

2.1 Overview of Requirements for Traffic Control Devices

The Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices* (MUTCD) is Washington's adopted standard for traffic control devices on public roadways.

The purpose of traffic control devices, such as signs, is to ensure highway safety by providing for the orderly and predictable movement of traffic. The five basic requirements for traffic control devices are:

1. Fulfill a need.
2. Command attention.
3. Convey a clear, simple meaning.
4. Command the respect of road users.
5. Provide adequate time for proper response.¹

A number of considerations must be taken to ensure that the above requirements are met. These include design, placement, application, maintenance, and uniformity considerations. The design and placement of signs must effectively communicate the intended message; and similar situations should be treated in a consistent manner to avoid confusion. Scenic byway logo signs must conform to these requirements.

2.2 Byway Logo Sign Design Considerations

A key factor in meeting the requirements for traffic control devices is the design of the sign itself. All roadway signs must combine design elements such as size, shape, color, contrast, composition, and lighting to draw attention to the device and produce a clear meaning. Signs must be legible so that they provide adequate time for response by a moving traveler. The uniformity and reasonableness of the message must command the attention and respect of the traveler. Early on, a byway group should coordinate with WSDOT regional Traffic Office(s) to ensure that the byway logo incorporates key design requirements. See Appendix A.4 for technical design information for byway logo signs.

Typically, byway logo signs employ an existing logo developed by a byway group as a symbol of their route. The sign is usually the same or similar to an image already on letterhead and newsletters. This approach builds upon an existing association. When possible, byway groups should consider the roadway sign design requirements prior to designing their logo. This will ensure a graceful transition when the route becomes eligible for byway logo signing.

¹ *Manual on Uniform Traffic Control Devices*, USDOT

Content

Scenic byway designation occurs because a route has special and unique qualities. These qualities and characteristics should be reflected in the byway logo. A scenic byway logo should combine words, colors, and images in a way that identifies the byway and symbolizes the essence of the route. In addition to graphic images, the logo may incorporate the name given to the scenic byway. The route number should be included in the logo design only when the byway name includes the route number.

Contrast

Good contrast allows a sign message to be read from a distance and in unfavorable conditions, such as low light, darkness, rain, and shadow. A readable image is created by a recognizable pattern of light and dark areas within the message space. Avoid combining colors with similar value or darkness because they can appear to be the same in low light or from a distance. The design should achieve good contrast between the logo and the background, such as light colors on a dark background or dark colors on a light background.

Color

A maximum of three colors should be used to encourage readability and minimize production costs. Some color combinations should be avoided, such as black/red, brown/red, and dark blue/green. These, and other colors with similar value, tend to wash together and become hard to read in poor visibility conditions, such as low light or rain. Some blues also make details hard to distinguish.

Care must be taken to avoid using colors that have special meaning. These should never be the dominant sign color. Red is used on regulatory signs, such as “Stop” and “Do Not” signs. Yellow is used on warning signs, such as “Watch For” and “Crossing” signs. Orange is used on construction and maintenance signs. Any resemblance to such signs must be avoided. As with other design considerations, it is important to consult the WSDOT regional Traffic Office to ensure that any general color theme for the logo design does not create confusion about sign meaning.

Letter Size and Style

Good letter style and size selection will contribute greatly to the readability of the sign. The best letter styles are simple and without serifs, such as Helvetica, Arial, or Clearview. Avoid complex fonts like Old English, Script, and Times. Words that contain all capital letters are harder to read than words with upper and lower case letters. Words that contain adequate space between letters are generally easier to read than words with very little space between letters.²

² *Sign Fabrication Manual*, M 55-05, WSDOT

Line Weight

Line weight becomes important as the viewing distance increases. Lines that are too narrow can begin to “disappear” with distance and degrade the overall readability of the image. As contrast decreases, line thickness should increase.

Border

A border defines the message space and frames the image. Borders can be anything from a line at the edge of the sign panel to everything outside the primary image/message.

Simplicity

Since the time a sign is viewed is very short, the logo should be instantly recognizable. Avoid complex details, colors, and text, as well as multiple subjects. Silhouettes and single object images are most easily recognized.

Balance

Balance can help to make a logo more easily recognizable by enhancing contrast and simplicity. The use of contrasting blank or empty space to offset an image or message is an important element of an effective sign. If all available space is filled with image details and text, the sign will look cluttered and lose effectiveness. Similarly, too much available space will make the message appear weak.

Readability

For the message to be immediately recognized and understood, it must be easy to read. This can be enhanced by using as few words as possible, avoiding long or complex words, and avoiding nonstandard abbreviations. Readability applies to both text and graphic images. To achieve good readability, always consider the following factors: good contrast, color selection, letter style and size, line weight, image simplicity, and balance.

Visibility

Many factors influence how easily signs are seen and understood. Sunshine will appear to increase contrast. Shade will decrease contrast. Rain will reduce detail and contrast. Nighttime viewing requires the use of light colors and reflectivity. Reflectivity should comply with traffic requirements.³

The background of the sign can also affect its appearance. A bright sky may compete with the viewer’s ability to read a light colored sign image. A dark sign may get lost against a wooded background. A sign can also become lost in a busy background, such as an urban setting or a location with numerous other signs and visual clutter.

³ WSDOT Standard Specifications, M 41-10, WSDOT

2.3 Conclusion

Good design is one of the most important components of effective byway logo signing. The above design considerations do not overly restrict creativity or limit options. They simply provide the guidance necessary to achieve the desired outcome — effective traveler information. For more specific information about design requirements and technical information, see Appendix A.3. Also, the WSDOT regional Traffic Office can provide extensive guidance.