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National Committee on Uniform Traffic Control Devices

17200 West Bell Road No.1135 * Surprise, Ariz. 85374 Telephone (623) 214-2403 * e-mail: ncutcd@aol.com

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National Committee on Uniform Traffic Control Devices RWSTC RECOMMENDATION FOLLOWING SPONSOR COMMENTS

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TECHNICAL COMMITTEE: NCUTCD Regulatory/Warning Signs Technical Committee

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DATE OF ACTION: (TASK FORCE): 12-26-10, revised 1-2-11, revised 1-5-11, revised 1-19-11, 6-5-11 REVISED FOLLOWING SPONSOR COMMENTS, 6-22-11

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- TASK FORCE: Tom Heydel (chair), Dan Paddick, Ron Lipps, Jim Pline, Andy
- 14 Ramisch, Roger Wentz, Mark Bott, Scott Kuznicki, Fred Ranck
- 15 RWSTC APPROVAL DATE: January 19, 2011
- 16 TRANSMITTAL TO SPONSORS DATE: Spring 2011
- 17 RWSTC APPROVAL DATE FOLLOWING SPONSOR COMMENTS: June 22,
- 18 **2011**
- 19 **COUNCIL APPROVAL DATE:** 6-23-11

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TOPIC: Size of Regulatory Signs on Ramps

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AFFECTED PORTIONS OF MUTCD: Section 2B.03 and Table 2B-1 (2009 MUTCD)

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BACKGROUND:

In its review of the 2009 MUTCD, the Regulatory and Warning Sign Technical Committee (RWSTC) noted a number of areas of concern. One of these was the size of the regulatory signs on single lane ramps on Expressways and Freeways in Section 2B.03 (09) Size of Regulatory Signs. This Section states that "The minimum size for regulatory signs facing traffic on exit and entrance ramps should be as shown in the column in table 2B-1 that corresponds to the mainline roadway classification (Expressway or Freeway). If a minimum size is not provided in the Freeway Column, the Expressway size should be used. If a minimum size is not provided in the Freeway or the Expressway Column, the Oversized size should be used." It was felt by the RWSTC, that while using the mainline roadway classification made sense on Freeway or Expressway connections to Freeways or Expressways, it did not make sense for multilane ramps and single lane ramps that terminate at traditionally controlled intersections on a conventional roadway. The conventional roadway sign sizes should be permitted for these applications. ramps often occur where the freeway exits as a one lane ramp but tapers out into multiply lanes prior to terminating at a signal or stop control at the ramp termini. This multi-lane section can be as much as 600 feet or more in length and multi-lane sign sizes are more appropriate, especially if only one sign on the right is provided. Section 2B.03 (05) already has text that states if a regulatory sign is placed on the left side of the roadway of a multi-lane roadway in addition to the same regulatory sign on the right side of the roadway, the size shown in the single lane column in table 2B-1 may be used. Therefore, this option is already accounted for should the practioner decide to use a sign on the left and right. If the practioner decides to use just a sign on the right, then the multi-lane sign size is needed.

The size of the regulatory signs to be used on ramps was not addressed in Section 2B.03 Size of Regulatory Signs in the 2003 MUTCD or in the 2007 NPA.

DISCUSSION:

Except on Freeway to Freeway connections, the operating characteristics of a single lane ramp are closer to that of a single lane conventional roadway than that of a Freeway. The operating characteristics of a multi-lane ramp are closer to that of a multi-lane conventional roadway than that of a Freeway or Expressway. Recommending that Freeway or Expressway size signs be used throughout the length of all ramps connecting a Freeway or Expressway to a normal intersecting road seems to be excessive. Many States, including New York, Michigan, Idaho and Wisconsin recommend using the size used on a single lane conventional road. The recommendation that the larger size signs be used on single lane or multi-lane ramps was not included in the 2003 MUTCD or in the 2007 NPA. Consequently, the States where not given the opportunity to comment on this recommendation.

 Away from the Freeway or Expressway mainline, the sightline characteristics of a single lane ramp are essentially the same as a single lane conventional road. The normal travel speed is less than the mainline speed and close to that of a single lane conventional road. Traffic normally decelerates on an exiting ramp knowing that a traditional controlled intersection is ahead. Traffic generally accesses the beginning of an entering ramp through a traditional controlled intersection. This generally results in lower traffic speeds. These lower speeds, when combined with single lane conventional road sightlines do not require the larger size signs associated with a Freeway or an Expressway.

RECOMMENDATION: Amend Section 2B.03 to allow the use of single lane or multi-lane conventional road size signs on ramps that connect Expressways or Freeways to intersections with conventional roadway.

Note: Proposed changes to the MUTCD are shown in <u>underline red</u> and removed text are shown in strikethrough red.

RECOMMENDED WORDING:

Section 2B.03 Size of Regulatory Signs

Standard:

Except as provided in Section 2A.11, the sizes for regulatory signs shall be as shown 90 in Table 2B-1. 91 92 02 Support: $\overline{93}$ Section 2A.11 contains information regarding the applicability of the various columns in 03 94 Table 2B-1. 95 96 04 Standard: 97 Except as provided in Paragraphs 4 and 5, the minimum sizes for regulatory signs 98 facing traffic on multi-lane conventional roads shall be as shown in the Multi-lane column 99 of Table 2B-1. 100 101 Option: 102 Where the posted speed limit is 35 mph or less on a multi-lane highway or street, other 103 than for a STOP sign, the minimum size shown in the Single Lane column in Table 2B-1 may be 104 105 Where a regulatory sign, other than a STOP sign, is placed on the left-hand side of a 106 multi-lane roadway in addition to the installation of the same regulatory sign on the right-hand 107 side or the roadway, the size shown in the Single Lane column in Table 2B-1 may be used for 108 both the sign on the right-hand side and the sign on the left-hand side of the roadway. 109 110 Standard: 111 A minimum size of 36 x 36 inches shall be used for STOP signs that face multi-lane 112 approaches. 113 Where side roads intersect a multi-lane street or highway that has a speed limit of 114 45 mph or higher, the minimum size of the STOP signs facing the side road approaches, 115 even if the side road only has one approach lane, shall be 36 x 36 inches. 116 Where side roads intersect a multi-lane street or highway that has a speed limit of 117 40 MPH or lower, the minimum size of the STOP signs facing the side road approaches 118 shall be as shown in the Single Lane or Multi-lane columns of Table 2B-1 based on the 119 number of approach lanes on the side street approach. 120 121 Guidance: 122 The minimum sizes for regulatory signs facing traffic on exit and entrance ramps at 123 major interchanges connecting an Expressway or Freeway with an Expressway or Freeway ((see 124 Section 2E.32A (a))should be as shown in the column of Table 2B-1 that corresponds to the 125 mainline roadway classification (Expressway or Freeway). If a minimum size is not provided in 126 the Freeway column, the minimum size in the Expressway column should be used. If a minimum 127 size is not provided in the Freeway or Expressway Column, the size in the Oversized column 128 should be used. 129 130 The minimum size for all regulatory signs facing traffic on exit and entrance 10 131 ramps at all other interchanges (see Section 2E.32A (b) B and C) should be the 132 regulatory sign size shown in Table 2B-1 Conventional Road Single Lane column for 133

single lane ramps and Multi-lane column for multi-lane ramps.

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136 **RWSTC VOTE:** For: Unanimous 137 Opposed: 138 Abstentions:

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COUNCIL VOTE: For: Unamimous

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- c:ncutcd/June 2011/Heydel/size of regulatory signs on one and multilane lane ramps 12-26-10, revised 1-2-11, revised 1-5-11, revised 1-19-11 ready for sponsors, revised 6-5-11,
- 6-22-11, 6-23-11