June 2, 2022

Dr. Steven Cliff
Administrator
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE
Washington, DC 20590

Submitted via www.regulations.gov

Re: National Highway Traffic Safety Administration Request for Comments
New Car Assessment Program
Docket No. NHTSA-2021-0002

Dear Administrator Cliff:

On behalf of our nearly 38 million members and all older Americans nationwide, AARP appreciates the opportunity to respond to the request for comments on proposed changes to the National Highway Traffic Safety Administration's New Car Assessment Program (NCAP). Older adults and people of all ages, ability levels, and incomes need a variety of safe, affordable, and convenient transportation options in their communities. AARP believes that transportation should help meet five key goals of enhancing mobility, ensuring affordability, securing equity, prioritizing accessibility, and supporting sustainability and healthy living. Increasing safety for all transportation users is a critical step toward meeting these goals.

Unfortunately, recent data demonstrate that existing efforts to improve safety are not doing enough to prevent deaths and injuries on our roadways. According to early estimates from the National Highway Traffic Safety Administration (NHTSA), 42,915 people were killed in motor vehicle crashes in 2021, a 10.5 percent increase over the prior year.[1] An increasing number of those deaths are among people walking. In 2009, motor vehicles killed about 4,100 pedestrians.[2] Ten years later, NHTSA's early estimates show that number had risen to over 7,300 people – a 78 percent increase.[3] The impacts of these statistics are not equitably distributed among all Americans. Older adults are more likely than younger people to be killed in crashes of the same severity because of their increased frailty, and pedestrians age 65 and above accounted for 21

[1] National Highway Traffic Safety Administration, May 2022, available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298.
[2] GAO Report 20-419, "Pedestrian Safety," available at: https://www.gao.gov/assets/gao-20-419.pdf
[3] National Highway Traffic Safety Administration, May 2022, available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813298.

percent of all pedestrian fatalities in 2019 while comprising only 16 percent of the population.[4] In addition, people of color are disproportionately represented among those killed while walking compared to white Americans.[5]

Making our roadways safer requires a multi-pronged approach, including both changes to road design and vehicle design. Road elements such as sidewalks, bike lanes, crosswalks, speed reduction, and other features that accommodate all modes of travel can significantly reduce pedestrian deaths and injuries, and AARP is encouraged to see DOT promoting these design features through its National Roadway Safety Strategy and new funding programs. At the same time, vehicle design is a critical component of addressing the safety crisis, as the characteristics of the motor vehicles involved in a crash have a significant impact on the outcomes, both for those inside and outside the vehicles.

For this reason, AARP strongly supports NHTSA's decision to modernize the NCAP, which not only empowers consumers to better understand the safety features of new vehicles, but also encourages manufacturers and suppliers in the auto industry to develop and adopt innovative safety features into their fleets. It is essential that the NCAP promote the highest standards of safety for all road users. AARP believes that the current proposal is an important step in that direction, but that more needs to be done.

Pedestrian Automatic Emergency Braking

AARP strongly supports NHTSA's proposal to include Pedestrian Automatic Emergency Braking (PAEB) in the NCAP. For the first time, the safety of those outside of motor vehicles would be considered in the NCAP, an essential step in countering the increasing number of pedestrian deaths and injuries. NCAP has led to significant improvements in safety for the occupants of motor vehicles over the decades; it is past time for the same attention to be paid to those outside of vehicles. We support not only the inclusion of PAEB in the NCAP, but also the recognition that testing of this technology must be conducted in different lighting and weather conditions, different times of day, and at different vehicle speeds.

NHTSA should also ensure that the tests evaluate sensors' ability to detect a variety of skin tones and body sizes, to ensure safer outcomes for everyone. Early tests have suggested that PAEB sensors do not register people with darker skin tones as well as those with lighter skin[6], an issue that must be addressed to help stem the tide of fatalities and injuries in communities of color. Moreover, NHTSA must make sure that PAEB systems recognize a range of heights, to improve safety for people who use wheelchairs or walkers, children, and others who may be shorter than the average adult. In addition, PAEB technology should also be tested and rated for detection of pedestrians when accompanied by other varying objects, for example when using a wheelchair (motorized and non-motorized), walker or cane, or when carrying shopping bags or walking a bicycle.

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[4] NHTSA, Traffic Safety Facts – Pedestrians, 2019 Data, May 2021, available at: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813079.

[5] U.S. Department of Transportation, "National Roadway Safety Strategy," p.8.

[6] See, e.g., Wilson, Benjamin, et al., "Predictive Inequity in Object Detection," February 2019, available at: https://arxiv.org/pdf/1902.11097.pdf.

In addition to pedestrians, NHTSA should test crash-avoidance systems that detect bicyclists. This technology exists today and is tested under the European version of the NCAP program. By proposing to delay consideration of bicyclist AEB until the 2025-2031 timeframe, NHTSA is unnecessarily delaying the deployment of potentially life-saving technology. Bicyclist deaths in collisions with motor vehicles increased nearly 45 percent over the last decade,[7] an increase that should not be allowed to continue. Comparing the years 2010-2014 to the years 2015-2019, three of the largest percentage increases in bicyclist fatalities were among people age 55-64 (52 percent) and 65-74 (47 percent).[8]

PAEB technology should also be tested and rated for the detection of other road users outside the vehicle, such as those using scooters, wheelchairs, and other assistive devices.

Finally, the NCAP should test and rate technology to provide automatic braking not only when vulnerable road users are in front of the vehicle, but also when the vehicle is approaching at an angle, such as during a right or left turn (as European and Australasian NCAP do), and when the vehicle is moving in reverse. Incorporating these tests will encourage rapid development and adoption of improved PAEB technology.

Blind Spot Detection Systems

Lane changes by motor vehicles can be dangerous for others using the roadway if the driver does not check the vehicle's blind spots before moving. The consequences for bicyclists can be particularly severe as they are not as protected as those in other vehicles. Assistive technology to alert drivers to blind spots should be tested and rated for the ability to detect not only other vehicles, but also bicyclists and other road users who might be adjacent to the motor vehicle. The Request for Comments notes that NHTSA has planned an upcoming research project designed to address injuries and fatalities for other vulnerable road users, specifically motorcyclists. Bicyclists should be included in this research as well.

Crashworthiness

In its notice on the NCAP program published in December 2015, NHTSA proposed a number of changes to crashworthiness tests. However, the current notice does not address crashworthiness, instead postponing its consideration until later this year. AARP believes that crashworthiness testing, which is intended to mitigate the damage to individuals involved in a crash, is a critical component of the NCAP and should be updated as soon as possible.

AARP believes that NHTSA should expand the range of mannequins used in crash tests to be more representative of the general population by using mannequins designed to better simulate the impacts of crashes on older adults. Older drivers and passengers sustain more severe injuries in motor vehicle crashes than the general population. Current crash dummies are not designed to reproduce the injury responses of older motor vehicle occupants. Without a reliable crash dummy that accurately reproduces older occupant crash injury responses, NHTSA's safety

[7] League of American Bicyclists, Comments on NCAP, April 29, 2022, available at: https://www.regulations.gov/comment/NHTSA-2021-0002-0269

[8] League of American Bicyclists, Benchmarking Insights on Older Adults, Jan. 2021, available at: https://www.aarp.org/livable-communities/getting-around/info-2021/bicycling-and-older-adults.html

standards will continue to undervalue the need for improved protection for this age group. NHTSA should include male and female older adults in its family of crash dummies representing the injury responses of older motor vehicle occupants of different sizes, heights, and weights. Further, these dummies should be used in frontal, rear, side, and rollover crash tests to develop vehicle and occupant safety countermeasures that will reduce the severity of injuries for older occupants. Crash mannequins should also better represent younger women, because test dummies based on male bodies lead to test results that are not applicable to women.

We also recommend that crashworthiness testing include consideration of people outside the vehicle as well as those within. Vehicle heights, weights, and composition have changed significantly in recent years, all of which impact the outcome for pedestrians and other vulnerable road users in the event of a crash. The European, Japanese, and Australian NCAPs, which were originally modeled on NHTSA's program, have outpaced the United States in this regard; each of those programs includes crashworthiness testing focused on pedestrians.[9] NHTSA should expedite updates to the NCAP's crashworthiness provisions that focus on improving outcomes for these vulnerable individuals, particularly as the vehicle fleet has become larger and heavier with more severe consequences for pedestrians when hit.

Roadmap

While we appreciate the inclusion of the ten-year roadmap, we encourage NHTSA to move as quickly as possible to expedite the critical safety tests outlined above. Technology is changing rapidly, and the NCAP should not only keep up, but should lead the way. We cannot afford to spend years contemplating changes to the NCAP before making them. While a reasonable period of public comment should always be offered, NHTSA should act with urgency to make these important updates.

Consumer Experience with Advanced Vehicle Technologies

We would also like to make the following recommendations based on what we have learned from the experiences of thousands of participants in the AARP Driver Virtual Smart DriverTEK Workshop. These measures will help drivers of all ages understand what technology is available in their vehicle and how to use it.

- Manufacturers and dealers should be required to turn all safety technology "on" as the default setting to encourage usage.
- Consistent terminology should be developed for safety technology that all manufacturers could use. For example, 50 different terms[10] are used for Automatic Emergency Braking (AEB) and packages that have AEB, which creates confusion.
- Standardizing how drivers turn on and off their safety technologies should be explored to facilitate driving a new or rental car.
- A concise "plain English" explanation of the safety technology should be provided upon purchase of a new or rental car.

[9] See, e.g., https://www.euroncap.com/en and https://www.ancap.com.au/.

[10] Consumer Reports, "Guide to Automatic Emergency Braking," updated May 9, 2022, available at https://www.consumerreports.org/car-safety/automatic-emergency-braking-guide-a1780056935/.

AARP appreciates the opportunity to provide our recommendations for the NCAP. We look forward to working with you as you continue your efforts to improve safety for all road users. If you have any questions or comments, please feel free to contact Debra Alvarez in Government Affairs at (202) 434-4814 or dalvarez@aarp.org.

Sincerely,

David Certner
Legislative Counsel and Legislative Policy Director
Government Affairs