



Micromobility 101

e-Scooter Risk Management

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Topics for today

 Regulating Ride Share Companies

 Restricting Use

Ontario Regulation 389/19 ---

- According to the Society of Automotive Engineers the type of electric kick scooter (e-Scooter) included in O.Reg. 389/19 is a Class 6 Powered Standing Scooter (SAE J 3194-Nov 2019)
- Sections 1(1) and sections 9(1) to 9(9) of the regulation provide the detailed equipment specifications for e-Scooters
- Section 1(2) of the regulation states that, an e-Scooter is deemed not to be a vehicle under the Highway Traffic Act

Ride Sharing

Dockless e-Scooters



- Ride sharing occurs when a company rents a bicycle, moped, e-bike, e-Scooter, etc. to the public.
- Currently a bicycle ride share company often sets up a ride share station(s) within the municipal right of way. A membership may be purchased, or a day pass acquired and a user gains access to the bicycle. At the end of the trip the bicycle is returned to a ride share station, which may be the station where the bicycle was first rented from or an alternate station.
- Many e-Scooters available today are “dockless” which means they can be picked up and left anywhere, there is no requirement to return the e-Scooter to a ride share station. Which provides convenience for short distance commutes, end of trip commutes or recreational rides.
- e-Scooter rides are arranged via an APP. The APP would locate the closest e-Scooter, a user would make a financial transaction on the APP, scan a QR code on the e-Scooter then ride to their destination.

Regulating e-Scooter Share Companies

- If there is a desire to allow more than one company to provide ride share services while at the same time restricting the total number of companies offering service, a 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 ask for a response to but not limited to:
 1. Location of e-scooter share corals;
 2. e-Scooter share coral maintenance;
 3. e-Scooter Parking at end of trip;
 4. Inspection and maintenance of e-Scooters;
 5. Helmet Use
 6. Training of 1st time users
- Each of these items will be explained in the following slides



e-Scooter Share Corrals

- 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 locations.
- e-Scooter share companies typically set up operation within the municipal right of way, either on the sidewalk or in a parking stall:
 - If the sidewalk is chosen for a e-Scooter share corral, the sidewalk must be sufficiently wide enough to ensure a clear pathway for pedestrians. The permit will need to set rules for how the on-sidewalk e-Scooter share corral will be delineated.
 - 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 and how the parking stall will be delineated to prevent parking by motor vehicles.

e-Scooter Share Corral Maintenance

- The permit must outline who will maintain the e-Scooter share corral location summer and winter.
- If the area of the e-Scooter share corral, either on the sidewalk or in a motor vehicle parking stall, is to be maintained by the municipality, the e-Scooter share company must be made aware of the municipality's frequency of maintenance and the municipality's expectations of the e-Scooter share company during the time maintenance operations are carried out.



Parking

- Dockless e-Scooters provides convenience for the user, 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.
- Parking is difficult to enforce
- The e-Scooter share company in the permit application response should identify how end of a trip parking will be managed.
- Include in the permit a requirement for the e-Scooter share company to respond, within an agreed upon timeframe, to a call from the municipality to remove an improperly parked e-Scooter and a statement that failure by the company to comply within the timeframe set out in the permit will result in revoking of the permit.



Inspection and Maintenance ---

- In the permit application there should be a requirement for the e-Scooter share company to provide details on the frequency for inspection and maintenance of the e-Scooters.
- 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.

Helmet Use

- Section 10 of O.Reg 389/19 requires a person who is under 18 years old shall wear a helmet that complies with the requirements of subsection 104 (1) or (2.1) of the HTA when operating an electric kick-scooter.
- Section 8(1) sets the minimum age to operate an e-Scooter at 16 years of age.
- The municipality in the permit application ask the e-Scooter share company to identify how or if they would confirm that a person 16 or 17 years old has a helmet with them.

“The CDC has 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, according to summary of the study released on Wednesday.”

Center for Disease Control May 2019

1st 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
 - The report does note that: “60% of riders in this study received training on using the e-scooter via a phone application, additional training may be necessary.”
- 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 user to activate the APP.

“Everyone learns different things at different rates. Some people will instantly grasp how to use an electric scooter like they were born for it, while others will take longer to get used to keeping themselves balanced. No matter what kind of beginner you are, you should always remember to pace yourself and go at the speed that feels most comfortable to you. Electric scooter riding isn’t just about fun but about safety as well so you should never sacrifice the latter for the former.”

www.motorizedrides.com

Municipal Bylaws

- What must be remembered is that a bicycle is a vehicle under the Highway Traffic Act (HTA) and are 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.
- Municipal bylaws regulating the use of e-Scooters must apply to privately owner e-Scooters and those available from e-Scooter share companies.
- Municipal bylaws regulating the use of e-Scooters should be consistent across jurisdictional boundaries.
- Municipalities will need to consider how they will accommodate e-Scooters, motor vehicles, transit, pedestrians, persons with mobility issues, cyclists, ATV's and others within the highway and provide a safe environment for all.

Nikan Namiri, lead author of the *JAMA Surgery* paper, hopes the reports of injuries are a wake-up call for cities to ensure they have the appropriate infrastructure and policies in place before allowing e-scooter rentals. “I hope that policy makers are more aware of the issue now, and that they are motivated to get policies in place quickly, so that when e-scooters hit the road, people aren’t put at dangers because of a lack of municipal rules.”

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, the operation of an e-Scooter on sidewalks should be prohibited.

"Many riders choose to break the law and stick to the sidewalks . . . because the alternative is much scarier. Safety is reliant on mutual understanding and respect between rider and driver, and that's not a lot to gamble your life on."

Irene Jiang, Business Insider
December 2019

Roadways

- Municipal bylaws regulating the use of e-Scooters must apply to both privately owned e-Scooters and those available from e-Scooter share companies.
- Here are a few example restrictions to consider:
 - Restricting roadway use where the speed limit is greater than (x)km/h.
 - Restricting roadway use on urban arterial and collector roads without a bike lane.
 - Restricting roadway use if the urban arterial and collector road has high percentage of heavy trucks, posted speed greater than the default (i.e. 50km/h), has a bike lane, but the bike lane does not have a buffer area between the bike lane and the travel lane.
 - Restricting roadway use on roads not in a built-up area with a default speed limit or greater (i.e. 80km/h), a narrow pavement surface, no shoulder and insufficient sight distance for the driver of a motor vehicle.

Restricting Use

Trails



- The Ontario Trails Council recently released a trail classification document that includes 4 classifications of trails.
 - Trails 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/user has been authorized by the trail owner/manager
 - Restrict e-Scooters to trails which are recreational Class 1 multi use trail with a tread width of 2m or greater and either an asphalt or concrete tread surface.

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