



# SENATE BILL 576: E-Bike Definition and Local Regulation.

2025-2026 General Assembly

**Committee:** Senate State and Local Government. If **Date:** May 6, 2025  
favorable, re-refer to Transportation. If  
favorable, re-refer to Rules and Operations of  
the Senate

**Introduced by:** Sens. Lee, Lazzara

**Prepared by:** Nicholas Giddings

**Analysis of:** First Edition

Staff Attorney

**OVERVIEW:** *Senate Bill 576 would expand the definition of electric assisted bicycles and provide that a local government may regulate the use of electric assisted bicycles within its jurisdiction.*

**CURRENT LAW:** G.S. 20-4.01(7a) defines an electric assisted bicycle as "a bicycle with two or three wheels that is equipped with a seat or saddle for use by the rider, fully operable pedals for human propulsion, and an electric motor of no more than 750 watts, whose maximum speed on a level surface when powered solely by such a motor is no greater than 20 miles per hour." Like nonmotorized bicycles, electric assisted bicycles may be operated on the highway, and the operator must follow traffic laws when doing so, but they are not required to be registered. State law does not address the use of electric assisted bicycles on non-highways, such as trails or other multi-use paths. Instead, local ordinances may apply to the operation of electric assisted bicycles within the local unit's boundary, while administrative code provisions regulate the use of electric assisted bicycles in State parks and forests.

The definition of electric bicycle at the federal level differs from the State's definition of electric assisted bicycle. 23 U.S.C. 217(j)(2) creates three classes of electric bicycles which differ depending on when the motor assists the rider and the speed at which the motor will cease to assist the rider.

**BILL ANALYSIS:** Senate Bill 576 would align the State's definition of "electric assisted bicycle" with the federal definition of "electric bicycle" by creating three classes of electric assisted bicycles as follows:

- Class 1 electric assisted bicycle – A bicycle equipped with a motor that assists only when the rider is pedaling and ceases to assist once the bicycle reaches a speed of 20 miles per hour.
- Class 2 electric assisted bicycle – A bicycle equipped with a motor that may propel the bicycle without pedaling but ceases to assist once the bicycle reaches a speed of 20 miles per hour.
- Class 3 electric assisted bicycle – A bicycle equipped with a motor that assists only when the rider is pedaling and ceases to assist once the bicycle reaches a speed of 28 miles per hour.

The bill would further provide that counties and cities may regulate the use of electric assisted bicycles on any street, road, highway, sidewalk, multi-use path, and trail within the local government's limits. This would also include establishing speed limits on greenways or shared-use paths. If the local government does not regulate the use of electric assisted bicycles, the bill would provide that electric assisted bicycles would be permitted on roadways, bicycle lanes, and shared-use paths.

The bill would also mandate that anyone operating or riding as a passenger on a Class 3 electric assisted bicycle wear a helmet that meets federal safety standards. Local governments may also provide that

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anyone operating or riding as a passenger on a Class 1 or Class 2 electric assisted bicycle must wear a helmet.

Lastly, the bill would require the Department of Transportation to develop educational materials on the proper use and safety considerations of electric assisted bicycles.

**EFFECTIVE DATE:** This act would be effective when it becomes law and apply to all electric assisted bicycle riders and passengers on or after that date.