



National Committee on Uniform Traffic Control Devices

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Item Number: 25B-RR-02

NCUTCD PROPOSAL FOR CHANGES TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

COMMITTEE / TASK FORCE: Railroad and Light Rail Transit Technical Committee
ITEM NUMBER: 25B-RR-02
TOPIC: LRT Signal Indications
ORIGIN OF REQUEST: RRLRT TC
**AFFECTED SECTIONS
OF MUTCD:** 8D.15, Figure 8D-3

DEVELOPMENT HISTORY:

Approved by RR/LRT TC:06/12/2025

Approved by NCUTCD Council:

This is a proposed change to the MUTCD that has been developed by a technical committee, joint committee, or joint task force of the NCUTCD. The NCUTCD is distributing this to its sponsoring organizations for review and comment. Sponsor comments will be considered in revising the proposal prior to NCUTCD Council consideration. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, options, or support. If approved by the NCUTCD Council, the recommended changes will be submitted to FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be revised only through the federal rulemaking process.
































SUMMARY:

The proposal expands the types of permitted LRT signal indications and eliminates the defined meaning of each LRT signal indication, which vary by transit operator.

DISCUSSION:

The 2003 MUTCD and 2009 MUTCD included a figure with examples of light rail transit signals in multiple configurations. The signal indications shown in the figure were white, and included horizontal bars, vertical bars, diagonal bars in both directions, and triangles. Figure 10D-1 from the 2003 MUTCD is provided for reference.

Figure 10D-1. Examples of Light Rail Transit Signals

	Three-Lens Signal	Two-Lens Signal
SINGLE LRT ROUTE 	STOP  PREPARE TO STOP  <i>Flashing</i> GO 	 STOP  ⁽²⁾ GO
TWO LRT ROUTE DIVERSION 	  <i>Flashing</i>   ⁽¹⁾	   ^{(1),(2)}
	<i>Flashing</i>    ⁽¹⁾	   ^{(1),(2)}
THREE LRT ROUTE DIVERSION 	  <i>Flashing</i>    ⁽¹⁾	    ^{(1),(2)}

Notes:

All aspects (or signal indications) are white.

(1) Could be in single housing.

(2) "Go" lens may be used in flashing mode to indicate "prepare to stop".

The 11th Edition MUTCD simplified the figure to include only the horizontal bar, vertical bar, and diagonal bars in both directions, and the accompanying Guidance statement indicates that only these signal indications should be used. The Notice of Proposed Amendment (NPA) for the 11th Edition MUTCD did not reference the figure or mention the removal of the triangle indication, so the reasons for its removal from the 11th Edition are not known.

The important characteristic of an LRT signal indication is that it is easily distinguishable from the standard red/yellow/green traffic signal indications, so that its operation does not create confusion for other road users. This distinction is accomplished with white indications and the shapes of the indications, which are different than standard traffic signal indications. White transit signal indications using shapes not shown in 8D-3 would still provide this distinction and transit operators have been using white triangle indications as allowed in the previous editions of the MUTCD for years. Allowing additional shapes would provide transit operators more flexibility to indicate special movements or operations at a signalized intersection, and there is no known research indicating that the triangle indication caused road user confusion or other issues. The proposal adds an Option statement to Section 8D.15 to allow other shapes of white transit signal indications and modifies Figure 8D-3 to remove the reference to bar signals.

The text in Section 8D.15 does not contain the definition of the LRT signals or their operations, but a meaning for each indication is included in Figure 8D-3. However, the application of LRT signal indications and their meanings are not uniform across the transit industry. Each transit agency defines the meaning of the LRT signals used on their system in the agency's rules of operation and LRT operators are required to be trained in and follow the agency's operating rules. As a result, the same indication could be used to communicate "prepare to stop" or "prepare to go" or other operations within different transit agencies. The 11th Edition NPA Executive Summary explains that "uniformity and consistency in message, placement, and operation of traffic control devices have been shown to address the expectancy of the road user, resulting in a more predictable response." However, inconsistency in the shape, meaning, and operation of LRT signal indications does not cause issues for the road users because the LRT signal indications do not communicate any meaning to the road users. Further, LRT operators on one transit system do not need to recognize or respond to LRT signal indications on a different transit system. Consistency in the meaning of LRT signal indications across transit systems does not contribute to the safety or efficiency of the transit systems, and Figure 8D-3 does not recognize all the current meanings and operations of the LRT signal indications. Therefore, the meaning of each LRT signal is proposed to be eliminated from the figure to provide flexibility to transit agencies and permit the current LRT signal indications and operations, which do not negatively affect road users.

RECOMMENDED MUTCD CHANGES:

The following present the proposed changes to the current MUTCD within the context of the current MUTCD language. Proposed additions to the MUTCD are shown in blue underline and proposed deletions from the MUTCD are shown in ~~red strikethrough~~. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double underline for additions and ~~green double strikethrough~~ for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by [bracketed white text in shaded green]. Deletions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in ~~highlighted red strikethrough and sans-serif text~~. Additions made by a technical committee, joint committee, or task force after initial distribution to sponsoring organizations are shown in underline blue and sans-serif text.

PART 8

TRAFFIC CONTROL FOR RAILROAD AND LIGHT RAIL TRANSIT GRADE CROSSINGS

CHAPTER 2C. WARNING SIGNS AND OBJECT MARKERS

Section 8D.15 Use of LRT Signals for Control of LRT Vehicles at Highway-LRT Grade Crossings

Option:

LRT signal indications may be used at grade crossings and at intersections in mixed-use alignments in conjunction with standard traffic control signals where special LRT signal phases are used to accommodate turning LRT vehicles or where additional LRT clearance time is desirable.

LRT signal indications may be used at intersections where special signal phases are used for bus movements.

96 **Standard:**

97 03 If the LRT crossing control is separate from the intersection control, the two shall be
98 interconnected. The LRT signal phase shall not be terminated until after the LRT vehicle has
99 cleared the crossing or intersection.

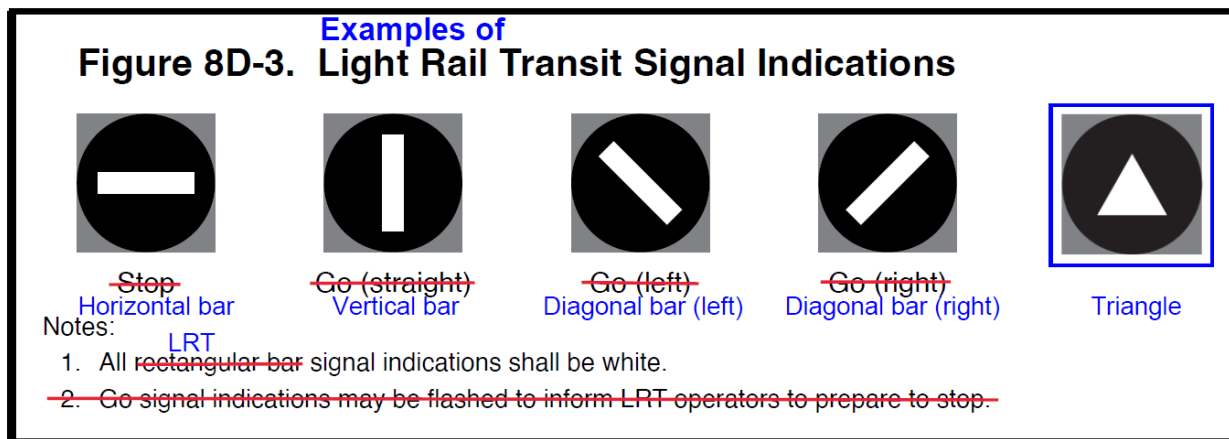
100 04 If a separate set of standard traffic control signal indications (red, yellow, and green circular
101 and arrow indications) is used to control LRT movements, the indications shall be positioned so they
102 are not visible to motorists, pedestrians, and bicyclists (see Section 4D.06).

103 *Guidance:*

104 05 If a signal face used to control LRT movements cannot be positioned where the indications are not
105 visible to road users, the LRT signal indications shown in Figure 8D-3 should be used.

106 **Standard:**

107 06 If special LRT signal indications such as those shown in Figure 8D-3 are used, the color of the
108 signal indications shall be white.



109

110 **Option:**

111 06a Other shapes or symbols that could not be confused with standard traffic signal indications may be
112 used for LRT signal indications.

113 07 If used, individual LRT signal sections may be displayed to form clustered signal faces or multiple
114 LRT signal indications may be displayed in an individual housing.

115 *Guidance:*

116 08 LRT signal faces should be located at least 3 feet from the nearest highway traffic signal face for the
117 same approach measured either horizontally perpendicular to the approach between the centers of the
118 signal faces or vertically from the center of the lowest signal indication of the top signal face to the center
119 of the highest signal indication of the bottom signal face.

120 **Support:**

121 09 Section 4F.18 contains information about the use of the LRT signal indications shown in Figure 8D-3
122 for the control of exclusive bus movements at “queue jumper lanes” and for the control of exclusive bus
123 rapid transit movements on mixed-use alignments.