





	NPA Item	Title	Change Summary	Agree with concept; suggested rewording of text in Comments	Disagree with concept	Comments	Suggested Changes	Line no for suggested changes (FHWA Mark Up Proposed Text)
Part 1	13	Experimentation	13. In proposed Section 1B.06 Experimentation, FHWA proposes to revise existing Section 1A.10, Paragraph 11, and change from Guidance to Standard. In addition, FHWA proposes to add Standards, Support, and Guidance paragraphs further addressing the experimentation process. FHWA proposes these revisions to clarify and streamline the experimentation process for agencies wishing to experiment with novel traffic control devices or applications.		X	The added Standard language eliminates flexibility and increases the burden on agencies conducting experiments. The added Standard language increases time and cost to evaluate and implement potentially innovative safety and / or mobility solutions. ----- Clarify what is a legally binding statement. The agency or the supplier should not be legally responsible for the patent, trademark, or copyright of a traffic control device.	Delete proposed new language Page 11, Lines 28, Page11, 34-49 ----- On Page 11, Line 52 change the language as follows: "manufacturer and/or developer of the device, andor the supplier of the device,..." On Page 12, Line 5 change the language as follows: "developer of the device, andor the supplier of the device are..."	Page 11, Lines 28, 34-49 ----- Page 11, Line 50-52 + Page 12, Line 1-8
	41	Posts and Mountings	41. In Section 2A.17 (existing Section 2A.21) Posts and Mountings, FHWA proposes to add the Option statement relocated from Section 2A.15 (existing Section 2A.19) permitting the use of existing supports. As part of this change, FHWA proposes to add a Support statement referring readers to lateral and height placement criteria for Guidance and Standards contained in this Manual for such signs. FHWA also proposes to delete the Option paragraph regarding adding retroreflective strips to sign posts because it is redundant to Section 2A.11 (existing Section 2A.15). In concert with this change, FHWA proposes to retain a reference and relocate the Standard paragraph to Section 2A.11 (existing Section 2A.15). FHWA also proposes to add a Standard with requirements regarding the placement of equipment for powering electronic components of a sign, including solar panels, when such equipment is mounted to a sign support. FHWA proposes these requirements to retain crashworthiness performance of the sign installation as well as to avoid obscuring the face or shape of the sign.		X	The standard will require change in department specifications and standards. Vendors will be required to redesign post mounted sign assemblies to comply with the proposed change. FDOT's standard for crash worthiness typically has the solar panel high on the pole, so, if hit, the pole goes over the car and not through the windshield.	Remove proposed standard language on Page 56, lines 3-8.	Page 56, Lines 3-8
	66	In-Street and Overhead Pedestrian and Trail Crossing Signs (R1-6 and R1-9 Series)	66. FHWA proposes to renumber and retitle existing Section 2B.12, "Section 2B.20 In-Street and Overhead Pedestrian and Trail Crossing Signs (R1-6 and R1-9 Series)" to reflect the additional proposed Trail Crossing sign. FHWA also proposes to revise existing Standard P3 through P5 to include the proposed new Trail Crossing sign. FHWA proposes to clarify in Standard P3 that no more than one in-street sign shall be placed in the roadway, on a lane line for a one-way roadway application, or on a median island. FHWA proposes this change to minimize sign proliferation in the roadway and to prevent potential distraction due to an overuse of signs at a single location. FHWA proposes this change as a conforming edit, which would not change the existing underlying requirement, in response to an apparent misinterpretation of the existing provisions as evidenced by a number of technical inquiries and observations of noncompliant field deployments. FHWA proposes to change existing Option P7 to a Standard and add a new Standard to require that if used, the In-Street or Overhead Pedestrian or Trail Crossing sign shall be used as a supplement to a Pedestrian Crossing (W11-2) or Trail Crossing (W11-15) warning sign with a diagonal downward-pointing arrow (W16-7P) plaque at the crosswalk location. FHWA proposes this change to ensure that if an in-street or overhead sign is used, that the appropriate non-vehicular warning sign is in place to ensure uniformity in application at crosswalks. FHWA proposes this change as a conforming edit, which does not change the existing underlying requirement, in response to an apparent misinterpretation of the existing provisions as evidenced by a number of technical inquiries and observations of noncompliant field deployments. FHWA proposes to add an Option allowing In-Street Pedestrian or Trail Crossing signs to be mounted back to back in the median or on the centerline of an undivided roadway. FHWA proposes this option to minimize the number of in-street obstructions at the crossing. FHWA also proposes to clarify in Standard P8 that the In-Street Pedestrian or Trail Crossing sign and the Overhead Pedestrian Crossing or Trail sign shall not be used at crosswalks on approaches controlled by a traffic control signal, pedestrian hybrid beacon, or an emergency vehicle hybrid beacon. FHWA proposes this clarification to eliminate conflict between the sign that says STOP or YIELD and a green signal indication on a traffic control signal or hybrid beacon. In concert with this change, FHWA proposes to add an Option statement permitting the use of the In-Street Pedestrian and Overhead Pedestrian and Trail Crossing sign at intersections or midblock pedestrian crossings with flashing beacons, because flashing beacons do not display a green indication, and therefore the use of this sign would not conflict with the signal indication. Finally, FHWA proposes to reword existing Option P15 to clarify that both the in-street and overhead mountings of signs may be used together at the same crosswalk.		X	Requires R1-6a signs to be a singular installation on the crosswalk approach. Available research through <i>Use of In-Street Crossing Signs (R1-6a) to create "Gateway Effect" in Florida - A Request to Experiment</i> . See FDOT docket submittal for a copy of the research paper. File Name: 2(09)-142(E) - R1-6a Gateway Effect - FDOT Interim Semi-Annual Progress Report and Additional Locations	Revert to 2009 MUTCD language. Also, add lane line and/or curb. Suggested language is shown below: If used, the In-Street Pedestrian or Trail Crossing sign shall be placed at one of the following locations: A:-in the roadway at the crosswalk location on the center line; B:- on a median island; C:- or, in the case of a one-way roadway application, on a lane line, <u>on a lane line, edge line or on top of a curb.</u>	Page 74, Line 9-14

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	NPA Item	Title	Change Summary	Agree with concept; suggested rewording of text in Comments	Disagree with concept	Comments	Suggested Changes	Line no for suggested changes (FHWA Mark Up Proposed Text)
Part 2	87	ONE WAY Signs (R6-1, R6-2)	<p>87. In Section 2B.50 (existing Section 2B.40) ONE WAY Signs (R6-1, R6-2), FHWA proposes, as the result of recent research, (24) to replace all language describing an intersection with a divided highway that has a median width at the intersection itself of 30 feet with proposed new language that describes the crossing of a roadway with a divided highway as an intersection operating as single or separate intersections. FHWA proposes these changes because it is important to base the application of ONE WAY signing on how the intersection functions, rather than the width of the median.</p> <p>FHWA also proposes to revise Option P11 to indicate that a One-Direction Large Arrow sign may be used instead of or in addition to a ONE WAY sign in the central island of a circular intersection. FHWA proposes this change to reflect the proposed removal of the Roundabout Directional Arrow from the MUTCD.</p> <p>In addition, FHWA proposes to add a Standard statement specifying that when a One-Direction Large Arrow sign is used without a ONE WAY sign, the R6-5P plaque shall be mounted below the Yield sign on the approach to a roundabout. FHWA proposes this to ensure that when only the One-Direction Large Arrow is used that a regulatory message indicating the direction of movements is provided.</p> <p>FHWA also proposes to delete P10 and 13 because they are duplicative and contradictory, respectively, and therefore not necessary to include in the MUTCD.</p>		X	See Comments for NPA Item 90 related to deletions of content for roundabout directional arrow signs	Restore content related to one-way signs at roundabouts from the 2009 MUTCD	Page 99, Lines 14-16
	90	Previously "Roundabout Directional Arrow Signs"	90. FHWA proposes to delete existing Section 2B.43 Roundabout Directional Arrow Signs, because the design of the R6-4 series signs, for which there are 3 versions, confounds a warning sign with a regulation and, as a result, have become prone to misuse. To address the condition for which these signs were intended, this proposed change also includes associated changes to the use of ONE WAY signs and the Large Arrow sign, as described above.		X	<p>Proposed change removes the current roundabout directional arrow sign that are currently installed at all roundabouts.</p> <p>•A distinction needs to be made between roundabouts, which are defined as “a circular intersection” (singular, not plural), and other circular intersections which may function as a series of T-intersections linked by a one-way roadway (such as larger rotaries). This is analogous to how an intersection along a divided highway may function as two intersections.</p> <p>•ONE WAY signs should only be used within a circular intersection if it functions as a series of separate T-intersections. This is consistent with the intent for the use of ONE WAY signs at the crossing of a roadway with a divided highway that functions as two separate intersections.</p> <p>•The proposed standard (Page 99, Lines 14-16) is unwarranted and unsupported by the current practice used at the vast majority of the over 7,000 roundabouts in use in the United States. Not only is the One Direction Large Arrow not used at the majority of sites in the United States, but the R6-5P plaque is typically only used at mini-roundabouts where no signs can be placed in the central island.</p>	<p>Restore section 2B.43 from 2009 MUTCD.</p> <p>The use of a regulatory sign to convey direction of circulation within the intersection is preferred over a warning sign, and it should be distinct from a ONE WAY sign used to designate one-way direction of travel on intersecting roadways. The sign is uniquely located within the interior of an intersection, unlike either the ONE WAY sign, used on the exterior of intersections, or the One-Direction Large Arrow sign, used on roadways with changes in curvature. The “misuse” suggested by FHWA does not appear to be founded in experience, nor has any research been cited. Indeed, the recommendation goes against the current guidance in NCHRP Report 672. The combination of regulatory and warning was intentional when added to the 2009 MUTCD.</p>	Page 99, Lines 14-16
	91	Roundabout Circulation Plaque (R6-5P)	91. As discussed above, FHWA proposes to relocate and renumber existing Section 2B.44 as "Section 2B. 52 Roundabout Circulation Plaque (R6-5P)."	X		<p>The Roundabout Circulation plaque should only be used at roundabouts functioning as single intersections. It should not be used at circular intersections functioning as a series of intersections. It should be indicated as optional for all except mini-roundabouts.</p> <p>Page 100; Line 26 says "Roundabout Circulation plaques may be placed below the YIELD signs on approaches to roundabouts.</p>	<p>•The option statement in 25-27 needs to be modified to restore the Roundabout Directional Arrow sign and to remove the ONE WAY sign.</p> <p>•The option statement in 28 should be changed to exclude those circular intersections functioning as a series of intersections.</p> <p>•On Figure 2B-22, replace the One Direction Large Arrow warning sign with the Roundabout Direction Arrow sign (R6-4 series). Indicate that the Roundabout Circulation sign under the YIELD sign is optional.</p> <p>•On Figure 2B-23, replace the One Direction Large Arrow warning sign with the Roundabout Direction Arrow sign (R6-4 series). Indicate that the Roundabout Circulation sign under the YIELD sign is optional.</p>	Page 100, Lines 25-28
	92	Examples of Roundabout Signing	92. FHWA proposes to delete existing Section 2B.45 Examples of Roundabout Signing. Roundabouts have become very common. The figures have been retained in Chapter 2B; however, a separate section dedicated to examples is not needed.	X		The Roundabout Circulation plaque (R6-5P) under the YIELD sign can be interpreted as "required." Page 100, Lines 26-27 indicate these "plaques may be placed below the YIELD signs."	Indicate that the Roundabout Circulation plaque (R6-5P) under the YIELD sign is optional on Page 100, Lines 29-32 and corresponding figures.	Figures 2B-21, 2B-22, 2B-23 Page 100, Lines 29-32
	116	Device Selection for Changes in Horizontal Alignment	116. FHWA proposes to add a new section numbered and titled "Section 2C.06 Device Selection for Changes in Horizontal Alignment." This proposed new section contains Standard, Support, and Option statements, as well as new tables, to assist practitioners in determining the type of device to be used in advance of horizontal curves on freeways, expressways, and roadways. FHWA proposes this new section to assist practitioners with the selection of the appropriate device for warning of a change in horizontal alignment.		X	An agency may not always have the 85th percentile speed information.	Recommend this "Shall" statement be updated as follows: "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, whichever is higher, or the prevailing speed on the approach to the curve."	Page 123, Lines 5-7



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Part 2	234	LAST EXIT BEFORE TOLL Warning Plaques (W16-16P, W16-16aP)	<p>234. In Section 2F.10 retitled, "LAST EXIT BEFORE TOLL Warning Plaques (W16-16P, W16-16aP)," FHWA proposes to add a new W16-16aP plaque as a two-line alternative to the W16-16P plaque. FHWA proposes this change to provide agencies design flexibility where the plaque is used above a narrow-width guide sign.</p> <p>FHWA also proposes to require the Exit Number Plaque, if used, to be installed above the LAST EXIT BEFORE TOLL plaque for numbered exits. FHWA proposes this change to reiterate and clarify the existing requirements in Chapter 2E for the position of the Exit Number plaque. FHWA proposes this change as a conforming edit, which would not change the existing underlying requirement.</p> <p>FHWA proposes to delete the Standard, since the design of the W16-16P is standardized and compliance is required in accordance with the existing provisions of Chapter 2A.</p>		X	<p>FHWA proposes to change the title of the section. FHWA also removed the option for placing the plaque below the guide sign, which is not mentioned in the Federal Register language.</p>	<p>It is recommended to retain the option of placement for the plaque to above or below the guide sign. This is consistent with the NCUTCD recommendation for 2E.23 and 2E.25. Designers should be allowed to have the flexibility of above or below the guide sign.</p>	Page 246, Lines 42-46
	240	Guide Signs for Entrances to ETC-Only Facilities	<p>240. In proposed new Section 2F.18, FHWA proposes to include a new Standard regarding signs used to identify ETC-Only facilities that collect tolls by post-travel billing of registered vehicle owners through postal mail, including if an ETC account program registration is also accepted. In concert with this change, FHWA proposes to add an Option allowing the addition of a plaque with the legend NO CASH on these signs.</p> <p>FHWA also proposes to include an Option statement providing flexibility to display pictographs for other accepted ETC toll programs on separate information signs if the post-travel billing program also allows payment through those ETC accounts without restriction in the agencies' primary ETC program.</p> <p>FHWA also proposes to add an Option statement for flexibility regarding signs that may be used to let motorist know if a surcharge is added to the toll amount for those not registered in toll account program.</p>		X	<p>FDOT's Florida's Turnpike Enterprise converted the first section of its tolled roadway system to an All-Electronic Tolling (AET) system in 2011, and other large portions of the system throughout the state have subsequently converted to AET. Florida is a tourist destination and since 2015, Florida has received more than 100 million out-of-state and international visitors a year. Part of the successful public information and education plan was making use of payment options displayed on guide signing in advance of entrances to AET facilities.</p> <p>The graphic to the right shows an example of a guide sign at the entrance to an AET facility:</p>  <p>The NPA proposal would eliminate the payment options information from these guide signs at all locations approaching AET facilities and would rely exclusively on a single roadside mounted sign that may be more difficult to see on crowded interchange approaches and multi-lane arterial corridors in both urban and rural areas. The visibility of the single roadside sign can frequently get obscured from view by large vehicles, congested conditions and landscaping. FDOT requests flexibility instead of the standard being proposed by the NPA so that the message "SUN PASS OR TOLL BY PLATE" can remain on the sequence of overhead guide signs.</p> <p>FDOT also requests flexibility to allow the message being proposed on the separate informational sign to include the TOLL-BY-PLATE legend (see to the right) instead of requiring the sign to display "TOLL BILLED BY MAIL OR SUN PASS" legend. FDOT also requests flexibility regarding the order of the message on this sign panel to include the ETC account pictograph above the BILLED BY MAIL or TOLL-BY-PLATE legend.</p>  <p>The TOLL-BY-PLATE message is observed to be widely understood by Florida visitors as well as residents who are not equipped with a SunPass or other interoperable transponder. We are concerned that visitors may not understand the message BILLED BY MAIL. The Toll-By-Plate program also allows a non-ETC account holder to log onto a website and make a payment for the toll amount prior to an invoice (or citation) being mailed to the registered license plate holder. In addition, the BILLED BY MAIL terminology is not consistent with third-party payment providers (such as rental car companies or future toll payment video bill apps) method of collection/notification to a customer. These payment options will continue to evolve with new technological advances and the BILLED BY MAIL message will not encompass other options for payment.</p>	<p>Section 2F.18 – Page 253 - Delete lines 9 through 17.</p>	Page 253, Lines 9-17



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Part 2					X	<p>R3-44 and R3-44a Periods of Operations sign should have the "shall" restriction changed to "may", should be relocated from "at the entrance point" to anywhere in the sign sequence, and should have the name changed from "Periods of Operation" to "Lane Restriction".</p> <p>Official Ruling 2(09)-78(1), dated November 20, 2013, refers to minimizing ambiguous messages at a decision point. The message on the Periods of Operation signs is shown on the other signs leading to an express lane entrance. Having this same information on a standalone overhead sign is redundant and adds to sign clutter.</p> <p>The language says the sign shall be placed at the entrance point. At this location, it provides no value to a customer wanting to access priced managed lanes. The location shown in the corresponding figures is at a point where a driver would have to make an unsafe maneuver to exit the lane. If the decision is made to use this sign, the engineer should have the option to place it anywhere along the priced managed lanes.</p> <p>The sign is named "Periods of Operation". There is no time reference on the sign panel. The R3-35 14 sign series, in the HOV section, is also called "Periods of Operation". These signs show a time when the HOV managed lanes are in operation. The R3-44 sign panel is used for priced managed lanes that are in operation 24 hours a day. The name of the sign should be changed to "Lane Restriction", since that is the message displayed on the sign panel.</p>	<p>Per NCUTCD Proposal 18A.GMI.02, update the text in Section 2G.18 to remove Page 273, Lines 42-44 and add the following:</p> <p><u>Option:</u> A priced managed Lane Restriction (R3-44 or R3-44a) sign (see Figure 2G-18) may be installed anywhere along a priced managed lane</p> <p>Further documentation is provided in this link: https://ncutcd.org/wp-content/uploads/meetings/2018B/AttachNo5.18A-GMI-02.R344R344aSigns.pdf</p>	Page 273, Lines 42-44
	249	Guide Signs for Priced Managed Lanes	<p>249. In Section 2G.19 (existing Section 2G.18) Guide Signs for Priced Managed Lanes, FHWA proposes to add a new Standard statement and accompanying figure prohibiting the use of ETC-account pictographs on the primary guide sign directing traffic to the managed lane when registration in a toll-account program is not required for travel in a managed lane in which tolls are charged. In such cases, FHWA proposes that the purple header panel shall be replaced with a warning header panel with a black legend and border on yellow background displaying the word TOLL. FHWA proposes this change to provide consistency in signing for toll facilities where registration is not required for travel for the purpose of improving traffic efficiency and safety.</p> <p>FHWA also proposes to add an Option provision allowing the legend TOLL BILLED BY MAIL ONLY on a separate information sign within the sequence of primary guide signs in advance of an entrance to the managed lane if the managed lane does not accept toll payments from an ETC account system and collects tolls only by post-travel billing of registered vehicle owners.</p> <p>FHWA proposes to add another Option allowing pictographs of the accepted ETC account programs and the legend TOLL BILLED BY MAIL on a separate information sign within the sequence of primary guide signs in advance of an entrance to the managed lane if the managed lane accepts payments from registered ETC accounts but does not require registration to use the lane.</p>	X		Is an alternate text allowed for the "TOLL BILLED BY MAIL ONLY" – this will create a financial impact to change out toll signs	For example, Florida uses "TOLL BY PLATE"	Page 274, line 39 and line 45
	263	State Welcome Signs	263. FHWA proposes to add a new section numbered and titled, "Section 2H.07 State Welcome Signs," to provide information regarding the design, placement, and function of State Welcome signs, which have a different purpose from Jurisdictional Boundary signs that identify and mark State lines. The new section contains provisions for the location, display, and size of State Welcome signs.		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.	Delete Lines 23-24 and Lines 34-35.	Page 283, lines 23-24 and 34-35
	284	Eligibility	<p>284. In Section 2J.01 Eligibility, FHWA proposes to delete the 24-hour Pharmacy Specific Service category because there has been little demand and most pharmacies that did obtain a logo on a Specific Service sign have since withdrawn from the associated agency program. Instead, the 24-hour pharmacy would remain as General Service only. FHWA also proposes to remove references to 24-hour pharmacies from Section 2J.02.</p> <p>FHWA also proposes to remove alternative fuels from the qualifications for a GAS business identification sign panel to eliminate any potential driver expectancy confusion should a facility offer one or more of the many alternative fuels only and not gasoline.</p> <p>FHWA also proposes to change existing Guidance P10 to Standard, because it is important for States to have a statewide policy for Specific Signing for the program to be successfully implemented in a consistent manner. Such policies already exist in a majority of the States.</p>		X	Alternative fuel options will increase as electric vehicles fleet continue to increase. The guidance provided in Section 2J.01 should maintain "the alternative fuels" option in the text.	<p>1st preference: Consider adding electric charging stations as business identification sign panel as part of 2J.01 after Page 303, line 43.</p> <p>2nd preference: As an alternative, consider adding an Option stating the following on Page 304, after line 45:</p> <p>Option: Businesses that are not in the gasoline category, but provide alternative fuels may include supplemental plaques appended to their logo sign indicating the availability of an alternative fuel at their location.</p> <p>3rd preference: As an alternative, maintain language from 2009 MUTCD, Page 303, Line 39: Vehicle services including gasoline <u>and/or alternative fuels, oil, and water</u>;</p>	Page 303, line 39

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Part 2	296	Applications of Changeable Message Signs	<p>296. In Section 2L.02 Applications of Changeable Message Signs, FHWA proposes to relocate and revise Standard P3 from Section 2L.01 because this language applies to the applications of CMS and not the description of them. As part of the revisions, FHWA proposes to clarify that CMS are to display only information as provided for in this chapter and other types of messages not related to traffic control and not provided for in this chapter shall not be displayed on CMS. FHWA proposes this additional language to promote uniformity in the use of CMS and to discourage the use CMS to display messages not provided for in the MUTCD, ensuring that the CMS adhere to the basic principles of an effective traffic control device that are stated in the existing provisions of Part 1.</p> <p>FHWA also proposes to change existing Option P2 to a Guidance and move the statement earlier in this section to clarify the types of messages to be used on CMS in support of the proposed Standard relocated from Section 2L.01.</p> <p>FHWA also proposes to add a new Guidance statement recommending that CMS not be used in place of static guide sign messages except for blank-out type signs used to display regulatory, warning, and guidance information that routinely reoccurs but only on a part-time basis. In addition, only elements of a sign that are subject to change should be in an electronic display. FHWA proposes these changes to help ensure consistency in sign design by controlling the potential variability of information that should not change on a sign.</p> <p>In addition, FHWA proposes to delete Support Item D, messages pertaining to control at crossing situations, from the list of types of messages for which CMS are applicable. FHWA proposes this change, because "control at crossings" is not well understood and such messages would be covered under the other more general categories within the list, such as "Warning situations" or "Traffic regulations."</p> <p>FHWA proposes to change existing Guidance P3 to a Standard to require that agencies that have permanently installed or positioned CMS have a policy regarding their use and the display of all types of messages used on CMS. Such policies shall define the types of messages that would be allowed, the priority of messages, the syntax of messages, the timing of messages, and other important messaging elements to ensure messages displayed meet the basic principles that govern the design and use of traffic control devices in general and traffic signs in particular as provided for in the MUTCD. In concert with this change, FHWA proposes that State and local agencies that use CMS that are not permanently installed or positioned should develop and establish a similar policy. FHWA proposes these changes in order to ensure urgent and real-time traffic operational and safety messages developed to address varying roadway and traffic conditions are easily understood, timely, and relevant.</p> <p>FHWA proposes to include recommendations specific to the display of AMBER alerts, including limiting the length of messages, and details, such as description of persons, vehicles or license plate numbers. In addition, FHWA proposes to add a new Standard paragraph prohibiting other "alert" messages that are not related to traffic or travel conditions that are specifically for AMBER alerts.</p>		X	<p>Proposed language on Page 317, lines 51-53 and page 318, lines 1-2, restricts the use of license, make and model of involved vehicles in an Amber Alert. The proposed change is counterintuitive to the purpose of using CMS for amber alerts and could encourage cell phone use while driving.</p> <p>In addition, FDOT uses DMS for safety campaigns when these devices are not being used for a higher priority message. The safety campaigns displayed are not required to be "considered as part of an active, coordinated safety campaign that uses other media forms as the primary means of outreach." The proposed standards proposed on Page 318, Lines 3-5 and Lines 32-33 conflict with FDOT's use of the DMS messages.</p>	<p>Delete the following proposed text: Page 317, Lines 52-53 and Page 318, Lines 1-2 (Guidance) Page 318, Lines 3-5 (Standard) Page 318, Lines 32-33 (Standard)</p>	<p>Page 317, Lines 51-53 + Page 318, Lines 1-5</p> <p>Page 318, Lines 32-33</p>
	350	High-Visibility Crosswalks	<p>350. FHWA proposes to add a new section numbered and titled, "Section 3C.05 High-Visibility Crosswalks," to provide Support, Option, Standard, and Guidance paragraphs about the various types of high-visibility crosswalks including longitudinal bar, perpendicular, and double-paired designs. FHWA proposes this section to provide agencies with three standard alternatives to improve crosswalk visibility when desired consistent with an FHWA research study. (58) FHWA also proposes to illustrate these crosswalk types in Figure 3C-2.</p>		X	<p>FHWA has proposed a standard that requires a uniform lateral spacing between longitudinal elements for a high-visibility crosswalk. FDOT standard drawing 711-001 places longitudinal elements on lane lines and on the centerline of individual lanes. As a result, the current FDOT standard drawing only complies with the proposed standard if the travel lane and bike lane widths are multiples of the same number (e.g., 6 feet).</p>	<p>It is suggested to modify the standard by adding an option. Add option on Page 371 between lines 25 and 26 stating: "<i>Spacing does not have to be uniform if the crosswalk marking are located along centerlines or lane lines.</i>"</p> <p>As an alternative, change text on Page 372, lines 9-11 as follows:</p> <p><i>"The lateral spacing between subsequent interior longitudinal bars shall not be less than 12 inches or greater than 60 72 inches. The lateral spacing of the interior longitudinal bars shall not exceed 2.5 3.0 times the width of an interior longitudinal bar."</i></p>	<p>Page 371; line 20-25</p>
Part 3	351	Longitudinal Bar Crosswalks, Perpendicular Crosswalks, Longitudinal Bar Pair Crosswalks	<p>351. FHWA proposes to add new sections numbered and titled, "Section 3C.06 Longitudinal Bar Crosswalks," "Section 3C.07 Perpendicular Crosswalks," and "Section 3C.08 Longitudinal Bar Pair Crosswalks," to provide provisions related to the design and spacing for the three new types of high-visibility crosswalks.</p>		X	<p>Consistent with NPA 350 response. FHWA has proposed a standard that requires a uniform lateral spacing between longitudinal elements for a high-visibility crosswalk. FDOT standard drawing 711-001 places longitudinal elements on lane lines and on the centerline of individual lanes. As a result, the current FDOT standard drawing only complies with the proposed standard if the travel lane and bike lane widths are multiples of the same number (e.g., 6 feet).</p>	<p>Modify the standard with an option. Add option between line 12 and 13. Spacing does not have to be uniform if the crosswalk marking are located along centerlines or lane lines.</p> <p>As an alternative, change text on lines 9-11 as follows:</p> <p>The lateral spacing between subsequent interior longitudinal bars shall not be less than 12 inches or greater than 60 <u>72</u> inches. The lateral spacing of the interior longitudinal bars shall not exceed 2.5 <u>3.0</u> times the width of an interior longitudinal bar.</p>	<p>Page 372; line 9-11</p>

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	NPA Item	Title	Change Summary	Agree with concept; suggested rewording of text in Comments	Disagree with concept	Comments	Suggested Changes	Line no for suggested changes (FHWA Mark Up Proposed Text)
Part 4	355	General	355. In Section 3D.01 (existing Section 3C.01) General, FHWA proposes to modify Guidance P3 to recommend that markings should supplement signs to help road users select the proper lane in the approach to the circular roadway to avoid changing lanes through the departure of the circular roadway based on an NCHRP Report. (60)		X	•The deletion of “or to meter traffic” (Page 374; line 23) is incorrect. 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, suggest adding the YIELD pavement marking message as an option to all multilane entries. For Figure 3D-2, the option asterisk needs to be removed from the multilane south leg.	See comments.	Page 374
	357	Yield Lines for Roundabouts	357. In Section 3D.04 (existing Section 3C.04) Yield Lines for Roundabouts, FHWA proposes to upgrade part of existing Option P1 to a Standard to require that a yield line be used on the entries before entering multi-line roundabouts. For single-lane roundabouts, the Option remains to allow a yield line on the entry before entering the roundabout.		X	•The added support statement referencing Section 2B.09 is unnecessary and incomplete. It should be deleted. •The change to use yield lines at multilane roundabouts should be changed from a Standard to Guidance. There is no evidence that this condition needs to be mandatory at all multilane roundabouts. Some states like Florida apply YIELD word messages instead of yield lines.	See comments.	Page 375-376
	413	Yellow Change and Red Clearance Intervals	In Section 4F.17 (existing Section 4D.26) Yellow Change and Red Clearance Intervals, FHWA proposes to change P2 from Standard to Support because the paragraph describes the function of a yellow change interval, rather than specific requirements. FHWA also proposes to revise Support P7 to reference "Guidelines for Determining Traffic Signal Change and Clearance Intervals: A Recommended Practice of the Institute of Transportation Engineers," which contains the current practices for determining the duration of yellow change and red clearance intervals. In addition, FHWA proposes to revise Guidance P14 to recommend the maximum duration of yellow change interval for through movements should be 6 seconds and for turning movements should be 7 seconds. As part of this change, FHWA proposes to delete the second sentence of Guidance P14 and Guidance P15. FHWA proposes these changes to reflect new guidance in the new ITE publication.		X	Changes guidance document 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". The TEM expressly prohibits the use of this document in Florida. FDOT is in support AASHTO's recommendation to revert to previous ITE guidance.	Replace p. 457, l 38-57 with: "Refer to ITE's "Determining Vehicle Signal Change and Clearance Interval" (1994) for calculating yellow change and red clearance intervals."	Page 457 line 38-39
	438	General Design and Operation of Flashing Beacons, Speed Limit Sign Beacon	In Section 4S.01 (existing Section 4L.01) General Design and Operation of Flashing Beacons, FHWA proposes to revise Standard P4 to discontinue the existing allowance of a beacon within the border of a sign for School Speed Limit Sign Beacons. FHWA proposes this change because under certain light and weather conditions, the flashing beacon causes irradiation that can obscure the sign message if the beacon is within the sign or too close to the sign legend. This proposal is consistent with research demonstrating the phenomenon of irradiation or disability glare. (96) FHWA also proposes a corresponding revision to Section 4S.04 (existing Section 4L.04) Speed Limit Sign Beacon. FHWA also proposes to add Interchange Exit Direction signs with advisory speed panels as an exception to the Standard prohibiting flashing beacons within the border of the sign. FHWA proposes this revision to clarify the existing practice and for consistency with Figure 2E-27. FHWA also proposes to add a new Standard establishing eight-inch and twelve-inch as the two nominal diameter sizes for flashing beacon signal indications in accordance with Official Ruling No. 4(09)-7(I). (97)		X	FHWA is proposing a Standard which would prevent the use of LEDs within the border of a Speed Limit sign to indicate the speed limit is in effect. Proposed changes on this standard is in conflict with the requirements of Section 2A-11 (K).	Revise Page 503 line 33-34 to avoid conflict with Section 2A-11 (K).	Page 503, line 33-34
	441	Speed Limit Sign Beacon	In Section 4S.04 (existing Section 4L.04) Speed Limit Sign Beacon, FHWA proposes to delete the second sentence of P2 to provide agencies more flexibility in arranging two or more indications. FHWA also proposes to modify P3 to expand the provision beyond two signal indications to address situations where four signal indications are used.		X	FHWA is proposing a Standard which would prevent the use of LEDs within the border of a Speed Limit sign to indicate the speed limit is in effect. Proposed changes on this standard is in conflict with the requirements of Section 2A-11 (K).	Revise Page 503 line 33-34 to avoid conflict with Section 2A-11 (K).	Page 503, line 33-34
	495	Channelizing Devices-General	495. In Section 6K.01 (existing Section 6F.63) Channelizing Devices-General, FHWA proposes to add P10 and revise P12 to reflect changes associated with Official Ruling No. 6(09)-11(I). (108) Also, FHWA proposes to change existing P18 from a Standard to a Guidance statement because "significant amount" is not defined.	X		This change <u>may</u> prohibit Florida's requirements for APL markings. This would create issues for field inspection staff who must verify that the device is listed on the APL. Contractors would also need to remove marked devices from their inventory.	Delete proposed standard on Lines 11-13. As an alternative, change "road users" to "vehicle operators" on line 12.	Page 566; lines 11-13
Part 6	496	Pedestrian Channeling Devices	496. FHWA proposes to create a new section numbered and titled, "Section 6K.02 Pedestrian Channeling Devices" that contains information relocated from existing Section 6F.63 plus new Standard, Guidance, Option, and Support information specific to pedestrian channelizing devices. Within this new section, FHWA proposes to add a new figure, Figure 6K-2, illustrating an example of a pedestrian channelizing device, including hand-trailing for visually-disabled pedestrians.	X		When a permanent existing wall is used as a channelizing device, the guidance is saying that it "should have alternating, contrasting sheeting positioned 32 inches above the walkway". This is not practical and should be removed. This is detectable and should already be known by visually impaired users.	Consider updating text to the following on Page 567 l. 9-10: 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, should have a common vertical face. and should have alternating, contrasting sheeting positioned 32 inches above the walkway.	Page 567; Lines 9-10

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	NPA Item	Title	Change Summary	Agree with concept; suggested rewording of text in Comments	Disagree with concept	Comments	Suggested Changes	Line no for suggested changes (FHWA Mark Up Proposed Text)
Part 6	499	Temporary Traffic Control Signals	499. FHWA proposes to revise Section 6L.01 (existing Section 6F.84) Temporary Traffic Control Signals to conform to proposed changes in Section 4K.01.		X	Revert back to "engineering judgement" per 2009 MUTCD language. Alternatively, see suggested changes to the right.	Should read something like this: "Where pedestrian traffic is detoured <u>from a facility having existing accessible pedestrian signals</u> to a temporary traffic control signal, an accessible pedestrian signal should be provided for crossing along an alternate route."	Page 574, lines 15-17
	516s	Closure at the Side of an Intersection	s. Figure 6P-28 (existing Figure 6H-28) Sidewalk Detour or Diversion: FHWA proposes to revise the drawing in this figure to correspond with the proposed changes in the notes for the figure as follows, to correspond with text changes in new Section 6N.04 (existing Section 6G.05). FHWA proposes to delete existing Standard note 1 and replace it with five new Standard notes. In addition, FHWA proposes to delete existing Guidance note 2 and replace it with two new Guidance notes, and to add one new Option note. FHWA also proposes to change the existing Guidance note 3 to a Standard in order to comply with 28 CFR 35.160(a)(1). These proposed changes are to correct discrepancies between the figure for Sidewalk Diversion and other sections in Part 6.	X		Audible information devices are not currently used in Florida for temporary conditions. Agree with the intent of the proposed changes. However, the text should allow greater flexibility to allow flaggers or other alternatives to aid vision impaired pedestrians.	For temporary conditions, consider flaggers or other alternatives.	Page 639; lines 22-24
	516t	Crosswalk Closures and Pedestrian Detours	t. Figure 6P-29 (existing Figure 6H-29) Crosswalk Closures and Pedestrian Detours: FHWA proposes to add two new Standard statements and move the existing Guidance statement 3 to a Standard in order to comply with 28 CFR 35.160(a)(1).	X		Audible information devices are not currently used in Florida for temporary conditions. Agree with the intent of the proposed changes. However, the text should allow greater flexibility to allow flaggers or other alternatives to aid vision impaired pedestrians.	For temporary conditions, consider flaggers or other alternatives.	Page 641; lines 11-13
Part 8	547	Low Ground Clearance Grade Crossing Sign (W10-5)	547. FHWA proposes new Option and Support statements in Section 8B.16 (existing Section 8B.23) to address warning, selective exclusion, and detour signing for additional vehicle types and combinations that may encounter hang-up situations at low ground clearance crossings. The proposed changes are in response to NTSB recommendation H-18-24. (120)		X	Modern tools such as Waze, Google, provide alternate route information. Detour signs may not be understood by low clearance vehicles. The sign may confuse drivers that are not low clearance. The approaches to railroad grade crossings are typically constrained and already have many signs. How would the detour routes be determined? What are reasonable distances for rerouting? What would the detour sign say?	Revert to 2009 MUTCD language.	Page 698, Line 34-36
Part 9	624	Bicycle Lanes at Intersection Approaches	624. FHWA proposes a new section numbered and titled, "Section 9E.02 Bicycle Lanes at Intersection Approaches," which contains material from existing Section 9C.04. FHWA proposes a new Option statement to allow a bicycle lane to be located on the outside of a turn lane if a bicycle signal face is used and the signal phasing and signing eliminates potential conflicts. FHWA also proposes a new Standard that requires bicycle lanes located at an intersection approach between contiguous lanes for motor vehicle movements be marked with a bicycle symbol and arrow pavement markings. FHWA also proposes a Standard to prohibit bicycle lanes from being marked as contiguous with a general purpose turn lane, either with dotted or any other line markings. FHWA proposes these additions to alert motor vehicles of the presence of bicyclists and prevent potential conflicts. In addition, FHWA proposes Option, Guidance, and Support statements for shifting over of buffer separated or separated bike lanes at intersections to improve visibility for motor vehicles and bicycles to account for developments in bicycle facility design since 2009 edition of the MUTCD. Finally, FHWA proposes new Option, Standard, and Support statements and a new figure to provide an option and requirements for the use of mixing zones, which are when general purpose and bike lanes must share the same space through an intersection.	X		In Lines 41 and 42 on Page 769, it says "Mixing zones shall have YIELD markings indicating where general purpose traffic entering the combined bicycle lane and turn lane shall YIELD to bicycles in the bicycle lane." See Figure 9E-5B.	Suggest reversing to have the bike yield to vehicles.	Page 769, Lines 41- 42
	631	Shared-Lane Marking	631. In Section 9E.09 (existing Section 9C.07) Shared-Lane Marking, FHWA proposes to revise the Guidance to recommend that shared-lane markings not be used on roadways with a posted speed limit of 40 mph or above, instead of 35 mph or above per the 2009 version of the Manual. FHWA also proposes to revise the Standard to expand the listing of locations where shared-lane markings are prohibited. FHWA proposes this change to include some of the new applications that are proposed in this NPA but are not in the 2009 Edition of the Manual, and to address field experience with this marking since it was adopted in the 2009 MUTCD. In addition, FHWA provides new Guidance statements on the placement of shared-lane markings and the use of Bicycles Allowed Use of Full Lane (R9-20, redesignated from R4-11) signs. Lastly, FHWA proposes new Options and an associated figure, for implementation of shared-lane markings in places where the width of the roadway is insufficient to continue a bike lane or separate bikeway on approach to the intersection. FHWA proposes this new section to provide practitioners discretion when developing a policy for the use of the shared-lane markings on intersection approaches.	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.	Page 775; lines 39-40