

CHAPTER 2D. GUIDE SIGNS—CONVENTIONAL ROADS

Section 2D.01 Scope of Conventional Road Guide Sign Standards

Standard:

Standards for conventional road guide signs shall apply to any road or street other than low-volume roads (as defined in Section 5A.01), expressways, and freeways.

Section 2D.02 Application

Support:

Guide signs are essential to direct road users along streets and highways, to inform them of intersecting routes, to direct them to cities, towns, villages, or other important destinations, to identify nearby rivers and streams, parks, forests, and historical sites, and generally to give such information as will help them along their way in the most simple, direct manner possible.

Chapter 2A addresses placement, location, and other general criteria for signs.

Section 2D.03 Color, Retroreflection, and Illumination

Support:

Requirements for illumination, retroreflection, and color are stated under the specific headings for individual guide signs or groups of signs. General provisions are given in Sections 2A.08, 2A.09, and 2A.11.

Standard:

Except where otherwise specified herein for individual signs or groups of signs, guide signs on streets and highways shall have a white message and border on a green background. All messages, borders, and legends shall be retroreflective and all backgrounds shall be retroreflective or illuminated.

Section 2D.04 Size of Signs

Support:

For most guide signs, the legends are so variable that a standardized size is not appropriate. The sign size is determined primarily by the length of the message, and the size of lettering and spacing necessary for proper legibility. However, for signs with standardized designs, such as

route signs, it is practical to use the standard sizes that are given in the "Standard Highway Signs" book.

Option:

Because the size of overhead signs are sometimes limited by factors such as lane width and vertical clearance, reduced letter height, reduced interline spacing, and reduced edge spacing may be used.

Guidance:

When a reduction in the standard size is necessary, the design used should be as similar as possible to the design for the standard size.

Section 2D.05 Lettering Style

Standard:

Design standards for upper-case letters, lower-case letters, capital letters, numerals, route shields, and spacing shall be as provided in the "Standard Alphabets for Highway Signs and Pavement Markings."

The standard lettering for conventional road guide signs shall be all capital letters (Section 2A.14), or a combination of lower-case letters with initial upper-case letters. When a combination of upper- and lower-case letters are used, the initial upper-case letters shall be approximately 1.33 times the "loop" height of the lower-case letters.

Section 2D.06 Size of Lettering

Support:

Sign legibility is a direct function of letter size and spacing. Legibility distance has to be sufficient to give road users enough time to read and comprehend the sign. Under optimum conditions, a guide sign message can be read and understood in a brief glance. The legibility distance includes a reasonable safety factor for inattention, blocking of view by other vehicles, unfavorable weather, inferior eyesight, or other causes for delayed or slow reading. Where conditions permit, repetition of guide information on successive signs gives the road user more than one opportunity to obtain the information needed.

Standard:

Design layouts for conventional road guide signs showing interline spacing, edge spacing, and other specification details shall be as shown in the "Standard Highway Signs" book.

The principal legend on guide signs shall be in letters and numerals at least 150 mm (6 in) in height for all capital letters, or a combination of 150 mm (6 in) in height for upper-case letters with 113 mm (4.5 in) in height for lower-case letters. On low-volume roads (as defined in Section 5A.01), and on urban streets with speeds of 40 km/h (25 mph) or less, the principal legend shall be in letters at least 100 mm (4 in) in height.

Sign panels shall be large enough to accommodate the required legend without crowding.

Guidance:

Lettering sizes should be consistent on any particular class of highway.

The minimum lettering sizes specified herein should be exceeded where conditions indicate a need for greater legibility.

Section 2D.07 Amount of Legend

Support:

The longer the legend on a guide sign, the longer it will take road users to comprehend it, regardless of letter size.

Guidance:

Guide signs should be limited to three lines of principal legend. Where two or more signs are included in the same overhead display, the amount of legend should be minimized. The principal legend should include only place names, route numbers, and street names.

Option:

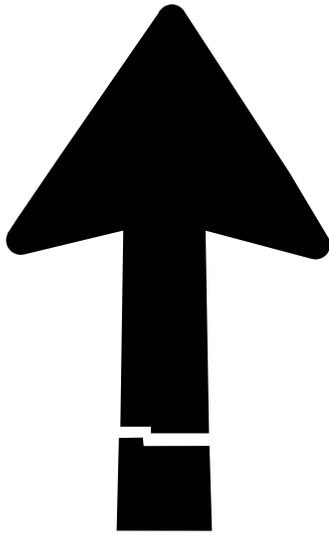
Symbols, action information, cardinal directions, and exit numbers may be used in addition to the principal legend where sign space is available.

Section 2D.08 Arrows

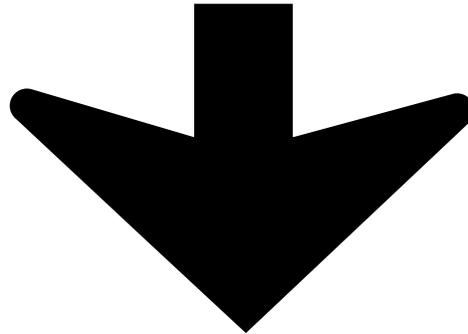
Support:

Arrows are used for lane assignment and to indicate the direction toward designated routes or destinations. Figure 2D-1 shows the up-arrow and the down-arrow designs that have been approved for use on guide signs. Detailed drawings of these standard arrows are shown in the "Standard Highway Signs" book.

Figure 2D-1. Arrows for Use on Guide Signs



Up Arrow



Down Arrow

Standard:

On overhead signs where it is desirable to indicate a lane to be followed, a down arrow shall point downward toward the center of that lane. Down arrows shall be used only on overhead guide signs that restrict the use of specific lanes to traffic bound for the destination(s) and/or route(s) indicated by these arrows. Down arrows shall not be used unless an arrow can be pointed to each lane that can be used to reach the destination shown on the sign.

Where a roadway is leaving the through lanes, an up arrow shall point upward at an angle representative of the alignment of the exit roadway.

Guidance:

Arrows used on guide signs to indicate the directions toward designated routes or destinations should be pointed at the appropriate angle to clearly convey the direction to be taken. A horizontally oriented up-arrow design should be used at right-angle intersections.

On a ground-mounted guide sign, a directional arrow for a straight-through movement should point upward. For a turn, the arrow on a guide sign should point upward and at an angle related to the sharpness of the turn.

Option:

Arrows may be placed below the principal sign legend or on the appropriate side of the legend.

Guidance:

At an exit, an arrow should be placed at the side of the sign which will reinforce the movement of exiting traffic. The up-arrow design should be used.

The width across the arrow head should be at least equal to the height of the largest letter on the sign. For short downward pointing arrows on overhead signs, they should be 1.75 times the letter height.

Diagrammatic signing used on conventional roads should follow the principles set forth in Section 2E.19.

Section 2D.09 Numbered Highway Systems**Support:**

The purpose of numbering and signing highway systems is to identify routes and facilitate travel.

The Interstate and United States (U.S.) highway systems are numbered by the American Association of State Highway and Transportation Officials (AASHTO) upon recommendations of the State highway organizations because the respective States own these systems. State and county road systems are numbered by the appropriate authorities.

The basic policy for numbering the U.S. and Interstate highway systems is contained in the following Purpose and Policy statements published by AASHTO (see Page i for AASHTO's address):

- A. "Establishment and Development of United States Numbered Highways"; and
- B. "Establishment of a Marking System of the Routes Comprising the National System of Interstate and Defense Highways."

Guidance:

The principles of these policies should be followed in establishing the above highway systems and any other systems, with effective coordination between adjacent jurisdictions. Care should be taken to avoid the use of numbers or other designations that have been assigned to Interstate, U.S., or State routes in the same geographic area. Overlapping numbered routes should be kept to a minimum.

Standard:

Route systems shall be given preference in this order: Interstate, United States, State, and County. The preference shall be given by installing the highest-priority legend on the top or the left of the sign panel.

Section 2D.10 Route Signs and Auxiliary Signs**Standard:**

All numbered highway routes shall be identified by route signs and auxiliary signs.

The signs for each system of numbered highways, which are distinctive in shape and color, shall be used only on that system and the approaches thereto.

Route signs and any auxiliary signs that accompany them shall be retroreflective.

Option:

Route signs and auxiliary signs may be proportionally enlarged where greater legibility is needed.

Support:

Route signs are typically mounted in assemblies with auxiliary signs.

Section 2D.11 Design of Route Signs**Standard:**

The "Standard Highway Signs" book shall be used for designing route signs. Other route sign designs shall be established by the authority having jurisdiction.

Interstate Route signs shall consist of a cutout shield, with the route number in white letters on a blue background, the word INTERSTATE in white capital letters on a red background, and a white border. This sign shall be used on all Interstate routes and in connection with route sign assemblies on intersecting highways.

A 600 x 600 mm (24 x 24 in) minimum sign size shall be used for Interstate route numbers with one or two digits, and a 750 x 600 mm (30 x 24 in) minimum sign size shall be used for Interstate route numbers having three digits.



Interstate Route Sign
M1-1



Off-Interstate Business Route Sign
M1-2 (Loop)
M1-3 (Spur)



U.S. Route Marker
M1-4



State Route Marker
M1-5



County Route Marker
M1-6



Forest Route Marker
M1-7

Option:

Interstate Route signs may contain the State name in white upper-case letters on a blue background.

Standard:

Off-Interstate Business Route signs shall consist of a cutout shield carrying the number of the connecting Interstate route and the words BUSINESS and either LOOP or SPUR in capital letters. The legend and border shall be white on a green background, and the shield shall be the same shape and dimensions as the Interstate Route sign. In no instance shall the word INTERSTATE appear on the Off-Interstate Business Route sign.

Option:

The Off-Interstate Business Route sign may be used on a major highway that is not a part of the Interstate system, but one that serves the business area of a city from an interchange on the system. When used on a green guide sign, a white square or rectangle may be placed behind the shield to improve contrast.

Standard:

U.S. Route signs shall consist of black numerals on a white shield surrounded by a black background without a border. This sign shall be used on all U.S. routes and in connection with route sign assemblies on intersecting highways.

A 600 x 600 mm (24 x 24 in) minimum sign size shall be used for U.S. route numbers with one or two digits, and a 750 x 600 mm (30 x 24 in) minimum sign size shall be used for U.S. route numbers having three digits.

State Route signs shall be designed by the individual State highway agencies.

Guidance:

State Route signs should be rectangular and should be approximately the same size as the U.S. Route sign. State Route signs should also be similar to the U.S. Route sign by containing approximately the same size black numerals on a white area surrounded by a black background without a border. The shape of the white area should be circular in the absence of any determination to the contrary by the individual State concerned.

Standard:

If County road authorities elect to establish and identify a special system of important County roads, County road identification signs shall be designed and used as specified in the publication, "A Proposal for a Uniform County Route

Marker Program on a National Scale," available from the National Association of Counties, 440 First Street, NW, Washington, DC 20001. County Route signs displaying two digits or the equivalent (letter and numeral, or two letters) shall be a minimum size of 450 x 450 mm (18 x 18 in); those carrying three digits or the equivalent shall be a minimum size of 600 x 600 mm (24 x 24 in).

If a jurisdiction uses letters instead of numbers to identify routes, all references to numbered routes in this Chapter shall be interpreted to also include lettered routes.

Guidance:

If used with other route signs in common assemblies, the County Route sign should be of a size compatible with that of the other route signs.

Option:

When used on a green guide sign, a yellow square or rectangle may be placed behind the County Route sign to improve contrast.

Standard:

Route signs for park and forest roads shall be designed with adequate distinctiveness and legibility and of a size compatible with other route signs used in common assemblies.

Section 2D.12 Design of Route Sign Auxiliaries

Standard:

Route sign auxiliaries carrying word legends, except the JCT sign, shall have a standard size of 600 x 300 mm (24 x 12 in). Those carrying arrow symbols, or the JCT sign, shall have a standard size of 525 x 375 mm (21 x 15 in). All route sign auxiliaries shall match the color combination of the route sign that they supplement.

Guidance:

Auxiliary signs carrying word messages and mounted with 750 x 600 mm (30 x 24 in) Interstate Route signs should be 750 x 375 mm (30 x 15 in). With route signs of larger sizes, auxiliary signs should be suitably enlarged, but not such that they exceed the width of the route sign.

Option:

A route sign and any auxiliary signs used with it may be combined on a single panel.

Section 2D.13 Junction Auxiliary Sign (M2-1)

Standard:

The Junction (M2-1) auxiliary sign shall carry the abbreviated legend JCT and shall be mounted at the top of an assembly (see Section 2D.27) either directly above the route sign or above a sign for an alternative route (see Section 2D.16) that is part of the route designation. The minimum size of the Junction auxiliary sign shall be 525 x 375 mm (21 x 15 in) for compatibility with auxiliary signs carrying arrow symbols.

Section 2D.14 Combination Junction Sign (M2-2)

Option:

As an alternative to the standard Junction assembly where more than one route is to be intersected or joined, a rectangular sign may be used carrying the word JUNCTION above the route numbers.

Other designs may be used to accommodate State and County Route signs.

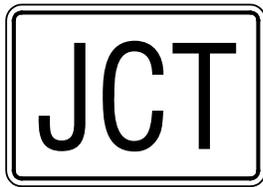
Standard:

The Combination Junction (M2-2) sign shall have a green background with white border and lettering for the word JUNCTION.

Guidance:

Where U.S. or State Route signs are used as components of guide signs, only the outline of the shield or other distinctive shape should be used.

Although the size of the Combination Junction sign will depend on the number of routes involved, the numerals should be large enough for clear legibility and should be of a size comparable with those in the individual route signs.



M2-1



M2-2



M3-1



M3-2



M3-3



M3-4



M4-1



M4-1a



M4-2



M4-3



M4-4



M4-5



M4-6



M4-7

Section 2D.15 Cardinal Direction Auxiliary Signs (M3-1 through M3-4)

Guidance:

Cardinal Direction auxiliary signs carrying the legend NORTH, EAST, SOUTH, or WEST should be used to indicate the general direction of the entire route.

Standard:

To improve the readability, the first letter of the cardinal direction words shall be ten percent larger, rounded up to the nearest whole number size.

If used, the Cardinal Direction auxiliary sign shall be mounted directly above a route sign or an auxiliary sign for an alternative route.

Section 2D.16 Auxiliary Signs for Alternative Routes (M4 Series)

Option:

Auxiliary signs, carrying legends such as ALTERNATE, BY-PASS, BUSINESS, or TRUCK, may be used to indicate an alternate route of the same number between two points on that route.

Standard:

If used, the auxiliary signs for alternative routes shall be mounted directly above a route sign.

Section 2D.17 ALTERNATE Auxiliary Signs (M4-1, M4-1a)

Option:

The ALTERNATE (M4-1) or the ALT (M4-1a) auxiliary sign may be used to indicate an officially designated alternate routing of a numbered route between two points on that route.

Standard:

If used, the ALTERNATE or ALT auxiliary sign shall be mounted directly above a route sign.

Guidance:

The shorter or better-constructed route should retain the regular route number, and the longer or worse-constructed route should be designated as the alternate route.

Section 2D.18 BY-PASS Auxiliary Sign (M4-2)

Option:

The BY-PASS (M4-2) auxiliary sign may be used to designate a route that branches from the numbered route through a city, bypasses a part of the city or congested area, and rejoins the numbered route beyond the city.

Standard:

If used, the BY-PASS auxiliary sign shall be mounted directly above a route sign.

Section 2D.19 BUSINESS Auxiliary Sign (M4-3)

Option:

The BUSINESS (M4-3) auxiliary sign may be used to designate an alternate route that branches from a numbered route, passes through the business portion of a city, and rejoins the numbered route beyond that area.

Standard:

If used, the BUSINESS auxiliary sign shall be mounted directly above a route sign.

Section 2D.20 TRUCK Auxiliary Sign (M4-4)

Option:

The TRUCK (M4-4) auxiliary sign may be used to designate an alternate route that branches from a numbered route, when it is desirable to encourage or require commercial vehicles to use the alternate route.

Standard:

If used, the TRUCK auxiliary sign shall be mounted directly above a route sign.

Section 2D.21 TO Auxiliary Sign (M4-5)

Option:

The TO (M4-5) auxiliary sign may be used to provide directional guidance to a particular road facility from other highways in the vicinity (see Section 2D.32).

Standard:

If used, the TO auxiliary sign shall be mounted directly above a route sign or an auxiliary sign for an alternative route.

Section 2D.22 END Auxiliary Sign (M4-6)

Guidance:

The END (M4-6) auxiliary sign should be used where the route being traveled ends, usually at a junction with another route.

Standard:

If used, the END auxiliary sign shall be mounted either directly above a route sign or above a sign for an alternative route that is part of the designation of the route being terminated.

Section 2D.23 TEMPORARY Auxiliary Sign (M4-7)

Option:

The TEMPORARY (M4-7) auxiliary sign may be used for an interim period to designate a section of highway that is not planned as a permanent part of a numbered route, but that connects completed portions of that route.

Standard:

If used, the TEMPORARY auxiliary sign shall be mounted either directly above the route sign, above a Cardinal Direction sign, or above a sign for an alternate route that is a part of the route designation.

TEMPORARY auxiliary signs shall be promptly removed when the temporary route is abandoned.

Section 2D.24 Temporary Detour and Auxiliary Signs

Support:

Chapter 6F contains information regarding Temporary Detour and Auxiliary signs.

Section 2D.25 Advance Turn Arrow Auxiliary Signs (M5-1, M5-2)**Standard:**

If used, the Advance Turn Arrow auxiliary sign shall be mounted directly below the route sign in Advance Route Turn assemblies, and displays a right or left arrow, the shaft of which is bent at a 90-degree angle (M5-1) or at a 45-degree angle (M5-2).

Section 2D.26 Directional Arrow Auxiliary Signs (M6 Series)**Standard:**

If used, the Directional Arrow auxiliary sign shall be mounted below the route sign in directional assemblies, and displays a single- or double-headed arrow pointing in the general direction that the route follows.

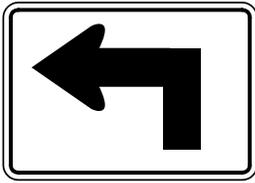
Section 2D.27 Route Sign Assemblies**Standard:**

A Route Sign assembly shall consist of a route sign and auxiliary signs that further identify the route and indicate the direction. Route Sign assemblies shall be installed on all approaches to numbered routes that intersect with other numbered routes.

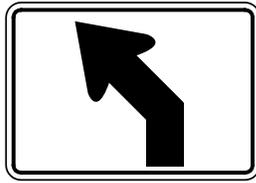
Where two or more routes follow the same section of highway, the route signs for Interstate, U.S., State, and County routes shall be mounted in that order from the left in horizontal arrangements and from the top in vertical arrangements. Subject to this order of precedence, route signs for lower-numbered routes shall be placed at the left or top.

Within groups of assemblies, information for routes intersecting from the left shall be mounted at the left in horizontal arrangements and at the top or center of vertical arrangements. Similarly, information for routes intersecting from the right shall be at the right or bottom, and for straight-through routes at the center in horizontal arrangements or top in vertical arrangements.

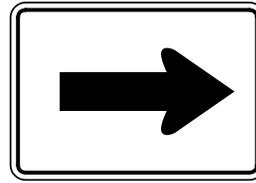
Route Sign assemblies shall be mounted in accordance with the general specifications for highway signs (Chapter 2A), with the lowest sign in the assembly at the height prescribed for single signs.



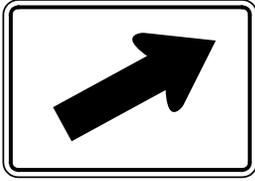
M5-1



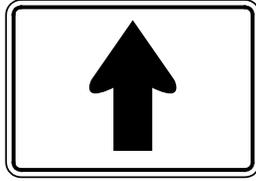
M5-2



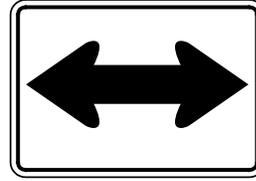
M6-1



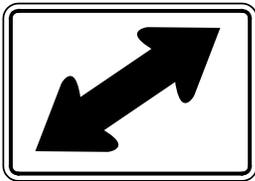
M6-2



M6-3



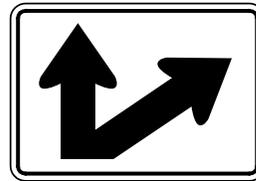
M6-4



M6-5



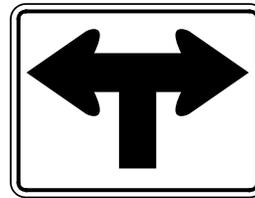
M6-6



M6-7



M6-8



M6-9

Guidance:

Assemblies for two or more routes, or for different directions on the same route, should be mounted in groups on a common support.

Option:

Route Sign assemblies may be installed on the approaches to numbered routes on unnumbered roads and streets that carry an appreciable amount of traffic destined for the numbered route.

If engineering judgment indicates that groups of assemblies that include overlapping routes or multiple turns might be confusing, route signs or auxiliary signs may be omitted or combined, provided that clear directions are given to road users.

Support:

Figure 2D-2 shows typical placements of route signs.

Section 2D.28 Junction Assembly**Standard:**

A Junction assembly shall consist of a Junction auxiliary sign and a route sign. The route sign shall carry the number of the intersected or joined route.

The Junction assembly shall be installed in advance of every intersection where a numbered route is intersected or joined by another numbered route. In urban areas it shall be installed in the block preceding the intersection, and in rural areas it shall be installed at least 120 m (400 ft) in advance of the intersection. In rural areas, the minimum distance between the Destination sign and the Route Turn assembly shall be 60 m (200 ft), and the minimum distance between the Route Turn assembly and the Junction assembly shall be 60 m (200 ft).

Guidance:

In urban areas where speeds are low, the Junction assembly should not be installed more than 90 m (300 ft) in advance of the intersection.

Where prevailing speeds are high, greater spacings should be used.

Option:

Where two or more routes are to be indicated, a single Junction auxiliary sign may be used for the assembly and all route signs grouped in a single mounting, or a Combination Junction sign (see Section 2D.14) may be used.

Figure 2D-2. Illustration of Directional Assemblies and Other Route Signs (For One Direction of Travel Only) (Sheet 1 of 3)

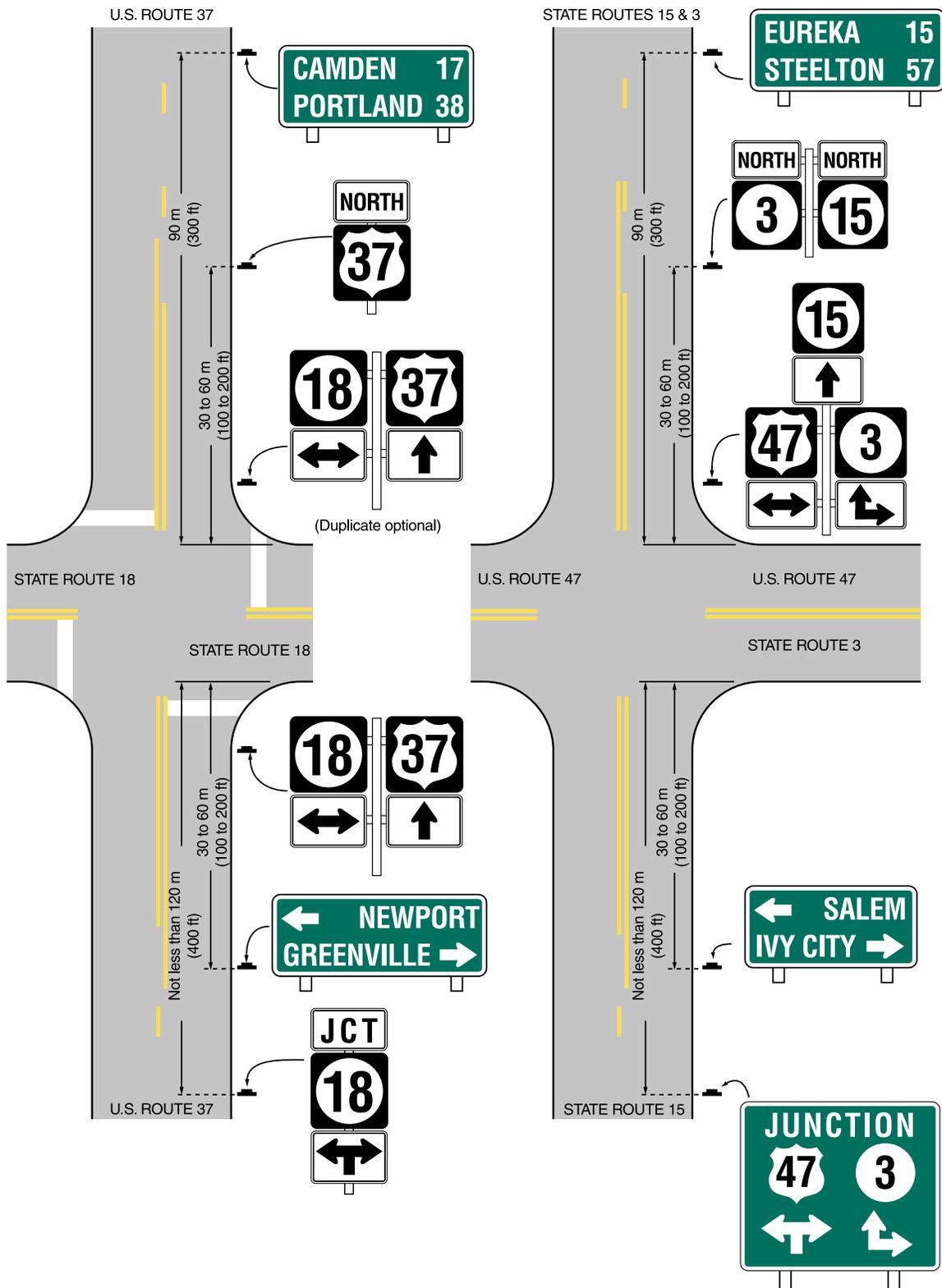
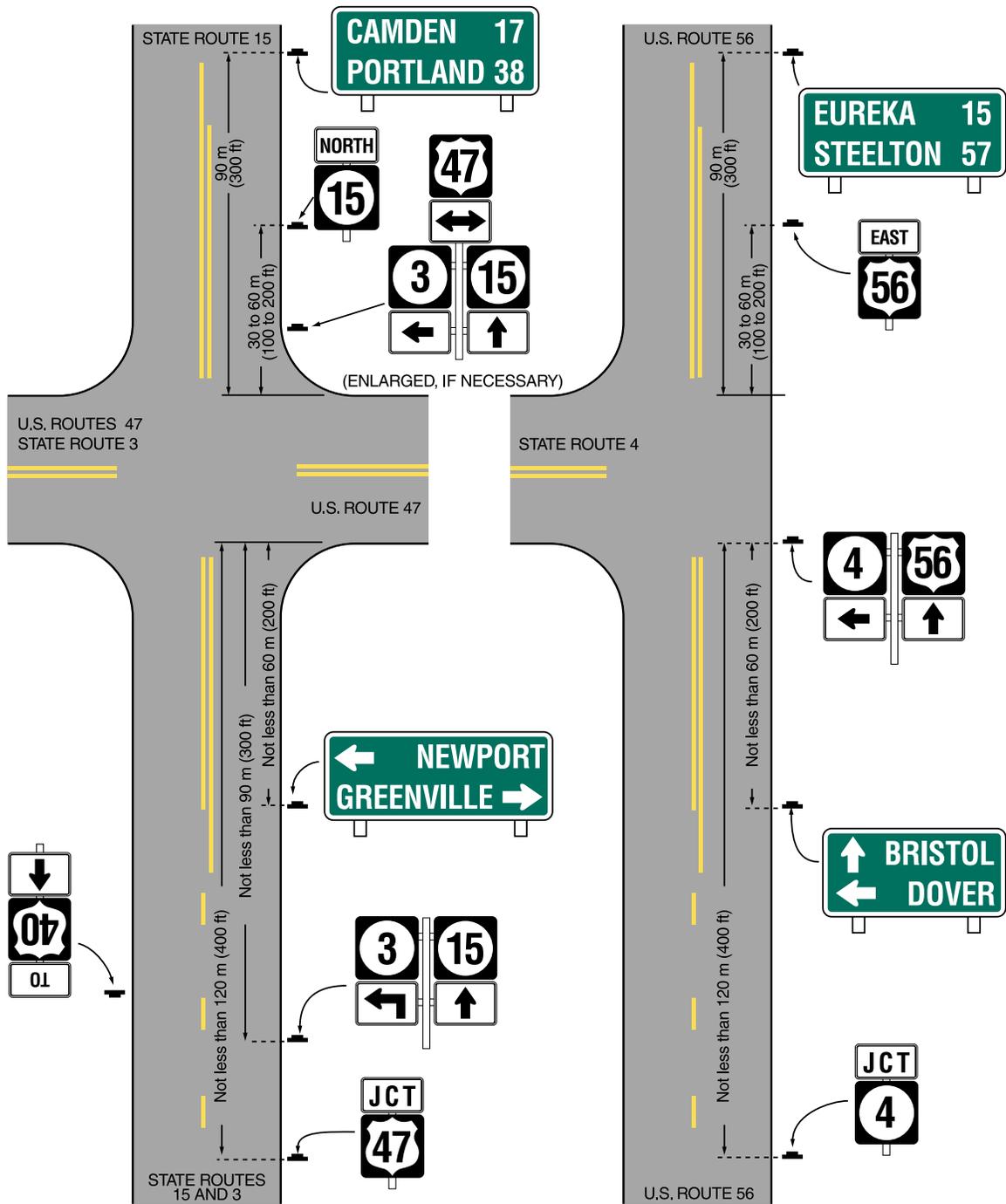


Figure 2D-2. Illustration of Directional Assemblies and Other Route Signs (For One Direction of Travel Only) (Sheet 2 of 3)



Section 2D.29 Advance Route Turn Assembly**Standard:**

An Advance Route Turn assembly shall consist of a route sign, an Advance Turn Arrow or word message auxiliary sign, and a Cardinal Direction auxiliary sign, if needed. It shall be installed in advance of an intersection where a turn must be made to remain on the indicated route.

Option:

The Advance Route Turn assembly may be used to supplement the required Junction assembly in advance of intersecting routes.

Guidance:

Where a multiple-lane highway approaches an interchange or intersection with a numbered route, the Advance Route Turn assembly should be used to pre-position turning vehicles in the correct lanes from which to make their turn.

In low-speed areas, the Advance Route Turn assembly should be installed not less than 60 m (200 ft) in advance of the turn. In high-speed areas, the Route Turn assembly should be installed not less than 90 m (300 ft) in advance of the turn.

Standard:

An assembly that includes an Advance Turn Arrow auxiliary sign shall not be placed where there is an intersection between it and the designated turn.

Guidance:

Sufficient distance should be allowed between the assembly and any preceding intersection that could be mistaken for the indicated turn.

Section 2D.30 Directional Assembly**Standard:**

A Directional assembly shall consist of a route sign, a Directional Arrow auxiliary sign, and a Cardinal Direction auxiliary sign, if needed. The various uses of Directional assemblies shall be as outlined below:

- A. Turn movements (indicated in advance by an Advance Route Turn assembly) shall be marked by a Directional assembly with a route sign displaying the**

number of the turning route and a single-headed arrow pointing in the direction of the turn.

- B. The beginning of a route (indicated in advance by a Junction assembly) shall be marked by a Directional assembly with a route sign displaying the number of that route and a single-headed arrow pointing in the direction of the route.**
- C. The end of a route shall be marked by a Directional assembly with an END auxiliary sign and a route sign displaying the number of that route.**
- D. An intersected route (indicated in advance by a Junction assembly) shall be designated by:**
 - 1. Two Directional assemblies, each with a route sign displaying the number of the intersected route, a Cardinal Direction auxiliary sign, and a single-headed arrow pointing in the direction of movement on that route; or**
 - 2. A Directional assembly with a route sign displaying the number of the intersected route and a double-headed arrow, pointing at appropriate angles to the left, right, or ahead.**

Guidance:

Straight-through movements should be indicated by a Directional assembly with a route sign displaying the number of the continuing route and a vertical arrow. A Directional assembly should not be used for a straight-through movement in the absence of other assemblies indicating right or left turns, as the Confirming assembly sign beyond the intersection normally provides adequate guidance.

Directional assemblies should be located on the near right corner of the intersection. At major intersections and at Y or offset intersections, additional Directional assemblies should be installed on the far right or left corner to confirm the near-side assemblies. When the near-corner position is not practical for Directional assemblies, the far right corner should be the preferred alternative, with oversized signs, if necessary, for legibility. Where unusual conditions exist, the location of a Directional assembly should be determined by engineering judgment with the goal being to provide the best possible combination of view and safety.

Support:

It is more important that guide signs be readable at the right time and place than to be located with absolute uniformity.

Figure 2D-2 shows typical placements of Directional assemblies.

Section 2D.31 Confirming or Reassurance Assemblies

Standard:

If used, Confirming or Reassurance assemblies shall consist of a Cardinal Direction auxiliary sign and a route sign.

If used, the Confirming assembly shall be installed just beyond intersections of numbered routes.

Guidance:

If the Confirming assembly is used, it should be placed 7.6 to 60 m (25 to 200 ft) beyond the far shoulder or curb line of the intersected highway.

If used, reassurance assemblies should be installed between intersections in urban districts as needed, and beyond the built-up area of any incorporated city or town.

Route signs for either confirming or reassurance purposes should be spaced at such intervals as necessary to keep road users informed of their routes.

Section 2D.32 Trailblazer Assembly

Support:

Trailblazer assemblies provide directional guidance to a particular road facility from other highways in the vicinity. This is accomplished by installing Trailblazer assemblies at strategic locations to indicate the direction to the nearest or most convenient point of access. The use of the word TO indicates that the road or street where the sign is posted is not a part of the indicated route, and that a road user is merely being directed progressively to the route.

Standard:

A Trailblazer assembly shall consist of a TO auxiliary sign, a route sign (or a special road facility symbol), and a single-headed Directional Arrow auxiliary sign pointing in the direction leading to the route.

Option:

A Cardinal Direction auxiliary sign may be used with a Trailblazer assembly.

Guidance:

The TO auxiliary sign, Cardinal Direction auxiliary sign, and Directional Arrow auxiliary sign should be of the standard size specified for auxiliary signs of their respective type. The route sign should be the size specified in Section 2D.11.

Option:

Trailblazer assemblies may be installed with other Route Sign assemblies, or alone, in the immediate vicinity of the designated facilities.

Section 2D.33 Destination and Distance Signs**Support:**

In addition to guidance by route numbers, it is desirable to supply the road user information concerning the destinations that can be reached by way of numbered or unnumbered routes. This is done by means of Destination signs and Distance signs.

Option:

Route and Cardinal Direction auxiliary signs may be included on the Destination sign panel with the destinations and arrows.

Guidance:

The size of the route signs and Cardinal Direction auxiliary signs should be at least the minimum size specified for these signs.

Section 2D.34 Destination Signs**Standard:**

Except where special interchange signing is prescribed, the Destination sign, if used, shall be a horizontal rectangle carrying the name of a city, town, village, or other traffic generator, and a directional arrow.

Option:

The distance to the place named may also be shown. If several destinations are to be shown at a single point, the several names may be placed on a single panel with an arrow (and the distance, if desired) for each name. If more than one destination lies in the same direction, a single arrow may be used for such a group of destinations.

Guidance:

Adequate separation should be made between any destinations or group of destinations in one direction and those in other directions by suitable design of the arrow, spacing of lines of legend, heavy lines entirely across the panel, or separate panels.

Standard:

An arrow pointing to the right shall be at the extreme right of the sign, and an arrow pointing left or up shall be at the extreme left. The distance figures, if used, shall be placed to the right of the destination names.

Guidance:

The directional arrows should be horizontal or vertical, but at an irregular intersection a sloping arrow will sometimes convey a clearer indication of the direction to be followed.

If several individual name panels are assembled into a group, all panels in the assembly should be of the same length.

Destination signs should be used:

- A. At the intersections of U.S. or State numbered routes with Interstate, U.S., or State numbered routes; and
- B. At points where they serve to direct traffic from U.S. or State numbered routes to the business section of towns, or to other destinations reached by unnumbered routes.

Standard:

Where a total of three or less destinations are provided on the Advance Guide (see Section 2E.30) and Supplemental Guide (see Section 2E.32) signs, not more than three destination names shall be used on a Destination sign. Where four destinations are provided by the Advance Guide and Supplemental Guide signs, not more than four destination names shall be used on a Destination sign.

Guidance:

If space permits, four destinations should be displayed as two separate sign panels.



D1-1



D1-2



D1-3



D1-1a



D1-2a



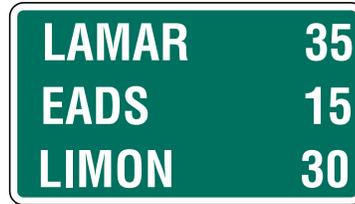
D1-3a



D2-1



D2-2



D2-3

Option:

Where space does not permit, or where all four destinations are in one direction, a single sign assembly may be used.

Standard:

Where a single four-name sign assembly is used, a heavy line entirely across the panel or separated sign panels shall be used to separate destinations by direction.

Guidance:

The next closest destination lying straight ahead should be at the top of the sign or assembly, and below it the closest destinations to the left and to the right, in that order. The destination shown for each direction should ordinarily be the next county seat or the next principal city, rather than a more distant destination. In the case of overlapping routes, there should be shown only one destination in each direction for each route.

Standard:

If there is more than one destination shown in the same direction, the name of the nearest destination shall appear above the names of any destinations that are further away.

Section 2D.35 Location of Destination Signs**Guidance:**

When used in high-speed areas, Destination signs should be located 60 m (200 ft) or more in advance of the intersection, and following any Junction or Advance Route Turn assemblies that may be required.

Option:

In urban areas, shorter advance distances may be used.

Because the Destination sign is of lesser importance than the Junction, Advance Route Turn, or Directional assemblies, the Destination sign may be eliminated when sign spacing is critical.

Support:

Figure 2D-2 shows typical placements of Destination signs.

Section 2D.36 Distance Signs**Standard:**

If used, the Distance sign shall be a horizontal rectangle of a size appropriate for the required legend, carrying the names of not more than three cities, towns, junctions, or other traffic generators, and the distance (to the nearest kilometer or mile) to those places.

Guidance:

The top name on the Distance sign should be that of the next place on the route having a post office or a railroad station, a route number or name of an intersected highway, or any other significant geographical identity. The bottom name on the sign should be that of the next major destination or control city. If three destinations are shown, the middle line should be used to indicate communities of general interest along the route or important route junctions.

Option:

The choice of names for the middle line may be varied on successive Distance signs to give road users additional information concerning communities served by the route.

Guidance:

The control city should remain the same on all successive Distance signs throughout the length of the route until that city is reached.

Option:

If more than one distant point may properly be designated, such as where the route divides at some distance ahead to serve two destinations of similar importance, and if these two destinations cannot appear on the same sign, the two names may be alternated on successive signs.

On a route continuing into another State, destinations in the adjacent State may be shown.

Section 2D.37 Location of Distance Signs**Guidance:**

If used, Distance signs should be installed on important routes leaving municipalities and just beyond intersections of numbered routes in rural areas. If used, they should be placed just outside the municipal limits or at the edge of the built-up district if it extends beyond the limits.

Where overlapping routes separate a short distance from the municipal limits, the Distance sign at the municipal limits should be omitted. The Distance sign should be installed approximately 90 m (300 ft) beyond the separation of the two routes.

Where, just outside of an incorporated municipality, two routes are concurrent and continue concurrently to the next incorporated municipality, the top name on the Distance sign should be that of the place where the routes separate; the bottom name should be that of the city to which the greater part of the through traffic is destined.

Support:

Figure 2D-2 shows typical placements of Distance signs.

Section 2D.38 Street Name Sign (D3)

Guidance:

Street Name (D3) signs should be installed in urban areas at all street intersections regardless of other route signs that may be present and should be installed in rural areas to identify important roads that are not otherwise signed.

Lettering on Street Name signs should be at least 150 mm (6 in) high in capital letters, or 150 mm (6 in) upper-case letters with 110 mm (4.5 in) lower-case letters. Larger letter heights should be used for street name signs mounted overhead.

Option:

For local roads with speed limits of 40 km/h (25 mph) or less, the lettering height may be a minimum of 100 mm (4 in).

Supplementary lettering to indicate the type of street (such as Street, Avenue, or Road) or the section of the city (such as NW) may be in smaller lettering, at least 75 mm (3 in) high. Conventional abbreviations (see Section 1A.14) may be used except for the street name itself.

A symbol or letter designation may be used to identify the governmental jurisdiction.

Standard:

If a symbol or letter designation is used, the width of the symbol or letter designation shall not exceed the letter height of the sign.

Guidance:

The symbol or letter designation should be positioned to the left of the street name.



D3



D4-1



D4-2

Standard:

The Street Name sign shall be retroreflective or illuminated to show the same shape and similar color both day and night. The legend and background shall be of contrasting colors.

Guidance:

Street Name signs should have a white legend on a green background. A border, if used, should be the same color as the legend.

In business districts and on principal arterials, Street Name signs should be placed at least on diagonally opposite corners so that they will be on the far right side of the intersection for traffic on the major street. 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.

Option:

Street name signs may be installed at both midblock and intersection locations. To optimize visibility, Street Name signs may be mounted overhead. On intersection approaches, a supplemental Street Name sign (see Section 2C.45) may be installed separately or below an intersection-related warning sign. Street Name signs may also be placed above a regulatory or STOP sign with no required vertical separation.

At intersection crossroads where the same road has two different street names for each direction of travel, both street names may be shown on the same sign along with directional arrows.

Guidance:

When combined with a warning sign, the color of the supplemental Street Name sign should be a black message and border on a yellow background.

Section 2D.39 Parking Area Sign (D4-1)**Option:**

The Parking Area (D4-1) sign may be used to show the direction to a nearby public parking area.

Standard:

If used, the sign shall be a horizontal rectangle with a standard size of 750 x 600 mm (30 x 24 in), or with a smaller size of 450 x 375 mm (18 x 15 in) for minor, low-speed streets. It shall carry the word PARKING, with the letter P five times the height of the remaining letters, and a directional arrow. The legend and border shall be green on a retroreflectorized white background.

Guidance:

If used, the Parking Area sign should be installed on major thoroughfares at the nearest point of access to the parking facility and where it can advise drivers of a place to park. The sign should not be used more than four blocks from the parking area.

Section 2D.40 PARK & RIDE Sign (D4-2)

Option:

PARK & RIDE (D4-2) signs may be used to direct road users to park and ride facilities.

Standard:

The signs shall contain the word message PARK & RIDE and direction information (arrow or word message).

Option:

PARK & RIDE signs may contain the local transit logo and/or carpool symbol within the sign border.

Standard:

If used, the local transit logo and/or carpool symbol shall be located in the top part of the sign above the message PARK & RIDE. In no case shall the vertical dimension of the local transit logo and/or carpool symbol exceed 450 mm (18 in).

Guidance:

If the function of the parking facility is to provide parking for persons using public transportation, the local transit logo symbol should be used on the guide sign. If the function of the parking facility is to serve carpool riders, the carpool symbol should be used on the guide sign. If the parking facility serves both functions, both the logo and carpool symbol should be used.

Standard:

These signs shall have a retroreflective white legend and border on a rectangular green background. The carpool symbol shall be as shown for sign D4-2. The color of the transit logo shall be selected by the local transit authority.

Option:

To increase the target value and contrast of the transit logo, and to ensure that the local transit logo retains its distinctive color and shape, the logo may be included within a white border or placed on a white background.

Section 2D.41 Rest Area Signs (D5 Series)**Standard:**

Rest Area signs shall be used only where parking and restroom facilities are available. Signs for this purpose shall have retroreflective white letters, symbols, and border on a blue background.

Guidance:

If used, Rest Area signs should be installed in advance of roadside parks or rest areas to permit the driver to reduce speed and leave the highway safely.

Option:

Messages such as REST AREA X km (X MILE) (D5-1), REST AREA (D5-2), PARKING AREA X km (X MILE) (D5-3), PARKING AREA (D5-4), ROADSIDE TABLE X km (X MILE) (D5-5), ROADSIDE PARK X km (X MILE), and PICNIC TABLE X km (X MILE) may be used, as well as other appropriate messages.

Section 2D.42 Scenic Area Signs (D6 Series)

Option:

Scenic areas may be marked by signs carrying the message SCENIC AREA, SCENIC VIEW, SCENIC OVERLOOK, or the equivalent, together with appropriate directional information.

Guidance:

The design of the signs should be consistent with that specified for rest areas in Section 2D.41 and should be white letters, symbols, and border on a blue background. An advance sign and an additional sign at the turnoff point should be used for this kind of attraction.



D5-1



D5-2



D5-3



D5-4



D5-5



D5-5a



D6-1



D6-2



D6-3

Section 2D.43 Weigh Station Signing (D8 Series)**Support:**

The general concept for Weigh Station signing is similar to Rest Area signing (see Section 2D.41) because in both cases traffic using either area remains within the right-of-way.

Standard:

The standard installation for Weigh Station signing shall include three basic signs:

- A. Advance sign (D8-1);**
- B. Exit Direction sign (D8-2); and**
- C. Gore sign (D8-3).**

Support:

The typical locations of these signs are shown in Figure 2D-3.

Option:

Where State law requires a regulatory sign (R13-1) in advance of the Weigh Station, a fourth sign (Section 2B.44) may be located following the Advance sign.

Guidance:

The Exit Direction sign (D8-2) or the Advance sign (D8-1) should display, either within the sign border or on a supplemental panel, the changeable message OPEN or CLOSED.

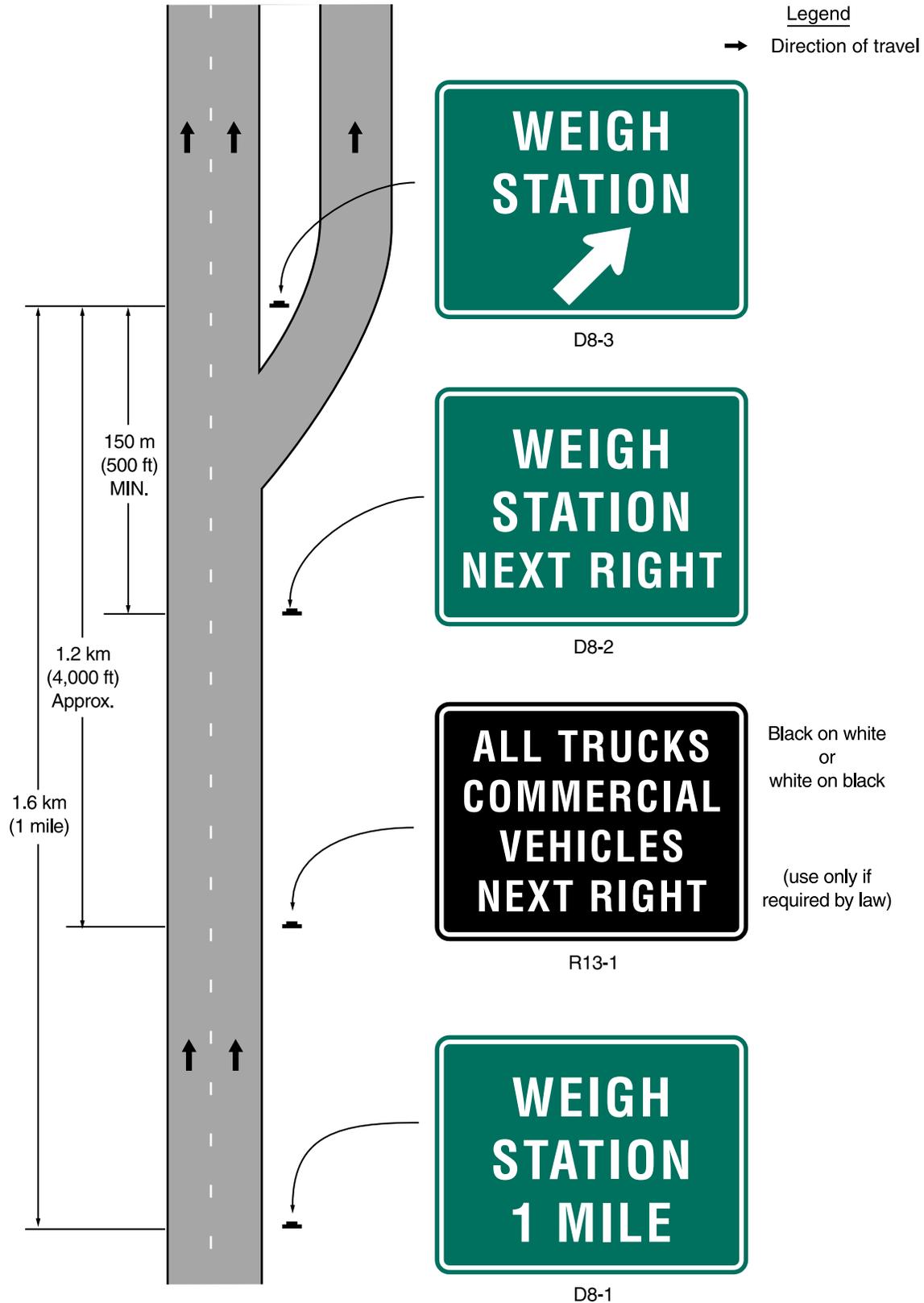
Section 2D.44 General Service Signs (D9 Series)**Support:**

On conventional roads, commercial services such as gas, food, and lodging generally are within sight and are available to the road user at reasonably frequent intervals along the route. Consequently, on this class of road there usually is no need for special signs calling attention to these services. Moreover, General Service signing is usually not required in urban areas except for hospitals, police assistance, tourist information centers, and camping.

Option:

General Service signs may be used where such services are infrequent and are found only on an intersecting highway or crossroad.

Figure 2D-3. Typical Weigh Station Signing



Standard:

All General Service signs and supplemental panels shall have white letters, symbols, and borders on a blue background.

Guidance:

General Service signs should be installed at a suitable distance in advance of the turn-off point or intersecting highway.

States that elect to provide General Service signing should establish a statewide policy or warrant for its use, and criteria for the availability of services. Local jurisdictions electing to use such signing should follow State policy for the sake of uniformity.

Option:

Individual States may sign for whatever alternative fuels are available at appropriate locations.

Standard:

General Service signs, if used at intersections, shall carry a legend for one or more of the following services: Food, Gas, Diesel, LP-Gas, Lodging, Camping, Phone, Hospital, Tourist Information, Police, or Truck Parking along with a directional message.

Option:

The General Service legends may be either symbols or word messages.

Standard:

Symbols and word message General Service legends shall not be intermixed on the same sign.

Guidance:

If used, the word message TRUCK PARKING should be placed on a separate panel below the other general motorist services.

Support:

Formats for displaying different combinations of these services are presented in Section 2E.51.



D9-1



D9-2



D9-3



D9-4



D9-5



D9-6



D9-7



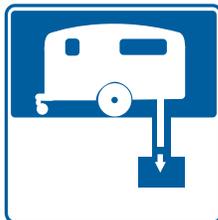
D9-9



D9-10



D9-11



D9-12



D9-13



D9-14



D9-15

Option:

If the distance to the next point at which services are available is 16 km (10 mi) or more, a sign NEXT SERVICES XX km (XX MILES) may be used as a separate panel installed below the General Service sign (see Figure 2E-35).

The International Symbol of Accessibility for the Handicapped (D9-5) sign may be used beneath General Service signs where paved ramps and rest room facilities accessible to, and usable by, the physically handicapped are provided.

The Recreational Vehicle Sanitary Station (D9-12) sign may be used as needed to indicate the availability of facilities designed for the use of dumping wastes from recreational vehicle holding tanks.

The Trash Receptacle Symbol (D9-4) sign may be placed in advance of roadside turnouts or rest areas, unless it distracts the driver's attention from other more important regulatory, warning, or directional signs.

A Channel 9 Monitored (D12-3) sign may be installed as needed. Official public agencies or their designees may be shown as the monitoring agency on the sign (see Section 2E.56). An Emergency Dial XXX (D12-4) sign along with the appropriate number to dial, may be used for cellular phone communications. A Road Conditions Dial 511 sign may be installed if a 511 number is available to road users for obtaining road condition information.

The Emergency Medical Services (D9-13) symbol sign may be used to identify medical service facilities that have been included in the Emergency Medical Services system under a signing policy developed by the State and/or local highway agency.

Standard:

The Emergency Medical Services symbol sign shall not be used to identify services other than qualified hospitals, ambulance stations, and qualified free-standing emergency medical treatment centers. If used, the Emergency Medical Services symbol shall be supplemented by a sign identifying the type of service provided.

Option:

The Emergency Medical Services symbol sign may be used above the HOSPITAL or H (D9-2) symbol sign or above a panel with either the legend AMBULANCE STATION or EMERGENCY MEDICAL CARE. The Emergency Medical Services symbol sign may also be used to supplement Telephone (D9-1), CB Monitoring, or POLICE (D9-14) signs.

Standard:

The legend EMERGENCY MEDICAL CARE shall not be used for services other than qualified free-standing emergency medical treatment centers.

Guidance:

Each State should develop guidelines for the implementation of the Emergency Medical Services symbol sign.

The State should consider the following guidelines in the preparation of its policy:

A. AMBULANCE

1. 24-hour service, 7 days per week.
2. Staffed by two State-certified persons trained at least to the basic level.
3. Vehicular communications with a hospital emergency department.
4. Operator should have successfully completed an emergency vehicle operator training course.

B. HOSPITAL

1. 24-hour service, 7 days per week.
2. Emergency department facilities with a physician (or emergency care nurse on duty within the emergency department with a physician on call) trained in emergency medical procedures on duty.
3. Licensed or approved for definitive medical care by an appropriate State authority.
4. Equipped for radio voice communications with ambulances and other hospitals.

C. CB 9 Monitored

1. Provided by either professional or volunteer monitors.
2. Available 24 hours per day, 7 days per week.
3. The service should be endorsed, sponsored, or controlled by an appropriate government authority to guarantee the level of monitoring.

Section 2D.45 Reference Posts (D10-1 through D10-3)**Option:**

Reference posts (D10-1 to D10-3) may be installed along any section of a highway route to assist road users in estimating their progress, to provide a means for identifying the location of emergency incidents and traffic accidents, and to aid in highway maintenance and servicing.

Standard:

If reference posts are used, the distance numbering shall be continuous for each route within a State, except where overlaps occur. With overlapped routes, reference post continuity shall be established for only one of the routes.

If used, reference posts shall be vertical panels having a green background with 150 mm (6 in) white numerals, border, and the legend km (MILE) in 100 mm (4 in) white letters. The design details for reference posts shall be as shown in the "Standard Highway Signs" book.

Guidance:

Zero distance should begin at the south and west State lines, or at the south and west terminus points where routes begin within a State.

On a route without reference post continuity, the first reference post beyond the overlap should indicate the total distance traveled on the route so that road users will have a means of correlating their travel distance between reference posts with that shown on their odometer.

Option:

Reference posts may be placed up to 9 m (30 ft) from the edge of the pavement.

Standard:

Reference posts located in line with delineator posts shall have the bottom of the sign at the same height as the delineator (see Section 3D.04).

For divided highways, distance measurement shall be made on northbound and eastbound roadways. The reference posts for southbound and westbound roadways shall be set at locations directly opposite the posts for the northbound or eastbound roadways.



D10-1



D10-2



D10-3



I1-1

Option:

If a reference post cannot be installed in the correct location, it may be moved in either direction as much as 15 m (50 ft).

Guidance:

If a reference post cannot be placed within 15 m (50 ft) of the correct location, it should be omitted.

Option:

To enhance the reference post numbering system, reference posts may be spaced at one, two, or five tenths of a kilometer (mile).

Section 2D.46 Traffic Signal Speed Sign (I1-1)**Option:**

The Traffic Signal Speed (I1-1) sign, reading SIGNALS SET FOR XX km/hr (XX MPH), may be used to indicate a section of street or highway on which the traffic signals are coordinated into a progressive system timed for a specified speed at all hours during which they are operated in a coordinated mode.

Guidance:

If used, the sign should be mounted as near as practical to each intersection where the timed speed changes, and at intervals of several blocks throughout any section where the timed speed remains constant.

Standard:

The Traffic Signal Speed sign shall be a minimum of 300 x 450 mm (12 x 18 in) with the longer dimension vertical. It shall have a white message and border on a green background.

Section 2D.47 General Information Signs (I Series)**Support:**

Of interest to the traveler, though not directly necessary for guidance, are numerous kinds of information that can properly be conveyed by general information signs. They include such items as State lines, city limits, other political boundaries, time zones, stream names, elevations, landmarks, and similar items of geographical interest.

Adopt-a-Highway signs provide travelers with information about organizations that take responsibility for picking up litter along a section of highway.

Guidance:

General information signs should not be installed within a series of guide signs or at other equally critical locations, unless there are specific reasons for orienting the road user or identifying control points for activities that are clearly in the public interest. On all such signs, the designs should be simple and dignified, devoid of any advertising, and in general conformance with other guide signing.

Option:

An information symbol sign (I-4 through I-11) may be used to identify a route leading to a transportation or general information facility, or to provide additional guidance to the facility. The symbol sign may be supplemented by an educational plaque where necessary; also, the name of the facility may be used if needed to distinguish between similar facilities.

Guide signs for commercial service airports and noncarrier airports may be provided from the nearest Interstate, other freeway, or conventional highway intersection directly to the airport, normally not to exceed 25 km (15 mi). The Airport (I-5) symbol sign along with a supplemental plaque may be used to indicate the specific name of the airport. An Airport symbol sign, with or without a supplemental name plaque or the word AIRPORT, and an arrow may be used as a trailblazer.

Standard:

Adequate trailblazer signs shall be in place prior to installing the airport guide signs.

Support:

Location and placement of all airport guide signs depends upon the availability of longitudinal spacing on highways.

Option:

Political jurisdiction logos may be placed on the political boundary general information signs. The logo may have different colors and shapes but should be simple, dignified, and devoid of any advertising.

Standard:

Except for political jurisdiction logos, scenic by-way logos, and Adopt-a-Highway signs, general information signs shall have white legends and borders on green rectangular-shaped backgrounds.



I-2



I-3



I-4



I-5



I-6



I-7



I-8



I-9



I-10



D13-1



D13-2

Messages, symbols, and trademarks that resemble any official traffic control device shall not be used on Adopt-a-Highway signs.

Option:

The Recycling Collection Center (I-11) symbol sign may be used to direct road users to recycling collection centers.

Guidance:

The Recycling Collection Center symbol sign should not be used on freeways and expressways.

Standard:

If used on freeways or expressways, the Recycling Collection Center symbol sign shall be considered one of the supplemental sign destinations.

Guidance:

Each agency with highway jurisdiction that elects to use Adopt-a-Highway signs should establish a signing policy that includes the following:

- A. Compliance by eligible organizations with State laws prohibiting discrimination based on race, religion, color, age, sex, national origin, and other applicable laws;
- B. The use of legends conforming to the requirements of State agencies;
- C. Provision for the removal of inappropriate signs;
- D. Provision for the State to charge fees to cover the cost of installing, maintaining, and removing the signs;
- E. The use of standard highway alphabets on all word message type signs; and
- F. Provision for limiting the number of signs.

Section 2D.48 Signing of Named Highways

Support:

Legislative bodies will occasionally adopt an act or resolution memorializing a highway, bridge, or other component of the highway.

Guidance:

Such memorial names should not appear on or along a highway, or be placed on bridges or other highway components. The requirement for signing should be carried out by placing memorial plaques in rest areas, at scenic overlooks, or at other appropriate locations where parking is provided with the signing inconspicuously located relative to vehicle operations along the highway.

Option:

If installation of the memorial plaque off the main roadway is not practical, memorial signs may be installed on the mainline provided that they are independent of other guide and directional signing and they do not adversely compromise the safety or efficiency of traffic flow.

Standard:

When the memorial signs are installed on the mainline instead of off-highway memorial plaques, the signing shall be limited to one sign at an appropriate location in each route direction.

Option:

Guide signs may contain street or highway names if the purpose is to enhance driver communication and guidance; however, they are to be considered as supplemental information to route numbers.

Standard:

Highway names shall not replace official numeral designations. Memorial names shall not appear on supplemental signs or on any other information sign either on or along the highway or its intersecting routes.

The use of route signs shall be restricted to signs officially used for guidance of traffic in accordance with this Manual and the Purpose and Policy statement of the American Association of State Highway and Transportation Officials that applies to Interstate and U.S. numbered routes (see Page i for AASHTO's address).

Option:

Unnumbered routes having major importance to proper guidance of traffic may be signed if carried out in accordance with the aforementioned policies. For unnumbered highways, a name to enhance route guidance may be used where the name is applied consistently throughout its length.

Guidance:

Only one name should be used to identify any highway, whether numbered or unnumbered.

Section 2D.49 Trail Signs**Support:**

Trail signs are informational signs, plaques, or shields designed to provide road users with route guidance in following a trail of particular cultural, historical, or educational significance.

Guidance:

Primary guidance should be in the form of printed literature and strip maps rather than trail signing.

Option:

Trail signs may be installed on a highway if they have been approved by the appropriate transportation agency.

Section 2D.50 Crossover Signs (D13 Series)**Option:**

Crossover signs may be installed on divided highways to identify median openings not otherwise identified by warning or other guide signs.

Standard:

A CROSSOVER (D13-1) sign shall not be used to identify a median opening that is permitted to be used only by official or authorized vehicles. If used, the sign shall be a horizontal rectangle of appropriate size to carry the word CROSSOVER and a horizontal directional arrow. The CROSSOVER sign shall have a white legend and border on a green background.

Guidance:

If used, the CROSSOVER sign should be installed immediately beyond the median, opening either on the right side of the roadway or in the median.

Option:

The Advance Crossover (D13-2) sign may be installed in advance of the CROSSOVER sign to provide advance notice of the crossover.

Standard:

If used, the Advance Crossover sign shall be a horizontal rectangle of appropriate size to carry the word CROSSOVER and the distance to the median opening. The sign shall have white legend and border on a green background.

Guidance:

The distance shown on the Advance Crossover sign should be 2 km, 1 km, or 500 m (1, 1/2, or 1/4 MILE), unless unusual conditions require some other distance. If used, the sign should be installed either on the right side of the roadway or in the median at approximately the distance shown.

