

Signing Changes That Affect Local Agencies

2007 County Engineers' Workshop

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What Is the Manual?

The Federal Highway Administration (FHWA) publishes the Manual on Uniform Traffic Control Devices – MUTCD. The MUTCD

- contains all national design, application, and placement standards for traffic control devices.
- promotes highway safety, efficiency and uniformity.

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2

The MMUTCD

- The Michigan Manual of Uniform Traffic Control Devices is required by State Law (MVC).
- The directors of MDOT and MSP shall adopt a manual in substantial conformance with the Federal Manual. (257.608)

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Effective, Adoption and Compliance Dates

- There is a difference:
- Effective Date: the date the final rule goes into effect. For the 2003 MUTCD, the effective date is **November 20, 2003**

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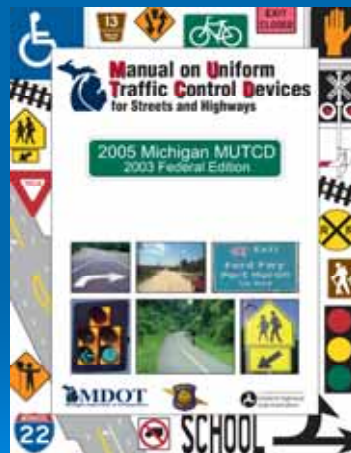
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Adoption Date

- Provides a two year period from the effective date for States to adopt either:
 - The National MUTCD
 - A State MUTCD
 - State Supplement to the MUTCD

MMUTCD Adoption Date

- For Michigan a new manual had to be in place by November 20, 2005.
- This was done with a supplement
- Supplement addresses:
 - Unique items in MVC
 - Unique items in Michigan
- Effective August 15, 2005



Compliance Dates

- Compliance periods are generally longer than the two-year adoption period
- Compliance dates are for those “Big Ticket” items
- 77 Phase-in Target Compliance Dates for Devices, includes:
 - Dates established by previous final rules
 - New dates established by 2003 MUTCD final rule

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7

MMUTCD Compliance Dates

- Will differ from those listed in the MUTCD
- General Rule Used:
 - Same time period (years) as shown in MUTCD
 - But will be from effective date (August 15, 2005) of MMUTCD

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8

Compliance Dates

Replacement of damaged non-compliant device via maintenance activities after a crash or other event:

Option for agencies to establish policies:

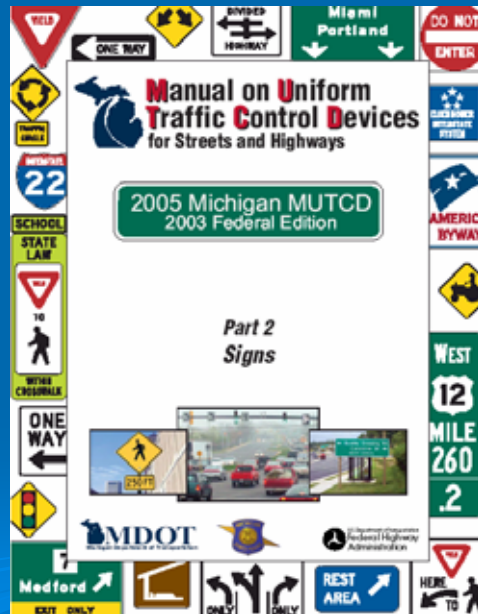
- replace with compliant device;
- or
- replace in kind under some conditions



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9

Part 2 Signs



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Design of Sign

Section 2A.06



- Internet addresses **shall not be shown** on any sign.

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Design of Sign

Section 2A.06



This has too many characters

- Phone numbers with > 4 characters should not be used unless permitted in manual.



These are okay



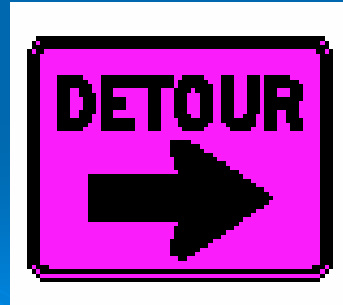
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Sign Colors

Section 2A.11

- Assign the color Fluorescent Pink for Incident Management
- Can still use orange



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Lateral Offset

Section 2A.19

- Sign supports within the clear zone for roads with posted speed limit of 50 mph or higher shall be crashworthy (NCHRP Report 350) unless shielded with a longitudinal barrier or crash cushion
- **Compliance date of August 15, 2015**

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Posts and Mountings

Section 2A.21



- Added OPTION - a strip of retroreflective material may be used on the supports of regulatory and warning signs to draw attention to the sign
- Added STANDARD specifying the size, location, and color of the strip of retroreflective material

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STOP and YIELD Sign Placement

Sections 2B.06 & 2B.10

- Other than a Do Not Enter sign, no other sign shall be mounted back-to-back with a STOP or yield sign
- Maintain distinctive shape of these signs
- Compliance date of August 15, 2015



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Stop Sign 4-WAY Plaque

Section 2B.04

- At intersections where all approaches are controlled by STOP signs, a supplement plaque shall be used.
- The ALL WAY plaque may be used instead of 4-WAY.
- Compliance date of August 15, 2009



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YIELD Sign Application

Section 2B.09 and 2B.10

- STANDARD: YIELD sign required to assign right-of-way at the entrance to a roundabout



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YIELD Sign Placement

Section 2B.10

At Roundabout Intersections:

- STANDARD: YIELD sign shall be installed on both the left and right sides of roundabout approaches having > one lane
- GUIDANCE: YIELD sign face should not be visible from the circulating roadway.

Speed Limit Sign

Section 2B.13

- New GUIDANCE: At least once **every 5 years**, States and local agencies should **reevaluate non-statutory speed limits** on segments of their roadways that have undergone a **significant change** in **roadway characteristics** or surrounding land use since the last review.

Speed Limit Sign

Section 2B.13

- **GUIDANCE:** Posted speed limit should be within 5 mph of the 85th-percentile speed of free-flowing traffic.



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Changeable Message Speed Limit Sign

Section 2B.13

- Changeable message signs may display the speed at which drivers are traveling.
 - If a Changeable message sign displaying approach speeds is installed, the legend YOUR SPEED XX KM/H (MPH) or similar legend should be shown.
 - The color of the XX for the speed value should be yellow on black or the reverse of these colors.
- **Compliance date of August 15, 2015**



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Turn Prohibition Sign

Section 2B.19

- New Combination Turn Prohibition Symbol Sign



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ONE WAY Signs

Section 2B.37

- ONE WAY signs shall be placed parallel to the one-way street at all alleys and roadways that intersect one-way roadways.
- Compliance date of August 15, 2013



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Van Accessible Plaque

Section 2B.40



➤ R7-8a plaque is used with guide sign to direct users to Accessible parking space

➤ R7-8b plaque is used with R7-8 Reserved Parking Sign

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NO TURN ON RED Sign

Section 2B.45



➤ NEW Design of sign. Revised to put "Red Ball" at bottom of sign.

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Turning Traffic Yield to Pedestrians

Section 2B.45



- May be used at locations of heavy pedestrian and vehicle turning movements
- Research found this sign not as effective as signs that restrict turns on red

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Hazardous Materials Signs

Section 2B.52



- New Design
- Change from HC to HM

➤ Compliance date of August 15, 2015

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Placement of Advance Warning Signs

Table 2C-4, Section 2C.05

- Revise the distance for the placement of advance warning signs to correspond with values in the 2001 AASHTO “A Policy on Geometric Design of Highway and Streets” book

Placement of Advance Warning Signs

Table 2C-4, Section 2C.05

- Combine the “Condition B” and “Condition C” columns and label them “Condition B”
- Add 60 and 70 mph for the deceleration speed
- Add rows for 70 and 75 mph to the Posted or 85 percentile column.
- These changes to Table 2C-4 reflect the needs of older road users.

Placement of Advance Warning Signs

Table 2C-4, Section 2C.05

Posted or 85th-Percentile Speed	Advance Placement Distance ¹								
	Condition A: Speed reduction and lane changing in heavy traffic ²	Condition B: Deceleration to the listed advisory speed (mph) for the condition ³							
		0 ⁴	10	20	30	40	50	60	70
20 mph	225 ft	N/A ⁵	N/A ⁵	—	—	—	—	—	—
25 mph	325 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—	—
30 mph	450 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—	—
35 mph	550 ft	N/A ⁵	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—
40 mph	650 ft	125 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—
45 mph	750 ft	175 ft	125 ft	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—
50 mph	850 ft	250 ft	200 ft	150 ft	100 ft	N/A ⁵	—	—	—
55 mph	950 ft	325 ft	275 ft	225 ft	175 ft	100 ft	N/A ⁵	—	—
60 mph	1100 ft	400 ft	350 ft	300 ft	250 ft	175 ft	N/A ⁵	—	—
65 mph	1200 ft	475 ft	425 ft	400 ft	350 ft	275 ft	175 ft	N/A ⁵	—
70 mph	1250 ft	550 ft	525 ft	500 ft	425 ft	350 ft	250 ft	150 ft	—
75 mph	1350 ft	650 ft	625 ft	600 ft	525 ft	450 ft	350 ft	250 ft	100 ft

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Truck Rollover Warning Sign

Section 2C.11



- New Section added (Penn design)
- Arrow shows direction of roadway curvature
- Compliance date of August 15, 2015

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Narrow Bridge/Road Sign

Sections 2C.15 and 2C.16



- Deleted Narrow Bridge/Road symbol sign due to poor understanding of this symbol sign
- Word version only for these signs
- **Compliance date of August 15, 2015**

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33

Pavement Ends Sign

Section 2C.25

- Deleted Pavement Ends symbol sign due to poor understanding of this symbol sign
- Word version only for this sign
- **Compliance date of August 15, 2015**



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SHOULDER Signs

Section 2C.26

- Deleted Pavement Ends symbol sign due to poor understanding of this symbol sign
- Word version only for this sign
- Compliance date of August 15, 2015
- GUIDANCE that SHOULDER DROP OFF sign is for shoulder drop-offs that exceed 3 inches in depth.



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Speed Reduction Signs

Section 2C.30



- Revised from regulatory to warning signs
- Compliance date of August 15, 2020
- Also applies Section 7B (Schools)

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Merge Signs

Section 2C.31

- New Entering Roadway Merge Sign (W4-5) added
- Used where the entering roadway curves before merging
- Compliance date of August 15, 2015



W4-1



W4-5

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Added Lane Signs

Section 2C.32

- New Entering Roadway Added Lane sign (W4-6) added
- Used where the entering roadway curves before converging with another roadway that has a tangent alignment at the point of convergence
- Compliance date of August 15, 2015



W4-3



W4-6

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LANE ENDS Sign

Section 2C.33

➤ Revised symbol
improve
comprehension

➤ Compliance date
of August 15, 2015



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TWO-WAY TRAFFIC Sign

Section 2C.34

➤ Add to GUIDANCE
Section of manual that W6-
3 sign should be used to
warn road users of a
transition from a one-way
street to a two-lane, two-
way roadway

➤ AHEAD plaque should be
used

➤ Compliance date of August
15, 2010



W6-3



W16-9p

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Intersection Warning Signs

Section 2C.37

➤ Revised design for CIRCULAR INTERSECTION warning sign

➤ Signing to roundabouts still being evaluated



➤ Compliance date of August 15, 2015

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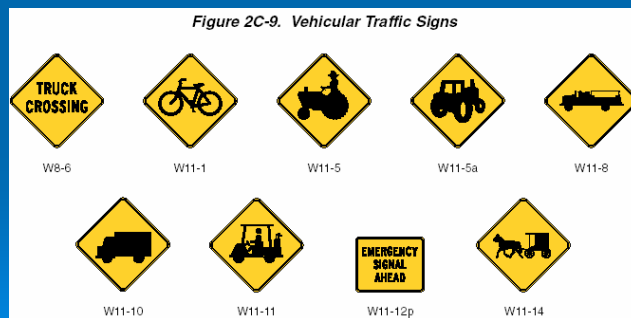
41

Vehicular Signs

Section 2C.40

➤ Add Truck symbol, Bicycle, Golf Cart, and Horse-Drawn Vehicle signs

➤ Add OPTION – SHARE THE ROAD may be mounted below Vehicular Traffic Signs



➤ Compliance date of August 15, 2015

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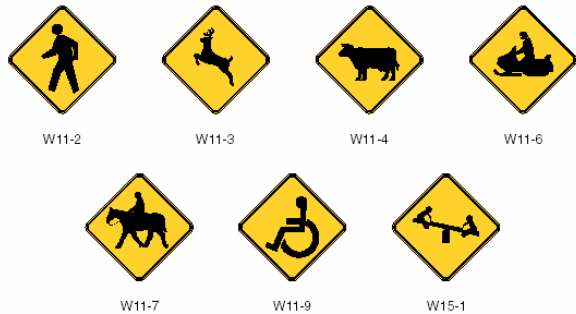
42

Non Vehicular Signs

Section 2C.41

- Add Equestrian, Handicapped, and Snowmobile symbol signs
- Add OPTION that AHEAD or XX FEET plaque may be used in advance of crossing

Figure 2C-10. Nonvehicular Traffic Signs



43

Non Vehicular Signs

Section 2C.41

- When a Non Vehicular warning sign is used at a crossing, it shall be supplemented with a diagonal downward pointing arrow (W16-7p) plaque showing the location of the crossing

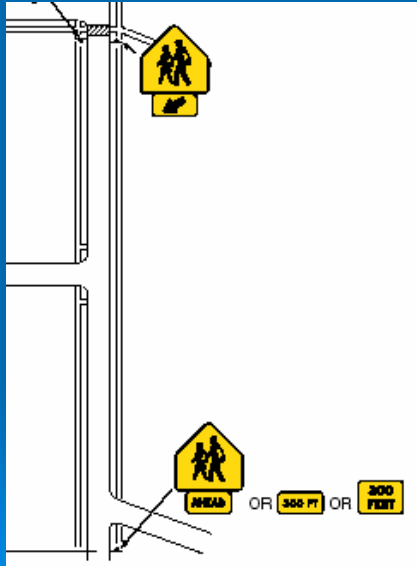


- Compliance date of August 15, 2015

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Signing for School Crosswalk



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CROSS TRAFFIC DOES NOT STOP

Section 2C.50

➤ New placement STANDARD. If used, it shall be installed below the STOP sign. The sign is optional.

- Deleted Arrow from design
- OPTION – Alternate legends TRAFFIC FROM LEFT (RIGHT)/ ONCOMING TRAFFIC DOES NOT STOP



W4-4

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46

Photo Enforced Signs

Section 2C.53



- New section added in 2C for uniformity
- In Michigan can only be used with W10-1 sign
- **Compliance date of August 15, 2015**

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47

Street Name Sign

Section 2D.38



- GUIDANCE that letter size should be 6 in or 6/4.5 in
- For local streets with a speed limits of 25 mph or less the minimum letter size is 4 in
- **Compliance date of August 15, 2017**

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48

Street Name Sign

Section 2D.38



- Added GUIDANCE that on multi-lane streets with speed limits of 40 mph or more the minimum letter size should be 8 in or 8/6 in
- Compliance date of August 15, 2020

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49

Street Name Sign

Section 2D.38



- Added GUIDANCE in urban and suburban areas, especially where Advance Street Name signs are not used, overhead-mounted signs should be considered.
- If overhead Street Name signs are used, the lettering should be at least 12 in or 12/9 in

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50

Advance Street Name Signs

Section 2D.39

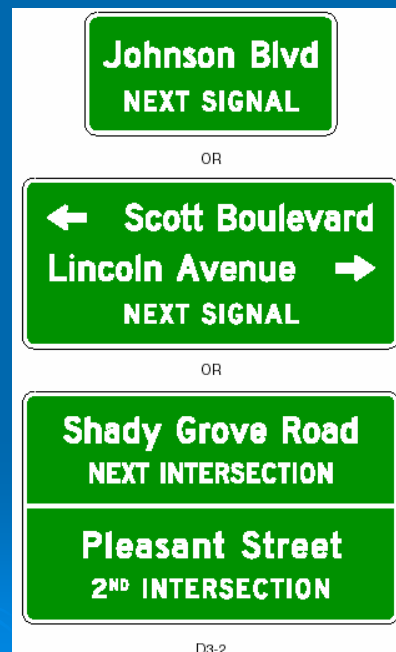


- New Section added
- Encouraged use:
 - Rural Arterials at signalized and exclusive turn lane intersections
 - Urban major arterials at signalized int.
- **Compliance date of August 15, 2020**

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Advance Street Name Sign Examples



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52

Reference Location Signs

Section 2D.46

- Change “Reference Posts” to “Reference Location Signs”
- New Designs:
 - reference
 - intermediate
- Compliance date of August 15, 2015



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53

Signing of Named Highways

Section 2D.49

Under Standards Section the following prohibitions were made:

- the use of memorial names on directional guide signs,
- interference with necessary highway signing, and
- placement which compromises the safety or efficiency of traffic flow.

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54

Reference Location Signs

Section 2E.54

- Change name from “Reference Posts” to “Reference Location Signs”
- MILE shall be in 4 in white letters
- OPTION added that intermediate and enhanced reference location signs may also be used on freeways and expressways.
- Decimal point for Intermediate Reference Location Signs
- **Compliance date of August 15, 2015**



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Carpool and Ridesharing Signs

Section 2E.57



- OPTION that Carpool Information signs may include Internet addresses or telephone numbers within the legend.
- Change the size of the maximum vertical dimension of the logo or symbol from 36 in to 18 in, to enhance the legibility of the primary message.

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56

Please take note!

- The 2005 Michigan Manual took effect August 15, 2005.
- The Michigan Manual on Uniform Traffic Control Devices is the document for all Michigan road agencies to follow.

Where to get MMUTCD?

- On line on MDOT's Web Page
 - <http://mdotwas1.mdot.state.mi.us/public/tands/plans.cfm>
- Michigan's Local Technical Assistance Program (LTAP) at Michigan Technological University
 - www.michiganltap.org (under Technical Publications)
 - Call 906-487-2102
 - Cost \$135 with interactive CD