

National Transportation Safety Board

Office of the Chair

Washington, DC 20594



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Docket Management Facility
US Department of Transportation
1200 New Jersey Avenue SE
West Building, Ground Floor
Room W12-140
Washington, DC 20590-0001

Attention: Docket No. NHTSA-2023-0020

Dear Sir or Madam:

The National Transportation Safety Board (NTSB) has reviewed the National Highway Traffic Safety Administration (NHTSA) request for comments (RFC) titled "New Car Assessment Program," published at 88 *Federal Register* 34366 on May 26, 2023. In its request, NHTSA proposes an upgrade to the New Car Assessment Program (NCAP) to provide consumers with information about crashworthiness pedestrian protection of new vehicles. The proposed upgrade includes testing using four test devices representing an adult and child head, upper leg, and lower leg but does not propose a comparative rating system for these tests. Instead, the proposal describes a pass/fail scoring system and a manufacturer self-reporting program in which vehicle manufacturers voluntarily provide data to NHTSA, NHTSA reviews any data provided and awards credit as appropriate, and NHTSA performs verification tests on certain new model year vehicles. NHTSA proposes to introduce the crashworthiness pedestrian safety program into NCAP by highlighting on its website new vehicles that meet the minimum safety threshold. NHTSA will consider including this program in an updated rating system when it updates the Monroney label (the window sticker displayed on a vehicle at the point of sale) at a later date.

In our response to this RFC, the NTSB first discusses our recommendations related to pedestrian safety. Then, we provide our views on the implications of the proposed program. This response does not address in detail the questions posed by the RFC but discusses the approach more generally. The NTSB appreciates this initial step towards improving pedestrian safety but also cautions that the proposed approach may not go far enough toward informing consumers about relative differences in vehicle pedestrian crashworthiness performance or incentivizing manufacturers to improve pedestrian crashworthy designs.

Pedestrian Safety and NTSB Advocacy

The NTSB actively advocates for a [Safe System Approach](#) that aims to eliminate fatal and serious injuries for all road users.¹ The approach does so through a holistic view of the road system that accepts the fact that drivers and vulnerable road users (VRUs) sometimes make poor decisions and errors; this approach identifies methods to reduce or eliminate the consequences of these errors. Unlike motor vehicle users, VRUs such as pedestrians, bicyclists, and motorcyclists lack an external structure to protect them when crashes occur, and they are more likely to suffer a serious injury or even death.

In 2018, the NTSB published a special investigation report in which we examined multiple ways to improve pedestrian safety including how improvements in vehicle design could reduce the extent of injuries to struck pedestrians.² In that report, we recommended that NHTSA develop test criteria for vehicle designs that reduce injuries to pedestrians. We also recommended that the agency incorporate pedestrian safety systems, including pedestrian collision avoidance systems and passive safety systems, into NCAP.³ Safety Recommendations [H-18-41](#) and [-43](#), issued to NHTSA, were classified Open—Unacceptable Response in 2019 and 2021, respectively.

NHTSA discussed adding pedestrian crashworthiness and crash avoidance to NCAP in 2013 and again in 2015, but neither has yet been implemented.⁴ In response to both requests, the NTSB encouraged NHTSA to move forward with pedestrian crashworthiness and crash avoidance systems for NCAP ratings.⁵ In 2022, NHTSA proposed inclusion of pedestrian automatic emergency braking (PAEB) in NCAP, and again the NTSB urged NHTSA to move forward.⁶ NHTSA recently issued a Notice of Proposed Rulemaking to require PAEB.⁷ With the current RFC, NHTSA has again acknowledged the importance of protecting VRUs, especially given the 66% increase in pedestrian fatalities from 4,457 in 2011 to 7,388 in 2021.⁸ The NTSB continues to

¹ For more information, refer to [The Safe System Approach](#) roundtable series of events.

² See National Transportation Safety Board. 2018. *Pedestrian Safety*. Special Investigation Report [NTSB/SIR-18/03](#). Washington, DC.

³ Included in the *Pedestrian Safety* special investigation report were examples of pedestrian safety systems such as automatic emergency braking, connected vehicle technology, and driver warning systems.

⁴ See [78 Federal Register 20597, April 5, 2013](#) and [80 Federal Register 78522, December 16, 2015](#).

⁵ See [Docket ID 2012-0180-0040](#) and [Docket ID 2015-0119-0352](#).

⁶ See [87 Federal Register 13452, March 9, 2022](#); for the NTSB's response, see [Docket ID 2021-0002-1530](#).

⁷ See [88 Federal Register 38632, June 13, 2023](#).

⁸ See NHTSA. [Traffic Safety Facts, 2021 Data, Pedestrians](#). DOT HS 813 458. Washington, DC: NHTSA's National Center for Statistics and Analysis, June 2023.

support this initial step toward including crashworthiness pedestrian protection in NCAP but urges NHTSA to finally implement this and its previous proposals as well.

NHTSA's NCAP proposal would adopt the majority of Euro NCAP's pedestrian crashworthiness assessment methods. The NTSB supports, whenever possible, harmonizing testing protocols with those used by NCAPs around the world. The NTSB believes that a vehicle that meets the proposed performance criteria would offer substantial safety benefits that should be recognized.

However, while the pedestrian crashworthiness NCAP changes can reduce the severity of some crashes, these changes must be implemented in the context of an overall Safe System Approach that prioritizes reduced speeds, crash detection and avoidance, and infrastructure changes. As shown by NHTSA's data, only 13% of pedestrian fatalities occur at speeds of 25 mph or less, and a further 52% occur between 26 and 45 mph. NHTSA proposes to match the test speeds of 25 mph used in Euro NCAP; however, since 2016, Euro NCAP has included PAEB along with the head impact and leg impact criteria. The complementary PAEB Euro NCAP testing protocols help to ensure that vehicles initially traveling at higher speeds can slow down to the speed range where pedestrian crashworthiness countermeasures will provide a benefit. It is of critical importance that NHTSA move forward quickly to require PAEB, as proposed in its recent Notice of Proposed Rulemaking.

NCAP and Regulation

In this RFC, NHTSA notes that concurrently with this proposal, it is also pursuing a rulemaking to set minimum safety standards for pedestrian protection.⁹ The future rulemaking indicates a focus on head impact requirements, while the NCAP upgrade proposal in this RFC evaluates protection for the adult and child head, upper leg, and lower leg in pedestrian impacts with the front of the vehicle. Also, the head impact speed is greater in the NCAP proposal than in the rulemaking effort. Thus, the proposed NCAP upgrade would provide a higher level of safety than the future rule. This approach mirrors that of other crashworthiness testing, wherein the Federal Motor Vehicle Safety Standards set a minimum threshold while NCAP provides consumers with the opportunity to buy cars that are safer than the minimum standard requires. In addition, the higher level of safety promoted by NCAP incentivizes manufacturers to produce safer vehicles. Unfortunately, without a comparative rating system, it is unclear if this NCAP proposal will incentivize manufacturers to improve the pedestrian crashworthiness of vehicles.

Head injuries are present in most pedestrian fatalities. While not intended to be a representative sample, the NTSB's special investigation into pedestrian safety found that 12 of the 15 fatal crashes investigated involved a head injury. Thus, the

⁹ See [RIN 2127-AK98](#), *Pedestrian Safety Global Technical Regulation*. Spring 2023.

NTSB supports the integrated regulatory and non-regulatory approach and urges NHTSA to act quickly to complete the rulemaking to provide a minimum threshold for pedestrian head protection. Further, the rulemaking approach may be particularly important for pedestrian protection, because unlike the comparative ratings for improved crashworthiness protection for vehicle occupants, the extent to which consumers may seek vehicles identified as protecting other road users is unknown, especially if the information is not easily accessible at the time of purchase.

Ratings Systems on the Monroney Label Not Proposed

NHTSA proposes meaningful changes in this RFC, but these proposals can improve safety only if implemented. In addition, NCAP's purpose of informing consumers will only be fulfilled if consumers actually receive the information about the pedestrian crashworthiness testing being discussed in this RFC. Per 49 *Code of Federal Regulations* 575.302, the Monroney label placed on all new vehicles is required to contain NCAP safety rating information and is intended to provide consumers with relevant information at the point of sale. In 2015, Section 24322 of the Fixing America's Surface Transportation Act (also known as the FAST Act) required NHTSA to promulgate a rule to ensure that crash avoidance information was included on the Monroney label within 1 year. The NTSB also recommended that NHTSA include the ratings of forward collision avoidance systems on the Monroney label (Safety Recommendation [H-15-7](#), classified Open—Unacceptable Response). Eight years later, NCAP still does not provide comparative ratings of any crash avoidance technologies, and the Monroney label has not been modified. Similarly, NHTSA's current RFC does not propose to accomplish either of these milestones for pedestrian safety.

Currently, certain recommended technologies, such as crash avoidance technologies, are included only on the agency's [NHTSA.gov/ratings](https://www.nhtsa.gov/ratings) website, where the presence or absence of four crash avoidance technologies is noted with an icon. This is also where NHTSA proposes to include the pedestrian crashworthiness information. Consumers looking at the Monroney label for a new vehicle may assume that they are seeing the best and most up-to-date data about the safety of that vehicle, but they would be mistaken. Further, 63% of the public is unaware of the NHTSA website's educational information about purchasing safe vehicles, and only 7% listed NHTSA as an organization that conducts crash tests on new vehicles.¹⁰

Other consumer information organizations, such as Euro NCAP and the Insurance Institute for Highway Safety (IIHS), publish vehicle ratings information on their websites. In addition, new IIHS vehicle safety ratings are typically publicized to the American public through thousands of television broadcasts and extensive

¹⁰ Team Stratacomm. [NCAP 5-Star Safety Ratings Communications Quantitative Research](#). January 16, 2020.

coverage by print and internet news media.¹¹ This consumer information is more effective in part because of the methods of dissemination, but also because of the differentiation between vehicles that is provided by IIHS's rating system, which is regularly updated and made more stringent. By contrast, most new vehicles earn NHTSA's five-star rating because the requirements have not been regularly updated. Thus, NHTSA's ratings show little differentiation between vehicles and are therefore less impactful. The NTSB believes NHTSA can learn from these other programs and provide safety ratings information to consumers in a better and more accessible way.

The NTSB previously found that because crashworthiness performance ratings influence the public's vehicle purchasing decisions, NCAP ratings incentivize manufacturers to improve performance and increase public demand for vehicles with the highest levels of safety performance.¹² An effective rating system can help to differentiate between the safety features of available vehicles. The NTSB is disappointed by the lack of specific proposals in this RFC for how NHTSA might include pedestrian safety on the Monroney label.

Summary

The NTSB encourages NHTSA's effort to improve safety for VRUs by including crashworthiness pedestrian protection in NCAP, something we have advocated for several years. However, as with NHTSA's March 2022 RFC, the current RFC does not propose a comparative rating system that will include pedestrian safety technologies, nor does the proposal make the limited information available to consumers in an effective manner. The effort of adding pedestrian safety technology to NCAP may be wasted if the information does not reach consumers or help to incentivize manufacturers to improve vehicle designs. Thus, the NTSB urges NHTSA to accelerate its effort to include pedestrian protection and other advanced safety technologies in its overall NCAP comparative rating system and display this information on the Monroney label.

Thank you for the opportunity to provide comments.

¹¹ Cicchino, J. B. [Consumer Response to Vehicle Safety Ratings](#). Paper No. 15-0069. Supported by the Insurance Institute for Highway Safety. Accessed June 7, 2023.

¹² National Transportation Safety Board. 2015. *The Use of Forward Collision Avoidance Systems to Prevent and Mitigate Rear-End Crashes*. Special Investigation Report [NTSB/SIR-15-01](#). Washington, DC.

Sincerely,

[Original Signed]

Jennifer Homendy
Chair