INFORMATION MEMO

Special Vehicles Operating on City Streets

Vehicles showing up on or along city streets and sidewalks include all-terrain vehicles (ATVs), golf carts, motorcycles, autocycles, pedicabs, rickshaws, mini-trucks, motorized foot scooters, pocket bikes, mini-motorcycles, motorized bicycles, and electric-assisted bicycles. Learn what traffic and vehicle regulations state and federal laws impose, and additional possible regulations cities can enact through local ordinances. Links to model ordinances regulating recreational and special vehicles.

RELEVANT LINKS:

I. Laws controlling particular vehicles

Most traffic and vehicle regulations are provided in state and federal law. This memo focuses only on particular vehicles, applicable federal and state laws, and possible additional local regulations.

II. State law definitions and regulations

A. State law: definitions

The Department of Natural Resources (DNR) regulates the operation of many types of vehicles, some defined and some not. The six main vehicle categories, and those that are defined, include off-highway motorcycles (OHMs), off-highway vehicles (OHVs), off-road vehicles (ORVs), snowmobiles, recreational motor vehicles and all-terrain vehicles (ATVs). Some vehicles fit multiple categories. For example, an ATV may be an off-highway vehicle and a recreational motor vehicle depending on where and how it is being operated. State DNR law defines these vehicles as follows.

- Off-highway motorcycle (OHM): A motorized, off-highway vehicle traveling on two wheels and having a seat or saddle designed to be straddled by the operator and handlebars for steering control, including a vehicle that is registered for highway use if it is also used for off-highway operation on trails or unimproved terrain. An OHM, commonly known as a dirt bike, may obtain dual registration for use off road or on public ways, if it is modified to meet federal and state traffic regulations such as emission, noise and lighting standards. If so modified, and OHM meets the definition of a motor vehicle. Off-highway motorcycle does not include a golf cart; mini truck; dune buggy; go-cart; moped; pocket bike; gray market vehicle; or vehicle designed and used specifically for lawn maintenance, agriculture, logging, or mining purposes.
• **Off-highway vehicles** (OHVs): defined as an off-highway motorcycle, an off-road vehicle, or an all-terrain vehicle, may operate only in certain public areas and on designated OHV trails.

• **Off-road vehicles** (ORVs): A motor-driven recreational vehicle capable of cross-country travel on natural terrain without benefit of a road or trail. Many vehicles are specifically exempted from the definition of an off-road vehicles, including but not limited to snowmobiles, all-terrain vehicles, motorcycles, watercraft, farm vehicles being used for farming; vehicles used for military, fire, emergency, or law enforcement purposes; a construction or logging vehicle used in the performance of its common function; a motor vehicle owned by or operated under contract with a utility, whether publicly or privately owned, when used for work on utilities; a commercial vehicle being used for its intended purpose; snow-grooming equipment when used for its intended purpose; or an aircraft.

• **Snowmobiles**: a self-propelled vehicle designed for travel on snow or ice and steered by skis or runners. State law classifies snowmobiles as recreational vehicles.

• **All-terrain vehicles** (ATVs): A motorized vehicle with: not less than three, but not more than six low pressure or non-pneumatic tires; a total dry weight of 2,000 pounds or less; and a total width from outside of tire rim to outside of tire rim that is 65 inches or less. All-terrain vehicle includes a class 1 all-terrain vehicle and class 2 all-terrain vehicle. All-terrain vehicle does not include a golf cart, mini-truck, dune buggy, or go-cart or a vehicle designed and used specifically for lawn maintenance, agriculture, logging, or mining purposes.  
  **All-terrain vehicle, Class 1**: An all-terrain vehicle that has a total width from outside of tire rim to outside of tire rim that is 50 inches or less.  
  **All-terrain vehicle, Class 2**: An all-terrain vehicle that has a total width from outside of tire rim to outside of tire rim that is greater than 50 inches but not more than 65 inches.

• **Recreational motor vehicles**: As used in DNR law, this catch all term means any self-propelled vehicle and any vehicle propelled or drawn by a self-propelled vehicle used for recreational purposes, including but not limited to snowmobiles, trail bikes, ATVs, hovercraft, and other motor vehicles licensed for highway operation which is being used for off-road recreational purposes.

**B. State law: operating regulations**

1. **Recreational motor vehicles**

State law regulating where “recreational motor vehicles” may operate is specific:
2. **Recreational vehicles on public waters**

The DNR governs the operation of such vehicles on public waters. In this context, a recreational vehicle is defined as an:

- ATV.
- Off-highway motorcycle.
- Off-road vehicle.

Subject to DNR approval, a city may, by ordinance, regulate the operation and the period of time within which recreational vehicles may operate on frozen public waters in their boundaries. According to the DNR, the best way to do this is to contact them and use their documents as needed.

3. **Off-highway vehicles**

State regulations of OHVs apply outside of city boundaries. A person may not operate an OHV on a trail or public land that is designated or signed for non-motorized use only; on restricted areas within public lands that are posted or where gates or other clearly visible structures are placed to prevent unauthorized motorized vehicle access; in public waters, except as specifically authorized by DNR law or rule; in a state park, scientific and natural area, or wildlife management area; in a DNR identified calcareous fen (rare and distinctive wetlands) or other wetlands.

Cities do not generally regulate OHVs because, by definition, they operate off-road. If an OHV, such as a motorcycle or a trail bike operates on public roads, it is subject to state law governing motorcycles. City regulation of ATVs (which may be defined as an ‘off-highway vehicle’) is discussed subsequently.

4. **Off-highway motorcycles**

A person may not drive or operate an off-highway motorcycle at speeds that are not reasonable under the conditions; in a careless, reckless, or negligent...
manner so as to endanger or to cause injury or damage to a person or property; in a tree nursery or planting in a manner that damages or destroys growing stock; without a hand or foot brake; at a speed exceeding ten miles per hour on the frozen surface of public waters within 100 feet of a person fishing or a fishing shelter; in a manner that violates operation rules; anywhere in this state or on the ice of any boundary water of this state while under the influence of alcohol or a controlled substance, or on an airport.

A county, city, or town, may regulate the operation of off-highway motorcycles on public lands, waters, and property under its jurisdiction other than public road rights-of-way within its boundaries, by resolution or ordinance and by giving appropriate notice, provided that the ordinance fits the following criteria:

- It must be consistent with state law and rules.
- It may not impose a fee for the use of public land or water under the jurisdiction of either the DNR or another state agency, or for the use of an access to it owned by the state, a county, or a city.
- It may not require an off-highway motorcycle operator to possess a motor vehicle driver's license while operating an off-highway motorcycle.

5. Off-road vehicles

According to state DNR law, a person may not drive or operate a vehicle off-road: at a rate of speed greater than is reasonable under the circumstances; in a careless, reckless, or negligent manner which may endanger or cause injury or damage to the person or property of another; without a functioning stoplight if so equipped; in a tree nursery or planting in a manner that damages or destroys growing stock; without a hand or foot brake or in a manner that violates rules; or on an airport.

Cities may, by ordinance, regulate the operation of off-road vehicles on public lands, waters, and property in city boundaries, other than public road rights-of-way within its boundaries, and by giving appropriate notice. The ordinance must meet the following criteria:

- It must be consistent with state law.
- It likely requires a public hearing or some notice before adoption.
- It may not impose a fee for the use of public land or water under the jurisdiction of the DNR or another agency of the state, or for the use of an access to the public land or water owned by the state, a county, or a city.
6. **Snowmobiles**

There are extensive regulations in state law and rule that apply to operating a snowmobile, which are beyond the scope of this memo. In summary, however, most snowmobiles must be registered with the state, and young people under the age of 18 must comply with specific restrictions. Cities may also regulate the operation of snowmobiles in city limits.

Cities may, by ordinance, allow two-way operation of snowmobiles on either side of the right-of-way of a street or highway under city jurisdiction, where the city, as road authority, determines that two-way operation will not endanger users of the street or highway or riders of the snowmobiles using the trail. Many cities use one ordinance to regulate operation of ATVs, snowmobiles, or other recreational vehicles using the same map for all such vehicles, discussed subsequently.

City ordinances must comply with state law. Any penalties in a local ordinance for a particular offense must match the penalty in state law for that same offense. Cities must not charge fees to snowmobile operators and must not require that operators possess a driver’s license while operating the snowmobile. Cities are not authorized to license snowmobiles.

7. **ATVs**

State law covers operation of ATVs on public (non-city) lands extensively. Basically, Minnesota law prohibits the riding of Class 1 ATVs in ditches (or rights-of-way) south of the agriculture line, roughly from Moorhead to Taylors Falls along Highway 10 and Highway 95, between April 1 and Aug. 1. This does not apply to ATVs licensed and used for agricultural purposes.

According to the DNR, Class 2 ATVs may not be operated on the shoulder of a state trunk highway.

Note that utility task vehicles (UTVs) fit the definition of a Class 1 or Class 2 ATV based on the width of the tire rim. Due to larger sized tires, most UTVs fit the definition of a Class 2 ATV when used for recreational purposes.

Cities have choices with respect to regulating Class 1 and 2 ATVs, including:

- Declining to regulate ATVs in the city and, by doing so, allowing state law regulating operation of ATVs to apply to any county or state road right-of-way in city boundaries.
- After a public hearing, prohibit operation of ATVs altogether in city boundaries.
- Allowing operation of ATVs on city streets by permit in the same way golf carts and mini-trucks are regulated and discussed below.
a. Regulation by resolution or ordinance

If a city council chooses to regulate ATVs under state law pertaining to the Department of Natural Resources, it must pass a resolution or an ordinance consistent with state law and rule.

- The city council must likely first hold a public hearing.
- An ordinance may not impose a fee for the use of public land or water under the jurisdiction of either the Department of Natural Resources or other agency of the state, or for access to land owned by the state county or city.
- An ordinance may not require an all-terrain vehicle operator to possess a motor vehicle driver's license while operating an all-terrain vehicle.

In theory, councils may pass ordinances allowing both ATV operation on city streets by permit—and ATV operation in the right-of-way.

b. Simultaneous city regulation of ATVS and snowmobiles

Some cities pass an ordinance combining the use of ATVs and snowmobiles along the same city street right-of-ways. Many cities use a map of the city to designate specific streets in the city where either ATVs or snowmobiles or both may operate in the right-of-way. This may include the larger Class 2 ATVs.

III. City regulation

A. Regulating golf carts, UTVs, ATVs, and mini-trucks (special vehicles)

Cities may adopt an ordinance permitting the operation of golf carts, smaller ATVs, utility task vehicles, and mini-trucks on city streets. This is a local decision, so if a city does not specifically permit the use of these special vehicles, they may not operate on city streets. Note that city regulation of special vehicles does not apply to their use on private property. If vehicles operating on private property cause other problems, such as excessive noise, it may become a nuisance issue, but the operation of the vehicles on private property is not otherwise subject to city regulation. Descriptions of the special vehicles cities may regulate by permit are as follows.
1. **Golf carts**

The term “motorized golf carts” is not further defined in state law. Regardless, operation of a motorized golf cart on city streets may only be done with a city-issued permit. There are many types of golf carts, including electric and gas powered, but all generally have a small wheel base and are not completely enclosed.

2. **ATVs**

For permitting purposes, an “all-terrain vehicle” means a motorized vehicle with not less than three, but not more than six low pressure or non-pneumatic tires; a total dry weight of 2,000 pounds or less; and a total width from outside of tire rim to outside of tire rim that is 65 inches or less. It includes a class 1 and class 2 ATVs.

3. **Utility task vehicles**

State law was amended in 2011 to allow cities to issue permits to operate utility task vehicles on city streets. As with the other special vehicles—motorized golf carts, all-terrain vehicles, or mini-trucks—operation of a utility task vehicle on city streets is authorized only by a city-issued permit. A UTV is a side-by-side, four-wheel drive, off-road vehicle that has four wheels, is propelled by an internal combustion engine with a piston displacement capacity of 1,200 cubic centimeters or less, and has a total dry weight of 1,800 but less than 2,600 pounds. UTVs differ from ATVs; they are heavier, have side-by-side front seats, and some sort of roof structure.

4. **Mini-trucks**

A “mini-truck” is a motor vehicle that:

- Has four wheels.
- Is propelled by an electric motor or an internal combustion engine with an enclosed cabin and a seat for the vehicle operator.
- Commonly resembles a pickup truck or van, including having a cargo area or bed located at the rear of the vehicle.
• Was not originally manufactured to meet federal motor vehicle safety standards, but must have head lamps; an exterior mirror mounted on the driver’s side of the vehicle; either an exterior mirror mounted on the passenger’s side of the vehicle or an interior mirror; a windshield; a seat belt for the driver and front passenger; and a parking brake.

B. City permitting ordinance

City regulation of these special vehicles requires a permitting scheme. Cities may issue permits as spelled out in a local ordinance so residents may operate mini-trucks, golf carts, UTVs, or ATVs on designated roadways under city jurisdiction. Such ordinances must:

• Regulate only what the state law allows a city to regulate.
• Be merely additional and complementary to a state law by covering specifically what the statute covers generally.
• Provide the same procedural protections as the state law when prosecuting offenses covered by an ordinance.
• Not prohibit what state law allows.


One case provides some guidance concerning a local ordinance regulating golf carts. This is an unpublished case, which means it does not set precedent or carry much weight legally, but it may be instructive in general terms. The case found that uniformity is the goal of the state law on permitting special vehicles. So if cities allow special vehicles on city streets, the regulations should generally be consistent from city to city. The Minnesota Court of Appeals found that a city ordinance requiring that not only drivers but also passengers on a golf cart have a permit (and a disability) to ride on a golf cart goes beyond what state law allows. The Court found that state law pre-empts such a unique restriction by one city. Thus, local ordinances governing special vehicles may not prohibit what state law allows or allow what state law prohibits.

1. Permitting scheme in ordinance

Local ordinances must describe the application process for a permit. A city ordinance may also set out conditions a person must meet to get an operator’s permit. Cities may revoke permits if owners show an inability to operate the vehicles safely but cities must allow a person to dispute the revocation.

2. Specific vehicle requirements

State law includes some vehicle-specific requirements that must be in each city ordinance. Specifically, the local ordinance must:
• Require all golf carts to display a slow-moving vehicle emblem.
• Limit the operation of golf carts, UTVs, and ATVs on designated roadways to between sunrise and sunset, unless equipped with original equipment headlights, taillights, and rear-facing brake lights.
• Prohibit the operation of golf carts, UTVs, and ATVs in inclement weather or when visibility is impaired by weather, smoke, fog, or other conditions, or at any time when there is insufficient light to clearly see persons or vehicles on the roadway at a distance of 500 feet.
• Likely not require that UTV, ATV, and golf cart operators have a driver’s license. (However, operators must be old enough to purchase insurance on the special vehicle, discussed below).
• Require mini-trucks to have at least two headlamps, at least two tail lamps, and front and rear turn-signal lamps.
• Require mini-truck operators to have a valid driver’s license.
• Allow the operators of any special vehicle to cross any street or highway that intersects a designated roadway.
• Require all special vehicles to have rear-view mirrors.
• State law requires insurance—on all four types of special vehicles—that complies with insurance for a motorcycle. City ordinances must require evidence of insurance complying with state law. Therefore, a person must present proof of insurance on the golf cart, UTV, ATV, or mini-truck before the city issues them a permit. If a person cannot get insurance on a special vehicle, the state insurance plan offers coverage.

The model ordinances linked here set forth the basic requirements for permitting these special vehicles in a city. Before adopting any of these ordinances, a city should review it with its attorney to adapt it to the city’s specific circumstances. Because provisions in these ordinances are related to state statutes and affect state and federal constitutional rights, the city attorney should review any modifications to ensure they conform to current state law and legal decisions.

IV. Regulating neighborhood electric vehicles, medium-speed electric vehicles, and natural gas vehicles in cities

A “neighborhood electric vehicle” (NEV) is an electrically powered motor vehicle that has three or four wheels, and has a speed attainable in one mile of at least 20 miles per hour, but not more than 25 mph on a paved level surface.
“Medium-speed electric vehicles” (MSEV) are very similar, but must be completely enclosed and can go slightly faster than an NEV. An MSEV is an electrically powered four-wheeled motor vehicle that:

- Is equipped with a roll cage or crushproof body design.
- Can attain a maximum speed of 35 mph on a paved level surface.
- Is fully enclosed and has at least one door for entry.
- Has a wheelbase of 40 inches or greater and a wheel diameter of 10 inches or greater.
- Meets or exceeds regulations in the Code of Federal Regulations, title 49, section 571.500, and successor requirements, except with respect to maximum speed.

Federal law, referenced in Minnesota statutes, requires that NEVs or MSEVs operating on public streets and highways meet these safety and equipment standards.

State law also governs operation of these small car-like vehicles on public roadways, allowing operation only on a street or highway with a speed limit less than 35 mph (except to make a direct crossing of that street or highway). A person may operate a three-wheeled neighborhood electric vehicle without a two-wheeled vehicle endorsement, provided the person has a valid driver's license. State law also gives cities the authority to prohibit or further restrict operation of NEVs and MSEVs on city streets, but gives no particular instruction on how cities might do this. Best practice suggests consultation with the city attorney before further regulating these tiny cars.

“Natural gas vehicle” or “NGV” means a motor vehicle that is capable of being propelled by natural gas, including compressed natural gas and liquefied natural gas. An NGV may exceed typical weight restrictions. State and federal law regulate NGVs.

V. Other vehicles subject to limited city regulation

Some low-power vehicles are subject to limited city regulation. Cities cannot generally prohibit use of non-motorized bicycles, motorized foot scooters (like motorized Razor™ scooters) pocket bikes, mini-motorcycles, motorized bicycles, or electric-assisted bicycles. State law governs operation of these vehicles on public roadways but cities may also regulate where some of these vehicles operate with city boundaries.
A. Bicycles and electric-assisted bicycles

A “bicycle” is defined by state law to be any device capable of being propelled solely by human power upon which any person may ride, having two tandem wheels and including any device generally recognized as a bicycle though equipped with two front or rear wheels. The term “bicycle” includes electric-assisted bicycles which are bicycles with electric motors that travel up to 20 mph. Electric-assisted bikes have additional regulation in state law.

The term “bicycle” does not include mopeds, scooters, motorized foot scooters, or similar devices. “Bicycles” are also not be confused with motorized bicycles which have a gas or electric motor and travel between 20 and 30 mph at most.

1. Bicycles in general

Persons operating bicycles have all of the rights and duties applicable to the driver of any other vehicle, except as provided by law. A city cannot prohibit persons from riding in the road, even if a bicycle path is available.

State law governs bicycle tires and brakes. Persons operating a bicycle upon a roadway are required to ride as close as practicable to the right-hand curb or edge of the roadway, with certain exceptions. Cities may, by ordinance, prohibit riding a bike on local sidewalks. A person riding a bike on the shoulder of a roadway must travel in the same direction as the adjacent vehicular traffic.

Bicycle events, parades, contests, or racing on a highway are legal if state or local authorities having jurisdiction over that highway approve the event. Participants in an approved bicycle highway event may be exempt from complying with traffic laws if traffic control is adequate to assure the safety of all highway users.

A city may, by ordinance, designate any roadway or portion of a roadway under its jurisdiction as a bicycle lane, and designate any sidewalk or portion thereof under its jurisdiction as a bicycle way, provided the designation does not destroy a pedestrian way or pedestrian access.

A city that designates a bicycle way or bicycle lane may:

- Designate the type and character of vehicles or other modes of travel that are allowed on the lanes or ways, provided this operation is not inconsistent with the safe use and enjoyment of bicycles.
- Establish priority rights of way on the lane or way, and otherwise regulate the use of the lane or way.
• Paint lines, construct curbs, or establish other physical separations to exclude the use of the lane or way by vehicles other than those specifically permitted by the city.

The city council may, after public hearing, prohibit through-traffic on any highway or a highway portion if the council has designated it as a bicycle lane. Through-traffic on a trunk highway may not be prohibited. The city must erect and maintain official signs giving notice of the regulations and priorities, and must also mark all bicycle lanes and bicycle ways with appropriate signs.

The city council may, by resolution or ordinance, and without an engineering or traffic investigation, designate a safe speed, not lower than 25 mph, for any street or highway with an established bicycle lane. The ordinance or resolution designating a safe speed is effective when the city has erected appropriate signs designating the speed.

2. Electric-assisted bicycles in particular

An electric-assisted bicycle is defined as a bicycle that:

• Has two or three wheels that has a saddle and fully operable pedals for human propulsion.

• Meets the requirements of federal motor vehicle safety standards for a motor-driven cycle or for bicycles under federal law, and

• Has an electric motor that has a power output of not more than 1,000 watts; is incapable of propelling the vehicle at a speed of more than 20 miles per hour; is incapable of further increasing the speed of the device when human power alone is used to propel the vehicle at a speed of more than 20 miles per hour, and; disengages or ceases to function when the vehicle’s brakes are applied.

An electric-assisted bicycle that fits the above definition does not require a state-issued certificate of title.

A governing body may not prohibit or restrict operation of an electric-assisted bicycle on any bikeway, roadway, or shoulder unless the governing body determines that operation of the electric-assisted bicycle is not consistent with the safety or general welfare of bikeway, roadway, or shoulder users, or with the terms of any property conveyance. Otherwise, a person may operate an electric-assisted bicycle (like any other bicycle) on the shoulder of a roadway, on a bikeway, or on a bicycle trail if not otherwise prohibited by state law.
While no motorized vehicle may be operated on state trails designated for non-motorized use, this does not apply to electric-assisted bikes (or motorized devices operated by an individual with a physical disability). No one under age 15 may operate an electric-assisted bicycle anywhere in the state.

B. Pedicabs, rickshaws, or other similar vehicles

A statutory or home rule charter city that licenses and regulates small vehicle passenger service must do so by ordinance. The ordinance must, at a minimum, provide for driver qualifications, insurance, vehicle safety, and periodic vehicle inspections.

A statutory or home rule charter city that has adopted an ordinance complying with this subdivision may enforce the registration requirement found in state law.

A statutory or home rule charter city that regulates, by ordinance, pedicabs, rickshaws, or other similar vehicles used for passenger service may permit authorized vehicles to be equipped with an electric motor that meets the requirements for an electric-assisted bicycle under state law.

C. Motorized foot scooters

A “motorized foot scooter” is a device with handlebars that the operator can stand or sit on, powered by an internal combustion engine or electric motor that is capable of propelling the device with or without human propulsion. It has no more than two 12-inch diameter or smaller wheels and has an engine or motor that is capable of a maximum speed of 15 mph on a flat surface. If operated under conditions when motor vehicle lights are required, a scooter must have a headlight and a taillight that comply with standards established by the commissioner of Public Safety.

Motorized foot scooter operators have the same rights and responsibilities as bicycle riders. Operators must comply with the following rules: They must not operate on a sidewalk, except when necessary to enter or leave adjacent property. They must not carry passengers. They must be at least 12 years old. If under 18, they must wear a helmet.

A person operating a motorized foot scooter on a public street must ride as close as practicable to the right-hand curb or edge of the roadway, except in the following situations:

- When overtaking and passing another vehicle proceeding in the same direction.
When preparing for a left turn, in which case the operator shall stop and
dismount at the right-hand curb or right edge of the roadway, and shall
complete the turn by crossing the roadway on foot, as a pedestrian must
do.

When reasonably necessary to avoid impediments or conditions that
make it unsafe to continue along the right-hand curb or edge.

Cities cannot prohibit or regulate motorized foot scooters on city streets. A
city may, however, prohibit motorized foot scooters on a bike path, lane,
trail, or bikeway designated for non-motorized use only and governed by a
local ordinance.

**D. Motorized bicycle**

Similar in function to an electric-assisted bicycle, the more powerful
“motorized bicycle” or moped is a bicycle that fits the following parameters:

- Is propelled by an electric or a liquid fuel motor of a piston displacement
capacity of 50 cubic centimeters or less.
- Has a maximum of two brake horsepower.
- Can travel not more than 30 miles per hour on a flat surface with not
more than 1 percent grade in any direction when the motor is engaged.

A motorized bicycle does not include an electric-assisted bicycle as defined
above and in state law. Motorized bicycles are registered with the state as
“mopeds.”

Motorized bicycles are subject to state law governing operation of
motorcycles with several exceptions, including the following:

- Protective headgear includes helmets that meet national standards for
bicycle helmets.
- A motorized bicycle equipped with a headlight and taillight meeting the
requirements of lighting for motorcycles may operate during nighttime
hours.
- Protective headgear is not required for operators 18 years of age or older.
- Requirements for parking of motorized bicycles are the same as parking
of regular bikes.

A motorized bicycle may be operated under either a driver’s license or a
special permit (“moped permit”). The Minnesota Department of Public
Safety issues both motorized bicycle operator’s permits and instructional
permits.

A person under the age of 16 operating a motorized bicycle under permit is
subject to the restrictions on motorcycles except that:
A parent or guardian of an operator under the age of 16 may also ride on the motorized bicycle as a passenger or operator if the motorized bicycle is equipped with a seat and footrests for a second passenger.

A motorized bicycle equipped with a headlight and taillight meeting the requirements of lighting for motorcycles may be operated during nighttime hours.

Operators under age 18 must wear protective headgear that meets national standards.

Motorized bicycles must not operate on a sidewalk at any time, except when such operation is necessary for the most direct access to a roadway from a driveway, alley, or building.

E. Motorcycles and autocycles

“Motorcycle” includes motor scooters and autocycles. It is a motor vehicle having a seat or saddle for the use of the rider. It is designed to travel on not more than three wheels in contact with the ground.

Note the term “motorcycle” does not include either motorized bicycles or electric-assisted bicycles (as defined in state law and this memo) or a tractor.

Motorcycle operators must have a valid standard driver’s license with a two-wheeled vehicle endorsement as provided by law. The commissioner of Public Safety will only issue a two-wheeled vehicle endorsement if the applicant has a valid two-wheeled vehicle instruction permit. The commissioner of Public Safety may issue a two-wheeled vehicle instruction permit to any person over 16 years of age. State law governs motorcycle equipment, driving rules, and noise limitations.

An autocycle is defined as a motorcycle that:

- Has three wheels in contact with the ground.
- Is designed with seating that does not require operators or any occupants to straddle or sit astride it.
- Has a steering wheel.
- Is equipped with antilock brakes.
- Is originally manufactured to meet federal motor vehicle safety standards for motorcycles in Code of Federal Regulations, title 49, part 571, and successor requirements.

A person may operate an autocycle without a two-wheeled vehicle, or motorcycle endorsement, provided the person has a valid Class D driver’s license. A driver and passengers of an autocycle must properly use shoulder and lap seat belts.
F. Pocket bikes and mini-motorcycles

State law does not define or regulate the use of pocket bikes, also known as mini-motorcycles, mini-bikes, mini-pocket rockets, or mini-choppers. Marketed as toys, they stand only about 15 inches above the ground and reach speeds ranging from 30 to 50 mph depending on the vehicle, the rider’s weight, and the riding surface.

Mini-motorcycles previously fit the definition of a motorized foot scooter in state law; however, current state law defines motorized foot scooters as having a wheel size of 12 inches. Since the wheel size on most mini-motorcycles is 10 inches, they no longer fit that definition. Thus, operation of mini-motorcycle with any size wheel on public roads must likely comply with state law governing motorcycles. And state law requires a valid driver’s license or permit and insurance to operate a motorcycle on public roads.

VI. Vehicles used by pedestrians

Some low-power vehicles are for pedestrian use only and are not subject to city regulation. These include Segways™, self-balancing scooters, manual or motorized wheelchairs, scooters, tricycles, or similar devices used by people with disabilities as a substitute for walking.

A. Segways™ and self-balancing scooters

State law defines a Segway as an “electric personal assistive mobility device,” meaning a self-balancing device with two non-tandem wheels, designed to transport not more than one person, and operated by an electric propulsion system that limits the maximum speed of the device to 15 mph. It must have reflective material on the front, back, and wheels, visible at night from 600 feet when illuminated by the lower beams of headlamps of a motor vehicle.

Recently, there has been an increase in the use of self-balancing scooters, often called “hoverboards.” Self-balancing scooters generally have two wheels and are connected to a self-balancing control mechanism using built-in gyroscopes and sensor pads. These devices are propelled by the user’s balance and body position.

A person operating a Segway or self-balancing scooter has the rights and responsibilities of a pedestrian under state law and must also follow specific rules:

- Operation may be on a bicycle path.
- It may not carry more than one person.
- No person may operate it on a roadway, sidewalk, or bicycle path at a rate of speed that is not reasonable and prudent under the conditions.
• A Segway operator must use due care in operating the device.

A Segway or self-balancing scooter may be operated on a roadway only under the following circumstances:
• While making a direct crossing of a roadway in a marked or unmarked crosswalk.
• Where no sidewalk is available.
• Where a sidewalk is so obstructed as to prevent safe use.
• When so directed by a traffic control device or by a peace officer
• Temporarily in order to gain access to a motor vehicle.

A Segway or self-balancing scooter may not be operated at any time on a roadway with a speed limit of more than 35 mph except to make a direct crossing of the roadway in a marked crosswalk. A person operating these devices on a sidewalk must yield the right-of-way to pedestrians at all times. A person operating a Segway on a bicycle path must yield the right-of-way to bicycles at all times.

A city may not prohibit or further regulate the operation of these devices, except that a city may allow and regulate their operation on roadways within its jurisdiction that have a speed limit of more than 35 mph. The Minnesota Court of Appeals has found that a Segway is not a “motor vehicle” for purposes of driving while intoxicated (DUI) statute.

B. Wheelchairs, scooters, and tricycles

State law defines a “wheelchair” to include any manual or motorized wheelchair, scooter, tricycle, or similar device used by a disabled person as a substitute for walking.

A person using a wheelchair must comply with state law governing pedestrians because the definition of “pedestrian” is any person on foot or in a wheelchair. Specifically, a person using a wheelchair along a roadway must stay on the left side of the street or its shoulder giving way to oncoming traffic. Where there are accessible sidewalks pedestrians in wheelchairs must use them.

VII. Conclusion

The proliferation of unique vehicles is likely to continue. The state recognizes city authority to regulate many of these vehicles to ensure safe local streets. Cities regulate particular vehicles by passing ordinances. Best practice suggests close consultation with the city attorney to ensure that local ordinances accomplish the desired level of regulation and are consistent with state and federal law.
Appendix A: Definitions

Definitions of conveyances that are not motor vehicles

All-terrain vehicle: A motorized vehicle with: not less than three, but not more than six low pressure or non-pneumatic tires; a total dry weight of 2,000 pounds or less; and a total width from outside of tire rim to outside of tire rim that is 65 inches or less. All-terrain vehicle includes a class 1 all-terrain vehicle and class 2 all-terrain vehicle. All-terrain vehicle does not include a golf cart, mini-truck, dune buggy, or go-cart or a vehicle designed and used specifically for lawn maintenance, agriculture, logging, or mining purposes. All-terrain vehicle, Class 1: An all-terrain vehicle that has a total width from outside of tire rim to outside of tire rim that is 50 inches or less. All-terrain vehicle, Class 2: "Class 2 all-terrain vehicle" means an all-terrain vehicle that has a total width from outside of tire rim to outside of tire rim that is greater than 50 inches but not more than 65 inches. Minn. Stat. § 84.92, subd. 8-10. *"Motor vehicle" includes an all-terrain vehicle only if the all-terrain vehicle (1) has at least four wheels, (2) is owned and operated by a physically disabled person, and (3) displays both disability plates and a physically disabled certificate and does not include an all-terrain vehicle except (1) an all-terrain vehicle described in paragraph (b), or (2) an all-terrain vehicle licensed as a motor vehicle before August 1, 1985. Minn. Stat. § 168.002, subd. 18 (b) (c).

Bicycle: Every device capable of being propelled solely by human power upon which any person may ride, having two tandem wheels, and including any device generally recognized as a bicycle though equipped with two front or rear wheels. Bicycle includes an electric-assisted bicycle. "Bicycle" does not include scooters, motorized foot scooters, or similar devices. Minn. Stat. § 169.011, subd. 4.

Bicycle – electric-assisted: A bicycle with two or three wheels that: has a saddle and fully operable pedals for human propulsion; meets the requirements: of federal motor vehicle safety standards for a motor-driven cycle in Code of Federal Regulations, title 49, sections 571.1 et seq.; or for bicycles under Code of Federal Regulations, title 16, part 1512, or successor requirements; and has an electric motor that has a power output of not more than 1,000 watts, is incapable of propelling the vehicle at a speed of more than 20 miles per hour, is incapable of further increasing the speed of the device when human power alone is used to propel the vehicle at a speed of more than 20 miles per hour, and disengages or ceases to function when the vehicle's brakes are applied. Minn. Stat. § 169.011, subd. 27.

Electric personal assistive mobility device: A self-balancing device with two non-tandem wheels, designed to transport not more than one person, and operated by an electric propulsion system that limits the maximum speed of the device to 15 miles per hour. Minn. Stat. § 169.011, subd. 26. *"Motor vehicle" does not include an electric personal assistive mobility device. Minn. Stat. § 168.002, subd. 18 (d).

Motorized foot scooter: A device with handlebars designed to be stood or sat upon by the operator, and powered by an internal combustion engine or electric motor that is capable of propelling the device with or without human propulsion, and that has no more than two 12-inch or smaller diameter wheels and has an engine or motor that is capable of a maximum speed of 15
miles per hour on a flat surface with not more than one percent grade in any direction when the
motor is engaged. An electric personal assistive mobility device, a motorized bicycle, an electric-
assisted bicycle, or a motorcycle is not a motorized foot scooter. Minn. Stat. § 169.011, subd. 46.
*“Motor vehicle” does not include a motorized foot scooter. Minn. Stat. § 168.002, subd. 18 (e).

Snowmobile: A self-propelled vehicle originally manufactured and designed for travel on snow
or ice steered by skis or runners. Snowmobile does not include the following vehicles equipped
with aftermarket ski and track configurations: an all-terrain vehicle; an off-highway motorcycle;
an off-road vehicle; a mini truck; a utility task vehicle; or any other vehicle being operated off
road. Minn. Stat. § 84.81, subd. 3.

*Snowmobile is not a motor vehicle: "Motor vehicle" means any self-propelled vehicle
including, but not limited to, automobiles, trucks, dune buggies, minibikes, motorcycles, trail
bikes, and all-terrain vehicles (ATV’s), but not including snowmobiles. Minn. Rule 6100.0500,
subd. 7.

Wheelchair: Includes any manual or motorized wheelchair, scooter, tricycle, or similar device
used by a disabled person as a substitute for walking. Minn. Stat. § 169.011, subd. 93.

Definitions of motor vehicles

Autocycle: A motorcycle that: has three wheels in contact with the ground; is designed with
seating that does not require operators or any occupants to straddle or sit astride it; has a steering
wheel; is equipped with antilock brakes; and is originally manufactured to meet federal motor
vehicle safety standards for motorcycles in Code of Federal Regulations, title 49, part 571, and
successor requirements. Minn. Stat. § 169.011, subd. 3a.

Electric Vehicle Medium Speed Vehicle (MSV): An electrically powered four-wheeled motor
vehicle, equipped with a roll cage or crushproof body design, that can attain a maximum speed of
35 miles per hour on a paved level surface, is fully enclosed and has at least one door for entry,
has a wheelbase of 40 inches or greater and a wheel diameter of ten inches or greater, and except
with respect to maximum speed, otherwise meets or exceeds regulations in the Code of Federal
Regulations, title 49, section 571.500, and successor requirements. Minn. Stat. § 169.011, subd.
39.

Electric Vehicle: Neighborhood Electric Vehicle (NEV): An electrically powered motor
vehicle that has three or four wheels, and has a speed attainable in one mile of at least 20 miles
per hour but not more than 25 miles per hour on a paved level surface. Minn. Stat. § 169.011,
subd. 47.

Golf cart: Not specifically defined other than “motorized golf cart.” Minn. Stat. § 169.045, subd.
1.

Mini truck: A motor vehicle that has four wheels; is propelled by an electric motor with a rated
power of 7,500 watts or less or an internal combustion engine with a piston displacement
capacity of 660 cubic centimeters or less; has a total dry weight of 900 to 2,200 pounds; contains
an enclosed cabin and a seat for the vehicle operator; commonly resembles a pickup truck or van,
including a cargo area or bed located at the rear of the vehicle; and was not originally
manufactured to meet federal motor vehicle safety standards required of motor vehicles in the
Code of Federal Regulations, title 49, sections 571.101 to 571.404, and successor requirements.
A mini truck does not include: a neighborhood electric vehicle or a medium-speed electric
vehicle; or a motor vehicle that meets or exceeds the regulations in the Code of Federal
Regulations, title 49, section 571.500, and successor requirements. Minn. Stat. § 169.011, subd.
40a.

**Motor vehicles:** Every vehicle that is self-propelled, other than an electric personal assistive
mobility device [Segway] and any vehicle propelled or drawn by a self-propelled vehicle, and
not deriving its power from overhead wires except snowmobiles. Minn. Stat. § 171.01, subd. 39.

**Motorcycle:** Every motor vehicle having a seat or saddle for the use of the rider and designed
to travel on not more than three wheels in contact with the ground, including motor scooters and
autocycles. Motorcycle does not include motorized bicycles or electric-assisted bicycles or a
tractor. Minn. Stat. § 169.011, subd. 44.

**Motorcycle – off highway:** A motorized, off-highway vehicle traveling on two wheels and
having a seat or saddle designed to be straddled by the operator and handlebars for steering
control, including a vehicle that is registered under chapter 168 for highway use if it is also used
for off-highway operation on trails or unimproved terrain. Minn. Stat. § 84.787, subd. 7. *"Motor
vehicle” includes an off-highway motorcycle modified to meet the requirements of state traffic
regulations. Minn. Stat. § 168.002, subd. 18 (f).

**Motorized bicycle:** A bicycle that is propelled by an electric or a liquid fuel motor of a piston
displacement capacity of 50 cubic centimeters or less, and a maximum of two brake horsepower,
which is capable of a maximum speed of not more than 30 miles per hour on a flat surface with
not more than one percent grade in any direction when the motor is engaged. Motorized bicycle
does not include an electric-assisted bicycle or a motorcycle. Minn. Stat. § 169.011, subd. 44-45.

**Motorized recreational vehicle:** Any self-propelled, off-the-road, or all terrain conveyance,
including but not limited to a snowmobile, minibike, amphibious vehicle, motorcycle, go-cart,
trail bike, or dune buggy. Minn. Rule 9900.0100, subp. 6.

**Natural gas vehicle (NGV):** A motor vehicle under subdivision 42 that is capable of being
propelled by natural gas, including compressed natural gas and liquefied natural gas. Minn. Stat.
169.011, subd. 46a.

**Off-highway vehicles:** For the purposes of sections 84.771 to 84.930, "off-highway vehicle"
means an off-highway motorcycle [OHV], an off-road vehicle [ORV], or an all-terrain vehicle.
Minn. Stat. § 84.771. In some situations, an OHV or and ORV is a motor vehicle, but an ATV is
not one.
**Off-road motorcycle:** Off-highway motorcycle" means a motorized, off-highway vehicle traveling on two wheels and having a seat or saddle designed to be straddled by the operator and handlebars for steering control, including a vehicle that is registered under chapter 168 for highway use if it is also used for off-highway operation on trails or unimproved terrain. Minn. Stat. § 84.787, subd. 7.

**Off-road vehicle:** A motor-driven recreational vehicle capable of cross-country travel on natural terrain without benefit of a road or trail. Off-road vehicle does not include a snowmobile; an all-terrain vehicle; a motorcycle; a watercraft; a farm vehicle being used for farming; a vehicle used for military, fire, emergency, or law enforcement purposes; a construction or logging vehicle used in the performance of its common function; a motor vehicle owned by or operated under contract with a utility, whether publicly or privately owned, when used for work on utilities; a commercial vehicle being used for its intended purpose; snow-grooming equipment when used for its intended purpose; or an aircraft. Minn. Stat. § 84.797, subd. 7.

**Recreational vehicles:** Any self-propelled vehicle and any vehicle propelled or drawn by a self-propelled vehicle used for recreational purposes, including but not limited to snowmobiles, trail bikes, ATVs, utility task vehicles, hovercraft, and motor vehicles used for recreation. Minn. Stat. § 84.771. Certain recreational vehicles may be considered a motor vehicle in specific situations.

**Trail bike:** not specifically defined, but referred to in various statutes and rules. Minn. Stat. § 84.90; Minn. Rule 6105.0210; Minn. Rule 6100.0500; Minn. Rule 6136.0300; Minn. Rule 6232.0300. A trail bike may be a motor vehicle depending on the use and the location of operation.

**Utility task vehicle (UTV):** a side-by-side, four-wheel drive, off-road vehicle that has four wheels, is propelled by an internal combustion engine with a piston displacement capacity of 1,200 cubic centimeters or less, and has a total dry weight of 1,800 but less than 2,600 pounds. Minn. Stat.§ 169.045, subd. 1(3). Some UTVs may be considered motor vehicles depending on the use, operation and modifications.
## Appendix B: State and federal regulations

<table>
<thead>
<tr>
<th>Vehicles or conveyances and definitional citation</th>
<th>Operator regulations including licensure</th>
<th>Includes</th>
<th>Who regulates the operation</th>
<th>Statutory cites</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-terrain vehicles (ATVs). Minn. Stat. § 84.92, subd. 8.</td>
<td>DNR Registration. No driver’s license required.</td>
<td>Class one and class two ATVs.</td>
<td>State and city. City by permit, resolution or ordinance.</td>
<td>Minn. Stat. §§ 84.92-84.928.</td>
</tr>
<tr>
<td>Bicycles Minn. Stat. § 169.011, subd. 4.</td>
<td>No title, driver’s license, or registration required.</td>
<td>Human-powered bikes, electric assisted bicycles.</td>
<td>State and city only if city sets up a bike trail in city boundaries.</td>
<td>Minn. Stat. § 169.222. Minn. Stat. § 169.222, subd. 4(d). Minn. Stat. § 160.263, subd. 2.</td>
</tr>
<tr>
<td>Bicycle - Electric-assisted Minn. Stat. § 169.011, subd. 27.</td>
<td>No title, driver’s license, or registration required. Minimum operator age is 15.</td>
<td></td>
<td>State. City may prohibit electric-assisted bicycles on trails for non-motorized use in some situations, only by local ordinance.</td>
<td>Minn. Stat. § 169.222. Minn. Stat. § 169.223, subd. 5 (3).</td>
</tr>
<tr>
<td>Conveyances used by pedestrians Minn. Stat. § 169.011, subd. 93.</td>
<td>No driver’s license, registration or tax applies.</td>
<td>Wheelchairs, scooters, tricycles.</td>
<td>State.</td>
<td>Minn. Stat. § 169.21</td>
</tr>
<tr>
<td>Vehicles or conveyances and definitional citation</td>
<td>Operator regulations including licensure</td>
<td>Includes</td>
<td>Who regulates the operation</td>
<td>Statutory cites</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------</td>
<td>-----------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Electric personal assistive mobility device</td>
<td>No driver’s license, registration or tax applies.</td>
<td>Segways™ and self-balancing scooters.</td>
<td>State.</td>
<td>Minn. Stat. § 169.212</td>
</tr>
<tr>
<td>Motorized foot scooters. Minn. Stat. § 169.011, subd. 46.</td>
<td>No driver’s license, title, registration or tax required. The minimum operator age is 12 years old.</td>
<td>Razors™</td>
<td>State and city. City only by ordinance and may only prohibit on bike paths, trail or non-motorized bikeway.</td>
<td>Minn. Stat. § 169.225 Minn. Stat. §§ 168.002, subd. 18 (e); 168.013, subd. 1; 168.09, subd. 1; 169.011, subd. 46.</td>
</tr>
<tr>
<td>Natural gas vehicles (NGVs) Minn. Stat. 169.0911, subd. 46a.</td>
<td>Title. Valid driver’s license. Registration.</td>
<td>Overweight NGVs allowed per Minn. Stat. § 169.824, subd. 3 (b) (c).</td>
<td>State.</td>
<td>Minn. Stat. § 168A.05, subd. 9. Minn. Stat. § 171.02, subd. 1. Minn. Stat. § 168.013, subd. 1</td>
</tr>
<tr>
<td>Off-highway motorcycle. Minn. Stat. § 84.787, subd. 7.</td>
<td>Limited to registration with DNR. May have dual registration to use on public roads.</td>
<td>State. City by ordinance or resolution.</td>
<td>Minn. Stat. §§ 84.787-84.796.</td>
<td></td>
</tr>
<tr>
<td>Off-highway vehicles (OHV). Minn. Stat. §84.771.</td>
<td>Limited to registration with DNR.</td>
<td>Off-highway vehicle means an off-highway motorcycle, an off-road vehicle, or an all-terrain vehicle.</td>
<td>State—outside city boundaries. Cities may regulate ORVs and ATVs in city boundaries.</td>
<td>Minn. Stat. §§ 84.771 - 84.781 (off-highway vehicles). Stat. § 84.787, subd. 7. (off-highway motorcycle); Minn. Stat. § 84.797, subd. 7. (off-road vehicle) Minn. Stat. §§84.92-84.928 (all-terrain vehicles).</td>
</tr>
<tr>
<td>Off-road vehicle (ORV). Minn. Stat. § 84.797, subd. 7.</td>
<td>Driver’s license required unless operated only off road.</td>
<td>Vehicles able to travel cross-county with no road or trail.</td>
<td>State and city.</td>
<td>Minn. Stat. §§ 84.771 – 84.781.</td>
</tr>
<tr>
<td>Pocket bikes. No definition in state law or rule.</td>
<td>Likely driver’s license with a two-wheeled vehicle endorsement.</td>
<td>Pocket bikes, minicmotorcycles, mini-</td>
<td>State.</td>
<td>Minn. Stat. § 65B.48, subd. 5.</td>
</tr>
<tr>
<td>Vehicles or conveyances and definitional citation</td>
<td>Operator regulations including licensure</td>
<td>Includes</td>
<td>Who regulates the operation</td>
<td>Statutory cites</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>------------------------------------------</td>
<td>----------</td>
<td>-----------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Special vehicles Minn. Stat. § 169.045.</td>
<td>City permit. Registration for ATVs, UTVs and mini trucks. Mini truck operators must have driver’s license, possibly with an exception.</td>
<td>Motorized golf carts, UTVs, ATVs, and mini-trucks.</td>
<td>City in city boundaries. Non-city operation may be subject to state or county regulation.</td>
<td>Minn. Stat. § 169.045. Minn. Stat. § 169.045, subd. 7.</td>
</tr>
</tbody>
</table>