



# STANLEY PARK TEMPORARY BIKE LANE OPTIONS

## Report Back

Regular Board Meeting  
Monday, February 13, 2023





- To update the Board on considerations for different options to removing and/or changing the existing temporary bike lane on Park Drive in Stanley Park
- To seek board direction for an option for returning pre-COVID 19 Pandemic traffic flows in Stanley Park with changes to the existing temporary bike lane which are:
  - OPTION A – Return the Pre-COVID-19 Traffic Flow on the East Side of the Park & Construct an Interim Bike Lane on the West Side of the Park
  - OPTION B – Return the Pre-COVID Traffic Flow & Construct an Interim Bike Lane Around the Entire Park
  - OPTION C – Return the Pre-COVID-19 Traffic Flow & Conditions on Park Drive with Added Safety Measures



1

## Introduction & Board Direction



2

## Key Issues & Considerations



3

## Options Overview & Details



Option A  
Option B  
Option C





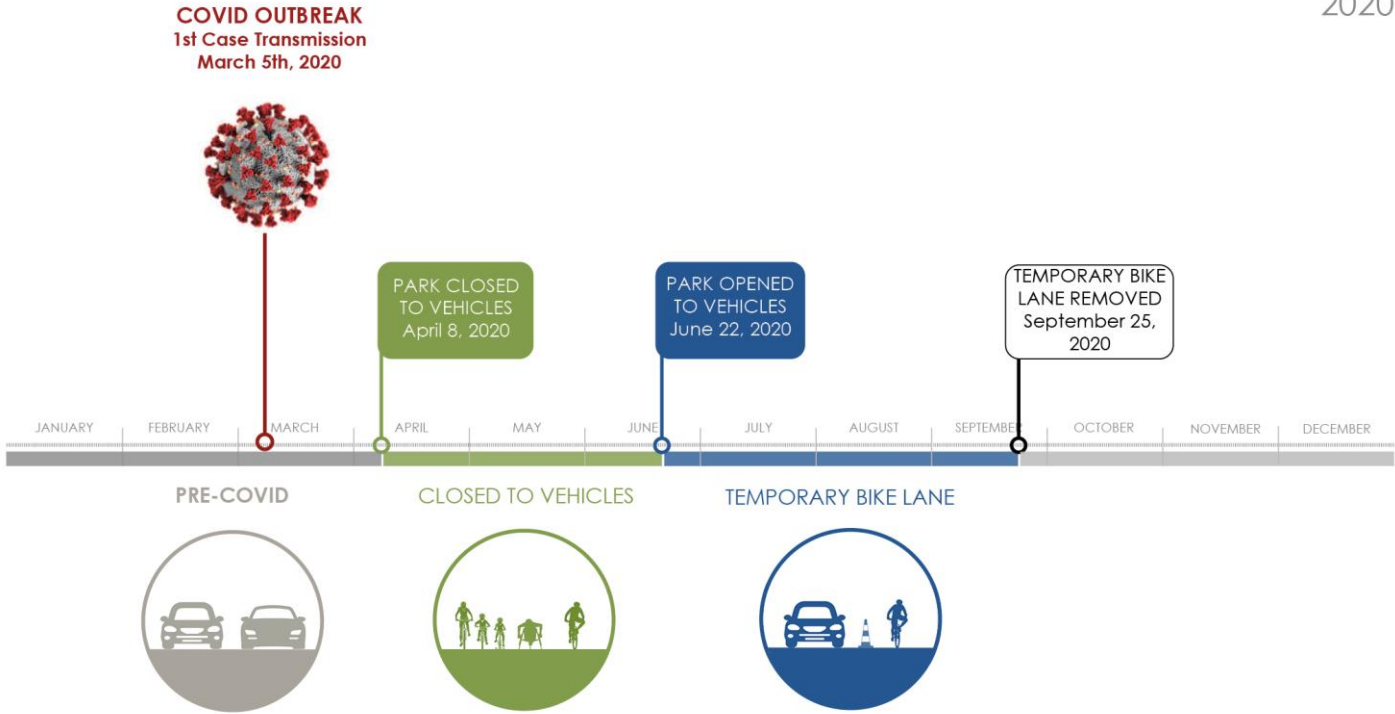


# Introduction & Board Direction



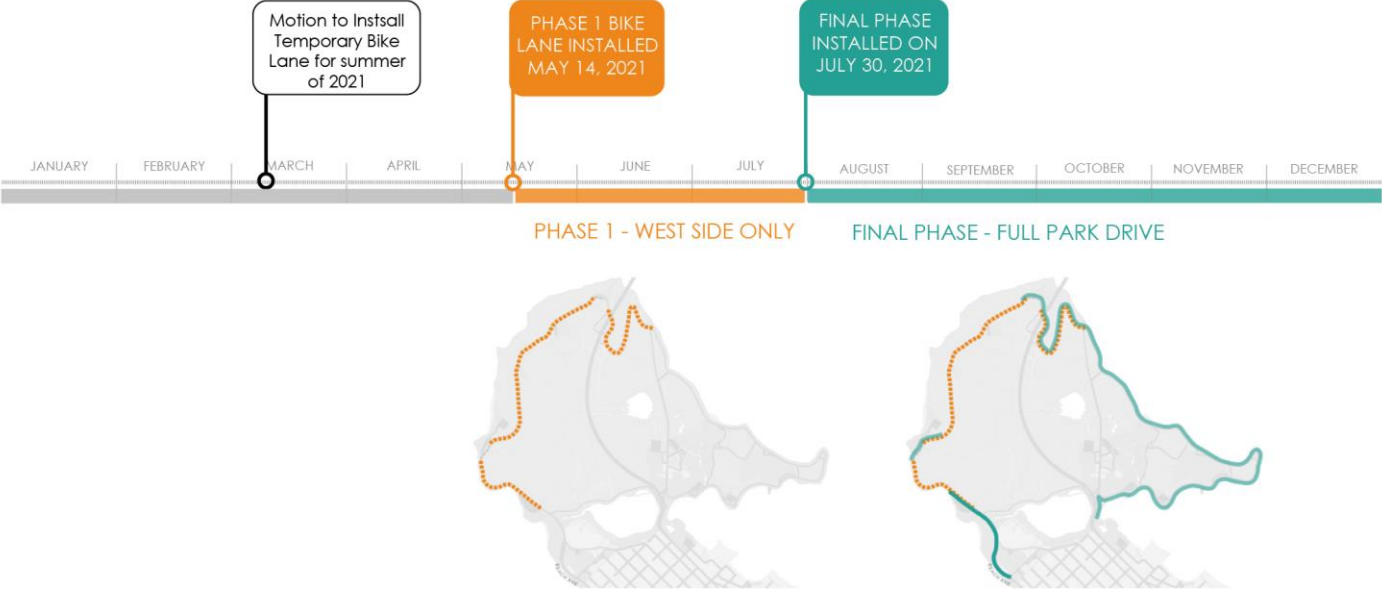


2020





2021









1. Remove "temporary" nature of the bike lane
2. Maintain some sections of bike lane for safety & accessibility
3. Confirmed feedback on key issues & challenges
4. Plan for more permanent bike lane in the near future





# Options for Bike Lane Removal and/or Changes

A



B



C



----- Interim Protected Bike Lane  
(with improvements)  
———— No protected bike lane



## Board Motions & Feedback

### *Engagement*

Over 15,000 responses over  
three public surveys

Over 50 stakeholders engaged  
in over 85 meetings

At least 150 individual speakers  
at Board Meetings

Thousands of web visits

Hundreds of emails



## Key Issues Identified



# Key Issues & Considerations





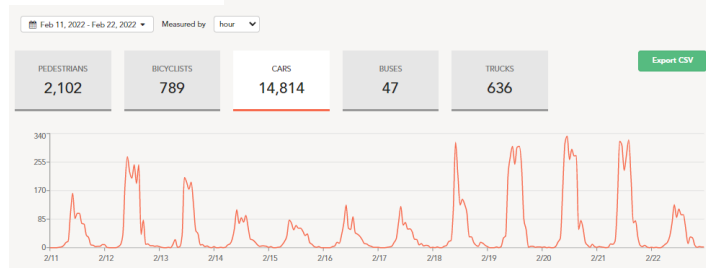
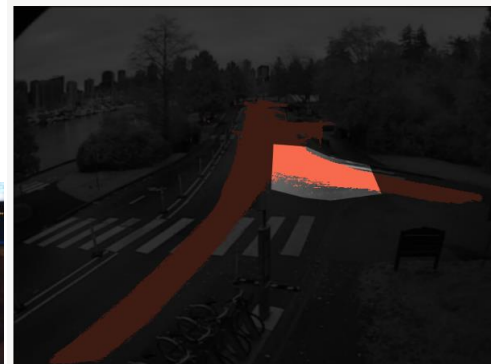
# Vehicle Traffic Congestion – Horse & Carriage



Tuesday, June 30th, 2020  
4:44pm



# Vehicle Traffic Congestion – Aquarium Traffic



Family Day (Aquarium Promotion)  
Monday, February 21, 2022  
4:45pm



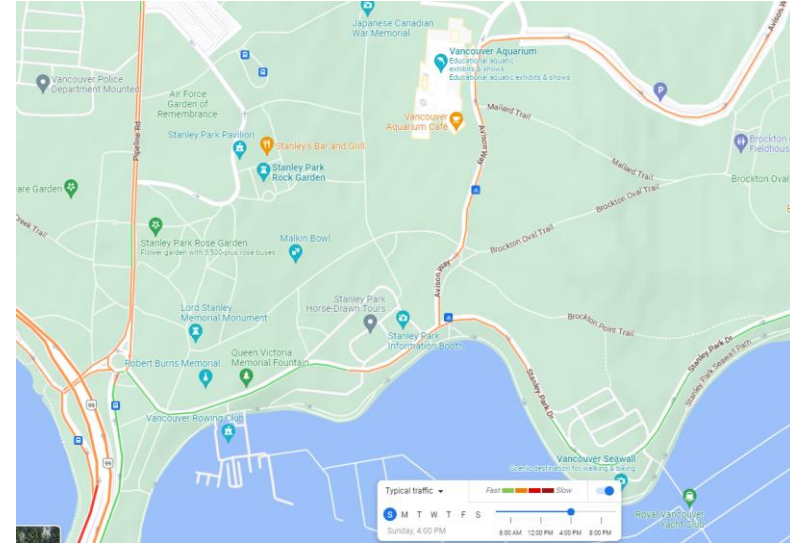
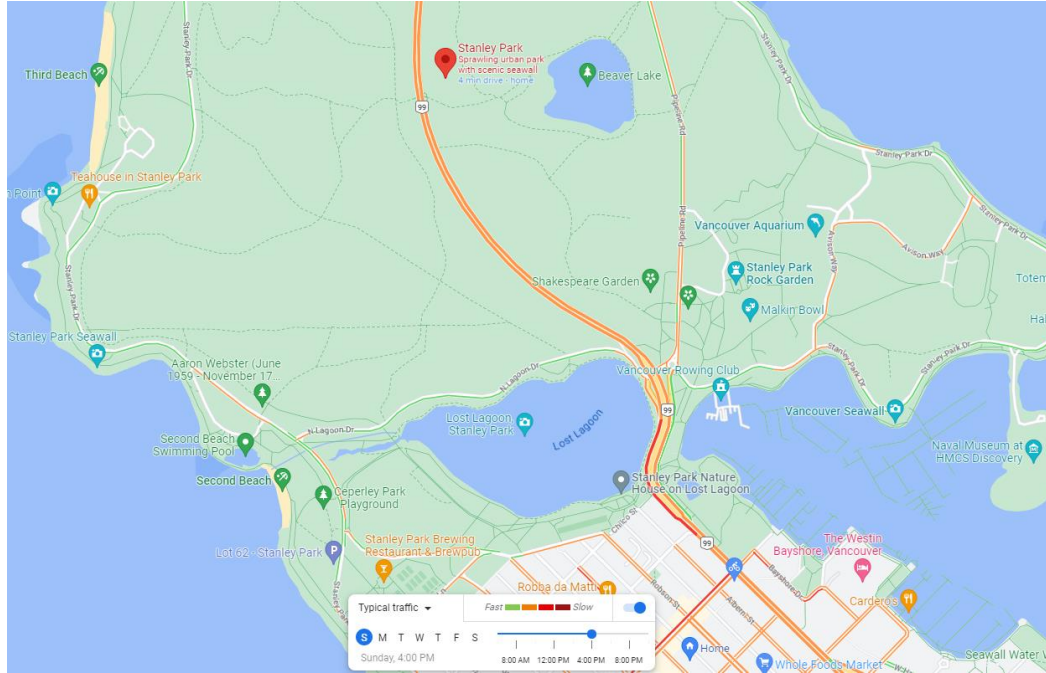
# Vehicle Traffic Congestion – Exit to Georgia Street



May Long Weekend  
Sunday, May 21, 2022  
4:45pm



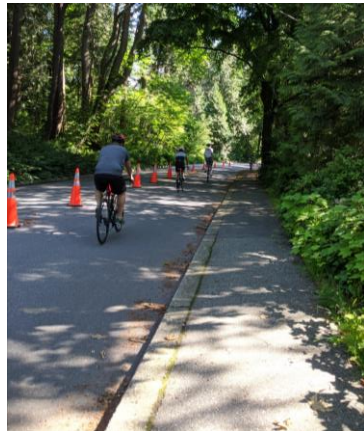
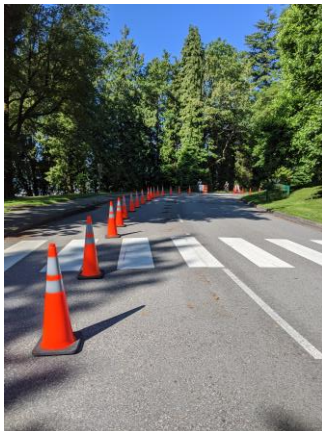
# Vehicle Traffic Congestion



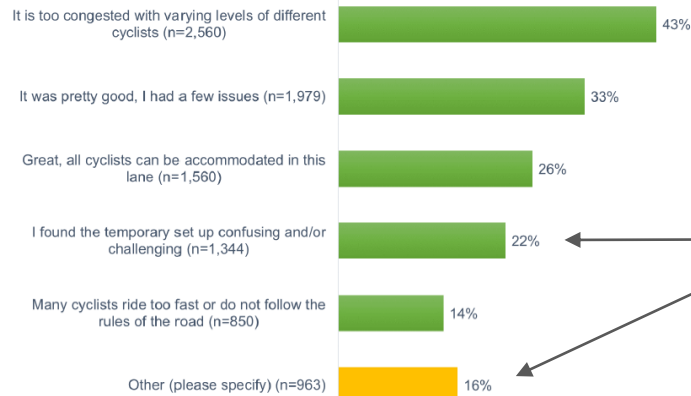
Aside from these exceptions, overall vehicle traffic flowed generally well throughout the Park



# Temporary Look



## 2020 Public Survey: Thoughts about cycling lane (6006 cyclist responses)



Included many comments related to the look of the **traffic cones**

## 2021 Public Survey: Experience using the bike lane (735 cyclist responses)

When asked about what aspects of their experience were

**worse**

top choice at 41% (299 responses)

*"the bike lane on Park Drive was too congested with cyclists of varying abilities in one lane"*

When asked about what aspects of their experience were

**better**

top choice at 55% (404 responses)

*"I felt safer with the concrete barriers in place".*



# Interim Bike Lane

example



Interim Design  
(semi-permanent)

quality



timeline to install



cost

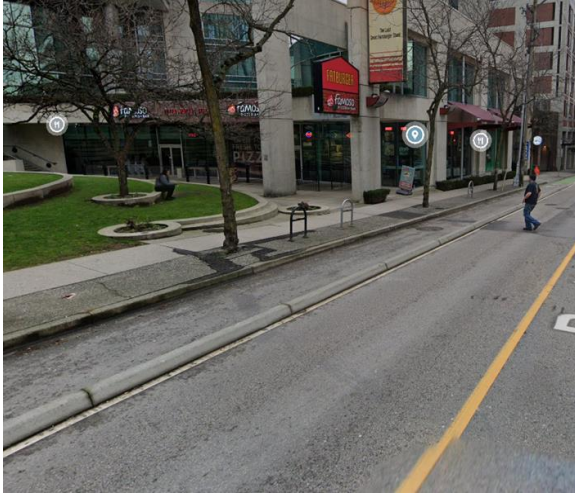


level of comfort





# Interim Bike Lane Considerations



**Top left:** Extruded 6" curb (under 1' wide), Beaty Street (2016)

**Above:** Extruded 6" curb (over 1' wide), Beach Avenue (2020)

**Left:** Cast-In-Place Concrete 3" curb (over 1' wide), 10th Ave Bike Lane (2019)



Examples of  
extruded concrete  
curbs



# Interim Bike Lane Considerations



**Top left:** New York City, NY  
**Above:** Robson Street, Vancouver, B.C.  
**Left:** Toronto, ON



# Options Overview & Details



Option A  
Option B  
Option C





# Changes That Apply to All Options

All three options involve:

1

Removal or  
replacement of traffic  
cones & delineators



And replacing them with a  
concrete mountable curb



Including all "breaks" in barrier for  
emergency & operational access





# Changes That Apply to All Options

All three options involve:

2

Open exit to west  
end





# Changes That Apply to All Options

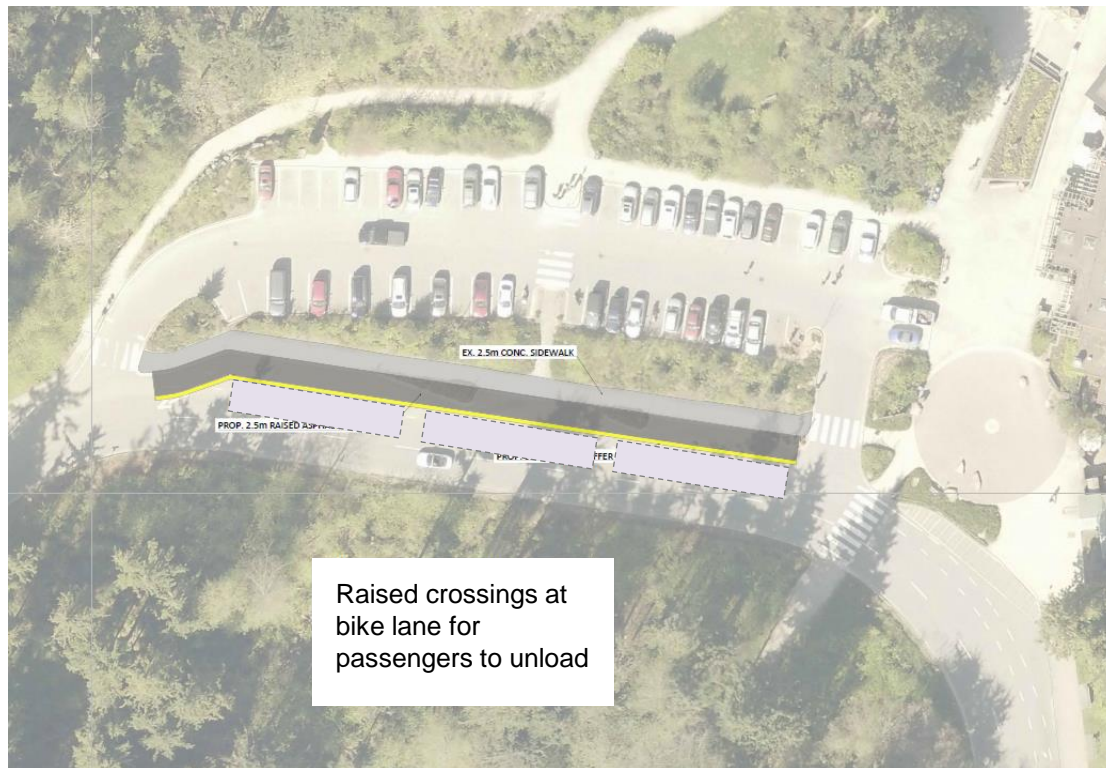
All three options involve:

3

Improvements to Coach  
Bus Parking and/or  
Maneuvering



Including up to three coach bus parking stalls at Prospect Point



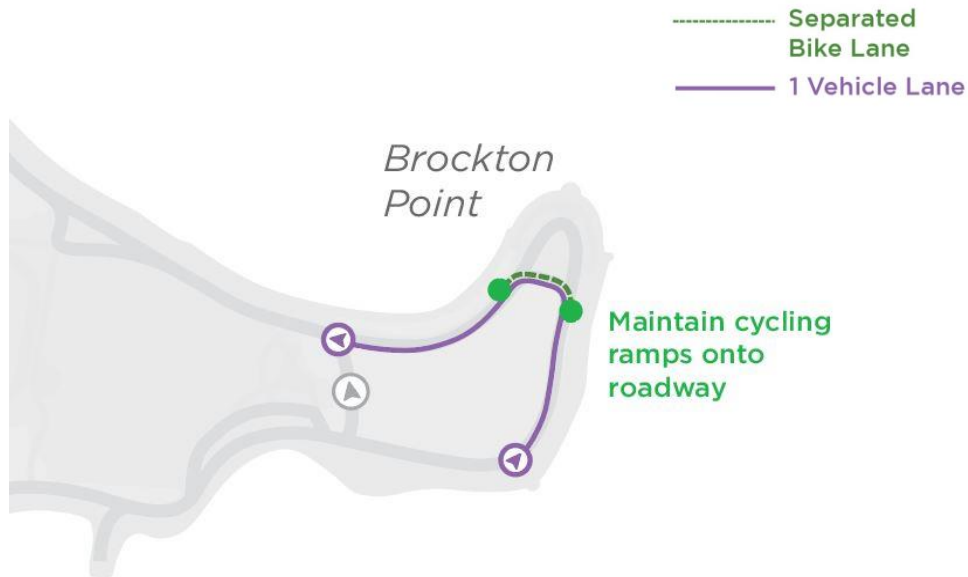


# Sections Maintained in All Options

All three options maintain these three components (including the changes reflected on previous slide (i.e. cone removal/replacement):

4

## Brockton Point By-Pass



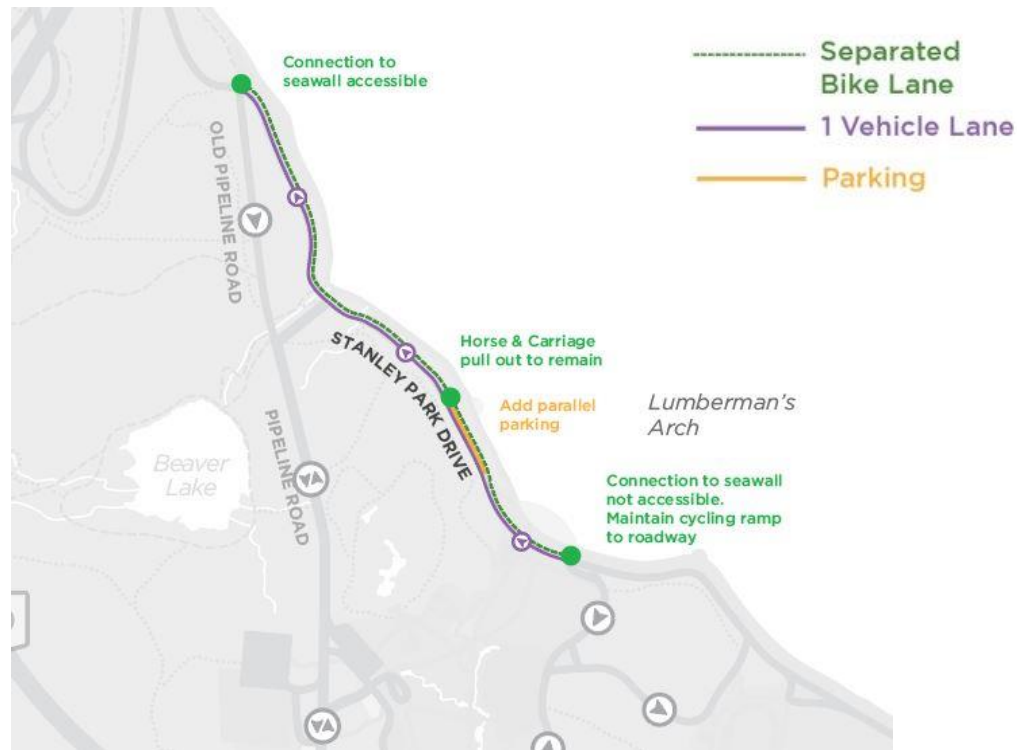


# Sections Maintained in All Options

All three options maintain these three components (including the changes reflected on previous slide (i.e. cone removal/replacement):

5

## Lumberman's Arch By-Pass





# Sections Maintained in All Options

All three options maintain these three components (including the changes reflected on previous slide (i.e. cone removal/replacement):

6

Second Beach  
Angled Parking  
Separation



- Separated Bike Lane
- 1 Vehicle Lane
- Parking



# OPTION A

Return to Pre-COVID Traffic Flow  
& Construct Interim Bike Lane on West Side of Park

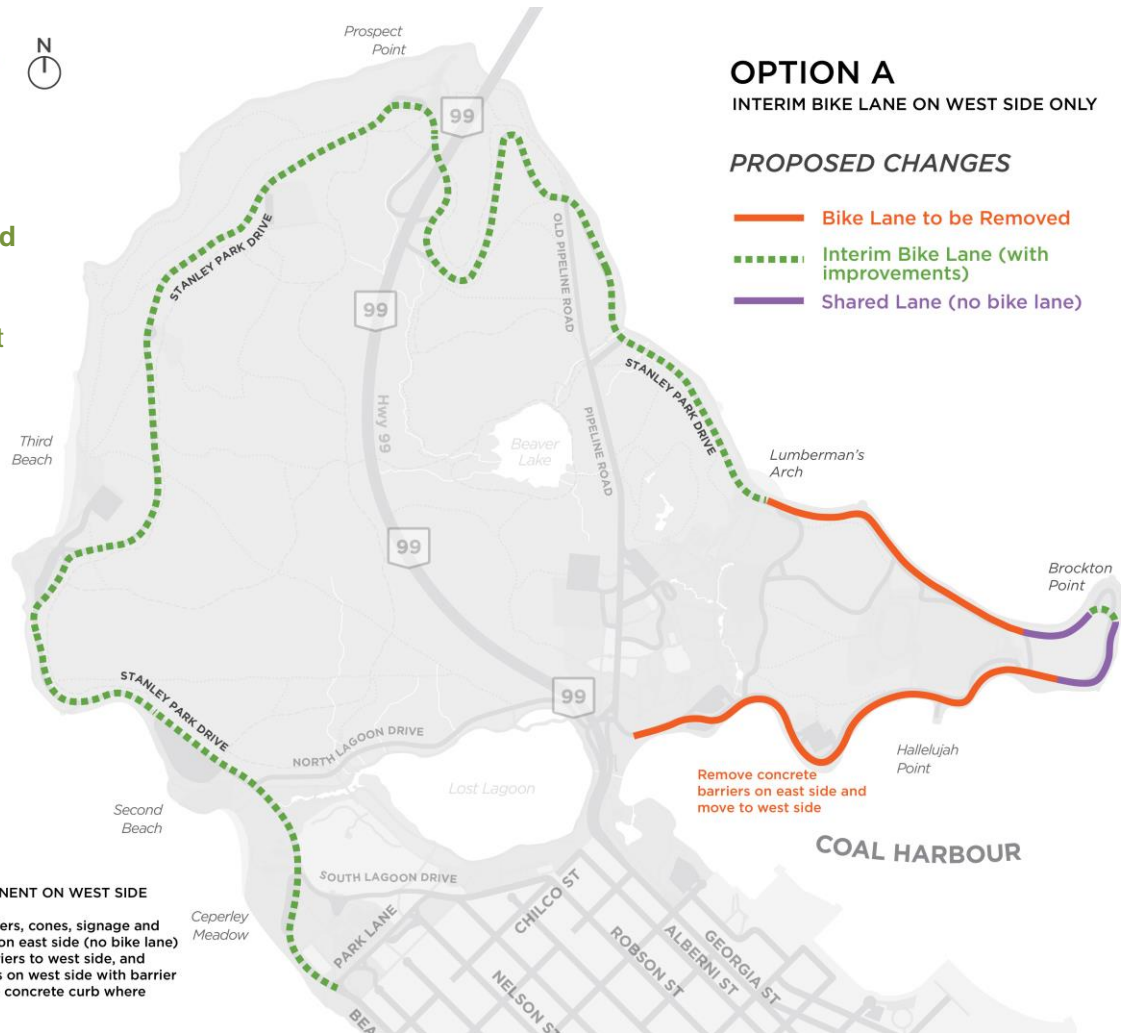




**Relocate concrete barriers to west side and infill with mountable concrete curb**  
(at spacing similar to east side to allow access for emergency services & operations)

**SEMI-PERMANENT ON WEST SIDE ONLY:**

Remove barriers, cones, signage and line painting on east side (no bike lane)  
Relocate barriers to west side, and replace cones on west side with barrier or mountable concrete curb where required







Prospect  
Point

## OPTION A

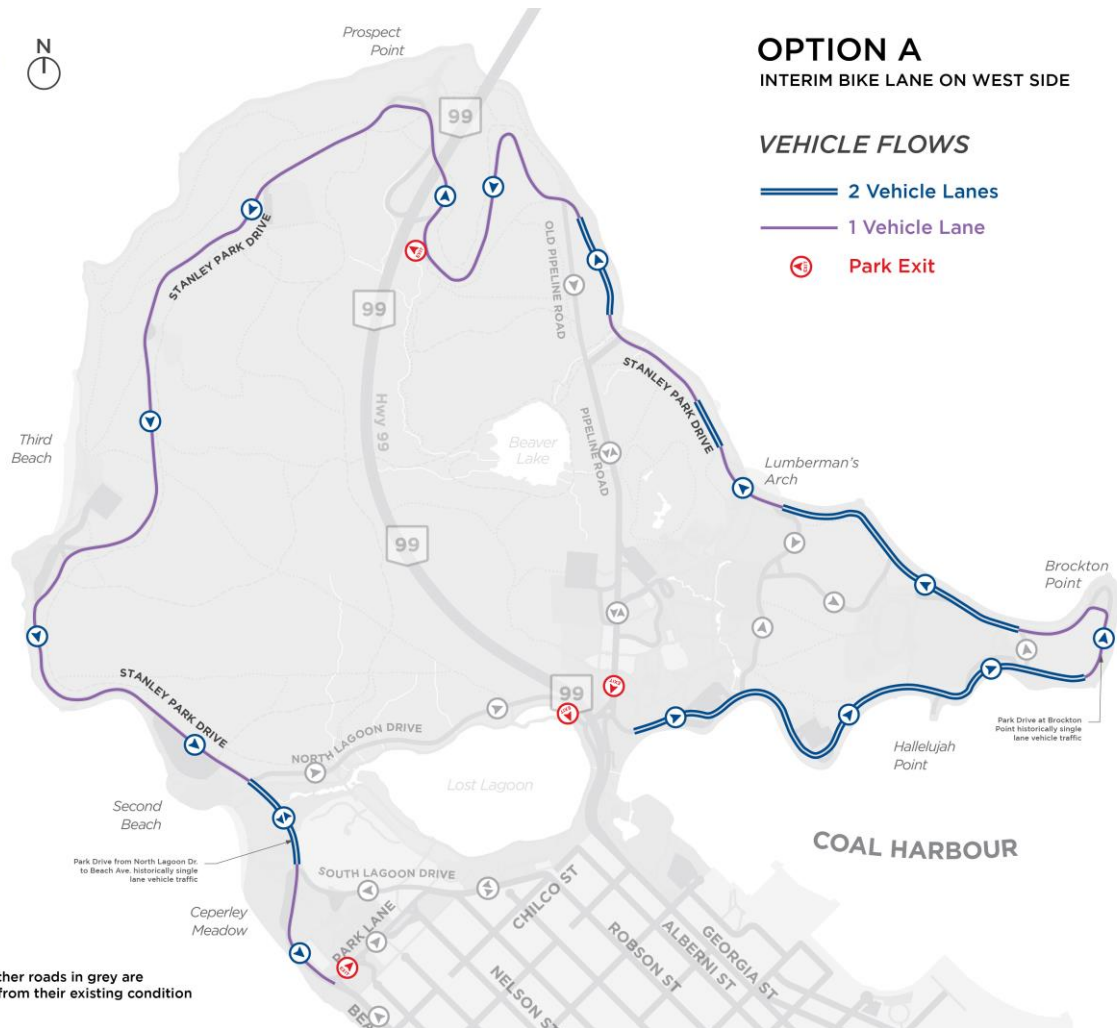
INTERIM BIKE LANE ON WEST SIDE

### VEHICLE FLOWS

2 Vehicle Lanes

1 Vehicle Lane

Park Exit



NOTE: All other roads in grey are unchanged from their existing condition



# OPTION A

Return the Pre-COVID-19 Traffic Flow on the East Side of the Park & Construct an Interim Bike Lane on the West Side of the Park

| OPTION A - SUMMARY OF WORK  | lin. m.  | Each | cost      | total cost           |
|---|----------|------|-----------|----------------------|
| Concrete Barriers to be Removed & Relocated                                 |          | 393  | \$ 145.00 | \$ 56,985.00         |
| CL painting to be removed & reinstated                                      | 2,325    |      | \$ 12.00  | \$ 27,900.00         |
| Cones to be removed   | 3218.8   |      |           | \$ 10,000.00         |
| Signage to be removed   | lump sum |      |           | \$ 30,000.00         |
| Special Line Painting to be removed   | 127      |      | \$ 321.00 | \$ 40,767.00         |
| New Concrete barriers for west side   |          | 598  | \$250.00  | \$ 149,550.00        |
| Repainting of traffic lines   |          |      |           | \$ 30,000.00         |
| Project Management, Traffic control, traffic management                     |          |      |           | \$ 55,000.00         |
| Removal of curb and gutters, drainage pipes, asphalt ramps and asphalt path |          |      |           | \$ 50,000.00         |
| Contingency (10%)   |          |      |           | \$ 45,020.20         |
| Engineering Design Fees   |          |      |           | \$ 50,000.00         |
| <b>TOTAL COST</b>   |          |      |           | <b>\$ 545,222.20</b> |

*NOTE: The above costs are preliminary estimates to give a sense of the scope of work and costs. Final cost estimate will be confirmed through official procurement process for construction, pending Board decision.*



# OPTION B

Return to Pre-COVID Traffic Flow  
& Construct Interim Bike Lane Around the  
Entire Park





INTERIM BIKE LANE AROUND ENTIRE PARK DRIVE







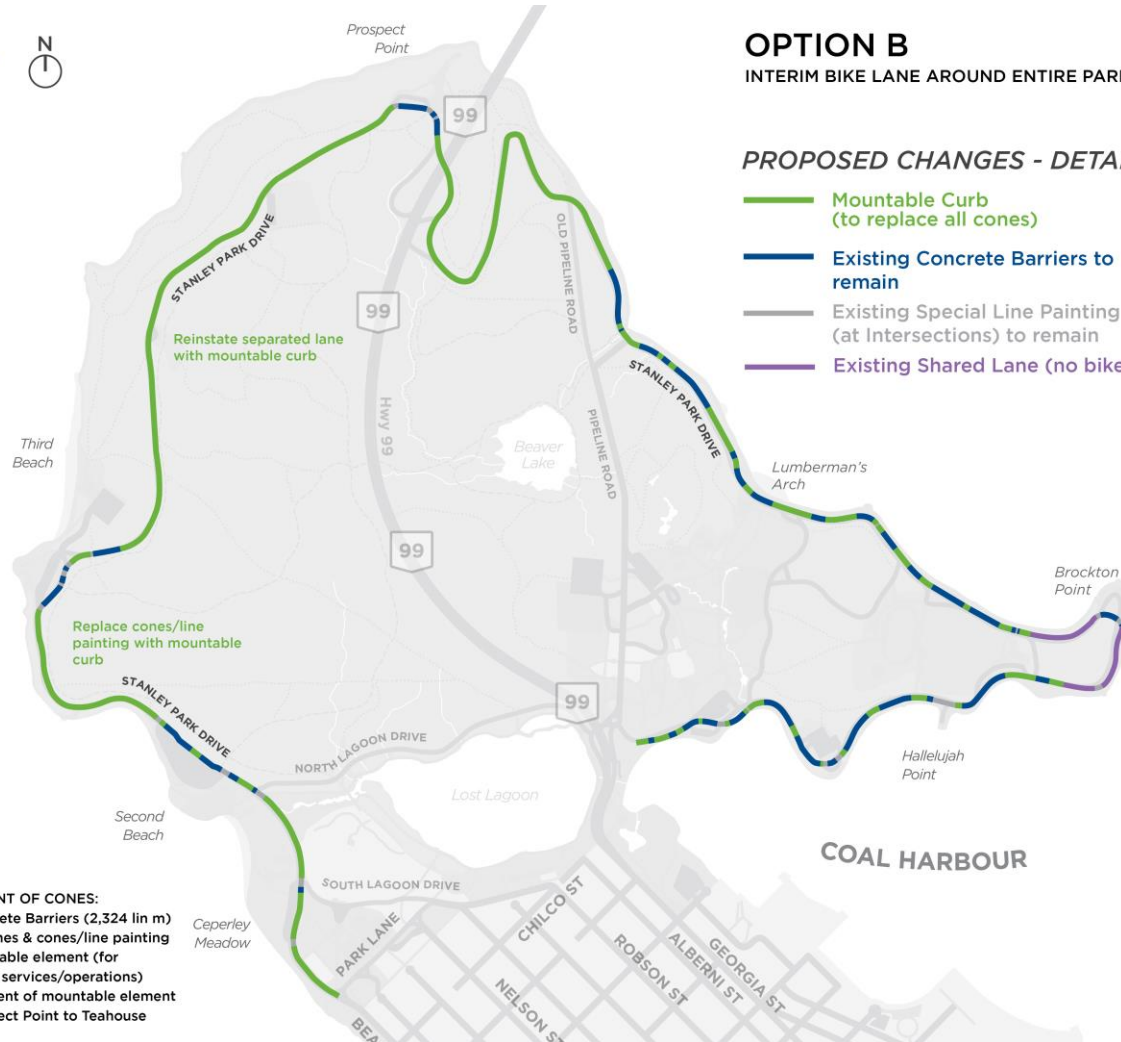
Prospect  
Point

## OPTION B

INTERIM BIKE LANE AROUND ENTIRE PARK DRIVE

### PROPOSED CHANGES - DETAILS

- Mountable Curb  
(to replace all cones)
- Existing Concrete Barriers to  
remain
- Existing Special Line Painting  
(at Intersections) to remain
- Existing Shared Lane (no bike lane)



#### REPLACEMENT OF CONES:

- Keep Concrete Barriers (2,324 lin m)
- Replace cones & cones/line painting with mountable element (for emergency services/operations)
- Reinstatement of mountable element from Prospect Point to Teahouse





## OPTION B

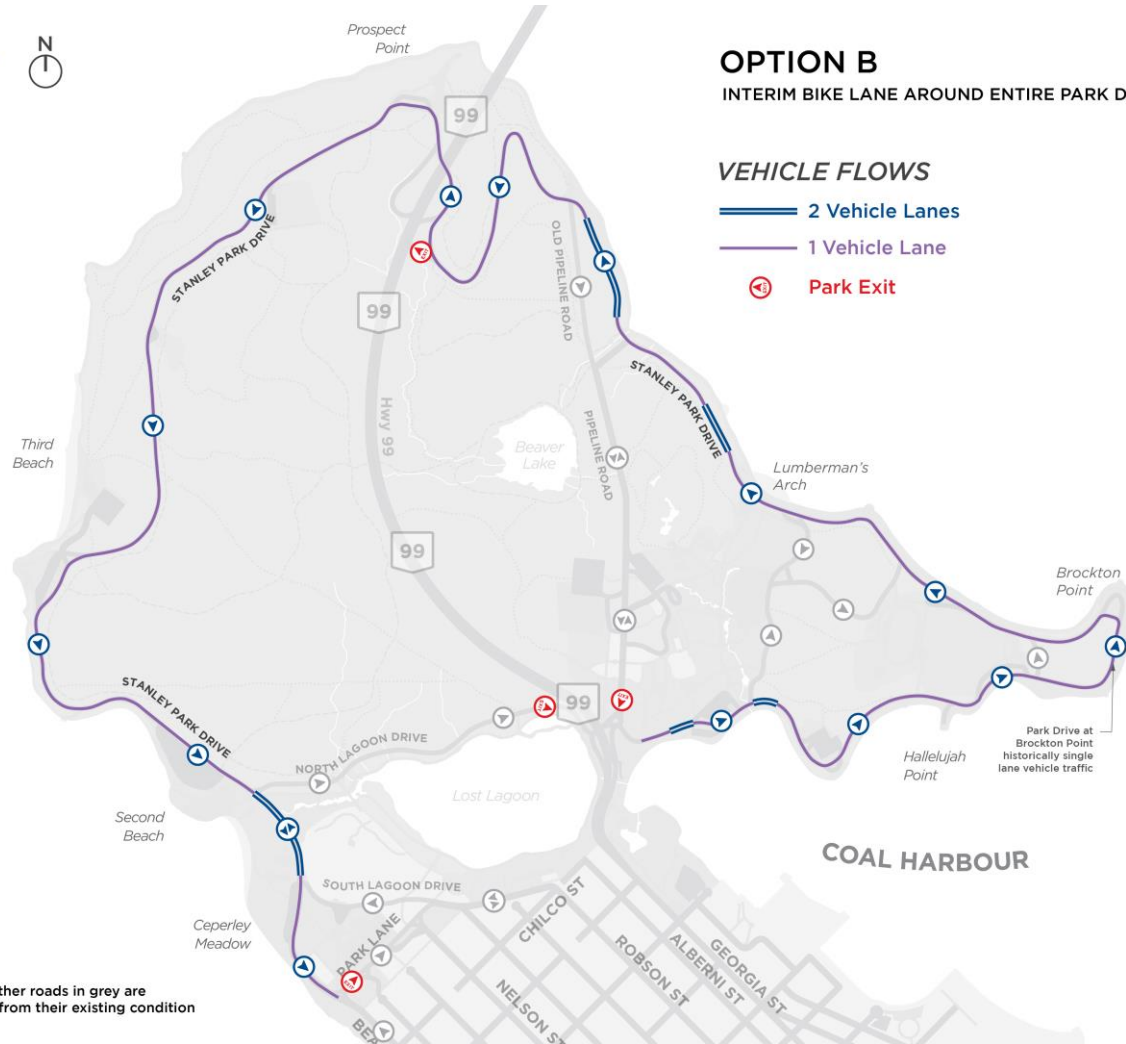
INTERIM BIKE LANE AROUND ENTIRE PARK DRIVE

### VEHICLE FLOWS

 2 Vehicle Lanes

 1 Vehicle Lane

 Park Exit



NOTE: All other roads in grey are unchanged from their existing condition



# OPTION B

Return the Pre-COVID Traffic Flow & Construct an Interim Bike Lane Around the Entire Park

| OPTION B - SUMMARY OF WORK  | lin. m.  | cost      | total cost           |
|---|----------|-----------|----------------------|
| Concrete Barriers to be Removed   | 0        | \$ 145.00 | \$ -                 |
| CL painting to be removed & reinstated                                      | 0        | \$ 12.00  | \$ -                 |
| Cones to be removed   | 3218.8   |           | \$ 10,000.00         |
| Signage to be removed   | lump sum |           | \$ -                 |
| Special Line Painting to be removed   | 0        | \$ 321.00 | \$ -                 |
| Install mountable curb  | 3816     | \$ 100.00 | \$ 381,600.00        |
| Repainting of traffic lines   |          |           | \$ -                 |
| Project Management, Traffic control, traffic management                     |          |           | \$ 65,000.00         |
| Removal of curb and gutters, drainage pipes, asphalt ramps and asphalt path |          |           | \$ -                 |
| Contingency (10%)   |          |           | \$ 45,660.00         |
| Engineering Design Fees   |          |           | \$ 50,000.00         |
| <b>TOTAL COST</b>   |          |           | <b>\$ 552,260.00</b> |

*NOTE: The above costs are preliminary estimates to give a sense of the scope of work and costs. Final cost estimate will to be confirmed through official procurement process for construction, pending Board decision.*



# OPTION C

Return to Pre-COVID Traffic Flow & Condition on  
Park Drive with Added Safety Measures





Prospect  
Point

## OPTION C

RETURN TO PRE-COVID CONDITIONS ON PARK  
DRIVE WITH ADDED SAFETY AREAS

### PROPOSED CHANGES

- Bike Lane to Remain (with improvements)
- Bike Lane to be Removed
- Bike Already Removed
- Shared Lane (no bike lane)

Only areas in green would remain as "protected bike lane"

**REMOVAL OF BIKE LANE:**  
408 Barriers  
2756 lin meters of cones  
1862 lin meters of CL painting  
5,335 lin meters of Signage  
115 lin meters of special line painting  
Asphalt Ramps

**EXCEPT AT:**  
Brockton Point By-Pass  
Lumberman's Arch to Old Pipeline Road  
Prospect Point By-Pass  
Second Beach On-Street Parking  
Ceperley Meadow

Third  
Beach

Second  
Beach





## OPTION C

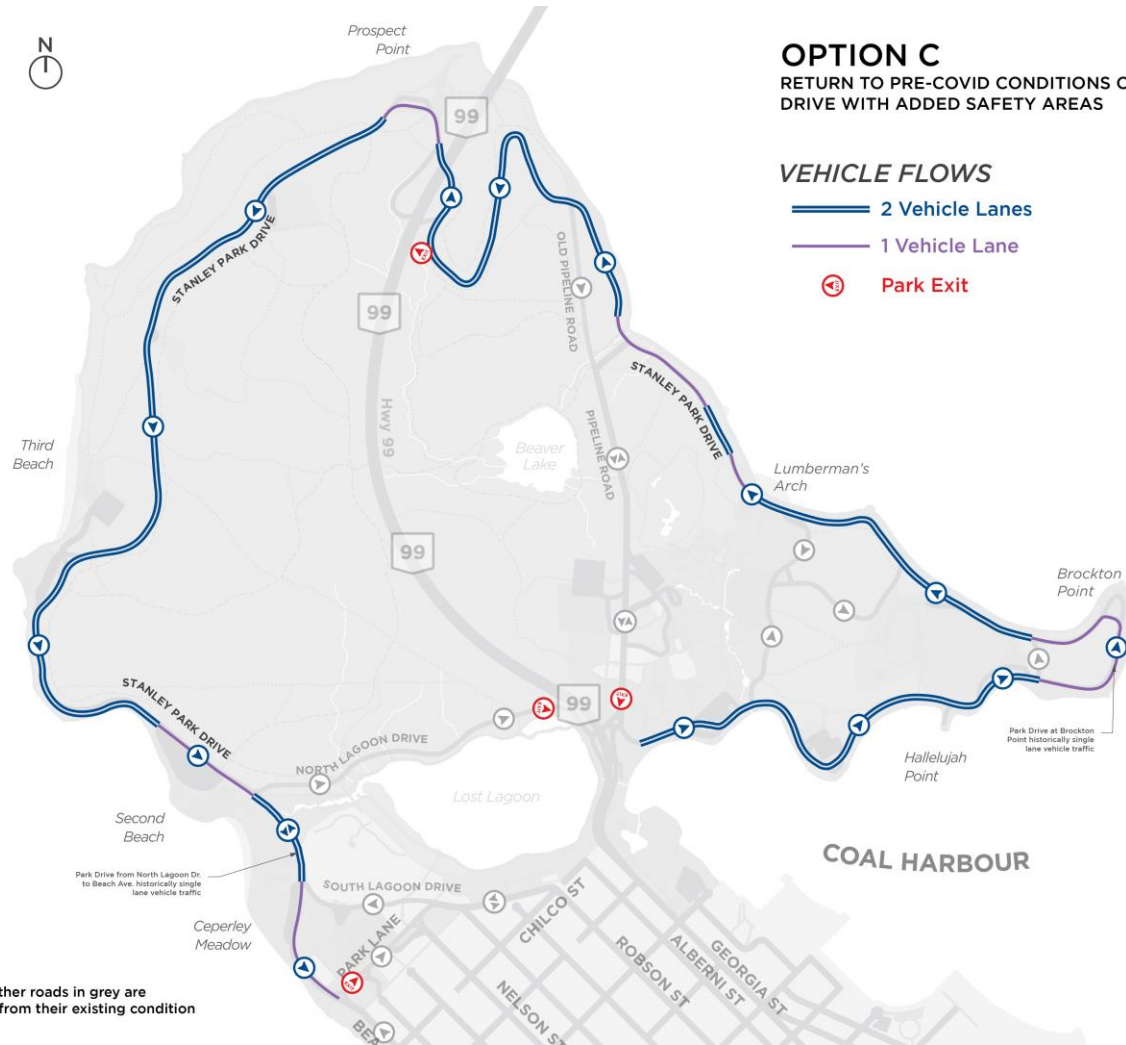
RETURN TO PRE-COVID CONDITIONS ON PARK  
DRIVE WITH ADDED SAFETY AREAS

### VEHICLE FLOWS

— 2 Vehicle Lanes

— 1 Vehicle Lane

⬇️ Park Exit





# OPTION C

Return the Pre-COVID-19 Traffic Flow & Conditions  
on Park Drive with Added Safety Measures

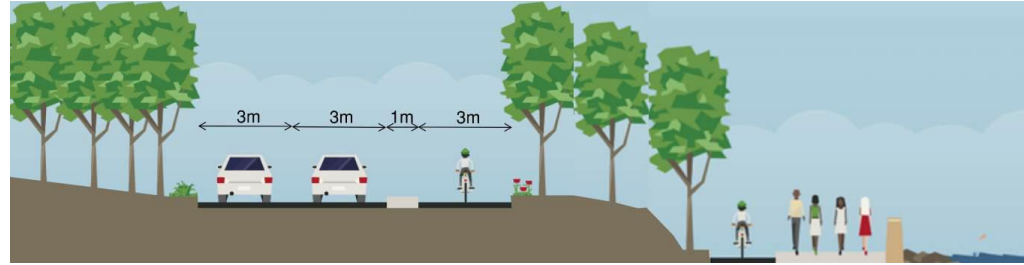
| OPTION C - SUMMARY OF WORK  | lin. m.  | units | cost  | total cost           |
|---|----------|-------|-------|----------------------|
| Concrete Barriers to be Removed   | 1,224    | 408   | \$145 | \$ 59,208.33         |
| CL painting to be removed & reinstated                                      | 1,862    |       | \$12  | \$ 22,344.00         |
| Cones to be removed   | 2,756    |       |       | \$ 10,000.00         |
| Signage to be removed   | lump sum |       |       | \$ 25,000.00         |
| Special Line Painting to be removed   | 115      |       | \$300 | \$ 34,500.00         |
| Repainting of traffic lines   |          |       |       | \$ 30,000.00         |
| Project Management, Traffic control, traffic management                     |          |       |       | \$ 55,000.00         |
| Removal of curb and gutters, drainage pipes, asphalt ramps and asphalt path |          |       |       | \$ 40,000.00         |
| Contingency (10%)   |          |       |       | \$ 27,605.23         |
| Engineering Design Fees   |          |       |       | \$ 30,000.00         |
| <b>TOTAL COST</b>   |          |       |       | <b>\$ 333,657.57</b> |

*NOTE: The above costs are preliminary estimates to give a sense of the scope of work and costs.  
Final cost estimate will be confirmed through official procurement process for construction,  
pending Board decision.*

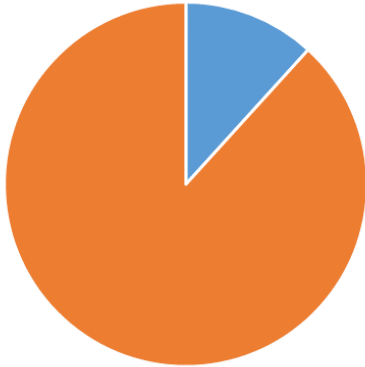


# Future Permanent Bike Lane & Vehicle Lanes

## Two-Lane Vehicle Traffic + Bike Lane Assessment



**12%** of Park Drive  
is wide enough



**88%** of Park Drive  
would require widening





# Summary of Options – Costs & Timelines

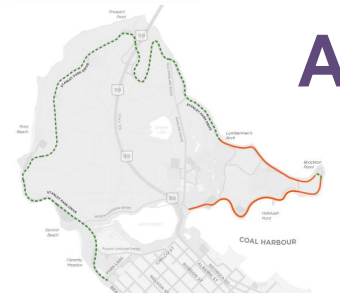
| Option | Description  | Timeline & Costs   |
|--------|--|--|
| A      | <b>Return the Pre-COVID Traffic Flow &amp; Construct Interim Bike Lane on West Side of Park -</b><br>Remove the temporary bike lane on the east side of Stanley Park, and upgrade the bike lane on west side only for the summer of 2023   | <b>Summer 2023</b><br><br>TOTAL COST ~\$550k for upgrades to semi-permanent bike lane (includes design fees)     |
| B      | <b>Return the Pre-COVID Traffic Flow &amp; Construct Interim Bike Lane Around the Entire Park -</b> Replace temporary segments of the bike lane as a more semi-permanent bike lane that would be in place for summer of 2023   | <b>Summer 2023</b><br><br>TOTAL COST ~\$550k for upgrades to semi-permanent bike lane (includes design fees)     |
| C      | <b>Return the Pre-COVID Traffic Flow &amp; Condition on Park Drive with Added Safety Measures -</b><br>Remove most of the temporary bike lane on Park Drive, with some sections remaining as detailed in report for safety and accessibility, with potential for a future permanent bike lane to be delivered when funding is available in future capital plans. | <b>Late Spring 2023</b><br><br>TOTAL COST ~\$330k for removal with some sections upgraded (includes design fees) |



# Summary of Options – What They Achieve

| KEY CONDITIONS   | OPTION A | OPTION B | OPTION C |
|--|----------|----------|----------|
| Replacement/ Removal of Traffic Cones                      | ✓        | ✓        | ✓        |
| Exit at West End Neighbourhood                             | ✓        | ✓        | ✓        |
| Brockton Point By-Pass                                     | ✓        | ✓        | ✓        |
| Lumberman's Arch By-Pass                                   | ✓        | ✓        | ✓        |
| Prospect Point Upgrades & Bus Parking                      | ✓        | ✓        | ✓        |
| Second Beach Parking Lot Safety Upgrades                   | ✓        | ✓        | ✓        |
| Teahouse Parking Lot - Revert Back to Previous Circulation |          |          | ✓        |
| Vehicle Congestion Relief for H & C                        | ✓        |          | ✓        |
| Congestion Relief due to Aquarium parking lot              | ✓        |          | ✓        |
| Enables semi-permanent bike lane this summer               | ✓        | ✓        |          |
| Enables fully permanent bike lane incrementally over time  | ✓        | ✓        |          |

|                          | PRE-COVID | BASELINE   | OPTION A   | OPTION B   | OPTION C   |
|--------------------------|-----------|--|--|--|--|
| DETAILS                  | 2019      | Current Configuration<br>(after phase 1 removal) | Return the Pre-COVID Traffic Flow & Construct Interim Bike Lane on West Side of Park | Return the Pre-COVID Traffic Flow & Construct Interim Bike Lane Around the Entire Park | Return the Pre-COVID Traffic Flow & Condition on Park Drive with Added Safety Measures |
| Protected Bike Lane      | 0%        | 85%  | 60%  | 95%  | 30%  |
| No protected bike lane   | 100%      | 15%  | 40%  | 5%   | 70%  |
| # of parking stalls open | 2317      | 2211   | 2190   | 2174   | 2242   |
| % of parking stalls open | 100% open | 95% open   | 95% open   | 94% open   | 97% open   |





# Next Steps





- A. THAT the Vancouver Park Board directs staff to proceed with implementation to (insert wording of OPTION A, B, or C) for returning pre-COVID 19 Pandemic traffic flows in Stanley Park and improving the 2021 temporary bike lane: and

**OPTION A – Return the Pre-COVID-19 Traffic Flow on the East Side of the Park & Construct an Interim Bike Lane on the West Side of the Park** - Remove the temporary bike lane on the east side of Stanley Park, and upgrade the bike lane on the west side of the park to a semi-permanent bike lane for summer of 2023; or

**OPTION B – Return the Pre-COVID Traffic Flow & Construct an Interim Bike Lane Around the Entire Park** – Replace several temporary segments of the bike lane with a semi-permanent bike lane that would be in place for summer of 2023; or

**OPTION C – Return the Pre-COVID-19 Traffic Flow & Conditions on Park Drive with Added Safety Measures** – Remove much of the temporary bike lane on Park Drive in May of 2023, with some sections remaining for safety as detailed in the report.



- B. THAT staff redirect funding from appropriate funding sources within the existing capital expenditure budget to enable this work; and
- C. THAT the Vancouver Park Board confirms that this motion supersedes and replaces all previous motions passed by the Park Board with respect to the timing of the removal of the temporary bike lane on Park Drive.



- A. THAT the Vancouver Park Board directs staff to proceed with Option C to return pre-COVID 19 Pandemic traffic flows in Stanley Park and improve the 2021 temporary bike lane, specifically to remove much of the temporary bike lane on Park Drive as soon as possible with work to be completed before the end of May 2023, with some sections remaining for safety as detailed in the report, and with the following additional direction to staff:
  - I. Restore vehicle parking at Lumberman's Arch that was available pre-COVID-19; and
  - II. Report back to the Park Board no later than November 2023 with a dedicated bike lane proposal for summer 2024 that incorporates 2023 summer usage data, stakeholder input and park user experience;
- B. THAT staff redirect funding from appropriate funding sources within the existing capital expenditure budget to enable this work; and
- C. THAT the Vancouver Park Board confirms that this motion retains the full intent of all previous motions passed by the Park Board, with the exception of the timing of the removal of the temporary bike lane on Park Drive, which are now superseded by this motion.



