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Micromobility

SUMMARY

Micromobility options such as e-bikes and e-scooters provide a new and inexpensive form of transportation, especially for “last-mile” mobility and at night, when public transit may not be available. However, growing concerns are leading city governments to enact regulations to reduce speed, prevent use in certain areas, and mandate helmet use. Representatives of cities throughout the U.S. and Canada shared what has worked and what new areas of education and regulation are needed to ensure safer use.

TRENDS AND CHALLENGES

CITY-RUN PROGRAMS

There are various iterations of city governments’ involvement in micromobility in different cities.

- **Raleigh, NC:** City owns the assets for the bike-share program. The city hires a contractor for operations. E-scooter companies Spin and Lime are operated privately.
- **Ottawa, ON:** E-scooters can operate in the city, but there is no bikeshare system.
- **Toronto, ON:** E-bikes are allowed, but e-scooters are banned from operation.

PRIVATELY OWNED MICROMOBILITY

In California’s beach communities, the use of privately-owned e-bikes and e-scooters is ubiquitous. The challenge in these communities is finding safe storage when they are used to access Downtowns and the beach. City government leaders are hesitant to create a city-sponsored or managed system of storage due to potential liability risks if a privately-owned e-bike or e-scooter is damaged or stolen.

BENEFITS VS. MISUSE AND RISKS OF MICROMOBILITY

Use of micromobility options provide an alternative form of transportation, especially for people who are delivery service workers, low income, may not have access to a car or who live in cities where public transportation is inconvenient or not operational at night.

Concerns over misuse are growing, however, as rules and regulations vary. Even in communities where there are rules on the books, enforcement is not considered a high priority.

Top issues and challenges include:

- **High speed use** in pedestrian-oriented areas
- **Riding on sidewalks**, resulting in collisions with pedestrians
- **Lack of understanding of traffic and mobility rules**, especially for underage users who may not yet have their driver's license
- **Carrying of passengers** on scooters
- **Use while intoxicated**
- **Lack of helmets for riders**, leading to more serious injury or fatalities
- **Collisions with cars and commercial trucks**, which have low visibility
- **Dockless scooters left overturned on sidewalks**, blocking public right of ways and impeding accessibility, especially for people with disabilities and seniors.
- **Fires from battery charging ports**

STRATEGIES AND PROMISING PRACTICES

Numerous cities have attempted various strategies to create safeguards for micromobility use to varying efficacy. This list outlines the strategies implemented and the discussion surrounding whether or not they are effective in enhancing safety.

STRATEGIES TO ENHANCE SAFETY

- **Mandating helmet use.** Ottawa requires a helmet, but this is not enforced by police. One e-scooter contractor in Ottawa provides helmets attached to the scooter. In Edmonton, Neuron (e-scooters and e-bikes) provide reusable helmets and police do enforce use of helmets. Dallas repealed the helmet requirement because the public expressed hesitancy in using a reusable helmet.
- **Education of truck drivers** to understand the speed and closing distance of e-bikes compared to regular bikes (NYC).
- **Requiring battery-charging ports** to be placed on sidewalks and outside of buildings to prevent fires inside of residences (NYC).
- **Time Limits:** E-scooters in Raleigh stop operation at 11:00 pm. However, data has shown that there isn't necessarily a higher rate of accidents at night. There was pushback from some participants, saying that it is not ideal to remove a form of transportation to disperse after-hours crowds, as some may drive under the influence.
- **Speed Limits/Slow Zones:** E-scooters and e-bikes in event areas are forced to slow down to a walking pace during events through geo-fencing (Raleigh).
- **Exclusion Zones.** In Edmonton, radiowaves prevent the use of e-scooters and e-bikes in the Whyte Avenue entertainment zone, a pedestrian heavy area, to address consistent misuse by riding on sidewalks.
- **Sobriety Tests for Night Use:** In Ottawa, at 9 or 10pm, sobriety tests are conducted to test a potential rider's cognitive abilities to determine if they are considered safe to use an e-bike or e-scooter.
- **Scooter Corrals:** Raleigh requires that scooters be returned to designated corrals in the entertainment district or the company will continue to charge the user. However, visibility at night has been a concern.

THE NEXT FRONTIER: STATEWIDE REGULATIONS?

It was suggested that micromobility options such as e-bikes and e-scooters be regulated on a statewide level to facilitate greater uniformity in rules and regulations. While some participants agreed, others felt that municipalities differ greatly in terms of their micromobility use patterns and infrastructure to support the use.

Instead, it was suggested that in Canadian provinces, that provincial transportation regulators provide a baseline of safety standards, then additional options that municipalities can opt in or out of.

QUESTIONS TO EXPLORE

- When should an e-scooter or e-bike be regulated like a motorcycle with a license and required education?
- Will driverless vehicles be a new form of mobility?

REFERENCE LINKS

- **Edmonton:** https://www.edmonton.ca/transportation/cycling_walking/bike-electric-scooter-sharing
- **New York City:** <https://www.nyc.gov/html/dot/html/bicyclists/ebikes.shtml>
- **Mexico City:** <https://restofworld.org/2024/electric-moped-regulation-mexico-city/>
- **Ottawa:** <https://www.cbc.ca/news/canada/ottawa/e-scooters-ottawa-new-rules-1.7181991>
- **Raleigh:** <https://raleighnc.gov/transportation/services/dockless-e-scooter-program/scooter-parking-corrals-glenwood-south-pilot>
- **Toronto:** <https://www.toronto.ca/wp-content/uploads/2024/07/8f8e-TSMicroWhere-can-I-ride-this-micromobility-vehicle-in-Toronto.pdf>