National Committee on Uniform Traffic Control Devices

RWSTC Agenda item III.3 June 2013

National Committee on Uniform Traffic Control Devices
RWSTC

TECHNICAL COMMITTEE: NCUTCD Regulatory/Warning Signs Technical Committee

DATE OF ACTION: 11-11-12, revised 11-25-12, revised 11-26-12, revised 12-2-12, revised 12-22-12, revised 12-24-12, updated 12-26-12, revised following sponsor comments 6-8-13, revised 6-11-13 following sponsor comments, revised 6-13-13 following sponsor comments, revised 6-16-13 following sponsor comments, revised 6-17-13 following sponsor comments, revised following sponsor comments 6-26-13, approved by council 6-28-13

Task force: Tom Heydel (chair), Lee Roadifer, Gerry Willhelm, Richard Meredith, Ron Lipps, Jim Sullivan

Details (figures): Richard Meredith

RWSTC APPROVAL DATE: January 10, 2013
TRANSMITTAL TO SPONSORS DATE: Spring 2013
RWSTC APPROVAL FOLLOWING SPONSOR COMMENTS: June 26, 2013
COUNCIL APPROVAL DATE: June 28, 2013

TOPIC: DO NOT ENTER/WRONG WAY Signing

AFFECTED PORTIONS OF MUTCD: Section 2B.37, 2B.38, 2B.41 and Figure-2B-12

DISCUSSION/QUESTION:

There are some clarifications and inconsistencies in the text and figures related to wrong way movement signing in the MUTCD.

Figure 2B-12 does not provide for situations where the median is less than 30 feet, and does not match the text in terms of wrong way movement signing shown in the text. Also, the figure and text do not adequately address the difference between urban low speed divided highways and high speed rural highways.
Figure 2B-12 is inconsistent regarding the WRONG WAY (R5-1a) sign. The text says the signs are optional and Figure 2B-12 does not say they are optional. The text in Section 2B.38 says wrong way signs are optional but figure 2B-18 indicates only one of the WRONG WAY signs is optional.

**RECOMMENDATION:**

Section 2B.37 – DO NOT ENTER signing - Add text to require the DO NOT ENTER signing for median widths 30 feet and greater. Add text to provide for median widths less than 30 feet and for low speed urban city streets that are divided highways.

Section 2B.38 – WRONG WAY signing – revise figure 2B-12 to show that the WRONG WAY sign is optional for divided highways. Text indicates the sign is optional; therefore, the figure should be changed to match the text. **Change text by eliminating the reference to exit ramps only, to make it all encompassing to match figure.** Remove reference in paragraph 01 related to ramps since that is covered in Section 2B.41.

Section 2B.41 WRONG WAY signing at interchange ramps – Move this section after 2B.38 in order to have the DO NOT ENTER and WRONG WAY signing sections together. Add language requiring at least one wrong way sign on exit ramp for consistency with the figure. **No changes recommended.** Text is consistent with figure 2B-18 in terms of the DO NOT ENTER and WRONG WAY signs.

Move Sections 2B.40 and 2B.41 which deal with ONE WAY signs and WRONG WAY signs at ramps after section 2B.38, so signs associated with wrong way movements are consecutive sections rather than having Selective exclusion signs intermixed in there.

**RECOMMENDED WORDING:**

Note: Proposed changes to the MUTCD are shown in **underline red** and removed text are shown in **strikethrough red.**

**NOTE: REVISED FIGURE 2B.12 FOUND AT END OF DOCUMENT**

**Section 2B.37 DO NOT ENTER Sign (R5-1)**

**Standard:**

01 The DO NOT ENTER (R5-1) sign (see Figure 2B-11) shall be used where traffic is prohibited a two-way roadway becomes a one-way roadway as shown in Figure 2B-14, from entering a restricted roadway, and near the downstream end of an interchange exit ramp as shown in Figure 2B-18 (see Section 2B.41).

(02) Except as noted in paragraph 4, a DO NOT ENTER (R5-1) sign shall be installed at an intersection with a divided highway where the median width is 30 feet or greater, as shown in Figure 2B-12.
Option:

(03) A DO NOT ENTER (R5-1) sign may be installed at an intersection with a divided highway where the median width is less than 30 feet.

(04) A DO NOT ENTER (R5-1) sign may be omitted at an intersection with a low speed urban street that is a divided highway where the median width is 30 feet or greater.

**Figure 2B-11 Selective Exclusion Signs**

![Selective Exclusion Signs](image)

**Guidance:**

02 The DO NOT ENTER sign, if used, should be placed directly in view of a road user at the point where a road user could wrongly enter a divided highway, one-way roadway, or ramp (see Figures 2B-12, 2B-14 and 2B-18). The sign should be mounted as shown in figure 2B.18 on the right-hand side of the roadway, facing traffic that might enter the roadway or ramp in the wrong direction. At an intersection with a divided highway where the median width is less than 30 feet; the sign, if used, should be placed on the left-hand outside edge side of the roadway facing traffic that might enter the roadway in the wrong direction.

**Figure 2B-12 Locations of Wrong-Way Signing for Divided Highways with Median Widths of 30 Feet or Wider**

![Locations of Wrong-Way Signing for Divided Highways with Median Widths of 30 Feet or Wider](image)

(see revised figure 2B-12 below)
03 If the DO NOT ENTER sign would be visible to traffic to which it does not apply, the sign should be turned away from, or shielded from, the view of that traffic.

Option:

04 The DO NOT ENTER sign may be installed where it is necessary to emphasize the one-way traffic movement on a ramp or turning lane.

05 A second DO NOT ENTER sign on the left-hand side of the roadway may be used, particularly where traffic approaches from an intersecting roadway (see Figure 2B-12).

Support:

06 Section 2B.41(XX) contains information regarding an optional lower mounting height for DO NOT ENTER signs that are located along an exit ramp facing a road user who is traveling in the wrong direction.

NOTE: Move Section 2B.41 after 2B.38 so all the DO NOT ENTER, WRONG WAY movement sections are consecutive. Paragraph 06 which states 2B.41 would be renumbered accordingly.

Note: Changes to Figure 2B-12 are shown with the new figure at the end of this proposal. New figure at end of proposal that replaces the figure above.

Section 2B.38 WRONG WAY Sign (R5-1a)

Option:

01 The WRONG WAY (R5-1a) sign (see Figure 2B-11) may be used as a supplement to the DO NOT ENTER sign where an exit ramp intersects a crossroad or a crossroad intersects a one-way roadway in a manner that does not physically discourage or prevent wrong-way entry (see Figure 2B-12).

Guidance:

02 If used, the WRONG WAY sign should be placed at a location along the one-way roadway farther from the crossroad than the DO NOT ENTER sign

Support:

03 Section 2B.41(XX) contains information regarding an optional lower mounting height for WRONG WAY signs that are located along an exit ramp facing a road user who is traveling in the wrong direction.

MOVE Section 2B.41 so it is after 2B.38 in order to have all the Wrong Way/Do Not Enter signing sections in consecutive order for easier reference by the user of these sections. Renumber sections 2B.39 and 2B.40 accordingly. Move 2B.39 (Selective Exclusion signs) so it is after Section 2B.40 (ONE WAY Signs). This way the ONE WAY signs section immediately follows the Do Not Enter and Wrong Way sign sections.

Section 2B.41(XX) (move to after Section 2B.38 and renumber accordingly)

Wrong-Way Traffic Control at Interchange Ramps

Standard:

01 At interchange exit ramp terminals; where the ramp intersects a crossroad in such a manner that wrong-way entry could inadvertently be made, the following signs shall
A. At least one ONE WAY sign for each direction of travel on the crossroad shall be placed where the exit ramp intersects the crossroad.

B. At least one DO NOT ENTER sign shall be conspicuously placed near the downstream end of the exit ramp in positions appropriate for full view of a road user starting to enter wrongly from the crossroad.

C. At least one WRONG WAY sign shall be placed on the exit ramp facing a road user traveling in the wrong direction.

Guidance:
02 In addition, the following pavement markings should be used (see Figure 2B-18):

A. On two-lane paved crossroads at interchanges, double solid yellow lines should be used as a center line for an adequate distance on both sides approaching the ramp intersections.

B. Where crossroad channelization or ramp geometrics do not make wrong-way movements difficult, a lane-use arrow should be placed in each lane of an exit ramp near the crossroad terminal where it will be clearly visible to a potential wrong-way road user.

Option:
03 The following traffic control devices may be used to supplement the signs and pavement markings described in Paragraphs 1 and 2:

A. Additional ONE WAY signs may be placed, especially on two-lane rural crossroads, appropriately in advance of the ramp intersection to supplement the required ONE WAY sign(s).
B. Additional WRONG WAY signs may be used.

C. Slender, elongated wrong-way arrow pavement markings (see Figure 3B-24) intended primarily to warn wrong-way road users that they are traveling in the wrong direction may be placed upstream from the ramp terminus (see Figure 2B-18) to indicate the correct direction of traffic flow. Wrong-way arrow pavement markings may also be placed on the exit ramp at appropriate locations near the crossroad junction to indicate wrong-way movement. The wrong-way arrow markings may consist of pavement markings or bidirectional red-and-white raised pavement markers or other units that show red to wrong-way road users and white to other road users (see Figure 3B-24).

D. Lane-use arrow pavement markings may be placed on the exit ramp and crossroad near their intersection to indicate the permissive direction of flow.

E. Freeway entrance signs (see Section 2D.46) may be used.

Guidance:
04 On interchange entrance ramps where the ramp merges with the through roadway and the design of the interchange does not clearly make evident the direction of traffic on the separate roadways or ramps, a ONE WAY sign visible to traffic on the entrance ramp and through roadway should be placed on each side of the through roadway near the entrance ramp merging point as illustrated in Figure 2B-19.

Figure 2B-19 Example of Application of Regulatory Signing and Pavement Markings at an Entrance Ramp Terminal Where the Design Does Not Clearly Indicate the Direction of Flow

Option:
05 At locations where engineering judgment determines that a special need exists, other standard warning or prohibitive methods and devices may be used as a deterrent to the wrong-way movement.

06 Where there are no parked cars, pedestrian activity or other obstructions such as snow or vegetation, and if an engineering study indicates that a lower mounting height would address wrong-way movements on freeway or expressway exit ramps, a DO NOT ENTER sign(s) and/or a WRONG WAY sign(s) that is located along the exit ramp facing a road user who is traveling in the wrong direction may be installed at a minimum mounting height of 3 feet, measured vertically from the bottom of the sign to the elevation of the near edge of the pavement.

Support:
07 Sections 2B.41 (XX), 2B.37 and 2B.38 contains further information on signing to avoid wrong-way movements at at-grade intersections on expressways.

NOTE: Section 2B.41, Paragraph 07 would be renumbered accordingly when placed after 2B.38

Figure 2B-14 shown below for information only
Revise Figure 2B-12, Locations of Do Not Enter and Wrong Way Signing for Divided Highways
The following changes are made to the figure 2B-12:

- DO NOT ENTER signs are optional where the median width is less than 30 feet.
- WRONG WAY signs are optional.
- Section 2B.40 and figures associated with Section 2B.40 describe ONE WAY or KEEP RIGHT signing required for reinforcing wrong way movement.
- Add double yellow center line in median and stop bars for clarity for wider medians. Change WRONG WAY sign to be optional to match text in section 2B.38.
- Delete reference to 30 feet or wider on the figure. Figure applies to all median widths with * describing options and ** describing where signs are required. Section 2B.37 providing standards, guidance and options.

RWSTC Vote on 6-26-13 following sponsor comments:

For: Unanimous
Against:
Abstentions:

Council Vote: 6-28-13

For: Unanimous
Against:
Abstentions:

C: NCUTCD/Jan 2013 meeting/ wrong way signing 11-11-12, revised 11-25-12, revised 11-26-12, revised 12-2-12, revised 12-22-12, revised 12-24-12, updated 12-26-12, revised 1-10-13, revised following sponsor comments 6-8-13. Revised 6-11-13 following sponsor comments, revised 6-13-13 following sponsor comments, revised 6-16-13 following sponsor comments, revised 6-17-13 following sponsor comments, revised following sponsor comments 6-26-13, approved by council 6-28-13