

1 S.66

2 Introduced by Senators Campion and Westman

3 Referred to Committee on Transportation

4 Date: February 5, 2021

5 Subject: Motor vehicles; electric bicycles; e-bikes; motor assisted; motor-  
6 assisted bicycle; municipalities

7 Statement of purpose of bill as introduced: This bill proposes to define and  
8 regulate three classes of electric bicycles.

9 An act relating to electric bicycles

10 It is hereby enacted by the General Assembly of the State of Vermont:

11 Sec. 1. 23 V.S.A. § 4(18)(A) is amended to read:

12 (18)(A) “Motorcycle” ~~shall mean~~ means any motor vehicle having a  
13 seat or saddle for the use of the rider and designed to travel on not more than  
14 three wheels in contact with the ground, and ~~shall include~~ includes autocycles  
15 but ~~exclude~~ excludes motor-driven cycles, *motor-assisted bicycles*, electric  
16 bicycles, golf carts, track driven vehicles, tractors, and electric personal  
17 assistive mobility devices.

18 Sec. 2. 23 V.S.A. § 4(21) is amended to read:

1 (21) “Motor vehicle” ~~shall include~~ includes all vehicles propelled or  
2 drawn by power other than muscular power, except farm tractors, vehicles  
3 running only upon stationary rails or tracks, motorized highway building  
4 equipment, road making appliances, snowmobiles, ~~or~~ tracked vehicles, motor-  
5 assisted bicycles, electric bicycles, or electric personal assistive mobility  
6 devices.

7 ~~Sec. 22 V.S.A. § 4(15) is amended to read:~~

8 (45)(A) “Motor-driven cycle” means any vehicle equipped with two or  
9 three wheels, a power source providing up to a maximum of two brake  
10 horsepower and having a maximum piston or rotor displacement of 50 cubic  
11 centimeters if a combustion engine is used, which will propel the vehicle,  
12 unassisted, at a speed not to exceed 30 miles per hour on a level road surface,  
13 and which is equipped with a power drive system that functions directly or  
14 automatically only, not requiring clutching or shifting by the operator after the  
15 drive system is engaged. As motor vehicles, motor-driven cycles shall be  
16 subject to the purchase and use tax imposed under 22 V.S.A. chapter 219 rather  
17 than to a general sales tax. ~~Neither an electric~~ Electric personal assistive  
18 mobility ~~device nor a~~ devices, ~~motor-assisted bicycle is a~~ bicycles, and electric  
19 bicycles are not motor-driven eyele cycles.

20 (B)(i) “Motor-assisted bicycle” means any bicycle or tricycle with  
21 ~~fully operable pedals and equipped with a~~ an internal combustion motor that.

- 1 ~~(I) has a power output of not more than 1,000 watts or 1.3~~  
2 ~~horsepower, and~~  
3 ~~(II) in itself is capable of producing a top speed of ~~no~~ not more~~  
4 ~~than 20 miles per hour on a paved level surface when ridden by an operator~~  
5 ~~who weighs 170 pounds.~~  
6 (ii) Motor-assisted bicycles shall be regulated in accordance with  
7 section 1136 of this title.  
8 ~~(iii) Electric bicycles are not motor-assisted bicycles.~~

*Sec. 3. 23 V.S.A. § 4(45) is amended to read:*

*(45)(A) “Motor-driven cycle” means any vehicle equipped with two or three wheels, a power source providing up to a maximum of two brake horsepower and having a maximum piston or rotor displacement of 50 cubic centimeters if a combustion engine is used, which will propel the vehicle, unassisted, at a speed not to exceed 30 miles per hour on a level road surface, and which is 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. As motor vehicles, motor-driven cycles shall be subject to the purchase and use tax imposed under 32 V.S.A. chapter 219 rather than to a general sales tax. ~~Neither an electric~~ Electric personal assistive mobility device nor a devices, motor-assisted bicycle is a bicycles, and electric bicycles are not motor-driven eyele cycles.*

*(B)(i) “Motor-assisted bicycle” means any bicycle or tricycle with fully operable pedals and equipped with a motor that in itself is capable of producing a top speed of not more than 20 miles per hour on a paved level surface when ridden by an operator who weighs 170 pounds and either:*

*(I) has an internal combustion motor with a power output of not more than 1,000 watts or 1.3 horsepower; and or*

*(II) in itself is capable of producing a top speed of no more than 20 miles per hour on a paved level surface when ridden by an operator who weighs 170 pounds has an electric motor with a power output of not more than 1,000 watts and does not meet the requirements of one of the three classes in subdivisions (46)(A)(i)–(iii) of this section.*

*(ii) Motor-assisted bicycles shall be regulated in accordance with section 1136 of this title.*

*(iii) Electric bicycles, as defined in subdivision (46) of this section, are not motor-assisted bicycles, as defined in subdivision (45) of this section.*

1 Sec. 4. 23 V.S.A. § 4(46) is added to read:

2 (46)(A) “Electric bicycle” means a bicycle equipped with fully operable  
3 pedals, a saddle or seat for the rider, and an electric motor of less than  
4 750 watts that meets the requirements of one of the following three classes:

5 (i) “Class 1 electric bicycle” means an electric bicycle equipped  
6 with a motor that provides assistance only when the rider is pedaling and that  
7 ceases to provide assistance when the bicycle reaches the speed of 20 miles per  
8 hour.

9 (ii) “Class 2 electric bicycle” means an electric bicycle equipped  
10 with a motor that may be used exclusively to propel the bicycle and that is not  
11 capable of providing assistance when the bicycle reaches the speed of 20 miles  
12 per hour.

13 (iii) “Class 3 electric bicycle” means an electric bicycle equipped  
14 with a motor that provides assistance only when the rider is pedaling and that  
15 ceases to provide assistance when the bicycle reaches the speed of 28 miles per  
16 hour.

17 (B) An electric bicycle is not a motor vehicle and is a vehicle to the  
18 same extent that a bicycle is a vehicle.

1           (C) Electric bicycles shall be regulated in accordance with section  
2           1136a of this title.

3           Sec. 5. 23 V.S.A. § 4(81) is amended to read:

4           (81) “Vulnerable user” means a pedestrian; an operator of highway  
5           building, repair, or maintenance equipment or of agricultural equipment; a  
6           person operating a wheelchair or other personal mobility device, whether  
7           motorized or not; a person operating a bicycle or other nonmotorized means of  
8           transportation (such as roller skates, rollerblades, or roller skis); a person  
9           operating *a motor-assisted bicycle or* an electric bicycle; or a person riding,  
10          driving, or herding an animal.

11          Sec. 6. 23 V.S.A. § 1136a is added to read:

12          § 1136a. ELECTRIC BICYCLES

13          (a) Except as provided in this subsection, electric bicycles shall be  
14          governed as bicycles under Vermont law, and operators of electric bicycles  
15          shall be subject to all of the rights and duties applicable to bicyclists under  
16          Vermont law.

17          (b) Electric bicycles and their operators shall be exempt from:

18                  (1) motor vehicle registration, inspection, and certificate of title  
19                  requirements under chapter 7 of this title, section 1222 of this title, and  
20                  chapter 21, subchapter 2 of this title;

1           (2) operator’s license requirements under chapter 9, subchapter 1 of this  
2 title;

3           (3) financial responsibility requirements under chapter 11 of this title;  
4 and

5           (4) requirements applicable to all-terrain vehicles under chapter 31 of  
6 this title.

7           (c) An electric bicycle shall comply with the equipment and manufacturing  
8 requirements for bicycles promulgated by the U.S. Consumer Product Safety  
9 Commission, including 16 C.F.R. Part 1512 as may be amended, and may only  
10 be operated in such a way that the electric motor is disengaged or ceases to  
11 function when the operator stops pedaling or applies the brakes.

12           (d) A class 3 electric bicycle shall be equipped with a speedometer that  
13 displays the speed the bicycle is traveling in miles per hour.

14           (e)(1) An electric bicycle may be ridden in places where bicycles are  
15 allowed, including highways, bicycle lanes, and bicycle or multiuse paths.

16           (2) Following notice and a public hearing, a municipality, local  
17 authority, or State agency having jurisdiction over a bicycle or multiuse path  
18 may prohibit the operation of a class 1 electric bicycle or class 2 electric  
19 bicycle on that path if it finds that such a restriction is needed for safety  
20 reasons or compliance with other laws or legal obligations.

1           (3) A municipality, local authority, or State agency having jurisdiction  
2           over a bicycle or multiuse path may prohibit the operation of a class 3 electric  
3           bicycle on that path.

4           (4) This subsection shall not apply to a trail that is specifically  
5           designated as nonmotorized and that has a natural surface tread that is made by  
6           clearing and grading the native soil with no added surfacing materials. A  
7           municipality, local authority, or State agency having jurisdiction over a trail  
8           described in this subdivision may regulate the use of an electric bicycle on that  
9           trail.

10          (f) An individual under 16 years of age shall not operate a class 3 electric  
11          bicycle but may ride as a passenger on a class 3 electric bicycle that is  
12          designed to accommodate passengers.

13          Sec. 7. 23 V.S.A. § 1136a(g) and (h) are added to read:

14          (g) Manufacturers and distributors of electric bicycles shall apply a label  
15          that is permanently affixed, in a prominent location, to each electric bicycle.  
16          The label shall contain the classification number, top assisted speed, and motor  
17          wattage of the electric bicycle and shall be printed in Arial font in at least 9-  
18          point type.

19          (h) A person shall not tamper with or modify an electric bicycle so as to  
20          change the motor-powered speed capability or engagement of an electric

1 bicycle unless the label indicating the classification required in subsection (g)  
2 of this section is replaced after modification.

3 Sec. 8. 23 V.S.A. § 3501(1) is amended to read:

4 (1) “All-terrain vehicle” or “ATV” means any nonhighway recreational  
5 vehicle, except snowmobiles, having not less than two low pressure tires  
6 (10 pounds per square inch, or less), not wider than 64 inches with two-wheel  
7 ATVs having permanent, full-time power to both wheels, and having a dry  
8 weight of less than 2,500 pounds, when used for cross-country travel on trails  
9 or on any one of the following or a combination thereof: land, water, snow,  
10 ice, marsh, swampland, and natural terrain. An ATV on a public highway  
11 shall be considered a motor vehicle, as defined in section 4 of this title, only  
12 for the purposes of those offenses listed in subdivisions 2502(a)(1)(H), (N),  
13 (R), (U), (Y), (FF), (GG), (II), and (AAA); (2)(A) and (B); (3)(A), (B), (C),  
14 and (D); (4)(A) and (B); and (5) of this title and as provided in section 1201 of  
15 this title. An ATV ~~shall~~ does not include an electric personal assistive mobility  
16 device ~~or electric bicycle~~, a motor-assisted bicycle, or an electric bicycle.

17 Sec. 9. 23 V.S.A. § 3801(1) is amended to read:

18 (1) “All-terrain vehicle” or “ATV” means any nonhighway recreational  
19 vehicle, except snowmobiles, motor-assisted bicycles, or electric bicycles,  
20 when used for cross-country travel on trails or on any one of the following or a



1 combination thereof: land, water, snow, ice, marsh, swampland, and natural  
2 terrain.

3 Sec. 10. EFFECTIVE DATES

4 (a) Sec. 7 (electric bicycle labeling requirements; 23 V.S.A. § 1136a(g) and  
5 (h)) shall take effect on January 1, 2022.

6 (b) All other sections shall take effect on July 1, 2021.