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 indicted 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.

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| --- | --- | --- | --- | --- |
| Proposed  Section Number(s) | Agree with concept and text as proposed | Agree with concept; suggested rewording of text in Comments | Disagree with concept | Comments  *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.* |
| All |  |  |  | See other file submitted to docket which shows detailed recommended changes to the draft MUTCD text, figures, and tables. |
| Part 5 (General) | YES | N/A | N/A | This is a new Part added to the MUTCD in the NPA. NCUTCD recommends all of Part 5 be revised from Standard, Guidance, or Option to Support so agencies can obtain information they can use to prepare their network for Automated Vehicles (AVs) and continue to be in compliance with the Manual without the burden of having to conform to new provisions in Part 5 different from those in other parts of the MUTCD. |
| 5B.01 (new) | NO | NO | YES | NCUTCD recommends adding a new Support section to Chapter 5B to reinforce the intent of this Chapter. |
| 5B.01 (now 5B.02) | NO | YES | N/A | NCUTCD recommends revising 5B.01 (now 5B.02) as follows:   * Revise Guidance to Support (see general Part 5 comment) * Revise references to DAS to AVs * Add section references as appropriate * Revise content for simplicity and clarity and delete content that is unnecessary or not specific to AVs * Revise the content on LED refresh rate to simplify wording and add reference to FCC compliance (47 CFR) |
| 5B.02 (now 5B.03) | NO | YES | N/A | NCUTCD recommends revising 5B.02 (now 5B.03) as follows:   * Revise Guidance to Support (see general Part 5 comment). * Revise references to DAS to AVs * Revise content for simplicity and clarity and delete content that is unnecessary or not specific to AVs * Delete references to line widths, as this is addressed in Part 3. * Relocate material on work zones to 5B.04 (now 5B.05) * Add a reference to broken lines with 15-foot line segments and 25-foot gaps on Interstates, freeways, and expressways in accordance with NCUTCD recommendation 19B-MKG-02 * Delete references to decorative items in crosswalks, since NCUTCD is unaware of specific information relative to negative impacts of decorative elements in crosswalks on roadways with low speeds |
| 5B.03 (now 5B.04) | NO | YES | N/A | NCUTCD recommends revising 5B.03 (now 5B.04) as follows:   * Revise Guidance to Support (see general Part 5 comment). * Revise content for simplicity and clarity and delete content that is unnecessary or not specific to AVs * Revise the content on LED refresh rate to specify a refresh rate greater than 200 Hz, since refresh rates below 200 Hz may cause traffic signal indications to appear dark to machine vision, even if they appear normal to human vision (example in photo below - both signals look red to a human, but the digital camera sees one as dark due to a low refresh rate)      * Add a reference to signal backplates with retroreflective borders, since machine vision may not recognize the presence of the traffic signal, especially at night - also, retroreflective backplates corroborate the presence of the traffic signal and the need to treat a dark signal as a stop condition * Add content on the use of flashing yellow arrows for permissive left turns, since a circular green indication over an exclusive turn lane could be mistaken as a protected turn treatment by machine vision |
| 5B.04 (now 5B.05) | NO | YES | N/A | NCUTCD recommends revising 5B.04 (now 5B.05) as follows:   * Revise Guidance to Support (see general Part 5 comment) * Extensively revise content for simplicity and clarity and delete content that is unnecessary or not specific to AVs * Add content on markings from 5B.02 (now 5B.03) |
| 5B.05 (now 5B.06) | NO | YES | N/A | NCUTCD recommends revising 5B.05 (now 5B.06) as follows:   * Revise Guidance to Support (see general Part 5 comment) * Extensively revise content for simplicity and clarity and delete content that is unnecessary or not specific to AVs |
| 5B.06 (now 5B.07) | NO | YES | N/A | NCUTCD recommends revising 5B.06 (now 5B.07) as follows:   * Revise Guidance to Support (see general Part 5 comment) * Revise content on segregated bicycle facilities, as separation is inappropriate, infeasible, or impractical due to cost or maintenance impacts on a large percentage of streets or highways * Delete the sentence referencing markings for the ends of bike lanes, as no uniform markings have yet been established for this condition |