peopleforbikes

P.O. BOX 2359 BOULDER, CO 80306
PeopleForBikes.org | 303.449.4893

Why is this legislation needed?
In many states, electric bicycles lack a specific vehicle classification. In these states it is unclear how they are regulated, or they may be interpreted to fall within terms primarily aimed at combustion engine vehicles such as mopeds or scooters. These classifications that were never intended to apply e-bikes. This legal scheme creates significant confusion for consumers and retailers, and hinders the electric bicycle market. In order to clarify state law, and properly regulate electric bicycles like traditional bicycles, it is critical to understand the existing legal rules that govern electric bicycles.

What other states use the classification system in this bill?
As of 2020, 26 states (Arizona, Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Illinois, Indiana, Maine, Maryland, Michigan, New Hampshire, New Jersey, New York, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin and Wyoming) have passed laws that define three classes of e-bikes in their traffic statutes.

Is similar legislation being advanced elsewhere in 2020?
Yes, PeopleForBikes is targeting 15 states in 2020. These states include: Alabama, Alaska, Delaware, Florida, Iowa, Louisiana, Massachusetts, Minnesota, Missouri, Montana, North Carolina, Oregon, Pennsylvania, South Carolina and Virginia.

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 45 KPH, which is equivalent to 28 MPH. Therefore, these rules provide uniform product standards between the European and U.S. markets.

I have read the federal definition of an e-bike and it 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 20 MPH 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).

Why not regulate e-bikes at the federal level?

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 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 in the model bill 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 asses which type of e-bike it is.

Can people tamper with e-bikes?
Like other mechanized or motorized devices, it possible that a user could tamper with an e-bike. We have inserted a tampering provision in the model bill that will place the onus on the owner to have a properly labeled bike if that were to occur. If a 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?
No, it only amends the traffic laws located in the revised vehicle code. The bill will provide rules for the regulation of e-bikes on our streets and on bicycle paths. The bill does not address the use of e-bike on trails.

Who is the typical purchaser of an e-bike?
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.

How many e-bike are sold each year in the U.S.?
While our data on this is imperfect, approximately 260,000 e-bikes are sold annually in the U.S. However, they are the fast growing segment of the bicycle sales, with approximately 75% year over year growth.

How much do e-bikes cost?
Entry-level e-bikes are about $1,500. High-end e-bikes can cost $8,000 or more.

Why distinguish between class 1 and class 2 e-bikes in the bill if the rules are the same?
The distinction between these two types of e-bikes provides for greater local flexibility. Some municipalities have demonstrated an interest in prohibiting throttle-powered 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.

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.