

February 19, 2020

Yukon Environmental and Socio-economic Assessment Board  
Whitehorse Designated Office  
Suite 203-309 Strickland St,  
Whitehorse, Y1A 2J9

**Re: Whitehorse Urban Cycling Coalition Views on Alaska Highway Project through Hillcrest**

The following provides views and concerns from citizens cycle commuting and traveling within Whitehorse with respect to the continued expansion of the Alaska Highway through our community. We acknowledge that the proposed signalized intersections and addition of separated multi-use pathways along portions of the highway expansion project will provide benefits to the cycling community. However, we remain extremely concerned about the proposed project and on-balance the project, as currently proposed, will not create significant safety improvements as claimed. This letter is being copied to the City of Whitehorse for incorporation with their review as per HPW's request.

Our concerns arise from both the overall premise of the project and from the details. We raise these matters in the interest of creating of project that will build a safer community for ALL citizens, including motorists. Furthermore, the issues raised here-in are presented in the context of providing and enhancing transportation equity: many citizen choose not to travel by car; are interested in not travelling by car, but are not presented with accessible options; and finally, many citizens do not have the privilege of operating a motor vehicle. In this age of the Climate Emergency, it is incumbent on Yukon Government to act on climate change, creating viable, attractive, safe non-motorized transportation opportunities for all citizens of our capital city.

**Big-Picture Issues**

It is laudable that Yukon Government wants to invest in transportation infrastructure within the City of Whitehorse. However, The Alaska Highway expansion project is plagued by two fundamental errors in the conceptualization of the project. These problems cascade throughout the design and have resulted in the issues that this project causes for sustainable transportation and community impacts expressed by many potentially effected citizens:

1. The design assumption that the roadway should be designed as a limited access highway using an auto-centric design to move as many cars as fast as possible. Furthermore, it is being design primarily to facilitate the movement of large freight vehicles such as B-trains and ore trucks.
  - This is an error because the primary user of this roadway through this section is local, community traffic. Large transport vehicles only represent a fraction of the road users. Thus, the roadway should be designed as an urban arterial road, designed to facilitate local mobility and connectivity within Whitehorse, but it will also need to accommodate transport vehicles. The currently proposed design is to move trucks and only "accommodates" vulnerable road users such as cyclists and pedestrians instead of designing for their convenience and safety first.

2. The design assumption of 4 through-travel lanes. Traffic volumes do not, and will not for any foreseeable future, warrant 4 lanes of through-travel. The roadway currently carries about 6,000 vehicles per day, which is only 1/3 the volume that 4 lanes warrants.
  - The stated rationale for four lanes by the proponent is to “Provide safe passing opportunities around slow vehicles”. This assumption simply is not a valid, nor a justified engineering design basis. In fact, this reduces road safety by facilitating speeding and dangerous passing movements<sup>1</sup>. Whitehorse residents have already seen the demonstrated with an increase in dangerous driving behaviour along the recently widened portion of the highway at Range Road. Furthermore, Whitehorse knows only too tragically from the deaths resulting on the 4-lanes of 2<sup>nd</sup> Ave and portions of 4<sup>th</sup> Ave. due the propensity for speeding and dangerous driving behaviors such as passing. Quite simply, 4 lanes are unnecessary and make the highway less safe for all road users.
  - Providing excess capacity will actually increase and encourage more automobile usage due to the well known phenomenon of “[induced demand](#)”. This is completely contrary to Yukon Government declaration of a Climate Emergency. Furthermore, more cars on the road makes it more hazardous for cyclists and creates further societal disincentive and barriers to cycling accessibility.

### **Specific Concerns**

As a result of the problems outlined above, several specific problems arise. These problems *significantly* reduce safety for cyclists and create barriers to using cycling as a viable, sustainable form of transportation:

1. Lack of integration with Whitehorse’s Bicycle Network Plan – the Alaska Highway is a key transportation route for Whitehorse’s residents to travel to work, school and business. Currently, the highway creates a barrier to cycling. The proposed project does not integrate well with or facilitate connectivity with the City’s planned bicycle network. For example, the intersection designs proposed pre-suppose how the bicycle network will be developed and thus constrains and limits the development of the bicycle network. Crossings need to be provided on both the north and south side of intersections to provide full accessibility for non-car road users crossing the highway and allow the future bicycle network to connect in the most convenient fashion possible.

Because the widened highway will become a significantly greater barrier to cross-highway travel, provision of an underpass would be an important mitigation to help reduce the negative impact this project has. Given Yukon Government is spending on the order of \$20 million on providing un-needed (and un-wanted) roadway capacity, it is completely reasonable that \$2 to \$3 million could be allocated for a high-quality, accessible, fully separated crossing, such as an underpass at the north end of the airport. Such a mitigation is completely technically and economically feasible. Such a quality piece of infrastructure is something Yukon Government could take pride in as a

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<sup>1</sup> European “Vision Zero” roadway engineers deliberately design roads to NOT allow passing because they recognize passing decreases roadway safety as a result of speeding and dangerous overtaking behaviors.

tangible Action on the Climate Emergency. For inspiration, an example of a state-of-the-art, accessible cycling underpass is shown below:



2. Dangerous Intersection Design – the proposed signalized intersections at Burns Road and Hillcrest Drive will become more dangerous, in spite of the signalization, for vulnerable road because of the increased size of the intersection (the 2mile Hill and Range Road intersection is a prime demonstration of this problem), faster turning movements of cars facilitated by “slip lanes” and their associated “pork chops” (see below,) and overall higher speed vehicles due to the widened highway design. To mitigate this, we recommend a “protected intersection” design be adopted. This should include refuge islands between the two direction of travel so that vulnerable road users crossing the highway (and children in particular) only need to watch traffic from one direction (children have limited cognitive ability to keep track of traffic from two directions). Quite simply, the highway crossing designs do not meet the contemporary philosophy of being “All Ages and Abilities” accessible.
3. Merge/Diverge Islands (aka “pork chops”) - The use of slip lanes and the associated triangular islands creates a real safety hazard to cyclists. This issue has been identified to HPW by WUCC in writing on at least two previous occasions, but this dangerous design continues to persist—this is most distressing. The acceleration and deceleration lanes and the resulting 'porkchops' are some of the greatest dangers to cyclists and pedestrians - especially those who do not understand traffic flow well. Such lanes exist to facilitate flow of traffic, even when lights are red for part of the flow, and hence lead to greater risk for cyclists and pedestrians, and to greatly increased complexity for kids (and others) to have to assess and understand in order to know when it is safe to "make a move". Even when the light is green for crossing, there are lanes that do not have to stop. This aspect of auto-centric design does not improve safety for crossings, despite the addition of pedestrian-controlled traffic lights. Examples of deadly 'porkchops' (with and without crossing lights)

can be found at: AKHwy & Two-Mile Hill; Industrial Rd & Two-Mile Hill; Where 2nd meets 4th at the bottom of Two-Mile Hill.

### **Summary of Recommendations**

The Whitehorse Urban Cycling Coalition provides the following specific recommended mitigations, especially should the project continue to proceed as a 4-lane, auto-centric limited-access highway:

1. The proponent should produce a single thru-lane design alternative (one lane each direction). Such a design, complete with rationalized turning lanes, would meet the traffic needs of the roadway, the claimed safety-improvement goals and at the same time mitigate many of the issues resulting as a consequence of the 4-lane design assumption.
2. Commit to the development of a high-quality underpass at the north end of the airport. Everyone from Copper Ridge, Granger, Logan, and Hillcrest should be able to get downtown without the safety concerns of crossing the highway.
3. Provide cross-ride (combined cross walk/ cycle) crossing on both sides of both the Hillcrest and Burns Road signalized intersections.
4. Implement Protected Intersection designs at both the Hillcrest and Burns Road intersections to make these increasingly large and congested intersections safer for children, pedestrians and cyclists. This includes appropriate signal timing, refuge islands, etc.
5. Eliminate the usage of “pork chops” (slip-lane islands). These represent a significant safety hazard for both on-road cyclists travelling in any direction and vulnerable users trying to cross the highway. Use of dedicated turning lanes such as used in many locations along the highway currently, without “pork-chops” is acceptable.
6. Ensure signal activation does not require a long wait, like it does at Two Mile Hill.
  - Design intersections to accommodate cyclists who choose to use road and those who choose to use multi-use paths. This includes providing a button to activate traffic signals that can easily be used by cyclists - if using road, shouldn't need to ride to the button and back onto road.
7. Coordinate with the City of Whitehorse and its stakeholders such that the multi-use paths constructed as part of this project fully implement the relevant components of the Bicycle Network Plan’s vision, including connecting seamlessly and safely with future neighborhood paths and cycle routes.
8. Re-consider closure of Norseman Drive/highway intersection. Closing this second entrance/exit to airport (north one) will lead to increased congestion and hazards at Hillcrest Drive intersection at peak times.
9. Work with the City to provide a way for bikes/pedestrians to avoid needing to use the Hillcrest intersection by safely navigating along Burns Rd. behind the new North 60 using a separated, safe connection from Hillcrest Drive to the multi-use path on west side of highway.
10. Install radar-activated speed signs in both directions on highway (as in Carcross), until such time as there is photo radar and red-light cameras enforcement.
11. Design trails with winter in mind - provide for areas where snow can be cleared to avoid snowbanks at intersections between multi-use paths and roads. Consider drainage needs during snowmelt periods.

12. Provide for safe, separated continuous pedestrian and cyclist access throughout construction period, and ensure it is clearly signed. (note: this was a major issue on the Range Rd. project).
13. Generally, follow state-of-the-art All Ages, Abilities and All-seasons (AAAA) design practices informed by the new BC Active Transportation Guidelines.
14. Multi-use paths must be paved, especially to facilitate winter use and maintenance.

Thank you for incorporating our input to make this more equitable for ALL citizens.

-Whitehorse Urban Cycling Coalition

CC: City of Whitehorse;