# **Appendix A: Sub-Regional Profiles**

Within each sub-region there are areas where travel time, reliability, and customer experience can be improved through transit priority treatments. Delay "hot-spots" are found across the region and, in some cases, may be nearly as intense as those along the top delay corridors (profiled in Appendix B) and are just more geographically constrained, including key intersections, bridge approaches, and entrances to transit hubs. This appendix provides sub-regional maps illustrating:

- Where people experience the most delay. These maps highlight problem areas where targeted interventions could make big improvements to bus speed and reliability.
- Existing bus priority (including projects under construction in 2023), along with an estimate of ridership benefitting from all bus priority currently in place and an estimate of time savings for buses from the projects evaluated in the 2023 BSR Report.
- The Bus Priority Vision, which identifies the proposed intensity of bus priority along the FTN, including proposed BRT or Rapid Transit.



### **BURNABY/NEW WESTMINSTER**

### Corridors in top 20 for systemwide passenger delay

- Willingdon Ave
- Edmonds St

### **Additional Profile Areas**

- Queensborough Bridge/ Hwy 91A
- Canada Way

### **High Ridership Locations**

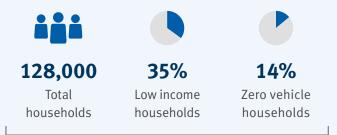
- Metrotown Station
- Edmonds Station
- Hastings St & Willingdon Ave



### **Quick Facts**

Metric	Sub-Region	Percent of System
Network Kilometres	401	12%
Total Person Delay (Hours)	3,500	12%
Total Bus Delay (Hours)	320	13%
Weekday Daily Ridership	73,300	13%
Weekday Daily Bus Trip-KM	38,000	13%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).

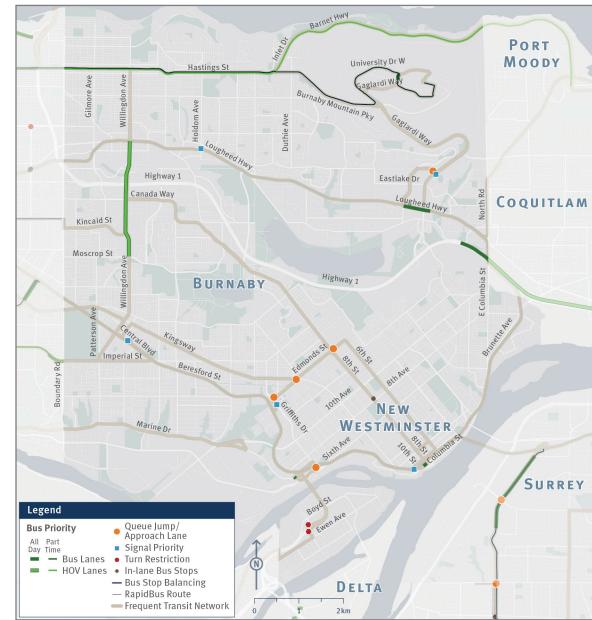




### Burnaby/New Westminster, continued

### Existing Frequent Transit Network and Bus Priority

- The FTN covers a third of the transit network in the Burnaby/New Westminster sub-region.
- Less than 5% of the FTN is on roadways controlled by MoTI.
- Over 20% of the FTN has some type of bus priority.
- Approximately 2% of the FTN has all-day bus priority.
- Since 2019, five new transit priority projects were implemented in Burnaby/New Westminster with funding assistance from the BSR program, including transit approach lanes, a queue jump, and signal upgrades.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	132 km	-
All bus priority (including HOV lanes)	27.5	21%
All-day bus-only priority (excluding HOV lanes)	2.3	2%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 37,000

Weekday Daily Riders Benefiting from Transit Priority



230

Daily Bus Hours Saved from 2019-2022 Projects Evaluated



### Burnaby/New Westminster, continued

### **Bus Priority Vision**

In the Burnaby/New Westminster sub-region:

- BRT or Rapid Transit is planned along 3 corridors.
- Approximately 55% of the FTN could benefit from High-Very High intensity bus priority.
- Approximately 35% of the FTN—over 40 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- 10-15% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are 85 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)

### Key Opportunities in Sub-Region



Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	49	40%
High	18	15%
Medium	42	34%
Low	14	11%



### **MAPLE RIDGE/PITT MEADOWS**

### Corridors in top 20 for systemwide passenger delay

• None

### **Additional Profile Areas**

• Lougheed Hwy

### **High Ridership Locations**

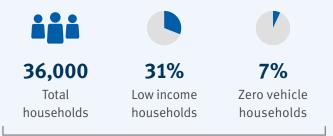
- Haney Place
- Maple Meadows Station
- Dewdney Trunk Rd & 248 St



### Quick Facts

Metric	Sub-Region	Percent of System
Network Kilometres	274	8%
Total Person Delay (Hours)	300	1%
Total Bus Delay (Hours)	60	2%
Weekday Daily Ridership	7,600	1%
Weekday Daily Bus Trip-KM	10,000	3%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).





### Maple Ridge/Pitt Meadows, continued

### **Existing Frequent Transit** Network and Bus Priority

- The FTN covers 17% of the transit network in the Maple Ridge sub-region.
- Nearly half of the FTN is on roadways controlled by MoTI.
- Nearly 20% of the FTN has some type of bus priority.
- Approximately 1% of the FTN has all-day bus priority.
- Since 2019, new transit priority implemented in the Maple Ride sub-region with funding assistance from the BSR program Includes the R3 RapidBus line along Lougheed Hwy.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	41	-
All bus priority (including HOV lanes)	7.3	18%
All-day bus-only priority (excluding HOV lanes)	0.2	1%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 2,000

Weekday Daily Riders Benefiting from Transit Priority Ð

# **3,390** Daily Bus Hours

Saved from 2019-2022 Projects Evaluated



### Maple Ridge/Pitt Meadows, continued

#### **Bus Priority Vision**

In the Maple Ridge/Pitt Meadows sub-region:

- BRT or Rapid Transit is planned along 2 corridors.
- Over 60% of the FTN could benefit from High-Very High intensity bus priority.
- Nearly 60% of the FTN—approximately 25 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- Less than 5% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are over 25 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)





Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	25	61%
High	0	0%
Medium	15	38%
Low	0	0%



### **NORTH SHORE**

# Corridors in top 20 for systemwide passenger delay

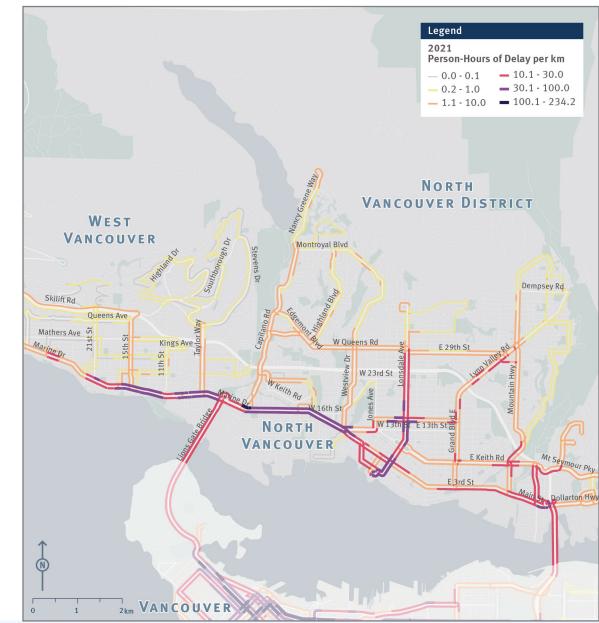
• Marine Dr

### Additional Profile Areas

- Lonsdale Ave
- 3rd/Main (as part of Marine Dr)
- Downtown to Ironworkers Memorial Bridge

### High Ridership Locations

- Park Royal [Multiple]
- Marine Dr & Hamilton Ave
- Phibbs Exchange
- Keith Rd & Horseshoe Bay Ferry Terminal



### Quick Facts

Metric	Sub-Region	Percent of System
Network Kilometres	342	10%
Total Person Delay (Hours)	1,600	6%
Total Bus Delay (Hours)	170	7%
Weekday Daily Ridership	42,100	8%
Weekday Daily Bus Trip-KM	23,000	8%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).





### North Shore, continued

### Existing Frequent Transit Network and Bus Priority

- The FTN covers 17% of the transit network in the North Shore.
- Approximately 15% of the FTN is on roadways controlled by MoTI.
- Approximately 12% of the FTN has some type of bus priority.
- Although most of this is all-day bus priority, it covers less than 11% of the FTN.
- Since 2019, new transit priority projects implemented in the North Shore with funding assistance from the BSR program include the R2 RapidBus route, bus/BAT lanes, bus bulbs, and signal upgrades.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	58	-
All bus priority (including HOV lanes)	6.8	12%
All-day bus-only priority (excluding HOV lanes)	6.5	11%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 24,000

Weekday Daily Riders Benefiting from Transit Priority



130

### Daily Bus Hours Saved from 2019-2022 Projects Evaluated



### North Shore, continued

### **Bus Priority Vision**

In the North Shore subregion:

- BRT or Rapid Transit is planned along 2 corridors.
- Over 75% of the FTN could benefit from High-Very High intensity bus priority.
- Over 65% of the FTN almost 40 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- Approximately 10-15% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are over 55 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)

### Key Opportunities in Sub-Region



Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	30	51%
High	16	28%
Medium	7	12%
Low	5	9%



### **NORTHEAST SECTOR**

# Corridors in top 20 for systemwide passenger delay

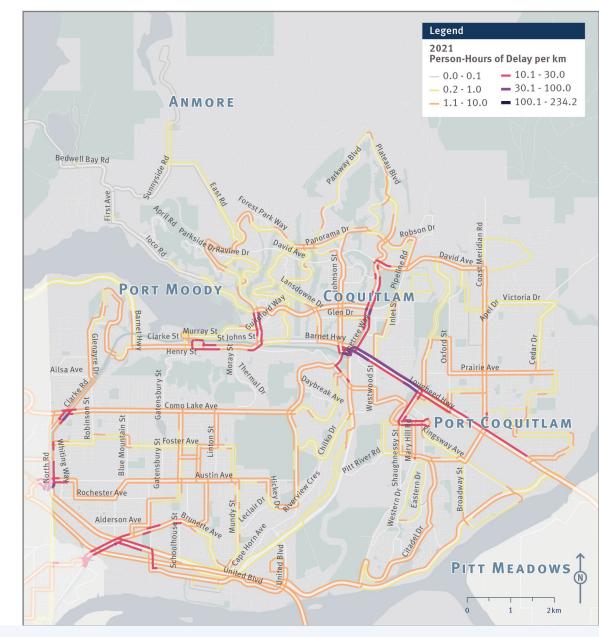
None

### **Additional Profile Areas**

• Lougheed Hwy

### **High Ridership Locations**

- Coquitlam Central Station
- Lougheed Hwy & Westwood St
- Lougheed Hwy & Shaughnessy St



### **Quick Facts**

Metric	Sub-Region	Percent of System
Network Kilometres	415	12%
Total Person Delay (Hours)	1,200	4%
Total Bus Delay (Hours)	220	9%
Weekday Daily Ridership	23,500	4%
Weekday Daily Bus Trip-KM	28,000	10%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).

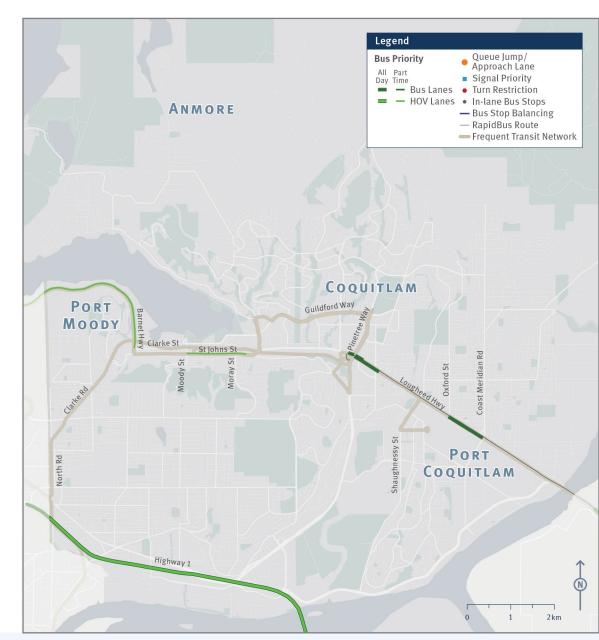




### Northeast Sector, continued

### Existing Frequent Transit Network and Bus Priority

- The FTN covers 10% of the transit network in the Northeast Sector.
- Approximately 5% of the FTN is on roadways controlled by MoTI.
- Over 20% of the FTN has some type of bus priority.
- Approximately 5% of the FTN has all-day bus priority.
- Since 2019, new transit priority projects implemented in the Northeast Sector with funding assistance from the BSR program include the R3 RapidBus route and bus/BAT lanes along Lougheed Hwy.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	41	-
All bus priority (including HOV lanes)	9.5	23%
All-day bus-only priority (excluding HOV lanes)	1.9	5%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 5,000

Weekday Daily Riders Benefiting from Transit Priority



Daily Bus Hours Saved from 2019-2022 Projects Evaluated



### Northeast Sector, continued

### **Bus Priority Vision**

In the Northeast Sector:

- BRT or Rapid Transit is planned along 2 corridors.
- Over 85% of the FTN could benefit from High-Very High intensity bus priority.
- Over 60% of the FTN almost 25 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- Less than 5% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are nearly 40 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)



3%

Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	18	46%
High	16	41%
Medium	5	14%
Low	0	0%



#### APPENDIX A: SUB-REGIONAL PROFILES A18

### SOUTHEAST

# Corridors in top 20 for systemwide passenger delay

- Scott Rd \*
- 104 Ave
- 72 Ave \*
- Fraser Hwy

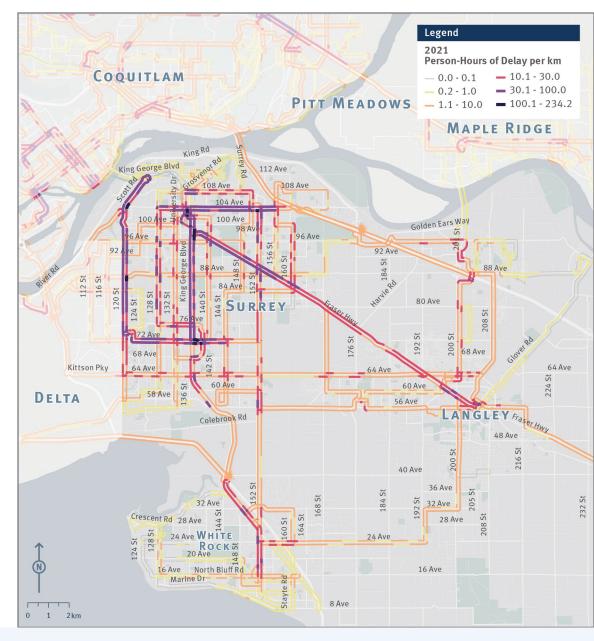
### **Additional Profile Areas**

- King George Blvd / 104 Ave
- 152 St
- 128 St
- 200 St / Golden Ears Bridge

### **High Ridership Locations**

- Surrey Central Station
- King George Station
- Scott Road Station
- Newton Exchange

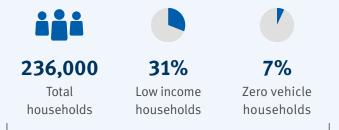
\* Detailed profile not developed along route of the forthcoming R6 RapidBus (which launched in early 2024).



### Quick Facts

Metric	Sub-Region	Percent of System
Network Kilometres	799	24%
Total Person Delay (Hours)	6,300	22%
Total Bus Delay (Hours)	480	20%
Weekday Daily Ridership	108,300	20%
Weekday Daily Bus Trip-KM	59,000	21%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).





### Southeast, continued

### **Existing Frequent Transit** Network and Bus Priority

- The FTN covers nearly 20% of the transit network in the Southeast sub-region.
- Approximately 10% of the FTN is on roadways controlled by MoTI.
- Over 10% of the FTN has some type of bus priority.
- Over 10% of the FTN has all-day bus priority.
- Since 2019, five new transit priority projects were implemented in the Southeast sub-region with funding assistance from the BSR program, including bus/BAT lanes, a queue jump, in-lane bus stops, and signal upgrades. The R6 RapidBus project opened in early 2024.



### FTN and Bus Priority Statistics

Metric	Kilometres	Percent of FTN
FTN	149	-
All bus priority (including HOV lanes)	16.7	11%
All-day bus-only priority (excluding HOV lanes)	16.3	11%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 30,000

Weekday Daily Riders Benefiting from Transit Priority



360

Daily Bus Hours Saved from 2019-2022 Projects Evaluated



### Southeast, continued

### **Bus Priority Vision**

In the Southeast Sector:

- BRT or Rapid Transit is planned along 6 corridors.
- 95% of the FTN could benefit from High-Very High intensity bus priority.
- Nearly 85% of the FTN over 110 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- Approximately 10% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are 85 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)



10%

Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	85	64%
High	42	31%
Medium	5	4%
Low	1	<1%



### SOUTHWEST

# Corridors in top 20 for systemwide passenger delay

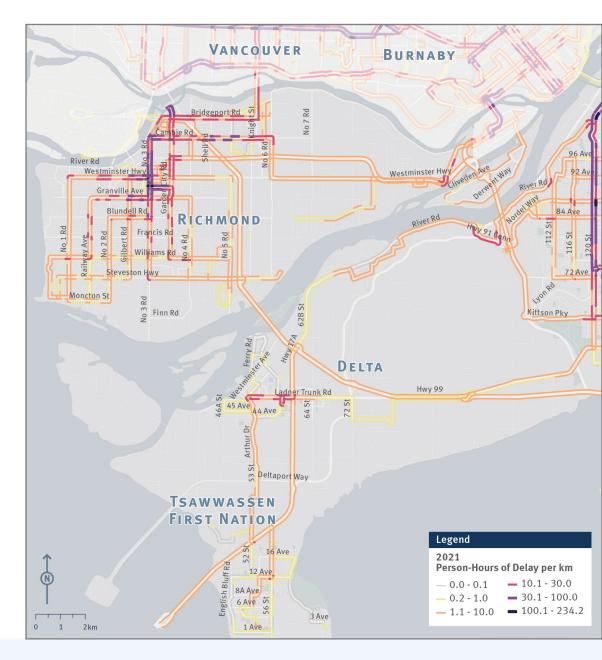
• None

### **Additional Profile Areas**

- No 3 Rd
- Bridgeport Rd

### **High Ridership Locations**

- Richmond-Brighouse Station [Multiple]
- Bridgeport Station
- No 3 Rd & Cook Rd



### Quick Facts

Metric	Sub-Region	Percent of System
Network Kilometres	598	18%
Total Person Delay (Hours)	2,800	10%
Total Bus Delay (Hours)	260	11%
Weekday Daily Ridership	39,300	7%
Weekday Daily Bus Trip-KM	43,000	15%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).





### Southwest, continued

### **Existing Frequent Transit Network and Bus Priority**

- The FTN covers nearly 20% of the transit network in the Southwest subregion.
- Nearly 60% of the FTN is on roadways controlled by MoTI.
- Nearly a quarter of the FTN has some type of bus priority, nearly 70% of which is exclusively for buses all-day.
- Over 15% of the FTN has all-day bus priority.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	114	-
All bus priority (including HOV lanes)	25.9	23%
All-day bus-only priority (excluding HOV lanes)	17.8	16%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



14,000

Benefiting from

**Transit Priority** 





### Southwest, continued

### **Bus Priority Vision**

In the Southwest sub-region:

- BRT or Rapid Transit is planned along 1 corridor.
- Nearly 60% of the FTN could benefit from High-Very High intensity bus priority.
- Over a third of the FTN—approximately 35 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- 5-10% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m.
- There are nearly 40 signalized intersections on the FTN, which could see benefits from signal priority or optimization.



# 38

Signalized intersections (along FTN)





Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	50	48%
High	10	10%
Medium	25	24%
Low	19	18%



### **VANCOUVER/UBC**

# Corridors in top 20 for systemwide passenger delay

- Broadway\*
- W Georgia St\*
- Wesbrook Mall<sup>1</sup>
- Hastings St
- 49 Ave<sup>1</sup>
- 41 Ave\*
- Burrard St\*
- Granville St\*
- Robson/Denman/Davie\*
- Pender/Powell/Dundas/ McGill<sup>3</sup>
- Main St<sup>2</sup>
- W 4 Ave
- Kingsway<sup>2</sup>

### **Additional Profile Areas**

- SE Marine Dr
- King Edward

### **High Ridership Locations**

- Commercial-Broadway Station
- Broadway-City Hall Station
- W 41 Ave & Cambie St
- Burrard Station
- Marine Drive Station

\* Detailed profile not developed 1, 2: Combined into profile areas 3: Profiled as "Downtown to Ironworkers Memorial Bridge"



### Quick Facts

Metric	Sub-Region	Percent of System
Network Kilometres	532	16%
Total Person Delay (Hours)	12,600	45%
Total Bus Delay (Hours)	900	37%
Weekday Daily Ridership	252,900	46%
Weekday Daily Bus Trip-KM	87,000	30%

Statistics for Fall 2021. Ridership is the total for routes in the sub-region. Demographic data is from the 2016 Canadian Census; zero vehicle households data from Insurance Corporation of British Columbia (ICBC).





### Vancouver/UBC, continued

### Existing Frequent Transit Network and Bus Priority

- The FTN covers 75% of the transit network in the Vancouver/UBC subregion.
- Less than 10% of the FTN is on roadways controlled by MoTI.
- Over 15% of the FTN has some type of bus priority, over a third of which is limited to buses all-day.
- Approximately 6% of the FTN has all-day bus priority.
- Since 2019, new transit priority projects implemented in the Vancouver/UBC subregion with funding assistance from the BSR program include bus stop balancing on five routes, the R4 RapidBus line, and five bus/BAT lane projects.



### **FTN and Bus Priority Statistics**

Metric	Kilometres	Percent of FTN
FTN	397	-
All bus priority (including HOV lanes)	68.4	17%
All-day bus-only priority (excluding HOV lanes)	24.2	6%

Notes: FTN km excludes SkyTrain and SeaBus. Statistics include infrastructure under construction as of 2023 and are limited to priority on the FTN. Ridership benefitting from transit priority based on Fall 2021 data. Bus hours saved is based on the before/after evaluation of projects completed in 2019-2022 and evaluated in this report.



### 169,000

Weekday Daily Riders Benefiting from Transit Priority



### **1,510** Daily Bus Hours Saved from 2019

Saved from 2019-2022 Projects Evaluated



### Vancouver/UBC, continued

### **Bus Priority Vision**

In the Vancouver/UBC subregion:

- BRT or Rapid Transit is planned along 8 corridors.
- Over 65% of the FTN could benefit from High-Very High intensity bus priority.
- Nearly half of the FTN approximately 190 km—could be considered for new full-time or part-time bus lanes after accounting for existing bus/HOV lanes.
- 55% of bus stops on the FTN are below TransLink's minimum spacing guideline of 300m, making up more than half all stops on the FTN that are below this guideline.
- There are 340 signalized intersections on the FTN, which could see benefits from signal priority or optimization.





Signalized intersections (along FTN)



55%

Bus stops below spacing guidelines (along FTN)



New bus lanes\* (directional)

### **Bus Priority Vision by Level of Intensity**

Intensity	Kilometres	Percent of FTN
Very High	183	46%
High	78	20%
Medium	107	27%
Low	26	7%

