

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: CS/HB 971 Electric Bicycles

SPONSOR(S): Transportation & Infrastructure Subcommittee, Grant, M.

TIED BILLS: **IDEN./SIM. BILLS:** SB 1148

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR or BUDGET/POLICY CHIEF
1) Transportation & Infrastructure Subcommittee	12 Y, 0 N, As CS	Roth	Vickers
2) Transportation & Tourism Appropriations Subcommittee	12 Y, 0 N	Hicks	Davis
3) State Affairs Committee			

SUMMARY ANALYSIS

The bill defines electric bicycles (e-bikes) within a three-tiered classification system. Class 1 e-bikes are bicycles equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the e-bike reaches 20 mph. Class 2 e-bikes are bicycles equipped with a throttle-actuated motor that may be used exclusively to propel the bicycle and that ceases to provide assistance when the e-bike reaches 20 mph. Class 3 e-bikes are bicycles equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the e-bike reaches 28 mph.

The bill also creates regulations governing the operation of e-bikes. An e-bike or an operator of an e-bike must be afforded all the rights and privileges, and be subject to all of the duties, of a bicycle or the operator of a bicycle. An e-bike is considered a vehicle to the same extent as a bicycle, and the bill authorizes an e-bike to operate where bicycles are allowed, including, but not limited to, streets, highways, roadways, shoulders, bicycle lanes, and bicycle or multiuse paths. However, local governments are authorized to regulate the operation of e-bikes on streets, highways, sidewalks, and sidewalk areas. Additionally, following notice and a public hearing, a municipality, county, or agency of the state having jurisdiction over a bicycle or multiuse path may restrict or prohibit the operation of an e-bike on the path if the entity determines that such a restriction is necessary in the interest of public safety or to comply with other laws or legal obligations.

The bill provides that an e-bike or an operator of an e-bike is not subject to the provisions of law relating to financial responsibility, driver or motor vehicle licenses, vehicle registration, title certificates, off-highway motorcycles, or off-highway vehicles.

The bill requires that beginning January 1, 2021, manufacturers and distributors of e-bikes must apply a label that is permanently affixed in a prominent location to each e-bike. The label must contain the classification number, top assisted speed, and motor wattage of the e-bike. The bill prohibits a person from tampering with or modifying an e-bike in order to change the motor-powered speed capability or engagement of an e-bike, unless the label indicating the classification number required is replaced after such modification.

The bill will likely have a negative, but insignificant, fiscal impact on state government revenues. See Fiscal Analysis for additional details.

The bill provides an effective date of July 1, 2020.

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. EFFECT OF PROPOSED CHANGES:

Current Situation

Bicycle Regulations

Section 316.003, F.S., defines a “bicycle” as:

Every vehicle propelled solely by human power, and every motorized bicycle propelled by a combination of human power and an electric helper motor capable of propelling the vehicle at a speed of not more than 20 miles per hour on level ground upon which any person may ride, having two tandem wheels, and including any device generally recognized as a bicycle though equipped with two front or two rear wheels. The term does not include such a vehicle with a seat height of no more than 25 inches from the ground when the seat is adjusted to its highest position or a scooter or similar device. A person under the age of 16 may not operate or ride upon a motorized bicycle.¹

Under state traffic control laws, bicyclists are considered vehicle operators and are generally required to obey the same rules of the road as other vehicle operators, including traffic signs, signals, and lane markings.² Section 316.2065, F.S., governs the operation of bicycles in Florida and provides for a number of bicycle-specific regulations, including:

- A bicycle rider or passenger who is under 16 years of age must wear a bicycle helmet.³
- A person may not knowingly rent or lease any bicycle to be ridden by a child who is under the age of 16 years unless the child possesses a bicycle helmet or the lessor provides a bicycle helmet for the child to wear.⁴
- Every bicycle in use between sunset and sunrise must be equipped with a lamp on the front exhibiting a white light visible from a distance of at least 500 feet to the front and a lamp and reflector on the rear each exhibiting a red light visible from a distance of 600 feet to the rear.⁵
- A person operating a bicycle on a sidewalk, or across a roadway on a crosswalk, must yield the right-of-way to any pedestrian and must give an audible signal before overtaking and passing the pedestrian.⁶

A person operating a bicycle on a roadway must ride in the bicycle lane, but if there is no bicycle lane, the bicycle operator must ride as close to the right-hand curb as practicable. However, a bicycle operator may move to the center of the lane when:

- Overtaking and passing another bicycle or vehicle proceeding in the same direction;
- Preparing for a left turn at an intersection or into a private road or driveway; or
- Reasonably necessary to avoid any condition or potential conflict, including, but not limited to, a fixed or moving object, parked or moving vehicle, bicycle, pedestrian, animal, surface hazard, turn lane, or substandard-width lane,⁷ which makes it unsafe to continue along the right-hand curb or edge or within a bicycle lane.⁸

¹ Section 316.003(4), F.S.

² Section 316.2065(1), F.S.

³ Section 316.2065(3)(d), F.S.

⁴ Section 316.2065(15)(a), F.S.

⁵ Section 316.2065(7), F.S.

⁶ Section 316.2065(10), F.S.

⁷ A substandard width lane is any lane that is too narrow for a bicycle and another vehicle to travel safely side-by-side within the lane.

⁸ Section 316.2065(5)(a), F.S.

Bicycle operators traveling on a one-way highway with two or more marked traffic lanes may ride as near to the left-hand curb as practicable⁹ and bicycle operators may not ride more than two abreast on a roadway.¹⁰

Electric Bicycles

In 2002, Congress amended the Consumer Product Safety Commission (CPSC) definition of electric bicycles (e-bikes).¹¹ The law defines a low-speed e-bike 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.” The federal law permits e-bikes to be powered by the motor alone (a “throttle-assist” e-bike), or by a combination of motor and human power (a “pedal-assist” e-bike).¹²

Devices that meet the federal definition of an e-bike are regulated by the CPSC and must meet bicycle safety standards. However, federal law only applies to e-bikes’ product standards and safety, and only specifies the maximum speed that an e-bike can travel under motor power alone. It does not provide a maximum speed when the bicycle is being propelled by a combination of human and motor power. The law does distinguish e-bikes that can travel 20 mph or less under motor power alone from motorcycles, mopeds, and motor vehicles. The CPSC has clarified that the federal law does not prohibit e-bikes from traveling faster than 20 mph when using a combination of human and motor power.¹³

While the federal government regulates the manufacturing and first sale of an e-bike, its operation on streets and bikeways remains within each state’s control. Therefore, some states have enacted laws that categorize e-bikes with mopeds and other motorized vehicles, require licensure and registration, or do not enable them to be used on facilities such as bike lanes or multi-purpose trails.¹⁴

According to a 2018 bicycle industry analysis, e-bike sales increased 83 percent between May 2017 and May 2018, and e-bikes made up 10 percent of overall bike sales in the U.S. for that time period. E-bikes cost on average \$2,000 - \$3,000, compared to \$1,000 average investment for a mid-range traditional commuter bicycle.¹⁵ As of June 2019, 22 states define e-bikes with a three-class definition.¹⁶

Representatives of the Florida Bicycle Association have expressed some concerns with the e-bike three-class definition. One concern is that the class 2 e-bike does not need pedal assist to engage and may be more similar to a motorized vehicle than a bicycle. Another concern is that the class 3 e-bike can reach speeds of 28 mph, which may be too fast to safely operate on sidewalks or multi-use paths.¹⁷

Likewise, some environmental groups, mountain bikers, hunters, and anglers in other states have voiced opposition to the authorization of e-bikes on public trails. Their concerns relate to damage to the trails, overcrowding of the trails, and excessive access to wildlife habitats.¹⁸

Effect of Proposed Changes

⁹ Section 316.2065(5)(b), F.S.

¹⁰ Section 316.2065(6), F.S.

¹¹ House Bill 727, available at <https://www.congress.gov/bill/107th-congress/house-bill/727/text> (last visited January 8, 2020).

¹² National Conference of State Legislatures, *State Electric Bicycle Laws: A Legislative Primer* (March 28, 2019), available at <https://www.ncsl.org/research/transportation/state-electric-bicycle-laws-a-legislative-primer.aspx> (last visited January 8, 2020).

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ People for Bikes, *22 States Now Follow the Three Class E-Bike System, Doubling Total in Six Months* (July 19, 2019), available at <https://peopleforbikes.org/blog/22-states-now-follow-the-three-class-ebike-system/> (last visited January 8, 2020).

¹⁷ Email from Becky Afonso, Executive Director, Florida Bicycle Association, RE: E-bikes (November 11, 2019).

¹⁸ See Kurt Repanshek, *Dozens of Conservation Groups Oppose eBikes on Non-Motorized Trails*, National Parks Traveler (August 7, 2019), available at <https://www.nationalparkstraveler.org/2019/08/dozens-conservation-groups-oppose-ebikes-non-motorized-trails> (last visited January 8, 2020).

The bill removes the definition of “motorized bicycle” from within the definition of “bicycle” and creates a separate definition for “electric bicycle” to read:

A bicycle or tricycle equipped with fully operable pedals, a seat or saddle for the use of the rider, and an electric motor of less than 750 watts which meets the requirements of one of the following three classifications:

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

“Class 2 electric bicycle” means an electric bicycle equipped with a motor that may be used exclusively to propel the electric bicycle and that ceases to provide assistance when the electric bicycle reaches the speed of 20 miles per hour.

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

The bill also creates regulations governing the operation of e-bikes and provides that an e-bike or an operator of an e-bike must be afforded all the rights and privileges, and be subject to all of the duties, of a bicycle or the operator of a bicycle. An e-bike is considered a vehicle to the same extent as a bicycle, and the bill authorizes an e-bike to operate where bicycles are allowed, including, but not limited to, streets, highways, roadways, shoulders, bicycle lanes, and bicycle or multiuse paths. However, local governments are authorized to regulate the operation of e-bikes on streets, highways, sidewalks, and sidewalk areas. Additionally, following notice and a public hearing, a municipality, county, or agency of the state having jurisdiction over a bicycle or multiuse path may restrict or prohibit the operation of an e-bike on the path if the entity finds that such a restriction is necessary in the interest of public safety or to comply with other laws or legal obligations.

The bill provides that an e-bike or an operator of an e-bike is not subject to the provisions of law relating to financial responsibility, driver or motor vehicle licenses, vehicle registration, title certificates, off-highway motorcycles, or off-highway vehicles. The bill requires that an e-bike must function so that the electric motor is disengaged or ceases to function when the rider stops pedaling or when the brakes are applied.

The bill requires that beginning January 1, 2021, manufacturers and distributors of e-bikes must apply a label that is permanently affixed in a prominent location to each e-bike. The label must contain the classification number, top assisted speed, and motor wattage of the e-bike. The bill prohibits a person from tampering with or modifying an e-bike in order to change the motor-powered speed capability or engagement of an e-bike, unless the label indicating the classification number required is replaced after such modification.

The bill removes the registration fee requirement for “motorized bicycles” and makes conforming changes to exclude “electric bicycle” from the definitions of “off-highway motorcycle”, “moped”, “motor vehicle”, “motorcycle”, and “motorized scooter”.

Lastly, the bill removes outdated bicycle helmet standards and eliminates the bicycle seat height requirement that prevents certain bicycles, such as recumbents, from being insured.

B. SECTION DIRECTORY:

Section 1: Amends s. 261.03, F.S., relating to definitions.

Section 2: Amends s. 316.003, F.S., relating to definitions.

Section 3: Amends s. 316.008, F.S., relating to powers of local authorities.

Section 4: Amends s. 316.027, F.S., relating to crash involving death or personal injuries.

Section 5: Amends s. 316.083, F.S., relating to overtaking and passing a vehicle.

Section 6: Amends s. 316.1995, F.S., relating to driving upon sidewalk or bicycle path.

Section 7: Amends s. 316.2065, F.S., relating to bicycle regulations.

Section 8: Creates s. 316.20655, F.S., relating to electric bicycle regulations.

Section 9: Amends s. 316.613, F.S., relating to child restraint requirements.

Section 10: Amends s. 316.614, F.S., relating to safety belt usage.

Section 11: Amends s. 320.01, F.S., relating to definitions, general.

Section 12: Amends s. 322.01, F.S., relating to definitions.

Section 13: Amends s. 324.021, F.S., relating to definitions, minimum insurance required.

Section 14: Amends s. 403.717, F.S., relating to waste tire and lead-acid battery requirements.

Section 15: Amends s. 681.102, F.S., relating to definitions.

Section 16: Amends s. 320.08, F.S., relating to license taxes.

Section 17: Amends s. 316.306, F.S., relating to school and work zones; prohibition on the use of a wireless communications device in a handheld manner.

Section 18: Amends s. 655.960, F.S., relating to definitions.

Section 19: Provides an effective date of July 1, 2020.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues:

In Fiscal Year 2018-2019, the Department of Highway Safety and Motor Vehicles (DHSMV) collected \$14,633 for both moped and motorized bicycle registration fees.¹⁹ Because the data is collected and stored together, it is estimated that 10 percent of the \$14,633 is associated with motorized bicycle registration fees.

The bill excludes an e-bike or an operator of an e-bike from the provisions of law relating to financial responsibility, driver or motor vehicle licenses, vehicle registration, title certificates, off-highway motorcycles, or off-highway vehicles. Based upon historical collections, DHSMV anticipates this exclusion will result in a negative, but insignificant, fiscal impact on the State Transportation Trust Fund and Highway Safety Operating Trust Fund revenues.

2. Expenditures:

The bill will likely have no impact on state government expenditures.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

¹⁹ E-mail from Kevin Jacobs, Deputy Legislative Affairs Director, Department of Highway Safety and Motor Vehicles, RE: HB 971 (January 9, 2020).

1. Revenues:

The bill will likely have no impact on local government revenues.

2. Expenditures:

The bill will likely have no impact on local government expenditures.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill may increase the sale of e-bikes in this state.

D. FISCAL COMMENTS:

None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to require counties or municipalities to spend funds or take action requiring the expenditure of funds; reduce the authority that counties or municipalities have to raise revenues in the aggregate; or reduce the percentage of state tax shared with counties or municipalities.

2. Other:

None.

B. RULE-MAKING AUTHORITY:

The bill does not provide a grant of rulemaking authority, nor does it require rulemaking.

C. DRAFTING ISSUES OR OTHER COMMENTS:

Other Comments: Local Regulation

The bill appears to contain inconsistent provisions relating to local government regulation of e-bikes. Section 316.008, F.S., authorizes local governments to regulate the use of e-bikes on sidewalks and sidewalk areas. Section 316.20655, F.S., authorizes local governments to exercise their power under s. 316.008, F.S., by governing the use of e-bikes on sidewalks, sidewalk areas, *streets*, and *highways*.

IV. AMENDMENTS/ COMMITTEE SUBSTITUTE CHANGES

On January 28, 2020, the Transportation & Infrastructure Subcommittee adopted an amendment and reported the bill favorably as a committee substitute. The amendment:

- Removed bicycle seat height requirements.
- Authorized local governments to regulate the operation of e-bikes.
- Removed outdated bicycle helmet standards.

This analysis is written to the committee substitute as reported favorably by the Transportation & Infrastructure Subcommittee.