

TO: TRANSPORTATION COMMITTEE
FROM: GENERAL MANAGER ENGINEERING
SUBJECT: **VANCOUVER-SFU CYCLING CONNECTION PROJECT UPDATE – PROPOSED IMPROVEMENTS**
PURPOSE: To provide an update on the proposed improvements as part of the Vancouver-SFU Cycling Connection Project and to seek Council endorsement to proceed with detailed design.

RECOMMENDATION

THAT the proposed improvements in the report titled “Vancouver-SFU Cycling Connection Project Update – Proposed Improvements” dated May 29, 2024, be advanced to detailed design.

1.0 POLICY SECTION

The Vancouver-SFU Cycling Connection Project supports the City of Burnaby’s Corporate Strategic Plan and goals for a safe, connected, healthy, and dynamic community. The project is also aligned with Council-adopted goals, policies, and targets within Burnaby’s Transportation Plan and the City’s Climate Action Framework that supports a sustainable, safe, and accessible transportation system.

2.0 BACKGROUND

The City is striving to develop a cycling network that is attractive, comfortable, and safe for cyclists of All Ages and Abilities (AAA), including children, young adults, seniors, and both new and experienced cyclists. As part of *Connecting Burnaby*, Burnaby’s Transportation Plan, the City’s goal is to upgrade the Priority Cycling Network to meet AAA standards by 2030. The Vancouver-SFU Cycling Connection Project, as detailed in *Attachment 1*, is a primary east-west cycling route that consists of the Frances-Union Bikeway, Burnaby Mountain Parkway, and Gaglardi Way. As part of the City’s Priority Cycle Network, it serves as an important cycling connection between Metro Vancouver’s urban centres and key destinations across the region. The project aligns with TransLink’s Transport 2050 Major Bikeway Network and is partially funded by Infrastructure Canada’s Active Transportation Fund.

Phase 1 of this project was completed in Fall 2023 and focused on understanding current conditions and identifying existing issues, gaps, and potential opportunities for change. The project team conducted an extensive data collection program that included vehicle and cycling volume counts, parking demand utilization, and vehicular speed data. Phase 1 concluded with several public engagement activities, including an online survey, three pop-up events, and direct communication through either phone calls or

emails. Feedback from residents, cyclists, and key stakeholders in terms of usage and expectation of the project corridor was documented.

Following Phase 1, the project team developed proposed improvements based on the results of our data collection program, technical analyses through best practice, and community feedback. The proposed improvements were shared with the community and key stakeholders during the Phase 2 public engagement in February 2024, which included an online survey, three pop-up events, and phone and email communication. Through technical analyses and community feedback received, the project team identified the recommended improvements to be included in the detailed design.

3.0 GENERAL INFORMATION

The proposed improvements for this project are summarized below based on their project area locations and can also be found in *Attachments 2 and 3*.

3.1 Frances-Union Bikeway

The Frances-Union Bikeway is an existing east-west neighbourhood bikeway that connects Boundary Road (municipal boundary with City of Vancouver) to the west with Burnaby Mountain Parkway to the east. Neighbourhood bikeways typically have low vehicular volumes and speeds such that drivers and cyclists can comfortably and safely share the road. The BC Active Transportation Design Guide recommends a vehicle volume threshold of 1,000 vehicles per day with operating vehicle speeds of 30 km per hour or less.

Based on current traffic volume collected, many portions of the corridor meet the provincial threshold for an all ages and abilities neighbourhood bikeway. However, the observed eighty-fifth percentile vehicular operating speeds ranged from 31 km per hour to 51 km per hour throughout the bikeway. To address vehicular speeds and to further reduce vehicular volumes along this bikeway the following measures are proposed:

3.1.1 Corridor-Wide Improvements

- Implement new speed humps to reduce vehicular speeds;
- Provide new raised crosswalks along most local cross-streets to improve stop-sign compliance, reduce vehicular speed at intersection, and enhance crossing safety;
- Enhance existing neighbourhood bikeway road stencil to inform all users of the shared roadway; and,
- Install new 30 km per hour signage to enforce roadway speed limit.

3.1.2 Intersection Improvements

- Install new pedestrian signal with bike crossings and push buttons at Gilmore Avenue and Frances Street to assist cyclists crossing;
- Install new bike crossing markings at Willingdon Avenue and Frances Street to help direct cyclists;

- Remove existing traffic diverter at Beta Avenue and Frances Street that is not in compliance with current design standards;
- Install new north-south two-way stop control along Beta Avenue at Frances Street to provide flow for cyclists;
- Install pedestrian signal with bike crossings and push buttons at Holdom Avenue and Frances Street to assist cyclists;
- Install new traffic diverter at Sperling Avenue and Union Street to reduce vehicular traffic;
- Install protected cycling infrastructure at Duthie Avenue and Union Street to assist cyclists' transition; and,
- Install protected cycling infrastructure at Duthie Avenue and Hastings Street to assist cyclists' transition.

3.1.3 New Cycling Facilities

- Propose a new multi-use pathway along Frances Street fronting Kensington Park (to be coordinated with the Parks, Recreation and Culture Department) to provide further cycling protection; and,
- Implement a two-way protected bike lane on the west side of Duthie Avenue between Union Street and Hastings Street to provide separation between cyclist and vehicle travel lane.

3.2 Burnaby Mountain Parkway

The Burnaby Mountain Parkway (BMP) currently consists of multiple vehicular lanes, painted on-street bike lanes and either a shared off-street multi-use pathway or sidewalk along part of the parkway. The proposed improvements include protected off-street unidirectional bike lanes on either side of the parkway. Existing bus stops will be maintained, but they will be redesigned as in-lane bus stops where feasible. The existing multi-use pathway along the north side of the BMP between Centennial Way and Gaglardi Way will be repurposed to include a unidirectional downhill bike lane and a sidewalk to provide separation between the two active modes – pedestrians and cyclists. The intersection of Centennial Way along the parkway will include a new traffic signal to facilitate safe crossing access to Burnaby Mountain Park and improve sight line for all users. The intersection of BMP and Gaglardi Way will be urbanized to include sightline improvements, protected cycling crossings, and the removal and optimization of channelized turn lanes, where feasible. The proposed improvements will connect to the existing multi-use pathways along University Drive towards SFU.

3.3 Gaglardi Way

Gaglardi Way currently consists of multiple vehicular lanes and painted on-street bike lanes. The proposed improvements will include protected off-street unidirectional bike lanes on either side of the roadway. To accommodate the future cycling facility with minimal environmental impact, the downhill travel lanes between the BMP and approaching Broadway north will be reduced from two lanes to one lane. The proposed laning configuration is supported from a capacity traffic analysis.

Note that the existing laning and intersection configuration at Gaglardi and Broadway north will not be impacted; however, to further improve cycling crossing and sightlines at the Broadway north and south intersections, new protected cycling crossings will be constructed. The existing unsignalized channelized turn lanes will be removed to further improve crossing safety. Additional improvements along this corridor will include a multi-use pathway around the trailhead entrance with formalized parking to safely accommodate a wider range of users.

Currently, there are capital infrastructure improvements planned for Gaglardi Way as part of the City’s current 5-year capital plan. Hence, the detailed design and implementation of the cycling improvements on Gaglardi Way will be coordinated through the planned infrastructure improvement program.

4.0 COMMUNICATION AND COMMUNITY ENGAGEMENT

During both Phase 1 and Phase 2, the project team connected with community members through several engagement activities, spanning multiple months and phases, which included online surveys, pop-up events, and direct communication through either phone calls or emails. The project team also engaged directly with key stakeholder groups, including students and staff at Simon Fraser University (SFU), residential blocks with high traffic volumes, and members of cycling advocacy groups. The community inputs from both Phase 1 and Phase 2 are available on the project website, summarizing the extent of engagement activities and feedback received throughout the project.

5.0 FINANCIAL CONSIDERATIONS

The Infrastructure Canada’s Active Transportation Fund has approved \$5,730,000 for this project that includes the Frances-Union Bikeway and Burnaby Mountain Parkway, which was endorsed by Council in March 2023. Additional funding for this project has also been committed in the current Engineering 5-year capital plan. Note that the Gaglardi Way segment is not funded through Infrastructure Canada’s Active Transportation Fund.

Respectfully submitted,

May Phang, P.Eng., General Manager Engineering

ATTACHMENTS

- Attachment 1 – Project Area Map
- Attachment 2 – Frances-Union Bikeway Improvements
- Attachment 3 – Burnaby Mountain Parkway and Gaglardi Way Improvements

REPORT CONTRIBUTORS

This report was prepared by Po Sun, M.Sc., ACIP, Transportation Planner, and reviewed by Kathy Ho, P.Eng., PTOE, Senior Manager, Transportation, and Amy Choh, P.Eng., PMP, Director Engineering, Transportation.