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

TECHNICAL COMMITTEE: GMI Committee
ITEM NUMBER: 18B-GMI-01
TOPIC: Exit Numbering
ORIGIN OF REQUEST: Missouri DOT (MoDOT)
AFFECTED SECTIONS OF MUTCD:
- Section 2E.31 Interchange Exit Numbering, Figure 2E-19
- Examples of Interchange Numbering for Mainline and Circumferential Routes, Figure 2E-20
- Example of Interchange Numbering for Mainline, Loop, and Spur Routes, Figure 2E-21
- Example of Interchange Numbering or Overlapping Routes

DEVELOPMENT HISTORY:
- Approved by Technical Committee: 06/21/2018 and 01/09/2019
- Approved by NCUTCD Council: 01/10/2019

This is a proposal for recommended changes 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.

SUMMARY:
The proposed changes contained in this ballot elaborate on the guidance found in the current MUTCD in the text and figures for exit numbering with the enhancements based on letters of interpretation supplied by the MUTCD team. Currently, the majority of the guidance for various exit numbering scenarios is only conveyed via the figures in the manual. In addition to adding clarifying text, the proposal also modifies the existing figures by eliminating details to make each existing figure clearer and easier to use and relate more clearly to the title of each figure. All the additional interchange configurations and exit numbering examples deleted from these figures are now being represented in a new figure.

DISCUSSION
The MUTCD provides guidance for exit numbering in both text and figure form, however, the text relies heavily on interpretation of the figures for many details and the figures can be overwhelming with the amount of detail provided. The exit numbering sequences, which are important details on these figures, are difficult to pick out with the various examples of
interchanges overlaid along the roadway segments. While these example interchange images
provide useful information on how exit numbers relate to interchange design and placement, they
are out of context with respect to the key purpose of each figure. This information was removed
from the three original figures and consolidated into one new figure to more clearly illustrate the
information. These changes are being recommended based primarily on an interpretation
MoDOT received from FHWA on the proper choice of exit numbers as well as input from GMI
technical committee members. The intent of these changes is to enhance both the text and figure
guidance to make it clearer without altering the original intent of the manual.

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].

Section 2E.31 Interchange Exit Numbering

Support:
01 Interchange exit numbering provides valuable orientation for the road user on a freeway or
expressway. The feasibility of numbering interchanges or exits on an expressway will depend
largely on the extent to which grade separations are provided. Where there is appreciable
continuity of interchange facilities, interrupted only by an occasional intersection at
grade, the numbering will be helpful to the expressway user.

Standard:
02 Interchange exit numbering shall be used in signing each freeway interchange exit
departure point. Interchange exit numbers shall be displayed with each Advance Guide
sign, Exit Direction sign, and Exit Gore sign. The exit number shall be displayed on a
separate plaque at the top of the Advance Guide or Exit Direction sign. The exit number
(E1-5P) plaque (see Figure 2E-22) shall be 30 inches in height and shall include the word
EXIT and the appropriate exit number in a single-line format. Suffix letters shall be used
for exit numbering at a multi-exit interchange. Exit suffix letters shall only be used to
supplement exit numbers. Exit suffix letters shall be used when there is more than one exit
departure point within the limits of a mile segment. The suffix letter shall also be included
on the exit number plaque and shall be separated from the exit number by a space having a
width of between 1/2 and 3/4 of the height of the suffix letter. Exit numbers shall not
include the cardinal initials corresponding to the directions of the cross route. The
minimum numeral and letter sizes are given in Tables 2E-2 through 2E-5. If used on
expressways, the interchange exit numbering system for expressways and non-Interstate
freeways shall comply with the provisions of this section prescribed for freeways and
Interstates.

03 At a multi-exit interchange an interchange with multiple exit departure points from the
mainline where suffix letters are used for exit numbering, an exit of the same number
without a suffix letter shall not be used on the same route in the same direction. For
example, if an exit is designated as EXIT 256 A, then there shall not be an exit designated
as EXIT 256 on the same route in the same direction. **Exit suffix letters shall increase or decrease in the same manner as exit numbering as described in paragraphs 10-15.**

04 Interchange exit numbering shall use the reference location sign exit numbering method. The consecutive exit numbering method shall not be used.

**Support:**

05 Reference location sign exit numbering assists road users in determining their destination distances and travel mileage, and assists highway agencies because the exit numbering sequence does not have to be changed if new interchanges are added to a route.

**Guidance:**

05a Exit numbering should be determined based on where the cross road of the interchange intersects the mainline with respect to the mainline mile segments. For example, if a cross road intersects the mainline at or after mile 15 and before mile 16 the interchange should be designated as EXIT 15 (see Drawing A of Figure 2E-XX). If a cross road is split into two roadways by direction, for example a split diamond, where one direction of the cross road is downstream of mile 18 and the other direction of the cross road is upstream of mile 18, the interchange exit number should be based on the mile marker located between the two roadways (see Drawings A and B of Figure 2E-XX).

05b Where exit suffix letters are used for interchanges with multiple exit departure points from the mainline and the number of exit departure points are not equal in both directions, the exit suffix lettering should be based on the number of departure points per direction. For example, if in one direction there are three exit departure points within the mile 25 segment, there should be an EXIT 25 A, EXIT 25 B and EXIT 25 C; however, if in the opposite direction there are only two exit departure points, the exits in that direction should be designated as EXIT 25 B followed by EXIT 25 A (see Drawing D of Figure 2E-XX).

05c Exit suffix letters should only be used to designate individual exit departure points from the mainline. When a ramp splits into two ramps after leaving the mainline, the two directions at the ramp splits should not be numbered with separate exit numbers or exit suffix letters (see Drawings A and D of Figure 2E-19).

**Option:**

06 Exit numbers may also be used with Supplemental Guide signs and Motorist Service signs.

**Guidance:**

07a Exit number (E1-5P) plaques should be added to the top right-hand edge of the advance guide and exit direction signs for an exit to the right.

**Standard:**

07b Because road users might not expect an exit to the left and might have difficulty in maneuvering to the left, a left exit number (E1-5bP) plaque (see Figure 2E-22) shall be added to the top left-hand edge of the sign for all left-hand exits (see Figures 2E-14 and 2E-15). The word LEFT on the E1-5bP plaque shall be a black legend on a yellow rectangular sign panel and shall be centered above the word EXIT.

**Support:**

08a Example exit number plaque designs are shown in Figure 2E-22. Figures 2E-3, 2E-7, 2E-22, 2E-26, and 2E-27 illustrate the incorporation of exit number plaques on guide signs.

09a The general plan for numbering interchange exits is shown in Figures 2E-19 through 2E-21. Figure 2E-19 shows a circumferential route, which is a route that makes a complete circle around a city or town and usually has two interchanges (one on each side of the city or town) with each of the mainline routes that travel through the city or town. Figure 2E-20 shows a loop route, which is
a route that departs from a mainline route and then rejoins the same mainline route at a subsequent 
point downstream, and a spur route, which is a route that departs from a mainline route and never 
rejoins the same mainline route. Figure 2E-21 shows two mainline routes that overlap each other. 

Standard:

14 Regardless of whether a mainline route originates within a State or crosses into a State 
from another State, the southernmost or westernmost terminus within that State shall be 
the beginning point for interchange exit numbering.

15 For circumferential routes, interchange exit numbering shall be in a clockwise 
direction. The numbering shall begin with the first interchange west of the south end of an 
imaginary north-south line bisecting the circumferential route, at a radial freeway or other 
Interstate route, or some other conspicuous landmark in the circumferential route near a 
south polar location (see Figure 2E-19).

16 The interchange exit numbers on loop routes shall begin at the loop interchange nearest 
the south or west mainline junction and increase in magnitude toward the north or east 
mainline junction (see Figure 2E-20).

17 Spur route interchanges shall be numbered in ascending order starting at the 
interchange where the spur leaves the mainline route (see Figure 2E-20).

18 If a circumferential, loop, or spur route crosses State boundaries, the numbering 
sequence shall be coordinated by the States to provide continuous interchange numbering.

19 Where numbered routes overlap, continuity of interchange numbering shall be 
established for only one of the routes (see Figure 2E-21). If one of the routes is an Interstate 
and the other route is not an Interstate, the Interstate route shall maintain continuity of 
interchange numbering.

Option:

1a Interchange exit numbers at the beginning of a loop or a spur route, at the point a route 
crosses a state line, or where a route simply begins within the boundaries of a state may be 
referenced as either EXIT 0 or EXIT 1.

Guidance:

16 The route chosen for continuity of interchange exit numbering should also have reference 
location sign continuity (see Figure 2E-21).
NEW FIGURE

Figure 2E-XX EXAMPLES OF INTERCHANGE EXIT NUMBERING

A

B

C

D

EXAMPLES OF EXIT NUMBERING WITH SUFFIXES

Legend

EXIT NUMBER
REFERENCE LOCATION SIGN

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Figure 2E-20. Example of Interchange Numbering for Mainline, Loop, and Spur Routes

Legend
- JUNCTION OF TWO INTERSTATE ROUTES
- EXIT NUMBER
- REFERENCE LOCATION SIGN
- INTERSTATE ROUTE NUMBER

The freeway/interchange where the beginning of the loop or spur route intersects the mainline route may be called either “Exit 1” or “Exit 0” on the loop or spur route.

** Exit numbers and suffixes are used at the end of loop and spur routes as these roadways physically end and all traffic must exit and continue on another route. The convention of the suffix “A” being used for the left exit and “B” being used for the right exit at a route that terminates is similar to the convention of a left destinations being listed first over a right destination on a guide sign.
Figure 2E-21. Example of Interchange Numbering for Overlapping Routes

Legend
- JUNCTION OF TWO INTERSTATE ROUTES
- 214 A EXIT NUMBER
- 212 REFERENCE LOCATION SIGN
- 30 INTERSTATE ROUTE NUMBER

NEW FIGURE