## Congress of the United States

Washington, DC 20515

February 12, 2024

Acting Administrator Sophie Shulman National Highway Traffic Safety Administration Department of Transportation 1200 New Jersey Avenue Washington, DC 20590

Dear Acting Administrator Shulman,

Thank you for the work the National Highway Traffic Safety Administration (NHTSA) is doing to make our transportation system safer for all users. We appreciate that NHTSA's latest proposed update to the New Car Assessment Program (NCAP) included vehicle Automatic Emergency Braking (AEB) in large trucks and cars and pedestrian AEB in cars and light trucks. We write to urge your agency to include cyclist-AEB in the forthcoming NCAP update as well.

There is ample research to support including cyclist-AEB in the NCAP and strong public demand for improved vehicle safety based on comments submitted to NHTSA's proposed NCAP update. Cyclist-AEB meets the four criteria that NHTSA evaluates for inclusion in the NCAP:

- **Safety need:** Cyclist-AEB addresses a safety need by mitigating against one of the most common crash scenarios for bicyclists.<sup>1</sup>
- **Safety technology:** Multiple companies have developed cyclist-AEB system designs that can mitigate the safety problem. These proven system designs are already in use in cars sold in Europe.
- **Safety benefits:** Cyclist-AEB provides the potential for safety benefits.<sup>2</sup> Studies suggest cyclist-AEB can address more than 50% of fatalities<sup>3</sup> and potentially up to 80% of car-to-cyclist crash scenarios.<sup>4</sup>
- **Test procedures:** Performance-based objective test procedures exist that can assess cyclist-AEB system performance. EuroNCAP, Australasian NCAP, and Japan NCAP all have instituted or announced the inclusion of cyclist-AEB, and researchers at the Transportation Active Safety Institute (TASI) have also developed a test to evaluate cyclist-AEB performance.<sup>5</sup>

<sup>3</sup> Henri Chajmowicz, Jacques Saadé & Sophie Cuny (2019) <u>Prospective assessment of the effectiveness of autonomous emergency</u> braking in car-to-cyclist accidents in France, *Traffic Injury Prevention*, 20:sup2, S20-S25, DOI: 10.1080/15389588.2019.1679797

<sup>4</sup> Char F, Serre T. <u>Analysis of pre-crash characteristics of passenger car to cyclist accidents for the development of advanced drivers</u> <u>assistance systems</u>. *Accid Anal Prev. 2020 Mar;136:105408*. doi: 10.1016/j.aap.2019.105408. Epub 2020 Jan 9. PMID: 31927453.\_ <u>https://pubmed.ncbi.nlm.nih.gov/31927453/</u>

<sup>5</sup> Yi, Qiang & Chien, Stanley & Li, Lingxi & Niu, Wensen & Chen, Yaobin & Good, David & Chen, Chi-Chih & Sherony, Rini. (2018). <u>Development of test scenarios and bicyclist surrogate for the evaluation of bicyclist automatic emergency braking systems.</u>

<sup>&</sup>lt;sup>1</sup> See Table A-4 Target Population for PAEB from NHTSA's RFC

 <sup>&</sup>lt;sup>2</sup> MacAlister, Anna and David S. Zuby, <u>Cyclist Crash Scenarios and Factors Relevant to the Design of Cyclist Detection Systems</u> *International Research Council on Biomechanics of Injury*. IRC-15-50. Presented September 9-11,2015.
 <u>http://www.ircobi.org/wordpress/downloads/irc15/pdf\_files/50.pdf</u>; Haus, S. H., Anderson, R. M., Sherony, R., & Gabler, H. C. (2021). <u>Potential Effectiveness of Bicycle-Automatic Emergency Braking using the Washtenaw Area Transportation Study Data Set</u>. *Transportation Research Record*, 2675(9), 265-270. <u>https://doi.org/10.1177/03611981211001377</u>; Hause, Samantha, <u>Effectiveness of Automatic Emergency Braking and Bicyclists in the U.S. Virginia Polytechnic Institute and State University presented October 12th, 2021 Blacksburg, Virginia\_ https://vtechworks.lib.vt.edu/bitstream/handle/10919/106655/Haus\_SH\_D\_2021.pdf?sequence=1 at 172
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Including cyclist-AEB in the NCAP would have a relatively small impact on car manufacturers, many of whom already test for cyclist-AEB in cars sold in Europe. It is also not a mandate for cars to include this new safety feature; it simply means that the American public will receive information on whether vehicles have cyclist-AEB technology and, if so, how well it works. This gives consumers better information on manufacturer safety claims when buying a vehicle.

America must not continue to lag behind peer nations that already test cyclist-AEB technology. Omitting cyclist-AEB from the forthcoming NCAP update would deprive the public of information about lifesaving safety technology while bicyclist deaths at are a 40-year high. This delay would only result in more tragic and unnecessary deaths, injuries, and economic costs. The epidemic of traffic violence, which claimed the lives of nearly 1,000 cyclists in 2021, demands NHTSA to use every tool at its disposal to save lives.

Thank you for your attention to this important matter.

Sincerely,

Earl Blumenauer Member of Congress

Gwen S. Moore Member of Congress

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Jerrold Nadler Member of Congress

Stephen F. Lynch Member of Congress

Ro Khanna Member of Congress

Journal of Intelligent and Connected Vehicles. 1.

https://www.researchgate.net/publication/326883894\_Development\_of\_test\_scenarios\_and\_bicyclist\_surrogate\_for\_the\_evaluation\_of\_bicyclist\_automatic\_emergency\_braking\_systems

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