

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

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>
1B.08	NO	NO	YES	We agree with the premise of removing items from interim approval if need be, but for things that aren't a critical safety issue we recommend there be a public forum or comment period prior to the removal of the device.
2B.06 A-F	NO	YES	NO	The references in this section point to 2B.04x which does not exist.
2B.52	NO	NO	YES	“The times and days for which the parking regulations are in effect shall be posted if they are not in 25 effect at all times of day or all days of the week.” We are not supportive of this change. This change will require us to add days we don't enforce to all signs (i.e. – Sundays and this will further add to sign complication as there are already multiple regulations on one sign. Adding days would make the font smaller and/or signs larger to accommodate.
2B.53	NO	NO	YES	We do not support changing pay parking to metered parking and other editorial changes that reflect current practice and commonly used nomenclature. The terminology of metered parking is misleading as most would expect a physical meter in place, especially since more and more cities are going asset light including meter removal for mobile pay and kiosks.
3C.01	NO	YES	NO	“Crosswalk markings shall be provided at non-intersection related crosswalk locations.” For consistency purposes suggest adding in “non-intersection and midblock” to the crosswalk locations to be consistent throughout the manual.
3C.03	NO	YES	NO	“”At a non-intersection crosswalk...” For consistency purposes suggest adding in “non-intersection and midblock” to the crosswalk locations to be consistent throughout the manual.
3C.11	NO	YES	NO	This section refers to Figure 3B-29 which does not exist.
3H.03	N/A	N/A	N/A	Suggest rewording this section in a manner where the standard doesn't reference a support paragraph. The way this section is worded now is confusing/circulatory.
3D	NO	YES	NO	This section has inconsistencies in the way roundabouts are called out (i.e. – they are called roundabouts, circular intersections, circulatory roadway, roundabout circulatory roadway,...). Suggest consolidating into one term for consistency purposes.
3E.01	NO	YES	NO	“The left- and right-hand edge lines used for preferential 26 lanes that are adjacent to general purpose lanes where traffic is flowing in the same direction be 27 in accordance with Table 3E-1.” The word shall is missing between direction and be.
Figure 3I.03	NO	YES	NO	Suggest clarification as to what the arrows are pointing at on the left most drawing calling out “Option”.
4A.01	NO	YES	NO	Suggest using the term bicycle heads rather than bicycle faces, as this is more in line with the terminology of the rest of the paragraph.
4A.05	NO	YES	NO	Suggest for consistency purposes calling it either bicycle traffic signal or bicycle signal as both are used throughout.

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4A.06	NO	YES	NO	Numerous references are made to pedestrian signals with the term heads deleted. However in the support statement of 4A.01, the term heads is being added to the pedestrian signal. References should be consistent throughout.
4A.10	NO	YES	NO	The first sentence should end in the word “agency”.
4D.04	NO	YES	NO	In the standard, the term motor vehicle is used several times as well as in the Opinion paragraphs. Using vehicle or vehicular may be more appropriate to include bicycles.
4D.06	NO	NO	YES	Suggest making the distance between signal faces for a turning movement and signal faces of another movement on the same approach greater than 3 feet, particularly when a center-to-center measurement is being used. If 8’ (which is the through head standard is not practical), than at least suggest using 6’.
4D.07 (B)	NO	YES	NO	There is an extra space in “requirements”
4E.01 B	NO	NO	YES	We do not support the change from “greater” to “more”. In terms of angles, greater is usually used to indicate relative size of the angle as opposed to more which is usually more indicative of number of, i.e. number of angles
4E.02	NO	NO	YES	Suggest allowing 8” arrow signal indications, thus treating arrows the same as all other signal heads. This could create significant problems for older infrastructure that needs heads replaced. There needs to be some consideration for useful life of other signal infrastructure as well, i.e. – if the strain poles will not support 12” heads but the heads need to be replaced.
4F.15 (F)	NO	YES	NO	There is an = symbol at the end of the first sentence.
4F.16	NO	NO	YES	This would result in unduly complex phasing and timing at some intersections if green balls are no longer allowed.
4F.16 Support	NO	YES	NO	This provision should be The provisions.
4H.10.A	NO	NO	YES	Suggest that signs that are mounted lower than 7 feet above pathway or sidewalk shall no project into the pedestrian feet rather than allow the 4 inches of projection. Anyone taller than 6 feet would be susceptible to hitting their head.
4I.06	N/A	N/A	N/A	This statement is unclear. Is this stating that the actual values of the times are to be displayed? If so, where? Or is this stating that the WALK PERSON shall be displayed for the length of time of the leading pedestrian interval plus the length of time of the minimum required WALK INTERVAL time? Clarity is requested.
Figure 4I-2	NO	NO	YES	The 1 ft MIN. and 2.5 ft MIN. dimensions on this figure do not make sense as currently shown. On the right hand side, the 1 ft MIN. dimension appears to depict a pushbutton being installed a minimum of 1 ft behind the top side of the ramp yet the gray area for the pushbutton location extends towards the roadway rather than away from the roadway. On the left hand side the 1 ft MIN. dimension seems to overlap with the 2.5 MIN. dimension. Provide a clearer depiction on what these two dimensions are supposed to represent.
Figure 4I-2	NO	NO	YES	Disagree with the 1 ft MIN. dimension shown on the right hand side of the figure. This dimension implies that a pusbutton should be installed behind the top of the curb ramp. This may result in supports/pedestals/poles being placed in the middle of the sidewalk area and creating an obstruction to the walking path.
Figure 4I-2	NO	NO	YES	General disagreement with the dimensions shown on this figure since they do not seem to account for the side reach requirements outlined in 2010 ADA Standards for Accessible Design section

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				308.3.2. This section implies that a pushbutton would need to be within 24" of the curb ramp landing.
4I.05	NO	YES	N/A	Page 472 line 4 – Recommend using the term “clear ground <i>space</i> ” to match the terminology in section 305 rather than “clear ground <i>clearance</i> ”
4I.05	NO	YES	N/A	Page 472 line 21 – Recommend using the term “Outside the flared <i>area</i> ” rather than “Outside the flared <i>side</i> .”
PART 5	NO	YES	NO	Suggest changing the title to “Connected and Automated Vehicles” as the overview includes both.
5A.01	NO	NO	YES	In the purpose and scope, suggest going over connected vehicles in addition to automated vehicles.
5A.02	NO	YES	NO	<p>“Drivers would receive notifications” Suggest striking the word “would” in this sentence as the rest of the paragraph is written in the present tense.</p> <p>Suggest providing a little more explanation of the connected vehicle environment. Drivers do not only receive alerts of dangerous situations but also current information about the transportation network, such as the status of traffic signals.</p>
5A.03	NO	YES	NO	<p>Suggest reordering to:</p> <ul style="list-style-type: none"> A. DDT (this puts the basics first) B. ODD (also putting the basics first) C. Driving Automation Levels 1-6 (explains the levels prior to referring to these levels in DAS and ADS) D. DAS E. ADS F. Cooperative Automation G. ADAS
5A.03	NO	YES	NO	Definitions and terms. “level 3,4, and 5” capitalize the word level. “Capable of level 1” capitalize the word level.
5B.06	NO	NO	YES	Suggest using a sign, in addition to road markings, to indicate the end of a bike lane that is merged with other traffic.
Part 5	NO	YES	NO	Requirements of traffic control are already called out in other sections of the manual, recommend removing the redundant references.
Part 7	NO	NO	YES	Recommend adding school entrance signs to this section. A school entrance sign may be used to help identify a school entrance and/or driveway where there is poor sight distance or a fairly large volume of traffic entering or existing the driveway.
7B.03	NO	YES	NO	The reference to 7B.09 should be changed to 7B.02
9A.01	NO	YES	NO	“Can increase public acceptable of bicyclists from other road users” acceptable should be changed to acceptance.
9E.01				Clarification is requested. We have several bike lanes where the portion of the right-of-way with a pavement composition traditionally referred to as “shoulder” has been repurposed for use by people riding bicycles. With the newly added definition of “shoulder” (definition #212) in Section 1.C.02, it would seem that the activities referenced in the new definition could be reasonably accommodated by a bike lane with appropriate striping and signage when the shoulder is sufficiently wide. There may also need to be consideration of the application of this regulation to design criteria and whether or when it might be reasonable to require additional pavement for a shoulder in addition to a bike lane or if a bike lane could substitute for a shoulder in certain situations.
Figure 9B-7	NO	YES	NO	Bicycle sign “C” is not labeled.
6A.01	NO	NO	YES	Page 517 Lines 32-34: Shouldn't this be dependent on the work being performed? I agree that a full blown setup may not be

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				<p>required on a roadway that gets a handful of vehicles per day, however TTC still serves a purpose in protecting road users and workers. A single sign and flashers may not be appropriate for short or long term excavation activities, for example, where channelizing devices would be appropriate.</p> <p>Additionally, in my experience, low-volume rural roads have a tendency for higher speeds due to the low traffic volumes and generally straight geometry. This is also stated in the support on the next page where it states that "A rural highway is normally characterized by higher speeds", as well as other areas of Part 6.</p>
6A.01	NO	YES	NO	<p>Page 518 Lines 48-49: The statement about device removal on page 519 lines 1-3 appears out of context without this statement about devices being in place.</p>
6A.01	NO	YES	NO	<p>Page 519 Lines 36-42: Reword as follows: When the roadway capacity is reduced due to the lane closures, the demand will might exceed the available capacity and result in either a lengthy long stopped or slow moving queue of vehicles that may could extend past the normal signs shown in the typical advance warning area. An assessment of the expected queue length should be a part of the temporary traffic control TTC plan design process, and adjustments to the sign spacing and number of signs, as well as the possibility of using more conspicuous devices, may can be provided used to increase the distance length and conspicuity visibility of the advance warning area.</p>
6A.03	NO	YES	NO	<p>Page 521 Lines 36-38: The removal of information about crashworthiness from this section causes confusion and uncertainty about what defines it. It's only present in Part 1 – which is not a place that's very commonly referenced without being pointed there. Suggest restoring the text to this section or include a reference on where to find the definition in Part 1.</p>
6H.01	N/A	N/A	N/A	<p>Page 550 Lines 27-41: Given that this section is focused on signs, this information seems out of place here since it's not related to a sign. Is this redundant info from the pedestrian section?</p>
6H.08	NO	YES	NO	<p>Page 552 Line 38: This should be a black on white regulatory sign to match the "STAY IN LANE TO MERGE POINT" sign, especially since it is rectangular in design. The message gives a regulatory direction. I understand that this is similar to the "LANE ENDS MERGE XX" sign, however I think there is a distinction between the two based on the signs they are associated with (regulatory rectangular "STAY IN LANE TO MERGE POINT" sign vs. warning diamond "XX LANE CLOSED AHEAD").</p>
6H.30 6H.31	N/A	N/A	N/A	<p>A shift of 10 lateral feet designed at 30 mph does not look like a Reverse Turn symbol, nor does it drive like one. Recommend only using Reverse Curve sign unless drivers must make a sharp maneuver. Turns like that are typically not going to be included in a well-designed TTC plan outside of very special circumstances.</p>
6H.38	NO	YES	NO	<p>Combining the "special" and "other" sections may cause confusion. Since the definition of what's meant by a special sign isn't present, the two terms seem to be interchangeable. Suggest including an explanation somewhere (perhaps in Part 1 or 2?) of what a special sign is.</p>
6I.02	NO	YES	NO	<p>Page 576 Lines 4-17: This info appears to fit better in the flagging section earlier in Part 6 than here.</p>
6M.04	N/A	N/A	N/A	<p>If this info is going to remain here, suggest including a reference to this section being included in previous areas that speak to detectable edging.</p>
6N.01	NO	NO	YES	<p>Changing the definitions of work duration from a standard to guidance is problematic. So many things in Part 6 rely on these definitions. This creates further ambiguity and concern that longer</p>

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				duration zones may not see adequate traffic control. With no apparent positive to switching these to guidance, suggest leaving the work duration information as a standard.
6N.11	N/A	N/A	N/A	Page 599 Lines 16-27: Recommend removing this section, since work duration device requirements are discussed earlier in the chapter. Utility work in intersections is not a special case, and intersections are typically more dangerous because you are vulnerable from multiple approaches. Increased guidance for roadway users is typically needed for them to navigate through the intersection, since turning movements or mandatory movement lanes may be affected, especially in signalized intersections (closing turn lanes, posting turn restriction signs, manually controlling signal phasing or law enforcement control, etc). Additionally, intersection work is discussed in a later section.
6N.11	N/A	N/A	N/A	Page 600 Lines 40-42: Is there a reason why this is limited to just "five-lane roads"? Could it be "roads with a center turn lane"?
Figure 6N-1	N/A	N/A	N/A	The "MERGE HERE TAKE TURNS" sign should be black on white, since it is a regulatory message on a regulatory shape sign.
Figure 6P-53	N/A	N/A	N/A	Are lane control signs needed on legs where you can drive on either side of the island?