



Vehicle Classifications and Applicable Laws



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ALL-TERRAIN VEHICLES (ATVs)

An **all-terrain vehicle or ATV** is defined by G.S. 20-4.01 as a motorized off-highway vehicle designed to travel on three or four low pressure tires, having a seat designed to be straddled by the operator and handlebars for steering control. Notice though that an all-terrain vehicle or ATV may also fit within the definition of a motor vehicle, a vehicle and a utility vehicle, all of which are defined below.

G.S. 20-54(8) provides that DMV will not register a utility vehicle. Since an ATV is classified, among other things, as a utility vehicle, it cannot be registered. Inspection (G.S. 20-183.2) and insurance (G.S. 20-309) requirements only apply to motor vehicles which are subject to registration. Therefore, these requirements generally do not apply to ATVs. In addition, a driver's license is only required to operate a motor vehicle upon a street or highway (G.S. 20-7). Since ATVs are typically operated off of the roadway, a driver's license is not required.

While there is not a law which prohibits, per se, an ATV from being driven upon the street or highway, if a person chooses to operate an ATV on a street or highway, the ATV will be considered a motor vehicle. Consequently, the ATV would have to be registered (G.S. 20-50), inspected (G.S. 20-183.2), insured (G.S. 20-309), and in compliance with all equipment regulations applicable to vehicles and motor vehicles (in addition to those required for ATVs pursuant to G.S. 20-171.18), and the driver would have to be licensed and operate the ATV in accordance with all laws applicable to vehicles and motor vehicles. As previously mentioned, DMV will not register a utility vehicle. Thus, with very limited exceptions, if a person operates an ATV on a street or highway, they are most likely in violation of one or more of the laws related to at least registration, inspection, insurance and equipment.

In addition, there are several laws specific to most all ATV operations. These include age restrictions (G.S. 20-171.15), a prohibition on carrying passengers unless the ATV is designed by the manufacturer to do so (G.S. 20-171.16), a requirement that the operator wear eye protection and a helmet (G.S. 20-171.19), and a requirement that all ATV operators born on or after January 1, 1990 possess a safety certificate indicating successful completion of an all-terrain vehicle safety course (G.S. 20-171.20).

DIRT BIKES

A **"dirt bike"** is not defined by North Carolina statute, but is a general term used to describe several different types of off-road motorcycles. Some dirt bikes are designed specifically for off-road use; some are dual-sport bikes which have both off-road and on-road capabilities.

A dirt bike designed for and used off-road will typically fit within the definitions of a motorcycle, a motor vehicle, a vehicle, and a utility vehicle, all of which are defined below. G.S. 20-54(8) provides that DMV will not register a utility vehicle. Since a dirt bike, designed and used off-roads, is classified, among other things, as a utility vehicle, it cannot be registered.

Inspection (G.S. 20-183.2) and insurance (G.S. 20-309) requirements only apply to motor vehicles which are subject to registration. Therefore, these requirements would not apply to a dirt bike designed and used off-roads. In addition, a driver's license is only required to operate a motor vehicle upon a street or highway (G.S. 20-7). If the dirt bike is operated off of the roadway, a driver's license is not required.

However, some dirt bikes are designed to be used both off and on the roadways. If a person operates a dirt bike on a street or highway, the driver will not be afforded the exemptions applicable to utility vehicles. Thus, the dirt bike will be treated like a motorcycle, a motor vehicle and a vehicle. Consequently, in order to be operated upon the public streets or highways, the dirt bike would have to be registered (G.S. 20-50), inspected (G.S. 20-183.2), insured (G.S. 20-309), and in compliance with all equipment regulations applicable not only to motorcycles but also to all vehicles and motor vehicles, and the driver would have to be licensed with a motorcycle endorsement (G.S. 20-7) and operate the dirt bike in accordance with all laws applicable to vehicles and motor vehicles. In addition, the operator would have to comply with those statutes specifically regulating motorcycles which include the use of a helmet by the operator and all passengers (G.S. 20-140.4), and a limitation on passengers to that which the device was designed to carry (G.S. 20-140.4).

GOLF CARTS

A **golf cart** is defined by G.S. 20-4.01 as a vehicle designed and manufactured for operation on a golf course for sporting or recreational purposes and that is not capable of exceeding speeds of 20 miles per hour. Notice that a golf cart may also fit within the definition of a motor vehicle, a vehicle and a utility vehicle, all of which are defined below.

G.S. 20-54(8) provides that DMV will not register a golf cart or a utility vehicle. State inspection (G.S. 20-183.2) and insurance (G.S. 20-309) requirements only apply to motor vehicles which are subject to registration. Therefore, these requirements would not apply to a golf cart.

There is not a law which prohibits, per se, a golf cart from being driven upon the street or highway. However, if a person chooses to operate a golf cart on a street or highway, the golf cart will be considered a motor vehicle. Prior to October 1, 2009, this has meant that the golf cart would have to be registered (G.S. 20-50) and consequently, inspected (G.S. 20-138.2) and insured (G.S. 20-309), unless the golf cart was being driven on the highway only for the purpose of crossing the highway from one property to another (G.S. 20-51). In addition, a golf cart operated upon the street or highway (except when the operation was merely to cross the highway from one property or another) had to be in compliance with all equipment regulations applicable to vehicles and motor vehicles, and the driver had to be licensed (G.S. 20-7) and operate the golf cart in accordance with all laws applicable to motor vehicles and vehicles. As previously mentioned, DMV will not register a golf cart. Thus, unless a county or municipality had obtained a local law exempting them from the above requirements, if a person operated a golf cart on a

street or highway (except when merely crossing the highway from one property to another), they were most likely in violation of the laws related at least to registration, inspection, insurance and equipment.

Effective October 1, 2009, Session Law 2009-459, House Bill 121 was passed by the North Carolina General Assembly. This bill creates new G.S. 160A-300.6 which allows a city, by ordinance, to regulate the operation of golf carts on any public street, road or highway where the speed limit is 35 mph or less within its municipal limits or on any property owned or leased by the city. Therefore, a city may allow golf carts to be driven on some of its lower speed roadways regardless of the fact that DMV will still not register the carts. Because DMV is not registering golf carts, State inspection (G.S. 20-138.2) and insurance (G.S. 20-309) requirements will not apply. The new statute also allows, but does not mandate, a city, by ordinance, to require local registration of golf carts, charge a fee for the registration, restrict who is authorized to operate the carts, and specify the required equipment, load limits, and the hours and methods of operation. The City of Durham has yet to pass such ordinances.

Finally, a driver's license is only required to operate a motor vehicle upon a street or highway (G.S. 20-7). Thus, a driver's license is not required to operate a golf cart off of the roadway. A driver's license is required to operate a golf cart on the roadway, and new G.S. 160A-300.6 provides that the operator be 16 years of age or older when on a public street or highway. Local ordinances may not eliminate the license requirement nor lower the minimum age for operation on a public street or highway. The driver must operate the golf cart in compliance with all laws applicable to the operation of a motor vehicle and a vehicle.

Note that exceptions are made for motorized wheelchairs or similar vehicles (such as a golf cart) not exceeding 1000 pounds gross weight when used by a handicapped person with a mobility impairment. G.S. 20-175.5 exempts the operators of such vehicles from the rules of the road or any other law, ordinance or regulation otherwise applicable to motor vehicles. For purposes of these statutes, handicapped with a mobility impairment includes a person who cannot walk 200 feet without stopping to rest, or cannot walk without the use of a cane or other assistance, has a diminished lung capacity or uses portable oxygen, has a cardiac condition, is severely limited in his/her ability to walk due to arthritic, neurological or orthopedic condition, or is totally blind or his/her vision with glasses is such that it prevents ordinary activity for which eyesight is essential.

LOW-SPEED VEHICLES

A **low-speed vehicle** is defined by G.S. 20-4.01 as a four-wheeled electric vehicle whose top speed is greater than 20 mph but less than 25 mph. A low-speed vehicle will also fit within the definition of a motor vehicle and a vehicle.

Low-speed vehicles are designed and used primarily to transport persons and property upon the street or highway. G.S. 20-121.1 provides that a low-speed vehicle may be operated only on

streets and highways where the posted speed limit is 35 mph or less. This does not prohibit a low-speed vehicle from crossing a road or street at an intersection where the road or street being crossed has a posted speed limit of more than 35 mph. However, the Department of Transportation may prohibit the operation of low-speed vehicles on any road or highway if it determines that the prohibition is necessary in the interest of safety. Designed for and used upon the streets and highways, a low-speed vehicle will be treated like a motor vehicle and a vehicle. Thus, G.S. 20-50 requires, and G.S. 20-121.1 clarifies, that the vehicle be registered. Consequently, the vehicle must also be inspected (20-183.2). G.S. 20-309 requires, and G.S. 20-121.1 clarifies, that the vehicle be insured. The low-speed vehicle would need to be in compliance with equipment regulations applicable to other vehicles and motor vehicles, in fact, G.S. 20-121.1 clarifies that low-speed vehicles must be equipped with headlamps, stop lamps, turn signal lamps, tail lamps, reflex reflectors, parking brakes, rearview mirrors, windshields, windshield wipers, speedometer, seat belts, a vehicle identification number, and be in compliance with the safety standards in 49 C.F.R. §571.500. In addition, the operator of a low-speed vehicle upon the street or highway would have to be licensed (G.S. 20-7) and operate the low-speed vehicle in accordance with all laws applicable to vehicles and motor vehicles.

MOPEDS

A **moped** is defined by G.S. 105-164.3 as a vehicle that has two or three wheels, no external shifting device, and a motor that does not exceed 50 cubic centimeters piston displacement and cannot propel the vehicle at a speed greater than 30 mph on a level surface. While a moped may be classified as a vehicle, it is specifically excluded from the definition of a motor vehicle.

G.S. 20-51 exempts mopeds from registration. Furthermore, because mopeds are not motor vehicles subject to registration, inspection (G.S. 20-182.8), insurance (G.S. 20-309) and license (G.S. 20-7 and G.S. 20-8) requirements do not apply. However, the operator would have to comply with those statutes specifically regulating mopeds which include a minimum age of 16 for operation (G.S. 20-101.), the use of a helmet by the operator and all passengers (G.S. 20-140.4), and a limitation on passengers to that which the device was designed to carry (G.S. 20-140.4).

MOTORCYCLES

A **motorcycle** is defined by G.S. 20-4.01 as a vehicle having a 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 motor-driven bicycles, but excluding tractor and utility vehicles equipped with an additional form of device designed to transport property, three-wheeled vehicles being used by law enforcement agencies and mopeds. A motorcycle would also fit the definitions of a motor vehicle and a vehicle, both of which are defined below.

Consequently, in order to be operated upon the public streets or highways, a motorcycle has to be registered (G.S. 20-50), inspected (G.S. 20-138.2), insured (G.S. 20-309), and in compliance

with all equipment regulations applicable not only to motorcycles but also to all vehicles and motor vehicles, and the driver would have to be licensed with a motorcycle endorsement (G.S. 20-7) and operate the motorcycle in accordance with all laws applicable to vehicles and motor vehicles. In addition, the operator would have to comply with those statutes specifically regulating motorcycles which include the use of a helmet by the operator and all passengers (G.S. 20-140.4), and a limitation on passengers to that which the device was designed to carry (G.S. 20-140.4).

MOTOR VEHICLES

A **motor vehicle** is defined by G.S. 20-4.01 as every vehicle which is self-propelled and every vehicle designed to run upon the highways which is pulled by a self-propelled vehicle. This does not include mopeds.

“SEGWAYS”

A “**Segway**” is a brand of self-balancing personal transportation devices. It meets the definition found in G.S. 20-4.01 of an electric personal assistive mobility device which is defined as a self-balancing nontandem two wheeled device, designed to transport one person, with a propulsion system that limits the maximum speed of the device to 15 miles per hour or less.

Since a “Segway” meets the definition of an electric personal assistive mobility device, its operation on public streets and sidewalks is governed by G.S. 20-175.6. This statute allows such devices to be operated on public streets with posted speed limits of 25 mph or less, sidewalks, and bicycle paths. This statute also excludes these devices from registration requirements. Consequently, they do not need to be inspected (G.S. 20-138.2) or insured (G.S. 20-309). In addition, because G.S. 20-4.01 specifically excludes electric personal assistive mobility devices from the definition of a vehicle, other equipment requirements and operation regulations normally applicable to vehicles using the roadway are not enforceable.

SCOOTERS

Depending upon its design and speed, a motor **scooter** will typically be equivalent to either a moped or a motorcycle (see above definitions and discussions).

SEMITRAILERS AND TRAILERS

Semitrailers and trailers are property hauling vehicles pursuant to G.S. 20-4.01. Semitrailers are defined by G.S. 20-4.01 as vehicles without motive power designed for carrying property or persons and for being drawn by a motor vehicle, and so constructed that part of their weight or their load rests upon or is carried by the pulling vehicle. Trailers are defined by G.S. 20-4.01 as vehicles without motive power designed for carrying property or persons wholly on their own structure and to be drawn by a motor vehicle, including “pole trailers” or a pair of wheels used primarily to balance a load rather than for purposes of transportation. Notice that semitrailers and

trailers will both fit within the definitions of a motor vehicle (defined above) and a vehicle (defined below).

G.S. 20-7 requires a license to drive a motor vehicle upon the highway. Semitrailers and trailers are motor vehicles, but since they are without motive power and will be drawn upon the highway by another motor vehicle, the type of license required will depend upon the towing motor vehicle. G.S. 20-8 exempts from a license any person driving or operating any road machine, farm tractor, or implement of husbandry (i.e. farming) temporarily operated or moved on a highway.

G.S. 20-50 requires a vehicle intended to be operated upon any highway to be registered. Semitrailers and trailers are vehicles intended to be operated upon a highway so they should be registered unless they fit within one of the numerous exceptions found in G.S. 20-51. Most of these exceptions apply to agricultural activities and road construction and maintenance. Most relevant to trailers, the exceptions are:

1. Vehicles driven or moved upon a highway only for the purpose of crossing such highway from one property to another;
2. Any implement of husbandry (i.e. farming), farm tractor, road construction or maintenance machinery or other vehicle which is not self-propelled that was designed for use in work off the highway and which is operated on the highway for the purpose of going to and from such nonhighway projects;
3. Farm tractors equipped with rubber tires and trailers or semitrailers when attached thereto and when used by a farmer, his tenant, agent, or employee in transporting his own farm implements, farm supplies, or farm products from place to place on the same farm, from one farm to another, from farm to market, or from market to farm. This exemption extends also to any tractor, implement of husbandry (i.e. farming), and trailer or semitrailer while on any trip within a radius of 10 miles from the point of loading, provided that the vehicle does not exceed a speed of 35 miles per hour. This section shall not be construed as granting any exemption to farm tractors, implements of husbandry (i.e. farming), and trailers or semitrailers which are operated on a for-hire basis, whether money or some other thing of value is paid or given for the use of such tractors, implements of husbandry (i.e. farming), and trailers or semitrailers.;
4. Any trailer or semitrailer attached to and drawn by a properly licensed motor vehicle when used by a farmer, his tenant, agent, or employee in transporting unginning cotton, peanuts, soybeans, corn, hay, tobacco, silage, cucumbers, potatoes, all vegetables, fruits, greenhouse and nursery plants and flowers, Christmas trees, fertilizers or chemicals purchased or owned by the farmer or tenant for personal use in implementing husbandry (i.e. farming), irrigation pipes, loaders, or equipment owned by the farmer or tenant from place to place on the same farm, from one farm to another, from farm to gin, from farm to

dryer, or from farm to market, and when not operated on a for-hire basis. The term “transporting” includes the actual hauling of said products and all unloaded travel in connection therewith.;

5. Small farm trailers known generally as tobacco-handling trailers, tobacco trucks or tobacco trailers when used by a farmer, his tenant, agent or employee, when transporting or otherwise handling tobacco in connection with the pulling, tying or curing thereof.;

6. A vehicle which is driven or moved upon a highway only for the purpose of crossing or traveling upon such highway from one side to the other provided the owner or lessee of the vehicle owns the fee or a leasehold in all the land along both sides of the highway at the place or crossing;

7. Devices designed for towing private passenger motor vehicles or vehicles not exceeding 5,000 pounds gross weight. These devices are generally known as “tow dollies.” A “tow dolly” is a two wheeled device without motive power designed for towing disabled motor vehicles and is drawn by a motor vehicle in the same manner as a trailer.; and

8. Devices generally called converter gear or dollies consisting of a tongue attached to either a single or tandem axle upon which is mounted a fifth wheel and which is used to convert a semitrailer to a full trailer for the purpose of being drawn behind a truck tractor and semitrailer.

Therefore, examples of trailers an officer might commonly see that need to be registered are trailers carrying general landscaping equipment, or a trailer carrying a jet-ski or a boat. On the other hand, mortar mixers or irrigation tanks with wheels permanently attached to them would fit within the second exception above and would not have to be registered.

G.S. 20-183.2 provides that a trailer will be subject to a safety inspection if it is subject to registration, not subject to inspection under 49 CFR 396 (Federal Motor Carrier Safety Regulations), and not a trailer whose gross weight is less than 4000 lbs or a house trailer. G.S. 20-309 requires insurance on the trailer if it is required to be registered.

Finally, unless specifically exempted by statute, laws regulating vehicles and motor vehicles will apply to trailers. For example, G.S. 20-125.1 makes it unlawful to register a motor vehicle unless the vehicle is equipped with directional signals visible from 200 feet of the front and the rear of the vehicle. However, for those trailers that have to be registered, there are exceptions within the statute which provide that trailers are not required to be equipped with directional signals if the trailer and load do not obscure the directional signals of the towing vehicle from the view of a driver approaching from the rear and within a distance of 200 feet, and the gross weight of the trailer and load does not exceed 4,000 lbs. Some statutes applicable to vehicles and motor vehicles will not only have exemptions for trailers and semitrailers, but may also contain

additional requirements specific to them. For example, G.S. 20-129 requires every motor vehicle, including trailers and semitrailers, to have originally equipped rear lamps or their equivalent, which exhibit a red light plainly visible under normal atmospheric conditions from a distance of 500 feet. One of those rear lamps, or a separate lamp, must be constructed and placed so that the plate on the rear of the vehicle shall, under like conditions, be illuminated by a white light so that it may be read from a distance of 50 feet from the rear of the vehicle. In addition, the statute requires trailers or semitrailers to carry at the rear a red reflector which is located and maintained so that it is visible for at least 500 feet when opposed by a motor vehicle displaying undimmed lights at night on an unlighted highway. The statute continues on to provide an exception from the rear lamp requirement for trailers weighing less than 4,000 lbs, or a trailer described in G.S. 20-51(6) (see number 4 above describing trailers exempt from registration) weighing less than 6,500 lbs, provided the trailer is equipped at the rear with two red reflectors of a diameter of not less than 3” and which are placed and maintained so that each reflector is visible for at least 500 feet when approached by a motor vehicle displaying undimmed headlights at night on an unlit highway. Finally, trailers and semitrailers will have to be in compliance with those statutes which specifically govern trailers and semitrailers alone. For example, G.S. 20-115.1 and G.S. 20-123 place size restrictions on certain types of trailers and requires that trailers and semitrailers be firmly attached to the towing vehicle.

UTILITY VEHICLES

A **utility vehicle** is defined by G.S. 20-4.01 as a vehicle designed and manufactured for general maintenance, security, recreational, and landscaping purposes, but does not include vehicles designed and used primarily for the transportation of persons or property on a street or highway. A utility vehicle will also fit the definition of a vehicle as defined below.

G.S. 20-54(8) provides that DMV will not register a utility vehicle. Inspection (20-183.2) and insurance (G.S. 20-309) requirements only apply to motor vehicles which are subject to registration. Since utility vehicles are not motor vehicles and are not subject to registration, inspection and insurance requirements do not apply to them. A driver’s license is only required to operate a motor vehicle upon the street or highway (G.S. 20-7). Since a utility vehicle should be operated off the roadway, a driver’s license is not required.

VEHICLES

A **vehicle** is defined by G.S. 20-4.01 as every device in, upon, or by which any person or property is or may be transported or drawn upon a highway, excepting devices moved by human power or used exclusively upon fixed rails or tracks; provided, however, that a bicycle is deemed a vehicle and every rider of a bicycle upon a highway is subject to the provisions of G.S. Chapter 20 which are applicable to the driver of a vehicle except those that by their nature can have no application; provided further, the term does not include devices which are designed for and intended to be used as a means of transportation for a person with a mobility impairment, or who

uses the device for mobility enhancement, is suitable for both inside and outside a building, including on sidewalks, and is limited by design to 15 mph when the device is being operated by a person with a mobility impairment, or who uses the device for mobility enhancement; the term also does not include electric personal assistive mobility devices.

If operated on the street or highway, would the following vehicles need to be registered and the operator licensed?

(See page 12 for answers)



A



B



C



D



E



F

If pulled upon the street or highway (other than for the purpose of crossing from one property to another), would the following trailers need to be registered?

(See page 12 for answers)



A



B



C



D

ANSWERS

Page 10:

- **A:** If operated upon the street or highway, a dual purpose dirt bike needs to be registered and its operator needs to be licensed with a motorcycle endorsement.
- **B:** Unless driven on the street or highway only for the purpose of crossing the street or highway from one property or another, or unless being operated by a handicapped person with a mobility impairment, a golf cart may only be driven on the street or highway if allowed by local ordinances. Registration by DMV is not required but local registration may be required by ordinance. The operator must be licensed and at least 16 years of age.
- **C:** A moped does not have to be registered nor its operator licensed to be driven upon the street or highway.
- **D:** A low-speed vehicle must be registered and its operator licensed to be driven upon the street or highway.
- **E:** An electric personal assistive mobility device does not have to be registered nor its operator licensed to be driven upon the street or highway. However, it may only be driven on public streets with posted speed limits of 25 mph or less.
- **F:** An electric scooter does not have piston displacement and therefore, will not qualify as a moped. This scooter will meet the definition of a motorcycle so if operated upon the street or highway, the scooter would have to be registered and its operator licensed with a motorcycle endorsement.

Page 11:

- **A:** Utility trailers typically need to be registered. Only when used in farming activities may they be exempt from registration (see exemptions 3 and 4 on pages 6-7)
- **B:** A towable mortar or cement mixer does not have to be registered. It fits within G.S. 20-51(3) which exempts from registration “any implement of husbandry (i.e. farming), farm tractor, road construction or maintenance machinery or other vehicle which is not self-propelled that was designed for use in work off the highway and which is operated on the highway for the purpose of going to and from such nonhighway projects.”
- **C:** Trailers carrying boats or jet-skis need to be registered.
- **D:** Farming implements do not have to be registered. See exemption found in G.S. 20-51(3) explained in B above.