

ATTACHMENT NO. 32

MARKINGS TECHNICAL COMMITTEE SPONSOR BALLOT HORIZONTAL SIGNING

Approved by NCUTCD Council January 20, 2006

The Markings Technical Committee (MTC) recommends several changes to Part 3 of the MUTCD to encourage greater use of horizontal signing and to specifically allow the use of an Interstate Highway shield as a pavement marking. These recommended changes were developed by the MTC in response to the following comments that FHWA provided to the MTC:

23. In Section 3B.19, should text be added to more strongly encourage the use of “horizontal signing” to supplement traditional signing for regulatory, warning, and directional information? Also, should the specific exception to the requirement for these markings to be white be stated for the red, white, and blue Interstate shield marking that was authorized by FHWA official interpretation number 3-162(I)?
25. In Paragraph 5 of Section 3B.19, should there be an Option of putting the first word last for low speed and bike messages?
26. In Section 3B.19, it is stated that symbol messages are preferable to word messages. However, the list of markings at the top of page 3B-38 includes almost all word messages. Should symbolic equivalents to some or many of the word messages listed be developed (using existing sign symbols) and illustrated in Chapter 3B?

The recommended changes include minor additions to the language in Sections 3A.04 and 3B.19. There are no proposed changes to the figures from either section. Therefore, the figures are not included in the ballot.

Additions to the current MUTCD language are shown in blue underline, deletions are shown in ~~red strikethrough~~.

Recommended Changes to Encourage Horizontal Signing

Section 3A.04 Colors

Standard:

Markings shall be yellow, white, red, or blue. The colors for markings shall conform to the standard highway colors. Black in conjunction with one of the above colors shall be a usable color.

When used, white markings for longitudinal lines shall delineate:

- A. The separation of traffic flows in the same direction.
- B. The right edge of the roadway.

When used, yellow markings for longitudinal lines shall delineate:

- A. The separation of traffic traveling in opposite directions.
- B. The left edge of the roadways of divided and one-way highways and ramps.
- C. The separation of two-way left turn lanes and reversible lanes from other lanes.

When used, red raised pavement markers shall delineate roadways that shall not be entered or used.

When used, blue markings shall supplement white markings for parking spaces for persons with disabilities. When used, blue raised pavement markers shall indicate locations of fire hydrants along a roadway.

Option:

Black may be used in combination with the above colors where a light-colored pavement does not provide sufficient contrast with the markings.

[Appropriate colors may be used in a route shield pavement marking symbol \(e.g. red, white, and blue for an Interstate highway route shield\).](#)

Support:

When used in combination with other colors, black is not considered a marking color, but only a contrast-enhancing system for the markings.

Section 3B.19 Pavement Word and Symbol Markings

Support:

Word and symbol markings on the pavement are used for the purpose of guiding, warning, or regulating traffic. Symbol messages are preferable to word messages. Examples of standard word and arrow pavement markings are shown in Figures 3B-20 and 3B-21.

Standard:

Word and symbol markings shall be white, except as otherwise noted in this Section.

Guidance:

Letters and numerals should be 1.8 m (6 ft) or more in height.

Word and symbol markings should not exceed three lines of information.

If a pavement marking word message consists of more than one line of information, it should read in the direction of travel. The first word of the message should be nearest to the road user.

Except for the two opposing arrows of a two-way left-turn lane marking (see Figure 3B-7), the longitudinal space between word or symbol message markings, including arrow markings, should be at

least four times the height of the characters for low-speed roads, but not more than ten times the height of the characters under any conditions.

The number of different word and symbol markings used should be minimized to provide effective guidance and avoid misunderstanding.

Except as noted in the Option, pavement word and symbol markings should be no more than one lane in width.

Option:

The SCHOOL word marking may extend to the width of two approach lanes (see Section 7C.06).

Guidance:

When the SCHOOL word marking is extended to the width of two approach lanes, the characters should be

3 m (10 ft) or more in height (see Section 7C.06).

Pavement word and symbol markings should be proportionally scaled to fit within the width of the facility upon which they are applied.

Option:

On narrow, low-speed shared-use paths, the pavement words and symbols may be smaller than suggested, but to the relative scale.

The International Symbol of Accessibility parking space markings may be placed in each parking space designated for use by persons with disabilities. A blue background with white border may supplement the wheelchair symbol as shown in Figure 3B-19.

[Interstate, U.S., state, and other official highway route shield pavement marking symbols may be used to direct road users to their destination.](#)

Standard:

Where through traffic lanes approaching an intersection become mandatory turn lanes, lane-use arrow markings (see Figure 3B-21) shall be used and shall be accompanied by standard signs.

Lane use, lane reduction, and wrong-way arrow markings shall be designed as shown in Figure 3B-21.

Guidance:

Where through lanes become mandatory turn lanes, signs or markings should be repeated as necessary to prevent entrapment and to help the road user select the appropriate lane in advance of reaching a queue of waiting vehicles.

Option:

Lane-use arrow markings (see Figure 3B-21) may be used to convey either guidance or mandatory messages.

The ONLY word marking (see Figure 3B-20) may be used to supplement lane-use arrow markings (see Figure 3B-22).

In situations where a lane reduction transition occurs, the lane reduction arrow markings shown in Figure 3B-21 may be used.

Guidance:

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 (see Figure 3B-23).

Option:

The wrong-way arrow markings shown in Figure 3B-21 may be placed near the downstream terminus of a ramp as shown in Figures 3B-23 and 3B-24 to indicate the correct direction of traffic flow and to discourage drivers from traveling in the wrong direction.

A yield-ahead triangle symbol or YIELD AHEAD word pavement marking may be used on approaches to intersections where the approaching traffic will encounter a YIELD sign at the intersection (see Figure 3B-25).

Support:

Lane-use arrow markings are often used to provide guidance in turn bays (see Figure 3B-22), where turns may or may not be mandatory, and in two-way left-turn lanes (see Figure 3B-7).

Option:

Word and symbol markings may include, but are not limited to, the following. Other words or symbols may also be used under certain conditions.

- A. Regulatory:
 - 1. STOP
 - 2. RIGHT (LEFT) TURN ONLY
 - 3. 40 km/h (25 MPH)
 - 4. Arrow Symbols
- B. Warning:
 - 1. STOP AHEAD
 - 2. YIELD AHEAD
 - 3. YIELD AHEAD Triangle Symbol
 - 4. SCHOOL XING
 - 5. SIGNAL AHEAD
 - 6. PED XING
 - 7. SCHOOL
 - 8. R X R
 - 9. BUMP
 - 10. HUMP
- C. Guide (word or symbol):
 - 1. I-81
 - 2. US 40
 - 3. STATE 135
 - 4. ROUTE 40

Standard:

Except at the ends of aisles in parking lots, the word STOP shall not be used on the pavement unless accompanied by a stop line (see Section 3B.16) and STOP sign (see Section 2B.04). At the ends of aisles in parking lots, the word STOP shall not be used on the pavement unless accompanied by a stop line.

The word STOP shall not be placed on the pavement in advance of a stop line, unless every vehicle is required to stop at all times.

The yield-ahead triangle symbol or YIELD AHEAD word pavement marking shall not be used unless a YIELD sign (see Section 2B.08) is in place at the intersection. The yield-ahead symbol marking shall be as shown in Figure 3B-25.