
Model E-Bike Safety Legislation

Sec. 1. Short Title

This Act may be cited as the “Micromobility Fire Safety Act”

Sec. 2. Findings

(a) Micromobility devices, such as electric bicycles, electric scooters, and personal e-mobility devices, like hoverboards and electric unicycles, are increasingly popular, battery powered transportation options for American consumers and workers.

(b) As battery powered devices, micromobility devices can be a fire and explosion safety hazard if they do not meet safety standards.

(c) For micromobility devices that do not meet safety standards, there is a heightened risk of the lithium-ion batteries that power these devices experiencing a cascading failure where the overwhelming generation of heat triggers the release of toxic gases, explosions, or the spread of flames.

(d) Over 2021 and 2022, the US Consumer Product Safety Commission (CPSC) received reports from 39 states of at least 208 fires or overheating events that tied to electric bicycles and personal e-mobility devices. These incidents were responsible for 19 fatalities.

(e) Consensus standards are available that mitigate the battery and electrical system hazards of electric bicycles and personal e-mobility devices that can cause fires, including UL 2849, Standard for Electrical Systems for E-Bikes, UL 2272, Standard for Electrical Systems in Personal E-Mobility Devices, and UL 2271, Standard for Batteries for Use in Light Electric Vehicle Applications.

(f) In 2022, the CPSC issued a letter to the manufacturers, importers, distributors, and retailers of electric bicycles and personal e-mobility devices urging these products be “designed, manufactured, and certified” to the appropriate UL standard as “[m]anufacturing these products in compliance with the applicable UL standards significantly reduces the risk of injuries and deaths from micromobility device fires.”

(g) After experiencing 216 micromobility related fires in 2022, that saw 147 injuries and six fatalities, New York City enacted a law requiring micromobility device certification to the applicable UL safety standards.

(h) Studies have demonstrated that without conformity assessment performed by a nationally accredited independent third-party certification organization, products are less likely to meet product safety standards. Product safety certification ensures safety is a level playing field in the market.

Sec. 3. Definitions

(a) In this Act--

- (1) CERTIFICATION means the attestation by the Certification Body, indicated by the Certification Body's certification mark on the equipment, device, or product, that the equipment, device, or product has been evaluated and tested and found to conform to the standards [applicable to this legislation].
- (2) CERTIFICATION BODY means an independent third-party organization providing certification for micromobility products that—
 - (A) is recognized by OSHA as a Nationally Recognized Testing Laboratory; and
 - (B) has received ISO/IEC 17065 accreditation from an independent accreditation body that is a member of the International Accreditation Forum.
- (3) CERTIFICATION MARK means a mark of conformity owned by the Certification Body and registered with the U.S. Patent and Trademark Office (USPTO) that is visible and affixed to a certified equipment, device, or product.
- (4) ELECTRIC BICYCLE means a two or three wheeled electrical/mechanical device provided with functional pedals that includes one or more electric motors to either assist the rider when pedaling or provide motive power to the wheels when the rider is not pedaling.
- (5) MICROMOBILITY means the term inclusive of e-bike, e-scooters, and other types of personal e-mobility devices.
- (6) NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) means an organization that meets the qualifications provided in 29 CFR 1910.7(b) and is Recognized as an NRTL by the U.S. Department of Labor, Occupational Safety and Health Administration's (OSHA) Nationally Recognized Testing Laboratory (NRTL) program.
- (7) PERSONAL E-MOBILITY DEVICE means a consumer mobility device intended for a single rider with a rechargeable electric drive train that propels the rider, and which may be provided with a handle for grasping while riding. This device may or may not be self-balancing and may or may not be seated.
- (8) TRACTION BATTERY means a rechargeable battery used to power the electric motors of the micromobility product.

Sec. 4. Requirements for Manufacturer, Distribution, Sale, Lease, Rent of Micromobility and Traction Batteries

(a) All micromobility and traction batteries for such devices manufactured, distributed, sold, or offered for lease or rent shall meet appropriate safety standards in accordance with this subsection.

(1) Electric bicycles shall be evaluated, tested and certified to UL 2849 and bear the mark of a certification body.

(A) Evaluation, testing and certification to UL 2849 shall be performed by a Nationally Recognized Testing Laboratory with UL 2849 included within its scope of recognition under the Nationally Recognized Testing Laboratory program.

(2) Personal E-Mobility Devices shall be evaluated, tested and certified to UL 2272 and bear the mark of a certification body.

(A) Evaluation, testing and certification to UL 2272 shall be performed by a Nationally Recognized Testing Laboratory with UL 2272 included within its scope of recognition under the Nationally Recognized Testing Laboratory program.

(3) Traction batteries for use in micromobility devices shall be evaluated, tested and certified to UL 2271 and bear the mark of the certifying body.

(A) Evaluation, testing and certification to UL 2271 shall be performed by a Nationally Recognized Testing Laboratory with UL 2271 included within its scope of recognition under the Nationally Recognized Testing Laboratory program.