



July 24, 2023

Office of the Secretary
Consumer Product Safety Commission
4330 East-West Highway
Bethesda, MD 20814

Submitted via *www.regulations.gov*

**Comments of Consumer Reports to the
Consumer Product Safety Commission on the
Petition for Rulemaking To Revoke the Footbrake Requirement for Sidewalk Bicycles
Docket No. CPSC-2023-0023**

Consumer Reports (CR), the independent, nonprofit member organization,¹ welcomes the opportunity to submit comments to the Consumer Product Safety Commission (CPSC) regarding the petition for rulemaking to revoke the footbrake requirement for sidewalk bicycles, a type of bicycle intended for young children. We also welcome the opportunity to comment on whether the requirements in 16 CFR Part 1512, the agency’s requirements for bicycles, are out of date, and whether the current requirements are adequate to address bicycles defined in section 1512.2(a)(2). We are glad to see the agency prioritize the safety of bicycles, a product category that is a priority for CR and has – since the start of the COVID-19 pandemic – seen a notable surge in popularity.

From 2020 to 2022, all bike sales rose by more than 50 percent. The e-bike category in particular saw a huge increase in demand.² CR has periodically, for years, tested and rated bicycles for performance. We also evaluate Class 1 and Class 2 electric bikes. Our e-bike evaluations consider a number of factors including range, comfort, and overall usability.³ Regardless of which type of bicycle they ride, consumers should be able to have confidence that their bike has been tested rigorously for safety. From style, to material, to brakes and beyond,

¹ Founded in 1936, Consumer Reports (CR) is an independent, nonprofit, and nonpartisan organization that works with consumers to create a fair and just marketplace. Known for its rigorous testing and ratings of products, CR advocates for laws and company practices that put consumers first. CR is dedicated to amplifying the voices of consumers to promote safety, digital rights, financial fairness, and sustainability. The organization surveys millions of Americans every year, reports extensively on the challenges and opportunities for today's consumers, and provides ad-free content and tools to 6 million members across the U.S.

² CR, “Bike Buying Guide” (updated Oct. 17, 2022) (online at: www.consumerreports.org/health/bikes/buying-guide).

³ CR, “Best Electric Bikes” (updated July 22, 2023) (online at: www.consumerreports.org/health/electric-bikes/best-electric-bikes-e-bike-review-a2596703950).

bicycles have evolved dramatically since federal bicycle safety regulations first took effect. Now, decades later, it is critical for the agency to update its bicycle standards to reflect advancements in technology. In the following sections, we share CR’s comments on information related to bicycle safety that has been requested by the agency.

Petition To Revoke the Footbrake Requirement for Sidewalk Bicycles

While we understand from the petition that the CPSC’s requirement that sidewalk bicycles be equipped with footbrakes “originated from an investigation in by the Food and Drug Administration (FDA) and the National Safety Council of all contributing factors leading to death or serious injuries of children associated with bicycles and certain bicycle components”⁴ – it is unclear whether this requirement is still justified. In evaluating whether to grant the petitioner’s request to remove the footbrake requirement for sidewalk bicycles, we recommend that the CPSC consult with its European counterparts on the safety of sidewalk bicycles without footbrakes and compare the information the agency receives with what it knows about the safety of sidewalk bicycles with footbrakes. In addition, the CPSC should ascertain whether any standards in Europe previously required a footbrake, but regulators later determined that such a requirement was unnecessary. While the petitioner notes that there are no identifiable published studies on the matter, the CPSC also should determine whether there is any reasonably obtainable data in Europe or elsewhere indicating whether the presence or absence of a footbrake has an impact on the overall safety of a sidewalk bicycle.

The petition cites a 2020 study published by SAE International to posit that using handbrakes can provide better braking performance than a footbrake alone.⁵ The agency should examine the 2020 study and any other information that it can access domestically or from international partners that may be relevant to this claim. According to CR’s bicycle testing experts, one safety advantage of handbrakes over footbrakes is a faster response time, due to footbrakes’ dependence on the rotational position of a bicycle’s pedals. CR’s experts have also noted that having handbrakes connected to both front and back wheels provides a larger margin of safety than a handbrake connected only to the back wheel, since a back wheel can become unloaded under heavy braking, resulting in a loss in traction. Therefore, it may be appropriate for the CPSC to require that handbrakes be connected to both front and back wheels. In addition, it is plausible that handbrake technology may have drastically improved since the footbrake requirement was first implemented. Handbrakes may have evolved in such a way that they now better suit children’s hands and gripping abilities, enabling children to have increased operational power. However, CR has no across-the-board position as to whether young children possess adequate grip strength or hand size to effectively actuate handbrakes. The Commission should take reasonable steps to verify the claims of the petition with respect to the use of handbrakes by children today, and if supported by the available evidence, proceed with a rulemaking.

⁴ *Id.*

⁵ Product Safety Insights, LLC, “Request for Rulemaking to Revoke the Footbrake Requirement for Sidewalk Bicycles” (Sept. 21, 2022) (online at: www.cpsc.gov/s3fs-public/Petition-CP-23-1-Petition-Requesting-Rulemaking-to-Revoke-the-Footbrake-Requirement-for-Sidewalk-Bicycles-FR-notice.pdf?VersionId=yaNVudnYEEIX.L_fgWhY9MZLYJz4wuw).

The petitioner states that “[m]ost companies that currently sell sidewalk bicycles without footbrakes have successfully escaped enforcement action by the CPSC,” and that a lack of enforcement “puts manufacturers who comply with the law at a competitive disadvantage due to their higher cost of production.” While CR lacks the information necessary to confirm whether or not the CPSC has taken sufficient action to enforce the law, we agree with the petitioner that it is vital for the agency to ensure that its regulations are properly tailored and that they are fairly and fully enforced, so that safety-minded companies are not disadvantaged, and retailers are not tempted to shirk their responsibilities under the law and sell noncompliant products.

Updating Requirements for Bicycles

Regarding the existing CPSC bicycle requirements, CR recommends that the agency make revisions to better reflect today’s marketplace, which includes a wide variety of bicycles such as mountain bikes, gravel bikes, dirt jump bikes, BMX bikes, downhill bikes, hybrid bikes, and road bikes. Differing requirements for these and other bicycle categories may be appropriate to address the unique structural and mechanical distinctions that exist between bicycle subdivisions. As a basis for revising bicycle standards, the CPSC should evaluate applicable ASTM standards, as well as ISO standards, which are commonplace in the European Union, and include requirements for adult and young children’s bicycles. When considering ASTM and ISO bicycle standards for mechanical and structural requirements, as well as prescribed tests and testing procedures, the CPSC should – as agency staff recently did with the proposed rule for portable generators – incorporate the strongest elements of the voluntary standards, and include modifications where necessary to address safety gaps. While 16 CFR Part 1512 does not currently prescribe requirements for various use conditions for bicycles, the agency should consider doing so.

Regulatory Action Needed for E-Bikes

E-bikes have soared in popularity in recent years, and so too has the rate at which they are imported. U.S. retail sales were \$770 million in 2021, and increased almost fifteen percent to \$885 million in 2022.⁶ E-bike imports were around 1.1 million in 2022, up from 880,000 in 2021, and 437,000 in 2020.⁷ Unfortunately, as the presence of e-bikes has increased, so too have fires and explosions linked to the products and their batteries. Since 2021, micromobility products using high energy density batteries, such as e-bikes with lithium-ion batteries, have been linked to hundreds of fires and over two dozen deaths, including multiple children.⁸ In early December 2022, the Commission strongly urged manufacturer, importer, distributor and seller compliance with UL voluntary standards.⁹ CR welcomed this action; however, we also recognize

⁶ *Supra* note 3.

⁷ Business Insider, “The incredible, earth-saving electric bike is having a moment” (Apr. 22, 2023) (online at: www.businessinsider.com/electric-bikes-popularity-sustainability-evs-2023-4).

⁸ CBS News, “53,000 hoverboards recalled over battery fire hazard after deaths of 2 sisters” (March 31, 2023) (online at: www.cbsnews.com/news/jetson-hoverboard-recall-battery-fire); New York Times, “How E-Bike Battery Fires Become a Deadly Crisis in New York City” (June 20, 2023) (online at: www.nytimes.com/2023/06/21/nyregion/e-bike-lithium-battery-fires-nyc.html).

⁹ CPSC, “Important Safety Information Concerning Micromobility Devices” (Dec. 19, 2022) (online at: www.cpsc.gov/s3fs-public/Important%20Safety%20Information%20Concerning%20Micromobility%20Devices.pdf).

that given the large quantity of e-bikes arriving from overseas and the reality of the CPSC’s limited resources, it is practically impossible to ensure that all e-bike shipments can be thoroughly examined for compliance.

In the absence of widespread industry adherence to voluntary standards, it is foreseeable that people will continue to be seriously injured and killed by fires linked to e-bikes. Last year, CR published an investigation into the surge of deadly fires linked to e-bikes. At the time, we found that as of December 2022, only thirteen companies had certified to the UL standard for e-bikes.¹⁰ It is clear that too many manufacturers and retailers have failed to take accountability for the safety of their products, and countless consumers remain at serious risk of injury or death from fires. A mandatory safety standard for e-bikes – especially for their batteries and related systems – is needed, and we urge the agency to take additional steps to stop the mounting toll of fatalities. Consistent with the agency’s letter urging industry compliance with applicable UL safety standards, we recommend that the CPSC consider adopting applicable UL standards as mandatory. Where safety gaps are identified by CPSC staff, the Commission should amend the standards as needed.

“Bicycle” Definition and Jurisdiction

Currently, the CPSC definition for “bicycle” covers products that are “[a] two-wheeled vehicle having a rear drive wheel that is solely human-powered” or “[a] two- or three-wheeled vehicle with fully operable pedals and an electric motor of less than 750 watts, 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.”¹¹ This definition encompasses e-bikes through those products that the bicycle industry considers Class 2. CR recommends that the agency expand its bicycle definition to include Class 3 e-bikes, which have been defined by the industry, numerous states, and the U.S. Department of the Interior as “electric bicycle[s] equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.”¹² Expanding the current definition accordingly would provide clarity to consumers and the bicycle industry as to which federal agency has jurisdiction over product safety with respect to Class 3 e-bikes. Doing so would also enable the CPSC to more efficiently oversee any potential hazards related to these products.

Conclusion

Consumer Reports thanks the CPSC for requesting information regarding the petition to revoke the footbrake requirement for sidewalk bicycles and the agency’s bicycle requirements more generally. We encourage the agency to consult with its European counterparts on the relative safety of sidewalk bicycles with and without footbrakes, and examine any information

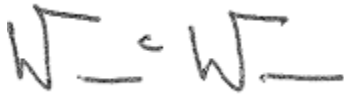
¹⁰ Stephanie Clifford, Consumer Reports, “‘Fire! Fire! Fire!’ The perplexing Deadly Electric Bike Problem” (Dec. 8, 2022) (online at: www.consumerreports.org/health/electric-bikes/electric-bike-fires-and-lithium-ion-batteries-a4632489902).

¹¹ 16 CFR § 1512.2.

¹² *See, e.g.*, 50 CFR § 27.31(m).

that it can access domestically or from international partners that may be relevant to the requests in the petition. We urge the agency to make a decision on the petition on the basis of its findings. We also urge the Commission to consider adopting applicable voluntary standards as requirements for bicycles, including e-bikes, and modifying the voluntary standards as needed to address any gaps in safety. Finally, a strong mandatory safety standard for e-bikes is urgently needed to address the rising number of injuries and fatalities linked to the high energy density batteries that power them. As the independent agency that consumers rely on to help keep them safe from unreasonable product hazards, it is imperative for the CPSC to take swift additional steps to ensure that all e-bikes made or sold in the U.S. meet strong safety requirements. Thank you for your consideration of our comments.

Respectfully submitted,

Handwritten signature of William Wallace in black ink, consisting of stylized letters.

William Wallace
Associate Director, Safety Policy

Handwritten signature of Gabe Knight in black ink, featuring a large, sweeping initial letter.

Gabe Knight
Safety Policy Analyst