



December 11, 2019

To: Bradley Romeo, Project Manager bromeo@mapleridge.ca

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Re: 232nd Street Corridor Improvements (Dewdney Trunk Road – 116 Ave.)

Dear Mr. Romeo,

Our HUB Cycling Committee would like to give the following feedback with regard to the proposed 232nd Street Corridor improvements.

We have previously explained why we can not support a bi-directional multi-use pathway on the east side of 232nd Street in our correspondence with the City about the Morningstar/Polygon development along 232nd Street between 116 Ave. and Kanaka Way.

In our opinion, on busier and higher speed roads in a more urban context, the goal should be to have uni-directional segregated and separated pedestrian and cycling facilities where possible.

The reasons for our opposition to bi-directional shared pathways on the west side of 232nd Street are:

- **Compromised safety for those riding in the “wrong” direction:**

Studies have shown that bi-directional protected bike lanes (or multi-use paths) along two-way streets tend to lead to an increase in vehicle-bike collisions. The Harris study¹ showed that **the risk is about 8 times higher** when a person cycling is coming in the direction opposite to what people driving are expecting, compared to the expected direction. The BC Active Transportation Design Guide recognizes that bi-directional protected bike lanes increase collision risk at intersections, driveways and laneways². The Transportation Association of Canada recommends uni-directional protected bike lanes because of these additional conflicts points³. It's challenging for people driving to look out for bicycle traffic coming from both directions as well as car traffic from both directions before turning.

- **Pedestrians and cyclists don't mix very well:**

Not all people cycling wish to ride on a bi-directional pathway on one side of the road, as we have seen with the 203rd Street separated bi-directional bike lanes. In addition to the reason stated above, on a multi-use path people walking can be unpredictable. Also, some people cycling move at higher speeds

¹ Study Comparing the effects of infrastructure on bicycling injury at intersections and non-intersections using a case-crossover design, Harris et al. [Link](#).

² Ministry of Transportation and Infrastructure. (2019). British Columbia Active Transportation Design Guide. P. D44

³ Transportation Association of Canada. (2017). Geometric Design Guide for Canadian Roads (3rd edition). P.17

than average, and the expected increase in use of e-bikes and other micromobility options will also lead to higher speeds. The difference in speeds between people walking and wheeled users increases the danger of collisions on a multi-use pathway.

- **Poor safety for cyclists sharing the car lanes:**

For those who prefer not to use the bi-directional multi-use pathway for reasons listed above, riding on the roadway along a main arterial without bike lanes, and parked cars in some locations, presents its own dangers (there is danger on both sides: people cycling risk getting clipped from behind, or can be “doored” by inattentive people driving or passengers opening their car door). As the road gets busier, the danger increases.

- **Poor accessibility:**

Along main roads, where there are limited options for crossing, accessibility of pathways on one side of the road only is problematic.

- **The urgent need to shift to “alternative” modes:**

Traffic congestion on our roads is worsening. We can not continue to expand road capacity and reserve ample but precious space for free on-street parking for private cars without giving people viable and attractive alternatives. The latter is imperative if we wish to encourage shifting of modes, to relieve some of the congestion, improve access to transit, encourage healthy living, and to improve livability in our city.

In order to encourage people to walk, cycle and take advantage of the emerging micromobility options, we need a high quality cycling network, not only separated from car traffic but uni-directional and segregated from sidewalks along busier and higher speed urban arterials and collectors where feasible.

Unfortunately Maple Ridge does not have a grid network like Vancouver does, which would allow cycling to be accommodated on quieter, lower speed residential streets parallel to the main roads. Therefore, designated bike routes along arterials such as 232nd Street should have high quality, uni-directional cycling facilities that accommodate fast, efficient, safe and convenient travel by people on bikes of all ages and abilities as well as emerging micromobility options. All of these “alternative modes” have great potential, but only if and when they start being treated as main modes of transportation rather than as an afterthought.

The proposed multi-use facilities

If no changes are made to the bi-directional and multi-use nature of these facilities, we suggest the following:

- Bollards should only be used if absolutely necessary and, if used, should be located in such a way that they're not in the path of travel of people on bikes.
- Hydropoles and other obstructions should not be in the path of travel of people on bikes.
- Transitions on and off the multi-use pathway should be smooth at the let-downs at intersections, so the bike does not get slammed going at a reasonable speed of 15 to 20 km/h. Note that speeds can be higher going downhill along sloping sections of 232nd Street, which is of significant importance since the plan appears to be to extend this bi-directional pathway north all the way to the roundabout at 132 Ave.
- The multi-use path and the let-downs should be lined up properly, so no weaving is required at intersections.

- Signal phases for bikes and turning vehicles should be separate as per the BC Active Transportation Design Guide⁴.

116 Avenue

- There needs to be a crosswalk-crossbike at the driveway entrance to Thomas Haney Secondary School.
- At the exit of the main parking lot as well as the entrance/exit to the parking lot in the back of the school crosswalks are proposed. If this pathway is supposed to function as a multi-use pathway, people on bikes can't be expected to dismount at each crosswalk, so there should be crossbikes as well. If there are no crossbikes, it can't be considered to be a multi-use pathway.
- In view of heavy school traffic and many turning movements during school drop-off and pick-up, the crosswalks/crossbikes should be raised for pedestrian and cyclist safety.

Intersection at 232nd/116 Ave.

- Push buttons for pedestrians and people on bikes should be conveniently located, and not in the path of travel of people on bikes/micromobility users.

232nd Street

- As stated above, we strongly prefer uni-directional infrastructure along the main arterials with frequent car turning movements. The road right-of-way on 232nd Street appears to be sufficient for uni-directional segregated and separated pedestrian and cycling infrastructure.
- Raised crossings at all side streets is important but especially at 118th Ave. as this street provides access to Golden Ears Elementary School.
- Between 118 Ave. and Slager on-street parking and curb bulges are proposed. When bi-directional shared facilities are provided on one side of the road only, not all cyclists will be using it. Having street parking and curb bulges means that people on bikes riding on the road will have to move into the path of travel of cars to avoid getting doored. This is not a desirable design for arterials. Parking should be off-road only.

With kind regards,

Ivan Chow
Co-chair
HUB Cycling, Maple Ridge/Pitt Meadows Committee

JC/DR/IC/DW/EH/JL

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 have 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.

⁴ Ministry of Transportation and Infrastructure. (2019). British Columbia Active Transportation Design Guide. P D45