



National Association of
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May 14, 2021

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

RE: Detailed comments to restructure the MUTCD as a proactive safety regulation

Dear Acting Administrator Pollack,

In March, the National Association of City Transportation Officials (NACTO) wrote to your office regarding the need to reframe and rewrite the Manual on Uniform Traffic Control Devices (MUTCD) as a proactive, multimodal safety regulation. We have since completed a full review of the entire MUTCD with engineers, planners, and other practitioners in our 89 member cities and agencies and offer the attached comprehensive, line-by-line comments as well as higher-level reframing recommendations to inform FHWA’s revisions to the Manual. We applaud your staff for their thoughtful work on several issues, such as leading pedestrian intervals, mini-roundabouts, and interim strategies for marked curb extensions and other on-roadway pedestrian spaces. We are also heartened by the recognition of design exceptions and their role in engineering. We thank you for your careful attention to these important issues.

The 11th edition of the MUTCD is a unique opportunity for the Biden Administration to enshrine its safety, sustainability and equity goals in a core regulatory document that impacts nearly every roadway in the country. However, the proposed draft undercuts the Administration by continuing to elevate operational efficiency for motor vehicles above safe and accessible mobility for people. Without significant revisions and reframing, the MUTCD will continue to be a regulation that allows almost 40,000 people to die each year on US roads and encourages unsustainable increases in driving and

greenhouse gas emissions. We encourage FHWA to seize this moment to reframe the MUTCD to become a document that goes beyond merely *permitting* practitioners to build safer roads and instead *encourages* and *empowers* them to build the roads that will truly make the people in our country safer, address fundamental inequities in our land use and transportation systems, and help us meaningfully turn the tide on climate change.

To assist FHWA in its task of updating the MUTCD, NACTO and our 89 member cities and transit agencies have developed more than 400 comments that, if incorporated, would help the Biden Administration and Secretary Buttigieg meet their stated goal to create a “[road system that is designed to protect its users, through implementing life-saving...infrastructure safety solutions.](#)” These comments, summarized below and also attached in a sorted spreadsheet, are a combination of detailed line edits, recommendations on structure and frame, and suggestions for an improved process going forward. The most critical of these are also summarized in an attached Appendix. They are intended to support FHWA through the process of reframing and rewriting the Manual. NACTO stands ready to discuss and collaborate at your convenience.

1. **Elevate the goal of eliminating serious injuries and deaths as a guiding principle of the Manual, ensuring a “safe systems” approach throughout the document.** The Manual unrealistically identifies target road users as pedestrians and bicyclists who always act “alertly and attentively”, “reasonably and prudently”, and “in a lawful manner” (Section 1A.03). This definition fails to recognize the inevitability of human error, as well as the enormous range of urban street users. Most children, for example, would not meet this standard. By including it, the Manual implies that engineers are only responsible for protecting road users who meet this specific impractical definition. Eliminating the language in Section 1A.03, redefining the Manual’s primary goal, and recognizing the primacy of substantive safety even above uniformity are essential to ensure that every regulation in the MUTCD serves to improve safety and accessibility for people rather than reducing motor vehicle delay.
2. **Remove guidance recommending the use of free-flow speeds, including the 85th percentile speed, in setting speed limits.** A substantial body of published research, most recently from [The National Transportation Safety Board \(NTSB\) in 2017](#), shows that using the 85th percentile approach to establish speed limits leads to increases in vehicular speed over time. As a result, a wide consortium of American safety and engineering organizations, including the [National Committee on Uniform Traffic Control Devices \(NCUTCD\)](#), the [National Safety Council](#), [NACTO](#), and the [Vision Zero Network](#) no longer endorse the MUTCD’s recommended speed-limit-setting approach. While FHWA has downgraded the use of the 85th percentile approach from a requirement to a recommendation, even the persisting recommendation sends the

message that local engineers may continue using this highway-based tool on most or all urban streets. Eliminating all guidance recommending use of free-flow speed in setting speed limits aligns with FHWA's intent to heed the most updated and relevant safety research and signals to state DOTs that this approach is no longer nationally endorsed.

3. **Make it safer to cross the street by reforming signal and hybrid beacon warrants so that practitioners can install protected street crossings without requiring pedestrians to risk their lives.** The Manual's circular signal warrants call for *either* a high volume of people crossing the street without a protected crossing *or* waiting for multiple traffic injuries or deaths to occur in order to justify installing signals or beacons for pedestrians - while motor vehicle signals are routinely installed simply on the basis of traffic projections from a new development (Chapter 4C, Section 4J.01, Sections 2B.06 to 2B.17). These warrant volumes are significantly higher than those in other industrialized countries with far lower traffic fatalities, including Canada. In some cases, the Manual's unreasonably restrictive warrants prevent practitioners from installing safe crossings, even when they can expect that a fatality or serious injury may occur. FHWA can begin to address the signal warrant double-standard by adding a simple non-motorized network warrant (Part 4), adopting basic guidelines about how far pedestrians can be expected to walk to get to a crosswalk (Section 3C.02), and following its own guidance and research buried in details of the [STEP guide](#), about what kinds of streets aren't safe enough to cross without a signal. (Chapter 4C).
4. **Remove the Manual's new proposed chapter on Autonomous Vehicles.** The Manual's new chapter on Autonomous Vehicles (Part 5) places these vehicles at the top of a new modal hierarchy by absolving AV companies of the responsibility to build vehicles that keep all road users safe within the existing transportation network. Upgrading street markings to be compliant with the proposed MUTCD could cost taxpayers billions of dollars; if the markings are non-compliant and an AV-involved crash occurs, taxpayers will likely foot the bill for that as well. FHWA should remove this new AV Part of the MUTCD and consult with a diverse set of transportation practitioners, including those who build and maintain roadways in cities, on appropriate and valid requirements concerning AVs that might be incorporated into existing sections. AV development simply is not far enough along to warrant a separate section at this time.
5. **Remove unnecessary restrictions on the use of green paint for bike lanes, red paint for bus lanes, and other colored paint for crosswalks.** Without any research basis, the proposed Manual prevents practitioners from using green paint to delineate select bike facilities (Section 3H.06), red paint in contextually appropriate ways and without an engineering study in transit lanes (Section 3H.07), and other colored paints to create artful crosswalks (Section 3H.03). The use of colored pavement in bus and bike lanes is

an important and heavily utilized treatment to delineate space on the street, and improves visibility for cyclists and transit vehicles. In crosswalks, colorful paint can meaningfully contribute to creating a sense of place and community, and there is no evidence to prove that these designs create any adverse safety impacts.

6. **Eliminate geometric design restrictions for urban bikeways.** The MUTCD is not intended to be geometric design guidance, yet includes dozens of standards and recommendations about bike lane positioning—where bike lanes are facilitated at all. Rather than include duplicative, conflicting guidance, the MUTCD should instead refer practitioners to best practice guidance such as MassDOT’s [Separated Bike Lane Planning and Design Guide](#) and NACTO’s [Urban Bikeway Design Guide](#). These best practice guidance documents have been developed with careful input from practitioners with experience and expertise in urban bikeway design, and should be treated as the standard for bikeway design in the US.

In addition to changes to the Manual’s content, we encourage FHWA to be transparent and inclusive in its process for reconciling comments and finalizing the 11th edition of the MUTCD. In particular, NACTO encourages FHWA to ensure that multimodal safety experts play a formal and substantive role in the finalization of the 11th edition. In refining this edition, and for all subsequent updates, we ask FHWA to bring new, essential stakeholders into the conversation about safety on America’s roads. Only through frequent, meaningful engagement with all stakeholders, including cities and transit agencies, public health experts, childhood development specialists, experts on aging, disability advocates, and transportation safety champions, can FHWA develop an MUTCD that meets the needs of a full spectrum of roadway managers and users while beginning to address historical inequities.

Finally, to ensure that subsequent editions of the MUTCD are timely and continue to drive progress toward safer streets and a more equitable and sustainable future, NACTO requests that FHWA ensure an inclusive process for more frequent updates to the MUTCD. The past 12 years have seen significant advances in safety research yet the process for incorporating new safety findings into the MUTCD remains slow and opaque. We ask FHWA to develop a process for the MUTCD that allows for thoughtful experimentation and ensures that new research and life-saving design practices can be quickly incorporated into the document and more expeditiously deployed at scale.

Ensuring safety for all road users is the cornerstone of the Biden Administration’s climate and equity goals and Secretary Buttigieg’s specific transportation goals. The recommendations included in this letter, supported by detailed line edits in the attached spreadsheet, will help transform the MUTCD into a document that can powerfully advance those goals, and support FHWA’s goals to foster a safe, equitable, and sustainable transportation system. We thank you for your thoughtful consideration of these

comments and hope that these recommendations will form the basis of a meaningful reframing and revision of the MUTCD. NACTO and our 89 member cities and transit agencies across America have spent hundreds of hours developing these recommendations and stand ready to work with you to achieve that goal.

Respectfully,



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