

# North Shore Transportation Context

## North Shore is a major traffic “hot spot”

- Lack of options for fast and reliable east-west travel
- Congestion impacts car traffic and transit

## Local and provincial governments calling for action, including improved transit

- Marine-Main B-Line is identified as key part of regional plan to address congestion by giving people fast and reliable alternatives to car travel
- Street and traffic changes will improve flow of traffic in West Vancouver



# B-Lines Move More People, Faster!

Four new rapid-service B-Line routes will be coming to Metro Vancouver in 2019, as part of Phase One of the Mayors' Council 10-Year Vision

## B-Lines are Big

- One B-Line bus can carry the equivalent of 110 single-occupancy cars
- Marine-Main B-Line can move up to 1,600 people per hour (which is more than 4 BC Ferry loads)

## B-Lines are Fast and Reliable

- All-door boarding
- Limited stops (1km apart)

## B-Lines are Convenient

- 8 minutes in peak times and 10-15 minutes at other times
- 20% less waiting compared to existing service
- Service from 6 a.m. to 1 a.m.
- Stops have “Next Bus” digital signage



# The B-Line and the West Vancouver Business Area

**40 per cent of North Shore jobs are located near the Marine-Main B-Line stops**

- The B-Line service will help to reduce the need for employee and customer parking within business district
- The B-Line service will provide easy and quick access for community members and visitors to travel between Dundarave, Ambleside, Park Royal and North Vancouver



# Street & Traffic Changes

## **Street and traffic changes will improve all traffic flow along the corridor**

- Turn bays at some intersections and turn restrictions at other intersections will improve through traffic flow for cars
- A designated bus lane will help keep buses moving

## **Travel time from Dundarave to Park Royal during peak hours will take six minutes by bus**

- West Vancouver buses move nearly 21,000 passengers each day
- Transit users represent 30-40% of the trips on Marine Drive in West Vancouver during peak times
- Improved service means faster travel to destinations such as Downtown, Lonsdale or YVR

# What we heard

## Over a two-month period, TransLink consulted with North Shore residents

- We talked to over 500 people at 7 open house events in the North Shore, including the Ambleside Farmers Market and Park Royal
- We received nearly 1,700 online survey responses

## We heard strong support for a North Shore B-Line from a diverse range of transit and non-transit users

- 87% support the Marine-Main B-Line
- 79% support street and traffic changes to make the B-Line faster

"I think any additional transit options on the North Shore will be well used considering the increase in traffic in our communities. And also is a step in the right direction for environmental responsibility."

- Survey Respondent

"I think the idea of making buses faster is good. However, I think it is really important not to make traffic or travel harder for those who are driving"

- Survey Respondent

# Key Considerations and Preferred Design

As directed by council, District staff have been working with TransLink on a preferred design

## Considerations and Constraints:

We considered the following impacts to local neighbourhoods and roadways, while also working within certain constraints.

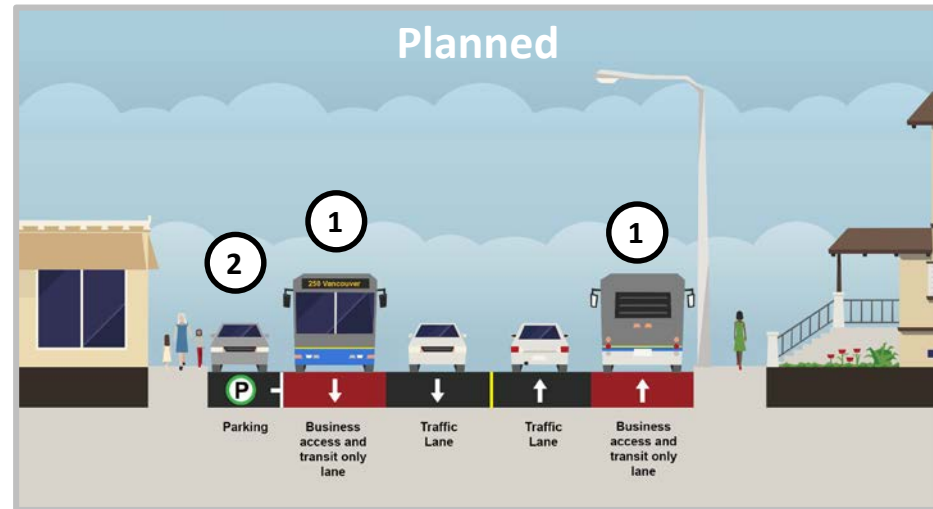
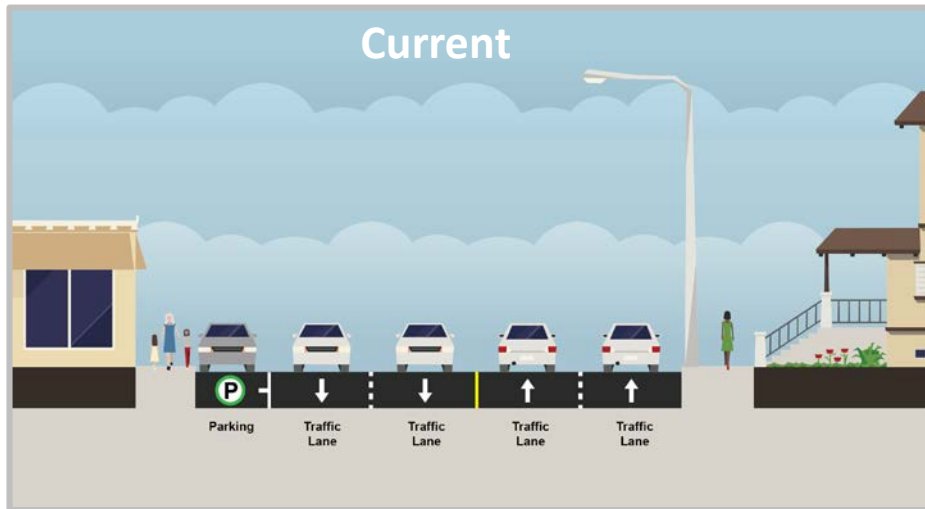
- Inability to widen roads
- Maintain commercial parking/loading
- Mitigate traffic delay
- Ensuring road and pedestrian safety
- Preserving the character of area

## Preferred design features include:

- Converting the right turn lane into a business access and transit lane, similar to what is already in place on Marine Drive at Park Royal
- New left-turn bays on Marine Drive at 15<sup>th</sup> and 17<sup>th</sup> Streets
- New B-Line bus bulge added to north west corner of Marine Drive at 14<sup>th</sup> Street for longer, articulated buses
- Left-turn restrictions on Marine Drive at 14<sup>th</sup> and 16<sup>th</sup> Streets
- Through traffic remains in centre lane

# Typical cross section: Marine Drive East of 23rd

(facing West)



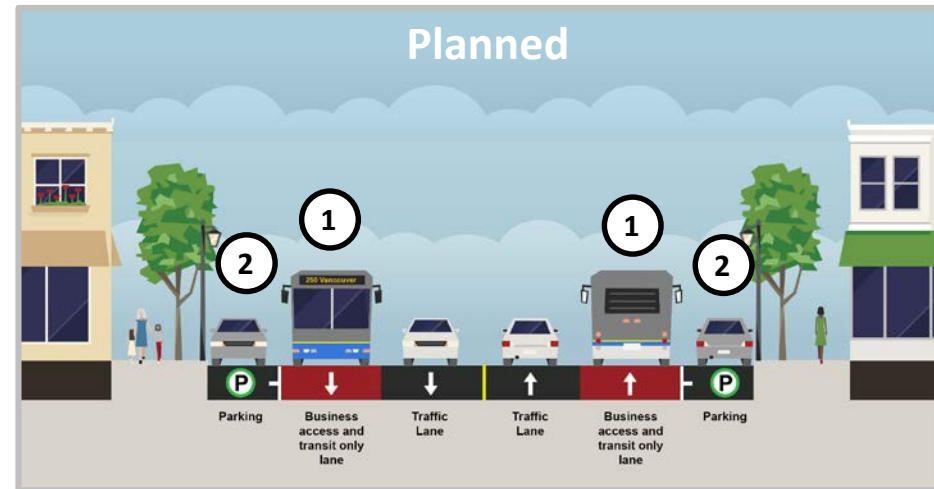
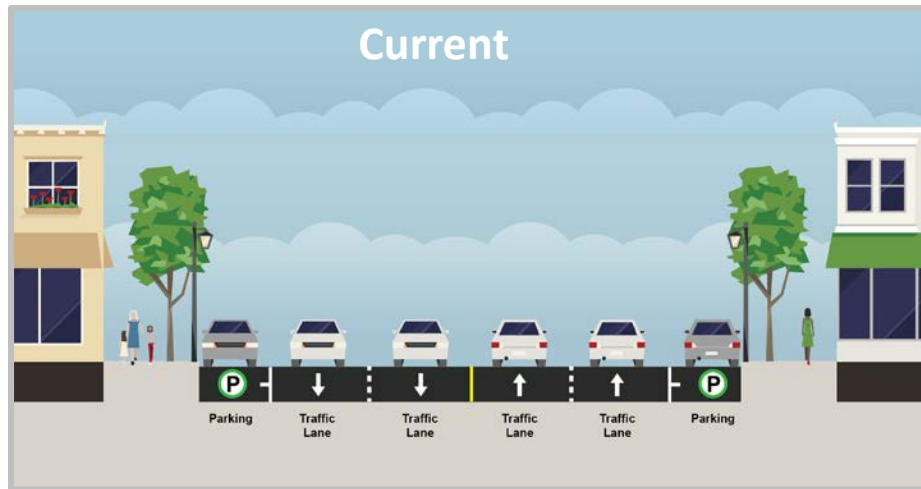
**1** **Right vehicle lane converted to right-turn and bus-only lane:**  
Bus-only lanes separate buses from traffic, increasing speed and reliability.

- Vehicles can use bus-only lane to:
  - turn right at intersections
  - access street parking
  - access driveways/businesses

**2** **No change to existing parking**

# Typical cross section: Ambleside

(facing West)



1

## Right vehicle lane converted to right-turn and bus-only lane:

- Used by B-Line and other West Vancouver bus routes, such as the 250
- Vehicles can use bus-only lane to:
  - turn right at intersections
  - access street parking
  - access driveways/businesses

2

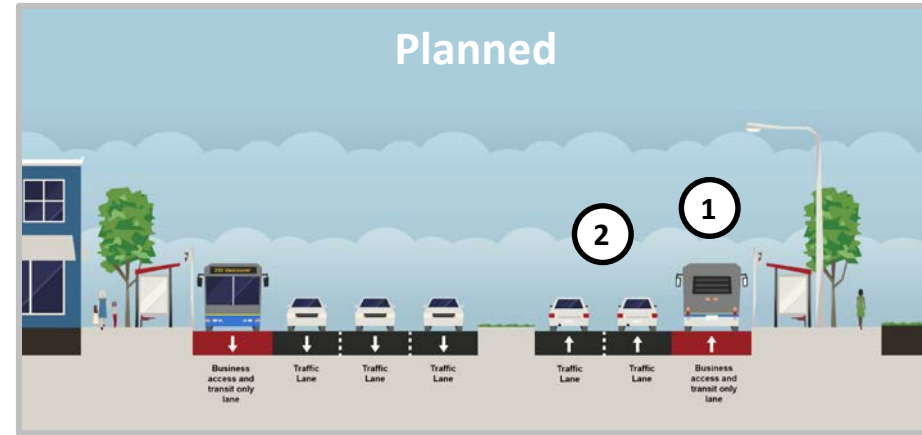
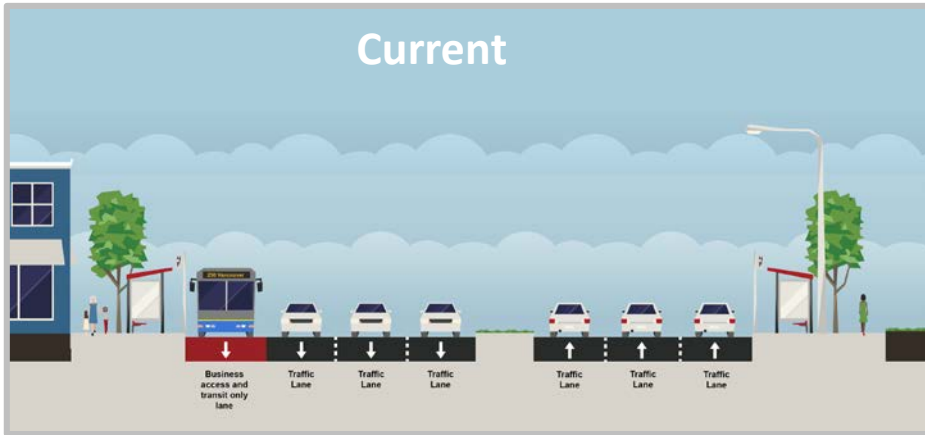
## Minimal change to street parking

- Some parking reduced at three intersections to accommodate left-turn bay



# Typical cross section: Park Royal

(facing West)



1

**Westbound Right vehicle lane converted to right-turn and bus-only lane to match existing eastbound lane**

- Used by B-Line and other West Vancouver bus routes, such as the 250
- Vehicles can use bus-only lane to turn right at intersections and access mall

2

**Preserves two lanes for car traffic**

# Rejected Designs

The District rejected other options for street and traffic changes.

## Convert parking lane into peak hours bus-only lane

- Disadvantages:
  - Most loss of parking of all options
  - Requires buses to manoeuvre around pedestrians bulges at intersections is more dangerous for operators
  - Weaving between lanes slows buses down
  - Benefit limited to peak hour only

## Convert centre lane into all day bus-only lane

- Disadvantages:
  - Difficult to accommodate left-turning cars with buses
  - Requiring buses to change lanes to get to curb-side bus stop is more dangerous for operators
  - Weaving between lanes slows buses down

# Next Steps

- The Marine-Main B-Line will launch in Fall 2019
- TransLink will share more information and design details in Spring 2019
- View the consultation report and all four B-Line routes at [translink.ca/bline](https://translink.ca/bline)

## Questions?

- [bline@translink.ca](mailto:bline@translink.ca)
- 778-375-7652
- [westvancouver.ca/bline](https://westvancouver.ca/bline)

# Come talk to us!

## TransLink B-Line Information Session

Ask questions and learn more about the B-Line, coming to the North Shore in 2019

**Wednesday, November 28, 4 – 6 p.m.**

West Vancouver Community Centre  
Lalji Family Atrium, 2121 Marine Drive

**Thursday, November 29, 1 – 3 p.m.**

Municipal Hall, ground level atrium  
750 17<sup>th</sup> Street, West Vancouver BC