

2021 HOUSE TRANSPORTATION

HB 1148

2021 HOUSE STANDING COMMITTEE MINUTES

Transportation Committee Room JW327E, State Capitol

HB 1148
1/21/2021

A bill relating to electric bicycle regulations, manufacturing, and operations; relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

2:00 **Representative Kading** opened the hearing.

Attendance

Representatives	
Representative Dan Ruby	P
Representative Tom Kading	P
Representative Rick Becker	P
Representative Cole Christensen	P
Representative LaurieBeth Hager	P
Representative Jared C. Hagert	P
Representative Karla Rose Hanson	P
Representative Terry B. Jones	P
Representative Emily O'Brien	P
Representative Mark S. Owens	P
Representative Bob Paulson	P
Representative Gary Paur	P
Representative Robin Weisz	P
Representative Greg Westlind	P

Discussion Topics:

- HB 1148
- Clearly define electric bicycles and provide rules for them.

Chairman Ruby introduced the bill. Testimony # 2170.

Amy Cleary, Director of Public Affairs with the GA Group introduced Morgan Lommele.

Morgan Lommele, People for Bikes, spoke in support on Zoom. Testimony # 1775.

Mike Rud, ND Retailer's Association, spoke in support.

Justin Kristan, testified in support on Zoom. Testimony #2105.

Amy Cleary answered questions.

Sergeant Wade Kadrmas, Safety and Education Officer for ND Highway Patrol, provided neutral testimony. Testimony # 2058, 2059, 2060.

Justin Kristan responded to questions.

Stephanie Dassinger, ND League of Cities, gave neutral testimony.

Representative O'Brien moved a DO PASS.

Representative Christensen seconded the motion.

Representatives	Vote
Representative Dan Ruby	P
Representative Tom Kading	P
Representative Rick Becker	P
Representative Cole Christensen	P
Representative LaurieBeth Hager	A
Representative Jared C. Hagert	P
Representative Karla Rose Hanson	P
Representative Terry B. Jones	P
Representative Emily O'Brien	P
Representative Mark S. Owens	P
Representative Bob Paulson	P
Representative Gary Paur	P
Representative Robin Weisz	P
Representative Greg Westlind	P

Motion passed. 13-0-1

Representative Becker – carrier.

Additional written testimony:

Jason Gates # 1558

2:43 **Chairman Ruby** closed the hearing.

Jeanette Cook, Committee Clerk

REPORT OF STANDING COMMITTEE

HB 1148: Transportation Committee (Rep. D. Ruby, Chairman) recommends **DO PASS** (13 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). HB 1148 was placed on the Eleventh order on the calendar.

HOUSE BILL 1148
Transportation Committee
January 21, 2021

Mr. Vice-Chairman and members of the House Transportation Committee I am Dan Ruby, Representative from District 38. I'm here to introduce House Bill 1148 which will clear up confusion for small businesses in the state and their customers pertaining to where these bicycles may be ridden.

North Dakota lacks specific vehicle classifications and it is unclear how they are regulated. They may be interpreted to fall within terms primary aimed at combustion engine vehicles such as mopeds or scooters.

The goal of HB 1148 is to clearly define electric bicycles, and provide clear rules with respect to how they must be equipped and operated and clear enforcement guidelines for public safety officials, consistent with the 43 states that have incorporated electric bicycles into their traffic codes. The classification system that is the foundation of 1148 aligns North Dakota law with the three main forms of product that are currently on the marketplace with the federal definitions of an electric bicycle, as well as consistent standards and rules for these devices.

I will run through the changes in the bill. Page 3 subsection 3 updates the definition of bicycle and adds electric bicycles. Page 5 subsection 19 describes the three classifications of electric bicycles. Pages 9, 10, 12, and 16 add exclusions for electric bicycles. Also on page 16 they are excluded from title requirements. On page 17 are provisions pertaining to the use and limitations for electric bicycles. The rest of the changes in the bill are more exclusion added to other types of vehicle definitions.

What this all boils down to is to ensure that electric bicycles aren't classified as motor vehicles that would require them to be titled, registered and prohibited from using bike trails. Without surety with their classification they could be considered a vehicle similar to a motorcycle, which they clearly are not. Mr. Vice-Chairman and members of the committee, there are others here to testify on this bill so I will stop here to answer questions and would like your favorable consideration for a Do Pass Recommendation.

TO: Chairman Ruby and Members of the House Transportation Committee
FROM: Morgan Lommele, Director of State and Local Policy, PeopleForBikes
DATE: January 15, 2020
SUBJECT: HB 1148 relating to electric bicycle regulations, manufacturing, and operations

Dear Chairman Ruby and Members of the House Transportation Committee,

On behalf of PeopleForBikes, I encourage a do-pass recommendation on House Bill 1148.

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 10,000 individual supporters in North Dakota.

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

Electric bicycles are enjoyed by people from all walks of life. They make riding a bicycle for fun, commuting or transportation easier and faster and provide an affordable and competitive transportation option. Electric bicycles 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 electric bicycle purchasers can use their product. In response to this, U.S. electric bicycle manufacturers came together to develop the three-class system six years ago, reflected in HB 1148, to update regulations around critical issues like their speed, wattage, and operation. In states where the three-class system of electric bicycles has been promulgated, sales of electric bicycles more than doubled. On the local level, bike retailers in states that have passed this law state that having a three-class electric bicycle system helps their team clearly explain where electric bicycles are and aren't. In their retail shops, electric bicycle sales have taken off and helped stores offset the loss of sales due to other declining categories.

Electric bicycle laws are completely changing business models and customer bases. We created the class system that is the foundation of HB 1148 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 electric bicycles helps law enforcement and public safety officials identify the class of electric bicycle in the event of enforcement issues. Additional restrictions ensure that they are used in a safe manner.

We have helped enact this system in 28 states (Arizona, Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Illinois, Indiana, Maine, Maryland, Michigan, New Hampshire, New Jersey, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Washington, Wisconsin and Wyoming); and bills are progressing in 17 other states this year. It has been codified and implemented with no known issues in those 28 states.

PeopleForBikes supports HB 1148, and we believe it is the proper way to regulate the use of electric bicycles in North Dakota. Again, we would urge a do pass recommendation on HB 1148 Thank you for your time.

Sincerely,
Morgan Lommele
Director of State + Local Policy
PeopleForBikes

What other states use the classification system in this bill?

At the end of 2020, 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) had passed laws that define three classes of electric bicycles in their traffic statutes.

Are you working to advance similar legislation elsewhere in 2021?

Yes. Aside from North Dakota, similar legislative efforts are underway in 16 states: Kansas, Nevada, Montana, Alabama, Alaska, Delaware, Iowa, Massachusetts, Minnesota, Mississippi, Missouri, Oregon, Pennsylvania, Rhode Island, South Carolina, and Vermont.

Why is the top speed for Class 3 electric bicycles 28 MPH?

In Europe, the classification that is equivalent to a class 3 electric bicycle 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 electric bicycle says that the top speed is 20MPH. How are class 3 electric bicycles legal given the federal definition?

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

Does the rider have to be pedaling for the electric bicycle’s motor to be engaged?

It depends on the type of electric bicycle. For Class 1 and Class 3 electric bicycles, the rider must be pedaling for the motor to be engaged. For Class 2 electric bicycles, the motor can propel the electric bicycle without the rider pedaling.

Can electric bicycles be safely operated on bike paths?

Yes. Researchers who have compared riders of electric bicycles and regular bikes at the University of Tennessee observed that electric bicycles riders exhibit similar safety behavior as riders of traditional bicycles. Perhaps most importantly, electric bicycle 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 electric bicycles at the federal level?

Electric bicycles 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 electric bicycles 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 electric bicycle is?

Electric bicycles 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 electric bicycle, and quickly assess which type of electric bicycle it is.

Can people tamper with electric bicycles?

Like other mechanized or motorized devices, it is possible that a user could tamper with an electric bicycle. 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 electric bicycle and create a machine that can travel faster than any of the specified classifications of electric bicycles, they would presumably be operating an unlicensed and unregistered vehicle, and would be subject to any applicable penalties.

Does the bill regulate electric bicycles off-road?

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

Who is the typical purchaser of an electric bicycle?

While all types of people purchase and use electric bicycles, the typical demographics are couples and households, urban dwellers, aging bicyclists, and people with physical or cognitive limitations.

How many electric bicycles are sold each year in the U.S.?

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

How much do electric bicycles cost?

The average price of an electric bicycle is \$2,000. Entry-level electric bicycles are about \$1,000. High-end electric bicycles can cost \$6,000 or more.

Why distinguish between classes of electric bicycles in the bill if the rules are the same?

The distinction between these classes of electric bicycles provides for greater local flexibility. Some municipalities have demonstrated an interest in prohibiting some classes of electric bicycles 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.

Testimony in support of House Bill 1148.

Mr. Chair and members of the House Transportation Committee thank you for allowing me to speak in support of House Bill 1148.

My name is Justin Kristan, I am a resident of West Fargo, North Dakota. I am speaking in support of House Bill 1148.

I have been an avid bicyclist since 1982 and enjoy walking regularly for recreation and utility. Since 1982, technological advancements in the bicycle industry have brought about many benefits such as the development of lighter frame materials, disc brakes and the development of reliable and durable electric assisted bicycles.

Electric assisted bicycles have reached a level of sophistication and durability that makes them very appealing for anyone who would like to ride a bicycle but needs or desires to have a little bit of assist to get going from a stationary state such as at a stop sign or traffic signal. Electric assisted bicycles are also very appealing for bicyclists who may have hills to contend with as is the case in Bismarck and other western cities within North Dakota. Anyone who has done any bicycling in flatter areas of the state knows there are days when the wind speed makes the use of an electric assisted bicycle appealing.

Electric assisted bicycles should not be considered motor vehicles as they do not offer the power or speed of a fully functional motor vehicle. Amending the definition of an electric assisted bicycle and codifying into law the three types of electric assisted bicycles is the ideal approach to allowing electric assisted bicycles to be operated legally on public roadways.

Thank you for allowing me the opportunity to speak to you today in support of House bill 1148.

Respectfully,

Justin Kristan,

Resident, West Fargo, North Dakota

ENTITLED, An Act to define electric bicycles and to provide for the regulation of electric bicycles.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF SOUTH DAKOTA:

Section 1. That chapter 32-20B be amended by adding a NEW SECTION to read:

For purposes of this chapter, the term, electric bicycle, means a bicycle or a tricycle that is equipped with a seat or saddle, with operable pedals for propulsion, and with an electric motor of seven hundred fifty watts or less.

An electric bicycle is a Class I electric bicycle if the motor provides assistance only when the person is pedaling and ceases to provide assistance when a speed of twenty miles per hour is achieved.

An electric bicycle is a Class II electric bicycle if the motor is capable of propelling the bicycle without the person pedaling and ceases to provide assistance when a speed of twenty miles per hour is achieved.

An electric bicycle is a Class III electric bicycle if the motor provides assistance only when the person is pedaling and ceases to provide assistance when a speed of twenty-eight miles per hour is achieved.

Section 2. That chapter 32-20B be amended by adding a NEW SECTION to read:

Beginning January 1, 2020, any person who manufactures or distributes an electric bicycle in this state shall permanently affix to the electric bicycle a label that contains the following information:

- (1) The designated class of the electric bicycle;
- (2) The maximum assisted speed of the electric bicycle; and
- (3) The wattage of the electric bicycle's motor.

If a person makes a modification to the electric bicycle that affects the bicycle's maximum speed,

or manner of propulsion, the person shall amend the label required by this section to accurately reflect the required information.

Any person who violates this section is guilty of a Class 2 misdemeanor.

Section 3. That chapter 32-20B be amended by adding a NEW SECTION to read:

An electric bicycle shall be equipped so that the electric motor is disengaged or ceases to function when the person stops pedaling or when the brakes are applied.

Section 4. That chapter 32-20B be amended by adding a NEW SECTION to read:

Unless otherwise prohibited by a governmental entity having jurisdiction, a person may operate a Class I or Class II electric bicycle on any bicycle path or multi-use path in this state.

A person may not operate a Class III electric bicycle on a bicycle path or multi-use path in this state unless:

- (1) The bicycle path or multi-use path is within or adjacent to a highway or roadway; or
- (2) The governmental entity having jurisdiction over the bicycle path or multi-use path expressly permits the use.

A person may operate a Class III electric bicycle on a trail that has been designated as nonmotorized, if the trail was constructed only by clearing or grading the native soil and without the installation or placement of any additional surface material and if the governmental entity having jurisdiction over the trail has not otherwise prohibited or restricted the operation.

Section 5. That chapter 32-20B be amended by adding a NEW SECTION to read:

To operate a Class III electric bicycle in this state, a person shall be at least sixteen years of age. This section does not prohibit a person younger than sixteen years of age from riding as a passenger on a Class III electric bicycle, if the bicycle is designed to accommodate a passenger.

Section 6. That chapter 32-20B be amended by adding a NEW SECTION to read:

Any person who is less than eighteen years of age and operating a Class III electric bicycle and

any person who is a passenger on a Class III electric bicycle, regardless of age, shall wear a properly fitted and fastened bicycle helmet.

Section 7. That chapter 32-20B be amended by adding a NEW SECTION to read:

Any person operating a Class III electric bicycle shall ensure that the bicycle is equipped with a functioning speedometer.

Section 8. That § 32-3-1 be amended to read:

32-3-1. Terms used in chapters 32-3 to 32-5B, inclusive, mean:

- (1) "Commercial motor vehicle," any motor vehicle used or maintained for the transportation of persons or property for hire, compensation, or profit, or designed, used, or maintained primarily for the transportation of property, and not specifically excluded under § 32-9-3;
- (2) "Component part," any part of a motor vehicle, trailer, or semitrailer other than a tire, having a vehicle identification number;
- (3) "Dealer," any person who, for commission or with intent to make a profit or gain, sells, exchanges, rents with option to purchase, offers or attempts to negotiate a sale or exchange of new, or new and used vehicles, or who is engaged wholly or in part in the business of selling new, or new and used vehicles, whether or not such vehicles are owned by that person;
- (4) "Department," Department of Revenue;
- (4A) "Electric bicycle," as that term is defined in section 1 of this Act;
- (4B) "Gross vehicle weight rating," the value specified by the manufacturer as the loaded weight of a single vehicle;
- (5) "Junking certificate," a certificate of ownership, which may not be restored to a title document which allows highway use, issued by the department to the owner of a vehicle which is going to be dismantled and sold for parts;

- (5A) "Low-speed vehicle," a four-wheeled motor vehicle whose speed attainable in one mile is more than twenty miles per hour and not more than twenty-five miles per hour on a paved level surface.
- (6) "Manufactured home," a structure, transportable in one or more sections, which is eight body feet or more in width or forty body feet or more in length in the traveling mode, or is three hundred twenty or more square feet when erected on a site; which is built on a permanent chassis and designed to be used as a dwelling, with or without a permanent foundation, when connected to the required utilities; and which contains the plumbing, heating, air conditioning, and electrical systems therein. The term includes any structure which meets all the requirements of this subdivision and any other structure which has been certified by the secretary of housing and urban development. The term does not include a recreational park trailer;
- (7) "Manufacturer," any person, firm, corporation, limited liability company, or association engaged in the manufacture of new motor vehicles as a regular business;
- (8) "Mobile home," a movable or portable unit, designed and constructed to be towed on its own chassis (comprised of frame and wheels), and designed to be connected to utilities for year-round occupancy. The term includes:
- (a) Units containing parts that may be folded, collapsed, or telescoped when being towed and that may be expanded to provide additional cubic capacity; and
 - (b) Units composed of two or more separately towable components designed to be joined into one integral unit capable of being separated again into the components for repeated towing.

The term does not include a recreational park trailer;

- (9) "Moped," a motor driven cycle equipped with two or three wheels. If a combustion engine

is used, the maximum piston or rotor displacement shall be fifty cubic centimeters regardless of the number of chambers in such power source. The power source shall be equipped with a power drive system that functions directly or automatically only, not requiring clutching or shifting by the operator after the drive system is engaged. The term does not include an electric bicycle;

- (10) "Motorcycle," includes motorcycles, motorbikes, mopeds, bicycles with motor attached, and all motor operated vehicles of the bicycle or tricycle type, whether the motive power be a part thereof or attached thereto, and having a saddle or seat with the driver sitting astride or upon it, or a platform on which the driver stands, but excluding a tractor. The term does not include an electric bicycle;
- (11) "Motor vehicle," automobiles, motor trucks, motorcycles, house trailers, trailers, and all vehicles propelled by power other than muscular power, except traction engines, road rollers, farm wagons, freight trailers, vehicles that run only on rails or tracks, electric bicycles, and off-road vehicles as defined in § 32-20-1;
- (12) "New motor vehicle," any motor vehicle to which a manufacturer's statement of origin has not been transferred, or is a motor vehicle on which title was issued from the manufacturer's statement of origin or manufacturer's certificate of origin and is still in the name of the first person who took title to the vehicle;
- (13) "Noncommercial motor vehicle," any motor vehicle not classified as a commercial motor vehicle;
- (14) "Noncommercial trailer or semitrailer," any trailer or semitrailer not used or maintained for the transportation of persons or property for hire, compensation, or profit;
- (14A) "Notation," a physical or electronic process of recording a lien on a certificate of title, a manufacturer's statement of origin, or a manufacturer's certificate of origin;

- (15) "Off-road vehicle," any self-propelled, two or more wheeled vehicle designed primarily to be operated on land other than a highway and includes all terrain vehicles, dune buggies, and any vehicle whose manufacturer's statement of origin (MSO) or manufacturer's certificate of origin (MCO) states that the vehicle is not for highway use. The term does not include a farm vehicle or an electric bicycle as defined in this section;
- (16) "Owner," any person, firm, association, or corporation renting a motor vehicle or having the exclusive use thereof, under a lease or otherwise, for a period greater than thirty days; as between contract vendor and contract vendee, the term, owner, shall refer to the contract vendee, unless the contrary clearly appears from the context of chapters 32-3 to 32-5B, inclusive, or a person having legal possession or title;
- (17) "Rebuilt vehicle," any motor vehicle, trailer, or semitrailer that has been rebuilt by the addition or deletion of assemblies, subassemblies, parts, or component parts so that upon gross visual examination it does not appear to be the vehicle described in the certificate of title last issued for the vehicle, or whose title has been marked as rebuilt by this state or another state or jurisdiction;
- (17A) "Recreational park trailer," a vehicle that is primarily designed to provide temporary living quarters for recreational, camping, or seasonal use and which:
- (a) Is built on a single chassis mounted on wheels;
 - (b) Has a gross trailer area not exceeding four hundred square feet in the setup mode;
 - (c) Is certified by the manufacturer as complying with American National Standards Institute Standard No. A119.5 in effect on January 1, 2008; and
 - (d) Has at least a seventeen digit identification number and the manufacturer has designated the vehicle as a recreational park model on the manufacturer statement of origin;

- (18) "Recreational vehicle," a vehicular portable structure built on a chassis designed to be used as a temporary dwelling for travel, recreational, vacation, or seasonal uses, permanently identified as a travel trailer or a recreational park trailer by the manufacturer of the trailer;
- (19) "Road tractor," any motor vehicle designed and used for drawing other vehicles, except farm or logging tractors used exclusively for farming or logging, and not so constructed as to carry any load thereon either independently or any part of the weight of a vehicle or load so drawn;
- (20) "Secretary," secretary of revenue;
- (21) "Semitrailer," any vehicle of the trailer type, equipped with a kingpin assembly, designed and used in conjunction with a fifth wheel connecting device on a motor vehicle constructed so that some part of its weight and that of its load rests upon or is carried by another vehicle;
- (22) "State," includes the territories and the federal districts of the United States;
- (23) "Trailer," any vehicle without motive power designed for carrying property or passengers wholly on its own structure and for being drawn by a motor vehicle;
- (24) "Truck tractor," any motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn;
- (25) "Used vehicle," any motor vehicle to which title has been issued to someone other than the first person who took title to the motor vehicle from the manufacturer's statement of origin or manufacturer's certificate of origin; and
- (26) "Vehicle identification number," the number assigned by the manufacturer or by the department for the purpose of identifying the vehicle. The term includes any number or

letters assigned by the manufacturer for the purpose of identifying a component part and any such number stamped on a vehicle or part according to law or the rules promulgated by the department for the purpose of identifying the vehicle or part.

Section 9. That chapter 32-3 be amended by adding a NEW SECTION to read:

An electric bicycle, as defined in section 1 of this Act, is exempt from this chapter.

Section 10. That chapter 32-5 be amended by adding a NEW SECTION to read:

An electric bicycle, as defined in section 1 of this Act, is exempt from this chapter.

Section 11. That subdivision (5) of § 32-6D-1 be amended to read:

- (5) "Motor vehicle," every vehicle intended primarily for use and operation on the public highways which is self-propelled. The term does not include any electric bicycle as defined in section 1 of this Act, any motor home or to any motor vehicle having a manufacturer's gross vehicle weight rating of fifteen thousand pounds or more;

Section 12. That subdivision (7) of § 32-9-1 be amended to read:

- (7) "Motor vehicle," all vehicles or machines propelled by any power other than muscular used upon the public highways for the transportation of persons or property or both. The term does not include an electric bicycle as defined in section 1 of this Act;

Section 13. That § 32-14-1 be amended to read:

32-14-1. Terms used in chapters 32-14 to 32-19, inclusive, 32-12 and 32-22 to 32-34, inclusive, mean:

- (1) "Alcoholic beverage," as that term is defined by subdivision 35-1-1(1);
- (2) "Authorized emergency vehicle," a vehicle of a fire department, a police vehicle, an ambulance or emergency vehicle of a municipal department or public service corporation that is designated or authorized by the department or the Department of Health, and an emergency vehicle titled to a local organization for emergency management created

pursuant to chapter 34-48A;

- (3) "Automobile transporter," a vehicle combination designed or modified to be used specifically for the transport of assembled highway vehicles;
- (4) "Boat transporter," a vehicle combination designed or modified to be used specifically for the transport of assembled or partially disassembled boats and boat hulls;
- (5) "Business district," the territory contiguous to a highway when fifty percent or more of the frontage thereon for a distance of three hundred feet or more is occupied by buildings in use for business;
- (6) "Commission," the Public Utilities Commission;
- (7) "Controlled drug or substance," as that term is defined in § 34-20B-3;
- (8) "Crosswalk," 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 the curbs or, in the absence of curbs, from the edges of the traversable roadway; or any portion of a roadway at an intersection or elsewhere distinctly indicated for pedestrian crossing by lines or other markings on the surface;
- (9) "Department," the Department of Public Safety of this state acting directly or through its duly authorized officers and agents;
- (9A) "Electric bicycle," as that term is defined in section 1 of this Act;
- (10) "Farm tractor," a motor vehicle designed and used primarily as a farm implement for drawing plows, mowing machines, and other implements of husbandry;
- (11) "Highway," the entire width between the boundary lines of every way publicly maintained when any part thereof is open to the use of the public as a matter of right for purposes of vehicular travel;
- (12) "Intersection," the area embraced within the prolongation of the lateral curb lines or, if

none, then of the lateral boundary lines of two or more highways which join one another at an angle, whether or not one such highway crosses the other. However, such area, in the case of the point where an alley and a street meet within a municipality, is not an intersection;

- (13) "Law enforcement officer," as that term is defined in § 23-3-27;
- (14) "Local authorities," a county, municipal, township, road district, and other local board or body having authority to adopt local police regulations under the Constitution and laws of this state;
- (15) "Metal tires," a tire the surface of which in contact with the highway is wholly or partly of metal or other hard, nonresilient material;
- (16) "Motorcycle," a motor vehicle designed to travel on not more than three wheels in contact with the ground, except any vehicle as may be included within the term, tractor;
- (17) "Motor vehicle," a vehicle that is self-propelled. The term does not include an electric bicycle;
- (18) "Official traffic control device," a sign, signal, marking, and device not inconsistent with the law placed or erected by authority of a public body or official having jurisdiction, for the purpose of regulating, warning, or guiding traffic. The term also includes a flagman or a sign, signal, marking, or other device temporarily placed or erected by a person working upon, along, above, or under a highway installing or maintaining a public service facility and which is necessary or required to warn, direct, or otherwise control traffic during the time of work or when a hazard exists;
- (19) "Owner," a person who holds the legal title of a vehicle or in the event a vehicle is the subject of an agreement for the conditional sale or lease thereof with the right of purchase upon performance of the conditions stated in the agreement and with an immediate right

of possession vested in the conditional vendee or lessee, or in the event a mortgagor of a vehicle is entitled to possession, then the conditional vendee or lessee or mortgagor is the owner for the purpose of said chapters;

- (20) "Park or parking," the standing of a vehicle, whether occupied or not, otherwise than temporarily for the purpose of and while actually engaged in loading or unloading merchandise or passengers;
- (21) "Pneumatic tire," a tire inflated with compressed air;
- (22) "Private road or driveway," a road or driveway not open to the use of the public for purposes of vehicular travel;
- (23) "Recreation vehicle," a self-propelled or towed vehicle equipped to serve as temporary living quarters for recreational, camping, or travel purposes and used solely as a family or personal conveyance and in no way used for a commercial purpose;
- (24) "Residence district," the territory contiguous to a highway not comprising a business district when the frontage on the highway for a distance of three hundred feet or more is mainly occupied by dwellings or by dwellings and buildings in use for business;
- (25) "Right-of-way," the right of one vehicle or pedestrian to proceed in a lawful manner in preference to another vehicle or pedestrian approaching under such circumstances of direction, speed, and proximity as to give rise to danger of collision unless one grants precedence to the other;
- (26) "Road tractor," a motor vehicle designed and used for drawing other vehicles and not so constructed as to carry any load thereon either independently or any part of the weight of a vehicle or load so drawn;
- (27) "Roadway," that portion of a highway improved, designed, or ordinarily used for vehicular travel, exclusive of the berm or shoulder. If a highway includes two or more

separate roadways, the term, roadway, refers to any such roadway separately but not to all such roadways collectively;

- (28) "Safety zone," the area or space officially set aside within a highway for the exclusive use of pedestrians and which is so plainly marked or indicated by proper signs as to be plainly visible at all times while set apart as a safety zone;
- (29) "Semitrailer," any vehicle of the trailer type equipped with a kingpin assembly, designed and used in conjunction with a fifth wheel connecting device on a motor vehicle and constructed so that some part of its weight and that of its load rests upon or is carried by another vehicle;
- (30) "Sidewalk," that portion of a street between the curb lines, or the lateral lines of a roadway, and the adjacent property lines intended for use of pedestrians;
- (31) "Single axle" or "one axle," one or more consecutive axles whose centers may be included between two transverse vertical planes spaced forty inches or less apart, extending across the full width of the vehicle;
- (32) "Solid rubber tire," a tire made of rubber other than a pneumatic tire;
- (33) "Steering axle," any axle on the front of a motor vehicle that is activated by the operator to directly accomplish guidance or steerage of the motor vehicle or combination of vehicles;
- (34) "Stinger-steered transporter combination," a truck tractor semitrailer combination with a fifth wheel located on a drop frame which is located behind and below the rearmost axle of the power unit;
- (35) "Tandem axle," two or more consecutive axles whose centers may be included between parallel transverse vertical planes spaced more than forty inches and not more than ninety-six inches apart, extending across the full width of the vehicle;

- (36) "Trailer," a vehicle without motive power designed for carrying property or passengers on its own structure and for being drawn by a motor vehicle;
- (37) "Truck tractor," a motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load other than a part of the weight of the vehicle and load so drawn;
- (38) "Urban district," the territory contiguous to and including any street which is built up with structures devoted to business, industry, or dwelling houses situated at intervals of less than one hundred feet for a distance of a quarter of a mile or more;
- (39) "Vehicle," a device in, upon, or by which any person or property is or may be transported or drawn upon a public highway, except devices moved by human power or used exclusively upon stationary rails or tracks; including bicycles, electric bicycles, and ridden animals;
- (40) "Wireless communication device," any wireless electronic communication device that provides for voice or data communication between two or more parties, including a mobile or cellular telephone, a text messaging device, a personal digital assistant that sends or receives messages, an audio-video player that sends or receives messages, or a laptop computer. A wireless communication device does not include a global positioning or navigation system (GPS) used to receive driving directions.

Section 14. That § 32-20-1 be amended to read:

32-20-1. Terms used in this chapter mean:

- (1) "Department" the Department of Public Safety.
- (2) "Moped" a motor driven cycle equipped with two or three wheels. If a combustion engine is used, the maximum piston or rotor displacement shall be fifty cubic centimeters regardless of the number of chambers in such power source. The power source shall be

equipped with a power drive system that functions directly or automatically only, not requiring clutching or shifting by the operator after the drive system is engaged. The term does not include an electric bicycle as defined in section 1 of this Act.

- (3) "Motorcycle" includes motorcycles, motorbikes, mopeds, bicycles with motor attached, and all motor operated vehicles of the bicycle or tricycle type, whether the motive power be a part thereof or attached thereto, and having a saddle or seat with the driver sitting astride or upon it, or a platform on which the driver stands, but excluding a tractor. The term does not include an electric bicycle as defined in section 1 of this Act.
- (4) "Off-road vehicle," any self-propelled, two or more wheeled vehicle designed primarily to be operated on land other than a highway and includes all terrain vehicles, dune buggies and any vehicle whose manufacturer's statement of origin or manufacturer's certificate of origin states that the vehicle is not for highway use. The term does not include a farm vehicle as defined in § 32-3-2.4 or an electric bicycle as defined in section 1 of this Act.

Section 15. That subdivision (6) of § 32-35-1 be amended to read:

- (6) "Motor vehicle," a vehicle that is self-propelled and a vehicle that is propelled by electric power obtained from overhead trolley wires, but not operated upon rails. The term does not include an electric bicycle as defined in section 1 of this Act;

Section 16. That § 32-38-2 be amended to read:

32-38-2. For the purposes of this chapter, a passenger vehicle is any self-propelled vehicle intended primarily for use and operation on the public highways including any passenger car, station wagon, van, taxicab, emergency vehicle, motor home, truck, or pickup. The term does not include any motorcycle, motor scooter, motor bicycle, electric bicycle, passenger bus, or school bus. The term also does not include any farm tractor or implement of husbandry designed primarily or exclusively for use in agricultural operations.

An Act to define electric bicycles and to provide for the regulation of electric bicycles.

=====

I certify that the attached Act
originated in the

SENATE as Bill No. 187

Secretary of the Senate
=====

President of the Senate

Attest:

Secretary of the Senate

Speaker of the House

Attest:

Chief Clerk

Senate Bill No. 187

File No. _____

Chapter No. _____

=====

Received at this Executive Office
this _____ day of _____ ,

20____ at _____ M.

By _____
for the Governor
=====

The attached Act is hereby
approved this _____ day of
_____, A.D., 20____

Governor
=====

STATE OF SOUTH DAKOTA,
ss.
Office of the Secretary of State

Filed _____, 20____
at _____ o'clock __ M.

Secretary of State

By _____
Asst. Secretary of State

Chairman Ruby and members of House Transportation Committee, my name is Sergeant Wade Kadrmas and I am the Safety and Education Officer for the North Dakota Highway Patrol. The highway patrol takes a neutral position on House Bill 1148 but would like to provide information for your consideration.

The highway patrol fields a variety of questions regarding vehicles, not only passenger cars and commercial motor vehicles, but also motorized bicycles and off highway vehicles and will likely field questions about electric bicycles. After this bill was introduced, I researched what other states have done to address potential safety concerns of electric bicycles. I have provided a 2019 document that the State of Montana Transportation Interim Committee put together regarding electric bikes and scooter (motorized bicycle) laws for each state. The document includes a table containing electric bicycle laws by state and province. This table was put together by the Transportation Research and Education Center, Portland State University, which was funded by U.S. Department of Transportation. This table provides an informative overview of laws guiding the use of electric bicycles.

House Bill 1148 proposes the implementation of an electric bicycle classification system. This system outlines three different classes. A Class Three electric bicycle can reach speeds of up to twenty-eight miles per hour. Since some electric bikes can reach that speed, the patrol requests the committee discuss and consider safety measures similar to other states where a minimum age limit is set for operators of a Class III electric bicycle and a helmet is required for all operators and riders under the age of 18. I have also provided a copy of South Dakota's 2019 electric bicycle law that includes similar safety requirements we are suggesting.

Mr. Chairman that concludes my testimony and I would be happy to answer any questions.

Electric Bikes and Scooters

Snapshot of State Laws

State legislators, including those in Montana, are examining state laws, analyzing the use of electronic bikes (e-bikes), and determining how best, if at all, to regulate their use on public streets and paths. According to the National Conference of State Legislatures (NCSL), 33 states and the District of Columbia define e-bikes in law.¹ Montana is included in that list.

Montana law (61-8-102, MCA) defines e-bikes, or “electrically assisted bicycles” as a bicycle with two operational pedals with a motor attached propels the bicycle and a rider who weighs 170 pounds no faster than 20 miles an hour. Essentially, for the purposes of regulation and enforcement, an e-bike is treated as a bicycle. The state does not require license or registration. And e-bikes may be ridden on roadways and bicycle paths.

Federal law provides guidance in terms of the manufacturing and sale of e-bikes in the nation. Amendments to the Consumer Product Safety Commission passed by Congress in 2002 provide a definition of e-bikes 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.” Montana’s definition largely mirrors the federal definition. Devices that meet the federal definition are regulated by the Consumer Product Safety Commission. However, the federal law applies only to the e-bike’s product standards and safety. Additional e-bike regulation is provided by states. State laws in general focus on e-bike classification systems, licensure and insurance regulation, helmet requirements, age requirements, and some guidance in terms of where e-bikes can travel.

As of late 2017, 13 states (Arizona, Arkansas, California, Colorado, Connecticut, Idaho, Illinois, Michigan, Ohio, Tennessee, Utah, Washington and Wyoming) created a three-tiered e-bike classification system for the purposes of e-bike regulation, according to NCSL. The People For Bikes and the Bicycle Product Suppliers Association in a 2019 publication, report that 22 states have enacted classifications. They add Georgia, Indiana, Maine, Maryland, New Hampshire, New Jersey, Oklahoma, South Dakota, and Texas to the NCSL list.² Classification systems allow states to regulate faster e-bikes more like motor vehicles and slower e-bikes more like regular bicycles. The classifications differentiate between e-bike models and speed capabilities.

2060

61-8-602, MCA

Traffic laws applicable to persons operating bicycles or mopeds. *A person operating a bicycle or moped is granted all of the rights and is subject to all of the duties applicable to the driver of any other vehicle by chapter 7, chapter 9, and this chapter except for special regulations in this part or the provisions of chapter 7, chapter 9, and this chapter that by their nature cannot apply.*

¹ <http://www.ncsl.org/research/transportation/state-electric-bicycle-laws-a-legislative-primer.aspx>

² <https://peopleforbikes.org/our-work/e-bikes/policies-and-laws/>



Electric Bikes and Scooters

Snapshot of State Laws

Those classifications most often include:

- Class 1 electric bicycle -- A bicycle equipped with a motor that assists only when the rider is pedaling, and that ceases to assist when the bicycle reaches the speed of 20 miles per hour.
- Class 2 electric bicycle -- A bicycle equipped with a motor that may be used exclusively to propel the bicycle, and that is not capable of assisting when the bicycle reaches the speed of 20 miles per hour.
- Class 3 electric bicycle -- A bicycle equipped with a motor that assist 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.

Additional regulation of e-bikes flows from the classification systems established. For example, protective headgear is sometimes required based on varying classifications. In Montana, the operator of a motorcycle or quadricycle under the age of 18 is required to wear a helmet. An e-bike is not defined as a motorcycle or quadricycle. Requirements in other states vary, from Connecticut which requires all e-bike operators to wear protective headgear to Utah which requires operators under that age of 21 to wear a helmet.

Other states have established age restrictions for operating an e-bike. For example, California prohibits a person under the age of 16 from operating a class 3 e-bike. Utah allows an e-bike operator between the ages of 8 and 14 on public property, highways, paths, or sidewalks, if supervised by a parent or guardian. Montana law does not include age restrictions for the operation of an e-bike.

Of the 13 states with classifications systems, 12 exempt e-bikes from any form of registration, licensure, or insurance, but all 13 state laws require an operator affix an e-bike with a label that establishes its classification. Laws in Illinois also allow local authorities to develop regulations for e-bike operations and registration or licensing requirements. Several state laws also specifically allow e-bike operation on bicycle paths or greenways, but some of those states also make exceptions for cities and counties to enact stricter operation regulations. Similar to the law in Montana, in Delaware, Florida, Iowa and Nebraska e-bikes are defined as bicycles and there is not a distinction when it comes to operation. California and Tennessee disallow class 3 e-bikes on a bicycle path, but allow local governments to opt-in.

The Transportation Research and Education Center (TREC) developed the table provided below, which provides a snapshot of electric bicycle laws by state.³ The list was compiled in November 2017. The TREC is located at Portland State University is one of seven university transportation centers funded by the U.S. Department of Transportation.

³ <https://trec.pdx.edu/>



Electric Bicycle Laws by State and Province



Area	Identity	Bicycle?	License?	Registration?	Age	Power	Speed	Pedals?	Federal?	Helmet?	Paths?	Sidewalks?	Law references
Alabama	Motor-Driven Cycle	N	Y	Y	14	150 cc	--	N	N	Y	N	N	Ala. Code § 32-1-1.1 (2013); § 885-1-1-.05; 32-5A-245; 32-12-41
Alaska	Motor-Driven Cycle	N	Y	N	14	50 cc	--	N	N	N	N	N	Alaska Stat. § 28.90.990
Arizona	Motorized Electric Bicycle	Y	N	N	--	48 cc	20	N	N	N	Y	Y	Ariz. Rev. Stat. § 28-2516
Arkansas	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Ark. Code § 27-51-1702; § 27-51-1703 to 1706
California	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Cal. Veh. Code. § 312.5; § 21200 - 21212; § 21207.5; § 24016
Colorado	Electrical assisted Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Colo. Rev. Stat. § 42-1-102 (28.5); 42-3-103(1)(b)(I) ; 42-4-111(1)(dd) ; 42-4-221(9)-(10); 42-4-1412
Connecticut	Motor-Driven Cycle	N	Y	N	16	50 cc	--	N	N	N†	N	N	Conn. Gen. Stat. § 248-14-1 (52); § 248-14-286
D. C.	Motorized Bicycle	Y	N	N	16	--	20	Y	N	N	N	N	D.C. Code § 18:99-01; § 50:1501.01-03; D.C. Act 19-658
Delaware	Bicycle	Y	N	N	--	750 W	20	Y	Y	N†	Y	Y	Del. Code tit. 21 § 1-101 (2); tit. 21 § 41
Florida	Bicycle	Y	N	N	16	--	20	Y	N	N	Y	Y	Fla. Stat. § 322.01; § 316.003
Georgia	Electric Assisted Bicycle	Y	N	N	15	1000 W	20	Y	N	Y	Y	N	Ga. Code § 40-1-1 (15.5); § 40-6-294; § 40-6-351; § 40-6-352
Hawaii	Moped	N	Y	Y	15	1491 W†	30	N	N	N†	N	N	Haw. Rev. Stat. § 14:249-1; § 17:286-81; § 17:291C-194
Idaho	Moped	N	Y	N	--	50 cc	30	N	N	N		Y	Idaho Code § 49-114; § 49-721; § 49-1428
Illinois	Low-Speed Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	625 Ill. Comp. Stat. 5/1-140.10; 625 ILCS 5/11-208; 625 ILCS 5/11-1517
Indiana	Motorized Bicycle	Y	N	N	15	50 cc	25	N	N	N†		N	Ind. Code § 9-13-2-109; § 9-21-11-12
Iowa	Bicycle	Y	N	N	--	750 W	20	Y	Y	N	Y	Y	Iowa Code § 321.1
Kansas	Electric Assisted Bicycle	Y	N	N	--	1000 W	20	Y	N	N	Y	Y	Kan. Stat. § 8-1489
Kentucky	Bicycle	Y	N	N	--	--	--	Y	N	N	Y	Y	Ky. Admin. Reg. 601 §14:020 (1)(a)
Louisiana	Motorized Bicycle	N	Y	Y	15	1119 W†	25	N	N	Y		N	La. Rev. Stat. § 32:401 (19); § 32:198; § 32:190
Maine	Motorized Bicycle	N	Y	Y	16	1119 W†	20	N	N	N†		Y	Me. Rev. Stat. tit. 29-A § 101-1 (41); tit. 29-A § 11; tit. 29-A § 19; tit. 29-A § 2063
Maryland	Electric Bicycle	Y	N	N	--	500 W	20	Y	Y	N	Y	N	Md. Code, Com. Law § 11-117.1; § 21-1200
Massachusetts	Motorized Bicycle	N	Y	Y	16	50 cc	25	N	N	Y	Y*	Y*	Mass. Gen. Laws ch. 14, §§ 90-1B~E; ch. 14 § 90-1
Michigan	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Mich. Comp. Laws § 257.13e; § 324.72105(2)-(4); § 500.3101(c)(i)(viii); § 657; § 662a;
Minnesota	Electric-Assisted Bicycle	Y	N	N	15	1000 W	20	Y	N	N	Y	Y	Minn. Stat. § 169.011 (27); § 168A.03; § 160.263
Mississippi	Bicycle with a Motor Attached	Y	N	N	--	--	--	N	N	N	Y*	Y*	Op. Atty. Gen. No. 2007-00602; Op. Atty. Gen. No. 2011-00095; Miss. Code § 63-3-103
Missouri	Motorized Bicycle	N	Y	N	16	2238 W†	30	N	N	N		N	Mo. Rev. Stat. § 301.010 (36); § 300.347; § 307.180; § 307.195
Montana	Electrically Assisted Bicycle	Y	N	N	--	--	20	Y	N	N	Y	Y	Mont. Code § 61-8-102(2)(g)
Nebraska	Electric Assisted Bicycle	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Neb. Rev. Stat. § 60-611
Nevada	Electric Bicycle	Y	N	N	--	750 W	20	Y	Y	N	Y	N	Nev. Rev. Stat. § 484B.017; § 484B.777; § 484B.117; § 483.090
New Hampshire	Electrically Powered Bicycle	Y	N	N	14	750 W	20	Y	Y	N†		N	N.H. Rev. Stat. § 259:65
New Jersey	Motorized Bicycle	N	Y	Y	15	1119 W†	25	N	N	Y	N	N	N.J. Rev. Stat. § 39:1-1; § 39:3-10
New Mexico	Moped	N	Y	N	15	50 cc	30	N	N	N†		N	N.M. Stat. § 66-1-4.11; § 66-1-4.2; § 66-5-2
New York	Motor-Assisted Bicycle	N	Y	Y	--	--	--	N	N	N	N	N	N.Y. Veh. & Traf. Law § 102; § 123
North Carolina	Electric Assisted Bicycle	Y	N	N	16	750 W	20	Y	Y	N		N	N.C. Gen. Stat. § 20-4.01 (7a & 49)
North Dakota	Motorized Bicycle	N	Y	Y	14	50 cc	30	Y	N	N		N	N.D. Cent. Code § 39-01-01 (48); 39-06-14.1
Ohio	Motorized Bicycle	N	Y	Y	14	745 W†	20	Y	Y	N†		N	Ohio Rev. Code § 4501.01(L); § 4511.521; § 4511.711
Oklahoma	Electric-Assisted Bicycle	N	Y	N	--	1000 W	30	Y	N	N	Y	Y	Okla. Stat. tit. 47 § 1-104; tit. 47 § 11-805.2; tit. 47 § 11-1103
Oregon	Electric Assisted Bicycle	Y	N	N	16	1000 W	20	Y	N	N	Y	N	Or. Rev. Stat. § 801.258; § 814.405; § 814.410; § 807.020
Pennsylvania	Pedalcycle with Electric Assist	Y	N	N	16	750 W	20	Y	Y	N		Y*	Senate Bill 997; 75 Pa. Cons. Stat. § 102; 75 Pa.C.S. § 3525; 75 Pa.C.S. §3703
Rhode Island	Electric Motorized Bicycle	N	Y	N	16	1491 W†	25	Y	N	N†	Y	Y	R.I. Gen. Laws § 31-1-3; § 31-3-2.2; § 31-19.1.1
South Carolina	Moped	N	Y	N	14	1491 W†	30	N	N	N†		N	S.C. Code § 56-5-165; § 56-1-1720
South Dakota	Moped	N	Y	N	14	50 cc	--	N	N	N†		N	S.D. Codified Laws § 32-3-1; § 32-20-1; § 32-5-1.2; § 32-26-21.1
Tennessee	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	N	Tenn. Code § 55-8-172-177; § 55-*171(c)
Texas	Electric Bicycle	Y	N	N	--	--	20	N	N	N	Y	Y	Tex. Trans. Code §541.201 (24); §541.202 (4); §551.106
Utah	Electric Bicycle**	Y	N	N	14	750 W	20	Y	N	N	Y	N	Utah Code § 41-6a-102 (7-9, 16); § 41-6a-1115.5; § 41-6a-1505;

Electric Bicycle Laws by State and Province



Area	Identity	Bicycle?	License?	Registration?	Age	Power	Speed	Pedals?	Federal?	Helmet?	Paths?	Sidewalks?	Law references
Vermont	Motor-Assisted Bicycle	Y	N	N	16	1000 W	20	N	N	N	Y	N	Vt. Stat. Ann. 23 § 4 (45(B)(i)); 23 § 1136
Virginia	Electric Power Assisted Bicycle	Y	N	N	14	1000 W	25	Y	N	N	Y	Y	Va. Code § 46.2-100; § 46.2-903; § 46.2-908.1; § 46.2-906.1
Washington	Electric Assisted Bicycle	Y	N	N	16	1000 W	20	Y	N	N	Y	N	Wash. Rev. Code § 46 4-169; § 46 61-710; § 46 4-320; § 46 37-530; § 46 16A-080; § 46 20-500
West Virginia	Moped	N	Y	Y	15	1491 W†	30	Y	N	Y		N	W. Va. Code § 17C-1-5a; § 17C-15-44
Wisconsin	Motor Bicycle	N	Y	N	--	750 W	20	Y	Y	N	Y*	Y*	Wis. Stat. § 340.01 (30); § 346.02 (4); § 346.79 (5); § 343.05(3)(c)
Wyoming	Moped	N	Y	N	15	1491 W†	30	Y	N	N‡	N	N	Wyo. Stat. § 31-5-102(xxi); § 10.32.160; § 31-5-115 (o); § 31-1-101
Alberta	Power Bicycle	Y	N	N	12	500 W	20	Y	Y	Y			Alta Reg 304/2002; Alta Reg 122/2009; RSA 2000, c T-6; Alta Reg 320/2002
British Columbia	Motor Assisted Cycle	Y	N	N	16	500 W	20	Y	Y	Y	Y	N*	BC Reg 151/2002; RSBC 1996, c 318, Part 1 & Part 3
Manitoba	Power-Assisted Bicycle	Y	N	N	14	500 W	20	Y	Y	Y		N	CCSM c H60
New Brunswick	Bicycle	Y	N	N	--					Y		Y	RSNB 1973, c M-17
Newfoundland	Bicycle	Y	N	N	--					N		N	RSNL 1990, c H-3
Northwest Territories	Bicycle	Y	N	N	--					N		N	RSNWT 1988, c M-16
Nova Scotia	Bicycle	Y	N	N	--	500 W	19	Y	Y	Y	Y	N	RSNS 1989, c 293
Nunavut	Bicycle	Y	N	N	--					N		N	RSNWT (Nu) 1988, c M-16
Ontario	Power-Assisted Bicycle	Y	N	N	16	500 W	20	Y	Y	Y	Y*	Y*	RSO 1990, c H.8; O Reg 369/09
Prince Edward Island	Motor Assisted Pedal Bicycle	N	Y	Y	16	50 cc	31	N	N	Y	Y	N	RSPEI 1988, c H-5; PEI Reg EC642/75
Quebec	Power-Assisted Bicycle	Y	N	N	18	500 W	20	Y	Y	Y	Y*	N	CQLR c C-24.2; CQLR c V-1.2, r 4.1; CQLR c P-9, r 25
	Electric Assist Bicycle;												
Saskatchewan	Power Cycle	Y	N	N	--	500 W	20	Y	Y	Y	Y*	Y*	SS 2004, c T-18.1; Motorcycle handbook
Yukon	Electric Power-Assisted Bicycle	Y	N	N	--	500 W	20	Y	Y	N		N*	RSY 2002, c 153

Area: Which state or province in the United States or Canada?

Identity: Under which definition in vehicle code does an electric bicycle fall?

Bicycle: Is it essentially classified and treated as a bicycle?

License: Is a driver's license required to operate an e-bike?

Registration: Is the e-bike required to be registered with the state/province?

Age: What is the minimum age of operation of an e-bike?

Power: What is the maximum power output permitted?

Speed: What is the maximum speed of operation permitted?

Pedals: Are fully functional pedals required for operation?

Federal: Is the state/provincial definition in line with the federal definition?

Helmet: Is a helmet required for operating an e-bike?

Paths: Are e-bikes permitted on shared-use paths and trails?

Sidewalks: Are e-bikes permitted on sidewalks?

Law reference: What is source of this information?

-- = Limit not specified under law

= Information unclear/inconsistent

"Bicycle" = allowed on bicycle paths and no license/registration required

† Horsepower expressed in watts equivalent; 1 hp = 745 watts

Different than maximum speed capability, though most areas see this as the same

‡ Age requirement; those under a certain age are required to wear a helmet

* Restrictions apply (engine cannot be engaged, local ordinances prohibit use, etc.)

* Restrictions apply (engine cannot be engaged, local ordinances prohibit use, etc.)

** California has establish a 3 Class structure. Class 3 "speed pedal-assisted electric bicycle" has additional requirements than Class 1 & 2, such as speed, age restriction, helmet use, and path access. Additional states are implementing this class structure.

CLA305 9212SLJA.pdf

I am in favor of HB 1148. I operate an electric bicycle regularly and appreciate that this bill clarifies how an electric bicycle is classified.

2021 SENATE TRANSPORTATION

HB 1148

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee Fort Totten Room, State Capitol

HB 1148
3/5/2021

A BILL for an Act to create and enact a new section to chapter 39-10.1 of the North Dakota Century Code, relating to electric bicycle regulations, manufacturing, and operations; to amend and reenact sections 39-01-01, 39-05-02.2, and 39-10.1-08, subsection 5 of section 39-16-01, subsection 2 of section 39-29-01, and subsection 2 of section 57-40.3-01 of the North Dakota Century Code, relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [10:01]

Discussion Topics:

- Defining bicycles
- Electric bicycles
- Required licensing
- Liability insurance
- Bicycle safety
- Alcohol restrictions on bicycles

Representative D. Ruby [10:01] presents the bill and offers oral testimony in favor.

Amy Cleary [10:07], with the GA Group, introduces Alex Logemann to answer questions.

Alex Logemann [10:08], Policy Counsel for People for Bikes, testifies in favor and submits testimony #7430.

Sergeant Wade Kadrmas [10:32], Safety and Education Officer for the ND Highway Patrol, offers neutral oral testimony and submits testimony #7558 in favor.

Dawn Mayer [10:49], Child Passenger Safety Program Director for the ND Department of Health, offers oral neutral testimony and submits testimony #7492.

Additional written testimony:

Jeff Solemsaas, Traffic Commander for the Bismarck Police Department, submits neutral written testimony #7211.

Nichole Selzler, of RN Trauma Services/Safe Kids Bismarck Mandan, submits neutral written testimony #7051.

Senate Transportation Committee

HB 1148

3/5/21

Page 2

Chair Clemens adjourns the public hearing. [11:01]

Sheldon Wolf, Committee Clerk



TO: Chairman Clemens and Members of the Senate Transportation Committee
FROM: Alex Logemann, Policy Counsel, PeopleForBikes Coalition
DATE: March 5, 2021
SUBJECT: HB 1148 relating to electric bicycle regulations, manufacturing, and operations

Dear Chairman Clemens and Members of the Senate Transportation Committee,

On behalf of PeopleForBikes, thank you for the opportunity to provide testimony in support of House Bill 1148 at your March 5th hearing.

The PeopleForBikes Coalition is the national advocacy group and trade association that works for better policies and infrastructure for bike riding. Our coalition includes nearly 300 companies and brands that manufacture, distribute, or sell bicycles and related products, including electric bicycles.

Electric bicycles are a still emerging technology that need clear rules to regulate their use and create stability in the marketplace. As electric bicycle adoption continues to grow and these products mature, manufacturers, retailers, and bike riders need clear rules that define these products and state what rules apply to them when they are being used. Our goal at PeopleForBikes has been to harmonize terminology and regulation at all levels of government so electric bicycles have consistent rules throughout the United States.

Before discussing the changes that this legislation would make to the law, I'd like to provide some general information about electric bicycles and who rides them. An electric bicycle is designed similarly to a traditional bicycle but has three additional components – a small motor that provides assistance to the bike rider, a battery to provide power to the motor, and electronics that enable the rider to control the system. Recent advances in electronic and battery technology have made electric bicycles more affordable and more enjoyable to ride. As technology has developed, the broad category of electric bicycles has divided into three types or classes of electric bicycle based on their speed and type of motor engagement. These are known as Class 1, 2, or 3 electric bicycles. They can quickly be summarized as follows:

- Class 1: Pedal-assist electric bicycle (the rider must be pedaling for the motor to engage), top speed of 20 miles per hour.
- Class 2: Throttle-assist electric bicycle (the motor can provide power independently of whether the rider is pedaling), top speed of 20 miles per hour.
- Class 3: Pedal-assist electric bicycle, top speed of 28 miles per hour.

Electric bicycles are enjoyed by people from all walks of life, and they are being widely adopted by Americans from all age groups. Older Americans often report using electric bicycles for recreational purposes and that the electric assist features of electric bicycles have enabled them to ride their bike for more of their life than they otherwise would have. Younger people are increasingly using electric bicycles for transportation. Electric bicycles are also a dependable option for people limited by fitness, age, or disability; as well as for those who make frequent trips of less than 10 miles.

I can personally attest to the value that an electric bicycle can provide for short range transportation. I own a fairly basic Class 1 electric bicycle. I frequently use my electric bicycle with a small child trailer attached to make trips to the park with my daughter, go to the grocery store, or even pick up home repair supplies from the hardware store. I would have never been able to achieve the same level of practicality and functionality without the assist that my electric bicycle provides.

Until recently, the regulation of electric bicycles in the United States had evolved in a piecemeal and uncoordinated manner. The federal government has regulated electric bicycles since 2002, when legislation was passed clarifying their product safety standards. Under this federal law, electric bicycles are treated

identically to bicycles for these purposes. They are regulated by the United States Consumer Product Safety Commission and they must comply with the federal safety standards for bicycles.

During the last 20 years, some state legislatures passed laws to recognize electric bicycles. Other states, such as North Dakota, have never addressed their use. Some states borrowed the federal consumer product safety definition, others altered it, and some created entirely new definitions for what an electric bicycle is. As a result, manufacturers were faced with inconsistent and often unclear rules that governed what an electric bicycle was and where electric bicycle purchasers could use their product. Critically, some state laws like North Dakota left the status of an electric bicycle unclear, or permitted power and speed limitations that vastly exceeded federal standards to the extent electric bicycles fell within an alternative vehicle class.

Recognizing the need for greater consistency as the market for electric bicycles grew, U.S. electric bicycle manufacturers came together to develop the three-class system six years ago, reflected in House Bill 1148, to update regulations around critical issues like speed, wattage, and operation. On the local level, bike retailers in states that have passed this law claim that having a three-class electric bicycle system helps their team clearly explain where electric bicycles are and aren't allowed to go. In their retail shops, electric bicycle sales have helped stores offset the loss of sales due to other declining categories of traditional bicycles.

The three-class system for electric bicycle regulation has now been adopted in 28 states (Arizona, Arkansas, California, Colorado, Connecticut, Georgia, Idaho, Illinois, Indiana, Maine, Maryland, Michigan, New Hampshire, New Jersey, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, Washington, Wisconsin and Wyoming); and bills are progressing in 16 other states in addition to North Dakota this year. It has also been adopted by four federal agencies.

The legislation before the Committee would implement the three-class system in North Dakota. It would provide a definition for an electric bicycle that aligns with other state and federal standards, and clarity regarding where electric bicycles can be ridden and what rules apply to people who use them. It would also facilitate local regulation of electric bicycles on bicycle paths so that local entities can make the best decision for their communities. A uniform labeling standard for all electric bicycles will help law enforcement and public safety officials easily identify the class of electric bicycle in the event of enforcement issues.

PeopleForBikes supports House Bill 1148, and we believe it is the proper way to regulate the use of electric bicycles in North Dakota. We would urge a do-pass recommendation on House Bill 1148. Thank you for your time.

Sincerely,

A handwritten signature in black ink, appearing to read 'Alex Logemann', with a stylized flourish at the end.

Alex Logemann
Policy Counsel

What other states use the classification system in this bill?

At the end of 2020, 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) had passed laws that define three classes of electric bicycles in their traffic statutes.

Are you working to advance similar legislation elsewhere in 2021?

Yes. Aside from North Dakota, similar legislative efforts are underway in 16 states: Alabama, Alaska, Delaware, Iowa, Kansas, Massachusetts, Minnesota, Mississippi, Missouri, Montana, Nevada, Oregon, Pennsylvania, Rhode Island, South Carolina, and Vermont.

Why is the top speed for Class 3 electric bicycles 28 MPH?

In Europe, the classification that is equivalent to a class 3 electric bicycle 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 electric bicycle says that the top speed is 20MPH. How are class 3 electric bicycles legal given the federal definition?

The 20 MPH threshold in federal law (15 U.S.C. § 2085) applies when the electric bicycle is being operated “solely” under motor power – commonly referred to as “throttle” power. However, many electric bicycles do not utilize a throttle, and are always operated under a combination of human and motor power – referred to as “pedal-assist.” The federal definition does not provide a top speed for when an electric bicycle is being operated under combined human and motor power. The class 3 definition clarifies this important ambiguity by specifying the maximum assisted speed for electric bicycles at 28 MPH. The class system aligns the definition of a Class 2 e-bikes – which utilizes a throttle – with federal law.

Does the rider have to be pedaling for the electric bicycle’s motor to be engaged?

It depends on the type of electric bicycle. For Class 1 and Class 3 electric bicycles, the rider must be pedaling for the motor to be engaged. For Class 2 electric bicycles, the motor can propel the electric bicycle without the rider pedaling.

Can electric bicycles be safely operated on bike paths?

Yes. Researchers who have compared riders of electric bicycles and regular bikes at the University of Tennessee observed that electric bicycles riders exhibit similar safety behavior as riders of traditional bicycles. Perhaps most importantly, electric bicycle 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 electric bicycles at the federal level?

Electric bicycles 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 electric bicycles may be ridden or what rules of the road govern their use. While the federal government can intervene in these matters in 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 electric bicycle is?

Electric bicycles 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 electric bicycle, and quickly assess which type of electric bicycle it is.

Can people tamper with electric bicycles?

Like other mechanized or motorized devices, it is possible that a user could tamper with an electric bicycle. 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 electric bicycle and create a machine that can travel faster than any of the specified classifications of electric bicycles, they would likely be operating an unlicensed and unregistered motor vehicle, and would be subject to any applicable penalties.

Does the bill regulate electric bicycles off-road?

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

Who is the typical purchaser of an electric bicycle?

While all types of people purchase and use electric bicycles, the typical demographics are couples and households, urban dwellers, aging bicyclists, and people with physical or cognitive limitations.

How many electric bicycles are sold each year in the U.S.?

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

How much do electric bicycles cost?

The average price of an electric bicycle is \$2,000. Entry-level electric bicycles are about \$1,000. High-end electric bicycles can cost \$6,000 or more.

Why distinguish between classes of electric bicycles in the bill if the rules are the same?

The distinction between these classes of electric bicycles provides for greater local flexibility. Some municipalities have demonstrated an interest in prohibiting some classes of electric bicycles 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.

House Bill 1148
Senate Transportation Committee
Senator Clemens, Chairman
March 5, 2021

#7558

Chairman Clemens and members of the Senate Transportation Committee, my name is Sergeant Wade Kadrmas and I am the Safety and Education Officer for the North Dakota Highway Patrol. The highway patrol takes a neutral position on House Bill 1148 but would like to provide information for your consideration.

The highway patrol fields a variety of questions regarding vehicles, not only passenger cars and commercial motor vehicles, but also motorized bicycles and off highway vehicles and will likely field questions about electric bicycles. After this bill was introduced, we looked at what other states have done to address potential safety concerns for electric bicycles. I have provided a 2019 document that the State of Montana Transportation Interim Committee put together regarding electric bikes and scooter (motorized bicycle) laws for each state. The document includes a table containing electric bicycle laws by state and province. This table was put together by the Transportation Research and Education Center with Portland State University, which is funded by U.S. Department of Transportation. This table provides an informative overview of laws guiding the use of electric bicycles.

House Bill 1148 proposes the implementation of an electric bicycle classification system. This system outlines three different classes. A Class III electric bicycle can reach speeds of up to 28 miles per hour. Since some electric bikes can reach that speed, the patrol requests the committee discuss and consider safety measures similar to other states where a minimum age limit is set for operators of a Class III electric bicycle and to consider helmets for all operators and riders under the age of 18. I have also provided a copy of South Dakota's 2019 electric bicycle law that includes similar safety requirements.

Mr. Chairman that concludes my testimony and I would be happy to answer any questions.

Electric Bikes and Scooters

Snapshot of State Laws

State legislators, including those in Montana, are examining state laws, analyzing the use of electronic bikes (e-bikes), and determining how best, if at all, to regulate their use on public streets and paths. According to the National Conference of State Legislatures (NCSL), 33 states and the District of Columbia define e-bikes in law.¹ Montana is included in that list.

Montana law (61-8-102, MCA) defines e-bikes, or “electrically assisted bicycles” as a bicycle with two operational pedals with a motor attached propels the bicycle and a rider who weighs 170 pounds no faster than 20 miles an hour. Essentially, for the purposes of regulation and enforcement, an e-bike is treated as a bicycle. The state does not require license or registration. And e-bikes may be ridden on roadways and bicycle paths.

Federal law provides guidance in terms of the manufacturing and sale of e-bikes in the nation. Amendments to the Consumer Product Safety Commission passed by Congress in 2002 provide a definition of e-bikes 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.” Montana’s definition largely mirrors the federal definition. Devices that meet the federal definition are regulated by the Consumer Product Safety Commission. However, the federal law applies only to the e-bike’s product standards and safety. Additional e-bike regulation is provided by states. State laws in general focus on e-bike classification systems, licensure and insurance regulation, helmet requirements, age requirements, and some guidance in terms of where e-bikes can travel.

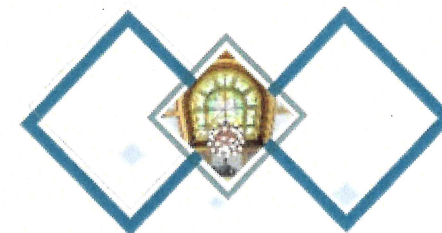
As of late 2017, 13 states (Arizona, Arkansas, California, Colorado, Connecticut, Idaho, Illinois, Michigan, Ohio, Tennessee, Utah, Washington and Wyoming) created a three-tiered e-bike classification system for the purposes of e-bike regulation, according to NCSL. The People For Bikes and the Bicycle Product Suppliers Association in a 2019 publication, report that 22 states have enacted classifications. They add Georgia, Indiana, Maine, Maryland, New Hampshire, New Jersey, Oklahoma, South Dakota, and Texas to the NCSL list.² Classification systems allow states to regulate faster e-bikes more like motor vehicles and slower e-bikes more like regular bicycles. The classifications differentiate between e-bike models and speed capabilities.

61-8-602, MCA

Traffic laws applicable to persons operating bicycles or mopeds. *A person operating a bicycle or moped is granted all of the rights and is subject to all of the duties applicable to the driver of any other vehicle by chapter 7, chapter 9, and this chapter except for special regulations in this part or the provisions of chapter 7, chapter 9, and this chapter that by their nature cannot apply.*

¹ <http://www.ncsl.org/research/transportation/state-electric-bicycle-laws-a-legislative-primer.aspx>

² <https://peopleforbikes.org/our-work/e-bikes/policies-and-laws/>



Electric Bikes and Scooters Snapshot of State Laws

Those classifications most often include:

- Class 1 electric bicycle -- A bicycle equipped with a motor that assists only when the rider is pedaling, and that ceases to assist when the bicycle reaches the speed of 20 miles per hour.
- Class 2 electric bicycle -- A bicycle equipped with a motor that may be used exclusively to propel the bicycle, and that is not capable of assisting when the bicycle reaches the speed of 20 miles per hour.
- Class 3 electric bicycle -- A bicycle equipped with a motor that assist 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.

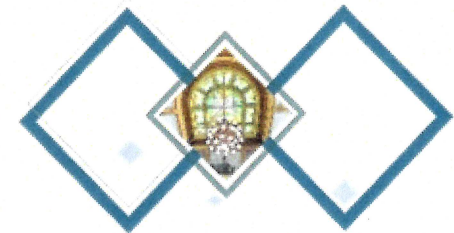
Additional regulation of e-bikes flows from the classification systems established. For example, protective headgear is sometimes required based on varying classifications. In Montana, the operator of a motorcycle or quadricycle under the age of 18 is required to wear a helmet. An e-bike is not defined as a motorcycle or quadricycle. Requirements in other states vary, from Connecticut which requires all e-bike operators to wear protective headgear to Utah which requires operators under that age of 21 to wear a helmet.

Other states have established age restrictions for operating an e-bike. For example, California prohibits a person under the age of 16 from operating a class 3 e-bike. Utah allows an e-bike operator between the ages of 8 and 14 on public property, highways, paths, or sidewalks, if supervised by a parent or guardian. Montana law does not include age restrictions for the operation of an e-bike.

Of the 13 states with classifications systems, 12 exempt e-bikes from any form of registration, licensure, or insurance, but all 13 state laws require an operator affix an e-bike with a label that establishes its classification. Laws in Illinois also allow local authorities to develop regulations for e-bike operations and registration or licensing requirements. Several state laws also specifically allow e-bike operation on bicycle paths or greenways, but some of those states also make exceptions for cities and counties to enact stricter operation regulations. Similar to the law in Montana, in Delaware, Florida, Iowa and Nebraska e-bikes are defined as bicycles and there is not a distinction when it comes to operation. California and Tennessee disallow class 3 e-bikes on a bicycle path, but allow local governments to opt-in.

The Transportation Research and Education Center (TREC) developed the table provided below, which provides a snapshot of electric bicycle laws by state.³ The list was compiled in November 2017. The TREC is located at Portland State University is one of seven university transportation centers funded by the U.S. Department of Transportation.

³ <https://trec.pdx.edu/>



Electric Bicycle Laws by State and Province



Area	Identity	Bicycle?	License?	Registration?	Age	Power	Speed	Pedals?	Federal?	Helmets?	Paths?	Sidewalks?	Law references
Alabama	Motor-Driven Cycle	N	Y	Y	14	150 cc	--	N	N	Y	N	N	Ala. Code § 32-1-1.1 (2013); § 885-1-1-.05; 32-5A-245; 32-12-41
Alaska	Motor-Driven Cycle	N	Y	N	14	50 cc	--	N	N	N	N	N	Alaska Stat. § 28.90.990
Arizona	Motorized Electric Bicycle	Y	N	N	--	48 cc	20	N	N	N	Y	Y	Ariz. Rev. Stat. § 28-2516
Arkansas	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Ark. Code § 27-51-1702; § 27-51-1703 to 1706
California	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Cal. Veh. Code. § 312.5; § 21200 - 21212; § 21207.5; § 24016
Colorado	Electrical assisted Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Colo. Rev. Stat. § 42-1-102 (28.5); 42-3-103(1)(b)(I) ; 42-4-111(1)(dd) ; 42-4-221(9)-(10); 42-4-1412
Connecticut	Motor-Driven Cycle	N	Y	N	16	50 cc	--	N	N	N	N	N	Conn. Gen. Stat. § 248-14-1 (52); § 248-14-286
D. C.	Motorized Bicycle	Y	N	N	16	--	20	Y	N	N	N	N	D.C. Code § 18-99-01; § 50:1501.01-03; D.C. Act 19-658
Delaware	Bicycle	Y	N	N	--	750 W	20	Y	Y	N	N	Y	Del. Code tit. 21 § 1-101 (2); tit. 21 § 41
Florida	Bicycle	Y	N	N	16	--	20	Y	N	N	Y	Y	Fla. Stat. § 322.01; § 316.003
Georgia	Electric Assisted Bicycle	Y	N	N	15	1000 W	20	Y	N	Y	Y	N	Ga. Code § 40-1-1 (15.5); § 40-6-294; § 40-6-351; § 40-6-352
Hawaii	Moped	N	Y	Y	15	1491 W†	30	N	N	N	N	N	Haw. Rev. Stat. § 14:249-1; § 17:286-81; § 17:291C-194
Idaho	Moped	N	Y	N	--	50 cc	30	N	N	N	Y	Y	Idaho Code § 49-114; § 49-721; § 49-1428
Illinois	Low-Speed Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	625 Ill. Comp. Stat. 5/1-140.10; 625 ILCS 5/11-208; 625 ILCS 5/11-1517
Indiana	Motorized Bicycle	Y	N	N	15	50 cc	25	N	N	N	N	N	Ind. Code § 9-13-2-109; § 9-21-11-12
Iowa	Bicycle	Y	N	N	--	750 W	20	Y	Y	N	Y	Y	Iowa Code § 321.1
Kansas	Electric Assisted Bicycle	Y	N	N	--	1000 W	20	Y	N	N	Y	Y	Kan. Stat. § 8-1489
Kentucky	Bicycle	Y	N	N	--	--	--	Y	N	N	Y	Y	Ky. Admin. Reg. 601 §14:020 (1)(a)
Louisiana	Motorized Bicycle	N	Y	Y	15	1119 W†	25	N	N	Y	N	N	La. Rev. Stat. § 32:401 (19); § 32:198; § 32:190
Maine	Motorized Bicycle	N	Y	Y	16	1119 W†	20	N	N	N	N	Y	Me. Rev. Stat. tit. 29-A § 101-1 (41); tit. 29-A § 11; tit. 29-A § 19; tit. 29-A § 2063
Maryland	Electric Bicycle	Y	N	N	--	500 W	20	Y	Y	N	Y	N	Md. Code, Com. Law § 11-117.1; § 21-1200
Massachusetts	Motorized Bicycle	N	Y	Y	16	50 cc	25	N	N	Y	Y*	Y*	Mass. Gen. Laws ch. 14, §§ 90-1B~E; ch. 14 § 90-1
Michigan	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Mich. Comp. Laws § 257.13e; § 324.72105(2)-(4); § 500.3101(c)(i)(viii); § 657; § 662a;
Minnesota	Electric-Assisted Bicycle	Y	N	N	15	1000 W	20	Y	N	N	Y	Y	Minn. Stat. § 169.011 (27); § 168A.03; § 160.263
Mississippi	Bicycle with a Motor Attached	Y	N	N	--	--	--	N	N	N	Y*	Y*	Op. Atty. Gen. No. 2007-00602; Op. Atty. Gen. No. 2011-00095; Miss. Code § 63-3-103
Missouri	Motorized Bicycle	N	Y	N	16	2238 W†	30	N	N	N	N	N	Mo. Rev. Stat. § 301.010 (36); § 300.347; § 307.180; § 307.195
Montana	Electrically Assisted Bicycle	Y	N	N	--	--	20	Y	N	N	Y	Y	Mont. Code § 61-8-102(2)(g)
Nebraska	Electric Assisted Bicycle	Y	N	N	--	750 W	20	Y	N	N	Y	Y	Neb. Rev. Stat. § 60-611
Nevada	Electric Bicycle	Y	N	N	--	750 W	20	Y	Y	N	Y	N	Nev. Rev. Stat. § 484B.017; § 484B.777; § 484B.117; § 483.090
New Hampshire	Electrically Powered Bicycle	Y	N	N	14	750 W	20	Y	Y	N	N	N	N.H. Rev. Stat. § 259:65
New Jersey	Motorized Bicycle	N	Y	Y	15	1119 W†	25	N	N	Y	N	N	N.J. Rev. Stat. § 39:1-1; § 39:3-10
New Mexico	Moped	N	Y	N	15	50 cc	30	N	N	N	N	N	N.M. Stat. § 66-1-4.11; § 66-1-4.2; § 66-5-2
New York	Motor-Assisted Bicycle	N	Y	Y	--	--	--	N	N	N	N	N	N.Y. Veh. & Traf. Law § 102; § 123
North Carolina	Electric Assisted Bicycle	Y	N	N	16	750 W	20	Y	Y	N	N	N	N.C. Gen. Stat. § 20-4.01 (7a & 49)
North Dakota	Motorized Bicycle	N	Y	Y	14	50 cc	30	Y	N	N	N	N	N.D. Cent. Code § 39-01-01 (48); 39-06-14.1
Ohio	Motorized Bicycle	N	Y	Y	14	745 W†	20	Y	Y	N	N	N	N Ohio Rev. Code § 4501.01(L); § 4511.521; § 4511.711
Oklahoma	Electric-Assisted Bicycle	N	Y	N	--	1000 W	30	Y	N	N	Y	Y	Okla. Stat. tit. 47 § 1-104; tit. 47 § 11-805.2; tit. 47 § 11-1103
Oregon	Electric Assisted Bicycle	Y	N	N	16	1000 W	20	Y	N	N	Y	N	Or. Rev. Stat. § 801.258; § 814.405; § 814.410; § 807.020
Pennsylvania	Pedalcycle with Electric Assist	Y	N	N	16	750 W	20	Y	Y	N	N	Y*	Senate Bill 997; 75 Pa. Cons. Stat. § 102; 75 Pa.C.S. § 3525; 75 Pa.C.S. § 3703
Rhode Island	Electric Motorized Bicycle	N	Y	N	16	1491 W†	25	Y	N	N	N	Y	R.I. Gen. Laws § 31-1-3; § 31-3-2.2; § 31-19.1.1
South Carolina	Moped	N	Y	N	14	1491 W†	30	N	N	N	N	N	S.C. Code § 56-5-165; § 56-1-1720
South Dakota	Moped	N	Y	N	14	50 cc	--	N	N	N	N	N	S.D. Codified Laws § 32-3-1; § 32-20-1; § 32-5-1.2; § 32-26-21.1
Tennessee	Electric Bicycle**	Y	N	N	--	750 W	20	Y	N	N	Y	N	Tenn. Code § 55-8-172-177; § 55-*.171(c)
Texas	Electric Bicycle	Y	N	N	--	--	20	N	N	N	Y	Y	Tex. Trans. Code §541.201 (24); §541.202 (4); §551.106
Utah	Electric Bicycle**	Y	N	N	14	750 W	20	Y	N	N	Y	N	Utah Code § 41-6a-102 (7-9, 16); § 41-6a-1115.5; § 41-6a-1505;

Electric Bicycle Laws by State and Province



Area	Identity	Bicycle?	License?	Registration?	Age	Power	Speed	Pedals?	Federal?	Helmet?	Paths?	Sidewalks?	Law references
Vermont	Motor-Assisted Bicycle	Y	N	N	16	1000 W	20	N	N	N	Y	N	Vt. Stat. Ann. 23 § 4 (45(B)(i)); 23 § 1136
Virginia	Electric Power Assisted Bicycle	Y	N	N	14	1000 W	25	Y	N	N	Y	Y	Va. Code § 46.2-100; § 46.2-903; § 46.2-908.1; § 46.2-906.1
Washington	Electric Assisted Bicycle	Y	N	N	16	1000 W	20	Y	N	N	Y	N	Wash. Rev. Code § 46 4-169; § 46 61-710; § 46 4-320; § 46 37-530; § 46 16A-080; § 46 20-500
West Virginia	Moped	N	Y	Y	15	1491 W†	30	Y	N	Y	N	N	W. Va. Code § 17C-1-5a; § 17C-15-44
Wisconsin	Motor Bicycle	N	Y	N	--	750 W	20	Y	Y	N	Y*	Y*	Wis. Stat. § 340.01 (30); § 346.02 (4); § 346.79 (5); § 343.05(3)(c)
Wyoming	Moped	N	Y	N	15	1491 W†	30	Y	N	N‡	N	N	Wyo. Stat. § 31-5-102(xxi); § 10.32.160; § 31-5-115 (o); § 31-1-101
Alberta	Power Bicycle	Y	N	N	12	500 W	20	Y	Y	Y	N	N	Alta Reg 304/2002; Alta Reg 122/2009; RSA 2000, c T-6; Alta Reg 320/2002
British Columbia	Motor Assisted Cycle	Y	N	N	16	500 W	20	Y	Y	Y	Y	N*	BC Reg 151/2002; RSBC 1996, c 318, Part 1 & Part 3
Manitoba	Power-Assisted Bicycle	Y	N	N	14	500 W	20	Y	Y	Y	N	N	CCSM c H60
New Brunswick	Bicycle	Y	N	N	--					Y	Y	Y	RSNB 1973, c M-17
Newfoundland	Bicycle	Y	N	N	--					N	N	N	RSNL 1990, c H-3
Northwest Territories	Bicycle	Y	N	N	--					N	N	N	RSNWT 1988, c M-16
Nova Scotia	Bicycle	Y	N	N	--	500 W	19	Y	Y	Y	Y	N	RSNS 1989, c 293
Nunavut	Bicycle	Y	N	N	--					N	N	N	RSNWT (Nu) 1988, c M-16
Ontario	Power-Assisted Bicycle	Y	N	N	16	500 W	20	Y	Y	Y	Y*	Y*	RSO 1990, c H.8; O Reg 369/09
Prince Edward Island	Motor Assisted Pedal Bicycle	N	Y	Y	16	50 cc	31	N	N	Y	Y	N	RSPEI 1988, c H-5; PEI Reg EC642/75
Quebec	Power-Assisted Bicycle	Y	N	N	18	500 W	20	Y	Y	Y	Y*	N	CQLR c C-24.2; CQLR c V-1.2, r 4.1; CQLR c P-9, r 25
Saskatchewan	Electric Assist Bicycle;												
	Power Cycle	Y	N	N	--	500 W	20	Y	Y	Y	Y*	Y*	SS 2004, c T-18.1; Motorcycle handbook
Yukon	Electric Power-Assisted Bicycle	Y	N	N	--	500 W	20	Y	Y	N	N*	N*	RSY 2002, c 153

Area: Which state or province in the United States or Canada?

Identity: Under which definition in vehicle code does an electric bicycle fall?

Bicycle: Is it essentially classified and treated as a bicycle?

License: Is a driver's license required to operate an e-bike?

Registration: Is the e-bike required to be registered with the state/province?

Age: What is the minimum age of operation of an e-bike?

Power: What is the maximum power output permitted?

Speed: What is the maximum speed of operation permitted?

Pedals: Are fully functional pedals required for operation?

Federal: Is the state/provincial definition in line with the federal definition?

Helmet: Is a helmet required for operating an e-bike?

Paths: Are e-bikes permitted on shared-use paths and trails?

Sidewalks: Are e-bikes permitted on sidewalks?

Law reference: What is source of this information?

-- = Limit not specified under law

= Information unclear/inconsistent

"Bicycle" = allowed on bicycle paths and no license/registration required

† Horsepower expressed in watts equivalent; 1 hp = 745 watts

Different than maximum speed capability, though most areas see this as the same

‡ Age requirement; those under a certain age are required to wear a helmet

* Restrictions apply (engine cannot be engaged, local ordinances prohibit use, etc.)

* Restrictions apply (engine cannot be engaged, local ordinances prohibit use, etc.)

** California has established a 3 Class structure. Class 3 "speed pedal-assisted electric bicycle" has additional requirements than Class 1 & 2, such as speed, age restriction, helmet use, and path access. Additional states are implementing this class structure.

CLA305 9212SLJA.pdf

Good morning, Chairman Clemens and members of the Senate Transportation Committee. My name is Dawn Mayer and I am the Child Passenger Safety Program Director for the North Dakota Department of Health (NDDoH). I'm here to provide neutral testimony to HB 1148 relating to electric bicycles.

Electric bicycles can reach speeds of 20 to 28 miles per hour. Due to the faster speed and motorized nature of electric bicycles, they travel faster than conventional bicycles, which increases the possibility of crashes. Adding safety measures to this bill that are similar to other methods of transportation in North Dakota would provide extra protection for our citizens. These include:

- Setting a minimum age for those who can operate electric bicycles. North Dakota's motorcycle and motorized bicycle (moped) law requires a 14 year-old to obtain an operator's permit to ride a motorcycle or motorized bicycle. As HB 1148 is written now, a child of any age can ride an electric bicycle on a recreational path or road. Having a young child operating an electronic bicycle up to 20-28 miles per hour, and not understanding the rules of the road, creates a dangerous environment for the child and for any persons in and around their path.
- Requiring electric bicycle riders under the age of 18 to wear helmets; this would be consistent with our state's motorcycle rider requirement. According to the Centers for Disease Control and Prevention, children (5-14 years) and adolescents (15-19 years) have the highest rates of nonfatal bicycle-related injuries, accounting for more than one-third of all bicycle-related injuries seen in U.S. emergency departments.

This concludes my testimony. I am happy to answer any questions you may have.

#7211

March 3, 2021

From: Lt. Jeff Solemsaas

To: Senate Transportation Committee

Re: HB 1148 Electric bicycles

Chairman Clemens and members the Senate Transportation Committee,

I'm submitting some brief testimony in relation to HB 1148 which would classify electric bicycles under the same category of a typical bicycle. I have some concerns with this classification that I would like to share.

Bicycles are allowed to use public roads under the premise that they follow the same rules of the road governing vehicles. Unfortunately, this is not always the case. In the past three years the Bismarck PD has investigated approximately 53 collisions involving bicycles. Approximately half of those are the result of the bicyclist committing a traffic violation such as failure to stop for a stop sign or red light. Often, these collisions result in injury to the bicyclist. It should be noted that Bismarck ordinances dictate that bicycle riders are obligated to follow the general rules of the road that apply to vehicles.

If an electric bicycle were to be classified as a bicycle there would be no age limitation for the rider. With the added speed in which the electric bicycle is operated at there is a great potential for serious injury or death. An obvious concern would be that juveniles would be operating an electric bicycle with no helmet or other protection.

There is also the concern that a motorist would see the bicycle approaching but would not be aware of the speed due to the fact that bicycles normally do not operate at a higher mph when under human power. This is a common factor in collisions also under the presumption that the motorist actually sees the bicycle approaching. Many times, motorists fail to see motorcycles approaching and enter the roadway in front of them, a bicycle presents a much smaller profile for a motorist to see.

With experience and maturity, a rider of a bicycle learns that they have to become defensive drivers just for self-preservation. A young rider does not have that experience and to add higher speeds into the mixture is asking for disaster.

The ND Century Code already has a definition for a motorized bicycle under 39-01-01. This would change the definition of a motorized bicycle from what exists and does define the function of an electric bicycle.

Motorized bicycle" means a vehicle equipped with two or three wheels, foot pedals to permit muscular propulsion or footrests for use by the operator, a power source providing up to a maximum of two brake horsepower having a maximum piston or rotor displacement of 3.05 cubic inches [49.98 milliliters] if a combustion engine is used, which will propel the vehicle, unassisted, at a speed not to exceed thirty miles [48.28kilometers] per hour on a level road surface, and a power drive system that functions directly or automatically only, not requiring clutching or shifting by the operator after the drive system is engaged, and the vehicle may not have a width greater than thirty-two inches [81.28 centimeters].

Under this bill, a rider of an electric bike would not be required to have a driver's license or insurance as noted previously. This would lead to some enforcement issues when there is property damage from a collision and the electric bicycle rider is not obligated to have insurance. The owner of the vehicle or property damaged would be left with the financial loss.

With the concerns that I have described taken into consideration I urge the Senate Transportation Committee to reject this proposal. At a minimum there should be an age limitation established to lessen the possibility of serious injury to juveniles using this form of transportation.

Respectfully submitted,

Lt. Jeff Solemsaas
Traffic Section Commander

Members of the Transportation Committee

Thank you for the opportunity to address this bill. My name is Nichole Selzler and I am a Registered Nurse in the Trauma Services Department and I work in the area of injury prevention in regards to children in the capacity as the Safe Kids Coordinator for the Bismarck/Mandan area. As I read thru the bill up for discussion today, I do not see where there is any information in regards to safe guards for e bicycles for the children of ND. I did not see in the bill an age requirement that a child must be in order to ride an e bicycle or whether or not a helmet will be required when riding the e bicycle. As an educator in the community and the hospital, I am asked to provide education to both children and parents on the use of a bike helmet when operating a manual pedal bicycle. We see many children in the ER who are riding without helmets and have suffered from a head injury. These children may not have suffered such an injury if they had been riding a bicycle with a helmet. If this bill should pass without provisions in regards to safety, we now could have children operating an e bicycle that can go up 20mph, possibly 28mph. The hospitals of ND could see an increase of head injuries due to an increase of e bicycle usage. There has not been a lot of studies done on safety in regards to the use of e bikes. I did find a study from two tertiary care centers in Israel. Data was collected from children less than 18 years of age that had cranial injuries in relation to e bike usage. 20 patients were included. Seventeen were e bike users and three were hit as pedestrians. Average age was 11 years old and none of the 17 included e bike users were wearing a helmet. 17 out of the 20 patients suffered from skull fractures, to intracerebral contusions, to epidural and subdural hematomas. 3 of these patients had to undergo surgery for depressed skull fractures reduction and one for insertion of intracranial pressure monitoring and of these 20 patients, one child died due to the injuries they obtained riding an e bicycle. I know that this is only one study that I referenced but I think it does hit my point that safety measures need to be addressed in this bill in order to keep the children of North Dakota safe.

Thank you for time

Nichole Selzler RN

Safe Kids Bismarck/Mandan

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee Fort Totten Room, State Capitol

HB 1148
3/11/2021
AM Meeting

A BILL for an Act to create and enact a new section to chapter 39-10.1 of the North Dakota Century Code, relating to electric bicycle regulations, manufacturing, and operations; to amend and reenact sections 39-01-01, 39-05-02.2, and 39-10.1-08, subsection 5 of section 39-16-01, subsection 2 of section 39-29-01, and subsection 2 of section 57-40.3-01 of the North Dakota Century Code, relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [10:51]

Discussion Topics:

- E-bikes
- Helmets
- Safety regulations

Amy Cleary [10:52], with the GA Group, introduces Alex Logemann.

Alex Logemann [10:54], with People for Bikes, offers neutral oral testimony and submits testimonies #8617, #8618, #8619.

Senator Bakke [10:55] asks the committee to consider her amendment, testimony #8823.

Chair Clemens adjourns the meeting. [10:55]

Sheldon Wolf, Committee Clerk

Summary of electric bicycle age restrictions and helmet laws in states with three class system

State	Electric bicycle age limit	Helmet law (bicycles - also applies to electric bicycles)	Additional helmet laws (electric bicycle only)	Driver's license required?	Citations
Arizona	None.	None.	None.	No	N/A
Arkansas	Class 3 only - must be 16.	None.	Class 3 only - riders under age 21.	No	Ark. Code Ann. § 27-51-1706
California	Class 3 only - must be 16.	Riders of bicycles, scooters, skateboards, roller skates/roller blades under age 18.	Class 3 only - all riders.	No	Cal. Veh. Code §§ 21212, 21213.
Colorado	Class 3 only - must be 16.	None.	Class 3 only - riders under age 18.	No	C.R.S. § 42-4-1412.
Connecticut	Class 3 only - must be 16.	Riders of bicycles, scooters, skateboards, roller skates/roller blades under age 16.	All riders.	No	Conn. Gen. Stat. §§ 14-289k, 14-286d.
Florida	None	All riders under age 16.	None.	No	Fla. Stat. §§ 316.2065.
Georgia	Class 3 only - must be 15.	All riders under age 16.	Class 3 only - all riders.	No	Ga. Code §§ 40-6-303, 40-6-296.
Idaho	None.	None.	None.	No	N/A
Illinois	Class 3 only - must be 16.	None.	None.	No	625 ILCS 5/11-1517(h)
Indiana	Class 3 only - must be 15.	None	Class 3 only - riders under age 18.	No	IC 9-21-11-13.1(k)(3),(5)
Louisiana	Class 3 only - must be 12.	All riders under age 12.	Class 3 only - all riders.	No	R.S. 32:204(G)-(H), 32:199
Maine	Class 3 only - must be 16.	All riders under age 16.	All riders under age 16.	No	29-A MRSA § 2063, sub-§14(H), § 2323(1)
Maryland	Class 3 only - must be 16.	All riders under age 16.	None.	No	Md. Code Ann., Trans. § 21-1205.2(B), 21-1207.1
Michigan	Class 3 only - must be 14.	None.	Class 3 only - riders under age 18.	No	MCL § 257.662a(4).
New Hampshire	Class 3 only - must be 16.	All riders under age 16.	Class 3 only - riders under age 18.	No	N.H. Rev. Stat. §§ 265:144-a(IX)-(x); 265:144 (X).
New Jersey	None.	All riders under age 17.	None.	No	N.J.S.A. 39:4-10.1.
New York	None.	All riders under age 14.	Class 3 only - all riders.	No	N.Y. Veh. & Traf. Law §§ 1238-5.
Ohio	Class 3 only - must be 16.	None.	Class 3 only - all riders.	No	O.R.C. § 4511.522(D).
Oklahoma	Class 3 only - must be 16.	None.	None.	No	47 O.S. § 11-1209(F)
South Dakota	Class 3 only - must be 16.	None.	Class 3 only - riders under age 18 and passengers.	No	SDCL §§ 32-20B-13, 32-20B-14
Tennessee	Class 3 only - must be 14.	All riders under age 16.	Class 3 only - all riders.	No	T.C.A. § 55-8-307, 55-52-105.
Texas	Class 3 only - must be 15.	None.	None.	No	Tex. Trans. Code § 551.107(c).
Utah	Class 3 - must be 16; All e-bikes - riders under age 14 must be under supervision of an adult.	None.	Class 3 only - riders under age 21.	No	Utah Code Ann. §§ 41.6a-1115.5 ; 41.6a-1505 .
Virginia	Class 3 only - must be 14 to ride unsupervised, under 14 may ride with supervision.	None.	Class 3 only - all riders.	No	Va. Code §§ 46.2-904.1(G) ; 46.2-908.1 .

Summary of electric bicycle age restrictions and helmet laws in states with three class system

State	Electric bicycle age limit	Helmet law (bicycles - also applies to electric bicycles)	Additional helmet laws (electric bicycle only)	Driver's license required?	Citations
Washington	Class 3 only - must be 16.	None.	None.	No	RCW 46.20.500(3).
West Virginia	Class 3 only - must be 16.	All riders under age 15.	None.	No	W.V. Code §§ 17C-11-8 ; 17C-11A-4 .
Wisconsin	Class 3 only - must be 16.	None.	None.	No	Wisc. Stat. § 346.806(4).
Wyoming	None.	None.	None.	No	N/A

NORTH DAKOTA'S EXISTING ELECTRIC BICYCLE LAW FOR THE ROAD

- » Electric bicycles are defined as “motorized bicycles.” As “motorized bicycles,” electric bicycles are not subject to all of the same rules of the road that apply to bicycles.
- » As “motorized bicycles,” electric bicycles are subject to some motor vehicle laws, including requirements for licensing, registration, and insurance.
- » The minimum user age for an electric bicycle is 14 years of age.

- » Electric bicycles are not allowed on sidewalks.
- » Consult your local authority or agency for information regarding whether electric bicycles are allowed on bicycle paths.

* The following North Dakota laws are referenced: N.D. Cent. Code § 39-01-01 (48); 39-06-14.1.

NEEDED CHANGES TO NORTH DAKOTA'S ELECTRIC BICYCLE LAW

There is an opportunity to update North Dakota's electric bicycle law, consistent with state laws recently passed in 28 states, including neighboring South Dakota, Wisconsin and Wyoming.

This bill would regulate low speed electric bicycles like bicycles. The same rules of the road would apply to both electric bicycles and human-powered bicycles when it comes to speed, proper passing, following local traffic laws, obeying posted speed limits, and other state and local ordinances.

Changes to the North Dakota Century Code would define an electric bicycle as a bicycle equipped with fully operable pedals, a saddle or seat for the rider, and an electric motor of seven hundred fifty or fewer watts. An electric bicycle would meet one of the following three classes:

- » CLASS 1: A class 1 electric bicycle if the motor provides assistance only when the individual is pedaling and the motor ceases to provide assistance when a speed of twenty miles [32 kilometers] per hour is achieved.
- » CLASS 2: A class 2 electric bicycle if the motor is capable of propelling the bicycle without the individual pedaling and the motor ceases to provide assistance when a speed of twenty miles [32 kilometers] per hour is achieved.
- » CLASS 3: A class 3 electric bicycle if the motor provides assistance only when the individual is pedaling and the motor ceases to provide assistance when a speed of twenty-eight miles [45 kilometers] per hour is achieved.

In the interest of safety, local governments would be allowed to restrict, regulate or prohibit the use of electric bicycles on bicycle paths or multi-use paths. This is a local jurisdictional decision.

These regulatory updates would also mean that:

- » Electric bicycles and electric bicycle riders would not be subject to the provisions of the code relating to financial responsibility, vehicle insurance, driver's licenses, vehicle registration, or certificates of title.
- » All electric bicycle manufacturers must apply a standard label to each electric bicycle specifying its class, type and wattage.
- » Any tampering or modification of the motor would require replacement of the standard label.
- » The definitions of off-highway vehicle motorcycle, motorized bicycle, motor-powered recreational vehicle, motor-driven cycle and motor vehicle would exclude that of an electric bicycle.

With an electric bicycle, bicyclists can ride more often, farther, and for more trips.

Electric bicycles are designed to be as safe as traditional bicycles, do not compromise consumer safety, and benefit bicyclists who may be discouraged from riding a traditional bicycle due to limited physical fitness, age, disability or convenience.

In many states, electric bicycles are regulated under antiquated laws primarily aimed at combustion engine vehicles such as mopeds or scooters. PeopleForBikes is clarifying state laws governing the use of electric bicycles in the U.S. Every state's law is different, but the objective is to ensure that low-speed electric bicycles are regulated similarly to traditional, human-powered bicycles.



Learn more at [PeopleForBikes.org/e-bikes](https://peopleforbikes.org/e-bikes)

- » Blogs and webinars
- » Electric bicycle laws around the country
- » Electric bicycle statistics and research
- » Buying guide
- » Retailer materials
- » eMTB management resources

Examples of Common Electric Bicycles



Class 1 Electric Bicycle

Common power range: 250-500 watts
or .333 to .667 horsepower
(Pictured bike: 250 watts)
Maximum speed: 20 MPH



Class 2 Electric Bicycle

Common power range: 250-750 watts
or .333 to 1 horsepower
(Pictured bike 500 watts)
Maximum speed: 20 MPH



Class 3 Electric Bicycle

Common power range: 250-650 watts
or .333 to .8 horsepower
(Pictured bike 250 watts)
Maximum speed: 28 MPH

Examples of Common Vehicles That Are Not Electric Bicycles



Electric Scooter

Common power range: 250-500 watts
or .333 to .667 horsepower
Maximum speed: 15-20 MPH
Distinctions to an electric bicycle:

- No pedals for human propulsion
- No seat, must be stood upon
- Smaller wheels



Scooter or Moped

Common power range: 3 (50cc) to 20
horsepower (250cc)
Maximum speed: 25-60 MPH
Distinctions to an electric bicycle:

- No pedals for human propulsion
- More powerful motors
- Faster maximum speed
- Often combustion powered



Off-Road Motorcycle/Dirt Bike

Common power range: 6 (125cc) to 60
horsepower (450cc)
Maximum speed: 45+ MPH
Distinctions to an electric bicycle:

- No pedals for human propulsion
- Much more powerful motors
- Much faster maximum speeds
- Often combustion powered

21.0508.02001
Title.

Prepared by the Legislative Council staff for
Senator Bakke

March 10, 2021

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1148

Page 17, after line 30, insert:

"7. An individual under the age of fourteen may not operate an electric bicycle. An individual who is fourteen years of age or older but is under the age of nineteen may not operate an electric bicycle unless the individual is wearing a safety helmet while operating the electric bicycle which meets United States department of transportation standards."

Renumber accordingly

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee Fort Totten Room, State Capitol

HB 1148
3/11/2021
PM Meeting

A BILL for an Act to create and enact a new section to chapter 39-10.1 of the North Dakota Century Code, relating to electric bicycle regulations, manufacturing, and operations; to amend and reenact sections 39-01-01, 39-05-02.2, and 39-10.1-08, subsection 5 of section 39-16-01, subsection 2 of section 39-29-01, and subsection 2 of section 57-40.3-01 of the North Dakota Century Code, relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [2:57]

Discussion Topics:

- E-bikes
- Helmets
- Safety regulations

Amy Cleary [2:57] is summoned to answer questions from the committee.

Chair Clemens adjourns the meeting. [3:03]

Sheldon Wolf, Committee Clerk

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee Fort Totten Room, State Capitol

HB 1148
3/18/2021

A BILL for an Act to create and enact a new section to chapter 39-10.1 of the North Dakota Century Code, relating to electric bicycle regulations, manufacturing, and operations; to amend and reenact sections 39-01-01, 39-05-02.2, and 39-10.1-08, subsection 5 of section 39-16-01, subsection 2 of section 39-29-01, and subsection 2 of section 57-40.3-01 of the North Dakota Century Code, relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [9:51]

Discussion Topics:

- E-bikes
- Safety
- Definition of 'bicycle'
- Helmets

Amy Cleary [9:53], with the GA Group representing People for Bikes, is called to answer questions for the committee.

The Committee [9:58] recesses briefly.

Senator Bakke [10:07] presents an amendment submitted on 3-11-2021 [LC 21.0508.02001]

Amy Cleary [10:09] provides ongoing answers to sporadic questions from the committee.

Senator Bakke [10:33] motions to adopt an amendment. ["an individual under the age of fourteen may not operate a class 3 electric bike."]

Senator D. Larsen [10:33] seconds.

Senators	Vote
Senator David Clemens	N
Senator Robert Fors	N
Senator Cole Conley	N
Senator Michael Dwyer	N

Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Motion fails 2-4-0. [10:35]

Senator Bakke [10:36] motions to adopt an amendment. ["an individual who is under the age of eighteen may not operate a class 3 electric bicycle, unless the individual is wearing a safety helmet while operating the electric bicycle, which meets United States Department of Transportation standards."]

Senator D. Larsen [10:37] seconds.

Senator Bakke [10:41] withdraws her motion.

Senator D. Larsen [10:41] withdraws his second.

Senator Bakke [10:53] motions to adopt an amendment. ["an individual who is under the age of eighteen may not operate a class 3 electric bicycle, unless the individual is wearing a safety helmet."]

Senator D. Larsen [10:53] seconds.

Senators	Vote
Senator David Clemens	N
Senator Robert Fors	N
Senator Cole Conley	Y
Senator Michael Dwyer	Y
Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Motion passes 4-2-0. [10:54]

Senator Bakke [10:54] motions DO PASS AS AMENDED.

Senator D. Larsen [10:55] seconds.

Senators	Vote
Senator David Clemens	N
Senator Robert Fors	N
Senator Cole Conley	Y
Senator Michael Dwyer	Y
Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Senate Transportation Committee

HB 1148

3/18/21

Page 3

Motion passes 4-2-0. [10:55]

Senator Dwyer will carry.

Chair Clemens adjourns the meeting. [10:59]

Sheldon Wolf, Committee Clerk

March 18, 2021

SAK
1.561
3/18

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1148

Page 17, after line 30, insert:

"7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

REPORT OF STANDING COMMITTEE

HB 1148: Transportation Committee (Sen. Clemens, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (4 YEAS, 2 NAYS, 0 ABSENT AND NOT VOTING). HB 1148 was placed on the Sixth order on the calendar.

Page 17, after line 30, insert:

"7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

2021 SENATE STANDING COMMITTEE MINUTES

Transportation Committee Fort Totten Room, State Capitol

HB 1148
3/19/2021

A BILL for an Act to create and enact a new section to chapter 39-10.1 of the North Dakota Century Code, relating to electric bicycle regulations, manufacturing, and operations; to amend and reenact sections 39-01-01, 39-05-02.2, and 39-10.1-08, subsection 5 of section 39-16-01, subsection 2 of section 39-29-01, and subsection 2 of section 57-40.3-01 of the North Dakota Century Code, relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

Chair Clemens calls the meeting to order. Present are Chair Clemens, Vice Chair Fors, Senators Bakke, Conley, Dwyer, D. Larsen. [10:37]

Discussion Topics:

- E-bikes

Senator Dwyer [10:38] motions to reconsider HB 1148.

Senator D. Larsen [10:38] seconds.

Senators	Vote
Senator David Clemens	Y
Senator Robert Fors	Y
Senator Cole Conley	Y
Senator Michael Dwyer	Y
Senator Doug Larsen	Y
Senator JoNell Bakke	N

Motion passes 5-1-0. [10:38]

Senator Dwyer [10:39] motions to adopt an amendment [LC 21.0508.02003]

Senator Bakke [10:40] seconds.

Senators	Vote
Senator David Clemens	N
Senator Robert Fors	N
Senator Cole Conley	Y
Senator Michael Dwyer	Y

Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Motion passes 4-2-0.

Senator Dwyer [10:41] motions DO PASS AS AMENDED.
Senator D. Larsen [10:42] seconds.

Senators	Vote
Senator David Clemens	N
Senator Robert Fors	N
Senator Cole Conley	Y
Senator Michael Dwyer	Y
Senator Doug Larsen	Y
Senator JoNell Bakke	Y

Motion passes 4-2-0. [10:42]

Senator Dwyer will carry.

Chair Clemens adjourns the meeting. [10:42]

Sheldon Wolf, Committee Clerk

March 19, 2021

SL
3/19
121

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1148

Page 17, after line 30, insert:

"7. An individual under the age of fourteen may not operate a class 3 electric bicycle. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

REPORT OF STANDING COMMITTEE

HB 1148: Transportation Committee (Sen. Clemens, Chairman) recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (4 YEAS, 2 NAYS, 0 ABSENT AND NOT VOTING). HB 1148 was placed on the Sixth order on the calendar.

Page 17, after line 30, insert:

"7. An individual under the age of fourteen may not operate a class 3 electric bicycle. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

2021 CONFERENCE COMMITTEE

HB 1148

2021 HOUSE STANDING COMMITTEE MINUTES

Transportation Committee
Room JW327E, State Capitol

HB 1148
4/8/2021
Conference Committee

A bill relating to electric bicycle regulations, manufacturing, and operations; relating to the requirements for electric bicycles distributed, manufactured, and operated in the state; and to provide a penalty.

3:00 PM **Representative Becker** opened the conference committee.
Roll call – all present. (Attached)

Discussion Topics:

- Consistency with rules for youth riding motor bikes
- Helmet usage for ages groups
- Age limits for electric bicycles

Discussion on Senate amendments and possible compromises.

Senator Dwyer made a motion to recede from the Senate amendments (21.0508.02003) and amend as follows. Oral amendment: (21.0508.02004)

Page 17, after line 30, insert:

“7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet.”

Representative Christensen seconded.

Roll call vote (attached). Motion carried. 6-0-0

Representative Christensen carrier for the House
Senator Dwyer carrier for the Senate.

3:19 PM Adjourned.

Jeanette Cook, Committee Clerk

April 8, 2021

9/8
4/8/21

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1148

That the Senate recede from its amendments as printed on pages 932 and 933 of the Senate Journal and page 1281 of the House Journal and that House Bill No. 1148 be amended as follows:

Page 17, after line 30, insert:

"7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

**2021 HOUSE CONFERENCE COMMITTEE
ROLL CALL VOTES**

BILL/RESOLUTION NO. HB 1148 as (re) engrossed

House Transportation Committee

- Action Taken** ☐ **HOUSE accede to Senate Amendments**
☐ **HOUSE accede to Senate Amendments and further amend**
☐ **SENATE recede from Senate amendments**
☒ **SENATE recede from Senate amendments and amend as follows**
- ☐ **Unable to agree**, recommends that the committee be discharged and a new committee be appointed

Motion Made by: Senator Dwyer Seconded by: Representative Christensen

Representatives	4/8			Yes	No		Senators	4/8			Yes	No
Chairman Becker	x			x			Chairman Dwyer	x			x	
Representative Christensen	x			x			Senator Fors	x			x	
Representative Hanson	x			x			Senator Conley	x			x	
Total Rep. Vote				3			Total Senate Vote				3	

Vote Count Yes: 6 No: 0 Absent: 0

House Carrier Representative
Christensen Senate Carrier Senator Dwyer

LC Number 21.0508 . 02004 of amendment

LC Number 21.0508 .05000 of engrossment

Emergency clause added or deleted.

Statement of purpose of amendment:

Page 17, after line 30, insert:

“7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet.”

Insert LC: 21.0508.02004
House Carrier: Christensen
Senate Carrier: Dwyer

REPORT OF CONFERENCE COMMITTEE

HB 1148: Your conference committee (Sens. Dwyer, Fors, Conley and Reps. Becker, Christensen, Hanson) recommends that the **SENATE RECEDE** from the Senate amendments as printed on HJ page 1281, adopt amendments as follows, and place HB 1148 on the Seventh order:

That the Senate recede from its amendments as printed on pages 932 and 933 of the Senate Journal and page 1281 of the House Journal and that House Bill No. 1148 be amended as follows:

Page 17, after line 30, insert:

"7. An individual under the age of eighteen may not operate a class 3 electric bicycle unless the individual is wearing a safety helmet."

Renumber accordingly

HB 1148 was placed on the Seventh order of business on the calendar.