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

TECHNICAL COMMITTEE: Temporary Traffic Control Committee
ITEM NUMBER: 19B-TTC-01
TOPIC: Circulating Lane Closure in a Multi-Lane Roundabout
ORIGIN OF REQUEST: FHWA MUTCD Team
AFFECTED SECTIONS OF MUTCD: Chapter 6H. Typical Applications
New Notes Page and Figure 6H.ZZ, Outside Lane Closure on a Multi-Lane Roundabout, TA-ZZ

DEVELOPMENT HISTORY
• Approved by TTC Technical Committee: 01/10/2019
• Sponsor Comments Reviewed and Modifications Approved by TTC Technical Committee: 06-20-2019
• Approved by Council: TBD

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 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 by the FHWA through the federal rulemaking process.

SUMMARY
The Temporary Traffic Control Technical Committee recommends three new Typical Application (TA’s) to Part 6H involving work within the circulating lane(s) of single and multi-lane roundabouts including “Flagging Operation on a Single-Lane Roundabout”, “Inside Lane Closure on a Multi-Lane Roundabout” and “Outside Lane Closure on a Multi-Lane Roundabout”. Two new TA’s for were approved by Council on 06/21/19 including “Flagging Operation on a Single-Lane Roundabout” and “Inside Lane Closure on a Multi-Lane Roundabout”. The proposed new TA for “Outside Lane Closure on a Multi-Lane Roundabout” had major changes based on addressing Sponsor comments and needed to be sent back out to Sponsors.
DISCUSSION
Modern roundabouts have been constructed in the United States since the early 1990’s (approaching 30 years). The pavement within the roundabout intersection have needed regular maintenance treatments, including pavement replacement, since originally constructed. The current and previous editions of the MUTCD included no guidance in Part 6H (Typical Applications) regarding the use of temporary traffic control for work within the circulating lane(s) of a modern 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.

Other industry resources for public agencies to utilize include ATSSA’s document “Temporary Traffic Control for Building and Maintaining Single and Multi-lane Roundabouts”, January 2013 (https://drive.google.com/file/d/0B6x5IpW9760GYlE2ZFd6TkZ1Mjg/view) and the FHWA Work Zone Safety Grant Page through Wayne University (http://workzone.eng.wayne.edu/) which includes Temporary Traffic Control Plans (TTCP) software which will develop specific Typical Applications for intersection and roadway sections based on the specific work being performed as well as existing conditions. A total of 20 different TA’s can be generated through the Modern Roundabout Intersection component of the TTCP software.

The Temporary Traffic Control Technical Committee has worked with the NCUTCD’s Roundabout Task Force to narrow down the number of TA’s available to three that would be most useful to practitioners “Flagging Operation on a Single-Lane Roundabout”, “Inside Lane Closure on a Multi-Lane Roundabout” and “Outside Lane Closure on a Multi-Lane Roundabout”. These are consistent with TA’s in current use which were developed by the Virginia DOT, Pennsylvania DOT, Oregon DOT and Washington DOT. Two of these proposed changes, “Flagging Operation on a Single-Lane Roundabout” and “Inside Lane Closure on a Multi-Lane Roundabout”, were approved by Council on 06/21/2019. The third proposal, “Outside Lane Closure on a Multi-Lane Roundabout”, has been renamed “Circulating Lane Closure in a Multi-Lane Roundabout” and modified through the review of the Sponsor comments. This modified proposal is being sent back to Sponsors for additional review and comment.

One comment provided by Janet Barlow of Accessible Design for the Blind, who is a frequent guest of the Temporary Traffic Control Technical Committee, was to include crosswalks on each approach to the roundabouts similar to what is shown in the in Chapter 3C. Roundabout Markings. The Temporary Traffic Control Technical Committee concurred with the recommendation and recommended to address this comment at the same time as addressing comments from Sponsors.

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

[highlighted light blue in brackets].

CHAPTER 6H TYPICAL APPLICATIONS
Notes for Figure 6H-ZZ – Typical Application ZZ
Circulating Lane Closure in a Multi-Lane Roundabout

Standard:

1. When crosswalks or other pedestrian facilities are closed or relocated, temporary
facilities shall be detectable and shall include accessibility features consistent with
the features present in the existing pedestrian facility. See Figure 6H-29, Crosswalk
Closures and Pedestrian Detours (TA-29).

Guidance:

2. When designing the temporary traffic control and installing the channelizing devices for
work activities at roundabouts, accommodations for the turning radius of wider heavy
commercial vehicles should be considered.

3. Since the geometrics of the roundabout will temporarily be altered, consideration should
be given to establishing a truck detour for the duration of the project.

4. 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
Figure 6H-8, Road Closure with an Off-Site Detour (TA-8).

5. Conflicting pavement markings should be removed for long-term projects. For short-
term and intermediate-term projects where this is not practical, the channelizing 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 be
installed where needed.

Option:

6. Flashing warning lights and/or flags may be used to call attention to the advance
warning signs.

7. A portable changeable message sign may be utilized as part of the temporary traffic
control plan to provide clear guidance to motorist on all approaches of the roundabout.
Figure 6H-ZZ. Circulating Lane Closure in a Multi-Lane Roundabout (TA-ZZ)