

Date of Hearing: April 27, 2015

ASSEMBLY COMMITTEE ON TRANSPORTATION

Jim Frazier, Chair

AB 1096 (Chiu) – As Amended April 22, 2015

SUBJECT: Vehicles: electric bicycles

SUMMARY: Defines various classes of electric bicycles and establishes parameters for their operation in California. Specifically, **this bill:**

- 1) Defines an “electric bicycle” as a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts and establishes the following three classes of electric bicycles:
 - a) “Class 1 electric bicycle,” or “low-speed pedal-assisted electric bicycle,” which is defined as a bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour;
 - b) “Class 2 electric bicycle,” or “low-speed throttle-assisted electric bicycle,” which is defined as a bicycle equipped with a motor that may be used exclusively to propel the bicycle and that is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour; and
 - c) “Class 3 electric bicycle,” or “speed pedal-assisted electric bicycle,” which is defined as a bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour, and is equipped with a speedometer.
- 2) Requires manufacturers and distributors of electric bicycles, on or after January 1, 2017, to apply a label that is permanently affixed, in a prominent location, to each electric bicycle that contains the classification number, top assisted speed, and motor wattage of the electric bicycle printed in Arial font in at least 9-point type.
- 3) Subjects a person riding an electric bicycle to all of the same legal requirements that apply to people riding bicycles.
- 4) Deletes one definition of “motorized bicycle” from existing law and makes conforming changes.
- 5) Prohibits anyone under 14 from operating a Class 3 electric bicycle.
- 6) Requires anyone operating, riding as a passenger on, in a restraining seat attached to, or in a trailer towed by a Class 3 electric bicycle to wear a properly fitted and fastened bicycle helmet.
- 7) Prohibits the operation of a Class 3 electric bicycle on a bicycle path or trail, bikeway, bicycle lane, equestrian trail, or hiking or recreational trail, unless it is within or adjacent to a

roadway or unless the local authority or the governing body of a public agency having jurisdiction over such path or trail permits such operation.

- 8) Authorizes local authorities and public agencies with jurisdiction over bicycle paths or trails, equestrian trails, or hiking or recreational trails to prohibit the operation of Class 1 and Class 2 electric bicycles on that path or trail.

EXISTING LAW:

- 1) Defines a “motorized bicycle” or “moped” as a two-wheeled or three-wheeled device with fully operative pedals for propulsion by human power, or with no pedals if powered solely by electrical energy, and an automatic transmission and a motor that produces less than 4 gross brake horsepower and is capable of propelling the device at a maximum speed of not more than 30 miles per hour on level ground.
- 2) Additionally defines "motorized bicycle" as a device that has fully operative pedals for propulsion by human power and has an electric motor that has a power output of not more than 1,000 watts, is incapable of propelling the device at a speed of more than 20 miles per hour on level ground, and is incapable of further increasing the speed of the device when human power is used to propel the motorized bicycle faster than 20 miles per hour.
- 3) Requires compliance with a variety of manufacturing, disclosure, safety, and operational requirements.
- 4) Prohibits the operation of motorized bicycles on all bicycle paths or trails, bikeways, bicycle lanes, equestrian trails, and hiking or recreational trails unless the local authority with jurisdiction over the facility permits their operation.

FISCAL EFFECT: Unknown

COMMENTS: Existing law provides for two categories of motorized bicycle. Bicycles in the first category have a maximum allowable speed of 30 mph, pedals for human propulsion, and a motor that produces no more than four horsepower. This category also includes devices that are powered solely by an electric motor but do not have pedals, like an electric-powered Vespa. Bicycles in the second category have a maximum allowable speed of 20 mph, a 1,000-watt (approximately 1.4 horsepower) motor, and pedals for human propulsion.

Current law authorizes the use of motorized bicycles on public streets and roads, as well as on some state highways with prior authorization by the Department of Transportation. The law prohibits them from being operated on bicycle paths or trails, bikeways, bicycle lanes, and equestrian or hiking trails except those within or adjacent to a roadway, unless the local authority having jurisdiction over the bike path or trail approves their use by ordinance. According to the California Highway Patrol, operation of motorized bicycles generally requires a Class C driver's license with an M2 endorsement. Motorized bicycles are also subject to various operational and safety requirements.

AB 1096 deletes the second category of motorized bicycles (those with a top speed of 20 mph) and instead creates a new section of law to define three classes of electric bicycles and generally treats them similarly to other bicycles. AB 1096 restricts the use of Class 3 electric bikes, those that have the highest top speed, to those 14 and up and requires all riders to wear a helmet. In addition, AB 1096 prohibits Class 3 electric bikes on paths and trails unless expressly authorized

and permits local authorities to restrict the use of Class 1 and Class 2 electric bikes on paths and trails. Finally, AB 1096 requires electric bikes to be affixed with a label that specifies which class it is to allow for easy identification by law enforcement.

According to the author, "California's regulations of electric bicycles are outdated. Modern electric motor-assisted bicycles are designed to behave almost exactly like a regular bicycle - just easier to pedal - but they are regulated as 'motorized bicycles' with restrictions that bar their use on most bicycle paths. Ambiguous language in the description of electric bikes creates confusion for manufacturers and consumers in this fast-growing market. AB 1096 would create improved definitions of electric bikes and appropriately permit more access to trails and paths."

California's laws around motorized bicycles did not conceive of the types of electric bicycles that exist today, which are functionally similar to regular bicycles. AB 1096 recognizes that the law needs to be updated and offers a comprehensive approach that addresses the various types of electric bicycles that are available on the market. It is a reasonable approach that ensures that electric bicycle riders can use roads just like other bicycle riders while also providing for some measure of local control if safety concerns arise on specific paths or trails.

Proposed amendment: The committee may wish to consider asking the author to amend the bill to increase the minimum age requirement to operate a Class 3 electric bicycle to 16 since these bicycles can reach speeds of up to 28 miles per hour. Younger children may not have the level of maturity or judgment necessary to safely operate a motorized device and are likely to be less familiar with the rules of the road.

Prior legislation: AB 2173 (Bradford), Chapter 60, Statutes of 2014, increased the maximum allowable horsepower from two to four in the definition of motorized bicycle and moped. When AB 2173 was introduced it also included language change the definition of "motorized bicycle" to accommodate modern electric bicycles, but that language was eventually amended out of the bill.

REGISTERED SUPPORT / OPPOSITION:

Support

California Bicycle Coalition (Sponsor)
Bicycle Product Supplier Association
Bosch
Currie Tech
Felt Bicycles
Mahindra GenZe
People for Bikes
Shimano American Corporation
Specialized Bicycle Components
Yuba Bicycles

Opposition

None on file

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