

National Committee on Uniform Traffic Control Devices

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1 Item No.: 24A-PED-02

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

COMMITTEE / TASK FORCE: Pedestrian Joint Task Force

ITEM NUMBER: 24A-PED-02

TOPIC: Pedestrian Clearance Interval with Preemption ORIGIN OF REQUEST: Pedestrian Clearance Interval Working Group

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AFFECTED SECTIONS

OF MUTCD:

4F.19 Preemption Control of Traffic Control Signals

DEVELOPMENT HISTORY:

Approved by Joint Task Force: 02/09/2024 Pedestrian Joint Task Force

Approved by Technical Committee: MM/DD/YYYY Pending Approval of Signals Tech. Com.

Approved by NCUTCD Council: MM/DD/YYYY

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This is a proposed change to the MUTCD that has been developed by a technical committee or joint task force of the NCUTCD. The NCUTCD is distributing it 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, or options. 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.

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SUMMARY:

In the 2023 MUTCD, FHWA changed a standard to option regarding truncation of pedestrian clearance intervals. The current language allows for an option to truncate pedestrian intervals without limitation. Additional text is provided to align the 2023 text with the Federal Register Preamble explanation of what was changed.

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DISCUSSION:

The 2023 MUTCD text modification for Section 4F.19 converts what was a standard statement to an option statement related to truncation of pedestrian clearance intervals transitioning into preemption. The text as modified from the 2020 NPA opens the potential for unlimited truncation of pedestrian change intervals with preemption. The description provided in the June 2013 (12B-STC-02) approved recommended change to the 2009 MUTCD explains the need for change, addressing vulnerable user safety in crossing streets after a walk indication has already

allowed them to enter the street. To address this concern, it is proposed that similar language which was used in the NCUTCD Council approved change (approved three times by Council in 12B-STC-02,14A-STC-01 and NPA item #414/Chapter 4F Docket Comment May 2021) and 2020 NPA be used within the FHWAs desire to convert this information to an option statement. By an option statement this does not fully limit or control the practice. The proposal simply outlines the preferred practice for practitioner consideration and provides greater clarity regarding the omission of pedestrian change interval.

 The following sections display the progression this text from the 2009 MUTCD, the NCUTCD approved recommendation of June 2013 (with changes noted) and the December 2020 FHWA NPA text for this paragraph for reference. As can been seen, the use of the exclusionary text, converted to option, simply clarifies the practice but does not establish it as either standard or guidance as advanced by FHWA in the final rule for the 2023 MUTCD. That may be subject to future study and considerations.

2009 MUTCD

Standard:

During the transition into preemption control:

- A. The yellow change interval, and any red clearance interval that follows, shall not be shortened or omitted.
- B. The shortening or omission of any pedestrian walk interval and/or pedestrian change interval shall be permitted.
- C. The return to the previous green signal indication shall be permitted following a steady yellow signal indication in the same signal face, omitting the red clearance interval, if any.

June 2013 NCUTCD 12B-STC-02

Standard:

During the transition into preemption control:

- A. The yellow change interval, and any red clearance interval that follows, shall not be shortened or omitted.
- B. The shortening or omission of any pedestrian walk interval and/or pedestrian change interval shall be permitted.
- C. The shortening or omission of any pedestrian change interval shall be permitted only for boats at movable bridges and for rail traffic to which other traffic is required to yield the right-of-way by law.
- <u>CD</u>. The return to the previous green signal indication shall be permitted following a steady yellow signal indication in the same signal face, omitting the red clearance interval, if any.

June 2014 NCUTCD 14A-STC-01 (showing only items B. and C.) Standard:

- B. The shortening or omission of any pedestrian walk interval and/or pedestrian change interval shall be permitted.
- C. The shortening or omission of any pedestrian change interval shall be permitted only when the traffic control signal is being preempted because a boat is approaching a movable bridge or because rail traffic is approaching a grade crossing.

December 2020 FHWA NPA (also approved by NCUTCD Council as a part of FHWA-2020-0001 Chapter 4F Docket Comments)

Standard:

During the transition into preemption control:

- A. The yellow change interval, and any red clearance interval that follows, shall not be shortened or omitted.
- B. The shortening or omission of any pedestrian walk interval shall be permitted.
- C. The shortening or omission of any pedestrian change interval shall be permitted only when the traffic control signal is being preempted because a boat is approaching a movable bridge or because rail traffic is approaching a grade crossing.
- D. The return to the previous green signal indication shall be permitted following a steady yellow signal indication in the same signal face, omitting the red clearance interval, if any.

This following proposal takes the NCUTCD Council approved (three times) and reuses it in the new 2023 MUTCD language by folding it into the option language. It segregates out the omission of the pedestrian clearance interval as linked to the omission of the pedestrian walk interval. In doing so the carve outs for due to rail or boat preemption on pedestrian change interval truncation are reinstated as options which do not affect the concerns noted in the Federal Register preamble regarding emergency service effectiveness. Terminology from "shall be **permitted**" is updated using the 2023 MUTCD language.

Further research regarding the concerns of emergency service being "greatly diminished and completely ineffective due to increased delay" is needed as some agencies have effectively instituted the pedestrian clearance interval protection for these preemption systems. The protection of vulnerable users in of high importance in the design of signal preemption systems and this change helps clarify that importance.

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 or task force after initial distribution to sponsoring organizations are shown in highlighted-red strikethrough and Helvetica text. Additions made by a technical committee or task force after initial distribution to sponsoring organizations are shown in underline blue and Helvetica text.

121 122	PART 4. HIGHWAY TRAFFIC SIGNALS
123 124	CHAPTER 4F. STEADY (STOP-AND-GO) OPERATION OF TRAFFIC CONTROL SIGNALS
125	Section 4F.19 Preemption Control of Traffic Control Signals Support:
126 127 128 129 130 131 132 133 134 135	 Support: Preemption control (see definition in Section 1C.02) is typically given to trains, boats, emergency vehicles, and light rail transit. Examples of preemption control include the following:
136 137 138	Standard: O3 During the transition into preemption control, the yellow change interval, and any red clearance interval that follows, shall not be shortened or omitted.
139 140 141 142 143 144 145 146 147	Option: Ouring the transition into preemption control: A. A. Any The pedestrian walk interval and/or pedestrian change interval may be shortened. or omitted. B. The pedestrian walk interval and its associated pedestrian change interval may be omitted. C. The pedestrian change interval may be shortened or omitted only for a boat approaching a moveable bridge or because rail traffic is approaching a grade crossing. BD. The red clearance interval, if any, may be omitted so that the return to the previous green signal indication follows a steady yellow signal indication in the same signal face.
148 149 150 151 152 153	Standard: During preemption control and during the transition out of preemption control: A. Any yellow change interval, and any red clearance interval that follows, shall not be shortened or omitted. B. A signal indication sequence from a steady yellow signal indication to a green signal indication shall not be permitted.
154 155 156 157 158 159 160 161 162 163	Option: A distinctive indication may be provided at the intersection to inform law enforcement personnel who are escorting traffic (such as a parade or funeral procession) that the traffic control signal has changed to a red indication not because of normal cycling, but because it has been preempted by rail traffic approaching an adjacent grade crossing or by boat traffic approaching an adjacent movable bridge. A distinctive indication may be provided at the intersection to show that an emergency vehicle has been given control of the traffic control signal (see Section 11-106 of the "Uniform Vehicle Code"). In order to assist in the understanding of the control of the traffic control signal, a common distinctive indication may be used where drivers from different agencies travel through the same intersection when responding to emergencies.
164 165 166 167	Guidance: observed by Guidance: Except for traffic control signals interconnected with light rail transit systems, traffic control signals with railroad preemption or coordinated with flashing-light signal systems should be provided with a back-up power supply.

- 168 op If a traffic control signal or hybrid beacon is installed near or within a grade crossing or if a grade
- 169 crossing with active traffic control devices is within or near a signalized highway intersection, Chapter
- 170 8D should be consulted.
- 171 Support:
- 172 section 8D.09 contains additional information regarding preemption for grade crossings. Section
- 8D.10 contains information regarding prohibiting movements toward the grade crossing during
- preemption. Sections 8D.11 and 8D.12 contain additional information regarding pre-signals and queue
- cutter signals, respectively, for grade crossings.