way and the Knight Street Bridge. Ridership is reported for the location with the most cumulative passengers on-board the bus throughout the day.




**57**  
Maximum hourly bus trips per direction




**180**  
Person-hours of delay per day



**2,700**  
Total households (300/km<sup>2</sup> density)



**29%**  
Low income households




**7%**  
Zero vehicle households

**6,700**  
Total ridership (daily load in one direction)

**13**  
Bus-hours of delay per day

**Demographics within 400m of corridor**



**Bridgeport Rd, continued**

**Corridor Significance**

- **Bridgeport Rd is a major transit corridor.** The 430 and 407 buses, which are the primary routes serving the corridor, have over 7,000 daily boardings. A bus for these routes arrives every 5 to 6 minutes along Bridgeport Rd and across the Knight Street bridge. Up to two-thirds of people travelling on Bridgeport Rd near Great Canadian Way are on buses during the morning rush hours.

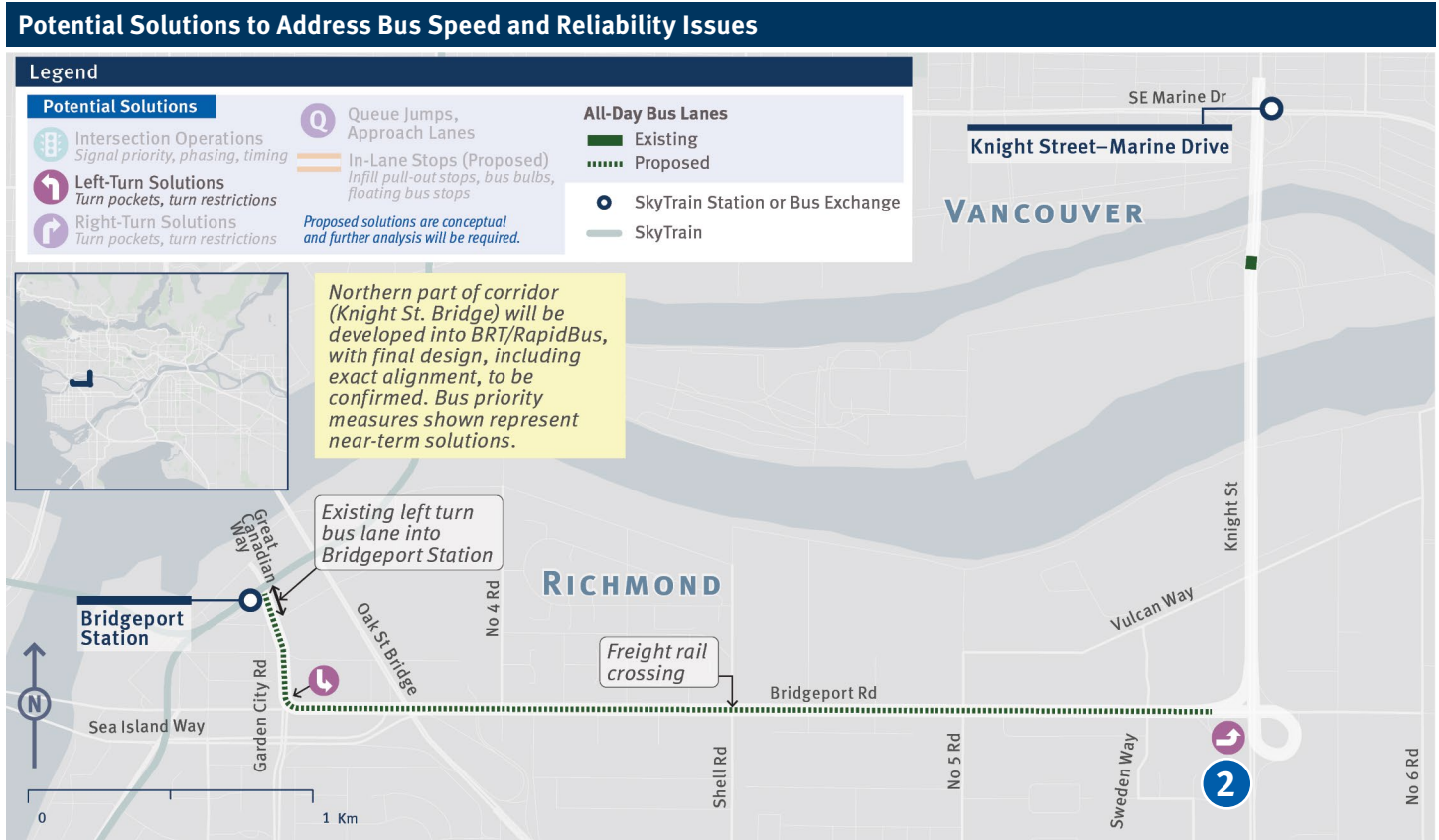
**Key Challenges for Bus Speed & Reliability**

- Narrow corridor adjacent to a mix of industrial and commercial businesses, with numerous vehicles entering and exiting the roadway from these land uses.
- Two travel lanes along the length of the roadway makes it challenging to have dedicated turning lanes.

**Location of Common Causes of Bus Delay**

Issue	Location(s)
Motorists turning left (or other delay from left-turns)	<ul style="list-style-type: none"> <li>• EB Bridgeport Rd at Great Canadian Way</li> <li>• EB Bridgeport Rd at Sweden Way</li> </ul>
Motorists turning right (or other delay from right-turns)	<ul style="list-style-type: none"> <li>• EB Bridgeport Rd at Sweden Way</li> <li>• WB Bridgeport Rd at No 5 Rd</li> </ul>
Roadway congestion	<ul style="list-style-type: none"> <li>• SB Great Canadian Way from Van Horne Way to Bridgeport Rd</li> <li>• EB Bridgeport Rd at Oak St Bridge</li> <li>• WB Bridgeport Rd from McLeod Ave to No 4 Rd</li> <li>• EB Bridgeport Rd at Shell Rd</li> <li>• EB/WB Bridgeport Rd No 5 Rd</li> <li>• EB/WB Bridgeport Rd at Sweden Way</li> <li>• NB Knight St Bridge from Bridgeport Rd to Kent Ave</li> <li>• SB Knight St Bridge at Kent Ave</li> </ul>
Closely spaced driveways or other roadways	<ul style="list-style-type: none"> <li>• WB Bridgeport Rd from McLeod Ave to No 4 Rd</li> <li>• EB Bridgeport Rd at Shell Rd</li> <li>• EB/WB Bridgeport Rd No 5 Rd</li> <li>• EB Bridgeport Rd at Sweden Way</li> <li>• NB Great Canadian Way from Bridgeport Rd to Van Horne Way</li> </ul>
Re-entering traffic from bus stops	<ul style="list-style-type: none"> <li>• NB/SB Knight St Bridge</li> </ul>
Location of bus stops	<ul style="list-style-type: none"> <li>• EB Bridgeport Rd at Oak St Bridge</li> <li>• WB Bridgeport Rd at MacLeod Ave</li> </ul>
Short spacing between bus stops	<ul style="list-style-type: none"> <li>• EB Bridgeport Rd at Sweden Way</li> </ul>
Uncoordinated traffic signals	<ul style="list-style-type: none"> <li>• EB Bridgeport Rd at Great Canadian Way</li> <li>• EB Bridgeport Rd at Oak St Bridge</li> <li>• WB Bridgeport Rd from No 4 Rd to Great Canadian Way</li> </ul>

Bridgeport Rd, continued



Key Opportunities



21

Signalized intersections along corridor



60+

Bus stops below spacing guidelines (50% of total)



8 km

New bus lanes (directional)

Northern part of corridor (Knight St. Bridge) will be developed into BRT/RapidBus, with final design, including exact alignment, to be confirmed.

Bus priority measures shown represent near-term solutions.

Map Callouts

- 1 A SB left turn lane onto Bridgeport is already funded and designed, with likely construction by end of 2024.
- 2 Studying improvements that would provide eastbound/northbound buses with more direct access to the Knight Street Bridge.

Corridor-Wide Opportunities

- At the 21 signalized intersections, solutions such as signal priority, signal coordination, or timing/phasing adjustments can help reduce delay.
- At the approximately 60 bus stops that are below spacing guidelines (300m) thoughtful removal or relocation could achieve more consistent spacing while maintaining access.
- Up to 8 km of new bus lanes could be added. Different types of lanes are appropriate in different contexts.

Further analysis is needed for all opportunities

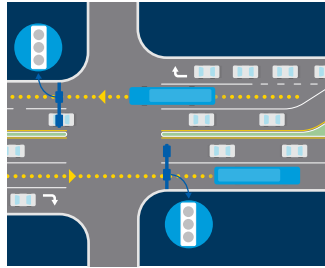
**Bridgeport Rd, continued**

**Considerations for Key Solutions**



**LEFT- AND RIGHT-TURN SOLUTIONS**

Where right-of-way permits, turn solutions include dedicated turn pockets. Where right-of-way is limited, solutions include turn restrictions for general traffic but permitted for buses.

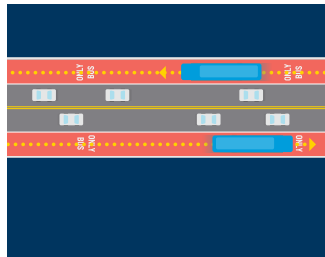


**Turn pockets** separate buses and motor vehicle traffic to reduce time spent by buses queuing behind general traffic. Consider turn pockets when turn volumes are high.

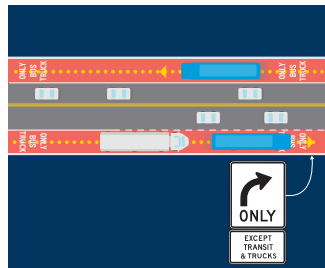


**BUS LANES**

Bus lanes can be implemented in context-specific solutions that consider traffic conditions, on-street parking and access to business and destinations; and integration with facilities for bicyclists or goods movements.



**Curbside bus lanes** can be full-time or part-time (peak hours). They are quick to implement but may have conflicts with right turning motor vehicle traffic and require enforcement and curb management to deter parking during operating hours.



**Bus lanes along freight routes** can consider implementing such as freight and bus lanes or restrictions on turning movements that accommodate buses and trucks to improve freight mobility and reduce conflict with other modes of travel.

# 152 ST

## Corridor Description

- 152 Street is a major north-south corridor in Surrey and White Rock. It connects Guildford Exchange with White Rock Centre.
- Route 375 operates along the entire length of 152 Street. Route 345 operates along most of the corridor, but serves King George Station via Fraser Hwy.

## Quick Facts

<b>Length</b>	17.9 km
<b>Subregion</b>	Southeast
<b>Primary Routes</b>	345, 375
<b>All Routes</b>	320, 321, 335, 342, 345, 351, 354, 361, 362, 363, 375, 394, 531, 855

Notes: Corridor ranked #41 for person-delay per km in Fall 2021. Ridership is reported for the location with the most cumulative passengers on-board the bus throughout the day.



**27**

Maximum hourly bus trips per direction



**470**

Person-hours of delay per day



**16,900**

Total households (200/km<sup>2</sup> density)



**36%**

Low income households



**10%**

Zero vehicle households

Demographics within 400m of corridor

**3,200**

Total ridership (daily load in one direction)

**39**

Bus-hours of delay per day



**152 St, continued**

**Corridor Significance**

- **152 St provides an important north-south transit connection through Surrey.** Buses carry approximately a third of people traveling through the southern end of the corridor. The share of low-income households ranks 10th among profile areas.
- **Variability along 152 St is fourth highest among areas profiled.** During heavier traffic, an end-to-end bus trip along this corridor can take nearly 17 minutes longer compared to a best-case trip, when the bus is able to move smoothly.
- **Transit priority measures are planned for 152 St.** A RapidBus route along the corridor is planned in TransLink's *10-Year Priorities*, connecting Newton Exchange to Guildford Exchange.

**Key Challenges for Bus Speed & Reliability**

- Most congestion on the roadway is due to conflicts with general purpose traffic and bus/bike conflicts along 152 St between 20 Ave and 26 Ave.
- Most delays are towards the northern part of the corridor at White Rock Centre. These delays are caused by congestion and turning movements from vehicles accessing businesses and shopping centers between 100 Ave and 94 Ave.

**Location of Common Causes of Bus Delay**

Issue	Location(s)
Motorists turning left (or other delay from left-turns)	<ul style="list-style-type: none"> <li>• NB 16 Ave at 154 St</li> <li>• White Rock Centre</li> <li>• NB 152 St between 18 Ave and 19 Ave</li> <li>• NB 152 St between 26 Ave and 28 Ave</li> <li>• NB 152 St between 64 Ave and 68 Ave</li> <li>• NB 152 St between 101 Ave and 102A Ave</li> <li>• SB 152 St at Fraser Hwy</li> <li>• SB 152 St at 88 Ave</li> </ul>
Motorists turning right (or other delay from right-turns)	<ul style="list-style-type: none"> <li>• NB 16 Ave at 154 St</li> <li>• White Rock Centre</li> <li>• NB 152 St at 20 Ave</li> <li>• NB 152 St at 28 Ave</li> <li>• NB 152 St at 32 Ave</li> <li>• NB 152 St at 64 Ave</li> <li>• NB 152 St at 88 Ave</li> <li>• NB 152 St at 96 Ave</li> <li>• NB 152 St at 101 Ave</li> <li>• NB 152 St between 101 Ave and 102A Ave</li> <li>• SB 152 St between 33 Ave and King George Blvd</li> <li>• SB 152 St at 19 Ave</li> </ul>
Roadway congestion	<ul style="list-style-type: none"> <li>• NB 16 Ave at 154 St</li> <li>• NB 152 St at 20 Ave</li> <li>• NB 152 St at 28 Ave</li> <li>• NB 152 St between 32 Ave and 36 Ave</li> <li>• NB 152 St between 54A Ave and 58A Ave</li> <li>• NB/SB 152 St between 64 Ave and 66 Ave</li> <li>• NB/SB 152 St between 82 Ave and Fraser Hwy</li> <li>• NB 152 St at 96 Ave</li> <li>• NB 152 St between 101 Ave and 102A Ave</li> <li>• SB 152 St between 104 Ave and 94 Ave</li> <li>• SB 152 St between 60 Ave and Hwy 10</li> <li>• SB 152 St between 28 Ave and 26 Ave</li> <li>• SB 152 St between 18 Ave and White Rock Centre</li> </ul>

**152 St, continued**

Issue	Location(s)
Closely spaced driveways or other roadways	<ul style="list-style-type: none"> <li>• NB 16 Ave between 154 St and White Rock Centre</li> <li>• NB 152 St at 20 Ave</li> <li>• NB 152 St at 3000 Block</li> <li>• NB 152 St at Hwy 10</li> <li>• NB 152 St at 64 Ave</li> <li>• NB 152 St at Fraser Hwy</li> <li>• NB/SB 152 St between 91 Ave and 92 Ave</li> <li>• NBSB 152 St between 94 Ave</li> <li>• NB/SB 152 St between 100 Ave and 102A Ave</li> <li>• SB 152 St between Fraser Hwy and 88 Ave</li> <li>• SB 152 St between 77 Ave and 66A Ave</li> <li>• SB 152 St at Hwy 10</li> <li>• SB 152 St at 28 Ave</li> <li>• SB 152 St at 22 Ave</li> </ul>
Re-entering traffic from bus stops	<ul style="list-style-type: none"> <li>• NB 152 St between King George Blvd and 28 Ave</li> <li>• NB 152 St between 34 Ave and 58A Ave</li> <li>• NB 152 St at 60 Ave</li> <li>• NB 152 St at 64 Ave</li> <li>• NB 152 St between 66A Ave and 81 Ave</li> <li>• SB 152 St at 100 Ave</li> <li>• SB 152 St between 7900 Block and 36 Ave</li> </ul>
Location of bus stops	<ul style="list-style-type: none"> <li>• NB 152 St between King George Blvd and 28 Ave</li> <li>• NB 152 St between 64 Ave and 66A Ave</li> </ul>
Short spacing between bus stops	<ul style="list-style-type: none"> <li>• NB 16 Ave between 154 St</li> <li>• NB 152 St between White Rock Centre and 18 Ave</li> <li>• NB 152 St between 88 Ave and 98 Ave</li> <li>• SB 152 St between 96 Ave and 88 Ave</li> <li>• SB152 St between 26 Ave and King George Blvd</li> </ul>
Pedestrian movements (including pedestrian signals)	<ul style="list-style-type: none"> <li>• NB White Rock Centre</li> <li>• NB 152 St between 20 Ave and King George Blvd</li> <li>• NB 152 St at 36 Ave</li> <li>• NB 152 St at 6200 Block</li> <li>• NB 152 St at 68 Ave</li> <li>• NB 152 St at 101 Ave</li> <li>• SB 152 St between 19 Ave and 18 Ave</li> <li>• SB 152 St at 36 Ave</li> <li>• SB 152 St between 19 Ave and 18 Ave</li> </ul>
Uncoordinated traffic signals	<ul style="list-style-type: none"> <li>• NB at White Rock Centre</li> <li>• NB 152 St at 18 Ave</li> <li>• SB 152 St between 66A Ave and 62 Ave</li> <li>• SB 152 St at 18 Ave</li> <li>• SB 152 St at 64 Ave</li> </ul>
Schedules and/or timepoints	<ul style="list-style-type: none"> <li>• NB 152 St at 6200 Block</li> </ul>
Bus/bicycle interactions	<ul style="list-style-type: none"> <li>• NB/SB 152 St between 22 Ave and King George Blvd</li> <li>• NB/SB 152 St at 36 Ave</li> <li>• SB 152 St at 66A Ave</li> <li>• SB 152 St between 60 Ave and 54A Ave</li> </ul>
Freight rail crossings	<ul style="list-style-type: none"> <li>• NB/SB 152 St between 64 Ave and 66A Ave</li> </ul>

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152 St, continued

Potential Solutions to Address Bus Speed and Reliability Issues

Map Callouts

- 1 Prioritize left-turns for Route 320. A dual left-turn lane for general purpose traffic along with an outside lane for transit/truck left-turns is scheduled to be built in 2024.
- 2 152 St Transit Priority Study proposed a bus lane in one or both directions north of Fraser Hwy; left-turn restrictions may be required. A SB BAT Lane between 98 Ave and 96 Ave is underway and scheduled to be built in 2024.
- 3 Left-turn restriction onto 91 Ave.
- 4 Infill stops (existing pull-outs) or floating bus stops (32 Ave to 56 Ave).

Per South Surrey Transit Priority Study:

- 5 Hwy 99 overpass can be improved including potential transit lanes.
- 6 Additional lane from south of King George Blvd and third lane to Mall Access could be considered; requires upgrades and redesign of 152 St/King George Blvd intersection.
- 7 Bus-only curb lane could be provided when site on the NE corner redevelops.

Corridor-Wide Opportunities

- At the 28 signalized intersections, solutions such as signal priority, signal coordination, or timing/phasing adjustments can help reduce delay.
- At the approximately 20 bus stops that are below spacing guidelines (300m) thoughtful removal or relocation could achieve more consistent spacing while maintaining access.
- Up to 23 km of new bus lanes could be added. Different types of lanes are appropriate in different contexts.

Further analysis is needed for all opportunities.



Key Opportunities



28

Signalized intersections along corridor



20+

Bus stops below spacing guidelines (> 1/3 of total)



23 km

New bus lanes (directional)

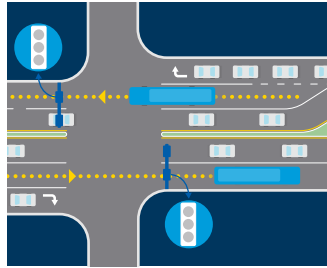
152 St, continued

Considerations for Key Solutions

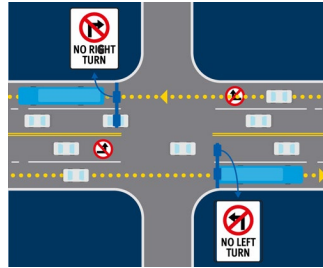


**LEFT- AND RIGHT-TURN SOLUTIONS**

Where right-of-way permits, turn solutions include dedicated turn pockets. Where right-of-way is limited, solutions include turn restrictions for general traffic but permitted for buses.



**Turn pockets** separate buses and motor vehicle traffic to reduce time spent by buses queuing behind general traffic. Consider turn pockets when turn volumes are high.

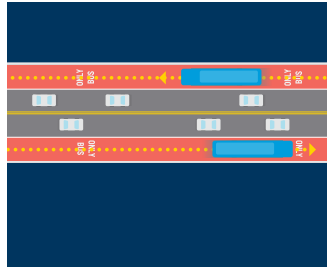


**Turn restrictions** limit left or right turns for general traffic to reduce delay for buses and other vehicles traveling along a corridor. Buses may be exempted from the restrictions.

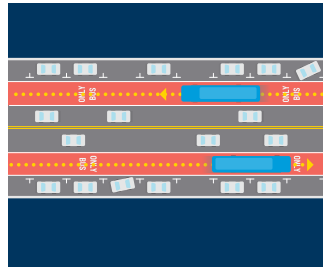


**BUS LANES**

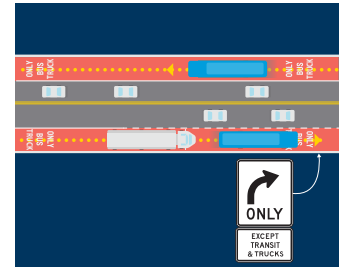
Bus lanes can be implemented in context-specific solutions that consider traffic conditions, on-street parking and access to business and destinations; and integration with facilities for bicyclists or goods movements.



**Curbside bus lanes** can be full-time or part-time (peak hours). They are quick to implement but may have conflicts with right turning motor vehicle traffic and require enforcement and curb management to deter parking during operating hours.



**Offset bus lanes (in commercial areas)** run between an on-street parking lane and a through-traffic lane and preserve parking and loading along the curb. Bus bulbs used with offset bus lanes can provide additional space for passengers at bus stops and shorten pedestrian crossing distances.



**Bus lanes along freight routes** can consider implementing such as freight and bus lanes or restrictions on turning movements that accommodate buses and trucks to improve freight mobility and reduce conflict with other modes of travel.

# 128 ST

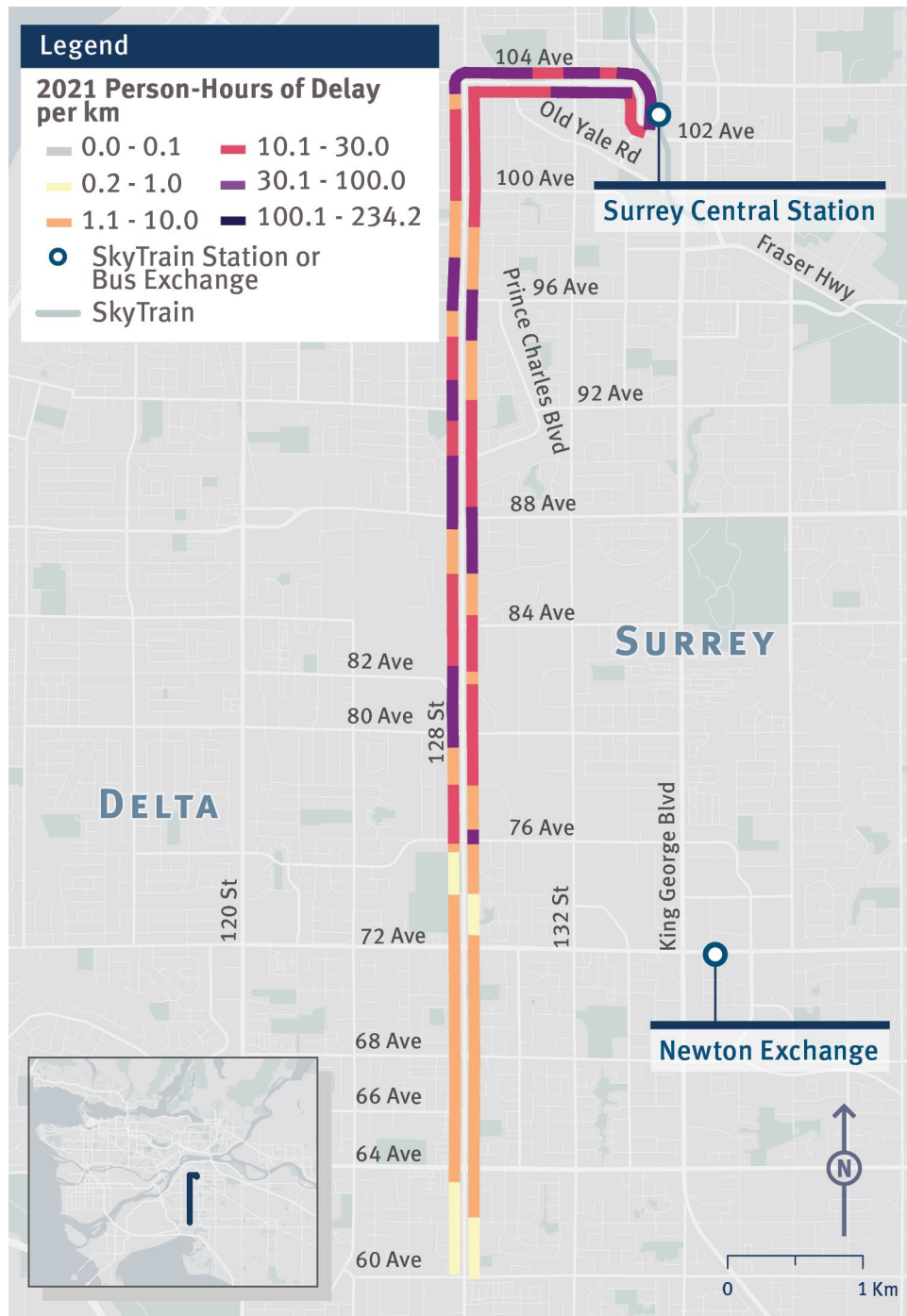
## Corridor Description

- 128 Street is a north-south corridor through the eastern part of Surrey, including a connection to Surrey Central along 104 Ave.
- Route 323 provides frequent service along the northern two-thirds of the corridor between Surrey Central and Newton Exchange.
- Route 393 provides peak direction service between Newton Exchange and Surrey Central, including service to Kwantlen Polytechnic University (KPU).

## Quick Facts

<b>Length</b>	10.4 km
<b>Subregion</b>	Southeast
<b>Primary Route</b>	323
<b>All Routes</b>	322, 323, 373, 393

Note: Corridor ranked #42 for person-delay per km in Fall 2021. Profile area includes an extension on 104 Ave. Ridership is reported for the location with the most cumulative passengers on-board the bus throughout the day; lower end of the range accounts only for routes using the corridor for at least 1 km and upper end of the range reflects all routes.



**31**

Maximum hourly bus trips per direction



**330**

Person-hours of delay per day



**11,600**

Total households (600/km<sup>2</sup> density)



**30%**

Low income households



**8%**

Zero vehicle households

Demographics within 400m of corridor

**2,800-6,100**

Total ridership (daily load in one direction)

**20**

Bus-hours of delay per day



**128 St, continued**

**Corridor Significance**

- **128 St is an important street for transit in Surrey.** During weekday peak hours, buses arrive approximately every 4 minutes. Nearly 30% of people travelling in the northern part of the corridor are on buses.
- **Bus performance can be unreliable for people riding the bus.** During heavier traffic, an end-to-end bus trip between the south part of the corridor and Surrey Central can take nearly 12 minutes longer compared to a best-case trip, when the bus is able to move smoothly.

**Key Challenges for Bus Speed & Reliability**

- Roadway congestion at intersections along the full length of 128 St, including from right- and left-turning vehicles, frequent driveways and other business access, and changes between one and two travel lanes per direction.
- Buses serving portions of 128 St may be delay when making left-turns.
- Bike lane along full length of 128 St creates opportunities for conflicts/delay.
- Bottleneck along 104 Ave where travel lanes are reduced to one per direction.

**Location of Common Causes of Bus Delay**

Issue	Location(s)
Motorists turning left (or other delay from left-turns)	<ul style="list-style-type: none"> <li>• SB 128 St at 64 Ave (Route 393)</li> <li>• NB 128 St at 72 Ave (Route 322)</li> <li>• SB 128 St at 76 Ave (Route 323)</li> <li>• SB 128 St at 78 Ave (unprotected turn pocket)</li> <li>• NB 128 St at 94 Ave</li> <li>• WB 104 Ave at 128 St (Routes 322 and 323)</li> <li>• WB 104 Ave at Old Yale Rd</li> <li>• NB University Dr at 104 Ave</li> </ul>
Motorists turning right (or other delay from right-turns)	<ul style="list-style-type: none"> <li>• NB/SB 128 St at 64 Ave</li> <li>• NB/SB 128 St at 68 Ave</li> <li>• NB/SB 128 St at 72 Ave</li> <li>• NB/SB 128 St at 76 Ave</li> <li>• SB 128 St at 78 Ave (unsignalized)</li> <li>• NB 128 St at 80 Ave</li> <li>• SB 128 at 82 Ave</li> <li>• NB 128 St at 86 Ave</li> <li>• SB 128 at 92 Ave</li> <li>• NB 128 St at 94 Ave</li> <li>• NB/SB 128 St at 96 Ave</li> </ul>
Roadway congestion	<ul style="list-style-type: none"> <li>• NB/SB 128 St between S of 72 Ave and N of 82 Ave</li> <li>• NB/SB 128 St between 86 Ave and 93 Ave (particularly approaching 88 Ave)</li> <li>• NB/SB 128 St at 96 Ave</li> <li>• EB/WB 104 Ave at 132 St (lane reduction)</li> <li>• SB/NB University Dr between 104 Ave and Surrey Central</li> </ul>
Closely spaced driveways or other roadways	<ul style="list-style-type: none"> <li>• SB/NB 128 St between 72 Ave and 84 Ave</li> </ul>
Re-entering traffic from bus stops	<ul style="list-style-type: none"> <li>• NB 128 St between 92 Ave and 102 Ave</li> <li>• SB 128 St between 99 Ave and 90 Ave</li> </ul>
Short spacing between bus stops	<ul style="list-style-type: none"> <li>• NB 128 St at 82 Ave</li> </ul>
Pedestrian access and/or safety	<ul style="list-style-type: none"> <li>• NB between 60 Ave and 66 Ave</li> </ul>
Freight rail crossings	<ul style="list-style-type: none"> <li>• NB/SB 128 Ave at 82 Ave</li> </ul>

128 St, continued

Potential Solutions to Address Bus Speed and Reliability Issues

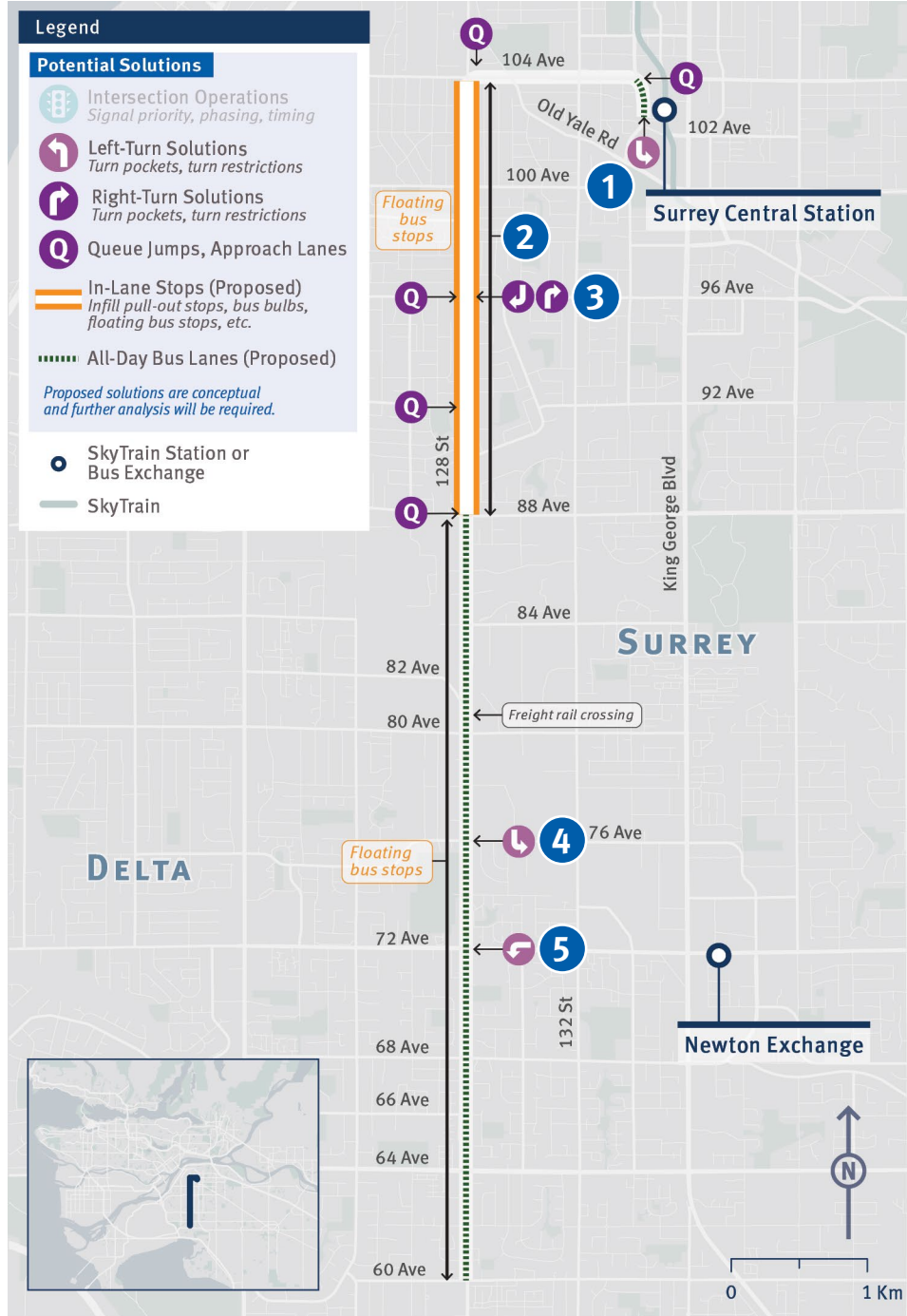
Map Callouts

- 1 Add SB left-turn lane.
- 2 Between 88 Ave and 104 Ave, where there is 1 lane per direction, consider far-side side stops with signal priority or near-side stops with queue jump signals to advance buses ahead of general purpose traffic.
- 3 The City of Surrey submitted a funding application to extend NB and SB RT lane storage and provide far side bus stop lanes at 96 Ave.
- 4 Prioritize left-turn movement for southbound Route 323
- 5 Prioritize left-turn movement for westbound Route 322

Corridor-Wide Opportunities

- At the 14 signalized intersections, solutions such as signal priority, signal coordination, or timing/phasing adjustments can help reduce delay.
- At the approximately 20 bus stops that are below spacing guidelines (300m) thoughtful removal or relocation could achieve more consistent spacing while maintaining access.
- Up to 13 km of new bus lanes could be added. Different types of lanes are appropriate in different contexts.

Further analysis is needed for all opportunities.



**14**

Signalized intersections along corridor

**20+**

Bus stops below spacing guidelines (> 1/3 of total)

**13 km**

New bus lanes (directional)

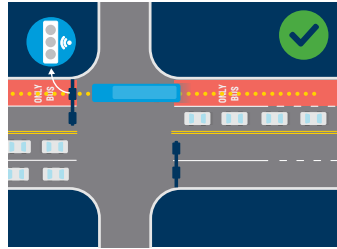
128 St, continued

Considerations for Key Solutions



**INTERSECTION OPERATIONS**

Intersection operations can include providing active signal priority, passive signal priority, or adding a new traffic signal or signal phase that benefits the direction of bus travel, or coordinating signals along a corridor to prioritize bus travel and reduce delay.

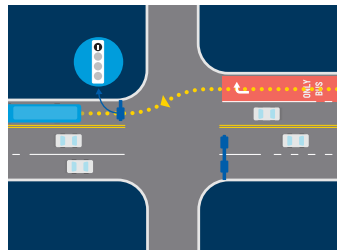


**Active signal priority** includes detecting an approaching bus in advance of an intersection and extending green times so the bus doesn't wait at the signal.

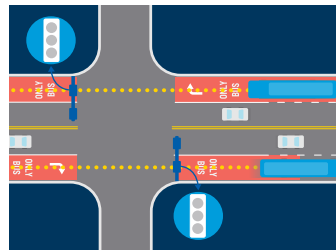


**QUEUE JUMPS AND APPROACH LANES**

Queue jumps and approach lanes should be implemented strategically and in combination with intersection operations and turn solutions. They are typically implemented when the right-of-way is too limited to create a whole bus lane.



**Queue jump** in right-turn lane or BAT lane without a receiving lane. A specialized **transit signal** and / or phase is required to help the bus transition back into traffic.

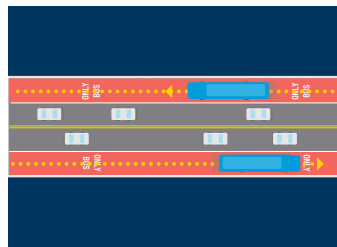


**Queue jumps** can be implemented **in the right-turn lane or BAT Lane**. Signal priority is not required but may be complementary.



**BUS LANES**

Bus lanes can be implemented in context-specific solutions that consider traffic conditions, on-street parking and access to business and destinations; and integration with facilities for bicyclists or goods movements.

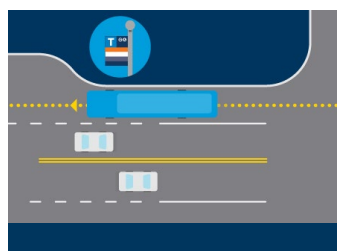


**Curbside bus lanes** can be full-time or part-time (peak hours). They are quick to implement but may have conflicts with right turning motor vehicle traffic and require enforcement and curb management to deter parking during operating hours.

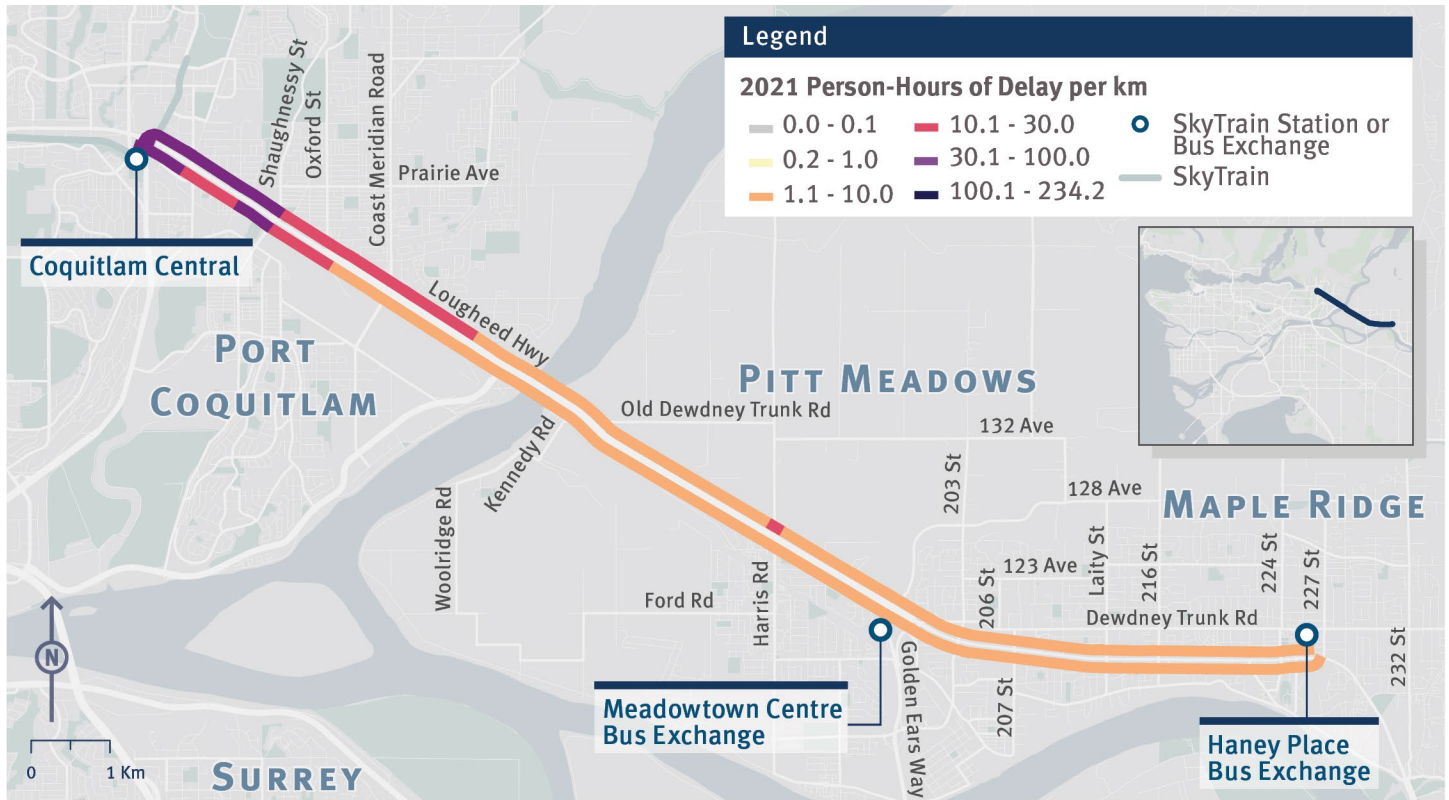


**IN-LANE STOPS**

In-lane stops (also called “bus bulb” or “floating bus stop”) may be temporary platforms or paved extensions of the sidewalk. Both applications improve passenger visibility for the bus and reduce passenger conflicts with pedestrians on the sidewalks.



# LOUGHEED HWY



## Corridor Description

- The Lougheed corridor connects the cities of Coquitlam, Port Coquitlam, Pitt Meadows, and Maple Ridge. A significant portion of the corridor passes through agricultural and industrial lands.
- The R3 RapidBus line began service along Lougheed Highway in early 2020. It runs between Coquitlam Central Station (Millennium Line and West Coast Express) and the bus exchange at Haney Place Mall in Maple Ridge.

## Quick Facts

<b>Length</b>	16.7 km
<b>Subregions</b>	Maple Ridge/Pitt Meadows, Northeast
<b>Primary Routes</b>	R3, 701
<b>All Routes</b>	159, 160, 171, 172, 189, 595, 701, 722, 748, 791, R3

Notes: Corridor ranked #44 for person-delay per km in Fall 2021. Profile area varies slightly from the corridor. Ridership is reported for the location with the most cumulative passengers on-board the bus throughout the day; lower end of the range accounts only for routes using the corridor for at least 1 km and upper end of the range reflects all routes.

 <b>43</b> Maximum hourly bus trips per direction	 <b>320</b> Person-hours of delay per day	 <b>11,200</b> Total households (200/km <sup>2</sup> density)	 <b>35%</b> Low income households	 <b>10%</b> Zero vehicle households
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**2,400-3,400**  
Total ridership (daily load in one direction)

**40**  
Bus-hours of delay per day

### Demographics within 400m of corridor



**Lougheed Hwy, continued**

**Corridor Significance**

- **Lougheed Hwy provides an important transit connection between the Northeast Sector and Maple Ridge/Pitt Meadows.**
- **Performance can be unreliable for people riding the bus.** During heavier traffic, an end-to-end bus trip on Lougheed Hwy between Coquitlam Central and Haney Place Mall can take nearly 10 minutes longer compared to a best-case trip, when the bus is able to move smoothly.
- **Additional transit priority is planned for Lougheed Hwy.** A planned upgrade of the current R3 RapidBus to BRT in TransLink's *10-Year Priorities* would provide faster connections between the city centre of Coquitlam and the city centre of Maple Ridge.

**Key Challenges for Bus Speed & Reliability**

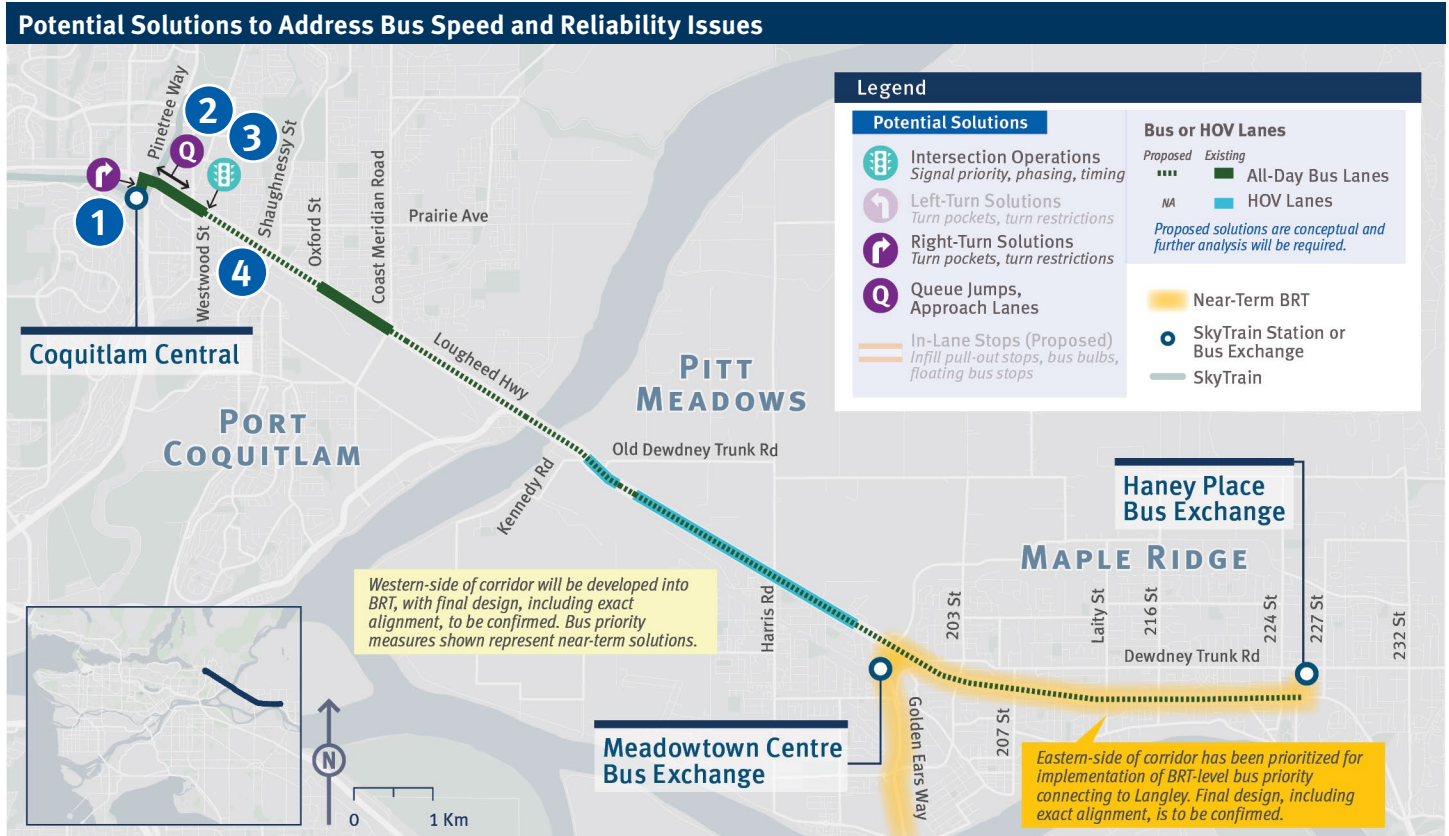
- Constrained right-of-way limits continuous bus priority treatments in some locations without major infrastructure investments.
- Limited alternative routes on parts of the corridors funnels local and regional traffic onto Lougheed in parts of the corridor.
- Right-turns at access roadways and driveways into major retail areas can slow buses and/or limit effectiveness of curbside bus-only lanes.

**Location of Common Causes of Bus Delay**

Issue	Location(s)
Motorists turning left (or other delay from left-turns)	<ul style="list-style-type: none"> <li>• WB at Pinetree Way (buses merging across travel lanes to turn left using bus-only turn lane)</li> </ul>
Motorists turning right (or other delay from right-turns)	<ul style="list-style-type: none"> <li>• WB between 226 St and 225 St (right-turns into Haney Place Mall)</li> <li>• WB/EB between Laity St and Dewdney Trunk Rd including 207 St and 203 St (right-turns into retail areas)</li> <li>• High right-turn volumes into retail area, vehicles merge into right-turn lane</li> <li>• EB at Pinetree Way (delay from right turns)</li> <li>• EB between Pinetree Way and Westwood St (bus lane added with R3 project, but may be affected by right-turns into major retail areas)</li> </ul>
Roadway congestion	<ul style="list-style-type: none"> <li>• WB/EB at 203 St</li> <li>• EB at Golden Ears Way (Meadowtown Mall)</li> <li>• WB at Harris Rd</li> <li>• WB between Sherling Ave and Shaughnessy St</li> <li>• WB/EB between Hastings St and Shaughnessy St (includes the Coquitlam River bridge, a significant bottleneck which is constrained to two lanes per direction)</li> <li>• EB between Shaughnessy St and Oxford St</li> <li>• WB/EB between Pinetree Way and Westwood St (including on Saturdays)</li> </ul>
Closely spaced driveways or other roadways	<ul style="list-style-type: none"> <li>• WB/EB between Laity St and Dewdney Trunk Rd including 203 St (driveways and access roads into retail areas)</li> <li>• WB/EB Pinetree Way to Westwood St (access roads to major retail areas)</li> </ul>
Re-entering traffic from bus stops	<ul style="list-style-type: none"> <li>• EB at Coquitlam Central (a bus-only signal added with the R3 RapidBus should stop traffic to allow buses to enter the roadway, but effectiveness could be verified)</li> </ul>



Lougheed Hwy, continued



Key Opportunities



20

Signalized intersections along corridor



0

Bus stops below spacing guidelines



25 km

New bus lanes (directional)

Western-side of corridor will be developed into BRT, with final design, including exact alignment, to be confirmed. Bus priority measures shown represent near-term solutions.

Eastern-side of corridor has been prioritized for implementation of BRT-level bus priority connecting to Langley. Final design, including exact alignment, is to be confirmed.

Map Callouts

- 1 Extend hatching, right-turn lane, and/or EB bus lane to address right-turning vehicles blocking buses coming out of Coquitlam Central.
- 2 Signal/queue jump and/or extended lane to help buses merge into transit-only left-turn lane between Westwood and Pinetree Way.
- 3 The City of Port Coquitlam has indicated that the intersection of Lougheed Highway and Raleigh Street is planned to be a signalized intersection.
- 4 Prioritize adding bus lanes across the Coquitlam River Bridge when the bridge is replaced

Corridor-Wide Opportunities

- At the 20 signalized intersections, solutions such as signal priority, signal coordination, or timing/phasing adjustments can help reduce delay.
- No stops are below TransLink's spacing guidelines (300m between stops).
- Up to 25 km of new bus lanes could be added. Different types of lanes are appropriate in different contexts.

Further analysis is needed for all opportunities.

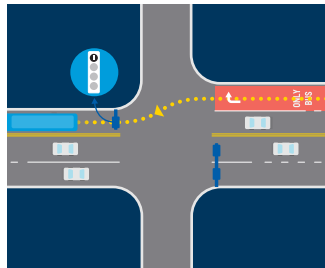
*Lougheed Hwy, continued*

**Considerations for Key Solutions**



**QUEUE JUMPS AND APPROACH LANES**

Queue jumps and approach lanes should be implemented strategically and in combination with intersection operations and turn solutions. They are typically implemented when the right-of-way is too limited to create a whole bus lane.

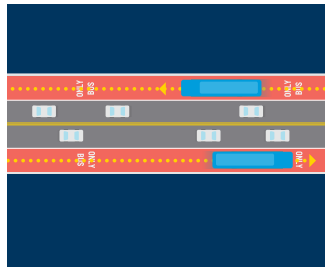


**Queue jump** in right-turn lane or BAT lane without a receiving lane. A specialized **transit signal** and / or phase is required to help the bus transition back into traffic.



**BUS LANES**

Bus lanes can be implemented in context-specific solutions that consider traffic conditions, on-street parking and access to business and destinations; and integration with facilities for bicyclists or goods movements.



**Curbside bus lanes** can be full-time or part-time (peak hours). They are quick to implement but may have conflicts with right turning motor vehicle traffic and require enforcement and curb management to deter parking during operating hours.

## 200 ST / GOLDEN EARS BRIDGE

### Corridor Description

- Golden Ears Way and the Golden Ears Bridge connect Pitt Meadows and Maple Ridge with Carvolth and Langley south of the Fraser River. The corridor follows 200 Street to Langley Centre.
- Route 595 serves the full corridor between the West Coast Express' Maple Meadows station, Carvolth Exchange, and Langley Centre. Route 501 runs on the corridor south of 96 Ave; it connects to the Guildford Exchange and Surrey Central.

### Quick Facts

<b>Length</b>	12.7 km
<b>Subregions</b>	Southeast, Maple Ridge/Pitt Meadows
<b>Primary Routes</b>	501, 595
<b>All Routes</b>	388, 501, 595

Notes: Corridor ranked #52 for person-delay per km in Fall 2021. Profile area varies slightly from the corridor. Ridership is reported for the location with the most cumulative passengers on-board the bus throughout the day; lower end of the range accounts only for routes using the corridor for at least 1 km and upper end of the range reflects all routes.



**20**

Maximum hourly bus trips per direction



**140**

Person-hours of delay per day



**5,600**

Total households (200/km<sup>2</sup> density)



**27%**

Low income households



**6%**

Zero vehicle households

Demographics within 400m of corridor

**1,500-2,800**

Total ridership (daily load in one direction)

**11**

Bus-hours of delay per day



**200 St / Golden Ears Bridge, continued**

**Corridor Significance**

- **Golden Ears Way, 200 St, and the Golden Ears Bridge provide important transit connections between the Southeast sub-region and both Maple Ridge/Pitt Meadows and Surrey.** Buses carry 30 to 40% of people travelling this corridor south of the Trans-Canada Hwy during morning rush hours.
- **Performance can be unreliable for people riding the bus.** During heavier traffic, an end-to-end bus trip between Langley and Maple Ridge can take nearly 9 minutes longer compared to a best-case trip, when the bus is able to move smoothly.
- **Additional transit priority is planned.** A RapidBus route is planned for the 200 St – Golden Ears corridor in TransLink's *10-Year Priorities*, along with consideration of and planning for BRT in the future.

**Key Challenges for Bus Speed & Reliability**

- Roadway congestion at major intersections. Frequent driveways, such as between Willowbrook Drive and 64 Ave, can increase conflict between buses and motorists and slow traffic.
- Travel to Carvolth Exchange requires multiple turns at stop-controlled or uncontrolled intersections.
- Pedestrian infrastructure not present or lower quality (e.g., sidewalks narrow or not present) in some parts of the corridor.
- This corridor is undergoing rapid development. This increases travel demand as well as causes traffic delays due to construction, particularly along 86 Ave.

**Location of Common Causes of Bus Delay**

Issue	Location(s)
Motorists turning left (or other delay from left-turns)	<ul style="list-style-type: none"> <li>• EB Willowbrook Dr to NB 200 St (buses turning left)</li> <li>• NB 202 St at 91A Ave (buses turning left)</li> <li>• SB 200 St at 91A Ave (buses turning left)</li> <li>• WB 86 Ave to SB 200 St (buses turning left)</li> <li>• EB 86 Ave to NB 202 St (buses turning left)</li> </ul>
Motorists turning right (or other delay from right-turns)	<ul style="list-style-type: none"> <li>• SB 200 St at Willowbrook Dr (buses turning right)</li> </ul>
Roadway congestion	<ul style="list-style-type: none"> <li>• NB 200 St between Willowbrook Dr and 66 Ave</li> <li>• SB 200 St between 68 Ave and Willowbrook Dr</li> <li>• NB/SB 200 St at 72 Ave</li> <li>• NB 200 St at 80 Ave (starting south of 80th Ave)</li> <li>• NB 200 St between 80 Ave and 86 Ave</li> <li>• SB 200 St between 84 Ave and 80 Ave</li> <li>• EB/WB 86 Ave between 200 St and 200 St with all-way stop at 202 St</li> <li>• NB/SB 202 St between 86 Ave and 88 Ave (includes Carvolth Exchange)</li> <li>• NB/SB 202 St at 88 Ave</li> <li>• NB 200 St/201 St between 91A Ave and 96 Ave</li> <li>• SB 200 St between 9200 Block and 91A Ave</li> </ul>
Closely spaced driveways or other roadways	<ul style="list-style-type: none"> <li>• NB/SB 200 St between Willowbrook Dr and 64 Ave, at 72 Ave</li> </ul>
Re-entering traffic from bus stops	<ul style="list-style-type: none"> <li>• NB 200 St at 78B Ave (Willoughby Community Centre)</li> <li>• EB 86 Ave E of 200 St</li> <li>• SB 202 St at Carvolth Exchange (buses turning left in bus-only lane to enter Exchange and turning left to exit Exchange; intersection is uncontrolled)</li> </ul>
Pedestrian access and/or safety	<ul style="list-style-type: none"> <li>• NB/SB 200 St at 76 Ave (stops at unsignalized intersection; signed for new development on west side)</li> </ul>

**200 St / Golden Ears Bridge, continued**

**Potential Solutions to Address Bus Speed and Reliability Issues**

Corridor has been prioritized for implementation of BRT-level bus priority. Final design, including exact alignment, is to be confirmed.

**Map Callouts**

- 1** The 200 St Study recommending a signal addition at Carvolth Exchange to help buses enter/exit.
- 2** The Township of Langley applied for funding to add a LT phase (protected-permissive) and storage extension to help the Route 501 bus to make the WB left-turn.
- 3** The 200 St Study identified near-term opportunities without interfering with a potential BRT alignment on 200 St.
- 4** The Township of Langley applied for funding to extend the WBLT storage at 64 Ave and 200 St to help WB buses thru the intersection.
- 5** BRT to continue south to connect with new Surrey-Langley SkyTrain. Route and terminus are to be determined.

**Corridor-Wide Opportunities**

- At the 13 signalized intersections, solutions such as signal priority, signal coordination, or timing/phasing adjustments can help reduce delay.
- Most of the bus stops along this corridor are within spacing guidelines—fewer than 10% are less than 300m between stops.
- Up to 24 km of new bus lanes could be added. Different types of lanes are appropriate in different contexts.

*Further analysis is needed for all opportunities.*



**13**

Signalized intersections along corridor



**<10%**

Bus stops below spacing guidelines



**24 km**

New bus lanes (directional)

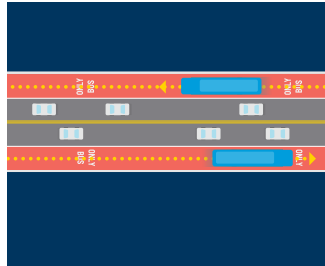
200 St / Golden Ears Bridge, continued

Considerations for Key Solutions



**BUS LANES**

Bus lanes can be implemented in context-specific solutions that consider traffic conditions, on-street parking and access to business and destinations; and integration with facilities for bicyclists or goods movements.



**Curbside bus lanes** can be full-time or part-time (peak hours). They are quick to implement but may have conflicts with right turning motor vehicle traffic and require enforcement and curb management to deter parking during operating hours.