

# Comments on Docket No. FHWA-2020-0001 National Standards for Traffic Control Devices; the *Manual on Uniform Traffic Control Devices for Streets and Highways*; Revision

Please use this form to provide comments on the Notice of Proposed Amendments for the MUTCD.

## INSTRUCTIONS:

1. Add your name or organization name where indicated in the footer of this form.
2. Use Table 1 to provide your original comments.
3. Use Table 2 to indicate your agreement with a comment that another commenter has submitted to the docket.
4. Do not adjust formatting of the rows and columns; text will automatically wrap and expand the row height as you type.
5. To add rows to this form, use the "Insert Rows" function, or hover just outside the left edge of the row below which you would like to add a row and click the encircled "+" that appears.
6. If you choose to provide a letter to accompany this comment form, please **print the document as a PDF; please do not scan a hard copy**. This will assist FHWA with cataloging your comments.

**TABLE 1. ORIGINAL COMMENTS ON PROPOSED CHANGES.** Please indicate the applicable proposed Section numbers in the far-left column. In the next three columns, please indicate your agreement, disagreement, or whether the column is applicable to your response by placing a, "YES," "NO," or "N/A" in the appropriate column of the row. If you agree with a proposed change, then there is no need to fill out the additional columns beyond the first two. However, it can be helpful to explain why you agree with a proposed change based on your objective experience as a roadway operator and/or empirical data. If you disagree in part or in whole, then please provide additional information that FHWA may find helpful.

Proposed Section Number(s)	Agree with concept and text as proposed	Agree with concept; suggested rewording of text in Comments	Disagree with concept	Comments <i>Please include justification for your position based on objective experience and empirical data. If there is a specific statement with which you take exception, please provide the Page and Line numbers from the mark-up version of the proposed MUTCD text.</i>
1A.05	NO	YES		<b>Reference #19</b> (page 5, line 11) to MASH-09 is outdated. Recommendation: amend to read: " <a href="#">Manual for Assessing Safety Hardware</a> ," 2016 Edition (AASHTO)
1C.02	NO	YES		<b>Definition # 44</b> (page 18, line 3) addresses "Crashworthy" but does not define it. Recommendation: amend page 18, line 8 to read: <a href="#">Acceptable performance of a crashworthy device is determined by a nationally established standard "such as "Manual for Assessing Safety Hardware," 2016 Edition (AASHTO)"</a>
1C.02	YES			<b>Definition # 49</b> (page 18, line 29): the words " <a href="#">on the roadway surface</a> " have been deleted. We concur with this clarification of a delineator – as opposed to a tubular marker/surface-mounted channelizer post. Much appreciated.
1C.02	YES			<b>Definition # 208</b> (page 28, line 1): the definition " <a href="#">Serviceable</a> " was added. We concur with this addition. Much appreciated.
1D.02	YES			<b>Traffic Control Device Characteristics and Activity</b> (page 35, line 22): the activity " <a href="#">Maintenance</a> " was added. We concur with this addition. Much appreciated.
3G.02	YES			<b>Design</b> (page 386, line 18): Minimum dimensions of retroreflective elements for delineators was clarified. We concur with this clarification. Much appreciated.
3I.01	YES			<b>Channelizing Devices</b> (page 395, line 8) The use of channelizing devices such as tubular markers in bicycle facilities was recognized and added. We concur with this addition.
3I.02	YES			<b>Tubular Markers</b> (page 395, line 38): The use of tubular markers to emphasize pavement marking patterns was recognized and added. We concur with this addition.
5B.02	NO		YES	<b>Markings</b> (page 513, line 40) Guidance # F: " <a href="#">Raised pavement markers only as a supplement to, rather than as a substitute for, markings</a> ". We recommend deletion of this guidance due to the lack

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				of provision for replacement of temporary markings in projects such as bituminous surface treatments and projects where immediate re-striping of roadways is not possible or practicable. Temporary raised pavement markers provide critical delineation on roadways otherwise void of markings altogether.
5B.04	NO		YES	<b>Temporary Traffic Control</b> (page 514, line 38) Guidance: “ <i>To better accommodate machine vision used to support the automation of vehicles, channelizing devices should be at least 8 inches wide with retroreflective material for reliable machine detection in all weather conditions.</i> ”. Recommend deletion of this guidance until more research is completed documenting the proposed rational for a minimum 8-inch dimension. As written, it lacks clarity on the dimensions of channelizing devices and the required amount of retroreflective material. In addition, it would eliminate a category of widely used channelizing devices (e.g., tubular markers) with no alternatives and without adequate research to justify such a restriction. Projects such as 2-way, 2-lane detours on 4-lane interstate freeways do not have sufficient widths to allow for the use of an 8-inch wide channelizer such as a drum. Not to mention the problems that would arise due to drums being knocked out of alignment, into the path of oncoming traffic traveling 70 MPH, etc. Lastly, this provision was inserted to reflect current technology, which is widely recognized to be rapidly changing, and may not be necessary for guidance of automated vehicles in the not-too-distant future.
5B.04	NO		YES	<b>Temporary Traffic Control</b> (page 514, line 40) Guidance: “ <i>Markings entering the work zone and through lane shifts should be made with highly visible and continuous materials, not intermittent buttons and reflectors.</i> ”. Recommend deletion of this guidance due to the lack of provision for replacement of temporary markings in projects such as bituminous surface treatments and projects where immediate re-striping of roadways is not possible or practicable. Temporary raised pavement markers provide critical delineation on roadways otherwise void of markings altogether.
6H.17	NO		YES	<b>Opposing Lane Traffic Divider</b> (page 554, line 1): we believe the NPA’s movement of the Opposing Traffic Lane Divider from 6F.76 in the 2009 Manual to the new 6H.17 is in error. These devices are channelizing devices and should be relocated from its proposed Warning Sign category back to the Channelizing Devices category – specifically to Section 6K.12 – and continue to be subject to all testing and restrictions in place for such devices. We recommend renumbering the current 6K.12 to 6K.13. We further recommend changing the title back to read “ <b>Opposing Traffic Lane Divider</b> ” and the words “center lane” (page 554, line 10) to read “center line”.
6J.04	NO		YES	<b>Delineators</b> (page 564, line 1): The prior reference to crashworthiness was eliminated (page 564, line 6) and reference is made back to Chapter 3G (line 10). But Chapter 3G “Delineators” has no reference to crashworthiness which is a critical safety characteristic of work zone traffic control devices! Recommendation: add the following underlined text on page 564, line 10: “ <u><b>They shall be mounted on crashworthy supports and shall be in accordance with Chapter G.</b></u> ”
6K.01	NO		YES	<b>Channelizing Devices</b> (page 566, line 23): Standard concerning replacement of damaged devices was changed to Guidance. Recommendation: maintain as a STANDARD and change to read: “Devices that are <del>damaged</del> <b>no longer serviceable or have lost a significant amount of their retroreflectivity and effectiveness shall</b> <del>should</del> be replaced.” In support, see Section 1C.02 (page 28, line 208) where the word “Serviceable” is defined. In further support, see

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				Section 1D.02 (page 35, line 22) where maintenance of traffic control devices is described. Also in support, see Section 1D.12 (page 41, line 29) where Maintenance of TCD's is further described and defined.
9A.03	YES			<b>Standardization of Application for Markings</b> (page 742, line 3). The Guidance statement was clarified to focus solely on prohibiting the use of raised pavement markers. Other raised devices e.g. tubular markers were proscribed in the 2009 Manual. Tubular markers have been shown to be effective in encouraging wider use of bicycle facilities with no adverse safety effects. We concur with this change in the guidance statement.

**TABLE 2. AGREE WITH ANOTHER COMMENTER.** If you agree with another commenter, please indicate the commenter with whom you agree with and note any additional information FHWA may find helpful or any exceptions.

Docket Comment Number and/or Commenter Name	Agree with commenter's comments as written	Agree with commenter; with exception(s)	Additional information helpful to FHWA, or exceptions to commenter's comments
(EXAMPLE) FHWA-2020-0001-59	YES	N/A	