

# Detailed Response to Saskatoon Cycles' report dated July 2017

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The purpose of this report is to respond to each of Saskatoon Cycles' recommendations to amend the Bicycle Bylaw as presented to the SPC Transportation at its meeting held on August 15, 2017. Saskatoon Cycles presented nine recommendations addressing seven specific provisions in the current bylaw.

The Administration's recommended rule change or clarification along with relevant discussion follows. The potential modifications below describe the intention of a proposed rule rather than the specific text that will form the finalized bylaw. Most modifications are adapted from regulation enacted in other jurisdictions. Furthermore, the Bicycle Bylaw Update project is in its early phase, and consultation with other stakeholders may alter the potential recommendations in the final version of a revised bylaw. The Administration is not proposing to amend the Bicycle Bylaw to incorporate the modifications below at this time, rather they will be incorporated into the comprehensive review of the Bicycle Bylaw in the remainder of 2018.

## 1. USE OF HORN OR BELL (SECTION 6)

**Either remove the requirement for a horn or bell or replace this with a requirement that an audible warning be given before pedestrians are overtaken and passed.**

### Bylaw excerpt

*No person shall operate a bicycle unless such bicycle is equipped with a horn or bell capable of emitting sound audible under normal conditions for a distance of not less than thirty-five (35) metres.*

### Potential bylaw modification

A person riding a bicycle on a sidewalk designated as a "Shared Pathway", multi-use pathway, or park trail shall:

- a) operate the bicycle to the right of center of any such sidewalk, trail, or path: and
- b) alert anyone about to be overtaken by sounding a horn or a bell a reasonable amount of time before overtaking.

### Discussion

Contrary to the studies cited, the province of Ontario requires a bicycle to be equipped with a bell, as does the city of Vancouver. Edmonton and Calgary both require warnings be sounded by horn or bell on shared pathways and trails. Interviews with staff from those cities conclude that they will maintain the requirement.

The Saskatoon Cycles' report claims that there is no empirical support for mandating the use of bells or horns. The studies cited, however, did not examine shared pathway or sidewalk situations. Due to limited space and resources in the municipal right-of-way, shared pathways are used with increasing frequency to achieve separation of cyclists from motorized traffic. However, mixing vulnerable user groups traveling at very different speeds can also result in serious injuries (Chong, Poulos, Olivier, Watson, & Grzebieta, 2010). The kinetic energy differential between a car traveling at 60 km/h and a bicycle traveling in the

same direction at 30 km/h is not much different to that between a person walking at 5 km/h and a bicycle traveling at 30 km/h (Grzebieta and Chong, 2008).

When compared to on-road cycling crashes, those occurring on bicycle paths that are separated from traffic more commonly result from a fall than a collision, and are more likely to involve a pedestrian or cyclist or be single bicycle-only events (De Rome et al., 2014; Teschke et al., 2014). As a result, in a compilation of collision studies by Ker et al. (2006), most recommend cyclists should use bells to warn pedestrians when passing, and pedestrians should keep left and move off the path when stopped. Another survey of literature concluded that cyclists should be required to keep right unless this is not practical, and to give way to pedestrians (Audrey et al., 2017). Furthermore, in an assessment of behavior and attitudes relevant to the user safety shared paths, Kang and Fricker (2016) reported that a painted centreline was associated with lower estimated cycling speeds and more comfortable cyclist-pedestrian interactions.

Implications of this bylaw clarification mean that much greater awareness of the social etiquette for shared use is required. Signs are often unclear about who has priority and which areas are for pedestrians or cyclists. As the Administration develops and formalizes Saskatoon’s All Ages and Abilities (AAA) and non-AAA network in the near-term, standard signage policies are being developed to inform better wayfinding and marking sidewalks that are “Shared Pathways.” Also, the Administration may explore centreline painting in high volume locations.

Other jurisdictions

Alberta	A person shall sound the vehicle’s horn or other audible warning device whenever it is reasonably necessary to warn persons.
Calgary	Bicycle must be equipped with a horn, bell or other signaling device when riding on a Pathway or Trail.
Edmonton	A person riding a bicycle on a sidewalk, bicycle path or Trail shall alert anyone about to be overtaken by sounding a bell a reasonable amount of time before overtaking.
Ontario	Bicycle must be equipped with an alarm bell, gong or horn.
Vancouver	Bicycle must be equipped with a bell.

**2. POSITION ON STREET (SECTION 8)**

**Either remove the requirement for cyclists to stay close to the right curb or revise this requirement to include a greater number of exceptions.**

Bylaw excerpt

*Every person operating a bicycle shall utilize only that portion of the street as is intended for the passage of motor vehicles and shall be so positioned thereon as to be as close as is reasonably practicable to the right hand curb, except that any such person operating a bicycle may leave the proximity of the right hand curb when approaching an intersection and indicating an intention to turn by giving the required signal to that effect.*

Potential bylaw modification

A person riding a bicycle shall utilize only that portion of the street as is intended for the passage of motor vehicles, except that cyclists may ride in an unmarked parking lane.

### Discussion

Some regulations treat a bicycle as a slow moving vehicle requiring the driver of such vehicle to drive as close as possible to the right hand edge or curb of any street unless it is impracticable to travel on such side. They advise that cyclists should exercise due care when passing a parked, stopped or standing vehicle or one proceeding in the same direction. Most jurisdictions with a one metre minimum passing distance for motor vehicles passing bicycles also include a provision that require cyclists to move to the right as practicable when being overtaken. For this reason, the exception to ride in a parking lane will be included.

### Other jurisdictions

Alberta	A person shall operate the cycle as near as practicable to the right curb or edge of the roadway unless that person is in the process of making a left turn with the cycle.
Kelowna	A person operating a cycle must ride as near as practical to the right side of a highway, within a bicycle path if available.
Manitoba	The driver of a vehicle who is proceeding at less than the normal speed of traffic shall drive in the right-hand lane then available for traffic, or as close as practicable to the right-hand kerb or edge of the roadway.
Ontario	Every person on a bicycle who is overtaken by a vehicle travelling at a greater speed shall turn out to the right and allow the vehicle to pass and the vehicle overtaking shall turn out to the left so far as may be necessary to avoid a collision.
Ottawa	A person driving a bicycle upon a roadway shall, where practicable, drive in the right-hand lane then available for traffic or as close as practicable to the right hand curb or edge of the roadway.
Vancouver	The driver of every slow moving vehicle (including bicycle) shall drive such vehicle as close as possible to the right hand edge or curb of any street unless it is impracticable to travel on such side.

## **3. ONE-METRE PASSING RULE**

**Consider implementing a one-metre minimum passing distance for motor vehicles overtaking cyclists within city limits.**

### Potential bylaw modification

None.

### Discussion

The Cities Act authorizes the City to pass bylaws regulating vehicles and pedestrians on the street as long as they do not conflict with The Traffic Safety Act or other provincial legislation. The TSA sets out the basic rules of the road. The City is not able to modify the rules of the road. If the TSA provisions are followed, either the person riding a bicycle or the motor vehicle driver must move into a different lane to pass the person on a bicycle. Section 220 of the TSA indicates that no vehicle shall pass another vehicle unless it is safe to do so.

Section 228(1) of the provincial Traffic Safety Act addresses the rules of the road regarding traffic lanes:

- 228(1) If a highway is divided into traffic lanes, the following rules apply:
  - (a) no driver of a vehicle shall fail to drive as nearly as is practicable entirely within one lane or shall drive from that lane to another unless it is safe to do so;

- (b) no driver of a vehicle shall drive from one traffic lane to another if a solid line exists between lanes except:
- (i) if solid and broken lines exist together, in which case the driver may cross the solid line from a lane in which the broken line exists; or
  - (ii) if the lane is designated by signs as a two-way left turn lane;
- (c) no driver of a vehicle shall drive to the left of the centre of the highway where a solid line exists in the right-hand lane near the centre of the highway;
- (d) a driver of a vehicle may drive from one traffic lane to another if broken lines exist between lanes;
- (e) no driver of a motorcycle shall drive so that more than two motorcycles move abreast in a traffic lane at any time;
- (f) no driver of a motorcycle shall drive beside any other vehicle in the same traffic lane, unless that other vehicle is a motorcycle.

The TSA stipulates that vehicles, especially motor vehicles, are not supposed to “pass” another vehicle, including, a person on a bicycle, within the traffic lane. Either the person riding the bicycle has to move into another lane or the motor vehicle has to move into another lane (usually the left lane). No vehicle other than a motorcycle-sized vehicle can pass another motorcycle-sized vehicle in the same traffic lane. Because the vehicle being passed must stay in the right lane until the passing vehicle has re-entered the right lane, the motor vehicle should be able to maintain the one-metre distance for overtaking.

Consequently, as is the case in other jurisdictions, provincial and state legislation (their versions of the TSA) sets this rule.

#### Other jurisdictions

Ontario and Nova Scotia have one-metre minimum passing rules.

## **4. RIDING ON SIDEWALKS (SECTION 8)**

**Remove the blanket prohibition against cycling on sidewalks and replace this with either area or behavioural restrictions as to where and how cycling on sidewalks can be safely conducted or provide exemptions for children under 12 and temporary use of sidewalks to avoid hazardous conditions.**

#### Bylaw excerpt

*Every person operating a bicycle shall utilize only that portion of the street as is intended for the passage of motor vehicles...*

#### Potential bylaw modification

A person riding a bicycle must not ride on a sidewalk unless otherwise directed by a sign.

#### Discussion

Cyclists should be discouraged from riding on sidewalks where motorized traffic may turn across their paths, unless cyclists proceed at speeds not exceeding pedestrian traffic. By extension, crosswalk riding should also be prohibited except where multi-use crossings are indicated by signage and pavement markings.

Adequate sight distance for the exit maneuver from the driveway is one of the most critical elements for restricting cycling on sidewalks. Sight distance is determined in consideration of the design speed of the

intersection roadway and sight triangle requirements. It is often difficult to provide the desired sight distance due to restrictions created by parked cars, fencing and vegetation. Reduced sight distances are generally tolerable in situations due to the low operating speeds and caution exercised by drivers (TAC, 2017). Limited visibility does not afford the time for a motorist to perceive an approaching cyclist who is travelling faster than a pedestrian and closer to the motorist.

Cyclists who ride on the sidewalk face higher risks of collisions with motor vehicles at driveways, lanes and intersections. Aultman-Hall and Adams (1998) concluded through empirical evaluation that overall, travel on roads has the lowest injury and fall rates, followed by off-road paths and then sidewalks. Sidewalk cyclists incurred higher accident rates than road cyclists on both roads and paths and attributed this to their being less skilled. The authors recommended that sidewalk cyclists need to be trained rather than being told merely to cease cycling on sidewalks. Saskatoon Police Service reiterated the need for education.

Many cities restrict riding on sidewalks except where designated as a “Shared Pathway”. Some do have a series of exclusions especially in the event of hazards in the travelled way. Exceptional circumstances will be considered in the event of a citation.

The Summary Offences Procedure Act indicates that no person under the age of 12 years is liable to be convicted of an offence under any Act, regulation or bylaw. Because City policy is not to ticket unless the official believes that an offence would stand up in court, notices of violation should never be issued to a person who is under 12 years of age.

Other jurisdictions

Regina	A person shall not ride a bicycle on a sidewalk except where posted by signs.
Calgary	
Edmonton	
Kelowna	
Manitoba	
Ottawa	
Toronto	
Vancouver	
Kelowna	A person must not ride a bicycle on a sidewalk.

**5. STUNTING (SECTION 10)**

**Remove the prohibition against stunts and acrobatics on bicycles.**

Bylaw excerpt

*Every person operating a bicycle shall have at least one hand on the handle bars at all times, and no person operating a bicycle shall perform or engage in any acrobatic or other stunt.*

Potential bylaw modification

Repeal section 10.

Discussion

The provincial Traffic Safety Act addresses stunting adequately in Sections 213 and 214(2).

- 213(1) No person shall drive a vehicle on a highway without due care and attention.
  - (2) No person shall drive a vehicle on a highway without reasonable consideration for other persons using the highway.
- 214(1) No person shall:
  - (a) drive a motor vehicle on a highway in any contest of speed; or
  - (b) use a vehicle to race with another vehicle on a highway.
  - (2) No driver shall, whether or not with the use or aid of any vehicle or other thing, perform or engage in any stunt or other activity on a highway that is likely to distract, startle or interfere with other users of the highway.
  - (3) No passenger shall perform or engage in any stunt or activity on a highway that is likely to distract, startle or interfere with other users of the highway.
  - (4) No pedestrian or bystander shall perform or engage in any stunt or activity on a highway that is likely to distract, startle or interfere with other users of the highway.
  - (5) Subsections (2) to (4) apply whether or not a vehicle or other thing is used directly or as an aid for the purposes of all or any of those subsections.

## **6. PASSENGERS (SECTION 11)**

**Remove or substantially revise the prohibition against passengers on bicycles to accommodate the full variety of bicycles designed for such purposes.**

### Bylaw excerpt

*No person shall operate a bicycle while carrying thereon any other person, except that such person may carry one passenger where the bicycle is equipped with a properly constructed pillion seat securely fastened over the rear wheel thereof.*

### Potential bylaw modification

A person riding a bicycle must not use the cycle to carry more persons at one time than the number for which it is designed and equipped.

## **7. LOADS (SECTION 12)**

**Remove the load restrictions on cyclists.**

### Bylaw excerpt

*No person shall operate a bicycle while carrying thereon any load in excess of twenty-five (25) kilograms, nor shall such load extend to a greater width than forty-five (45) centimetres on either side of the center line of the bicycle, nor to such a height as would obstruct the clear vision in all directions of the person operating the bicycle while seated on the seat thereof.*

### Potential bylaw modification

No person riding a bicycle shall carry any package, bundle or article which prevents the rider from keeping at least one hand on the handlebars or interferes with the normal operation of the bicycle.

## **8. OBLIGATORY USE OF CYCLING LANES (PARAGRAPH 13)**

**Remove the requirement for cyclists to use cycling lanes or revise this requirement to include a greater number of exceptions.**

### Bylaw excerpt

*In any location where an exclusive lane for the passage of bicycles has been established and is so designated by traffic signs and pavement markings, every person operating a bicycle shall utilize such lane only, except that any such person may depart from the exclusive bicycle lane when approaching an intersection and indicating an intention to turn by giving the required signal to that effect.*

### Potential bylaw modification

Repeal section 13.

## **9. DISMOUNTING WHEN PASSING ON A BRIDGE SIDEWALK (SECTION 21)**

**Remove the requirement for cyclists to dismount before passing pedestrians while crossing bridges in the city.**

### Bylaw excerpt

*In traversing any bridge or river crossing upon the sidewalk as provided in Section 20(b), every person operating a bicycle shall:*

- (a) proceed with due care and attention and with reasonable consideration for all pedestrians;*
- (b) yield the right of way to all pedestrians; and,*
- (c) dismount and walk the bicycle when passing a pedestrian proceeding in the same direction upon such sidewalk.*

### Potential bylaw modification

Repeal paragraph 21 and designate bridge sidewalks as “Shared Pathways” subject to rules identified in the response to the first and fourth recommendation.

## References

- Audrey, S.; Leonards, U.; & Damen, D. (2017). Shared Use Routes for People Who Walk or Cycle: Addressing the Challenges. *Journal of Transport & Health*, 5, S57-S58.
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- Chong S., Poulos R., Olivier J.; Watson W.L., & Grzebieta R. (2010). Relative injury severity among vulnerable non-motorised road users: Comparative analysis of injury arising from bicycle-motor vehicle and bicycle-pedestrian collision. *Accident Analysis and Prevention*, 42, 290 – 296.
- De Rome, L.; Boufous, S.; Georgeson, T.; Senserrick, T.; Richardson, D., & Ivers, R. (2014) Bicycle Crashes in Different Riding Environments in the Australian Capital Territory. *Traffic Injury Prevention*, 15(1), 81-88.
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- Kang, L. & Fricker, J.D. (2016) Sharing urban sidewalks with bicyclists? An exploratory analysis of pedestrian perceptions and attitudes. *Transport Policy*, July 2016, Vol.49, 216-225.
- Ker, I., Huband, A., Vieth, G., & Taylor, J. (2006). Pedestrian-cyclist conflict minimisation on shared paths and footpath. *Austroads Report Number: AP-R287/06*.
- Manual of Uniform Traffic Control Devices for Canada*. Fifth Edition. (2014). Ottawa: Transportation Association of Canada.
- Teschke, K., Frendo, T., Shen, Hui et al. (2014). Bicycling crash circumstances vary by route type: a cross-sectional analysis. *BMC Public Health*, 14, 1205.



## Regulations Reviewed

SASKATCHEWAN	The Traffic Safety Act, Chapter T-18.1
Regina	Bylaw No. 9900
ALBERTA	Traffic Safety Act
Edmonton	Bylaw 5590 - Traffic Bylaw
Edmonton	Bylaw 2202 - Parkland Bylaw (Trail Use)
Calgary	Traffic Bylaw Number 26M96
Calgary	Parks and Pathways Bylaw Number 20M2003
BRITISH COLUMBIA	Motor Vehicle Act [RSBC 1996] Chapter 318
Kelowna	Consolidated Traffic Bylaw No. 8120
Victoria	Streets and Traffic Bylaw No. 09-079
Vancouver	Street and Traffic Bylaw No. 2849
MANITOBA	The Highway Traffic Act, C.C.S.M. c. H60
Winnipeg	Traffic By-Law No. 1573/77
ONTARIO	Highway Traffic Act, R.S.O. 1990, c. H.8
Toronto	Toronto Municipal Code Chapter 886, Footpaths, Pedestrian Ways, Bicycle Paths, and Cycle Tracks
Toronto	Toronto Municipal Code Chapter 950, Traffic and Parking
Ottawa	By-Law No. 2003-530
OREGON	Oregon Revised Statutes, Vol. 17
Portland	City Charter, Title 16 Vehicles and Traffic