

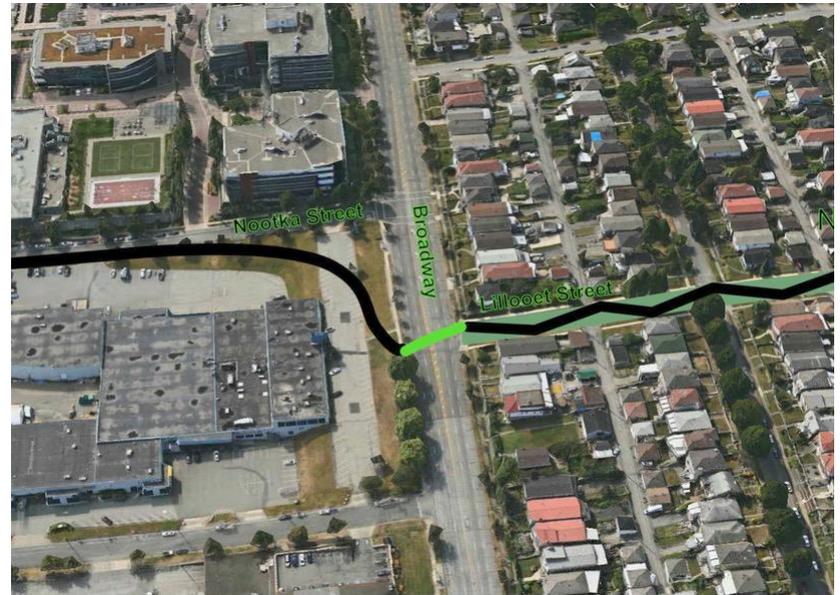
# Vancouver-UBC Local Committee

May 21<sup>st</sup>, 2019

# Topics

- NE Greenway Route Recommendations
- Deep Dive - Cycling in Vancouver Parks
- Consultations
  - Drake St Bikeway Options
  - New NACTO intersection design guide
  - Translink 10 Year Vision - Dashboard

# NE Quadrant Greenway Working Group Route Recommendations

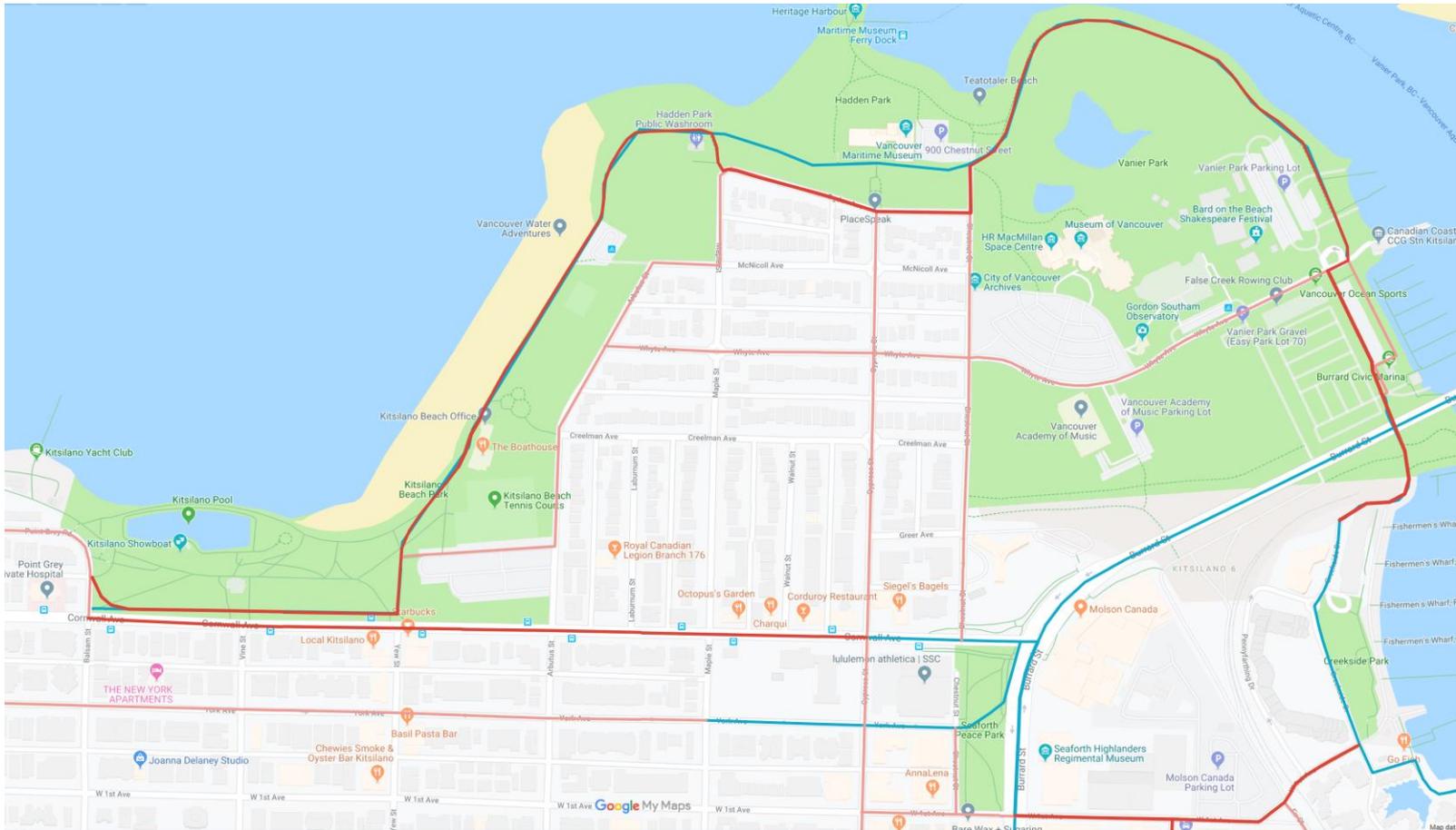


# Cycling in Vancouver Parks - topics

- Working Group – from Seaside Greenway to Parks
- Kits Beach Park gaps
- Letter writing campaign requesting a Park Board motion or communication supporting cycling in Vancouver parks
- Van Play
- West End Beaches Master Plan
- Stanley Park Cycling Plan
- Next steps on the Cycling in Parks campaign

# Cycling in Vancouver Parks

## Kits Beach Park Area - Priority Gaps



# Cycling in Vancouver Parks

## Van Play Planning Process

- *“The Vancouver Park Board is developing Vancouver’s Playbook, a new plan to guide how we create vibrant, parks and recreation over the next 25 years.”*
- Report 1 - Inventory and Analysis - a compendium to the current state of the City’s parks & recreation system
- Report 2 - 10 Goals to shape the next 25 years - a set of aspirational statements to set the course for parks and recreation into the future
- Report 3 - Strategic Big Moves – outlining strategies to meet the goals over the next 25 years
- Report 4 - Playbook – the plan for implementation and operationalization of the big moves (planned Q1 2019)

# Cycling in Vancouver Parks

## Van Play – 3 Big Moves

- Interconnected Network
  - Project a bold vision
- Equity Initiative Zones
  - Address historical inequities
- Asset Targets
  - Articulate the need

# Cycling in Vancouver Parks West End Beaches Master Plan (CoV & PB)



# Cycling in Vancouver Parks

## Stanley Park Cycling Plan (2012)

### STANLEY PARK CYCLING & PEDESTRIAN IMPROVEMENTS CONTEXT MAP

**PURPOSE:**

- IMPROVE SAFETY FOR CYCLISTS AND PEDESTRIANS
- PROVIDE FOR GREATER ACCESSIBILITY
- REDUCE IMPACTS TO PARK ECOLOGY CAUSED BY OFF-TRAIL CYCLING/PEDESTRIAN ACTIVITY BY PROVIDING FORMAL PATHS AT DESIRED ROUTES

1. CYCLING ACCESS TO NORTH LAGOON DR. FROM CAUSEWAY (WEST SIDE)
2. ACCESSIBLE ROUTE FROM ROSE GARDEN TO CAUSEWAY (EAST SIDE)
3. PEDESTRIAN ACCESS TO PARK TRAILS FROM CAUSEWAY (WEST SIDE) AT PEDESTRIAN OVERPASS
4. ACCESSIBLE CYCLING/PEDESTRIAN ROUTE FROM HANSON TRAIL TO CAUSEWAY (EAST SIDE)
5. PEDESTRIAN ACCESS TO CAUSEWAY (EAST SIDE) FROM STANLEY PARK DRIVE
6. CYCLING/PEDESTRIAN CONNECTION BETWEEN CAUSEWAY (WEST SIDE) AND STANLEY PARK DRIVE AT PROSPECT POINT ALONG EXISTING OFF-RAMP
7. IMPROVED CYCLING/PEDESTRIAN PATHS FROM ENGLISH BAY TO CEPERLEY FIELD
8. IMPROVED CYCLING/PEDESTRIAN PATHS AT CEPERLEY FIELD (WEST SIDE OF STANLEY PARK DRIVE)
9. IMPROVED CYCLING/PEDESTRIAN PATHS AT CEPERLEY MEADOW (EAST SIDE OF STANLEY PARK DRIVE)
10. SAFE CYCLING/PEDESTRIAN CROSSING OF PARKING AREA ACCESS ROAD AT SECOND BEACH CONCESSION
11. ACCESSIBLE ROUTE FROM SEAWALL TO TUNNEL TRAIL



Figure 9 - Planned Park Board 2019 Cycling and Pedestrian Improvements Map

# Cycling in Vancouver Parks

## Stanley Park Cycling Plan Progress 2019

① Proposed pathway up slope at 6.6% to Stanley Park Drive.



*Figure 1 - Path route recommended in SPCP 1b and 1c*



*Figure 2 - Staircase built in lieu of the recommended ramp*

# Cycling in Vancouver Parks

## Stanley Park Cycling Plan Progress 2019

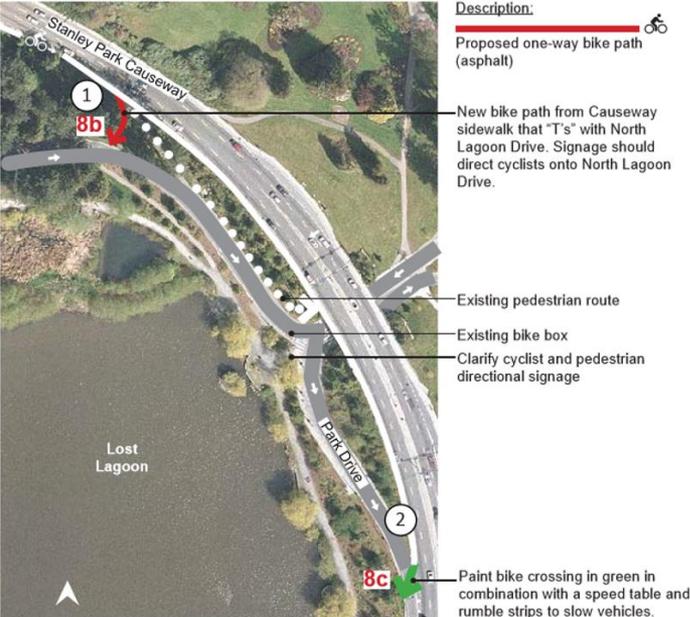


Figure 10 - SPCP 8a - Connection from west Causeway



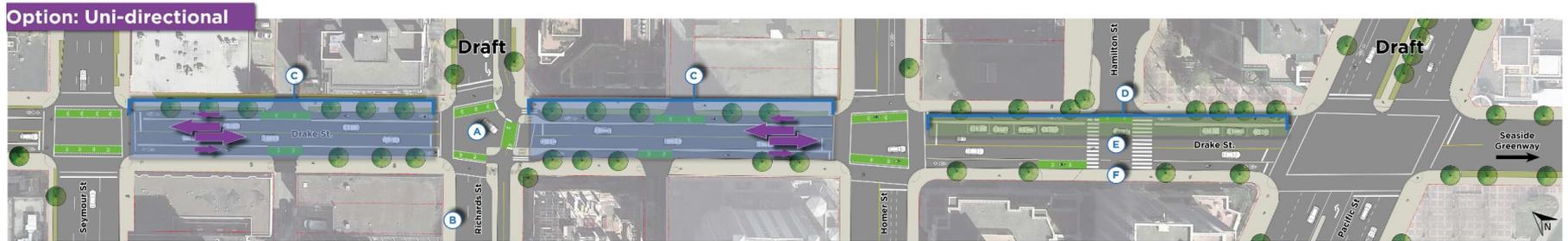
Figure 11 - Existing paved path that replaces the need for 8b

Cycling in Vancouver Parks

**Next Steps on the Campaign**

# Drake St Bikeway Options - DRAFT

- Burrard to Pacific
- Concept designs for two protected bike lane options



# Drake St Bikeway Options - DRAFT

- Concept design for intersections with two bi-directional bike lanes (eg Hornby, Richards)



# New Intersection Design Standards



- NACTO publication, released May 2019
- Produced by staff from Cambridge, New York, Portland, San Jose, San Francisco, Seattle, and Vancouver
- Best practices in protected intersection designs
- [https://nacto.org/wp-content/uploads/2019/05/NACTO\\_Dont-Give-Up-at-the-Intersection.pdf](https://nacto.org/wp-content/uploads/2019/05/NACTO_Dont-Give-Up-at-the-Intersection.pdf)

# Translink 10 Year Vision Dashboard

Completing the 10-Year Vision for Metro Vancouver Transit & Transportation			
ENTIRE 10-YEAR VISION	APPROVED/UNDERWAY FUNDED		REMAINING INVESTMENTS UNFUNDED
	Phase One	Phase Two	Phase Three
 <b>BUS SERVICE</b> <ul style="list-style-type: none"> <li>25% increase</li> <li>12 B-Lines</li> <li>10 new service areas</li> </ul>	<ul style="list-style-type: none"> <li>10% increase</li> <li>5 new B-Lines</li> <li>5 new service areas</li> </ul>	<ul style="list-style-type: none"> <li>8% increase</li> <li>2 new B-Lines</li> <li>New service areas to be confirmed</li> </ul>	<ul style="list-style-type: none"> <li>7% increase</li> <li>5 new B-Lines</li> <li>Any remaining new service areas</li> </ul>
 <b>SEABUS SERVICE</b> <ul style="list-style-type: none"> <li>1 new SeaBus</li> <li>10-minute peak frequency; 15-minute all day</li> </ul>	<ul style="list-style-type: none"> <li>1 new SeaBus</li> <li>10 minute peak frequency; 15-minute all day</li> </ul>		
 <b>HANDYDART SERVICE</b> <ul style="list-style-type: none"> <li>30% increase</li> </ul>	<ul style="list-style-type: none"> <li>15% increase</li> </ul>	<ul style="list-style-type: none"> <li>7% increase</li> </ul>	<ul style="list-style-type: none"> <li>8% increase</li> </ul>
 <b>SKYTRAIN &amp; WEST COAST EXPRESS (WCE)</b> <ul style="list-style-type: none"> <li>164 Expo/Millennium Line cars</li> <li>24 Canada Line cars</li> <li>10 WCE cars + new locomotive</li> <li>Upgrades of power and control systems, stations</li> </ul>	<ul style="list-style-type: none"> <li>56 Expo/Millennium Line cars</li> <li>24 Canada Line cars</li> <li>2 new + 6 refurbished WCE locomotives</li> <li>Upgrades to Expo/Millennium &amp; Canada Line Stations and stations</li> </ul>	<ul style="list-style-type: none"> <li>108 Expo/Millennium Line cars (including Broadway Extension)</li> <li>Upgrades to Expo/Millennium Stations and systems</li> </ul>	<ul style="list-style-type: none"> <li>Upgrades to Expo/Millennium &amp; Canada Line Stations</li> <li>10 WCE cars</li> <li>Upgrades to Canada Line Stations and systems</li> </ul>
 <b>MAJOR PROJECTS</b> <ul style="list-style-type: none"> <li>Millennium Line Broadway Extension</li> <li>South of Fraser Rapid Transit (SOFRT)</li> <li>Pattullo Bridge Replacement</li> </ul>	<ul style="list-style-type: none"> <li>Pre-construction of Broadway Extension</li> <li>Pre-construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT)</li> <li>Design for Pattullo Bridge replacement</li> </ul>	<ul style="list-style-type: none"> <li>Construction of Broadway Extension</li> <li>Construction of Stage 1 of SOFRT (Surrey-Newton-Guildford LRT)</li> <li>Construction of Pattullo Bridge replacement (by the province)</li> <li>Planning for Stage 2 of SOFRT (Surrey-Langley Line)</li> </ul>	<ul style="list-style-type: none"> <li>Construction of Stage 2 of SOFRT (Surrey-Langley Line)</li> </ul>
 <b>MAJOR ROADS NETWORK (MRN)</b> <ul style="list-style-type: none"> <li>MRN upgrades: \$200M</li> <li>MRN seismic: \$130M</li> <li>MRN expansion: 1% annual increase + one-time 10% increase</li> </ul>	<ul style="list-style-type: none"> <li>\$50M (25% of Vision)</li> <li>\$32.5M (25% of Vision)</li> <li>MRN expansion: 1% annual increase + one-time 10% increase</li> </ul>	<ul style="list-style-type: none"> <li>\$40M (20% of Vision)</li> <li>\$26M (20% of Vision)</li> </ul>	<ul style="list-style-type: none"> <li>\$110M (55% of Vision)</li> <li>\$71.5M (55% of Vision)</li> </ul>
 <b>WALKING &amp; CYCLING</b> <ul style="list-style-type: none"> <li>Regional Cycling: \$97M</li> <li>TransLink-owned Cycling: \$34M</li> <li>Walking Access to Transit: \$35M</li> </ul>	<ul style="list-style-type: none"> <li>\$30M (31% of Vision)</li> <li>\$12M (35% of Vision)</li> <li>\$12.5M (36% of Vision)</li> </ul>	<ul style="list-style-type: none"> <li>\$24M (25% of Vision)</li> <li>\$9M (27% of Vision)</li> <li>\$10M (29% of Vision)</li> </ul>	<ul style="list-style-type: none"> <li>\$43M (44% of Vision)</li> <li>\$13M (38% of Vision)</li> <li>\$12.5M (36% of Vision)</li> </ul>
 <b>TRANSIT EXCHANGES</b> <ul style="list-style-type: none"> <li>13 new or expanded transit exchanges</li> </ul>	<ul style="list-style-type: none"> <li>4 updated transit exchanges</li> </ul>		<ul style="list-style-type: none"> <li>9 upgraded transit exchanges</li> </ul>
 <b>MOBILITY INNOVATION</b> <ul style="list-style-type: none"> <li>Integrated travel planning and payment</li> <li>New technologies and services</li> </ul>	<ul style="list-style-type: none"> <li>Vanpool pilot</li> <li>Innovation Lab to explore mobility concepts</li> </ul>	<ul style="list-style-type: none"> <li>Mobility pricing development</li> </ul>	<ul style="list-style-type: none"> <li>Mobility pricing implementation</li> </ul>

# Appendices

# Vancouver Bike Lanes (Van Map)



# Vancouver Bike Lanes And HUB Gaps



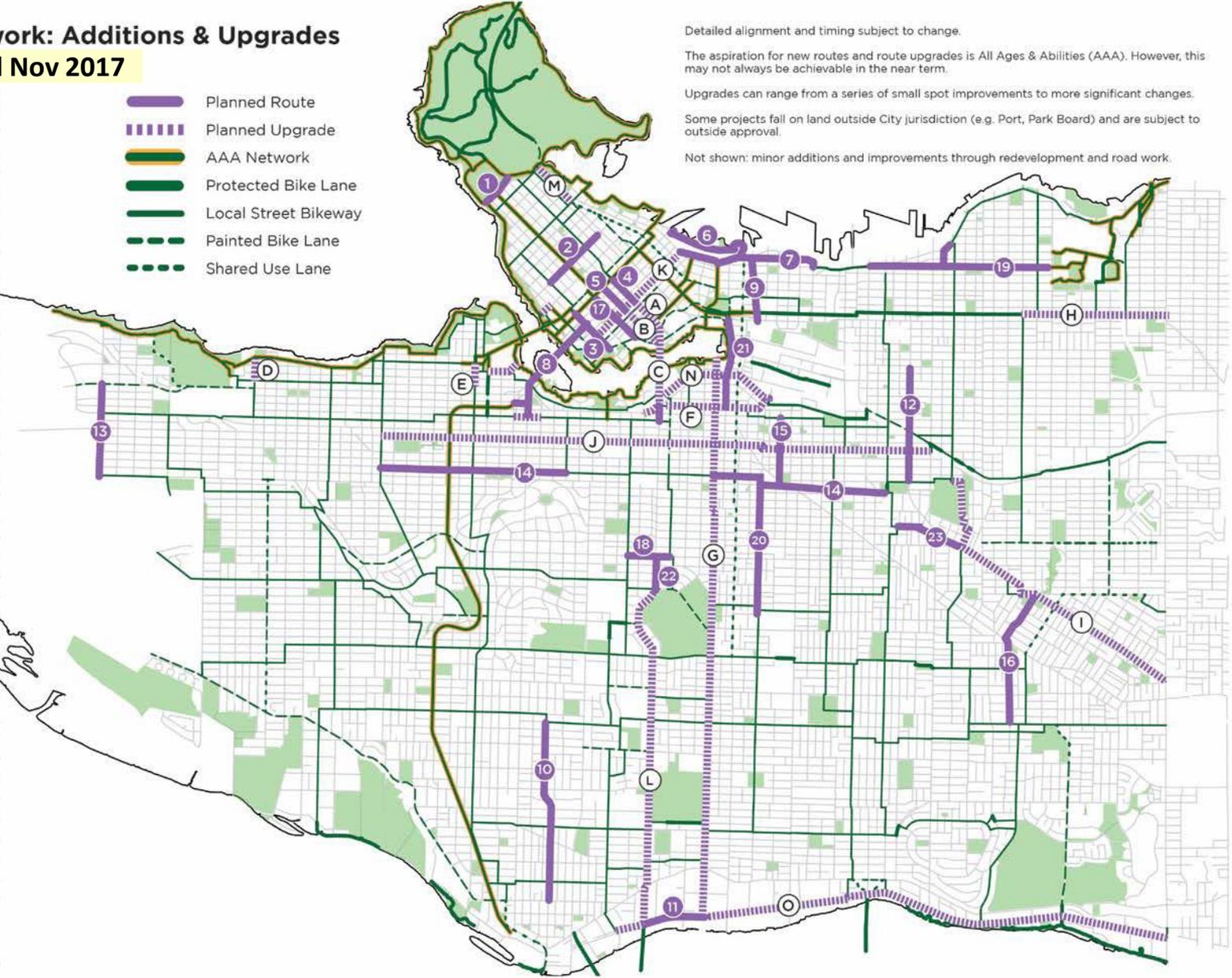
# 5-Year Cycling Network: Additions & Upgrades 2018-2022

Added Nov 2017

Detailed alignment and timing subject to change.  
 The aspiration for new routes and route upgrades is All Ages & Abilities (AAA). However, this may not always be achievable in the near term.  
 Upgrades can range from a series of small spot improvements to more significant changes.  
 Some projects fall on land outside City jurisdiction (e.g. Port, Park Board) and are subject to outside approval.  
 Not shown: minor additions and improvements through redevelopment and road work.

Planned Routes	
1	Park Lane*
2	Bute
3	Drake
4	Smithe
5	Nelson
6	West Waterfront Road**
7	Water-Alexander-Powell
8	Granville Bridge
9	Gore
10	Hudson
11	Kent
12	Commercial
13	Blanca
14	14th Ave
15	St. George Rainway
16	Duchess-Wales*
17	Helmcken
18	King Edward
19	Pandora-Semlin
20	Prince Edward
21	Quebec
22	Cambie
23	Stainsbury
Planned Upgrades	
A	Smithe
B	Nelson
C	Cambie Bridge
D	Highbury
E	Cypress
F	5th Ave
G	Ontario
H	Adanac
I	BC Parkway
J	10th Ave
K	Richards
L	Cambie
M	Georgia
N	1st Ave
O	Kent

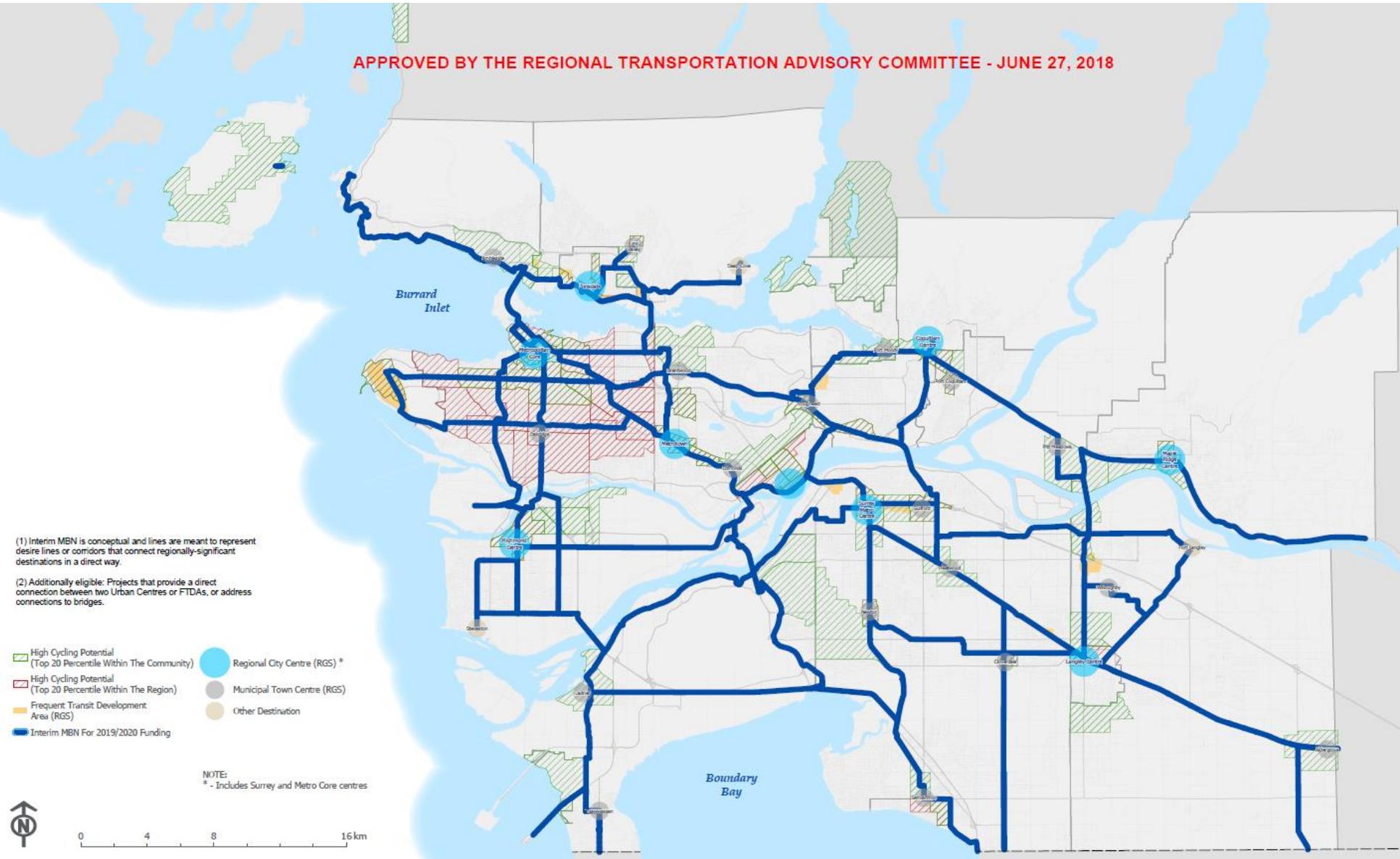
- Planned Route
- Planned Upgrade
- AAA Network
- Protected Bike Lane
- Local Street Bikeway
- Painted Bike Lane
- Shared Use Lane



\* Park Board jurisdiction  
 \*\* Port Authority jurisdiction  
 Number/Letter sequence does not imply priority

# Translink Major Bikeway Network (MBN)

APPROVED BY THE REGIONAL TRANSPORTATION ADVISORY COMMITTEE - JUNE 27, 2018



(1) Interim MBN is conceptual and lines are meant to represent desire lines or corridors that connect regionally-significant destinations in a direct way.  
 (2) Additionally eligible: Projects that provide a direct connection between two Urban Centres or FTDA's, or address connections to bridges.

- High Cycling Potential (Top 20 Percentile Within The Community)
- High Cycling Potential (Top 20 Percentile Within The Region)
- Frequent Transit Development Area (RGS)
- Interim MBN For 2019/2020 Funding
- Regional City Centre (RGS) \*
- Municipal Town Centre (RGS)
- Other Destination

NOTE:  
 \* - Includes Surrey and Metro Core centres



Type *	Class A** (Comfortable for most people)	Class B (Comfortable for some people)	Class C (Comfortable for few people)	Notes
<b>Separated from vehicle traffic</b>				
1 Bike Path: Off-road facility for the exclusive use of people cycling, may be unidirectional or bidirectional. Separate from both motorists and pedestrians, but designed based on bicycles operating in parallel with pedestrians, especially at intersections.	Width: Bidirectional 3.1-4.8 m, Unidirectional 2.1-3.0 m Posted Speed: N/A Volume: N/A	Width: Bidirectional 2.4-3.0 m, Unidirectional 1.5-2.0 m Posted Speed: N/A Volume: N/A	More narrow widths and unpaved facilities would be unclassified but may be shown on a regional cycling map	When in a road right of way (ROW): A bike path should fall outside of the Clear Zone (>1.2 m on roadways with posted speeds of <60 km/h - see Transportation Association of Canada Geometric Design Guide (TAC GDG), Table 7.3.1 for higher speed roads). Further, designs of bike paths should avoid obstacles in the pathway, include adequate sight lines and lighting, be direct, and avoid the use of rigid bollards. If cyclist volumes exceed 1,500 per day then recommended facility widths shall be >3.6 m bidirectional, and >2.4 m unidirectional. Bike Path's are generally appropriate near higher speed roads.
2 Protected Bike Lane: Exclusive on-road facility delineated by a vertical barrier element/physical separation from motor vehicles, as well as separation from pedestrians. Can be unidirectional or bidirectional	Width: Bidirectional 3.1-4.8 m, Unidirectional 2.1-3.0 m Posted Speed: ≤60 km/h Volume: N/A	Width: Bidirectional 2.4-3.0 m, Unidirectional 1.5-2.0 m Posted Speed: ≤80 km/h Volume: N/A	More narrow widths would be unclassified but may be shown on a regional cycling map	Separation from vehicles by delineator (curbs, bollards, concrete barriers, etc.) is required. Type of delineator dependent on speed and volume of traffic (for specific details see TAC GDG Chapter 5, section 5.7.5). Parking may provide additional barrier beyond the delineator - at a minimum curbstops over 100 mm high are necessary with periodic gaps for drainage and wheelchair access. Width of delineator is 0.30-1.0 m. If adjacent to parking, min separation is >0.80 m (Class A), >0.60 m (Class B). Volume: If motor vehicle ADT is greater than 4,000, this facility is more acceptable than others. If cyclist volumes exceed 1,500 per day then recommended facility widths shall be >3.6 m bidirectional, and >2.4 m unidirectional.
3 Multi-Use Path (MUP): Off-road facility that allows for shared use by people cycling and pedestrians.	Width: Bidirectional 4.0-6.0 m, Unidirectional bikes 3.0-4.0 m Posted Speed: N/A Volume: N/A Paved	Width: Bidirectional 3.0-3.9 m, Unidirectional bikes 2.4-2.9 m Posted Speed: N/A Volume: N/A Paved	Width: Bidirectional 2.7-2.9 m, Unidirectional bikes 2.1-2.3 m Posted Speed: N/A Volume: N/A Unpaved	MUP's are not intended to replace a sidewalk where there is sufficient motor vehicle or pedestrian and bicycle traffic that may lead to high rates of conflict. As a guide, MUPs are not appropriate when pedestrian and bicycle traffic volumes exceed a total peak hour volume of 200 users or where motor vehicle volumes on the parallel roadway exceed 4,000 ADT. MUPs are generally appropriate near higher speed roads. A MUP should fall outside of the Clear Zone (>1.2 m on roadways with posted speeds of <60 km/h - see TAC GDG, Table 7.3.1 for higher speed roads). Further, designs of MUPs should avoid obstacles in the clear zone, include adequate sight lines and lighting, be direct, and avoid the use of rigid bollards.
<b>Unseparated from vehicle traffic</b>				
4 Neighbourhood Street Bikeway or Shared Roadway: Bikes and motor vehicles share the roadway, which provides a continuous corridor of suitable operating conditions for people cycling, including limiting exposure to motor vehicle traffic. Can include a variety of roadways including local roads, alleys and service roads.	Width: Parking one side 5.5 - 7.5 m, parking both sides 8.0 - 11.0 m Posted Speed: ≤30km/h Volume: ≤1,000 ADT Traffic control at all major intersections designed to be bicycle activated. Traffic diversion and traffic calming preferred.	Width: Parking one side 5.5 - 7.5 m, parking both sides 8.0 - 11.0 m Posted Speed: ≤30km/h Volume: ≤2,000 ADT Traffic control at all major intersections designed to be bicycle activated. Traffic diversion and traffic calming preferred.	Width: varies, depending on road type Posted Speed: ≤50 km/h Volume: ≤3,000 ADT	Traffic diversion can include such treatments as directional and median barriers. Traffic calming can include such treatments as raised crossings, and bicycle permeable humps and chicanes. All such facilities should include shared lane markings to indicate the potential presence and positioning of people cycling. Municipalities are encouraged to limit posted speeds to 30 km/h on all Neighbourhood Street Bikeways and Shared Roadways. Widths: If curb less than 100 mm, or parking along curb, gutter pan can be included in width. Otherwise, width excludes gutter pan.
5 Bike Lane: On-road facility adjacent to a curb or a parking lane and delineated from motor vehicles with paint markings.	Never	Width: 1.8 - 2.4 m Posted Speed: ≤50 km/h Volume: ≤4,000 ADT Absence of curbside parking.	Width: 1.5-1.7 m Posted Speed: <60km/h Volume: N/A Presence of curbside parking permitted. If present, a buffer should be included btwn parking and bike lane. Combined curbside parking & buffer should be >3.0 m.	If parking present or speeds/ volumes might exceed limits or over 1,500 people cycling per day, protected bikeway recommended. Widths: If curb less than 100 mm, or parking along curb, gutter pan can be included in width. Otherwise, width excludes gutter pan.
6 Bike Accessible Shoulder: Signed and marked, paved area with no curb, located to the right of roadway general purpose travel lanes, and separated from general purpose lanes by white edge line or painted buffer. Usually in rural areas. May be shared with pedestrians.	Never	Width: 1.8-2.4 m Posted Speed: <50 km/h Volume: ≤4,000 ADT	Width: 1.5-1.7 m Posted Speed: <90 km/h If speeds >60km/h, buffer required between bicycle and vehicle lanes Volume: N/A	Parking not permitted in bikeway. If speeds/ volumes exceed limits, or over 1,500 people cycling per day protected bikeway recommended Width for buffered facility: 2.4-3.5 m total, bike lane 1.8-2.4 m

\* In all cases pavement markings (bicycle stencils) and signage are necessary at regular intervals and should be placed 20 to 30 metres in advance of, and following each intersection and other decision points, or every 400 m when intersections are not present.

\*\* Those facilities that do not meet the criteria for Classes A, B and C will be considered unclassified bikeway facilities. Such facilities should be upgraded over time to meet criteria for designated bikeways.