The League of American Bicyclists (League) appreciates the opportunity to comment on the future of the New Car Assessment Program (NCAP). The League, founded in 1880, is a non-profit bicyclist education and advocacy organization dedicated to building a Bicycle Friendly America for Everyone. The League believes that NCAP has an important role within the mission of the National Highway Traffic Safety Administration (NHTSA) and should be updated in order to continue providing information to consumers that allows them to determine which vehicles are the safest, for both occupants and non-occupants.

In this Request for Comments, NHTSA asks “what changes could NHTSA make to the program that would better assist consumers in understanding the relative safety of vehicles?” The League believes that NHTSA should create crash avoidance and mitigation testing procedures for bicyclists and pedestrians so that consumers can understand the relative safety of vehicles when faced with a crash involving a bicyclist or pedestrian. This change is needed as the mere presence of crash avoidance systems, such as Automated Emergency Braking (AEB), will not be enough to provide distinguishable information to consumers in the near future.

In 2016, NHTSA, the Insurance Institute for Highway Safety and 20 automakers representing more than 99 percent of the U.S. auto market announced a voluntary commitment on the part of the automakers to make AEB systems standard by 2022. The League believes that testing the effectiveness of such systems within NCAP is crucial to helping consumers understand the difference between these systems when they are standard and become educated on their benefits and limitations. Testing for both efficacy and limitations is very important for assisting consumer understanding as some systems can be effective, but limited to only certain circumstances, and may have different abilities related to detecting and responding to bicyclists or pedestrians. Developing responsible procedures and compelling language describing differences, including limitations, for AEB systems will be immensely helpful in laying the groundwork for other Automated Driving Systems and combatting over-reliance on or mis-application of such systems.

The League supports NHTSA pursuing NCAP testing that is harmonized with European NCAP and Australasian NCAP testing for bicyclist and pedestrian crash avoidance and survivability. The European and Australasian NCAP has recently implemented three test procedures for AEB systems to avoid or mitigate crashes with bicyclists based on longitudinal or nearside impacts of varying overlaps with the striking vehicle (1). These crash types likely represent more than 50% of bicyclist deaths – showing the dramatic increase in safety possible through better vehicle systems (2).

The League supports NHTSA incorporating both bicyclist and pedestrian crash avoidance features into the overall NCAP rating and presenting information on the effectiveness and limitations of such features separately. These are new technologies with limited consumer understanding that could greatly increase the safety of non-occupants, who have traditionally not be included in NCAP ratings, for these reasons there should be an emphasis to provide a wealth of information on these technologies to help consumers understand their value. It may be valuable to note
the high rate of bicyclist and pedestrian fatalities in the United States and that they represent an increasing share of traffic fatalities to help consumers understand the value of these safety systems. The value of these systems stems from their ability to increase safety for non-occupants, who are unlikely to be the buyer of the vehicle, so there is an additional need for NHTSA to fulfill its mission to save lives and prevent injury by publicizing that benefit to people who may not otherwise realize the opportunity to make others safe through their vehicle purchase.

Incorporating both bicyclist and pedestrian crash avoidance features into the overall NCAP rating and presenting information on the effectiveness and limitation of such features separately would be consistent with the recommendations made by the National Transportation Safety Bureau (NTSB) in 2018 (3). The NTSB found that “The public would benefit from knowing that the model vehicle they are considering for purchase has pedestrian-safe design characteristics, and their choices could in turn affect the implementation of pedestrian safety systems in new car designs.” To make consumers aware of pedestrian-safe design characteristics, the NTSB recommended that NHTSA “[i]ncorporate pedestrian safety systems, including pedestrian collision avoidance systems and other more-passive safety systems, into the New Car Assessment Program.” While bicyclists were not mentioned in that report on pedestrian safety, there is every reason to believe that the findings and recommendations would be applicable to all non-occupants, including bicyclists.

The League believes that consumers will not be able to understand the relative safety of vehicles if the NCAP rating system continues to provide 4- or 5-star ratings to most new vehicles. NHTSA should regularly adjust star ratings to promote the ability of consumers to tell the difference between the safety of new vehicles. Regular and transparent updates may become increasingly important as Advanced Driver Assistance Systems (ADAS) and Automated Driving Systems are developed and consumers must be educated on what these systems are, what their limitations are, and how effective these systems are in particular context. Failing to educate consumers on these systems and their limitations is likely to lead to over-reliance and other mis-use that has the possibility to lead to consumer deaths, as seen with Tesla’s “autopilot” system.

The League believes that NCAP has an important role in supporting the safe integration of Advanced Driver Assistance Systems that may lay the groundwork for Automated Driving Systems. A recent survey by AAA found that “two-thirds (63 percent) of U.S. adults report they would actually feel less safe sharing the road with a self-driving vehicle while walking or riding a bicycle (4).” NCAP can be an important part of helping educate consumers about the safety of ADAS by developing testing methods and promoting transparency regarding the effectiveness of systems, such as AEB, that will be stepping stone components to higher level automated driving systems. NCAP, with its decades of experience and consumer trust, is an ideal vehicle for communicating the potential of individual automated systems that may lay the groundwork for Automated Driving Systems. For this reason, it is important that NCAP is updated to incorporate testing consistent with or more rigorous than the European and Australasian NCAP testing for vulnerable road user safety, including at least the three bicyclist crash types included in European and Australasian NCAP testing of AEB systems.

Thank you again for this opportunity to comment. If you have any questions, please contact me at ken@bikeleague.org.

Best Regards,

Ken McLeod
Policy Director

References:
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(2) https://www.iihs.org/iihs/sr/statusreport/article/50/3/3