



Risk Management Considerations for E-Scooters

On January 1st, 2020 Ontario Regulation 389/19 Pilot Project – Electric Kick Scooters (e-Scooter) came into force. According to the Society of Automotive Engineers (SAE J 3194-Nov 2019), the type of e-Scooter included in O.Reg. 389/19 is a Class 6 Powered Standing Scooter. The detailed equipment description can be found in Section 1(1) and Sections 9(1) to 9(9) of the regulation.

With the introduction of e-Scooter share companies capable of renting e-Scooters by the minute, e-Scooter use has grown in popularity in big cities as an environmentally friendly alternative to walking and bicycling. Their use can be either for short distance commutes, end of trip commutes or recreational rides. Municipalities will need to consider how they can accommodate e-Scooters, motor vehicles, pedestrians, persons with mobility issues, cyclists, ATV's and others within the highway¹ and provide a safe environment for all.

Municipalities should provide consistent rules, for e-Scooter share companies and riders who may cross jurisdictional boundaries, as to: 1) where e-Scooters, either owned by the e-Scooter share company or privately owned, can operate within the municipal right of way; 2) what permits/contracts

will be required to regulate the e-Scooter share company; and 3) how will the municipality or e-Scooter share company communicate to riders the terms of service and restrictions, if any, on where the e-Scooter can operate.

The purpose of this paper is not to penalize e-Scooter share companies or place overbearing restrictions on e-Scooter riders. The pilot project will succeed if e-Scooter share companies operate within a set of well-defined rules and e-Scooter riders know where they can and cannot ride.

1.0 E-Scooter Sharing

Ride sharing occurs when a company rents a car, bicycle, moped, e-bike, e-Scooter, etc. to the public. Currently a bicycle share company often sets up a bicycle share station(s) within the municipal right of way. A membership may be purchased, or a day pass acquired and a rider gains access to the bicycle. At the end of the trip the bicycle is returned to a bicycle share station, which may be the station where the bicycle was first rented from or an alternate station. Most e-Scooters available today are “dockless” which means they can be picked up and left anywhere, usually in the street furniture zone adjacent to the sidewalk, there is no requirement to return the e-Scooter to an e-Scooter share corral. E-Scooter share companies would

¹ “highway” includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lines thereof;

make the e-Scooter available to riders via an APP on their smartphone. The APP would locate the closest e-Scooter, a rider would make a financial transaction on the APP, scan a QR code then ride to their destination and leave it for the next rider. This has the potential to create significant issues for a municipality and therefore the e-Scooter share company should be regulated to assist in minimizing the issues outlined below.

1.1 Regulating e-Scooter share companies

If there is a desire to allow more than one company to provide e-Scooter share services while at the same time restricting the total number of companies offering service, a simple method to accomplish this would be through offering a limited number of permits. A permit process may need to be developed for your municipality, but it may be similar to a request for proposal format. The permit application process should be created in accordance with accepted principles and practices of public procurement. Whatever method is chosen, the permit application should include how the documentation received from the e-Scooter share company will be evaluated by the municipality. In the permit application a municipality may want to consider, but not limit yourself to, requesting a response to the following:

1.1.1 Control location of e-Scooter share corrals

E-Scooter share companies often want to set up operations within the right of way. If e-Scooter share corrals are to be allowed within the right of way, a municipality may want to identify the location(s) before the permit application process begins and include the location(s) in the permit application. To increase multi modal transportation options and encourage end of trip commutes using e-Scooters, an e-Scooter share corral could be placed at or near bus/transit stops, train stations, etc. A municipality, through the permit application process, may allow the e-Scooter share company to negotiate other locations.

If the sidewalk is chosen for an e-Scooter share corral, the sidewalk must be sufficiently wide enough to ensure a clear pathway for pedestrians. In the permit application response, the e-Scooter share company should identify how the on-sidewalk e-Scooter share corral will be delineated. NOTE: Where e-Scooter use on a sidewalk is restricted by bylaw, placing the e-Scooter share corral on a sidewalk may encourage riders to ride on the sidewalk.

If the e-Scooter share corral will be allowed to occupy a motor vehicle parking stall, the permit must identify which parking stall(s) can be used. The municipality will want to ensure that the e-Scooter share corral within a parking stall does not obstruct sight lines for drivers of motor vehicles stopped at an intersection. In the permit application response, the e-Scooter share company should identify how the parking stall will be delineated to prevent parking by motor vehicles.

1.1.2 Maintenance of e-Scooter share corral

The municipality, in the permit, must outline who will maintain the e-Scooter share corral location in both summer and winter (e.g. sweeping, snow removal). If the area of the e-Scooter share corral either on the sidewalk or on roadway is to be maintained by the municipality, the e-Scooter share company must be made aware of the municipality's expectations during the time maintenance operations are carried out.

1.1.3 E-Scooter parking

As mentioned in this document, e-Scooters are dockless which means they can be parked anywhere. This certainly provides convenience for the rider but may be a hazard if discarded at the end of a trip and left blocking sidewalks, driveways, roadways, motor vehicle parking spots, sidewalk handicap ramps, railings used by pedestrians, bus stops or passenger waiting areas or outdoor benches, seats and tables. An example of how parking could be controlled is for the rider to submit a picture of a properly parked e-Scooter (upright and not obstructing the areas listed above) to the e-Scooter share company, otherwise the rider will continue to be charged for the rental until they do provide a picture. Unfortunately, that does not mean it won't be knocked over by someone else. The e-Scooter share company in the permit application response should identify how end of a trip parking will be managed. The e-Scooter share company must be required to identify the person responsible for the supervision of operations for the e-Scooter share company and provide their 24/7 contact information.

The municipality, in the permit, should identify that it will be the responsibility of the attendant to remove any e-Scooter improperly parked within the right of way. Include in the permit, a requirement for the attendant to respond, within an agreed upon timeframe (e.g. two hours

during business hours), to a call from the municipality to remove an improperly parked e-Scooter and a statement that failure by the e-Scooter share company to comply within the timeframe set out in the permit will result in revoking of the permit.

1.1.4 Inspection and maintenance of e-Scooters

Municipalities should, in the permit application, require the e-Scooter share company to provide details on the frequency for inspection and maintenance of the e-Scooter and specify that inspection and maintenance is to occur off-site. The permit should state the timeframe for retention of the inspection reports and that the inspection report(s) be surrendered to the municipality if requested. The e-Scooter share company could be required to submit an example inspection report with the permit application response.

1.1.5 Training of first time riders

According to the Centers for Disease Control and Prevention (CDC) and the Public Health and Transportation departments in Austin Texas, roughly one in three first time electric scooter riders sustains an injury. Injuries include bone fracture, nerve, tendon or ligament injuries, severe bleed, sustained organ damage and traumatic brain injury (Dockless Electric Scooter Related Injuries Study, September – November 2018).

In the permit application, a municipality should ask the e-Scooter share company to identify how first time riders will be trained on the operation of the e-Scooter prior to allowing the rider to activate the APP.

1.1.6 Confirming helmet use

The CDC, in the report referenced in section 1.1.5, found that head injuries topped the list of accident-related incidents involving e-Scooters at 45%. The study determined that many e-Scooter injuries could have been prevented if riders wore helmets and were more careful around cars. O.Reg. 389/19 requires riders under the age of 18 to wear a helmet. The regulation sets the minimum age to operate an e-Scooter at 16 years of age. In the permit application a municipality should ask the e-Scooter share company to identify how or if they can confirm that a person 16 or 17 years old has a helmet with them.

1.1.7 Insurance and indemnity clauses

An e-Scooter share company to which a permit has been granted must provide insurance satisfactory to the municipality, naming the municipality as third-party insured and the permit include an indemnity clause that saves the municipality harmless.

1.1.8 Communication of the terms of service and e-Scooter restrictions

There are many options available for communicating with the public. Websites and social media would meet the needs of the target audience. However, there will be interaction with pedestrians, drivers of motor vehicles and others who may not be tech savvy and need information about why e-Scooters are appearing on the roads. The public will need to know the expectations of e-Scooter riders and the restrictions placed upon the rider by the municipality. The e-Scooter share company in the permit application response should outline how they will communicate with the public the e-Scooter share company's terms of service and the restrictions placed upon the e-Scooter rider. Municipalities will need to determine how they will communicate the restrictions to private e-Scooter owners.

2.0 Municipal Bylaws

Municipal bylaws regulating the use of e-Scooters must apply to both privately owned e-Scooters and those available from e-Scooter share companies. It is important to restate that the purpose of regulating the use of e-Scooters is to minimize risk and improve safety for all within the highway. Included in the subsections are example areas where restrictions may be applied. A municipality may have more areas where they may wish to prohibit e-Scooters.

2.1 Restrictions on sidewalks

While Section 7 of O.Reg 389/19 does provide operational restrictions for e-Scooters on sidewalks, the enforcement of these restrictions, as set out in the regulation, would be difficult. Mixing pedestrians, persons in wheelchairs, persons with mobility issues and e-Scooters should be avoided. Therefore, a municipality should consider prohibiting the operation of an e-Scooter on sidewalks.

2.2 Restrictions on roadways

What must be remembered is that a bicycle is a vehicle under the Highway Traffic Act (HTA) and is allowed on all roads except where prohibited by bylaw. An e-Scooter is not a vehicle under the HTA and the pilot project regulation gives a municipality the ability to restrict roadway use by e-Scooters. Here are a few example roadway use restrictions a municipality may wish to consider:

2.2.1 Restricting roadway use where the speed limit is greater than (x)km/h. Remember that, according to Section 128 of the HTA the default speed limit, unless otherwise posted, in an urban area is 50km/h and 80km/h on a highway that is not in a built-up area but under the jurisdiction of a local municipality. Speed differential can be a factor in a collision and the e-Scooter is limited, in the regulation, to a maximum speed of 24km/h.

2.2.2 Restricting roadway use on urban arterial and collector roads without a bike lane.

2.2.3 Restricting roadway use if the urban arterial and collector road has high percentage of heavy trucks, posted speed greater than the default, has a bike lane but the bike lane does not have a buffer area between the bike lane and the travel lane. The buffer would provide additional room for a bicycle to overtake and pass an e-Scooter or vice versa without entering the travel lane.

2.2.4 Restricting roadway use on roads not in a built-up area with a default speed limit or greater (see 2.2.1), a narrow pavement surface, no shoulder and insufficient sight distance. The insufficient sight distance could be a sharp curve, a sharp curve with obstructions on private property (such as trees), the crest of a hill(s) or any location where the driver of a motor vehicle would not have sufficient view of the road ahead and would be surprised by the e-Scooter and have inadequate time to make a maneuver and avoid the e-Scooter.

2.3 Restrictions on trails

The Ontario Trails Council recently released a trail categorization document that includes four categorizations of trails. This document conforms and advances the Ontario Trails Strategy (2005) and the work of the Ontario Trails Coordinating Committee (2006-16).

The Ontario Trails Council trail categorization system indicates that trail types can be either a wilderness trail, natural environment trail or a recreation trail. Trails can either be for a specific use or may be a multi-use trail where the type of use/rider has been authorized by the trail owner/manager. Here are a few example trail use restrictions a municipality may wish to consider:

2.3.1 Restrict trail use by e-Scooters to trails which are recreational Class 1 multi use trails with a tread width of 2m or greater and either an asphalt or concrete tread surface.

2.3.2 Restrict trail use by e-Scooters where the owner/manager of the trail has restricted use by all motorized vehicles.

2.3.3 Restrict trail use by e-Scooters unless all users are aware of the presence of e-Scooters via published and publicly available documentation.

3.0 Best Practices

The Ministry of Transportation (MTO) has published a best practice document titled “Ontario e-Scooter pilot program – increasing mobility options”. The following adds to what the Ministry has suggested:

3.1 All municipalities and e-Scooter share companies should promote e-Scooter awareness to the public and appropriate e-Scooter etiquette to all e-Scooter riders.

3.1.1 O.Reg 389/19 in section 7(1) includes etiquette for e-Scooter riders to keep a safe distance and give way to pedestrians and bicycles. A municipality could take this even further by communicating that proper etiquette and rules of the road apply to everyone including e-Scooter riders, bicycle riders and the driver of a motor vehicle.

3.1.2 The Ontario Trails Council has a document titled Trail Etiquette Principles, published in 2004. This document is reinforced by Ontario Ministry of Tourism and Recreation “Principles of Trail Etiquette – 2012”, where that etiquette includes statements such as – “Expect and Respect Other Uses”. For example: the clear signing of posted ‘yield to principles’ for all allowed users of the trail such as “Motorized Users, Stop, De-helmet and wait for passive uses to pass”.

3.1.3 Encourage e-Scooter riders to learn how to ride an e-Scooter safely and responsibly.

3.2 For road authorities:

3.2.1 Train staff on the restrictions applied to e-Scooters use on roadways and sidewalk, if any. Ensure that staff are aware of end of use parking requirements and the protocol to report violations.

3.2.2 When patrolling roads ensure that the condition of the road surface where e-Scooters are expected to operate is observed and any deficiencies recorded including the condition of the pavement (cracks, potholes, surface discontinuities) and surface discontinuities or defects with the curb, catchbasins, maintenance holes, water valves and any other appurtenances.

3.3 For trail managers:

3.3.1 Establish a relationship with all trail user communities including e-Scooter share companies to increase awareness of the needs of all users.

3.3.2 Train staff and volunteers (where applicable), via Ontario Trails Council (OTC) on-line course (2012), or OTC's in class Ontario Trails Risk Management Education for Trail Managers (2010).

3.3.3 Train staff and/or volunteers on the tread surface condition required for safe operation by e-Scooter riders.

3.3.4 Ensure other users on the trail know that e-Scooter use is occurring on the trail.

3.3.5 That the transport of an e-Scooter on a trail by any other means include the safe and secure tie down of the e-Scooter, and that, any transport of an e-Scooter not impede, restrict or endanger the safe and responsible operation of any other machine or allowed trail-based activity.

This paper was prepared with input from the Motorcycle and Moped Industry Council, the Ontario Trails Council and the Ontario Good Roads Association.

Source: Adga Group Consultants Inc. v. Lane, 2008 CanLII 39605 (ON SCDC), <http://canlii.ca/t/205dq>