



**BICYCLE
COALITION
OF MAINE**

**Rise of the Machines!
Micromobility and Active Transportation**

February 1, 2023

What is micromobility?

AGENDA

- What is Micromobility?
- Why BCM is interested in Micromobility?
- Concerns about Micromobility
- National Policy Trends
- Local Micromobility Trends
- BCM Stance

What is micromobility?

“Federal Highway Administration broadly defines micromobility as any small, low-speed, human- or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles, electric scooters (e-scooters), and other small, lightweight, wheeled conveyances.

Other definitions of micromobility focus primarily on powered micromobility devices and characterize these devices as partially or fully motorized, low-speed (typically less than 30 miles per hour), and small size (typically less than 500 pounds and less than 3 feet wide).”

Basically, anything that moves a person faster than just feet without being in a car.



What is micromobility?

Micromobility can be:

- Human-powered or electric
- Privately owned or shared
- Most commonly low speed (25km/h top speed) or sometimes moderate speed (45km/h top speed)

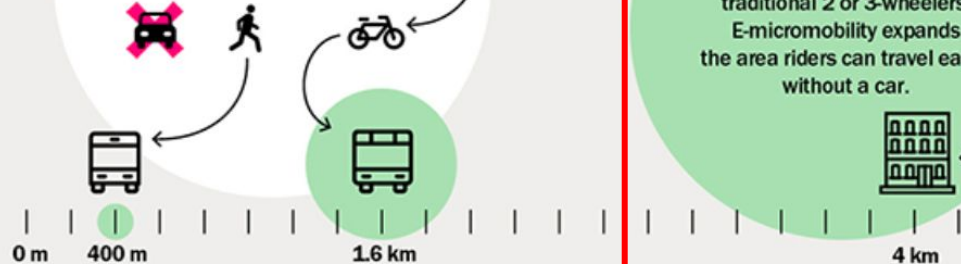


Micromobility cannot be:

- Internal combustion engine powered
- High speed (exceeds 45km/h top speed)

Most people in cities do not own cars.
Micromobility unlocks more city for more people.

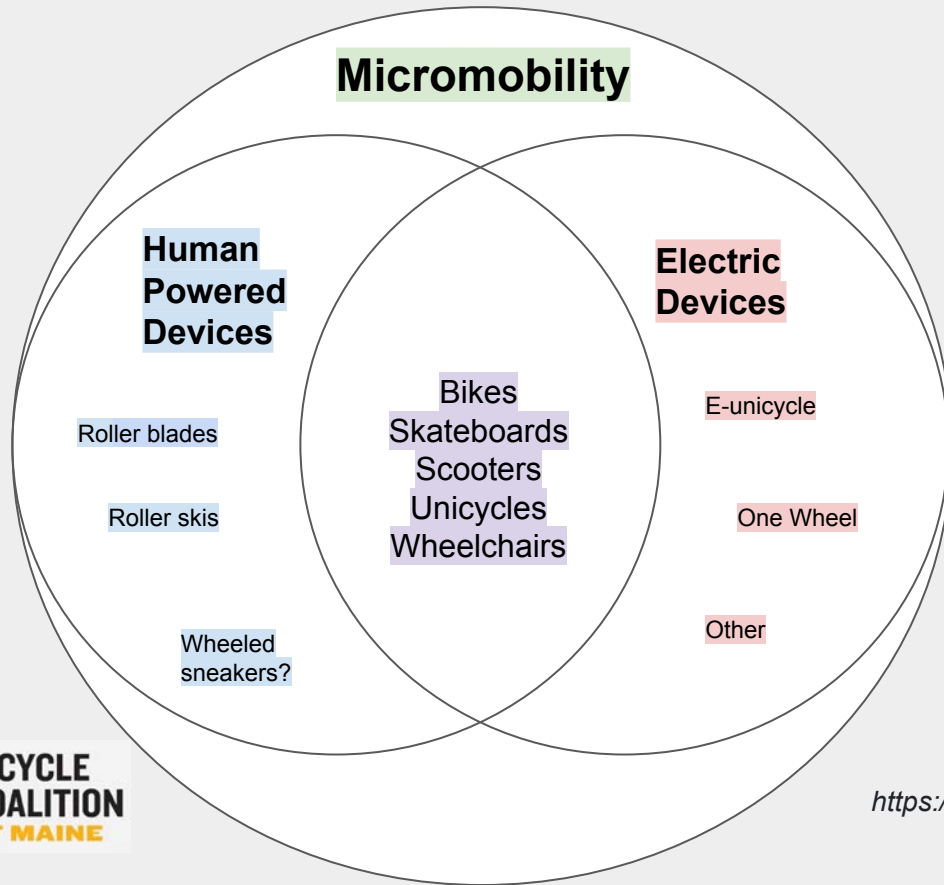
Micromobility increases access to public transportation, replacing cars for short trips.



Electric devices make micromobility more attractive to people who may not use traditional 2 or 3-wheelers. E-micromobility expands the area riders can travel easily without a car.

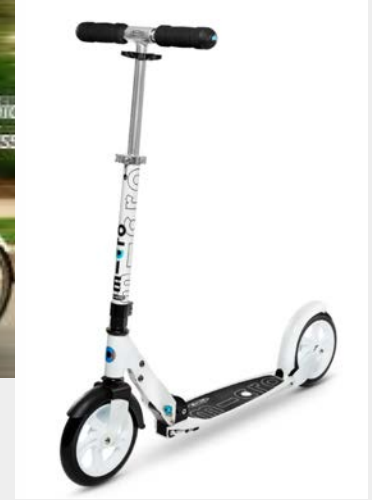


What is micromobility?



- Bicycles
- Scooters
- Roller blades
- Skateboards
- Electric Assist Bikes
- E-Scooters
- E-Skateboards
- Electric Assist Mono-Wheels

Micromobility Devices



**Bicycles, scooters, skateboards:
“traditional” human-powered
devices**

Micromobility Devices



But also: Electric Devices, like
E-Bicycles—commuter and cargo



Micromobility Devices

Electric Skateboards



Micromobility Devices

Electric Scooters



Micromobility Devices

One Wheels



Micromobility Devices

Mono Wheels or Electric Unicycles



What is micromobility?

- **FHWA:**

- Micromobility has rapidly proliferated in cities nationwide, proving to be a popular transportation option for many users. In response to the increasing demand for walking and bicycling facilities in cities and towns across the country, many jurisdictions are exploring micromobility as an alternative mode for short trips and active transportation.

- **NACTO:**

- The rapid growth in the number of shared micromobility trips and the introduction of e-scooters has required cities to focus new attention on how best to regulate these new services in order to achieve the best public outcomes.

- **Streetsblog:**

- These days, micromobility devices are evolving and radiating like animal species during the Cambrian period — and it's confusing everyone, even the people who are supposed to know this stuff better than all of us.

What is micromobility? Roles and Impacts

Safety and Infrastructure – Because they lack the protection of an enclosed vehicle, micromobility users are considered "vulnerable road users," similar to pedestrians.

- Micromobility users rely on safe and connected bicycle and pedestrian facilities for travel.
- Cities and agencies addressing micromobility, while others have prohibited their use
- Need to engage in efforts to educate the public on safe travel behaviors and to support the expansion of robust, continuous bicycle and pedestrian infrastructure.

What is micromobility? Roles and Impacts

Access and Mobility – Micromobility devices help to close the first- and last-mile gaps to transit and can offer individuals greater access to jobs, health care, and other services.

- Powered and adaptive micromobility devices may also increase mobility for older adults or individuals with disabilities.
- Shared micromobility devices present challenges to cities as individuals operate and park them in the public right-of-way, sometimes blocking sidewalks.
- Cities employ strategies to maintain compliance with the Americans with Disabilities Act by removing parked or abandoned devices that block sidewalks and multi-use paths.



What is micromobility? Roles and Impacts

Equity – Micromobility can help to expand access and mobility options to underserved communities.

- Cities and operators have enacted strategies to ensure equitable access for shared fleets including requiring a certain number of micromobility devices to be available in underserved communities, creating discounted fare structures, and providing credit-free access.

<https://highways.dot.gov/public-roads/spring-2021/02>

Why does BCM care about micromobility?

- **BCM is already a micromobility advocacy organization!**
- **Increasing number of questions about skateboards, scooters, and electric devices**
- **Explosion of new electric-assist devices that share or compete for operational space with bikes and pedestrians**
- **These users are also vulnerable and risk conflicts with vehicles**

Why does BCM care about micromobility?

Vulnerable Users in Maine

A person lawfully on or within a public way, crosswalk or shoulder portion of the public way who is lawfully operating, riding, using, holding or otherwise on or in any of the following devices:

- (1) A bicycle, or a device that is an extension of a bicycle such as an extend-a-bike, a bicycle trailer or a child's bicycle seat;
- (2) A motorized bicycle or tricycle, including an electric-assisted bicycle;
- (3) A farm tractor or similar vehicle designed primarily for farm use;
- (4) A skateboard;
- (5) Roller skates;
- (6) In-line skates;
- (7) A scooter;
- (8) A moped;
- (9) A horse-drawn carriage;
- (10) An electric personal assistive mobility device;
- (11) A wheelchair;
- (12) A Segway; or
- (13) Roller skis.

Title 29-A, Chapter 1, §101

Concerns about Micromobility

Questions, questions, questions



- Active Transportation?
- How are micromobility devices defined under the law?
- Something else?
 - Ebikes are regulated as their own thing, and are explicitly NOT motor vehicles, motorized bicycles, motorized scooters, or mopeds
 - Skateboards mentioned in state law under Vulnerable User definition, and incidently under “Toy Vehicles” (§2063-B)
 - Motorized Scooters are defined, regulated as bikes in §2063 (1)
- Risks of conflicts with other active transportation users?
- Infrastructure needs?

National Micromobility policy trends



- Generally not a ton of policy yet
- Often pointed more at shared devices than personally owned ones
- Speed limits come up (esp. for shared fleets)
- Parking concerns
- Skateboarding is still a crime in some places!
- Land access concerns—e-bikes on trails
- Speed—perception electric devices that they go much faster
- Motorized vehicle or devices?
- Medical necessity for some users

Local micromobility policy trends

Goals for bike share in Portland

- To increase the visibility of biking and encourage people who do not normally ride.
- To provide a mobility option for people who cannot afford a car or do not have a bike.
- To improve public health through active transportation and by providing access to other resources that improve health (e.g., parks, trails, grocery stores, farmers market).
- To contribute to economic development (i.e., generate business/development activity).
- To serve the tourist market.
- To allow people to 'park once' when coming to the city (i.e., allow people to park and then use bike share, walking or transit for other trips throughout the day). EPA Technical Assistance for Sustainable Communities: Building Blocks Page 5 of 16
- To reduce parking demand, congestion and need for parking infrastructure downtown.
- To serve regional destinations (e.g., provide access to parks, mall, Casco Bay Ferry Lines to connect islanders to and provide mobility in the downtown area).

EPA MEMO: Planning for Bikeshare Programs Portland, Maine Next Steps Memorandum July 3, 2013

Local micromobility policy trends in Maine

- South Portland launched the first municipal e-bike rebate program to great success
- Portland likely to also have a rebate program
- Bike share launched in Portland
- Scooter shares in Portland, Old Town
- Statewide e-bike rebate program proposed in legislature (LD 256)
- Micromobility study committee proposed
- Regulating micromobility users as bikes on public ways proposed



BCM Stance

BCM Supports Human Scale Micromobility Devices, beginning with E-bikes

- BCM supports the use of Class 1 pedal assist e-bikes anywhere an unpowered bike may be used, including paved and unpaved roads, multi-use paths, and mountain bike trails.
- BCM supports the use of Class 2 e-bikes in most places an unpowered bicycle may be used. BCM does NOT support the use of Class 2 e-bikes on mountain bike trails, as there is some evidence that throttle-actuated bikes are worse for trails and user relations than pedal assist bikes.
- BCM supports the use of Class 3 pedal assist e-bikes as defined in Maine state law, which restricts them to paved and unpaved roads, and only on off-road trails for which authorization has been explicitly provided.
- BCM does NOT support the use of devices that have motors larger than 750 watts or that can exceed 28mph. Such devices are outside of the Three Class regulatory framework established in 2019.

BCM Stance

BCM Supports Human-Scale E-Micromobility Devices as Active Transportation Modes within these Limits

For us, this is derived from E-Bike Policy, and means 1) motors of 750w or less 2) Top speeds of 28mph or less and 3) No internal combustion engines

While the organization's position on things like e-scooters, e-skateboards and one-wheels is still evolving, the BCM believes that these users:

- Have a right to use public ways.
- Should follow the guidance and law for bicycle operations
- Should obey 15 mph speed limits on multi-use trails
- Should not generally operate on sidewalks
- Should yield to pedestrians when present
- Are covered under the definition of vulnerable users in Maine law.



Thanks!

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