

National Committee on Uniform Traffic Control Devices

13236 North 7th Street, Suite 4-259, Phoenix, Arizona 85022 Phone/Text: 231-4-NCUTCD (231-462-8823) E-mail: secretary@ncutcd.org Website: https://ncutcd.org

1 Item No.: 25A-SIG-02

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

COMMITTEE / TASK FORCE: Signals Technical Committee

ITEM NUMBER: 25A-SIG-02

TOPIC: Clarification of Same Section Flashing Yellow Arrow Display

ORIGIN OF REQUEST: Signal Features Task Force

AFFECTED SECTIONS 4F.02, 4F.09

OF MUTCD:

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DEVELOPMENT HISTORY:

Approved by Signals TC: 01/09/2025 Approved by NCUTCD Council: 06/13/2025

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This is a recommended change to the MUTCD that has been approved by the NCUTCD Council. This proposal does not represent a revision of the MUTCD and does not constitute official MUTCD standards, guidance, or options. It 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.

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SUMMARY:

This proposal allows for the flashing YELLOW ARROW display to occur in the same section as the steady YELLOW ARROW or steady GREEN ARROW as part of a bi-modal section.

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DISCUSSION:

The 2009 MUTCD provided for the use of a bimodal section in limited situations, allowing the use of a flashing YELLOW ARROW and steady GREEN ARROW to be displayed in the same section, known as a bimodal display. Interim Approval 17 allowed an additional option of a bimodal display where the flashing YELLOW ARROW and the steady YELLOW ARROW were displayed in the same section. In addition to the above bimodal displays being used in a 3-section head (in place of a 4-section head), the bimodal display was also allowed as part of a 5-section signal head to provide additional display options.

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The 11th Edition of the MUTCD stated a bimodal display could still be used as part of a 5-section head, but it only allowed the steady (right or left) YELLOW ARROW and flashing YELLOW ARROW displays to be in the same section. This change provides for an alternative display, consistent with other sections of Part 4, by allowing the flashing YELLOW ARROW and steady GREEN ARROW to be displayed in the same section.

These changes will clarify the allowance of displays that are otherwise specifically mentioned in other Sections of Part 4 that are not specifically mentioned in these sections.

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 <u>blue underline</u> and proposed deletions from the MUTCD are shown in <u>red strikethrough</u>. Changes previously approved by NCUTCD Council (but not yet adopted by FHWA) are shown in <u>green double underline</u> for additions and <u>green double strikethrough</u> for deletions. In some cases, background comments may be provided with the MUTCD text. These comments are indicated by <u>[bracketed white text in shaded green]</u>.

PART 1. GENERAL

CHAPTER 1C. DEFINITIONS, ACRONYMS, AND ABBREVIATIONS USED IN THE MANUAL

Section 1C.02 Definitions of Words and Phrases Used in this Manual

53 Standard:

- Unless otherwise defined in this Section, or in other Parts of this Manual, words or phrases shall have the meaning(s) as defined in the "Uniform Vehicle Code," "AASHTO Transportation Glossary (Highway Definitions)," or other appropriate publications.
- Where a term that is defined in this Section or elsewhere in this Manual has a different definition in another resource or in common use, the definition herein shall govern for purposes of the applicability of the provisions of this Manual.
- The following words and phrases, when used in this Manual, shall have the following meanings:
 - 28a. Bimodal Signal Section—the assembly of a signal housing, signal lens, if any, and light source with necessary components to be used for changing alternating between the display of two different arrow indications pointing in the same direction, provided that the two indications are never displayed simultaneously.
 - 67. Dual-Arrow Signal Section—a type of signal section designed to include both a yellow arrow and a green arrow.see Bimodal Signal Section.

68	PART 4
69 70	HIGHWAY TRAFFIC SIGNALS
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72 73	CHAPTER 4F. STEADY (STOP-AND-GO) OPERATION OF TRAFFIC CONTROL SIGNALS
73 74	Section 4F.02 Signal Indications for Left-Turn Movements – General
75	Support:
76	In Sections 4F.03 through 4F.08, provisions applicable to left-turn movements and left-turn lanes are
77	also applicable to signal indications for U-turns to the left that are provided at locations where left turns
78	are prohibited or not geometrically possible.
79	Left-turning traffic is controlled by one of four modes as follows:
80	A. Permissive Only Mode—turns made on a CIRCULAR GREEN signal indication, a flashing left-
81	turn YELLOW ARROW signal indication, or a flashing left-turn RED ARROW signal
82	indication after yielding to pedestrians, if any, and/or opposing traffic, if any.
83	B. Protected Only Mode—turns made only when a left-turn GREEN ARROW signal indication is
84	displayed.
85	C. Protected/Permissive Mode—both modes can occur on an approach during the same cycle.
86	D. Variable Left-Turn Mode—the operating mode changes among the protected only mode and/or
87	the protected/permissive mode and/or the permissive only mode during different periods of the
88	day or as traffic conditions change.
89	Option:
90	In areas having a high percentage of older drivers, special consideration may be given to the use of
91	protected only mode left-turn phasing, when appropriate
92	Standard:
93	During a permissive left-turn movement, the signal faces for through traffic on the opposing
94	approach shall simultaneously display green or steady yellow signal indications. If pedestrians
95	crossing the lane or lanes used by the permissive left-turn movement to depart the intersection are
96	controlled by pedestrian signal heads, the signal indications displayed by those pedestrian signal
97	heads shall not be limited to any particular display during the permissive left-turn movement.
98	During a protected left-turn movement, the signal faces for through traffic on the opposing
99	approach shall simultaneously display steady CIRCULAR RED signal indications. During a
00	protected left-turn movement, a GREEN ARROW or a YELLOW ARROW signal indication shall
01	not simultaneously be displayed to right-turning traffic on the opposing approach, except where a
02	separate departure lane is available for each left-turn and right-turn lane with moving traffic and
03	pavement markings or raised channelization clearly indicate which departure lane to use (see Item
04	H.1 in Paragraph 3 in Section 4F.01). If pedestrians crossing the lane or lanes used by the protected
05	left-turn movement to depart the intersection are controlled by pedestrian signal heads, the
06	pedestrian signal heads shall display a steady UPRAISED HAND (symbolizing DONT WALK)
07	signal indication during the protected left-turn movement.
08	of If a combined left-turn/through lane exists on an approach, a left-turn GREEN ARROW or
09	left-turn YELLOW ARROW signal indication or a flashing left-turn RED ARROW signal
10	indication shall not be displayed to the approach simultaneously with a CIRCULAR RED signal
11	indication for the through movement, and a left-turn RED ARROW signal indication shall not be
12	displayed to the approach simultaneously with a CIRCULAR GREEN or CIRCULAR YELLOW
13	signal indication for the through movement.
14	A yellow change interval for the left-turn movement shall not be displayed when the status of
15	the left turn energtion is changing from normicsive to protected within any given signal sequence

- If the operating mode changes among the protected only mode and/or the protected/permissive mode and/or the permissive only mode during different periods of the day or as traffic conditions change, the requirements in Sections 4F.03 through 4F.08 that are appropriate to that mode of operation shall be met, subject to the following:
 - A. The CIRCULAR GREEN and CIRCULAR YELLOW signal indications shall not be displayed when operating in the protected only mode.
 - B. The left-turn GREEN ARROW and left-turn YELLOW ARROW signal indications shall not be displayed when operating in the permissive only mode.

Option:

- When variable left-turn mode phasing is used for an approach that has a combined left-turn/straight-through lane and a flashing yellow arrow is used as the permissive turn display, a five-section shared left-turn signal face containing both circular and arrow indications may be used in combination with one or more separate left-turn signal faces for the mandatory left-turn lane(s), if any are present, on the same approach. The steady left turn YELLOW ARROW signal indication and the flashing left turn YELLOW ARROW signal indication may be displayed in the same section of the five section shared left-turn signal face. The five-section shared left-turn signal face may include a bimodal signal section that is capable of either of the following combinations of arrow indications both pointing in the same direction, provided that both arrows are never displayed simultaneously:
 - 1. changing alternating between the display of a steady left-turn YELLOW ARROW and flashing left-turn YELLOW ARROW; or
 - 2. changing alternating between the display of a steady left-turn GREEN ARROW and a flashing left-turn YELLOW ARROW, both pointing in the same direction, provided that both arrows are never displayed simultaneously.
- Additional static signs or changeable message signs may be used to meet the requirements for the variable left-turn mode or to inform drivers that left-turn green arrows will not be available during certain times of the day.

Support:

- Sections 4F.03 through 4F.08 describe the use of the following two types of signal faces for controlling left-turn movements:
 - A. Shared signal face This type of signal face controls both the left-turn movement and the adjacent movement (usually the through movement) and can serve as one of the two required primary signal faces for the adjacent movement. A shared signal face always displays the same color of circular indication that is displayed by the signal face or faces for the adjacent movement. If a shared signal face that provides protected/permissive mode left turns is mounted overhead for an approach that includes a mandatory left-turn lane, it is usually positioned over or slightly to the right of the extension of the lane line separating the left-turn lane from the adjacent lane. If a shared signal face that provides protected/permissive mode left turns is mounted overhead for an approach that does not include a mandatory left-turn lane, it is usually positioned over the center of the combined left-turn/straight-through lane.
 - B. Separate left-turn signal face This type of signal face controls only the left-turn movement and cannot serve as one of the two required primary signal faces for the adjacent movement (usually the through movement) because it displays signal indications that are applicable only to the left-turn movement. This type of signal face is used only for an approach that has a mandatory left-turn lane(s). If a separate left-turn signal face is mounted overhead at the intersection, it is positioned over the extension of the mandatory left-turn lane. In a separate left-turn signal face, a flashing left-turn YELLOW ARROW signal indication or a flashing left-turn RED ARROW signal indication is used to control permissive left-turn movements.
- Section 4D.07 contains provisions regarding the lateral positioning of signal faces that control left-turn movements.

- 165 13 It is not necessary that the same mode of left-turn operation or same type of left-turn signal face be
- used on every approach to a signalized location. Selecting different modes and types of left-turn signal
- faces for the various approaches to the same signalized location is acceptable.
- 168 Option:
- 169 A signal face that is shared by left-turning and right-turning traffic may be provided for a combined left-turn/right-turn lane on an approach that has no through traffic (see Section 4F.16).

Section 4F.09 Signal Indications for Right-Turn Movements – General

173 Support:

- In Sections 4F.10 through 4F.15, provisions applicable to right-turn movements and right-turn lanes are also applicable to signal indications for U-turns to the right that are provided at locations where right turns are prohibited or not geometrically possible.
 - Right-turning traffic is controlled by one of four modes as follows:
 - A. Permissive Only Mode—turns made on a CIRCULAR GREEN signal indication, a flashing right-turn YELLOW ARROW signal indication, or a flashing right-turn RED ARROW signal indication after yielding to pedestrians, if any.
 - B. Protected Only Mode—turns made only when a right-turn GREEN ARROW signal indication is displayed.
 - C. Protected/Permissive Mode—both modes occur on an approach during the same cycle.
 - D. Variable Right-Turn Mode—the operating mode changes among the protected only mode and/or the protected/permissive mode and/or the permissive only mode during different periods of the day or as traffic conditions change.

Standard:

- During a permissive right-turn movement, the signal faces, if any, that exclusively control Uturn traffic that conflicts with the permissive right-turn movement (see Item H.1 in Paragraph 3 in Section 4F.01) shall simultaneously display steady U-turn RED ARROW signal indications. If pedestrians crossing the lane or lanes used by the permissive right-turn movement to depart the intersection are controlled by pedestrian signal heads, the signal indications displayed by those pedestrian signal heads shall not be limited to any particular display during the permissive right-turn movement.
- During a protected right-turn movement, a GREEN ARROW or a YELLOW ARROW signal indication shall not simultaneously be displayed to left-turning traffic on the opposing approach, except where a separate departure lane is available for each left-turn and right-turn lane with moving traffic and pavement markings or raised channelization clearly indicate which departure lane to use (see Item H.1 in Paragraph 3 in Section 4F.01). Signal faces, if any, that exclusively control U-turn traffic that conflicts with the protected right-turn movement shall simultaneously display steady RED ARROW signal indications. If pedestrians crossing the lane or lanes used by the protected right-turn movement to depart the intersection are controlled by pedestrian signal heads, the pedestrian signal heads shall display a steady UPRAISED HAND (symbolizing DONT WALK) signal indication during the protected right-turn movement.
- of If a combined right-turn/through lane exists on an approach, a right-turn GREEN ARROW or right-turn YELLOW ARROW signal indication or a flashing right-turn RED ARROW signal indication shall not be displayed to the approach simultaneously with a CIRCULAR RED signal indication for the through movement, and a right-turn RED ARROW signal indication shall not be displayed to the approach simultaneously with a CIRCULAR GREEN or CIRCULAR YELLOW signal indication for the through movement.
- signal indication for the through movement.

 If the operating mode changes among the protected only mode and/or the protected/permissive mode and/or the permissive only mode during different periods of the day or as traffic conditions

- change, the requirements in Sections 4F.10 through 4F.15 that are appropriate to that mode of operation shall be met, subject to the following:
 - A. The CIRCULAR GREEN and CIRCULAR YELLOW signal indications shall not be displayed when operating in the protected only mode.
 - B. The right-turn GREEN ARROW and right-turn YELLOW ARROW signal indications shall not be displayed when operating in the permissive only mode.

Option:

- When variable right-turn mode phasing is used for an approach that has a combined right-turn/straight-through lane and a flashing yellow arrow is used as the permissive turn display, a five-section shared right-turn signal face containing both circular and arrow indications may be used in combination with one or more separate right-turn signal faces for the mandatory right-turn lane(s), if any are present, on the same approach. The steady right turn YELLOW ARROW signal indication and the flashing right turn YELLOW ARROW signal indication may be displayed in the same section of the five-section shared right-turn signal face may include a bimodal signal section that is capable of either of the following combinations of arrow indications both pointing in the same direction, provided that both arrows are never displayed simultaneously:
 - 1. changing alternating between the display of a steady right-turn YELLOW ARROW and flashing right-turn YELLOW ARROW; or
 - 2. changing alternating between the display of a steady right-turn GREEN ARROW and a flashing right-turn YELLOW ARROW, both pointing in the same direction, provided that both arrows are never displayed simultaneously.
- OB Additional static signs or changeable message signs may be used to meet the requirements for the variable right-turn mode or to inform drivers that right-turn green arrows will not be available during certain times of the day.

Support:

- OB Sections 4F.10 through 4F.15 describe the use of the following two types of signal faces for controlling right-turn movements:
 - A. Shared signal face This type of signal face controls both the right-turn movement and the adjacent movement (usually the through movement) and can serve as one of the two required primary signal faces for the adjacent movement. A shared signal face always displays the same color of circular indication that is displayed by the signal face or faces for the adjacent movement.
 - B. Separate right-turn signal face This type of signal face controls only the right-turn movement and cannot serve as one of the two required primary signal faces for the adjacent movement (usually the through movement) because it displays signal indications that are applicable only to the right-turn movement. If a separate right-turn signal face is mounted overhead at the intersection, it is positioned over the extension of the mandatory right-turn lane. In a separate right-turn signal face, a flashing right-turn YELLOW ARROW signal indication or a flashing right-turn RED ARROW signal indication is used to control permissive right-turn movements.
- Section 4D.07 contains provisions regarding the lateral positioning of signal faces that control right-turn movements.
- 254 It is not necessary that the same mode of right-turn operation or same type of right-turn signal face 255 be used on every approach to a signalized location. Selecting different modes and types of right-turn 256 signal faces for the various approaches to the same signalized location is acceptable.
- 257 Option:
- A signal face that is shared by left-turning and right-turning traffic may be provided for a combined left-turn/right-turn lane on an approach that has no through traffic (see Section 4F.16).