National Committee on
Uniform Traffic Control Devices

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National Committee on Uniform Traffic Control Devices (NCUTCD)
Recommended Changes to Proposed Text for 11th Edition of the MUTCD
Docket Number: FHWA-2020-0001

Federal Register Item Number: 317-320
NPA MUTCD Section Number: Sections 3A.01-3A.05
Legend: Base text shown in proposal is the NPA "clean" proposed text.

- NCUTCD recommendation for text to be added in final rule.
- ~~NCUTCD recommendation for text to be deleted in final rule~~.
- NCUTCD recommendation for text to be moved/relocated in final rule.
- NPA text that was not previously approved by NCUTCD but is now approved.
- Explanatory note: [Note that explains purpose of recommended change.]

The following pages present NCUTCD recommendations for changes to the MUTCD NPA proposed text, tables, and figures for Chapter 3A. Below is a short summary of the NCUTCD position for each section of this chapter. A more detailed summary is provided at the beginning of each section.

- NPA #317, Section 3A.01: NCUTCD agrees with NPA content (no changes recommended).
- NPA #318, Section 3A.02: NCUTCD agrees with NPA content (no changes recommended).
- NPA #319, Section 3A.03: NCUTCD agrees with NPA content (no changes recommended).
- NPA #320, Section 3A.04: Changes recommended based on Council action in spring 2021.

CHAPTER 3A. GENERAL

Section 3A.01 Comments: NCUTCD agrees with 3A.01 as presented in the NPA.

Section 3A.01 Standardization of Application

Support:

Markings are used to supplement other traffic control devices such as signs, signals, and other markings. In other instances, markings are used alone to effectively convey regulations, guidance, or warnings in ways not obtainable by the use of other devices.

Markings can take many forms including road surface markings, curb markings, delineators, colored pavements, and channelizing devices.

Standard:

Each standard marking shall be used only to convey the meaning prescribed for that marking in this Manual, including when used for applications not described in this Manual.

Except as provided in Chapter 3H, markings that must be visible at night shall be retroreflective unless the markings are adequately visible under street or highway lighting. All markings on Interstate highways shall be retroreflective.

Markings that are no longer applicable for roadway conditions or restrictions and that might cause confusion for the road user shall be removed or obliterated to be unidentifiable as a marking as soon as practical.

Option:

Until they can be removed or obliterated, markings that are no longer applicable for roadway conditions or restrictions may be temporarily masked with non-reflective, preformed tape that is approximately the same color as the pavement surface.

Section 3A.02 Comments: NCUTCD agrees with 3A.02 as presented in the NPA.

Section 3A.02 Materials

Guidance:

The materials used for markings should provide the specified color throughout their useful life.

Consideration should be given to selecting pavement marking materials that will minimize tripping or loss of traction for road users, including pedestrians, bicyclists, and motorcyclists.

Option:

Marking systems that consist of clumps or droplets of material with visible open spaces of bare pavement between the material droplets, which can function in a manner that is similar to the marking systems that completely cover the pavement surface, may be used as pavement markings if they meet the other pavement marking requirements of the highway agency.

Section 3A.03 Comments: NCUTCD agrees with 3A.03 as presented in the NPA.

Section 3A.03 Colors

Standard:

Markings shall be yellow, white, red, blue, or purple. The colors for markings shall conform to the standard highway colors.

Option:

Black markings may be used in combination with the colors mentioned in Paragraph 1 to enhance the contrast with a light-colored pavement.

Standard:

When used, yellow markings for longitudinal lines shall delineate:

A. The separation of traffic traveling in opposite directions,

B. The left-hand edge of the roadways of divided highways and one-way streets or ramps, or

C. The separation of two-way left-turn lanes and reversible lanes from other lanes.

When used, white markings for longitudinal lines shall delineate:

A. The separation of traffic flows in the same direction, or

B. The right-hand edge of the roadway.

When used, red raised pavement markers or delineators shall delineate:

A. Truck escape ramps, or

B. One-way roadways, ramps, or travel lanes that shall not be entered or used in the direction from which the markers are visible.

When used, blue markings shall supplement white markings for parking spaces for persons with disabilities.

When used, purple markings shall be in accordance with the provisions of Chapters 3F and 3H.

When pavement markings that simulate official route signs are used (see Section 3B.22), the colors shall be the same as those that are used for the official route signs (see Section 2D.11).

Support:

Provisions regarding colored pavements are contained in Chapter 3H.

Section 3A.04 Comments: NCUTCD generally agrees with 3A.04 as presented in the NPA, but recommends revising the criteria of a normal width line to change the threshold for 6 inch lines to a speed of 55 mph or more and an ADT of 6000 vehicles per day or more in accordance with NCUTCD recommendation 19B-MRK-02. This change encompasses higher speed and volume highways where 6 inch lines have shown value, without unduly burdening local agencies, especially agencies with urban streets with posted speeds greater than 40 mph.

Section 3A.04 Functions, Widths, and Patterns of Longitudinal Pavement Markings

Standard:

The general functions of longitudinal lines shall be as follows:

A. A double line indicates maximum or special restrictions.

B. A solid line discourages or prohibits crossing (depending on the specific application).

C. A broken line indicates a permissive condition.

D. A dotted lane line provides warning of a downstream change in lane function.

E. A dotted line used as a lane line or edge line extension guides vehicles through an intersection, a taper area, or an interchange ramp area.

The widths and patterns of longitudinal lines shall be as follows:

A. Normal width line – 6 inches wide for interstate, freeways, expressways, and ramps~~; 6 inches for~~ and for edge lines on all other roadways with posted or statutory speeds ~~limits > 40~~ of ~~55~~ mph or more and an ADT of 6,000 vehicles per day or greater; otherwise, a normal line shall be 4 to 6 inches ~~for all other roadways~~. (revise per 19B-MRK-02)

B. Wide line – at least 8 inches in width if 4 inch or 5 inch normal width lines are used and at least 10 inches in width if 6 inch normal width lines are used.

C. Double line – two parallel lines separated by a discernible space. The pavement surface shall be visible between the lines in the same way that it is visible outside the lines, except where contrast markings are used in combination with the double line (see Section 3A.03).

D. Broken line – normal width line segments separated by gaps.

E. Dotted line – noticeably shorter line segments separated by shorter gaps than used for a broken line. The width of a dotted line extension shall be at least the same as the width of the line it extends.

Guidance:

The discernible space separating the parallel lines of a double line should not exceed that which is necessary to be recognized as a double line rather than two separate, disassociated single lines.

Support:

The width of the line indicates the degree of emphasis.

Wide edge lines have been shown to be beneficial when applied in combination with horizontal alignment warning signs to enhance safety around curves and locations with a history of run off the road crashes (see Section 3B.09).

Guidance:

Broken lines should consist of 10-foot line segments and 30-foot gaps, or dimensions in a similar ratio of line segments to gaps as appropriate for traffic speeds and need for delineation, except within the circulatory roadway of a circular intersection as provided in Section 3D.02.

A dotted line used as a lane line (see Section 3B.07) should consist of 3-foot line segments and 9-foot gaps. A dotted line for line extensions within an intersection, taper area, or interchange ramp area (see Section 3B.11) should consist of 2-foot line segments and 2- to 6-foot gaps.

Section 3A.05 Maintaining Minimum Pavement Marking Retroreflectivity

(This section reserved for future text based on FHWA rulemaking)