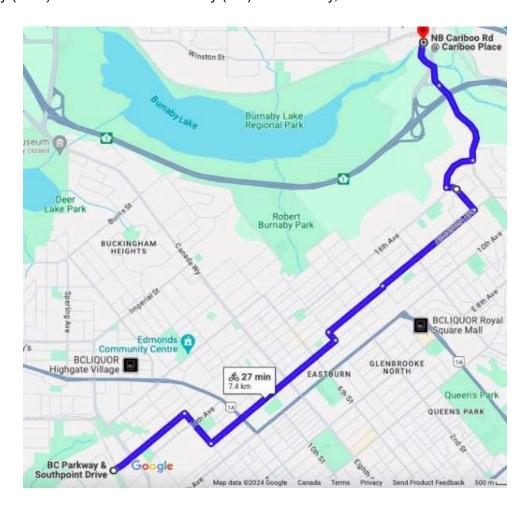




July 8, 2024

Burnaby Southeast Bikeway (SEB) and Cariboo Bikeway (CB) Assessment

The Burnaby Local Committee of HUB Cycling conducted an assessment ride of the Southeast Bikeway (SEB) and the Cariboo Bikeway (CB) on Saturday, 30 March 2024.



The SEB and CB are important parts of the bike network in Burnaby, as they

- connect two Burnaby Town Centres: Edmonds Town Centre and Lougheed Town Centre
- connect the BC Parkway, the Lakes Bikeway, the Central Valley Greenway, and the Burnaby Mountain Urban Trail
- provide access to six schools which are on or very close to the SEB and,
- lead to crossings over 10th Ave into New Westminster.

General Comments

The SEB experiences heavy "rat-running", a practice used by people driving vehicles to use neighbourhood side streets instead of the intended main road in areas, between Mary Ave. (near Kingsway) and 2nd St., due to people wanting to shortcut and avoid rush hour traffic on Kingsway and also on 10th Ave.

Many parts of the SEB could benefit from the bike-route road marking proposed for Frances/Union St. (rendering shown below) to reduce conflicts between people driving and people biking on the often narrow road between parked cars on either side.

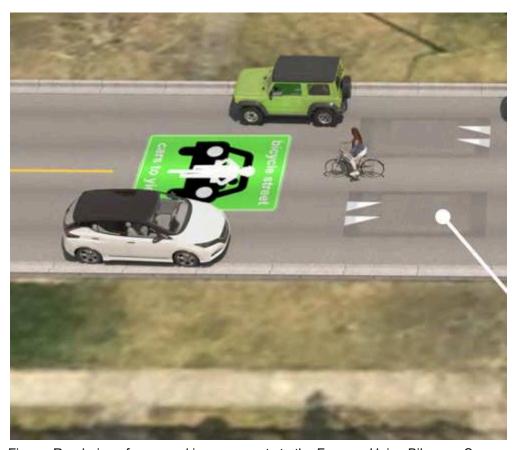


Figure: Rendering of proposed improvements to the Frances-Union Bikeway. Source: www.burnaby.ca

Most of the SEB is a "neighborhood bikeway", sharing the road with all other traffic, often sandwiched between parked cars. As such, many sections are inherently not up to the All, Ages, and Abilities (AAA) standard, as they would not be suitable for children to ride on their own, despite the potential for providing access to schools for children who want to cycle to school.

On the Cariboo Bikeway, the bikeway is not up to AAA standards as Cariboo Rd. is a Major Collector Primary-designated road and there is only a painted bike lane running along it. Cariboo Bikeway is near a major Highway 1 exit to Gaglardi Way and has heavy vehicular traffic at most times of the day. The route is also steep, with vehicles observed travelling much faster than the 50 km/h posted speed limit. Even for experienced riders, the route does not feel safe.

Small improvements such as converting some short sections of sidewalk to multi-use paths (MUPs) and adding some quick-build concrete curbs along Cariboo Rd. between Government St. and Cariboo Rd. could significantly improve the safety of this bike route for people cycling, and also provide an option for people walking between Avalon Ave. (entrance to Burnaby Lake Regional Park) and Cariboo Rd. as there is currently no sidewalk there. These suggestions are detailed in the table below.

Furthermore, we identified opportunities for improvement, which are listed in the table below.

Table of specific opportunities for improvement

Table 1 presents the issues along the SEB including Cariboo Road. The route is broken down into three segments to organize the findings.

The rating in the rightmost Safety/Comfort level column reflects our Committee's perceived impact of the deficiency on meeting the "All Ages and Abilities" bike route requirement for a route to be "low stress", taking into account the following:

- high volumes of vehicle traffic and potential risk of being struck by a person driving a vehicle
- ease of ability to navigate the bike route (e.g., absence of wayfinding or signs), a
 deficiency which may lead to confusion from other road users
- characteristics of the bike path (e.g., narrowness of path, proximity to lamp post and/or bollards)
- legality of a cyclist being on path (e.g., a cyclist riding across a crosswalk without elephant's feet is illegal)

Table 1. Issues identified by the assessment team along the Southeast Bikeway (SEB) and the Cariboo Bikeway (CB). The information is mostly presented travelling in a west to east manner.

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
	SEGMENT BE	TWEEN Mary Ave. and 2nd S	t.	
A1	Significant vehicular traffic during rush hour using the SEB to bypass traffic on Kingsway and on 10th Ave. Many drivers in the afternoon rush hour use the traffic light at 2nd St. and 10th Ave. to get back onto 10th Ave. to get to New Westminster and the Pattullo Bridge. The speed limit is set at 50 km/h. Drivers observed not stopping at stop signs at pedestrian-controlled traffic signal crossings at Canada Way and also at 6th St. There are no traffic diverters to prevent drivers from rat-running along 12th Ave between Mary Ave and 2nd St.		Segment of the SEB between Mary Ave. and 2nd St.	Very High

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
	SEGMENT 1 - BO	C Parkway TO 13th Ave. at 4t	h St.	
1.01	No crossbike/elephant's feet marked on crosswalk, which makes it illegal for people to cycle across Southpoint Dr. along the BC Parkway.		BC Parkway at Southpoint Dr.	Low
1.02	No bike path to connect the BC Parkway to the SEB. Entering the crosswalk and then making a turn inside the crosswalk is not expected by drivers.		BC Parkway at Southpoint Dr.	Low
1.03	Poor signage between BC Parkway and SEB.		BC Parkway at Southpoint Dr.	Low

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
1.04	Space but no physical protection from heavy and fast traffic in both directions.		Station Hill Dr. to Griffiths Dr.	High
1.05	No protection, guidance or signage to assist people cycling to get to the center bike lane to cross Griffiths Dr. Also high potential for conflict with right turning vehicular traffic.		Southpoint Dr. approaching Griffiths Dr. intersection	Very High
1.06	No pavement markings (crossbike/elephant's feet) or infrastructure to guide and protect crossing. The bike route crosses over a sidewalk with no warning for people walking or cycling.		Griffiths Dr. intersection.	High

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
1.07	Faded and missing bicycle stencil road markings.		Stride Ave (Griffiths Dr. to 15th St.)	Medium
1.08	People frequently observed walking on the bike path. Insufficient signage and pavement markings to indicate the separate paths. Provide more signage along route to direct users.		15th St.	Low
		The "Keep Left and Right" sign is misleading, do the pedestrians need to walk on the grass?		

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
1.09	Unfinished exit from / access to the new 12th St MUP (missing markings, gap in barrier). Pavement markings to direct people cycling onto the bike routes would be helpful such as green paint with crossbike/elephant's feet.		15th St. and 12th Ave.	Low
1.10	No physical protection. Road not suitable for all ages and abilities, especially children going to school.		Twelfth Avenue Elementary School	Medium

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
1.11	No markings, crossing not clear. Easy for people cycling to get "squished" at the west side of the intersection when cars and bikes merge to the narrower road. We recommend that modal filters be installed to block traffic from proceeding straight across Canada Way. It is difficult for people on bikes to reach the call button during rush hour congestion. There is often a lineup of cars blocking the button.		Canada Way intersection	Very High
1.12	We recommend that modal filters be installed to block traffic from proceeding straight across 6th St.	Const.	6th St. intersection	High

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
1.13	Narrow road without protection and heavy vehicular traffic especially during rush hour.		Canada Way to 4th St.	Very High
	SEGMENT 2 -	13th Ave. at 4th St. TO Caribo	00	
2.01	Missing wayfinding road markings.		13th Ave. at 4th St. modal filter	Low
2.02	Obsolete "Midtown Detour" signs still up.		13th Ave. (and elsewhere in Burnaby, e.g. Lakes Bikeway)	Low

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
2.03	Missing road markings. Narrow space between parked cars.		4th St. to Newcombe St.	High
2.04	Difficult to cross 1st St (no marked cross-bike or RRFB).		1st St.	Medium
2.05	Hard to pass stopped cars when parents drop off / pick up children (photo from April 2023).		At John Knox School	High
2.06	Road markings (crossbike/elephant's feet/green paint) could aid wayfinding.		Newcombe St.	Low

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
2.07	Hard to cross Cumberland St. No cross-bike markings. Existing RRFB activator button can not be reached.		Cumberland St.	High
2.08	Little space with parked cars - have to take the lane. Difficult for faster traffic to pass safely. Road is a Local Collector and is busy during the day; it is also a bus route.		Armstrong Ave.: Cumberland St. to Cascade St.	High
2.09	Missing wayfinding signs to/from Cariboo.		Cascade St.	Low

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
	SEGME	NT 3 - Cariboo Bikeway		
3.01	"Left turn bay" is very uncomfortable for people cycling. There is a high potential for conflict with vehicles in this segment. A safer alternative would be to continue the painted bike lane to an expanded sidewalk or bike box near the traffic light, so that people cycling can activate the traffic lights and cross the street.		16th Ave. and Cascade St.	High
3.02	No westbound bike lane. Fast-moving vehicular traffic travelling down the hill towards Cariboo Rd. We recommend a MUP along the north side of 16th Ave. between Cascade St. and Cariboo Rd. This would also address Issue 3.01 above.		16th Ave.	Very High

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
3.03	Northbound painted bike lane is narrow and not protected, with fast moving traffic.	Carlin	Cariboo Rd.	Very High
3.04	The Cariboo Rd. MUP on the west side of the road between Cariboo Dr. and 16th lacks signage indicating that it is a MUP. Cariboo Dr. is a quiet road and would be a safer alternative also for northbound bike traffic on the CB. There is no signage for people cycling northbound to take Cariboo Dr. instead of Cariboo Rd. as an alternative to going downhill/northbound on Cariboo Rd.		Cariboo Rd.	Medium

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
3.05	Roots buckling pathway.	Briar Rd Briar Rd JC Premium Finishes	Path between Cariboo Dr. and Cariboo Rd.	Medium
3.06	Dismount and walk signs - could widen the sidewalk to extend the MUP so that it connects Cariboo Dr (quiet street section). and Stormont Ave intersection.	Call	Southbound between the Temple and Cariboo Dr.	High
	At Stormont Ave and Cariboo Dr., there is a dismount and walk sign on the path that is clearly designed as a MUP and safer than taking the painted bike lane, we recommend removing the dismount and walk sign here and making this officially a MUP.			

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
3.07	Narrow unprotected bike lane. Sidewalk could be labelled a MUP.	Cartin	Cariboo Rd southbound near Highway 1 crossing	High
3.08	For people cycling southbound on the CB at the Cariboo Rd. and Cariboo Rd./Stormont Ave. intersection, the bike lane ends in the shoulder and there is often heavy vehicular traffic going into the right turn bay, making it unsafe for people cycling to make the left turn from Cariboo Rd. onto Cariboo Rd. to continue along the CB.	Carloo	Cariboo Rd. and Cariboo Rd. intersection	Very High
3.09	Narrow shoulder needs protection and lighting. Could be shared with pedestrians. Ideal location for a quick-build bike lane similar to the upcoming project for Mt. Seymour Parkway in North Vancouver.	Co Co	Cariboo Rd. under Gaglardi Way	Very High

Issue code	Issue description	Photo	Location along bikeway	Safety/ Comfort Level Impact (Very High, High, Medium, Low)
3.10	North-south crosswalk not labelled as cross-bike for northbound bikes on CB.		Cariboo Rd. and CVG	High
	East-west crosswalk has no RRFB or pedestrian-activated flashers, we recommend implementing here			

About HUB:

HUB Cycling (HUB) is a charitable not-for-profit organization working to get more people cycling, more often and making cycling safer and better through education, action and events. More cycling reduces greenhouse gas emissions, relieves traffic congestion and means healthier, happier and more connected communities.