



Traffic Guidelines Manual

ORIGINATOR State Traffic Engineer		2-3-30
CHAPTER 2	Signing	
SECTION 3	Warning Signs	
SUBJECT 30	Speed Reduction Signs (Reduced Speed Ahead)	

A. Purpose

This guidance is to establish the appropriate use and location of the speed reduction sign in relation to the speed limit sign for the lower speed zone. This policy pertains to signing on freeways, expressways, and conventional highways.

B. Background (Authority)

The [2009 MUTCD](#) in Section [2C-38](#) covers the usage of the Reduced Speed Limit Ahead sign (W3-5 sign). The 2009 MUTCD Wisconsin Supplement in Section 2C, Guidelines For Advanced Placement of Warning Signs, Table 2C-4, Condition B addresses the placement of advanced warning signs with minimum distances. However, based upon experience and from the establishment of a “comfortable braking distance”, these distance guidelines have been increased per the chart contained herein.

C. Policy

General Speed Reductions

A speed reduction sign (W3-5) **shall** be erected in advance of downward changes of the speed limit from 70, 65, 60, or 55 mph regardless of the amount of reduction, and from 50 mph or below for reductions of 15 mph or more. The speed reduction sign **shall not** be used for reductions of 10 mph or less for speeds of 50 mph or below.

School Speed Reductions

In accordance with [Section 7B.16](#) of the 2009 MUTCD, a Reduced School Speed Limit Ahead Sign (S4-5) should be installed in advance for reductions of 15 mph or more (from posted speed limit to school speed limit).

1. **Sign Spacing In Advance of Reduced Speed Zone.** Signs **shall** be placed to provide adequate time for the driver to perceive, identify, decide, and perform the speed reduction. The following table establishes the minimum distances to be

used for the speed reduction signs. The table was developed by modifying the distance chart for Advanced Placement of Warning Signs, Table 2C-4, Condition B of the 2009 MUTCD, (deceleration to listed advisory speed). The modifications provide more time for the driver to respond, as opposed to the warning signs when a driver is required to decelerate to a specific speed, based on a road condition. The increased distance between the speed reduction sign and the speed limit sign provides additional time to decelerate. This is consistent with the guidance in the 2009 MUTCD, Section 2C-5 which indicates the time necessary for Perception, Identification/understanding, Emotion/decision making, and Volition/execution of decision (PIEV) is higher for signs that involve more driver judgment, as opposed to warning signs. In particular, the comfortable braking distance and therefore the execution distance is being increased to the following:

SPEED REDUCTION SIGN DISTANCE IN ADVANCE OF SPEED LIMIT SIGN

MINIMUM DISTANCES (in feet)

From Speed Limit	To Speed Limit									
	65	55	50	45	40	35	30	25	20	15
70 -----	700	700	700							
65 -----		700	700	700	-	-	-	-	-	
60 -----		600	600	600	-	-	-	-	-	
55 -----	-		500	500	500	550	600	600	600	600
50 -----	-	-	-	-		550	550	600	600	600
45 -----	-	-	-	-			450	475	500	525
40 -----	-	-	-	-				425	450	475
35 -----	-	-	-	-					375	400
30 -----	-	-	-	-						325

2. **Sizes of Signs.** Size of signs **shall** be in accordance with TGM policy 2-1-35.

3. **Double Marking.** Double marking (right and left side) **shall** be employed for any reduction from 70 mph or 65 mph and *may* be employed for other speed limit reductions, especially on divided or multilane highways and for added emphasis. If a double marked Reduced Speed Ahead sign assembly (R2-5A and W13-1W signs) is replaced on one side of the roadway with a W3-5 Speed Reduction Sign, the R2-5A and W13-1W sign on the other side of the roadway **shall** also be replaced with a W3-5 Speed Reduction Sign.

4. **Phase in Period.** Signs *should* be adjusted to conform to this guideline when opportunities arise such as knockdown or damage, when other work is occurring nearby, or projects make removal practical.

5. **Work Zone Traffic Control Speed Limit and Reduced Speed Ahead Signs.** The spacing shown in this policy does not apply to Work Zone Traffic Control Speed limit changes. See the Work Zone Standard Detail Drawings for applicable requirements.