

# Alaska Department of Transportation and Public Facilities

# Alaska Sign Design Specifications

Effective November 15, 2006

# Introduction

The Alaska Sign Design Specifications (ASDS) contains size and layout information for approved highway signs. Use these specifications for all traffic signs on Alaska public roads. We recommend using them on private roads as well.

This publication is a supplement to the Alaska Traffic Manual (ATM), which specifies appropriate use and placement of traffic control devices, including signs.

The ASDS is intended to enhance road safety and operation by specifying uniform, understandable, and effective traffic signs for Alaska roads.

### **Related Documents**

The ATM is comprised of the current <u>Alaska</u> <u>Supplement</u>, published by the Alaska Department of Transportation and Public Facilities (DOT&PF), and the <u>Manual on Uniform Traffic Control Devices</u> (MUTCD), published by the Federal Highway Administration. See the ATM for the version of the MUTCD that is currently effective in Alaska.

The Alaska DOT&PF Highway Preconstruction Manual contains additional information on sign supports and other items. It pertains to DOT&PF construction projects.

The DOT&PF Standard Specifications for Highway Construction contains descriptions, material requirements, and construction methods for traffic signs and other items. It pertains to DOT&PF construction projects.

The 2004 FHWA <u>Standard Highway Signs</u> (SHS) contains standard highway sign details adopted by the federal government. The ASDS, which includes many signs from the SHS, is the authoritative reference in Alaska and supersedes the SHS.

Sign lettering shall conform to Appendix C. .

# Obtaining the ASDS and Related Documents

You may purchase documents published by the DOT&PF from the Alaska Department of Transportation and Public Facilities, 3132 Channel Drive, Room 115, Juneau, Alaska 99801 (907-465-2985). They are also available for free download at the DOT&PF Design and Construction Standards web site at:

http://www.dot.state.ak.us/stwddes/dcspubs/index.shtml

You may obtain the MUTCD and revisions from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 371954, Pittsburgh, PA 15250-7954, Stock No. 650-001-00001-0. You may also purchase it on the web at

http://mutcd.fhwa.dot.gov/ser-pubs.htm.

You may obtain <u>The Standard Highway Signs Book</u>, Stock No. 950-044-00000-4, from the same physical and web addresses as the MUTCD.

For the Standard Alphabets for Highway Signs, 1966 Edition and Standard Alphabets for Highway Signs and Pavement Markings, 1977 Metric Edition, write to the Federal Highway Administration (FHWA), Office of Transportation Operations (HOTO), 400 7th Street, SW, Room 3416, Washington, DC 20590.

Note. These web addresses and references were current when the ASDS was published.

# **ASDS** Revisions

We will periodically post revisions to this publication on the DOT&PF web site listed above. We will no longer mail a written notice of revisions. Manual holders are responsible for checking the website and keeping their manuals up to date.

Revisions to these specifications become effective on the date of web publication. When traffic signs are installed under State contracts, the ASDS in effect as of the initial date of contract advertising shall apply, unless specified otherwise in contract documents.

# **Conformity with Standards**

Signs on state-owned public streets and highways in Alaska shall conform to these specifications unless

specifically exempted by the DOT&PF State Traffic Engineer. In accordance with AS 28.01.010, The Alaska Uniform Traffic Laws Act, signs on other public streets and highways shall conform unless conformance is not practicable. Sign supports shall be crashworthy (in conformance with the requirement of National Highway Cooperative Research Program Report 350) or located outside of the clear zone (as defined in the DOT&PF\_Highway Preconstruction Manual). Sign installations and usage shall conform to the ATM.

# Sign Numbering

In many cases, sign numbers differ from those in past versions of the ASDS. Generally, the new numbers either correspond with those in the 2003 MUTCD or, if there are no corresponding signs, have suffixes high enough to not conflict with future additions to the MUTCD. Usually, signs used in Alaska but not shown in the MUTCD have a "-100" or higher suffix. Exceptions include D1, D2, D3 and E series signs where most sign numbers used in the past were retained because there is little overlap or conflict with the MUTCD.

Existing documents such as standard drawings, manuals, and policies may refer to signs by their old numbers. To provide a cross-reference, the old numbers are listed in the index and, when numbers have changed, on sign drawings.

# Notes on Using the ASDS

In most cases, variable sign characters are shown as outlines. Exception: when it is obvious that characters are variable, as with destinations or street names, they are shown normally.

Sign drawings are ordered as shown in the Index. Because some pages have multiple signs, sign order does not always follow an exact alpha-numeric sequence. However, signs will always be within a few pages of being sequential.

# **General Specifications**

# Sign Sizing by Roadway Class

Roadway classes are defined as follows:

Roadway Class	Definition
Bike	Signs intended for the exclusive use of bicyclists
Minimum	Local roads (as defined by AASHTO) with no more than one lane in each direction and speed limits of 25 MPH or less.
Conventional	Streets or highways other than freeways, expressways, and roads that fall under the Minimum class above.
Expressway	Divided highways with partial control of access
Freeway	Divided highways with full control of access
Oversized	Where special emphasis is needed

Sign dimensions shown on the sign drawings are standard sizes for each roadway class. You may use larger sizes where greater legibility or emphasis is desired. Larger "Oversized" sizes are provided for some signs. Maintain the specified shapes, colors, and proportions when enlarging other signs.

#### Color

Sign color specifications shall comply with the MUTCD.

# **Symbols**

Symbol designs shall be essentially like those shown on sign drawings. You may download electronic images from the ASDS sign drawings on the Internet and scale them to the appropriate size.

Unless otherwise shown on sign drawings, symbols should be centered.

# **Word Messages**

Use the sign text shown in these Specifications for standard sign legends. Legends for directional signs and other non-standard wordings should be as brief as possible.

Long place names or messages often present difficulties in sign layout. Although the width of directional signs is determined by legend length, there are sometimes practical limits to sign width.

You may use reduced spacing between letters where some condensation in legend length is necessary. However, spacing between individual letters shall not be reduced more than 25%, and no reduction shall be made unless permitted in writing by the agency with road authority.

# Lettering

Standard letter dimensions and spacings are addressed in Appendix C.

Unless otherwise shown on sign drawings, text should be centered.

With the exception of road or destination names on guide signs, sign lettering shall be upper-case. Unless otherwise shown, road or destination names shall be lower-case, with initial upper-case.

Sign lettering is designated by size and series. Letter series determines the width of characters and intervening spaces. "Series 2000" letter series ranges from B to F (narrow to wide). "Clearview" letter series range from 5W to 5WR (wider to narrower). As examples, a "6C" designation means a letter height of 6 inches with a series C width, while a 10-5W designation means a 10 inch letter using a Clearview series 5W width.

# Sign Borders

With few exceptions, the signs in this manual have a border of the same color as the legend, at or just inside the edge. This improves the appearance of the signs and makes them more conspicuous. A dark border shall be set in from the edge, while a white border shall extend to the edge of the plate. See the Appendix for standard border dimensions.

If the border color is not defined on a sign drawing, the border shall be the same color as the legend.

## **Tolerances**

All dimensions given are assumed to have a tolerance of  $\pm 1/16$ ". However, if the standard product of a sign manufacturer presents essentially the desired format and varies from the dimensions given by less than 5%, the standard product will be considered in compliance with these specifications.

# **Illumination and Reflectorization**

Unless otherwise noted, all traffic signs shall be reflectorized or illuminated to show the same shape and similar color day and night.

When signs are reflectorized, all colors except black shall be fabricated from retro-reflective material, unless otherwise noted.