

National Committee on Uniform Traffic Control Devices

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Item No.: 19B-TTC-01

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

TECHNICAL COMMITTEE: ITEM NUMBER: TOPIC: ORIGIN OF REQUEST: AFFECTED SECTIONS OF MUTCD:

TASK FORCE MEMBERS:

Temporary Traffic Control Technical Committee

19B-TTC-01
Circulating Lane Closure in a Multi-Lane Roundabout
FHWA MUTCD Team
Chapter 6H. Typical Applications
New Notes Page and Figure 6H.ZZ, Circulating Lane
Closure on a Multi-Lane Roundabout, TA-ZZ
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Tim Stroth, Jim Bragdon, Todd Lohman, Gene Edmonds,
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DEVELOPMENT HISTORY:

- Approved by TTC Technical Committee: Tentative approval 01/10/2019
- Approved by Roundabout Task Force: 01/07/2021
- Approved by TTC Typical Application Task Force: 01/08/2021
- Revisions from sponsor comments approved by Technical Committee: 06/20/2019, 01/08/2020, 01/13/2021
 - Approved by Council: 01/20/2021

13 14 This is a proposal for recommended changes to the MUTCD that has been approved by 15 the NCUTCD Council. This proposal does not represent a revision of the MUTCD and 16 does not constitute official MUTCD standards, guidance, or options. It will be submitted to 17 FHWA for consideration for inclusion in a future MUTCD revision. The MUTCD can be 18 revised only by the FHWA through the federal rulemaking process. 19

20 SUMMARY:

- 21 The TTC Technical Committee recommends adding a new Typical Application (TA) to Chapter
- 22 6H involving work within the circulating lanes of multi-lane roundabouts. Two new TAs
- 23 involving roundabouts were approved by Council on 06/21/2019 including "Flagging Operation
- on a Single-Lane Roundabout" and "Inside Lane Closure on a Multi-Lane Roundabout". The
- 25 proposed new TA for "Circulating Lane Closure in a Multi-Lane Roundabout" was originally
- 26 part of the proposal approved earlier, but was separated to further address Sponsor comments.
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28 **DISCUSSION**

- 29 Modern roundabouts have been constructed in the United States since the early 1990's (around
- 30 30 years). The pavement within the roundabout intersection have needed regular maintenance
- 31 treatments, including pavement replacement, since originally constructed. The current and
- 32 previous editions of the MUTCD included no guidance in Chapter 6H Typical Applications –
- 33 regarding the use of temporary traffic control for work within the circulating lanes of a modern
- 34 roundabout. As a result, several states have developed their own typical applications to meet
- these needs including Virginia DOT, Pennsylvania DOT, Oregon DOT, Washington DOT, etc.
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- 37 Other industry resources for public agencies to utilize include ATSSA's document "Temporary
- 38 Traffic Control for Building and Maintaining Single and Multi-lane Roundabouts", January 2013
- 39 (https://www.workzonesafety.org/training-resources/fhwa wz grant/atssa ttc roundabouts/) and
- 40 the FHWA Work Zone Safety Grant Page through Wayne State University
- 41 (<u>http://workzone.eng.wayne.edu/</u>) which includes Temporary Traffic Control Plans (TTCP)
- 42 software which will develop specific Typical Applications for intersection and roadway sections
- 43 based on the specific work being performed as well as existing conditions. A total of 20 different
- 44 Roundabout TAs can be generated through the Wayne State University Work Zone site.
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- 46 The Temporary Traffic Control Technical Committee has worked with the NCUTCD's
- 47 Roundabout Task Force to narrow down the number of TAs available to three that will be most
- 48 useful to practitioners "Flagging Operation on a Single-Lane Roundabout" (19A-TTC-02
- 49 approved by council 6/21/2019), "Inside Lane Closure on a Multi-Lane Roundabout" (19A-TTC-
- 50 02 approved by council 6/21/2019) and "Outside Lane Closure on a Multi-Lane Roundabout"
- 51 (this proposal). These are consistent with TAs in current use which were developed by the
- 52 Virginia DOT, Pennsylvania DOT, Oregon DOT and Washington DOT. Two of these proposed
- 53 changes, "Flagging Operation on a Single-Lane Roundabout" and "Inside Lane Closure on a
- 54 Multi-Lane Roundabout", were approved by Council on 06/21/2019. This third proposal,
- 55 "Outside Lane Closure on a Multi-Lane Roundabout", has been renamed "Circulating Lane
- 56 Closure in a Multi-Lane Roundabout" and modified through the review of the Sponsor
- comments. This modified proposal has been sent back to Sponsors for additional review andcomment.
- 58 59
- 60 One comment provided by Janet Barlow of Accessible Design for the Blind, who is a frequent
- 61 guest of the Temporary Traffic Control Technical Committee, was to include crosswalks on each
- 62 approach to the roundabouts similar to what is shown in the in Chapter 3C. Roundabout
- 63 Markings. The Temporary Traffic Control Technical Committee concurred with the
- 64 recommendation and recommended to address this comment at the same time as addressing
- 65 comments from Sponsors.

66 RECOMMENDED MUTCD CHANGES

67 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 68 69 proposed deletions from the MUTCD are shown in red strikethrough. Changes previously 70 approved by NCUTCD Council (but not yet adopted by FHWA) are shown in green double 71 underline for additions and green double strikethrough for deletions. In some cases, background 72 comments may be provided with the MUTCD text. These comments are indicated by 73 [highlighted light blue in brackets]. 74 75 PART 6 TEMPORARY TRAFFIC CONTROL 76 77 **CHAPTER 6H TYPICAL APPLICATIONS** 78 79 **Notes for Figure 6H-ZZ – Typical Application ZZ** 80 **Circulating Lane Closure in a Multi-Lane Roundabout** 81 82 **Standard:** 83 1. Detour routes shall be provided for affected roundabout approaches. See Figures 6H-8, 6H-9, 6H-19, and 6H-20. 84 85 2. When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with 86 87 the features present in the existing pedestrian facility. See Figure 6H-29, Crosswalk 88 **Closures and Pedestrian Detours (TA-29).** 89 Guidance: 90 3. When designing the temporary traffic control and installing the channelizing devices for 91 work activities at roundabouts, accommodations for the turning radius of wider heavy commercial vehicles should be considered. 92 93 4. Since the geometrics of the roundabout will temporarily be altered, consideration should 94 be given to establishing a truck detour for the duration of the project. 95 5. For intermediate or long term work, the roundabout should be closed if traffic cannot be accommodated, and traffic detoured with appropriate detour signing provided. See 96 97 *Figure 6H-8, Road Closure with an Off-Site Detour (TA-8).* 98 6. Conflicting signs and pavement markings should be removed for long-term projects. For 99 short-term and intermediate-term projects where this is not practical, the channelizing 100 devices in the area where the pavement markings conflict should be placed at a maximum spacing of 1/2 S feet where S is the speed in mph. Temporary markings should 101 be installed where needed. 102 103 **Option**: 104 7. Flashing warning lights and/or flags may be used to call attention to the advance warning signs. 105 106 8. Portable changeable message signs may be utilized as part of the temporary traffic control plan to provide clear guidance to motorists on all approaches of the roundabout. 107 108 9. Positive protection devices may be used per Section 6F.84a. [For consistency with 19B-109 TTC-02 Approved by Council 01/10/2020]



