



Micromobility Strategy Development

Toronto Accessibility Advisory Committee on February 5, 2024

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www.toronto.ca/micromobility




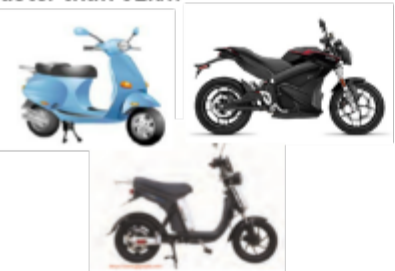

Outline of the presentation

- Key background (what is micromobility, current micromobility in Toronto, provincial pilot opportunities, council directions, previous TAAC feedback, and project timeline)
- What is proposed for the micromobility strategy?
- What are key criteria for selecting pilot projects?
- What are the food delivery industry issues and impacts?
- Discussion and opportunities for input and next steps

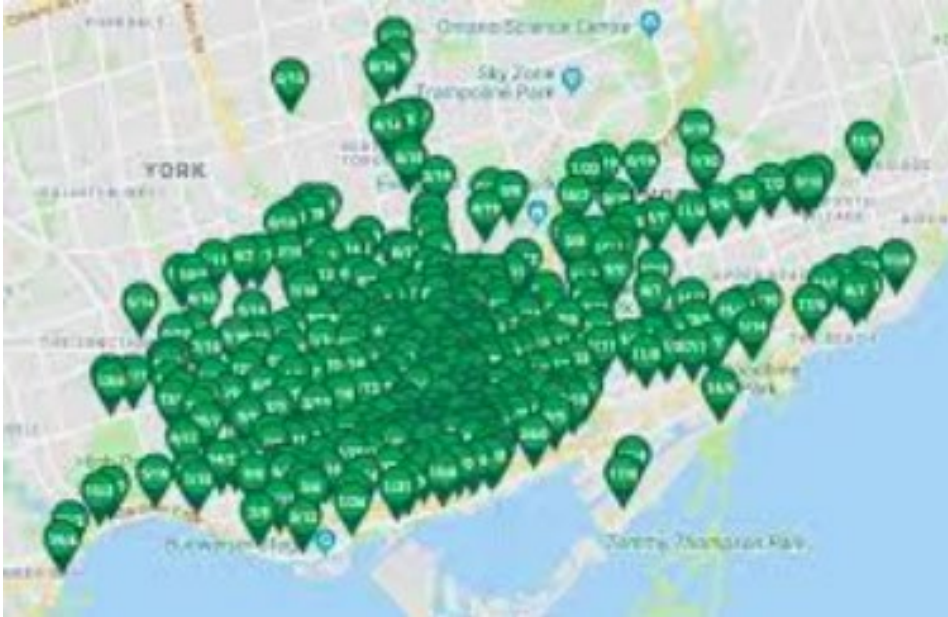
Key Background

What is micromobility?

- Describes small, low-speed vehicles that are lighter weight than cars, including bicycles, cargo bikes or trikes, folding bikes, electric two, three, or four-wheeled cycles, e-mopeds, electric kick-scooters, electric mini-cars, and more.
- Micromobility can serve as alternatives to cars.
- Persons operating motorized wheelchairs are considered pedestrians and allowed to use sidewalks, whereas micromobility vehicles are not being considered for operating on the sidewalk.

Where can I ride this vehicle in Toronto?	Road	Bike Lane (painted)	Cycle Track (separated by posts/planters/curb)	Bike Path/Trail - Max 20k/h & Max 40kg unladen	Sidewalk
Bike or e-bike (can tow trailer) 	✓	✓	✓	✓	✗
Cargo cycles/E-Cargo Cycles 	✓	✓	✓	✗	✗
Throttle Max 32k/h 	✓	✓	✗	✗	✗
Faster than 32k/h 	✓	✗	✗	✗	✗
Electric kick-scooter (private property only) 	✗	✗	✗	✗	✗

Shared Micromobility – Bike Share Toronto



- Operated by Toronto Parking Authority – its plan is to expand to more than 1,000 docked stations, to serve every ward, and reach 20 per cent electrification
- Currently over 9,000 bikes and over 780 docked stations
- At 52 TTC stations and 6 GO stations
- 4,600,000 rides in 2022, and 5,704,000 rides for 2023 (24% increase)
- Year-over-year 217% increase in ridership in the month of January

Examples of MTO Micromobility Pilot Opportunities

Golf Cars*

(*limited to two smaller municipalities)



Low Speed Vehicles

(2017-27, Toronto has not opted in)



Urban Mobility Vehicles* (*proposed for

2023-28 but on pause by MTO)



Large Cargo E-bikes (Toronto opted into pilot in 2021, expires 2026)



Large Quadricycles (e.g. Pedal Pub) (Toronto opted into pilot in 2022, expires 2032)



Electric kick-scooters (2020-25, Toronto has not opted in)



Council direction – Item IE5.5 July 19-21, 2023

- To report back on a comprehensive Micromobility Strategy – updated timing is **May 2024**
 - Whether the City should launch additional micromobility pilot projects
 - Education and enforcement to address illegal parking in bike lanes and illegal sidewalk riding
 - Mandatory helmets and options to require standardized individual identification markings on e-scooters as part of any future pilot
 - Request that the City Manager write a coordinated response to Transport Canada to regulate micromobility vehicle safety and battery safety

Council Direction – Item DM6.3 May 10-12, 2023

Report back to include micromobility courier issues:

- How to deter dangerous illegal behaviour by those who operate motorized or motor-assisted vehicles on sidewalks
 - Include a jurisdictional scan of other municipalities struggling with similar issues
- Options for requiring motor-assisted micro-mobility vehicles (except motorized wheelchairs) to bear a unique identifier when being used for commercial purposes on a public thoroughfare.
- Request courier companies to develop programs to educate their delivery staff on rules of the road and compliance

Toronto Accessibility Advisory Committee Feedback

On Feb. 25, 2021 the TAAC unanimously affirmed that it does not support use of e-scooters, including any pilot, and requested a ban without exception

- **More barriers** for people who use sidewalks as a necessity, not for recreation
- **Infeasible to enforce** against illegal sidewalk riding (police need to be present) and hit and runs (no license plates or registration for privately-owned e-scooters)
- **Technologies are experimental** and not preventive. Not reliable as GPS is disrupted by buildings and Cloud connectivity is not continuous.
- **“Lock-to cables” enable being locked anywhere** – blocking paths/entrances.
- **Concerns about limited city resources** for enforcement. Seniors and persons with disabilities are also concerned about being triaged out of care if seriously injured with overburdened hospitals.

Micromobility Strategy Development Project Timeline & Coordinated Initiatives

*Research &
Engagement*

*Develop
Ideas &
Further
Feedback*

*Finalize Staff
Report*

IEC & Council

Nov to Jan

Jan to Feb

Mar to Apr

May 2024

- Online public survey with 3,400 responses
 - A number of small workshops with interest groups and affected groups, and meetings with industry and associations.
 - An interdivisional working group.
 - Two public, virtual town halls (Jan 24 & Feb 29)
 - Public phone line and e-mail contact for feedback and webpage
- Coordination with various related initiatives: Cycling network (2025-27), TTC 5-Year Service Plan, Net Zero Strategy, Sustainable Transportation Sector growth map, Bike Share Toronto growth plan, Poverty Reduction Strategy & Equity, Zoning by-law review and bike parking, cargo bike parking, exploration of automated enforcement & illegal parking in bike lanes, Toronto Fire safety education, and more.
 - Large quadricycle report will be its own report.

What is proposed for the
micromobility strategy?

What is micromobility? Examples of vehicle types

✘ vehicles not permitted currently under city by-laws and

✘ not under the Ontario Highway Traffic Act currently

Light Duty – similar to bicycles in weight and power



Mid Duty – heavier, larger and/or more powerful



What problems does Micromobility solve?

- First and last mile connections to public transit
- Lower cost / more affordable
- No immediate source of emissions (TransformTO/Climate Action)
- Cargo cycles/e-cargo cycles can substitute for a car/small van
- Less dangerous to others, compared to SUVs, when in collisions
- Take up less road space and easier to park or store
- Electric powered makes it easier to travel uphill and longer distances
- Pedal-assisted micromobility enables physical activity

Jurisdictional scan on micromobility

- **Increasing interest in micromobility and similar issues/challenges** (e.g. sidewalk riding, friction with speed/mass differentials in bikeways, road safety, incentives/disincentives, etc.)
- **Infrastructure is key:** building and expanding a network of bikeways, and secure, weather protected bike parking
- **Public bike share:** station-based, more e-bikes, equity (e.g. access, affordability)
- Greater interest and support for **cargo cycles and cycle logistics**
- **Mixed results for electric kick-scooters**, e.g. Paris ban on rentals, private rental companies leaving cities, UK ban on private/personally owned e-scooters but allows restricted rental trials, and still some unresolved issues
- **Electric mini-car:** safety issues point to the need for licence, registration and insurance (these are required under Ontario HTA)
- **Similar food delivery app industry issues:** proliferation of deliveries, equity issues, lack of enforcement resources, fire safety and prevention for lithium ion batteries

Proposed Micromobility Strategy

- Guide the further adoption of micromobility in Toronto with a focus on safety
- Explain benefits and drawbacks of different types of micromobility
- Outline clear set of rules for where vehicles can operate, park and be integrated into our transportation system
- Clarify pilot project opportunities and recommendations based on research/ review of other jurisdictions and public engagement
- A holistic approach – the 3Es (engineering, education, enforcement), and key metrics/monitoring

Key criteria for selecting
pilots & priorities?

Draft Criteria & Considerations for Selecting New Pilots

- **Safety** (e.g. of riders and non-riders, especially for accessibility)
- **Mobility** (e.g. improved access/travel options for all abilities, 1st and last mile, utilitarian travel, reliability)
- **Environmental** (e.g. mode shift, climate action, sustainability/life cycle)
- **Equity & Inclusion** (e.g. social/demographic, all ages and abilities, geographic, affordability, gender)
- **Public Health** (e.g. reduced killed and seriously injured, physical activity, well-being)
- **Economic** (e.g. cost of living, commercial use, BIAs, street vibrancy, industry, reduced traffic congestion)
- **Costs & Liability** (e.g. resourcing, claims/liability, enforcement, state of good repair, infrastructure)

Specific to accessibility concerns, some feedback we have received so far...

- **Need enforcement of by-laws on illegal sidewalk riding** and the ban on electric kick-scooters. Not supportive of an e-scooter pilot.
- **Electric micromobility is silent, dangerous** when encountered on sidewalks, crosswalks, or paths, or bikeways that are at-grade/same level with the sidewalk
- **Concerns about trip hazards with parking of micromobility** on sidewalks
- **Need education and training** on the rules for operating and road safety
- **Requesting the need for licence, registration and insurance**
- Hearing less concerns regarding human-powered cyclists as they tend to not travel as fast and tend to know the rules better than newer electric micromobility users – faster, speeding, and not following rules

Overall, some public feedback we have received so far...

- **Safe infrastructure is key** including expanding the network and maintenance
- **Enforcement of road safety** to address unsafe driving and sidewalk riding
- **Personal and privately-owned e-scooters** enable first/last mile and more responsible care than rentals
- **Prioritize publicly owned and operated Bike Share Toronto** – many concerns still regarding rental e-scooters, especially for persons with disabilities
- **Educate the public on rules and safe riding** – need a public campaign/program and partners (e.g. schools, delivery companies, gig workers, etc.)
- **General support for low speed vehicles** (electric mini-car that seats two or more)
- **Mixed feedback** on mid duty vehicles in bikeways, e.g. where to allow seated scooters/e-mopeds, urban mobility vehicle (electric one-person enclosed three wheeled mini-car), and large delivery cargo cycles, as they mix with bicyclists who are lighter weight and have less physical protection

Input on food delivery industry
issues and impacts?

Online Delivery Apps – reasons for this focus?

- Proliferation of online deliveries during and since the pandemic
- One of the biggest user groups of micromobility is the food delivery industry – in particular use of power-assisted micromobility. Some of the concerns include:
 - Illegal sidewalk riding, speeding, and parking obstructions (e.g. delivery vehicles blocking sidewalks, bikeways, driveways, or entrances)
 - Other road safety issues such as lack of knowledge of traffic rules, riding the wrong way in bikeways, weaving dangerously between bikeway and roadway or among pedestrians, injury prevention, etc.
 - Equity considerations given the working conditions of gig workers/couriers
- Overall, there is still great benefit to having deliveries made by micromobility rather than by car, van or truck

Specific to accessibility concerns, some feedback we have received so far...

- **Many persons with disabilities use food delivery services** and appreciate being able to access these services year-round where they cannot make the trips themselves.
- **Recognize the equity issues faced by gig workers** and see a role for the delivery app companies to make things safer, e.g. business practices
- **Importance of education and training** on the rules for operating, safe riding and road safety
- **Importance of road safety enforcement** to address unsafe driving and reckless riding
- **Importance of safe infrastructure** – separated bikeways from roadway and from sidewalks

Online Delivery Apps – issues being explored...

- What factors might be influencing negative behaviours, e.g. illegal riding on sidewalks or speeding/reckless riding?
- What education & training is provided to gig workers through online delivery apps?
- What business practices might be factors? E.g. delivery time promises that are marketed to customers, routing algorithms (using driving routes versus providing cycling routes), service fees/wages, etc.
- Initiatives from elsewhere that we can learn from?

Discussion & Next Steps

Seeking feedback from TAAC

- What are the most important things that should be included in the micromobility strategy?
- What are the priority pilot projects for the City?
 - What new micromobility vehicles should be allowed in bike lanes and/or the roadway? E.g. electric kick-scooters, Low Speed Vehicles (electric mini-car) on streets with max 50kph speed limits?
- What are your thoughts on the issues regarding delivery app services and micromobility usage?

Further opportunities for input

- Accessibility virtual town hall was held on January 24
- Public telephone town hall on February 29
- Feedback welcome by e-mail at micromobility@toronto.ca or by phone at 416-338-2848
- More information and updates provided on the city's website at www.toronto.ca/micromobility