Electric Kick-Scooters (E-scooters)

Special Meeting
of the Toronto Accessibility Advisory Committee (TAAC)
February 25, 2021

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TORONTO

Purpose

- Update TAAC members on the status of provincial and city regulations on e-scooters
- Provide a summary of how accessibility and insurance issues could be addressed
- Share what's been heard from key accessibility stakeholders
- Consult the TAAC for feedback

Electric Kick-Scooter (e-scooter)

- A two-wheeled device with a board the rider stands on and a handle stick to steer.
- Powered by battery.
- Can travel at a speed of 24 km/hour using a throttle.
- Shared e-scooter fleets can be rented using mobile apps.

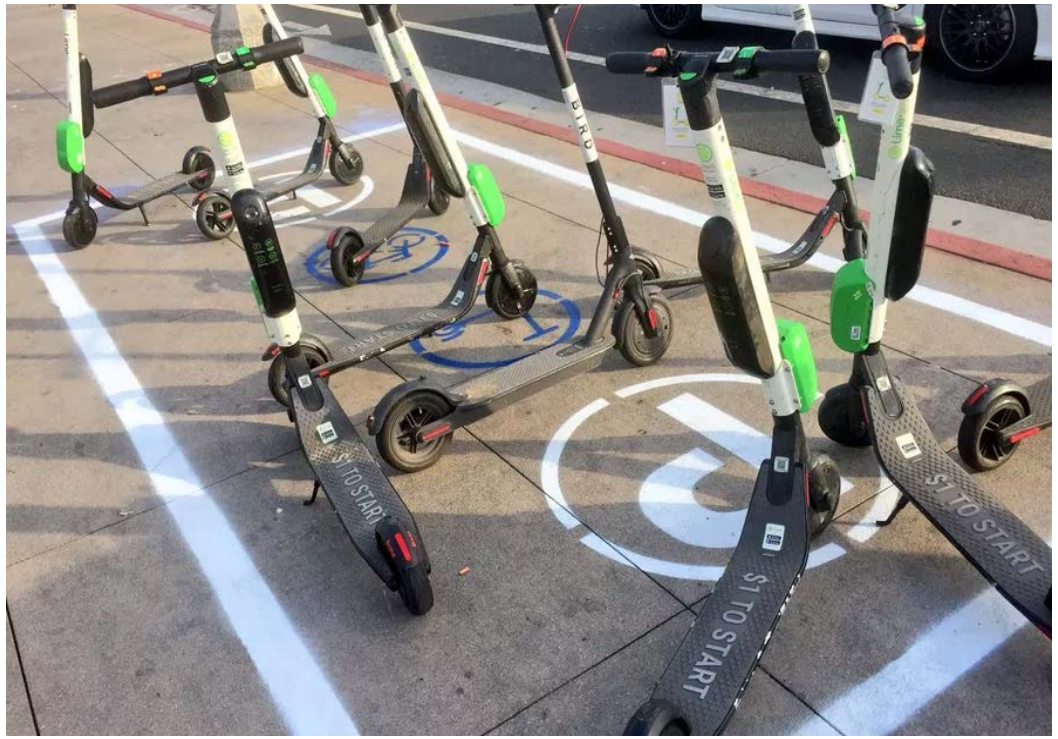

Photo credit: Rick Cole (www.curbed.com)

Status of Ontario Regulation 389/19 – Pilot Project Electric Kick-Scooters

- In effect from January 1, 2020 to November 24, 2024
- Sets a 5 year pilot period for municipalities to opt in to test e-scooters
- E-scooter use within a municipality is not allowed unless that municipality permits e-scooters by municipal by-law for public roads, bike lanes, cycle tracks, trails, paths, parks, sidewalks, walkways etc...
- Must use bicycle lanes where they exist, except for in a tunnel or underpass, may operate on a sidewalk
- Not to be operated on controlled access highways or highways where pedestrians and bicyclists are prohibited

Status of Toronto's E-scooter Regulations

- E-scooters are not permitted by by-law for operation on public roads, bike lanes, cycle tracks, trails, paths, parks, sidewalks, walkways, or public squares.
    - **On Oct 2-3 2019**, City Council prohibited parking, storing or leaving e-scooters on any street, sidewalk and pedestrian way.
    - **On Feb 3, 2020**, the TAAC recommended City Council prohibit e-scooters for use in public spaces including sidewalks and roads, and requested robust consultation with people living with disabilities and related organizations.
    - **On Jul 28-29 2020**, City Council referred e-scooters back to staff to research further changes necessary to address accessibility and insurance issues.
    - No timeline was specified in the July motion; however, work is ongoing including meeting with stakeholders and tracking best practices.

Accessibility issues communicated to industry

Industry provided feedback in Fall/Winter 2020 and at a January 20, 2021 industry group meeting (29 participants from 15 companies) to feed into this material.

- E-scooter rider conflicts with persons with disabilities on sidewalks, specifically with people who are blind or living with low vision or older adults or those using mobility assistive devices;
- Enforcement issues (e.g., for illegal sidewalk riding/moving violations);
- Accountability for potential hit and runs on sidewalks; and
- How someone injured by an e-scooter rider or an e-scooter trip hazard would be compensated for costs incurred (e.g., rehabilitation, lost wages, and medical costs).

Accessibility Issues – E-scooter Sidewalk Riding and Parking

Potential solutions to address **e-scooter sidewalk riding**

- Protected bike lane/micromobility network and placing e-scooter parking on-street so that trips begin/end off the sidewalk
- Field staff/ambassadors/patrols and enforcement teams
- Visible, unique identifiable plate numbers (licence plates for rental fleets)
- E-scooter sidewalk riding detection technologies* (*emerging technology)

Other proposals to address **e-scooter sidewalk riding**

- Geofencing pedestrian areas or slow zones
- Education and warnings (by companies) and fines for riders (by police)
- Suspensions/bans on repeat offenders (by companies)
- Decals on sidewalks and signage
- Audible warnings on the device for the rider and pedestrians

Potential solutions to address **improper e-scooter parking**

- Adequate supply of parking areas (and fleet size caps/reviews)
- Proper parking verification (photo selfies and/or other technologies)
- Field staff/patrols and enforcement teams (1-2 hr service standards or better)
- Braille/tactile and unique identifiable numbers on e-scooters (licence plates for rental fleets)
- Docked stations* like Bike Share Toronto (*dockless preferred or hybrid by companies)

Other proposals for **improper e-scooter parking**

- Education and incentives (e.g., discounts for proper parking or penalties for repeat offenders by companies; or fines to the companies that are passed onto the repeat offenders)
- “Lock-to” parking mechanism (similar to a bicycle lock)
- Double kick-stand (less likely to topple over); and
- Onboard diagnostics indicating the device has toppled over.


Photo credit: scootersdream.com

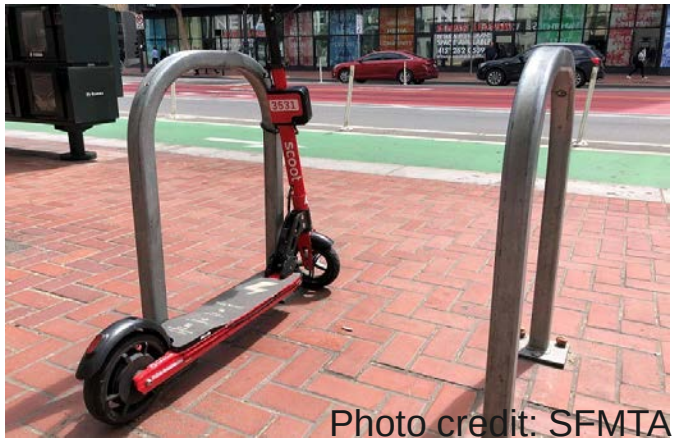
Photo credit: SFMTA

Insurance and Liability Issues

Key solutions for **insurance and liability issues**

- 1st and 3rd party insurance coverage must be provided by e-scooter companies for riders (like in the UK trials) to ensure compensation, for example, when:
  - an e-scooter rider hits and injures a pedestrian (3rd party injuries)
  - an e-scooter is left as a hazard and injures a pedestrian (3rd party injuries)

Examples of **safety and liability issues**

- According to the **UDV (German Insurers Accident Research) in January 2021**, e-scooter riders are 4 times more (or 400% more) likely than bicyclists to injure others, due to e-scooters being illegally ridden on sidewalks.
  - In 21% of e-scooter incidents with personal injury, the victim is not the rider, but another road user. This is due in part to e-scooters being ridden on sidewalks 60% of the time when they should be on the road or bike lane.
- According to **Austria's Kuratorium für Verkehrssicherheit (KFV) in October 2020**, 34% of 573 e-scooter riders observed at several Vienna locations illegally rode on the sidewalk.
  - Even if there was a bike path, 23 percent preferred the sidewalk. If there was only one cycle or multi-purpose lane, 46 percent rode on the sidewalk. If there was no cycling infrastructure, 49 percent rolled illegally on the sidewalk.

Feedback from Accessibility Stakeholders

List of accessibility stakeholders

Tele-meetings with:

- B’nai Brith Canada – League of Human Rights
- Canadian National Institute for the Blind (CNIB)
- March of Dimes of Canada

Written submissions (including letters to the Mayor) from the above and:

- Canadian Council of the Blind (CCB) – Toronto Visionaries Chapter
- AODA Alliance (coalition of 11 disabilities organizations – see list to the right)
- Accessibility for Ontarians with Disabilities Act Alliance
- March of Dimes of Canada
- Canadian National Institute for the Blind
- ARCH Disability Law Centre
- Spinal Cord Injury Ontario
- Ontario Autism Coalition
- Older Women’s Network
- Alliance for Equality of Blind Canadians
- Guide Dog Users of Canada
- Views for the Visually Impaired
- Citizens With Disabilities – Ontario

Accessibility Feedback on Proposed Solutions…

Technologies are still emerging and not adequate yet:

- Geofencing and other technologies to prevent sidewalk riding are not sophisticated enough, and would only apply to rental e-scooters.
- Docking stations for e-scooters has potential, but is still in development.
- Lock-to cables on e-scooters mean they could be locked anywhere (e.g., café fence/railing) including in spots blocking entrance access and paths of travel.
    - Already a lack of bike parking so this would worsen the number of sidewalk obstructions on already narrow and cluttered sidewalks.
    - If Bike Share Toronto were dockless, there wouldn't be enough bike rings to lock the rental fleet… same for dockless rental e-scooter fleets.

Accessibility Feedback on Proposed Solutions

Not enough city resources for enforcement and infrastructure priorities

- Oversight is very labour- and resource-intensive and depends on enforcement, which is already stretched or non-existent in parts of the City
    - Licence plates on rental e-scooter fleets could help, but this is a reactive tool and would be a drain on city resources to monitor and enforce.
- Bigger priorities for limited city resources
    - Inadequate infrastructure is a bigger priority – not enough sidewalk space or accessible infrastructure; not enough bike lanes/bike lane space; and not enough public transit.
    - Importance of other city priorities before allowing something which poses a hazard and a nuisance for pedestrians and persons with disabilities.

Accessibility Feedback on Proposed Solutions

Impacts on seniors and persons with disabilities on sidewalks

- COVID-19 has resulted in challenges for persons with disabilities, their caregivers and pedestrians who use sidewalks as a necessity and not for recreation.
- Allowing e-scooters will pose hazards that affect persons with disabilities, seniors, their caregivers and pedestrians.
- Risk of severe injury for seniors or persons with disabilities if tripping and falling or struck by an e-scooter.
- Inability to identify e-scooter rider because of their speed, and that the person's credit card on the app may not be the person riding the e-scooter.

Canadian Context and Other Jurisdictions

Canadian and Ontario context…

- **Montréal** – no rental/shared e-scooters in 2021. Focusing on bike share and e-bike share.
- **Vancouver** – no rental/shared e-scooters; also has bike share.
- **Hamilton** and **Mississauga** will now allow personal use e-scooters, with work on potential rental/shared micromobility (bike share and e-scooter share) pending.
- **York Region** allows e-scooters on bike lanes on regional roads. (liability issues being discussed among local municipalities and the region)
- A few other jurisdictions in Ontario are in process of consultation and review: London, Waterloo Region, and Windsor (delays with COVID-19).

Canadian context – City of Calgary

- No bike share. Only rental e-scooters allowed in Alberta.
- Allows e-scooter riding on sidewalks.
- 43% of 311 requests about bad behaviour or conflicts with pedestrians; 42% parking concerns. (total 769 requests over the pilot period)
- Now allowing e-scooter use on some roads to reduce sidewalk riding issues. Added slow speed zones and 30 parking zones (2.5% of riders ended trips in parking zones; 10% of the e-scooter fleet was deployed to the parking zones).
- E-scooters to return via procurement process. Lowered fleet cap from 2,800 (2020) to 1,500 (2021). Will require licence plates for enforcement.
- “Likely that e-scooters have the highest rate of injury per transportation mode” but less severe. 43% of EMS e-scooter injuries required surgery (double that of EMS bicycles at 21%). 37% of severe e-scooter injuries had suspected intoxication.
- 1,300 e-Scooter related ER visits during the pilot period, but may be over-inclusive of other devices referred to as scooters. 75 required ambulance transport, 5% were pedestrians injured.

Canadian context – City of Ottawa

- No bike share. Personal use and rental e-scooters allowed on roads with max 50km/h limit, bike lanes, and trails/paths that are not National Capital Commission multi-use paths.
- Lowered max. speed to 20km/hr for e-scooters from the permitted 24km/hr under the provincial pilot. 8km/hr for slow zones, e.g., transit malls/stations.
- Piloted a fleet of 600 e-scooters with 3 vendors in 2020. Will increase the fleet cap to between 1,200 and 1,500 for 2021 and expand outside the Greenbelt (suburban area).
- 76% surveyed used e-scooters for recreation; 2% to connect to transit (COVID-19 context)
- Will pilot in 2021 via procurement process. Staff labour costs not included in cost-recovery. Considering designated parking areas. 69% of all survey respondents reported encounting misparked e-scooters.
- No injury data collection with hospitals and not likely for 2021 given the pandemic.
- Accessibility stakeholders were consulted and raised concerns about sidewalk riding and improper parking, especially barriers for persons with low vision or no vision.

Large Urban Peer Cities

- Peer cities have banned rental/shared e-scooters from downtowns in Chicago and New York City.
- No rental/shared e-scooters yet in places such as:
    - Montréal (not for 2021) or Vancouver
    - Massachusetts (e.g., City of Boston)
    - Pennsylvania (e.g., City of Philadelphia)
    - New South Wales (e.g., City of Sydney, Australia)
    - Scotland (e.g., City of Edinburgh), The Netherlands (e.g., Amsterdam), and
    - Others have banned or since banned them, e.g., Copenhagen (city centre), Houston, San Diego (boardwalk ban), etc.
- NYC (outside of Manhattan only) and Transport for London (UK) pilots not yet underway.

Questions for TAAC Feedback

Key Questions for the TAAC

- Any questions or comments on the potential solutions/proposals?
- Any questions or clarifications about accessibility community feedback?
- Does the additional information satisfy the concerns that TAAC raised in 2020?
- Do any new concerns arise from the additional information?

Whether to recommend an e-scooter pilot?

As directed by City Council, Transportation Services staff will take into consideration the following in its development of a report back on e-scooters for the Infrastructure and Environment Committee and City Council:

- Feedback from accessibility stakeholders
- Feedback from the TAAC
- As well as further research regarding safety, accessibility and insurance issues.

E-scooter Report – Process & Next Steps

- Feedback from TAAC and accessibility stakeholders will be taken into consideration into the report back to the Infrastructure & Environment Committee (IEC).
- Next IEC meetings are on March 23 and April 28. (most likely slated for April)
- Contact: Janet Lo, Senior Project Manager by e-mail at Janet.Lo@toronto.ca or by phone at 416-397-4853

Thank you