

**OMUTCD 2005 Edition**  
**List of Major Changes from the 2003 Edition**

Item	Location	Description of Proposed Change
<b><u>General Overall Items</u></b>		
1	overall	The format change is probably again the most obvious difference. To conserve space, margins have been reduced, some text has been reduced in size, and spacing has been reduced.
2	overall	Assigned figure numbers to the previous groupings of sign cuts, and added references to the figures in the text.
3	overall	Revised certain terms throughout the text, for example, “police officer” has been revised to “law enforcement officer,” “motor vehicle” has generally been revised to “motorized vehicle,” and “motor vehicle traffic” has been revised to “vehicular traffic.”
<b><u>Preface/Introduction</u></b>		
1	Introduction	Added information on compliance dates set by the Federal Highway Administration (FHWA).
2	Introduction	Added Table I-2 for revision detail information.
<b><u>Part 1. General</u></b>		
1	Section 1A.10	Added information to address the process for Interim Approval of new or revised traffic control devices or applications not yet incorporated into the manual.
2	Section 1A.12	Added a new color, fluorescent pink, for incident management signs.
3	Section 1A.13	Added definitions for crashworthy, detectable, inherently low-emission vehicle, pedestrian facilities and roundabout intersection.
4	Table 1A-1	Revised the acceptable abbreviations for northbound, southbound, eastbound and westbound, e.g., NB is now shown as N-BND.
<b><u>Part 2, Signs</u></b>		
1	Section 2A.06	Added information about internet addresses and phone numbers in sign legends.
2	Section 2A.07	Added information on use of changeable message signs.
3	Section 2A.08	Added information on use of LEDs to improve sign conspicuity.
4	Table 2A-1	Added LED information.
5	Section 2A.21	Added requirements about retroreflective material used on sign supports.
6	Section 2A.23	Added text to clarify that the provision about medians 30 feet or more in width means the width at the median opening itself.
7	Table 2B-1	Revised some sign sizes and added some Regulatory Signs.
8	Section 2B.06	Added text indicating that “Other than a DO NOT ENTER sign, no sign should be mounted back-to-back with a STOP sign in a manner that obscures the shape of the STOP sign.”
9	Section 2B.09	Added a requirement for use of YIELD signs at the entrances to a roundabout intersection.

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10	Section 2B.10	Added a Standard regarding placement of YIELD signs at roundabout intersections. Also added text indicating that “Other than a DO NOT ENTER sign, no sign should be mounted back-to-back with a YIELD sign in a manner that obscures the shape of the YIELD sign.”
11	Section 2B.11	Added a Section on Yield Here to Pedestrian signs.
12	Section 2B.12	Added a Section on In-Street Pedestrian Crossing signs.
13	Section 2B.13	Added a recommendation for reevaluation of non-statutory speed limits every 5 years.
14		Deleted information about the Reduced Speed Limit Ahead signs. This type of signing has been revised to a Warning Sign design.
15	Section 2B.17	Added a Section on signing for increased fines.
16	Sections 2B.26 thru 2B.28	Revised and relocated the information about Preferential Only Lane signing.
17	Section 2B.46	Added a Section on PHOTO ENFORCED signs
18	Section 2B.50	Revised the text about Weigh Stations signs.
19	Section 2B.52	Revised the Hazardous Cargo symbol (HC) signs to Hazardous Materials symbol (HM) signs.
20	Table 2C-2	Revised some sign sizes.
21	Table 2C-4	Revised warning sign advance placement distances.
22	Section 2C.06	Added signs for Hairpin and Loop curves.
23	Section 2C.07	Revised the code number for the combination Turn/Advisory Speed sign from W1-9 to W1-1a and added a combination Curve/Advisory Speed sign.
24	Section 2C.11	Added a Section on the Truck Rollover Warning sign.
25	Section 2C.14	Added a Section on the HILL BLOCKS VIEW sign.
26	Section 2C.21	Combined and revised information about the DEAD END and NO OUTLET signs.
27	Section 2C.28	Added a Section on the BRIDGE ICES BEFORE ROAD sign.
28	Section 2C.30	Revised and relocated information on Speed Reduction signs to Section 2C.30 from old Section 2B.16. The signs are now Warning Signs rather than Regulatory Signs.
29	Section 2C.31	Added the Entering Roadway Merge symbol (W4-5) sign.
30	Section 2C.32	Added the Entering Roadway Added Lane symbol (W4-6) symbol sign.
31	Section 2C.33	Revised the design of the Lane Reduction, or Lane Ends, symbol (W4-2) sign.
32	Section 2C.34	Added information about the use of an AHEAD plate with the Two Way Traffic Sign “to warn road users of a transition from a one-way street to a two-lane, two-way section of roadway.”

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33	Section 2C.36	Added information on how to choose the speed to use for Ramp, Exit and Curve Speed Advisory signs, including new information regarding ball-banking curves.
34	Section 2C.37	Revised the Circular Intersection symbol (W2-6) sign design.
35	Section 2C.39	Added a Section regarding Traffic Signal signs, adding a couple of new signs.
36	Section 2C.40	Added several new Vehicular Traffic symbol signs, for example, the Golf Cart, Horse Drawn Vehicle, and alternate Farm Machinery symbols; and revised the Truck Crossing symbol sign.
37	Section 2C.41	Revised the Section title and sign description from “Crossing Signs” to “Nonvehicular Traffic Signs.”
38	Figure 2C-9	Added sign cuts for the Golf Cart, Horse Drawn Vehicle and alternative Farm Machinery symbol signs.
39	Section 2C.46	Added information to the Advisory Speed Plaque Section about ball-banking curves. Added requirement for use of an Advisory Speed plaque where an engineering study indicates a need.
40	Section 2C.50	Revised and relocated the information on the CROSS TRAFFIC DOES NOT STOP plaque. Also revised the design again and added information about alternative legends
41	Section 2C.52	Added a Section regarding the High-Occupancy Vehicle plaque.
42	Section 2C.53	Added a Section regarding the PHOTO ENFORCED plaque.
43	Section 2D.03	Added information about color coding of destinations.
44	Section 2D.38	Added information about letter heights on Street Name signs and the use of overhead Street Name signs.
45	Figure 2D-3	Added sign cuts for Ohio’s Alternate County Route and Township Route signs.
46	Section 2D.23	Added TEMP as an alternate to the TEMPORARY auxiliary sign.
47	Section 2D.39 and Figure 2D-8	Added a Section and figure about Advance Street Name signs.
48	Section 2D.44 and Figure 2D-10	Revised the Weigh Station signing information.
49	Section 2D.45	Added information about Carpool Information signs and the TRAVEL INFO CALL 511 sign.
50	Section 2D.46	Added information about Intermediate Reference Location signs.
51	Section 2D.52	Added a Section about the National Scenic Byways signs.
52	Section 2D.53	Added a Section about the Ohio Byway sign.
53	Chapter 2E, General	Revised Chapter 2E to reference only Ohio’s traditional Freeway & Expressway Design Method (shown in Appendix C of the Sign Design Manual), rather than both it and the method found in FHWA’s MUTCD. Also added sign code numbers.
54	Section 2E.08	Added information about the Eisenhower Interstate System sign.

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55	Section 2E.20	Added more information about Ohio's EXIT ONLY panels.
56	Section 2E.28	Added information about the use of LEFT on exit number plaques, and interchange exit numbering on expressways.
57	Section 2E.36	Added a provision to allow for placement of advisory speed information below the Exit Gore sign.
58	Figure 2E-29	Added a figure showing guide signs for full cloverleaf interchange with collector-distributor roadways.
59	Section 2E.49	Expanded the information about Signing of Approaches and Connecting Roadways (also known as Entrance Ramp Approach Signs). Added related Figures 2E-34 through 2E-38.
60	Section 2E.54	Added information on the Enhanced Reference Location signs.
61	Section 2E.59	Revised information about Preferential Only Lane signs and relocated it to this Section. Added Figures 2E-46 through 2E-52.
62	Section 2F.01	Added "attractions" to the list of eligible services for Specific Service Signs, and updated the location requirements.
63	Figure 2H-5	Revised the figure to essentially include a complete set of the Recreational and Cultural Interest Area Symbol Signs. However, the new optional 24-Hour Pharmacy symbol adopted by FHWA for the MUTCD was not adopted for the OMUTCD.
64	Section 2I.02	Added Table 2I-1, for sign sizes.
65	Section 2I.03	Revised the design of the Evacuation Route Marker (EM-1).
<b>Part 3, Markings</b>		
1	Section 3A.05	Revised the Option regarding dotted lines to differentiate between dotted lines for line extensions and those for lane drop/add situations.
2	Section 3B.01	Revised the Standard and Guidance information about centerline markings, adding ADT criteria.
3	Section 3B.06	Revised the Guidance information to clarify that the edge lines should not be broken for "minor" driveways.  Also added an Option about the use of wide edge lines for greater emphasis.
4	Section 3B.07	Revised edge line warrants, adding ADT criteria.
5	Section 3B.08	Revised the text to clarify that a normal line may be used to extend a wide line through an intersection, and a dotted edge line extension may be placed through an intersection or major driveway.
6	Section 3B.12	Revised the spacing of raised pavement markers used as positioning guides on freeways and expressways.
7	Section 3B.14	Revised the spacing of raised pavement markers used to substitute for pavement markings.
8	Section 3B.16	Added Guidance about placement of Yield Lines for midblock crosswalks.

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Item	Location	Description of Proposed Change
9	Section 3B.17	Added more Guidance information about crosswalk markings.
10	Figure 3B-21	Except for the Turn Lane-Use Arrow, slightly revised dimensions of the pavement marking arrows.
11	Section 3B.19	Revised Section to clarify that parking lot STOP word markings require a Stop Line, but not a sign at the end of the aisle.
12	Section 3B.21	Revised to provide that certain curb markings may be used without word markings or signs.
13	Section 3B.22	Added the word message HOV and the letter T (for transit lane). Also added a requirement that if two or more preferential lane uses are permitted in a single lane, the symbol or word message for each shall be used.
14	Figure 3B-30	Deleted Option C for pavement markings for speed tables or speed humps with crosswalks.
15	Section 3B.24	Added a restriction against use of bicycle lane markings on the circular roadway of a roundabout intersection.
16	Figures 3B-27 & 3B-28	Revised these figures to correct depiction of markings and to show YIELD signs in the splitter islands. In Figure 3B-27 a note was added to indicate that the YIELD signs on the splitter islands are optional.
17	Section 3C.01	Revised text about the Type 3 Object Marker to clarify that either the traditional Ohio design or the design shown in FHWA's Standard Highway Signs book may be used.
<b>Part 4, Traffic Signals</b>		
1	Section 4A.01	Added several new definitions, including "separate left-turn signal face" and "shared left-turn signal face."
2	Section 4C.01	Added an option allowing high left-turn volume on the major street to be considered in a warrant analysis as the minor street movement against the single direction of opposing traffic as the major street. Also, for a signal warrant analysis, bicyclists may be counted as vehicles or pedestrians, depending on their use of the facility.
3	Section 4C.08	For Warrant 7 added an Option for the use of the 56% column in Table 4C-1 instead of the 80% column in certain circumstances.
4	Section 4D.01	Added a requirement that a midblock crosswalk shall not be signalized if within 300 feet of a traffic control signal, unless it will not restrict progressive movement of traffic. Also, added a paragraph indicating that a midblock crosswalk should not be signalized if within 100 feet of a driveway controlled by a STOP or YIELD sign.
5	Section 4D.05	Added requirements to Item B(4) about the CIRCULAR YELLOW indication and the "yellow ball trap." Also added a provision about using a sign for u-turns facing a left-turn GREEN ARROW, but in conflict with right turns facing a GREEN ARROW.

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6	Section 4D.06	Expanded the requirements for “Permissive Only Mode” and the “Protected/Permissive Mode” to include both the separate and shared signal head.
7	Section 4D.15 (& Figure 4D-2)	Increased the maximum distance for use of 12-inch signal heads without the use of a supplemental head from 150 feet to 180 feet.
8	Section 4D.16	For clarity revised “variable indication” to “dual arrow.”
9	Figure 4D-3	Corrected details c and d to eliminate the red arrow, in conformance to the text.
10	Section 4D.18	In the fifth paragraph, deleted “red” since we don’t use the red arrow in Ohio. Also deleted the Guidance item “signal housings should be highway yellow.”
11	Section 4E.04	Added a provision to allow the “outline style symbols” for pedestrian signal indications to be retained for the remainder of their useful service life. Also added provisions for the “animated eyes” symbol.
12	Figure 4E-1	Deleted the “One Section (Outlined Symbol)” detail.
13	Section 4E.06	Added a provision in the sixteenth paragraph regarding sound pressure level requirements for the audible tone(s) used for accessible pedestrian signals.
14	Section 4E.07	Added a Section addressing Countdown Pedestrian Signals.
15	Section 4E.08	Added an Option to provide for additional crossing time by means of an extended pushbutton press.
16	Section 4E.10	Added a requirement regarding the pedestrian signal indication to be used with countdown pedestrian signals. Revised measurement of pedestrian clearance time to be from the “far side of the traveled way” (instead of the “center of the farthest traveled lane”). Also revised text to explicitly state that the pedestrian clearance time “may be entirely contained within the vehicular green and yellow change intervals.”
17	Section 4F.02	Added text in the sixth paragraph (an Option) to clarify that the signal face mentioned may consist of one or more signal sections.
18	Section 4G.02	Revised the paragraph from Guidance to a Standard and revised “should” in Items A and B to “shall.”
19	Section 4I.02	Added new Guidance recommending that use of 3-section signal faces be considered if movable bridge operation is frequent.
20	Section 4J.03	In the twelfth paragraph, added an option for the use of 18-inch lane-use control signal faces in certain situations for white two-way left-turn arrows and white one-way left-turn arrows.
<b>Part 5, Low-Volume Roads</b>		
1	Table 5A-1	Revised and reorganized the sign size table, adding “Minimum” and “Oversized” sizes.
2	Section 5A.03	Revised the second paragraph to clarify that the Minimum sizes shown in Table 5A-1 are only for use on low-volume roads where the 85 <sup>th</sup> percentile speed or the posted speed limit is less than 35 mph.

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3	Section 5C.12 (& Figure 5C-2)	Revised the NO TRAFFIC SIGNS sign code number from W16-2 to W18-1.
<b>Part 6, Temporary Traffic Control</b>		
1	Part 6, General	<p>Added some signs, revised a few sign legends and/or designs, and revised the following code numbers: W3-1a to W3-1, W3-2a to W3-2, W4-1a to W4-7, W20-7b to W3-4 and G20-2a to G20-2.</p> <p>Revised various terms “temporary traffic control” to “TTC,” “police” to “law enforcement,” and “rotating/strobe” to “high-intensity rotating, flashing, oscillating, or strobe.”</p> <p>Since the term “low-volume roads” is now defined in Part 5 to address a specific category, or type of road.</p> <p>Typically, revised the phrase “low-volume roads” to “roads with low traffic volumes.” The term “low-volume roads” is now defined in Part 5 in a way that was not intended to apply to most situations described previously in Part 6 using this term.</p>
2	Section 6A.01	Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.
3	Section 6B.01	<p>Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.</p> <p>Added a requirement for all necessary signs to be in place before a new detour or temporary route is opened. Also added a recommendation about assessing the needs of commercial vehicles, such as buses and large trucks.</p>
4	Section 6C.01	Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.
5	Section 6C.06 (& Table 6C-2)	Added a table (Table 6C-2) of stopping sight distance, as a function of speed, and allow its use in determining the length of a longitudinal buffer space.
6	Section 6C.07	Revised the provision about the termination area extending from the downstream end of the work to “the END ROAD WORK sign, if posted” to “the last TTC device such as END ROAD WORK signs, if posted.”
7	Section 6C.08, Figure 6C-2, Table 6C-3	<p>Deleted provision indicating that the shifting taper “should not be less than 300 ft (90 m).”</p> <p>Also revised the Ohio provisions in the text and figure to indicate that “A shifting taper should be L when the speed is less than 50 mph, and may be 0.5 L when the speed is less than 50 mph.”</p>
8	Section 6D.01	<p>Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.</p> <p>Also added a provision indicating that a pedestrian route “should not be severed and/or moved for nonconstruction activities such as parking for vehicles or equipment.”</p>
9	Section 6D.02	Added a Section about Accessibility Considerations.

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10	Section 6D.03	Added a comment about separating moving equipment and construction vehicles from workers on foot. Revised Item B about Worker Safety Apparel, and added Items E (Activity Area) and F (Worker Safety Planning).
11	Section 6E.01	Revised/rewrote the description of the abilities a flagger should have.
12	Section 6E.02	Added requirements about the flagger's apparel.
13	Section 6E.03	Added information about the use of flashing lights in the sign faces of the Stop/Slow Paddle.
14	Section 6E.05 (& Table 6E-1)	Revised information regarding placement of the flagger station to reference new Table 6E-1, related to stopping sight distance as a function of speed. Also revised the Guidance about a flagger stations being preceded by advance warning signs and illuminated to a requirement for advance signing and illumination, except in emergency situations.
15	Section 6F.01	Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990. Also, added information about the definition of "crashworthy" and NCHRP Report 350.
16	Section 6F.02 (& Table 6F-1)	Added a paragraph to emphasize that sign illumination "shall not be considered to be satisfied by street, highway, or strobe lighting." Added a Support statement about fluorescent orange providing higher conspicuity than standard orange, especially in twilight. Also, added a reference to Chapter 6I and the fact that warning and guide signs used for incident management may have a black legend and border with a fluorescent pink background. Added a requirement that TTC sign sizes shall be as given in new Table 6F-1.
17	Section 6F.03	Added information about accommodating pedestrians with disabilities. Also, added a provision indicating that signs mounted lower than 7 ft should not project more than 4 in into pedestrian facilities. Added more Guidance about unshielded sign posts in the clear zone, and information about NCHRP 350 provisions.
18	Section 6F.12	Added requirement that a temporary crosswalk be accessible.
19	Section 6F.13	Added Guidance about the use of either the M4-9a or M4-9b sign when pedestrian flow is rerouted. Also added information about detectable barriers.
20	Section 6F.14.1	Updated information about Ohio's Work Zone Increased Penalties Sign.
21	Section 6F.15	Added a provision for optional use of fluorescent pink as the background color for warning and guide signs used for incident management. Added Guidance about the use of audible information or detectable barriers for pedestrians with visual disabilities. Added a requirement that diamond TTC warning signs on freeways and expressways shall have a minimum size of 48 x 48 inches.
22	Section 6F.17	Added a provision for use of advance warning signs on high-volume driveways, as well as on crossroads.



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23	Figure 6F-4 (4 pages)	<p>Revised the sign code numbers for the W3-1a to W3-1, W3-2a to W3-2, W20-7b to W3-4, W4-1a to W4-7, and the G20-2a to G20-2.</p> <p>Revised the legend for the W8-9a to three lines, revised the first line of legend for the W9-2 to be larger, and deleted the periods from the MPH legend on the Speed Advisory sign.</p> <p>Revised the W13-4 to a square shape, and added a note about the alternate AHEAD legend for various signs being shown in the Sign Design Manual.</p> <p>The W22-2 sign was redesigned to add the word "CELL."</p> <p>The new signs W24-1, W24-1a and W24-1b were added.</p>
24	Section 6F.24	Revised the name/description of the W4-2 sign from "Lane Reduction sign" to "Lane Ends sign."
25	Section 6F.28	Added Guidance about placing an EXIT CLOSED panel diagonally across the interchange/intersection guide sign when an exit ramp is closed.
26	Section 6F.34	Added a Section about Motorized Traffic Signs, about the TRUCK CROSSING and Truck Crossing symbol signs.
27	Section 6F.40	Revised the legend of the W22-2 by changing "PHONE" to "CELL PHONE."
28	Section 6F.42	<p>Revised the title of the Section from "Shoulder DROP-OFF Sign" to "Shoulder Signs" and added information about the SOFT SHOULDER and LOW SHOULDER signs.</p> <p>Revised the information about the SHOULDER DROP OFF sign from a Standard to Guidance, and revised "and is not protected by portable barriers" to "for a continuous length along the roadway, based on engineering judgment."</p>
29	Section 6F.44	Revised the code number for the NO EDGE LINE sign to W8-H12a.
30	Section 6F.45	Added a Section about the new Double Reverse Curve signs.
31	Section 6F.47	Added a Section about Special Warning Signs.
32	Section 6F.50	Added provisions about the optional use of fluorescent pink for the background of warning and guide signs used in TTC incident management situations.
33	Section 6F.52	Revised the Guidance for placement of the END ROAD WORK sign from "about 150 m (500 ft) "beyond the temporary traffic control zone" to "near the end of the termination area, as determined by engineering judgment."
34	Section 6F.53	<p>Added an Option allowing use of fluorescent pink as a background color for Detour signs used in incident management situations.</p> <p>Also added provisions for Pedestrian/Bicycle Detour signs.</p>
35	Section 6F.55	<p>Added information about changeable message signs, including a requirement that "Each character module shall use at least a five wide and seven high pixel matrix."</p> <p>Added Guidance about the letter height for PCMS units and recommending a 3 second per phase minimum display rate.</p> <p>Revised the mounting height Standard to 5 ft above the roadway in rural areas.</p>

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36	Section 6F.56	Added more Guidance regarding use of Arrow Panels, including a recommendation for their use in certain circumstances. Added prohibition against the use of Arrow Panels to laterally shift traffic, and revised the lighting requirement to require that the panels be equipped with “high-intensity rotating, flashing, oscillating, or strobe lights.” Added an option to allow that “a portable changeable message sign may be used to simulate an arrow panel display.”
37	Section 6F.58	Added Standard and Option information regarding the use of devices to channelize pedestrians with disabilities.
38	Section 6F.59	Added Guidance about the use of cones for pedestrian channelization or as pedestrian barriers.
39	Section 6F.60	Added Guidance about the use of tubular markers for pedestrian channelization or as pedestrian barriers.
40	Figure 6F-7	Added note regarding the use of drums, cones, or tubular markers to channelize pedestrians. Added another note on the second sheet to address the use of barricades to channelize pedestrians.
41	Section 6F.62	Added Guidance about the use of drums for pedestrian channelization or as pedestrian barriers.
42	Section 6F.63	Added more information about the use of barricades on pedestrian facilities.
43	Section 6F.64	Added more details about the design of the Direction Indicator Barricade.
44	Section 6F.65	Added Support clarifying that temporary traffic (TTC) barriers are not temporary traffic control devices in themselves; however, in certain circumstances they serve as TTC devices. Added a Standard requiring that temporary traffic barriers serving as TTC devices shall conform to requirements for such devices. Also, revised the Standard to require temporary traffic barrier used to channelize vehicular traffic to be supplemented with delineation, pavement markings, or channelizing devices.
45	Section 6F.66	Added a Section about Longitudinal Channelizing Barricades.
46	Section 6F.67	Added a Section about Other Channelizing Devices.
47	Section 6F.68	Added a Section about Detectable Edging for Pedestrians.
48	Section 6F.69	Added a requirement that at pedestrian crossing locations, temporary raised islands have an opening or be shortened to provide at least a 60 in pathway for crossing pedestrians.
49	Section 6F.70	Added a restriction against the placement of Opposing Traffic Lane Dividers not be placed across pedestrian crossings.
50	Section 6F.72	Added references to use of the DO NOT PASS and PASS WITH CARE signs.
51	Section 6F.75	Added Guidance about the maximum spacing for warning lights.

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52	Section 6F.76	Added a requirement that, “except in emergency situations, flagger stations shall be illuminated at night.” Also added a restriction against floodlighting causing disabling glare for flaggers or workers. Added Support information about desired illumination levels.
53	Section 6F.78	Added provisions for a Type D 360-degree warning light.
54	Section 6F.80	Added a provision indicating that pedestrian signals or accessible pedestrian signals should be considered when detouring pedestrian traffic to a temporary traffic control signal. Also added a provision restricting how much the supports for a temporary traffic control signal can encroach into the width of a “pedestrian access route” or an “alternate circulation path.”
55	Section 6F.84	Added color Standards for rumble strips and Guidance on the design of them.
56	Section 6G.01	Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.
57	Section 6G.02	Clarified that the Option about using flaggers for mobile operations involves “operations that often involve frequent short stops.”
58	Section 6G.03	Added text to emphasize the need to consider bicyclists and pedestrians.
59	Section 6G.04	Added text to emphasize the need to consider bicyclists and pedestrians.
60	Section 6G.05	Added a Section about Work Affecting Pedestrian and Bicycle Facilities.
61	Section 6G.06	Added text to emphasize the need to consider bicyclists and pedestrians.
62	Section 6G.07	Added text to emphasize the need to consider bicyclists and pedestrians.
63	Section 6G.08	Added text to emphasize the need to consider bicyclists and pedestrians.
64	Section 6G.09	Added text to emphasize the need to consider bicyclists and pedestrians.
65	Section 6G.10	Added text to emphasize the need to consider bicyclists and pedestrians. Also, in describing the illustration shown in Figure 6H-8, revised the reference to the ROAD CLOSED TO THRU TRAFFIC sign to the ROAD CLOSED AHEAD, LOCAL TRAFFIC ONLY sign.
66	Section 6G.11	Added text to emphasize the need to consider bicyclists and pedestrians, including a requirement that if the work affects “an accessible and detectable pedestrian facility, the accessibility and detectability shall be maintained along the alternate pedestrian route.” Also added a requirement that “where transit stops are affected or relocated because of work activity, access to temporary transit stops shall be provided,” and Guidance that “Work sites within the intersection should be protected against inadvertent pedestrian incursion by providing detectable channelizing devices.”
67	Section 6G.12	Added text to emphasize the need to consider bicyclists and pedestrians.
68	Section 6G.13	Added text to emphasize the need to consider bicyclists and pedestrians.
69	Section 6G.20	Added a Section about Temporary Traffic Control During Nighttime Hours.

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70	Section 6H.01	Added information emphasizing the need to consider persons with disabilities in accordance with the ADA Act of 1990.
71	Figure 6H-1	Added Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
72	Figure 6H-3	Added Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights. Added a note requiring use of at least one advance warning sign and channelizing devices when a paved shoulder 8 ft or more in width is closed.
73	Figure 6H-4	Added Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
74	Figure 6H-5	Revised Note 4 from Guidance (should) to a Standard (shall).
75	Figure 6H-6	Added Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
76	Figure 6H-7	Revised the Guidance about placement of the curve and turn warning signs. Deleted the Reverse Turn sign within the diversion and replaced the Reverse Turn sign in advance of the diversion with a new Double Reverse Curve sign.
77	Figure 6H-8	Revised the note to address alternate use of barricades in the center of the traveled lanes. Added a Standard related to placement of the barricades when used in the traveled lanes.
78	Figure 6H-10	Added Guidance about extending the buffer space so that the two-way taper is placed before a horizontal (or crest vertical) curve. Also added a note about the requirement for a flagger station to be illuminated at night, except in an emergency.
79	Figure 6H-11	Deleted the requirement to replace the YIELD AHEAD sign with the Flagger symbol sign when flaggers are used. Replace the stop line with a yield line.
80	Figure 6H-12	Added a requirement that the red clearance intervals be adequate to clear the one-lane section of conflicting vehicles. Also added a requirement for safeguards to avoid the possibility of conflicting signal indications at each end of the zone.
81	Figure 6H-13	Deleted the option for use of a changeable message sign in this application and revised the Standard to specify use of a flagger or uniformed law enforcement officer.
82	Figure 6H-14	Added the requirement about flagger stations being illuminated at night except in an emergency.
83	Figure 6H-15	Added Guidance about workers in the roadway wearing high-visibility safety apparel. Added an Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights. Also added channelizing devices along the centerline at both ends.

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Item	Location	Description of Proposed Change
84	Figure 6H-17	Added Standard notes indicating that “if an arrow panel is used, it shall be used in the caution mode,” and “vehicle hazard warning signals shall not be used instead of the vehicle’s high-intensity rotating, flashing, oscillating, or strobe lights.” Deleted the legend shown on the truck-mounted sign and added a note indicating “Use sign shape and legend appropriate to the work.”
85	Figure 6H-19	Added Guidance indicating that this typical “should be used for streets without posted route numbers.” Revised placement of some of the barricades shown.
86	Figure 6H-21	Added an Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
87	Figure 6H-26	Added an Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
88	Figure 6H-27	Added the requirement about flagger stations being illuminated at night except in an emergency. Added an Option note allowing vehicle hazard warning signals to supplement high-intensity rotating, flashing, oscillating, or strobe lights.
89	Figure 6H-28	Revised the Standard and Guidance with more information about pedestrians with disabilities. Added an Option for the use of Type D 360-degree Steady-Burn warning lights.
90	Figure 6H-29	Revised the Standard and Guidance with more information about pedestrians with disabilities. Added an Option for the use of Type D 360-degree Steady-Burn warning lights.
91	Figure 6H-29	Added a note indicating that “For long-term stationary work, the double yellow centerline and/or lane lines should be removed between the crosswalk lines.”
92	Figure 6H-30	Replaced the LEFT LANE CLOSED AHEAD signs shown with symbol Lane Ends (W4-2) signs, and revised Note 1 to refer to the LEFT LANE CLOSED AHEAD sign as an additional sign that should be used between the signs shown where speeds or volumes are higher.
93	Figure 6H-31	Revised Note 3 to indicate that “where speeds are 50 mph or greater a shifting taper should be approximately L in length.”
94	Figure 6H-32	Added Guidance about using channelizing devices to close the shoulder in advance of the merging taper when a paved shoulder of 8 ft or more is closed. Also, added a Note about using Reverse Curve signs, instead of a Double Reverse Curve sign, when the tangent distance along the temporary diversion is more than 600 ft.
95	Figure 6H-33	Added Guidance about using channelizing devices to close the shoulder in advance of the merging taper when a paved shoulder of 8 ft or more is closed.
96	Figure 6H-34	Added a Note requiring that the ends of temporary traffic barriers be “treated in accordance with the provisions of Section 6F.81.”

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Item	Location	Description of Proposed Change
97	Figure 6H-36	Added a Note requiring that the ends of temporary traffic barriers be “treated in accordance with the provisions of Section 6F.81.” Also added a Note allowing the shifting taper to be 0.5L where speeds are less than 50 miles per hour.
98	Figure 6H-38	Added a Note allowing the shifting taper to be 0.5L where speeds are less than 50 miles per hour.
99	Figure 6H-40	Added information about installing a stop or yield line across the ramp to indicate the point at which road users should yield or stop.
100	Figure 6H-45	In the description of the transition shift from Phase A to B, in Item 2(a) added “Change the mode of the second northbound arrow panel from Caution to Right Arrow”; and in Item 2(e) added “change the mode of the second southbound arrow panel from Right Arrow to Caution.”
101	Figure 6H-46	Added a requirement about illumination of flagger stations at night, except in emergencies.
102	Chapter 6I	Added new Chapter on Control of Traffic Through Traffic Incident Management Areas, based on revising and expanding the information from Section 6G.19. “Traffic incidents” has been redefined to eliminate planned special events.
<b>Part 7, School Area Traffic Control</b>		
1	Section 7A.04	Deleted the standard that indicated “Portable school signs shall not be used” and added an Option for the use of In-Roadway signs.
2	Table 7B-1	Revised the sign size table, revising the terms “Standard” and “Special” to “Conventional Road” and “Oversized,” respectively, and adding several signs.
3	Figure 7B-1	Added an example of a fluorescent yellow-green sign, replaced the School Reduced Speed Ahead Assembly with the new School Zone Ahead Warning signs, and added various sign cuts.
4	Figure 7B-2	Added a figure about signing for school crosswalks.
5	Section 7B.08	Added information about In-Street School Advance Warning signs.
6	Figure 7B-4	Added a figure about In-Street signs in school areas.
7	Section 7B.09	Added information illustrating In-Street Pedestrian Crossing signs.
8	Section 7B.11	Added text about changeable message signs. Added the Day of Week plaque; but deleted reference to a WHEN FLASHING legend since it would not typically apply in Ohio.
9	Section 7B.12	Revised this Section to address the new Reduced Speed School Zone Ahead signs.
10	Section 7B.15	Relocated the information on the STOP FOR SCHOOL BUS LOADING OR UNLOADING sign from the Regulatory Chapter to this Section.
11	Section 7C.03	Added text about crosswalk markings and revised the dimensions for spacing of diagonal or longitudinal lines used to mark crosswalks.
12	Section 7C.04	Added text about Yield Lines.

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Item	Location	Description of Proposed Change
13	Section 7E.04	Added a requirement regarding the safety apparel worn by adult crossing guards and student patrols.
14	Section 7E.05	Added information about the STOP paddle used by adult crossing guards.
<b>Part 8, Highway-Rail Grade Crossing Traffic Control</b>		
1	Section 8A.01	Added and revised various definitions.
2	Section 8A.04	Added an Option regarding the temporary use of the TRACKS OUT OF SERVICE sign.
3	Section 8A.05	Revised “width and riding quality” to “width, grade, alignment, and riding quality” in the last sentence of this Section on Temporary Traffic Control Zones.
4	Chapter 8B, General	Deleted the UNEVEN TRACKS sign in favor of using the ROUGH CROSSING (W10-15) sign.
5	Section 8B.02 (& Table 8B-1)	Added a sign size table, and added a Section referencing the Table as the standard for sizes of grade crossing signs.
6	Section 8B.03	Revised the placement standard for the retroreflective material on the post to within “2 ft above the edge of the roadway...”
7	Section 8B.04	Revised Item A regarding placement of the W10-1 sign on an approach to a highway-rail grade crossing from a T-intersection with a parallel highway. Added Ohio text allowing use of the ROUGH CROSSING (W10-15) plaque with the Highway-Rail Grade Crossing Advance Warning sign. Also, added text regarding use of the Highway-Rail Grade Crossing Advance Warning signs on a parallel highway.
8	Section 8B.10	Added a Section about the optional STOP HERE WHEN FLASHING sign.
9	Section 8B.11	Added a Section about the optional STOP HERE ON RED sign.
10	Section 8B.15	Added information about the NO GATES OR LIGHTS sign (W10-13).
11	Section 8B.19	Revised the text about the design of the Skewed Crossing sign.
12	Section 8D.01	Added Ohio Guidance about use of automatic gates on a shared-use facility, recommending use of a gate long enough to block the full width of the path.
13	Section 8D.05	Provided additional guidance regarding four-quadrant gate systems.
14	Section 8D.07	Added text about pre-signals.
<b>Part 9, Traffic Control for Bicycle Facilities</b>		
1	Table 9B-1	Revised and updated the sign size table.
2	Section 9B.04	Revised the text about placement of the BIKE LANE (R3-17) sign, and revised about use of AHEAD and ENDS signs with the R3-17 to Guidance.
3	Section 9B.06	Added a Section about the Bicycle WRONG WAY sign and the RIDE WITH TRAFFIC plaque.
4	Section 9B.12	Added a Section about the Bicycle Signal Actuation sign.
5	Figure 9B-6	Added a figure illustrating signing for an On-Roadway Bicycle Route.

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Item	Location	Description of Proposed Change
6	Section 9C.03	Added a recommendation that markings as shown in Figure 9C-2 should be used at the location of obstructions in the center of a path. Added Ohio text referencing Section 3C.01 for additional information about object markers.
7	Section 9C.04	Revised the text about the use of signs with the word and symbol markings; and added text to specifically prohibit placing a through bicycle lane to the right of a right turn only lane, or on the circular roadway of a roundabout intersection. Also added Support and Guidance text. Added Ohio text referencing Section 3C.01 for additional information about object markers.
8	Section 9C.05	Revised Section to address the optional Bicycle Detector Symbol.
9	Figure 9C-6	Revised the figure to show various optional word and symbol markings for bicycle lanes.
10	Figure 9C-7	Added a figure showing the bicycle detector pavement marking.
<b>Part 10, Highway-Lite Rail Grade Crossing Traffic Control</b>		
1	Section 10A.03	Added a prohibition against locating signs or signals in the center of an undivided highway, except in a raised island. Added a recommendation for the use of additional traffic control devices when the distance between tracks is greater than 100 ft.
2	Section 10A.04	Added a requirement to relocate and/or modify traffic control devices that become improperly placed or inaccurate because of the removal of some of the tracks at a multiple-track grade crossing.
3	Section 10A.05	Added Guidance indicating that “The width, grade, alignment, and riding quality of the highway surface at a light rail transit crossing should, at a minimum, be restored to correspond with the quality of the approaches to the highway-light rail transit grade crossing.”
4	Section 10C.02 (& Figure 10C-1)	Added a Section and figure about the Crossbuck and Number of Tracks signs.
5	Figure 10C-2	Added sign cuts, revised some, deleted some, and revised some code numbers.
6	Section 10C.04	Added several characteristics to the list of those that a highway-light rail grade crossing should have to warrant use of STOP or YIELD signs for road users.
7	Section 10C.05	Added an Option allowing placement of DO NOT STOP ON TRACK signs on both sides of the track.
8	Section 10C.06	Added a Section about the TRACKS OUT OF SERVICE sign.
9	Section 10C.08	Added a Section about the STOP HERE WHEN FLASHING sign.
10	Section 10C.09	Added a requirement that “Turn prohibition signs that are associated with preemption shall be visible only when the highway-light rail transit grade crossing restriction is in effect.”
11	Section 10C.10	Added a Section about the EXEMPT sign.



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<b>Item</b>	<b>Location</b>	<b>Description of Proposed Change</b>
12	Section 10C.15	Added to the criteria used in determining when a W10-1 sign is required. Also added text about use of Highway-Rail Grade Crossing signs on a parallel roadway.
13	Section 10C.16	Added a Section about the Low Ground Clearance Crossing sign.
14	Section 10C.18	Added a Section about the Storage Space signs.
15	Section 10C.19	Added a Section about the Skewed Crossing sign.
16	Section 10C.21	Added a Section about the Emergency Notification signs.
17	Section 10C.23	Added a Section about Pavement Markings.
18	Section 10C.24	Added a Section about Stop Lines.
19	Figures 10C-5 and 10C-6	Added figures about markings for grade crossings.
20	Section 10D.04	Added more Guidance about four-quadrant gate systems.
21	Section 8D.01	Added Ohio Guidance about use of gates on a shared-use facility, recommending use of a gate long enough to block the full width of the path.
<b><u>Appendix A</u></b>		
	General	Updated the information per the 2003 Edition of FHWA's Manual on Uniform Traffic Control Devices.
<b><u>Appendix B</u></b>		
	General	Updated the information per the most current version of each ORC section at the time of preparation of the manuscript. Also added some additional information.
<b><u>Appendix C</u></b>		
	General	This space had been reserved in the 2003 Edition of the OMUTCD for a graphic sign index. The sign index has been incorporated with this edition.
<b><u>Index/Notes</u></b>		
	General	This space is still reserved for an index to be developed later.