

Wayside Exhibit

Map Standards

November 1999

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Why map standards

The intent of the NPS Wayside Map Standards is to establish a common language with National Park Service maps developed by the Division of Publications. Visitors will likely use a combination of both wayside maps and published maps for orientation purposes. Visitors should find that the wayside maps look, feel, and function like the official park publication maps. Map standards should serve as a guide to mapping, not as a hard-and-fast set of rules.

What's unique about wayside maps

The differences between the two standards are due to the different functions of waysides and publications. Unlike published maps, wayside maps can only be used on-site and cannot be carried away with the visitor for further reference. Wayside maps are more often related to trails given that they are being viewed by a visitor who is already out of their car. The You Are Here is the most important feature on a wayside map. Orientation maps should provide only the necessary information to assist a visitor traveling from the site to point B. Wayside maps work best when they are site-specific and have a clear focus. They should not include all the information you would see in a photograph or on the ground. Only those elements which are relevant to the purpose of the map should be shown.

Planning

When planning a new map it is critical to establish clear intent. A map may not be appropriate. Identify the audience. Establish the size and scale of the map based on the intent, the amount of space available for the map, and the subject area. Keep in mind that detail maps shown at a very large scale may mislead people into thinking that short distances are actually longer.

Determine what geographical information and labels to include on the map. These are not design decisions at this point, but rather informational choices. Gather resource maps to be used for base information, keeping in mind that these reference maps were created for different purposes. Consider the wording used on the map to be sure it doesn't conflict with the signage used in the park or the wording used in the exhibit text. Refer to the official publication for consistency among media. When developing compilations of map contents, labels should be clear and easy to read. Always supplement the compilation with a printed list of all labels correctly spelled and organized by feature type and hierarchy of information. Avoid placing maps within maps. Readers don't know where one ends and the other starts. Avoid placing non-map information on maps.

In general, maps work best when north is at the top of the map. However, wayside maps often work better when they are oriented in the same direction as the viewer. More information on orientation is included in the Map Standards section on the North Arrow.

General rules

Create layers of information such as linework, typography, and areas of flat color each on their own layer. Generalizing or simplifying geographic features may be necessary to clearly separate, for example, a road or trail which parallels a drainage, but never misrepresent intersections. Trails and roads must have accurate intersections, i.e. showing whether a trail junction will be a fork or a t-intersection.

Production Guidelines

Adobe Illustrator production file

Separate layers should be developed for each feature type. For example, all drainages of the same type should be on one layer and all drainage labels should be on a separate layer.

Layers should be named the same as the feature on the layer, followed by the color and line specifications and an indication as to whether the layer overprints or not. "NoOP" means only the specified color should print.

Layers
Green Type: 100c, 100y
Black Type: 100k
Trails: 100m, 100y 4pt line, 0.5 dot, 7pt gap
Limited Access highways: 50k, 8pt
Secondary Road: 100k, 2pt
Drainage: 65c, 6pt NoOP
NPS land: 25c, 30y NoOP
Non-subject land: 4c, 4m, 12y, NoOP

Always work at actual scale. Never create a map to be reproduced at a different scale.

For maps which will bleed to the edge of the panel, labels and features should be placed at least 1-3/8" from the outside edge.

Always show dashed linework that intersects with other map features as touching. It may be necessary to adjust a few of the dash lengths. Never leave a short or extra long dash hanging.

Panel Imaging

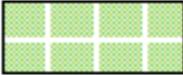
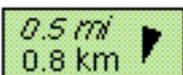
In some cases, maps may be created as a combination of four-color process and flat color imaging. In other cases, maps may be screened in all flat colors. These decisions will depend on various factors including complexity of the map, the panel type (fiberglass, porcelain or digital), the project budget, the size of the map, and the panel layout. Since these decisions will affect how the map is designed, the production methods should be identified as early in the planning and design process as possible.

Maps should be proofed with color keys (to check color separation) and/or match prints (for color proofing).

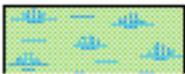
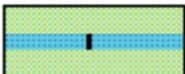
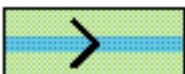
Production contractors shall modify the digital files as necessary to create appropriate traps for elements which do not overprint.

Linework

These specifications are intended as a guide for parkwide maps and maps which show large areas. Linework may vary with focus, size and scale of the map. Relationships between line specifications should remain similar.

Limited access highway		8pt line, prints gray. (Grays lines and type may need to be imaged as a 5th color gray to achieve smooth curves.)
Primary road		4pt line, prints gray
Secondary road		2pt line, prints gray
Unpaved road		2pt line, prints gray, 12pt dash, 5pt gap
4-Wheel drive road		2pt line, prints gray, 5pt dash, 5pt gap
Street grid		2 pt. white intersecting lines
Limited access highway interchange		12 point square placed at intersection of limited access highway Outline of square prints 2pt. grey box; interior of square prints white
Parking lot		Gray shape
Overlook		Half-circle abutting road or trail
Overpass or bridge tunnel		Two short black ticks parallel to upper road
Locked gate		2pt. black tick
Distance indicator		12 point Helvetica Neue Italic for english measurement over 12 point Helvetica Neue Roman for metric.

Linework

Drainage		6 pt. line, prints 65% Cyan or Pantone 298
Intermittent drainage		6 pt. line, prints 65% Cyan or Pantone 298, 4pt dash, 4pt gap, 15 pt dash, 4pt. gap, 4pt dash
Waterfall		Three parallel 1pt ticks printing the same color blue as the drainage
Marsh pattern		prints 65% cyan or Pantone 298
Spring		prints 65% cyan or Pantone 298
Dam		Black tick across drainage
Ford		Parallel black ticks break drainage
Lock		2pt black chevron points upstream
River milepost		Solid 9 pt black dot with 18 point Helvetica Neue number
Ferry or water route		2pt. line, 100% cyan or symbol blue, 7pt. dash, 5pt. gap
Red starboard day marker		Triangle prints highlight red
Green port day marker		Square prints highlight green
Red starboard channel buoy		Symbol prints highlight red

Linework

Tour route		Color line (replaces road) with directional arrow alongside, if necessary. Prints "highlight color"
Trail		4pt line, printing highlight color, 0.5pt dot, 7pt gap
Bike trail		4pt line, printing highlight color, 0.5pt dot, 7pt gap and showing a positive bike pictograph
Steep trail		2pt. chevron, prints 100% black, points uphill.
National scenic trail		2pt line, prints highlight green, 7pt dash, 5pt gap
Railroad		1pt. line, gray with regularly spaced ticks (ticks are 15 points long)
Battle		1pt. line with highlight yellow fill

Colors

General notes This listing is only a general guide. Colors may vary with focus, size, and scale and final production method of the map. Each color is specified as both for four color process and flat color.

National park areas



prints 10% cyan and 15% yellow or 40% of Pantone 358



prints 25% cyan and 35% yellow or Pantone 358



prints 40% cyan and 50% yellow or Pantone 359

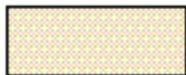


prints 60% cyan and 80% yellow or Pantone 360

Non-subject areas



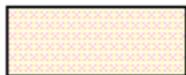
prints 8% cyan, 5% magenta and 10% yellow or 70% of Pantone 454



prints 5% cyan, 7% magenta and 18% yellow or 80% of Pantone 468



prints 7% cyan, 7% magenta and 5% yellow or 50% of Pantone 518



prints 7% magenta and 11% yellow or 60% of Pantone 475



prints 6% cyan, 10% magenta and 10% yellow or 90% of Pantone 482

Open water



prints 15% cyan or 50% of Pantone 290



prints 25% cyan and 5% magenta or Pantone 290



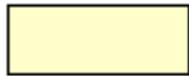
prints 50% cyan and 10% magenta or Pantone 291

Colors

Built-up area



prints 10% yellow or Pantone 607



prints 20% yellow or 65% of Pantone 608



prints 30% yellow or Pantone 608

Indian reservation



prints 15% magenta and 10% yellow or Pantone 691



prints 30% magenta, 10% yellow and 5% black or Pantone 693

Military area



prints 5% cyan and 15% magenta or Pantone 524

State parks and other natural areas



prints 10 % cyan and 30% yellow or Pantone 365



prints 30 % cyan and 60% yellow or Pantone 367

Highlight colors

Highlight colors are used to emphasize trails and other routes.



prints 40% Magenta + 100% Yellow or Pantone Orange 021



prints 100% Yellow or Pantone Process Yellow



prints 56% Cyan + 100% Yellow or Pantone 376



prints 100% Cyan + 100% Yellow or Pantone 354



prints 100% Cyan + 100% Magenta or Pantone Violet



prints 100% Cyan + 43% Magenta or Pantone 300



prints 100% Cyan or Pantone Process Blue



prints 15% Cyan + 40% Magenta or Pantone 251



prints 100% Magenta or Pantone Process Magenta



prints 100% Magenta + 100% Yellow or Pantone Red 032

Typography

General notes All type is in Helvetica Neue. Type smaller than 14 point should not be used except in circumstances approved by the Division of Wayside Exhibits. All type prints black except where otherwise specified. Use tracking to show the extent of an area. When positioning labels and symbols, try to avoid overprinting linework. Avoid using punctuation marks.

Point sizes listed here are not fixed, but should be used as a guide for establishing a visual hierarchy of labels.

Park sites

P A R K N A M E

36 point 75 Bold, ALL CAPS, track 100, prints black or highlight green.

Visitor Center

30 point 75 Bold, Caps/lower case prints black or highlight green

Point of interest

24 point 75 Bold, Caps/lower case

Other site

14 or 18 point 75 Bold, Caps/lower case

Non -park sites

CITY

20 point 55 Roman, ALL CAPS

Town

20 point 55 Roman, Caps/lower case

NEIGHBORHOOD

14 point 55 Roman, ALL CAPS, track 20

Point of Interest

14 point 55 Roman, Caps/lower case

Roads and trails

Road

14 or 18 point 55 Roman, Caps./lower case, align to road, showing type above the road line whenever possible

Trail

18 point 75 Bold, Caps/lower case, align to trail

RR, Ferry and Transit Line

14 or 18 point 55 Roman, Caps/lower case, align to route

Political areas

NATIONAL

24 point 55 Bold, ALL CAPS, track 50, prints 50% black

STATE

24 point 55 Roman, ALL CAPS, track 50, prints 50% black

COUNTY

14 point 55 Roman, ALL CAPS, track 50, prints 50% black

OTHER PUBLIC ACCESS AREA

14 point 45 Light, ALL CAPS, track 50, prints 50% black

Natural features

LARGE OPEN WATER

24 point 46 Light Italic, ALL CAPS, track 50, overprints highlight blue

Other Drainage

14 or 18 point 56 Italic, Caps/lower case, align to drainage, overprints highlight blue

Rapids

14 or 18 point 56 Italic, Caps/lower case, overprints highlight blue

Point Labels

14 or 18 point 56 Italic, Caps/lower case (use with 9point solid dot)

AREA LABELS

14 or 18 point 56 Italic, ALL CAPS, track 25

Other labels
and
directional notes

Legend Entries

14 or 18 point 55 Roman, Caps/lower case

You are Here

Specifications

Type is 24 point Helvetica Neue 75 Bold Caps/Lower case printing white in a solid black box. The black box is 2.25" wide by 0.375" high. Use a 12 point locator symbol..

You Are Here ●

● **You Are Here**

● **You Are Here** ●

You Are Here

You Are Here ●

National Park Service Pictographs

General Notes These pictographs are the official symbols of the National Park Service. No other pictographs should be used for wayside exhibit maps unless approved by the Division of Wayside Exhibits. Always use these pictographs with a locator symbol.

All pictographs used on the map must be identified in a map legend. Pictographs should be limited to no more than six per map. Any map feature which appears only once or twice should be labeled.

Specifications Pictograph box: 0.375" with radius corners printing black
Symbol: Prints white (specification is part of the artwork)
Label: 18pt Helvetica Neue 55 Roman with 18pt leading
Align labels to pictographs as shown here.



Airport



Fishing



Amphitheater



Food service



Boat launch



Four-wheel drive
vehicle trail



Boat tour



Gas station



Bike trail



Hiking trail



Campground



Horse trail



Canoe access



Interpretive trail



Cross-country
ski trail



Lodging



Downhill skiing



Marina



Drinking water



Medical facility

National Park Service Pictographs

 Parking	 Showers
 Picnic area	 Snowmobile trail
 Post office	 Stable
 Ranger station	 Store
 RV camping	 Swimming
 Restrooms	 Telephone
 Sailing	 Tour bus
 Sanitary disposal station	 Trail bike trail
 Scuba Diving	 Visitor information
 Shelter	 Wheelchair accessible

Permit Requirements

 When a permit is required for feature identified by a symbol, add the word "Permit" in Helvetica Neue Bold, to the symbol as shown here.

Positive Symbols



Use positive form of camping and picnic table pictographs to refer to a particular point. Use positive symbols in conjunction with the trail or route line. Do not use with a locator dot.

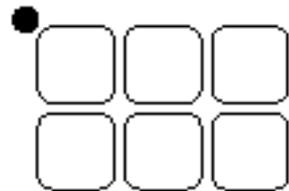
Map Legend

Legend

All pictographs shown on the map should be included in the legend. Legends should be aligned to the grid. Include any lines, symbols or colors which are not labeled directly on the map. When the legend is shown outside the map area use a one point black line around the map legend as shown here. Legend text should be 18 point Helvetica Neue Roman with 18 point leading. Align the centerline of the cap height to the centerline of the symbol. Symbol colors should be the same as the map colors.

	Wilderness area		Parking
	Public land		Restrooms
	Private land within park		Picnic Area

Pictograph Alignment



Locator Symbols

Locator Dots



Use locator dots for points of interest and natural features. Use yellow highlight color dot with black outline for cities and towns. Use black dots for mountain peaks.

Locator Squares



Use locator squares for structures. Use green highlight color square with black outline for small park areas.

Type placement



The preferred placement of type in relation to locator symbols is to the upper left of the symbol. It is most desirable to maintain a consistent relationship between type and locator symbols on a map.



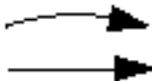
Where maps include very dense labeling, it may be necessary to place locator symbols at either end of the label. It is desirable to have the symbol match the x-height of the label when this style is used. Use this style when showing pictographs aligned with the label.

Leaders



Leaders should be straight 1 point black lines. Leader should be used with locator symbols and should not touch the symbol or the label. Leaders should point to the baseline of the label and the center of the symbol.

Leaders with arrows



Use arrowheads with leader lines when labeling to an area (no locator symbol.)

Tour stop



White letter or number centered in a black or highlight color dot.

Other arrows



Road Shields

Specifications Shape: 1.25pt black line, white fill. Specifications are part of the artwork.
Numbers: 14 and 16 pt Helvetica Neue 55 Roman

Interstate road shield



Federal road shield



State road shield



County and other road shield



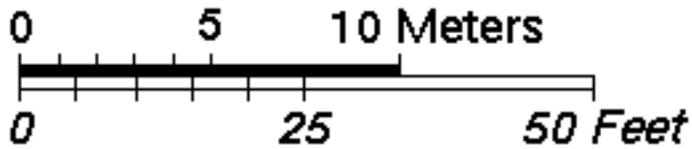
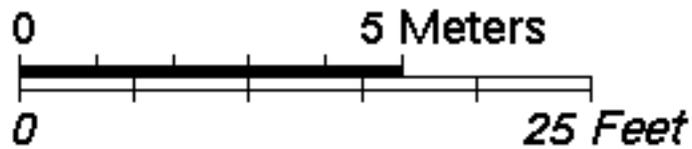
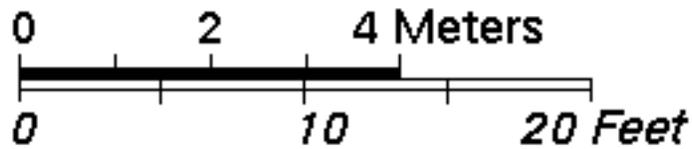
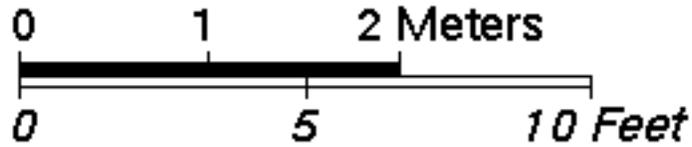
Bar Scales

Specifications Scales shown actual size. Adjust the length as necessary to match map scale but do not exceed five inches. Specifications are part of the artwork.

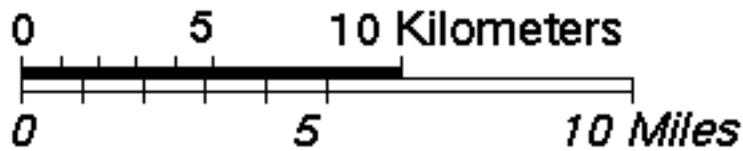
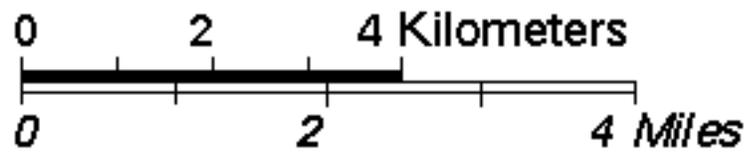
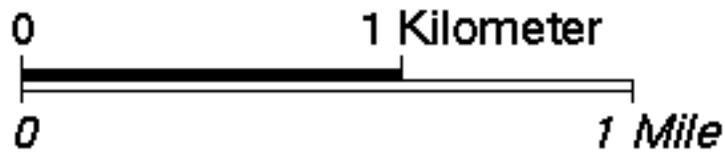
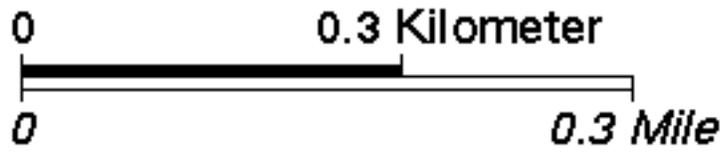
Lines: 0.75pt line weight printing black

Bars: Top bar prints solid black, bottom bar shows with no fill

Labels: 18pt Helvetica Neue 55 Roman for metric and 56 Italic for english



Bar Scales



North Arrows

Map Orientation

It is preferable to orient most maps with north at the top, however Wayside maps often work better when oriented to match the direction of the wayside. The following guidelines should be used to determine how to orient a wayside map.

Under the following circumstances, a map should be oriented North:

- maps which show a large area (entire park or an area that includes features that cannot be seen from the location of the wayside)
- maps used in more than one location with different You Are Here's
- maps used on kiosks
- maps used on upright exhibits which can be oriented north, east or west
- visitors are likely to have a published map in hand and may use it for cross-reference

A map can be oriented in the direction of the viewer when:

- it shows a small area with features that can be readily seen from the location of the wayside
- it is used on a low-profile exhibit
- it is used on an upright exhibit that is oriented south

Specifications

Circle: 7pt line weight printing black, no fill, 0.75" diameter

Arrow: 2.5pt line weight printing black

Label: 18pt Helvetica Neue 55 Roman



Glossary

Area map	A secondary map showing a large area at a small size
Base map	A map to which information from other source materials is added
Bike Trail	A separate trail from the road system
Bike Path	A designated lane that is part of the roadway
Bike Route	A designated route on roads and streets
Compilation	A hand or computer drawn map including all content necessary to create the final map. Wayside map compilations are developed by the project planner and do not include type, line, or color specifications.
Detail map	A secondary map showing a small area in a large space
Four-color process	A full-spectrum of color obtained from the the combination of magenta, cyan, yellow and black
Flat color	A single color specified using the Pantone Color Matching System or other color samples
GIS	Geographic Information System for storage and retrieval of data
Highlight color	A bright bold color used to highlight a trail or route and identified in the map legend
Orientation map	A map which provides just enough information to aid the visitor in finding their way from point A (You Are Here) to point B
Perspective map	A portrayal of a landscape or cityscape from an oblique view that gives an impression of three-dimensional relationships and is not planimetrically accurate
Planimetric map	A map which shows all features in correct relationship to one another
Plat map	An accurately surveyed map showing land ownership
Reference map	A map which shows all features on the landscape, like a USGS map
Terrain map	A planimetrically accurate map that portrays landform shape by a variety of methods, including shaded relief, hachuring or contour lines
Thematic map	A map showing only those features related to the focus or intent of the map