

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 highway user or identifying control points for activities that are clearly in the public interest.

On all such signs the design should be simple and dignified, devoid of any advertising and in general conformance with other guide signing.

Such signs shall conform to the general standards for guide signs, and shall be reflectorized where required to provide nighttime visibility.

These signs shall be erected in accordance with the general specifications (secs. 2A-23, 24).

2D-51 Signing of Named Highways

Numbered highways are not to be signed as memorial routes. Where legislatures name highways or bridges, appropriate plaques may be erected in rest areas or at other appropriate points to recognize this designation, but the affected highways and bridges are not to be signed with memorial names for viewing by traffic.

The use of route markers will be restricted to markers officially used for guidance of traffic in accordance with this Manual and the "Purpose and Policy" statement of the American Association of State Highway Officials, which applies to Interstate and U.S. numbered routes. However, the marking of unnumbered routes having major importance to the proper guidance of traffic is permissible if carried out in accordance with the aforementioned policies.

E. GUIDE SIGNS—EXPRESSWAY

2E-1 Scope of Expressway Guide Sign Standards

Specifications for Expressway Guide signs prescribed herein shall apply to any divided highway with partial control of access.

2E-2 Application

Expressways call for an intermediate level of signing more advanced than that prescribed for Conventional Roads (Part II-D), but less demanding in their requirements and specifications than Freeway signing standards (Part II-F). Since there are many geometric design variables to be found in existing expressways, a signing concept commensurate with prevailing conditions must be the primary consideration. Whenever possible, expressway signing should be planned at the design stage.

2E-3 General Standards

Basically, expressway signs should be so designed that they are legible to the drivers of vehicles approaching them, and readable in time to permit a proper response. On arterials and rapid-service facilities of expressway design, this usually means (a) high visibility, (b) large lettering and symbols, and (c) a short legend for quick comprehension. Standardized shapes and colors are used so that the several types of traffic signs can be promptly recognized.

Although the sections which follow deal specifically with expressway guide signs, it must be remembered that the dimensions of regulatory and warning signs will have to be suitably enlarged for the expressway traveler in consideration of multiple traffic lanes and higher operating speeds. Moreover, ground signs in these categories may have to be posted in the median as well as at the right-hand side of the roadway as traffic in the right-hand lane may obstruct the view to the right.

Reference should be made to Part II-A for pertinent data on sign shapes, sign borders, variable messages, overhead sign warrants, height and lateral clearance. Standard messages and symbols for regulatory and warning signs will also apply. (Parts II-B and II-C.)

2E-4 Functions of Expressway Guide Signs

Guide signs on expressways serve a number of distinct functions. These are:

1. Giving directions to destinations, or to streets or highway routes, at intersections or interchanges.
2. Furnishing advance notice of the approach to intersections or interchanges.
3. Directing drivers of vehicles into appropriate lanes in advance of diverging or merging movements.
4. Identifying routes, and directions on those routes.
5. Showing distances to destinations.
6. Indicating access to general motorist services, rest, scenic, and recreational areas.
7. Providing other information of value to the driver.

2E-5 Color of Expressway Guide Signs

Guide signs on expressways except as noted herein shall have white letters, symbols, and borders on a green background. Color requirements for route markers and trailblazers, signs with blank-out or variable messages, signs for services, rest areas, park and recrea-

tional areas, and for certain miscellaneous signs are specified in the individual sections dealing with the particular sign or sign group. Color Tolerance Charts for the standard colors are available.*

2E-6 Reflectorization or Illumination

White letters, symbols, and borders shall be reflectorized. The background of expressway guide signs may be reflectorized or non-reflectorized. However, the mixing of signs with reflectorized and nonreflectorized backgrounds in the same general area should be avoided.

In general, where there is no serious interference from extraneous light sources, reflectorized signs will usually be adequate. However, on expressways where much driving at night is done with low beam headlights, the amount of headlight illumination incident to an overhead sign display is relatively small. Therefore, all overhead sign installations should normally be illuminated. The type of illumination chosen should provide effective and reasonably uniform illumination of the sign face and message.

2E-7 Size of Expressway Guide Signs

Sign size must be fixed primarily in terms of the length of the message and the size of the lettering necessary for proper legibility. On a given expressway it is desirable, for esthetic and economic reasons, to keep to a minimum number of sizes.

Under some circumstances, particularly for overhead signs, the available space must be considered. A sign mounted over a particular roadway lane to which it applies may have to be limited in horizontal dimension to the width of the lane, so that another sign may be placed over an adjacent lane. The necessity to maintain proper vertical clearance may place a further limitation on the size of the overhead sign and the copy that can be accommodated.

2E-8 Amount of Legend on Expressway Guide Signs

Regardless of letter size, the legend on an expressway guide sign must be kept to a minimum. Two destinations and the directional copy are as much as most drivers can comprehend readily at high speed. For this reason, on any single major guide sign, not more than two destination names or street names ordinarily should be shown. A city name and street name on the same sign should be avoided. Directional copy, not exceeding three lines, may include symbols, route numbers, arrows, cardinal directions, and exit instructions. Where two or more signs are placed on the same sup-

* Available from the Federal Highway Administration, Washington, D.C. 20591.

ports, it is desirable to limit destinations or names to one per sign, or to a total of three in the display. Indiscriminate use of supplemental signs should be avoided (sec. 2E-26).

2E-9 Style of Lettering

The style of lettering to be used on expressway guide signs shall be one of the following two types:

1. Upper-case letters for all word legend; or
2. Lower-case letters with initial upper-case letters for all names of places, streets, and highways and upper-case letters for other word legend.

2E-10 Size of Lettering

Word messages in the legend of expressway guide signs shall be in letters at least 8 inches high. Larger lettering is necessary for major guide signs at or in advance of interchanges and for all overhead signs. Recommended numeral and letter sizes according to interchange classification, type of sign and component of sign legend are shown in table II-1. These sizes are to be regarded as the minimum desirable under favorable conditions. Freeway lettering sizes (table II-2) may be considered applicable to expressways designed closely to freeway geometrics.

For use with lower-case letters, the initial upper-case letters shall be $1\frac{1}{3}$ times the "loop" height of the lower-case letters.

Letter sizes on expressway signs are to be the same for both rural and urban conditions. Space is often at a premium on urban sections, but large easy-to-read copy is just as necessary as on rural highways because of the more complex traffic pattern.

TABLE II-1 Letter and Numeral Sizes for Expressway Guide Signs

	Major*		Inter- mediate*	Minor*	Overhead
	Category (a)*	Category (b)*			
<i>Exit Panel</i>					
Word.....	10"	10"	10"	8"	10"
Numeral.....	15"	15"	15"	12"	15"
Letter.....	15"	15"	15"	12"	15"
<i>Route Marker Interstate</i>					
Numeral.....	18"	-----	-----	-----	18"
Shield					
(1-2 Digit).....	36"x36"	-----	-----	-----	36"x36"
(3 Digit).....	45"x36"	-----	-----	-----	45"x36"

TABLE II-1 Letter and Numeral Sizes for Expressway Guide Signs—Cont.

	Major*		Inter- mediate*	Minor*	Overhead
	Category (a)*	Category (b)*			
<i>U.S. or State</i>					
Numeral.....	18"	18"	18"	12"	18"
Shield (1-2 Digit).....	36"x36"	36"x36"	36"x36"	36"x36"	36"x36"
(3 Digit)..... or Alternate (Ex: U.S. 56)	45"x36"	45"x36"	45"x36"	45"x36"	45"x36"
Initials.....	15"	12"	12"	10"	12"
Numeral.....	18"	15"	15"	12"	15"
<i>Cardinal</i>					
Word.....	15"	12"	10"	8"	12"
<i>Name of Place, Street, or Highway</i>					
Word.....	20"/15"	16"/12"	13.3"/10"	10.6"/8"	16"/12"
<i>Distance</i>					
Numeral.....	18"	15"	12"	10"	15"
Fraction.....	12"	10"	10"	8"	10"
Word.....	12"	10"	10"	8"	10"
<i>Action Message (Exit Direction Signs)</i>					
Word.....	10"	10"	10"	8"	10"

*See Section 2E-21, Expressway Interchange Classification

B. Ground Mounted Gore Signs

At major interchange, category (a)*

Cardinal direction.....	12"
Route marker.....	36"x36"

At major category (b)* and intermediate interchanges

Word.....	10"
Numeral.....	12"

At minor interchange

Word.....	8"
Numeral.....	10"
Letter.....	8"

C. Thru Traffic Signs

"Thru Traffic" Message

Word.....	12"
-----------	-----

Destination Message

Word.....	13.3"/10"
-----------	-----------

TABLE II-1 Letter and Numeral Sizes for Expressway Guide Signs—Cont.

Route Marker as Message	
Cardinal Direction.....	10"
Route Marker.....	36"x36"
D. <i>Supplemental Guide Signs</i>	
Exit Number	
Word.....	8"
Numeral.....	12"
Letter.....	12"
Place name.....	10.6"/8"
Action message.....	8"
E. <i>Interchange Sequence Signs</i>	
Word.....	10.6"/8"
Distance Numeral.....	10"
Fraction.....	8"
F. <i>"Next—Exits" Signs</i>	
Place name.....	10.6"/8"
NEXT—EXITS.....	8"
G. <i>Mileage Signs</i>	
Word.....	8"/6"
Numeral.....	8"
H. <i>General Motorist Services Signs</i>	
Exit Number	
Word.....	8"
Number.....	12"
Letter.....	12"
Services.....	8"
I. <i>Rest Area and Scenic Area Signs</i>	
Word.....	10"
Distance	
Numeral.....	12"
Fraction.....	8"
Word.....	10"
Action Message	
Word.....	10"
J. <i>Mileposts</i>	
Word.....	4"
Numeral.....	10"
K. <i>Boundary and Orientation Signs</i>	
Word.....	8"/6"

TABLE II-1 Letter and Numeral Sizes for Expressway Guide Signs—Cont.

L. "Next Exit" and "Next Services" Signs

Word.....	8"
Numeral.....	8"

M. "Exit Only"

Word.....	10"
-----------	-----

2E-11 Interline and Edge Spacing

Interline spacing of upper-case letters should be approximately three-fourths the average of upper-case letter heights in adjacent lines of letters.

The spacings to the top and bottom borders should be approximately equal to the average of the letter height of the adjacent line of letters. The lateral spacing to the vertical borders should be essentially the same as the height of the largest letter.

2E-12 Abbreviations

Abbreviations are to be kept to a minimum. In the case of cardinal directions used with route markers on major guide signs, the words NORTH, SOUTH, EAST, and WEST are not to be abbreviated. This does not apply to branch routes where the suffix letter is an integral part of the route designation, or to interchange numbers that have letters for cardinal direction indications following the exit number.

2E-13 Symbols

Symbol designs should be essentially like those shown in this Manual. Educational plaques (word messages) may be used below symbol signs where needed. A special effort should be made to balance legend components for maximum legibility of the symbol with the rest of the sign legend. Intersection or interchange diagrams (figs. 2-10, 2-11), if used, should be as straightforward and simple as possible.

2E-14 Arrows

On all guide signs, both overhead and ground-mounted, used to direct traffic into an exit roadway, arrows shall point upward at an angle representative of the alignment of the exit roadway.

Downward pointing arrows shall be used only for overhead guide signs to prescribe the use of specific lanes for traffic bound for the destination(s) and/or route(s) indicated by the arrows. In such

cases a separate arrow shall be centered over each lane serving the destination appearing on the sign.

If the lane that is to be used by exiting traffic is also to be used by through traffic, the bottom line of the overhead sign shall contain the legend NEXT RIGHT (LEFT). Unusual design conditions may require the use of other directional messages such as STRAIGHT AHEAD.

Dimensions of arrows for use on guide signs are shown in figure 2-7.

2E-15 Viewing Factors

Proper placement of signs, either overhead or on the ground, can greatly enhance the effectiveness of an installation. Sign faces should always be oriented to minimize specular reflection by a slight turning away from the roadway. Decisions on the placement of signs, both ground-mounted and overhead, should be related to the site conditions. Where highway design features and other appurtenances are affected, sign placement should be jointly planned for best service and safety.

2E-16 Overhead Sign Installations

Overhead sign installations will have value at many locations on expressways. Specifications for the design and construction of structural supports for highway signs have now been standardized by the American Association of State Highway Officials, and other agencies.⁹

Factors justifying the erection of overhead signs are enumerated in section 2A-22.

An overcrossing structure will sometimes serve for the support of overhead signs, and may be the only practical location that will provide adequate viewing distance. Such use of a structure as a sign support will eliminate the need for the foundations and sign supports along the roadside. On an urban expressway where overhead crossings are closely spaced, it may be desirable to place signs on the bridges. Butterfly-type signs, and other overhead sign supports should not be erected in gores or other exposed locations.

2E-17 Urban Expressways

Urban expressways are characterized not so much by physical city limits or other boundary lines, but by factors such as high traffic

⁹ Available from the American Association of State Highway Officials, Washington, D.C. 20004.

volumes, lower operating speeds, closely-spaced interchanges, and roadway lighting.

Operating conditions and road geometrics on urban expressways usually require special sign treatment. This involves the following considerations:

1. Use of Interchange Sequence signs (sec. 2E-31).
2. Elimination of service signing (sec. 2E-33).
3. Reduction to a minimum of post interchange signs (sec. 2E-29).
4. Display of advance signs at distances closer to the interchange, with appropriate adjustment in the legend (sec. 2E-24).
5. Use of overhead signs on roadway structures and independent sign supports (sec. 2E-16).
6. Use of diagrammatic signs in advance of intersections and interchanges (sec. 2E-24).

2E-18 Expressway Guide Sign Classification

Expressway guide signs are classified and treated in the following categories:

1. Route markers and trailblazers (sec. 2E-19).
2. Intersection signs (sec. 2E-20).
3. Interchange signs (secs. 2E-23 to 2E-30).
4. Interchange sequence signs (sec. 2E-31).
5. Next (3) exits area signs (sec. 2E-32).
6. Services signs (sec. 2E-33).
7. Rest area and scenic area signs (sec. 2E-35).
8. Recreational area signs (sec. 2E-36).
9. Milepost markers (sec. 2E-37).
10. Miscellaneous guide signs (sec. 2E-38).

2E-19 Route Markers and Trailblazers

Route markers on expressways ordinarily are incorporated as shields or other distinctive shapes in large directional guide signs. Markers designed for independent mounting have less application on expressways.

Route markers and auxiliary markers showing junctions and turns should be used for guidance on approach roads, for route confirmation just beyond entrances and exits, and for reassurance along the expressway. Where used on the expressway proper, the markers should be suitably enlarged. Dimensional data for route marker shields is given in section 2F-37.

The standard Trailblazer assembly (sec. 2D-34) may have application on roads leading to the expressway. If desired, the component parts of the Trailblazer assembly may be included on a single sign panel.

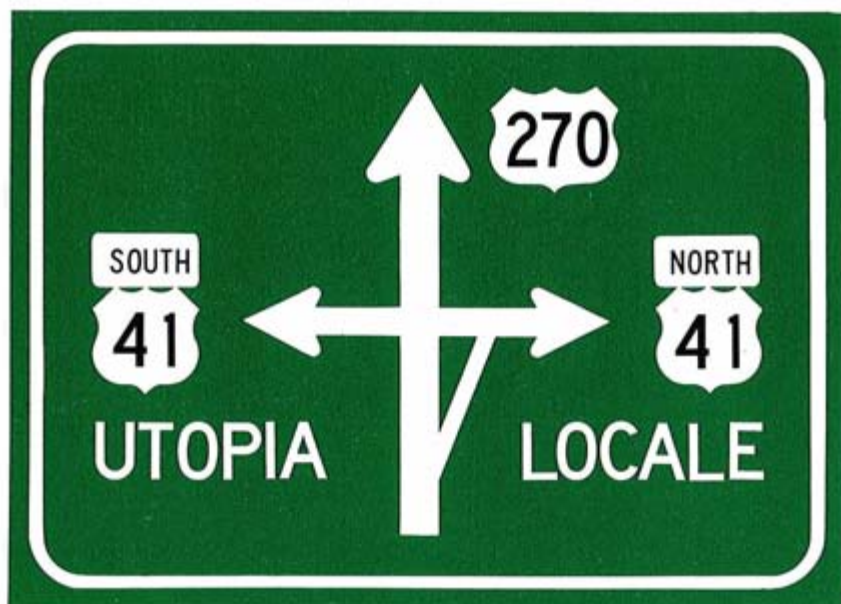


Figure 2-10. Diagrammatic sign for intersection at grade.

2E-20 Signs for Intersections at Grade (fig. 2-10)

Wherever there are intersections at grade within the limits of an expressway, sign types specified in Part II-D will be applicable. However, such signs should be of a size compatible with the level of signing on the expressway as a whole. Advance guide signs for intersections at grade may take the form of diagrammatic layouts depicting the geometrics of the intersection along with essential directional information. A pictorial guide sign of this kind is shown in figure 2-10.

2E-21 Expressway Interchange Classification

For expressway signing purposes interchanges are classed as: major, intermediate and minor.

1. Major interchanges are subdivided into two categories:
 - a. Interchanges with other expressways or freeways.
 - b. Interchanges, other than those named in (a), with high-volume multilane highways, principal urban arterials, and major rural routes where the interchanging traffic is heavy or includes many drivers unfamiliar with the area.
2. Intermediate interchanges are those with urban and rural routes not in the category of major or minor interchanges, as defined herein.

3. Minor interchanges include those where traffic is local and very light, such as the interchanges with isolated land service roads in the west. Where the sum of exit volumes is estimated to be lower than 100 vehicles per day in the design year, the interchange will be classed as minor.

2E-22 Interchange and Exit Numbering

The feasibility of numbering interchanges or exits on an expressway will depend largely on the extent to which grade separations are provided. Where there is appreciable continuity of interchange facilities, interrupted only by an occasional intersection at grade, the numbering will be helpful to the expressway traveler.

Where used, the interchange numbering shall conform to the mile-post numbering system prescribed for freeways (sec. 2F-20). The exit number legend, if used, shall be white letters and numerals (table II-1) on a green background and shall appear on interchange guide signs as hereinafter described in sections 2E-24 through 2E-31 and as shown in figures 2-11, 2-15, and 2-18.

2E-23 Interchange Guide Signs

Interchange guide signs, in proper sequence, combine the functions of separate Route Markers and Destination signs, previously described in Part II-D, to give all necessary guidance through interchanges. For each interchange there should be a minimum of three guide signs (or assemblies of guide signs) and a maximum of five, not including any duplicate signs placed on the left side of the roadway to supplement the regular signs. In all cases major guide signs placed in advance of the interchange deceleration lane should be spaced at least 800 feet apart. Sections 2E-24 through 2E-33 describe, in order, the signs that should appear at the approach to, at and beyond each interchange.

2E-24 Advance Guide Signs (fig. 2-11)

The advance guide sign gives notice well in advance of the exit point of the principal destinations served by the next interchange and the distance to that interchange.

For major interchanges two advance guide signs should be used. The recommended distance for their placement is one and two miles. The legend on the sign shall be the same as on the Exit Direction sign except that the last line shall read EXIT 1 MILE or EXIT 2 MILES as the case may be. If the interchange has two or more exit roadways, the bottom line shall read EXITS 1 (2) MILE(S).

EXITS 33 A-B

E1-5 Exit Number Panel



E1-1



E1-1a

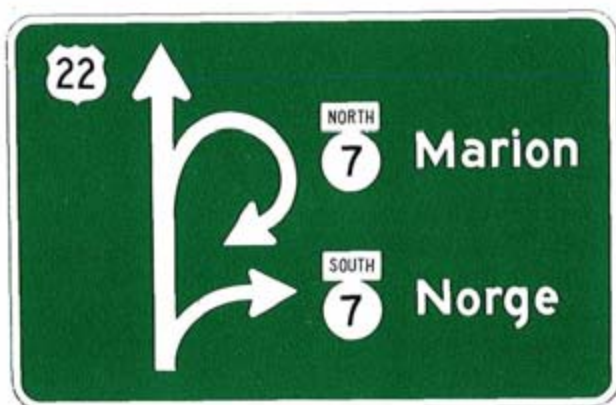
Note: Delete word EXIT(S) if exit number is used.



E1-2



E1-3



E1-4

Figure 2-11. Typical interchange advance guide signs.

However, where exit numbers are used, the word EXIT will be omitted from the bottom line. It may not always be desirable to locate the sign at the exact 1 and 2 mile point from the interchange. In such case the distance shown should be to the nearest $\frac{1}{4}$ mile. Fractions of a mile, rather than decimals, should be shown in all cases. Where the distance between interchanges is less than two miles, the two-mile sign will be omitted.

At intermediate interchanges, two advance guide signs should be used, with appropriate distance indications, to give the driver a total of three notices of the exit destinations. As previously indicated, the sign location may be adjusted for interchange spacing and other conditions, subject only to a minimum allowable distance of 800 feet between the advance guide sign and the exit direction sign.

At minor interchanges, only one advance guide sign is required. It should be located $\frac{1}{4}$ to $\frac{1}{2}$ mile from the exit gore.

Recommended letter and numeral sizes for advance guide signs are shown in table II-1. Where appropriate, diagrammatic signing of a type shown in figure 2-11 may be used either as a substitute for or in addition to the above-described signs.

2E-25 Next Exit Supplemental Sign (fig. 2-12)

Where the distance to the next interchange is such that a driver failing to make a desired turn would be required to travel a number of miles out of his way, it may be desirable to use a supplementary panel mounted below the advance guide sign nearest the interchange. This will carry the legend NEXT EXIT (12) MILES. Where this sign is used, it shall be placed below the guide sign nearest the interchange. Normally, the Next Exit sign should not be used unless the distance between successive interchanges is more than 5 miles.

The legend for the Next Exit sign may be displayed in either one or two lines. The one-line message is the more desirable choice.



E2-1



E2-1A

Figure 2-12. Next exit supplemental advance guide sign.

However, where the sign is to be mounted below the advance guide sign, the two-line message should be used if the one-line message will cause the sign to have a horizontal dimension greater than that of the principal sign.

2E-26 Other Supplemental Signs (fig. 2-13)

Information regarding destinations accessible from an interchange, other than places shown on the standard interchange signing, may be shown on a supplemental guide sign. Such a sign may list one or two destinations followed by the legend NEXT RIGHT or SECOND RIGHT or both, as appropriate. The supplemental guide sign installation should be erected approximately mid-way between the two major advance guide signs. If only one advance guide sign is used, the supplemental sign should follow by at least 800 feet. Where exit numbers are used, the NEXT RIGHT or similar action message is unnecessary.

Supplemental signing can impair the effectiveness of other guide signing because of the possibility of overloading the driver's capacity



E3-1

Figure 2-13. Other supplemental advance guide signs.

to receive and make decisions on visual messages. For this reason each jurisdiction should develop an appropriate policy for such signing. Such items as population and distance from the expressway route and the significance of the destination should be taken into account.

Only one supplemental guide sign may be used on each interchange approach. It is to be located as an independent sign installation rather than being added to any of the major guide signs.

2E-27 Exit Direction Signs (fig. 2-14)

The exit direction sign repeats the route and destination information that was shown on the advance guide sign(s) for the next exit, and thereby assures the driver of the destination served and indicates whether he leaves on the right or on the left for that destination.

The sign for exit direction should be located at least 500 feet in advance of the theoretical gore point. It should be placed either at the beginning of the deceleration lane or at a location approximately $\frac{1}{4}$ to $\frac{1}{2}$ mile in advance of the gore point, usually depending on the visibility of the exit roadway to drivers approaching on the through lanes of the expressway.

When the sign is located at or near the beginning of the deceleration lane and the alignment of the exit ramp is so conspicuous that



Figure 2-14. Interchange exit direction signs.

an arrow symbol will be readily associated with the departure point and ramp alignment, the upward pointing directional arrow, appropriately included for the exit roadway alignment, shall be incorporated into the sign. When these conditions are not met or when the sign is located well in advance of the beginning of the deceleration lane, the directional word message NEXT RIGHT (or NEXT LEFT) shall be used in lieu of the directional arrow.

In some cases, principally in urban areas, visibility obstructions due to structures, unusual alignment, or closely spaced interchanges may make it impossible to locate the exit direction sign, either with the arrow or with the action message, without violating the required minimum spacing between major guide signs. In such circumstances, interchange sequence signs (sec. 2E-31) may be substituted for the exit direction or advance guide sign.

Letter, numeral and arrow sizes are presented in table II-1 and figure 2-7.

2E-28 Gore Signs (figs. 2-15, 2-16)

The gore sign indicates the place of departure from the main-line roadway. Therefore, consistent application of this type of sign according to design conditions is of much importance. The basic need is for a sign to indicate the exiting point. Each gore should be treated similarly, whether the interchange has one exit roadway or multiple exits. Requirements for ground-mounted and overhead sign installations are considered separately.

The ground-mounted gore sign is located in the area between the main roadway and the ramp at all exits which do not have overhead gore signs. It may be used to supplement the overhead sign where this is necessary for delineation or other purposes. The following



Figure 2-15. Ground-mounted gore exit signs.



E6-1



E6-2



E6-3



E6-3a

Figure 2-16. Overhead gore exit signs.

provisions govern the design and application of the ground-mounted gore sign:

1. The sign shall carry the word EXIT, or EXIT with a number (if interchange or exit numbering is used), and an arrow (figure 2-7).

2. In cases where special emphasis is needed to identify the exit roadway, such as at the second exit of a multiple exit interchange, the sign may consist of a route marker, cardinal direction plate and arrow.

3. In no case should the sign present information not previously displayed on approach signs to the interchange exit.

4. Breakaway or yielding supports should be used for ground-mounted gore signs because of their vulnerability at this location to vehicles out of control.

The overhead gore sign is located at or close to the theoretical gore point. The following provisions govern its design and application.

1. The sign shall carry the exit number (if used), the route number, cardinal direction and destination, with an appropriate upward-sloping arrow (figure 2-7).

2. At a multi-exit interchange the sign should be located directly over the exit roadway for the first exit. At the same location and normally over the right-hand through lane, an exit direction sign

for the second exit should be located. A sign over the lane or lanes farthest to the left may also be used for the through movement. For such a sign, the words THRU TRAFFIC with or without a down arrow may be displayed with the appropriate route number or control city destination, or both.

3. Overhead gore signs may also be used effectively at the second exit. If the second exit is beyond an underpass, the sign should ordinarily be mounted on the face of the overhead structure so as to give motorists adequate visibility of the exit message. When the expressway route is on an overcrossing, the gore sign should be on a cantilever support over the exit lane in advance of the gore point.

4. Where the distance between interchanges is short, advance guide signs for a given interchange have to be placed near or at the preceding interchange. In these circumstances, the overhead gore sign at the exit may also have as a companion sign over the through lanes, the advance guide sign for the next interchange.

5. The message EXIT ONLY (sec. 2E-38) may be used on the overhead gore sign to advise drivers of a lane drop situation.

2E-29 Post-Interchange Signs

Where space between interchanges permits, as in rural areas and where undue repetition of messages will not occur, a fixed sequence of signs should be displayed beginning 500 feet beyond the end of the acceleration lane. At this point there should be a route marker, followed 1,000 feet farther along by a speed limit sign, and this followed in another 1,000 feet by a mileage sign.

Where space between interchanges does not permit placement of these three post-interchange signs without encroaching on or overlapping the advance guide signs necessary for the next interchange, or in rural areas where the interchanging traffic is primarily local, one or more of the post-interchange signs should be omitted. Usually the mileage sign will be of less importance than the other two and can, therefore, be omitted especially where interchange sequence signs are used. If the sign for through traffic on an overhead assembly already contains the route marker, the post-interchange route marker may also be omitted.

2E-30 Mileage Signs (fig. 2-17)

Where used, the post-interchange mileage sign shall consist of a two- or three-line sign carrying the names of significant destination points and the distances to those points. Destination points should be selected and arranged as follows:

1. The top or first line of the sign shall identify the next interchange with the name of the community near or through which the



E7

Figure 2-17. Post interchange mileage sign.

expressway route passes, or if there is no community, the route number or name of the intersected highway.

2. A second line may be used on the sign, and when used, should be reserved for communities of general interest which are on or immediately adjacent to the route or major traffic generators that the route was specifically located to serve. The choice of names for the second line, when it is used, can be varied on successive mileage signs to give motorists maximum information concerning communities served by the expressway.

3. The third, or bottom line, shall contain the name and distance to a control city (if any) which has national significance for travelers using the expressway route.

Under normal conditions, mileages to the same destinations should not be shown more frequently than at five-mile intervals. The mileages displayed on these should be the actual distance to the destination points and not to the exit from the expressway.

2E-31 Interchange Sequence Signs (fig. 2-18)

Where exits are very closely spaced, particularly through large urban areas, interchange sequence signs identifying the next two or three interchanges by name or route number, are useful. Mileages or fractions thereof to the appropriate interchange are displayed. Such signs should be placed in advance of the first advance guide sign and approximately midway between interchanges.

The interchange sequence sign may also have application for smaller communities served by three or more exits. In these cases,

Santa Barbara Ave	3/4
Vernon Ave	1 1/2
51st Street	2 1/4

E8-1

Columbia Exits	
College St	1 1/2
Hanover St	2 1/4
High St	2 3/4

E8-1a

Figure 2-18. Interchange sequence signs.

the name of the community followed by the word EXITS should be on the top line and destinations (not to exceed three) and corresponding mileages should be shown below. Interchange exit numbers shall not be shown on interchange sequence signs.

2E-32 Next (3) Exits Area Sign (fig. 2-19)

Expressways may pass through "historical" or "recreational" regions, or urban areas served by a succession of several interchanges. Such regions or areas may be indicated by a special sign several miles, if possible, in advance of the advance guide sign or signs for the first interchange. The sign legend should identify the region or area followed by the words NEXT (3) EXITS or NEXT (3) INTERCHANGES as appropriate.



E9

Figure 2-19. Next (3) exits area sign.

2E-33 Signing for Services (fig. 2-20)

On rural sections of expressways where general motorist services are infrequent, service signing may be needed. In such cases, the provisions of section 2D-46 will apply, except that signs should be suitably enlarged. Letter and numeral sizes are shown in table II-1.



Figure 2-20. Services sign.

Special signs or other displays may be erected in safety rest areas, scenic overlooks, roadside turnouts and similar areas, for providing motorists with specific services information. National criteria for such postings are given in the Federal Register, Vol. 24, No. 15, January 23, 1969.¹⁰

2E-34 Uniform Signing by Type of Interchange

Signing should be consistent for each type of interchange to help motorists identify the geometric layout, as well as to obtain route, direction and destination information for specific exit ramps. Where unusual geometric features exist, sign modifications may be justified, but should be held to a minimum to preserve a pattern of uniformity. Figures 2-27 through 2-33 show applications of guide signs for common types of interchanges.

2E-35 Rest and Scenic Areas

Signing for safety rest areas and for scenic areas should conform to the provisions previously set forth in sections 2D-42 and 2D-43.

¹⁰ National Standards and Criteria for Official Highway Signs Within Interstate Rights-of-way Giving Specific Service Information for the Traveling Public, Part 22, Chapt. I, Title 23—USC (1969).



E11-1



E11-1a

Figure 2-21. Exit only panel.

However, the signs should be suitably enlarged for expressway application. Letter and numeral sizes are shown in table II-1.

2E-36 Recreation Area Signs

Recreation area signs of the type described previously in section 2D-44 may have application on expressway facilities. Where such

signs are used, the provisions of that section should be followed with suitable enlargement of the signs for expressway conditions.

2E-37 Milepost Markers

Milepost markers will be required on expressway facilities which are located on a route where there is milepost continuity. In such cases, the provisions of section 2F-36 will apply.

2E-38 Miscellaneous Guide Signs (fig. 2-21)

Miscellaneous guide signs, such as those pointing out geographical features like rivers, summits, and political boundaries may be used on expressways if they do not interfere with signing for interchanges or other critical points. If they are to be of value to the expressway traveler they should be consistent with other expressway signs in design and legibility.

Where Weigh Station signing is applicable on an expressway route the provisions of section 2D-45 should be followed. Suitable adjustment will have to be made in the sizes of the signs and in the posting distance.

A special sign reading EXIT ONLY is of value in advising drivers of an imminent lane drop situation. The sign shall have a yellow background with black legend, and may be used on the lower edge or lowest line of overhead gore, exit direction or advance guide signs on roadways approaching an interchange where there is a reduction in the number of available lanes for through traffic.

2E-39 Special Signing on Expressway Approaches and Connecting Roadways

The identification of entrances to expressways from roads of lesser importance should be given adequate attention. Conventional signing on the approach roads, as prescribed in Part II-D, may in some cases be ineffective for some of the more critical interchanges. Under such conditions the expressway signing standards may have to be extended to the approach roads.

Signing for frontage roads need not be to the same standard as is used on the through traffic roadways of the expressway, but otherwise should be consistent with requirements for roadways of this class. Good judgment and careful attention to details of such signs and their locations must be exercised in the vicinity of ramp terminals to avoid giving drivers confusing or conflicting information, or creating sight obstructions.