



# OHIO LEGISLATIVE SERVICE COMMISSION

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## Bill Analysis

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### **Sub. H.B. 250**

132nd General Assembly

(As Reported by H. Transportation and Public Safety)

**Reps.** Brinkman, Becker, Seitz, Blessing, Green, Greenspan, Householder, Hughes, Johnson

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### **BILL SUMMARY**

- Categorizes electric bicycles into three distinct classes based on the assistance provided by the electric motor and the electric bicycle's top speed.
- Requires manufacturers and distributors of electric bicycles, starting January 1, 2018, to permanently and prominently affix a label on each electric bicycle specifying the electric bicycle's class, top assisted speed, and motor wattage.
- Prohibits a person from modifying an electric bicycle's top assisted speed unless the person also modifies the label.
- Establishes other equipment requirements for the electric bicycle based on federal requirements and the class of the electric bicycle.
- Permits class 1 and class 2 electric bicycles on bicycle-only and shared-use paths, unless prohibited on the path by the local authority in control of the path.
- Prohibits class 3 electric bicycles on bicycle-only and shared-use paths, unless either the path is within or adjacent to a highway, or class 3 bicycles are permitted on the path by the local authority in control of the path.
- Specifies that a shared-use path does not include a trail that is intended for mountain biking, hiking, equestrian use, or other similar use, or a single track or other natural surface trail that has been historically reserved for nonmotorized use.
- Unless authorized by a local authority, prohibits the operation of an electric bicycle on a path that is intended for mountain biking, hiking, equestrian use, or other similar uses, or on a single track or other natural surface trail that has been historically reserved for nonmotorized use.

- Requires the operator of a class 3 electric bicycle to be at least 16 years old and all operators and passengers of a class 3 electric bicycle to wear a protective helmet.
- Requires an electric bicycle operator to follow all traffic and equipment laws that apply to bicycles.

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## **CONTENT AND OPERATION**

### **Classification of electric bicycles**

The bill classifies electric bicycles into three classes.<sup>1</sup> All three classes of electric bicycles must be equipped with fully operable pedals and electric motors that are less than 750 watts. A "class 1" electric bicycle provides assistance only when the rider is pedaling and only up to 20 miles per hour.<sup>2</sup> A "class 2" electric bicycle may provide assistance regardless of whether the rider is pedaling, but only up to 20 miles per hour.<sup>3</sup> A "class 3" electric bicycle provides assistance only when the rider is pedaling and only up to 28 miles per hour.<sup>4</sup> The classification of electric bicycles affects certain equipment requirements and rules governing where the electric bicycles may be ridden as discussed below.<sup>5</sup>

### **Equipment requirements for electric bicycles**

The bill requires manufacturers and distributors of electric bicycles, starting on January 1, 2018, to permanently affix a label, in a prominent location, on each electric bicycle. The label must specify the top assisted speed that the electric bicycle is capable of reaching, the motor wattage, and whether the electric bicycle is a class 1, class 2, or class 3 electric bicycle.<sup>6</sup> No person is allowed to modify an electric bicycle in order to change the top assisted speed of that electric bicycle unless the person also modifies the label to reflect the modification.<sup>7</sup>

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<sup>1</sup> R.C. 4511.01(RRR).

<sup>2</sup> R.C. 4511.01(SSS).

<sup>3</sup> R.C. 4511.01(TTT).

<sup>4</sup> R.C. 4511.01(UUU).

<sup>5</sup> For purposes of the Motor Vehicle, Financial Responsibility, and Traffic Laws, electric bicycles are considered vehicles, but not motor vehicles, and are distinct from motorized bicycles. R.C. 4501.01(B) and (L); 4509.01(I); and 4511.01(A), (B), and (H).

<sup>6</sup> R.C. 4511.522(A)(1).

<sup>7</sup> R.C. 4511.522(A)(2).



Under the bill, manufacturers must ensure that each electric bicycle complies with the federal equipment and manufacturing requirements established by the Consumer Product Safety Commission.<sup>8</sup> Additionally, manufacturers must manufacture class 1 and class 3 electric bicycles so that when the rider ceases pedaling, the electric motor ceases to provide assistance and class 2 electric bicycles so that when the rider applies the brakes, the electric motor ceases to provide assistance.<sup>9</sup> Class 3 electric bicycles also must be equipped with a speedometer displaying the speed of the electric bicycle in miles per hour.<sup>10</sup>

## **Operational requirements for electric bicycles**

The bill subjects all electric bicycles to many of the same laws as regular bicycles (see "**General rules governing bicycle operation**" below). However, there are also additional operational requirements based on the class of electric bicycle. Under the bill, a class 1 or class 2 electric bicycle is permitted to operate on a bicycle-only path or on a shared-use path, unless the political entity that controls the path by resolution, ordinance, or rule prohibits their use on the path. ("Shared-use path" does not include a trail that is intended to be used primarily for mountain biking, hiking, equestrian use, or other similar uses, or a single track or other natural surface trail that has been historically reserved for nonmotorized use). A class 3 electric bicycle, in contrast, is not permitted on a bicycle-only path or on a shared-use path, unless the path is within or adjacent to a highway or the political entity that controls the path by resolution, ordinance, or rule permits the class 3 electric bicycles on the path.<sup>11</sup>

Additionally, the bill prohibits the operation of a class 1, 2, or 3 electric bicycle on a path that is intended to be used primarily for mountain biking, hiking, equestrian use, or other similar uses. It also prohibits the operation of those bikes on a single track or other natural surface trail that has been historically reserved for nonmotorized use, unless a local authority or state agency that controls the path by resolution, ordinance, or rule authorizes the use of a class 1, 2, or 3 electric bicycle on the path.<sup>12</sup>

Last, under the bill, class 3 electric bicycle operators have additional restrictions. The operator of such an electric bicycle must be at least 16 years old. There is no age restriction on passengers. All operators and passengers of class 3 electric bicycles also

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<sup>8</sup> R.C. 4511.522(B)(1).

<sup>9</sup> R.C. 4511.522(B)(2). See 16 C.F.R. 1512 *et seq.*

<sup>10</sup> R.C. 4511.522(B)(3).

<sup>11</sup> R.C. 4511.01(PPP) and 4511.522(C).

<sup>12</sup> R.C. 4511.522(C).



must wear a protective helmet that meets the Consumer Product Safety Commission or the American Society for Testing and Materials standards.<sup>13</sup>

## **Penalties**

The bill specifies that failure to follow the operational requirements specific to electric bicycles is a minor misdemeanor. If within one year of the offense, the offender previously has been convicted of or pleaded guilty to one additional predicate motor vehicle or traffic offense, the offender is guilty of a 4th degree misdemeanor. If within one year of the offense, the offender previously has been convicted of or pleaded guilty to two or more predicate motor vehicle offenses, the offender is guilty of a 3rd degree misdemeanor. In any instance, the offense is considered a strict liability offense.<sup>14</sup>

## **General rules governing bicycle operation**

The bill applies to electric bicycles many of the requirements and restrictions in current law that apply to regular bicycles. General descriptions of those laws, with the inclusion of electric bicycles as amended by the bill, are provided below:

--Requires a motor vehicle or trackless trolley to pass at a safe distance of three feet or greater when overtaking an electric bicycle (R.C. 4511.27);

--Requires an operator of an electric bicycle to give an appropriate turn signal at least once when not in a designated turn lane and provided the operator's hands are not needed for safe operation of the electric bicycle (R.C. 4511.39);

--Describes the appropriate hand and arm turn signals (R.C. 4511.40);

--Applies the traffic and equipment laws to an electric bicycle when it is operated on any highway or on any path set aside for the exclusive use of bicycles; and the electric bicycle operator may be issued a ticket, citation, or summons for a violation in the same manner as a motor vehicle operator (R.C. 4511.52);

--Requires a firmly attached and regular seat for an operator and passengers, the operator to keep at least one hand on the handlebars, and an appropriate number of passengers (R.C. 4511.53);

--Prohibits attaching the electric bicycle to a streetcar, trackless trolley, or vehicle on the roadway or while the streetcar, trackless trolley, or vehicle is moving (R.C. 4511.54);

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<sup>13</sup> R.C. 4511.522(D).

<sup>14</sup> R.C. 4511.522(E).



--Prohibits the use of an electric bicycle on a freeway (R.C. 4511.051);

--Requires an operator of an electric bicycle to ride near the edge of the right side of the roadway when it is reasonable and safe to do so (R.C. 4511.55);

--Requires certain equipment, such as lamps, reflectors, audible signals, and brakes during specified times of day and times of low visibility (R.C. 4511.56);

--Permits electric bicycles to park on sidewalks when not impeding the normal flow of pedestrian traffic (R.C. 4511.68);

-- Permits the rider of an electric bicycle to proceed through an intersection controlled by a traffic control signal, after taking specified precautionary steps, when the signal malfunctions due to the failure of the vehicle detector to detect the presence of the electric bicycle (R.C. 4511.132(A)).

--Permits electric bicycles to drive on a sidewalk or sidewalk area if the motor is not engaged (R.C. 4511.711).

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## HISTORY

ACTION	DATE
Introduced	05-31-17
Reported, H. Transportation and Public Safety	12-14-17

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