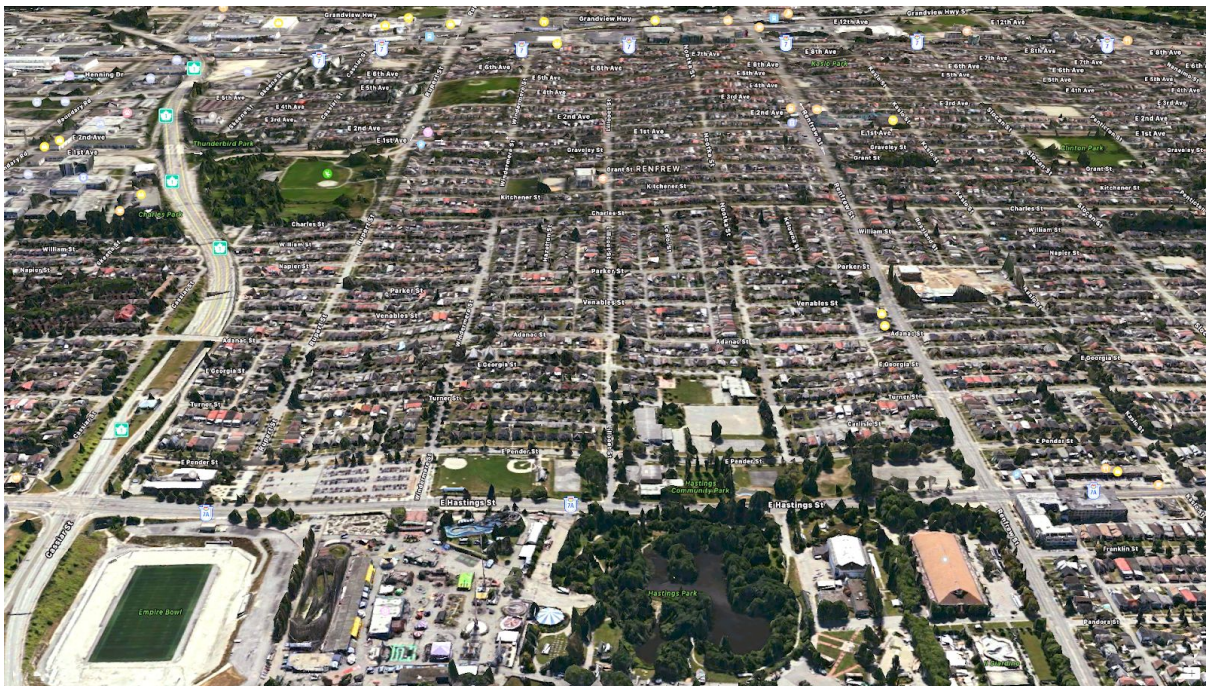




Your Cycling Connection

## Assessment of Potential Greenway Routes in the Northeast Quadrant of Vancouver

May 21, 2019



### BACKGROUND

In 2018, Vancouver City Council passed a motion to prioritize investigation of a greenway in the city's northeast quadrant. A greenway in the area has been proposed since at least 1992 when some suggested routes were included in the city's Bicycle Network Study; again in the 1995 Neighbourhood Greenways Plan; in the 1999 Bicycle Plan; and in the 2011 City Greenways Plan, where it was referred to as the *Eastside Crosscut* (see Figure 1)

Census data shows that in the northeast quadrant over 11% of people commute by walking and over 10% of people commute by cycling.

In 2018, 1st Avenue between Clark Drive and Boundary Road was closed to upgrade a trunk gas line. When the job was finished, and the street was repaved, it was still closed to motor traffic for part of a week. People came out in droves to use it for picnics, strolling, hanging out, children learning to cycle, etc. This demonstrated that there is high demand for a venue to engage in these activities in the east side of Vancouver. Other areas of Vancouver have the Seawall and Arbutus Greenway.

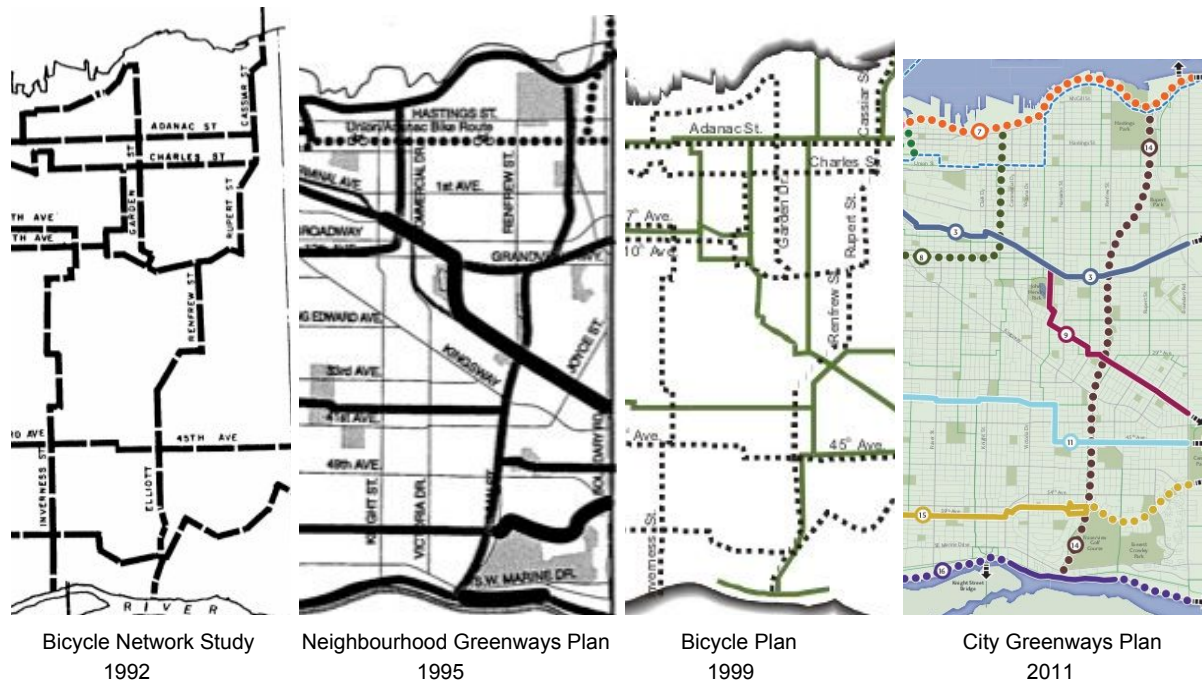


Figure 1 - Past Network Studies

The area for this assessment is bounded by Slocan in the West, Boundary Road in the East, Hastings St in the North and the Central Valley Greenway in the South. A future extension of the greenway is proposed for south of this area, potentially reaching to the Fraser River.

Destinations in the area shown in Figure 2 include Hastings Park, the Pacific National Exhibition, Rupert Pitch and Putt, several schools (including Vancouver Technical Secondary), and many markets and shops, including the retail zone on Hastings Street. There are two schools that face Lillooet whose students would benefit from a greenway, Sir Matthew Begbie Elementary at Grant Street and Dr. AR Lord Elementary at Turner Street.

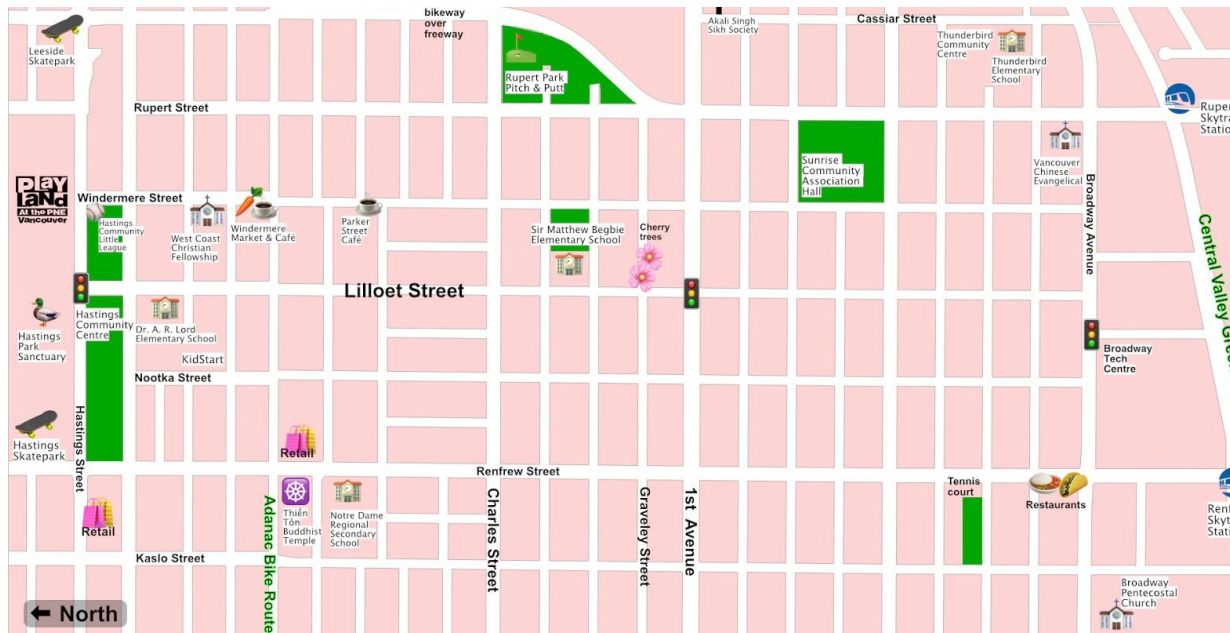


Figure 2 - Key destinations in the area.

The north-south streets that were assessed include Slokan, Kaslo, Renfrew, Nootka, Lillooet, Windermere, Rupert and Cassiar.

The streets that were ruled out because of steep grades include Slokan, Kaslo, Windermere and Cassiar. (COV's Transportation Design Guidelines recommend a grade of 3% or less<sup>1</sup>.)

Streets that were ruled out because of traffic noise include Renfrew, Rupert and Cassiar. Sections of these streets are fine and could become part of a cycling network but are not as suitable along their full length to be the primary greenway for the area.

Through our assessment, Lillooet Street stood out well above the rest as the best street for a greenway in the area. The key advantages of Lillooet are a very gradual grade from Hastings to 8th Avenue, existing signalled crossings at Hastings and 1st Avenue, a central location in the study area and a simple straight route that is easy to remember.<sup>2</sup>

<sup>1</sup>Transportation Design Guidelines.

Rule #9. Keep grades below 3% as much as possible.

<https://vancouver.ca/files/cov/design-guidelines-for-all-ages-and-abilities-cycling-routes.pdf>

<sup>2</sup> Transportation 2040:

C 1.2.2. Develop, regularly update, and implement short-term (approximately 5-year) network improvement strategies to address gaps and deficiencies in the network...

d. favouring simple and direct connections with few deviations to establish an easily understood and memorable network of routes, while also considering the importance of topography in route choice.

[https://vancouver.ca/files/cov/Transportation\\_2040\\_Plan\\_as\\_adopted\\_by\\_Council.pdf](https://vancouver.ca/files/cov/Transportation_2040_Plan_as_adopted_by_Council.pdf)





Figure 3 - Graveley Street at Lilloet Street with cherry blossoms.



Figure 4 - Proposed Lilloet Street greenway route (dashed line) with existing bikeways and greenways<sup>3</sup>

<sup>3</sup> City of Vancouver Open Data catalogue SHP files for bikeways, greenways, streets, lanes, and traffic signals

## NETWORK CONNECTIVITY

Lillooet crosses an existing bike route (Adanac), and other streets that have good potential as future bike routes (Graveley, Charles, 8th Avenue). To be part of a network it would need some new connections to other cycle routes in the area such as the connection to Wall Street and the 2nd Narrows Bridge in the North and the Central Valley Greenway in the South. New east-west cycle routes could be planned for 2nd Avenue and Parker Street.



Figure 5 - Lillooet Street at E 3rd Avenue

## CHALLENGES

One challenge is the slope between 8th Avenue and Broadway, which rises 11 metres in 115 metres (about 9.5% grade). We propose investigating whether the section of Lillooet between 7th Avenue and Broadway could be closed to traffic and turned into a small park. It could have switch-backs or gentle curves to help pedestrians, cyclists and those with mobility challenges get up the hill. (see Figure 6) There should be no crossing vehicle traffic at 8th Avenue. There is an existing crossing signal a half block to the west at Nootka. Access to that crossing would be required; an alternative would be to move the light and crossing to Lillooet.

Another challenge is the slope south of Broadway from Virtual Way, which rises 10 metres in 130 metres (about 7.7% grade). The slope could be lessened by making the existing parking lot into a park with a low grade curved path up to the height of Broadway.



Most north-south streets between Nanaimo and Cassiar have similar grades near Broadway. For example, Slokan, the nearest parallel bikeway, rises 16 metres in 170 metres (about 9.4% grade) just south of Broadway. The only nearby north-south streets across this barrier that have lower grades, and then only slightly, also have heavy traffic. No alternate route was identified, including using multiple streets, that has a significantly easier grade than that on Lillooet.



Figure 6 - Conceptual route to connect to the Central Valley Greenway and to manage grade.

At Hastings a connection to other routes is needed. The greenway route could turn one block east at the north end to connect with the existing cycle route on Windermere Street to use the existing crossing. Wayfinding should be improved on the north side of Hastings Street to separate travel modes.

Alternatively, there is a retaining wall and service road at the north end of Lillooet Street there that would need some modification to connect to other routes in Hastings Park.

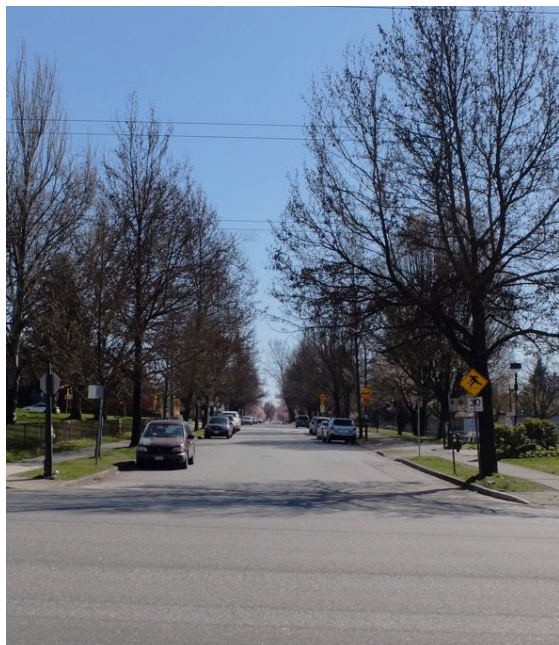


Figure 7 - Lillooet at Hastings



Figure 8 -Hastings St & Hastings Park service road

The Hastings Park Master Plan proposes that a “separated pedestrian/bicycle trail will comprise the northern segment of the proposed Eastside Crosscut Greenway which will eventually connect to the Fraser River”<sup>4</sup>, and that “this greenway system begins at Windermere Street south of the park, travels along the upper edge of Festival Meadows and the edge of Festival Plaza and then continues along the daylighted stream corridor through Creekway Park to New Brighton Park.” If the greenway in Hastings Park connected one block west at Lillooet instead of at Windermere, it would avoid a hill with moderate slope and more directly connect to a greenway on Lillooet. See Figure 9.



Figure 9 - Hastings Park Greenway Plan

To make the greenway attractive, motor vehicle volumes need to be reduced. We suggest intensive traffic diversion for the entire length, and sections with complete vehicle traffic removal. At arterials (Hastings, 1st Avenue and Broadway), motor traffic should be prevented altogether from entering or leaving the greenway. A good example of this treatment is at 7th and Oak.

The greenway should have priority over cross streets, apart from arterials. Stop signs should be on the cross streets. It should be made very obvious to someone

<sup>4</sup> City of Vancouver Hastings Park / Pacific National Exhibition Master Plan, January 2011  
<https://vancouver.ca/files/cov/HastingsParkPNE-doco-MasterPlan.pdf>



approaching the greenway that it is ahead. Some cross streets should have diversions to allow longer sections of greenway without interruption

## OTHER IDEAS

Charles Street from Nanaimo Street to Lillooet could have some greenway features or be part of the greenway. It's very wide and flat from Nootka to Nanaimo. See Figures 10 and 11.

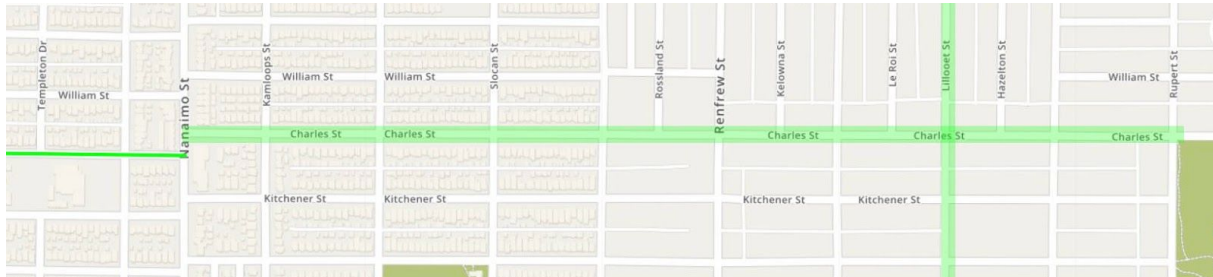


Figure 10 - Charles Street intersecting Lillooet.



Figure 11 - Charles Street at Lillooet Street

Charles Street could be narrowed into two one-way service roads on each side or a single service road on one side leaving plenty of room to incorporate a variety of features. It could be similar to the Seaside Greenway on Point Grey Road or Gemenskap Park in Seattle.

Charles Street west of Nanaimo could be a future active transportation corridor. The intersection of Nanaimo and Charles is a retail area with a hair salon, butcher, coffee shop and more. See Figure 12.





Figure 12 - Charles Street at Nanaimo.



Figure 13 - Gemenskap Park in Seattle<sup>5</sup>

The proposed small park on Lillooet between 7th Avenue and Broadway could have a monument or public art entrance, visible to people passing by on Broadway, and which would help promote the greenway as a feature of the neighbourhood.

<sup>5</sup> <https://eastballard.wordpress.com/friends-of-14th/>



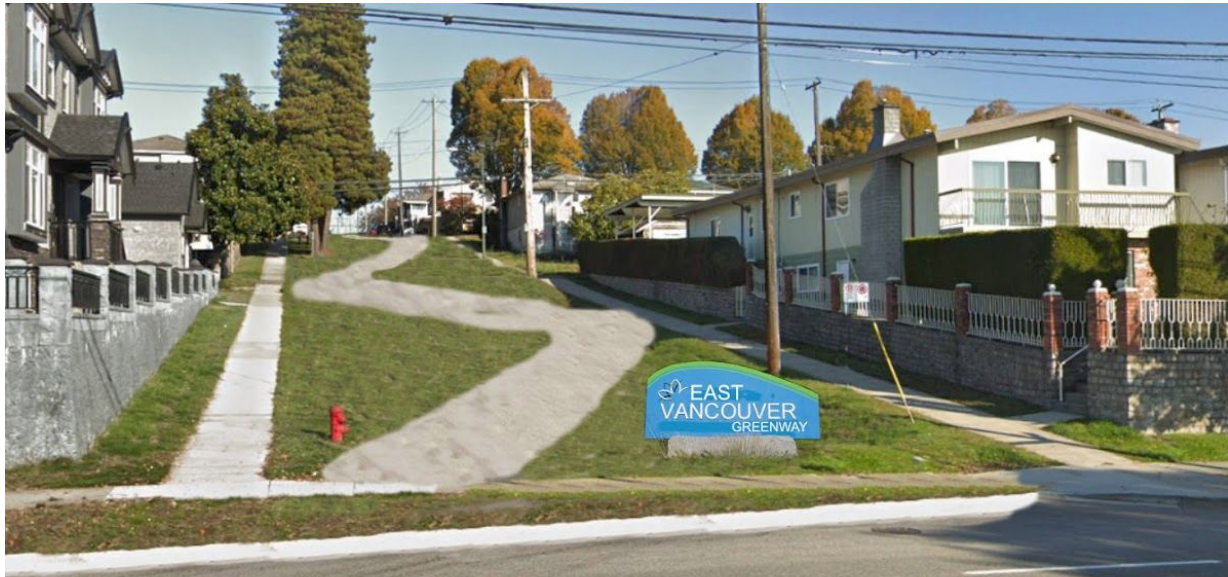


Figure 14 - Mockup of a small park between 7th Avenue and Broadway.

Since all of the blocks from Charles to Broadway are the short end of the blocks (with few or no houses fronting onto this portion of Lillooet), motor traffic could be removed entirely from Lillooet. Conceptual mockups are shown in Figures 14 and 15. This could also be justified north of Charles if all the residents had a garage or parking spot in their backyards. There of course should be delivery and drop-off spots near by.



Figure 15 - Mockup of a section of a car free greenway on Lillooet at 3rd Avenue.

Still Creek could be daylighted in places as part of the future southern part of the greenway.



HUB Cycling strongly supports the creation of a new Greenway in the northeast quadrant of Vancouver. We are available to discuss the concepts introduced in this assessment, and look forward to seeing progress on this initiative.

## MORE INFORMATION

HUB Cycling is a charitable organization that works to make cycling better through education, events and collaboration. We are Metro Vancouver's leader in making cycling an attractive choice for everyone.



Man cycling 1898. Major Matthews Collection - City of Vancouver Archives

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