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PREPARING FOR E-SCOOTERS IN CANADA

How should Ontario & other provinces govern emerging micro-mobility services?

BY JAMIE STUCKLESS, SHARE THE ROAD & DAVID MCLAUGHLIN, WSP CANADA

Dockless e-scooter systems (e-scooters) have been launched in more than 100 cities across the United States. Are they coming to Ontario and the rest of Canada? The kick-style type e-scooters are **currently not permitted to operate within public road rights-of-ways in Ontario**. Although we haven't seen the launch of a full fledged e-scooter system yet in Ontario, there is a [pilot currently underway in the City of Waterloo](#) and this new form of micro-mobility is generating a great deal of interest.

Jurisdictions across the United States have frequently found themselves in the position of having to retroactively develop e-scooter policies after the systems have been launched in their community. In Ontario, we have a short window of opportunity to pro-actively develop a policy framework to govern the arrival of e-scooters in the province. Many other provinces across

Canada will also have to decide soon whether they plan to embrace or reject this new form of micro-mobility.

THE OPPORTUNITY

E-scooters represent a new way for residents (and visitors) to get around their communities. They have been lauded as providing first and last mile connections to transit, particularly in areas where the trip is too long to walk. If residents choose to replace car trips with e-scooters, they also represent an opportunity to reduce traffic congestion. Preliminary [evidence from the e-scooter pilot in Portland, Oregon](#) suggests that e-scooter riders are using them to replace car trips (34%) and that the e-scooters are popular among residents, with 85% of those surveyed indicating that they would recommend e-scooters to a friend.

CANADIAN JURISDICTIONS PREPARING FOR E-SCOOTERS

Waterloo: Canada's first e-scooter pilot project completed its first phase in Oct–Nov 2018. It was deemed a success, with more than 6,000 riders completing over 18,000 trips on the Lime scooters. The pilot continues with phase two running Apr–Sept 2019.

Montreal: The Quebec Transport Ministry and City of Montreal have modified regulations and bylaws to allow dockless e-scooter services to rollout in the city in 2019.

Edmonton: City Council recently voted to move forward with bike and scooter sharing recommendations which would see companies set up their own programs as soon as June 2019.



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THE CHALLENGE

E-scooters are a relatively new technology and mode of transportation. As a result, there are few studies about their safety, market resilience, and ability to operate through the winter. While the Portland pilot results indicate that people are using e-scooters for trips that otherwise may have been made by car, it is important to note that Portland is recognized as a Platinum Bicycle Friendly Community and has invested more than most in providing safe & convenient space for people to cycle. This bicycle infrastructure is also now being used by people riding e-scooters, and is preferred among riders who were surveyed. Most communities do not have the same infrastructure available for bicycling or for e-scooter riders as Portland does and the availability of safe spaces to ride should be a key concern.

Medical professionals have raised concerns about increased emergency room visits due to the proliferation of e-scooters, with many sources pointing to one Salt Lake City hospital that reported a 161% increase in emergency room visits related to e-scooters (from 8 patients to 21). Another recent study of medical records from two UCLA hospitals in Los Angeles and Santa Monica indicate that e-scooters have been associated with 249 emergency room visits between September 2017 and August 2018. As of September 2018, the death rate among e-scooter riders across the United States

was reported to be 1 per 10.75 million trips, compared to 1 per 61.5 million trips for bike share. In December 2018, the Centre for Disease Control announced that it would be conducting its first study of the health risks of dockless scooters in Austin, Texas.

There have also been collisions between e-scooter riders and pedestrians on the sidewalk and concerns about sidewalks being obstructed by poorly parked e-scooters, and the serious impact this has on the mobility of elderly and visually impaired residents, including those using mobility devices.

E-SCOOTERS AND ONTARIO LAW

At present, e-scooters can only be operated where the Ontario Highway Traffic Act (HTA) does not apply, such as on private property if permitted by the owners. This is the case during the ongoing pilot conducted by Lime in Waterloo, ON, where the scooters are permitted only on private trails, a technology park and university campus.

The Waterloo pilot is being run in two phases under current Ontario laws, with a maximum of 100 e-scooters in Fall 2018 and a maximum of 150 e-scooters in spring/summer 2019. The maximum speed of e-scooters during the pilot is 24 km/h. The pilot identifies the specific "pilot routes" on which the e-scooters can be operated. It also

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specifies hours of operation for e-scooters between 7am to 9pm. The operator (Lime) is responsible for removing all e-scooters from operation after 9pm and for collecting all e-scooters on public and private property (except those in designated recharge havens). E-scooter riders must be 18 years of age and upload a driver's license as proof of age. Riders are not required to wear a helmet.

LEARNING FROM OTHER JURISDICTIONS

While there is no clear-cut guidance for this new technology, several jurisdictions have enacted policies to govern the use of e-scooters and to address key issues around the devices:

Speed

- Most e-scooters in the United States appear to be capped at a maximum speed of 15 miles per hour (24 km/h). A [2018 effort in California](#)—reportedly

led by e-scooter company Bird—aimed to increase the maximum speed to 20 mph (32 km/h) and allow sidewalk riding, but failed to pass.

Where e-scooters can be operated

- While some jurisdictions (e.g., Denver) allow the use of e-scooters on the sidewalks, many jurisdictions have banned e-scooters from the sidewalks and require riders to use the road and bicycle lanes.
- Some jurisdictions, like Miami and Nashville, have banned the use of e-scooters all-together, while others like San Francisco require prospective companies to apply for a limited number of operating permits. Some municipalities have set geographic limits on where e-scooters can be operated (e.g., [Santa Monica banned them](#) along the beach path and [Portland has banned them](#) in Waterfront Park).

RESOURCES & OPPORTUNITIES

NACTO Guidelines for the Regulation and Management of Shared Active Transportation

<https://nacto.org/home/shared-active-transportation-guidelines/>
<http://betterbikeshare.org/2018/07/13/nacto-releases-guidelines-on-dockless-bikes-and-scooters/>

Report strategies and standards for communication between city, company, and rider; permitting; data sharing; privacy; equipment safety standards; and dockless bike and scooter parking.

ITE Mobility as a Service (MaaS) Initiative

<https://www.ite.org/pub/?id=F3EC1FCA-AC58-9151-7BF8-094EE7C801DF>

In late 2018, ITE International launched a MaaS initiative to help transportation professionals integrate MaaS in the planning, design, and operation of transportation systems. Learn more at the [MaaS technical session](#) being held on June 3 at the CITE Annual Conference in Ottawa.

T4America's Shared Micromobility Playbook

<https://playbook.t4america.org/equity/>

"This playbook is intended to be a... continuously updated site that explores the core components of a comprehensive shared micromobility policy for local governments to consider."

The playbook covers a depth of policy issues including Parking & Street Design, Equity, and more, highlighting options available, pros and cons, and case studies.



Use of public space & parking

- In [Santa Monica](#), city council recently approved a “use of public space fee” for the use of public property for private commercial purposes. The recommended fee is \$0.98/scooter per day.
- As part of their pilot project, Santa Monica is also [repurposing street space](#) to create shared mobility device zones to help prevent sidewalk blockage by e-scooters. Over 60 zones have been installed in the first few months.
- Regulations [currently being considered in Washington, DC](#) would require companies to provide a toll-free phone number for people to report badly parked vehicles. They also require companies to provide a \$10,000 security deposit, which the city can keep if companies fail to remove badly parked e-scooters.

Equity & access

- In Washington, DC e-scooter systems [must offer a cash payment option](#) and the ability to unlock scooters without a smart phone to ensure that residents can access the e-scooters without a smartphone or a bank account.
- To ensure that these services are available to residents and communities that could benefit most, Portland, Oregon [requires that e-scooter operators deploy](#) a minimum of 100 e-scooters or 20% of their fleet (whichever is less) each day in the historically underserved East Neighbourhoods.

Safety & equipment

- [California recently passed legislation](#) allowing people 18 years of age and older to operate e-scooters without a helmet. This same legislation stipulates that e-scooter riders cannot carry passengers or any packages that prevent them from keeping at least one hand on the handlebars. California also prohibits riders from leaving motorized scooters lying on their side on any sidewalk, or from parking e-scooters on sidewalks in a manner that does not provide an adequate path for pedestrian traffic.

E-scooter companies themselves also have campaigns and technology aimed at enhancing the e-scooter experience. This includes requiring users to take photos of their parked e-scooters to encourage good parking

behaviour, and allowing users to report poorly parked e-scooters through the app. To keep sidewalks clear, [Bird has committed](#) to re-organizing and re-balancing their systems at the end of every day.

Companies require users to participate in an online safety tutorial the first time they use the app and many distribute free helmets to users who request them. Bird requires users to upload a driver's license as proof of being at least 18 years old. In San Francisco, Skip has established a community advisory council to oversee operations. [Lime has indicated](#) that they can provide incentives as well as fines to users through their app if required by local government. In terms of ensuring that e-scooter users have safe spaces to ride, in some cities Bird provides \$1 per scooter per day to municipalities to [help build protected cycling infrastructure](#).

DRAFT POLICY RECOMMENDATIONS FOR ONTARIO

Introducing a new mode of transportation is not a decision that should be made lightly, which is why we would like to see e-scooters permitted in Ontario as part of a **2-year pilot program**. Many municipalities in the US have adopted e-scooters under a pilot framework as it allows for a better understanding of the opportunities and challenges presented by e-scooters. Ontario should do the same.

Share the Road recommends that the Province of Ontario permit the riding of e-scooters on roads and in bicycle lanes, but not on sidewalks. Like e-bicycles, we recommend that e-scooters be permitted anywhere that conventional bicycles can operate, unless restricted by a municipal by-law. The regulation of e-scooters for private use should be consistent with how e-bicycles are governed, including the use of lights and a bell. We also recommend several additional specifications, including:

- Limit the speed of e-scooters to 24 km/h and require an emergency power shut off switch;
- Specify that e-scooter riders are prohibited from carrying passengers of any age;
- Prohibit e-scooter riders from carrying any packages that prevent them from keeping two hands on the handlebars;
- Specifically prohibit e-scooter riders from leaving e-scooters lying on their sides or parking in a way

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that does not allow adequate space for pedestrian traffic, and;

- Allow municipalities to set geographic limits in which e-scooters can/cannot operate.

There are extra steps that dockless e-scooter companies should be required to take to ensure the safety of their users during the pilot project. Based on experience from other jurisdictions, this should include:

- Require that all first-time users participate in an online training tutorial via the operator's app, developed by the operator and approved by the province and respective local municipality;
- Require that e-scooter companies provide a toll-free number for residents to report poor parking of e-scooters, in addition to any in-app reporting that can be done by users.

Finally, if the proposed e-scooter pilot is deemed successful following its evaluation and consultation with users and these micro-mobility devices are recommended for approval use in Ontario, what next? It should be recognized that this new mode of transportation requires an investment in both education and building safer spaces for people to ride. This should be addressed by:

- Allowing municipalities the option of charging a "use of public space fee" to e-scooter companies;
- Establishing clear regulations by which e-scooters may be used in Ontario on public property, including road rights-of-way;
- Updating the Driver Training Handbook to provide information about e-scooters and requiring operators of shared systems to provide mandatory education / training to new users;
- Requiring operators of shared systems to collect and track user trip and demographic data and share this information at no charge to municipalities annually, and;
- Recommending that a portion of both municipal and provincial transportation funding be allocated to build safe and separate spaces for both bicycles, including e-bicycles, and e-scooters in municipalities.

E-scooters, like e-bicycles, could very well have a transformative impact on how people choose to travel in Ontario and across Canada. Although exciting as a new way to get around, consideration for the safety of both e-scooter users as well as all road users must be evaluated along with impacts to the design and enjoyment of our built environment. If it is to be, let's get it right.



Workers create a dockless shared mobility parking zone for e-scooters and bikes in Austin, Texas.



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