



July 25, 2023

Docket Management Facility  
U.S. Department of Transportation  
1200 New Jersey Avenue S.E.  
West Building Ground Floor, Room W12-140  
Washington, D.C. 20590

Submitted via *www.regulations.gov*

**Comments of Consumer Reports to the  
National Highway Traffic Safety Administration on the  
Request for Comments: New Car Assessment Program  
Crashworthiness Pedestrian Protection Information  
Docket No. NHTSA-2023-0020**

Consumer Reports (CR), the independent, nonprofit member organization,<sup>1</sup> welcomes the opportunity to comment on the plans of the National Highway Traffic Safety Administration (NHTSA) to update the New Car Assessment Program (NCAP) to provide consumers with information about the pedestrian crashworthiness of new vehicles. Given the stark rise in pedestrian deaths in recent years, NHTSA should work expeditiously to finalize these updates while accounting for our comments, and move to fully incorporate pedestrian protection into the NCAP five-star safety ratings system. It is also vital for NHTSA to complete its broader, long-overdue improvements to NCAP to make it much more useful for consumers, as we have advocated in previous comments.<sup>2</sup>

Pedestrian fatalities have been dramatically increasing in the U.S. According to the Governors Highway Safety Association, pedestrian deaths increased 77% between 2010 and 2021, and in 2022, 7,500 people were killed – marking it the deadliest year for pedestrians since 1981.<sup>3</sup>

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<sup>1</sup> 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 United States.

<sup>2</sup> Consumer Reports, “CR comments to NHTSA on NCAP RFC 6-8-2022” (June 8, 2022) (online at: [advocacy.consumerreports.org/wp-content/uploads/2022/06/CR-comments-to-NHTSA-on-NCAP-RFC-6-8-2022-2.pdf](https://www.consumerreports.org/wp-content/uploads/2022/06/CR-comments-to-NHTSA-on-NCAP-RFC-6-8-2022-2.pdf)).

<sup>3</sup> Governors Highway Safety Association, “Pedestrian Traffic Fatalities by State: 2022 Preliminary Data” (June 2023) (online at: [www.ghsa.org/resources/Pedestrians23](https://www.ghsa.org/resources/Pedestrians23)).

Earlier this year, we also learned that Americans have become increasingly fearful for their safety as pedestrians. According to a nationally representative survey of 2,088 U.S. adults conducted by Consumer Reports in January 2023, around one in five Americans said they or a family member had been hit by a car or had a close call as a pedestrian in the past year, and more than half said that pedestrians are more likely to be hit by cars today compared with five years ago.<sup>4</sup> About two-thirds of Americans would support a policy requiring pedestrian detection technology in all new vehicles, and nearly three-quarters said that they would prefer to have such technology in their next vehicle.<sup>5</sup> These alarming statistics and consumer sentiments underscore the need for NHTSA to prioritize pedestrian crashworthiness and better protect pedestrians, cyclists, and other vulnerable road users.

In previous comments, CR suggested improvements to strengthen the crashworthiness program and pushed for incorporation of these changes into NCAP ratings. Specifically, we called for the inclusion of head-to-hood, upper leg-to-hood leading edge, and lower leg-to-bumper tests, at a minimum, in an NCAP pedestrian crashworthiness program. We also pushed NHTSA to align U.S. NCAP with Euro NCAP and other leading third-party rating systems. We are pleased to see that NHTSA has taken steps to fulfill these recommendations and urge the agency to keep moving forward expeditiously to complete a broader overhaul of NCAP.

In the comments that follow, CR addresses specific questions posed in NHTSA's request for comments (RFC). We list the agency's question first, followed by our response. At the end, please see additional comments of ours not prompted directly by any individual question.

*[4] An Agency study of Abbreviated Injury Scale (AIS) 3+ pedestrian injuries in the U.S. showed that the apportionment of points in NCAP for crashworthiness pedestrian protection should be 3/8<sup>th</sup> for head impact test results (37.5 percent), 3/8<sup>th</sup> for lower leg impact test results (37.5 percent), and 2/8<sup>th</sup> for upper leg impact test (25 percent). NHTSA seeks comment on whether injury severity or frequency would be this the most appropriate basis for point allocation apportionment.*

NHTSA should base point allocation on both the frequency and severity of injuries, as well as the outcomes as a result of particular types of injuries. Assuming these point allocations have been created based on U.S. injury data, CR supports this methodology.

*[8] Given the pedestrian death and injury crisis on U.S. roadways NHTSA is seeking comment on test speeds. Should test speeds for either of the head or leg tests be increased in an attempt to provide better protection to pedestrians in vehicle to pedestrian crashes? Should the area of assessment be increased beyond the WAD 2100 mm currently proposed to account for pedestrian heads overshooting the hood and impacting the windshield or the roof of the vehicle?*

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<sup>4</sup> Consumer Reports, Nationally Representative American Experiences Survey of 2,088 U.S. Adults (Jan. 2023) (online at: [article.images.consumerreports.org/image/upload/v1674838693/prod/content/dam/surveys/Consumer\\_Reports\\_AES\\_January\\_2023.pdf](https://article.images.consumerreports.org/image/upload/v1674838693/prod/content/dam/surveys/Consumer_Reports_AES_January_2023.pdf)).

<sup>5</sup> *Id.*

CR considers 25 mph an adequate test speed given the recent introduction of an Automatic Emergency Braking (AEB) rule with pedestrian AEB (PAEB).<sup>6</sup> The rule would require new passenger vehicles to be able to avoid a crash with a stopped vehicle at speeds up to 50 mph if the driver does not hit the brakes, or at speeds up to 62 mph if the driver does hit the brakes. The rule would also require vehicles to avoid a crash with a pedestrian at speeds of up to 37 mph, including in darkness.<sup>7</sup>

*[11] NHTSA seeks comment on what level of detail should be required for self-reported data. Should manufacturers be allowed to submit predicted head and leg response data, or only actual physical test results? Should reporting consist of just the results for each test location, or should full data traces or a comprehensive test report including photographs and videos be required?*

The level of detail required for self-reported data depends on how biofidelic the models are that are being used to predict the results. CR believes that a phase-in approach could be appropriate, whereby manufacturers would initially be required to submit comprehensive test reports including photographs and videos to provide the additional necessary context. If, over time, NHTSA finds that the computational modeling accurately represents what happens physically, it is possible that predicted head and leg response data could be used as a surrogate. However, until NHTSA verifies that is the case, a more comprehensive approach is required. At this time, there is no replacement for physical test results.

*[12] NHTSA requests comment on whether vehicles with an LBRL greater than 500 mm should be eligible to receive crashworthiness pedestrian protection credit because they will automatically receive a zero score for the FlexPLI bumper tests.*

Vehicles with a lower bumper reference line (LBRL) greater than 500mm should not be able to receive crashworthiness pedestrian protection credit. It will not be possible to prove crashworthiness without using a leg form. Additionally, other risks to pedestrians such as visibility will be inherent to a vehicle that is higher off the ground. These vehicles may even warrant a deduction that would be based on real-world interactions.

*[14] NHTSA tentatively plans to use the corner gauge and bumper beam width procedure for corner definition for this NCAP proposal and requests comment on this change.*

CR supports this plan. Requiring more data at the beginning will help NHTSA get ahead of any potential issues and will encourage manufacturers to design for safety in a broader scope.

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<sup>6</sup> Federal Register, “Federal Motor Vehicle Safety Standards: Automatic Emergency Braking Systems for Light Vehicles” (June 12, 2023) (online at: [www.federalregister.gov/documents/2023/06/13/2023-11863/federal-motor-vehicle-safety-standards-automatic-emergency-braking-systems-for-light-vehicles#h-46](http://www.federalregister.gov/documents/2023/06/13/2023-11863/federal-motor-vehicle-safety-standards-automatic-emergency-braking-systems-for-light-vehicles#h-46)).

<sup>7</sup> Consumer Reports, “Automatic Emergency Braking With Pedestrian Detection Could Become Mandatory on All New Cars” (June 1, 2023) (online at: [www.consumerreports.org/cars/car-safety/aeb-with-pedestrian-detection-could-become-mandatory-a7468313823](http://www.consumerreports.org/cars/car-safety/aeb-with-pedestrian-detection-could-become-mandatory-a7468313823)).

*[17] NHTSA proposes utilizing a modified 3/8, 3/8, 2/8 scoring apportionment for the head impacts, Flex PLI impacts, and upper leg impacts respectively for NCAP and requests comment on this proposal.*

In line with our response to question [4], CR supports the scoring apportionment under the assumption that it is based on frequency, severity, outcomes, and was created using recent U.S. crash data. In regard to other comments that might be made in response to this question, we defer to academic colleagues and experts who specialize in pedestrian injury biomechanics.

*[18] NHTSA seeks comment on whether [a checkmark on NHTSA.gov] is an appropriate way to identify vehicles that meet the Agency's minimum criteria for crashworthiness pedestrian protection, or if some other notation or identifying means is more appropriate.*

While a checkmark is preferable to a total absence of information about pedestrian crashworthiness, it is only minimally useful for consumers. To better evaluate relative safety, consumers need a comparative rating – even if it starts with basic, better, and best. We urge NHTSA to incorporate pedestrian crashworthiness into the NCAP five-star safety ratings system as soon as possible, along with other necessary enhancements.

*[19] NHTSA seeks comment on what options or features might exist within the same vehicle model that would affect the vehicle's performance of crashworthiness pedestrian protection. NHTSA also seeks comment on whether the Agency should assign credit to vehicles based on the worst-performing configuration for a specific vehicle model, or if vehicle models with optional equipment that affect the crashworthiness pedestrian protection credit should be noted as such.*

If equipment that improves pedestrian protection is not standard, the score should be based on the least-equipped trim level of a specific vehicle model. For years, CR has argued that safety must be standard, and should not be an optional add-on that places the financial burden on consumers. Assigning credit based on the lowest trim level would be consistent with this approach.

#### *Additional comments*

Finally, we are concerned by NHTSA's statement that "at this time, there are not widely accepted objective test procedures for crashworthiness bicyclist protection ... and thus it does not meet the four prerequisites for inclusion [in] NCAP." Previously, NHTSA's four prerequisites did not include a stipulation for test procedures to be widely accepted. Instead, NHTSA stated that "it must be feasible to develop a performance-based objective test procedure to measure the ability of the vehicle technology to mitigate the safety issue."<sup>8</sup> We encourage NHTSA and the Department of Transportation to pursue the strongest possible safety measures for bicyclists and abide by the original prerequisites, rather than waiting on "widely accepted" procedures, as the latter approach could contribute to delays that would continue to leave cyclists' safety at risk.

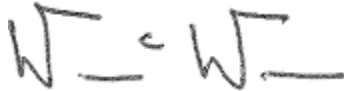
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<sup>8</sup> Federal Register, "New Car Assessment Program (NCAP)" (April 5, 2013) (online at: [www.federalregister.gov/documents/2013/04/05/2013-07766/new-car-assessment-program-ncap](http://www.federalregister.gov/documents/2013/04/05/2013-07766/new-car-assessment-program-ncap))

*Conclusion*

We are pleased to see NHTSA taking action to provide consumers with more information about pedestrian crashworthiness. This proposal is an important step forward, even as it remains critical for NHTSA to continue working urgently on broader enhancements to make NCAP a more robust and useful program for consumers. We look forward to NHTSA's next steps.

Respectfully submitted,

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

William Wallace  
Associate Director, Safety Policy

Handwritten signature of Julia Friedberg in black ink, written in a cursive style.

Julia Friedberg  
Senior Policy Analyst