



Louisiana Local Road Traffic Sign Handbook for Parishes and Small Communities



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Chapter 1: Introduction

Definitions

The following terms are used in this Handbook to refer to specific documents.

- **MUTCD - (Manual on Uniform Traffic Control Devices.)** The term refers to the general concept of the Manual on Uniform Traffic Control Devices. When used in the Handbook, it refers to the National MUTCD.
- **National MUTCD - (2009 National Manual on Uniform Traffic Control Devices for Streets and Highways.)** Specifically refers to the nationwide set of standards published by the Federal Highway Administration (FHWA) under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.
<http://mutcd.fhwa.dot.gov/index.htm>
- **SHSM - (Standard Highway Signs and Markings Book.)** This book, published by the Federal Highway Administration, contains the actual sign and marking layouts for specific traffic control devices in the National MUTCD.
http://mutcd.fhwa.dot.gov/ser-shs_millennium.htm
- **Handbook - (Traffic Sign and Pavement Markings Handbook for Local Roads.)** This handbook.



How to use this Handbook

This Handbook provides guidance for solving many traffic problems encountered on local roads. Cross-references to the National MUTCD are included herein, and it should be consulted whenever this Handbook does not describe the exact situation at hand. The MUTCD describes all approved traffic control devices and their proper use. This fosters uniformity throughout the State and Nation. A driver who sees a particular traffic control device should expect the same conditions and be prepared to take the same action whether he or she is on a town road in the City of Shreveport or on an expressway in New Orleans. This is the goal of uniform traffic control devices.

To foster this uniformity, federal law prohibits municipalities from purchasing or fabricating signs that do not conform to the current MUTCD or any amendments. Compliance dates for signs that are on hand, in place, or on order when a new revision is adopted are contained in the National MUTCD. Existing signs **shall** be brought into compliance with the MUTCD as part of a systematic upgrading and installation of traffic control devices. The newest version with the latest amendments of the national MUTCD should be checked to make sure that material contained in this Handbook has not been changed.

Every effort has been made to ensure that this Handbook is consistent with the MUTCD. However, in using only those parts of the MUTCD that have information that applies to “normal” situations on local roads, some situations have necessarily been left out. If the conditions in this Handbook do not fit your traffic situation, or if there is any question about the applicability of the Handbook to a particular situation, consult the MUTCD and/or a knowledgeable engineer. Assistance may be obtained through your LADOTD District office in your area, your LTAP center, or a traffic engineering consultant.

English units are used for all measurements in this Handbook.



Positive guidance

Positive guidance suggests that competent drivers can be given appropriate information about hazards in order to avoid errors. Positive guidance means designing the road and its surroundings in such a way that drivers have the information they need when they need it in order to make the right decision. Too much or too little information, or information that is provided too soon or too late, can confuse drivers and cause safety problems. Positive guidance should be considered when determining the need for and placement of traffic control devices.

Meanings of “Shall”, “Should”, and “May”

As used in this Handbook, the words “shall,” “should,” and “may” have the following standard meanings:

- **SHALL** — A mandatory condition. Requirements having “shall” stipulations are **MANDATORY** unless there is documentation by engineering study stating otherwise. It is acceptable to exceed the minimum standards. Items marked as “shall” are typically included as a **STANDARD** in the MUTCD.
- **SHOULD** — A recommended practice. Where “should” is used, the suggestion is recommended, and normally is to be followed, but is not mandatory. Deviation from such provision is permissible if, and to the extent that, there is justifiable cause to do so. The reasons for any deviation should be documented and filed for future reference. Items marked as “should” are typically included as **GUIDANCE** in the MUTCD.
- **MAY** — A permissive condition. No requirement for design or application is intended, but such provisions are intended to help improved uniformity when implemented. Items marked as “may” are typically included as an **OPTION** in the MUTCD. The MUTCD contains additional information and background details not included in this handbook. When available, the background information is usually included in a **SUPPORT** section.



Documentation

In every case, write down an explanation of the sign installation, what you did about it, and why. Be sure to document why you were unable to meet the requirements of a “shall” or “should” condition. Also document that you followed the MUTCD. This will be particularly helpful if a lawsuit arises years later involving the traffic control device.

Authority

Section 1A.07 of the National MUTCD states that “The responsibility for the design, placement, operation, maintenance, and uniformity of traffic control devices **shall** rest with the public agency or the official having jurisdiction, or, in the case of private roads open to public travel, with the private owner or private official having jurisdiction.” The local agency should determine the need to authorize, place and maintain traffic control devices necessary to satisfy legal requirements and to promote the safe, efficient flow of traffic. Traffic control devices placed under this authority must conform to other statutes and the MUTCD.

In other words: If the road is open to the public, the MUTCD SHALL be followed!

Statutory mandates

Louisiana state laws will be referenced throughout this document. This is not an inclusive list of all laws, always consult with your attorney.



Basic considerations

For a traffic control device to be effective, it should meet these basic principles:

- Fulfill a need
- Command attention
- Convey a clear, simple meaning
- Command respect
- Give adequate time for response

If a traffic control device does not meet these basic needs, it might be ignored, misunderstood, overlooked, or otherwise not meet the need it is meant to fulfill. To this end, there are certain basic requirements for the use and placement of traffic control devices:

DESIGN. The features of standard road signs, such as color, contrast, shape, and legend, are intended to draw attention to the signs and make them easy to recognize. The legend and size of the sign need to make it legible from far enough away that the motorist can react in time. Minor modifications are permitted to fit a specific situation, as long as they do not alter the basic meaning of the sign or make it more difficult to read.

When there is a symbol sign in the National MUTCD, it should be used. If there is a text equivalent, it may be used, but the symbol sign is preferred. Symbols used on signs **shall** come from the MUTCD. No new symbols **shall** be created without permission. See 2009 MUTCD page 28 paragraph 9 for further information.

“... Symbols and colors shall not be modified unless otherwise provided in this Manual. All symbols and colors for signs not shown in the “Standard Highway Signs and Markings” book shall follow the procedures for experimentation and change described in Section 1A.10.”



PLACEMENT. A sign should be placed where it will attract attention. It should be placed in a location where a driver has enough time to see the sign, understand it, decide what to do, and perform that action. Signs should be placed where they do not create hazards or maintenance problems.

OPERATION. Devices with moving parts, lights, etc. must operate as prescribed in the MUTCD. This ensures consistency with similar devices throughout the country.

MAINTENANCE. Faded and damaged signs lose visibility, and might not be noticed or heeded. Retroreflectivity is often lost before the color has faded, so a sign that is legible by daylight may be illegible at night. Signs should be regularly inventoried during daylight and night time hours and deficient signs should be replaced promptly.

UNIFORMITY. This is important so that a driver from anywhere in the country can come to your community and understand the intent of your traffic control devices. It is also important for members of your community when they travel. Signs that do not conform to the MUTCD should be replaced with ones that do. Signs that have been deleted or changed from previous editions of the MUTCD **shall** be removed or replaced as prescribed in the MUTCD.



Types of signs

REGULATORY SIGNS inform road users of traffic regulations and laws. They are used to control vehicle, bicycle, and pedestrian movements. They include stop signs, parking signs, speed limits, etc. Regulations cannot be enforced unless the proper signs are in place. Regulatory signs can be used to remind drivers of statutory rules, but statutory rules do not need to be signed to be enforced. For example, it is illegal to park a vehicle in front of a fire hydrant, whether or not a sign prohibits it.

If properly used and enforced, regulatory signs can promote smooth, orderly traffic flow. When they aren't used correctly, they can often cause more problems than they solve. Drivers often disobey regulations they perceive to be unneeded. These drivers may develop a habit of disobeying traffic regulations, whether or not they are needed. Other roadway users may expect them to obey the regulation, and act accordingly. For example, a pedestrian may cross a street expecting an approaching driver to stop at the stop sign. If the driver does not stop, a serious injury could occur.

Most regulatory signs are rectangles taller than they are wide. There are some exceptions, such as stop and yield signs. White, black and red are the most common colors used for regulatory signs.

WARNING SIGNS are used to tell road users there is a need for caution because of a condition on or near the roadway that is unexpected and of situations that might not be readily apparent. Warning signs are especially helpful to drivers who are not familiar with the road. Warning signs should only be used where needed, because **overuse tends to cause disrespect for all warning signs and reduces their effectiveness.**

After you determine that a warning sign is needed, consider whether the hazard can be removed. Removal of the hazard is always preferable to adding signs. If it is impossible or not cost effective to remove the hazard, then a warning sign should be installed. If you plan to remove the hazard, but not immediately, a sign should be used to warn traffic of the condition until it is removed.













Warning signs are usually diamond-shaped, with black text on a yellow background. When a sign warns of a condition caused by road work, it should have an orange background. An exception is the railroad crossing sign (W10-1). It is always round, and it always has a yellow background, even if used in a work zone.

Certain warning signs may have fluorescent yellow-green backgrounds. These include pedestrian, handicapped and bicycle signs. The use of fluorescent yellow-green is optional on these signs. School signs **shall** be fluorescent yellow-green in color.



GUIDE AND INFORMATION SIGNS help drivers reach their destinations. They include route markers, destination signs, and information signs. They typically have green, blue or brown backgrounds and white legends. Examples are shown below.

Table 2A-4. Use of Sign Shapes

SHAPE	Signs
 Octagon	Stop*
 Equilateral Triangle (1 point down)	Yield*
 Circle	Grade Crossing Advance Warning*
 Pennant Shape/Isosceles Triangle***	No Passing*
 Pentagon (pointed up)	School Advance Warning Sign (square bottom corners)*
 Pentagon (pointed up)	County Route Sign (tapered bottom corners)*
 Crossbuck ****	Grade Crossing*
 Diamond	Warning Series
 Rectangle (including square)	Regulatory Series, Guide Series**, Warning Series
 Trapezoid	Recreation and Cultural Interest and National Forest Route

* This sign shall be exclusively the shape shown

** Guide series includes general service, specific service, tourist-oriented directional, general information, recreational and cultural interest area, and emergency management signs.

*** longer axis horizontal

**** two rectangles in an "X" configuration

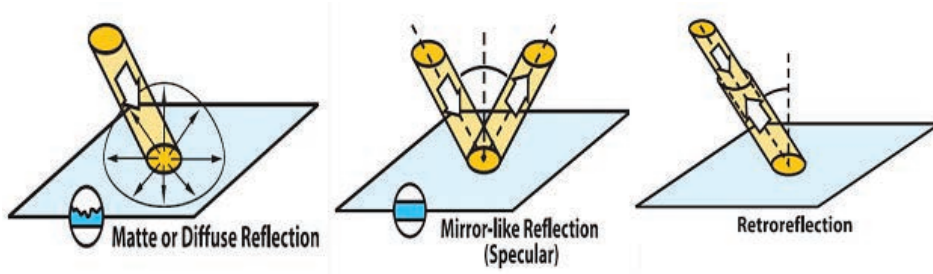
See Table 2A-5 on page 33 of the 2009 MUTCD for all colors and uses of the different sign types.



Retroreflectorization

Traffic signs **shall** be retroreflective so that they have essentially the same appearance day and night. Black portions of a sign face need not be retroreflectorized. Materials used for signs should provide nighttime visibility comparable to daytime visibility. DOTD has chosen to use Type X sheeting. This is the most cost effective sheeting to meet all MUTCD requirements. Signs using this sheeting typically need to be replaced every 10 years.

What is Retroreflectivity?



Retroreflectivity is a term used to describe how light is reflected off of a surface and return to its original source (“retro”-reflector). Traffic sign sheeting materials now use technology with small glass beads or prismatic reflectors that allow light from vehicle headlights to be reflected by to the vehicle and the driver’s eyes, thus making the sign appear more bright and visible to the driver.

See http://safety.fhwa.dot.gov/roadway_dept/night_visib/retrotoolkit/ for more information.



Sign size

See MUTCD tables in the Appendix beginning on page 47.

Sign location

GENERAL. Proper location of each sign is essential to obtain maximum visibility and effectiveness. The location of a sign must be compatible with the layout of the highway. If signs are placed in locations different than what is shown in the MUTCD or this Handbook, the reasons for this placement should be documented and filed for future reference.

All sign locations should be carefully checked to ensure that nothing obstructs the motorist's view of the sign and that nighttime visibility will be adequate. A run through of the route is always a good idea to check for visibility of newly installed signs. Exercise care to avoid placing signs in dips, beyond hillcrests, or at other places where they would not be seen by motorists soon enough to allow perception and safe reaction. Make sure a new sign will not block the view of an existing sign. Always consider the possibility of a sign being obscured by parked cars or summer foliage, or being a hazard to pedestrians. Any requirements of the Americans with Disability Act (ADA) should be followed.

ROADSIDE SIGNS. Ground-mounted signs should be located on the right side of the roadway facing approaching traffic. Signs in any other position should be considered supplementary to those in the usual location. Supplemental signs do not replace the signs on the right side of the road but merely make the sign more visible to the road user.

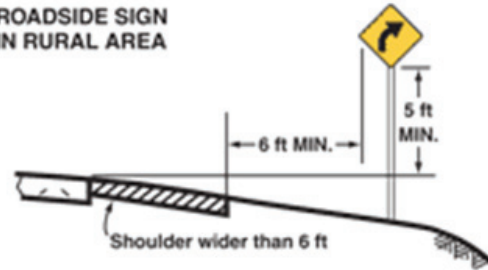


Figure A, B, C, D

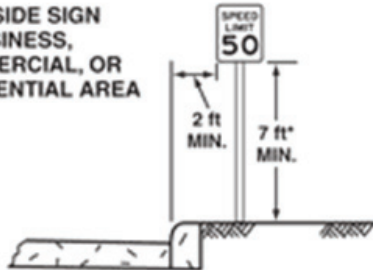
A - ROADSIDE SIGN
IN RURAL AREA



B - ROADSIDE SIGN
IN RURAL AREA

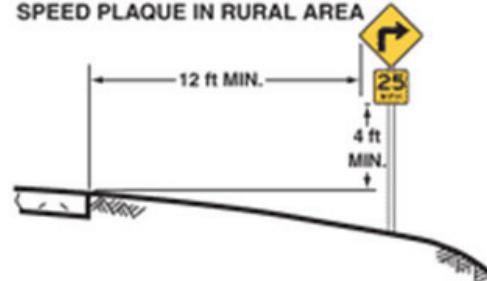


C - ROADSIDE SIGN
IN BUSINESS,
COMMERCIAL, OR
RESIDENTIAL AREA



*Where parking or pedestrian movements are likely to occur

D - WARNING SIGN WITH ADVISORY
SPEED PLAQUE IN RURAL AREA



LATERAL PLACEMENT. Where conditions permit, signs on roads without curbs should have at a minimum lateral clearance of at least 2 feet from the edge of the travel lane to the near edge of the sign (**Figure C**), When physical limitations or visibility problems prohibit such placement, signs **shall** be located as far from the travel lane as possible.

On curbed roads, the edge of the sign should be at least 2 feet from the face of the curb (see Figure C). The sign should be further from the curb, if possible, to minimize the chance that it will be struck by vehicles. This is especially true on corners where trucks turn frequently. Take care to make sure the sign and sign post will not block a sidewalk or cause interference with pedestrians or bicyclists.

HEIGHT. Sign height is measured vertically from the edge of the nearest travel lane to the bottom of the sign. Single signs **shall** be at a height of at least 5 feet above the edge of the travel lane (Figures A, B) when there are no sidewalks or bicycle path. Where supplemental plaques are used, the height of the supplemental plaque **shall** be at least 4 feet (Figure D). Where parking or pedestrian movements occur, these minimum heights **shall** be 7 feet and 6 feet above the edge of the sidewalk or curb, respectively. The bottom of any sign over a sidewalk **shall** be at least 7 feet (Figure C).

LONGITUDINAL PLACEMENT AND ADVANCE POSTING DISTANCE. The distance along the road from a sign to the condition, regulation, or action to which it refers is the longitudinal placement. Placement of signs along the highway depends on the type of sign, the nature of the message, and, for many signs, the prevailing speed of traffic. The posted speed **shall** be used as one factor in determination of sign spacing.

Table 2C-4. Guidelines for Advance Placement of Warning Signs provides minimum distances for placement of warning signs. See page 108 in the 2009 MUTCD. This table should also be placed in the appendix

The placement of signs in relation to each other is affected by sign type and highway characteristics. Except for signs with supplemental plaques, signs should be erected individually. Exceptions to this rule include route and direction



signs grouped to clarify information to motorist and street name signs posted above a yield or stop sign.

Signs requiring decisions by the motorist should be sufficiently separated to provide adequate response time. Motorists react best when they are only required to make one decision at a time. Spacing of signs should be at a minimum of at least 150 feet.

Situations will arise where more than one sign is warranted at the same location. The importance of the signs should be considered in resolving this problem. Warning signs and important regulatory signs (such as stop signs) should generally take precedence over other regulatory and guide signs. The message for a greater hazard should take priority over one for a lesser hazard. Guide signs have the most flexibility in placement, so they normally have the lowest priority on roads.

Where physical conditions limit visibility, the sign location should be suitably adjusted. For example, a post-mounted sign placed immediately beyond an overpass may not be sufficiently visible. Placing the sign just before or well beyond the overpass could improve its visibility and effectiveness. If possible, avoid placing signs in locations where they would interfere with roadway maintenance activities, such as mowing. The reason for adjusted locations should be documented and filed for future reference.

Advance posting distance for warning signs is determined by the approach speed and the action required to respond to the condition. These factors govern the travel distance needed for the driver to understand and react to the sign message, and perform any necessary action. Table 2C-4. Guidelines for Advance Placement of Warning Signs provides minimum distances for placement of warning signs. See page 108 in the 2009 MUTCD.

For purposes of determining advance posting distance, each highway warning sign is in one of two posting categories. Condition A concerns speed reduction and lane changing in heavy traffic while Condition B addresses the need for a motorist to decelerate from a posted or 85th percentile speed to an advisory speed that would be appropriate for the condition.



Sign supports

Traffic sign supports along the roadside sometimes present a hazard of injury or death to an errant driver who strikes the support. Sign posts within the clear zone **shall** be crashworthy (breakaway, yielding) or shielded with a longitudinal barrier or crash cushion. As you update your sign installations, make sure the new supports meet the requirements of National Cooperative Highway Research Program (NCHRP) Report 350 or the AASHTO Manual for Assessing Safety Hardware (MASH). This will help municipalities reduce their liability risk. Over time, MASH will be the controlling standard for sign support hardware.

These sign support systems are designed to minimize the hazard to motor vehicle occupants in collisions. These supports have been tested to demonstrate that they are likely to break away in a controlled manner when hit, which is unlikely to cause injury to the occupants of the vehicle. Many have base stubs designed to be reusable after a collision, reducing the labor needed for repair.

LADOTD Qualified Products List number 39 covers sign supports and can be found at <http://www.dotd.la.gov/highways/construction/lab/qpl/qpl%2039%20flexible%20posts.pdf>. Each of these qualified products comply with Section 1015.2.3 of the Louisiana Standards and Specifications for Roads and Bridges which states:

Steel Posts for Small Signs, Markers and Delineators:

*Posts **shall** be steel of the flanged channel type shown on the plans, galvanized after fabrication in accordance with Subsection 811.12. Before fabrication, posts **shall** be within 3.5 percent of the specified weight (mass). Posts **shall** be fabricated from steel complying with either ASTM A 499, Grade 60 with chemical properties conforming to ASTM A 1 for 91-lb/yd (45 kg/m) or heavier rail steel, or ASTM A 576, Grade 1080 with 0.10 percent -0.20 percent silicon. Holes 3/8 inch (10 mm) in diameter **shall** be drilled or punched through the middle of each post on one inch (25-mm) centers for at least 36 inches (900 mm) from the top of each post.*

Sign designations

The first letter of the sign designation is used to classify the sign series. Examples include Regulatory (“R”), Warning (“W”), and Information (“I”).

Signs that can be used in both a left or right orientation typically have a single alphanumeric designation in the MUTCD. As appropriate, the “R” or “L” suffix is added to specify the orientation. Figure 6 shows the two orientations for a side road intersection sign (W2-2) with the left and right orientation suffix shown below the sign.



Figure 6: Right and left designation of side road (W2-2) sign

Upgrading signs

Whenever there is a change in the MUTCD, there are usually requirements for upgrading some signs to meet new requirements and regulations. Some signs and provisions have compliance dates listed in the introduction of the MUTCD. These dates must be followed. Other existing signs do not need to be replaced or upgraded unless they no longer meet a requirement in the MUTCD. However, if there is a compliance date in the MUTCD, the sign needs to be replaced sooner. Even devices that need upgrading may not need to be replaced immediately. Signs that no longer function properly, however, should be replaced as soon as possible.

Existing non-conforming devices **shall** be brought into compliance as part of a systematic upgrading and installation of traffic control devices. Having a plan for managing the signs in the highway system is critical. Signs on roads being upgraded using Federal Aid funds **shall** be brought up to compliance before the project is complete.



Chapter 2: Intersections

The intersection of two or more roads, where vehicles must cross the paths of other vehicles, is a location which offers a greater potential for traffic conflict. More than half of all traffic crashes occur at intersections. This chapter covers the devices used to make these locations safer for motorists and other roadway users including bicyclists and pedestrians.

A driver should have an unobstructed view of the intersection and enough of the intersecting road to allow time to stop or slow the vehicle and avoid a collision. The minimum sight distance considered safe under various conditions is directly related to vehicle speeds and the distances traveled, once the driver sees the situation, reacts, and brakes.

Right-of-way should be assigned at the intersection of two roads by the installation of stop signs. The following should be considered in determining how basic right-of-way rules should be modified:

- The highway with the heavier traffic volume should be given right-of-way.
- The higher-speed traffic should be given right-of-way.
- The highway that has the appearance of being the major road should be given right-of-way.

Some intersections have unusual geometry, unexpected traffic conflicts, or both. A careful study should be conducted before a determination is made with respect to the assigned right-of-way.

The decision to use a stop sign should be documented and filed for future reference.





R1-1

Stop signs can improve safety by assigning right-of-way and reducing the number of right-angle collisions at an intersection. However, stop signs cause substantial inconvenience and delay to motorists. Excessive use of stop signs can lead to disregard for them. Many drivers will run a stop sign, or only come to a rolling stop. Stop signs should not be used for speed control. There is some evidence that frequent stop signs may actually increase traffic speed between the signs. On roads with high traffic volumes, stop signs may also increase the number of rear-end accidents.

Stop signs are not used on an approach to an intersection when the intersecting road is controlled by another stop sign or a flashing red signal. Exceptions include all-way stop controlled intersections or unusual conditions such as poor sight distance.

Stop signs **shall** not be used at intersections controlled by three-color traffic signals. This does not prevent using them to control separately channelized turn lanes.

LOCATION: The stop sign **shall** be placed on the right side of the roadway. It should be at least 2-12 feet from the edge of the intersecting roadway. It is recommended that the sign be not more than 50 feet from the near edge of the intersecting roadway. Where there is a marked crosswalk at the intersection, the sign should be about 4 feet in advance of the crosswalk. When there is no crosswalk or stop line, place the stop sign at the location where traffic should stop before entering the intersection. If this would result in that location which will not be visible to approaching traffic, move the sign where it will be visible, and consider using a stop line to show drivers where to stop for a good view of opposing traffic.

The stop sign needs to be visible to approaching traffic. Some steps that can increase the visibility of the sign include:

- Removing vegetation
- Installing a Stop Ahead (W3-1) sign
- Installing a second stop sign on the left side of the road
- Installing a larger stop sign
- Adding a red retroreflective sleeve on the front of the sign post

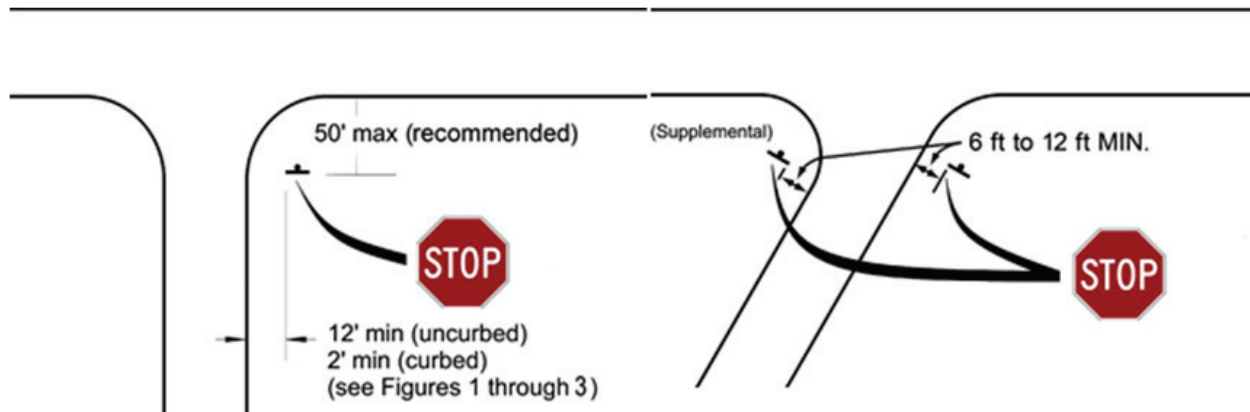


If there are a large number of crashes at the approach controlled by the stop sign and all of the above has been tried then consider installing a red flashing beacon on the sign or overhead.

Where roads intersect at a sharp angle, the stop sign should be installed so that it is clear to the traffic on the other road that it does not apply to them. It can be moved back from the intersection or angled away from traffic on the other road.

More than one stop sign **shall** not be installed on the same support. A stop sign **shall** not be installed on the far side of any intersection or at midblock locations.

Figure 8: Placement of Stop Signs



R1-3P



All-way supplemental plaques **shall** be used where all approaches to an intersection are controlled by stop signs. The supplemental plaque **shall** be placed beneath each stop sign where all-way stop control is used. They **shall** not be used unless all approaches to an intersection have stop signs.

All-way stop control should not be used unless it is warranted. If the warrants contained in the MUTCD (are not met, the disadvantages are likely to outweigh the benefits. Some disadvantages are increased delay to drivers, increased air and noise pollution, and disrespect for stop signs.

All-way stop control may be warranted for the following reasons:

- As a safety measure where certain crash types occur regularly. If five or more left-turn or right-angle accidents have occurred in a twelve-month period, all-way stop control may help correct the problem at the expense of a possible increase in rear-end accidents.
- At intersections where traffic volumes meet certain minimum values. All-way stop control usually works best when all the approaches to the intersection carry similar amounts of traffic.

See Section 2B.07 of the MUTCD for more information.

LOCATION: At all way stop intersections the supplemental plaque goes immediately below the stop sign on all approaches to the intersection.





W3-1

This sign is used to warn of a stop sign which is not clearly visible to approaching drivers for a sufficient distance (See Table 2C-4 in 2009 MUTCD p. 108)

They can also be very useful to improve safety, especially in rural areas. First, consider all measures to make the stop sign visible, such as relocating the stop sign or removing vegetation. If these measures will not get the desired results, a stop ahead sign **shall** be installed. This sign may also be used where stop signs are unexpected, or obedience to them is not satisfactory.

Local governments are responsible for installing and maintaining STOP AHEAD signs on the local roads leading up to state routes.

LOCATION: The stop ahead sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting distance should be measured from the stop sign. To avoid confusion, the stop ahead sign should not be placed in advance of an intersection preceding the one at which the stop sign is located. If you have closely spaced intersections and these minimum distances can not be achieved place the STOP AHEAD warning sign immediately after the intersection.

Posted or 85th-Percentile Speed (mph)	Minimum visibility distance (ft) Level approach
20	100
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400



Roundabout Intersection Warning Signs

This sign is used to warn of a roundabout intersection where entering traffic is required to yield the right-of-way.



W2-6

LOCATION: (See Appendix 2C-4) This sign assumes deceleration to an advisory speed of 0 mph (stopped) just like the STOP AHEAD sign. Advance posting should be measured from the yield line of the roundabout. This sign installation is used to warn that traffic must turn either left or right. This sign may be used at a “T” intersection where the road forming the top of the “T” is two-way. Double arrow signs and object markers are used when there is evidence of problems with vehicles driving through the intersection, limited sight distance on the approach, or other unusual conditions or geometry indicate the need for this sign. This sign installation is used to warn that traffic must turn either left or right. This sign may be used at a “T” intersection

“T” Intersections



OM3-R



OM3-R



OM3-L



OM3-L

where the road forming the top of the “T” is two-way. Double arrow signs and object markers are used when there is evidence of problems with vehicles driving through the intersection, limited sight distance on the approach, or other unusual conditions or geometry indicate the need for this sign.



LOCATION: **Shall** be placed on the far side of the “T” intersection in line with and facing traffic approaching on the stem.

Chapter 3: Non-Intersection Signs

INTERSECTION WARNING SIGNS



W2-1



W2-2



W2-3



W2-4



W2-8



W2-7L



W2-7R



W1-10



These signs are used to warn traffic on the major approach of a significant intersection ahead. They are usually unnecessary where sight distance is good, in residential or business districts, or on highways where intersections are frequent and to be expected. Crash rates or other factors, such as unusual layout, may indicate the need to alert approaching drivers of the presence of an intersection. Good judgment should prevail in determining the need for intersection warning signs.

Use should be limited to intersections which are not visible to approaching traffic for a sufficient distance or which otherwise require motorists to exercise more caution than is usual.

These signs **shall** not be used on approaches to stop signs, yield signs, flashing red signals, or traffic control signals. Use the appropriate stop ahead, yield ahead, or signal ahead sign instead discussed in Chapter 2.

The particular sign used should be that which best depicts the intersection. The legend is intended only as a symbolic representation. In all cases, the vertical line represents the highway on which the sign is posted.

The W2-7 signs are used where two roads intersect from opposite sides and the distance between the two intersections is between 30 and 250 feet. Where the distance is less than 30 feet, the W2-1 sign may be used. Where the separation is more than 250 feet, the intersections should be considered independently and, if appropriate, signed separately. A W10-1 combination intersection/curve sign may be more appropriate if a curve occurs at the intersection.

An advance street name plaque (Black on Yellow, see Section 2C.58 in the MUTCD) may be installed below the intersection warning sign.



LOCATION: Intersection warning signs assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting distance should be measured from the near (approach) side of the intersecting road. An intersection warning sign should not be placed in advance of another intersection before the one to which it applies. This may require substantial adjustment in advance posting distances.

Critical distance (Red): Sight distance less than stopping sight distance for vehicles on main road.

Adequate sight distance (White): Sight distance is greater than the typical turning movement sight distance for trucks and the minimum passing sight distance from the MUTCD.

The table assumes a relatively level intersection. Appropriate distances should be increased or decreased as grades and prevailing speeds warrant.

Table 5: Guide for Intersection Warning

Sight distance in feet to a vehicle waiting at the intersecting road		
60	570'	1200'
55	495'	1100'
50	425'	1000'
45	360'	900'
40	305'	800'
35	250'	700'
30	200'	600'
25	155'	500'
20	115'	400'

Red area: an intersection sign should be used.
 Yellow area: an intersection sign may be used.
 White area: an intersection sign would not normally be used, but may be used if other factors warrant it.

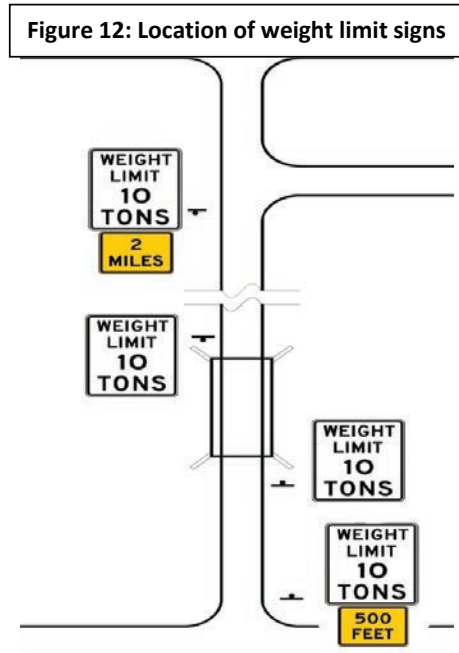


Bridges and culverts that are narrower than the approach roadway (including shoulders and roadway) or have weight restrictions violate the drivers' expectations and can cause unsafe conditions. It is necessary to provide drivers with sufficient information to safely negotiate the narrowed roadway, low clearance, or weight restrictions of a bridge or culvert.



This sign **shall** be used to indicate the safe capacity of bridges or elevated structures. It **shall** also be used on highway sections where an order, ordinance, rule, or regulation prohibits vehicles in excess of a designated gross weight.

LOCATION: The R12-1 sign **shall** be placed at or immediately before the bridge or highway section that has a restricted weight limit (see Figure 12.)



W12-2



W12-2a



These signs provide advance warning of overhead bridges or structures that have a low clearance. It **shall** be used whenever the clearance is within 12 inches of the statutory maximum vehicle height. The statutory maximum vehicle height of 13'6" is set in Revised Statute 32:381. Therefore, any vertical clearance equal to or less than 14' 6" **shall** be signed. The actual clearance should be displayed on the sign W12-2a to the nearest 1 inch not exceeding the actual clearance. This sign **shall** be placed on the structure or on the ground near the structure. The W12-2 sign should be used on the immediate

approach to the bridge. Additional signs should be located where traffic can detour or turn around conveniently. See the MUTCD for more information. This sign should not be used on intersecting roads.

LOCATION: This sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting should be measured from the near end of the bridge. Additional signs should be placed where traffic can detour or conveniently turn around. Advance posting plaques should be used to indicate the distance to the bridge (see page 56).

W5-2



The W5-2 sign should be used where any of the following pavement width conditions exist on a bridge:

- A two-lane, two-way bridge with a roadway 16 to 18 ft wide
- Any bridge with a roadway width less than the width of the approach roadway

LOCATION. This sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting should be measured from the near end of the bridge. (See Appendix 2C-4.)



The W5-3 sign should be used on two-lane, two-way roads to warn of one lane bridges or culverts where traffic must alternate one way at a time. It should also be used to warn of two-lane, two-way bridges or culverts on which the traveled way is less than 16 ft wide. It should also be used where the traveled way is less than 18 ft with a large percentage of commercial traffic or where the sight distance is limited.

LOCATION. This sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting should be measured from the near end of the bridge. (See Appendix 2C-4.)

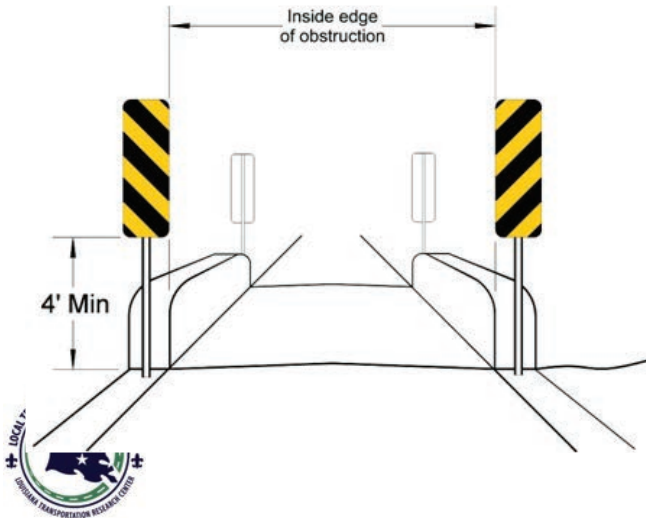
OM3-L and OM3-R object markers are used to mark obstructions close to the roadway or shoulder, such as underpass piers, bridge abutments, and headwalls. OM3-L marker is placed to the left of traffic. The OM3-R marker is placed to the right of traffic. The stripes on these signs **shall** slope downward toward traffic at approximately 45 degrees.

LOCATION: These markers should be placed with the near edge of the marker in line with the edge or portion of the obstruction closest to traffic.

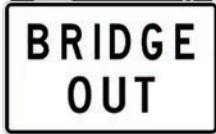
W5-3



OM3-L and OM3-R



R11-2 (Road), R11-2 (Bridge)



Temporary roadway condition signs should be promptly removed when the condition that required their use no longer exists. This encourages the motorist to pay strict attention to this type of warning sign. Do not tell drivers to expect a hazard that is not there! If you do, they may not believe other warning signs.

These signs **shall** be used where a roadway or bridge is closed to all traffic except maintenance or construction equipment and officially authorized vehicles. They **shall** not be used where vehicular traffic is permitted beyond the sign. These signs should be placed on a Type III (three-rail) barricade in the roadway (see Figure 17).

These signs **shall** be preceded by the Advance Road Closed (W20-3) warning sign with the secondary legend AHEAD or appropriate distance, or, if applicable, an Advance Detour (W20-2) warning sign.

LOCATION. At the point of closure.



These signs **shall** be used where a bridge or highway section is closed some distance ahead, and traffic can continue on the highway to the point of closure. The words ROAD CLOSED and BRIDGE OUT are all acceptable.

- Distances less than 1 mile should be stated to the nearest quarter mile
- Distances between 1 and 3 miles should be stated to the nearest half mile
- Distances more than 3 miles should be to the nearest whole mile

LOCATION: These signs should be placed at the intersection where traffic must detour to reach points beyond the closed bridge or highway section. The sign should be placed on a Type III barricade in the roadway immediately



beyond the intersection (see Figure 17). Where use of a barricade would leave insufficient travel width for local traffic, the sign should be placed on the right side of the roadway, just beyond the intersection.

Figure 17: Signs on barricades



A. Partial barricade



B. Road closed barricade



C. Shoulder barricade



W8-1 (Bump) and W8-2 (Dip)



These signs are to warn of isolated bumps or dips in the pavement, which are abrupt enough to cause discomfort, cargo shifting, or deviation of a vehicle from the driver's intended course.

These signs may be supplemented with a W13-1 advisory speed sign. These signs should be removed as soon as the bump or dip requiring them is fixed. These signs should not be used where the rough road sign is applicable. The orange background signs **shall**

only be used in a work zone. If no work zone is present then the yellow sign **shall** be used.

LOCATION: (See Appendix 2C-4.) The advisory speed should be one which would allow the driver to safely travel over the isolated bump or dip. Advance posting should be measured from the bump or dip.

W8-3



This sign is used to warn of a change from a hard-surfaced pavement to an unpaved or earth roadway. This sign may be supplemented with a W13-1 advisory speed sign.

LOCATION: (See Appendix 2C-4.) The advisory speed should be one which would allow the driver to safely travel from the paved to the unpaved section. Advance posting distance should be measured from the end of the hard-surfaced pavement.

The dead end signs (W14-1 and W14-1a) are used where drivers are required to turn around and proceed in the opposite direction.

LOCATION: On a dead end road more than 300 ft long, or where appropriate, a dead end sign may be placed on the right side of the dead end roadway just beyond the intersection. Where used, the sign **shall** be posted to permit the road user to avoid the dead end by turning off, if possible, at the nearest intersecting street. The W14-1a sign may be used in combination with Street Name (D3-1) signs as shown in Figure 18. The W14-1a sign may be placed above or below the Street name sign.

W14-1, W14-1a



Figure 18: Placement of W14-1a sign with street name (D3-1) sign



W8-18



This sign is used to warn road users of a section of highway that is subject to frequent flooding. Moving water has tremendous power, so this sign should only be used in limited situations. Where a roadway is, or is expected to become, impassable, it should be closed. A Depth Gauge Sign (W8-19) may be installed in addition to the Road May Flood sign to indicate the deepest depth of water along the roadway. See the MUTCD Section 2C.35 for more information.

LOCATION: This sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting distance should be measured from the beginning of the section that may flood. See Appendix 2C-4.

W16-9P



Due to some road users not understanding how far 1 mile or 500 feet may be. The supplemental plaque AHEAD may be used under some warning signs. The size of the plaque would vary with the size of the warning sign.

Chapter 4: Railroad Crossings

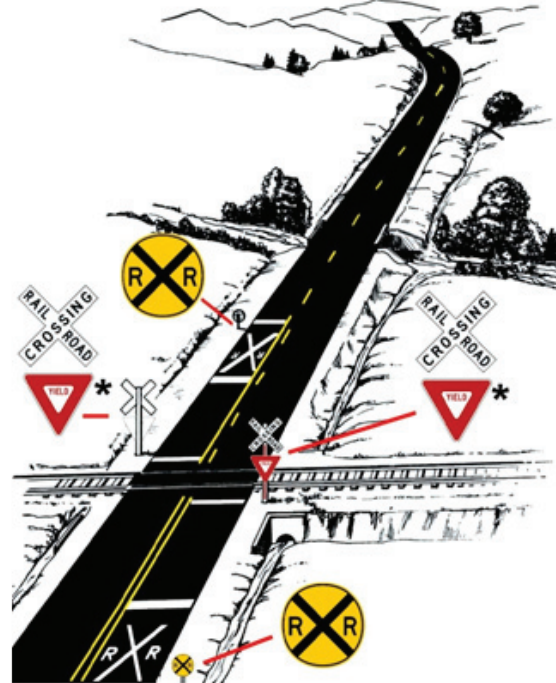
The purpose of traffic control systems at railroad-highway grade crossings is to permit safe and efficient operation of rail and highway traffic over such grade crossings. They provide appropriate information and sufficient time for roadway users to make relatively uncomplicated decisions that will allow them to pass safely over the crossing.

Various signals, signs, and pavement markings are used to convey traffic control messages at railroad crossings. The types, purpose, and application of these devices are discussed in this part of the Handbook. The uniform application of standard devices is essential. To ensure the safe operation of a traffic control system at a railroad highway grade crossing, it is important that each traffic control device look the same, have the same meaning, and be applied in the same manner, regardless of which highway agency or Railroad Company installs or maintains it.

Railroad crossing devices such as flashing light signals, automatic gates, and cross buck signs are typically the responsibility of the railroad owner.

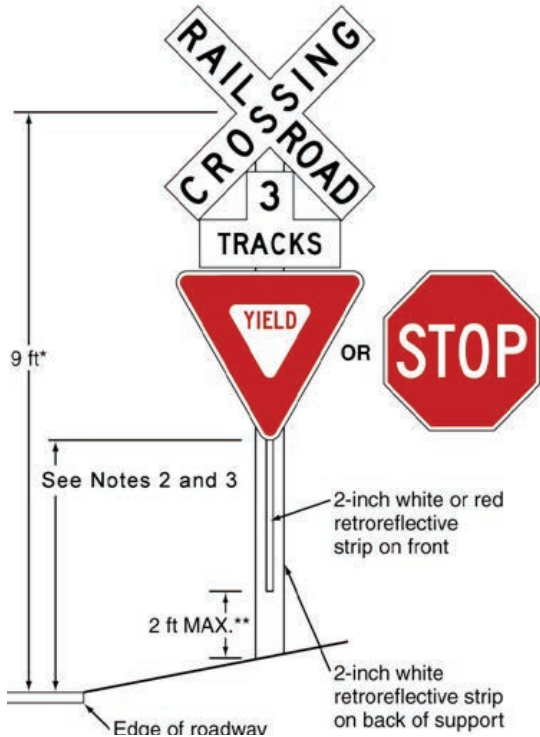


Figure 14: Railroad crossing signs and markings.



*A stop (R1-1) or yield (R2-1) sign is required for any passive crossing.

Figure 15: Crossbuck assembly with a YIELD or STOP sign on the crossbuck sign support



Notes:

* Height may be varied as required by local conditions and may be increased to accommodate signs mounted below the Crossbuck sign.

** Measured to the ground level at the base of the support.

1. YIELD or STOP signs are used only at passive crossings. A STOP sign is used only if an engineering study determines that it is appropriate for that particular approach.
2. Mounting height shall be at least 4 feet for installations of YIELD or STOP signs on existing Crossbuck sign supports.
3. Mounting height shall be at least 7 feet for new installations in areas with pedestrian movements or parking.

Typically, the railroad is responsible for the installation and maintenance of this assembly. The assembly shown shall be used at all passive crossings (those without lights and/or gates). The yield or stop sign may be placed on a separate post if conditions warrant. More details on the use of the assembly can be found in section 8B.04 of the MUTCD.

LOCATION: Railroad crossing warning signs assume a deceleration speed of 0 mph (stopped). Advance posting distance should be measured from a point at least 15 ft from the nearest rail of the crossing. This location corresponds to the location of a stop line, if used.



Railroad crossing pavement markings

Railroad crossing pavement markings provide additional warning of railroad grade crossings. Railroad crossing pavement markings **shall** be used at railroad grade crossings when one or more of the following conditions are present:

- Crossings with railroad crossing gates or signals
- Crossings where the prevailing approach speed on the highway is 40 mph or higher
- Other locations where significant conflicts could occur between trains and motor vehicles

LOCATION AND LAYOUT: The locations and layout of railroad markings are shown in Figure 16.

A portion of the X symbol on the pavement should be directly opposite the Advance Warning Sign (W10-1). Where conditions require, this distance may be shortened if necessary, but should not be less than 50 ft from the stop line.

Where there is no railroad crossing gate, the stop line, if used, should be perpendicular to the roadway, and 15 ft from the nearest rail at its closest point. Where there is a gate, the clearance line should be parallel to the gate, in its lowered position, and either 15 ft from the nearest rail or 8 ft from the gate, whichever places the line farther from the crossing.

If pavement markings are used on two lane roads, passing **shall** be prohibited in advance of railroad grade crossings, as shown in Figure 16. Exact dimensions and details on the pavement markings can be found in Chapter 8B of the MUTCD.

W10-1



Chapter 5: Crossing Hazards

This section deals with signs that warn of locations where motorists might encounter unexpected persons, animals, or vehicles crossing the road. It also alerts drivers that they may need to share the road with other types of traffic. The determining factor for use of these signs is the amount of time available for the driver to see the hazard and react properly.

If used as part of a crossing, warning signs **shall** be supplemented with a diagonal arrow (W16-7P) supplemental plaque. The size of the plaque depends upon the size of the sign it supplements (see Table 9, Page 56).

Standard yellow or fluorescent yellow-green backgrounds may be used for pedestrian signs, handicapped signs, and bicycle signs. Fluorescent yellow-green is required for school signs. The color of the W16-7P plaque should match the sign it supplements. Fluorescent signs are highly visible during daylight, but fluorescent colors are not a substitute for reflectorization.

LOCATION: The W11-2 sign should be used prior to a marked crosswalk to warn of possible pedestrian activity. A W16-7P supplemental plaque should be used at all crosswalk locations not controlled by a traffic signal or a stop sign.

W16-7P



W11-2, W11-2/W16-7P



W11-1 and W11-1/ W16-7P



The W11-1 sign is used to provide advance warning of well-defined bicycle crossings. It is also used to alert motorists that bicycles may need to share a particular section of highway. As a crossing warning, the W11-1 sign should be used only where sight distance is limited or the crossing is used by an unusually large number of bicyclists. This sign should only be displayed during periods of the year when bicycle activity is significant. It should not be used for crossings at intersections, or when another crossing sign is used for the same crossing.

LOCATION: The W11-1 sign assumes deceleration to an advisory speed of 0 mph (stopped). Advance posting distance should be measured from the near side of the crossing.

The W11-1/W16-7P assembly is used to identify crossings regularly used by bicyclists. The sign assembly should not be used unless it is preceded by a W11-1 sign. Where used, the assembly should be placed at or near the crossing location.

LOCATION: Where used, the assembly should be placed at or immediately in advance of the crossing location.

Playground signs, non standard play activity signs and any type of animal crossing signs should not be installed. The MUTCD states that the use of warning signs should be kept to a minimum as the unnecessary use of warning signs tends to breed disrespect for all signs. The intent of this sign does not inform the motorist to do anything more than what he should be doing already and that is pay attention. These signs just remind the motorist to be aware of their surroundings.

Chapter 6: Guide & Information Signs

Guide and information signs generally provide drivers with information about destinations and routes. As a general rule, they have a lower priority versus regulatory and warning signs. However, some guide signs can be very important in certain situations. An example of this is the Hospital 'H'. When a medical emergency occurs, this particular guide sign becomes very important.

This Handbook does not have room to cover even a small percentage of the available guide and information signs available in the MUTCD. The following are some of the common guide signs.

STREET NAME SIGNS (optional)



D3-1



The D3-1 sign is used to identify an intersecting street. **The lettering for names of streets and highways on Street Name signs shall be composed of a combination of lower-case letters with initial upper-case letters(see chart below).** The first letter of each name or abbreviation **shall** be upper-case and the rest of the lettering in the name or abbreviation **shall** be lower-case. The lettering height should be according to the chart below. Street name signs have a white legend on a green, blue or brown background, or a black legend on a white background.

LOCATION: In business or commercial areas and on principal arterials, Street Name signs should be placed at least on diagonally opposite corners. In residential areas, at least one Street Name sign should be mounted at each intersection. Signs naming both streets should be installed at each intersection. They should be mounted with their faces parallel to the streets they name.

Type of Mounting	Type of Street or Highway	Speed Limit	Recommended Minimum Letter Height	
			Initial Upper-Case	Lower-Case
Overhead	All types	All speed limits	12 inches	9 inches
Post-mounted	Multi-lane	More than 40 mph	8 inches	6 inches
Post-mounted	Multi-lane	40 mph or less	6 inches	4.5 inches
Post-mounted	2-lane	All speed limits	6 inches*	4.5 inches*

* On local two-lane streets with speed limits of 25 mph or less, 4-inch initial upper-case letters with 3-inch lower-case letters may be used.

Street name signs may be mounted on the same posts as stop or yield signs as long as the street name sign will not distract the drivers on the road approaching the stop sign. Note that the letter size for the sign parallel to the Stop sign may be the smaller four (4") inch size as vehicles have to stop when they get to the sign. The sign perpendicular to the Stop sign may need to be the larger lettering depending upon the speed on the intersecting highway.

If a Street Name sign will be placed on a DOTD owned support a permit will be needed. Contact your local DOTD office for this information. DOTD installs and maintains state route markers only. DOTD does not install or maintain Street Name signs.



Jurisdictional Boundary Signs on Interstate and Non Interstate Highways (optional)

The political boundary sign is to inform road users of when they have entered a parish, city, town, village, etc. This sign is optional. The political boundary signs **shall** be designed as follows: 1) the signs **shall** be made with green background reflective sheeting with the primary legend in white reflective sheeting in a standard font. Other legends and symbols may be in different colors, fonts and reflective or non reflective sheeting. 2) Signs within the clear zone **shall** be installed on breakaway posts or **shall** be installed behind existing guardrail. Breakaway posts **shall** be AASHTO approved. 3) The signs **shall** contain no commercial advertising or sponsorship. 4) Minimum letter heights for capital and lower case letters for the primary message are: a) two lane roadways-4 inch lettering spaced 3 inches apart b) multi lane roadways, 45 mph or less- 4 inch lettering spaced 3 inches apart c) multilane roadways, 50 mph or greater – 6 inch lettering spaced 4.5 inches apart d) control of access roadways such as interstates – 13 inch lettering spaced 4.5 inches apart.



On State Routes any community may apply for a permit to place a personalized political boundary sign. DOTD will not maintain or install these signs.

LOCATION: Shall be placed as close as practical to the boundary it is referring to.



Gateways for interstate and non interstate roadways (optional)

The Gateway is a combination of Welcome TO signs, lighting and landscaping. Gateways are not considered traffic control devices. The following are examples of some types:



Gateway signs on state routes are only installed and maintained via permit. Sign design of a Gateway must meet the following criteria 1) Legends **shall** be made with white reflective sheeting or illuminated by appropriately placed spotlights or streetlights. Legends, which are illuminated, may be any color. 2) Should be placed outside of the clear zone. If not possible, the gateway signs within the clear zone **shall** be installed on breakaway supports or installed behind existing guardrail. 30 **Shall** contain no commercial advertising 4) minimum letter heights are a) two lane roadways-4 inch lettering spaced 3 inches apart b) multi lane roadways, 45 mph or less- 4 inch lettering spaced 3 inches apart c) multilane roadways, 50 mph or greater – 6 inch lettering spaced 4.5 inches apart d) control of access roadways such as interstates – 13 inch lettering spaced 4.5 inches apart.

LOCATION: Gateways are to be placed at the official limits or as close as possible.



SUPPLEMENTAL GUIDE SIGNS on INTERSTATE and Non INTERSTATE STATE ROADWAYS

DOTD has rules developed for placement of supplemental guide signs on Interstate and non interstate state owned and maintained roadways. Just like all other signs an overuse of the guide sign can cause road users not to be able to digest all of the information on the roadway. Supplemental guide signs are optional signs and should only be used if meets a need for a majority of road users. Supplemental guide signs should not be used if they draw attention away from a warning or regulatory sign. For more information on these signs and other signs in this booklet please refer to the LADOTD Traffic Engineering Manual.



Appendix

Table 2B-1. Regulatory Sign and Plaque Sizes

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	36 x 36 x 36*	48 x 48 x 48	48 x 48 x 48	60 x 60 x 60	30 x 30 x 30*	—
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

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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	—	—
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

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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	R4-8E	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	—	—	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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	—	—	—	—
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 & 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

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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 (symbol)	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 Equestrian	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	—	—	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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	—	—	—	—
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	—	—	—	—

Table 2B-1. Regulatory Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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

Table 2C-2. Warning Sign and Plaque Sizes

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	—	—	—

Table 2C-2. Warning Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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
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	—	—

Table 2C-2. Warning Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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

Table 2C-2. Warning Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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
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	—	—	—	—

Table 2C-2. Warning Sign and Plaque Sizes

Sign or Plaque	Sign Designation	Section	Conventional Road		Expressway	Freeway	Minimum	Oversized
			Single Lane	Multi-Lane				
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

Table 2C-4. Guidelines for Advance Placement of Warning Signs

Posted or 85th-Percentile Speed	Advance Placement Distance ¹									
	Condition A: Speed reduction and lane changing in heavy traffic ²	Condition B: Deceleration to the listed advisory speed (mph) for the condition								
		0 ³	10 ⁴	20 ⁴	30 ⁴	40 ⁴	50 ⁴	60 ⁴	70 ⁴	
20 mph	225 ft	100 ft ⁶	N/A ⁵	—	—	—	—	—	—	—
25 mph	325 ft	100 ft ⁶	N/A ⁵	N/A ⁵	—	—	—	—	—	—
30 mph	460 ft	100 ft ⁶	N/A ⁵	N/A ⁵	—	—	—	—	—	—
35 mph	565 ft	100 ft ⁶	N/A ⁵	N/A ⁵	N/A ⁵	—	—	—	—	—
40 mph	670 ft	125 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—	—
45 mph	775 ft	175 ft	125 ft	100 ft ⁶	100 ft ⁶	N/A ⁵	—	—	—	—
50 mph	885 ft	250 ft	200 ft	175 ft	125 ft	100 ft ⁶	—	—	—	—
55 mph	990 ft	325 ft	275 ft	225 ft	200 ft	125 ft	N/A ⁵	—	—	—
60 mph	1,100 ft	400 ft	350 ft	325 ft	275 ft	200 ft	100 ft ⁶	—	—	—
65 mph	1,200 ft	475 ft	450 ft	400 ft	350 ft	275 ft	200 ft	100 ft ⁶	—	—
70 mph	1,250 ft	550 ft	525 ft	500 ft	450 ft	375 ft	275 ft	150 ft	—	—
75 mph	1,350 ft	650 ft	625 ft	600 ft	550 ft	475 ft	375 ft	250 ft	100 ft ⁶	—

1. The distances are adjusted for a sign legibility distance of 180 feet for Condition A. The distances for Condition B have been adjusted for a sign legibility distance of 250 feet, which is appropriate for an alignment warning symbol sign. For Conditions A and B, warning signs with less than 6-inch legend or more than four words, a minimum of 100 feet should be added to the advance placement distance to provide adequate legibility of the warning sign.
2. Typical conditions are locations where the road user must use extra time to adjust speed and change lanes in heavy traffic because of a complex driving situation. Typical signs are Merge and Right Lane Ends. The distances are determined by providing the driver a PRT of 14.0 to 14.5 seconds for vehicle maneuvers (2005 AASHTO Policy, Exhibit 3-3, Decision Sight Distance, Avoidance Maneuver E) minus the legibility distance of 180 feet for the appropriate sign.
3. Typical condition is the warning of a potential stop situation. Typical signs are Stop Ahead, Yield Ahead, Signal Ahead, and Intersection Warning signs. The distances are based on the 2005 AASHTO Policy, Exhibit 3-1, Stopping Sight Distance, providing a PRT of 2.5 seconds, a deceleration rate of 11.2 feet/second², minus the sign legibility distance of 180 feet.
4. Typical conditions are locations where the road user must decrease speed to maneuver through the warned condition. Typical signs are Turn, Curve, Reverse Turn, or Reverse Curve. The distance is determined by providing a 2.5 second PRT, a vehicle deceleration rate of 10 feet/second², minus the sign legibility distance of 250 feet.
5. No suggested distances are provided for these speeds, as the placement location is dependent on site conditions and other signing. An alignment warning sign may be placed anywhere from the point of curvature up to 100 feet in advance of the curve. However, the alignment warning sign should be installed in advance of the curve and at least 100 feet from any other signs.
6. The minimum advance placement distance is listed as 100 feet to provide adequate spacing between signs.

