Rural Local Agency

Traffic Sign Upgrade Program

Guidelines

Prepared by:

Illinois Department of Transportation
Division of Highways
in cooperation with the
U.S. Department of Transportation
Federal Highway Administration

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RURAL LOCAL AGENCY TRAFFIC SIGN UPGRADE PROGRAM

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RURAL LOCAL AGENCY TRAFFIC SIGN UPGRADE PROGRAM GUIDELINES

I. INTRODUCTION

All installed traffic control devices must conform to the current *Manual on Uniform Traffic Control Devices for Streets and Highways* along with the *Illinois Supplement to the National Manual on Uniform Traffic Control Devices* (hereinafter referred to as MUTCD and the IL Supplement) and meet the traffic warrants stated therein. Section 11-305 of the Illinois Vehicle Code mandates conformance with the MUTCD and the IL Supplement. The Rural Local Agency Traffic Sign Upgrade Program provides federal and state funding to assist eligible local agencies in meeting this requirement (note: the obligation of funds for any fiscal year is subject to availability). To comply with this requirement, a physical inventory of all traffic signs must be conducted (see Attachment B.) The cost to conduct the inventory is the responsibility of the applicant agency. Chapter 39 of the Bureau of Local Roads Manual provides additional signing guidelines for local agencies and may be found online at BLRS Manual. The MUTCD also required that a sign assessment or management method be established by June 2014.

II. ELIGIBILITY

A. **Eligible Local Agencies:** Currently local agencies are invited annually to participate in this program based upon specific criteria including the number of fatal and serious injuries, rural mileage, and economic need in the county as measured by the Equalized Assessed Valuation (EAV). The eligible local agencies invited to participate can include municipalities with populations of 5,000 or less, counties, and townships. Once an agency has received funding, they will not be eligible to receive funding through this program for another 10 years.

B. **Items Eligible for Reimbursement:** The participating local agency may replace most existing warning or regulatory signs under their jurisdiction that do not meet the retroreflectivity requirements defined in the current MUTCD (all engineering grade signs are eligible for replacement), or install new warning or regulatory signs which enhance safety and are based upon crash data and safety analysis. Existing high intensity or prismatic signs less than 10 years old should be inspected, and those that are functioning in accordance with the current MUTCD and meet the reflectivity and visibility requirements are not eligible for replacement under this program.

Attachment C defines which types of signs are eligible for this program. All new signs shall meet the requirements of the current MUTCD and IL Supplement, and the sign face shall be high-intensity or prismatic sheeting. Engineer grade sheeting will not be allowed for new signs in this program, since they do not meet the proposed retroreflectivity requirements. Installation of the signs is the responsibility of the local agency and is not reimbursable through this program.

Mounting hardware and shipping costs are eligible for reimbursement under this program. Sign supports are an eligible item if the sign on it will be replaced (or if new signs are approved for installation), the post height or damage causes it to be insufficient in accordance with the requirements of the MUTCD, or it is not

considered breakaway. New tubular steel, telescoping steel no greater than 2.25 inches by 2.25 inches, U-channel, 4-inch by 4-inch wood, and 4-inch by 6-inch wood posts with the 6-inch side parallel to the roadway with appropriately drilled holes to ensure that the post is breakaway are allowed.

Signs and posts funded under this program must be used to replace existing deficient signs or approved new signs and be installed immediately. Additional signs stockpiled for future use are not eligible for reimbursement.

The total maximum cost any local agency can apply for is $25,000 for sign upgrades of existing inventory. Safety enhancement signage beyond the current inventory may be in addition to this maximum amount as justified by a benefit-cost analysis.

III. PARTICIPATION PROCESS

A. **How to Participate:** Local agencies will be invited annually to participate in the program based upon data analysis and identification of opportunity areas. Each eligible local agency must complete the Intent to Participate form (Attachment A) and submit it, via the county highway department, to the Illinois Department of Transportation (IDOT) District Bureau of Local Roads & Streets (BLRS) – see Attachment D. Submittal of this form denotes a commitment to participate in this program. IDOT will not provide any type of approval or notification upon receipt of the Intent to Participate forms; once the form is submitted, the local agency will begin the next steps in the program process (described in Parts II and III).

B. **Intent to Participate Due Date:** The due date to submit the Intent to Participate form is **October 24, 2014**. The form must be submitted by the deadline indicated in order to be considered for funding. The District BLRS will assist the local agency with any questions during preparation of their Intent to Participate and review the completed form prior to submittal to Central BLRS.

C. **Intent to Participate Form (Attachment A):** The instructions for completing this form are detailed in the following pages. The District BLRS personnel are available to answer questions pertaining to the preparation of the form.

1. **Participating Local Agency field:** The local agency intending to participate in the Sign Upgrade Program is required to enter its name and address on the application. The Taxpayer Identification Number (TIN) or the Federal Employer Identification Number (FEIN) is required in the appropriate space.

2. **Project Description field:** The project description is indicated on the Intent to Participate form as follows:

"Upgrade eligible signs (See Attachment C) and install new safety enhancement signs when applicable within the participating agency's jurisdiction, identified by sign inventory and/or a safety analysis, that do not conform to the current MUTCD requirements (including retroreflectivity). After the signing upgrades have been made, the local agency will continuously monitor and maintain their sign program."

3. **Agreement Conditions field**: This describes the terms and obligations to which the local agency agrees to comply. Local agency officials must assure compliance with all conditions.

4. **Estimated Local Agency Costs:** Please provide the anticipated project costs for the signs, posts, mounting hardware, and shipping costs using either Illinois Type A, AP, or AZ sheeting.

5. **Project Director field**: The person identified by the local agency to act as a liaison to the District and Central BLRS. Type in the name, title, address, telephone number, and email address or fax number. The assigned project director must sign and date the application in the space provided.

6. **Authorizing Official field**: The authorizing official is the person designated the authority to expend local funds (Village President, County Board Chairperson, Highway Commissioner, etc.). Type in the name, title, address, telephone number, and email address or fax number. The authorizing official must sign and date the application in the space provided.

IV. SIGN INVENTORY AND SAFETY ANALYSIS

After submittal of the Intent to Participate form, each local agency will then need to submit the following two items prior to entering into a joint funding agreement with IDOT:

A. Sign Inventory and Sign Assessment Method

A sign inventory and sign assessment or management method will need to be submitted to the District BLRS office.

The sign inventory will justify the replacement of existing signs. The sign inventory (see Attachment B example) must include the following information relative to existing signs:

- Location
- Size
- Condition
- Adequacy per MUTCD and the IL Supplement requirements
- MUTCD/IL Supplement Sign Number
- Reflectivity
- Visibility
- Post Condition

Attachment C includes tables from the MUTCD showing the warning and regulatory sign information, including code and size.

The sign assessment or management method shall comply with Section 2A.08 of the MUTCD (see Attachment D for two examples of sign management methods).

The District BLRS Office will review and approve the sign inventory and assessment/management method prior to execution of the joint funding

agreement. The District BLRS should send an approval letter to the applicable county with a copy to the Central BLRS.

B. Safety Enhancement Signs Analysis

Additional signs beyond those included in the current local agency inventory must be justified through a brief safety analysis (see attachment G example). This safety analysis should include the relevant inventory information listed above under Sign Inventory, along with the following applicable items:

- Problem description to be addressed by proposed sign enhancements
- Crash data review or analysis as a spot location or systematic approach
- Anticipated benefit and cost of the enhancements

Any safety analyses for new signage should be submitted electronically to Priscilla Tobias (Priscilla.Tobias@illinois.gov) in the Central Bureau of Safety Engineering for approval.

V. JOINT FUNDING AGREEMENT

After the District BLRS has approved the sign inventories for the eligible local agencies, and after any safety analyses have been approved by the Central Bureau of Safety Engineering, a joint funding agreement will need to be drafted between the lead local agency and IDOT (see Attachment H for the agreement format to be utilized). IDOT plans to enter into agreements with the county highway departments as the local agency sponsors. The cost estimates in the joint funding agreement should be based on the actual replacement needs; the estimate will also need to include the approved cost of adding new signs if applicable. The following should be included as attachments with the joint funding agreement:

A. **Material Estimate/Summary of Quantities:** This form should identify the number and type of signs, posts, and the reflective sheeting requested and estimated cost per agency. Form BLR 11510 may be used for this purpose (see Attachment F). Please note any non-participating signs and posts on this form. The summary of quantities needed for the upgrade project should detail the sign designation shown in the MUTCD and the IL Supplement. Please keep in mind when requesting weight limit or speed limit signs to denote the actual number designation that needs to be included on the sign. In addition, IDOT recommends that warning signs be 30-inch diamonds and that stop signs also be 30 inches.

B. **Local Agency Addenda:** Even though the county will be acting as the lead local agency sponsor for the joint funding agreement, all applicable local jurisdictions will need to sign specific addenda agreeing to the established conditions of the program (see Attachment H for the example addenda).

C. **Payment Addendum** (this is required only if the approved payment method differs from the options listed on the agreement form)

The county agreement, along with all local jurisdiction addenda, will be submitted to IDOT for final execution. Four original agreements, along with all required forms, must be sent to the District BLRS. The District will forward the copies to the Central BLRS for signature

by the Secretary of Transportation. Upon receiving the Secretary's signature, a copy of the executed agreement will be returned to the applicant local agency.

VI. FUNDING/PROGRAMMING

As lead agency, the county is responsible for the initial funding of the entire project. Funds will be reimbursed to the local agency in accordance with the agreement at 100% of *eligible* costs. Ninety percent (90%) of the funding is federal Highway Safety Improvement Program (HSIP) funds, and the remaining 10% is state safety matching funds.

The funding for each local agency will be capped at a not-to-exceed amount ($25,000 for existing signs and an approved amount for any new signs). Any amount over the capped amount and associated state match will be the responsibility of the local agency. In addition, any non-participating costs will also be the responsibility of the local agency. Separate intergovernmental agreements between the county and local agencies may be necessary to allow reimbursement to the county from local agencies that have received non-participating signs.

Since these funds are part of a statewide line item, no program revision is required, and there is no impact to the individual district program(s).

VII. LETTING

Local agencies will determine the appropriate method for procuring materials for reimbursement under this program in accordance with federal, state and local agency requirements. IDOT anticipates that most contracts will be through local material lettings (please refer to Chapter 24 of the Bureau of Local Roads and Streets Manual for the procedures to be followed for local material lettings involving federal funds). The material letting should occur within six months of the local agency receiving the executed joint funding agreement from IDOT. The signs should be installed within nine to twelve months of the local agency actually receiving the signs.

VIII. INVOICING

Once the contract has been awarded and the local agency has paid the supplier, the local agency can submit an invoice to Central BLRS for reimbursement.

IX. FINAL INSPECTION

Upon completion of all sign installations, the project director shall submit a letter of certification to the appropriate District BLRS office, with a carbon copy to Central BLRS, indicating that the agreement has been fulfilled and all signs and posts were installed and are in accordance with the current MUTCD and the IL Supplement. The District BLRS will ensure the work was performed and installations were completed.

ATTACHMENTS

A. Rural Local Agency Traffic Sign Upgrade Program Intent to Participate Form

B. Sign Inventory Instructions and 3 Sample Sign Inventories

C. Definition of Eligible Signs for Rural Local Agency Traffic Sign Upgrade Program and Tables from MUTCD with Warning and Regulatory Sign Information

D. Sign Assessment Information and 2 Examples

E. IDOT Regional/District Offices

F. MUTCD and Illinois Supplement Order Information

G. BLR 11510 Estimate of Cost form

H. Example Safety Enhancement Sign Analysis

I. Sample Joint Funding Agreement

ATTACHMENT A

Rural Local Agency Traffic Sign Upgrade Program
Intent to Participate

Fiscal Year: 2015 Participating Local Agency:_____

County: _____ **Address:** _____

TIN/FEIN: _____

Project Description:

Upgrade eligible signs (See Attachment C) and install new safety enhancement signs when applicable within the participating agency's jurisdiction, identified by sign inventory and/or a safety analysis, that do not conform to the current MUTCD requirements (including retroreflectivity). After the signing upgrades have been made, the local agency will continuously monitor and maintain their sign program.

Estimated Local Agency Costs:

Signs:_____ Posts:_____ Hardware:_____ Shipping & Handling: _____

Total Costs: _____

Project Director:

Name: _____

Title: _____

Address: _____

_____

Telephone: _____

E-mail: _____

Fax: _____

_____
Signature Date

Authorizing Official:

Name: _____

Title: _____

Address: _____

_____

Telephone: _____

E-mail: _____

Fax: _____

_____
Signature Date

ATTACHMENT B

Sign Inventory Instructions

1. Heading Information

a. **City/County/Township** - Municipality, county, or township name and quadrant designation, if the local agency is so divided, for inventory purposes.

b. **Street/Road Name** - All signs on the right-of-way of each street or road must be inventoried.

c. **Direction** - The direction traveled while recording data (N, S, E, or W).

d. **Date** - Day, month, and year the sign data is recorded.

e. **Maintenance Dates** - When adequacy or maintenance deficiencies are corrected.

f. **Maintenance Personnel** - Initials of who made the corrections.

2. Inventory Data

a. **Location** - An odometer reading, intersecting street or road name, house address, or rural reference number that identifies the sign's location along the subject street or road.

b. **Side of Street** - N, S, E or W.

c. **MUTCD/IL Supplement Sign Number** - The code number from the current adopted MUTCD and/or the IL Supplement may be viewed at the following IDOT link, Illinois MUTCD Manual. Section 11-304 of the Illinois Vehicle Code requires local authorities to place and maintain traffic control devices that conform to this State manual and are justified by traffic warrants stated in the manual. Signs not in the manual should be coded with a letter series other than R, W, S, D, I, G, M, or X (such as O-1, 2 ...for “other”) and described in "Remarks."

d. **Size** - The width and height of the sign face in inches. Diamond-shaped warning signs (W) are measured from the bottom to the side corners for height and width. Triangular signs (yield or R1-2) are also measured from the bottom to side corner for height, but width is the actual dimension of the top edge.

e. **Number in Assembly** - Numbered from left to right and from top to bottom, the first sign is coded as 1, the second as 2, etc.

f. **Reflectivity -** Whether the sign face reflects headlights at night. May be coded as **G**-good, **P**-poor, or **N**-no reflectivity and the method of assessment **Cal**-calibration, **Con Par**-consistent parameter, **Com Panel** – Comparison Panel, or **R**-retroreflectometer.

g. **Visibility** - Whether the sign is readily **V**-visible, **O**-obscured by trees and shrubbery, or completely **H**-hidden by buildings, signs, or other objects.

h. **Sign Condition** - Any change in the sign from its new conditions, such as 1-faded, 2-rusted, 3-bent, 4-peeling, 5-defaced, 6-missing, etc.

i. **Post Type (optional)** - The local agency may wish to record types of posts to compare lifetimes (such as P-steel pipe, U-steel channel, W-4x4" wood, etc.).

j. **Post Condition** - Any change in the post from its new condition, such as **B**-bent, **R**-rusted, **M**-missing.

k. **Maintenance** - This column is also coded in the office with the actions needed to bring the device back to its new condition. Codes are: 1-replace post, 2-replace sign face, 3-remove obscuring shrubbery, etc., and 0-sign and post are satisfactory.

SAMPLE INVENTORY 1

LOCAL AGENCY **SIGN INVENTORY**
Last updated:
Total Signs:

						Sign Placement				Sign Dimensions			Sign Inspection				Post Information			
Sign Inventory Number	Sign Description	MUTCD Code	Sheeting Type	Manufacture Date	Installation Date	Location	Horizontal (ft)	Vertical (ft)	Side of Street (N,E,W,S)	Width (in)	Height (in)	Area (ft^2)	Inspection Date	Retro-reflectivity	Visibility	Condition	Type	Number	Condition	Length (linear ft)

LOCAL AGENCY SIGN INVENTORY AND MAINTENANCE RECORDS

Sign Information

Sign Inventory #		Sign Type		MUTCD Code	
Purchase Date		Install Date		Replacement Date	
Street Name			Location		
Side of Street		Face Direction		Sheeting Type	
Warranty		Size		Sign Blank	
Horizontal Placement		Height		Post Type	

Inspection Record

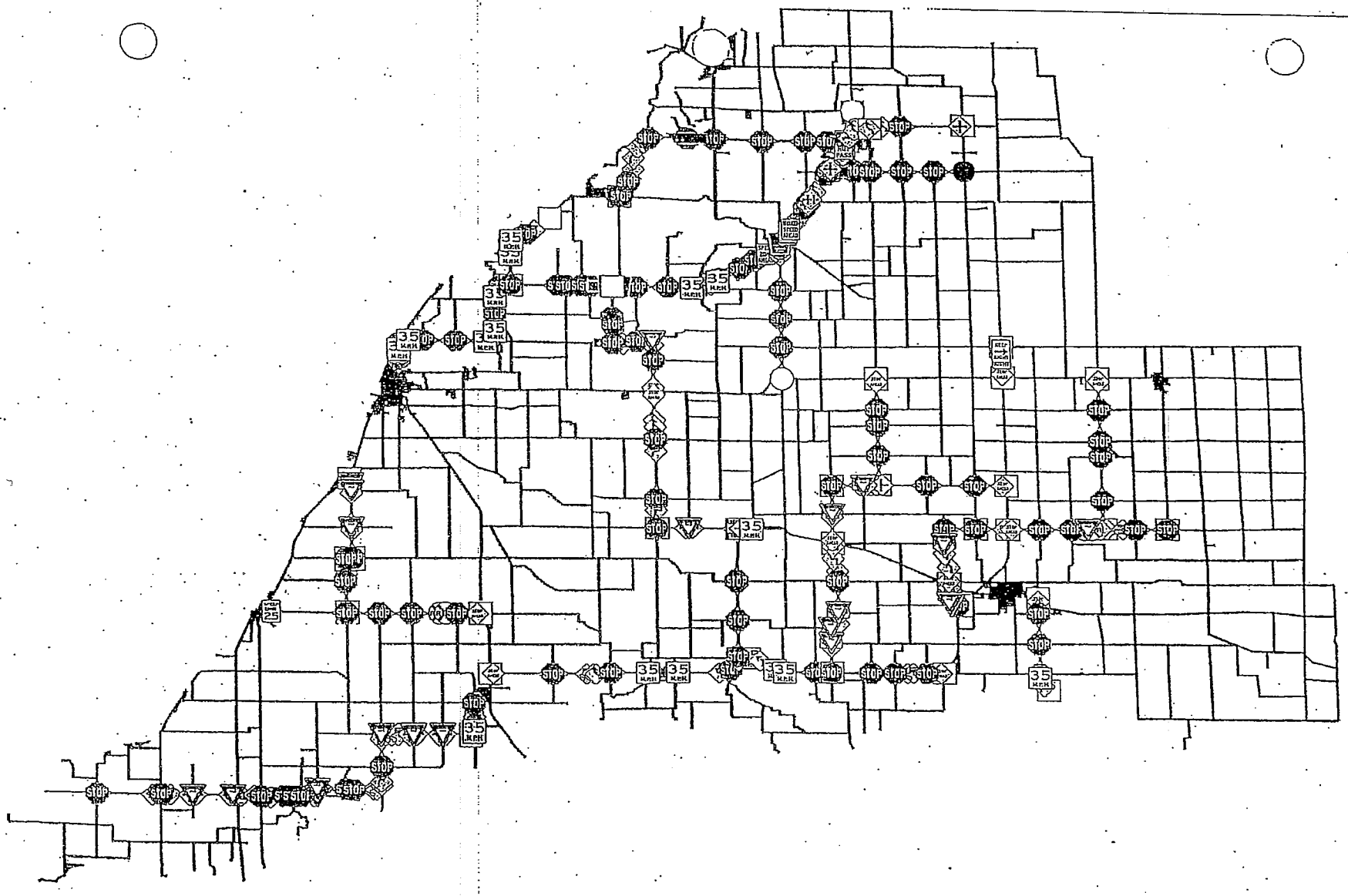
Date	Inspector	Type[1]	Visibility[2]	Retro-reflectivity[3]	Sign Condition[4]	Post Condition[5]	Action[6]

1 - N = Nighttime; M = Retroreflectometer; S = Statistical; C = Combination
2 - V = Visible; O = Obscured; H = Hidden
3 - G = Good; A = Adequate; P = Poor; N = No Reflectivity
4 - F = Faded; R = Rusted; B = Bent; P = Peeling; D = Defaced; M = Missing
5 - B = Bent; R = Rusted; M = Missing
6 - RSP = Replace Sign and Post; RS = Replace Sign; RP = Replace Post; E = Eliminate; W = Wash; C = Clear Foliage;

Maintenance Record

Date	Employee	Comments

All inspections and maintenance have been performed according to *Local Agency* sign management program.



Mason County Signs

Total Signs - 804
Regulatory - 306
Non Regulatory - 498

Mid-WestGIS

Mason County Signs

Mason County has a total of 306 Regulatory signs, and 498 Warning signs. The following is a breakdown of the signs:

10 MPH - 6
25 MPH - 1
30 MPH - 4
40 MPH - 40
45 MPH - 16
55 MPH - 2
Weight Limit - 36
Stop - 172
Yield - 29
Warning - 498

Reflectivity

There are currently 625 Engineering grade Signs in Mason County and 179 Retro-Reflective grade signs. The following signs are Retro-Reflective:

Stop - 140
Yield - 25
Warning - 14

Sign Condition

There are currently 7 signs that are in poor condition. The following signs are in poor condition:

Stop - 2
Yield - 1
Warning - 4

Summary:

There are 179 Retro-Reflective signs on Mason County roads, therefore the other 625 Regulatory and Warning signs will need to be replaced.

Cost:

The following are the estimated costs associated to replace the 625 Regulatory and Warning signs on Mason County roads:

Stop Signs – $45
Other Signs – $35
Post & Hardware - $35

32 Stop signs @ $45 each - $1,440
593 Other signs @ $35 each - $20,755
625 Post & Hardware @ $35 each - $21,875

Total Estimated Cost to Replace 625 signs - $44,070

ATTACHMENT C

Definition of Eligible Signs for Rural Local Agency Traffic Sign Upgrade Program

All standard regulatory and warning signs, object markers, and end of roadway markers conforming to the current edition of the national Manual on Uniform Traffic Control Devices (MUTCD) and the Illinois Supplement to the MUTCD not meeting the current retroreflectivity and/or legibility requirements are eligible ***except*** for the following:

- R5-3
- R5-7
- R5-10b and R5-10c
- R7, R8, and R9 series
- R10-1 through R10-4b
- Other warning and regulatory signs for use exclusively by pedestrians or cyclists
- Slow Children at Play symbol sign
- Other child text warning signs such as deaf child, autistic child, and blind child unless engineering study or school for disabled children results in a high volume of children with a certain disability being on or near a roadway
- Signs giving notice of regulations not primarily for traffic control such as NO DUMPING, NO SOLICITING WITHOUT PERMIT, etc.
- Signs within public parking lots specifically for traffic entering and exiting the lot.
- Temporary traffic control signs
- Signs or markers for maintenance stock
- Object markers and end of roadway markers containing individual retroreflectors

Existing eligible signs, which are smaller than required by the current MUTCD, shall be replaced with the proper size signs. The messages and/or symbols used for all replacement signs shall conform to current sign standards. The replacement of guide signs, including street name signs and county highway signs, is not considered as eligible through this program.

The MUTCD tables on the following eleven pages provide regulatory and warning sign information and requirements.

Table 2B-1. Regulatory Sign and Plaque Sizes (Sheet 1 of 4)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Stop	R1-1	2B.05	30 x 30*	36 x 36	36 x 36	—	30 x 30*	48 x 48
Yield	R1-2	2B.08	36x36x36*	48x48x48	48x48x48	60x60x60	30x30x30*	—
To Oncoming Traffic (plaque)	R1-2aP	2B.10	24 x 18	24 x 18	36 x 30	48 x 36	24 x 18	—
All Way (plaque)	R1-3P	2B.05	18 x 6	18 x 6	—	—	—	30 x 12
Yield Here to Peds	R1-5	2B.11	—	36 x 36	—	—	—	36 x 36
Yield Here to Pedestrians	R1-5a	2B.11	—	36 x 48	—	—	—	36 x 48
Stop Here for Peds	R1-5b	2B.11	—	36 x 36	—	—	—	36 x 36
Stop Here for Pedestrians	R1-5c	2B.11	—	36 x 48	—	—	—	36 x 48
In-Street Ped Crossing	R1-6,6a	2B.12	12 x 36	12 x 36	—	—	—	—
Overhead Ped Crossing	R1-9,9a	2B.12	90 x 24	90 x 24	—	—	—	—
Except Right Turn (plaque)	R1-10P	2B.05	24 x 18	24 x 18	—	—	—	—
Speed Limit	R2-1	2B.13	24 x 30*	30 x 36	36 x 48	48 x 60	18 x 24*	30 x 36
Truck Speed Limit (plaque)	R2-2P	2B.14	24 x 24	24 x 24	36 x 36	48 x 48	—	36 x 36
Night Speed Limit (plaque)	R2-3P	2B.15	24 x 24	24 x 24	36 x 36	48 x 48	—	36 x 36
Minimum Speed Limit (plaque)	R2-4P	2B.16	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
Combined Speed Limit	R2-4a	2B.16	24 x 48	24 x 48	36 x 72	48 x 96	—	36 x 72
Unless Otherwise Posted (plaque)	R2-5P	2B.13	24 x 18	24 x 18	—	—	—	—
Citywide (plaque)	R2-5aP	2B.13	24 x 6	24 x 6	—	—	—	—
Neighborhood (plaque)	R2-5bP	2B.13	24 x 6	24 x 6	—	—	—	—
Residential (plaque)	R2-5cP	2B.13	24 x 6	24 x 6	—	—	—	—
Fines Higher (plaque)	R2-6P	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	—	36 x 24
Fines Double (plaque)	R2-6aP	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	—	36 x 24
$XX Fine (plaque)	R2-6bP	2B.17	24 x 18	24 x 18	36 x 24	48 x 36	—	36 x 24
Begin Higher Fines Zone	R2-10	2B.17	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
End Higher Fines Zone	R2-11	2B.17	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
Movement Prohibition	R3-1,2,3,4,18,27	2B.18	24 x 24*	36 x 36	36 x 36	—	—	48 x 48
Mandatory Movement Lane Control	R3-5,5a	2B.20	30 x 36	30 x 36	—	—	—	—
Left Lane (plaque)	R3-5bP	2B.20	30 x 12	30 x 12	—	—	—	—
HOV 2+ (plaque)	R3-5cP	2B.20	24 x 12	24 x 12	—	—	—	—
Taxi Lane (plaque)	R3-5dP	2B.20	30 x 12	30 x 12	—	—	—	—
Center Lane (plaque)	R3-5eP	2B.20	30 x 12	30 x 12	—	—	—	—
Right Lane (plaque)	R3-5fP	2B.20	30 x 12	30 x 12	—	—	—	—
Bus Lane (plaque)	R3-5gP	2B.20	30 x 12	30 x 12	—	—	—	—
Optional Movement Lane Control	R3-6	2B.21	30 x 36	30 x 36	—	—	—	—
Right (Left) Lane Must Turn Right (Left)	R3-7	2B.20	30 x 30*	36 x 36	—	—	—	—
Advance Intersection Lane Control	R3-8,8a,8b	2B.22	Varies x 30	Varies x 30	—	—	—	Varies x 36
Two-Way Left Turn Only (overhead)	R3-9a	2B.24	30 x 36	30 x 36	—	—	—	—
Two-Way Left Turn Only (post-mounted)	R3-9b	2B.24	24 x 36	24 x 36	—	—	—	36 x 48
BEGIN	R3-9cP	2B.25	30 x 12	30 x 12	—	—	—	—
END	R3-9dP	2B.25	30 x 12	30 x 12	—	—	—	—
Reversible Lane Control (symbol)	R3-9e	2B.26	108 x 48	108 x 48	—	—	—	—
Reversible Lane Control (post-mounted)	R3-9f	2B.26	30 x 42*	36 x 54	—	—	—	—
Advance Reversible Lane Control Transition Signing	R3-9g,9h	2B.26	108 x 36	108 x 36	—	—	—	—
End Reverse Lane	R3-9i	2B.26	108 x 48	108 x 48	—	—	—	—
Begin Right (Left) Turn Lane	R3-20	2B.20	24 x 36	24 x 36	—	—	—	—
All Turns (U Turn) from Right Lane	R3-23,23a	2B.27	60 x 36	60 x 36	—	—	—	—
All Turns (U Turn) with arrow	R3-24,24b, 25,25b,26a	2B.27	72 x 18	72 x 18	—	—	—	—
U and Left Turns with arrow	R3-24a,25a,26	2B.27	60 x 24	60 x 24	—	—	—	—
Right Lane Must Exit	R3-33	2B.23	—	—	78 x 36	78 x 36	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes (Sheet 2 of 4)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Do Not Pass	R4-1	2B.28	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Pass With Care	R4-2	2B.29	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Slower Traffic Keep Right	R4-3	2B.30	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Trucks Use Right Lane	R4-5	2B.31	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
Keep Right	R4-7,7a,7b	2B.32	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Narrow Keep Right	R4-7c	2B.32	18 x 30	18 x 30	—	—	—	—
Keep Left	R4-8,8a,8b	2B.32	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Narrow Keep Left	R4-8c	2B.32	18 x 30	18 x 30	—	—	—	—
Stay in Lane	R4-9	2B.33	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Runaway Vehicles Only	R4-10	2B.34	48 x 48	48 x 48	—	—	—	—
Slow Vehicles with XX or More Following Vehicles Must Use Turn-Out	R4-12	2B.35	42 x 24	42 x 24	—	—	—	—
Slow Vehicles Must Use Turn-Out Ahead	R4-13	2B.35	42 x 24	42 x 24	—	—	—	—
Slow Vehicles Must Turn Out	R4-14	2B.35	30 x 42	30 x 42	—	—	—	—
Keep Right Except to Pass	R4-16	2B.30	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Drive on Shoulder	R4-17	2B.36	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Pass on Shoulder	R4-18	2B.36	24 x 30	24 x 30	36 x 48	48 x 60	18 x 24	36 x 48
Do Not Enter	R5-1	2B.37	30 x 30*	36 x 36	36 x 36	48 x 48	—	36 x 36
Wrong Way	R5-1a	2B.38	36 x 24*	42 x 30	36 x 24*	42 x 30	30 x 18*	42 x 30
No Trucks	R5-2,2a	2B.39	24 x 24	24 x 24	30 x 30	36 x 36	—	36 x 36
No Motor Vehicles	R5-3	2B.39	24 x 24	24 x 24	—	—	24 x 24	—
No Commercial Vehicles	R5-4	2B.39	24 x 30	24 x 30	36 x 48	36 x 48	—	—
No Vehicles with Lugs	R5-5	2B.39	24 x 30	24 x 30	36 x 48	48 x 60	—	—
No Bicycles	R5-6	2B.39	24 x 24	24 x 24	30 x 30	36 x 36	24 x 24	48 x 48
No Non-Motorized Traffic	R5-7	2B.39	30 x 24	30 x 24	42 x 24	48 x 30	—	42 x 24
No Motor-Driven Cycles	R5-8	2B.39	30 x 24	30 x 24	42 x 24	48 x 30	—	42 x 24
No Pedestrians, Bicycles, Motor-Driven Cycles	R5-10a	2B.39	30 x 36	30 x 36	—	—	—	—
No Pedestrians or Bicycles	R5-10b	2B.39	30 x 18	30 x 18	—	—	—	—
No Pedestrians	R5-10c	2B.39	24 x 12	24 x 12	—	—	—	—
Authorized Vehicles Only	R5-11	2B.39	30 x 24	30 x 24	—	—	—	—
One Way	R6-1	2B.40	36 x 12*	54 x 18	54 x 18	54 x 18	—	54 x 18
One Way	R6-2	2B.40	24 x 30*	30 x 36	36 x 48	48 x 60	18 x 24*	36 x 48
Divided Highway Crossing	R6-3,3a	2B.42	30 x 24	30 x 24	36 x 30	—	—	36 x 30
Roundabout Directional (2 chevrons)	R6-4	2B.43	30 x 24	30 x 24	—	—	—	—
Roundabout Directional (3 chevrons)	R6-4a	2B.43	48 x 24	48 x 24	—	—	—	—
Roundabout Directional (4 chevrons)	R6-4b	2B.43	60 x 24	60 x 24	—	—	—	—
Roundabout Circulation (plaque)	R6-5P	2B.44	30 x 30	30 x 30	—	—	—	—
BEGIN ONE WAY	R6-6	2B.40	24 x 30	30 x 36	—	—	—	—
END ONE WAY	R6-7	2B.40	24 x 30	30 x 36	—	—	—	—
Parking Restrictions	R7-1, 2,2a,3,4,5,6,7,8, 21,21a,22,23, 23a,107,108	2B.46	12 x 18	12 x 18	—	—	—	—
Van Accessible (plaque)	R7-8P	2B.46	18 x 9	18 x 9	—	—	—	—
Fee Station	R7-20	2B.46	24 x 18	24 x 18	—	—	—	—
No Parking (with transit logo)	R7-107a	2B.46	12 x 30	12 x 30	—	—	—	—
No Parking/Restricted Parking (combined sign)	R7-200	2B.46	24 x 18	24 x 18	—	—	—	—
No Parking/Restricted Parking (combined sign)	R7-200a	2B.46	12 x 30	12 x 30	—	—	—	—
Tow Away Zone (plaque)	R7-201P,201aP	2B.46	12 x 6	12 x 6	—	—	—	—
This Side of Sign (plaque)	R7-202P	2B.46	12 x 6	12 x 6	—	—	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes (Sheet 3 of 4)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Emergency Snow Route	R7-203	2B.46	18 x 24	18 x 24	—	—	—	24 x 30
No Parking on Pavement	R8-1	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
No Parking Except on Shoulder	R8-2	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
No Parking (symbol)	R8-3	2B.46	24 x 24*	30 x 30	36 x 36	48 x 48	12 x 12*	36 x 36
No Parking	R8-3a	2B.46	24 x 30	24 x 30	36 x 36	48 x 48	18 x 24	36 x 36
Except Sundays and Holidays (plaque)	R8-3bP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
On Pavement (plaque)	R8-3cP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
On Bridge (plaque)	R8-3dP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
On Tracks (plaque)	R8-3eP	2B.46	12 x 9	12 x 9	—	—	—	30 x 24
Except on Shoulder (plaque)	R8-3fP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
Loading Zone (plaque)	R8-3gP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
Times of Day (plaque)	R8-3hP	2B.46	24 x 18	24 x 18	—	—	12 x 9	30 x 24
Emergency Parking Only	R8-4	2B.49	30 x 24	30 x 24	30 x 24	48 x 36	—	48 x 36
No Stopping on Pavement	R8-5	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
No Stopping Except on Shoulder	R8-6	2B.46	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
Emergency Stopping Only	R8-7	2B.49	30 x 24	30 x 24	48 x 36	48 x 36	—	48 x 36
Walk on Left Facing Traffic	R9-1	2B.50	18 x 24	18 x 24	—	—	—	—
Cross Only at Crosswalks	R9-2	2B.51	12 x 18	12 x 18	—	—	—	—
No Pedestrian Crossing (symbol)	R9-3	2B.51	18 x 18	18 x 18	24 x 24	30 x 30	—	30 x 30
No Pedestrian Crossing	R9-3a	2B.51	12 x 18	12 x 18	—	—	—	—
Use Crosswalk (plaque)	R9-3bP	2B.51	18 x 12	18 x 12	—	—	—	—
No Hitchhiking (symbol)	R9-4	2B.50	18 x 18	18 x 18	—	—	—	24 x 24
No Hitchhiking	R9-4a	2B.50	18 x 24	18 x 24	—	—	12 x 18	—
No Skaters	R9-13	2B.39	18 x 18	18 x 18	24 x 24	30 x 30	—	30 x 30
No Equestrians	R9-14	2B.39	18 x 18	18 x 18	24 x 24	30 x 30	—	30 x 30
Cross Only On Green	R10-1	2B.52	12 x 18	12 x 18	—	—	—	—
Pedestrian Signs and Plaques	R10-2, 3,3b,3c,3d,4	2B.52	9 x 12	9 x 12	—	—	—	—
Pedestrian Signs	R10-3a,3e,3f, 3g,3h,3i,4a	2B.52	9 x 15	9 x 15	—	—	—	—
Left on Green Arrow Only	R10-5	2B.53	30 x 36	30 x 36	48 x 60	—	24 x 30	48 x 60
Stop Here on Red	R10-6	2B.53	24 x 36	24 x 36	—	—	—	36 x 48
Stop Here on Red	R10-6a	2B.53	24 x 30	24 x 30	—	—	—	36 x 42
Do Not Block Intersection	R10-7	2B.53	24 x 30	24 x 30	—	—	—	—
Use Lane with Green Arrow	R10-8	2B.53	36 x 42	36 x 42	36 x 42	—	—	60 x 72
Left (Right) Turn Signal	R10-10	2B.53	30 x 36	30 x 36	—	—	—	—
No Turn on Red	R10-11	2B.54	24 x 30*	36 x 48	—	—	—	36 x 48
No Turn on Red	R10-11a	2B.54	30 x 36*	36 x 48	—	—	—	—
No Turn on Red	R10-11b	2B.54	36 x 36	36 x 36	—	—	—	—
No Turn on Red Except From Right Lane	R10-11c	2B.54	30 x 42	30 x 42	—	—	—	—
No Turn on Red From This Lane	R10-11d	2B.54	30 x 42	30 x 42	—	—	—	—
Left Turn Yield on Green	R10-12	2B.53	30 x 36	30 x 36	—	—	—	—
Emergency Signal	R10-13	2B.53	42 x 30	42 x 30	—	—	—	—
Emergency Signal - Stop on Flashing Red	R10-14	2B.53	36 x 42	36 x 42	—	—	—	—
Emergency Signal - Stop on Flashing Red (overhead)	R10-14a	2B.53	60 x 24	60 x 24	—	—	—	—
Turning Vehicles Yield to Peds	R10-15	2B.53	30 x 30	30 x 30	—	—	—	—
U-Turn Yield to Right Turn	R10-16	2B.53	30 x 36	30 x 36	—	—	—	—
Right on Red Arrow After Stop	R10-17a	2B.54	36 x 48	36 x 48	—	—	—	—
Traffic Laws Photo Enforced	R10-18	2B.55	36 x 24	36 x 24	48 x 30	54 x 36	—	54 x 36
Photo Enforced (symbol plaque)	R10-19P	2B.55	24 x 12	24 x 12	36 x 18	48 x 24	—	48 x 24
Photo Enforced (plaque)	R10-19aP	2B.55	24 x 18	24 x 18	36 x 30	48 x 36	—	48 x 36
MON—FRI (and times) (3 lines) (plaque)	R10-20aP	2B.53	24 x 24	24 x 24	—	—	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes (Sheet 4 of 4)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
SUNDAY (and times) (2 lines) (plaque)	R10-20aP	2B.53	24 x 18	24 x 18	—	—	—	—
Crosswalk, Stop on Red	R10-23	2B.53	24 x 30	24 x 30	—	—	—	—
Push Button To Turn On Warning Lights	R10-25	2B.52	9 x 12	9 x 12	—	—	—	—
Left Turn Yield on Flashing Red Arrow After Stop	R10-27	2B.53	30 x 36	30 x 36	—	—	—	—
XX Vehicles Per Green	R10-28	2B.56	24 x 30	24 x 30	—	—	—	—
XX Vehicles Per Green Each Lane	R10-29	2B.56	36 x 24	36 x 24	—	—	—	—
Right Turn on Red Must Yield to U-Turn	R10-30	2B.54	30 x 36	30 x 36	—	—	—	—
At Signal (plaque)	R10-31P	2B.53	24 x 9	24 x 9	—	—	—	—
Push Button for 2 Seconds for Extra Crossing Time	R10-32P	2B.52	9 x 12	9 x 12	—	—	—	—
Keep Off Median	R11-1	2B.57	24 x 30	24 x 30	—	—	—	—
Road Closed	R11-2	2B.58	48 x 30	48 x 30	—	—	—	—
Road Closed - Local Traffic Only	R11-3a,3b,4	2B.58	60 x 30	60 x 30	—	—	—	—
Weight Limit	R12-1,2	2B.59	24 x 30	24 x 30	36 x 48	—	—	36 x 48
Weight Limit	R12-3	2B.59	24 x 36	24 x 36	—	—	—	—
Weight Limit	R12-4	2B.59	36 x 24	36 x 24	—	—	—	—
Weight Limit	R12-5	2B.59	24 x 36	24 x 36	36 x 48	48 x 60	—	—
Weigh Station	R13-1	2B.60	72 x 54	72 x 54	96 x 72	120 x 90	—	—
Truck Route	R14-1	2B.61	24 x 18	24 x 18	—	—	—	—
Hazardous Material	R14-2,3	2B.62	24 x 24	24 x 24	30 x 30	36 x 36	—	42 x 42
National Network	R14-4,5	2B.63	30 x 30	30 x 30	36 x 36	36 x 36	—	42 x 42
Fender Bender Move Vehicles	R16-4	2B.65	36 x 24	36 x 24	48 x 36	60 x 48	—	48 x 36
Lights On When Using Wipers or Raining	R16-5,6	2B.64	24 x 30	24 x 30	36 x 48	48 x 60	—	36 x 48
Turn On Headlights Next XX Miles	R16-7	2B.64	48 x 15	48 x 15	72 x 24	96 x 30	—	72 x 24
Turn On, Check Headlights	R16-8,9	2B.64	30 x 15	30 x 15	48 x 24	60 x 30	—	48 x 24
Begin, End Daytime Headlight Section	R16-10,11	2B.64	48 x 15	48 x 15	72 x 24	96 x 30	—	72 x 24

* See Table 9B-1 for minimum size required for signs on bicycle facilities

Notes: 1. Larger signs may be used when appropriate
2. Dimensions in inches are shown as width x height

07 **Where side roads intersect a multi-lane street or highway that has a speed limit of 45 mph or higher, the minimum size of the STOP signs facing the side road approaches, even if the side road only has one approach lane, shall be 36 x 36 inches.**

08 **Where side roads intersect a multi-lane street or highway that has a speed limit of 40 MPH or lower, the minimum size of the STOP signs facing the side road approaches shall be as shown in the Single Lane or Multi-lane columns of Table 2B-1 based on the number of approach lanes on the side street approach.**

Guidance:

09 *The minimum sizes for regulatory signs facing traffic on exit and entrance ramps should be as shown in the column of 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 minimum size in the Expressway column should be used. If a minimum size is not provided in the Freeway or Expressway Column, the size in the Oversized column should be used.*

Section 2B.04 Right-of-Way at Intersections

Support:

01 State or local laws written in accordance with the "Uniform Vehicle Code" (see Section 1A.11) establish the right-of-way rule at intersections having no regulatory traffic control signs such that the driver of a vehicle approaching an intersection must yield the right-of-way to any vehicle or pedestrian already in the intersection.

Table 2C-2. Warning Sign and Plaque Sizes (Sheet 1 of 3)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Horizontal Alignment	W1-1,2,3,4,5	2C.07	30 x 30*	36 x 36	36 x 36	36 x 36	—	48 x 48
Combination Horizontal Alignment/Advisory Speed	W1-1a,2a	2C.10	36 x 36	36 x 36	48 x 48	48 x 48	—	48 x 48
One-Direction Large Arrow	W1-6	2C.12	48 x 24	48 x 24	60 x 30	60 x 30	—	60 x 30
Two-Direction Large Arrow	W1-7	2C.47	48 x 24	48 x 24	—	—	—	60 x 30
Chevron Alignment	W1-8	2C.09	18 x 24	18 x 24	30 x 36	36 x 48	—	24 x 30
Combination Horizontal Alignment/Intersection	W1-10,10a, 10b,10c,10d, 10e	2C.11	36 x 36	36 x 36	36 x 36	48 x 48	—	—
Hairpin Curve	W1-11	2C.07	30 x 30	30 x 30	36 x 36	48 x 48	—	48 x 48
Truck Rollover	W1-13	2C.13	36 x 36	36 x 36	36 x 36	48 x 48	—	36 x 36
270-degree Loop	W1-15	2C.07	30 x 30	30 x 30	36 x 36	48 x 48	—	48 x 48
Intersection Warning	W2-1, 2,3,4,5,6,7,8	2C.46	30 x 30	30 x 30	36 x 36	—	24 x 24	48 x 48
Advanced Traffic Control	W3-1,2,3	2C.36	30 x 30	30 x 30	48 x 48	48 x 48	30 x 30	—
Be Prepared to Stop	W3-4	2C.36	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30	—
Reduced Speed Limit Ahead	W3-5	2C.38	36 x 36	36 x 36	48 x 48	48 x 48	—	—
XX MPH Speed Zone Ahead	W3-5a	2C.38	36 x 36	36 x 36	48 x 48	48 x 48	—	—
Draw Bridge	W3-6	2C.39	36 x 36	36 x 36	48 x 48	—	—	60 x 60
Ramp Meter Ahead	W3-7	2C.37	36 x 36	36 x 36	—	—	—	—
Ramp Metered When Flashing	W3-8	2C.37	36 x 36	36 x 36	—	—	—	—
Merge	W4-1	2C.40	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Lane Ends	W4-2	2C.42	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Added Lane	W4-3	2C.41	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Cross Traffic Does Not Stop (plaque)	W4-4P	2C.59	24 x 12	24 x 12	36 x 18	—	—	48 x 24
Traffic From Left (Right) Does Not Stop (plaque)	W4-4aP	2C.59	24 x 12	24 x 12	36 x 18	—	—	48 x 24
Oncoming Traffic Does Not Stop (plaque)	W4-4bP	2C.59	24 x 12	24 x 12	36 x 18	—	—	48 x 24
Entering Roadway Merge	W4-5	2C.40	36 x 36	36 x 36	48 x 48	—	—	—
No Merge Area (plaque)	W4-5P	2C.40	18 x 24	18 x 24	24 x 30	—	—	—
Entering Roadway Added Lane	W4-6	2C.41	36 x 36	36 x 36	48 x 48	—	—	—
Road Narrows	W5-1	2C.19	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Narrow Bridge	W5-2	2C.20	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
One Lane Bridge	W5-3	2C.21	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Divided Highway	W6-1	2C.22	36 x 36	36 x 36	48 x 48	48 x 48	—	—
Divided Highway Ends	W6-2	2C.23	36 x 36	36 x 36	48 x 48	48 x 48	—	—
Two-Way Traffic	W6-3	2C.44	36 x 36	36 x 36	48 x 48	48 x 48	—	—
Hill	W7-1	2C.16	30 x 30*	36 x 36	36 x 36	36 x 36	24 x 24*	48 x 48
Hill with Grade	W7-1a	2C.16	30 x 30*	36 x 36	36 x 36	36 x 36	24 x 24*	48 x 48
Use Low Gear (plaque)	W7-2P	2C.57	24 x 18	24 x 18	—	—	—	—
Trucks Use Lower Gear (plaque)	W7-2bP	2C.57	24 x 18	24 x 18	—	—	—	—
XX% Grade (plaque)	W7-3P	2C.57	24 x 18	24 x 18	—	—	—	—
Next XX Miles (plaque)	W7-3aP	2C.55	24 x 18	24 x 18	—	—	—	—
XX% Grade, XX Miles (plaque)	W7-3bP	2C.57	24 x 18	24 x 18	—	—	—	—
Runaway Truck Ramp XX Miles	W7-4	2C.17	78 x 48	78 x 48	78 x 48	78 x 48	—	—
Runaway Truck Ramp (with arrow)	W7-4b	2C.17	78 x 60	78 x 60	78 x 60	78 x 60	—	—
Truck Escape Ramp	W7-4c	2C.17	78 x 60	78 x 60	78 x 60	78 x 60	—	—
Sand, Gravel, Paved (plaques)	W7-4dP, 4eP,4fP	2C.17	24 x 12	24 x 12	24 x 12	24 x 12	—	—
Hill Blocks View	W7-6	2C.18	30 x 30*	36 x 36	36 x 36	—	—	48 x 48
Bump or Dip	W8-1,2	2C.28	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48

Table 2C-2. Warning Sign and Plaque Sizes (Sheet 2 of 3)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Pavement Ends	W8-3	2C.30	36 x 36	36 x 36	48 x 48	—	30 x 30*	—
Soft Shoulder	W8-4	2C.31	36 x 36	36 x 36	48 x 48	48 x 48	24 x 24*	48 x 48
Slippery When Wet	W8-5	2C.32	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Road Condition (plaques)	W8-5P,5bP,5cP	2C.32	24 x 18	24 x 18	30 x 24	36 x 30	—	36 x 30
Ice	W8-5aP	2C.32	24 x 12	24 x 12	30 x 18	30 x 18	—	—
Truck Crossing	W8-6	2C.49	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Loose Gravel	W8-7	2C.32	36 x 36	36 x 36	36 x 36	—	24 x 24*	48 x 48
Rough Road	W8-8	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Low Shoulder	W8-9	2C.31	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Uneven Lanes	W8-11	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	—	48 x 48
No Center Line	W8-12	2C.34	36 x 36	36 x 36	36 x 36	48 x 48	—	—
Bridge Ices Before Road	W8-13	2C.32	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Fallen Rocks	W8-14	2C.32	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Grooved Pavement	W8-15	2C.33	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Motorcycle (plaque)	W8-15P	2C.33	24 x 18	24 x 18	30 x 24	36 x 30	—	36 x 30
Metal Bridge Deck	W8-16	2C.33	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Drop Off (symbol)	W8-17	2C.31	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Drop-Off (plaque)	W8-17P	2C.31	24 x 18	24 x 18	30 x 24	36 x 30	—	36 x 30
Road May Flood	W8-18	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Flood Gauge	W8-19	2C.35	12 x 72	12 x 72	—	—	—	—
Gusty Winds Area	W8-21	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Fog Area	W8-22	2C.35	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
No Shoulder	W8-23	2C.31	36 x 36	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Shoulder Ends	W8-25	2C.31	30 x 30*	36 x 36	36 x 36	48 x 48	24 x 24*	48 x 48
Left (Right) Lane Ends	W9-1	2C.42	36 x 36	36 x 36	36 x 36	48 x 48	30 x 30*	48 x 48
Lane Ends Merge Left (Right)	W9-2	2C.42	36 x 36	36 x 36	36 x 36	48 x 48	30 x 30*	48 x 48
Right (Left) Lane Exit Only Ahead	W9-7	2C.43	132 x 72	132 x 72	132 x 72	132 x 72	—	—
Bicycle	W11-1	2C.49	30 x 30	30 x 30	36 x 36	—	24 x 24*	48 x 48
Pedestrian	W11-2	2C.50	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Large Animals	W11-3,4,16,17,18,19,20,21,22	2C.50	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Farm Vehicle	W11-5,5a	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Snowmobile	W11-6	2C.50	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Equestrian	W11-7	2C.50	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Emergency Vehicle	W11-8	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Handicapped	W11-9	2C.50	30 x 30*	36 x 36	36 x 36	—	—	48 x 48
Truck	W11-10	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Golf Cart	W11-11	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Emergency Signal Ahead (plaque)	W11-12P	2C.49	36 x 30	36 x 30	36 x 30	—	—	—
Horse-Drawn Vehicle	W11-14	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Bicycle / Pedestrian	W11-15	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Trail Crossing	W11-15a	2C.49	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Trail X-ing (plaque)	W11-15P	2C.49	24 x 18	24 x 18	30 x 24	—	—	36 x 30
Double Arrow	W12-1	2C.25	30 x 30*	36 x 36	36 x 36	—	—	—
Low Clearance (with arrows)	W12-2	2C.27	36 x 36	36 x 36	48 x 48	48 x 48	30 x 30*	—
Low Clearance	W12-2a	2C.27	78 x 24	78 x 24	—	—	—	—
Advisory Speed (plaque)	W13-1P	2C.08	18 x 18	18 x 18	24 x 24	30 x 30	—	30 x 30
Advisory Exit or Ramp Speed	W13-2,3	2C.14	24 x 30	24 x 30	36 x 48	36 x 48	—	48 x 60
Combination Horizontal Alignment/Advisory Exit or Ramp Speed	W13-6,7	2C.15	24 x 42	24 x 42	36 x 60	36 x 60	—	48 x 84
Dead End, No Outlet	W14-1,2	2C.26	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48

Table 2C-2. Warning Sign and Plaque Sizes (Sheet 3 of 3)

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
Dead End, No Outlet (with arrow)	W14-1a,2a	2C.26	36 x 8	36 x 8	—	—	—	—
No Passing Zone (pennant)	W14-3	2C.45	48 x 48 x 36	48 x 48 x 36	—	—	40 x 40 x 30	64 x 64 x 48
Playground	W15-1	2C.51	30 x 30*	36 x 36	36 x 36	—	24 x 24*	48 x 48
Share the Road (plaque)	W16-1P	2C.60	18 x 24	18 x 24	24 x 30	—	—	24 x 30
XX Feet	W16-2P	2C.55	24 x 18	24 x 18	—	—	—	30 x 24
XX Ft	W16-2aP	2C.55	24 x 12	24 x 12	—	—	—	30 x 18
XX Miles (2-line plaque)	W16-3P	2C.55	30 x 24	30 x 24	—	—	—	—
XX Miles (1-line plaque)	W16-3aP	2C.55	30 x 12	30 x 12	—	—	—	—
Next XX Feet (plaque)	W16-4P	2C.55	30 x 24	30 x 24	—	—	—	—
Supplemental Arrow (plaque)	W16-5P,6P	2C.56	24 x 18	24 x 18	—	—	—	—
Downward Diagonal Arrow (plaque)	W16-7P	2C.50	24 x 12	24 x 12	—	—	—	30 x 18
Advance Street Name (1-line plaque)	W16-8P	2C.58	Varies x 8	Varies x 8	—	—	—	—
Advance Street Name (2-line plaque)	W16-8aP	2C.58	Varies x 15	Varies x 15	—	—	—	—
Ahead (plaque)	W16-9P	2C.50	24 x 12	24 x 12	30 x 18	—	—	—
Photo Enforced (symbol plaque)	W16-10P	2C.61	24 x 12	24 x 12	36 x 18	—	—	48 x 24
Photo Enforced (plaque)	W16-10aP	2C.61	24 x 18	24 x 18	36 x 30	—	—	48 x 36
HOV (plaque)	W16-11P	2G.09	24 x 12	24 x 12	30 x 18	—	—	30 x 18
Traffic Circle (plaque)	W16-12P	2C.46	24 x 18	24 x 18	—	—	—	—
When Flashing (plaque)	W16-13P	2C.50	24 x 18	24 x 18	—	—	—	—
New (plaque)	W16-15P	2C.62	24 x 12	24 x 12	—	—	—	—
Roundabout (plaque)	W16-17P	2C.46	24 x 12	24 x 12	—	—	—	—
NOTICE	W16-18P	2A.15	24 x 12	24 x 12	—	—	—	—
Speed Hump	W17-1	2C.29	30 x 30*	36 x 36	—	—	24 x 24*	48 x 48
Freeway Ends XX Miles	W19-1	2C.24	—	—	—	144 x 48	—	—
Expressway Ends XX Miles	W19-2	2C.24	—	—	144 x 48	—	—	—
Freeway Ends	W19-3	2C.24	—	—	—	48 x 48	—	—
Expressway Ends	W19-4	2C.24	—	—	48 x 48	—	—	—
All Traffic Must Exit	W19-5	2C.24	—	—	90 x 48	90 x 48	—	—
New Traffic Pattern Ahead	W23-2	2C.52	36 x 36	36 x 36	—	—	—	—
Traffic Signal Extended Green	W25-1,2	2C.48	24 x 30	24 x 30	—	—	—	—

* The minimum size required for diamond-shaped warning signs facing traffic on multi-lane conventional roads shall be 36 x 36 per Section 2C.04

Notes: 1. Larger signs may be used when appropriate
2. Dimensions in inches are shown as width x height

Support:

02 Section 2A.11 contains information regarding the applicability of the various columns in Table 2C-2.

Standard:

03 **Except as provided in Paragraph 5, the minimum size for all diamond-shaped warning signs facing traffic on a multi-lane conventional road where the posted speed limit is higher than 35 mph shall be 36 x 36 inches.**

04 **The minimum size for supplemental warning plaques that are not included in Table 2C-2 shall be as shown in Table 2C-3.**

Table 2C-3. Minimum Size of Supplemental Warning Plaques

Size of Warning Sign	Size of Supplemental Plaque			
	Rectangular			Square
	1 Line	2 Lines	Arrow	
24 x 24	24 x 12	24 x 18	24 x 12	18 x 18
30 x 30				
36 x 36	30 x 18	30 x 24	30 x 18	24 x 24
48 x 48				

Notes: 1. Larger supplemental plaques may be used when appropriate
2. Dimensions in inches are shown as width x height

Option:

05 If a diamond-shaped warning sign is placed on the left-hand side of a multi-lane roadway to supplement the installation of the same warning sign on the right-hand side of the roadway, the minimum size identified in the Single Lane column in Table 2C-2 may be used.

CHAPTER 7B. SIGNS

Section 7B.01 Size of School Signs

Standard:

01 **Except as provided in Section 2A.11, the sizes of signs and plaques to be used on conventional roadways in school areas shall be as shown in Table 7B-1.**

02 **The sizes in the Conventional Road column shall be used unless engineering judgment determines that a minimum or oversized sign size would be more appropriate.**

03 **The sizes in the Minimum column shall be used only where traffic volumes are low and speeds are 30 mph or lower, as determined by engineering judgment.**

04 **The sizes in the Oversized column shall be used on expressways.**

Guidance:

05 *The sizes in the Oversized column should be used on roadways that have four or more lanes with posted speed limits of 40 mph or higher.*

Option:

06 The sizes in the Oversized column may also be used at other locations that require increased emphasis, improved recognition, or increased legibility.

07 Signs and plaques larger than those shown in Table 7B-1 may be used (see Section 2A.11).

Table 7B-1. School Area Sign and Plaque Sizes

Sign	Sign Designation	Section	Conventional Road	Minimum	Oversized
School	S1-1	7B.08	36 x 36	30 x 30	48 x 48
School Bus Stop Ahead	S3-1	7B.13	36 x 36	30 x 30	48 x 48
School Bus Turn Ahead	S3-2	7B.14	36 x 36	30 x 30	48 x 48
Reduced School Speed Limit Ahead	S4-5, S4-5a	7B.16	36 x 36	30 x 30	48 x 48
School Speed Limit XX When Flashing	S5-1	7B.15	24 x 48	—	36 x 72
End School Zone	S5-2	7B.09	24 x 30	—	36 x 48
End School Speed Limit	S5-3	7B.15	24 x 30	—	36 x 48
In-Street Ped Crossing	R1-6, R1-6a, R1-6b, R1-6c	7B.11, 7B.12	12 x 36	—	—
Speed Limit (School Use)	R2-1	7B.15	24 x 30	—	36 x 48
Begin Higher Fines Zone	R2-10	7B.10	24 x 30	—	36 x 48
End Higher Fines Zone	R2-11	7B.10	24 x 30	—	36 x 48

Plaque	Sign Designation	Section	Conventional Road	Minimum	Oversized
X:XX to X:XX AM X:XX to X:XX PM	S4-1P	7B.15	24 x 10	—	36 x 18
When Children Are Present	S4-2P	7B.15	24 x 10	—	36 x 18
School	S4-3P	7B.09, 7B.15	24 x 8	—	36 x 12
When Flashing	S4-4P	7B.15	24 x 10	—	36 x 18
Mon-Fri	S4-6P	7B.15	24 x 10	—	36 x 18
All Year	S4-7P	7B.09	24 x 12	—	30 x 18
Fines Higher	R2-6P	7B.10	24 x 18	—	36 x 24
XX Feet	W16-2P	7B.08	24 x 18	—	30 x 24
XX Ft	W16-2aP	7B.08	24 x 12	—	30 x 18
Turn Arrow	W16-5P	7B.08, 7B.09, 7B.11	24 x 12	—	30 x 18
Advance Turn Arrow	W16-6P	7B.08, 7B.09, 7B.11	24 x 12	—	30 x 18
Diagonal Arrow	W16-7P	7B.12	24 x 12	—	30 x 18
Diagonal Arrow (optional size)	W16-7P	7B.12	21 x 15	—	—
Ahead	W16-9P	7B.11	24 x 12	—	30 x 18

Note: 1. Larger sizes may be used when appropriate
2. Dimensions are shown in inches and are shown as width x height
3. Minimum sign sizes for multi-lane conventional roads shall be as shown in the Conventional Road column

Standard:

07 **Except as provided in Paragraphs 11 and 12, neither individual LEDs nor groups of LEDs shall be placed within the background area of a sign.**

08 **If used, the LEDs shall have a maximum diameter of 1/4 inch and shall be the following colors based on the type of sign:**

- **A. White or red, if used with STOP or YIELD signs.**
- **B. White, if used with regulatory signs other than STOP or YIELD signs.**
- **C. White or yellow, if used with warning signs.**
- **D. White, if used with guide signs.**
- **E. White, yellow, or orange, if used with temporary traffic control signs.**
- **F. White or yellow, if used with school area signs.**

09 **If flashed, all LED units shall flash simultaneously at a rate of more than 50 and less than 60 times per minute.**

10 **The uniformity of the sign design shall be maintained without any decrease in visibility, legibility, or driver comprehension during either daytime or nighttime conditions.**

Option:

11 For STOP and YIELD signs, LEDs may be placed within the border or within one border width within the background of the sign.

12 For STOP/SLOW paddles (see Section 6E.03) used by flaggers and the STOP paddles (see Section 7D.05) used by adult crossing guards, individual LEDs or groups of LEDs may be used.

Support:

13 Other methods of enhancing the conspicuity of standard signs are described in Section 2A.15.

14 Information regarding the use of retroreflective material on the sign support is contained in Section 2A.21.

Section 2A.08 Maintaining Minimum Retroreflectivity

Support:

01 Retroreflectivity is one of several factors associated with maintaining nighttime sign visibility (see Section 2A.22).

Standard:

02 **Public agencies or officials having jurisdiction shall use an assessment or management method that is designed to maintain sign retroreflectivity at or above the minimum levels in Table 2A-3.**

Support:

03 Compliance with the Standard in Paragraph 2 is achieved by having a method in place and using the method to maintain the minimum levels established in Table 2A-3. Provided that an assessment or management method is being used, an agency or official having jurisdiction would be in compliance with the Standard in Paragraph 2 even if there are some individual signs that do not meet the minimum retroreflectivity levels at a particular point in time.

Guidance:

04 *Except for those signs specifically identified in Paragraph 6, one or more of the following assessment or management methods should be used to maintain sign retroreflectivity:*

- *A. Visual Nighttime Inspection—The retroreflectivity of an existing sign is assessed by a trained sign inspector conducting a visual inspection from a moving vehicle during nighttime conditions. Signs that are visually identified by the inspector to have retroreflectivity below the minimum levels should be replaced.*
- *B. Measured Sign Retroreflectivity—Sign retroreflectivity is measured using a retroreflectometer. Signs with retroreflectivity below the minimum levels should be replaced.*
- *C. Expected Sign Life—When signs are installed, the installation date is labeled or recorded so that the age of a sign is known. The age of the sign is compared to the expected sign life. The expected sign life is based on the experience of sign retroreflectivity degradation in a geographic area compared to the minimum levels. Signs older than the expected life should be replaced.*
- *D. Blanket Replacement—All signs in an area/corridor, or of a given type, should be replaced at specified intervals. This eliminates the need to assess retroreflectivity or track the life of individual signs. The replacement interval is based on the expected sign life, compared to the minimum levels, for the shortest-life material used on the affected signs.*

Table 2A-3. Minimum Maintained Retroreflectivity Levels[1]

Sign Color	Sheeting Type (ASTM D4956-04)				Additional Criteria
	Beaded Sheeting			Prismatic Sheeting	
	I	II	III	III, IV, VI, VII, VIII, IX, X	
White on Green	W*; G ≥ 7	W*; G ≥ 15	W*; G ≥ 25	W ≥ 250; G ≥ 25	Overhead
	W*; G ≥ 7	W ≥ 120; G ≥ 15			Post-mounted
Black on Yellow or Black on Orange	Y*; O*	Y ≥ 50; O ≥ 50			[2]
	Y*; O*	Y ≥ 75; O ≥ 75			[3]
White on Red	W ≥ 35; R ≥ 7				[4]
Black on White	W ≥ 50				–

[1] The minimum maintained retroreflectivity levels shown in this table are in units of cd/lx/m^2 measured at an observation angle of 0.2° and an entrance angle of -4.0°.
[2] For text and fine symbol signs measuring at least 48 inches and for all sizes of bold symbol signs
[3] For text and fine symbol signs measuring less than 48 inches
[4] Minimum sign contrast ratio ≥ 3:1 (white retroreflectivity ÷ red retroreflectivity)
* This sheeting type shall not be used for this color for this application.

Bold Symbol Signs

• W1-1,2 – Turn and Curve • W1-3,4 – Reverse Turn and Curve • W1-5 – Winding Road • W1-6,7 – Large Arrow • W1-8 – Chevron • W1-10 – Intersection in Curve • W1-11 – Hairpin Curve • W1-15 – 270 Degree Loop • W2-1 – Cross Road • W2-2,3 – Side Road • W2-4,5 – T and Y Intersection • W2-6 – Circular Intersection • W2-7,8 – Double Side Roads	• W3-1 – Stop Ahead • W3-2 – Yield Ahead • W3-3 – Signal Ahead • W4-1 – Merge • W4-2 – Lane Ends • W4-3 – Added Lane • W4-5 – Entering Roadway Merge • W4-6 – Entering Roadway Added Lane • W6-1,2 – Divided Highway Begins and Ends • W6-3 – Two-Way Traffic • W10-1,2,3,4,11,12 – Grade Crossing Advance Warning	• W11-2 – Pedestrian Crossing • W11-3,4,16-22 – Large Animals • W11-5 – Farm Equipment • W11-6 – Snowmobile Crossing • W11-7 – Equestrian Crossing • W11-8 – Fire Station • W11-10 – Truck Crossing • W12-1 – Double Arrow • W16-5P,6P,7P – Pointing Arrow Plaques • W20-7 – Flagger • W21-1 – Worker

Fine Symbol Signs (symbol signs not listed as bold symbol signs)

Special Cases

- W3-1 – Stop Ahead: Red retroreflectivity ≥ 7
- W3-2 – Yield Ahead: Red retroreflectivity ≥ 7; White retroreflectivity ≥ 35
- W3-3 – Signal Ahead: Red retroreflectivity ≥ 7; Green retroreflectivity ≥ 7
- W3-5 – Speed Reduction: White retroreflectivity ≥ 50
- For non-diamond shaped signs, such as W14-3 (No Passing Zone), W4-4P (Cross Traffic Does Not Stop), or W13-1P,2,3,6,7 (Speed Advisory Plaques), use the largest sign dimension to determine the proper minimum retroreflectivity level.

E. Control Signs—Replacement of signs in the field is based on the performance of a sample of control signs. The control signs might be a small sample located in a maintenance yard or a sample of signs in the field. The control signs are monitored to determine the end of retroreflective life for the associated signs. All field signs represented by the control sample should be replaced before the retroreflectivity levels of the control sample reach the minimum levels.

F. Other Methods—Other methods developed based on engineering studies can be used.

Support:

05 Additional information about these methods is contained in the 2007 Edition of FHWA's "Maintaining Traffic Sign Retroreflectivity" (see Section 1A.11).

Option:

06 Highway agencies may exclude the following signs from the retroreflectivity maintenance guidelines described in this Section:

A. Parking, Standing, and Stopping signs (R7 and R8 series)
B. Walking/Hitchhiking/Crossing signs (R9 series, R10-1 through R10-4b)
C. Acknowledgment signs
D. All signs with blue or brown backgrounds
E. Bikeway signs that are intended for exclusive use by bicyclists or pedestrians

Maintaining Minimum Retroreflectivity – Expected Sign Life

The Manual on Uniform Traffic Control Devices (MUTCD) Section 2A.08 requires public agencies or officials having jurisdiction of signs shall use an assessment or management method that is designed to maintain sign retroreflectivity at or above the minimum levels in MUTCD Table 2A-3. Compliance with this requirement is achieved by having a method in place and using the method to maintain the minimum levels established in MUTCD Table 2A-3 by July 2014. Provided that an assessment or management method is being used, an agency or official having jurisdiction would be in compliance even if there are some individual signs that do not meet the minimum retroreflectivity levels at a particular point in time.

Therefore, this public agency and officials have determined that the Expected Sign Life (ESL) Management Method shall be used to meet the MUTCD requirements. A sign inventory is available that contains an inventory number, sign type, MUTCD designation, location, size, sheeting type, manufactured date, installation date, and removal date for all signs under jurisdiction of this public agency.

Based on recommendation from the Illinois Department of Transportation Circular Letter 2010-03 issued on May 26, 2012, the following parameters will be used:

- High Intensity Prismatic Sheeting will be used for all signs;
- The time between manufactured date and installation date will not exceed 2 years; and
- All signs will be replaced within 15 years of the installation date.

Routine day time sign inspections will continue to ensure signs are present, undamaged, and visible. Maintenance records will be kept for each sign in the inventory.

MEETING MUTCD MINIMUM MAINTAINED RETROREFLECTIVITY STANDARDS ON THE STATE HIGHWAY SYSTEM

General

Chapter 2 of the MUTCD requires signs to be maintained at minimum retroreflectivity standards and requires agencies to adopt one of several assessment or management methods to ensure compliance. On the state highway system, compliance shall be achieved by use of the Blanket Replacement method based upon a 15-year expected sign life for prismatic sheeting. This eliminates the need to assess retroreflectivity or track the life of individual signs. The MUTCD language recognizes that there may be some individual signs that do not meet the minimum retroreflectivity levels at a particular point in time. However, as long as an agency is maintaining signs in accordance with Section 2A.08 of the MUTCD, the FHWA will consider the agency to be in compliance.

After signs have been removed and shipped to the Central Sign Shop for recycling, random samples will be pulled and submitted to the Bureau of Materials and Physical Research. These samples will then be tested to assure the minimum retroreflectivity values are being met. Further, it will give the Department an opportunity to determine if a longer life expectancy can be achieved.

Conventional Highways

Each district shall replace all signs within one or more counties or along one or more entire routes each year so that every sign within the district is replaced on a 15-year cycle. The method adopted, by county or by route, shall be uniform within a district.

Damaged or deteriorated signs should continue to be repaired as needed. However, they still must be replaced at the same time as the county or route undergoes blanket replacement regardless of their anticipated remaining life. While this will result in some signs being replaced before their anticipated life expectancy is reached, the "waste" will be countered by savings in fuel and personnel costs achieved with blanket replacement.

When the replacement is scheduled the existing signs should be reviewed to ensure the messages and sizes conform to the latest MUTCD requirements and the signs continue to be required.

Freeways

Replacement and/or overlaying of guide and service signs on the Interstate system and on full-freeways constructed to Interstate standards will be scheduled and handled separately by the Highway Sign Shop so that each sign is replaced at least every 15 years.

Standard signs on freeways and freeway ramps are to be included with the blanket replacement of signs on conventional highways to be coordinated by the appropriate district.

ATTACHMENT E

Illinois Department of Transportation Regional/District Offices

District 1 – Region 1	Address
Cook, DuPage, Kane, Lake, McHenry, Will	201 West Center Court Schaumburg, Illinois 60196 Phone: (847) 705-4201
District 2 – Region 2	**Address**
Boone, Carroll, Henry, JoDaviess, Lee, Ogle, Rock Island, Stephenson, Whiteside, Winnebago	819 Depot Avenue Dixon, Illinois 61021 (815) 284-5380
District 3 – Region 2	**Address**
Bureau, DeKalb, Ford, Grundy, Iroquois, Kankakee, Kendall, LaSalle, Livingston	700 East Norris Drive Ottawa, Illinois 61350 (815) 434-8402
District 4 – Region 3	**Address**
Fulton, Henderson, Knox, Marshall, McDonough, Mercer, Peoria, Putnam, Stark, Tazewell, Warren, Woodford	401 Main Street Peoria, Illinois 61602 (309) 671-3690
District 5 – Region 3	**Address**
Champaign, DeWitt, Douglas, Edgar, McLean, Piatt, Vermilion	13473 IL Hwy. 133 P. O. Box 610 Paris, Illinois 61944 (217) 466-7252
District 6 – Region 4	**Address**
Adams, Brown, Cass, Christian, Hancock, Logan, Macoupin, Mason, Menard, Montgomery, Morgan, Pike, Sangamon, Schuyler, Scott,	126 East Ash Street Springfield, Illinois 62704 (217) 782-4690
District 7 – Region 4	**Address**
Clark, Clay, Coles, Crawford, Cumberland, Edwards, Effingham, Fayette, Jasper, Lawrence, Macon, Moultrie, Richland, Shelby, Wabash, Wayne	400 West Wabash Avenue Effingham, Illinois 62401 (217) 342-8321
District 8 – Region 5	**Address**
Bond, Calhoun, Clinton, Greene, Jersey, Madison, Marion, Monroe, Randolph, St. Clair, Washington	1102 Eastport Plaza Drive Collinsville, Illinois 62234 (618) 346-3330
District 9 – Region 5	**Address**
Alexander, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Massac, Perry, Pope, Pulaski, Saline, Union, White, Williamson	State Transportation Building 2801 West Murphysboro Road P.O. Box 100 Carbondale, Illinois 62903 (618) 351-5260

ATTACHMENT F

Manual on Uniform Traffic Control Devices (MUTCD) and Illinois Supplement (IL Supplement) Order Information

TO ORDER:

The **2009 Edition of the National MUTCD for Streets and Highways** may be viewed on the Federal Highway Administration website at http://mutcd.fhwa.dot.gov/. Hard copies of the MUTCD may be purchased from various national associations such as the American Association of State Highway Transportation Officials (AASHTO), Institute of Transportation Engineers (ITE), and American Traffic Safety Services Association (ATSSA).

TO ORDER:

The **IL Supplement** to the 2009 MUTCD may be viewed on the IDOT website at Illinois Supplemental MUTCD.

Local agencies are encouraged to download or print a copy of the Illinois Supplement to the MUTCD. However, a limited number of copies are available to local agencies, at no charge, if they do not have Internet access. The copies are available from the Technology Transfer Center at the address or phone number shown below.

ILLINOIS DEPARTMENT OF TRANSPORTATION
Bureau of Local Roads and Streets
Technology Transfer Center
2300 South Dirksen Parkway
Springfield, Illinois 62764

or call (217) 785-5048

ATTACHMENT G

Illinois Department of Transportation

Route ______________
County ______________
Local Agency ______________
Section ______________

(Construction) Estimate of Cost

Location and brief description (Sta. and land description of beginning; Sta. only for end for county and road districts; street limits for municipality.)

____
____
____
____

Total Project Length	
Net Length	

Surface Type	
Width	

Shoulder Type	
Width	

Bridge or Culvert

Length	
Width	

Item Number	Items	Unit	Quantity	Unit Price	Total Cost
	CARRIED FORWARD				

☐ Page Total ☐ Total Estimated Cost

Made by ______________________ Date ____________

Checked by ______________________ Date ____________

BLR 11510 (Rev. 7/05

ATTACHMENT H

Example Safety Enhancement Sign Analysis

1. Proposed Safety Enhancement: Installation of new chevron signs (W1-8) at twelve curve locations throughout county as shown on the enclosed county map.

2. Crash Data Analysis and Problem Description: In the past 5 years (2002-2007), roadway departure crashes at curve locations with no chevron signage have resulted in 4 fatal and 6 A-injury crashes as shown. These crashes occurred at 3 curve locations in the county; however, this safety enhancement is a proactive-systematic approach to 12 curve locations with similar site characteristics.

3. Anticipated Benefit and Cost: Chevron signs have a proven crash reduction factor of over 40% for roadway departure crashes at curves. The cost for signs, posts and hardware will be approximately $800 per location for a total cost of $9,600. This low cost safety improvement is likely to substantially reduce fatal and serious injury crashes at these locations.

ATTACHMENT I

Illinois Department of Transportation	Local Agency	State Contract	Day Labor	Local Contract	RR Force Account
Local Agency Agreement for Federal Participation	X County			X	
	Section	Fund Type		ITEP Number	
	09-12345-00-SG	HSIP			

Construction		Engineering		Right-of-Way	
Job Number	Project Number	Job Number	Project Number	Job Number	Project Number
C-91-123-45	HSI-0123(123)				

This Agreement is made and entered into between the above local agency hereinafter referred to as the "**LA**" and the state of Illinois, acting by and through its Department of Transportation, hereinafter referred to as "**STATE**". The **STATE** and **LA** jointly propose to improve the designated location as described below. The improvement shall be constructed in accordance with plans approved by the **STATE** and the **STATE**'s policies and procedures approved and/or required by the Federal Highway Administration hereinafter referred to as "**FHWA**".

Location

Local Name Various Route Various Length N/A

Termini Countywide

Current Jurisdiction Each local agency is responsible for its own jurisdiction Existing Structure No N/A

Project Description

Upgrade eligible existing signs within the participating agency jurisdiction, identified by sign inventory, that do not conform to the current MUTCD requirements (including retroreflectivity). When applicable, to also add new warning and regulatory signs as approved based on a benefit-cost analysis.

Division of Cost

Type of Work	FHWA	%	STATE	%	LA	%	Total
Participating Construction		( )		(10)		(BAL)	
Non-Participating Construction		( )		( )		( )	
Preliminary Engineering		( )		( )		( )	
Construction Engineering		( )		( )		( )	
Right of Way		( )		( )		( )	
Railroads		( )		( )		( )	
Utilities		( )		( )		( )	
Materials	206,919	(90)	22,991	(10)		( )	229,910
TOTAL	$ 206,919		$ 22.991		$		$ 229,910

The total expenditure for each local agency cannot exceed $25,000 for the upgrade of existing signs; any amount over the $25,000 will be the responsibility of the local agency

[*Use this only when applicable*: "The amount approved for new signage cannot exceed $XXX."]

NOTE: The costs shown in the Division of Cost table are approximate and subject to change. The final **LA** share is dependent on the final Federal and State participation. The actual costs will be used in the final division of cost for billing and reimbursment.

If funding is not a percentage of the total, place an asterisk in the space provided for the percentage and explain above.

The Federal share of construction engineering may not exceed 15% of the Federal share of the final construction cost.

Local Agency Appropriation

By execution of this Agreement, the **LA** is indicating sufficient funds have been set aside to cover the local share of the project cost and additional funds will be appropriated, if required, to cover the **LA**'s total cost.

Method of Financing (State Contract Work)

METHOD A---Lump Sum (80% of **LA** Obligation) _____

METHOD B--- _____ Monthly Payments of _____

METHOD C---**LA**'s Share _____ divided by estimated total cost multiplied by actual progress payment.

Section #: xx-xxxxx-xx-SG
Job #: C-91-xxx-xx
Project #: HSIP-
X County

Addendum 1
Additional Terms

In addition to the terms of the standard joint agreement, the Local Agency (LA) agrees to the following requirements:

1. The LA will ensure that all signs will be installed in accordance with the requirements of the current Manual on Uniform Traffic Control Devices (MUTCD) and the Illinois Supplement to the MUTCD. The state will not be required to perform any engineering regarding whether or not a particular type of sign should be installed on any route under the LA's jurisdiction for this program.

2. The LA will be responsible to determine the number of posts and length required for each location where the post will be replaced. The LA shall ensure the post heights and the distance of signs from the edge of pavement shall meet the requirements of the current MUTCD.

3. The LA agrees to install signs and posts, at their own expense, using the following materials:

   Signs – High-intensity or prismatic sheeting should be used. Engineer-grade sheeting shall not be used for this program.

   Posts – Tubular steel, telescoping steel no greater than 2.25 inches by 2.25 inches, U-channel, 4-inch by 4-inch wood, and 4-inch by 6-inch wood posts with the 6-inch side parallel to the roadway with appropriately drilled holes to ensure that the post is breakaway are allowed. All new posts shall be made breakaway.

4. The LA agrees not to stockpile signs in this program for future use.

5. The LA agrees to ensure that the material letting occurs within 6 months of the local agency receiving the executed joint funding agreement from IDOT and that all new signs are installed within 9-12 months of actually receiving the signs. The LA will submit a letter to the applicable District Local Roads office, with a carbon copy to Central BLRS, certifying that sign installation is complete.

6. After the sign upgrades have been made through this program, the LA will be responsible for continuously monitoring and maintaining their sign program.

The LAs agree, accept and will comply with applicable provisions set forth in this Agreement and all addenda.

A Road Commissioner
John Smith

D Road Commissioner
John Jones

B Road Commissioner
Joe Smith

E Road Commissioner
Joe Jones

C Road Commissioner
Bill Smith

F Road Commissioner
Bill Jones

The LAs agree, accept and will comply with applicable provisions set forth in this Agreement and all addenda.

A Village President John Smith	D Village President John Smith
B Village President Jane Smith	E Village President Jane Jones
C Village President Joe Smith	F Village Clerk Joe Jones