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To: TransLink Engineering and Planning teams

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Recommended updates to TransLink's BICCS funding program

Thank you for continuing to invest in cycling and other active transportation modes. HUB Cycling acknowledges that TransLink takes active transportation seriously and has invested more than \$32 million in 2022 alone in active transportation infrastructure, programs, and services across Metro Vancouver.

In August of 2022, HUB Cycling sent TransLink a [letter of recommendation](#) to improve upon the current BICCS funding program. As TransLink is currently in the process of updating the BICCS program, this demonstrates your commitment to ensuring that funding for bike and active transportation projects is as effective and impactful as possible. A short summary of the previous recommendations is included at the end of this letter.



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Building upon our 2022 letter, we have compiled additional suggestions for improvements to the BICCS program. Shorter term fixes are labelled as **quick wins** for easy reference.

Quick win: Draw from existing reference documents

In addition to the Transportation Association of Canada's (TAC) guide on bikeway development, there are several reference documents that would be helpful as TransLink updates the BICCS guidance.

- BC Active Transportation (BCAT) Design Guide
 - The BCAT provides a solid reference for active transportation projects and is especially helpful as a BC resource. However, the guide outlines all facility types, including lower-quality ones. TransLink should take care to focus on the highest quality facilities and pay attention to areas where the guide urges caution around the facility type. For example, in the section on multi-use pathways, the design guide includes a reference to the [Cycling in Cities](#) work that shows that multi-use pathways have a higher than expected number of collisions requiring hospitalization (p.E8).
 - As we noted in our [recommendation letter](#) to the Ministry of Transportation and Infrastructure:
 - All projects should adhere to the highest quality standards of the BC Active Transportation Design Guide. Approved projects should only be of the highest quality, such as protected cycling lanes, when the route includes higher-speed, higher-volume roadways.

Recommendation: Incorporate the best standards of the BC Active Transportation Design Guide into BICCS guidelines and requirements.



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- National Association of City Transportation Officials (NACTO)
 - [NACTO has several quality guides](#) for street and bikeway design. While not as technical as TAC, NACTO provides clear examples of how to build high-quality facilities for people cycling and rolling.

Recommendation: Use NACTO's guides to improve the BICCS program, with a focus on funding the most comfortable and safe active transportation facilities.

- The CROW Design Manual for Bicycle Traffic
 - The Netherlands' pre-eminent guide on developing bikeway facilities showcases best practices in designing facilities that are safe and comfortable for all. While North America is not yet at the level of bikeway design as a lot of European locations, in Metro Vancouver, we can lead the way in building truly world-class facilities.

Recommendation: Incorporate best practices from the CROW manual into BICCS guidelines to encourage municipalities to build the highest-quality active transportation facilities.

Continue to fund high-quality facilities comfortable for All Ages and Abilities (AAA) while avoiding lower-quality facilities

TransLink's BICCS program has funded a number of quality active transportation facilities over the years but occasionally funds projects of lower quality.

Examples of good-quality facilities funded by BICCS

- Glover Road protected bike lane in Langley (2023 Infrastructure Improvement Award Winner)
 - This [planter-protected bike lane](#) with intersection treatments, including green paint at crossings, provides a safe and comfortable connection for most people. As part of the project, the four-lane roadway underwent a road diet, slowing vehicle speeds and increasing safety for people cycling and rolling.



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- 10th Ave upgrades in the Health Precinct in Vancouver
 - This project is a great example of how to accommodate people cycling and rolling alongside people walking in a busy health area with a lot of movement. People walking and rolling are separate from those walking, and there are intersection treatments and green paint at all of the crossing points.

Examples of lower-quality facilities that received funding

The two examples in our previous letter provide the best examples of lower-quality facilities receiving BICCS funding (117 Avenue MUP in Maple Ridge and the Rumble Street MUP in Burnaby).

Fund multi-use pathways (MUPs) with caution

- As we noted in our previous recommendation letter, multi-use pathways (MUPs) can be appropriate and useful under the right circumstances. But proximity to high-speed, high-volume roadways, multiple conflict points (driveways, intersections), various users travelling at different speeds, and trail obstructions (e.g. light posts, rigid bollards, street furniture) all increase the risk of an injury for someone walking, rolling or cycling.
- Multi-use pathways next to residential roadways should be placed along low-traffic, low-volume roadways (e.g. 30 km/h).
- Road-adjacent MUPs beside 60+km/h should not be encouraged. However, in limited circumstances, it can be useful. For example, active transportation facilities on bridges and causeways provide valuable connections for the network. Ideally, these should be separated pathways or at least segregated (visual marker showing the area for walking/running vs cycling/rolling). When a combined multi-use pathway is needed, the following should be provided:
 - Ample widths - The path should be wide enough to comfortably accommodate people moving slower (e.g. walking) and others passing at a faster rate (e.g. rolling). For example, although the Lion's Gate bridge does have markings showing one side for walking/running and the other for cycling/rolling, passing a user running while cycling can be quite tight, especially with the numerous support posts that reduce the effective width.



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- When justified for key connections, MUPs within 1.2 metres of a roadway greater than 30km/h (per the [State of Cycling](#)) should include vertical barriers to minimize potential conflicts with moving vehicles. However, the type of vertical barrier should be carefully chosen to avoid catching bicycle handlebars or creating other potential conflicts with users rolling and cycling.

Quick win: Expand promotion and enabling

- The current promotion and enabling funding is underutilized. The \$1,000 minimum should be removed, and grantees should spend 1 - 5% of the project budget. One percent of the average BICCS funding per project between 2021 - 2022 would be around \$5,000. Removing the \$1,000 minimum and focusing on 1% - 5% would represent a five to twenty-five-fold increase. Research shows that comprehensive programs and policies, including promotion and enabling, can increase mode shift by up to 400% over infrastructure alone.¹
- Promotion and enabling should be directly overseen by TravelSmart. The TravelSmart team has a lot of expertise in this area and can partner with the municipalities for the most effective use of the funds.

Make Quick Build funding a permanent funding stream

- The City of Surrey used the Quick Build funding to rapidly construct protected cycling infrastructure in their city centre. This funding incentivizes quickly constructing active transportation facilities and enables a network to be completed in a short time frame. TransLink should expand this funding stream and make it an ongoing part of the BICCS program to encourage local governments to make a 'big leap' forward with their active transportation network.
- Introduce a long-distance Quick Build category with new funding. The Major Bikeway Network (MBN) is a pivotal concept to create an optimal mode shift to cycling by providing connections between regional centres and major destinations. Sometimes called cycle highways, long-distance, paved, lit, well-signed bike routes with minimal intersections allow residents an efficient and safe way to cycle using traditional and electric-assist cycles, as well as other mobility devices.

¹ A case study of nine North American cities found that Chicago increased their bike mode share by 400%, nearly double that of New York (both started with the same mode share), which focused largely on infrastructure alone. Portland also increased its cycling share by 600% with a comprehensive package of infrastructure, policies and programs.

http://www.utrc2.org/sites/default/files/pubs/bike-renaissance-journal_0.pdf



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Quick win: Add wayfinding requirements to the BICCS funding guidelines

- Proper signage and branding is a key component of active transportation networks. Wayfinding allows users to be confident about where they are in the network, how to get where they are going, and how long it will take to get there. Wayfinding is often neglected in BICCS projects but should be tied to the eligibility criteria. For example, grantees must incorporate TransLink's wayfinding guidelines to unlock the full amount of cost-share funding. This will ensure high-quality design and consistency across municipalities, which improves the user experience. Good wayfinding will help attract first-time users to new facilities and help shift more people over to cycling and rolling. We have learned many municipalities are waiting until "full cycling network buildout" before implementing wayfinding. This dramatically reduces the usability of cycling infrastructure in the meantime and would delay wayfinding for many years or decades.

Identify priority gaps in the active transportation network and incentivize municipalities to fill those gaps quickly

- TransLink should create a database of gaps in the network, rank those gaps by priority (e.g. safety, feasibility, and utility), and fund the highest priority gaps first. Municipalities should be incentivized to fix those gaps with a higher funding amount or great funding percentage, or both.
- HUB Cycling maintains a Gap Priority List for Metro Vancouver, ranked by safety, feasibility, and utility. HUB Cycling can share this Gap List for TransLink's review in the development of TransLink's own gap database. Some gaps related to the Major Bikeway Network include:
 - A safe and comfortable direct regional connection between the Tri-Cities and the North Shore. This was a top five potential cycle highway corridor as ranked in our [Cycle Highway](#) report.
 - A longer distance route between Lougheed Centre in Coquitlam and Maple Ridge, which ranked in the top ten for cycle highway potential in our report.
 - Key links to the Horseshoe Bay and Tsawwassen ferry terminals, YVR airport and the US border.



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Thank you for taking the time to review and consider our additional recommendations to help improve the BICCS funding program. We would be happy to meet with TransLink to discuss any of these items in more detail.

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Our previous [BICCS recommendation letter](#) identified some key areas for improvement to the BICCS program:

- Recommendation: Improve class I facility funding above 75%, and reduce class II facility funding
 - **Takeaway**: Put more funding toward the most comfortable facilities that will encourage more cycling and rolling
- Recommendation: Cautiously consider the funding of multi-use pathways (MUPs)
 - **Takeaway**: Not all cycling facilities are safe and comfortable for all people. Care should be taken to fund the most appropriate facility for the area that will have the biggest impact on encouraging active transportation
- Recommendation: Increase the score allocated for intersection treatment. Consider making intersection treatment required on all major road crossings
 - **Takeaway**: People's safety and comfort along the entire length of a corridor should be considered, and intersections are a key element of that
- Recommendation: More robust encouragement of the 1 - 5 % available for promotion and enabling
 - **Takeaway**: New cycling and rolling infrastructure should be promoted as much as possible. Promotion and enabling funding are currently heavily underused.
- Recommendation: Prioritize equity in all projects
 - **Takeaway**: Underserved areas are often the ones that most need quality infrastructure
- Recommendation: Invest in cross-jurisdictional, long-distance cycling routes (cycle highways)
 - **Takeaway**: Make it easy for municipalities to build cycling and rolling routes that cross boundaries and enable long-distance rides and rolls between key destinations
- Recommendation: Award extra points for letters of support from stakeholders
 - **Takeaway**: Local knowledge from community stakeholders can ensure that only the most impactful projects get funding.