

Chapter 2

Signing

Section 2 Regulatory Signs

2-2-4 STOP and YIELD Signs for Separated Turn Lanes

August 2013

PURPOSE

The MUTCD, Section <u>2B.04</u> provides general guidance for the determination of STOP or YIELD sign usage to determine the right-of-way at intersections. The MUTCD also states that for signalized intersections, a STOP or YIELD sign **shall** only be used if there is a separated turn lane that is not controlled by the traffic signal.

In addition to separate, unsignalized turn lanes at signalized intersections, WisDOT has also installed roundabouts with separated turn lanes where the approaching, right-turning traffic can utilize a "bypass" lane to avoid going through the roundabout circle altogether.

Questions about whether to use a STOP or YIELD sign or no control for these applications has led to an inconsistent practice throughout the State. The purpose of this policy is to provide guidance on the signing treatments that are available and when they *should* be used, to help achieve a better consistency of practice statewide.

POLICY AND GUIDELINES

Signalized Intersections with Separated (Unsignalized) Turn Lane

- 1. Right turn lane with dedicated, long parallel receptor lane on the receiving roadway; typically, a STOP or YIELD sign would not be used. An added lane warning sign (W4-6) *should* be used in these cases. If traffic or crash problems persist, a YIELD sign *may* be used.
- 2. If there are two or more receptor lanes on the receiving roadway, a YIELD sign *should* be used. If traffic or crash problems persist, a STOP sign *may* be used in lieu of the YIELD sign.
- 3. If there is only one receptor lane on the receiving roadway, a STOP sign *should* be used. A YIELD sign *may* be used in lieu of a STOP sign where there is wider pavement and an available recovery area.
- 4. If double separated right turn lanes are used at a signalized intersection, traffic signal control **shall** be utilized.
- 5. If traffic or crash problems persist with any YIELD sign control, STOP signs or signal control *should* be considered.

Roundabouts with Separated Right Turn Lanes

- 1. YIELD signs should be used for both single and double separated right turn lanes at roundabouts.
- 2. If traffic or crash problems persist with any YIELD sign control, STOP signs should be considered.

SIGNING IMPLEMENTATION

- 1. The guidelines listed in Part B should be followed for newly installed intersections.
- 2. For existing intersections with signing not meeting these guidelines, there is no compliance date for making these changes. However, opportunities *should* be utilized through improvement projects, knockdowns or routine sign replacements to bring the signing up to the current guidelines.

2-2-4.5 STOP and YIELD Signs on Driveways and Private Roads

April 2008

GENERAL

The Department uses regulatory and warning signs conservatively, as recommended in the Manual on Uniform Traffic Control Devices (Section <u>2A.04</u>). This conservative use is important to retain the effective impact of signs on driver behaviors; used in excess, regulatory and warning signs tend to lose their effectiveness. There is the concern that a proliferation of unnecessary STOP or YIELD signs at driveways and private roads will lead to their disregard and could cause potential safety issues at locations where STOP or YIELD signs are necessary.

Oftentimes the Department is requested to install and/or maintain STOP or YIELD signs for driveways and private roads. The Department is not obligated to provide STOP or YIELD signs for many of these locations, by basis of Wisconsin Statutes and the 2009 MUTCD.

AUTHORITY

The following Wisconsin State Statutes establish relevant rules of the road that drivers must obey without requiring a sign to be posted and describe the authority to place signs, and the MUTCD Sections provide standards and guidance for installations of these signs.

Chapter 346, Rules of the Road

- s. 346.02 (7) Applicability of Provisions Requiring Signposting.
 - ...Whenever a particular section does not state that signs are required, such section is effective even though no signs are erected or in place.
- s. 346.18 (4) Entering Highway from Alley or Non-highway Access.

The operator of a vehicle entering a highway from an alley or from a point of access other than another highway **shall** yield the right-of-way to all vehicles approaching...

s. 346.18 (7) (b) Entering Alley or Driveway from Highway

The operator of any vehicle crossing a sidewalk...**shall** yield the right-of-way to any pedestrian...on the sidewalk.

s.346.41 (1) Display of Unauthorized Signs and Signals Prohibited

No person **shall** place, maintain or display upon or in view of any highway...any unauthorized sign...which: (a) purports to be...an official traffic sign...

MUTCD, 1A.08, Authority for Placement of Traffic Control Devices.

Traffic control devices... **shall** be placed only as authorized by a public authority or the official having jurisdiction...

Any unauthorized sign placed on the highway right-of-way by a private organization or individual constitutes a public nuisance. All unofficial and nonessential traffic control devices, signs, or messages *should* be removed.

All regulatory traffic control devices **shall** be supported by laws, ordinances, or regulations.

These statutory provisions clarify that signs are not required to affect a requirement to comply with rules of the road, and it is apparent that a motorist is not required to comply with rules of the road, and it is apparent that a motorist is not required to stop before entering a street or highway from a driveway. STOP signs are not required in these situations. The following policy is established consistent with the stated objective of conservatively using regulatory signs to retain their effectiveness.

POLICY

- 1. STOP signs or YIELD signs **shall not** be erected on state highway right-of-way at driveways, except as noted below:
 - a. STOP or YIELD signs **shall** be installed and maintained by WisDOT at driveways to state, county or municipal parks, and state forest, driveways on school grounds, and driveways to county institutions. These intersections often appear to be driveways, but are defined as highways under <u>s.340.01(22)</u>.
 - b. If a private driveway operates and functions like a public street, the Regions *may* provide a temporary exception to allow a STOP or YIELD sign while working to encourage the local government to make the intersecting road a public roadway.
 - c. When there are <u>demonstrated</u> operational or safety issues resulting from a lack of a STOP or YIELD sign, and best efforts of the region to locate the STOP or YIELD sign off the state highway right-of-way do not work, a permit *may* be granted by the Region to allow the STOP sign in the highway right-of-way. The permit *should* be documented using the standard application/permit to work on highway right-of-way (<u>DT 1812 form</u>). The owner of the STOP or YIELD sign **shall** be responsible for the installation and long-term maintenance of the sign.
- 2. For pre-existing STOP or YIELD signs installed at driveway connections to state highways, not consistent with this policy and located in the right-of-way of the state highway, the Region *should* remove the sign from the right-of-way. Before removal, make every effort to work with the driveway owner, as opportunities permit, to relocate privately owned STOP or YIELD signs off the state highway

- right-of-way. An ideal time for working with property owners for relocation of STOP or YIELD signs would be during an improvement project or if any other work is being performed on the right-of-way.
- 3. STOP or YIELD signs for private driveways connecting to state highways *should* be located off the state highway right-of-way in a location that is reasonably close to the ideal starting point. The 2009 MUTCD, Section 2A.16 states that a STOP sign *may* be located a maximum of 50 feet from the mainline roadway edgeline.
- 4. When privately owned STOP or YIELD signs are allowed in the highway right-of-way, the proper size STOP or YIELD sign for that particular state trunk highway **shall** be used, in accordance with <u>TEOpS 2-2-5</u>. In addition, the owner of the private road or driveway **shall** install STOP or YIELD in accordance with the MUTCD, Sections 2B.04, 2B.05, 2B.06, 2A.18, 2A.19 and 6F.05.

2-2-5 Size of STOP Signs on Roadways

September 2010

PURPOSE

The intent of this policy is to establish minimum STOP sign sizes on WisDOT roadway. These guidelines are applicable for intersections with single-lane conventional State Trunk Highways, intersections with multi-lane conventional State Trunk Highways and intersections with Expressways.

DEFINITIONS

<u>Freeways</u> are defined as divided highways with fully controlled access at interchanges only. Interstate highways are freeways with the interstate route designation.

<u>Expressways</u> are divided arterial highway facilities that have partial control of access, generally with grade separations at major intersections.

<u>Conventional highways</u> are defined as streets or roads other than freeways or expressways. They *may* be divided or undivided, two-lane or multi-lane, and access is available at intersections and driveways.

INSTALLATION GUIDELINES

The following minimum sizes **shall** be used for the installation of STOP signs on WisDOT system roadways.

- 1. A 36" STOP sign size **shall** be used for all STH/STH intersections, regardless of the number of approach lanes on each STH.
- 2. A 36" STOP sign size **shall** be used for all roadways intersecting multi-lane conventional state trunk highways and expressways.
- 3. A 36" STOP sign size **shall** be used for multi-lane conventional roadways intersecting single-lane conventional state trunk highways.
- 4. A 30" STOP sign size **shall** be used for single-lane conventional roadways intersecting single-lane conventional state trunk highways.
- 5. Additional STOP sign size criteria for bypasses are contained in TGM 2-15-53 (Bypass Signing).

If there are demonstrated or perceived problems at these intersections, the Regions have the option of increasing the STOP sign size. A traffic engineering study can be used to identify problems at intersections. Justification *may* be based on unusual roadway geometrics, crash problems, or sight restrictions.

2-2-12 In-Street Pedestrian Crossing Signs

June 2005

PURPOSE

The MUTCD section <u>2B.12</u> allows usage of in-street pedestrian crossing signs to remind motorists of laws regarding pedestrian right-of-way at an unsignalized location. While these signs *may* be useful to remind motorists of traffic/pedestrian right-of-way laws, it is important to develop and use additional application standards to promote consistency, safety and efficiency of the roadway. Local units of government have requested to install this signing. This policy provides guidance on the usage of these signs on state maintained roadways.

POLICY

Local units of government shall request, in writing, permission to install and maintain in-street pedestrian

crossing signs on DOT permitted crosswalks. A map **shall** be provided to the District by the local unity of government showing the proposed locations of the in-street pedestrian crossing signs. Upon District review, approval or denial *should* be made by a letter to the local unit of government. If approval is given, the District *should* also provide a copy of the R1-6 standard sign plate with the approval letter so consistency is maintained in the design and manufacture of the signs.

The following guidelines **shall** be used by the District to determine whether a roadway crossing would qualify for in-street pedestrian crossing signs.

GUIDELINES

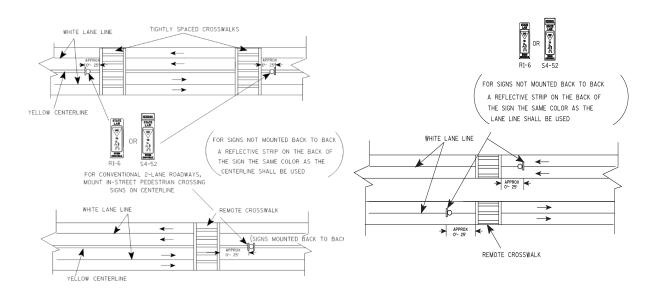
- 1. The local unit of government **shall** be responsible for all liability costs.
- 2. Only the R1-6, in-street YIELD TO PEDESTRIANS WITHIN CROSSWALK sign **shall** be allowed only on roadways with posted speeds of 40 mph or less.
- 3. The R1-6, in=street YIELD TO PEDESTRIANS WITHIN CROSSWALK sign message shall only be used in Wisconsin since <u>State Statute 346.24</u> requires drivers must yield to a pedestrian in a crosswalk. The R106a, STOP FOR PEDESTRIANS WITHIN CROSSWALK, sign should not be used.
- 4. Existing in-street pedestrian crossing signs that do not conform to this policy **shall** be removed. Notification to communities **shall** be made by written letter. *Should* existing non-permitted signing not be removed, WisDOT will remove the sign(s).
- 5. The in-street YIELD TO PEDESTRIAN sign **shall** only be used as a supplement to the standard pedestrian crossing sign (W11-2) with diagonal down arrow (WF16-7L/R) or standard school warning sign (S1-1) with diagonal down arrow (W16-7L/R). As an exception, the in-street YIELD TO PEDESTRIAN WITHIN CROSSWALK sign *may* be used alone provided there are no sight restrictions.
- 6. The in-street YIELD TO PEDESTRIAN sign **shall** only be used as an in-street sign, not on the outside shoulder or parking lane.
- 7. The in-street YIELD TO PEDESTRIAN sign shall only be used at marked and maintained crosswalk approaches that are not controlled by a STOP sign or traffic signal. Signs should be restricted to key locations, such as high-volume pedestrian crosswalks, to avoid overuse. The minimum spacing of signs shall be every other block, where there are several consecutive marked and maintained pedestrian crossings.
- 8. The sign locations **shall not** impede traffic movements (through or turning). Signs *may* have to be temporarily removed due to maintenance operations or oversized loads. WisDOT is not responsible for sign removal or reinstallation costs.
- 9. Only one sign, in each direction of a two-way street approach or back-to-back signs, will be allowed for each crosswalk approach.
- 10. For pedestrian crossing applications, the signs **shall** have a black legend on yellow background the design on the R1-6 sign plate **shall** be used.
- 11. For school crossing applications, the signs **shall** include the SCHOOL plaque and **shall** have black legend on fluorescent yellow-green background. The design on the S4-52 sign plate **shall** be used.
- 12. The reduced size in-street school warning sign (S1-1) with reduced size AHEAD sign (WF16-9P) or reduced size diagonal down arrow sign (WF16-7L/R) *may* be used in lieu of in-street pedestrian crossing signs for school applications as shown in the MUTCD, sections <u>7B.08</u> and <u>7B.09</u>.
- 13. Supports **shall** be freestanding (maximum 2" square or 2" round post), meeting National Cooperative Highway Research Program (NCHRP) 350 breakaway standards. The maximum mounting height **shall** be 2 feet to the bottom of the sign. The sign **shall** be securely attached to the pavement if left in place for more than 24 hours. Sign support bases **shall not** be bolted or cored into the pavement.
- 14. Communities *may* use the following mounting devices. Mounting devices not included in this list **shall** be a proved by the District Traffic section, prior to use:
 - a. *Impact Recovery Systems* Mount or Portable models (portable model #103QR or fixed model #101NS).
 - b. Safe-Hit Surface Mount or Potable models (portable model #ST948PCD44WX or fixed model #ST948SMP44WX).
- 15. For signs not mounted back-to-back, a reflective strip the same color as the centerline or lane line shall

be used to warn traffic approaching from the opposite direction.

- 16. The local unit of government **shall** be responsible for manufacture, liability, installation and maintenance costs, which includes removal prior to snowfall and re-installation in the spring. If signs are not removed prior to November 1, WisDOT will remove and charge the local unit of government for all costs associated with removal. The in-street pedestrian crossing signs **shall not** be installed prior to April 1.
- 17. The local unit of government **shall** affix an identification label to the back of each sign, per Wisconsin State Statute 86.19(5).

TYPICAL PLACEMENT OF IN-STREET
PEDESTRIAN CROSSING SIGN

TYPICAL PLACEMENT OF IN-STREET
PEDESTRIAN CROSSING SIGNS



FOUR LANE UNDIVIDED SECTION

FOUR LANE DIVIDED SECTION

2-2-13 Location of Speed Limit Signs

June 2015

PURPOSE

The following is to provide policy guidelines for distance between and proper location of speed limit signs. The policy pertains to signing on freeways, expressways, and conventional highways.

BACKGROUND (AUTHORITY)

The Wisconsin Statutes in <u>Section 346.57</u> discusses Speed Restrictions. The statutes require certain statutory limits to be posted. Refer to this statute for locations that require Speed Limit signs to be posted.

<u>TEOpS 13-5-1</u> discusses the statutory and approval process and setting limits. Refer to this section for information on these issues.

The MUTCD Section 2B-13 discusses location of Speed Limit signs.

Note: Reduce speed ahead sign requirements and placement is covered under a separate <u>TEOpS 2-3-30</u>, "Reduced Speed Ahead" signing.

POLICY

Based on the requirements in the MUTCD Section <u>2B-13</u>, the following **shall** be the location where speed limit signs **shall** be placed:

1. Speed limit signs **shall** be placed at points of change from one speed limit to another and when leaving a zoned area such as a town, village, city, or municipality to return to rural speed.

2. After a school zone, where speed limit was reduced.

The following chart or table indicates MINIMUM criteria for each specific speed limit:

70/65/60/55/50 mph (Freeways)

- 1. After each interchange
- 2. Beginning and end of freeway segment
- 3. Changes in speed zone (double mark—outside and inside shoulder for reductions from 70 or 65 to 65/60/55/50 mph)

65/60/55/50 mph (Expressways)

- 1. After each interchange
- 2. At state or county highways
- 3. Changes in speed zone (consider double marking outside and inside shoulder)
- 4. Beginning and end of expressway section

Note: An expressway is defined as a divided arterial highway facility that has partial control of access and generally with grade separations at major intersections.

55 mph (Conventional Highways)

- 1. Leaving a zoned area less than 55 mph such as a town, village, city or municipality
- 2. After every state highway in a rural area
- 3. Typically, after major intersections with higher volumes
- 4. Reminder signs *should* be spaced approximately every 15 miles, when signs under criteria 1, 2, or 3 do not provide a reminder within 15 miles

50/45 mph (Conventional Highways)

- 1. At points of change from one speed limit to another
- 2. After major intersections with higher volumes
- 3. Every ½ mile (maximum distance between reminder signs)

Note: Engineering judgment *should* be used when placing every ½ mile to coordinate with other criteria above such as after major intersections to avoid unnecessary duplication.

40 mph and BELOW (Conventional Highways)

- 1. After major intersections with higher volumes
- 2. **Maximum** distance between reminder signs
 - a. 40 mph = 2000 feet
 - b. 35 mph = 1500 feet
 - c. 30 mph = 1000 feet
 - d. 25 mph = 1000 feet

Note: Field conditions may require varying from these criteria for these speed and highway categories.

SIZE OF SIGNS

See <u>TEOpS 2-1-35</u> for optimum size of signs.

DOUBLE MARKING

Double marking (right and left side) for the first set of signs **shall** be employed for any reduction from 70 or 65 mph and *should* be employed for other speed limit reductions on divided highways.

PHASE IN PERIOD

As signs are replaced due to wear or where there are problem areas with spacing, maximum of five years from the effective date of this policy.

WORK ZONE TRAFFIC CONTROL SPEED LIMIT SIGNS

The spacing shown in this policy does not apply to work zone traffic control speed limit changes. See work zone standard detail drawings for applicable requirements.

2-2-15 NO TURNS (R3-3) Signs—Freeways

November 1992

In the early 1970s there was some special concern expressed about wrong-way movements on the freeway system. Some of the concern was being generated by the Federal Highway Administration, and some of it was local in nature. As a result, standardized signing practices were developed and implemented throughout the state on the freeway system. Along with some other extensive signing, NO TURNS signs were installed in the areas between the merging roadways at on-ramps on all freeways. These signs were intended to discourage illegal U-turns, whether made purposefully or by accident. There was subsequently some feedback from the State Patrol that the signing improvements were effective in reducing wrong-way movements.

Unfortunately, the NO TURNS signs in the merging area are in a rather vulnerable location and have no doubt suffered more than their share of knockdowns, thus incurring maintenance costs, and costs and damages to the public. Over the years, the public has come to understand and accept the restrictive nature of the freeway roadways, which make U-turns difficult.

Consequently, it has been determined that there is no longer a need for the sign, and it can be eliminated.

There *may* be some specific locations where the geometrics or condition peculiar to the locations, or where an awareness of unusual driving habits, would seem to make the retention of these signs desirable. In these cases, the R3-3 sign *may* still be used. Consultation with the State Patrol or other enforcement agencies *may* be desirable in these instances.

2-2-19 No U-Turn Sign (Freeway/Expressway median Crossover Sign Placement)

January 2013

GENERAL

The MUTCD Section <u>2B.18</u> gives some guidance and options for the placement of No U Turn Signs (R3-4 sign with R3-4a plaque, or R3-4B sign). However, the 2009 MUTCD is lacking on guidance for the placement of these signs in median crossovers. Guidance as to the proper number and placement of these signs in the median is important. The median width plays a role in the effective placement of the signs.

GUIDANCE/POLICY

The following guidelines/policy apply to these signs:

- 1. The Region has the option of using the R3-4 sign with R3-4A supplemental plaque or the combination R3-4B sign for these applications.
- 2. If used for freeway and expressway median crossovers with a width of 50 feet or greater (distance from yellow edgeline to yellow edgeline), separate No U-Turn signs **shall** be installed on the far side of the median crossover facing traffic.
- 3. If used for freeway and expressway median crossovers with a width of less than 50 feet (distance from yellow edgeline to yellow edgeline), the No U-Turn signs *may* be mounted back-to-back in the center of the median. Vegetation or other sight obstructions *should* be considered to ensure visibility of the signs all year.
- 4. A yellow delineator *should* be placed on the left side of the through roadway on the near side of the crossover for each roadway (see Figure 1).
- 5. Any existing median crossover No U-Turn signs not conforming to this policy will be allowed to remain in place until the end of their useful life. Useful life ends when the sign message no longer meets legibility or condition standards. Existing signs *may* be removed prior to the end of their useful life when opportunities arise such as knockdown or damage, when other work is occurring nearby, or when projects make removal practical.

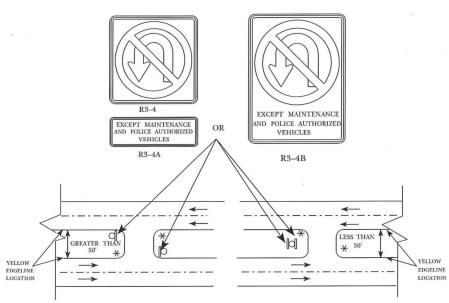


Figure 1. Median Crossover Signing and Delineation

2-2-19.1 No U-Turn Signs (Controlled Intersection Placement)

April 2010

BACKGROUND

Historically, Wisconsin State Law has not allowed U-turns at intersections controlled by traffic control signals or intersections controlled by an officer. Effective January 1, 2010, the State law was changed to make U-turns legal at intersections that do not have signs prohibiting the maneuver. Traffic engineering experience has shown that the permitting of U-turns at controlled intersections can be a safe and beneficial traffic maneuver. From an economic standpoint, the permitting of U-turns can reduce costs and issues connected with access control where highway projects result in median closings because reasonable access to the businesses can be possible via U-turns. It is noteworthy to point out that all other states allow U-turns at intersections to one degree or another.

For dual left turn applications, Wisconsin State Statute 346 states that U-turns would be made from the innermost left turn lane in the same fashion as a left turn. Vehicles on the intersecting streets turning right on red will need to yield to the U-turning vehicle. Statute 346 also states that backing is not permitted as part of a U-turn maneuver, therefore a motorist will need to have knowledge of the turning radius of their vehicle. A U-turn is also prohibited on undivided highways for crest and vertical curve locations where the sight distance is less than 500 feet.

Usage of turn prohibition signs, specifically No U-turn Signs, is covered in MUTCD Section <u>2B.19</u>. However, the MUTCD does not get into specific engineering criteria as to when signs *should* be used. Motorists are not necessarily familiar with state statute language and signing *may* be appropriate at certain intersections to prohibit U-turns, due to motorist safety issues or to help enforce the state statute. Wisconsin State Statute 346 gives maintaining governments the authority to prohibit U-turns at specific intersections. Intersections where U-turns are prohibited **shall** be signed.

DEFINITIONS

<u>Freeways</u> are defined as divided highways with fully controlled access at interchanges only. Interstate highways are freeways with the interstate route designation.

<u>Expressways</u> are defined as divided highways with partially controlled access by a combination of interchanges, at-grade intersections and driveways.

<u>Conventional highways</u> are defined as streets or roads other than freeways or expressways. They *may* be divided or undivided, two-lane or multi-lane, and access is available at intersections and driveways.

QUALIFYING CRITERIA FOR SIGNING

1. No U-Turn (R3-4 signs) **shall** be installed at the following signal and stop controlled intersections where U-turns are prohibited:

- a. Intersections where there are existing no left turn signs: The no U-turn (R3-4) sign **shall** be installed at these locations in conjunction with the no left turn (R3-2) sign. The combination no left turn/no U-turn (R3-18) sign *may* be utilized for these locations instead.
- b. Intersections where there are signalized right turns that operate simultaneously with protected left turn movements. The no U-turn (R3-4) sign *may* be utilized for these locations instead.
- c. Signalized intersections that are interconnected to a railroad crossing and operate with advance (not simultaneous) pre-emption. The no U-turn (R304) sign **shall** be installed on any divided highway approach that crosses the railroad tracks.
- 2. No U-turn (R3-4) signs *may* be installed at other signal and stop controlled intersections that have demonstrated the following operational issues:
 - a. Intersections with less than 500 feet of sight distance and demonstrated crashes attributed to U-turns that are above the statewide average for that type of intersection.
 - b. Intersections with dual left turn lanes and demonstrated problems with motorists making U-turns from the outside left turn lane. For this issue, the lane control sign (R3-8 UU) *should* be used to emphasize that U-turns *may* only be made from the inside left lane. For overhead signing applications, the R3-5U (with 6" black border) *may* be installed in place of the R3-5L or R3-50L.
 - c. Intersections with a deficient truck turning radius that present repeated problems with trucks backing up to complete a U-turn, signs and/or signals being damaged or other safety or operational issues cause by the deficient truck turning radii. Intersections *may* have signing to just restrict trucks in making U-turns. For these applications, the standard no U-turn (R3-4) sign with supplemental truck plaque (M4-4) sign would be used.
 - d. Temporary signalized intersections during improvement projects where left turns *may* be restricted or eliminated.
 - e. Intersections that have poor geometrics and there are demonstrated crashes attributed to Uturns that are above the statewide average for that type of intersection. Examples would be skewed intersections or nearby railroad crossings.
- 3. Eliminations of signs. In the past, many signalized intersections were signed mainly from requests by law enforcement due to repeated problems with illegal U-turns at intersections and the signs aided in enforcement of the law. The Region *should* make efforts to review these intersections, based on the criteria outlined in items 1 and 2 above, and adjust or remove signs as necessary.

GUIDANCE FOR FIELD PLACEMENT OF SIGNS

- Installation of no U-turn signs at controlled intersections can be challenging due to lack of space to
 install signs and the presence of many other signs. A minimum of on no U-turn sign **shall** be
 installed at each intersection approach where the U-turn move is prohibited. Below is a hierarchy of
 where the sign *should* be installed:
 - a. <u>Primary choice</u> is mounting of the no U-turn (R3-4) sign on the far side median signal pole if it does not conflict with any other signs (keep right, etc.).
 - b. Secondary choice is to install the no U-turn (R3-4) sign side-by-side with the keep right sign on the far side median signal pole. This *may* be accomplished by a separate post or bracket system. If a bracket system is used, the no U-turn sign *should* be mounted to the left of the keep right sign.
 - c. Third choice is to install the no U-turn (R3-4) sign on a nearside median signal pole.
 - d. Fourth choice is to install the no U-turn (R3-4) sign underneath the keep right on the far side median signal pole. This option is the last desirable because the no U-turn sign will be lower than the minimum 5-foot mounting height as specified by the MUTCD.
- 2. A second no U-turn (R3-4) sign *may* be installed in advance of the intersection approach for areas where compliance is still a problem that is resulting in safety issues or if visibility of the mandatory no U-turn sign is compromised due to intersection geometrics or the presence of other signs.
- 3. Placement of the ground mounted R3-8UU sign mentioned in 2B above *should* be in advance of the near median signal head in the median at a minimum distance of 150 feet back from the signal.

2-2-20 Intersection Lane Control Sign

May 2011

PURPOSE

The MUTCD sections <u>2B.19</u>, <u>2B.20</u>, <u>2B.21</u>, <u>and 2B.22</u> provide standards and guidance for the usage of intersection lane control signs, mandatory movement lane control signs, optional movement lane control signs, and advanced intersection lane control signs. This policy provides requirements and guidance to the proper use of the signs on state maintained highways.

DEFINITIONS

- 1. Intersection lane control signs (R3-5 through R3-8 and R3-20L or LL and R3-20R or RR) include mandatory movement lane control signs, optional movement lane control signs, and advanced intersections lane control signs.
- 2. Mandatory movement lane control signs are as follows:
 - a. R3-5, R3-5A, R3-5XL and R3-50 series contain an arrow and word ONLY
 - b. R3-7 series indicate RIGHT (CENTER or LEFT) LANE MUST TURN RIGHT (CENTER or LEFT).
- 3. Optional movement lane control signs (R3-6 series) indicate a combination arrow.
- 4. Advanced intersection lane control signs (R3-8 series) indicates the configuration of all lanes ahead. The R3-20 series signs indicate the start of a turn lane with the text LEFT (RIGHT) TURN LANE (tilting down arrow).

POLICY

1. Mandatory movement lane control signs (Figures 1, 2 and 3)

R3-5, R3-5A, R3-5XL and R3-50 series are generally used as overhead signs directly over the lane to which they apply. The R3-5, R3-5A, R3-5XL and R3-6 **shall not** be used as a ground mounted sign on a multi lane approach.

R3-7 series signs **shall** only be used as ground mounted signs. The RIGHT (LEFT) LANE MUST TURN RIGHT (LEFT) **shall** be installed whenever there is a mandatory turn lane and **shall** be accompanied by pavement marking arrows/only per <u>3B.20</u> of the MUTCD. A mandatory turn lane is one where a through lane becomes a mandatory turn lane and the driver must change lanes to continue straight. An R3-7 series sign *should* be placed in advance of the intersection and repeated at the intersection depending on space availability for signs and the speed limit of the roadway. For higher speed roadways, 45 MPH or higher place the sign a minimum of 400' prior to the intersection and repeat the sign at the intersection. For lower speed roadways, 40 MPH and below, place the sign a minimum of 300' prior to the intersection and repeat the sign if necessary. An option to the R3-7 series ground mounted sign is an overhead R3-5 series sign (ONLY, ARROW). NOTE: The R3-8 series sign *may* be used in lieu of the R3-7 series sign when there is only one lane approaching an intersection and the roadway widens into separate turn lane(s).

2. Optional movement lane control signs

R3-6 series signs indicate a combination arrow and are installed overhead. The word OK **shall not** be used on the sign per <u>2B.19</u> of the Wisconsin supplement to the 2009 MUTCD.

3. Advanced intersection lane control signs (Figures 4, 5, 6, 7, 8, 9 and 10)
R3-8 signs show the configuration of all lanes ahead. This sign *should* be placed in advance of the tapers for the turn lanes to allow for drivers to read the sign and change lanes accordingly. This sign is required for complex intersections where it *may not* be apparent to the driver what each lane movement is. Examples where it is not apparent include horizontal and vertical curves approaching an intersection or lack of physical barrier channelization. Examples of complex intersections include dual rights and dual lefts. At other locations, it is an optional sign.

R3-20L or LL and R3-20R or RR signs which indicate LEFT (RIGHT) TURN LANE and tilted down arrow are intended to be placed at the start of the taper for the turn lane. This sign is required:

- a. For dual left turns where there is a median physical separation.
- b. At single or dual turn lanes where there is a physical separation between the left turn lane and through lane. Note: If the R3-20 sign is used between the through lane and turn lane per Figure 7, the advanced sign is optional.

The R3-20 series sign is not necessary at other locations unless there is a horizontal curve where the

- driver cannot distinguish the turn lane taper from the through lane.
- 4. Mandatory turn lane downstream of an intersection (Figure 3)
 An R3-7 series sign, RIGHT (LEFT) LANE MUST TURN RIGHT (LEFT) **shall** be used where a lane becomes a mandatory turn lane after an intersection. Option—overhead sign R3-5 series sign is recommended for higher speed facilities in lieu of the ground mounted R3-7 series sign.

OVERHEAD RECOMMENDED FOR HIGHER SPEED ONLY HIGHER VOLUME RIGHT LANE MUST TURN RIGHT ONLY R3-7R (3) OPTION IN' SIGN SPACING LIEU OF 45 MPH OR ONE R3-7R GREATER = 400' +/

40 MPH OR LESS = 300'+/

Figure 1. Mandatory Movement Lane Control Signs

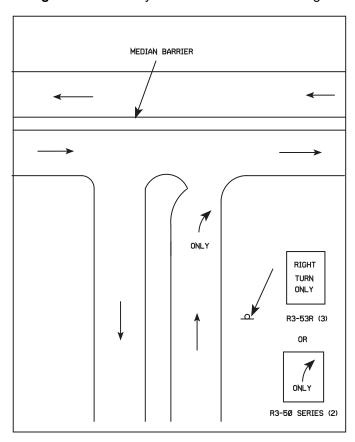
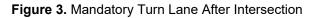
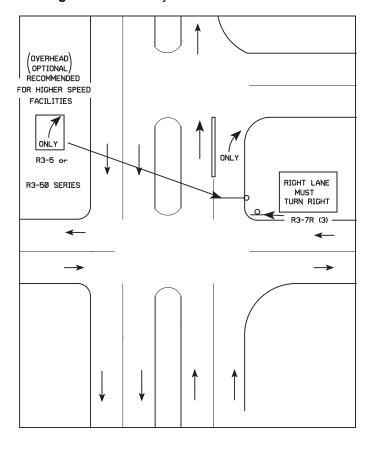


Figure 2. Mandatory Movement Lane Control Signs

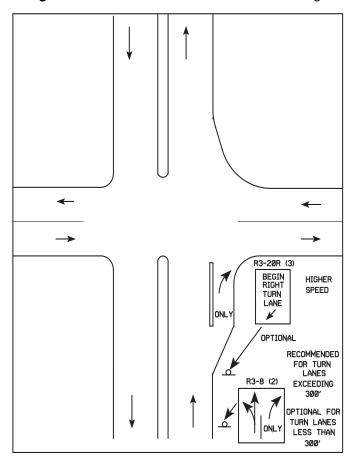




OPTIONAL
ONLY
ONLY
ONLY
ONLY
ONLY
ONLY
R3-8P (2)

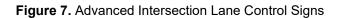
Figure 4. Advanced Intersection Lane Control Signs

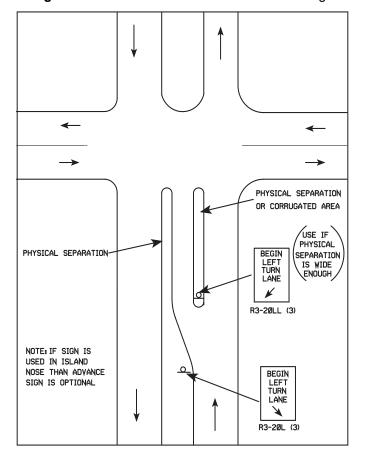
Figure 5. Advanced Intersection Lane Control Signs



ONLY OPTIONAL
OVERHEAD
R3-5 OR
R3-50 SERIES
SIGNS

Figure 6. Advanced Intersection Lane Control Signs (Overhead Lane Control Signs)





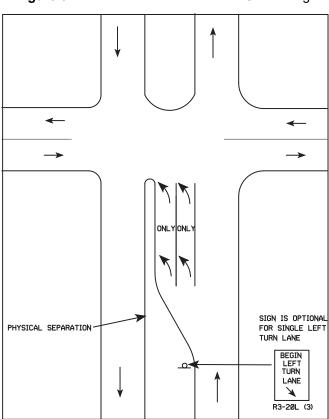
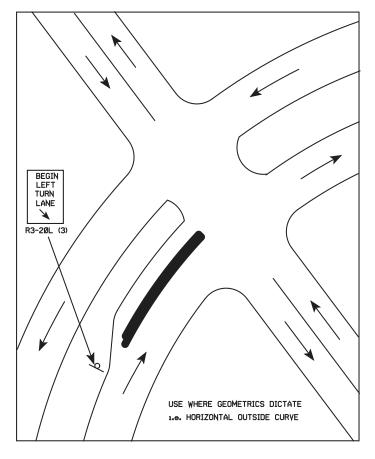


Figure 8. Advanced Intersection Lane Control Signs

Figure 9. Advanced Intersection Lane Control Signs (Left Turn Lane on Curve)



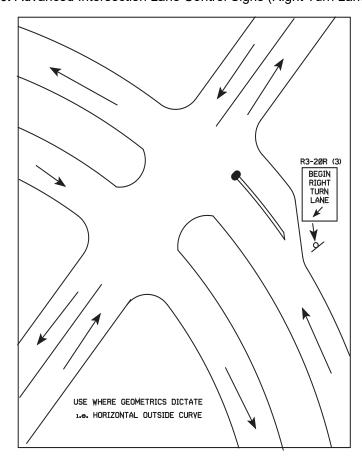


Figure 10. Advanced Intersection Lane Control Signs (Right Turn Lane on Curve)

2-2-28 Restricting Pedestrians and Non-Motorized Vehicles on Expressways and Freeways August 2013 PURPOSE

The operation of non-motorized vehicles or pedestrians on high-speed multi-lane facilities are incompatible uses that create hazards. The Department *may* prohibit certain traffic on freeways or expressways. To apply these restrictions on traffic, the Department is required to erect and maintain official signs giving notice of the prohibition.

This subject provides guidance on the official signs that *may* be used to give notice of restrictions on the use of controlled access highways, expressways and freeways.

AUTHORITY

State Statute 349.105 provides the authority to prohibit certain traffic on expressways and freeways. The authority in charge of maintenance of an expressway or freeway *may*, by order, ordinance or resolution, prohibit the use of such expressway or freeway by pedestrians, persons riding bicycles or other non-motorized traffic or by persons operating mopeds or motor bicycles. The state or local authority adopting any such prohibitory regulation **shall** erect and maintain official signs giving notice thereof on the expressway or freeway to which such prohibition applies.

DEFINITIONS

<u>State Statute 990.01 (9a)</u> <u>Freeway</u> means a highway with full control of access and with all crossroads separated in grade from the pavements for through traffic.

State Statute 990.01 (7a) Express highway or expressway is a divided arterial highway for through traffic with "full" or "partial" control of access and generally with grade separations at intersections. "Full" control of access means that the authority to control access is exercised to give preference to through traffic by providing access connections with selected public roads only and by prohibiting crossings at grade or direct private driveway

connections. "Partial" control of access means that the authority to control access is exercised to give preference to through traffic to a degree that, in addition to access connections with selected public roads, there *may* be some crossings at grade and some private driveway connections.

Listings of declared freeways and expressways are available from the Region Planning Section.

POLICY FOR HIGHWAYS CLOSED TO CERTAIN TRAFFIC

Freeways

Freeways **shall** be closed to use by pedestrians, by persons riding bicycles or other non-motorized traffic and by persons operating mopeds or motor bicycles. Any exceptions to <u>open</u> freeway segments to use by pedestrians, by persons riding bicycles or other non-motorized traffic and by persons operating mopeds or motor bicycles *may* only be approved by the Director of the Bureau of Traffic Operations and listed in this policy.

Freeway exceptions (approved by Director, Bureau of Traffic Operations): none, as of October 1, 2007.

Expressways

Expressways *should* be open to use by pedestrians, by persons riding bicycles or other non-motorized traffic and by persons operating mopeds or motor bicycles. A general exception to open use of expressways is for those expressways with a parallel trail for pedestrians, persons riding bicycles or other non-motorized traffic and by persons operating mopeds or motor bicycles. In those cases, the Department **shall** prohibit that traffic from using the expressway and erect and maintain signs giving notice of the prohibition. Any other exceptions to close expressway segments to use by pedestrians, by persons riding bicycles or other non-motorized traffic and by persons operating mopeds or motor bicycles *may* only be approved by the Director of the Bureau of Traffic Operations and listed in this policy.

Expressway exceptions (approved by Director, Bureau of Traffic Operations): USH 10, Wood County, from CTH BB to CTH N

SIGN INSTALLATION POLICY

The R5-57 sign (see Figure 1) **shall** be erected on each ramp leading from a crossroad or frontage road to a restricted freeways or expressway within approximately 100 feet of the point where the ramp leaves the crossroad, and at other locations where pedestrian entrance has occurred or *may* reasonably be anticipated.

Transition from expressway to freeway

For areas that transition from a non-restricted expressway to a restricted freeway, the R5-57 sign *should* be placed after the last at-grade intersection and the R5057B sign (see Figure 2) BEYOND NEXT EXIT *may* be used to supplement the R5-7 sign. The R5-57 sign *should* be placed on all freeway on-ramps after this point.

Figure 1



Figure 2



R5-57B

2-2-30 Engine Brake Signing

January 2018

PURPOSE

One method of slowing the motion of a vehicle is to use the compression of the engine as part of vehicle braking. This method is often referred to as compression braking or exhaust braking. Engine braking can produce excessive, undesirable noise when muffler systems are not functioning as designed or are otherwise inadequate.

Noise from engine braking in vehicles with inadequate muffler systems has led some communities to take actions to restrict the noise. Compression braking is typically an unavoidable result of operating a vehicle that the driver cannot prevent or fully disengage. However, for some vehicles there are driver choices as to whether or when engine compression braking is used. Objectionable noise levels *may* be produced by any car or truck when using compression braking and often are related to equipment failure or aftermarket modifications.

There are several advantages to compression braking on vehicles and especially on large trucks. In addition to assisting deceleration, when a truck engine brake system is engaged, it helps prevent the conventional truck air brakes from overheating, thus saving on the normal wearing life of the truck air brakes. This is especially true on roadways with steep downgrades with long distances, where the safety of the truck can be enhanced using engine brakes.

Communities have installed or requested signing on state highways to address noise concerns associated with use of compression braking. The Department controls traffic signs on highways maintained by the state. Local governments do not have the authority to erect signs on those highways except when written permission is provided by the Department.

The Department supports efforts to deal with excessive noise from all vehicles and encourages enforcement of laws requiring effective mufflers (for example, State Statute Section 347.39). The use of signs specific to engine or compression braking has become popular among many communities, although it is unclear whether those signs are effective or necessary. Generally, the Department does not allow installation of traffic signs on state highways that have not been shown to be necessary or effective. In the case of engine braking, the Department has chosen to work with communities and allow limited use of these signs on state highways under certain conditions, despite the lack of evidence that they are effective in reducing noise problems.

POLICY

The Department *may* permit local governments to place signs on highways under WisDOT jurisdiction subject to the requirements included here:

- 1. Requests for a permit to allow these signs must be in writing to the WisDOT Regional Office and *should* contain the following information
 - a. Locations where signs are to be installed, including state highway route number and distance to the nearest public roadway intersection
 - b. Sign offset (distance from edge of travel lane) and type of post to be used
 - c. Assurance that sign will be free standing (not attached to other signs)
- 2. The local government **shall** be responsible for supplying, installing, and maintaining the signs in conformance with the permit. The local government **shall** furnish their identification sticker on the sign.
- 3. The local government must be committed to actively enforce the requirements of the signs with local law enforcement personnel.
- 4. Only the standard ENGINE BRAKE MUFFLERS REQUIRED sign (R10-64) *may* be used on highways under state maintenance responsibility and those signs *may* be installed only on conventional highways at or near the corporate limits of the community (see Figure 1). This sign **shall not** be used on freeways, expressways, interchange ramps, or site-specific locations on conventional highways.
 - a. For freeway locations going through communities, engine brake signs *may* be permitted on conventional state highways after the entry point to the conventional highway from the freeway, provided signs are already approved at the city/village limits.
 - b. Engine brake signs *may* be allowed for urbanized townships provided they have the means to enforce it. Documentation **shall** be provided by the local law enforcement indicating that the ordinance will be enforced throughout the township. Urbanized townships are defined by having at least two of the following features:
 - i. Urban cross section
 - ii. Residential development abutting the highway that meets the definition of "semi urban district" as defined in Wisconsin State Statutes 346.57(1)(b)
 - iii. Reduced speed zone
 - iv. Qualify for an unincorporated community sign.

- For qualifying urban townships, only 1 sign is allowed in each direction on any given state highway. The signs **shall** be installed at the township limits.
- c. The local government must obtain the approval of the appropriate Regional office for the location of the sign. The sign language **shall** meet the requirements of the WisDOT R10-64 sign plate as described in item 4.
- d. Any other signs related to use of engine braking installed on highways under WisDOT jurisdiction within or for the local government that do not meet the requirements of this policy *should* be replaced by the local government, as opportunities arise (knockdowns, improvement projects or replacement due to age) to comply with this policy.

Figure 1. R10-64 Sign

ENGINE BRAKE MUFFLERS REQUIRED

2-2-35 Littering Signs September 2000

PURPOSE

The intent of this guideline is to eliminate signs that inform the public about fines for littering since the signs are not necessary for the guidance or warning of traffic.

Signs with the message \$500 FINE FOR THROWING LITTER OR TRASH ON HIGHWAYS KEEP WISCONSIN CLEAN (R5-56) have been installed on state highways in the past. The purpose of these signs was to discourage littering and to reinforce to motorists the maximum statutory fine for littering on highways. While littering has the potential to create safety hazards as well as diminishing the quality of state highways, there is reason to believe that usage of these signs has a minimal effect on curbing littering problems. The State Patrol has mentioned that these signs have little effect on the motoring public, the law is very difficult to enforce, and citations have very rarely been given out. The State Patrol does not object to removing these signs. Due to previous cutbacks in resources and funding, these signs had previously been declared nonessential. Given the limited effectiveness of the signs, it has been determined these signs are not necessary.

POLICY

Littering signs (R5-56) are declared nonessential on state highways. As a result, the following actions are expected:

- 1. No new littering signs **shall** be erected on state highways.
- 2. Littering signs that have been installed on state highways will be allowed to remain in place until the end of their useful life, when they are to be removed and not replaced. Useful life ends when the sign message no longer meets legibility or condition standards. Littering signs *may* be removed prior to the end of the signs' useful life when opportunities arise such as knockdown or damage, when other work is occurring nearby, or projects make removal practical.

2-2-40 Seatbelt Signs January 2018

PURPOSE

Over the years seatbelt signs have been installed to reinforce to motorists the importance of fastening safety belts and to remind motorists that there are penalties for people not fastening safety belts. These signs were placed at various locations on state highways and in rest areas, waysides, and weigh stations. It is typically expected that many motorists now know the importance of buckling up by means of media advertisements and safety campaigns. Consequently, it has been determined that these signs are no longer necessary.

DEFINITIONS

<u>Freeways</u> are defined as divided arterial highway facilities that have full controlled access, by means of grade separation at interchanges only.

<u>Expressways</u> are defined as divided arterial highway facilities that have partial control of access and generally with grade separations at major intersections.

<u>Conventional highways</u> are defined as either divided or undivided roadway facilities that have no control of access with grade separations at intersections. These highways can be two-lane or multilane facilities.

POLICY

- 1. No new seatbelt signs **shall** be erected.
- 2. Seatbelt signs that have been installed will be allowed to remain in place until the end of their useful life, when they *should* be removed and not replaced. Useful life ends when the sign message no longer meets legibility or condition standards. Seatbelt signs *may* be removed prior to the end of the signs' useful life when opportunities arise such as knockdown or damage, when other work is occurring nearby, or projects make removal practical.

2-2-41 Community Parking Restriction Signs

December 2008

PURPOSE

Oftentimes, municipalities will adopt ordinances for the prohibition or restriction of parking on certain roadways during certain periods of time. Wisconsin State Statutes 349.13(1e)(c)(2) gives municipalities the authority to enact ordinances and post signs at or reasonably near the corporate limits of the municipality on all state and county trunk highways and connecting highways.

The intent of posting signs is to inform motorists that 24-hour parking limitations, night parking regulations or snow emergency regulations are in effect in the municipality. It is the responsibility of the motorist to contact the governing body to determine the specifics of the actual ordinance. Posting of signs allows law enforcement to effectively enforce the municipal parking ordinances.

POLICY

The following rules **shall** apply for local governments requesting community parking restriction signs on highways under WisDOT jurisdiction:

- 1. The local government must pass a parking ordinance prior to requesting the sign(s).
- 2. The local government **shall** submit a written request to the WisDOT Regional Office for a permit to install and maintain the signs. The permit may be in the form of a letter.

This request for a permit from the local government *should* contain the following items:

- a. Sign message in accordance with items 4 and 8 of this policy
- b. Sign offset (distance from edge of travel lane)
- c. Where sign is proposed to be located
- d. Type of post used
- e. Assurance that sign will be freestanding (not attached to other signs)
- f. Copy of local government parking ordinance.

Once the permit is granted, the local government is responsible for supplying, installing and maintaining these signs in conformance with the permit.

- 3. It **shall** be the responsibility of the local law enforcement personnel to enforce the ordinance or the sign(s).
- 4. The sign message shall meet the requirements of the WisDOT R7-66 municipal parking sign plate (see Figure 1). See item 8 for approved supplemental messages. The local government must obtain the approval of the appropriate WisDOT Regional Office for the location(s) of the sign(s).
- 5. The R7-66 sign shall only be used on conventional highways at or near the corporate limits of the community. This sign shall not be used at site-specific locations on conventional roadways, freeways, expressways or interchange ramps.
- 6. Municipal parking signs not meeting the layouts outlined in this policy will be allowed to remain in their place until the end of their useful life. At that time, they should be removed and replaced with signs conforming to this policy. Useful life ends when the sign message no longer meets legibility or condition standards. Municipal parking signs may be removed prior to the end of the signs' useful life when opportunities arise such as knockdown or damage, when other work is occurring nearby, or projects make removal practical.
- 7. For townships, the signs should be placed at the boundary of built-up areas where the ordinance applies.
- 8. A maximum of three supplemental message **shall** be used on a sign. The six approved supplemental messages are:
 - a. NIGHT
 - b. SNOW EMERGENCY

- c. 24 HR
- d. X:XX AM X:XX AM (example: 2:00 AM 7:00 AM)
- e. DATE DATE (example: NOV 15 MAR 15)
- f. ODD / EVEN

Figure 1



2-2-45 Move Over or Slow Down Signs

January 2018

PURPOSE

The intent of this guideline is to restrict the usage of signs that inform the public about Moving Over or Slowing Down for Stopped Emergency Vehicles to locations that are most helpful to motorists.

Signs with the message "MOVE OVER OR SLOW DOWN FOR STOPPED VEHICLES WITH FLASHING LIGHTS" (R5-60) are installed on state highways as a reminder to motorists to slow down or move over for emergency/law enforcement vehicles that are on the roadway. These signs were installed in a partnership between Bureau of Traffic Operations and Bureau of Transportation Safety to educate motorists of this law. While signs can be a useful tool to help re-enforce a law, education and enforcement are also effective and essential tools that must be used with highway signing. These signs are primarily focused to motorists entering the state and *may* be unfamiliar with the Move Over or Slow Down Law. As for a reminder tool, other, more effective educational efforts have been employed in lieu of signs. These educational efforts often consist of public service announcements through the media, reminders included in DMV vehicle registration notices and driver education. However, due to budgetary concerns and the concern about over signage, signs *should* only be installed in locations that are the most effective for motorists.

DEFINITIONS

Freeways are defined as divided arterial highway facilities that have <u>full</u> controlled access, by means of grade separation at interchanges only.

Expressways are defined as divided arterial highway facilities that have <u>partial</u> control of access and generally with grade separations at major intersections.

Conventional Highways are defined as either divided or undivided roadway facilities that have <u>no</u> control of access with grade separations at intersections. These highways can be two lane or multilane facilities.

POLICY

- 1. Any requests to install "MOVE OVER OR SLOW DOWN FOR STOPPED VEHICLES WITH FLASHING LIGHTS" (R5-60) signs **shall** be reviewed by the statewide Traffic Incident Management Committee and approved by the State Traffic Engineer prior to installation.
- 2. "MOVE OVER OR SLOW DOWN FOR STOPPED VEHICLES WITH FLASHING LIGHTS" (R5-60) signs **shall** be installed in all rest areas and weigh stations serving freeways and expressways.
- 3. The following mainline locations have been approved for installation of "MOVE OVER OR SLOW DOWN FOR STOPPED VEHICLES WITH FLASHING LIGHTS" (R5-60). Signs **shall** be installed at these locations:

SW Region:

- IH 39 northbound in Rock County north of the state line
- IH 39 northbound in Dane County north of USH 51 in Madison

- IH 39 northbound in Columbia County north of IH 90-94
- IH 39 southbound in Columbia County south of IH 90-94
- IH 39 southbound in Dane County south of USH 12-18
- IH 90 eastbound in La Crosse County east of the state line
- IH 90 eastbound in Monroe County east of IH 94
- IH 90 westbound in Columbia County west of IH 39
- IH 90 westbound in Monroe County west of IH 94
- IH 94 eastbound in Dane County east of IH 39-90
- IH 94 westbound in Monroe County west of IH 90
- USH 18 westbound in Dane County west of Dairy Ridge Rd
- USH 151 northbound in Grant County north of the state line
- USH 151 northbound in Dane County north of IH 39-90-94

SE Region:

- IH 41 northbound in Washington County north of USH 45
- IH 43 northbound in Milwaukee County at Holt Ave
- IH 43 northbound in Ozaukee County north of STH 60
- IH 94 eastbound in Milwaukee County east of 84th St
- IH 94 westbound in Kenosha County west of the state line
- IH 94 westbound in Waukesha County west of the Milwaukee County line
- USH 12 westbound in Walworth County west of the state line
- STH 119 westbound in Milwaukee County east of IH 94

NE Region

- IH 41 southbound in Outagamie County south of the Brown County line
- IH 43 southbound in Brown County south of STH 172
- USH 10 westbound in Winnebago County west of IH 41
- USH 41 northbound in Brown County north of CTH B
- USH 41 southbound in Marinette County south of Marinette
- USH 41 southbound in Brown County south of CTH B
- STH 29 westbound in Brown County west of IH 41

NC Region

- IH 39 northbound in Portage County at Stevens Point
- IH 39 southbound in Marathon County south of Business 51
- IH 39 southbound in Portage County at Stevens Point
- USH 51 northbound in Marathon County north of STH 29
- USH 45 southbound in Vilas County south of the state line
- STH 29 eastbound in Marathon County east of USH 51
- STH 29 westbound in Marathon County west of USH 51
- STH 153 westbound in Marathon County east of IH 39

NW Region

- IH 94 eastbound in Saint Croix County east of the state line
- IH 94 eastbound in Eau Claire County east of USH 53
- IH 94 westbound in Dunn County west of STH 29
- USH 2 eastbound in Douglas County south of Superior
- USH 53 northbound in Chippewa County north of STH 29
- STH 29 eastbound in Chippewa County east of USH 53

2-2-50 Spacing of Reminder Signs

January 2007

EMERGENCY STOPPING ONLY

The R8-7 EMERGENCY STOPPING ONLY sign **shall** be used on expressways and freeways only. The R8-7 sign *should* be placed at random intervals of about 15 miles, generally being located just beyond the signing required after an interchange.

SLOWER TRAFFIC KEEP RIGHT

The R4-3 SLOWER TRAFFIC KEEP RIGHT sign may be used on multiple-lane roadways to reduce

unnecessary weaving. If used on conventional highways, it *should* be erected just beyond the beginning of a multiple-lane pavement and selected locations where there is a tendency on the part of the motorist to drive in the left-hand lane (or lanes) below the normal speed of traffic. If used on freeways and expressways, the sign **shall** be erected at random intervals of about 7 ½ miles, generally just beyond the signing required after an interchange. It *should* not be used on the approach to an interchange or through an interchange area. Successive signs **shall** be alternated between the median and the right-hand side of the roadway.

2-2-51 Except Right Turn Signals

March 2011

PURPOSE AND BACKGROUND

The RIGHT TURN NO STOP sign is occasionally used below a STOP sign for intersections where an engineering study indicates that right turns do not have to stop. Many of these intersections are in urban areas with high right turning traffic volumes and oftentimes have a lack of space to construct a pork chop island with a separated free flow right turn lane. FHWA has previously discouraged the usage of the RIGHT TURN NO STOP sign, and as a result the Department used it very sparingly after exhausting all other traffic control strategies.

The MUTCD now allows the usage of a supplemental plaque below a STOP sign at intersections that allow a right turn to free flow.

POLICY

The EXCEPT RIGHT TURN (R1-10P sign) is approved for usage on WisDOT maintained roadways, provided the following policy criteria are met:

- 1. An engineering study of the intersection is performed and it is determined that the geometrics and traffic volumes make it possible for free-flowing right turns.
- 2. Existing locations should be reviewed periodically to see if geometric conditions can be changed (upcoming improvement project) or if the traffic volumes are still applicable. Discussion with local officials may result in developing other control strategies. At some locations, it may be possible to install right-turn channelization.
- 3. RIGHT TURN NO STOP (R1-51) signs should be replaced with the EXCEPT RIGHT TURN (R1-10P) signs as opportunities permit (improvement projects, knockdown replacement and replacement due to age).

2-2-53 Signing for Flashing Yellow Arrow Traffic Signals

May 2021

PURPOSE AND BACKGROUND

The MUTCD allows the usage of a flashing yellow left turn arrow that is intended to provide a safer, more efficient left turn for motorists. National studies have indicated that drivers have fewer crashes with the flashing yellow left-turn arrow than with the traditional yielding left-turn indication.

FHWA has indicated that flashing yellow arrow educational signing for motorists is normally not needed, since the obvious intent of the flashing yellow arrow is to yield to oncoming motorists. This is the reason why no signing for flashing yellow arrows is included in the MUTCD. Previously, WisDOT has utilized signing for intersections because flashing yellow arrows were new to Wisconsin, and the signs aided in motorist education efforts. However, with continued expansion of the usage of flashing yellow arrow signals, the need for signs has been mitigated to the point where they are now only needed for locations with demonstrated operational and safety issues. This policy will address the installation of signing for flashing yellow arrow signals to address any problem areas.

QUALIFYING CRITERIA FOR SIGNING

The LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) sign has been designed for usage on WisDOT maintained roadways, provided the following policy criteria are met:

- The LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) sign, shall only be used for intersection locations with demonstrated operational or safety issues, per approval of the Region Traffic and Safety Engineer.
- 2. The LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) signs located at intersections that do not have operational or safety issues *should* be removed is opportunities permit (traffic signal work by electricians, corridor signing projects, knockdowns, etc.

GUIDELINES FOR FIELD INSTALLATION OF SIGNS

If signs are warranted at an intersection, the following guidelines should be utilized for installation:

- 1. <u>Primary choice</u> for mounting of the LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) sign is the far side overhead signal that has a flashing left yellow arrow indication.
- 2. <u>Secondary choice</u> for mounting of the LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) sign is the far side ground mounted signal that has a flashing left yellow arrow indication.
- 3. Third choice for mounting of the LEFT TURN YIELD ON FLASHING YELLOW ARROW (R10-50) sign is the near side ground mounted signal that has a flashing left yellow arrow indication.

2-2-54 Stop for School Bus Flashing Red Lights State Law Sign

September 2009

PURPOSE

Wisconsin State Statute <u>346.48</u> mandates that motorists approaching a school bus from the front or rear **shall** stop when the bus is displaying the flashing red lights. The exception to this is oncoming motorists would not have to stop if there is a physical separation in the median, as in the case of divided highways. Oftentimes, requests come to the WisDOT Region offices to install signs for areas where motorist compliance is problematic. Typically, these are areas where there are multiple school bus stops and the sight distance does not warrant the placement of the SCHOOL BUS STOP AHEAD (S3-1) warning sign. In the past, the STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW *R59-51) sign has been installed for these problem areas. However, due to a lack of statewide guidance, these signs have been used inconsistently.

MUTCD Section <u>2B.54</u> allows the customization of regulatory signs to aid in the enforcement of other laws or regulations. Therefore, the STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW (R59-51) sign has been designed to reinforce <u>Wisconsin State Statute 346.48</u> and aid law enforcement for problem areas. Listed below are criteria that *should* be followed when considering the placement of these signs.

DEFINITIONS

<u>Freeways</u> are defined as divided arterial highway facilities that have full controlled access, by means of grade separation at interchanges only.

<u>Expressways</u> are defined as divided or undivided roadway facilities that have partial control of access and generally with grade separations at major intersections.

<u>Conventional highways</u> are defined as divided or undivided roadway facilities that have limited access with no grade separations at intersections. These highways *may* be two-lane or multi-lane facilities.

POLICY

Below are policy criteria that *should* be applied when considering installations of the STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW (R-59-51) sign.

- 1. For installation of the STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW (R59-51) sign on expressways, TEOpS 2-3-55 should be followed.
- 2. If a specific school bus stop has a sight distance less than the minimum visibility distance for warning signs per the MUTCD, the SCHOOL BUS STOP AHEAD (S3-1) warning sign *should* be used.
- 3. The STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW (R59-51) sign *may* be used for segments of conventional highways that have the following criteria:
 - a. Multiple stops on a segment of roadway
 - b. Documented compliance problems exist,
 - c. Sight distance is not a factor that would not allow the use of warning signs for most of the stops in the segment of roadway.
- 4. If the STOP FOR SCHOOL BUS FLASHING RED LIGHTS STATE LAW (R59-51) sign is warranted, it should be installed at the beginning of the segment and *may* be repeated every five miles if the segment is greater than 5 miles or after major intersections (at the discretion of the Region Traffic Engineer).
- 5. In considering the usage of this sign, the Regions are encouraged to obtain a school bus route map or other information supplied by the school district to identify the locations of the stops. The Region *should* contact the school districts annually to determine where stops are no longer made so that signing can be adjusted accordingly.