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Attachment No.6

RW SIGNS NO. 5

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National Committee on Uniform Traffic Control Devices

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Agenda item IV.F June 2012 RWSTC Agenda item III.5 January 2013, RWSTC

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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) 5-6-12, revised 5-20-12, revised 5-22-12, revised
- 19 5-23-12, revised 12-13-12, revised 12-19-12, revised 12-21-12
- 20 TASK FORCE: Tom Heydel (chair), Scott Kuznicki
- 21 RWSTC APPROVAL DATE: 1-9-13
- 22 TRANSMITTAL TO SPONSORS DATE: Fall 2012
- 23 COUNCIL APPROVAL DATE: 1-11-13

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TOPIC: Preferential lanes - Overhead signs at preferential lanes and 24 hour period signs

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AFFECTED PORTIONS OF MUTCD: Section 2G.05

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DISCUSSION/QUESTIONS:

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1. Delaware DOT requested clarification regarding the requirement for overhead preferential lane signs on conventional type roadways. FHWA responded that Section 2G.03 paragraph (08) provides for engineering study to determine the need for overhead based on various parameters. Delaware responded back that the MUTCD should be clearer since it can be easily misunderstood. FHWA indicated that this could be clarified in future editions of the MUTCD.

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The following is what DelDOT questioned and FHWA response:

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DelDOT Issue #14

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87 88 89 **2G.05:** Standard: "For buffer-separated or contiguous preferential lanes where continuous access with the adjacent general-purpose lanes is provided, including those where a preferential lane is added to the roadway (see Figure 2G-2 for HOV lanes) and those where a general-purpose lane transitions into a preferential lane (see Figure 2G-3 for HOV lanes), an overhead Periods of Operation (R3-14 series) sign shall be used at the beginning or initial entry point of the preferential lane." "Option: On conventional roads, the overhead Periods of Operation (R3-14 series) signs may be installed at the beginning or entry points and/or at intermediate points along preferential lanes in any geometric configuration."

The option simply restates the standard that "an overhead Periods of Operation (R3-14) sign shall be used at the beginning or initial entry point of the **preferential lane"** for buffer-separated or contiguous preferential lanes where continuous access with the adjacent general-purpose lanes is provided. Furthermore, the requirement to provide overhead signs for some conventional roadway, for example a bus-only lane, seems unnecessary.

FHWA Response: The distinction made by the Option is that overhead Periods of Operation signs are not required on conventional roads (i.e., post-mounted signs alone may be used). Section 2G.03, paragraph 08, discusses the "decision regarding whether to use a post-mounted or overhead version of a particular type of [regulatory] sign" for preferential lanes on conventional roads. By inclusion of this provision, the preferential lane regulatory signs on conventional roads are not required to be mounted overhead. The preceding provisions that require overhead mounting of certain preferential lane regulatory signs are intended to apply to expressway and freeway applications. Rewording or clarification to this effect can be added in a future revision.

DelDOT Request to NCUTCD

This section can be easily misunderstood, and is overly confusing. We do not see how the guidance statement referred to by FHWA can override the standard statement. DelDOT requests that the NCUTCD reword this section to clarify the intent.

2. Delaware DOT also said that the MUTCD should not require the 24 hour legend on the R3-11c sign.

The following is what DelDOT questioned and FHWA response:

DelDOT Issue #13

2G.05: Preferential Lane Periods of Operation Regulatory Signs (R3-11 Series and R3-14 Series) -- Standard: "For preferential lanes that are in effect on a fulltime basis, either the full-time Periods of Operation (R3-11b and R3-14b) signs

shall be used, or the legends of the part-time Periods of Operations (R3-11, R3-11a, R3-14, R3-14a) signs shall be modified to display the legend 24 HOURS."

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Providing a "24 HOURS" legend on preferential lane signs seems unnecessary. It is generally implied that posted regulations are applicable at all times unless otherwise stated – e.g., speed limit signs, turn prohibitions, etc.

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FHWA Response: The legend 24 HOURS is not a requirement, it is merely one of the alternatives allowed in the Standard. Instead of modifying the part-time Periods of Operation signs to include this legend, the full-time Periods of Operation sign, which does not include this legend, can be used instead. Ordinarily, traffic regulations are assumed to be on a full-time basis. However, the typical HOV lane is more often operated on a part-time basis. The provision allowing modification of the part-time signs is included to accommodate cases where it is determined that the 24 HOURS legend is necessary as a part of a change in the operation (converting from part-time to full-time), or where several facilities in the same area have different hours of operation—some part-time, others full-time, or where the same lane changes from part-time to full-time operation somewhere along its length.

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DelDOT Request to NCUTCD

- 111 DelDOT requests that this standard be deleted or downgraded to a guidance statement.
- There are many different kinds of preferential lanes other than HOV lanes that are
- 113 commonly in affect full time, and no apparent reason why a "24 hour" or "hours of
- operation" sign should be required.

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RECOMMENDATION:

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- Add language to 2G.05 that does not require an overhead preferential lane sign for
- 119 conventional roadways. Add language to 2G.05 that does not require the 24 hour words
- on the R3-11c sign. Add additional post mounted signs that do not have time periods on
- 121 them.

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RECOMMENDED WORDING:

- 124 Note: Proposed changes to the MUTCD are shown in underline red and removed
- 125 text are shown in strikethrough red.
- 126 Section 2G.05 Preferential Lane Periods of Operation Regulatory Signs (R3-
- 127 <u>11 Series and R3-14 Series</u>)
- 128 Guidance:
- 129 on The sizes of post-mounted Periods of Operation (R3-11 series) signs should remain
- 130 consistent to accommodate any manual addition or removal of a single line of text for
- 131 each sign.
- 132 Support:
- 133 oz Consistent sign sizes are beneficial for agencies when ordering sign materials, as well
- as when making text changes to existing signs if changes occur to operating times or

- occupancy restrictions in the future. For example, the R3-11c sign has space for one line
- located below "24 HOURS" if an agency determines that it is appropriate to display
- additional information (such as "MON FRI"), yet the R3-11c sign has the same
- dimensions as the other R3-11 series signs.
- 139 Standard:
- 140 03 When used, the post-mounted Periods of Operation (R3-11 series) signs shall
- 141 be located adjacent to the preferential lane, and the overhead Periods of
- Operation (R3-14 series) signs shall be mounted directly over the lane.
- 143 04 The legend format of the post-mounted Periods of Operation (R3-11 series)
- signs shall have the following sequence:
- 145 A. Top Lines: Lanes applicable, such as "RIGHT LANE" or "2 RIGHT LANES" or "THIS LANE"
- B. Middle Lines: Eligible uses, such as "HOV 2+ ONLY" (or 3+ or 4+ if appropriate) or "BUSES ONLY" or other applicable uses or eligible turning movements
- 150 C. Bottom Lines: Applicable times and days, such as "7 AM 9 AM" or "6:30 AM 9:30 AM, MON-FRI"
- 152 05 The legend format of the overhead Periods of Operation (R3-14 series) signs shall have the following sequence:
- A. Top Line: Eligible uses, such as "HOV 2+ ONLY" (or 3+ or 4+ if appropriate) or "BUSES ONLY" or other applicable uses or eligible turning movements
- B. Bottom Lines: Applicable times and days, with the time and day placed above the down arrow, such as "7 AM 9 AM" or "6:30 AM 9:30 AM, MON-FRI" (When the operating periods exceed the available line width, the hours and days of the week shall be stacked as shown for the R3-14a sign in Figure 2G-1.)
- 162 06 For preferential lanes that are in effect on a full-time basis, either the full-
- time Periods of Operation (R3-11b and R3-14b, R3-XX and R3-XY and R3-11c)
- signs shall be used, or the legends of the part-time Periods of Operations (R3-
- 165 11, R3-11a, R3-14, R3-14a) signs shall be modified to display the legend 24
- 166 HOURS or to display no legend relative to period of operation.
- 167 ADD the following signs to table 2G-1 post mounted signs





169 **R3-XX**

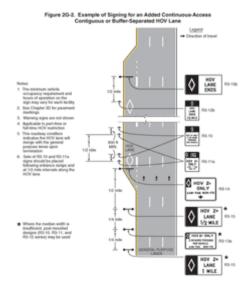
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- -XX R3-XY
- 170 Add R3-XX and R3-XY to Table 2G-1. FHWA to determine size. 30 x 36
- 171 recommended.

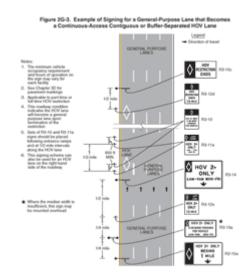
172 07 Support: 173 The 24-hour legend used on the R3-11c sign reinforces the restriction where several 174 facilities in the same area have different hours of operation—some part-time, others full-175 time, or where the same lane changes from part-time to full-time operation somewhere 176 along its length. 177 078 The full-time Periods of Operation (R3-14b) sign shall not be used where the 178 preferential lane is in effect only on a part-time basis. 179 180 089 Where additional movements are permitted from a preferential lane on an approach 181 to an intersection, the format and words used in the legend in the middle lines on the 182 post-mounted Periods of Operation (R3-11 series) signs and on the top line of the 183 overhead Periods of Operation (R3-14 series) signs may be modified to accommodate the 184 permitted movements (such as "HOV 2+ AND RIGHT TURNS ONLY"). 185 0910 A MOTORCYCLES ALLOWED (R3-11P) plague may be used where motorcycles, 186 regardless of the number of occupants, are allowed to use an HOV lane. 187 Standard: 188 1011 If used, the MOTORCYCLES ALLOWED plaque shall be mounted below a 189 post-mounted Preferential Lane Periods of Operation (R3-11, R3-11a, or R3-190 11c) sian. 191 44 12 For all barrier- or buffer-separated or contiguous preferential lanes where 192 access is restricted to designated locations, an overhead Periods of Operation 193 (R3-14 series) sign shall be used at the beginning or initial entry point on 194 freeways, expressways, and at locations on conventional roadways where the 195 preferential lane is not the outermost (far right or far left) lane of the roadway, and 196 at any intermediate entry points or gaps in the barrier where vehicles are 197 allowed to legally access the access-restricted preferential lanes. For all barrier-198 separated and buffer-separated preferential lanes, post-mounted Periods of 199 Operation (R3-11 series) signs shall be used only as a supplement to the 200 overhead signs on freeways, expressways, and at locations on conventional 201 roadways where the preferential lane is not the outermost (far right or far left) lane 202 of the roadway at the beginning or initial entry point, or at any intermediate 203 entry points or gaps in the barrier or buffer. 204 1213 For buffer-separated or contiguous preferential lanes where continuous 205 access with the adjacent general-purpose lanes is provided, including those 206 where a preferential lane is added to the roadway (see Figure 2G-2 for HOV 207 lanes) and those where a general-purpose lane transitions into a preferential 208 lane (see Figure 2G-3 for HOV lanes), an overhead Periods of Operation (R3-14 209 series) sign shall be used at the beginning or initial entry point of the 210 preferential lane on freeways and expressways. 211 212 14 On conventional roads where preferential lane operations exist, R3-11 series post 213 mounted signs may be used in lieu of or in addition to overhead R3-14 series signs. 214 Figure 2G-2 Example of Signing for an Added Continuous-Access Contiguous or

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Buffer-Separated HOV Lane



<u>Figure 2G-3</u> Example of Signing for a General-Purpose Lane that Becomes a Continuous-Access Contiguous or Buffer-Separated HOV Lane



Guidance:

1315 Overhead (R3-14 series) or post-mounted (R3-11 series) Periods of Operation signs should be installed at periodic intervals along the length of a contiguous or buffer-separated preferential lane where continuous access with the adjacent general-purpose lanes is provided.

Option:

226 1416 15 Additional overhead (R3-14 series) or post-mounted (R3-11 series) Periods of Operation signs may be provided along the length of any type of preferential lane.

1517-16 On conventional roads, the overhead Periods of Operation (R3-14 series) signs may be installed at the beginning or entry points and/or at intermediate points along preferential lanes in any geometric configuration.

231 232 233 234	Standard: 1618 17 For all types of direct access ramps that provide access to or lead to preferential lanes, a post-mounted Periods of Operation (R3-11 series) sign shall be used at the beginning or initial entry point of the direct access ramp.	
235 236 237 238	Option: 1719 18 For direct access ramps to preferential lanes, an overhead Periods of Operation (R3-14 series) sign may be used at the beginning or initial entry point to supplement the required post-mounted signs.	
239 240 241 242	19 Lane-use control signals (see Chapter 4M) may be used at access points to preferential lanes to indicate that a ramp or access roadway leading to the preferential lane or facility, or one or more specific lanes of the facility, are open or closed (see <u>Figure 2G-14</u>).	
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245	RWSTC Vote: For: Unanimous	
246	6-20-12 Against:	
247	Abstentions:	
248	RWSTC Vote following sponsor comments 1-9-13	
249	For: Unanimous	
250		
251	COUNCIL VOTE: 1-11-13 For: Unanimous	
252		
253	c: NCUTCD/June 2012/Heydel/preferential lanes 2G.05 5-6-12, revised 5-20-12,	
254	revised 5-22-12, revised 5-23-12, approved RWSTC 6-20-12 READY FOR SPONSORS,	
255	revised 12-13-12 following sponsor comments, revised 12-19-12 following sponsor	
256	comments, revised 12-21-12 following sponsor comments, approved by RWSTC 1-9-13,	
257	council approved 1-11-13	
258		