

Segways

Segways were first introduced in 2001. They are referred to in law as "electric personal assistive mobility devices." They have two wheels that are parallel rather than tandem and handlebars that a standing operator uses for steering. They are designed to be self-balancing, which contrasts with the other two-wheeled lowspeed vehicles that require balancing by the vehicle operator. The latest Segways come in several models, having a top speed of 12.5 miles per hour and a range of up to roughly 25 miles.

To be considered an electric personal assistive mobility device under Minnesota law, a device must have two nontandem wheels, be able to transport only one person, use an electric motor, and have a maximum speed of 15 miles per hour on a flat surface. Minn. Stat. § 169.011, subd.26.

Operators of a Segway (or other electric personal assistive mobility device) have the same rights and responsibilities as pedestrians, with some additional requirements. Minn. Stat. § 169.212.





Image Sources: <u>http://upload.wikimedia.org/wikipedia/commons/9/93/Segwaygreen.jpg</u> http://upload.wikimedia.org/wikipedia/commons/1/10/Segway_x2.jpg



Electric-Assist Bicycles

These devices are only a sampling of what is on the market. On average, they can operate at speeds of 13-20 miles per hour. The bicycles can be pedaled faster than 20 miles per hour but the motor assistance will stop after the bike exceeds 20 miles per hour. However, not all electric bicycles operate within these parameters. The rider's weight, terrain, and battery charge are factors in the bicycle's overall speed.

To be classified as an electric-assisted bicycle in Minnesota, it must have a saddle and operable pedals, two or three wheels, and an electric motor of up to 1,000 watts, as well as meet certain federal motor vehicle safety standards. The motor must disengage during braking and have a maximum speed of 20 miles per hour (whether assisted by human power or not). Minn. Stat. § 169.011, subd. 27.



Image Sources:

<u>http://emotoev.com/products/bicycles/new_models/delta/index.html</u> <u>http://www.x-tremescooters.com/electric_bicycles/xb300li/xb300li.html</u> http://worksmancycles.com/shopsite_sc/store/html/page47.html

Single-user Electric Devices



Electric Foot Scooters

The electric scooters are similar in speed to the electric bicycles. The same factors (rider's weight, terrain, and battery charge) determine the average speed of these devices. Due to the wide variability in makes and models, not all electric scooters can be shown.





Images Sources:

http://upload.wikimedia.org/wikipedia/commons/1/16/Boy on electric scooter 5988226382 e289654724 z.jpg http://upload.wikimedia.org/wikipedia/commons/7/77/Tricyclopod.jpg http://upload.wikimedia.org/wikipedia/commons/9/9e/Escooter.JPG



Action Trackchair

The Action Trackchair is 32.5 inches wide and weighs approximately 350 pounds. The electric motor allows for a maximum speed of 3 to 4 miles per hours and a range of approximately 6 hours.





Images Sources: <u>https://commons.wikimedia.org/wiki/File:MCAA_benefits_Semper_Fi_Fund_130919-M-OK471-005.jpg</u> https://commons.wikimedia.org/wiki/File:MCAA_benefits_Semper_Fi_Fund_130919-M-OK471-004.jpg