September 12, 2019

Ministry of Transportation
Road Safety Policy Office
Safety Policy and Education Branch
87 Sir William Hearst Avenue
Building "A", Room 212
Toronto, Ontario
M3M 0B4

RE: City of Toronto's Response to Proposal Number 19-MTO026, Kick Style Electric Scooters (e-scooters)

Thank you for the opportunity to comment on a regulatory and policy framework for the use of e-scooters in Ontario. While the ministry's expedited deadline for comment has not allowed us to bring this issue to City Council for consideration, City of Toronto staff wish to submit the following preliminary comments. City staff intend to report to Council in the coming months on a program to enable the oversight and management of e-scooters on City roadways, with the goal of ensuring a safe and accessible transportation network for all users during the proposed pilot project.

Municipal Role in Regulating E-Scooters Locally

As the Association of Municipalities of Ontario (AMO) noted in its response to this proposal, a key to the success of e-scooters in other jurisdictions has been the proactive role that municipal governments play in regulating their use. It is critical that the province take an enabling approach to municipal regulation of e-scooters, and specify that e-scooters are only allowed where municipal governments have opted-in via by-laws to allow these vehicles within municipal boundaries. This would enable cities/towns to have the authority to shape their own regulations and systems by permit or other programs to provide oversight and manage any mass deployment of e-scooters on a commercial basis (e.g., scooter share).
Local management of e-scooter issues would include, for example, the ability to further regulate:

- speed (such as in city centers/downtown areas, as is done in Montreal and Paris);
- the number of e-scooters (fleet size for commercial operations);
- locations where e-scooters can and cannot operate by type of facility (such as sidewalk, trail, bike lane, or curb lane);
- parking, maintenance and operations requirements;
- communications protocols between the City and e-scooter rental/sharing companies;
- permit revocation if safety and enforcement issues arise;
- data-sharing requirements; and
- further public education and training for safety.

**Promoting Safety**

As supported by Share The Road and Toronto Public Health, the City has several concerns regarding the safety and general health impacts of e-scooters, both for users and for non-users (e.g., pedestrians, cyclists and even drivers) that could be injured or involved in collisions.

**Kick-Style E-Scooter Design**

The design of e-scooters is such that they have small wheels, uneven acceleration and a high centre of gravity. Given these design issues, kick-style e-scooters would pose a potentially serious risk to riders when travelling on typical road surfaces in Toronto (and much of Ontario) given debris, cracks and bumps in pavement, and rail or streetcar tracks as well as inclement weather. A study of two UCLA hospitals published in JAMA (2019) noted that falls accounted for 80% of injuries by e-scooter riders. Common injuries included head injuries (40%), fractures (32%), and contusions, sprains and lacerations (28%). Health risks that have been identified by the Centers for Disease Control (2018) in e-scooter collisions include head injuries (48%, including 15% that involved traumatic brain injury), fractures to limbs (70%), and 16% of injured riders involved collisions with motor vehicles.

As widespread e-scooter use is a recent phenomenon, data availability regarding safety and personal injury is limited. However, statistics gathered for the US since 2016 regarding fatalities of users on bikeshare and e-scooter share systems suggest reason for concern. Note that vehicle kilometres travelled for bike share systems exceed those of e-scooter share systems, so the relative safety of kick-style e-scooters may be worse than it appears from this table if the per km travelled rate is considered.
• 11 fatalities in the first half of 2019 alone; 9 on e-scooters and 2 on bike share.
• In total, e-scooters account for 12 of the 16 total shared micromobility fatalities in the US since 2016.

<table>
<thead>
<tr>
<th>Summary</th>
<th>Bike Share</th>
<th>E-Scooter</th>
<th>TOTAL</th>
</tr>
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<tbody>
<tr>
<td>2016</td>
<td>1</td>
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</tr>
<tr>
<td>2017</td>
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<td>9</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>4</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

(Source: NACTO Bike Share / Shared Micromobility resource as of July 2019)

Maximum Kick-Style E-Scooter Speed

MTO's proposal is for a maximum speed of 32km/hr for kick-style e-scooters. Allowing such a high e-scooter travel speed would pose a potentially serious risk to riders, especially given the design issues noted above, and increase the potential risk for collisions with pedestrians.

AMO and Share The Road have noted that most cyclists travel between 10 to 20km/hr. All Canadian jurisdictions that currently regulate e-scooters (Calgary, Edmonton, and Montreal) have set a 20km/hr maximum travel speed for e-scooters. Setting the maximum speed for kick-style e-scooters at 20km/hr would reduce the risk of injuries from falls and collisions, and also reduce the speed differential among active modes (cyclists) and e-scooters.

While the primary benefit of reducing the speed differential between e-scooters and bikes is to address safety and reduce in serious injuries or potential fatalities, another benefit would be the potential to reduce diversion of trips from cycling and public transit, which is another potential public health impact. 7 of the top 10 leading causes of mortality result from lack of physical activity, which means that any trips diverted from active transportation such as walking, cycling and taking active modes to use public transit would result in public health impacts.

Safety Requirements

The City is strongly supportive of MTO's proposed regulatory requirements that are positive and support public health and safety, including:
• Requiring bicycle helmet use for those under 18 years of age
• No passengers allowed
• Having a horn or bell
• Having a front and back light
Data Requirements

In order to meet MTO's proposed requirement that municipalities remit data to the province, MTO's Motor Vehicle Collision Reporting form must be updated, so that police can record e-scooter collisions in a consistent and standardized way. A simple approach would be to add two check boxes under the field for vehicle class/type on the MTO collision report form for: e-scooters (1) standing or (2) seated. All kick-style e-scooters are categorized as "standing", and any e-bikes/mopeds are categorized as "seated".

This update to the MTO collision reporting form for police would enable some data collection by municipalities – specifically for injuries or fatalities resulting from collisions with motor vehicles (in motion) that are reported and tracked by police. In the 2018 Centers for Disease Control study, 16% of injured riders were involved collisions with motor vehicles. There are further challenges with obtaining and collecting data, and a need for MTO's guidance and coordination on how data and evaluations will be conducted for consistency among jurisdictions in Ontario.

Protecting Against Municipal Liability & Costs

A growing number of lawsuits against e-scooter operators in the United States are unresolved, and cities are being sued alongside e-scooter operators despite indemnification agreements and release of liability clauses. More recently, as of early 2019, e-scooter operators have begun altering indemnification agreements to not indemnify cities for negligence for poor city infrastructure. This would have major implications for municipal budgets if funds are to be diverted to address claims and lawsuits resulting from kick-style e-scooter sharing fleet implementation and state-of-good-repair issues. Given the significant infrastructure maintenance backlog in cities and towns across Ontario, there are major concerns for municipalities relating to liability and costs in the event of property damage, injuries and fatalities for existing infrastructure conditions.

While Calgary has required $10 million in insurance from Bird Canada, this policy appears to cover all Canadian jurisdictions that are being added – including Edmonton, Montreal, and any Ontraio jurisdictions, which does not make sense when considering the expanded risk with expanded fleet size and geographic areas. The Province should consider the insurance requirements for users and operators to protect both users and non-users in the event of property damage, injuries and fatalities.

Pilot Duration

Like AMO, Share The Road, and other jurisdictions, we support MTO's decision to take a pilot approach to e-scooter implementation and evaluation. Given the rapidly evolving ecosystem of technology and programs, we recommend a 2-year pilot period that would provide the province and municipalities the experience, data and feedback to effectively evaluate the pilot while enabling flexibility for unanticipated impacts prior to a five-year horizon.
Moving forward, it will be important for municipalities to have the ability to adjust to the ongoing implementation of e-scooters to meet their local needs and ensure safety for users and pedestrians. By providing municipalities with the ability to tailor their regulatory frameworks and programs, implementation of new mobility solutions for "last and first mile" options will be enhanced to meet the needs of citizens and visitors to Toronto and neighbouring municipalities.

Thank you for providing us with the opportunity to comment. If you have any questions regarding the City's submission, please contact Janet Lo, Senior Project Manager in the City of Toronto's Transportation Services Division at 416-397-4853, or by e-mail at Janet.Lo@toronto.ca.

Sincerely,

[Signature]

Chris Murray
City Manager

c: Councillor James Pasternak, Chair, Infrastructure & Environment Committee
   Tracey Cook, Deputy City Manager, Infrastructure & Development Services
   Barbara Gray, General Manager, Transportation Services
   Carleton Grant, Executive Director, Municipal Licensing & Standards
   Dr. Eileen De Villa, Medical Officer of Health