



February 20, 2020

Jesse Skulmoski
Director of Strategic Initiatives and Active Transportation Grants
BC Ministry of Transportation and Infrastructure
(by email)

cc: Dan Casey, Urban Systems (by email)
Brian Patterson, Urban Systems (by email)

Dear Jesse

Thank you for the opportunity to provide additional feedback on the recently published BC Active Transportation Design Guide. We are very pleased to see that many of our previous comments have been taken into consideration and incorporated into the Design Guide. The Design Guide will help shape active transportation design and infrastructure planning into the future. We are happy to present the following feedback to help improve the Guide and assist the provincial goal of doubling active transportation in BC by 2030.

General Comments:

- This document should help inform an update of the Motor Vehicle Act to ensure harmonization between the two documents. We look forward to discussions on required changes to the MVA and consider this the most important next step in improving active transportation in BC.
- Thank you for including humanizing language (people walking, people driving, people cycling) throughout the document. Please consider updating the remaining references to cyclists, pedestrians, etc. For example, there are 190 references to people walking, but over a 1,000 to pedestrians - although a number are referencing facilities rather than people. Some examples of where the phrase “pedestrians” should be changed to “people walking”:
 - B20 - 'pedestrian activity anticipated'
 - B43 - 'pedestrian fatality when hit'
 - B46 - 'operating envelope for a pedestrian is 2.1 metres'

- Consider referencing the Regional Cycling Network Study completed by the Lower Mainland District team within MoTI. This tool considers safety, utility, and feasibility and could be shared province wide for use by MoTI as well as municipalities when determining project priority.
- Some terms used throughout the Guide should be more clearly defined. For example:
 - Low/high speed and volume for motor vehicles (and sometimes other modes) are referenced, but not clearly defined. Consider providing clear guidance on what is meant with these terms (e.g. high volumes over 5000 ADT, etc)
- Some situations are mentioned without sufficient detail. For example, facilities and design guidance for suburban settings is mentioned, but this could be expanded. Suburban contexts can be quite challenging for building active transportation facilities, especially bicycle facilities. Providing more details on the suburban context would be useful.
- There is an opportunity to encourage using the best quality infrastructure based on research and best practices, going beyond other standards such as those outlined by TAC. In line with the province's goal to double active transportation, putting in higher quality facilities will not only encourage more people to use active transportation, but also provide a safer environment to do so
 - Consider more clearly emphasising the infrastructure that is best, such as protected bicycle lanes. Use lower quality infrastructure (e.g. bike accessible shoulders on high speed (>70km/h) high volume roadways) as examples of what currently exists, but isn't recommended for people's safety and comfort
 - The constrained limit versus minimum limit has a clearer distinction. Consider emphasising that these alternatives should be avoided if possible. Words like 'acceptable,' 'safety' and 'comfort' make the constrained limit in particular sound like a quality facility. Although TAC's recommended lower limit is generally consistent with the Guide's 'constrained limit,' the guide could hold up a higher standard
- There is a subtle focus on designing for motor vehicles - minimizing designs that might infringe on motor vehicle speeds or access. e.g. bike signals must be signed off by the engineer who is experienced in *traffic engineering* (read - experienced designing for maximum free flow of vehicles - therefore bike signals shouldn't impede on this) G18. Consider revising this focus so all road users are considered.
- Consider adding information on the context of the facilities. For example, cycling facilities in a park have different considerations (more recreational) than ones on road (more likely to be used for commuting)
- Cycling facilities in the guide often don't consider safe passing offsets. Consider revising this.

Specific Feedback:

B2: Planning for Active Transportation

- The inclusion of network planning in the Guide is a welcome addition. Since the new Active Transportation grant includes network planning considerations, a more complete network planning section in the guide would help those communities that are working on putting together a network plan.
- Also consider adding information about connected, continuous bike routes that would support longer distance cycling trips (super cycle highway) within the network planning section
- Facility selection criteria are outlined starting on B28, but there is no mention of thresholds for vulnerable road users. Please consider volumes of vulnerable road users that might trigger the consideration of higher order facilities. Consider referencing these in later sections, such as D8

B4: Operational and Behavioural Characteristics

- On B48, the design characteristics for a cargo bike look small. Given the increasing popularity of cargo bikes, especially with e-assist, and cargo bike use as delivery vehicles, consider revising, or adding additional examples if research warrants. H87 notes that cargo tricycles can be 1.2 metres wide

C: Pedestrian Facilities

- School zone is referenced in this section, but there is no set definition (walkshed/from 30 km/h to 30 km/h sign, etc). Consider revising

D1: General Design Guidance

- On D10 - rural context, the speed for shared roadways is 85 km/h, and bike accessible shoulders allow speeds up to 100 km/h with volumes as high as 4000 ADT. These limits surpass those recommended by TAC in the GDG. Even on lower volume roadways, such speeds are likely to intimidate and threaten vulnerable road users. Please indicate how such limits might be supportable given the guiding principles established on B13 and please consider reduced motor vehicle speeds for such facilities. TAC notes in the Bike Accessible Shoulder section that a buffer is recommended at speeds above 50 km/h

D2: Neighbourhood Bikeways

- The table of level of treatments (D19) suggests that traffic calming and diversion are only recommended on higher volume and higher speed facilities, yet such design options are often recommended and necessary in order to enforce lower limits. Please consider the challenges associated with such guidance and suggest a means to address such concerns.

E2: Multi-use pathways

- On page E5, a two-way facility beside a two-way road is mentioned, with a note that a two-way path is more suitable beside a one-way street. However, just after that it says beside a two-way road is OK as long as crossing issues are mitigated. We recommend cautioning against the use of bi-directional multi use paths beside higher speed, higher volume, two way streets (such as done for projected bike lanes) as well as encouraging intersection designs that help to minimize potential conflicts.
- For design guidance for multi-use paths (E14 - E16) we recommend that street buffer zone widths for multi-use paths be reinforced with physical (vertical) separation from the street, especially in constrained circumstances, due to higher incidences of conflicts between people walking and people cycling, and the risk of users ending up in the path of vehicles.

F: Context Specific Applications

- On F11, consider adding stronger guidelines above the MOTI BC supplement to TAC such as recommending off street pathways on rural roadways if speed above 70 km/h.
- On F15, there are a number of caveats on why not to use protected bike lanes (as well as buffered bike lanes), despite the obvious protection and comfort for users. Consider revising.

H: Amenities and Integration

- On H9, TransLink has recently revised their bike racks rules to allow e-bikes on buses. Consider updating
- On pages H18 - H22 multi-modal integration, all designs shown include multiple travel lanes for the bus. Is there design guidance for single travel lanes? Shared bus/bike lanes? Or even places where routing the cyclist to the right of the bus is unrealistic due to ROW constraints and concerns over losing space designated for people walking?
- In H2, end-point facilities, consider referencing HUB research report [Not just Bike Racks](#)

- On H23 - 25, consider adding more recommendations for the ferry section - such as covered/comfortable spaces for people cycling to wait for the ferry, streamlined check in procedures allowing people biking to take their bikes with them while getting tickets, and both short and long term secure parking options (H23)

I: Post Implementation

- In I.1 - celebrating and launching - we are pleased to see references to the importance of launching the new infrastructure. This helps raise awareness and usership as well as getting the Province and municipality some good public relations. We recommend including a recommendation that funders mandate a % of their cost sharing grants to promote and launch the new infrastructure.
- In I.3 Maintenance, there should be references to the different surface types listed in C22, including how the different surface types fare in winter, and whether there are additional maintenance issues with paving stones.

Thank you for the opportunity to present this feedback. We appreciate the work you are doing to improve conditions for active transportation in British Columbia. We are both available to meet and review any of the points discussed above, at your convenience.

Sincerely,

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About HUB Cycling

HUB Cycling is a charitable not for profit organization that has spent over 20 years removing barriers to cycling in Metro Vancouver, while cultivating the health, environmental, and economic benefits that active transportation can bring. HUB has educated thousands of people, motivated thousands more, and championed improvements that #UnGapTheMap to create a connected cycling network. HUB Cycling's mission is to get more people cycling more often. HUB Cycling has close to 3,000 members and more than 40,000 direct supporters. HUB Cycling has 11 volunteer committees across Metro Vancouver that encourages cycling for all ages and abilities (AAA) in municipalities across Metro Vancouver. For more information, visit bikehub.ca.