

TRAFFIC AND SAFETY MANUAL

Chapter 2 - Signing 2D - Guide

Freeway and Expressway

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General

Requirements of the Manual on Uniform Traffic Control Devices (MUTCD) for freeways and expressways provide a uniform and effective system of guide signing for high-volume, highspeed motor vehicle traffic. For purposes of the Traffic and Safety Manual, Expressways are defined as multi-lane divided highways with medians more than 30 feet wide and partial control of access. Freeways are defined as multi-lane divided highways with full control of access. This section addresses guide signing for those roads.

MUTCD Chapter 2E provides the principles, guidelines and characteristics of signing for freeways and expressways and the Standard Highway Signs book provides specifications for all signs, including those for freeways and expressways. Iowa Dept. of Transportation Policy 620.10 provides further explanation for freeway and expressway guide signing.

Color

Route signs have distinct color combinations for each highway system. For the Interstate system the signs are blue with white letters with the word Interstate on a red background. For Interstate business routes the signs are green with white letters. For the U.S. system the signs consist of black numerals on a white shield surrounded by a black background. Iowa route signs are similar but with a circle rather than a shield. County route signs are of a pentagon shape with a yellow county name, route number and border on a blue background. Auxiliary signs match the color of the route sign they supplement. Colors used for memorial highways, historic trails and scenic trails shall be as approved by the Traffic and Safety Bureau.

Green is used on destination and distance signs and most directional and general information signs. This includes traffic generators that are not open to the general public, such as camps operated by civic, religious or nonprofit charitable organizations.

Blue is used on General Service signs, including Food, Phone, Gas, Lodging, Hospital, and Camping. Blue is also used for Specific Service signs and Tourist-oriented Directional signs, as well as for Rest Area, Tourist Information Center, Scenic Area, Roadside Park, and some general information signs such as Weather Information, Car Pool, and Travel Information.

When the name of the hospital is used on the sign, the background color is green rather than blue.

Brown is used on signs for Recreational and Cultural Interest areas that are open to the general public for the purpose of play, amusement, or relaxation. Examples are parks, sports complexes, river accesses, wildlife areas, preserves, recreation areas, ski areas, historical sites, historical markers and museums.

Route Signs and Trailblazer Assemblies

Route signs at interchanges will be incorporated on large directional guide signs or used as independent installations for confirmation assemblies and on intersected roads. When used in place of Pull-through signs they should be located just beyond the exit. Information about erection of signs for numbered business routes is contained in Administrative Rule 761-131.

Standard Trailblazer Assemblies may be used on roads leading to the freeway and are often used as part of a freeway incident detour route.

Signs for Intersections at Grade

Section 2D-1 of the Traffic and Safety Manual addresses guide signing for conventional roads and should also be referred to for at-grade intersection guide signing on expressways.

Interchange Signs

For most locations, the most important signs at an interchange are the Advance Guide and Exit Direction signs. These two signs, along with the Supplemental Destination sign, where used, provide road users with clear instructions for orderly progress toward their destinations. Policy 620.10 contains information about those and other signs at interchanges. Policy 620.07 contains information about Supplemental Destination signs for camps operated by civic, religious or non-profit charitable organizations, for camping service signs and signs for ski area facilities. Policy 620.03 contains a provision whereby a hospital may be signed as a destination rather than a service depending on how much other necessary signing is located at a particular location.

Trailblazing

Trailblazing signs are additional guide signs on the intersecting roadway, or city/county roads, that are needed to direct traffic to destinations signed for at the interchange, or intersection. Any necessary trailblazing signs on the state highways will be installed by the DOT. Those needed on the city/county roads will be installed by the local jurisdiction. All trailblazing signs should be installed before the guide signs are installed on the freeway/expressway.

Trailblazing from one interchange to another interchange is not permitted. The destination should be included on the guide signs for the interchange that provides the direct access to the destination. For example, a destination that is signed for at an interchange on US 61 should not be signed at the interchange of I-80 and US 61, or US 30 and US 61. This would be trailblazing from I-80, or US 30 to the exit on US 61 where another guide sign would be necessary to direct traffic to exit US 61 to get to the destination.

Post-Interchange Signs

If space between interchanges permits, 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 a route sign assembly should be installed followed by a Speed Limit sign and a Distance sign, each at a spacing of 1,000 feet. If space between interchanges does not permit placement of these three post-interchange signs without encroaching on or overlapping the Advance Guide signs for the next interchange, one or more of the post-interchange signs should be omitted. Usually the Distance sign will be the least important, followed by the Route sign assembly and the Speed Limit sign.

General Service Signs

The requirements and procedures for the installation of Hospital service signing on expressways and freeways are found in Policy 620.03. If the sign includes the name of the hospital the background color is green rather than blue. A business that qualifies for, but does not wish to participate in the Specific Service Signing program may qualify for General Service signing. The requirements and procedure for placing Camping signs are set forth in Policy 620.07.

Gas, Food and Lodging service signs on the freeway are provided, installed and maintained by the Iowa Dept. of Transportation. Businesses must meet the following criteria to qualify for signing:

- The Business should be located no further than five miles from the nearest off-ramp intersection with the intersected highway or street.
- The Business must be appropriately licensed as required by law.
- The Business must provide a public telephone.
- If needed, adequate trailblazing signs are required on local roads and streets to guide motorists from the freeway to the Business. Trailblazing signs must conform to requirements for guide signs in the MUTCD. The Iowa Dept. of Transportation will not pay for trailblazing signs and will not install the service signs until necessary trailblazing signs are in place.

In addition, the Business must meet other criteria as listed below:

Gas

To qualify for Gas service signs the business must:

- Provide vehicle services including gasoline, oil and water.
- Provide rest room facilities and drinking water.
- Operate year-round at least 12 continuous hours per day, 7 days per week.

Card-operated only fueling stations need not provide telephone, oil, water, rest rooms or drinking water but must operate 24 hours per day, 7 days per week. These fueling stations must be operable by motorists without membership.

Food

To qualify for Food service signing the business must:

- Operate year-round six days per week
- Serve a minimum of two meals per day

Lodging

To qualify for Lodging service signing the business must:

- Provide adequate sleeping accommodations consisting of a minimum of ten units.
- Each unit must have a bathroom and sleeping room, except that a bed and breakfast establishment is not required to have more than two guest rooms or to provide separate bathroom facilities for each guest room.

Specific Service Signs

Specific service signs, commonly referred to as Logo signing, are guide signs that provide road users with business identification and directional information for services and for eligible attractions. The program is described in Administrative Rule 761-118 with procedures contained in Policy 620.08.

Weigh Station Signs

On freeways and expressways, signs similar to those used for interchanges and rest areas are used for weigh station signing:

- Weigh Station 1 Mile
- All Trucks Over 10,000 lbs Must Weigh
- Weigh Station Next Right
- Weigh Station with right diagonal arrow placed in gore of ramp

The signs have a white message on a green background except that the All Trucks Over 10,000 lbs Must Weigh sign has a black message on a white background.

Reference Location Signs

The guidelines for installation and maintenance of Milepost signs, referred to in the MUTCD as Reference Location signs, are contained in Policy 620.04. More detailed information on the history, installation and maintenance of mileposts is included in Section 2D-1 of the Traffic and Safety Manual. The design details of Reference Location signs shall be as shown in the Standard Highway Signs book. When Intermediate Reference Location signs are used to augment the reference location sign system, the Reference Location sign at the mile point shall display a decimal point and a zero numeral. Reference Location signs shall have a minimum mounting height of 4 feet in accordance with the mounting heights of delineators, regardless of whether the particular section is delineated, and shall be offset 8 feet outside the edge of the shoulder. Reference Location signs shall be mounted on the right side of the roadway unless conditions limit or restrict their use on the right, in which case they may be mounted in the median for that particular section of highway. They may be mounted back to back when placed in the median unless they would then be further than 30 feet from the edge of the road.

Intermediate Reference Location Signs

To augment the reference location sign system, Intermediate Reference Location signs, which show the tenth of a mile with a decimal point, may be installed at one-tenth mile intervals. They may be used in urban areas to assist with identification of incident locations. The design details and placement of Intermediate Reference Location signs shall be as described for Reference Location signs.

Enhanced Reference Location Signs

Enhanced Reference Location signs, which enhance the reference location sign system by identifying the route, are placed on freeways and expressways instead of Reference Location signs, when two or more routes run concurrently. The priority for determining which concurrent route is to be mileposted is listed in Policy 620.04. They may also be used in urban areas near concurrent route sections to assist with identification of the route. The design details and placement of Enhanced Reference Location signs shall be as described for Reference Location signs. They shall have a green background with white numerals, letters and borders.

Intermediate Enhanced Reference Location Signs

To augment an enhanced reference location sign system, Intermediate Enhanced Reference Location signs, which enhance the reference location sign system by identifying the route and showing the tenth mile with a decimal point, may be installed. They may be used in urban areas to assist with identification of incident locations. The design details and placement of Intermediate Enhanced Reference Location signs shall be as described for Reference Location signs. They shall have a green background with white numerals, letters and borders.

Miscellaneous Guide Signs

Miscellaneous Guide signs are used to point out geographical features, such a rivers and jurisdictional boundaries. Of interest to the traveler, though not directly necessary for guidance, are numerous other kinds of useful information that can be conveyed by general information guide signs.

Street Name Signs

Street name signs on expressways are the responsibility of the City or County. In rural areas they should be located near the right-of-way line. Street name signs, if used on freeways, will be placed by the Iowa Dept. of Transportation, usually on overhead structures.

Advance Street Name Signs

Advance street name signs may be installed and maintained by the County or City on primary highway expressways for intersections with county roads or city streets respectively, in coordination with the Iowa DOT Maintenance Supervisor.

The County may be eligible for reimbursement for the initial cost of signs, posts and fasteners under the Expressway Crossroad Sign Program for Counties, administered through the Traffic and Safety Bureau.

An Advance Street Name Plaque with black legend on a yellow background, installed supplemental to an Intersection (W2) or Advance Traffic Control (W3) series warning sign may be used instead of an Advance Street Name guide sign. When used it will be provided, installed and maintained by the Iowa Dept. of Transportation.

City Name Signs

City name signs are placed at the corporate limit line as shown in Traffic and Safety Manual Section 2A-10.

County Name Signs

County name signs are placed as nearly as possible to the county line.

River Signs

The guidelines for signing rivers are contained in Policy 620.02. The policy identifies which rivers are to be signed where they intersect primary and interstate highways.

Program Recognition Signs

Refer to TAS Manual Chapter 2D-1 (Conventional Road Signs) for information about Program Recognition Signs.

Adopt-A-Highway Signs

The Adopt-A-Highway Program and signing system is set forth in Maintenance Bureau Instructional Memorandum 5.140. The Adopt-A-Highway sign system is designed for one post and consists of:

- The main Adopt-A-Highway sign panel (36" x 24")
- The sponsor name panel $(18" \times 24" = 3 \text{ lines})$

- A maximum of 10 characters per line (including spaces, hyphens, etc)
- The Workers symbol sign (24" x-24")

Border Crossing Signs

A series of signs is placed on highways for traffic entering the State of Iowa. The following signs are typically placed on a freeway or expressway where it enters the state. Some of these signs are also strategically located around the state at locations on record in the Traffic and Safety Bureau and/or as listed in the tables in this section.

- Welcome to Iowa
- Eisenhower Memorial Highway (Interstate only)
- Route and Cardinal Direction assembly
- Speed Limit
- Distance
- Highway Emergency Long Distance Phone (See Table 1 below or Table 1 Section 2D-1)
- Commercial Vehicle Permit Center (Interstate only)
- Traveler Information 511 (See table 2 below)
- Slower Traffic Keep Right (See tables 3 and 4 below)
- Buckle Up (See tables 3 and 4 below)
- Fines Double/Road Workers (See tables 3 and 4 below)
- Unlawful to Pass Stopped School Bus (Expressway only)
- Litter Disposal (Expressway only)

The list above is basic for rural conditions and may be altered due to conditions at a particular site. On an expressway where a city is near the state line, the last four signs listed may logically be placed for traffic leaving the city as shown on Figure 6 of Traffic and Safety Manual Section 2A-10, rather than entering the state.

Unlawful to Pass Stopped School Bus and Litter Disposal Signs

Unlawful to Pass Stopped School Bus and Litter Disposal signs are placed on expressways for traffic leaving cities over 1000 population as shown on Figure 6 of Traffic and Safety Manual Section 2A-10.

Highway Emergency Long Distance Phone Sign

Highway Emergency Long Distance Phone signs are placed on Interstate routes at the locations listed in Table 1. For all other routes they are shown in Table 1 of Section 2D-1 of the Traffic and Safety Manual.

 Table 1

 Highway Emergency Long Distance Phone Sign Locations, Interstate

Route	County	Location	Facing	
I-29	Fremont	N of MO State Line	NBT	
I-29	Pottawattamie	S of Council Bluffs	SBT	
I-29	Pottawattamie	N of S Jct. I-280	NBT	
I-29	Woodbury	S of Sergeant Bluffs	SBT	

Route	County	Location	Facing
I-35	Clarke	N of 34	NBT
I-35	Decatur	N of MO State Line	NBT
I-35	Hamilton	S of 20	SBT
I-35	Polk	N of I-80	NBT
I-35	Warren	S of 5	SBT
I-35	Worth	S of MN State Line	SBT
I-80	Cass	E of 71	EBT
I-80	Cass	W of 71	WBT
I-80	Dallas	W of I-35	WBT
I-80	Iowa	E of 149	EBT
I-80	Polk	W of Altoona	EBT
I-80	Pottawattamie	E of 6	EBT
I-80	Scott	W of I-280	WBT
I-80	Iowa	W of 149	WBT

Commercial Vehicle Permit Center Signs

Commercial Vehicle Permit Center signs are placed on Interstate routes at border crossings to inform commercial vehicle drivers that information and assistance regarding needed Iowa permits is available by calling 515-237-3264.

Traveler Information Phone Signs

Traveler Information Phone signs are placed on Interstate routes at the locations listed in Table 2. They are placed 1000 ft. to 5000 ft. prior to the entrance to rest areas, with a minimum of 800 ft. from other signs. They are placed in the border crossing series of signs except when they would be near rest areas. Small 8 in. by 10 in. signs are posted near rest area payphones and 36 in. by 36 in. signs are installed in weigh station areas where truck drivers can see the sign while on the scale or shortly after leaving the scale and before entering the highway. The purpose of the signs is to inform travelers that they may dial 511 to obtain updated information about highway conditions.

Traveler Information Phone Sign Locations, Interstate				
Route	County	Location	Facing	
I-29	Fremont	N of MO State Line	NBT	
I-29	Harrison	S of NB Rest Area	NBT	
I-29	Harrison	N of SB Rest Area	SBT	
I-29	Mills	S of NB Rest Area	NBT	
I-29	Mills	N of SB Rest Area	SBT	
I-29	Monona	S of NB Rest Area	NBT	
I-29	Monona	N of SB Rest Area	SBT	

-Table 2

Route	County	Location	Facing
I-29	Woodbury	S of NB Rest Area	NBT
I-29	Woodbury	N of NB Rest Area	SBT
I-29	Woodbury	S of SD State Line	SBT
I-35	Clark	S of NB Rest area	NBT
I-35	Clark	N of SB Rest Area	SBT
I-35	Decatur	S of NB Rest Area	NBT
I-35	Decatur	N of SB Rest Area	SBT
I-35	Franklin	S of NB Rest Area	NBT
I-35	Franklin	N of SB Rest Area	SBT
I-35	Polk	S of NB Rest Area	NBT
I-35	Polk	N of SB Rest Area	SBT
I-35	Story	S of NB Rest Area	NBT
I-35	Story	N of SB Rest Area	SBT
I-35	Worth	S of NB Rest Area	NBT
I-35	Worth	N of SB Rest Area	SBT
I-74	Scott	N of IL State Line	NBT
I-80	Adair	E of WB Rest Area	WBT
I-80	Adair	W of EB Rest Area	EBT
I-80	Cedar	E of WB Rest Area	WBT
I-80	Cedar	W of EB Rest Area	EBT
I-80	Dallas	E of WB Rest Area	WBT
I-80	Dallas	W of EB Rest Area	EBT
I-80	Iowa	E of WB Rest Area	WBT
I-80	Iowa	W of EB Rest Area	EBT
I-80	Jasper	E of WB Rest Area	WBT
I-80	Jasper	W of EB Rest Area	EBT
I-80	Johnson	E of WB Rest Area	WBT
I-80	Johnson	W of EB Rest Area	EBT
I-80	Polk	E of WB Rest Area	WBT
I-80	Polk	W of EB Rest Area	EBT
I-80	Scott	E of WB Rest Area	WBT
I-80	Scott	W of EB Rest Area	EBT
I-80	Pottawattamie	E of WB Rest Area	WBT
I-80	Pottawattamie	W of EB Rest Area	EBT
I-280	Scott	W of IL State Line	WBT

Route	County	Location	Facing
I-380	Linn	S of NB Rest Area	NBT
I-380	Linn	N of SB Rest Area	SBT
I-680	Pottawattamie	W of EB Rest Area	EBT
I-680	Pottawattamie	E of WB Rest Area	WBT
I-680	Pottawattamie	E of Overlook	WBT

Slower Traffic Keep Right, Fines Double and Buckle Up Signs

Slower Traffic Keep Right signs, Fines Double in Construction Zones signs and Buckle Up signs are installed at the locations listed in Table 3 for Interstate routes and Table 4 for other freeways and expressways. The standard locations are for traffic entering the State, exiting rest areas and exiting weigh stations for Interstate routes and at selected locations for other freeways and expressways. The Fines Double in Construction Zones regulatory message is combined with the Road Workers Give em a Brake warning message on the same sign.

Fines Double Signs, Interstate Slower Traffic Keep Right Signs, Interstate				
Route	County	Location	Facing	
I-29	Fremont	N of MO State Line	NBT	
I-29	Mills	S of Rest Area	SBT	
I-29	Mills	N of Rest Area	NBT	
I-29	Harrison	S of Rest Area	SBT	
I-29	Harrison	N of Rest Area	NBT	
I-29	Monona	N of Rest Area	NBT	
I-29	Monona	S of Rest Area	SBT	
I-29	Woodbury	N of Rest Area	NBT	
I-29	Woodbury	S of Rest Area	SBT	
I-29	Woodbury	S of SD State Line	SBT	
I-35	Decatur	N of Rest Area	NBT	
I-35	Cerro Gordo	N of Rest Area	NBT	
I-35	Cerro Gordo	N of Rest Area	SBT	
I-35	Hamilton	S of US 20	SBT	
I-35	Polk	N of US 6	NBT	
I-35	Polk	S of IA 28	SBT	
I-35	Story	N of Rest Area	NBT	
I-35	Story	S of Rest Area	SBT	
I-35	Story	S of Weigh Station	SBT	

Table 3 **Buckle Up Signs, Interstate** Fines Double Signs, Interstate

Route	County	Location	Facing
I-35	Story	N of Weigh Station	NBT
I-35	Worth	S of MN State Line	SBT
I-74	Scott	W of IL State Line	WBT
I-80	Adair	W of Rest Area	WBT
I-80	Adair	E of Rest area	EBT
I-80	Cedar	W of Rest Area	WBT
I-80	Cedar	E of Rest Area	EBT
I-80	Dallas	E of Rest area	EBT
I-80	Dallas	W of Rest Area	WBT
I-80	Iowa	W of Rest Area	WBT
I-80	Iowa	E of Rest Area	EBT
I-80	Jasper	W of Rest Area	WBT
I-80	Jasper	E of Rest Area	EBT
I-80	Johnson	W of Rest Area	WBT
I-80	Johnson	E of Rest Area	EBT
I-80	Polk	E of Rest Area	EBT
I-80	Polk	W of Rest Area	WBT
I-80	Pottawattamie	W of Rest Area	WBT
I-80	Pottawattamie	E of Rest Area	EBT
I-80	Pottawattamie	W of Weigh Station	WBT
I-80	Pottawattamie	E of Weigh Station	EBT
I-80	Pottawattamie	E of NE State Line	EBT
I-80	Scott	E of Rest Area	EBT
I-80	Scott	W of Rest Area	WBT
I-235	Polk	E of U.S. 6	EBT
I-235	Polk	E of Iowa 28	WBT
I-280	Scott	W of IL State Line	WBT
I-380	Buchanan	N of Weigh Station	NBT
I-380	Buchanan	S of Weigh Station	SBT
I-380	Johnson	S of Rest Area	SBT
I-380	Linn	N of Rest area	NBT
I-680	Pottawattamie	E of NE State Line	EBT

Table 4				
Buckle Up Signs, Freeway and Expressway Fines Double Signs, Freeway and Expressway				
Slower Traffic Keep Right Signs, Freeway and Expressway				
Route	County	Location	Facing	
20	Buchanan	W of Exit 252	WBT	
20	Buchanan	E of Iowa 150	EBT	
20	Delaware	W of Iowa 13	WBT	
20	Delaware	E of Co. X-35	EBT	
20	Dubuque	W of WI State Line	WBT	
20	Hamilton	E of Iowa 17	EBT	
20	Hamilton	W of Iowa 17	WBT	
20	Webster	E of Co. P-59	EBT	
20	Woodbury	E of I-29	EBT	
30	Boone	E of Boone	EBT	
30	Boone	W of Boone	WBT	
30	Linn	E of Co. W6E	EBT	
30	Story	E of Nevada	EBT	
30	Story	W of Nevada	WBT	
30	Story	E of I-35	EBT	
61	Des Moines	N of Burlington	NBT	
61	Des Moines	S of Burlington	SBT	
61	Dubuque	W of WI State Line	SBT	
61	Dubuque	S of Dubuque	SBT	
61	Lee	N of Keokuk	NBT	
61	Lee	N of Fort Madison	NBT	
61	Lee	S of Fort Madison	SBT	
61	Muscatine	N of Muscatine	NBT	
61	Muscatine	S of Muscatine	SBT	
61	Scott	N of Davenport	NBT	
61	Scott	S of Davenport	SBT	
65	Polk	N of I-80	NBT	
71	Clay	N of Spencer	NBT	
75	Plymouth	S of Le Mars	SBT	
75	Woodbury	N of Sioux City	NBT	
141	Polk	N of I-35/80	WBT	
218	Johnson	S of Iowa City	SBT	
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Table 4

Route	County	Location	Facing
330	Marshall	S of U.S. 30	SBT

Tourist-oriented Directional Signs

The requirements and procedure for placing Tourist-oriented Directional signs are set forth in Administrative Rule 761-119. They may be used on expressway sections with at-grade intersections but not at interchanges.

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