

Motorized Scooters and Other Low-Power Vehicles

There has been an upsurge in the number and types of motorized scooters and other low-power vehicles available in Minnesota, from recreational vehicles intended primarily for children to more powerful vehicles aimed at young adults and even seniors. Minnesota law prohibits many of these types of vehicles from being operated on streets and highways.

This information brief describes the various types of vehicles and their status under Minnesota law and looks at how some other states have addressed them.

There are many types of motorized scooters and low-power vehicles

A wide variety of motorized scooters (sometimes called go-peds) are now on the market, including gasoline-powered and electric-powered models.

Electric scooters. These are usually lightweight (as light as 22 pounds) platforms with a battery-operated motor of 100 to 750 watts. They are usually designed to have the operator stand, but many come with seats and some come with removable seats. Their maximum speed is from 8 to 25 miles per hour and the range on a single charge is generally from 15 to 30 miles. Tires are from 6 inches to 12 inches in diameter. They usually have only a foot-operated rear brake, although some also have a hand-operated front brake. Steering is with front-mounted handlebars. Their prices can range from under \$200 to over \$1,200.

Gasoline-powered scooters. Gasoline-powered scooters are even more varied than electric scooters. Vehicles marketed as scooters may be as simple as gasoline-powered versions of

lightweight electric scooters, with four wheels, handlebars, and small (as low as 26 cc) rear-mounted two-cycle gasoline engines that are similar to lawnmower engines. At the other end of the spectrum, some can resemble small motorcycles (some are called “mini-choppers”). Their maximum speeds are generally higher than those of electric scooters, from 15 mph to as high as 40 mph or more. Front and rear brakes are more common than with electric scooters. Gas scooters are somewhat more expensive than electric scooters with prices ranging from a low of about \$300 to over \$2,500.

There are several other kinds of low-powered and relatively lightweight vehicles, some of which have been around for years.

Motor scooters. These are the familiar “step-through” scooters often called Vespas after their best-known manufacturer. They are legally classified and registered as motorcycles, but are generally lighter (200 lbs.), smaller (145 cc engine), and slower (58 mph top speed) than the average motorcycle.

Mopeds. Motorized bicycles and bicycles with electric motors are both often referred to as “mopeds.”

- “Electric-assisted bicycles” are bicycles with both operable pedals and an electric motor of up to 1,000 watts with a maximum speed of 20 mph.
- “Motorized bicycles” are referred to as bicycles in law but do not require operable pedals. They are propelled by a motor of up to 50 cc and 2 horsepower, with a maximum speed of 30 mph.

Segways. Segways have been introduced into the retail market only within the past two years. They are referred to in law as “electric personal assistive mobility devices.” They have two wheels that are parallel rather than in tandem, and handlebars that the standing operator uses for steering. Under Minnesota law they are limited to a maximum speed of 15 mph.

Electric carts. These are golf carts and similar vehicles that have electric motors. Their use is expanding beyond just golf courses. They are increasingly being used for personal mobility, in which case they are sometimes referred to as “neighborhood electric vehicles.”

Minnesota law classifies these vehicles as “motor vehicles” and prohibits many of them from public streets and highways

The most important thing about motorized scooters and other low-power vehicles is that they are considered “motor vehicles” under Minnesota law. Only human-powered vehicles such as bicycles and push scooters are outside this classification.

Motorized scooters and other low-power vehicles are not subject to state regulation while they are being operated on private land, including private driveways. However, once they venture

onto streets, roads, and even alleys they are subject to state, and in some places local, regulations.

Motorcycles are subject to the following state requirements:

- Liability insurance required up to \$25,000
- Vehicle must be registered and licensed at an annual tax of \$10
- Helmet required for operators and passengers up to age 18
- Driver's license with two-wheeled vehicle endorsement required
- Vehicle must have front and rear lights and rear brake
- Operation on streets is allowed but not sidewalks

Under Minnesota law any electric or gasoline-powered scooter that has a seat and no more than three wheels is a motorcycle, excluding only motorized bicycles. However, owners of many of the smaller scooters could not register them as motorcycles even if they wanted to. Minnesota law requires every motor vehicle to have a certificate of title in order to be registered, and most small scooters lack the type of identification such as a vehicle identification number (VIN) that is required before a title may be issued. In most cases a VIN could not be issued because the vehicle lacks safety equipment that federal regulations require.

Motorized bicycles must be registered and licensed at an annual tax of \$6. No title is required. They may be operated on streets and highways if registered, but the operator needs either a driver's license or a motorized bicycle operator permit. They may not be operated on a sidewalk except to cross it. The vehicle must have a headlight and, if operated at night, a taillight. If the vehicle is an electric-assisted bicycle an operator must wear a helmet when riding on a street or highway; if it is a motorized bicycle a helmet is required only up to age 18. Operators of motorized bicycles must wear eye protection but operators of electric-assisted bicycles need not do so. Headlights and taillights are required for nighttime operation.

Segways do not require registration, a driver's license, or lights (braking system is built in). They may be operated on sidewalks but not on streets unless no passable sidewalk is available.

A vehicle that does not fall into any of these categories, even a scooter that is not equipped with a seat, is simply a motor vehicle like any other. As such it must be registered and licensed, the operator must have a driver's license, full insurance coverage is required, and the vehicle must be equipped with lights and brakes at both front and rear. As with motorcycles, many of the smaller scooters could not be registered as motor vehicles even if they meet state equipment requirements since they lack a VIN.

Electric carts are treated like any other motor vehicle, requiring registration and a driver's license to be operated on Minnesota streets and highways. Federal motor vehicle safety standards require carts that have a maximum speed of 20 mph or more to have headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brakes, rearview mirrors, windshields, seat belts, and vehicle identification numbers. These requirements also apply to motor vehicles used on Minnesota highways, and most golf carts don't meet them. Under Minnesota law the only circumstances under which they may legally be operated on streets and

highways without being registered or complying with equipment requirements is when they are driven on designated streets and highways by a disabled person with a locally issued permit.

Some cities have adopted ordinances to regulate scooters

Some Minnesota cities have passed or are considering local ordinances to regulate scooters and low-powered vehicles. Most notable is Bloomington, whose ordinance applies to trail bikes, mini-bikes, go-carts, scooters, and power skateboards with motors of 25 cc or less and a maximum speed of over 20 mph. They are prohibited from sidewalks and publicly owned lands such as school grounds and parks, and allowed on public streets only if licensed. No one under age 14 may cross a street on one of these vehicles. They may be operated only from 8 a.m. to 10 p.m. Equipment requirements include brakes, mufflers, headlamp, and taillight.

Wheelchairs, powered or not, are in a separate category

Under Minnesota law persons in wheelchairs are considered pedestrians rather than vehicle operators and have the same rights and responsibilities as pedestrians. This is true whether the wheelchair is powered or not. Wheelchairs are required to remain on sidewalks and stay off streets except to cross them or where a passable or useable sidewalk is not available.

States have only begun to address the legal status of these vehicles

Most states are just beginning to address the question of how their statutes deal with motorized scooters and low-powered vehicles. An exception is California, which passed a major motorized scooter law in 2000.

California motorized scooter law. The California law defines “motorized scooter” as any two-wheeled device that has handlebars, is designed to be stood or sat upon by the operator, and is powered by an electric motor or other power source that is capable of propelling the device with or without human propulsion. The definition excludes motorcycles, segways, “motor-driven cycles” (motorcycles with engines under 150 cc), motorized bicycles, and “toys.” California law defines a toy as “an article designed and made for the amusement of a child or for his or her use in play.” Since some motorized scooters are marketed for children as young as eight years, this last exclusion could be problematic.

The new California law generally gives operators of powered scooters the same rights and responsibilities as the driver of any other vehicle, with several notable exceptions:

- The minimum age for operation is 16 but a driver’s license is not required
- The scooter need not be registered, licensed, or insured
- Maximum speed is 15 mph
- Front and rear lights and side reflectors are required
- A brake on at least one wheel is required

- All operators are required to wear an approved helmet
- Operators are prohibited from riding on sidewalks and on highways with a speed limit of 25 mph unless it is within a bicycle lane

Electric vehicle laws. The U.S. Department of Energy reports that “Since [1998, when federal rules regulating equipment on these vehicles became effective], 37 states have passed legislation allowing these vehicles to be driven on roads with posted speed limits of 35 miles per hour or lower.”

Minnesota legislation. Minnesota’s first venture into regulation of motorized scooters was in 2004, when the Senate passed legislation to regulate powered scooters. This provision defined a motorized scooter as a device with handlebars and wheels up to 10 inches in diameter, with or without a seat, powered by either an internal combustion engine or electric motor. Segways, motorcycles, motorized bicycles, and electric-assisted bicycles were excluded from this definition. Operators of these scooters were generally given the same rights and responsibilities as bicycle riders, except for the following:

- they were prohibited from sidewalks
- the minimum age for operation was set at 12 years
- operators under age 18 were required to wear helmets

Like bicycles, motorized scooters were required to have headlights and taillights if being used at night.

This legislation was not heard in the House and did not become law, but the issue is likely to be raised again in future legislative sessions.

For more information about vehicles, visit the transportation area of our web site, www.house.leg.state.mn.us/hrd/issinfo/trans.htm.