

GREATER MADISON mpo

Greater Madison Metropolitan Planning Organization

Municipal Guidance on E-Moto and Other E-Micromobility Device Regulation

May 2026

Background

This guidance is intended to foster the development of consistent local ordinances across jurisdictions, with the purpose of encouraging municipalities to support the use of new mobility modes while protecting public safety.[1] Adopting consistent regulations of micromobility devices across municipal and state borders is supported by numerous national and state-specific organizations, including the Governor's Highway Safety Association,[2] People for Bikes[3], and Ride Illinois[4].

With improvements in battery technology, e-bikes, e-motos, e-scooters, and other micromobility devices have exploded in popularity, and are now common sights in both urban areas and small towns. These devices provide inexpensive, accessible mobility options, and have become popular with people who are unable to drive, unable to afford a motor vehicle, or are looking for a more efficient and enjoyable way to move about in their communities.

The Greater Madison MPO recognizes that the development and adoption of these technologies has outpaced their definition and regulation by state and federal lawmakers and regulators, and that many communities are struggling to address safety concerns resulting from their proliferation. This guidance offers municipalities a consistent set of definitions and expectations to assist with developing appropriate, regionally consistent regulations governing how and where these devices may be legally used.

The Greater Madison MPO discourages outright bans on legal (low-speed) e-bikes, e-scooters, and other micromobility devices. These devices fill an important niche in the transportation landscape and improve mobility options for many lower-income and/or disabled people, as well as the public in general. The Greater Madison MPO encourages municipalities and the State of Wisconsin to integrate these types of low-speed devices into their transportation networks, policies, and regulations.

Due to a variety of factors, particularly the high-speed capabilities of some of these types of devices relative to their non-motorized counterparts, many communities are considering new regulations on the use of micromobility devices, with some adopting outright bans on micromobility devices. Before taking such drastic action, there are several questions communities should ask themselves to better define the problem:

- Are concerns focused on school children riding too fast, people riding on sidewalks or something else?
- Are problems related to poor etiquette or a failure to follow the rules of the road?
- Are these devices being used by non-drivers to commute or run errands, or are they purely recreational?
- Are people with disabilities or mobility impairments using them as mobility devices?

Any proposed ordinance or law that restricts community mobility must be publicly vetted to ensure that elected officials are aware of and have carefully considered public opinion on the proposed restrictions to ensure that such restrictions do not violate federal civil rights law and meet the needs of the community.

1 Based on Ride Illinois' guidance at https://rideillinois.org/safety/municipal-guidance/, revised to match Wisconsin statutes

2 https://www.ghsa.org/sites/default/files/2025-09/GHSA_Policies_Priorities_2025.pdf Section G.4

3 https://www.peopleforbikes.org/news/solutions-to-the-e-moto-problem

4 https://rideillinois.org/safety/municipal-guidance/

The Problem

Electrically powered personal mobility devices have proliferated in recent years, and many communities are experiencing public concern and pushback against them. Unfortunately, the explosive growth in the use of these devices has exceeded the capacity of national, state, and local governments to adopt definitions and regulations regarding their use.

As a result, many communities have adopted, or are considering, outright bans on such devices rather than grappling with the differences between available devices and how they can be safely managed. In Wisconsin, as in many states, many available micromobility devices do not fit into the classes identified in state law. One of the key issues is that many device types are defined by their maximum speed. This is a problem because devices that look nearly identical may have very different top speeds, with some exceeding the maximum speed for that device type as defined in statute. These vehicles essentially do not exist under law.[5]

Whether shopping online or at brick-and-mortar retailers, buyers are often confronted with a variety of similar looking options with no clear way of discerning their different standings under state law. Some may qualify as street-legal e-micromobility devices. Others may be undefined in state law and therefore be illegal to operate on public roads. Others may be classified as motorcycles under state law, subjecting riders to licensing and insurance requirements, such as with e-bikes that do not fit in one of the three defined classes.[6] These un-defined or "out-of-class" electric vehicles are the subject of this guide and its recommendations.

It is worth noting that under Wisconsin Statute, many important pedestrian protections already exist such as Wisconsin Statute 346.804 (text below). While many pedestrians may not feel safe walking with higher-speed users on the same facility, there is a significant question of whether speed restrictions would have much effect on path behavior. Police agencies often do not have the resources to enforce such restrictions. Studies by the City of Madison Traffic Engineering Division have shown that very few bike path users exceed 20 MPH, with only a small portion doing so, even in downhill straightaway conditions.

Signage reminding device users to maintain reasonable speeds, yield to pedestrians, and provide space when passing as required by 346.28(1) may be more effective than passing restrictions that are difficult to enforce.

5 For example, an e-scooter which does not have a seat and is therefore not a motorcycle, but which is capable of speeds exceeding 20 mph under electric power alone.

6 For example, an e-bike that has had its software cracked and which can now exceed design specifications, or commercially available bike-like e-vehicles that may not even have pedals.

Recommended Definitions & Restrictions

It is recommended that municipalities not adopt existing state statutes at the local level, but instead only adopt unique or more restrictive limits based on authority provided by state statutes and the definitions therein. This avoids the potential for changes to state statutes to result in contradictions or nonconformities between local and state laws. It is recommended to include an informational section that repeats (but doesn't duplicate) state law. For example:

For informational purposes, applicable state laws and definitions regarding the use of e-bikes, e-scooters, and similar devices are listed below. These were accurate on the date this ordinance is adopted but may have changed since.

- *§340.01(15ps) ... definition of electric scooter...*
- *§346.80(4) ... not riding where prohibited...*
- *§346.80(2)(a) ... ride as far right as practicable...*
- *Etc.*

Existing definitions in state or federal law are provided in the final section of this document for reference. Figure 1 shows the state-defined and non-state-defined device classes discussed in this document. The MPO recommends that e-devices that are not currently defined by the State of Wisconsin be considered as two separate classes of devices – one capable of top speeds of no more than 28 MPH, consistent with Class 3 e-bikes ("micromobility devices"), and one capable of higher speeds ("e-motos").

"**E-moto**" means any type of device with an electric motor greater than 750 Watts, capable of speeds greater than 28 mph without pedal assist, or otherwise beyond the definition of a Class 1, 2, or 3 electric bicycle (e-bike)[7] or e-scooter.[8]

7 2019 Wisconsin Act 34 https://docs.legis.wisconsin.gov/2019/related/acts/34
8 Wisconsin Statutes 346.94(18s)

Figure 1: State-Defined and Non-Defined Device Classes

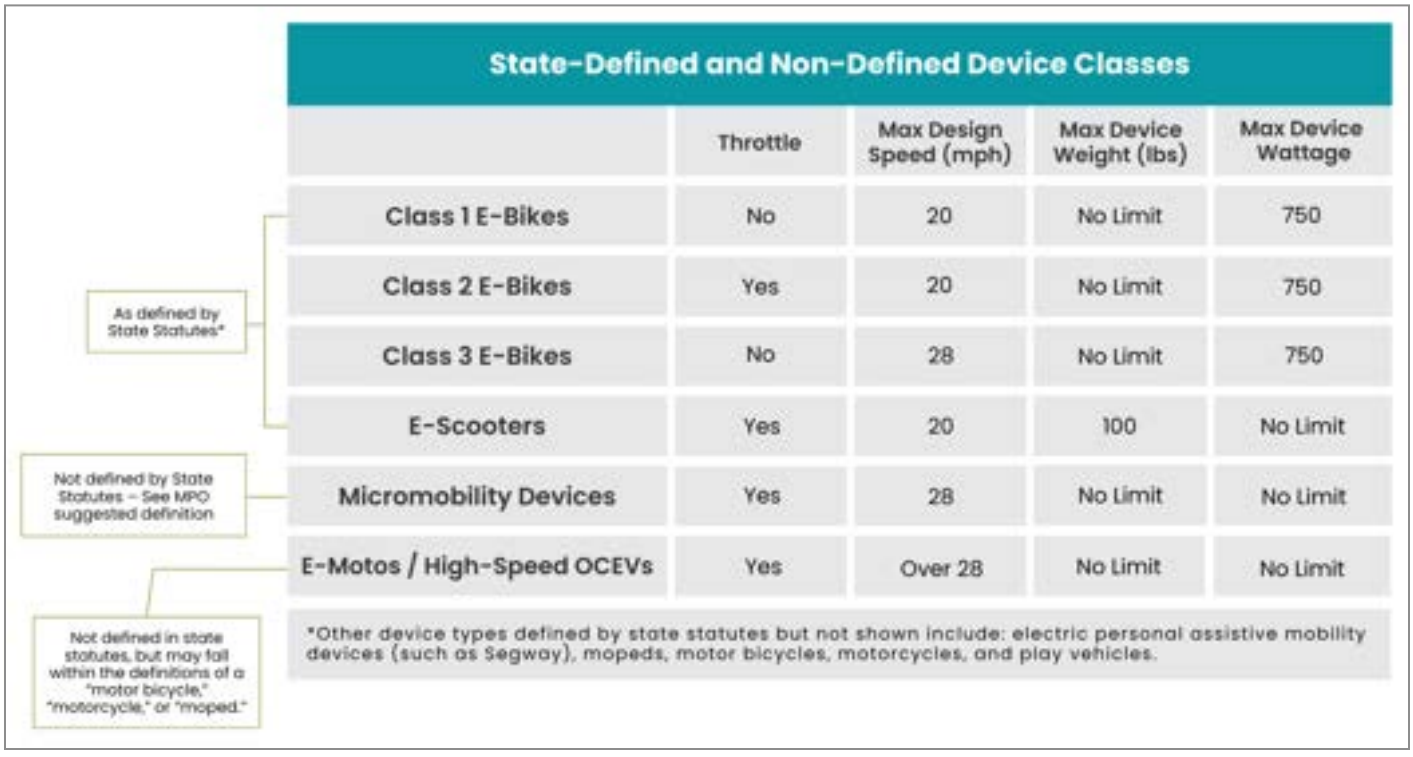

Figure 2: Where to Ride & What Can Be Regulated Locally?



Suggested regulations: These devices are not legal e-bikes or e-scooters and should not be advertised, sold, offered for sale, or labeled as e-bikes or e-scooters. Only such devices with a Vehicle Identification Number (VIN) can be registered and insured for street use, and a Class M (motorcycle) license is required to operate them. Such devices which do not have a VIN and cannot be registered may only be used on private property. These devices are also known as "Out-of-Class Electric Vehicles" (OCEVs). These devices are prohibited from using bike lanes, separated paths, and sidewalks.

"Micromobility device" includes a broad range of lightweight vehicles that serve as personal mobility devices and have a top assisted speed of 28 mph. These devices are generally designed to accommodate a single rider but may be equipped with after-market child carriers.

The regulation of the use of these devices should be incorporated into statutes and ordinances regulating other vehicles and mobility devices. Figure 2: Where to Ride & What Can Be Regulated Locally shows where each type of vehicle is allowed or prohibited under state law, as well as instances which should be carefully considered by elected officials prior to adopting regulations for their community.

For reference, existing state law defines "Electric bicycle" as:

"Electric bicycle" means a bicycle that is equipped with fully operative pedals for propulsion by human power and an electric motor of 750 watts or less and that meets the requirements of any of the following classifications:

(a) Class 1 electric bicycle is an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

(b) Class 2 electric bicycle is an electric bicycle that may be powered solely by the motor and is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour.

(c) Class 3 electric bicycle is an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.[9]

92019 Wisconsin Act 34 https://docs.legis.wisconsin.gov/2019/related/acts/34

Authority to regulate the operation of the power unit of electric bicycles.

The governing body of a municipality or county may by ordinance prohibit the operation, with the power unit in operation, of electric bicycles on bikeways, as defined under s. 84.60 (1) (a), under its jurisdiction.[10]

Note that this does not enable local governments to ban electric bicycles outright or to restrict classes of e-bikes differently from one another.

When developing a state law or municipal ordinance, the Greater Madison MPO encourages elected officials to consider the impact of the proposed law on:

- Low-income individuals and families.
- Individuals, including youth and seniors, with limited mobility.
- Individuals, including youth and seniors, who can't drive or don't own or have access to a motor vehicle.
- Pedestrian safety, including people with disabilities.

Additional Notes & Recommendations

- A driver's license is not required to operate legal classes of e-bikes, e-scooters, and micromobility devices.
- A class M driver's license is required to operate e-motos that have been registered as motor vehicles; e-motos that have not been registered as motor vehicles may only be ridden on private property.
- Pedestrian right of way should continue to be strengthened, so that rules are clear that any person riding a human-powered bicycle, e-bike, e-scooter, or micromobility device upon a sidewalk, shared-use path, or trail must yield the right of way to pedestrians and users of other power-driven mobility devices.
- Rather than attempting to set speed limits on various paths that can create additional confusion and conflict between laws, rules should continue to be promulgated that indicate that no person shall operate a human-powered bicycle, e-bike, e-scooter, or micromobility device at a speed greater than is reasonable and prudent under existing conditions.
- Helmet use by individuals riding bicycles, e-bikes, e-scooters, and micromobility devices is strongly encouraged, but should not be required. Helmets significantly reduce the risk of head injuries if a crash occurs.
- E-bikes, e-scooters, and micromobility devices must be equipped with a functioning white front headlight and rear reflector or red taillight during nighttime use.
- Adopting bans on the operation of e-bike power units on bikeways under Wisconsin Statutes 349.18(4)(a) is not recommended.

This statute does not enable any other restrictions on e-bikes compared to non-electric bicycles.

- If trail or path speed limits are set, they should be set no lower than at 20 mph.
- Personal responsibility is essential, regardless of facility or type of device being used, speed limit, or conditions.
- Education-focused efforts are preferred over punitive measures. Fines for minor violations should be modest, to avoid creating financial hardship, and unpaid fines should not result in incarceration under the provisions of Wis. Statute 30.04(1)(a).
- Electric bicycles capable of switching between, but not exceeding, legally defined Class 1, 2, and/or 3 e-bike modes should be considered e-bikes. Vehicles with one or more modes which exceed the limits of legally defined Class 1, 2, and 3 e-bikes should be considered e-motos/OCEVs.

Recommended State Restrictions

- No person shall sell any e-bike, e-scooter, or micromobility device designed to be easily modifiable to an e-moto. This includes any dongles, apps, or other means of reprogramming or removing speed or power limitations on the device.
- Any bicycle that is modified by its owner or a business must be labeled as a Class 1, 2, or 3 e-bike. No bicycle may be modified to become an out-of-class electric vehicle or e-moto.
- No person shall sell any "crossover" devices such as e-motos with pedals and one or more settings limiting speeds to 20 mph or less and other settings with higher speed limits. These vehicles may only be ridden on private property, unless they are registered as motor vehicles. They may not be ridden in any bike

10 Wisconsin Statutes 349.18(4)

lane, on sidewalks, or upon any off-street path or trail.

- False advertising of e-motos as "street legal" electric bicycles should be prohibited, and retailers of e-motos should be required to disclose to buyers the legal status of the device and where it may legally be operated.
- E-motos should be required to meet applicable motor vehicle (on-road) or consumer product (off-road) electrical and battery safety standards.
- People for Bikes has developed model e-moto legislation for states, which should be considered when developing legislation for Wisconsin.

Definitions & Statutes

Unless cited otherwise, definitions[11] and statutes appear as published on the Wisconsin Statutes and Annotations webpage on the date of drafting.

Text in italics is a summary of the relevant portions of the adopted text, not a direct quote of adopted text.

"Bicycle" means every vehicle propelled by feet or hands acting upon pedals or cranks and having wheels any 2 of which are not less than 14 inches in diameter.[12]

Note that this definition does not limit the number of wheels on the vehicle; it therefore includes tricycles and any other applicable vehicle with two or more wheels.

"Bicycle lane" means that portion of a roadway set aside by the governing body of any city, town, village, or county for the exclusive use of bicycles, electric scooters, electric personal assistive mobility devices, or other modes of travel where permitted under s. 349.23 (2) (a), and so designated by appropriate signs and pavement markings.[13]

"Bicycle way" means any path or sidewalk or portion thereof designated for the use of bicycles, electric scooters, and electric personal assistive mobility devices by the governing body of any city, town, village, or county.[14]

Under Wisconsin law[15], there are three classes of electric bikes (e-bikes):

"Electric bicycle" means a bicycle that is equipped with fully operative pedals for propulsion by human power and an electric motor of 750 watts or less and that meets the requirements of any of the following classifications:

a. Class 1 electric bicycle is an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.
b. Class 2 electric bicycle is an electric bicycle that may be powered solely by the motor and is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour.
c. Class 3 electric bicycle is an electric bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.

Authority to regulate the operation of the power unit of electric bicycles: The governing body of a municipality or county may by ordinance prohibit the operation, with the power unit in operation, of electric bicycles on bikeways, as defined under s. 84.60 (1) (a), under its jurisdiction.[16]

"Electric personal assistive mobility device" means a self-balancing, two-nontandem-wheeled device that is designed to transport only one person and that has an electric propulsion system that limits the maximum speed of the device to 15 miles per hour or less.[17]

Electric Personal Assistive Mobility Devices on Roadways & Sidewalks

(a)

1. Except as otherwise prohibited in this chapter, a person may operate an electric personal assistive mobility device upon any roadway or sidewalk that is under the jurisdiction of the department.
2. Except as provided in s. 349.236 (1) (c), the department may by rule prohibit electric personal assistive mobility devices upon any roadway under its jurisdiction for which the speed limit is more than 25 miles per hour, and may by rule prohibit such devices upon any sidewalk under its jurisdiction. This

11 Wisconsin Statutes 340.01 Vehicles - General Provisions, Words and phrases defined.
12 Wisconsin Statutes 340.01(5)
13 Wisconsin Statutes 340.01(5e)
14 Wisconsin Statutes 340.01(5s)
15 2019 Wisconsin Act 34 https://docs.legis.wisconsin.gov/2019/related/acts/34
16 Wisconsin Statutes 349.18(4)
17 Wisconsin Statutes 340.01(15pm)

subdivision does not apply upon any sidewalk at a permanent or temporarily established driveway.

(b) A person may operate an electric personal assistive mobility device upon any roadway under the jurisdiction of a local authority, subject to any prohibitions specified by municipal ordinance enacted under s. 349.236.[18]

"Electric scooter" (e-scooter) means a device weighing less than 100 pounds that has handlebars and an electric motor, is powered solely by the electric motor and human power, and has a maximum speed of not more than 20 miles per hour on a paved level surface when powered solely by the electric motor. "Electric scooter" does not include an electric personal assistive mobility device, motorcycle, motor bicycle, electric bicycle, or moped.[19]

Electric Scooters on Roadways, Sidewalks, Bicycle Lanes, and Bicycle Ways

(a) Except as otherwise prohibited in this chapter, a person may operate an electric scooter upon any roadway, sidewalk, bicycle lane, or bicycle way that is under the jurisdiction of the department or that is open to operation of bicycles.

(b) A person may operate an electric scooter upon any roadway, sidewalk, bicycle lane, or bicycle way under the jurisdiction of a local authority, subject to any restrictions or prohibitions specified by municipal ordinance enacted under s. 349.237.

(c) No person may operate an electric scooter upon any roadway, sidewalk, bicycle lane, or bicycle way at a speed in excess of 15 miles per hour.[20]

Authority to regulate electric scooters: The governing body of any municipality or county may, by ordinance, regulate the rental and operation of electric scooters in a manner consistent with the regulation of bicycles in the municipality or county, except that the governing body of any municipality or county may do any of following:

1. Restrict or prohibit the operation of electric scooters on any roadway under its jurisdiction having a speed limit of more than 25 miles per hour.
2. Restrict or prohibit the operation of electric scooters on any sidewalk or bicycle way under its jurisdiction.
3. Establish requirements for and limitations on the parking of electric scooters on roadways, sidewalks, bicycle lanes, or bicycle ways under its jurisdiction.
4. Restrict or prohibit the short-term commercial rental of electric scooters to the general public.[21]

"In-line skates" means skates with wheels arranged singly in a tandem line rather than in pairs.[22]

"Moped" means any of the following motor vehicles capable of speeds of not more than 30 miles per hour with a 150-pound rider on a dry, level, hard surface with no wind, excluding a tractor, a power source as an integral part of the vehicle and a seat for the operator:

1. A bicycle-type vehicle with fully operative pedals for propulsion by human power and an engine certified by the manufacturer at not more than 130 cubic centimeters or an equivalent power unit.
2. A motorcycle with an automatic transmission and an engine certified by the manufacturer at not more than 50 cubic centimeters or an equivalent power unit.

"Moped" does not include a motor bicycle or electric bicycle.[23]

"Motor bicycle" means a bicycle to which a power unit that is not an integral part of the vehicle has been added to permit the vehicle to travel at a speed of not more than 30 miles per hour with a 150-pound rider on a dry, level, hard surface with no wind and having a seat for the operator. "Motor bicycle" does not include an electric bicycle.[24]

"Motorcycle" means a motor vehicle originally manufactured with motive power, a seat or saddle requiring the rider to sit astride, not more than 3 wheels in contact with the ground, steering controlled by handlebars, and acceleration and braking controlled with handle-

18 Wisconsin Statutes 346.94(18s)
19 Wisconsin Statutes 340.01(15ps)
20 Wisconsin Statutes 346.94(18s)
21 Wisconsin Statutes 349.237
22 Wisconsin Statutes 340.01(24m)
23 Wisconsin Statutes 340.01(29m)
24 Wisconsin Statutes 340.01(30)

bar and foot controls and that is capable of speeds in excess of 30 miles per hour.[25]

"Motor vehicle" means a vehicle, including a combination of 2 or more vehicles or an articulated vehicle, which is self-propelled, except a vehicle operated exclusively on a rail. "Motor vehicle" includes, without limitation, a commercial motor vehicle or a vehicle which is propelled by electric power obtained from overhead trolley wires but not operated on rails. A snowmobile, an all-terrain vehicle, a utility terrain vehicle, an electric scooter, and an electric personal assistive mobility device[26] shall be considered motor vehicles only for purposes made specifically applicable by statute. "Motor vehicle" does not include an electric bicycle.[27]

"Other power-driven mobility device" (OPDMD) means any mobility device powered by batteries, fuel, or other engine that is used by individuals with mobility disabilities for the purpose of locomotion, including golf cars, electronic personal assistance mobility devices such as the Segway® PT, or any mobility device designed to operate in areas without defined pedestrian routes, but that is not a wheelchair. When an OPDMD is being used by a person with a mobility disability, different rules apply under the ADA than when it is being used by a person without a disability.[28]

"Pedestrian" means any person afoot or any person in a wheelchair, either manually or mechanically propelled, or other low-powered, mechanically propelled vehicle designed specifically for use by a physically disabled person, or a person using an OPDMD, but does not include any person using an electric scooter, or an electric personal assistive mobility device.[29]

"Play vehicle":

a. Means a coaster, skateboard, roller skates, sled, toboggan, unicycle or toy vehicle upon which a person may ride.
b. Does not include in-line skates or electric scooters.[30]

"Vehicle" means every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, except railroad trains. A snowmobile, an all-terrain vehicle, a personal delivery device, an electric scooter, and an electric personal assistive mobility device shall not be considered a vehicle except for purposes made specifically applicable by statute.[31]

346.78 Play vehicles not to be used on roadway.

Prohibits the use of play vehicles in roadways except where crossing in a crosswalk.

346.79 Special rules applicable to bicycles. Whenever a bicycle is operated upon a highway, bicycle lane or bicycle way the following rules apply: …

(5) No person may ride a moped or motor bicycle with the power unit in operation upon a bicycle way.

346.80 Riding bicycle, electric scooter, or electric personal assistive mobility device on roadway.

Specifies circumstances under which riders may ride two abreast, where in travel lanes they should ride, and allows prohibitions against riding on designated streets and highways.

346.803 Riding bicycle, electric scooter, or electric personal assistive mobility device on bicycle way.

Specifies requirements such as giving audible warning when passing, obeying traffic signals and signs, and yielding to other users.

346.804 Riding bicycle on sidewalk. When local authorities under s. 346.94 (1) permit bicycles on the sidewalk, every person operating a bicycle[32] upon a sidewalk shall yield the right-of-way to any pedestrian and shall exercise due care and give an audible signal when passing a bicycle, electric scooter, or electric personal assistive mobility device rider or a pedestrian proceeding in the same direction.

346.805 Riding electric scooter or electric personal assistive mobility device on sidewalk. Except as

25 Wisconsin Statutes 340.01(32)

26 Where electric scooters and electric personal assistive mobility devices are treated differently ("purposes made specifically applicable statute") includes local authority to regulate e-scooters but not electric personal assistive devices (349.237).

27 Wisconsin Statutes 340.01(35)

28 ADA Title II and Title III rule effective March 15, 2011. https://www.ada.gov/resources/opdmds/

29 Wisconsin Statutes 340.01(43)

30 Wisconsin Statutes 340.01(43m)

31 Wisconsin Statues 340.01(74)

32 Including e-bikes

provided in ss. 346.94 (18) (a) 2. and (18s), 349.236 (1) (b), and 349.237, a person may operate an electric scooter or an electric personal assistive mobility device upon any sidewalk. Every person operating an electric scooter or an electric personal assistive mobility device upon a sidewalk shall yield the right-of-way to any pedestrian or bicyclist[33] and shall exercise due care and give an audible signal when passing a bicycle or other electric scooter or electric personal assistive mobility device or a pedestrian proceeding in the same direction.

346.806 Special rules applicable to electric bicycles.

(1) Except as otherwise expressly provided, an electric bicycle and an operator of an electric bicycle shall be afforded all the same rights and privileges, and be subject to the same duties, provided in chs. 340 to 351 as a bicycle or an operator of a bicycle. An electric bicycle shall be considered a vehicle to the same extent as a bicycle.

33 Including e-bicyclists



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