

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
1	Part 1	X			
2	Part 1	X			
3	1A.01		X		Don't concur with the term, "site roadways". It seems like regional language and "private roads open to public travel" is more easily understood.
4	1A.02	X			support change
5	1A.03	x			
6	1A.04			x	Standard statement 1- not sure what "conduct traffic control device activities" means. Agree with removal of metric units.
7	1A.05		X		There seem to be a number of outdated or incorrect references included in the proposed list. The metric guides can be removed if metric dimensions are removed from the manual. #14 should be removed as it's been disputed by the majority of state DOT's.
8	1A.06		x		need a new UVC
9	1B.01		X		prefer "private roads open to public travel" instead of "site roadways"
10	1B.02			X	Do not agree that all DOT policies, directives, specifications, standard drawings, etc. are part of MUTCD
11	1B.03		X		Standard statement should say, "most recent adopted edition"
	Table 1B-1			X	Compliance of devices introduced or modified by the next edition of the MUTCD should be through "the systematic upgrading of substandard traffic control devices (and installation of new required traffic control devices) and not subject to an arbitrary compliance date determined by the FHWA.
12	1B.03 - 1B.09		X		Figures 1B-1 and 1B-2 are labelled as 1A-1 and 1A-2 in supporting files posted in the Federal Register.
13	1B.06		X		The operators of a "site roadway" will not seek out permission from FHWA to experiment with a device. Do not concur with changing the experimentation reporting guidance statement to a standard statement.
14	1B.08			x	The request guidelines were better as a "guidance" rather than "standard". Recommend keeping them as "guidance".
15	1B.09	X			
16	1C.01	X			
17	1C.02				Comments to specific definitions are made below. Definitions that are not included, but that may be helpful include: Diverging Diamond Intersection, Interstate, Parking Lanes, Rotaries, Side Roadway, Traffic Circle.
				x	17. Keep "average day" definition. It is still used in the manual.
			X		32. Circular Intersection-the definition refers to roundabout, which is defined, traffic circles and rotaries, which are not.
				X	44. Crashworthy- barricades are traffic control devices (see Section 2B.76), but are listed in this definition as not being a TTC device.
				x	54. Diagnostic Team- Don't agree with the use of a "diagnostic team" to conduct a study that determines traffic control for the DOT.
		x			
				x	175- Private Road- keep as "private road open to public travel"
				X	189. Reconstruction-the term "major renovation" is subject to interpretation and can lead to inconsistent application.
		x			190- Rectangular Rapid-Flashing Beacon
			X		208. Serviceable- NDOT does not object to the definition, but notes that agencies, contractors, and others that are not replacing traffic control devices that are no longer serviceable are probably not going to be influenced by this definition.
				X	236. Site Roadways Open to Public Travel- site roadway is less understood than private roadway. Suggest keeping as is.
			X		265. Traffic Control Device-see comment to docket item 4, Section 1A.02. The definition of Traffic Control Device ends with the first sentence. The rest of the material, if warranted, belongs in Section 1A.02.
18	1C.03		x		should also include RRFB in the list.

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19	1D.01		X		Reference to Section 1A.03 is incorrect. Sign size exceptions are noted in each Chapter as applicable.
20	1D.02	X			
21	1D.04		X		23 CFR 1.23(b) does not apply to all roads open to public travel and should not be referenced in the MUTCD. States may, or may not have different rules with regard to advertising in local or county jurisdictions.
22	1D.05		X		There are many decision regarding traffic control devices, particularly those regulating highway operation, that fall under the statutory authority of elected boards and commissions. For that reason, proposed paragraphs 7, 8, and 9 should be deleted.
23	1D.06		x		Colors- What about allowances for state border signs or wayfinding signs? Digital printing technologies will allow for color gradients on these types of signs.
24	1D.07	X			
25	1D.08	x			
26	1D.09	X			
27	1D.10	X			
28	1D.11	X			
29	2A.01		X		Support Guidance recommending against signs for "rules of the road"; however, MUTCD includes a growing number of signs for that purpose and would further recommend that these signs not be included in the MUTCD.
30	2A.02	X			
31	2A.04		X		Concerns with the revision to the Standard that had allowed "minor changes to the proportion...of symbols." This is especially significant when there is a gap between publishing of the MUTCD Final Rule and the Standard Highway Signs and Markings Book where the symbols may be subtly different, but unmistakably similar. Also, prohibition against alternative sign legend should be Guidance rather than Standard to allow legends appropriate for specific conditions based on engineering judgment.
	2A.04		X		The phrase "and not visible to operators of motor vehicles" is too restrictive for the option to have Internet addresses, e-mail addresses, or telephone numbers, scanning graphic, bar codes or other graphics for the purpose of obtaining information displayed on the face of signs, supplemental plaques, sign panels, and changeable message signs that are intended for viewing only by pedestrians, bicyclists, occupants of parked vehicles? There are times when such information is useful to display on signs, particularly web addresses and phone numbers that can be captured at a glance (for phone numbers, using letters corresponding to the numbers).
32	2A.05	X			
33	2A.07	X			
34	2A.08		X		recommend different word for "diacritical". Shouldn't need a dictionary for these words. Keep "(slanted line or forward slash)" as a definition for solidus. It helps explain what it is.
35	2A.09	x			
36	2A.10	X			
37	2A.11	x			
38	2A.12		x		This section discusses the location of a sign on the left-hand side of a roadway. Sign placement on the right-hand side of the roadway is also important based on the number of through lanes in each direction. Signs should always be placed on the right hand side as most driving laws require drivers to use the right lane, therefore, signs should always be placed on the right-hand side with supplements on the left-hand side. The support statement contradicts this. The support statement that begins, "Primacy according type of sign...." should be written in plain language (find another word for "primacy").
39	2A.14		X		MUTCD should reflect NCUTCD 20B-RW-01 regarding signs placed more than 30' from the edge of the traveled way.
40	2A.15	X			
41	2A.17	X			

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41	2A.17			X	It seems that there is concern about the panel casting shadows upon the sign, but we are not sure why that's such a concern - it's impossible to prevent shadows from being cast on signs anyway due to other adjacent objects (trees, utility poles, etc.) The proposed Standard would have the de facto result of completely prohibiting solar-powered beacons, since they are rarely placed anywhere <u>but</u> over the sign, which in turn could significantly increase costs for such beacons. It also might preclude use of a beacon altogether in locations where hardwire power is impractical or prohibitively expensive. We recommend deleting the proposed Standard as being impractical.
42	2A.19		X		The definition of vanity signs in the Support statement on lines 9 - 14 on page 50 may not be enough to clearly convey what signs are meant by this. Vanity Signs are not traffic control devices and may not be appropriate for inclusion in the MUTCD.
43	2A.20	X			
44	2A.21		x		reference to Table 2A-5 is actually 2A-3 in the proposed tables.
45	2A.22	X			
46	Chapter 2B	X			
47	2B.01	X			
48	2B.02	X			
49	2B.03		x		Do not concur with the R10-11 sign series discussion as it should be guidance, not a standard. Also, the majority of the time, this sign will be behind right turners and therefore not effective.
50	2B.04	X			
51	2B.05	X			
52	2B.06		X		The roundabout discussion in the 2nd support paragraph isn't necessary in the MUTCD.
			x		Guidance B.- "Driver yielding behavior with regard to bicyclists and pedestrians" should be rewritten to "driver yielding behavior with regard to all modes of conflicting traffic including bicyclists and pedestrians".
			x		The thresholds that were deleted vehicular, bicycle, and pedestrian volumes should be retained as they help assist our decision making process.
53	2B.07	X			
54	2B.08		x		A.- should match up stop/ stop ahead or yield/ yield ahead- put them in the same order.
			x		Q. Installing a roundabout; and.... The 2nd paragraph in 2B.86 specifically states not including criteria in the MUTCD for the installation of a roundabout. This goes against that statement. Why not say, "consider alternative geometric/ intersection design"?
55	2B.09	X			
56	2B.10		x		Option A- figure numbers (Figures 2B-12 and 2B-15) are wrong.
			x		Option F- "or an approach to a roundabout" isn't needed given the standard statement below it.
			x		The last guidance statement should be an Option, not guidance. It would be better as a "may", not a "should"
57	2B.11	X			
58	2B.12	X			
59	2B.13		X		Clarify if only 1 of the options should be met or multiple options.
60	2B.14	X			
61	2B.15	X			
62	2B.16	X			
63	2B.17	X			
64	2B.18	X			
65	2B.19	x			
66	2B.20		X		Figure 2B-2 doesn't show a R1-6b or 6c sign.
66	2B.20	X			
66	2B.20	X			
66	2B.20	x			

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66	2B.20	X			
66	2B.20	X			
66	2B.20	X			
67	2B.21		X		The standard statement of, "The engineering study shall include an analysis of the current speed distribution of free flowing vehicles" should be retained and not deleted.
		x			agree with the continued inclusion of the 85th-percentile speed
			x		Guidance section- "When a speed limit within a speed zone is posted on freeways or expressways, it should be within 5 mph of the 85th-percentile speed of free-flowing traffic vehicles." The "freeways or expressways" section should be removed. It unnecessarily complicates the classification of roadway being discussed.
			x		support paragraph "in addition to the factors in Paragraph 2...." should not refer to a website, but rather be listed as a reference in the reference section.
68	2B.22	X			
69	2B.23	X			
70	2B.24	X			
70	2B.25	X			
71	2B.26	X			
71	2B.26	X			
71	2B.26	X			
71	2B.26	X			
72	2B.27	X			
72	2B.27	X			
73	2B.28	X			
73	2B.28	X			
73	2B.28	x			
73	2B.28	X			
73	2B.28	X			
73	2B.28	X			
73	2B.28	x			
73	2B.28			X	Use of "Do Not Drive On Shoulder" sign should be option not guidance. Even if drivers do occasionally drive on the shoulder, it should be at the agency's discretion to judge whether this is creating a significant operational or safety issue.
74	2B.29	x			
74	2B.29	X			
74	2B.29	X			
74	2B.29	X			
75	2B.30		X		the "ALL" message should remain.
75	2B.30	X			
75	2B.30	X			
75	2B.30	X			
75	2B.30		X		Change this to a "should" statement
76	2B.30	X			
77	2B.33	X			
78	2B.34	X			
78	2B.34	X			
79	2B.38		X		Recommend referring users back to new guidance in 2A.01 recommending against frequent use of "rules of road" signs. Agencies often get considerable public pressure to install these signs frequently, out of a misperception that slow drivers in the left hand lane is a significant safety issue (i.e. drivers "only" going 66 mph in the left hand lane on a 65 mph roadway). Also recommend that the "Slower Traffic Keep Right" sign be limited to locations where there is an issue with drivers driving below the speed limit in the left-hand lane, not drivers driving below "the normal speed of traffic".
80	2B.40		X		This should be a "may". Will a motorist perceive the difference in signs as a way to "emphasize the degree of curvature"?
80	2B.40	X			
81	2B.45	X			

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82	2B.46	x			
82	2B.46	X			
82	2B.46	X			
83		X			
84	2B.47		X		Paragraph 2 as worded would seem to imply that DNE signs shall be installed at the downstream end of ALL interchange exit ramps. While we agree that DNE signs shall be installed in most circumstances, there should be an option to allow DNE signs to be omitted where the interchange exit ramp empties onto a one-way street or a divided highway where there is little chance of a driver being able to enter the ramp wrong way. For example at a cloverleaf interchange where the cross street is a divided highway.
84	2B.47			X	Recommend that only red LEDs, not white LEDs, be allowed in the border of Do Not Enter signs.
85	2B.48	X			
85	2B.48			X	Recommend that only red LEDs, not white LEDs, be allowed in the border of Do Not Enter signs.
86	2B.49	x			
86	2B.49	X			
86	2B.49	X			
86	2B.49	X			
86	2B.49	X			
87	2B.50	X			
87	2B.50			X	The R6-4 Roundabout Directional Arrow sign (black chevrons on white background) should not be removed from the MUTCD. The One-Direction Large Arrow sign should be reserved for sharp curves as has been the case through numerous previous MUTCDs. For roundabouts, a white-background regulatory sign is essential since the intent is to legally prohibit drivers from traversing the roundabout clockwise. The addition of the roundabout directional arrow was just included in the last manual and is understood well.
87	2B.50			X	see previous comment
87	2B.50	X			
88	2B.51	X			
89	2B.52	X			
90				X	The R6-4 Roundabout Directional Arrow sign (black chevrons on white background) should not be removed from the MUTCD. The One-Direction Large Arrow sign should be reserved for sharp curves as has been the case through numerous previous MUTCDs. For roundabouts, a white-background regulatory sign is essential since the intent is to legally prohibit drivers from traversing the roundabout clockwise.
91	2B.51	X			
92	NA		X		NDOT agrees with AASHTO comment. There's no loss of relevant content with the removal of this Section. This Section merely informed readers of the 3 Roundabout Figures; and that there's more respective roundabout information in Section 2D.38 for Guide signs and in Part 3 for Pavement Markings. AASHTO recommends that the ROUNDABOUT CIRCULATION sign under the YIELD sign is optional in Figures 2B-21 2B-22, 2B-23.
93	2B.53	X			
94	2B.54	X			
94	2B.54	X			
94	2B.54	X			
94	2B.54	X			
94	2B.54	X			
94	2B.54	X			
95	2B.55		x		Use plain English- not "efficacy".
96	2B.56		X		Typo: There is no R8-8 sign shown in Table 2B-1 so it should be removed from the title of the Section.
97	2B.57	X			

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	2B.58		x		Since this is a traffic control manual, is this statement needed? "Pedestrians with low-vision capabilities might need additional features other than traffic control devices to communicate the prohibition of pedestrian crossing."
98	2B.59	x			
98	2B.59	X			
98	2B.59	X			
98	2B.59	X			
99	2B.60	X			
99	2B.60	X			
99	2B.60	X			
99	2B.60	X			
99	2B.60	X			
99	2B.60	X			
100	2B.61	X			
100	2B.61	X			
101	2B.62		x		This info is repeated in the standard statement below that states, it "shall not be installed on the same support".
101	2B.62	X			
101	2B.62		x		repeat of the Option statement from above.
102	2B.66	X			
102	2B.66	X			
102	2B.66	X			
102	2B.66	X			
102	2B.66	X			
102	2B.66	x			
102	2B.66		X		A question remains is whether drivers understand what is meant to be conveyed - that is, that the symbol applies to all trucks of that "type" regardless of the shape or the number of axles. Could truck drivers claim they did not understand that to be the case?
102	2B.66		X		This Guidance statement appears to need more context otherwise it may be open to some interpretation.
102	2B.66	X			
102	2B.66		X		We recommend that this be changed to a Guidance statement rather than a Standard. Identifying where and how far from the restricted site a certain type of truck may turn around, and get the signs made and installed at each restricted site may take a great deal of effort and some amount of time to get established, especially in a rural environment.
102	2B.66	x			
102	2B.66			X	If a R12-7aP, the Emergency Vehicle Weight Limit plaque, is placed as a supplemental to a R12-5 or R12-6 primary Weight Limit sign, each with multiple restrictions displayed, then it would be too much information on one sign assembly for a driver to process. The R12-7aP sign alone is shown in the figure allowing for up to 3 weight restrictions.
103	2B.67	X			
103	2B.67			X	NDOT agrees with AASHTO comment. AASHTO favors allowing agencies this option if deemed necessary.
104	2B.68		X		Why is the reference to Figure 2B-30 proposed to be deleted in the Guidance statement when Sign R14-1 is still shown in the Figure?
105	2B.72			x	We question the need for these sections because they are reminders of regulations or vary from state to state. These types of signs should be added to state supplements.
106	2B.71			x	This proposed sign, along with the "Move Over or Reduced Speed" sign described in Section 2B.72 are contrary to proposed Guidance recommending against signing for rules of the road.
107	2B.73			x	This proposed sign, along with the "Move Over or Reduced Speed" sign described in Section 2B.72 are contrary to proposed Guidance recommending against signing for rules of the road.

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108	2B.77	X			
108	2B.77		x		The dimension requirements stated in the standard statement do not match the dimensions or operations of our older swing style gates. The vertical to horizontal discussion doesn't match the guidance below where swing gates are described.
108	2B.77	X			
109	NA	X			
110	NA	X			
111	2C.01	X			
112	2C.02	X			
112	2C.02	X			
112	2C.02	X			
112	2C.02	X			
113	2C.03	X			
114	2C.04			x	Would change the location of a lot of signs that approach a stop sign. Suggest retaining the 2009 MUTCD language.
115	2C.05		X		Added ten plus traffic control treatments that might be used in advance or within curves. These TC signs/treatment are shown or addressed in other areas of the MUTCD. Plus listed below those are non-traffic control treatments and guidance for curves. These could all be removed as they are shown and addressed elsewhere. Chapt. 1 states "non-traffic control devices" would not be discussed. Also don't agree with "D. Daily traffic volumes on the roadway" as a consideration for a horizontal alignment sign. Wouldn't the need for a horizontal alignment sign be there regardless of traffic volumes?
116	2C.06			X	Recommend removal of this "Shall" statement: "The speed differential shall be the difference between the horizontal curve's advisory speed and the roadway's posted or statutory speed limit or 85th percentile speed, if available, whichever is higher, or the prevailing speed on the approach to the curve.". An agency may not always have the 85th percentile speed information. Also, motorists, especially those unfamiliar with the area, will not recognize what the 85th percentile speed might be, but they should always know what the posted speed limit is.
117	2C.07	X			
118	2C.08		X		Standard will not allow chevron LED to flash from one sign to the next. AASHTO recognizes that horizontal alignment crashes are a significant issue and recommends providing this flexibility to address particularly problematic locations.
119	2C.09			X	NDOT agrees with AASHTO comment. Disagree with deleting existing Section 2C.10 combination Supplemental Horizontal Alignment/Advisory Speed Signs. The preamble notes that there is considerable evidence that the sign is being used incorrectly. That would seem to be reason for better education and not to eliminate a sign that, when used appropriately, provides additional emphasis to changes in horizontal alignment. In South Dakota, for instance, this sign is placed immediately at the curve as intended. It seems there may need to be more emphasis put on the proper location to mount the sign. The replacement for this sign (W13-1aP) only allows it when there is a one-directional arrow. For curves that have chevrons rather than the arrow sign, the W13-1aP would not be applicable.
120	2C.10			X	We recommend against the proposed use of the Large Arrow sign within a roundabout and concurs with the NCUTCD recommendation to reserve the large arrow sign for use for changes in horizontal alignment along a roadway.
121	2C.11	X			
122	2C.12		X		NDOT agrees with AASHTO comment. Add a Standard on geometries represented on advisory exit, ramp speeds and limits their use to standard size signs. Appears to not allow oversize signs. Recommend this be changed to a Guidance statement. Standard should be clear that "RAMP" or "EXIT" signs should be used, not both, unless length of ramp warrants separate warning sign for the alignment different than the advisory exit speed.

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123	2C.13			X	NDOT agrees with AASHTO comment. Do not agree to requirement of yellow background color behind legend of YOUR SPEED, Guidance (should) would be acceptable recognizing the volume of expensive, non-compliant, assets that would need to be replaced. Also many of these driver feedback signs are sold to law enforcement agencies or local governing bodies who may not be aware of the MUTCD. It can be very difficult for transportation agencies to require compliant devices to replace non-compliant devices after the fact.
124	2C.14		X		Do not see the need to add "on a freeway, expressway, or a conventional road". If it is used to describe every condition, is it needed?
125	2C.16	X			
126	2C.18, 2C.19	X			
127	2C.24	X			
128	2C.25		X		NDOT agrees with AASHTO comment. Given the five-year compliance date, there needs to be an explicit threshold of when clearance "varies greatly" thus requiring multiple signs over each lane (recommend 6 inches). Also: the NPA needs to allow an option for post-mounted W12-2 signs to be used with a downward diagonal arrow or "left lane" plaque instead of W12-2A or 2B signs in situations where it is impractical to attach a sign directly to an overpass (e.g. where the overpass is a historic stone arch bridge and the bridge owner may not allow direct drilling into the stone).
129	2C.26	X			
130	2C.28	X			
131	2C.30	X			
132	2C.34	X			
133	2C.35	X			
134	2C.36	X			
134	2C.36	X			
135	2C.37	X			
136	2C.39	X			
137	2C.40	X			
138	2C.41	X			
139	2C.42	X			
139	2C.42	X			
140	2C.43	X			
141	2C.44	X			
142	2C.45		X		NDOT agrees with AASHTO comment. On page 124, Lines 15 & 16 - the new Guidance statement incorrectly states which roadway should be represented by the arrow. The arrow should represent the major roadway and the curved stem should represent the entering roadway. NPA refers to new Figure 2C-12, but is Figure 2C-14 according to supporting documents. There is no reference to the Figure in the Section text. This comment also applies to the signing shown in Figure 2C-14.
142	2C.45	X			
143	2C.46		X		Descriptions of arrows are incorrect in L50/P124 and L1/P125 and need to be fixed. NPA refers to new Figure 2C-12, but is Figure 2C-14 according to supporting documents. There is no reference to the Figure in the Section text. This comment also applies to Figure 2C-14.
144	2C.47	X			
144	2C.47	X			
144	2C.47		X		Don't like Figure title of "Examples Sequences for Lane Ends and Lane Merge Signs" and would propose "Examples of Lane Ends and Lane Merge Signing". Markings on all Sheets should match Part 3. On sheet 1, first W9-1 should be shown as optional. Sheet 3 needs note to indicate that it is for low speed urban environments. Sheet 4 and Sheet 5 should show same dimensions as Sheet 1 and Sheet 2 regarding placement distance of signs from beginning of taper. Sheet 5 shows a supplemental distance plaque on the advance sign but this option is not discussed in the text. Recommend it be deleted here or show another optional advance sign with the supplemental plaque.
	2C.47				Guidance- the lane ends signs should be posted on the right hand side also (as the primary sign).

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145	2C.48			X	This sign would work in "no fault" crash states, but in those who assign fault, who would have the right-of-way?
146	2C.49		X		Agree with AASHTO comment
147	2C.50	X			
147	2C.50		X		The NPA says that the option is for a 3rd line of text showing the distance, but the proposed Figure shows the sign as a 3 line message already. Not sure how the distance would be incorporated into a 3rd line. Might be best to handle with supplemental distance plaque.
148	2C.52	X			
149	2C.54	X			
149	2C.54	X			
150	2C.59	X			
150	2C.59	X			
151	2C.60	X			
152	2C.66	X			
153	2C.67	X			
154	2C.71	X			
155	2D.01		X		Figure 2D-1 reference in this section. The figure needs to have the signs with "Airport Exits" changes to "Airport EXITS" to be consistent with EXITS being capitalized throughout the manual.
156	2D.05		X		This contradicts Table 2D-2 (page 2). The table is broken down by less than 35 mph, 35-55 mph, and greater than 55 mph. 40 mph falls in between the first two columns with different requirements.
157	2D.07		X		should keep "(slanted line or forward slash)" for definition of "solidus"
158	2D.08	X			
159	2D.09	X			
160	2D.11		x		"complex graphics" in the guidance statement should be defined.
161	2D.12	X			
162	2D.16	X			
163	2D.17	X			
164	2D.29		X		This should be listed as an option since a guide sign could be too large for limited ROW.
165	2D.34	X			
166	2D.35	X			
167	2D.36		X		
168	2D.37			X	NDOT agrees with AASHTO comment
169	2D.39	X			
170	2D.40	X			
171	2D.41		x		Typo- "A system of guides" should be "A system of guide".
172	2D.45		X		NDOT agrees with AASHTO comment.
	2D.45				Memorial/ Dedication name discussion is a good addition.
173	2D.46	X			
174	2D.47	X			
175	2D.49		X		Exit and entrance ramps are off of the frontage roads and main lanes. This figure should reflect an example with a frontage road entrance/exit ramp configuration.
176	2D.51		X		NDOT agrees with AASHTO comment.
177	2D.52	X			
178	2D.53		x		The lane ends signing isn't consistent with the lane ends signing presented in Section 2C.
179	2D.54	X			
180	2D.55	X			
181	2D.56	X			good additions
182	2D.57	X			
183	2D.58	X			
184	2D.59	X			
185	2E	X			
186	2E.01		X		NDOT agrees with AASHTO comment.
187	2E.06	X			

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
188	2E.07	X			
189	2E.08	X			
190	2E.12	x			
191	2E.14	X			
192	2E.15	X			
193	2E.16	X			
194	2E.17	X			
195	2E.18			X	This can make the sign too large and does make arrow placement consistent with overhead guide signs.
196	2E.20	X			
197	2E.21	X			
198	2E.22	x			
199	2E.23		X		Figure 2D-13, 2/3 - recommend that object markers under exit guide signs either be marked as optional or be removed from figure. It is unclear why these would be shown with the exit guide signs and not also with the route marker assemblies.
200	2E.24	X			
201	2E.25	X			
202	2E.26		X		Need to show E5-1c sign on Figure 2E-15.
203	2E.27	X			
204	2E.28		X		Page 219, Line 9: "Where a mainline lane is dropped immediately..." replace the word "dropped" with "terminated" because a dropped lane is a lane that ends at an exit ramp, whereas this lane is merging with the mainline traffic. Also, Figure 2E-23 uses the term "mainline termination".
205	2E.29	X			
206	2E.31	X			
207	2E.32	X			
208	2E.33	X			
209	2E.34	X			
210	2E.35	X			
211	2E.36	X			
212	2E.37	X			
213	2E.38	X			
214	2E.40			X	NDOT agrees with AASHTO comment.
215	2E.41		X		NDOT agrees with AASHTO comment.
216	2E.42		X		This should be an option in 2E.40.
217	2E.45	X			
218	2E.48	X			
219	2E.49	X			
220	2E.50		X		Don't agree with the new guidance statement. Are supplemental guide signs allowed or not? Shouldn't make a general statement on their "need". It doesn't seem appropriate.
					How are 4 supplemental destinations figured?
					Pictographs- why do park and ride facilities get special treatment for the use of pictographs?
221	2E.51		X		Figure 2E-58: Guide signs for Exit 146 show a mix of street names and city names which violates Section 2E.15
222	2E.52		X		Remove EAST from Directional Sign with EXIT 147A - Main St.
223	2E.53		X		Standard- Figure 2E-61 shows "WEIGH STATION NEXT RIGHT", but B. states, "Advance Weigh Station Distance (D8-1) sign, with the distance 1/2 MILE displayed". Which one is correct?
					Guidance on Weigh Station advance sign- should show this info in Figure 2E-61
224	2E.54	X			
225	2E.55	X			
226	2E.56	X			
227	2E.57		X		NDOT agrees with AASHTO comment.
255	2G.25	X			
256	2G.26	X			
257	2H.01	X			
258	2H.02	X			

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
259	2H.03	X			
260	2H.04	X			
261	2H.05	X			
262	2H.06	X			
263	2H.07			X	State Welcome Signs are not traffic control devices and should not be regulated through the MUTCD. Specific concerns with the proposed language in the NPA include the requirement to be post mounted as many state lines are rivers where there is no option for post-mounted signs. Also the Option statement as to what may be included implies what cannot be included on these signs. Such limitations do not anticipate all of the options that may be considered for such signing that would not compromise highway safety or operation. Nebraska has 5 border signs that are currently overhead as they are on a bridge. Finding room for these signs elsewhere would be difficult.
264	2H.08			X	This goes against previous guidance by FHWA, specifically a Federal Aid Policy Guide Dated Dec. 19, 1997, Transmittal 20 which in Appendix C under Sign Design, it states "An Interstate shield may be located on a green informational sign of a few words. For example: Future Interstate Corridor or Future I-00 Corridor. The Interstate shield may not include the word Interstate."
265	2H.09			X	Too much information on the sign which violates number of lines of text on a sign. Remove the federal and state dollars information from the sign design. Other than the associated figure, the NPA provides no Standard, Guidance, or Option relative to the design of this sign. Also, at the end of the day, this is not a traffic control device and need not be addressed in the MUTCD.
266	2H.10	X			
267	2H.11	X			
268	2H.12			x	Standard- "shall display a decimal point". I disagree with this addition. Our enhanced reference location signs are easily understood and do not include a decimal.
269	2H.07	X			
270	2H.13	X			
271	2H.14		X		The proposed language does not match the provisions of FHWA policy memorandum entitled, "MUTCD - Signing for Designated Alternative Fuels Corridors," dated December 21, 2016. Change standard to option for signing such facilities at interchanges.
				x	Also, why add a section with support that states, "The Alternative Fuels Corridor sign provides limited information to travelers and therefore are used sparingly." Seems like this section isn't needed.
				x	Why include placement information in the standard statement, when it's not specifically included in any other section?
272	2I.02		x		The "emergency medical services" sign should have a requirement of 24/7 operation.
273	2I.03	X			
274	2I.04	X			
275	2I.08	X			
276	2I.09	X			
277	2I.10	X			
278	2I.11	X			
279	2I.12	X			
280	2I.13	X			
281	2I.14	X			
282	2I.15		X		NDOT agrees with AASHTO comment.
283	2J.01	X			
284	2J.01	X			
285	2J.02	x			
			X		Page 305 Line 28 and Line 37. Recommend..."the sign may be covered or panels and legend removed,"
286	2J.03	X			
287	2J.06	X			
288	2J.07			X	does a sign need a distance when less than 1/4 mile? You should be able to see it at this point.

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289	2J.09	X			
290	2J.11	X			
291	2J.12	X			
292	2K.01	X			
293	2k.02		X		NDOT agrees with AASHTO comment.
294	2K.04	X			
295	2L.01		x		all DMS signs have the manufacturer name on the front of them. They do not interfere with the intent of the sign.
296	2L.02		X		NDOT agrees with AASHTO comment.
	2L.01			X	NDOT agrees with AASHTO comment.
	2L.02			X	Page 318 (Lines 1-2): It does not seem to be reasonable to not allow vehicle and license plate numbers to be displayed in an AMBER alert message on a CMS. CMS is where the traveling public can conveniently access such info and provide timely tips to help locate the vehicle.
				x	"For example, messages regarding school bus-stop safety should not be displayed on freeways where school bus stops are not found". I disagree as the drivers of freeways also drive on roadways where school bus stops are found
297	2L.03	X			
298	2L.,04			X	Page 320 (Lines 12-14): states should have the option to allow beacons on the CMS for critical messages. Absolutely no reason or safety issue with bringing attention to critical messages you want to enhance such as crashes ahead.
299	2L.05	X			
300	2L.06		X		this section seems like common sense and provides really no direction on what "frequency" is. Leave it up to states depending on the situation.
301	2L.07	X			
302	2L.08			X	This should not prevent states from pushing safety campaigns at other parts of the year if there are specific emphasis areas they are trying to address.
				x	Standard- find new word for "primacy".
303	2L.09		X		"Section 6F.60" should read "Section 6L.05."
304	2M.02	X			
305	2M.04	X			
306	2M.06	X			
307	2M.07	X			
308	2M.08	X			
309	2M.09	X			
310	2M.10		X		Memorial or Dedication signs, along with referenced "vanity signs" are not traffic control devices and need not be discussed in the MUTCD.
311	2N	X			
312	2N.02	X			
313	2N.03	X			
314	2N.04	X			
315	2N.05	X			
316	Part3	x			NDOT agrees with the AASHTO comment. AASHTO fully concurs with the reorganization of Part 3 to improve the continuity and flow of information regarding the application of markings in the MUTCD, and is generally consistent with 2013 NCUTCD Markings Technical Committee recommendations, that were not submitted to NCUTCD Council for approval. AASHTO generally concurs with relocation of various paragraphs and sections, dividing long sections into several sections each having a clearly understandable title and function, and creating a new Chapter 3C Crosswalks. AASHTO's detailed recommendations on Part 3 follow.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
317	3A.01		x		NDOT supports the proposed changes in principle but notes that lower volume roads are typically open to travel without all final markings, depending on the road type, and/or if surface treatment has just been completed. Temporary markers and/or markings may be used when the surface will not support the permanent markings and opening the road to limited travel can accelerate the aggregate "fully wearing-in" and the surface becoming less porous so it can support final markings.
318	3A.02	x			NDOT concurs with changing existing Paragraph 2 from Support to Option. The use of clumps or droplets of material is appropriate as an Option. Concur with relocating existing Paragraph 5 to Section 3G.04 (existing Section 3F.04) because it describes delineator placement.
319	3A.03		x		NDOT concurs with the revisions and to clarify use of black markings as an Option to enhance the contrast when needed. NDOT will continue to work with FHWA, to assist with defining research to help establish a Standard for contrast and when contrast "Should" be used.
320	3A.04			x	6" markings should be held to freeway and expressway applications. 2-lane applications should remain at 4-6" width.
321	3B.01	x			Agree with AASHTO comment. AASHTO concurs with revising Paragraph 6 to specify that reversible lanes and two-way left turn lanes are exceptions to the requirement for two normal solid yellow lines for undivided roadways with four or more lanes.
322	3B.02	x			Agree with AASHTO comment. AASHTO concurs with the wording in paragraphs 9 through 13 of existing Section 3B.01 to establish Section 3B.01.
323	3B.03		x		Agree with AASHTO comment. AASHTO concurs with the revisions with the interpretation that the establishment of No Passing Zones applies to new and reconstructed road segments and does not apply to existing segments that have been previously established.
324	3B.04-3J.03	x			Agree with AASHTO comment. AASHTO concurs with the proposed separation of content.
325	3B.05		x		Two way left turn lane markings are extended to several minor intersections. Has this caused issues? Some intersections/ driveways are spaced close enough together that there isn't sufficient room to stop one and start another. This change will offset the efficiency of a 3 or 5 lane section.
326	3B.06	x			Agree with AASHTO comment. AASHTO concurs with the proposed changes from Option to Guidance and the addition of Option of Support statements.
			x		Was it intended to provide examples? We are not sure what a "curved transition" means.
327	3B.07	x			Agree with AASHTO comment. AASHTO concurs with the changes and revisions and finds they include revisions consistent with the recommendations of NCUTCD.
328	3B.08		x		Agree with AASHTO comment. AASHTO concurs with changing Option to Support, the proposed revisions, and the addition of new Standards with one editorial correction needed to Section 3B.08 in line 38 on page 308 of 697 of the clean version, correct "entrance and entrance" to "entrance and exit".
329	3B.09		x		Guidance- Regardless of the width of the normal line used on the roadway, edge lines on two-lane roadways should be at least 6 inches wide. This guidance statement does not match the standard in 3A.04. Why is a 6" edge line needed under 40 mph?
330	3B.11		X		New standard statement of "Extensions of center lines through intersections shall be dotted lines." Nebraska has dashed/ solid center lines through minor road intersections throughout the state. Making this a shall will affect all of our 2-lane highways. We recommend this statement be deleted.
331	3B.12		X		There are inconsistencies in the lane reduction markings/signing shown in Figure 3B-14 and those shown in Figure 2C-13. Inconsistencies need to be addressed. Prefer if 3B.12 would allow option (as shown in Figure 2C-13) of extending broken line (or dotted line extension) though 3/4 d up to the beginning of the lane taper.
332	3B.13	x			Agree with AASHTO comment. AASHTO concurs with adding the Option paragraph.

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	3B.14				Are raised pavement markers to follow the width standards in 3A.04?
333	3B.17		x		Agree with AASHTO comment. AASHTO concurs with the Standard for permanent markings, However, a confirmation of conformance, other solution or an exception is needed for Flexible Temporary Reflective Markers used on Surface Treatment Paving Operations to simulate solid and broken lines until the surface can support the installation of temporary or permanent markings.
			x		non-reflective raised pavement markers shall not be used alone. What if the section was sufficient lit with overhead lighting per Section 3A.01.
			x		Part 6 stopped using the "N" spacings, can they be changed in this section also?
334	deleted	x			NDOT agrees with AASHTO comment. AASHTO concurs with the deletion of 3B.15 Transverse Markings, as they are already defined in Part 1 and the Section does not provide information related to the application or operation of traffic control devices.
335	3B.18	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the changing Paragraph 2 from Standard to Guidance to allow engineering judgment to determine if signs should be provided based on site conditions. and concurs with changing Paragraph 6 from Support to Guidance because yellow and white curb markings used frequently for curb delineation and visibility of parking regulations should be established through the installation of standard signs and the provision is more appropriate as a recommendation
336	3B.19		x		NDOT agrees with the AASHTO comment. AASHTO concurs with the change from Option to Standard which clarifies ambiguity in the previous Option statement. The referenced Figure needs to be checked for needed corrections. The proposed text retains the guidance that yield (stop) lines should not be used in advance of crosswalks that cross an approach or departure from a circular intersection. This guidance is unwarranted and should be removed. The use of a yield (stop) line can help manage the multiple threat conflict experienced by pedestrians at a roundabout crosswalk that is controlled only by signs and markings (i.e., passive devices). Delete the following paragraph: Guidance: Yield (stop) lines and Yield Here To (Stop Here For) Pedestrians signs should not be used in advance of crosswalks that cross an approach to or departure from a circular intersection
337	3B.20	x			NDOT agrees with AASHTO comment. AASHTO concurs with the Option paragraph allowing pavement words, symbols, and arrows to be reduced in size no less than 1/4 size, but in relative proportion to the associated full-size word, symbol, or arrow on roadways where the operating speed is less than 25 mph. AASHTO concurs with deletion of Standard Paragraph 3.
338	3B.21	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the proposed changes in new 3B.21.
339	3B-22		x		NDOT agrees with the AASHTO comment. AASHTO concurs with changes subject to editorial corrections.
n/a	3B.23			x	NDOT agrees with AASHTO comment. FHWA proposes to delete the exception for locations "where engineering judgment determines that physical conditions or other markings (such as a dotted extension of the lane line through the taper into the turn bay) clearly discourages unintentional use of a turn bay by through vehicles." The NPA did not list this as one of the 647 "significant" changes, but this change will have significant cost implications for those agencies who currently have a common practice (particularly in rural areas) of omitting turn arrows in turn lanes that lead into low-volume streets or crossovers, as allowed by the current MUTCD. There is little evidence that the lack of arrows leads drivers to confuse the turn lane for a thru lane (particularly for left turn lanes cut into the median of divided highways), as long as a dotted lane is present through the taper area and as long as the turn lane is not unusually long. AASHTO recommends keeping this language.

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340	3B.25		x		NDOT agrees with the AASHTO comment. AASHTO supports the use of the terms, chevron and diagonal markings, and generally concurs with the revisions. AASHTO does not concur with the blanket Guidance statement "Chevron markings should be used" and recommends that this be Option ("may"). This Guidance will result in significant unfunded operational and maintenance costs for highway agencies. Markings within the neutral area of exit ramp and entrance ramp gores needs to remain as an engineering judgment determination. Figures 3B-8, 3B-9 and 3B-10 state "recommended" on the Figures. When the dotted-line extensions on the approach to an exit ramp are provided, the chevrons within the neutral area, are generally not needed for Machine Vision. The application of engineering judgment will address the need based upon experience, especially for some left side exits and some right exit neutral areas. It is understood that other areas of evaluation, could include chevrons immediately before a crash attenuator, in wide paved areas where the space between the edge line and ramp edge line exceeds approximately 9 feet, those areas with a grade greater than 6 %, the areas with grade differentials within the open space and other such conditions which may appear to a driver, or camera system, that the open area is an additional lane for vehicles. The version of the NCUTCD Council approved item on 01-10-2020 (NCUTCD 19B-MRK-02) retained the Chevron Markings as Optional. States have amplified that adding Chevrons in all neutral areas is not financially feasible. States request that the determination of Chevrons remains as engineering judgment.
341	3B.27	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the changes. Local Land Development Codes are responsible for regulating development standards for private and public parking lot spaces
342	Deleted Text	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the deletion of Section 3B.21. States may place Speed Measurement Markings in their Standards and/or policies if they are continuing to use.
343	3B.28	x			NDOT agrees with the AASHTO comment. AASHTO fully supports changing the second sentence in Paragraph 3 from Standard to Guidance regarding longitudinal spacing between speed reduction markings, to allow engineering judgment to determine the longitudinal pattern of the markings based on the site conditions.
344	3B.29	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the Option paragraph and new Standard.
345	3B.31 and Figure 3B-29		x		"Standard- Flush median islands..." Median type is not a traffic control device. This isn't a design manual and should be removed from the text. Figure 3B-29 doesn't exist.
346	3C.01		x		NDOT agrees with AASHTO comment. AASHTO generally concurs with the changes and recommends rewriting the first Standard statement in 3C.01 line 4, in order to avoid misinterpretations: "Where crosswalks are approved at non-intersection locations, crosswalk markings shall be provided in order to establish that an approved crosswalk exists at that location."
347	3C.02		x		NDOT agrees with the AASHTO comment. AASHTO supports portions of the revisions, but recommends that the additional work is needed on this section and recommends that FHWA continue to work with stakeholders such as AASHTO and the NCUTCD to consider improved guidance for subsequent revision: 1.) language to improve and clarify the appropriate "criteria" in the Guidance statement, 2.) Revision or deletion of first sentence (Page 326 line 32 clean version): "Crosswalk markings should not be used indiscriminately". This statement may create a judgement that crosswalks are overused. The Guidance (lines 32-34) that an engineering study should be used when considering crosswalks at uncontrolled locations is sufficient. 3.) For emphasis, the list of criteria (clean version) Pages 326-327 should include in the next revision: "The density and proximity of pedestrian and bicycle traffic generators".
348	3C.03	x			

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349	3C.04 and Figure 3C-1		x		NDOT agrees with AASHTO comment. AASHTO generally concurs with comments: Figure C-1 change "Perpendicular" to "Ladder" or add "(Ladder)" and show 6' dimension as per NCUTCD approval 11A-MKG-1. The first Option seems to suggest that an engineering study is needed to support the installation of any crosswalk. This should be clarified that it applies to uncontrolled crosswalks.
350	3C.05 and Figure 3C-2	x			
351	3C.06 3C.07 3C.08		X		The text refers to these as "longitudinal bar pair" and Figure 3C-1 refers to it as "double-paired". Should these match?
352	3C.10		x		NDOT agrees with the AASHTO comment. AASHTO generally concurs, except the success of local application of diagonal crosswalks for exclusive pedestrian movements, does not reflect the need to extend the markings across the full width of pavement for low speed urban environments. This needs to be considered in the final editorial revisions.
353	3C.11 and Figure 3C-3		x		Guidance refers to "pedestrian desire lines". What does this mean? Support refers to Figure 3B-29- this figure doesn't exist.
354	Chapter 3D	x			NDOT agrees with the AASHTO comment. AASHTO concurs with the recommendations with recommendations to make revisions noted in our comments on NPA 356, 357 and 358. To the extent that these improvements in standards, guidance and options can be considered for Roundabouts, AASHTO supports implementing the improved guidance. AASHTO notes that not all circular intersections are not roundabouts and that an option should be included to allow crosswalks to the center island for some non-roundabout circular intersections.
355	3D.01		X		NDOT agrees with the AASHTO comment. • The deletion of "or to meter traffic" (Page 374; line 23) is not recommended. Metering signals are in use at several roundabouts in the United States and are a recommended treatment for managing peak periods without the need for adding lanes. • Figure 3D-2 shows fishhook-shaped through-left markings. These should be replaced with standard elongated left-through arrows. • For Figures 3D-3, 3D-4, 3D-5, 3D-6, 3D-7, and 3D-8, yield lines should be added to all multilane entries if the proposed standard statement in 3D.04 goes into effect or if it is changed to a guidance statement. For Figure 3D-2, the option asterisk needs to be removed from the multilane south leg. • Update Figure Titles to use term "roundabout" instead of "circular intersection" since all of the examples are roundabouts
356	3D.02		x		NDOT agrees with the AASHTO comment. AASHTO concurs in part. Minor correction of the Option Statement from Lines 12 thru 15 corrected to reflect practices that have shown to be clearer for the drivers: "If broken lane line markings are used in circulatory roadways of multi-lane roundabouts, the spacing of the broken lane line may be altered to reduce the gap between 10-ft lane lines (down to a 10-ft space between lines) and 6 – 9 foot lane lines (down to a 3' space between lines). To complete the clarification of best practices, adding to 3D.03 an Option Statement: "Wide dotted line may be 18 to 24 inches wide and 2-3' line with 2' gap" as this provides the entering driver a "limit line" to wait for the gap
357	3D.04			x	NDOT agrees with the AASHTO comment. AASHTO concurs with anticipated recommendations to be submitted by the NCUTCD that were Approved by Markings Technical Committee on 2/23/2021 which are based upon best practices on State and Local projects yielding better driver guidance and understanding. Using the Marked-up Version pages 375-376: The 3D.04 new Standard Statement WOULD BE REMOVED Lines 41 – 44. The 3D.04 new Option Statement Lines 3 – 5 WOULD BE REMOVED. In 3D.04 Reinstate the existing Option Statement (in strike thru red from 2009 Manual language) Lines 6 – 8. page 376. 3D.05 consistent with the language Approved by MTC on 2/18/21. The NCUTCD Roundabout Task Force will work with FHWA.

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358	3D.06		x		NDOT agrees with the AASHTO comment. AASHTO notes that roundabout best practices were Approved by NCUTCD MTC on 2/18/2021 and supports this anticipated NCUTCD recommendation. In the 2nd paragraph of 3D.06, the 1st Guidance Statement SHOULD BE REMOVED Lines 23 - 26 page 376 of marked-up text. In Line 43 of the NPA (page 376) the proposed language would REMOVE (with an oval). This will require minor changes to Figures. The NCUTCD Roundabout Task Force is prepared to work with FHWA to help develop and implement best practices.
359	Chapter 3E	x			
360	3E.02	x			
361	3E.03	x			
362	3E.04 and Figures 3E-5 and 3E-6	x			
363	3F.02	x			
364	3G.03	x			
365	3H.01	x			
366	3H.02		x		
367	3H.03		x		NDOT agrees with the AASHTO comment. AASHTO recognizes the concerns that have been expressed and recommends evaluations of driver distraction, lack of driver recognition that the area of the "art" is an actual crosswalk and include, are pedestrians focusing on what is placed in the crosswalk rather than observing traffic turning right and left during concurrent vehicle phases (as well as are pedestrians making eye contact with the drivers).
368	3H.04	x			
369	3H.05		x		NDOT agrees with the AASHTO comment. AASHTO generally concurs with the new Section, but requests caution and evaluation of the "Option" to use painting or coloring Exit Gore areas in "all-white" as it is another variable for Machine Vision to recognize, as opposed to chevrons in gore areas with the wide longitudinal lines to define it as a "Gore Area". If "all-white" is to remain as an "Option", there may need to be a discernable gap between the longitudinal wide lines and the white pavement area.
370	3H.06	x			
371	3H.07	x			
372	3H.08	x			
373	3I.01	x			
374	3I.02	x			
375	3J	x			
376	3J.02	x			
377	3J.03	x			
378	3J.04	x			
379	3J.05	x			
380	3J.07	x			
381		x			
382			X		NDOT agrees with AASHTO comment. AASHTO concurs with the reorganization of Part 4 as the proposed reorganization creates a more logical flow of information. However, in some sections of Part 4 (mostly Chapters 4E and 4F) there are multiple instances of "shall be permitted" and "shall not be required" within Standards which are both essentially saying "may" which doesn't seem consistent with 1C.01. In some instances, they seem to suggest an option rather than a standard.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
383	4F.08, 4F.15, 4F.02, 4F.09, 4F.16		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the change to allow the optional use of flashing yellow area signal indication on three-section signal faces as this allows agencies to convert existing three-section protected only turning movements to FYA and implement variable turning phasing.</p> <p>However, the proposed addition in 4F.02, 4F.09 and 4F.16 for the option of displaying both the FYA and steady yellow arrow in the same section for five section shared left/right signal faces does not seem to reflect the official interpretation 4(09)15(l), which indicates that the use of FYA and steady green arrow in the same signal section is appropriate. Are we now allowed to have FYA and steady green arrow in the same signal section?</p>
384	4A.05		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the addition of Section 4A.05 as this section provides definitions of the proposed bicycle traffic signal indications for bicyclist.</p> <p>However, some states allow bicyclists to treat a signal like a stop sign where bicyclist can proceed through a red indication after stopping if traffic is clear so the proposed meaning of the red bicycle signal indications won't apply. This is another indication that the UVC has not been a valuable tool to assure that state "rules of the road" are consistent with regard to traffic control devices and this continues to be an issue for uniformity.</p>
385	4A.08		X		<p>NDOT concurs with the change of P5 from Standard to Guidance as this change provides agencies flexibility, based on engineering judgement, to achieve a balance in visibility for both traffic signal signs and traffic signal faces.</p> <p>However, the terminology change (previously said refuge islands) seems inconsistent. Elsewhere, MUTCD still refers to pedestrian refuge islands.</p>
	4A.08		x		We don't see the need to change "traffic control signal" to "highway traffic signal". Where is the confusion that requires the change? This change isn't consistent throughout the manual either.
	4A.10		x		"agency" is crossed out of the guidance statement, but should remain.
386	4B.02	x			
	4B.04			x	Do not agree with this language change. Traffic signals only assign right of way, they don't force drivers to stop. The language should remain as previously written.
387	(Deleted)	X			NDOT agrees with AASHTO comment. AASHTO concurs with deleting Section 4B.05 as the information does not relate to traffic control uniformity and instead discusses roadway design philosophy.
388	4B.05	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the clarification of Option Item M in Section 4B.05 that to reduce vehicular conflicts a roundabout is an alternative to a traffic control signal.</p> <p>Additionally, AASHTO concurs with the Support statement referencing Part 8 as it regards <u>the installations of roundabouts in proximity to grade crossings</u>.</p>
389	4C.01, 4B.05		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the proposed change; however, 1. Guidance for major-street (p. 412,L. 38-47) is now different for minor street (p. 413, l. 1-3). Now: If minor with L, T+R but L vol is negligible then minor volume=highest lane volume. If major with L, T+R, but L vol is negligible, then major volume=approach volume. 2009: If L, T+R but L vol is negligible, then volume=approach volume. >>may lead to more signals. 2. New Guidance: "For signal warrant analysis, a location with a wide median may be analyzed as one intersection or as two intersections based on engineering judgment." No guidance as to when to analyze as one intersection and when to analyze as two intersections.</p>

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
390	Sections 4C.02 - 4C.10	X			NDOT agrees with AASHTO comment. AASHTO concurs with the changes to the sections listed that describes the application of a the signal warrant criterion for installing a new traffic control signal form Standard to Guidance as this change provides agencies flexibility in performing signal warrant analyses.
391	4C.02, 4C.03, 4C.04, 4C.08	X			
392	4C.05		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the proposed change; however, Section 4C.05 p. 417 I. 14-15 - "Where there is a divided street having a median of sufficient width for pedestrians to wait, the criteria in Items A and B of Paragraph 2 may be applied separately to each direction of vehicular traffic." The new guidance could result in fewer signalized ped crossings on divided arterials (if the analyst chooses to follow the new guidance). Typically, guidance for this option is less restrictive.</p> <p>In addition, AASHTO recommends adding the following text, "In population centers where operating speeds are 30mph or higher and traffic volume create conditions where pedestrians or bicyclists would experience excessive delay do not use pedestrian or bicyclist volume warrants to determine need for a traffic control signal. Consider the density and proximity of pedestrian and bicycle traffic generators such as schools, transit stops, rail, parks, and commercial development."</p> <p>Change the text to read "Outside of population centers, where the operating speeds are 25mph or less, the need for a traffic control signal at an intersection or midblock crossing should be considered if an engineering study finds that one of the following criteria is met:"</p>
393	4C.08		X		With this change, there is a potential for misuse or misinterpretation of the "crash history". A crash could include multiple severe injuries or fatalities, but by this warrant, it should only count as one crash towards wth warrant. Recommend a support statement that states a single crash may include more than one injury, but only counts as one crash.
394	4D.01		x		The new standard statement should include "all modes of traffic present". There is no need to address peds if no peds exist.
		x			support the change from standard to guidance for the midblock crosswalks.
395	4D.02		X		NDOT agrees with AASHTO comment. AASHTO concurs with the proposed change; however, page 423, I. 37-40 says using accessible ped signals will be based on engineering study (2009: required only engr. judgment). Recommend 2009 language be retained.
396	4D.03		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the addition of a new section added titled, "Section 4D.03 Provisions for Bicyclists" with an Option to allow bicycle signal faces to be used where it is desired to provide separate signal indications to control bicycle movements at a traffic control signal as this change is in line with increasing bicycle activity and infrastructure throughout the country.</p> <p>However, some states allow bicyclists to treat a signal like a stop sign where bicyclist can proceed through a red indication after stopping if traffic is clear so the proposed meaning of the red bicycle signal indications won't apply.</p>

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397	4D.05		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the changes to the listed paragraphs within Section 4D.05 from Standard to Guidance as this provides agencies flexibility in locating signal faces.</p> <p>AASHTO concurs with the new Standard prohibiting the use of ancillary legends on signal face backplates as adding a legend reduces contrast and could reduce driver comprehension.</p> <p>Nonetheless, Page 425 line 30-31, claiming that it is the "most important" is more descriptive than prescriptive. Guidance should be more of the form, "The visibility of signal indications to approaching traffic should be the highest priority for signal face placement, aiming, and adjustment."</p> <p>As written, this guidance statement sounds more like a support statement and we <u>recommend rewording</u>.</p>
398	4D.06	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the new Guidance paragraph in Section 4D.06 recommending locating separate turn signal faces at least 3 feet, horizontally and vertically, from the nearest traffic signal face for a different movement on the same approach as this change minimizes driver confusion and enhances signal visibility.</p> <p>AASHTO concurs with the change of P7 from Standard to Guidance as this provides agencies flexibility in locating signal faces.</p> <p>AASHTO concurs with the revision of Standard P10 for supplemental post-mounted signal faces as it clarifies the intent is to prohibit the display of left-turn arrows to the right of adjacent through and right-turn lanes, and not to prohibit such a display if an opportunity is available to post-mount a signal face that is to the immediate right of the left-turn lane.</p>
399	4D.07	X			<p>AASHTO concurs with the deletion of Item A.3 of P1 of Section 4D.07 as it is redundant with information contained in Section 4D.06.</p> <p>AASHTO concurs with the change of existing Item B of P1 from Standard to Guidance as it provides agencies flexibility when deciding where to install supplemental near-side signal faces.</p>
400	4D.08	X			<p>AASHTO concurs with the change in Section 4D.08 from Standard to Guidance related to the maximum height for vehicular signal faces as increasing maximum heights does not impact the safety of road and sidewalk users and therefore agencies should have the flexibility to do so where they deem it advisable to meet site conditions.</p>
401	4D.09	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the Standard to Guidance change in Section 4D.09 as it provides agencies flexibility when designing signal face placement.</p>
402	4D.10	X			<p>NDOT concurs with the deletion of Item C in P4 of Section 4D.10 as Item D supersedes Item C and it provides agencies with more flexibility in temporary traffic control operations. AASHTO also agrees with the Option permitting temporary traffic signals to operate in semi-actuated mode instead of flashing mode.</p>
403	4E.01			x	<p>The new standard statement allowing a dual-arrow signal section capable of alternating between a green arrow and a yellow arrow does not account for color blind drivers. We do not concur with this change.</p>
404	4E.02			x	<p>Don't agree with the addition of the different sizes of signal indications used in the same signal face.</p>
	4E.04			x	<p>Do not agree with the addition to the standard statement. The flashing yellow arrow and solid yellow arrow should remain as separate arrows.</p>

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
405	4F.01			x	do not concur with the addition of E in the standard statement. The Flashing red should only be used to show that the signal is in flash, not as part of the normal operation or the two will end up getting blended together.
	4F.01		x		Agree with the addition in H.
406	4F.02			x	Do not concur with the addition of the Flashing red arrow for a combined left-turn/ through lane.
407	4F.04, 4F.06, 4F.08, 4F.11, 4F.13, 4F.15			x	Do not concur with the addition to 4F.04 E. This should be removed and not allowed.
408	4F.06, 4F.13	X			NDOT agrees with AASHTO comment. AASHTO concurs with the deletion of the reference in P3 of existing Section 4D.19 as this removes the undefined term "signal instruction sign" and to provide additional flexibility for the use of traffic signal signs for separate left-turn signal faces operating in a protected only mode. Additionally, AASHTO concurs with a similar revision to P3 of existing Section 4D.23 to delete the reference to signal instruction sign and requirement for the RIGHT ON GREEN ARROW ONLY (R10-5a) sign for the same reasons listed above.
409	4F.08		x		Should keep Standard H2. as previously written. Request removal of "considered to be a four-section signal face..." We prefer a true four section head.
410	4F.09		X		AASHTO concurs with the deletion of P6 in Section 4F.09 as this will allow, when needed, a yellow change interval for the right-turn movement when the status of the right-turn operation is changing from permissive to protected within any given signal sequence. However, it is not clear whether FYA can be in the same section as a steady green arrow in a five section signal head as indicated in official interpretation 4(09)-15(I). The option of having FYA and steady yellow in the same signal section reflected in Figure 4F-13 for the shared signal face with protected/permitted right turn is not included. Page 448, line 2 through 8.
	4F.11			x	Do not like the change in Standard F. The change should happen in the signal head display.
411	4F.15			x	Do not agree with change to Standard I2. We prefer a traditional 4 section head. Also, do not agree with the "considered to be a four-section signal face...." statement. We prefer the traditional r-section head.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
412	4F.16		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the expansion in information regarding signal displays in situations where all traffic on an approach must turn onto the intersecting roadway in Section 4F.16 as existing Section 4D.25 does not address situations for approaches where there is no through movement and there is not a shared left-turn/right-turn lane or the lanes operate with variable lane-use regulations.</p> <p>AASHTO concurs with the added Option to allow the continuous display of a steady circular red signal indication during time when the traffic control signal is being operated in steady (stop-and-go) mode, and new Standard prohibiting the display of circular green and circular yellow signal indications to an approach with no through movement and an approach speed 35 mph or greater, to an approach where the one-way roadway that opposes the approach is an exit ramp from a freeway or expressway, or to an approach where the one-way roadway that opposes the approach has a speed limit of 35 mph or greater as these additions improve safety by minimizing the potential for road users driving straight through in the wrong direction onto a one-way roadway or exit ramp.</p> <p>However, it is not clear whether FYA can also be displayed in the same section as steady green arrow in a five section signal head as indicated in official interpretation 4(09)-15(I). The option for FYA and steady yellow in the same section of a five section signal arrangement in Figure 4F-15 is not included in the text. Page 457, line 1 through 6.</p> <p>AASHTO has concerns with prohibiting yellow and green circular indications for intersection approaches with no vehicular through movements. In particular, locations with pedestrian phases that would run concurrently with affected vehicular phases would effectively be required to have exclusive pedestrian phases and thus increase cycle lengths and potentially significantly reduce the overall capacity of these intersections.</p>
413	4F.17			X	<p>NDOT agrees with AASHTO comment. AASHTO does not concur with the guidance document change for determining yellow change and red clearance intervals to "Guidelines for Determining Traffic Signal Change and Clearance Intervals: A Recommended Practice of the Institute of Transportation Engineers". Some states expressly prohibits the use of this document.</p> <p>AASHTO supports the recommendation to revert to previous ITE guidance.</p>

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
414	4F.19	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the revision of the Standard in Section 4F.19 regarding preemption control transitions to permit the shortening or omission of any pedestrian change interval only when the traffic control signal is being preempted because a boat is approaching a movable bridge or because rail traffic is approaching a grade crossing as this change improves pedestrian safety.</p> <p>AASHTO concurs with the addition of the new Option permitting the display of a distinctive indication to inform law enforcement personnel who are escorting traffic that the traffic control signal has changed because it has been preempted as this change is based on an NTSB recommendation from the results of their investigation into the causes of the fatal truck/train crash that occurred in Midland, Texas, when law enforcement officers were escorting a parade.</p> <p>AASHTO concurs with the modification of P11 to recommend that backup power supply for traffic control signals with railroad preemption or coordinated with flashing-light signal systems should provide a minimum operating period sufficient to allow the implementation of alternative traffic control during a power outage as this change provides agencies with more guidance on the duration for backup power supplies.</p>
415	4G.02		x		AASHTO concurs with changing P1 in Section 4G.02 from Standard to Option as the language does not provide a requirement and is more appropriate as an Option. Do not concur with the change to Standard B. Prefer not allowing this change.
416	4G.04	X			NDOT agrees with AASHTO comment. AASHTO concurs with the addition of the new Guidance paragraph in Section 4G.04 providing two recommended display sequences for transitioning out of yellow-red flashing mode where there is a common major-street green interval, and the revision of the existing recommendation for display sequences for transitioning out of yellow-red flashing mode where there is not a common major-street green interval to provide a steady yellow signal indication followed by a steady red clearance interval on the major traffic movement on the major street as these changes <u>provide safety and consistency in signal operations.</u>
419	4I.01			x	Do not concur with the accessible pedestrian signal change based on engineering study. Recommend 2009 language be retained.
432	4L		X		<p>NDOT agrees with AASHTO comment. AASHTO concurs with the new Chapter 4L as it provides a dedicated section to RRFBs which will improve clarity associated with them.</p> <p>AASHTO concurs with the Guidance statement in Section 4L.02 to recommend the use of audible information devices with RRFBs to assist pedestrians with vision disabilities as this provides assistance due to the lack of audible traffic cues.</p> <p>However, there is guidance for engineering study to access the needs of installing APS devices at traffic signal control crosswalk, but there's no such guidance for accessing the needs of audible information devices for RRFB. We recommend adding similar guidance from 4K.01 be used for accessing the need of audible information devices at RRFB.</p> <p>Recommend revising the audible information device guidance (line 38 on page 488 of the mark-up) to read similarly to Section 6A.02 which states, "Traffic control devices should provide information in usable formats for pedestrians with visual disabilities."</p>

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
435	4P.02	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the reorganization of Section 4P.02 and revision to P3 that a minimum of two signal faces shall be provided on ramps that have one controlled lane as well as ramps that have more than one controlled lane and the ramp control signals are operated such that green signal indications are always displayed simultaneously to all of the controlled lanes on the ramp as it provides clarification.</p> <p>AASHTO concurs with the split requirements to entrance ramps as this is in accordance with Official Ruling No. 4(09)-6(I).</p> <p>AASHTO concurs with a new Option to expand the existing exception to the requirement of 8-foot minimum lateral separation of signal faces for one-lane entrance ramps to apply to entrance ramps with two or more controlled lanes as this improves consistency with single-lane ramps.</p> <p>AASHTO concurs with the change of P6 from Standard to Guidance as it provides agencies additional flexibility in the location and design of ramp control signals.</p>
				X	<p>NDOT agrees with AASHTO comment. AASHTO disagrees with the change to the Standard that "a minimum of two signal faces shall be provided for each of the two lanes" where two controlled lanes are present. The proposed change does not appear to be entirely consistent with the referenced Official Interpretation which states "that at least one ramp control signal face is required for each separately-controlled lane of a multi-lane entrance ramp where green indications are not always simultaneously displayed to all of the lanes. AASHTO would support the Official Interpretation language that clarifies that the one required signal face for each of the lanes may be placed either overhead or on a pole at the side of the ramp."</p>
436	4P.03	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the revision of Standard P3 to prohibit the use of flashing light emitting diode (LED) units within the legend or border of signs to inform road users that ramp control signal is in operation as FHWA believes that warning beacons should be used to inform road users that a regulation is in effect and that flashing LED lights within the border or legend of the sign should only provide added conspicuity to sign legends.</p>
439	4S.02	X			<p>NDOT agrees with AASHTO comment. AASHTO concurs with the new Standard requiring twelve-inch signal indications for Intersection Control Beacons facing approaches where road users view both flashing beacon indications and lane-use control signal indications simultaneously or where the nearest flashing beacon signal face is more than 120 feet beyond the stop line, unless a supplemental near-side flashing beacon signal face is provided, and new Guidance recommending twelve-inch signal indications for Intersection Control Beacons facing approaches where the speed is 40 mph or higher or where post-mounted flashing beacon signal faces are used, as these changes will increase the signal indication visibility for the road users and for consistency with provisions for traffic control signals.</p>

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
440	4L.03		X		<p>NDOT agrees with AASHTO comment. Guidance to include audible information devices with pedestrian activated warning beacons is consistent with guidance for all pedestrian-activated beacons and lights, which are similar in function for pedestrians with visual disabilities.</p> <p>New standard prohibiting the use of vibrotactile or percussive indications would require these indications to be removed and presumably replaced with audible information devices.</p> <p>See Page 503, Lines 6-16 for when a Warning Beacon is used for a pedestrian crossing and it is ped actuated. Requires an audible information device.</p> <p>In addition, there is guidance for engineering study to access the needs of installing APS devices at traffic signal control crosswalk, but there's no such guidance for accessing the needs of audible information devices for RRFB. We recommend adding similar guidance from 4K.01 be used for accessing the need of audible information devices at RRFB.</p>
442	4S.05	X			NDOT agrees with AASHTO comment. AASHTO concurs with the change P3 from Standard to Guidance as it provides agencies flexibility in designing and installing the Stop Beacon with the Stop, Do Not Enter, and Wrong Way signs.
461	Part 6	X			
462	Part 6	X			
463	Part 6		X		We have some concerns about the revisions that are proposed. Please see Comments for Section 6A.02 and for Typical Applications 6P-28 and 6P-29 for specific comments and requested revisions.
464	6A.01	X			
465	6A.02		X		<p>We agree with the proposed relocations, additions, and revisions and respectfully request that FHWA make some further refinements. We agree with the new guidance text in what appears to be P03.D and request revisions. The way it is currently written implies demand exceeds capacity any time a lane is closed, which is not necessarily true for all locations or all times of day or all locations in the country. The new text also includes "may" which implies an option that we request to be changed to "could." In the same text, there is a typo in the first sentence. We propose the following language: When the roadway capacity is reduced due to lane closures, the demand will <u>could</u> exceed the available capacity. <u>This could</u> and result in either a lengthy stopped or slow moving queue of vehicles that may 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 plan design process, and <u>and</u> adjustments to the sign spacing and number of signs as well as the possibility of using more conspicuous devices may <u>could</u> be provided to increase the distance and conspicuity of the advance warning area.</p>
465	6A.02	X			We agree with the revisions to what appears to be P03.3.A and P03.3.B. The implementation of 28 CFR 35.16 (subpart a) appears to remain true to the text and intent of the CFR. In particular, we approve of the phrases, "Information should be provided in usable formats for pedestrians with visual disabilities" and "Traffic control devices should provide information in usable formats for pedestrians with visual disabilities."
466	6A.03 & 6A.04		X		We agree with dividing Section 6F.01 into two new sections. We generally agree with the revisions made to Section 6A.03, but ask that the first Standard in P02 be deleted since it is repetitive with the definition of traffic control devices in Part 1. Further, we ask that "pedestrian facility, bikeway, pathway..." be added to the second Standard. We agree with the revisions to Section 6A.04.
467	6B.01		X		We agree with the proposed revisions. We respectfully ask that the guidance statement in P05 be further refined as follows: "A TTC plan should be developed for any activity, either planned or unplanned, <u>activities</u> that will affect road users. <u>A TTC plan should be developed for unplanned and emergency situations where practical.</u> "

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468	6B.04	X			
469	6B.05		X		We respectfully request further simplification to the proposed changes to P02. The reference to "short-term" is inappropriate in this section and the Option statement in P03 provides the exception for mobile operations. We propose the following revisions to P02: "When redirection of the road users' normal path is required, they shall be directed from the normal path to a new path with appropriate temporary traffic control devices with signs, arrow boards, and/or channelizing devices, except for short term or mobile operations."
-	6B.07		X		We agree with the reorganization and revisions. We respectfully request that FHWA add 80 mph and an associated Distance to Table 6B-2.
470	6B.08	X			
471	6C.02		X		We agree with the relocations and revisions in Section 6C.02 including changing the Standard statement to guidance in P02, with the exception of the wording in new guidance statement in P10. We respectfully request that the first part of the sentence, "Due to the likelihood of high pedestrian presence in site roadways open to public travel" be deleted and that the sentence start with "TTC zones should be designed..." We think it seems hyperbole to state that "high pedestrian presence" is likely just because the roadway is "open to public travel."
472	6C.03	X			
-	6C.04		X		We respectfully request that FHWA replace "accidents" with "crashes" at the end of Section 6C.04, P03.D
473	6C.05		x		request that the 2015 part of ANSI/ISEA 107-2015 is removed. This should always make the current version the required one.
474	6D.02		X		
475	6D.03	X			
476	6D.05	X			
476	6D.05	X			
477	6D.06		X		We request that FHWA retain P01 as a Standard and add "Except as provided in paragraph 2," to the beginning of P01. Also request that FHWA add a new P02 as an Option as follows: "If stopping sight distances are not achievable, flagger stations may be modified based on engineering judgment."
478	6E.04		X		We agree with the revisions to require the PILOT CAR FOLLOW ME sign to be on the top or rear of the pilot vehicle and we agree with the revisions to allow pilot cars to be used with AFAD and temporary signals. For use with temporary signals, we recommend the following Guidance statement be added, to address the potentially long (10-15 min) wait times that could be experienced by road users at the temporary signal: "If temporary signals are used in pilot car operations and long wait times will be encountered by road users, consideration should be made for using signs to notify road users of the wait time and/or pilot car operation, based on engineering judgment."
		x			We agree with the addition of the AFAD pilot car operations standard statement.
479	6F.01		X		We agree with and support the revisions and relocations, including changing a standard to guidance. We respectfully request that FHWA change the reference to the "Standard Highway Signs and Markings book" reference to "Standard Highway Signs publication" to be consistent with how the publication is referenced elsewhere in the NPA.
480	6F.02	X			
-	Figure 6G-1		X		Signs R11-2, R11-3a, G20-5aP, R2-11, R2-12, R2-6P, R2-6aP, R2-6bP, R9-8, R9-9, R9-10, R9-11, and R9-11a are mentioned Chapter 6G and are said in the sections to be shown in Figure 6G-1, but these appear to be omitted from the figure. We respectfully ask that these signs be shown on the figure. The sign shown as R9-4a in Figure 6G-1 should be R4-9a as described in Section 6G.07.
481	6G.07	X			
482	6G.10		X		We agree with the revisions including deletion of audible information device. However, the R9-9, R9-10, R9-11, and R9-11a signs are not shown in Figure 6G-1 as indicated. We respectfully request that FHWA show these signs in Figure 6G-1.

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483	6G.11		X		We agree with changing this sign from a warning sign to a regulatory sign. Also agree with the section as worded and inclusion of the R22-2 sign to Figure 6G-1 and Table 6G-1. However, "(R22-2)" should replace "(RXX-X)" in the section. Further, Figure 6P-2 should show the regulatory sign rather than the warning sign from the 2009 Manual.
n/a	Table 6H-1/ Figure 6H-1		X		Signs W20-1, W20-2, W20-3, W20-4, W20-5, W20-5a, W9-3, W4-2, W13-4P, W5-4, W23-1, W23-2, W20-7, W20-7a, W6-3, W6-4, W21-1, W21-1a, W21-2, W21-3, W8-6, W11-10, W21-5, W21-5a, W21-5b, W21-6, W21-7, W22-1, W22-3, W8-4, W8-9, W8-17, W8-17P, W8-11, W8-24, W8-12, W1-4 Series, W21-1 Series, W13-1P, W7-3aP, are W8-15P are mentioned Chapter 6H and are said in the sections to be shown in Figure 6H-1, but these appear to be omitted from the figure. We respectfully ask that these signs be shown on the figure.
484	6H.01		X		We agree with the revisions. Editorial change: Reference should be changed to the "Standard Highway Signs" publication for consistency with updated throughout the manual.
485	6H.03	X			
486	6H.04	X			
487	6H.05		x		PATH CLOSED (TA-49,50) and SHOULDER CLOSED (TA-51) are also options listed in the MUTCD. Should they be listed as well?
488	6H.06	X			
489	6H.07		X		We agree with the revisions presented. We agree with revising and changing paragraphs from Standard to Option. We respectfully request that FHWA include each of the revisions from NCUTCD proposal 17B-TTC-01 to coincide with revisions to Typical Application 36. Among the revisions proposed is inclusion of the W9-4 Interior Lane Shift sign which has been included in Figure 6H-1, but is not mentioned in Section 6H.07. We recognize that the W9-4 sign designation is already used in Part 2 and we recommend that the Interior Lane Shift Ahead sign be designated as W9-3a instead of W9-4. We request that FHWA add a new guidance paragraph at the end of Section 6H.07 that states, "The Interior Lane Shift Ahead (W9-3a) symbol sign (see Figure 6H-1) should be used in advance of that point where work occupies the interior lane(s) and approaching motor vehicle traffic is directed to the right or left of the work zone in the interior lane by using a shifting taper to route traffic around the closed interior lane." We agree with the relocation of the W9-3 sign to this section and recommend further revisions to P04. We respectfully request revising P04 as follows, "The CENTER LANE CLOSED AHEAD (W9-3) sign (see Figure 6H-1) should be used when a lane separating directions of traffic, such as a two-way left-turn lane, is closed."
490	6H.08	X			
491	6H.24	X			
492	6H.25	X			
	6H.30		x		Should follow the same guidance from Chapter 2.
	6H.32		x		The support statement refers to AASHTO and ITE design documents. This should reference those specific documents.
493	6J.01		X		We agree with the revisions, including changing P04 from a Standard to Guidance. We respectfully request that FHWA delete or clarify "as soon as practical" from P04 because the meaning is subjective.
494	6J.03	X			
495	6K.01		X		We agree with the revisions. However, we respectfully ask that FHWA restore the option after P03 that states that a gap may be used to facilitate drainage. We do not see that this is repetitive with the Standard in P01.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
496	6K.02		X		We agree with the additions of this new section, the revisions and additions, and respectfully request further refinement. We respectfully request that the new guidance statement in P10 be revised as follows: "When used, a continuous wall should have a lower edge no more than 2 inches above the walkway, should extend a minimum of 32 inches above the walkway, and should have a common vertical face., and should have alternating, contrasting sheeting positioned 32 inches above the walkway." Our reason for this request is it is impractical to add sheeting material to existing continuous walls. Further, we respectfully request that FHWA revise the option statement in P16 with the following: "The sheeting on the side of the device on <u>On the pedestrian side of the Pedestrian Channelizing device, the alternating dark and light stripe on the may have sheeting may be oriented vertically with a vertical orientation."</u>
496	Figure 6K-2		X		We agree with the inclusion of new Figure 6K-2 and respectfully request revisions to the figure. We request that the note leaders in the top half of Figure 6K-2 point to the top and center of the hand-trailing edge. We further request that the "2 inches MIN." shown in the top half of Figure 6K-2 and Note 1 on the figure be deleted. It is our understanding from the text in Section 6K.02 that the hand trailing edge can be integrated into the pedestrian channelizing device and does not need to be attached two inches from the face of the support device.
497	6K.07	X			We agree with the revisions.
-	6K.09	X			We agree with the revisions.
-	6K.10		X		We respectfully request that FHWA delete the second sentence of the second Standard in P07. The following should be deleted: "The interlocking devices shall not have gaps that allow pedestrians to stray from the channelizing path." It seems impractical that there will be gaps if the longitudinal devices are interlocked.
498	6K.11	X			
499	6L.01			X	In P04, we respectfully disagree with the proposed revisions and ask that FHWA retain engineering judgment and reword the sentence. We agree with deleting "are needed" and adding "should be provided" and ask that P04 be worded as follows: "Where pedestrian traffic is detoured to a temporary traffic control signal, engineering judgment should be used to determine if pedestrian signals or accessible pedestrian signals should be provided for crossing along an alternate route." To address APS on a roadway that normally has APS, we respectfully request that FHWA add a guidance statement after P04 as follows: "If the existing traffic signals along the roadway have accessible pedestrian signals, the temporary traffic signals should have accessible pedestrian signals."
n/a	6L.02		X		We respectfully request that FHWA delete P08, "AFADs shall meet the crashworthy performance criteria contained in Section 6A.04." We conclude that this sentence is unnecessary.
500	6L.03		X		We agree with the revisions. The R1-7a sign is shown in Figure 6L-1 and referenced in Section 6L.03 but is not included in Table 6G-1. We respectfully request this sign be added to Table 6G-1 to specify a minimum size for the combined message sign.
501	6L.05	X			
	6L.06			X	The 2nd sentence in the standard statement, "This sign shall provide additional warning and directional information to assist in merging and controlling road users through or around a TTC zone." sounds more like a support statement, not a shall statement. Shall should be replaced with "is intended to".
502	6L.07	X			
503	6M.01		x		We respectfully request that the title of new Chapter 6M be changed to "OTHER TTC ZONE DESIGN FEATURES AND SAFETY DEVICES."
504	6M.02		X		This language is straight from CFR 630.1108, Subpart K. It is more proper to refer to this document instead of restating it here.

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504	6M.02		X		This language is straight from CFR 630.1108, Subpart K. It is more proper to refer to this document instead of restating it here.
	6M.02		x		"Highly mobile barriers" is noted in the last Option statement. This should be defined somewhere.
505	6M.04		x		The first sentence should remain. The use of detectable edging should always be based on need.
506	6M.05	X			
n/a	6M.06		X		Portable rumble strips are frequently used by states across the country to alert drivers to the presence of temporary traffic control zones. We respectfully request that FHWA include an option statement after P05 as follows: "Portable transverse rumble strips may be placed with in the temporary traffic control zone to alert road users to changes road conditions." This addition was previously proposed by the NCUTCD in proposal 17B-TTC-02 and we support the inclusion.
507	N/A	X			
508	6M.08		x		The added guidance, "Lighting should be sufficient so as to clearly identify a worker as a person." Lighting levels that don't blind drivers may not clearly identify a worker as a person. This should be restated.
509	6N.01		x		We support the addition of information on rolling roadblocks as this strategy can reduce the likelihood of queue related crashes. We respectfully request the word "requires" be changed to "consists of" to avoid standard language in a Support statement. We also recommend the following sentence be added to the Support statement: "From a safety perspective, rolling roadblocks used to slow traffic are preferred to rolling roadblocks used to stop traffic." Also, not sure the statement, "The rolling roadblock is normally performed by law enforcement officers during off-peak hours" is a necessary statement.
510	6N.04		X		The new guidance for bikeways is a lot to maintain for bicycles. In most instances, it would not be practical to maintain the continuity of a bikeway. Bicyclists are allowed to travel on a shoulder, but they are also allowed to travel in the thru lane. Unless they are required to use the shoulder, nothing more than an open (shared) lane would need to be provided.
					Option statement discusses 14' width of lane, Figure 6P-50 says 14'. Which one is correct?
511	6N.05		X		We agree with the relocations to the section. We respectfully request that use of the SHOULDER WORK sign be retained as an option and not moved to guidance.
	6N.12		x		Reference to Figures 6P-47 and 6P-48 in the last Support statement should be Figures 6P-52 and 6P-53.

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512	6N.13		X		<p>We agree with the proposed relocations, additions, and revisions and respectfully request that FHWA make some further refinements. We support the new text in what appear to be P02 and P03 if revised. The way the notes are currently written imply demand exceeds capacity any time a lane is closure, which is not necessarily true for all locations or all times of day. The new text also includes "may" which implies an option that we request to be changed to "could." In the same text, there is a typo in the first sentence. We propose P02 and P03 be revised with the following language: "<u>Guidance: Attempts should be made to reduce the volume of traffic using the roadway or freeway to match the restricted capacity conditions. Road users should be encouraged to use alternative routes. Often,</u> When the roadway capacity is reduced due to lane closures, the demand will <u>could</u> exceed the available capacity. <u>This could</u> and result in either a lengthy stopped or slow moving queue of vehicles that may 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 plan design process, and a adjustments to the sign spacing and number of signs as well as the possibility of using more conspicuous devices may <u>could</u> be provided to increase the distance and conspicuity of the advance warning area.</p> <p><line break> Option: One strategy often employed to mitigate the extended queue issue is to work during off peak hours or at night- <u>may be employed to mitigate the extended queue issue.</u> When the work is limited to night hours, increased use of warning lights, illumination of work spaces, <u>positive protection devices</u>, and intelligent advance warning systems may be necessary. <u>Support:</u>"</p>
513	6N.14	X			We agree with the revisions.
514	6N.19		X		We agree with and support FHWA's inclusion of this new Section for Late Merge. We respectfully request that FHWA delete the guidance sentence in P04. The sentence that we ask to be deleted is stated: "If used, the Late Merge should not be used on high speed or low volume roadways." In our experience, late merge is used nearly exclusively "on high speed" roadways. The remainder of the sentence seems benign, but unnecessary.
	6N.19			x	Guidance statement notes, "if used, the Late Merge should not be used on high speed or low volume roadways." There is less of a need on the low volume roadways, but should be allowed on high speed roadways. We have only used them on high speed roadways.
515	6O.01	X			
516	6P.01		X		We agree with the revisions to Section 6P.01. We recommend and request that FHWA Chapters 6N and 6P together. Chapter 6O should be relocated after Chapter 6P. Table 6P-2 is missing from the NPA. The body of Tables 6P-3 and 6P-5 in the NPA appear to be the same, but the titles are different. If one is deleted, then the reference on line 13 of NPA page 611 should be revised.
			x		There are 54 typical applications included, not 46 as noted.
			x		Table 6P-2 does not exist.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
516	6P-47		X		we agree with addition of new Typical Application 47 and respectfully request that FHWA make the following revisions to the notes and figure. In note 1, revise as follows, "If a bicycle lane on a an urban high speed roadway having a speed limit of 35 mph or higher is closed and conditions are not appropriate..." In notes 2 and 3, revise as follows, "If a bicycle lane on a an urban low speed roadway having a speed limit of 30 mph or less is closed,..." Also in notes 2 and 3, change "...17 feet wide,..." to "...14 feet wide,..." As depicted its impractical to think that there will be a very wide 17 foot lane adjacent to a bicycle lane. 14 feet is a better number. Additionally, in note 3, change "ON STREET" and "ON ROADWAY" to "IN STREET" AND "IN ROADWAY" to match Section 2C.66 in the NPA. On Figure 6P-47, retain the 14' lane widths shown, remove the SHARE THE ROAD plaque and replace it with IN STREET or IN ROAD. Also on Figure 6P-47, change the channelizing devices taper length from L to 1/3 L for consistency with other sections and figures in Part 6.
516	6P-48		X		We agree with addition of new Typical Application 48 and respectfully request that FHWA make the following revisions to Figure 6P-48. On Figure 6P-48, retain the 14' lane widths shown, remove the SHARE THE ROAD plaque and replace it with IN STREET or IN ROAD. Also, the Standard statement, should be guidance.
516	6P-49		X		We agree with addition of new Typical Application 49 and respectfully request that FHWA make the following revisions to Figure 6P-49. On Figure 6P-49, remove the PATH CLOSED and DETOUR signs and replace with One Direction Large arrows to match Typical Application 7. A standard in Section 6G.04 of the NPA prohibits use of ROAD CLOSED when the road remains open, but diverted, and that prohibition appears to apply to PATH CLOSED as well.
516	6P-50		X		Agree with addition of new Typical Application 50 and respectfully request that FHWA make the following revisions to Figure 6P-50. On Figure 6P-50, retain the 14' lane widths shown, remove the SHARE THE ROAD plaque and replace it with IN STREET or IN ROAD. Also replace the solid white centerline pavement markings on the path (the vertical path on the left side of the figure) with double yellow centerline pavement markings.
516	6P-51		X		We agree with addition of new Typical Application 51 and respectfully request that FHWA make the following revisions to Figure 6P-51. On Figure 6P-48, we respectfully request that FHWA remove the SHOULDER CLOSED sign. SHOULDER CLOSED is not a regulatory sign in the MUTCD, but rather a TTC warning sign, and its use as a regulatory sign on Figure 6P-51 is inconsistent with Figure 6P-5. Also, the divided highway edge line needs to be shown as a solid yellow line on the median side of the divided highway.
516	6P-52			X	We support and appreciate inclusion of roundabout typical applications. However Typical Application 52 appears to be a repeat and a light version of Typical Application 53. Recommend keeping TA-53 and removing TA-52. If desired by FHWA, we will support the addition of options to TA-53 to use fewer TTC traffic control devices for short-term or short duration.
	6P-52			x	Figure 6P-52 is titled, "...in a Circular Intersection", not "Roundabout". This title should match. 6P-47 is a "Bicycle Lane Closure without Detour". Should be 6P-52. Note 8 isn't shown on other plans, is it needed here? Note 12 doesn't match the other roundabout TA's.
516	6P-53		X		We support and appreciate FHWA including this new typical application in the NPA. However, roundabouts are intersections and the work in the traveled way of roundabouts would seem to fit after TA-27. Respectfully request that FHWA move TA-53 to immediately after TA-27. We also respectfully request that "adequate" be changed to "stopping" in note 11.

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	6P-53		x		The orientation of the double arrow warning sign should be changed (180 degrees). TA-52 & 53 should be combined to make one, not 2 similar ones. The sidewalk discussion in Standard 2 isn't necessary as it's already covered in sidewalk detours. Guidance 7- this doesn't match guidance from 6P-52. Guidance 8 should show a traffic signal setup. Guidance 10 seems to have a 98 & 99 misplaced. Option 13- it seems like there needs to be some operation guidance for the operation of 2 pilot vehicles.
516	6P-54		X		We support and appreciate FHWA including this new typical application in the NPA. However, roundabouts are intersections and the work in the traveled way of roundabouts would seem to fit after TA-27. We respectfully request that FHWA move TA-54 to immediately after what is currently numbered TA-53 and after TA-27. Further, we respectfully request that FHWA make the following revisions to Figure 6P-54. At the bottom of the figure there is an incorrect reference to "Typical Application 55" that should be corrected. The W9-2 LANE ENDS MERGE LEFT sign is removed from the MUTCD in the NPA. For consistency with these revisions, respectfully request that FHWA remove the sign from Figure 6P-54 and remove one sign symbol so there are three advance warning signs on each approach. We further respectfully request that the "L" dimension and buffer space on the top, left, and right legs be dimensioned the same way as the bottom leg of the figure.
					The standard statement isn't necessary as it's already covered in sidewalk detour TA. Option 7- isn't this always an option for all TA's? It's not mentioned for others.
516a	Fig 6P-3		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
			x		Option 2- note says "may be used", but the TA states, "consider use of". These aren't the same thing and should be revised to match.
516b	Fig 6P-4		x		Option 3- Additional positive protection devices may be used? This is not stated on the TA? Same comment for all TA's it's stated on. It should be a general statement that applies to all and not repeated.
516c	Fig 6P-6		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516d	Fig 6P-7	X			
516e	Fig 6P-10		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516f	Fig 6P-11		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516g	Fig 6P-12		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure. Support the removal of "intermediate and" from note 4.
516h	Fig 6P-13		x		What kind of positive protection devices are needed on a closed road? Recommend deleting this statement.
516i	Fig 6P-14	X			

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
516j	Fig 6P-15		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516k	Fig 6P-17		X		We support and appreciate revisions to the notes. However, because TMAs are shown in Figure 6H-17, we respectfully request that FHWA include "additional" to the beginning of note 7 so it will read "Additional positive protection devices..." The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516l	Fig 6P-18		X		We support and appreciate revisions to the notes. However, because a TMA is shown in Figure 6H-18, we respectfully request that FHWA include "additional" to the beginning of note 7 so it will read "Additional positive protection devices..."
516m	Fig 6P-21		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516n	Fig 6P-22		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure. The NPA notes are an improvement. However, new support note 8, relocated and revised from an earlier note, incorrectly includes a reference to a left-hand lane and should be further revised and simplified. We respectfully request that FHWA further revise new note 8 as follows, "By first closing off the left-hand right-hand lane and then reopening it as a turn bay, the through capacity of the through lane is increased-preserved by eliminating right turns from the open through lane separating the right-turning vehicles from the through vehicles."
			x		The use of the lane ends symbol sign here does not match the use for the same sign in Chapter 2. Also, the TA shows 3 "A" dimensions. Should change this to another letter or distinguish it somehow. Is the "A" distance the sign spacing or the length of the cones? This distance isn't consistent in other similar TA's- see TA-24.
516o	Fig 6P-23		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
			x		This TA shows a 100' gap for the left turn lane, but TA-22 doesn't show any dimension for the gap. Is this intentional? Arrow board should be shown in the taper (optional), not on the opposite side of the intersection.
516p	Fig 6P-24		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
			x		The TA doesn't show reverse curve/ reverse turn signs. They should be required for traffic making the shift. This "A" dimension is shown as the sign spacing, not the length of the cones. There are 4 "A" dimensions shown.
516q	Fig 6P-25		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.

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516r	Fig 6P-27		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516s	Fig 6P-28		X		We support and appreciate revisions to the figure and notes. However, we have concern about making "audible information devices" a requirement in a standard note. We Respectfully request that FHWA reword notes 5 and 6 with wording similar to that proposed in Section 6A.02, P03.3.B. We therefore respectfully request that note 5 be revised as follows: <u>"When SIDEWALK CLOSED CROSS HERE signs are used, the information shall also be provided in a format usable shall include audible information devices to provide adequate communication</u> to pedestrians with visual disabilities." We respectfully request that note 6 be revised as follows: <u>"Information in a format useable for pedestrians with visual disabilities shall be provided where at midblock closings and changed crosswalk areas cause inadequate communication to pedestrians who have visual disabilities."</u> We agree with the deletion of "old" note 1 and the addition of 4 new notes as standard statements. We agree with the deletion of note 2 and the addition of two notes as guidance statements. Also, information in Section 6C.02 allows the use of project personnel to assist and direct pedestrians while work is in progress. Making this a Standard (shall) condition eliminates that option. Requiring the use of audible TTC devices anytime a sidewalk is closed, regardless of the duration of the operation, will add significant cost increases to these types of operations. We have had AID units stolen in urban areas, and have received nuisance complaints from businesses in high pedestrian locations. We would like for FHWA to develop more guidance and best practices for implementing audible TTC devices before making this a Standard requirement. What audible messages are to be used? Do AIDs need to be placed at every turning point along the pedestrian detour? Improperly used AIDs could cause more harm than good by misleading vision impaired pedestrians who try to rely on them.
			x		The standard statement should require features consistent with the existing facility. Following this statement may require more than the existing facility provides. Standard statement #6 should remain as Guidance as it should be based on "need".

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
516t	Fig 6P-29		X		<p>We have concern about making "audible information devices" a requirement in a standard note. We Respectfully request that FHWA reword notes 3 and 4 with wording similar to that proposed in Section 6A.02, P03.3.B. We therefore respectfully request that note 3 be made a guidance statement and revised as follows: "<u>When SIDEWALK CLOSED CROSS HERE signs are used, the information shall also be provided in a format useable shall include audible information devices to provide adequate communication</u> to pedestrians with visual disabilities." We respectfully request that note 4 be made a guidance statement and revised as follows: "<u>Information in a format useable for pedestrians with visual disabilities</u> shall be provided where at midblock closings and changed crosswalk areas cause inadequate communication to pedestrians who have visual disabilities."</p> <p>Also, information in Section 6C.02 allows the use of project personnel to assist and direct pedestrians while work is in progress. Making this a Standard (shall) condition eliminates that option. Requiring the use of audible TTC devices anytime a sidewalk is closed, regardless of the duration of the operation, will add significant cost increases to these types of operations. We have had AID units stolen in urban areas, and have received nuisance complaints from businesses in high pedestrian locations. We would like for FHWA to develop more guidance and best practices for implementing audible TTC devices before making this a Standard requirement. What audible messages are to be used? Do AIDs need to be placed at every turning point along the pedestrian detour? Improperly used AIDs could cause more harm than good by misleading vision impaired pedestrians who try to rely on them.</p>
					Disagree with change to shall statement, comment consistent with TA-28.
516u	Fig 6P-30		X		We support and appreciate revisions to the notes. However, because a TMA is shown in Figure 6H-30, we respectfully request that FHWA include "additional" to the beginning of note 2 so it will read "Additional positive protection devices..." The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516v	Fig 6P-31		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516w	Fig 6P-32		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516x	Fig 6P-33		X		We support and appreciate revisions to the notes. However, because a TMA is shown in Figure 6H-33, we respectfully request that FHWA include "additional" to the beginning of note 2 so it will read "Additional positive protection devices..." The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516y	Fig 6P-35		X		We support and appreciate revisions to the notes. However, because a TMA is shown in Figure 6H-35, we respectfully request that FHWA include "additional" to the beginning of note 2 so it will read "Additional positive protection devices..." The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure. Further, in note 8, we respectfully request that FHWA delete "adequate" and replace it with "stopping." Stopping sight distance is "adequate" sight distance.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
516z	Fig 6P-37		X		We support and appreciate revisions to the notes. However, because a TMA is shown in Figure 6H-37, we respectfully request that FHWA include "additional" to the beginning of note 5 so it will read "Additional positive protection devices..." The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516aa	Fig 6P-38		X		The Interior Lane Shift Ahead (W9-4) sign was a W9-3a in the 2003 MUTCD, then was removed from the 2009 manual. The W9-4 sign is a different sign in 2C-12. This sign was removed due to a lack of understanding. Why add it back in?
516bb	Fig 6P-40		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure. We also respectfully request that FHWA add four notes to make TA-40 consistent with TA-44. First, add a new Standard after note 1 stating, <u>"Where inadequate acceleration distance exists for the temporary entrance, a STOP sign shall be installed."</u> Add a new guidance note after note three stating, <u>"If sufficient gaps are not available, consideration should be given to closing the ramp."</u> Add two new option notes after note 6. The first new note after note 7 (as numbered in the NPA) should state, <u>"A Stop Beacon (see Section 4S.05) or a Type B high-intensity warning flasher with a red lens may be placed above the STOP sign."</u> The second note should state, <u>"Where the acceleration distance is significantly reduced, a supplemental plaque may be placed below the Yield Ahead sign reading NO MERGE AREA."</u> These additional notes are consistent with NCUTCD proposal 16B-TTC-06. Finally, in note 3, respectfully request that FHWA delete <u>"adequate"</u> and replace it with <u>"stopping."</u> Stopping sight distance is "adequate" sight distance.
516cc	Fig 6P-41		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516dd	Fig 6P-42		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516ee	Fig 6P-43		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
516ff	Fig 6P-44		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure. We also respectfully request that FHWA make revisions to notes 2, 3, and 4 for consistency with TA-40 and as proposed by the NCUTCD in proposal 16B-TTC-06. In note 2, please make the following revisions, "For the information shown on the diagram on the right-hand side of the typical application, where inadequate acceleration distance exists for the temporary entrance, the YIELD sign shall be replaced with STOP signs (one on each side of the approach) a STOP sign shall be installed. In note 3, please revise the last sentence as follows, "If insufficient <u>sufficient</u> gaps are not available..."short, that proposal recommends revising notes 2, 3, and 4. Further, in note 3, respectfully request that FHWA delete <u>"adequate"</u> and replace it with <u>"stopping."</u> Stopping sight distance is "adequate" sight distance.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
516gg	Fig 6P-46		X		We support and appreciate revisions to the notes. The note on the figure to "Consider use of Positive Protection per Section 6M.02" is redundant with the notes page. We respectfully request that FHWA remove the "Consider use of Positive Protection..." note from the figure.
518	7A.01	X			
519	7D.01	X			
520	7B.01	X			
521	7B.02	X			
522	7B.03	X			
523	7B.04	X			
524	7B.05			X	NDOT agrees with AASHTO comment. Recommend removing this section and related sign graphic as it is contrary to Guidance to avoid signing for rules of the road (Section 2A.01). Placing this language in the MUTCD, along with a graphic representation of the sign, will promote the use of this unnecessary sign. Should agencies elect to provide signing for this universal rule of the road, it should be the exception and therefore not appropriate for inclusion in the MUTCD.
525	7B.06		X		NDOT agrees with AASHTO comment. Recommend removing proposed Guidance sentence providing a maximum distance. Recognizing that this distance is supported by research published by the Texas A&M Transportation Institute on behalf of TXDOT in 2008, the Guidance would need to reference specific Support language to be effective. In addition, the dimensions of school properties can vary significantly so that this dimension may not be fixed. It would be more appropriate to include Support language citing the findings of the TTI study so that practitioners understood that extending the limit of the reduced speed zone too far may have unintended consequences.
526	7D.01	X			
527	7D.02	X			
528	8A.01			x	Do not concur with the recommendation of using a "Diagnostic Team". Our past experience has shown they wanted to recommend products that a team member sells.
529				x	Do not concur with the recommendation of using a "Diagnostic Team". Our past experience has shown they wanted to recommend products that a team member sells.
530	8A.03			X	It can be logistically complicated for road agencies to assemble a Diagnostic Team, as railroad companies are not always easy to contact and coordinate with. Should be flexibility for road agencies to implement engineering judgment or engineering standards without DT involvement for less complicated situations that only involve devices maintained by the road agency. For example all decisions involving advance warning signs or RXR markings are solely at the province of the road agency. "Diagnostic team" would have no approval authority over traffic control devices belonging to State or locals.
531	8A.04			x	The standard that adds "Diagnostic Team" should remain as "engineering study".
532	8A.05			X	The definition of engineering study would prohibit it from being completed by a Diagnostic Team. We request that the "conducted by a Diagnostic Team" be removed from the standard statement. This standard should also be kept as Guidance.
533	8A.06			x	Determinations should not be made by a Diagnostic Team.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
547	8B.16		X		The guidance <i>A signed detour should be installed to guide potential hang-up vehicles to alternate nearby crossings to avoid the potential hang-up condition</i> arguably means that agencies have to warn the low-clearance driver to stay away from the humped crossing AND have to install even more signs beyond that to direct him to an alternative crossing. Recommend rewording using language similar to that of proposed Section 2B.66 (weight limits): "Low Ground Clearance Grade Crossing Signs with a supplemental "ahead" or distance ahead plaque" should also be placed at the nearest upstream turnaround point or intersection so that potential hang-up vehicles can detour or turn around prior to reaching the at-grade rail crossing." AASHTO also disagrees with proposed compliance date for this item as devices should be brought into compliance through routine maintenance operations.
					The need for the "low ground clearance" educational plaque should be a guidance statement, not a standard. These signs have been in existence long enough to not require the plaque.
556	8C.04 & 8C.05		X		Remove reference to edgelines and lane lines extending "up to and across the track(s)". This isn't necessary and unlikely the tracks are viewed as an vehicular intersection. Also recommend deleting the "if recommended by a Diagnostic Team" from the Option statements.
559			x		Do not concur with the addition of the "diagnostic team" recommendation. Conflict of interest between diagnostic team members recommending products they sell vs. roadway owners engineering judgement.
561		x			Keep engineering study- agree.
562	8D.05		x		keep engineering study and remove "diagnostic team" from all changes in this section.
565			x		remove determination by a diagnostic team
565			x		remove diagnostic team
570	8D.15		x		remove diagnostic team
573	8E.02		X		keep as originally written
582			X		It appears that the marked up version of Part 9 does not include the ALL CAPS format for specific traffic control devices as indicated in docket item 1.
583	9A.01		X		This seems to be common sense language that could be restated for most sections in the manual. The last paragraph in the Support section (lines 12-15) does not add value and should be deleted.
584	9A.02		X		The end of the Support statement (Page 660, line 28) should read "...facility can contribute to problems with public acceptance and enforcement" for clarity.
585	9A.03		X		The proposed new Standard relative to retroreflectivity does not determine what "adequately visible under provided lighting" would be so that it is subject to interpretation. Also, without requirements for when pavement markings are required, there are none that are "must be visible at night" because there are none that are required period. Recommend deleting proposed Standard.
	9A.03		X		incomplete thought- "following another." Should be "following another bicyclist."
586		X			
587	9B.01	X			Logical
588	9B.02		X		Proposed section is consistent with previous NCUTCD recommendations; however, Figure 9B-2 should be clarified. In Sheet 1 of 2, it is only clear that the bicyclists should be in the right lane if the optional marking is present. The sign is not clear on its own. On Sheet 2 of 2, the plaque would suggest that right turning bicyclist should not use the jughandle turn lane. It would also suggest that a bicyclist using the jughandle to make a right turn would be in violation of the law. If that is the intent, the sign should be supported by state "rules of the road", which may not always be the case.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
	9B.02		x		The standard statement should read, "and is installed ON the same post...", not "to". Same in the last sentence.
589	9B.03		X		Concur with reverse color scheme for bike lane as bicycle symbol on a white background may not be perceptible to a driver and may suggest another travel lane.
590	9B.04	X			Bike lane signs should be mandatory, just like other types of preferential lanes.
591	9B.08	X			
592	9B.10			x	The support statement discussing "angled back-in parking" isn't necessary and should be deleted.
593	9B.11		X		FHWA should avoid redundancy as much as possible and reference relevant material in other Parts of the Manual, rather than repeat it. This would include discussion of R10-5 signs.
594	9B.12	X			
595	9B.14		X		Figure 9B-1 does not show a sign referenced "R4-11", but rather shows the sign that has that reference in the 2009 MUTCD labelled as "R9-20"
596	9B.15		X		This is another example of a rule of the road that varies from state to state, resulting in unnecessary posting of signing to reflect less than uniform motor vehicle codes. That being said, the sign should be allowed to include a "STATE LAW" plaque in contrasting color. Agree with the addition of the guidance statement.
597	9B.16	X			
598	9B.17			x	NDOT specifically calls out bicycles on our PROHIBITED sign that is placed on all freeway entrance ramps and on sections where freeways begin. As long as it's covered and made clear, there should be flexibility on how to sign for it.
599	9B.18		X		The opening Support statement is unclear, "Where two-stage bicycle turn boxes" are provided doesn't seem to relate to "will determine if the use of a two-stage bicycle turn box is required". Also, the first paragraph of the Standard, including subparagraphs A, B, and C would seem to be Options as a two-stage bicycle turn box is not required if there is no bicycle lane. Lastly, subparagraph C may be inappropriate unless there is a specific legal authority prohibiting bicyclists from turning from the lanes used by motor vehicles.
600	9B.19	X			
601	9B.20	X			
602	9B.21		X		The MUTCD should include guidance (small "g") on when this sign should and shouldn't be used
603	9B.22		X		The table does not include the size required by Part 4 for an overhead sign. If the sign is supposed to be primarily for motorists, a 12" x 21" size may not be reasonable for a post-mounted sign.
605	9B.25			x	this section seems unnecessary.
606	9C.05		X		The Support statement could be improved with another, or maybe better example of a warning sign that could be supplemented with the EXCEPT bikes plaque, such as LOW CLEARANCE or NARROW BRIDGE sign.
607	9C.06		X		The TWO WAY BICYCLE CROSS TRAFFIC plaque is one example, but recommend that the plaque shown warn of "BICYCLE CROSS TRAFFIC" as the default and allow modifications by engineering judgment to reflect different variations. Also, second Guidance statement indicates the plaque should not be used "on" bicycle facilities, when the plaque is actually used on roadways intersecting with bicycle facilities. Lastly, not sure why this plaque would not be used consistently along a bicycle facility crossed by multiple drives and roadways.

NPA Item	Draft 11th Ed MUTCD Section	Agree with concept and text as proposed	Agree with concept; see comments	Disagree with concept; see comments	Comments
608	9C.07		X		The docket item should reference relevant research, if available. Specifically, the BICYCLE MERGE sign would seem to imply that bicyclists would be merging and is not clear that it is intended to warn motor vehicle operators that bicyclists may be merging. Need to update figure numbers.
609	9C.08	X			
611	9D.01		X		The Support statement should be phrased in terms of the benefits the signs provide to bicyclists, not by emphasizing that the signs should be small to keep them away from motorists. AASHTO understands that the NCUTCD anticipates comments recommended specific changes.
612	9D.02		X		The figure does not contain drawings of the proposed new signs, D11-1d, D11-1e, D11-1f, and D11-1g. Also, recommend deleting Guidance that travel times should not be displayed on BIKE ROUTE guide signs as it would seem to be unnecessary.
613	9D.03	X			
614	9D.04	X			
615	9D.05	X			
616	9D.06			X	The intent of uniformity in the MUTCD was so motorists from one part of the country understood traffic control devices in another part of the country. That is less of a concern on bike routes, and may not be a concern at all, where the primary design item being followed is a unique graphic logo associated with (and promoted for) a bike route of local or regional significance. An example would be the East Coast Greenway. These routes are often marketed as unique bicycle touring experiences. Recommend different approach for bike route signing where the route is not numbered. Similar to auto tour route signs, there should be an allowance for non-motorized tour route signs.
617	9D.07	X			
618	9D.08		X		The first Standard prohibiting BICYCLE ROUTE SIGN AUXILIARY plaques from highway route marker assemblies should be Guidance as it may be desirable in some conditions or in areas where bicycle routes are particularly integrated into the roadway network.
619	9D.09		X		The size shown in the table does not match the figure. The design of the D4-4 sign is unconventional. We recommend a redesign of the sign with 2 lines of text. What is a "unregulated bicycle-sharing parking facility"? Should this be defined?
620	9D.10	X			
621	9D.12		X		Chapter 9G was not posted on the Federal Register at the time of this comment. AASHTO reserves the right to comment on this material when it is made available for public comment. That being said, it would seem to be a conflict to required signing on a shared use path be retroreflective when elsewhere, traffic control devices are not required to be retroreflective if the facility is adequately lighted.
622	9D.13	X			
623	9E.01		X		AASHTO notes concerns with this section, specifically with Standard language that indicates a shoulder cannot be a bike lane and prohibiting the use of the bicycle symbol or BIKE LANE marking on a shoulder. This is a common practice. For example, separated bike lanes and/or shared use paths are often connected by a roadway where the bicycle symbol or BIKE LANE marking provides confirmation. Additionally, Figure 9E-1 seems to have replaced the helmeted bicyclist with the proposed symbol. AASHTO notes that this may have been inadvertent as we are not aware of any research that supports one over the other.
624	9E.02	X			
625	9E.03		x		The figure noted does not show the "lane extension markings" referred to in the 3rd sentence of the standard statement. It should also be an option, not standard.

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626	9E.04	X			
627	9E.05	X			
628	9E.06		X		Figures should include a graphic showing a buffer between a bicycle lane and parking, which is the real threat to bicyclists, not the travel lane. Line 30- placing chevrons or one-direction markings within a 3' gap can be difficult to do and not provide much benefit.
629	9E.07		X		The Support statement should mention "vertical objects or <u>horizontal</u> separation." The Standard statement from line 9-12 seems like good design guidance, but not a shall statement. The standard statement from Line 1-4 states a 2' gap, which seems to conflict with 9E.06 which states 3' for the chevron/one direction marking requirement.
630	9E.08	X			
631	9E.09		X		The Guidance in Page 775, Lines 39 and 40 says "At non-intersection locations, the Shared Lane Marking should be spaced at intervals not less than 50 feet and not greater than 250 feet seems to be excessive. Consider 500 feet instead of 250 feet.
632	9E.10	X			
633	9E.11		X		Practitioners need more concrete guidance on the sizing of the symbols within the box; we need a fixed set of sizes from which to choose.
634	9E.12		X		Figure 9E.12 is missing a title. AASHTO recommends that there be recommended conditions to warrant the use of a bike box and looks to the NCUTCD to provide specific comments to improve this Section.
635	9E.13	X			
635	9E.13	X			
636	9E.14	X			
637	9E.15	X			
638	9E.17	X			
639	9F.02	X			
640	9G				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.
641	9G.01				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.
642	9G.02				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.
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644	9G.04				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.
645	9G.05				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.
646	9G.06				NPA is missing the text & figures. AASHTO reserves comment until material is available to review and provide public comment.