B. REGULATORY SIGNS

2B-1 Application of Regulatory Signs

Regulatory signs inform highway users of traffic laws or regulations and indicate the applicability of legal requirements that would not otherwise be apparent. These signs shall be erected wherever needed to fulfill this purpose, but unnecessary mandates should be avoided. The laws of many States specify that certain regulations are enforceable only when made known by official signs.

Some regulatory signs are related to operational controls but do not impose any obligations or prohibitions. For example, signs giving advance notice of or marking the end of a restricted zone are included in the regulatory group.

Regulatory signs normally shall be erected at those locations where regulations apply. The sign message shall clearly indicate the requirements imposed by the regulation and shall be easily visible and legible to the vehicle operator.

2B-2 Classification of Regulatory Signs

Regulatory signs are classified in the following groups:

1. Right-of-way series:
   (a) STOP sign (sec. 2B-4 to 6)
   (b) YIELD sign (sec. 2B-7 to 9)
2. Speed series (sec. 2B-10 to 14)
3. Movement series:
   (a) Turning (sec. 2B-15 to 19)
   (b) Alignment (sec. 2B-20 to 25)
   (c) Exclusion (sec. 2B-26 to 28)
   (d) One Way (sec. 2B-29 to 30)
4. Parking series (sec. 2B-31 to 34)
5. Pedestrian series (sec. 2B-35 to 36)
6. Miscellaneous series (sec. 2B-37 to 44)

2B-3 Design of Regulatory Signs

Regulatory signs are rectangular, with the longer dimension vertical, and have black legend on a white background, except for those signs whose standards specify otherwise.

All regulatory signs shall be reflectorized or illuminated to show the same shape and color both by day and by night, unless excepted in the standards covering a particular sign or group of signs.

For use of educational plaques with symbol signs see section 2A-13.
STOP signs are intended for use where traffic is required to stop. The STOP sign shall be an octagon with white message and border on a red background. The standard size shall be 30 × 30 inches. Where greater emphasis or visibility is required, a larger size is recommended. On low-volume local streets and secondary roads with low approach speeds, a 24 × 24 inch size may be used.

At a multiway stop intersection (sec. 2B-6), a supplementary plate (R1-3) should be mounted just below each STOP sign. If the number of approach legs to the intersection is three or more, the numeral on the supplementary plate shall correspond to the actual number of legs, or the legend ALL-WAY (R1-4) may be used. The supplementary plate shall have white letters on a red background and shall have a standard size of 12 × 6 inches (R1-3) or 18 × 6 inches (R1-4).

A STOP sign beacon or beacons may be used in conjunction with a STOP sign as described in section 4E-4.

Secondary messages shall not be used on STOP sign faces.

2B-5 Warrants for Stop Sign

Because the STOP sign causes a substantial inconvenience to motorists, it should be used only where warranted. A STOP sign may be warranted at an intersection where one or more of the following conditions exist:

1. Intersection of a less important road with a main road where application of the normal right-of-way rule is unduly hazardous.
2. Street entering a through highway or street.
3. Unsignalized intersection in a signalized area.
4. Other intersections where a combination of high speed, restricted view, and serious accident record indicates a need for control by the STOP sign.

Prior to the application of these warrants, consideration should be given to less restrictive measures, such as the YIELD sign (2B-7) where a full...
stop is not necessary at all times. Periodic reviews of existing installations may be desirable to determine whether, because of changed conditions, the use of less restrictive control or no control could accommodate traffic demands safely and more effectively.

STOP signs should never be used on the through roadways of expressways. Properly designed expressway interchanges provide for the continuous flow of traffic, making STOP signs unnecessary even on the entering roadways. Where at-grade intersections are temporarily justified for local traffic in sparsely populated areas, STOP signs should be used on the entering roadways to protect the through traffic. STOP signs may also be required at the end of diverging roadways at the intersection with other highways not designed as expressways. In most of these cases, the speeds will not warrant any great increase in the sign sizes.

STOP signs shall not be erected at intersections where traffic control signals are operating. The conflicting commands of two types of control devices are confusing. If traffic is required to stop when the operation of the stop-and-go signals is not warranted, the signals should be put on flashing operation with the red flashing light facing the traffic that must stop.

Where two main highways intersect, the STOP sign or signs should normally be posted on the minor street to stop the lesser flow of traffic. Traffic engineering studies, however, may justify a decision to install a STOP sign or signs on the major street, as at a three-way intersection where safety considerations may justify stopping the greater flow of traffic to permit a left-turning movement.

STOP signs may be used at selected railroad-highway grade crossings only after their need has been determined by a detailed traffic engineering study. Use of the STOP sign at railroad-highway grade crossings is described in Section 8B–9.

Portable or part-time STOP signs shall not be used except for emergency purposes. Also, STOP signs should not be used for speed control.

2B–6 Multiway Stop Signs

The "Multiway Stop" installation is useful as a safety measure at some locations. It should ordinarily be used only where the volume of traffic on the intersecting roads is approximately equal. A traffic control signal is more satisfactory for an intersection with a heavy volume of traffic.

Any of the following conditions may warrant a multiway STOP sign installation (sec. 2B–4):

1. Where traffic signals are warranted and urgently needed, the multiway stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the signal installation.
2. An accident problem, as indicated by five or more reported accidents of a type susceptible of correction by a multiway stop installation in a 12-month period. Such accidents include right- and left-turn collisions as well as right-angle collisions.

3. Minimum traffic volumes:
   (a) The total vehicular volume entering the intersection from all approaches must average at least 500 vehicles per hour for any 8 hours of an average day, and
   (b) The combined vehicular and pedestrian volume from the minor street or highway must average at least 200 units per hour for the same 8 hours, with an average delay to minor street vehicular traffic of at least 30 seconds per vehicle during the maximum hour, but
   (c) When the 85-percentile approach speed of the major street traffic exceeds 40 miles per hour, the minimum vehicular volume warrant is 70 percent of the above requirements.

2B-7 Yield Sign (R1-2)

The YIELD sign assigns right-of-way to traffic on certain approaches to an intersection. Vehicles controlled by a YIELD sign need stop only when necessary to avoid interference with other traffic that is given the right-of-way.

The YIELD sign shall be a downward pointing, equilateral triangle having a red border band and a white interior and the word YIELD in red inside the border band. The standard size shall be 36 x 36 x 36 inches.

2B-8 Warrants for Yield Signs

The YIELD sign may be warranted:

1. On a minor road at the entrance to an intersection where it is necessary to assign right-of-way to the major road, but where a stop is not necessary at all times, and where the safe approach speed on the minor road exceeds 10 miles per hour.
2. On the entrance ramp to an expressway where an acceleration lane is not provided.

3. Within an intersection with a divided highway, where a STOP sign is present at the entrance to the first roadway and further control is necessary at the entrance to the second roadway, and where the median width between the two roadways exceeds 30 feet.

4. Where there is a separate or channelized right-turn lane, without an adequate acceleration lane.

5. At any intersection where a special problem exists and where an engineering study indicates the problem to be susceptible to correction by use of the YIELD sign.

YIELD signs should not ordinarily be placed to control the major flow of traffic at an intersection. They should not be erected on the approaches of more than one of the intersecting streets or highways or used at any intersection where there are STOP signs on one or more approaches, except, under special circumstances, to provide minor movement control within complex intersections.

YIELD signs should not be used on the through roadways of expressways. They may be used on an entering roadway without an adequate acceleration lane, but in a well designed interchange, the sign would interfere with the free merging movement, and it should not be used under those circumstances.

2B-9 Location of Stop Sign and Yield Sign

A STOP sign should be erected at the point where the vehicle is to stop or as near thereto as possible, and may be supplemented with a Stop line and/or the word STOP on the pavement, as shown in figure 2-2 (page 2A-10). A YIELD sign should be erected in the same manner, at the point where the vehicle is to stop if necessary to yield the right-of-way. Where there is a marked crosswalk on the pavement, the sign should be erected approximately 4 feet in advance of the crosswalk line nearest to approaching traffic.

Where only one sign, STOP or YIELD, is used, it shall be on the right-hand side of the traffic lane to which it applies. At an intersection where a wide throat exists on the signed approach, observance of the sign may be improved by the erection of an additional sign on the left side of the approach road, and by the use of a Stop line. Where two lanes of traffic are subject to the STOP sign, a second sign should be placed where it is visible to traffic in the inner lane. At certain channelized intersections, the additional sign may be effectively placed on a channelizing island. In no instance shall one STOP or YIELD sign be mounted above another on the same post.

Where two roads intersect at an acute angle, the STOP or YIELD sign should be positioned at an angle, or shielded, so that the message is out of view of traffic to which it does not apply.
In the event the visibility of a STOP sign or a YIELD sign at any location is restricted, the sign shall be located as specified, and a Stop Ahead sign (sec. 2C-15) or a Yield Ahead sign (sec. 2C-16) shall be erected in advance of the STOP or YIELD sign.

Figures 2-2, 2-7a, 2-7b, and 2-7c (pages 2A-10 and 2D-16 to 2D-18) show typical STOP and YIELD sign installations.

2B-10 Speed Limit Sign (R2-1)

The Speed Limit sign shall display the limit established by law, or by regulation, after an engineering and traffic investigation has been made in accordance with established traffic engineering practices. The speed limits shown shall be in multiples of 5 miles per hour.

In order to determine the proper numerical value for a speed zone on the basis of an engineering and traffic investigation the following factors should be considered:

1. Road surface characteristics, shoulder condition, grade, alignment and sight distance.
2. The 85-percentile speed and pace speed.
3. Roadside development and culture, and roadside friction.
4. Safe speed for curves or hazardous locations within the zone.
5. Parking practices and pedestrian activity.
6. Reported accident experience for a recent 12-month period.

Two types of speed limit signs may be used: One to designate passenger car speeds including any nighttime information or minimum speed limit that might apply, and the other to show any special speed limits for buses and trucks. No more than three speed limits should be displayed on any one speed limit sign or assembly. Where a special speed limit applies to trucks or other vehicles, the legend TRUCKS 40, or such similar message as is appropriate, shall be shown below the standard
message or on a separate plate (R2-2). When used independently, the Truck Speed sign should carry a reference to SPEED or MPH.

Minimum speeds shall be displayed only in combination with the posted speed limit (sec. 2B-12).

Advisory Speed signs are treated under section 2C-35.

The standard Speed Limit sign shall be $24 \times 30$ inches. On expressways the sign should be at least $36 \times 48$ inches, with $48 \times 60$ inches prescribed for use on freeways.

2B-11 Night Speed Sign (R2-3)

Where different speed limits are prescribed for day and night, both the limits shall be posted. This may be done in either of two ways:

1. Immediately below the standard Speed Limit sign (R2-1) or combined with it, a Night Speed sign (R2-3) carrying the legend NIGHT 45 (or other suitable numerical limit) may be erected. In this case the numerals in the Night Speed sign and only the words SPEED LIMIT in the standard sign, should be reflectorized. As a special but logical exception to the general color scheme, the Night Speed sign should have its legend in white upon a black background.

2. A changeable message sign may be used, so that only the appropriate regulation is visible at a given time. The sign may have interchangeable panels, or reflectorization of the nighttime speed superimposed over the unreflectorized numerals of the daytime speed, to permit only the nighttime speed to become legible in the beam of motor-vehicle headlamps at night.

2B-12 Minimum Speed Sign (R2-4)

Where an engineering and traffic investigation shows that slow speeds on a highway consistently impede the normal and reasonable movement of traffic, signs may be used to post a minimum legal speed. Driving slower than the minimum limit is illegal except when necessary for safe operation or in compliance with the law. The minimum speed shall be displayed only in combination with the posted speed limit, and if desired, these two signs may be combined (R2-4a). The Minimum Speed sign shall have standard, and minimum, size of $24 \times 30$ inches.

R2-3
24" x 24"

2B-7
Rev. 9/84
2B-13 Location of Speed Limit Sign

Speed Limit signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another. These signs shall not be erected until the speed limits are approved and officially authorized.

At the end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be erected. Additional signs shall be installed beyond major intersections and at other locations where it is necessary to remind motorists of the limit that is applicable. In school areas, the END SCHOOL ZONE sign may be used as an alternate to the Speed Limit Sign.

The Speed Zone Ahead sign (sec. 2B-14) may be used to give advance notice of a speed zone with a lower limit.

In rural districts on U.S. and other State numbered routes, Speed Limit signs indicating the statutory speed limits shall be erected at entrances to the State and at boundaries of metropolitan areas. A special oversize sign is often desirable at these locations.

2B-14 Sign for Reduced Speed Ahead (R2-5)

This sign should be used in rural areas to inform the motorist of a reduced speed zone when an advance notice is needed to comply with the speed limit posted ahead. The sign is not ordinarily needed in urban areas where speeds are relatively low.

This sign shall always be followed by a Speed Limit sign erected at the beginning of the zone where the altered speed limit applies.
This sign shall have a standard size of 24 \times 30 inches. It shall, however, be of the same size as the Speed Limit sign at the beginning of the speed zone, shall be erected in the same manner, and shall display one of the three illustrated legends.

\[\text{REDUCED SPEED AHEAD} \quad \text{REDUCED SPEED 30} \quad \text{SPEED ZONE AHEAD}\]

R2-5a  
24'' x 30''

R2-5b  
24'' x 30''

R2-5c  
24'' x 30''

2B-15 Turn Prohibition Signs (R3-1 to 3)

Turn Prohibition signs should be used to indicate the turns that are prohibited or restricted at a particular intersection.

The standard, and minimum, size of the No Right Turn sign (R3-1), the No Left Turn sign (R3-2), and the NO TURNS sign (R3-3) shall be 24 \times 24 inches.

Turn Prohibition signs should be placed where they will be most easily seen by drivers intending to turn. Where No Right Turn signs are needed, at least one should be placed either over the roadway or at a right-hand corner of the intersection. If signals are present, the sign may be installed adjacent to a signal face viewed by motorists in the right lane.

Where No Left Turn signs are needed, at least one should be placed over the roadway or at a left-hand corner of the intersection. If signals are present, the sign may be installed adjacent to a signal face viewed by motorists in the left lane. Where No Turns signs are needed, two signs should be used, one at a location specified for a No Right Turn sign and one at a location specified for a No Left Turn sign. If signals are present, a No Turns sign may be placed adjacent to a signal face viewed by all motorists on that approach.

If advance signs are used, care should be taken that no alley or public driveway exists between them and the intersection where the turning movement is prohibited. At an intersection where one or more approaches to the intersection are limited to one-way traffic, whether signalized or not, the ONE WAY sign (sec. 2B-29) shall be used, and may be supplemented by the Turn Prohibition sign (fig. 2-3, page 2A-11). A Turn Prohibition sign is not needed at a ramp entrance to an expressway where the design is such as to indicate clearly the one-way traffic movement on
the ramp. The DO NOT ENTER sign (sec. 2B–26) will serve in lieu of the Turn Prohibition sign where it is necessary to emphasize the one-way traffic movement on the ramp.

When the movement restriction applies during certain periods only, the use of Turn Prohibition signs calls for special treatment. The following alternatives are listed in order of preference:

1. Variable message signs or internally illuminated signs that are lighted and made legible only during the restricted hours, particularly desirable at signalized intersections.

2. Permanently mounted signs incorporating a supplementary legend showing the hours during which the prohibition is applicable.

3. Portable signs off the roadway at each corner of the intersection where required, put in place under police supervision only when applicable and removed at other hours.

The appropriate word message, NO RIGHT TURN or NO LEFT TURN, on a 24 x 30 inch panel may be used as an alternate.

2B–16 U-Turn Prohibition Sign (R3–4)

The U-Turn Prohibition sign is intended for use at or between intersections to indicate locations where U turns are prohibited. The sign shall have a standardized size of 24 × 24 inches.
The word message NO U TURN, on a 24 x 30 inch panel, may be used as an alternate.

2B-17 Lane-Use Control Signs (R3-5 to 8)

Lane-Use Control signs shall be used where turning movements are required or where unconventional turning movements are permitted from specific lanes at an intersection. The standard size of these signs shall be 30 x 36 inches when mounted overhead, and 30 x 30 inches when post mounted. Signs for overhead mounting shall be mounted over the lanes to which they apply. The Mandatory Movement sign (R3-5) shall show a single arrow and the regulatory word message ONLY. The optional movement sign (R3-6) shall show a straight-through and a curved arrow with the lower ends of their shafts superimposed, to indicate that either of the movements symbolized is permissible. The letters "OK" may be added to the legend of the R3-6 sign. The optional movement sign (R3-6) shall not be used alone to effect a turn prohibition.

Both signs R3-5 and R3-6 are intended for overhead mounting only.
The mandatory turn sign (R3-7) designed for post mounting shall carry the message Right (or Left) Lane Must Turn Right (or Left).

The post-mounted double turn sign (R3-8) may be needed at such locations as at the right curb (for double right turns) or on the left side of a one-way street or on the median of a divided highway (for double left turns). The double-turn sign should carry, side by side on the same plate, two arrow symbols similar to the designs for the overhead signs. The letters OK may be added to the double turn portion of the legend for the R3-8 sign; however, when two mandatory movement arrows are displayed, the word ONLY should be used under each arrow.

2B-18 Application of Lane-Use Control Signs at Intersections

Lane-Use Control signs shall be used at intersections whenever it is desired to require vehicles in certain lanes to turn, or to permit turns from an adjacent lane. However, signs R3-5 and R3-7 are not required at signalized intersections where separate turn signals and turning bays are provided.

Lane-Use Controls permitting left (or right) turns from two (or more) lanes are normally warranted whenever the turning volume exceeds the capacity of one turning lane, and when all movements can be accommodated in the lanes available to them. When multiple-lane left turns are to be permitted at signalized intersections, special signal phasing should be used to allow the turning movements without interference from opposing or cross traffic.

Overhead Lane-Use Control signs are preferred because they can be placed over the lanes to which they apply. This type of control, and particularly the multiple-lane turn, occurs where volumes are high and an overhead installation can be justified. Use of an overhead sign for one approach lane does not require installation of overhead signs for the other lanes of that approach.

When post-mounted Lane-Use Control signs are used, one sign should be placed at the intersection. A second Lane-Use Control sign should be placed at an adequate distance in advance of the intersection so that motorists can select the appropriate lane before reaching the ends of the lines of waiting vehicles. Pavement markings (sec. 3B-17) may be used to supplement post-mounted signs and should be used with mandatory turn signs.

2B-19 Two Way Left Turn Only Signs (R3-9a, 9b)

Two-Way Left Turn Only signs (R3-9a or R3-9b) should be used in conjunction with the required pavement markings where a lane is reserved for the exclusive use of left turning vehicles in either direction and is not used for passing and overtaking. The post-mounted R3-9b sign may be used as an alternate to or a supplement to the overhead mounted R3-9a sign.
Signing is especially helpful to motorists in areas where the two-way left turn only maneuver is new, in areas subject to environmental conditions that frequently obscure the pavement markings, and on peripheral TWLTO streets to an extensive system of two-way left turn only routes.

The use of BEGIN or END at the top of a Two-Way Left Turn Only sign is permitted. The message may appear on the main sign itself, or on a plate mounted immediately above it.

2B-20 Preferential Lane Signing (R3-10 to 15)

Preferential lanes are lanes where usage is limited according to class of vehicle occupancy. Signing for these lanes should follow the standard regulatory signing principles: black legend on white background, rectangular shape, and reflectorized or illuminated if applicable during periods of reduced visibility. The diamond lane marking symbol used to designate preferential lanes should be incorporated in the body of the signs, as a white symbol on a black background.
Signs R3-11 (post-mounted) or R3-14 (overhead) are intended for use with a preferential lane to indicate the particular restrictions applying to that lane. When used, sign R3-11 should be located adjacent to the preferential lane and the R3-14 sign should be mounted directly over the lane. The message format of a Bus-Carpool lane for sign R3-11 should have the following sequence:

**TOP LINES:** lane(s) applicable (e.g., CENTER LANE, CURB LANE, RIGHT 2 LANES, THIS LANE)

**MIDDLE LINES:** applicable vehicles (e.g., BUSES ONLY, BUSES AND CARPOOLS, BUSES AND RIGHT TURNS ONLY)

**BOTTOM LINES:** applicable time and day (e.g., 7-9 AM, 4-6 PM, MON-FRI).

The message format of sign R3-14 should have this sequence:

**TOP LINES:** applicable vehicles (e.g., BUSES ONLY, BUSES AND CARPOOLS, BUSES AND RIGHT TURNS ONLY)

**BOTTOM LINES:** applicable time and day (e.g., 7-9 AM, 4-6 PM, MON-FRI). The time and day are separated by a down arrow.

The diamond symbol on these signs preferably should appear in the top left quadrant.
Where overhead lane-use control signals or changeable message signs are used to convey the preferential lane-use restrictions, signs R3-11 and R3-14 are not mandatory but may be used to supplement the other controls. The required pavement markings for these lanes are specified in section 3B-22.

Advance notification of preferential lane-use roadways is desirable. RESTRICTED LANE AHEAD signs, R3-10 for post mounting and R3-13 for overhead mounting, may be used for this purpose.

At the end of a signed section of preferential lanes, a RESTRICTED LANE ENDS sign (R3-12 or R3-15) shall be used.

Although the legend format of signs R3-10 through 15 should be retained, other messages may be used to fit a specific preferential lane-use operation. Sign size, location and spacing are dependent upon the individual situation, but should be consistently applied.

2B-21 Do Not Pass Sign (R4-1)

The DO NOT PASS sign may be used on a two- or three-lane road at the beginning of, and at intervals within a zone through which restricted sight distance or other condition makes overtaking and passing hazardous. Where standard pavement markings (sec. 3B-3) are present, the sign need not be used. However, the sign may be used in addition to the pavement markings to emphasize the restriction on passing.

The standard DO NOT PASS sign shall be 24 × 30 inches, with a minimum size for minor roads of 18 × 24 inches.

Because a driver about to pass a vehicle ahead often has only a restricted view to the right, consideration should be given to placing a sign on the left-hand side of the roadway. The NO PASSING ZONE sign (sec. 2C-38), placed on the left-hand side of two-way roadways, should be considered as a supplement to the enforceable no-passing zone control which is the regulatory marking and/or the regulatory signs.

Standards for determining the location and extent of no-passing zones are set forth in connection with pavement markings through such zones (sec. 3B-4, 5).
2B-22  Pass With Care Sign (R4-2)

The PASS WITH CARE sign should be used at the end of a no-passing zone where a DO NOT PASS sign has been erected at the beginning of the zone. It shall be of the same size and erected in the same manner as the DO NOT PASS sign.

![Pass With Care Sign](image)

2B-23  Slower Traffic Keep Right Sign (R4-3)

The SLOWER TRAFFIC KEEP RIGHT sign may be used on multiple-lane roadways to reduce unnecessary weaving. It should be erected just beyond the beginning of a multiple-lane pavement, and at selected locations on the median strip of a divided highway where there is a tendency on the part of the motorist to drive in the left-hand lane (or lanes) below the normal speed of traffic. It should not be used on the approach to an interchange or through an interchange area.

This sign shall have a standard, and minimum, size of $24 \times 30$ inches. Because it is not used on secondary roads, no small design is provided. On expressways the sign should be at least $36 \times 48$ inches, with $48 \times 60$ inches prescribed for freeways.

![Slower Traffic Keep Right Sign](image)
Where an extra lane has been provided on an upgrade for slow-moving traffic, it should be preceded by a sign directing such traffic into this "climbing" lane. The SLOWER TRAFFIC KEEP RIGHT sign (sec. 2B-23) is applicable for this purpose, or more specific messages such as TRUCKS USE RIGHT LANE (R4-5) may be used. The standard, and minimum, size of these signs shall be $24 \times 30$ inches.

In advance of the beginning of the climbing lane a sign, TRUCK LANE (500) FEET (R4-6), may be erected, of the same size as the sign at the beginning of the climbing lane. The distance shown should approximate that of the actual location of the sign.

In advance of the end of the climbing lane, a Pavement Width Transition warning sign should be erected (sec. 2C-19). This is particularly important, as the end of the climbing lane will normally be concealed beyond the crest of the grade. A duplicate sign on the left of the roadway is also desirable to warn the faster traffic, as the sign on the right may be obscured by the slower moving trucks.

Pavement markings should clearly indicate how the climbing lane is designed to operate.

2B-25 Keep Right Sign (R4-7)

The Keep Right sign should be used at the ends of medians, parkways, loading islands, and refuge islands, at traffic islands, and at underpass piers, where traffic is required to keep to the right. The Keep Right sign may not always be necessary at intermediate ends of divisional islands and medians and should not be used with other signs that obviously mark locations where motorists know they must pass on the right. The word message KEEP RIGHT, with an arrow, on a $24 \times 30$ inch panel may be used as an alternate for the R4-7 sign.

The Keep Right sign shall have a standard size of $24 \times 30$ inches. On expressways the sign should be at least $36 \times 48$ inches, with $48 \times 60$
inches prescribed for use on freeways. A smaller size of 18\(\times\)24 inches is permissible for use on narrow medians and at median openings to serve entering cross traffic and to remind through traffic of the regulation.

A certain amount of flexibility must be allowed in the mounting height for Keep Right signs. Where the obstruction is in or so near the lane of traffic that the sign at a normal minimum height may be obscured by vehicles, a second sign of the same design may be mounted directly above the standard sign with its bottom edge at a height of 8 to 10 feet above the pavement. In this case the lower sign may be placed somewhat below the normal minimum height.

On a median, the Keep Right sign should be mounted not more than 50 feet beyond the approach end of the island. On a pedestrian island or intersection channelizing island it should be mounted at the approach end or as close thereto as practicable. The sign should be mounted on the face of or just in front of a pier or other obstruction in the center of the roadway. Where appropriate, a Keep Left sign (R4–8) may be used (sec. 5E–2).
2B-26  Do Not Enter Sign (R5-1)

To prohibit traffic from entering a restricted road section the DO NOT ENTER sign should be conspicuously placed in the most appropriate position at the end of a one-way roadway or ramp. The sign should normally be mounted on the right-hand side of the roadway, facing traffic entering the roadway or ramp in the wrong direction. However, a second sign on the left-hand side of the roadway may be justified, particularly where traffic may be approaching in a turn.

The DO NOT ENTER sign shall be a 30-inch white square on which is inscribed a 29-inch diameter red circle, with a white band 5 inches in width placed horizontally across the center of the circle. The legend DO NOT ENTER shall appear in white letters with the words DO NOT above the band and ENTER below the band. Larger sizes are prescribed for use on major streets or on expressways with one-way ramp or roadway connections. (Ref: Sec. 2A-31 & 2E-41)

2B-27  Wrong Way Sign (R5-1a)

The WRONG WAY sign (R5-1a) may be used as a supplement to the DO NOT ENTER sign (R5-1) where an exit ramp intersects a crossroad or a crossroad intersects a divided highway in a manner that may invite wrong-way entry.

The sign should be placed at a location along the exit ramp or the divided roadway farther from the crossroad than the DO NOT ENTER sign. (Ref: Sec. 2A-31 & 2E-41)
The laws of most States permit the State or local authority having jurisdiction to exclude trucks or other commercial vehicles from any designated highway where signs have been placed giving this notice. Sign legends should be developed to meet requirements established by statute or ordinance. The No Trucks symbol (R5-2), COMMERCIAL VEHICLES EXCLUDED (R5-4), and TRUCKS (VEHICLES) WITH LUGS PROHIBITED (R5-5) are suggested as suitably specific legends.

The word legend NO TRUCKS on a 24 × 24 inch panel may be used as an alternate.

Most States provide that the proper authority may exclude pedestrians, bicycles, or other type traffic and shall erect signs setting forth such restrictions. To be effective such signs must clearly indicate the type of traffic that is admitted or the type that is excluded. Typical exclusion messages include No Bicycles (R5-6), NONMOTORIZED TRAFFIC PROHIBITED (R5-7), MOTOR-DRIVEN CYCLES PROHIBITED (R5-8) or an appropriate combination or grouping of these legends into a single sign, such as PEDESTRIANS BICYCLES MO-
TOR-DRIVEN CYCLES PROHIBITED (R5-10a) or PEDESTRIANS AND BICYCLES PROHIBITED (R5-10b).

If an exclusion is to be governed by vehicle weight, a Weight Limit sign (sec. 2B-41) rather than an Exclusion sign should be used. Because of the variety of possible messages for these signs, it is not practicable to fix standard sizes for them as a class. In all cases the lettering should be large enough to give adequate legibility. They should be conspicuously placed at all entrances to the restricted roadway. The Exclusion sign should be placed on the right-hand side of the roadway approximately 25 feet from the intersection so as to be clearly visible.
visible to all drivers and others turning into the roadway which has the exclusion. A supplementary sign may be necessary on the left-hand side of the restricted roadway.

A PEDESTRIAN PROHIBITED sign (R5-10c) should be used at interchanges or elsewhere where pedestrians can enter the expressway right-of-way and endanger themselves or others, particularly where they attempt to cross the roadways. The sign may also be used at underpasses or elsewhere where safe pedestrian facilities are not provided. The sign should be erected wherever it can be most effective. Because of the length of the words constituting its legend, a 24 × 12 inch horizontal panel is warranted.

2B-29 One Way Sign (R6-1, R6-2)

The ONE WAY sign shall be used when required to indicate streets or roadways upon which vehicular traffic is allowed to travel in one direction only. The sign shall be either (a) a white arrow, right or left, on black horizontal rectangle of a standard, and minimum, size of 36 × 12 inches with the words ONE WAY centered in the arrow (R6-1); or (b) a vertical rectangle of a standard, and minimum, size of 18 × 24 inches with black lettering and a right or left arrow on a white background (R6-2). The vertical design has advantages where lateral space is limited.

One Way signs shall be placed on the near right-hand and the far left-hand corners of the intersection at nonsignalized intersections so as to face traffic entering or crossing the one-way street (Figure 2–3, page 2A-11), except that intersections of divided highways with median widths of 30 feet or more may be signed as in Section 2A-31. Where the intersection is signalized, the signs shall be placed either near the appropriate signal faces or at the locations specified for nonsignalized intersections. One Way signs should also be placed parallel to the one-way street directly opposite the exits from alleys and other public ways. A One Way sign should always be used, where applicable, and may be supplemented by a Turn Prohibited sign (sec. 2B-15).
One Way signs are not ordinarily needed on the one-way roadways of divided expressways, where the design of interchanges indicates the direction of traffic on the separate roadways.

2B-30 Divided Highway Crossing Sign (R6-3, R6-3a)

The Divided Highway Crossing sign may be used as a supplemental sign on the approach legs of a roadway that intersects with a divided highway.

The sign may be placed beneath a stop sign or mounted separately. When the Divided Highway Crossing sign is used at a four-legged intersection, sign R6-3 shall be used. When used at a "T" intersection, sign R6-3a shall be used. The standard and minimum size sign in 24" by 18".

2B-31 Urban Parking and Stopping Signs (R7 Series)

Parking signs and other signs governing the stopping and standing of vehicles cover a very wide variety of regulations and only general specifications can be laid down here. Typical examples are as follows:

**NO PARKING ANY TIME (R7-1)**

**NO PARKING 8:30 AM to 5:30 PM (R7-2)**

**NO PARKING EXCEPT SUNDAYS AND HOLIDAYS (R7-3)**

**NO STANDING ANY TIME (R7-4)**

**ONE HOUR PARKING 9 AM - 7 PM (R7-5)**

**NO PARKING LOADING ZONE (R7-6)**

**NO PARKING BUS STOP (R7-7, R7-107, R7-107a)**

Many other wordings will be found necessary to fit local conditions. To minimize the number of parking signs, blanket regulations that apply to a given district may, if legal, be posted at municipal boundary lines. School area parking signs are treated in Part VII of this Manual.

The legend on parking signs shall state whatever regulations apply, but the signs shall conform to the standards of shape, color, location and
use. Generally, parking signs should display such of the following information as is appropriate, from top to bottom of the sign, in the order listed:

1. Restriction or prohibition.
2. Time of day it is applicable, if not at all hours.
3. Days of week applicable, if not every day.

In addition there should be a single-headed arrow pointing in the direction the regulation is in effect, if the sign is at the end of a zone, or a double-headed arrow pointing both ways, if the sign is at an intermediate point in a zone. As an alternate to the arrow, if the signs are posted facing traffic at an angle of 90 degrees to the curb line, there may be included on the sign, or on a separate plate below the sign, such legend as BEGIN, END, HERE TO CORNER, HERE TO ALLEY, THIS SIDE OF SIGN, or BETWEEN SIGNS.

Where parking is prohibited at all times or at specified times, parking signs shall have red letters and border on a white background (Parking Prohibition signs). Where only limited-time parking or parking in a particular manner are permitted, the signs shall have green letters and borders (Parking Restriction signs).

In signs R7-107 and 108, the word NO or the numeral showing the time limit in hours or minutes is presented in a reversed color arrangement in the upper left-hand corner, for emphasis. These two signs should be limited to using the word PARKING rather than STOPPING or STANDING so that the proper size and series of letters need not be sacrificed.

Alternate designs for the R7-107 sign are permissible (R7-107a). Alternate designs may include, on a single panel, a transit logo, an approved bus symbol, a parking prohibition, the words BUS STOP, and an arrow. The preferred bus symbol color is black but other dark colors may be used. Additionally, the transit logo may be shown on the bus face in the appropriate colors in lieu of placing the logo separately. The reverse side of the sign may contain bus routing information.

Where parking is prohibited during certain hours and permitted under a time limit at other periods of the day, two parking signs should ordinarily be used, the red above the green. As an alternative both messages, in different colors may be used on a single plate, with the sign lengthened vertically if necessary.

On urban streets parking signs shall have a standard, and minimum, size of 12 x 18 inches and need not be reflectorized.

At the transition point between two parking zones it may be advantageous to use, instead of two signs, a single sign 24 x 18 inches. This is in effect two standard signs mounted side by side. Such a sign should display a right and a left arrow pointing in the directions that the respective restrictions apply.
Where it is essential that all traffic lanes be kept open for moving traffic, some city authorities make it a practice to tow away illegally parked vehicles. To make the parking regulations more effective and to improve public relations by giving a definite warning, a sign reading TOW-AWAY ZONE (R7-201) may be appended to, or incorporated in, any parking prohibition sign. It should have red legend on a white background. The Tow-Away Zone Symbol sign (R7-201a) may be used in lieu of the R7-201 sign.

Where special parking restrictions are imposed during heavy snowfall, Snow Emergency signs may be erected. The legend will vary according to the regulations, but the signs shall be vertical rectangles, having a white background with the upper part of the plate a red background.

The words NO PARKING may be used as an alternative to the No Parking symbol (shown in sign R8-3a) on signs R7-1, R7-2, R7-3, R7-6, R7-7, and R7-107a. When the symbol sign itself (R8-3a) is used for urban applications, it shall have a minimum and standard size of 6 inches square. The symbol “P” is black, circumscribed in a red circle with a red slash on a white background and black border.

The supplemental educational plaque, NO PARKING, with a red legend and border on a white background, may be used above the symbol.

2B-32 Placement of Urban Parking Signs

When parking signs with arrows are used to indicate the extent of the restricted zones, the signs should be set at an angle of not less than 30 nor more than 45 degrees with the line of traffic flow to be visible to approaching traffic.

Care should be exercised to see that the single arrows point in the proper direction to indicate the regulated zone. Where the zone is unusually long, signs showing a double arrow are desirable at intermediate points within the zone.

If the signs are mounted at an angle of 90 degrees to the curb line, two signs shall be mounted back to back at the transition point between two parking zones, each with the appended plate reading THIS SIDE OF SIGN. At intermediate points within a zone, a single sign without any arrow or appended plate should be used, facing in the direction of approaching traffic. Otherwise the standards of placement should be the same as for signs using directional arrows.

2B-33 Parking Prohibition Signs in Rural District (R8-1, 2, 3, 5, 6)

In rural districts, special parking prohibition signs may be used to emphasize that no person shall stop, park, or leave standing any vehicle on the paved or traveled part of the highway. Rural parking prohibition signs shall have a red legend on a white background.
The legend on rural parking signs must be appropriate to the restrictions imposed. The legend NO PARKING ON PAVEMENT (R8-1) is generally suitable. Where a roadway has paved shoulders, the NO PARKING EXCEPT ON SHOULDER (R8-2) is less likely to cause confusion. The simple legend, NO PARKING (R8-3) prohibits any parking along a given highway. However, if the restriction applies to a limited area or zone, the limits of the zone should be shown by arrows or supplemental plates as used on urban parking signs. If necessary, the word STOPPING may be substituted for PARKING.

The standard size for rural parking signs shall be 24 × 30 inches. On secondary roads a smaller size of 18 × 24 inches is permitted. Expressway parking signs should be at least 36 × 48 inches.
The words NO PARKING may be substituted for the No Parking symbol on signs R8-1, R8-2, and R8-3. Or, symbol sign R8-3a may be used, with any accompanying word message to appear on a separate supplemental plate mounted below the symbol plate. For rural applications, sign R8-3a shall have a minimum and standard size of 24 inches square. The supplemental plate shall conform to the width of the symbol plate, but the length should vary depending upon the length of the legend used. The legend and border shall have a red color with a white background.

A supplemental educational plaque, NO PARKING, with a red legend and border on a white background, may be used above the symbol.

2B-34 Emergency Parking Signs (R8-4, 7)

Stopping of vehicles on expressways can be exceedingly hazardous. If an emergency stop is necessary, it should be made on the shoulder, well off the pavement. Except where adequate paved turnouts are provided, the road shoulders should be reserved for emergency use by vehicles that must leave the roadway to stop because of mechanical breakdown, tire trouble, lack of fuel, or other emergencies involving the vehicles or their occupants.

The EMERGENCY PARKING ONLY sign (R8-4) may be used on expressways a short distance beyond an interchange entrance and at random intervals as needed, particularly where scenic or other attractions create a tendency to stop temporarily, and no turnout or rest areas have been provided. If necessary the word STOPPING (R8-7) may be substituted for PARKING. These signs are designed as horizontal rectangles as shown below and shall have a black legend on a white background. A size of 48 x 36 inches is prescribed for use on freeways.

2B-35 Walk on Left and No Hitchhiking Signs (R9-1, 4)

The pedestrian sign WALK ON LEFT FACING TRAFFIC may be used to encourage safer pedestrian habits on rural highways where no sidewalks
are provided. This sign shall be in only one standard size of $18 \times 24$ inches, and need not be reflectorized. It should be erected on the right-hand side of the road where pedestrians must walk on the pavement or road shoulder in the absence of pedestrian pathways or sidewalks.

The No Hitchhiking sign may be used to post prohibition against standing in the roadway for the purpose of soliciting a ride. It may be erected at locations where hitchhiking has been observed contrary to law. The R9–4 word message sign may be used as an alternate to the R9–4a symbol sign.

2B–36 Pedestrian Crossing Signs (R9–2, R9–3)

Pedestrian Crossing signs may be used selectively to aid in limiting pedestrian crossing to safe places. They will ordinarily be required only in urban areas and, when used, shall be erected to face the traffic for which they are intended. The messages shown are typical. These signs need not be reflectorized.

The CROSS ONLY AT CROSS WALKS sign (R9–2) may be used, where crosswalks are clearly defined, to discourage jay-walking or unauthorized crossing.

The No Pedestrian Crossing sign may be used to prohibit pedestrians from crossing a roadway at a point which is considered to be hazardous, especially in front of a school or other public building where a crossing is not designated. The R9–3 word message sign may be used as an alternate to the R9–3a symbol sign. Supplemental black on white panel R9–3b (R or L), USE CROSSWALK with an arrow, may be used below either sign to designate the direction of the crossing. When R9–3b is used, the educational plaque for R9–3a should be deleted.
2B-37 Traffic Signal Signs (R10-1 to 12)

To supplement traffic signal control, auxiliary signs of the type illustrated are often desirable or necessary for the instruction of pedestrians and drivers. Signal instruction signs should be located adjacent to the signal face to which they apply.

Among the traffic signal instruction signs applicable to pedestrians are signs R10-1, 2, 3, and 4. These signs need not be reflectorized.

Permissible as an alternate message for the Pedestrian Actuated Signal sign (R10-3, R10-4) is the legend TO CROSS STREET (arrow) PUSH BUTTON WAIT FOR GREEN (WALK) SIGNAL (R10-3a, R10-4a). The symbol sign R10-4b may also be used as an alternate to sign R10-4.

The Pedestrian Actuated Signal sign should be 9 x 12 inches in size and shall be mounted immediately above or incorporated in the pedestrian push-button unit (sec. 4D-6).

Signal instruction signs may be needed at certain locations to clarify signal control. Among the legends for this purpose are LEFT ON ARROW ONLY (R10-5), LEFT TURN YIELD ON GREEN (symbolic green ball) (R10-12), or LEFT (RIGHT) TURN SIGNAL (R10-10) for compliance with certain turn signals, STOP HERE ON RED (R10-6) for observance of signal limit lines, DO NOT BLOCK INTERSECTION (R10-7) for avoidance of traffic obstructions, and USE LANE(S) WITH GREEN ARROW (R10-8) for obedience to lane-direction control signals.

The NO TURN ON RED sign (R10-11a, 11b) shall be used to indicate that a right turn on red (or left turn on red for one-way streets) is not permitted. For part time prohibitions see section 2B-15. The NO TURN ON RED sign should have standard dimensions of 24 x 30 inches and 24 x 24 inches for R10-11a and R10-11b, respectively. The sign should be erected near the appropriate signal head.
A NO TURN ON RED sign may be considered whenever an engineering study finds that one or more of the following conditions exist:

1. Sight distance to vehicles approaching from the left (or right, if applicable) is inadequate.
2. The intersection area has geometrics or operational characteristics which may result in unexpected conflicts.
3. There is an exclusive pedestrian phase.
4. Significant pedestrian conflicts are resulting from RTOR maneuvers.
5. More than three RTOR accidents per year have been identified for the particular approach.
6. There is significant crossing activity by children, elderly, or handicapped people.

Where improved utilization of progressive signal systems is desired, the Traffic Signal Speed sign (sec. 2D-48) should be used.
The Keep Off Median sign is intended for use where driving into or parking on the median is prohibited.

The KEEP OFF MEDIAN sign shall have a standard, and minimum, size of 24 × 30 inches. On expressways it should be at least 36 × 48 inches, with 48 × 60 inches prescribed for freeways.

The sign should be erected on the left of the roadway within the median wherever there is a tendency for drivers to enter or cross and at random intervals as needed.
The sign should be erected on the left of the roadway within the median wherever there is a tendency for drivers to enter or cross and at random intervals as needed.

**Keep Off Median**

**Road Closed**

2B-39 Road Closed Sign (R11-2)

The ROAD CLOSED sign should be used to mark roads that have been closed to all traffic (except authorized vehicles) either because of construction or maintenance operations (Part VI) or because of a temporary emergency. It should not be used where traffic is maintained or where a route is detoured several miles in advance of the actual construction or blockade. In the latter case the Local Traffic Only sign (sec. 2B-40) should be used.

The Road Closed sign shall have a standard, and minimum, size of 48 x 30 inches.

Where the sign faces through traffic, it shall be preceded by an Advance Road Closed warning sign (sec. 6B-17) and, if applicable, an Advance Detour warning sign (sec. 6B-16).

2B-40 Local Traffic Only Sign (R11-3, R11-4)

The Local Traffic Only sign should be used where through traffic must detour to avoid a closing of the highway for construction or maintenance work (Part VI), or for a temporary emergency some distance beyond, but where the highway is open for traffic up to the point of closure. It shall carry the legend ROAD CLOSED (10) MILES AHEAD—LOCAL TRAFFIC ONLY, or optionally for urban application, ROAD CLOSED TO THRU TRAFFIC. Both signs shall be designed as horizontal rectangles.

The words BRIDGE OUT (or similar message) may be substituted for ROAD CLOSED where applicable. Where the sign faces through traffic, it shall be preceded by an Advance Road Closed warning sign.
2B-41 Weight Limit Signs (R12-1 to 5)

Due to seasonal weakening of the road surface, obsolescence of bridges or pavements, or other impairment of roadways, it is often necessary to limit the load permitted on a roadway.

The Weight Limit sign (R12-1) carrying the legend WEIGHT LIMIT (10) TONS, may be used to indicate restrictions pertaining to total vehicle weight including load.

Where the restriction applies to axle weight rather than gross load, the legend may be AXLE WEIGHT LIMIT (5) TONS (R12-2).

In residential districts, where it is intended to restrict trucks of certain sizes by reference to empty weight, the legend may read NO TRUCKS OVER 7000 LBS EMPTY WT (R12-3).

In areas where multiple regulations of the type described above are applicable, a sign combining the necessary messages on a single panel may be used, such as WEIGHT LIMIT (2) TONS PER AXLE (10) TONS GROSS (R12-4).

Posting of specific load limits may be accomplished by use of the Weight Limit symbol sign (R12-5). This sign contains the legend WEIGHT LIMIT on the top two lines and shows three different truck symbols with the allowable weight limit shown to the right of each symbol as ( ) T. A bottom line of legend stating GROSS WT is permissible if needed for enforcement purposes. Only the truck symbols and their respective weight limits for which restrictions apply need be shown.

A Weight Limit sign shall be located immediately in advance of the section of highway or the structure to which it applies. To reduce costly delay and backtracking, a weight limit sign (R12-1) with an advisory message may be placed at approach road intersections or other points where the affected vehicle can detour or turn around. The standard, and minimum, size shall be 24 × 30 inches but a larger size is desirable on major roads and streets.
The laws of many States provide for the establishment of Weigh Stations at ports of entry and elsewhere, and require that trucks and other classes of vehicles shall stop at these stations for weighing, inspection, and clearance. A regulatory sign is usually necessary to direct the concerned traffic into the Weigh Station. When so required, the message ALL TRUCKS/COMMERCIAL VEHICLES/NEXT RIGHT (R13–1) is recommended. This sign should be supplemented by a series of guide signs standardized for the identification and operation of Weigh Stations (sec. 2D–45).

Although the standard regulatory sign color combination is a black legend on a white background, the reverse color combination, white legend on black background, is preferred for this sign.
2B-43 Truck Route Sign (R14-1)

The TRUCK ROUTE sign (R14-1) should be used to mark an unnumbered truck route which has been designated by proper authority where either a weight limit restriction or a truck exclusion has been imposed on alternate routes.

On a numbered highway, the auxiliary TRUCK marker (sec. 2D-20) will be applicable.

2B-44 Other Regulatory Signs

Regulatory signs other than those classified and specified in this Manual may be required to aid the enforcement of other laws or regulations. Typical miscellaneous regulatory signs are KEEP OFF WET PAINT, NO DUMPING ALLOWED, DO NOT THROW LITTER, NO FISHING FROM BRIDGE, and EMERGENCY AND AUTHORIZED VEHICLES ONLY, the uses of which are sufficiently obvious to require no detailed specifications. Care should be taken to avoid the use of special signs whenever a standard sign will serve the purpose.