

Vancouver-UBC Local Committee

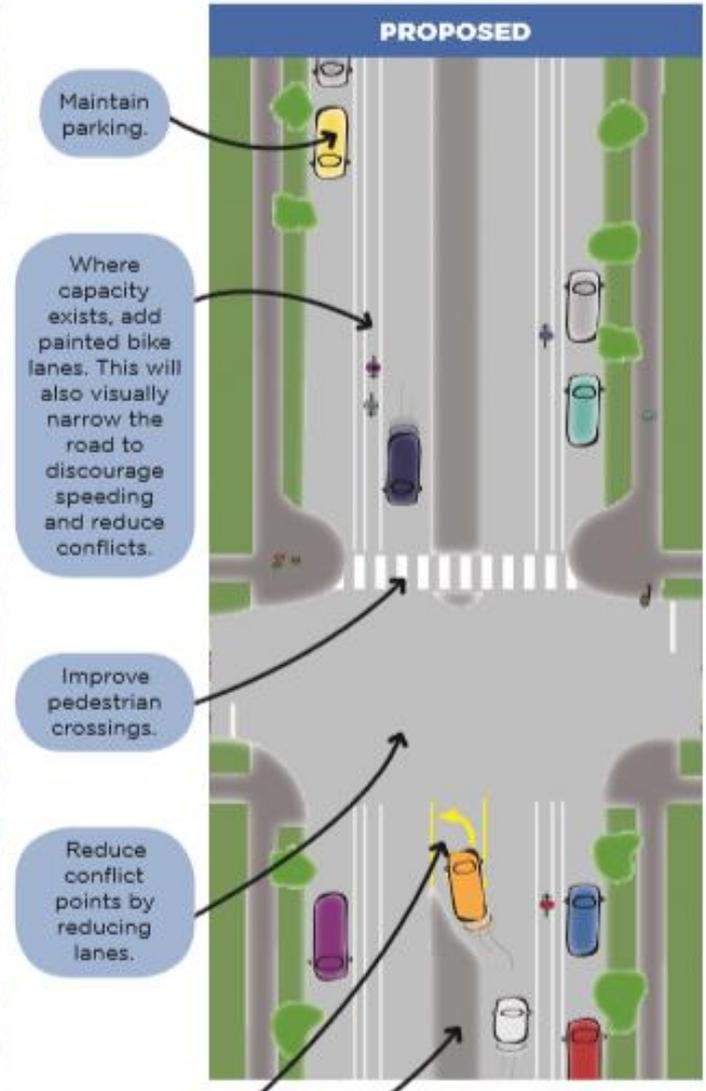
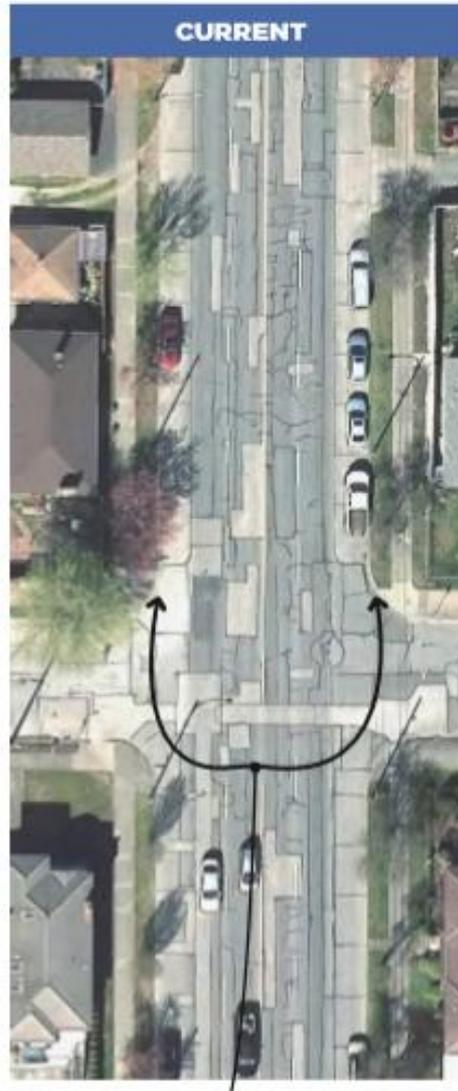
January 15th, 2019

Topics

- Translink Fleet Expansion Survey:
<https://www.translink.ca/fleetexpansion>
- Nanaimo St Assessment Ride
- Drake St Improvements
- 10th Ave Improvements Section #4 (Burrard to Trafalgar)
- Vehicles Stopping in Bike Lanes
- 2019 Annual Plan for our Local Committee
- State of Cycling Project – Types of Infrastructure

Nanaimo Street

LOCATIONS	
	Trinity St.
McGill Park	McGill St.
	Eton St.
	Cambridge St.
	Oxford St.
Garden Dr.	Dundas St.
	Triumph St.
	Pandora St.
Pandora Park	Franklin St.
	Hastings St.
	E Pender St.
	Turner St.
	E Georgia St.
Templeton Park	Adanac St.
	Venables St.
	Parker St.
	Napier St.
	William St.
	Charles St.
	Kitchener St.
	Grant St.
	Gravelly St.
	E 1st Ave N
	E 2nd Ave



Nanaimo Street



- Street work combined with major sewer work
- Reduction to two vehicle travel lanes from four
- Painted bike lanes (with buffer) between parked cars and vehicle travel lanes, due to existing concrete surface near curbs
- Some protected bike lanes near Hastings

Nanaimo Street

What would the street feel like?

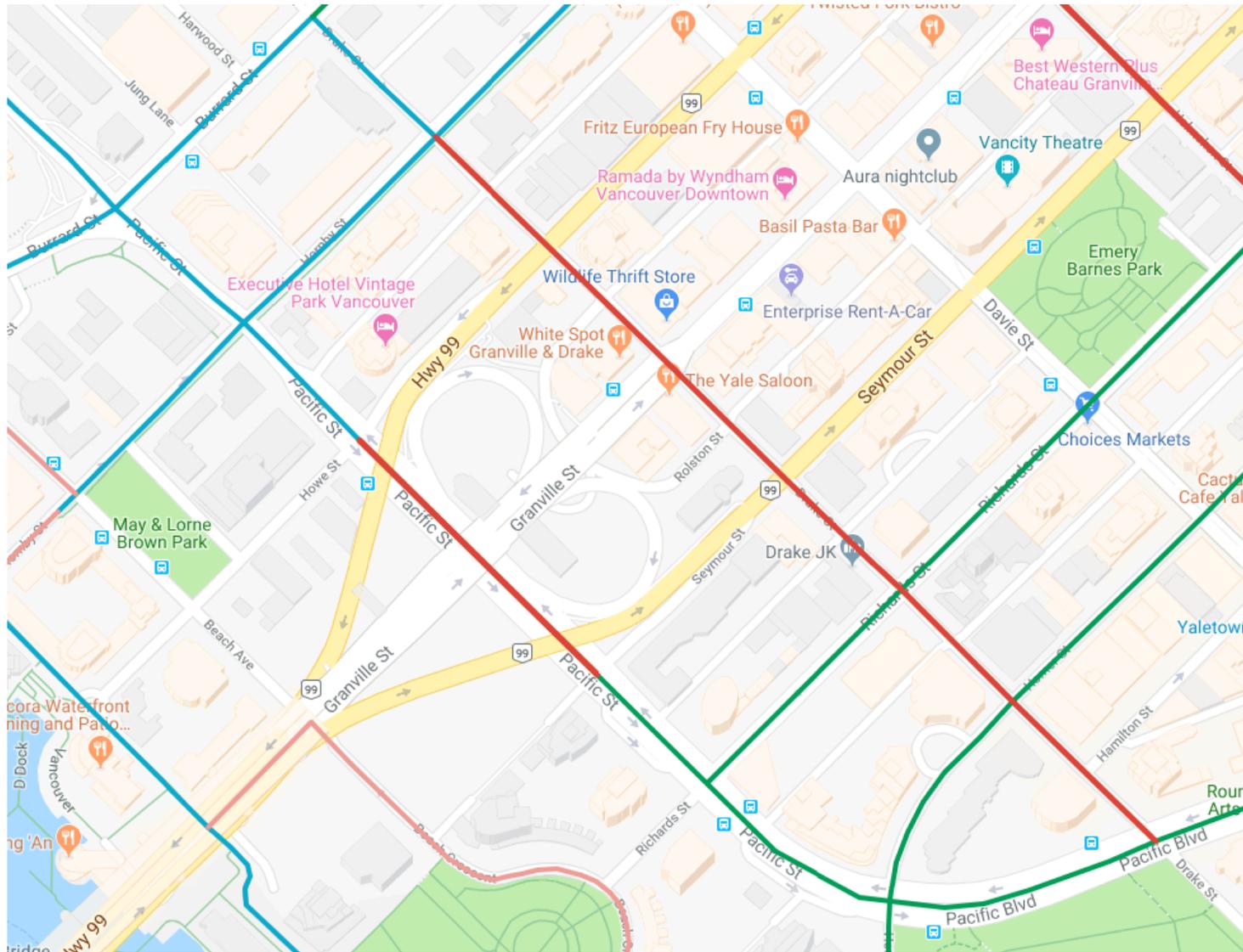
Sections of Nanaimo Street have vehicle volumes similar to Rupert Street between E 22nd Avenue and E 28th Avenue. This section is designed similarly to the proposed improvements for Nanaimo, with a single travel lane in each direction and painted bike lanes.



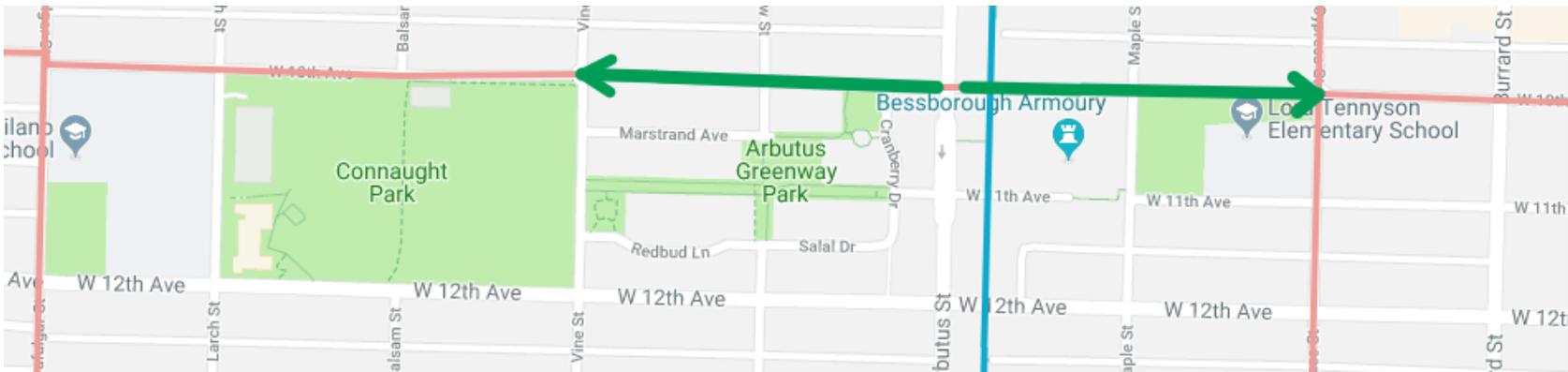
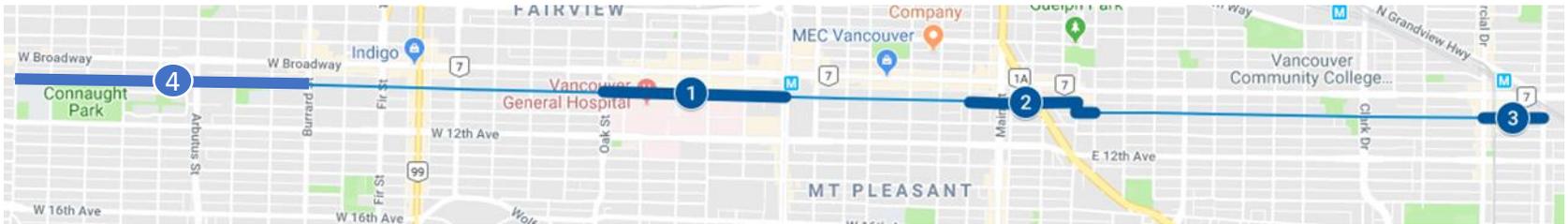
Images from Google Earth



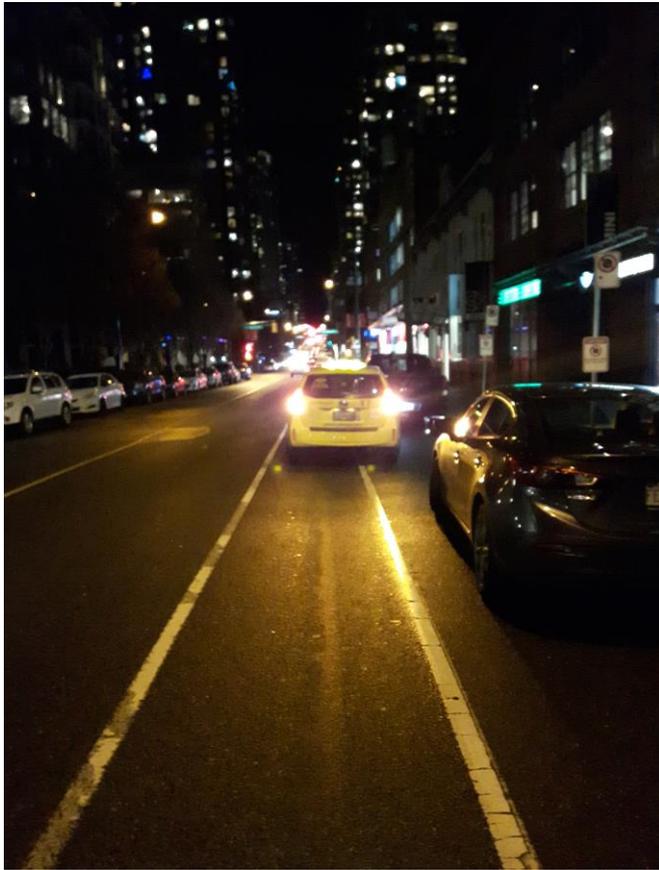
Drake St. Improvements



10th Ave Improvements Burrard to Trafalgar



Vehicles Stopping in Bike Lanes



2019 Annual Plan – Route Priorities

- Gastown Complete Street
- NE False Creek
- SW Marine Drive
- Georgia Gateway
- Kent Ave
- Stanley Park Causeway Connections (south end)
- Commercial Drive
- Arbutus Greenway
- 1st Ave (Cambie to Ontario)
- Iron Workers Memorial Bridge Connections
- Pender Corridor
- Robson
- 10th Ave
- Nelson & Smithe
- Richards St.
- Pacific St (near Granville Loops)
- Main St.
- Off Broadway Bikeway
- Granville Bridge
- Seaside Greenway

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- Richards St.
- Pacific St (near Granville Loops) (Drake St Alternate)
- Main St.
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2019 Annual Plan – Other Priorities

- Committee Functioning (including welcoming new members)
- Relationship management (City, PB, Translink, Moti)
- Events – consider adding key events to our plan
- Working Groups
 - Assessment Rides – Develop a position on each priority route
 - Seaside Greenway – Push for improvements near Kits Beach Park
 - Arbutus Greenway – Participate in planning for the permanent path
 - Other?

State of Cycling Project (HUB Staff)

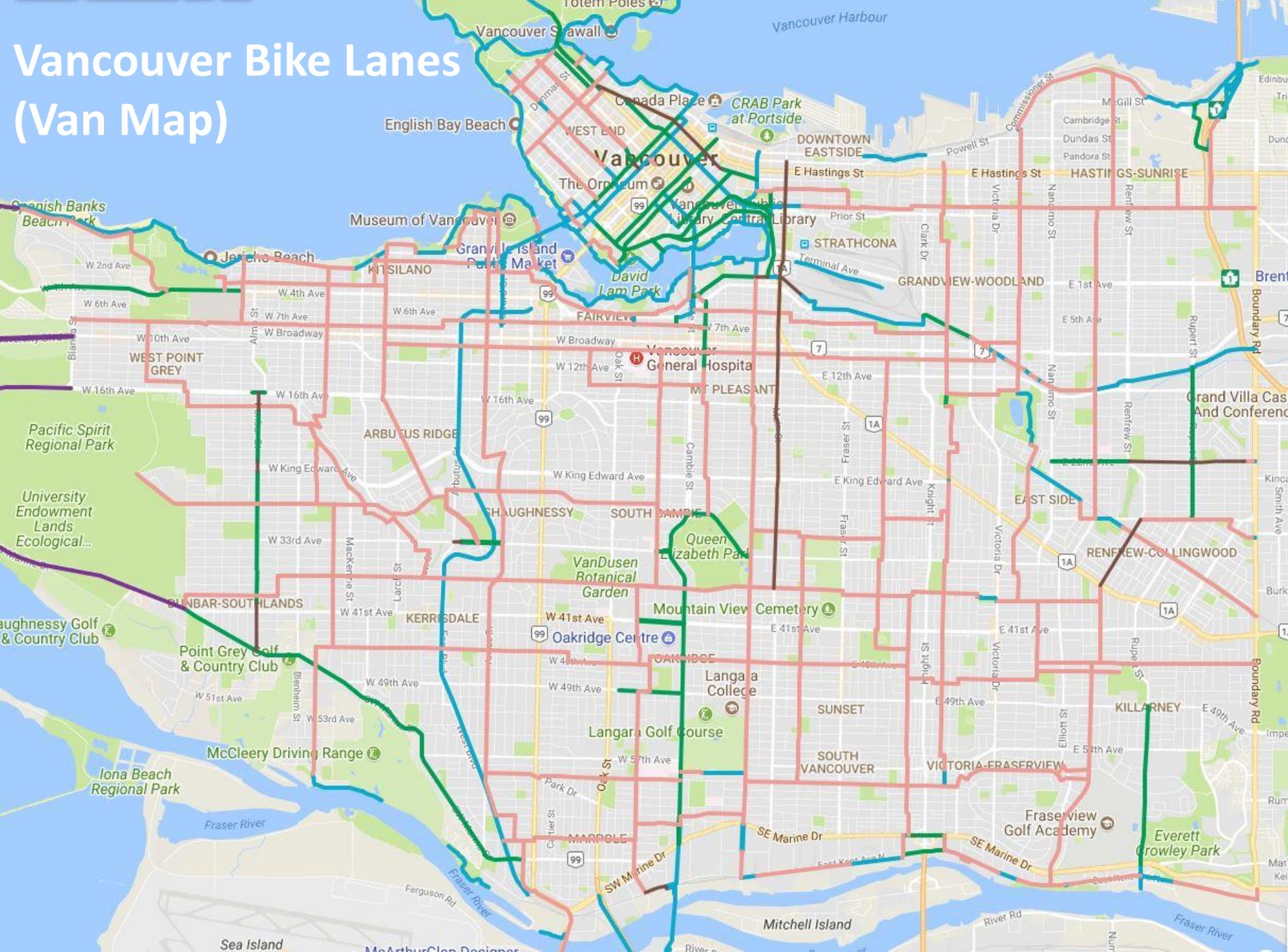
Type *	Class A** (Comfortable for all people)	Class B (Comfortable for some people)	Class C (Comfortable for few people)	Notes
Separated from vehicle traffic				
1 Bike Path: Off-road facility for the exclusive use of people cycling, may be unidirectional or bidirectional. Separate from both motorists 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 Paths 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 require 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, MUP's 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. MUP's 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 MUP's should avoid obstacles in the clear zone, include adequate sight lines and lighting, be direct, and avoid the use of rigid bollards.
Unseparated from vehicle traffic				
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: ≤30 km/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: ≤30 km/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: ≤60 km/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: ≤30 km/h If speeds ≥60 km/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 at a distance of 20 to 30 metres in advance of, and following each intersection and other decision points, or every 400

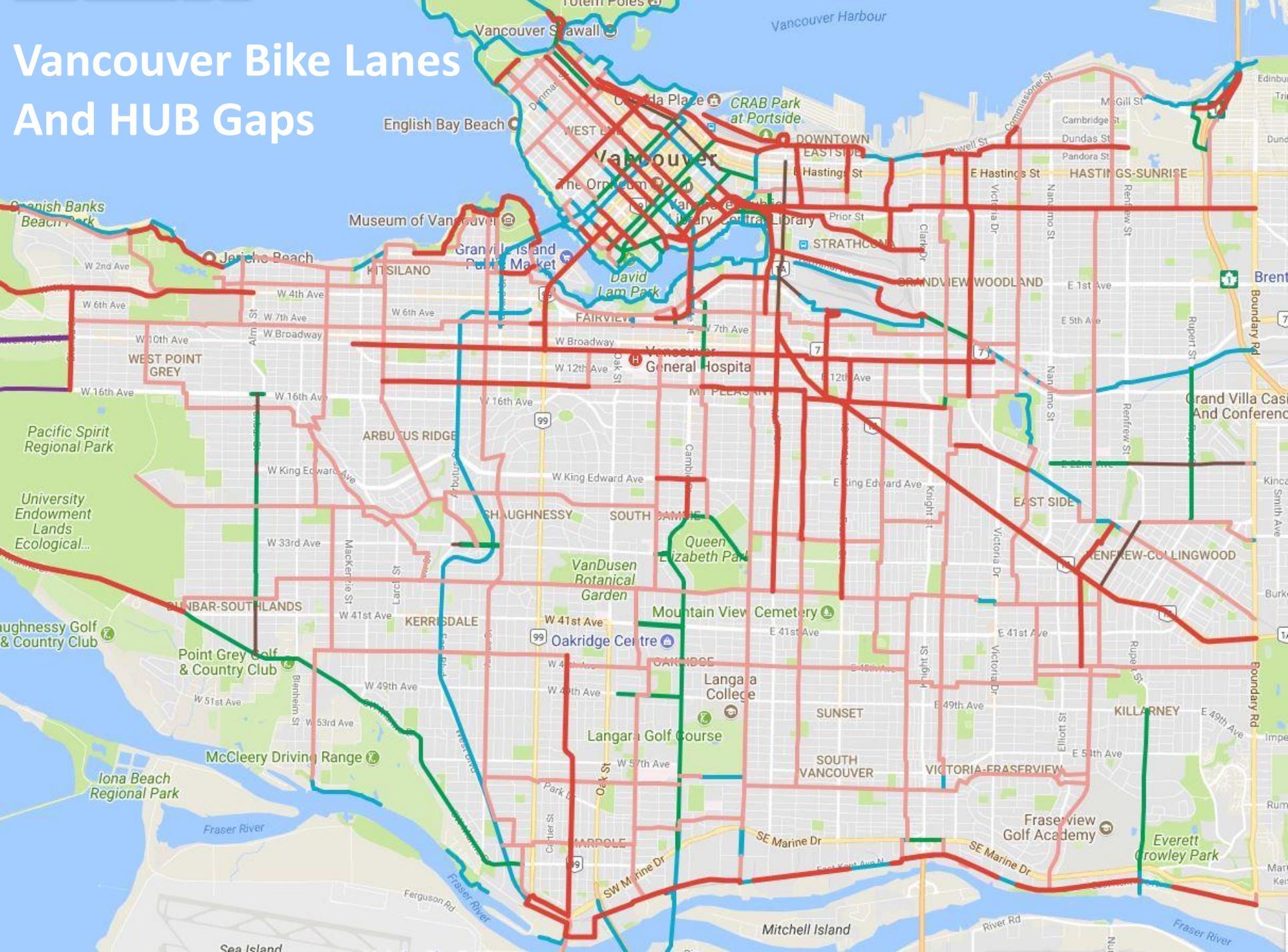
** Those facilities that do not meet the criteria for Classes A, B and C will be considered unclassified bikeway facilities. Such facilities should be upgraded over time to meet criteria for designated bikeways.

Appendices

Vancouver Bike Lanes (Van Map)



Vancouver Bike Lanes And HUB Gaps

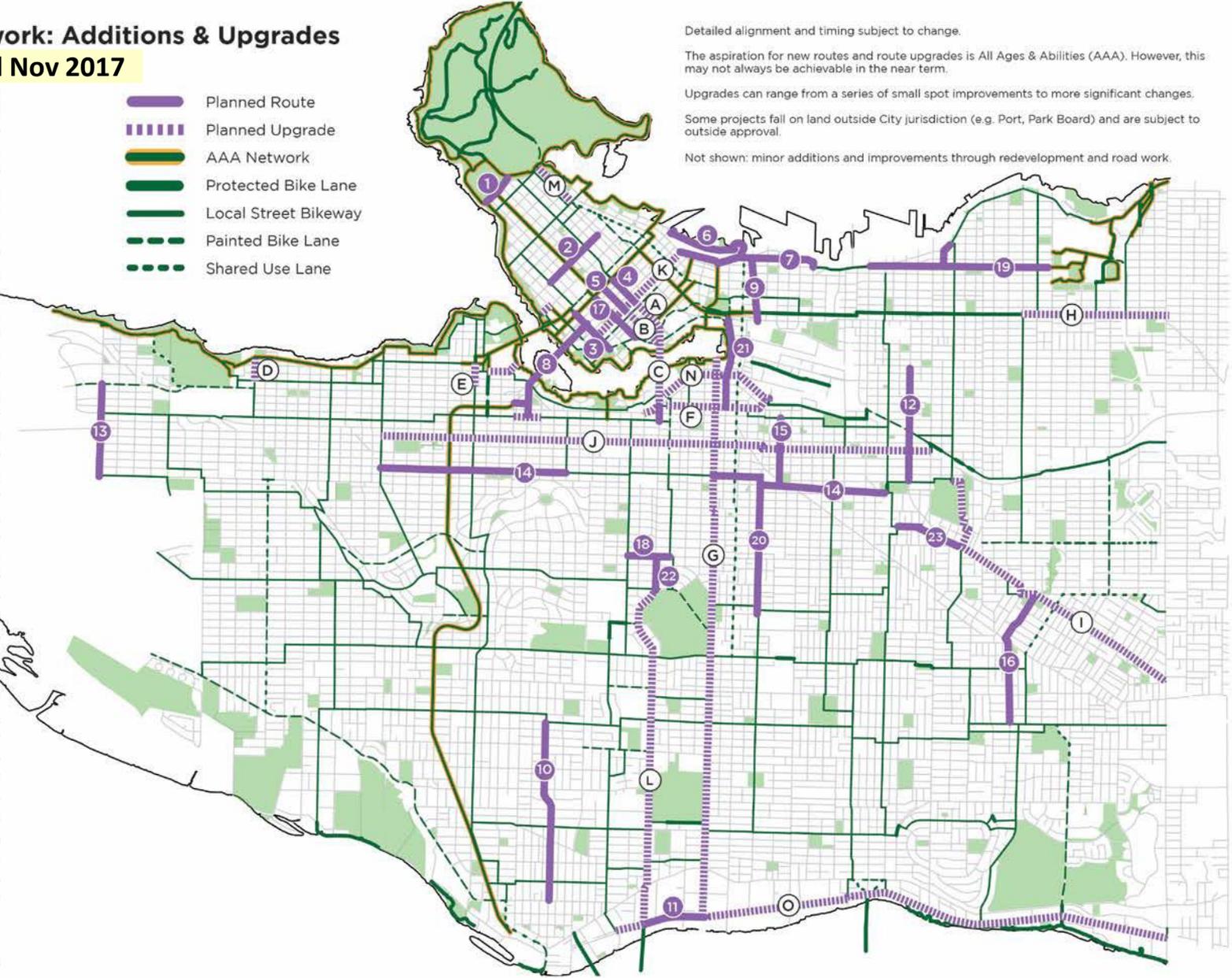


5-Year Cycling Network: Additions & Upgrades 2018-2022

Added Nov 2017

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



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.

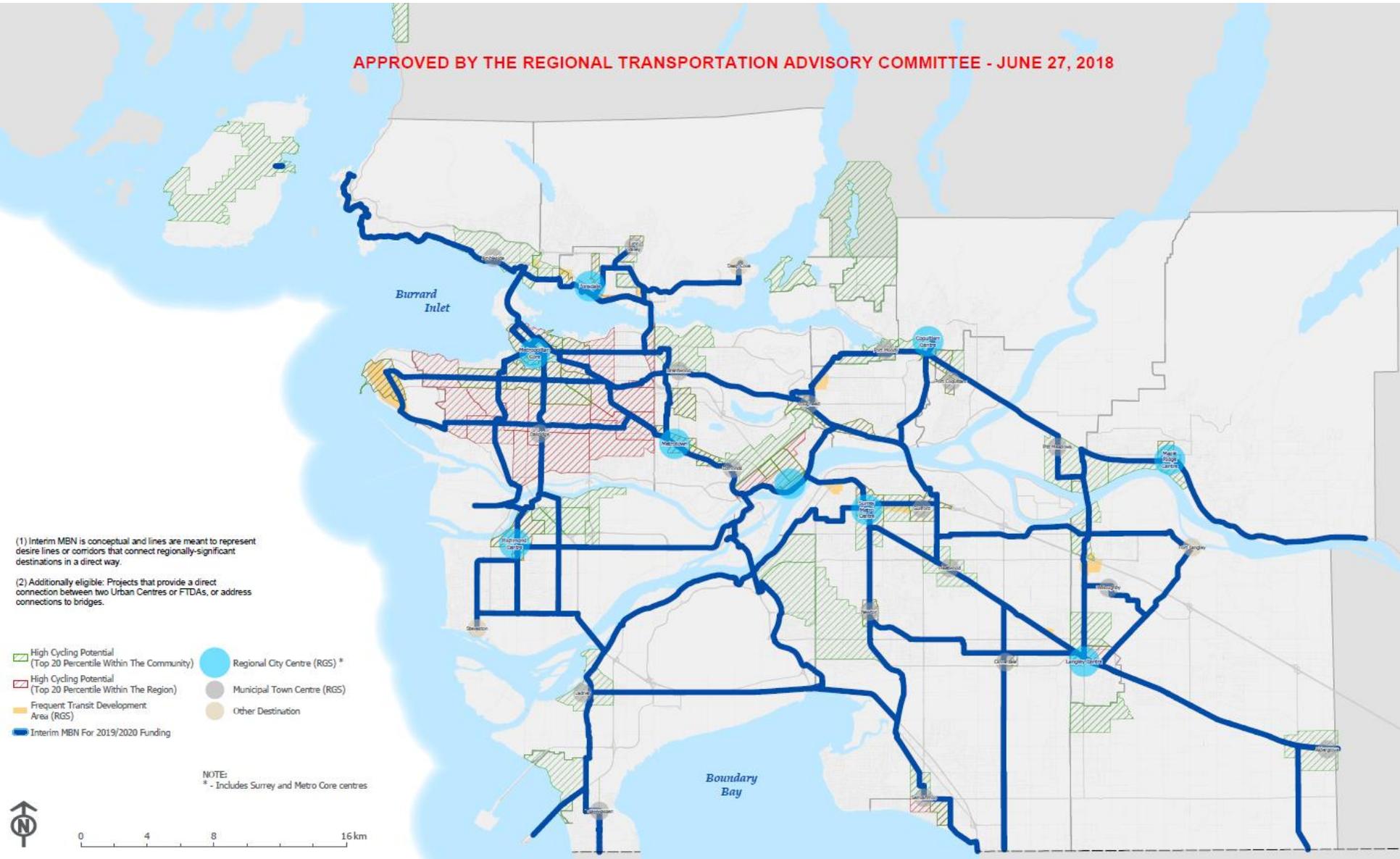
Some projects fall on land outside City jurisdiction (e.g. Port, Park Board) and are subject to outside approval.

Not shown: minor additions and improvements through redevelopment and road work.

* 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.

HUB Project Linkages

