

Let's talk about the proposed B-Line

Park Royal to Dundarave in West Vancouver

WE WANT TO HEAR FROM YOU

A proposal for a B-Line service connecting West Vancouver with Lonsdale Quay and Phibbs Exchange has been developed. The District is reviewing the B-Line proposal and wants to engage with the community to get your input.

Mayor and Council have been hearing the concerns of West Vancouver residents who want better transit service, and the concerns of small businesses and local residents regarding the potential impacts of the proposed B-Line.

ABOUT THE PROPOSED B-LINE

A B-Line is faster and more frequent than regular bus routes, and will move more people per day than current service.

In order to ensure B-Line service can operate effectively, the proposal recommends shared bus lanes on Marine Drive, the construction of new left-turn bays, and other measures that will help cars and buses move more smoothly.

CONSULTATION TOPICS

The District is seeking feedback on the following topics:

- Shared bus lane - hours of operation
- Changes to on-street parking
- Western terminus location
 - Park Royal
 - Marine Drive at 21st Street
 - Marine Drive at 24th Street

IT'S WEST VANCOUVER'S DECISION

West Vancouver Council will consider community input and feedback in determining whether the B-Line proposal is in the best interests of our residents, and whether there are changes that can be made to improve the plan.



You can provide us with your feedback by:

- Attending the community meeting on February 21, 2019
- Completing the hard copy feedback form and leaving it with a member of our team
- Filling out the feedback form online at westvancouverITE.ca/b-line
- Sending an email to bline@westvancouver.ca
- Mailing your feedback form or written feedback to:
District of West Vancouver, 750 17th Street,
West Vancouver, BC V7V 3T3
Attn: Community Relations

If you'd like to receive District of West Vancouver updates regarding the B-Line project, you can subscribe to the project at westvancouverITE.ca/b-line.

Transportation on the North Shore

Traffic congestion and transit opportunities are ongoing issues on the North Shore, including West Vancouver. There are currently limited east-west transit connections and frequent traffic congestion along major routes, including Marine Drive.

The District of West Vancouver recognizes the importance of addressing these issues and is committed to improving traffic flow for all modes of travel. We need to find ways to help people move around the North Shore faster and more reliably, including more efficient use of infrastructure and improved transit.

The new B-Line service was proposed to address regional and local needs, and to improve the speed, reliability and convenience of transit service across the North Shore.



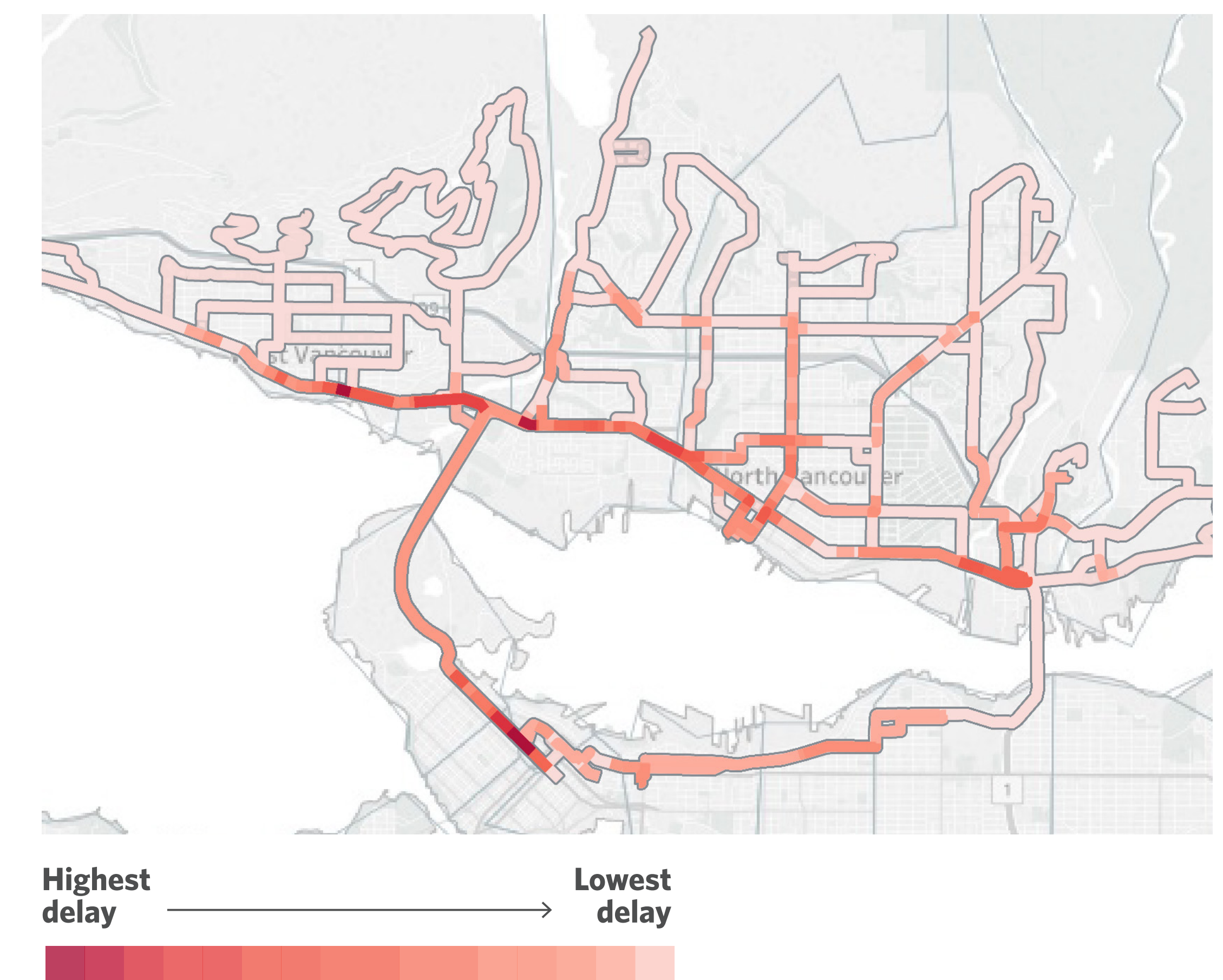
Official Community Plan and Integrated North Shore Transportation Planning Project (INSTPP)

The B-Line project fulfills the District of West Vancouver's Official Community Plan Policy 2.4.8, approved in 2018, which says, "Support the expansion of frequent transit services, prioritizing connections between Park Royal and Dundarave by expanding bus priority measures and transit-supportive road treatments along Marine Drive to improve reliability and speed of transit service, and to facilitate future rapid bus service."

In addition to supporting transit priorities, the proposed B-Line supports concerns about housing availability and affordability, as well as concerns about climate change and social equity.

The B-Line is also supported by INSTPP recommendations.

Average Transit Delay on the North Shore



Source: TransLink

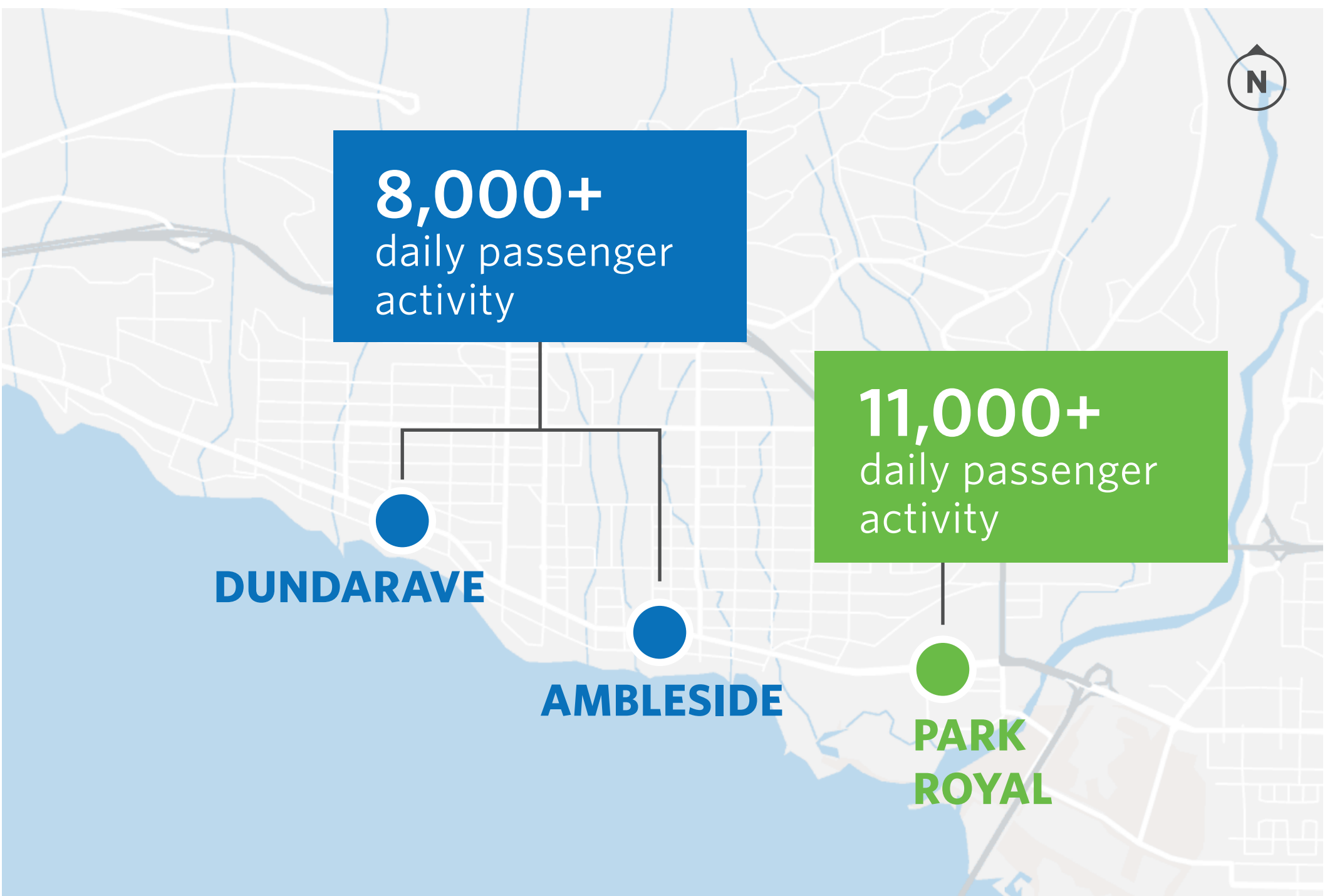
Ridership Demand

According to TransLink’s statistics, West Vancouver has the fastest growth in bus ridership on the North Shore, with daily boardings increasing 9.8% between 2017 and 2018.

Many passengers depend on transit to get downtown, to community services like Lions Gate Hospital, or to come to West Vancouver for work or school from other parts of the North Shore, Vancouver, and beyond.

As the cost of living in West Vancouver continues to increase, ridership demand for people who do not live in, but work or go to school in our community, is rising. On some West Vancouver bus routes, demand already exceeds capacity.

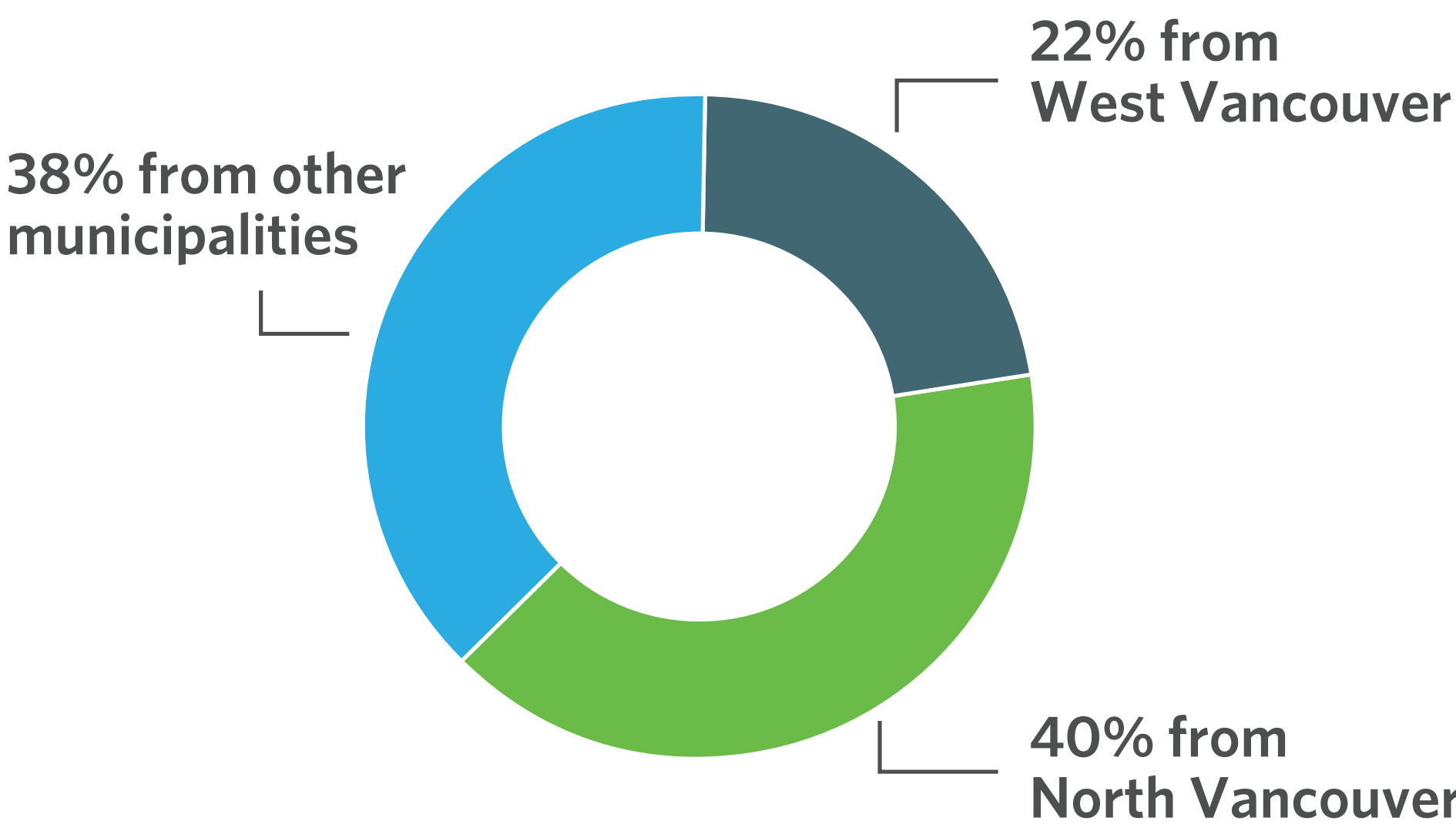
Average Daily Passengers in West Vancouver



Source: TransLink, Automatic Passenger Count Data, TransLink: Daily Boardings and alightings (M-F), Sept to Dec 2018

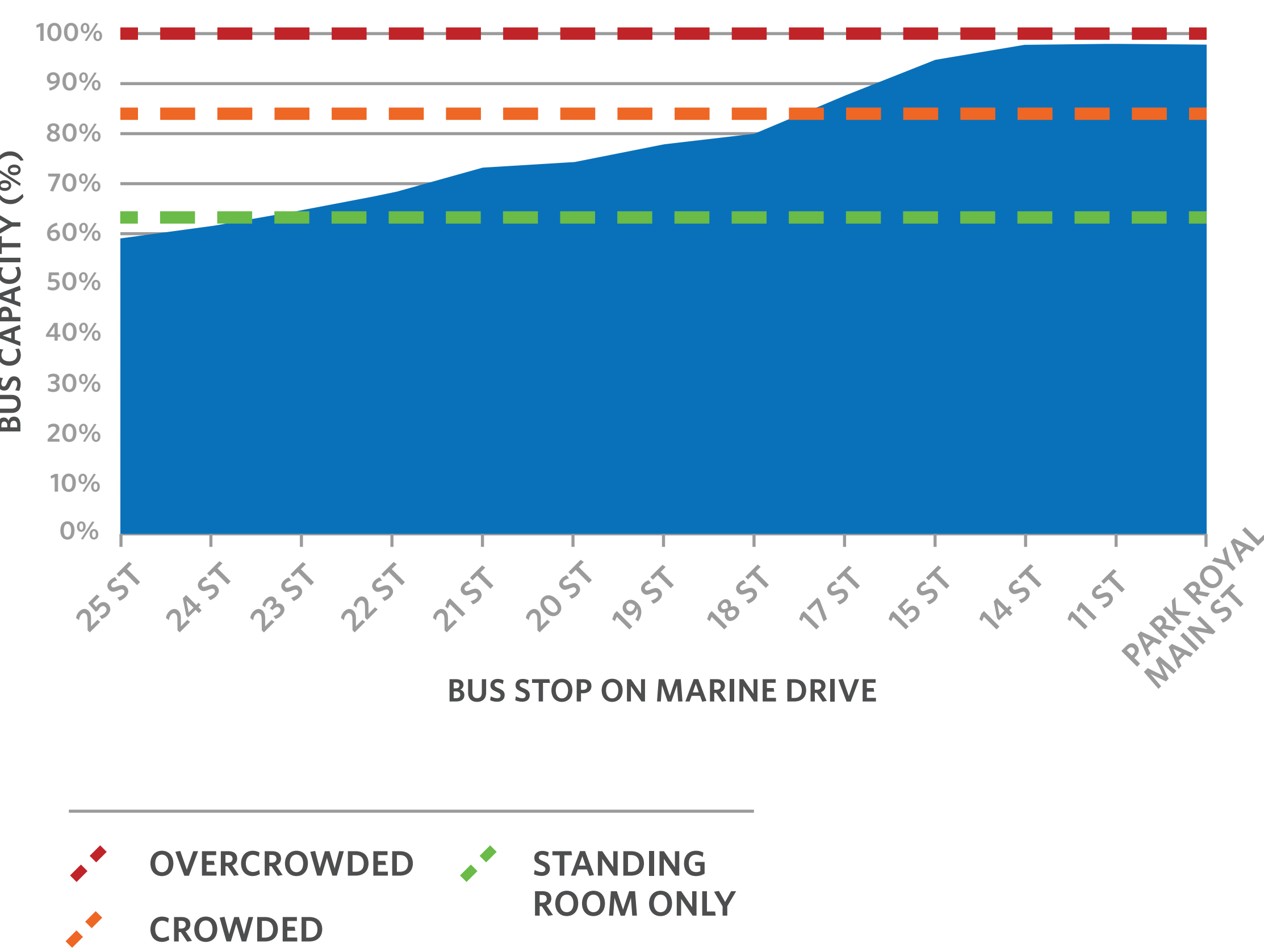
East-West Travel Demand

78% of West Vancouver employees (library, parks and recreation, fire and rescue, police, etc.) commute to West Vancouver from other municipalities



District of West Vancouver, Human Resources & Payroll Services

Existing Bus (Route 250) – Average Bus Loads Eastbound during PM Peak (3-6pm)



Source: TransLink, Automatic Passenger Count Data, TransLink: Average load per scheduled trip (M-F), Sept to Dec 2018

About the Proposed B-Line

As part of Phase One of the Mayors' Council 10-Year Vision, three new rapid-service B-Line routes are planned for Metro Vancouver in 2019.

One of these routes is the Marine-Main B-Line, to provide a faster, more reliable, east-west connection across the North Shore. There are four proposed stops in West Vancouver:

- Marine Drive at Park Royal
- Marine Drive at 14th Street
- Marine Drive at 21st Street
- Marine Drive at 24th Street

THE PROPOSED B-LINE AT A GLANCE

- Service would be from 6 a.m. to 1 a.m.
- Frequency of service would be 8 minutes during peak periods and 10-15 minutes during off-peak periods
- Travel from Dundarave to Phibbs Exchange would take approximately 45 minutes

ENGAGEMENT AND PUBLIC INFORMATION TO DATE

West Vancouver's previous Mayor and Council worked with TransLink, and the City and District of North Vancouver, to look at plans to improve transit service on the North Shore and get an increased share of regional transit investment.

In Spring 2018, TransLink consulted with the public on the four new B-Line corridors, as well as proposed changes to local routes, streets, and intersections. Engagement on the B-Lines included an online survey available on TransLink's website, and a series of in-person events.

In addition, from November 27-29, 2018, TransLink held two community information sessions in West Vancouver to provide information and seek feedback on the proposed plan.

More information is available in the engagement summary report, posted on TransLink's website: translink.ca/bline.



Proposed B-Line Route



Legend	
	Planned B-Line route
	Planned B-Line stop
	Proposed future B-Line stop
	Bus exchange

Planned stops



Source: TransLink

Why B-Line?

A B-Line provides improved travel time and reliability by separating buses from through-traffic.

The B-Line proposal has buses running at least every 15 minutes (every 8 minutes in peak periods) throughout the day, every day of the week, with the ability to move 25,000+ more passengers per day.

Improved travel time and reliability

- B-Line stops are spaced approximately 1 km apart
- All-door boarding
- Streets are designed to make bus service faster
- High-capacity articulated buses
- Longer hours of service, 6 a.m. to 1 a.m.

Frequent

- At least every 8 minutes during peak periods
- At least every 15 minutes at other times
- Stops have Next Bus digital signage

Why Marine-Main B-Line?

The proposal was developed and is being considered for the following reasons:

- Improves transit service for West Vancouver residents
- Helps West Vancouver employers attract employees by providing faster and more reliable transit service
- Proposed street changes benefit local Blue Bus services
- Takes cars off the road by providing a reliable transit alternative
- Reduces impact of employee parking in adjacent residential neighbourhoods
- Improvements would be funded by TransLink, not the District of West Vancouver
- Supports the District's commitments to address climate change and social equity

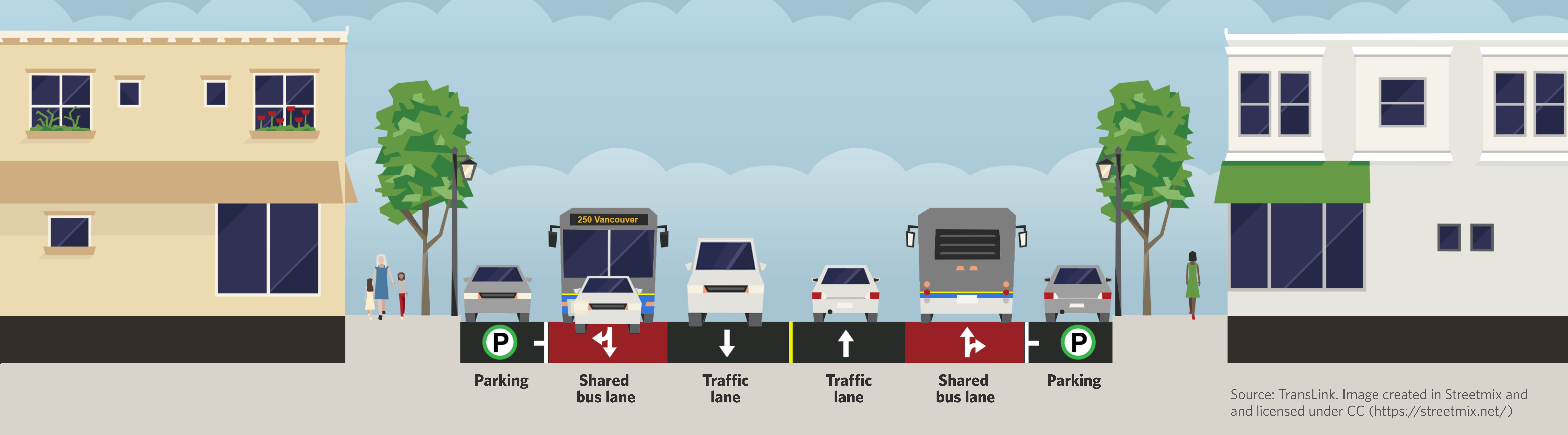
Mayor and Council have been hearing the concerns of West Vancouver residents who want better transit service, and the concerns of small businesses and local residents regarding the potential impacts of the proposed B-Line service.

The B-Line would make transit more attractive for East-West travel.

25% of North Shore residents, 40% of North Shore jobs, and 35% of planned North Shore growth are on or near the proposed B-Line route.



TransLink bus illustration.



Street Changes Included in the B-Line Proposal

To ensure B-Line service can operate effectively, the proposal recommends a number of street changes that would improve speed and reliability for cars and buses on Marine Drive, including the construction of new left-turn bays in some locations.

The proposed street changes include:

- **Through-traffic uses the centre lane**
- **Left-turn traffic on Marine Drive at 13th, 15th and 17th Streets would have left-turn bays**
- **Left-turn restrictions on Marine Drive at 14th and 16th Streets**
- **The right lane would be allocated for buses, right turning traffic, cyclists, and access to street parking and business driveways**

The proposed changes separate all buses from through-traffic, allowing faster and more reliable transit service, as well as fewer delays for through-traffic.

Currently, car traffic gets stuck behind vehicles parking or turning right in the right lane, and behind left-turners in the left lane. This proposal would create a through-traffic lane for cars in the centre lane. Dedicated left-turn bays on

Marine Drive at 13th, 15th and 17th Streets would improve the flow of through-traffic, as would the restriction of left-turns at 14th and 16th Streets.

With through-traffic in the centre lane, the right lane would be for cars parking, cars turning right, cyclists, and buses.

North Vancouver Transit Priority Measures

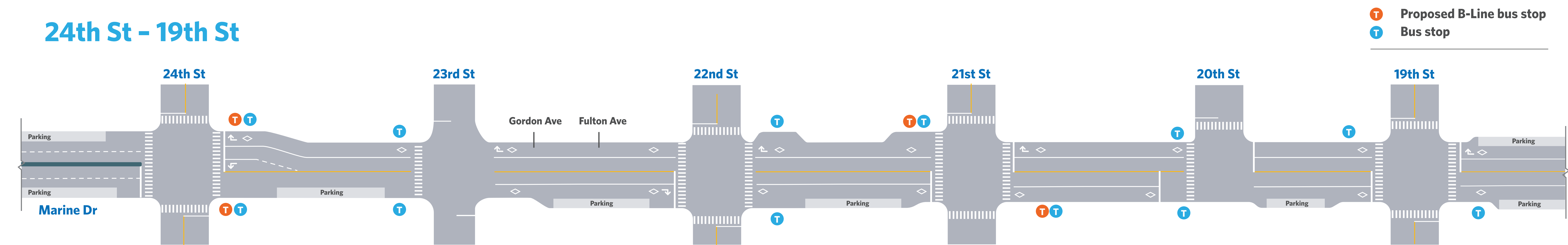


Source: TransLink

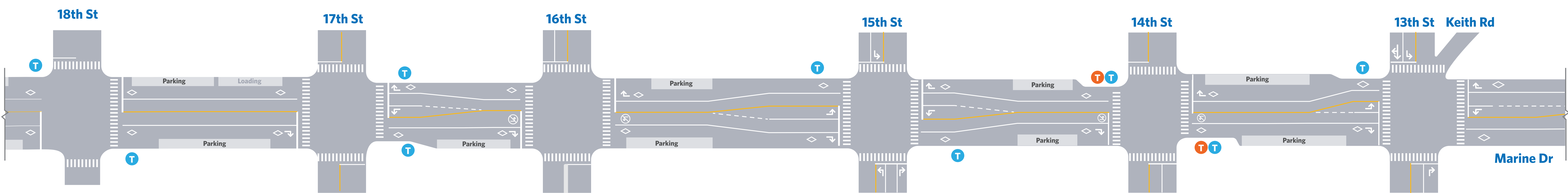
How would the lanes operate on Marine Drive?

Park Royal to Dundarave (Marine Drive at 24th Street)

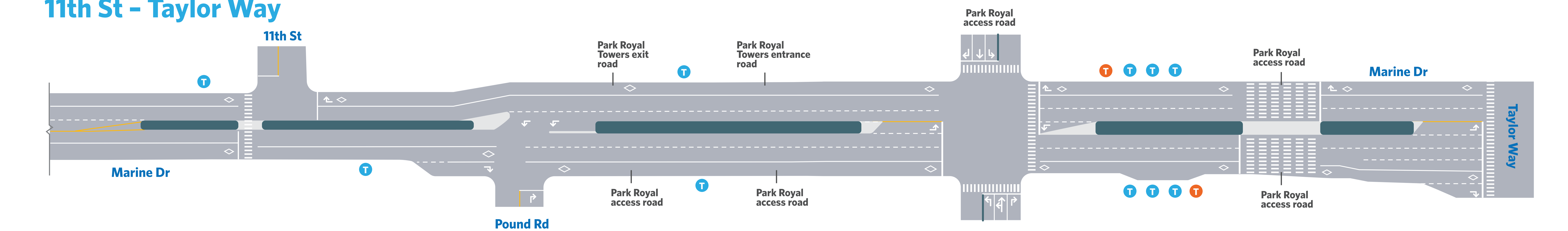
24th St - 19th St



18th St - 13th St/Keith Rd



11th St - Taylor Way

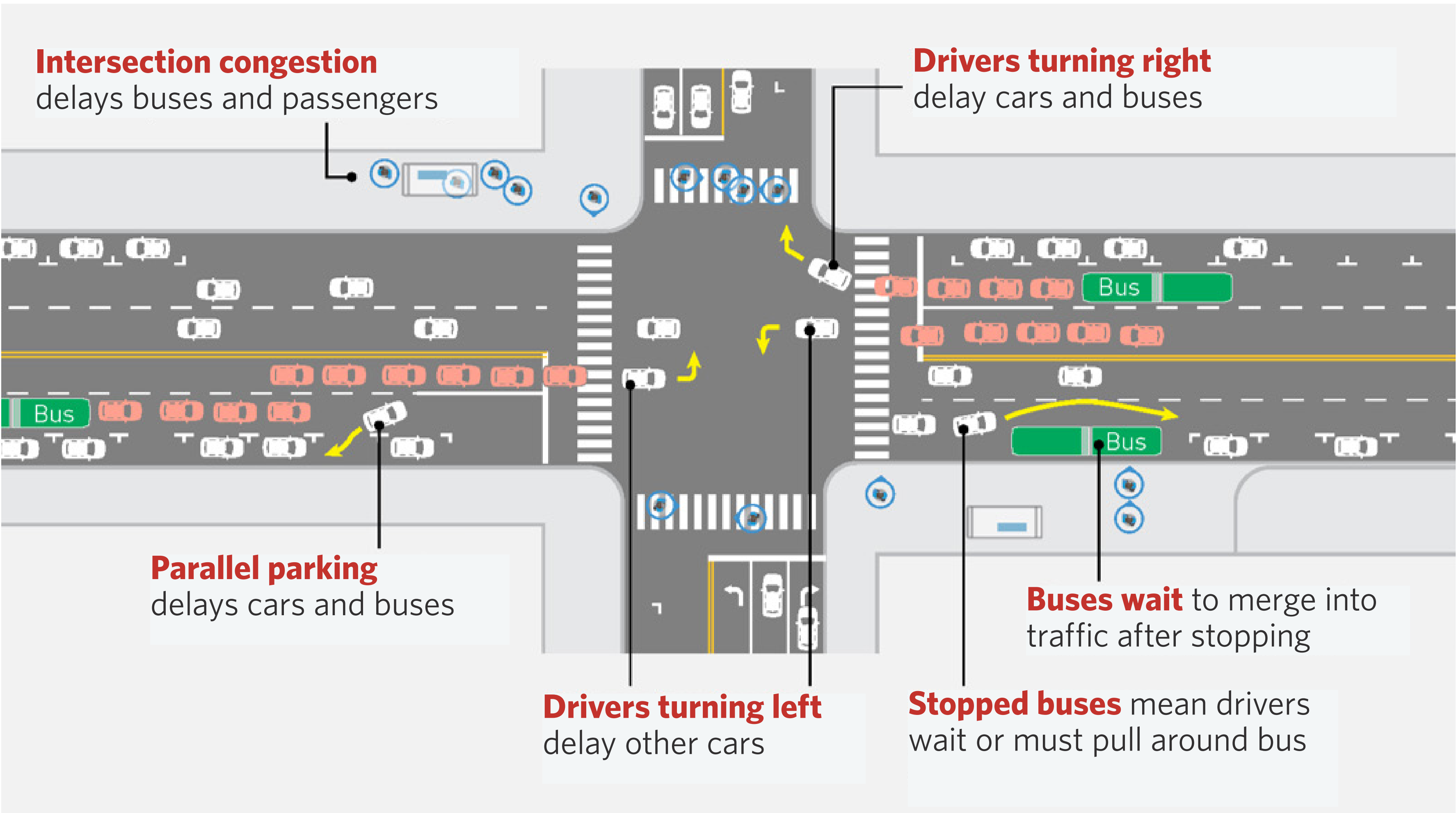


Note: drawing is based on preliminary designs and subject to change. Drawing not to scale.
Source: TransLink

Marine Drive at 15th Street

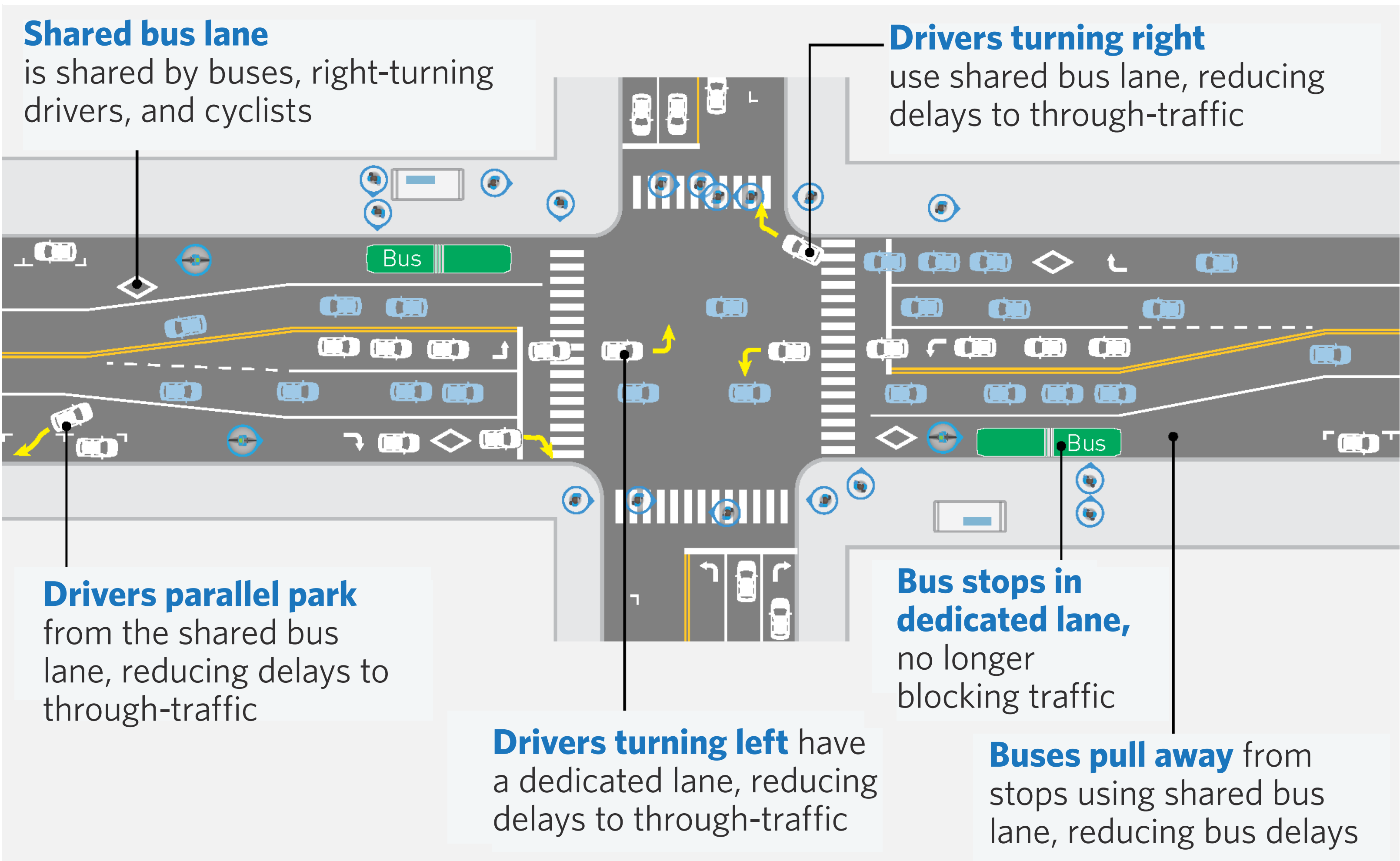
Street Changes Included in the B-Line Proposal

CURRENT INTERSECTION CONFIGURATION



Source: TransLink

PROPOSED INTERSECTION CONFIGURATION



Source: TransLink



Shared Bus Lane – Hours of Operation

The District wants to know...

During the day, Marine Drive experiences consistent congestion. In an effort to help reduce congestion and more efficiently organize bus and car traffic, the B-Line proposal includes converting the right lane on Marine Drive in both directions into a shared bus lane.

If the proposed B-Line terminates in Dundarave (21st Street or 24th Street), the following are the time-of-day options for the shared bus lane.

WHO WOULD USE THE SHARED BUS LANE?

- The right lane would be allocated for buses, right turning traffic, cyclists, and access to street parking and business driveways

OPTION 1

6 A.M. – 7 P.M., EVERY DAY

Considerations

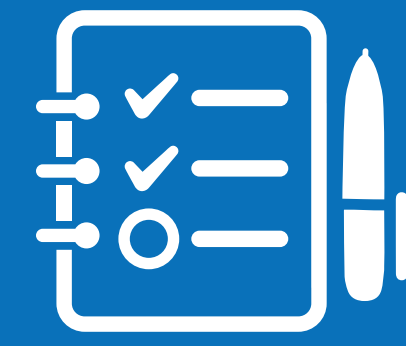
- **Allows through-traffic to use shared bus lane outside of daytime hours – enforcement challenges**
- **Potential for confusion about when lanes are in effect**
- **Inconsistent with proposed lane operation through North Vancouver**
- **Results in 95% of total available bus travel time savings, according to TransLink's modelling**

OPTION 2

24 HOURS/DAY, EVERY DAY

Considerations

- **No confusion about when lanes are in effect**
- **Allows lane to be painted – improved compliance**
- **Results in 100% of total available bus travel time savings, according to TransLink's modelling**



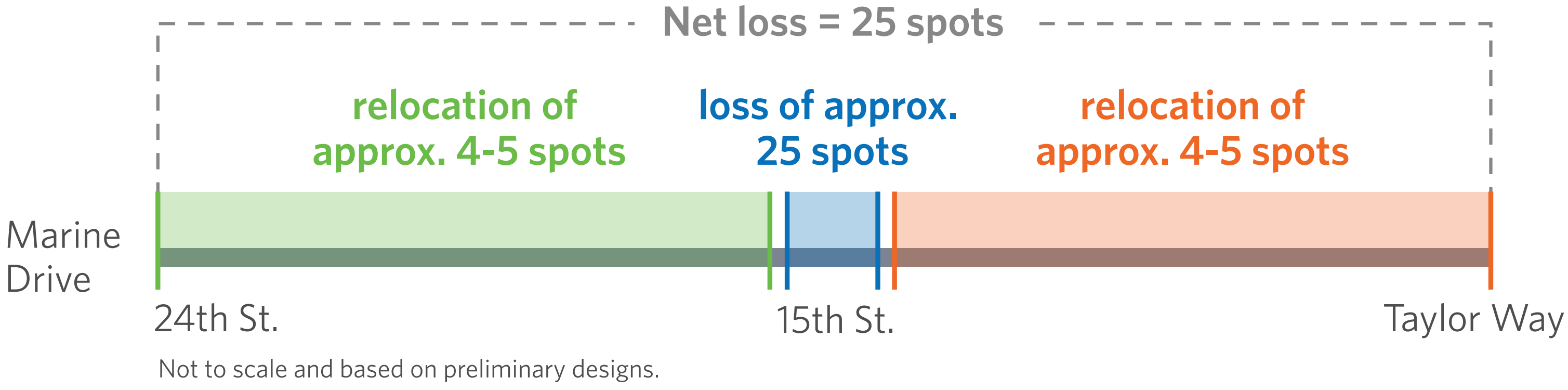
Tell us what you think online at westvancouver1TE.ca/b-line or ask a project team member for a feedback form.

Changes to On-Street Parking

The District wants to know...

If the proposed B-Line terminates in Dundarave (21st Street or 24th Street), the loss of parking through the corridor to accommodate left-turn bays, right-turn bays in some locations, and B-Line bus stops has been mitigated to approximately 25 spots, primarily around Marine Drive/15th Street intersection. The District is aware of the constraints regarding on-street parking availability in areas like Ambleside and Dundarave, and has developed the following potential options to further minimize parking loss:

LOCATIONS OF POTENTIAL PARKING LOSS



OPTION 1

CONSOLIDATE TWO LOCAL BUS STOPS

To create additional on-street parking

- **Reduces the net loss of on-street parking by 6-9 spots**
 - **13th Street: 1-3 new parking spots**
Nearest alternative stop is 130 metres away, at 14th Street; average 560 boardings/alightings per weekday
 - **18th Street: 5-6 new parking spots**
Nearest alternative stops are 130 metres away, at 17th Street or 19th Street; average 290 boardings/alightings per weekday

OPTION 2

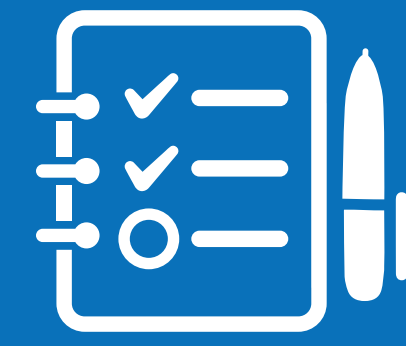
ELIMINATE NEW WESTBOUND LEFT-TURN BAY AT 15TH STREET FROM THE PROPOSAL

- **Reduces the net loss of on-street parking by 8 spots**
- **Results in left-turn restriction westbound at 15th Street**

RECOVERY OF 11 ON-STREET PARKING SPOTS, ESTIMATED SPRING 2020

The construction on 1300 Block Marine drive is estimated to be complete in spring 2020, which will:

- Recover 11 on-street parking spots on Bellevue Avenue
- Revert 13th Street and Bellevue Avenue back to two-way car traffic
- Reduce pressure from trades parking



Tell us what you think online at westvancouver1TE.ca/b-line or ask a project team member for a feedback form.

Western Terminus Location

The District wants to know...

OPTION 1

PARK ROYAL TERMINUS

The proposed B-Line could run from Phibbs Exchange in North Vancouver and terminate on Marine Drive at Park Royal.

Considerations

- **No travel time or reliability improvements for existing West Vancouver bus service**
- **No transit priority benefits from Park Royal to Dundarave**
- **No additional bus service**
- **No construction of street changes to Marine Drive**

OPTION 2

MARINE DRIVE AT 21ST STREET TERMINUS

The proposed B-Line could run from Phibbs Exchange in North Vancouver and terminate at Marine Drive and 21st Street, with stops at Park Royal and 14th Street.

Considerations

- **Reduces proposed B-Line route by one stop**
- **Improved travel time and reliability of transit service on Marine Drive from Park Royal to 21st Street**
- **No transfer required to connect from Park Royal to Ambleside or Dundarave**
- **Would include street and traffic changes on Marine Drive, including the construction of new left-turn bays in some locations**
- **Allows efficiency gains to be re-invested in additional local service**

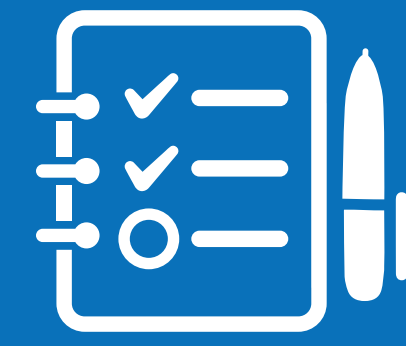
OPTION 3

MARINE DRIVE AT 24TH STREET TERMINUS, BUT NOT NEAR IRWIN PARK SCHOOL

The proposed B-Line could run from Phibbs Exchange in North Vancouver and terminate at Marine Drive and 24th Street, with stops at Park Royal, 14th Street and 21st Street.

Considerations

- **Improved travel time and reliability of transit service on Marine Drive from Park Royal to 24th Street**
- **No transfer required to connect from Park Royal to Ambleside or Dundarave**
- **Would include street and traffic changes on Marine Drive, including the construction of new left-turn bays in some locations**
- **Allows efficiency gains to be re-invested in additional local service**

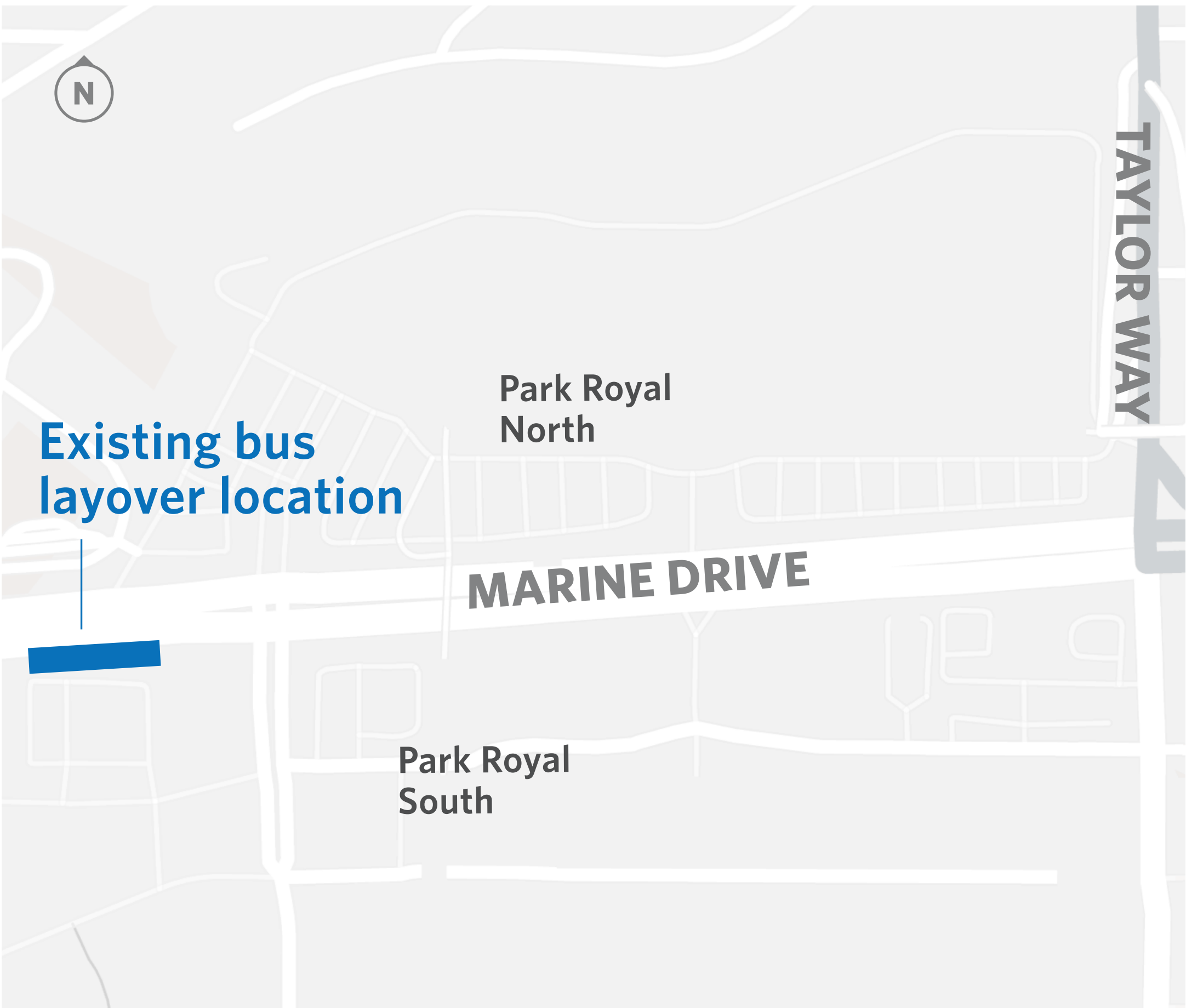


Western Terminus Proposed Layover Locations

The District wants to know...

The following maps outline the preliminary B-Line layover locations proposed for each terminus location. A layover area is for buses that have finished one trip and not yet started their next one. These spaces are essential to enable buses to stay on schedule and allow drivers to change-over or take breaks.

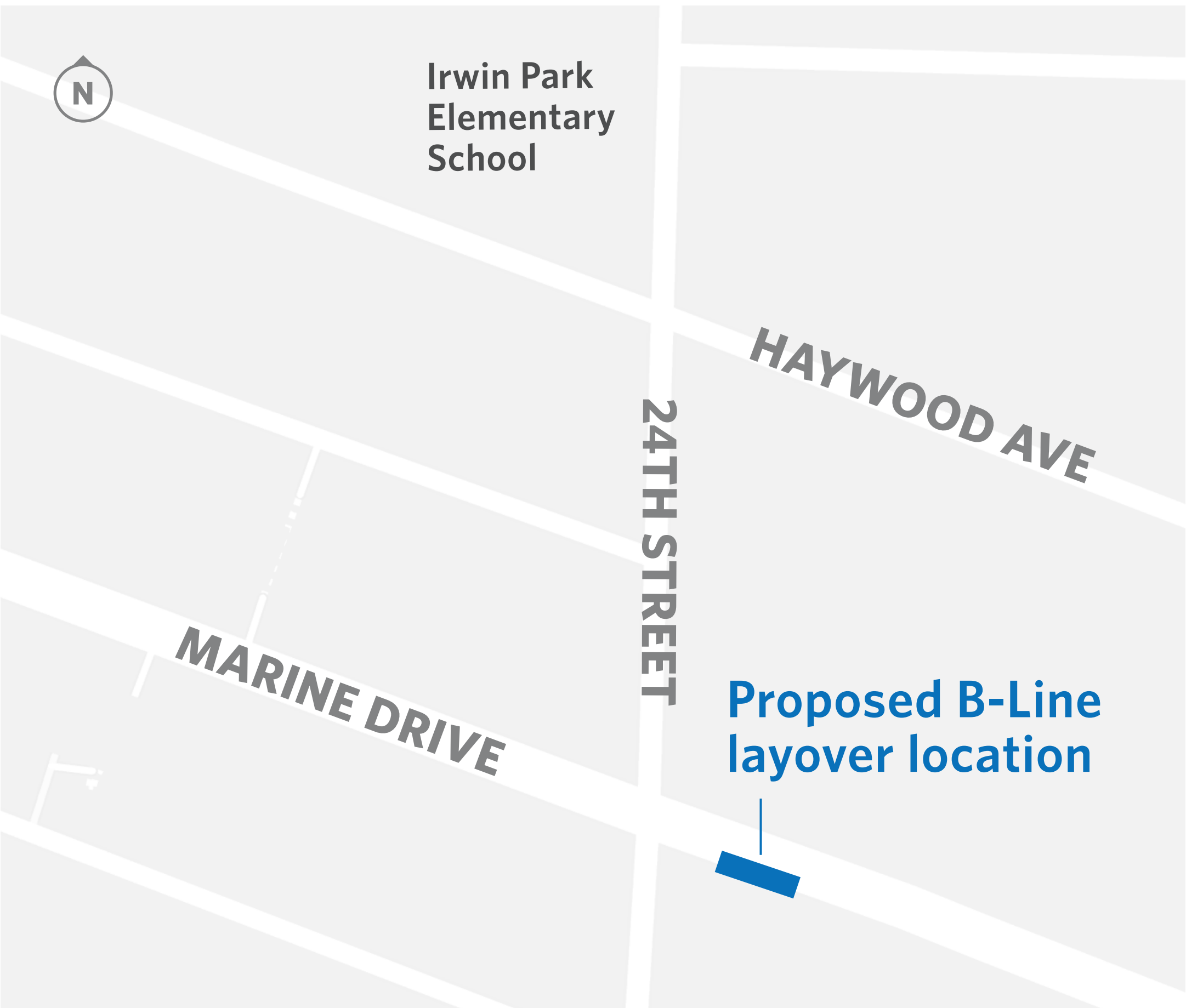
OPTION 1 PARK ROYAL TERMINUS



OPTION 2 MARINE DRIVE AT 21ST STREET TERMINUS

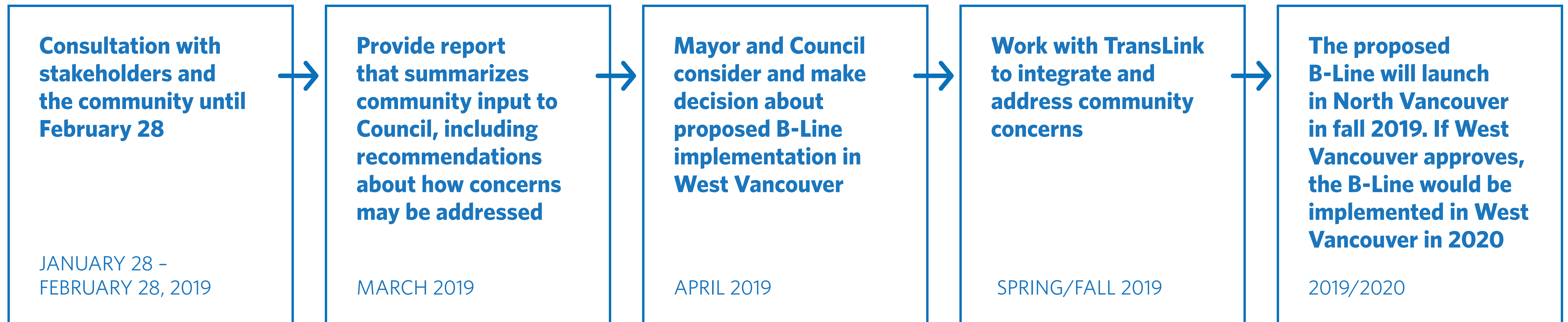


OPTION 3 MARINE DRIVE AT 24TH STREET TERMINUS



* Maps based on preliminary designs.
Source: TransLink

Next Steps



Please provide us with your feedback by February 28, 2019.

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