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May 14, 2021

Stephanie Pollack, Acting Administrator  
Federal Highway Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue S.E.  
Washington, DC 20590

RE: Docket No. FHWA-2020-0001

Dear Acting Administrator Pollack:

AAA is pleased to submit comments in response to the Federal Highway Administration's (FHWA) notice of proposed amendments to the Manual on Uniform Traffic Control Devices (MUTCD). The uniformity of signs, markings, signals, work zones, school zones, railroad crossings, and bicycle facilities are integral to maintaining the safe and efficient flow of traffic on the nation's roadways. AAA also expresses its appreciation to FHWA for extending the comment period to allow careful and thorough consideration of the NPA proposals by all stakeholders.

The MUTCD states that "The purpose of traffic control devices, as well as the principles for their use, is to promote highway safety and efficiency by providing for the orderly movement of all road users on streets, highways, bikeways, and private roads open to public travel throughout the nation." AAA has been at the forefront of promoting these principals for over 100 years. We were a participant in the First National Conference on Street and Highway Safety in 1924 which led the development of the first MUTCD. Since then, AAA has been actively involved with the National Committee on Uniform Traffic Control Devices and its predecessor groups to promote traffic safety. Below are several comments from AAA regarding the NPA.

The current MUTCD reflects a now outdated state of the practice that existed more than eleven years ago (when the current 2009 edition was adopted). There have been many significant advancements in traffic control device practices over the past eleven years that are not in the 2009 MUTCD, in many cases precluding their use on the nation's streets and highways. Many of those significant advancements can improve traffic safety and have been included in the NPA. AAA supports the following changes proposed in the NPA:

- Bicycle Signals (Item 417) – The addition of the new Chapter 4H on bicycle signals. This chapter will provide practitioners with the needed guidance for deploying this effective traffic safety treatment in a uniform and consistent manner.
- Pedestrian Hybrid Beacons (Item 426) – Specifically, expanding the use of pedestrian hybrid beacons to intersections. This application should help to improve safety for pedestrian crossing intersections which do not meet signal warrants.
- Accessible Pedestrian Signals (Items 428-431) – The proposed changes to the MUTCD related to accessible pedestrian signals. Expanding this guidance will enhance safety for all pedestrians.

- Rectangular Rapid Flashing Beacons (Item 432) – The addition of Chapter 4L related to rectangular rapid flashing beacons (RRFB). RRFB's have been found to be an extremely effective option for warning drivers of crossing pedestrians.
- Part 9 Traffic Control for Bicycle Facilities – The proposed changes to Part 9 which will enhance the uniformity and consistency of bicycle facilities on a nationwide basis. As bicycling continues to increase in popularity, consistent facilities are needed to promote traffic safety. From a safety perspective, it is essential that all road users are familiar with these newer bicycle focused traffic control devices. The proposed content in Part 9 will help to promote this necessary national uniformity.
- Part 7 Updates (Items 517-527) – Specifically, updates to Part 7 on Traffic Control in School Areas as these changes will further enhance safety around schools.
- Site Roads Open to Public Travel (Item 19)-Specifically, the addition of a new standard indicating that traffic control devices used on site roads open to the public shall have the same shape, color, and meaning as those required by the MUTCD, unless exceptions are noted in the Manual. This is extremely vital to promote traffic safety on site roads open to public travel.
- Inclusion of recommendations in the new Part 5 from NCUTCD CAV Task Force and Automated Driving Systems Task Force to provide agencies with guidance when assessing their infrastructure needs in preparation for automated driving systems.
- Signing at divided intersections (Item 138) - Specifically, the change to Figure 2A-5 as it will improve safety for vehicles turning from divided roadways.
- Airport Signing (Item 155) – More consistency will reduce driver confusion around airports which typically include high numbers of unfamiliar drivers.
- Overhead arrow per lane signs (item 168) –To enhance clarity of lane use, particularly for elderly drivers.

Additionally, AAA asks FHWA consider the following recommendations to improve the proposed amendments to the MUTCD:

- Eliminate policy requirements in the MUTCD that require or encourage overreliance on the 85th percentile speed when setting posted speed limits. In a national survey<sup>1</sup> of 175 traffic engineers from 48 states, AAA Foundation researchers found that 88% of them consider the 85<sup>th</sup> percentile speed when raising or lowering posted speed limits. Thirty-one percent indicated it was the only factor considered “most of the time” and six percent said it was the only factor considered “at all times.” Recognizing that motorists commonly treat posted speed limits as minimum speeds rather than maximum speeds, the 85<sup>th</sup> percentile speed will increase over time. Further, recently published research conducted by the AAA Foundation in partnership with the Insurance Institute for Highway Safety found that seemingly small increases in vehicle impact speeds dramatically reduce survivability of related crashes. For example, crashes at impact speeds of 56 mph instead of 50 mph result in more serious injuries to the driver and reduce his odds of surviving the crash.<sup>2</sup> In summary, overreliance on the 85<sup>th</sup> percentile speed results in ever increasing operating speeds, subsequent hikes in maximum posted speed limits, higher crash severity, and higher probability of fatal injury to all road users involved in a crash. AAA recommends that references to the 85th percentile speed within the MUTCD be replaced with statements that reference expert systems such as FHWA's USLIMITS (which factors prevailing speeds) and the safe system approach.

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<sup>1</sup> Kim, W., Kelley-Baker, T., Chen, K. T. (2019, April). Review of Current Practices for Setting Posted Speed Limits. (Research Brief). Washington, D.C.: AAA Foundation for Traffic Safety.

<sup>2</sup> Kim, W., Kelley-Baker, T., Arbelaez, R., O'Malley, S., Jensen, J. (2021). Impact of Speeds on Drivers and Vehicles – Results from Crash Tests (Technical Report). Washington, D.C.: AAA Foundation for Traffic Safety.

- Uniform Vehicle Code (NPA Item 8) – AAA has concerns with the use of the Uniform Vehicle Code as the basis of the MUTCD. Considering the National Committee on Uniform Traffic Laws and Ordinances, which was responsible for writing and maintaining the UVC was disbanded more than 15 years ago, many of the items contained in the UVC are out of date with recent practices. AAA suggests that FHWA consider partnering with key stakeholders to update the UVC.
- Public Domain, Copyrights, and Patents (Item 25) – AAA has concerns with the inclusion of the following standard in the MUTCD “meaning, appearance, operation, and application of traffic control devices as a road user experiences them shall not be protected by a patent, trademark, or copyright due to its adverse impact on the very uniformity the MUTCD is intended to promote.” This standard likely will discourage individuals or companies from developing innovative traffic control devices which could significantly improve safety. This standard seems to conflict with the spirit of what the patent process is trying to achieve.
- Lanes Merge Signs W4-8 and W9-4 (Item 145) – AAA has concerns about adding the lanes merge signs and the inclusion of Figure 2C-13. In this situation it is unclear as to which vehicle approaching the merge has right-of-way. We are concerned that encouraging this approach to merges is likely to result in a degradation of safety when compared to applying the traditional approach to merges.
- Design of Route Signs (Item 160) – AAA suggests that FHWA consider adding a unique shield for US designated business routes. While interstate business routes have a unique shield, there are likely some situations where US designated routes are confused with US designated business routes as they have the same shield. Human factors testing should be considered to evaluate the design, color and configuration of route signs.
- Lane-Use Control Signals for Part-Time Travel on a Shoulder (Item 254) – AAA has concerns about the use of the yellow X on lane-use control signs. Color blind drivers may not be able to distinguish between the yellow X or a red X which is the same shape and size. For the same reasons we do not include the yellow and red signal indications in the same signal section, it is suggested that FHWA consider an alternate figure for the yellow X.

AAA supports proceeding with the current rulemaking process, culminating in a Final Rule. This represents the best path to incorporating those significant advancements in a national standard as soon as possible, and will allow these advancements and innovations to be deployed to improve traffic safety. AAA supports an examination of the MUTCD scope, structure, process, and content to meet the needs of all users in an equitable manner and those assessments should continue.

Thank you for the opportunity to provide input on this important matter.

Sincerely,



Jill Ingrassia  
Executive Director  
AAA Advocacy & Communications