

# Rural Highway Safety and Speed Review Submission

The British Columbia Cycling Coalition (BCCC) has strong concerns about traffic speeds on British Columbia's roads and in particular their effect on the safety and comfort of people cycling. We encourage the Province to take advantage of this opportunity to ensure that cycling facilities meet or exceed standards for the actual speed of all vehicles on highways; adopt maintenance policies that improve cycling safety; increase enforcement of speed and other traffic laws; and consider changes to the Motor Vehicle Act (MVA) that improve the safety of people cycling on BC Highways.

BCCC members and members of coalition cycling groups attended several of the Open Houses around the Province. Over 150 people from across B.C. have endorsed the BCCC's position<sup>1</sup> on the Review. We also met with the Speed and Safety Review Team on January 19, 2014. While we are encouraged by the Minister's comments on cycling safety during the Twitter Town Hall, we are quite concerned about the lack of cycling condition information on the highway sections being reviewed in any of the materials or at the Public Open Houses. In addition, no cycling specific feedback was requested at the Open Houses or in the on-line materials.

Unfortunately, the majority of B.C.'s highways, including some newer ones like Sea to Sky, provide sub-standard cycling conditions. An increase in traffic speeds would compound the difficulties cyclists already face. We are concerned that increased speed limits would not only affect the safety of cyclists, but also discourage people from cycling for transportation, recreation and tourism. This may well affect the future growth of cycling and the significant quality of life and economic benefits that cycling already contributes, and is poised to further contribute, to British Columbia.

The BCCC recommends that speed limit increases not be considered on any highway unless there are adequate facilities present for cyclists of varying abilities and comfort levels and that audits of cycling facilities, maintenance procedures and cycling collisions be undertaken in conjunction with the speed limit review.

By enabling safe cycling outside of motor vehicle travel lanes, many of these recommendations will also improve the safety of those in motor vehicles by reducing the need to enter oncoming traffic lanes to pass cyclists. Wider shoulders, clear of debris, also allow for safer emergency stopping.

**Table 1.** Comparison of cycling fatality rates by jurisdictions (Teschke 2012)

	<u>B.C.</u>	<u>Germany</u>	<u>Denmark</u>	<u>Netherlands</u>
Fatalities per 100 million km	2.6	1.7	1.5	1.1

As shown in the table above, B.C. has significantly higher rates of cycling fatalities than several European countries. According to Transport Canada, B.C. has higher traffic fatality rates than the Canadian average (Transport Canada 2011). Transport Canada also states "Research indicates that a 1% reduction in speed

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<sup>1</sup> "Provide Your Endorsement". <http://bccyclingcoalition.nationbuilder.com/endorsement>

results in reducing the likelihood of a fatal collision by 5% (OECD, 2008). Therefore, a downward shift in the distribution of driving speeds for all drivers would be beneficial not just for those speeding on highways.” We are concerned that the Province is considering raising speed limits before safety measures such as improved infrastructure, education and enforcement have been fully implemented to decrease fatality rates.

## Safety and Speed Review Process

### Cycling Audits

No cycling information was included in the Review materials. We strongly recommend that audits of cycling facilities, maintenance procedures and cycling collisions be undertaken in conjunction with the speed limit review. The audits should include:

- the width and condition of cycling facilities;
- cycling counts;
- hazard identification;
- maintenance procedures; and
- cycling collisions, fatalities and injuries.

### Review of Draft Report and Recommendations

Especially in light of the absence of cycling specific information in the review process, the BCCC and our member organizations would welcome an opportunity to review and comment on the draft report and recommendations and, in particular, any sections where a speed limit increase is recommended. Given the large number of sections of highways being considered, the short time period and winter weather, the BCCC and our member organizations simply did not have the time, nor resources, to gather input from our members, nor to confirm conditions on the sections of highways in question.

## Safety and Speed Recommendations

### Speed Limit Increases

Speed limit increases should not be considered on any highway unless there are adequate facilities for cyclists of varying abilities and comfort levels (see below), that meet or exceed standards for expected motor vehicle speeds. Substandard cycling facilities should be upgraded or exceed standards for expected motor vehicle speeds. Maintenance should also be improved before any speed limit increases are implemented so that the cycle facilities are safe and usable.

### Speed Limit Decreases

The speed limit should be decreased on roads with cycling facilities or maintenance levels that are not adequate.

### Adequate cycling facilities

Adequate cycling facilities can be provided by a variety of means, such as:

- Sufficiently wide paved shoulders that are well maintained and kept free of road debris. Some of the factors bearing on sufficient width are listed below;

- Physically separated bike lanes, preferably directional and properly integrated into intersection design;
- High quality bike paths within highway rights-of-way, with safe and efficient crossings of intersecting roads; and
- A high quality bike path outside of a highway right-of-way could be an option if it involved no substantive increase in distance or grade.

Sufficient shoulder width should account for the following factors:

- Speed of traffic on the adjacent roadway;
- The volume of buses, large trucks and RV's, bearing in mind wind turbulence and off-tracking on corners;
- The presence of significant cross-winds and grades (cyclists need more space for weaving when climbing or negotiating cross-winds and avoiding obstacles when descending);
- The presence and condition of rumble strips, drainage grates and road-side barriers, all of which can reduce useable space, introduce hazards and collect debris; and
- How frequently debris accumulates and how quickly it is cleared.

### **Improved Maintenance Policies and Procedures**

Improved maintenance policies are required especially on routes popular with cyclists. This includes both increased frequency of debris removal and spot checks in problem areas. Debris and hazards including sand, gravel, snow, ice, garbage, motor vehicle parts, vegetation and road kill can reduce or eliminate the usable width of the shoulder or bike lane; this requires cyclists to use, or cycle closer to, the travel lane and increases the risk of collisions with motor vehicles. Cyclists can also be seriously injured due to collisions with debris or falls caused by debris.

Special attention needs to be taken in areas where debris collects against barriers, construction areas, intersections with gravel roads or areas where debris falls off of vehicle tires or out of trucks.

### **Cycling Hazard Reduction**

#### **Potholes and Cracks**

Roads and shoulders need to be rehabilitated and maintained to ensure that the surface is safe for cycling and does not contain potholes and cracks. Longitudinal cracking is common on highway shoulders and is a real danger for cyclists.

#### **Puddling**

Puddling and standing water on roads and shoulders can hide hazards including potholes, cracks and debris. The surface should be regraded or drainage should be added to eliminate standing water. Drains need to be regularly cleared of debris.

#### **Rumble Strips**

Improperly installed rumble strips reduce the usable width of shoulders on many sections of highway around BC. Such rumble strips either need to be installed correctly or removed.

## **Railway Tracks**

Cyclists need to cross train tracks at a 90 degree angle, or near thereto. When the tracks aren't perpendicular to the road, the cyclist needs to ride across the through lane, often at a sharp angle. Motorists don't know to give cyclists proper room to safely perform this manoeuvre. Special facilities should be provided to allow cyclists to cross tracks safely without using the regularly travelled portion of a highway.

Unless a special facility is provided to allow cyclists to cross tracks safely without using the regularly travelled portion of a highway, it should be unlawful to pass a cyclist at, or in close proximity to, a railroad crossing angled at more than 120 degrees or less than 60 degrees in relation to the highway. This prohibition should at all times be posted with a sign in advance of such railway crossings and be effective from the location of said sign to a point 30 metres beyond the railway crossing.

## **Construction Signs, Barriers and Equipment**

Improved policies and execution is required to ensure that construction zones safely accommodate cyclists. This includes avoiding the placement of hazards including construction signs, barriers and equipment in the shoulders or on bike lanes such that the cyclist is forced into the regularly travelled portion of the highway with little or no warning. Provisions should also be made for the safe passage of cyclists through the construction including avoiding the routing of cyclists over rough or loose surfaces.

## **Improved Reporting and Tracking of Cycling Hazards and Collisions**

### **Tracking and Monitoring Hazards, Debris and Collisions**

Currently only collisions with motor vehicles are tracked in a method that is useful for determining problem areas on roads. As there are a significant number of cycling collisions causing injuries involving debris, hazards, wildlife, other cyclists and pedestrians, but not motor vehicles, the Province needs to track and monitor these collisions to determine where problem areas are, what improvements are needed and to prioritize upgrades and maintenance improvements.

### **Reporting Hazards, Debris and Collisions by the Public**

The public needs easy and obvious methods to report hazards and debris on shoulders and highways. Possibilities include:

- A 311 line that is dispatched to the correct authority to address the problem;
- Signs with information on reporting hazards; and
- Mobile websites and apps. The BCCC is investigating the development of a mobile app focused on reporting cycling hazards, collisions and injuries.

## **Enforcement Policy Changes**

### **Prioritizing Safety with Strict Speed Limit Enforcement**

In many other jurisdictions (e.g. NSW and Victoria, Australia), prioritizing safety has led to strong enforcement of speed limits resulting in drivers complying with designated speeds, saving lives and reducing accidents and property damage. The speed review process is an opportunity to similarly

prioritize safety and compliance with laws.

### **Strict Speed Limit Enforcement When Cyclists Present**

Another option would be a policy of strict speed limit enforcement when cyclists are present on a highway. This could also apply when there are stopped or parked vehicles on the shoulder or pedestrians walking on the shoulder or roadway.

### **Strict Speed Limit Enforcement In Rightmost Travel Lane**

Strict speed limit enforcement in the rightmost travel lane would improve cyclists safety while allowing higher speeds for motor vehicle in the left lane(s), where present. This may make passing slower vehicles easier for motorists as well.

### **Speed Enforcement Cameras**

The targeted use of fixed and mobile speed enforcement cameras that do not impede cyclists or other road users should be considered on dangerous sections of road with cycling facilities that are inadequate for actual motor vehicle speeds and where other means of enforcement are problematic. As these sections of road likely have missing or substandard shoulders, pulling vehicles over can be dangerous both for the occupants of the vehicles and for the police officers. The vehicles may also block the shoulders requiring cyclists to enter travel lanes. Speed enforcement cameras should not be seen as a substitute for the upgrading of inadequate and unsafe cycling facilities.

Speed cameras have been found effective in reducing crashes, injuries and fatalities (Wilson 2010). Transport Canada (Transport Canada 2011) states that "... greater speed enforcement is key. Speed cameras and red light cameras could be implemented more widely across the country and their usage publicized."

### **Changes to the Motor Vehicle Act**

The BCCC and our member organizations are in the process of drafting recommendations for changes to the Motor Vehicle Act which we will submit to the Province later on in the year. The recommendations detailed below are particularly relevant to safety on rural highways.

### **Safe Passing Distance**

This law would require that motor vehicles pass cyclists by a safe distance. We recommend at least:

- 1.0 m for motor vehicle speeds of 50 kph or less
- 1.5 m for motor vehicle speeds of greater than 50 kph and up to 80 kph
- 2.0 m for motor vehicle speeds greater than 80 kph

In some other jurisdictions, drivers are allowed to cross a double yellow line, if necessary and safe to do so, in order to pass a cyclist. ICBC currently recommends passing cyclists by at least 1 metre in their driver education material. Nova Scotia and 21 U.S. states have passed safe passing distance laws.

### **Riding on Shoulders**

The MVA currently requires cyclists to ride on a paved shoulder when one exists, thus not allowing cycling on the travel lanes. However, in many instances paved shoulders are not safe to cycle on due to problems, including debris, cracks, potholes, improperly installed rumble strips, overgrown vegetation, snow, and ice. Shoulders are often of substandard width for the motor vehicle speeds on highways. Cyclists should have the option of riding in the travel lanes should they determine that the travel lane is safer than the shoulder. The best method to encourage cyclists to use shoulders and bike lanes is to build and maintain them to a high standard, keeping them debris-free, instead of banning cycling on travel lanes.

### **Railway Tracks**

Cyclists need to cross train tracks at or near a 90 degree angle. When the tracks aren't perpendicular to the road, the cyclist needs to ride across the through lane, often at a sharp angle. Motorists don't know to give cyclists proper room to safely perform this manoeuvre.

We recommend adding the following to MVA section "Railway Crossings S.185"

185 (7)Unless a special facility is provided to allow cyclists to cross the track safely without using the normally travelled portion of a highway, it is unlawful to pass a cyclist at or in close proximity of a railroad crossing angled at more than 120 degrees or less than 60 degrees in relation to the highway. This prohibition shall at all times be posted with a sign in advance of such railway crossing and shall be effective from the location of said sign to a point 30 metres beyond the railway crossing.

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