

# 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 11<sup>th</sup> Edition of the MUTCD

Docket Number: FHWA-2020-0001

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6 Federal Register Item Number: 311 – 315

NPA MUTCD Section Number: 2N Legend: Base text shown in proposal is the NPA "clean" proposed text.

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NCUTCD recommendation for text to be added in final rule.

10 11 NCUTCD recommendation for text to be deleted in final rule.

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• NPA text that was not previously approved by NCUTCD but is now approved.

NCUTCD recommendation for text to be moved/relocated in final rule.

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• Explanatory note: [Note that explains purpose of recommended change.]

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The following pages present the NCUTCD recommendations for changes to the MUTCD NPA proposed text and figures for portions of Chapter 2. Below is a summary of the NCUTCD position on the Sections of Chapter 2N. A more detailed summary is provided at the beginning of each section.

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• NPA #311, Chapter 2N: Recommend restoring language from 2009 MUTCD

20 21 NPA # N/A, Section 2N.01: No proposed changes by the NPA

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NPA # 312, Section 2N.02: Changes recommended based on Council action in spring 2021
 NPA # 313, Section 2N.03: Changes recommended based on Council action in spring 2021

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• NPA# 314, Section 2N.04: Changes recommended based on Council action in spring 2021

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• NPA# 315, Section 2N.05: Changes recommended based on Council action in spring 2021

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• NPA # N/A, Section 2N.06: Changes recommended based on Council action in spring 2021

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NPA # N/A, Section 2N.07: Changes recommended based on Council action in spring 2021
 NPA # N/A, Section 2N.08: Changes recommended based on Council action in spring 2021

28 29 • NPA # N/A, Section 2N.09: Changes recommended based on Council action in spring 2021

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Chapter 2N Comments: NCUTCD recommends retaining the sign numbering and codes for emergency management signs from the 2009 and earlier MUTCDs. Changing these codes will be an unnecessary burden on agencies in terms of inventory, ordering, and tracking, and could result in agencies having inconsistent or non-uniform coding.

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Section 2N.01 Comments: NCUTCD agrees with 2N.01 as presented in the NPA.

Section 2N.01 Emergency Management

Guidance:

Contingency planning for an emergency evacuation should be considered by all State and local jurisdictions and should consider the use of all applicable roadways.

In the event of a disaster where highways that cannot be used will be closed, a successful contingency plan should account for the following elements: a controlled operation of certain designated highways, the establishment of traffic operations for the expediting of essential traffic, and the provision of emergency centers for civilian aid.

**Section 2N.02 Comments:** NCUTCD generally agrees with 2N.02 as presented in the NPA, but recommends revisions as follows:

- Add a figure reference to the first Standard paragraph to define the signs included in the emergency management category
- Revise the second Standard paragraph to Guidance and revise wording, because a
  requirement that all conflicting signs "shall" be covered doesn't allow needed flexibility if a
  large number of signs are in place that all need to be covered at once, especially under
  emergency conditions

## Section 2N.02 <u>Design and Use of Emergency Management Signs</u> Standard:

Emergency Management signs are those signs shown in Figure 2N-1 and shall be used to guide and control highway traffic during an emergency. (Add a reference to Figure 2N-1 to define Emergency Management signs.)

Guidance:

During an emergency, permanently installed regulatory and warning <u>S</u>signs <u>normally in</u> <u>place</u> that conflict with Emergency Management signs <u>shall</u> should be removed or covered until such time as the Emergency Management signs are no longer necessary.

Except for Evacuation Route signs, Emergency Management signs that are no longer necessitated by the emergency shall should be promptly removed or covered and signs that normally provide guidance, warning or regulation that were removed or covered during the emergency shall should be promptly displayed again.

#### **Standard:**

Advance planning for transportation operations' emergencies shall be the responsibility of State and local authorities.

Support:

The Federal Government provides guidance to the States as necessitated by changing circumstances.

#### **Standard:**

Except as provided in Section 2A.11, the sizes for Emergency Management signs shall be as shown in Table 2N-1.

Support:

Section 2A.11 contains information regarding the applicability of the various columns in Table 2N-1. Option:

Signs larger than those shown in Table 2N-1 may be used (see Section 2A.11).

84 Guidance:

As conditions permit, the Emergency Management signs should be replaced or augmented by standard signs.

<u>Except where specifically required elsewhere in this Chapter</u>, the background of Emergency Management signs should be retroreflective.

Any Emergency Management sign that is used to mark an area that is contaminated by biological or chemical warfare agents or radioactive fallout may be accompanied by the standard symbol that is illustrated in the upper left corner of the EM<u>4-1b-7c</u> and EM<u>4-1c-7d</u> signs in Figure 2N-1.

NCUTCD recommends revising Table 2N-1 by retaining the 2009 MUTCD sign numbering, and adding an Evacuation Route sign with symbol (EM-1b) in accordance with NCUTCD recommendation 12A-GMI-10.

Table 2N-1. Emergency Management Sign Sizes

Sign or Plaque	Sign Designation	Section	Minimum Size
Evacuation Route	EM1-1, EM1-2, EM1-2a, EM1-26	2N.03	24 x 24*
Area Closed	EM2-1	2N.04	30 x 24
Traffic Control Point	EM2-2	2N.05	30 x 24
Maintain Top Safe Speed	EM2-3	2N.06	24 x 30
Permit Required	EM2-4	2N.07	24 x 30
Emergency Aid Center	EM3-1, EM3-1a, EM3-1b, EM3-1C	2N.08	30 x 24
Shelter-Directional	EM4-1, EM4-1a, EM4-1b, EM4-1C	2N.09	30 x 24

Sign or Plaque	Sign Designation	Section	Minimum Size
Evacuation Route	EM-1, EM-1a <u>, EM-1b</u>	2N.03	24 x 24*
Area Closed	EM-2	2N.04	30 x 24
Traffic Control Point	EM-3	2N.05	30 x 24
Maintain Top Safe Speed	EM-4	2N.06	24 x 30
Permit Required	EM-5	2N.07	24 x 30
Emergency Aid Center	EM-6a to EM-6d	2N.08	30 x 24
Shelter Directional	EM-7a to EM-7d	2N.09	30 x 24

<sup>\*</sup> A minimum size of 18 x 18 may be used on low-volume roadways or roadways with speeds of 25 mph or less Notes:

- 1. Larger signs may be used when appropriate
- 2. Dimensions in inches are shown as width x height

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NCUTCD recommends revising Figure 2N-1 by retaining the 2009 MUTCD sign numbering, and adding an Evacuation Route sign with symbol (EM-1b) in accordance with NCUTCD recommendation 12A-GMI-10.

Figure 2N-1. Emergency Management Signs



MAINTAIN ROAD USE PERMIT TRAFFIC TOP AREA REQUIRED CONTROL SAFE CLOSED FOR THRU **POINT** SPEED TRAFFIC EM-3 EM-4 EM-5 EM-1b MEDICAL WELFARE DECONTAMINATION REGISTRATION CENTER CENTER CENTER CENTER EM-6a EM-6b EM-6c EM-6d EMERGENCY HURRICANE ALLOUT CHEMICAL SHELTER SHELTER SHELTER 2 MI → 🗲 4мі **1** 5 мг ← 6 мі EM-7a EM-7b EM-7c EM-7d

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HURRICANE is an example of one type of evacuation route. Legends for other types may also be used, or this line of text may be omitted.

- Section 2N.03 Comments: NCUTCD generally agrees with 2N.03 as presented in the NPA, but recommend revisions as follows in accordance with NCUTCD recommendation 12A-GMI-10:
- Relocate the first Standard paragraph to the fourth Standard paragraph to consolidate arrow standards on EM-1 signs in one location
- Delete references to white on blue M6 auxiliary plaques with EM-2 series signs, since the EM-2 is black on white and does not need an arrow
- Add references to EM-1b signs
- Restore 2009 MUTCD sign codes (see general Chapter 2N comment)

#### Section 2N.03 Evacuation Route Signs (EM-1 Series)

**Standard:** 

The EM1-1 sign shall include a white directional arrow (relocate arrow Standard)

The <u>EM-1 series</u> signs <u>and any plaques used to supplement the EM-1 series signs shall be</u> retroreflective.

An Advance Turn Arrow (M5 series) or Directional Arrow (M6 series) auxiliary plaque (see Figure 2N-1) shall be installed below the EM1-2 series -1a and EM-1b signs. The Advance Turn Arrow and Directional Arrow auxiliary plaques shall have a white arrow and border on a blue background when used with EM2-2 series signs. (Delete & revise) Option:

Where different evacuation conditions use different evacuation routes in the same area, the word HURRICANE, or a word that describes some other type of evacuation route, may be added above the EVACUATION ROUTE legend within the blue circular symbol on the EM1-1 sign.

#### **Standard:**

The arrow designs on the EM1-1 sign shall include a straight, vertical arrow pointing upward, a straight horizontal arrow pointing to the left or right, or a bent arrow pointing to the left or right for advance warning of a turn. The arrow shall be white and shall be within the blue circular symbol. (relocate arrow Standard)

Guidance:

If used, the Evacuation Route sign, with the appropriate arrow, should be installed 150 to 300 feet in advance of, and at, any turn in an approved evacuation route. The sign should also be installed elsewhere for straight-ahead confirmation where needed.

#### Standard

If used in urban areas, the Evacuation Route sign shall be mounted at the right-hand side of the roadway, not less than 7 feet above the top of the curb, and at least 1 foot back from the face of the curb. If used in rural areas, the Evacuation Route sign shall be mounted at the right-hand side of the roadway, not less than 7 feet above the pavement and not less than 6 feet or more than 10 feet to the right of the right-hand roadway edge.

Evacuation Route signs shall not be placed where they will conflict with other signs. Where conflict in placement would occur between the Evacuation Route sign and a standard regulatory sign, the regulatory sign shall take precedence.

Option:

In case of conflict with guide or warning signs, the Evacuation Route sign may take precedence. *Guidance*:

Placement of Evacuation Route signs should be made under the supervision of the officials having jurisdiction over the placement of other traffic signs. Coordination with Emergency Management authorities and agreement between contiguous political entities should occur to assure continuity of routes.

**Section 2N.04 Comments:** NCUTCD generally agrees with 2N.04 as presented in the NPA, but using the sign code from the 2009 MUTCD (see general Chapter 2N comment)

#### Section 2N.04 AREA CLOSED Sign (EM2-1-2)

Guidance:

The AREA CLOSED (EM2-1-2) sign (see Figure 2N-1) should be used to close a roadway in order to prohibit traffic from entering the area. It should be installed on the shoulder as near as practical to the right-hand edge of the roadway, or preferably, on a portable mounting or barricade partly or entirely in the roadway.

For best visibility, particularly at night, the sign height should not exceed 4 feet measured vertically from the pavement to the bottom of the sign. Unless adequate advance warning signs are used, it should not be placed to create a complete and unavoidable blocked route. Where feasible, the sign should be located at an intersection that provides a detour route.

**Section 2N.05 Comments:** NCUTCD generally agrees with 2N.05 as presented in the NPA, but using the sign code from the 2009 MUTCD (see general Chapter 2N comment)

#### Section 2N.05 TRAFFIC CONTROL POINT Sign (EM2-2-3)

Guidance:

The TRAFFIC CONTROL POINT ( $EM_{\frac{2-2-3}{2}}$ ) sign (see Figure 2N-1) should be used to designate a location where an official traffic control point has been set up to impose such controls as are necessary to limit congestion, expedite emergency traffic, exclude unauthorized vehicles, or protect the public.

The sign should be installed in the same manner as the AREA CLOSED sign (see Section 2N.04), and at the point where traffic must stop to be checked.

<u>A</u> STOP (R1-1) sign (see Section 2B.05) should be used in conjunction with the TRAFFIC CONTROL POINT sign.

The TRAFFIC CONTROL POINT sign should be mounted directly below the STOP sign.

Standard

The TRAFFIC CONTROL POINT sign shall be retroreflective.

**Section 2N.06 Comments:** NCUTCD generally agrees with 2N.06 as presented in the NPA, but using the sign code from the 2009 MUTCD (see general Chapter 2N comment)

### Section 2N.06 MAINTAIN TOP SAFE SPEED Sign (EM2-3-4)

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The MAINTAIN TOP SAFE SPEED (<u>EM2-3-4</u>) sign (see Figure 2N-1) may be used on highways where conditions are such that it is prudent to evacuate or traverse an area as quickly as possible.

Where an existing Speed Limit (R2-1) sign is in a suitable location, the MAINTAIN TOP SAFE SPEED sign may be mounted directly over the face of the speed limit sign that it supersedes. Support:

Since any speed zoning would be impractical under such emergency conditions, no minimum speed limit can be prescribed by the MAINTAIN TOP SAFE SPEED sign in numerical terms. Where traffic is

supervised by a traffic control point, official instructions will usually be given verbally, and the sign will serve as an occasional reminder of the urgent need for maintaining the proper speed. *Guidance*:

The sign should be installed as needed, in the same manner as other standard speed signs.

#### **Standard:**

If used in rural areas, the MAINTAIN TOP SAFE SPEED sign shall be mounted on the right-hand side of the road at a horizontal distance of not less than 6 feet or more than 10 feet from the roadway edge, and at a minimum height, measured vertically from the bottom of the sign to the elevation of the near edge of the traveled way, of 5 feet. If used in urban areas, the minimum height, measured vertically from the bottom of the sign to the top of the curb, or in the absence of curb, measured vertically from the bottom of the sign to the elevation of the near edge of the traveled way, shall be 7 feet, and the nearest edge of the sign shall be not less than 1 foot back from the face of the curb.

**Section 2N.07 Comments:** NCUTCD generally agrees with 2N.07 as presented in the NPA, but using the sign code from the 2009 MUTCD (see general Chapter 2N comment)

## Section 2N.07 <u>ROAD (AREA) USE PERMIT REQUIRED FOR THRU TRAFFIC Sign (EM2-4-5)</u>

Support:

The intent of the ROAD (AREA) USE PERMIT REQUIRED FOR THRU TRAFFIC (EM2-4-5) sign (see Figure 2N-1) is to notify road users of the presence of the traffic control point so that those who do not have priority permits issued by designated authorities can take another route, or turn back, without making a needless trip and without adding to the screening load at the post. Local traffic, without permits, can proceed as far as the traffic control post.

Standard:

If used, the ROAD (AREA) USE PERMIT REQUIRED FOR THRU TRAFFIC (EM2-4-5) sign shall be used at an intersection that is an entrance to a route on which a traffic control point is located.

If used, the sign shall be installed in a manner similar to that of the MAINTAIN TOP SAFE SPEED sign (see Section 2N.06).

**Section 2N.08 Comments:** NCUTCD generally agrees with 2N.08 as presented in the NPA, but using the sign codes from the 2009 MUTCD (see general Chapter 2N comment)

## Section 2N.08 <u>Emergency Aid Center Signs (EM3-1-6 Series</u> Standard:

In the event of emergency, State and local authorities shall establish various centers for civilian relief, communication, medical service, and similar purposes. To guide the public to such centers a series of directional signs shall be used.

Emergency Aid Center (EM3-1-6 series) signs (see Figure 2N-1) shall <u>display</u> the designation of the center and an arrow indicating the direction to the center. They shall be installed as needed, at intersections and elsewhere, on the right-hand side of the roadway, in urban areas at a minimum height, measured vertically from the bottom of the sign to the top of the curb, or in the absence of curb, measured vertically from the bottom of the sign to the elevation of the near edge of the traveled way, of 7 feet, and not less than 1 foot back from the face of the curb, and in rural areas at a minimum height, measured vertically from the bottom of the sign to the elevation of the near edge

of the traveled way, of 5 feet, and at a horizontal distance of not less than 6 feet or more than 10 feet from the roadway edge.

Emergency Aid Center signs shall <u>display</u> one of the following legends, as appropriate, or others designating similar emergency facilities:

- A. MEDICAL CENTER (EM3-1-6a),
- B. WELFARE CENTER (EM<sup>3-1a-6b</sup>),
- C. REGISTRATION CENTER (EM3-1b-6c), or
- D. DECONTAMINATION CENTER (EM3-1e-6d).

The Emergency Aid Center sign shall be a horizontally <u>oriented</u> rectangle. Except as provided in Paragraph 5, the <u>Emergency Aid Center signs shall have a black legend and</u> border on a white background.

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When Emergency Aid Center signs are used in an incident situation, such as during the aftermath of a nuclear or biological attack, the background color may be fluorescent pink (see Chapter 6I).

**Section 2N.09 Comments:** NCUTCD generally agrees with 2N.09 as presented in the NPA, but using the sign codes from the 2009 MUTCD (see general Chapter 2N comment)

### Section 2N.09 Shelter Directional Signs (EM4-1-7 Series Standard:

Shelter Directional (EM<u>4-1-7</u> series) signs (see Figure 2N-1) shall be used to direct the public to selected shelters that have been licensed and marked for emergency use.

The installation of Shelter Directional signs shall comply with established signing standards. Where used, the signs shall not be installed in competition with other necessary highway guide, warning, and regulatory signs.

The Shelter Directional sign shall be a horizontally oriented rectangle. Except as provided in Paragraph 4, the Shelter Directional signs shall have a black legend and border on a white background.

Option:

When Shelter Directional signs are used in an incident situation, such as during the aftermath of a nuclear or biological attack, the background color may be fluorescent pink (see Chapter 6I).

The distance to the shelter may be omitted from the sign when appropriate.

Shelter Directional signs may <u>display</u> one of the following legends, or others designating similar emergency facilities:

- A. EMERGENCY (EM4-1-7a),
- B. HURRICANE (EM4-1a-7b),
- C. FALLOUT (EM4-1b-7c), or
- D. CHEMICAL (EM4-1c-7d).

If appropriate, the name of the facility may be used.

The Shelter Directional signs may be installed on the Interstate Highway System or any other major highway system when it has been determined that a need exists for such signs as part of a State or local shelter plan.

The Shelter Directional signs may be used to identify different routes to a shelter to provide for rapid movement of large numbers of persons.

318 Guidance:

The Shelter Directional sign should be used sparingly and only in conjunction with approved plans of State and local authorities.

The Shelter Directional sign should not be posted more than 5 miles from a shelter.