

2013 General Session
House Bill 299
Bicycles and Bike Equipment
Background Material
11 February 2013
Representative Johnny Anderson

Summary and Intent

Over the past years cycling use on our roadways has evolved. In the mid 70's many states adopted the "as far right as practicable" (FRAP) language we currently have in Utah Code at section 1105. Since then there have only been a couple of revisions to the code. About 10 years ago some modifications and clarifications were made to Utah's code such as being able to use your right hand to signal a right turn and equipment requirement revisions and clarifications for hazards regarding FRAP.

Since then the variety of the types of vehicles with more than two wheels in tandem are being utilized on the roadways in addition to bike lanes popping up everywhere.

After only a couple of years, Bike Utah and cyclists in Utah are one of the few groups who have managed to surpass the 500 plate minimum enacted in 2011 for special group plates for the "Share the Road" license plate.

Below are notes to the changes to Utah code to make them more applicable to current uses. The proposed changes provide some clarifications on current transportation uses.

We did examine adding in a formal definition of a bike lane, but Utah does loosely address this since adopting the current MUTCD and bike lanes are well defined in there and in the AASHTO Guide for Bicycles as a traffic lane, bike lanes are travel lanes and all the existing prohibitions and conditions under traffic codes apply for other travel lanes used by vehicles. On the flip-side, a striped "shoulder" although bicycles "use them" as stated in the shoulder description is not part of the roadway portion of the highway by definition.

Notes by Section

41-6a-102(4)

Updating the Bicycle Definition



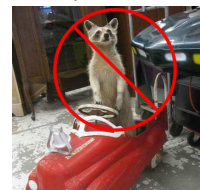
This section is updated to recognize vehicles generally referred to bicycles. The old language restricted the definition to just standard bicycles with only two wheels. Three and even four-wheel recumbent are becoming more common, but currently are not classified. These bikes although are a bit lower but are more stable since the operator does not have to put a foot down when stopping and is much less susceptible to falling over if struck, close passes by motorists, hitting hazards, etc.

Although these trikes quads are wider, while being operated, they generally do not have a wider profile than that of a standard two wheeled bicycle since the shoulders is typically the widest part of the operator/bicycle combination. The wheel-track is about the same as a wheelchair around 30 inches and wheels generally 16" to 20" with sometimes a 26" or 27" rear.

The AASHTO Guide already includes three and four wheeled cycles in its definition of a bicycle.



The definition excluding vehicles with less than 14" is to exclude other vehicles which may fall under the other general language, but are generally considered "toy vehicles" under the Uniform Vehicle Code or loosely under 10-8-69 "Annoying Pastimes in the Street" or children's bicycles which generally have 12" wheels or a "Big-wheel" which has a 16" front wheel and smaller rear wheels. The sections of Utah Code referenced here are for the regulation of traffic and as a rule, kids on bikes this size generally use the sidewalk in the neighborhood or on their way



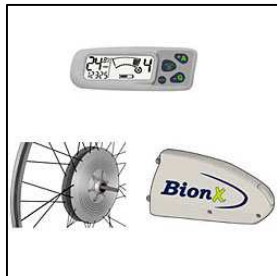
to school, but still not excluded from the use of the roadway any more than any other device such as skate boards, roller-blades etc.

Electric Motors

The electric motor described is basically an “electric assist” motor to assist those less fit to better utilize bicycles. These have been increasing in their popularity and can be fitted to both bicycles and trikes alike. When we saw gas prices go over \$4.00 per gallon, there was sharp increase in interest in these efficient forms of transportation.



Both the assist motors and the trikes are becoming more popular amongst our aging society as it affords more mobility without a motor vehicle with ease of use and in the case of the trike a more stable platform where balance issues become more of an issue.



The motor depicted in this addition follows the Federal Product Safety definitions of a bicycle. It differs from a “moped” which are generally purpose built and have a gasoline engine and much heavier and require a license to operate.

Since permanent pedals must be part of the vehicles, push scooters with motors would not be part of this description neither would some of the newer battery operated “scooters” since they have removable pedals and weigh more than 75 lbs. The electric assist definition is more restricted than a moped since they are typically used on pathways and other locations you would also typically see bicycles, are capable of about the same speed as a bicycle and are relatively quiet. (A strong/regular commuter cyclist is typically capable of 18-20mph while commuting, 22-25 on a “racing bike.” Mopeds can have a larger engine and travel up to 30mph.

Currently the Electric Assisted Bicycle is classified and/or confused with a moped, so it requires an operator’s license to operate, but not a motorcycle license according to DPS. Mopeds up to 50cc do not currently require vehicle registration, but if over 40cc does require a m/c license.

This updated definition will bring Utah Code more in line with Federal Regulations and reclassify an electric assisted bicycle as a **bicycle** rather than a **moped** (thus allowing use on shared use paths subject to 41-6a-1106 and not requiring an operator’s license)

(From Public Law 107-319 Requirements for Low Speed Electric Bicycles; 16 CFR 1512 Consumer Product Safety Commission)

SUMMARY: Public Law 107-319, 116 Stat. 2776 (the Act), enacted December 4, 2002, subjects low-speed electric bicycles to the Commission’s existing regulations at 16 CFR part 1512 and 16 CFR 1500.18(a)(12) for bicycles that are solely human powered. For purposes of this requirement, the Act defines a low-speed electric bicycle as “a two-or three-wheeled vehicle with fully operable pedals and an electric motor of less than 750 watts (1 h.p.), whose maximum speed on a paved level surface, when powered solely by such a motor while ridden by an operator who weighs 170 pounds, is less than 20 mph.” Public Law No. 107-319, section 1, 116 Stat. 2776 (2002). The Commission is issuing this immediately effective amendment to its requirements for bicycles at 16 CFR part 1512 to promptly inform the public of the newly enacted statutory requirement on low-speed electric bicycles.

Excluding Larger Electric Scooters

The motor size, maximum speed and dry weight limit is meant to exclude the larger electric bikes which look and are about the same size as the smaller gas powered scooters. Operating these on pathways and sidewalks is not advised due to their size. Although many of these have pedals, they are easily removed by removing a pin in the crank and are rarely and not very practicable to use. The changes would not require riders of these vehicles to obtain or have a current license, but they would not be classified as a bicycle allowing them to use shared pathways and sidewalks.



Actual Ad:

XB-610 Elite Electric e-bike (highest power unit we offer) with 4 (20 AMP) batteries & brush less rear 600 watt hub motor. The pedals are included free but do not need to be installed. The XB-610 is classified as a power assisted bicycle and is legal most everywhere with no license needed to ride.[weight 210# Photo at left.]

The main intent of clarifying and allowing the electric motor assist bicycles is to allow a wider range of people to use a bicycle for everyday transportation needs that otherwise may not be able to use a standard bicycle effectively. Under current statutes all electric bicycles are allowed under 1,000 watts including the larger electric scooters, the updates presented better define the intended use and puts a cap on the size and speed of the vehicles which can be considered a bicycle.

Trailers

The current definition of a trailer in the vehicle code 41-6a-1634 does not differentiate between attaching to a non-motorized vehicle or motorized vehicle, it only states that it must have a hitch and safety chains. This is not practicable for attaching to a bicycle. It also could be added to this section at (3)(c): “, or (3)(c) a bicycle.” Although the “trailer” definition in section 102 indicates that it is a device attached to a motor vehicle, this change would clarify that a trailer attached to a bicycle would not need the safety chains not applicable to one attached to a bicycle.

41-6a-1634. Safety chains on towed vehicles required -- Exceptions.

(1) A towed vehicle shall be coupled by means of a safety chain, cable or equivalent device, in addition to the regular trailer hitch or coupling.

(2) Except as provided under Subsection (3), a safety chain, cable or equivalent device shall be:

(a) securely connected with the chassis of the towing vehicle, the towed vehicle, and the drawbar;

(b) of sufficient material and strength to prevent the two vehicles from becoming separated; and

(c) attached to:

(i) have no more slack than is necessary for proper turning;

(ii) the trailer drawbar to prevent it from dropping to the ground; and

(iii) assure the towed vehicle follows substantially in the course of the towing vehicle in case the vehicles become separated.

(3) The provisions of Subsection (2) do not apply to a:

(a) semitrailer having a connecting device composed of a fifth wheel and king pin assembly; or

(b) pole trailer.

41-6a-1114

Placement of Equipment

This adjustment make it legal for a light or reflector to be placed either on the operator or the bicycle as long as it still meets the night time visibility requirements. This is not so much a law enforcement issues, but rather a legal liability issues if there is an accident.

If the light or reflector can be seen from 500' (about 10 standard SLC house lots or 2/3 a block) then it should not really matter. Many of the higher end lighting systems can be helmet mounted which provides better visibility for the operator to see where they are headed, and the rear blinking lights which many use will attach to a bag or backpack and in sometimes their gear will block the standard reflector/light on the seat post and needs to be mounted to a bag so it can be seen.

Stakeholder Groups Consulted

Over the past three years, various versions and revisions of these proposed code changes have been presented to various groups, provided input formally and informally, and research conducted including both formally and informally. Arguments and suggestions were taken from these groups and were considered in the drafting of the language of this bill:

- Bike Utah (Utah Bicycle Coalition)
- Local and State Bicycle and Transportation Engineers
- Salt Lake City Mayor's Bicycle Advisory Committee
- Salt Lake County Mayor's Bicycle Advisory Committee
- League of American Bicyclists
- Utah Municipal and County law enforcement agencies
- Community Councils
- Bicycle Safety Instructor user groups (similar to the motorcycle safety foundation courses)
- Association of Bicycle and Pedestrian Professionals
- Survey of other state's codes
- Transportation Alliance
- Discussions with many cyclists and motorists groups

Misc. Related Definitions (Emphasis Added):

- **Highway:** 41-6a-102(21) "Highway" means the entire width between property lines of every way or place of any nature when any part of it is open to the use of the public as a matter of right for vehicular travel. (The entire ROW)
- **Roadway:** 41-6a-102(51)(a) "Roadway" means that portion of highway improved, designed, or ordinarily used for vehicular travel. (b) "Roadway" does not include the sidewalk, berm, or shoulder, even though any of them are used by persons riding bicycles or other human-powered vehicles. (c) "Roadway" refers to any roadway separately but not to all roadways collectively, if a highway includes two or more separate roadways. (Roadway does not include the shoulder, even though cyclists may use them)
- **Shoulder:** 41-6a-102(55) "Shoulder area" means: (a) that area of the hard-surfaced highway separated from the roadway by a pavement edge line as established in the current approved "Manual on Uniform Traffic Control Devices"; or (b) that portion of the road contiguous to the roadway for accommodation of stopped vehicles, for emergency use, and lateral support. (Shoulder includes the parking area and everything to the right of the fog line)

- **Crosswalk:** (9) "Crosswalk" means:
 - (a) that part of a roadway at an intersection included within the connections of the lateral lines of the sidewalks on opposite sides of the highway measured from:
 - (i) (A) the curbs; or
 - (B) in the absence of curbs, from the edges of the traversable roadway; and
 - (ii) in the absence of a sidewalk on one side of the roadway, that part of a roadway included within the extension of the lateral lines of the existing sidewalk at right angles to the centerline; or
 - (b) any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface.
- **Electric personal assistive mobility device:** 41-6a-102(14)(Segway) means a self-balancing device with:
 - (i) two nontandem wheels in contact with the ground;
 - (ii) a system capable of steering and stopping the unit under typical operating conditions;
 - (iii) an electric propulsion system with average power of one horsepower or 750 watts;
 - (iv) a maximum speed capacity on a paved, level surface of 12.5 miles per hour; and
 - (v) a deck design for a person to stand while operating the device.
 - (b) "Electric personal assistive mobility device" does not include a wheelchair.
- **41-6a-1102 Bicycle and device propelled by human power and moped riders subject to chapter**
 - (1) Except as provided under Subsection (2) or as otherwise specified under this part, a person operating a bicycle, a vehicle or device propelled by human power, or a moped has all the rights and is subject to the provisions of this chapter applicable to the operator of any other vehicle.
 - (2) A person operating a nonmotorized bicycle or a vehicle or device propelled by human power is not subject to the penalties related to operator licenses under alcohol and drug-related traffic offenses.
- **41-6a-1106**
Bicycles and human powered vehicle or device to yield right-of-way to pedestrians on sidewalks, path
 - (1) A person operating a bicycle or a vehicle or device propelled by human power shall:
 - (a) yield the right-of-way to any pedestrian; and
 - (b) give an audible signal before overtaking and passing a pedestrian.
 - (2) A person may not operate a bicycle or a vehicle or device propelled by human power on a sidewalk, path, or trail, or across a roadway in a crosswalk, where prohibited by a traffic-control device or ordinance.
 - (3) A person may not operate a bicycle or a vehicle or device propelled by human power in a negligent manner so as to collide with a:
 - (a) pedestrian; or
 - (b) person operating a:
 - (i) bicycle; or
 - (ii) vehicle or device propelled by human power.
 - (4) A person operating a bicycle or a vehicle or device propelled by human power on a sidewalk, path, or trail, or across a driveway, or across a roadway on a crosswalk may not operate at a speed greater than is reasonable and prudent under the existing conditions, giving regard to the actual and potential hazards then existing.

(5) Except as provided under Subsections (1) and (4), a person operating a bicycle or a vehicle or device propelled by human power on a sidewalk, path, or trail, or across a roadway on a crosswalk, has all the rights and duties applicable to a pedestrian under the same circumstances.

Websites of Interest

<http://urban-rider.blogspot.com/2008/07/cyclist-facts.html> (common questions/answers regarding cyclist riding behavior)

<http://bicyclecolo.org/articles/black-hawk-bike-ban-pg1118.htm> (Black Hawk road rights case)

<http://www.ecrater.com/p/15625512/x-treme-xb-610-elite-electric-moped?gps=1> (Large Electric Scooter)

Mandatory Use of a Bike Lane “example” websites:

<http://iamtraffic.org/>

<http://bicycledriving.org/bikeways/bike-lanes>

<http://greatergreaterwashington.org/tag/bike+lanes/>

http://gothamist.com/2011/09/30/cyclist_psa_cops_ticketing_bikers_n.php

<http://labreform.org/blunders/b5.html>

Check for updates and more background information at:

www.safe-route.org

urban-rider.blogspot.com

For questions and comment:

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