NCUTCD Proposal for Changes to the Manual on Uniform Traffic Control Devices

TECHNICAL COMMITTEE: Temporary Traffic Controls

ITEM NUMBER: 17A-TCC-01


ORIGIN OF REQUEST: TCCTC Task Force: John Leonard (TTCTC Chair), David Church, Tim Cox, Tom Hicks, Dave Royer, Tim Stroth, Jim Bryden, Todd Lohman, Gene Edmonds, Fred Hanscom, Dave McKee, Gene Putman, Charles Adams, Jim Harkness

AFFECTED SECTIONS OF MUTCD:
Chapter 6F. TEMPORARY TRAFFIC CONTROL ZONE DEVICES
   Section 6F.52, Advisory Speed Plaque (W13-1P)
Chapter 6H. TYPICAL APPLICATIONS
   Figure 6H-7, Road Closure with a Diversion
   Figure 6H-31, Lane Closure on a Street with Uneven Directional Volumes
   Figure 6H-32, Half Road Closure on a Multi-Lane, High-Speed Highway
   Figure 6H-37, Double Lane Closure on a Freeway
   Figure 6H-39, Median Crossover on a Freeway
   Figure 6H-43, Partial Exit Ramp Closure
   Figure 6H-45, Temporary Reversible Lane Using Movable Barriers

DEVELOPMENT HISTORY:
• Approved by Technical Committee: 01/05/2017
• Resolution of Sponsor Comments by Technical Committee: 06/28/2017
• Approved by NCUTCD Council: 06/30/2017

This is a proposal for recommended changes to the MUTCD that has been developed by a technical committee 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
SUMMARY:
The Temporary Traffic Controls Technical Committee recommends a clarification to the use of the Advisory Speed Plaque. This will require modifications to Section 6F.52, Advisory Speed Plaque (W13-1P); to Figure 6H-7, Road Closure with a Diversion; to Figure 6H-31, Lane Closure on a Street with Uneven Directional Volumes; to Figure 6H-32, Half Road Closure on a Multi-Lane, High-Speed Highway; to Figure 6H-37, Double Lane Closure on a Freeway; to Figure 6H-39, Median Crossover on a Freeway; Figure 6H-43, Partial Exit Ramp Closure and Figure 6H-45, Temporary Reversible Lane Using Movable Barriers.

This is a modification to 16B-TTC-05 based upon comments received from sponsors.

DISCUSSION
As now presented in the Section 6F.52, the use of an Advisory Speed (W13-1P) Plaque is optional in combination with a warning sign to indicate a recommended speed through the TTC zone. The optional use of this sign calls for engineering judgment, considering many factors. The TTCTC recommends adding two support statements to Section 6F.52 to 1) clarify locations where it may be appropriate to add an advisory speed plaque and 2) that AASHTO design documents contain established engineering practices that are appropriate to help make those determinations.

Additionally, the figures in Section 6H, Typical Applications, are not consistent in the presentation of the concept of optional advisory speed plaques. Figures 6H-7, 6H-31, 6H-32, 6H-37, 6H-39, and 6H-43 are proposed to be modified to reflect a consistent approach to the use of the optional Advisory Speed Plaque.

The proposed figure modifications are as follows:

TA-7, add ‘Advisory Speed Plaque Optional’ to the existing advisory speed plaque.

TA-31, add advisory speed plaques and ‘Advisory Speed Plaque Optional’ to both reverse curve signs.

TA-32, add an advisory speed plaque to the existing right reverse curve sign and ‘Advisory Speed Plaque Optional’ to both exiting reverse curve signs.

TA-37, remove the existing advisory speed plaque to be consistent with other lane closures.

TA-39, add an advisory speed plaque to the existing right reverse curve sign and ‘Advisory Speed Plaque Optional’ to both exiting reverse curve signs.

TA-43, add ‘Advisory Speed Plaque Optional’ to the existing advisory speed plaque.

TA-45, add advisory speed plaques and ‘Advisory Speed Plaque Optional’ to all four reverse curve signs.

RECOMMENDED MUTCD CHANGES

17A-TCC-01 Optional use of the Advisory Speed (W13-1P) Plaque
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 [highlighted light blue in brackets].

Part 6. TEMPORARY TRAFFIC CONTROL

Chapter 6F. TEMPORARY TRAFFIC CONTROL ZONE DEVICES

Section 6F.52 Advisory Speed Plaque (W13-1P)

Option:
01 In combination with a warning sign, an Advisory Speed (W13-1P) plaque (see Figure 6F-4) may be used to indicate a recommended speed through the TTC zone.

Standard:
02 The Advisory Speed plaque shall not be used in conjunction with any sign other than a warning sign, nor shall it be used alone. When used with orange TTC zone signs, this plaque shall have a black legend and border on an orange background. The sign shall be at least 24 x 24 inches in size when used with a sign that is 36 x 36 inches or larger. Except in emergencies, an Advisory Speed plaque shall not be mounted until the recommended speed is determined by the highway agency.

Support:
03 Warning signs with advisory speed plaques inform drivers of the recommended operating speed based on temporary conditions within a TTC zone (see Section 2C.08). Examples include narrow lanes, temporary diversion (reverse curves), lane shifts, sight distance restrictions, rough road surface, bumps, low/no shoulder, workers on foot, work vehicles or equipment close to the open travel lane, or other conditions that indicate the need for reduced speed.
04 AASHTO and ITE design documents contain established engineering practices for the determination of the recommended advisory speeds for horizontal curves or locations with limited sight distance.

Chapter 6H. TYPICAL APPLICATIONS
Figure 6H-7. Road Closure with a Diversion (TA-7)

Typical Application 7

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
Figure 6H-31. Lane Closures on a Street with Uneven Directional Volumes (TA-31)

* = speed in mph

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
Figure 6H-32. Half Road Closure on a Multi-Lane, High-Speed Highway (TA-32)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 32
Figure 6H-37. Double Lane Closure on a Freeway (TA-37)

Work vehicle
Truck-mounted attenuator (optional)

Buffer space (optional)

Shoulder taper

Road work 1 mile

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and or letter codes used in this figure.

Typical Application 37
Figure 6H-39. Median Crossover on a Freeway (TA-39)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 39

*S = speed in mph
Figure 6H-43. Partial Exit Ramp Closure (TA-43)

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.

Typical Application 43

Optional use of the Advisory Speed (W13-1P) Plaque
Figure 6H-45. Temporary Reversible Lane Using Movable Barriers (TA-45)

Typical Application 45

Note: See Tables 6H-2 and 6H-3 for the meaning of the symbols and/or letter codes used in this figure.
Although leader lines point to the signs on the right-hand side of the roadway, most of these signs should be installed on both sides of the roadway.