



peopleforbikes

P.O. BOX 2359 BOULDER, CO 80306

PeopleForBikes.org | 303.449.4893

TO: Chairman Hennessey and members of the House Committee on Transportation
FROM: Morgan Lommele, Director of State and Local Policy PeopleForBikes
DATE: July 22, 2020
SUBJECT: HB 2646 - "Pedalcycles with Electric Assist"

Dear Hennessey and members of the House Committee on Transportation,

On behalf of PeopleForBikes, I encourage a favorable report on House Bill 2646.

PeopleForBikes is the national advocacy group and trade association that works for better policies and infrastructure for bike riding. Our coalition includes companies that manufacture or sell bicycles and related products, including electric bicycles; as well as more than 75,000 individual supporters in Pennsylvania.

E-bikes are an emerging technology, and need clear rules to regulate their use and create stability in the marketplace. In states where modern day e-bikes lack a specific vehicle classification, such as Pennsylvania, it is unclear how they are regulated, which creates significant confusion for consumers and retailers, and hinders the electric bicycle market.

E-bikes are enjoyed by people from all walks of life. E-bikes make riding a bicycle for fun, commuting or transportation easier and faster and provide an affordable and competitive transportation option. E-bikes are also a dependable option for people limited by fitness, age, or disability; as well as for those who traditionally drive to work in the 5-20 mile range.

Manufacturers are faced with inconsistent, outdated and unclear rules that govern where e-bike purchasers can use their product. In response to this, U.S. e-bike manufacturers came together to develop the three-class system reflected in HB 2646 five years ago to update regulations around critical issues like their speed, wattage and operational rules. In states where the three-class system of e-bikes has been promulgated, sales of e-bikes more than doubled. On the local level, bike retailers in states that have passed this law state that having a three-class e-bike system helps their team clearly explain where e-bikes are and aren't. In their retail shops, e-bike sales have taken off and helped stores offset the loss of sales due to other declining categories.

E-bike laws are completely changing business models and customer bases. We created the class system that is the foundation of HB 2646 in order to align the law with the three main forms of product that are currently on the marketplace and with the federal definitions of an electric bicycle, create consistent standards and rules for these devices, and clearly distinguish between an electric bicycle and a motorcycle. A uniform labeling standard for all e-bikes helps law enforcement and public safety officials identify the class of e-bike in the event of enforcement issues. Additional restrictions will ensure that they are used in a manner that is safe and at speeds that are appropriate for the infrastructure on which they are traveling.

We have helped enact this system in 28 states, including neighboring Maryland, New Jersey, New York, Ohio, Virginia and West Virginia; and bills are progressing in 15 other states. It has been codified and implemented with no known issues in those 28 states.

PeopleForBikes supports HB 2646, and we believe it is the proper way to regulate the use of electric bicycles at the state level. Thank you Chairman Hennessey and members of the House Committee on Transportation.

Sincerely,

Morgan Lommele
Director of State + Local Policy
PeopleForBikes



What other states use the classification system in this bill?

28 states: Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Indiana, Louisiana, Maine, Maryland, Michigan, New Hampshire, New Jersey, New York, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin and Wyoming.

Are you working to advance similar legislation elsewhere in 2020 and 2021?

Yes. In addition to Pennsylvania, Alabama, Alaska, Delaware, Iowa, Massachusetts, Minnesota, Missouri, Montana, North Carolina, Oregon and South Carolina.

Why is the top speed for Class 3 e-bikes 28 MPH?

In Europe, the classification that is equivalent to a class 3 e-bike is "speed pedelec." Under European rules, speed pedelecs are limited to a top assisted speed of 45KPH, which is equivalent to 28MPH. Therefore, these rules provide uniform product standards between the European and U.S. markets.

The federal definition of an e-bike says that the top speed is 20MPH. How are class 3 e-bikes legal given the federal definition?

The federal definition uses very specific language to delineate the top speed of e-bikes. The 20MPH threshold applies when the e-bike is being operated "solely" under motor power. However, e-bikes are most commonly ridden under a combination of human and motor power. The federal definition does not provide a top speed for when an e-bike is being operated under combined human and motor power. The class 3 definition clarifies this ambiguity by specifying the maximum assisted speed for e-bikes at 28MPH.

Can e-bikes be safely operated on bike paths?

Yes. Researchers who have compared riders of e-bikes and regular bikes at the University of Tennessee observed that e-bikes riders exhibit similar safety behavior as riders of traditional bicycles. Perhaps most importantly, e-bike riders traveled at similar speeds to riders of human-powered bicycles. They rode slightly faster when riding on the road (1.8 mph), but actually slower than regular bikes riders when on bicycle paths (1 mph). Observations regarding the safe use of electric bicycles on existing bike infrastructure are consistent with the results of a pilot study in Boulder, Colorado from 2013, where no safety issues emerged after a lengthy trial period.

Why not regulate e-bikes at the federal level?

E-bikes have been regulated federally since 2002. However, as with other consumer products, the federal regulations are limited to manufacturing and product safety. They do not specify where e-bikes may be ridden or what rules of the road govern their use. While the federal government can intervene in these matters in very rare situations, the rules of the road are generally a matter of state law. Other emerging technologies have followed the same path of creating new state traffic laws to address the use of these devices on our streets. This includes segways, autocycles, and commercial quadricycles.

How can anyone tell what an e-bike is?

E-bikes are becoming more and more difficult to distinguish from regular bicycles. The labeling requirement is a proactive measure on behalf of the industry to ensure that law enforcement or land managers can easily tell that a bicycle is in fact an e-bike, and quickly assess which type of e-bike it is.

Can people tamper with e-bikes?

Like other mechanized or motorized devices, it is possible that a user could tamper with an e-bike. We have inserted a tampering provision in the legislation that will place the onus on the owner to have a properly labeled bike if that were to occur. If someone was to tamper with an e-bike and create a machine that can travel faster than any of the specified classifications of e-bikes, they would presumably be operating an unlicensed and unregistered vehicle, and would be subject to any applicable penalties.



Does the bill regulate e-bikes off-road?

The bill regulates the use of e-bikes streets and on bicycle paths. The bill does not regulate the use of e-bikes on trails, where land management agencies maintain their authority to regulate. The terminology in the bill is consistent with existing state statutes that govern e-bikes and other types of motorized devices that require off-street infrastructure access, such as segways/EPAMDs.

Who is the typical purchaser of an e-bike?

While all types of people purchase and use e-bikes, older, baby-boomer purchasers are the most common.

How many e-bike are sold each year in the U.S.?

While data on this are imperfect, approximately 300,000 e-bikes are sold annually in the U.S. They are the fastest growing segment of the bicycle sales.

How much do e-bikes cost?

The average price of an e-bike is \$2,500. Entry-level e-bikes are about \$1,200. High-end e-bikes can cost \$8,000 or more.

Why distinguish between classes of e-bikes in the bill if the rules are the same?

The distinction between these classes of e-bikes provides for greater local flexibility. Some municipalities have demonstrated an interest in prohibiting some classes of e-bikes from certain types of infrastructure, and this bill provides the flexibility to take those measures if they are desired on a local level. The definitions could serve as the foundation for future determinations that will need to be made by land managers for natural surface use.

Does the rider have to be pedaling for the e-bike's motor to be engaged?

It depends on the type of e-bike. For Class 1 and Class 3 e-bikes, the rider must be pedaling for the motor to be engaged. For Class 2 e-bikes, the motor can propel the e-bike without the rider pedaling.