

Date of Hearing: March 21, 2022

ASSEMBLY COMMITTEE ON TRANSPORTATION  
Laura Friedman, Chair  
AB 1946 (Boerner Horvath) – As Amended March 11, 2022

**SUBJECT:** Electric bicycles: safety and training program

**SUMMARY:** Requires the California Highway Patrol (CHP) to develop statewide safety standards and training programs for electric bicycles (e-bikes). Specifically, **this bill:**

- 1) Requires CHP to develop, on or before September 1, 2023, statewide safety standards and training programs based on evidence-based practices for users of e-bikes, including, but not limited to:
  - a. General electric bicycle riding safety, emergency maneuver skills, rules of the road, and laws pertaining to electronic bicycles.
- 2) Requires the safety standards and training programs to be developed in collaboration with relevant stakeholders and to be posted on CHP's website by September 1, 2023.

**EXISTING LAW:**

- 1) Defines an e-bike as a bicycle equipped with fully operable pedals and an electric motor of less than 750 watts.
- 2) Defines a "class 1 electric bicycle," or "low-speed pedal-assisted electric bicycle," as a bicycle equipped with a motor that provides assistance only when the rider is pedaling, and, ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.
- 3) Defines a "class 2 electric bicycle," or "low-speed throttle-assisted electric bicycle," 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.
- 4) Defines a "class 3 electric bicycle," or "speed pedal-assisted electric bicycle," 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 equipped with a speedometer.
- 5) Prohibits the following actions while operating an e-bike:
  - a. Riding on a freeway
  - b. Riding an e-bike under the age of 18 without a helmet
  - c. Operating an e-bike under the influence of alcohol and drugs
- 6) Requires the Department of Transportation (Caltrans) to develop minimum safety design criteria for cycle tracks.
- 7) Authorizes local governments to deviate from Caltrans' design criteria for bikeways under specified conditions.

- 8) Establishes the CHP within the Transportation Agency.

**FISCAL EFFECT:** Unknown.

**COMMENTS:** During the COVID-19 pandemic, riding bikes became a popular way to be outside and maintain social distancing, while getting some exercise. This led to the radical increase in sales of all types of bikes, with a noticeable spike in e-bike purchases. E-bike sales grew 145% from 2019 to 2020, more than double the rate of classic bikes, according to the market research firm NPD Group. Deloitte projected that between 2020 and 2023, 130 million e-bikes will be sold worldwide. At the present, e-bikes are among the world's top-selling electric vehicle.

According to the National Electronic Injury Surveillance System (NEISS), accidents involving e-bikes are more likely to result in serious injuries than traditional pedal-powered bicycles; a collision while operating an e-bike is more likely to result in hospitalization, and those operating e-bikes are three times more likely to hit a pedestrian. Current state law does not require or provide safety and training programs for the operation of traditional bikes or e-bikes.

*Local Training:* The rise in popularity of, and accidents on, e-bikes has led local governments and organizations to curate e-bike safety and education campaigns. The San Diego Bicycle Coalition, the Silicon Valley Bicycle Coalition, the cities of Encinitas, Carlsbad, and Solano Beach, the Hermosa Beach City School District, the San Diego Association of Governments (SANDAG), and others, have all created education materials regarding e-bike safety. However, very few offer classes, and efforts remain localized.

*Current State Programs:* CHP implements a traffic safety grant funded by the Office of Traffic Safety (OTS), through the National Highway Traffic Safety Administration, known as The California Pedestrian and Bicyclist Enforcement and Education Project. The stated goals of the project is, "to reduce pedestrian and bicyclist collisions and victims." The project includes both enhanced enforcement and a public education and awareness campaign focusing on traffic safety, which includes motorist behavior when driving in the presence of pedestrians and bicyclists. The program provides comprehensive traffic educational events, "rodeos," community informational sessions and collaboration, distributes bicycle helmets and other safety equipment, educational materials, and training for CHP personnel.

CHP has also created a Bicycle Safety Course which holds valuable information related to bicycle safety and maintenance. The course is available for anyone to complete, but is required within 120 days if a rider receives a citation for failing to wear a helmet. If the rider wears a properly fitted helmet and provides a copy of the course completion, the citation will be cleared. CHP, in consultation with OTS, and has also created a bicycle and pedestrian tip sheet for motorists that include reminders such as "share the road."

This bill creates a central authority on e-bike safety training and protocol that local governments and organizations can utilize in each community. This bill allows CHP to expand their current work on bicycle and pedestrian safety to e-bikes, and requires this information to be publicly available.

*According to the author,* "Unlike bicycles, an average e-bike can go as fast as 20 mph. Without the proper safety education and training for parents and children on how to ride safely, where to ride, bike maintenance, and the rules of the road for cyclists and drivers, e-bike riders are at risk

of experiencing severe injuries or even fatalities. Currently, a handful of cities and bicycle organizations offer e-bike education classes. AB 1946 requires Caltrans and the Division of Traffic Safety to develop statewide, uniform safety education and training guidelines for e-bike riders to be posted on their respective websites to make it easier to locate and find this information.”

*Prior Legislation:* AB 1096 (Chiu), Chapter 568, Statutes of 2015 defines electric bicycle, motorized bicycle, moped, and includes various restrictions for the operation of Class I, II, and III electric bicycles.

AB 1193 (Ting), Chapter 495, Statutes of 2015 adds a new category of bikeway named cycletracks or separated bikeways, also known as Class IV bikeways; clarifies Caltrans is required to establish minimum safety design criteria for each category of bikeways and provide consideration for the safety of vulnerable populations; and authorizes a local agency to utilize other minimum safety criteria if specified conditions are met.

SB 1095 (Killea), Chapter 517, Statutes of 1998) creates a bicycle facilities coordinator within Caltrans to be responsible for the administration of the department’s bicycle-related activities, and consolidates provisions within the California Bicycle Transportation Act.

**REGISTERED SUPPORT / OPPOSITION:****Support**

None on file.

**Opposition**

None on file.

**Analysis Prepared by:** Julia Kingsley / TRANS. / (916) 319-2093