

Southern Pinelands Natural Heritage Trail Scenic Byway Corridor Management Plan

Task 13: Signage Plan

November 2008

Taintor & Associates, Inc.
Whiteman Consulting, Ltd.
Paul Daniel Marriott and Associates

Contents

1. Introduction	1
Terminology	2
2. General Recommendations	4
Branding	4
Graphic Identity	4
Signage to Promote Environmental Awareness and Stewardship.....	5
Enhanced Roadside Aesthetics	5
Signage Plan/Manual	5
Coordination with Existing Sign Plans and Programs	6
General Signage Observations and Recommendations	7
3. Gateway Points.....	9
Introduction	9
Gateway Sign Location.....	10
Gateway Pull-offs/Parking Areas.....	10
Secondary Gateways	10
Acknowledgements	11
4. Wayfinding	13
Introduction	13
Byway Logo/Shield	13
Turns and Movements (Directional) Signs	13
Confirmation Signs	14
Design and Installation	15
Destination Signs for Wayfinding	15
Branding	15
5. Interpretive Signage	16
Introduction	16
3-30-3 Rule	16
Graphic Design.....	18
Design and Installation	19
Orientation	19
Accessibility	19
Interpretive Panel Shelf-Life	19
Acknowledgements	20
Supplementing Interpretive Signage	20

6. Tourist Oriented Destination Signs (TODS)	23
Introduction	23
TODS for the SPNHT Scenic Byway	23
TODS Guidelines	24
Branding	24
7. Regulatory, Warning, and Guide Signage	25
MUTCD – Manual of Uniform Traffic Control Devices	25
8. Concepts/Relationships	30
Graphic Identity	30
Parkway Concept	30
Signage to Promote Environmental Awareness and Stewardship	31
Branding	31
9. General Signage Concepts/Recommendations	33
SPNHT Signage Plan/Manual	33
SPNHT Sign Review Board	35
General Recommendations for SPNHT Signage	36
10. Sign Hierarchy Concepts for the Southern Pinelands Natural Heritage Trail Scenic Byway	39
Gateway Signs	39
Wayfinding and Destination Signs	41
Byway Signs Location Concepts	41
Appendices	45
Appendix 1: MUTCD Use of America’s Byways® Logo/Shield	47
Appendix 2: Pinelands Comprehensive Management Plan Sign Standards	48
Appendix 3: Historic Markers	51
Appendix 4: Resources/Publications	52

1. Introduction

From gateway entry points to byway directions and interpretative panels, signs will be one of the principal methods to welcome, advise, direct and educate visitors traveling along the Southern Pinelands Natural Heritage Trail byway (SPNHT). Signs are important, not only for the information they convey, but also as a representation of the organization of the byway and the professionalism of its management. A consistent, integrated, informative and attractive sign system should be a primary goal for the SPNHT.

A consistent and integrated sign system provides the visitor with strong visual cues along the byway route and within the byway corridor. Recognizable logos, colors, fonts (letter styles), and installation practices (uniform construction such as all wood or metal posts, and standard locations such as directional signs at intersections or interpretive signs at waysides) present a comprehensive, predictable and organized impression for visitors. More practically, though no less important, a well organized sign system ensures that visitors will focus on the natural and heritage resources of the byway corridor—not frustrations at getting lost along the route, not being able to find food, fuel, or lodging, or not having their questions at an interesting site answered.

An important component of this sign plan will be the use of byway iconography (signs, shields, logos) to “brand” the byway—creating a sense of a comprehensive and unified route that is regularly, if subtly, reinforced by the presence of consistent and high quality signs, information and interpretation that is identified by a standard logo/image associated with the New Jersey Pinelands.

A good byway signage plan should also work closely with state and local authorities to ensure the greatest level of consistency along the byway route for all types of signs and information. The byway sign plan should work to ensure that existing state and local signs for route markings (US, state and county route shields) and directional and distance signs are clear and consistent in information and completeness. The byway signage plan should also address sign issues that may negatively impact the aesthetic quality of the byway (unnecessary signage, sign clutter, repetitive or obsolete signs). Byway signs posted within the public right-of-way along the byway route should meet all applicable standards for sign posting and safety (such as reflectivity, size and breakaway posts).

This signage plan for the SPNHT makes recommendations for the following:

- byway visitor direction (wayfinding), orientation and identification
- byway interpretation
- traveler services (food, lodging and fuel)
- general highway signage (direction, safety, route markings)

And recommends the following hierarchy of sign information:

- gateway signs for the Pinelands National Reserve
- wayfinding logo/shield marking the SPNHT route
- destination signs at byway intersections where options/choices/alternatives for byway travel are offered
- interpretive panels

Terminology

The following definitions are presented to clarify the differences among sign types and concepts found along the SPNHT.

Branding establishes an expectation of a quality experience that is effectively and efficiently captured and recognized through a singular image (such as a logo shield), phrase (such as “New Jersey: Great Destinations in Any Direction”) or concept (relaxation, fun, tranquility, high-energy).

Ecotourism is a relatively new segment of the travel market that recognizes the special destinations focused on aspects of the environment and natural resources. Ecotourism is based on the concept of travel itineraries and facilities that contribute to the ongoing health and sustainability of the natural systems they seek to showcase.

Heritage tourism is a relatively new segment of the travel market that recognizes the special destinations focused on aspects of history and culture. Heritage tourism is based on the concept of showcasing human stories and experiences (settlement, adversity, accomplishment and the creative arts) within settings that are authentic.

Heritage tourism signage is a term that collectively refers to interpretive signs, wayfinding signs and tourist oriented directional signs (TODS), each of which is defined below.

Historic markers are signs that identify sites and events from the past. Historic markers, unlike interpretive panels, are often succinct in language and do not include images (photographs, illustrations and maps). Historic markers explain key concepts with limited detail and explanation. In most states, historic markers are of cast aluminum with raised letters and consist of no more than a paragraph of text. Most historic marker programs began in the early twentieth century and are often administered by local or state historical societies.

Interpretive signage refers to the signs or panels that offer detailed information of events, sites, history and systems. Interpretive signs or panels include a hierarchy of information (from basic concepts to detailed explanations) on a single sign or panel and are supplemented with photographs, illustrations, charts, maps and other visual aids that help to explain and enhance the understanding of the site.

Navigational signage: see “Wayfinding.”

OBDS (Official Business Directional Signs): See “TODS.”

PMS Color System defines the “Pantone Matching System” as the standard color reference system used in the US. All colors are assigned an identification number to ensure consistent color regardless of manufacture or source.

Regulatory, warning and guide signs are non-visitor signs that provide basic information to all travelers along a particular road.

- **Regulatory signs** include stop and yield sign, parking prohibitions, speed limits, weight limits, and activity prohibitions (e.g., no fishing or no swimming).

- **Warning signs** include warnings for curves, intersections, pedestrian crossings, animal crossings, and hazards (e.g., flood area, falling rocks).
- **Guide signs** include arrows or distances to communities and other destinations (such as a major intersection or park) and general information signs for hospitals, food, gas, lodging, picnic areas and rest areas.

Tourist Oriented Directional Signs (TODS) are signs to provide reliable and consistent traveler information in areas with high levels of tourism and visitation. In many communities TODS are utilized as an alternative to off-premise signs (billboards). TODS may be used to provide direction to private establishments such as bed and breakfasts, antique shops or skiing areas, or to public facilities such boat launches, public beaches, and hiking trails. In many places TODS are reinforced with a graphic (for example, a spinning wheel for antiques, or a bed for lodging) and an associated color with each graphic as well (e.g., blue for lodging, brown for park facilities). TODS may also be referred to as OBDS (Official Business Directional Signs).

Wayfinding (or navigational) signage refers to simple signs or shields that provide consistent and reliable direction along a designated route. Wayfinding signs operate independently from route shields and road name signs. Wayfinding signs are used to mark special routes designated for tourism (byways or heritage trails, for example) by providing information for all turning movements and confirmation signs to reinforce the concept of the designated route.

2. General Recommendations

The following general recommendations for signage along the SPNHT summarize concepts and recommendations made in this section.

Branding

The SPNHT byway should be branded by a recognizable and uniform logo identity, the thoughtful and attractive use of that logo, and a reputation for efficient, reliable and consistent direction and information for visitors. The following key components are recommended:

- **Gateway points** will announce the byway route at key entry points along the byway route. Gateway points will prominently display and introduce the byway logo/shield.
- **Wayfinding:** The byway logo/shield posted along the byway will be the principal communication tool for the byway. The byway logo/shield will be posted at all turns and at regular intervals along the route.
- **Interpretive signage** at sites of significance and interest along the byway route will provide the detailed information regarding the corridor and raise visitor awareness and appreciation for the significance of the New Jersey Pinelands. Interpretive signage may be a project of the byway or may be provided through existing interpretive programs. The byway logo/shield should appear on all byway-sponsored interpretive signs and panels, and should be provided for use by other interpretive programs along the byway that meet a basic threshold for quality and design.
- **Licensing:** As the principal brand identifier for the SPNHT, the byway logo/shield should be licensed by the byway organization (or other participating organization) to ensure its appropriate and quality use and association.

Graphic Identity

The byway should be easily recognized through both a standard logo/shield and consistent graphic design. All byway visitor signs (interpretation, wayfinding and gateway) should have a common graphic design/look that is easily recognized and immediately associated by the public with the byway. A standard logo/shield, color family (color of panel and sign backgrounds), and font (letter type) should be designed for and associated with the SPNHT. The graphic identity should be used for both visitor signs along the byway route (gateway, wayfinding, destination and interpretive signs) and other byway resources (websites, publications and promotional materials). Through such a coordinated process, the potential visitor who learns of the byway through a print ad, for example, sees the graphic identify of the advertisement reflected in the website as they seek more information on a potential trip to the pinelands, then, on arrival to the Pinelands sees the graphic identify reinforced at the byway's gateway and wayfinding system, and finally at the individual sites he/she selects to visit.

Signage to Promote Environmental Awareness and Stewardship

Consider identifying all the boundaries of the different Pinelands management districts, including urban growth boundaries, and identifying the sub-environmental regions within the designated Pinelands. Such efforts will raise public awareness that the vast reserves of land are not accidental occurrences but a part of a comprehensive and complex program to preserve the ecosystem of the pinelands. Consider too identifying properties under conservation or preservation easements. Such signs may be small and discrete—offering a subtle level of interpretation and awareness for the observant traveler and raising awareness for residents of the region of the exceptional resources and programs active in the Pinelands.

Enhanced Roadside Aesthetics

Signage for the SPNHT should seek to accomplish an overall enhancement of roadside aesthetics along the marked byway route. This may be accomplished through graphic design, the selection of attractive posts and other sign hardware, the painting of the backs of signs to reduce glare and visual impact to the landscape or setting, the review and removal of redundant, repetitive and unnecessary signs, adherence to existing local laws for off-premise signs, and comprehensive maintenance.

Signage Plan/Manual

The SPNHT should develop a comprehensive sign plan/manual for the byway route that addresses byway branding through gateway signs, wayfinding and interpretation; and establishes a standard program for general signage among state and county transportation departments for the byway to ensure consistent direction to key communities and resources, standard application of safety and warning signs, and cooperative efforts to reduce redundant or unnecessary signage.

The signage plan should include the following:

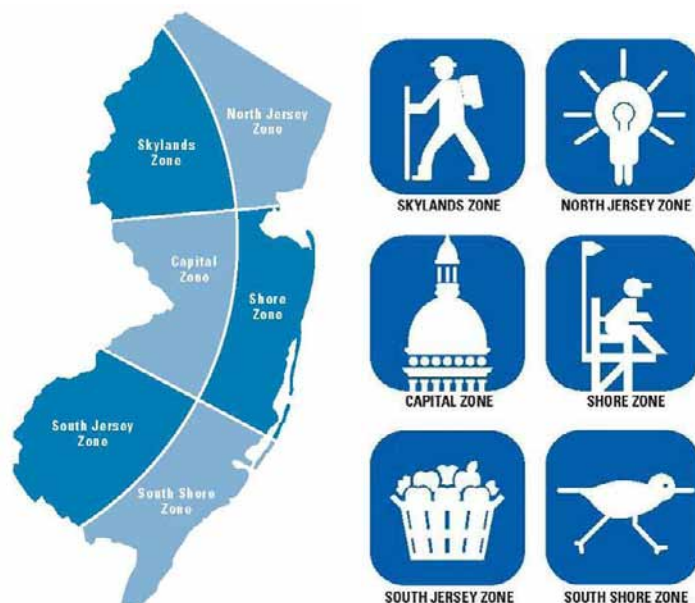
- Maps showing exact locations for all gateway, wayfinding, destination and interpretive signs;
- Graphic design standards for all byway signs including all colors, images and fonts; spacing between letters, words and lines; abbreviations; and sign sizes and placement;
- Standard installation practices for all byway signs including post design, mounting, and repair of any installation disturbance to the ground/surface;
- Maintenance standards for regular inspection, repair and replacement.
- Standards for adhering to the original design guidance in the signage plan/manual to ensure that replacement signs and materials, installed over time, are of the same size, materials and colors;
- A plan to stockpile signs, posts and other structures for repair and replacement;
- Recommendations for the removal of redundant and non-conforming signs along the route; and
- Recommendations for coordination for all regulatory, safety and general information signs among state and county transportation departments having oversight for the scenic byway.

Coordination with Existing Sign Plans and Programs

All signs and interpretive panels should work with and conform to existing signage standards and protocols currently in use in the scenic byway corridor and in the New Jersey Pinelands generally. These include interpretive panels produced by the New Jersey Coastal Heritage Trail; the New Jersey Department of Environmental Protection, Division of Parks and Forests (for State Forests) and Division of Fish and Wildlife (for State Wildlife Management Areas); and the U.S. Fish and Wildlife Service (for the two National Wildlife Refuges within the scenic byway corridor). (Within the scenic byway corridor the NJDEP panels typically also bear the logos of the National Park Service and the New Jersey Coastal Heritage Trail.)

The **Pinelands Interpretive Program**, prepared in 1998 by the National Park Service in cooperation with the New Jersey Department of Environmental Protection, Division of Parks and Forestry, recommended an “interpretive partnership” of federal, state and local public agencies, and private sector and non-profit organizations. The recommended interpretive program would include several levels of exhibits and signage, including Visitor Information Centers, Orientation Kiosks, Wayside Exhibits, Regional Road Signs, and Community Welcome Signs. The program is a conceptual outline rather than a detailed plan, and there does not appear to be any necessary conflict with a signage and wayfinding program for the SPNHT Scenic Byway.

A potential challenge to the signage program outlined in this plan is presented by a parallel effort to develop a **Wayfinding Master Plan** for the State of New Jersey. The Wayfinding Master Plan, published as a “90% Draft” in July 2008, makes recommendations for a comprehensive program of wayfinding for visitors throughout New Jersey. The plan addresses gateway considerations, TODS and recommends the development of six zones to organize the state for visitor information and direction. Unfortunately, the recommended zone system does not recognize the Pinelands region, splitting it among four zones (Capital, Shore, South Jersey and South Shore) each with its own identifying logo for wayfinding signage.



Recommended “wayfinding zones” (left) and preliminary wayfinding icons, in the draft Wayfinding Master Plan

Source: *State of New Jersey Wayfinding Master Plan (90% Draft)*, Celebrate NJ!, July 2008.

The **Pinelands Comprehensive Management Plan** regulates private signs in the area under the jurisdiction of the Pinelands Commission (see Appendix 2). However, no specific guidance is provided for gateway, interpretive, or wayfinding signs.

Note: Many of the recommendations and suggestions in this signage plan include the addition of new signs to raise visitor awareness, assist with wayfinding and showcase conservation activities. These must adhere to the same recommendations being made to reduce sign clutter along the route—their location, size, necessity and frequency must be carefully considered.

General Signage Observations and Recommendations

Existing Signage and Issues

- The byway route is composed predominantly of county roads that are well signed with blue and gold county route shields. Cardinal directions and junctions are posted.
- The county routes do not generally provide direction or distance signs for communities or destinations.
- Both the byway and the numbered routes can change directions at intersections, resulting in two potential problems for the byway traveler:
 - At some intersections, the numbered route continues straight but the byway turns onto a different numbered route.
 - At other intersections, the numbered route turns left or right while the byway continues straight on a different numbered route.
- Few intersections have street/road name signs—there is a noticeable difference among townships.
- State and US routes are well identified with shields and also provide distance and direction information to communities and destinations.
- Visitor facilities and attractions have independent signage programs and systems.
- There is a significant amount of sign clutter along the route—especially at township lines.
- There is an inconsistent application of regulatory, safety and general directional/informational signage along the byway route.

Recommendations/Notes

- The byway route makes numerous turns. Every turn is a potential point for a visitor to get lost or misdirected. Clear wayfinding is important to maintain visitor comfort and enjoyment and to ensure that the visitor can focus on byway resources instead of checking a map or questioning if a turn was missed. This is one of the most common problems with many byways. Local byway advocates and transportation departments familiar with the routes and geographic features of the region may overlook simple turns—it is helpful to test the route wayfinding system with an outside visitor to determine if he/she can navigate the byway based only on posted signs.

- The byway should be identified by a byway logo/shield sign (recommend considering the pinelands logo developed for the Pinelands National Reserve—oval with pinecone)
- Every byway turn or intersection with significant cross routes (such as US 322) should have three wayfinding (byway logo) signs:
 1. An advance notice of movement (left ahead, right ahead, forward);
 2. Notice of movement at the intersection (left, right, straight);
 3. After the turn or intersection, a confirmation (byway logo) sign identifying the byway.
- Byway logo signs should be used:
 - At byway gateway points;
 - For all wayfinding logo/shield and destination signs;
 - For confirmation signs (along long byway segments the byway should be announced once every ten miles if no other byway logo signs, including visitor sites, parks, etc, are posted);
 - For all TODS
 - At byway visitor sites (in coordination with the site's signage and interpretive programs) and through standards and licensing adopted by the byway organization.
 - For other secondary wayfinding or awareness signs such as street-name signs, easement boundaries, or watershed areas.

3. Gateway Points

Introduction

Gateway signs provide a clear sense of arrival to the SPNHT and introduce (or reinforce for those who have already sought information on the byway route) a brand identification that will be useful for wayfinding (direction) and suggest the beginning of a quality of experience. The gateway sign will be the principal Introduction of the byway logo/shield that will identify route and key interpretive signs throughout the corridor.

Gateway signs should be significant in size and prominently located at a site that is attractive and expressive of the character of the byway. The gateway sign should identify the route by name (and without abbreviations), include a note of arrival such as “welcome” or “entering,” introduce the logo or shield image that the traveler will be following as a part of the wayfinding system, and include logos or acknowledgements for byway sponsors or partners (America’s Byways logo, New Jersey scenic byway logo, etc). A goal of the gateway sign should be to reduce sign clutter along the byway route by recognizing all byway partners at a few key entry points, therefore allowing the simple byway wayfinding logo/shield to represent the byway (and all its partners) as the principal route marking.

Gateway points for the SPNHT should work in conjunction with the general gateway signs for the Pinelands National Reserve. In some locations the National Reserve gateway will mark the gateway point for the SPNHT; in other locations gateway signs will mark the boundary of the reserve, but not the start of the byway. Regardless, gateway signs should be consistent.

Potential Gateway Sign Locations:

- Tuckerton – US 9 southbound, east of CR 539
- Little Egg Harbor Township – Garden State Parkway Exit 58 (CR 539)
- Oceanville – US 9 northbound, at Great Creek Road / Edwin B. Forsythe NWR
- Nesco – Pleasant Mills Road (CR 542) eastbound, west of Columbia Road (CR 658)
- Mays Landing –
 - NJ 50 southbound, north of US 40;
 - US 40 westbound, east of CR 559;
 - US 40 eastbound, west of NJ 50
- Tuckahoe – NJ 50 northbound, south of NJ 49
- Dennisville – NJ 47 westbound, south of Petersburg Road (CR 610)
- Port Elizabeth – NJ 47 eastbound, west of Weatherby Road (CR 548)



Newly erected signs introduce the traveler to the Pinelands. The prominent display of the logo/shield is an ideal introduction for a wayfinding logo/shield to mark the byway route. The secondary message “keep it clean and green” is a generic statement and could apply to any highway—unique messages such as “an international biosphere” or “a world class ecosystem” (already used on some interpretive panels in the Pinelands) convey more targeted and meaningful concepts to the first time visitor. Note the “adopt-a-highway” sign immediately following, diminishing the visual impact of the gateway sign.

(Photo: Rick Taintor)

Gateway Sign Location

When a scenic byway route is linear and does not intersect with other major routes, its two endpoints provide logical locations for gateway signs. However, the Southern Pinelands Natural Heritage Trail Scenic Byway is more complex, including two loops and intersecting with three US routes and several major state routes. As a result, instead of two clearly defined starting points, there are multiple entry points to the byway for travelers. Nevertheless, there are some logical principal points of entry based on prevailing travel patterns across the Pinelands (for example, Tuckahoe for travelers accessing the byway from Cape May) or existing destinations where visitor centers/facilities provide a logical introduction to the byway route (such as Batsto Village and Tuckerton Seaport).

Once general gateway locations are identified, it is important to identify the exact location where the gateway sign should be placed. The following recommendations should be considered:

- The location should be prominent to the byway route.
- The location should be in an area with minimal visual clutter (signs, commercial property, utility lines, etc).
- The location should be expressive of the natural or heritage resources of the route—the gateway sign against a background of woodlands, water or a historic structure (a gateway sign should never compromise or detract from a natural or historic site).
- It is more important to have the gateway sign at a location that is attractive and representative of the byway corridor, than at the exact boundary of the defined route or district. The gateway sign should be as close to the boundary as possible. If an exact boundary marking is required, a small sign acknowledging the “begin” or “start” point may be erected.

Gateway Pull-offs/Parking Areas

Whenever possible, shortly after the gateway sign a pull-off or parking area should be constructed. The pull-off should include an interpretive panel providing a general introduction to the New Jersey Pinelands (natural features and history), a map of the region showing the byway route (with a “you are here” indicator), and more detailed acknowledgements of byway sponsors and partners. A reliable contact telephone number or email should be provided.

The gateway pull-off should be sensitively designed and landscaped using appropriate native or traditional plant materials, depending on the location. Such areas should also consider the possible development of restroom facilities. Existing facilities, located near the gateway points may be used to meet this objective, in which case the gateway pull-off should include a sign indicating visitor information and restroom facilities, if available (e.g., “Byway Information/Visitor Center XX miles”).

Secondary Gateways

Secondary gateways may be identified to help orient the visitor within the byway corridor and larger landscape, and can include boundaries of major watersheds or public lands. These secondary gateways should be identified by simple signs that include the byway logo/shield and note the feature or secondary gateway (e.g., “Entering Mullica River Watershed”; “Entering

Wharton State Forest”). No acknowledgements other than the byway logo/shield should be included.

Acknowledgements

In order to minimize sign clutter and provide for an easily recognized icon to guide and direct travelers along the byway route, a single graphic logo/shield is recommended. However, the development of a quality byway route and program is the result of multiple parties, agencies and organizations, and key organizations and sponsors should be recognized with a logo/shield on the principal gateway signs. For gateway signs (unlike interpretive signs) acknowledgements should be limited to corridor-wide sponsors and partners. For example:

- New Jersey state scenic byway logo shield
- “America’s Byways” pennant logo (if the route is designated a National Scenic Byway)
- Pinelands Commission logo shield
- New Jersey Division of Parks and Forestry logo shield

Written acknowledgements and or logos/seals/shields should be included on the gateway interpretive signs and panels, including, but not limited to:

- New Jersey state scenic byway logo shield
- “America’s Byways” pennant logo (if the route is designated a National Scenic Byway)
- Pinelands Commission logo shield
- County and municipal partners
- Advocacy organizations

Existing interpretive panels introducing the Pinelands, such as this one at Batsto Village with its map, illustrations and general history, provide a good introduction to the region and meet the objectives of a panel for a gateway pull-off or parking area.

(Photo: Dan Marriott)





The gateway sign for Olympic National Park in Washington creates a strong arrival statement, sense of place and quality. The rustic design of the sign reinforces the natural features of the park and establishes a strong visitor expectation. The sign is basic in information—the name of the park and the National Park Service logo/shield.

(Photo: National Park Service)

The gateway sign for the Blue Ridge Parkway is more contemporary in design, but still fits well in the natural setting of the scenic road.

(Photo: National Park Service)



4. Wayfinding

Introduction

Wayfinding signs are the principal form of visitor orientation and direction for a byway route. Wayfinding signs are generally logos or shields that mark the route and provide information in two key situations: turns and movements, and confirmation. Through the design and installation of a single logo or shield to mark the byway route, byway travelers are provided with a uniform and reliable route marking that operates in conjunction with, but independently from, other identifiers such as route numbers and road names. Wayfinding is particularly important for the SPNHT because it takes a many turns and follows multiple US, state and county route numbers.

Byway Logo/Shield

The byway logo/shield will be the principal indicator identifying the byway route for the traveler. The logo/shield should be distinctive in form and color and easily recognized. It should also be simple and attractive in its graphic design. It should be recognized from a distance, due to its color and shape—not text or imagery. The byway logo/shield should be introduced at the gateway points and reinforced on all interpretive signs and panels, and with all general byway marketing efforts (web and print based).

Turns and Movements (Directional) Signs

Turns and movements (directional) signs include the byway logo/shield with additional traveler information affixed immediately below the logo/shield including one of the following messages:

Message	Location
Arrow straight ahead	Major intersections only, if no turns are required
Arrow left	At the turn location
Advance arrow left*	In advance of the turn location, approximately 100 yards depending on location
Arrow right	At the turn location
Advance arrow right*	In advance of the turn location, approximately 100 yards depending on location
Left lane ahead	In advance of a left turn if multiple lanes are present, approximately 100 yards depending on location
Right lane ahead	In advance of a right turn if multiple lanes are present, approximately 100 yards depending on location

*Advance turn movements are only needed at major intersections, or areas that may be potentially confusing. In general on single lane (each direction) low volume roads, an advance turn sign may not be necessary.



Examples of advance turn sign (left) and “turn here” sign (right) on scenic byways.
(Photos: Dan Marriott)

Confirmation Signs

Confirmation logos or shields should be placed after all turning movements directed by the byway wayfinding system and periodically along the byway route to reassure byway travelers that they are still traveling the prescribed route. Due to the many turns that are a part of the SPNHT route and the multiple crossroads and intersections not associated with the byway route, regular confirmation signs will be an important consideration. Confirmation signs should be placed within one-quarter mile after the turning movement, and generally every 8 to 10 miles for lengthy byway segments from which no turning is required.



Design and Installation

Byway logo/shield signs should be identical in size and installation. All byway logo/shield signs should have the back of the sign painted a dark neutral color (such as brown, black or dark green) to minimize the visual impact on the landscape, and should be installed on uniform posts, ideally matching the color of the back of the sign. In general, byway logo/shields should be proximate to US, state or county route shields indicating intersections or confirmation of the route number. Coordination with existing route shields should be undertaken to avoid sign clutter and minimize confusion.

Destination Signs for Wayfinding

The Southern Pinelands Natural Heritage Trail Scenic Byway is a non-linear route with loops and parallel routes in some areas, and as a result offers the traveler multiple options to continue on the byway. At some intersections the byway route may continue straight as well as making a turn to the left or right. Approaching an intersection with wayfinding signs showing the byway route both continuing straight *and* turning left (for example) can potentially be confusing for the visitor. This is especially problematic for visitors who are using the wayfinding signs as their principal form for guidance and direction, since not all visitors will have a byway map. At these intersections it is critical that wayfinding signs be paired with clear destination (guide) signs indicating the direction to communities and points of interest.

A list of principal destinations for general wayfinding should be established. These should include gateway communities, other town centers with visitor services, key transportation junctions, and attractions that have high visitation. (This should not, however, be a list of all destinations along the route.) Destination signs for wayfinding should be posted in advance of all intersections where a choice/option in the byway routing is presented. At such decision points, the additional destination information will assist byway visitors in making an informed choice. In general no more than three destinations should be listed on any one sign.

The following locations are recommended for destination signs for wayfinding:

Tuckerton
Mays Landing
Port Elizabeth

Batsto Village
Tuckahoe
Woodbine

Atlantic City Expressway
Garden State Parkway
Belleplaine State Forest

Branding

It is recommended that the Pinelands National Reserve Shield be used as the wayfinding logo/shield for the byway route and that it be used on destination signs for wayfinding as well.

5. Interpretive Signage

Introduction

Interpretive signs and panels provide information to residents and byway visitors through written text and graphic images including photographs, illustrations, maps and charts/graphs/sketches. Interpretive signs and panels can provide both general byway information (an introduction to the features of the New Jersey Pinelands) and site specific information (detailed information at a natural feature or historic site). Interpretive signs and panels are reliable 24-7 facilities that can provide the visitor with basic information.

Interpretive signs and panels should be distinctive, visible, of high quality design and uniform in appearance and expected locations (at every wayside, for example) Interpretive signs, as the principal visitor education signage effort, should appear at all key sites along the byway route. For significant byway sites that have existing sign systems are in place, an introductory interpretive panel, based on the design of the byway interpretive panels, should be considered as an introduction to the site—transitioning visitors to the local or site interpretive sign system. An introductory interpretive panel enhances byway branding and informs the visitor that the facility is clearly a part of the SPNHT experience by this visual association or cue. Again, interpretive panels for the byway need not replace existing interpretive signs and panels currently in place or planned for resources, communities and attractions along the byway route.

3-30-3 Rule

Interpretive experts recommend the use of the 3-30-3 rule for the presentation of information on interpretive signs and panels. The rule, 3 seconds—30 seconds—3 minutes, is based on studies indicating the typical time the general public is willing to read, and the levels of interest best provided for visitors utilizing an interpretive sign system. The 3-second time is reserved for the most basic of information—identifying a location or site, for example. The 30-second time is used for a basic secondary, or explanatory message, and the 3 minute time is reserved for the visitor willing and interested in learning more detail about the site or resource. In general, the font size (size of letters) decreases from the 3 second introduction (largest letters) to the 3 minute text (smallest letters). If the 3 and 30 second rules are well prepared and designed the visitor will more likely continue reading—and learning!

Seven Keys to Creating an Effective Interpretive Panel:

1. Communicate visually. Use photographs, maps and drawings to help tell the story.
2. Graphics should do more than duplicate what can be seen at the site. They should reveal hidden meanings, ideas and concepts.
3. Use a message pyramid: develop a descending order of message importance and detail. This can be expressed as the 3-30-3 rule: visitors can receive a message in 3 seconds, 30 seconds, or 3 minutes.
4. Keep the message short. Use short sentences and paragraphs.
5. Create imagery with the written word by using concrete nouns and active verbs. Avoid adjectives and adverbs.
6. Relate to the visitor's experience. Use personal pronouns, personal language, and familiar terms. Enhance the text by using metaphors, analogies, quotes, questions, and real examples.
7. Provide for multi-sensory involvement. Use digital audio repeaters and participatory devices. This may include tactile elements, video, models, and relief maps.

The following examples are presented to show the use of the 3-30-3 rule at sites along the SPNHT. The examples are intended only to showcase the recommended level of information at any site along the byway—each site, though the 3-30-3 rule could have multiple foci on multiple panels.

Example A:

For the Weymouth Furnace along the SPNT in Atlantic County, consider the following 3-30-3 rule example. This example does not reflect current interpretive signage at this site, but is included here as a general concept to explain the 3-30-3 rule concept.

3 second Weymouth Furnace, 1802

30 second An early iron furnace fueled by charcoal to smelt the abundant bog iron found in the New Jersey Pinelands for the manufacture of basic consumer goods (pots, tools and stoves) and ammunition for the US Government during the War of 1812.

3 minute* Looking at the area now, it is hard to imagine that by the time of peak production in the early 1850's, the area where you are now standing contained a furnace, forge, gristmill, Methodist church, sawmill, large owner's mansion, store, 20 workers' houses, a blacksmith shop, and a wheelwright.

The Weymouth Forge land was purchased in 1800 from the West New Jersey Society by five partners headed by George Ashbridge and Charles Shoemaker. In 1801, the State granted permission to dam the Great Egg Harbor River "for accommodation of iron works and other waterworks...". Iron production began in 1802.

The forge remained in production for about 60 years. The iron produced at Weymouth was smelted from local bog iron in furnaces fueled by charcoal. Production consisted mostly of cast iron water pipe with limited production of pots, stoves, and nails.

During the War of 1812, the Weymouth Forge / Furnace was a supplier of shot and bombs to the United States Government. By 1862, the Forge could no longer compete with anthracite coal powered forges of the Pennsylvania area. It was reportedly destroyed by fire that same year.

In the 1860's, the land was the site of 2 paper mills: Atlantic Paper Mills, made of stone, and Weymouth Paper Mills, a wooden structure. These two plants produced paper primarily from old manila rope, rags, and old bagging until 1886, when wood pulp was used for paper production. The mills ceased production in 1897.

**Text modified from Atlantic County Department of Public Works, Division of Parks and Recreation*

Example B:

An example of the 3-30-3 rule as applied to a panel for a wetland or woodland where bird migration and habitat may be reliably viewed.

3 second New Jersey Migratory Birds

30 second Centrally located at a crossroads of bird migration routes, New Jersey's diverse habitats support over 450 bird species including over 200 that breed in the Garden State.

3 minute* The Garden State is rich with bird life! New Jersey may be small, but its climate and geography provide a great diversity of bird habitats across rugged ridges, vast marshes, sandy beaches, pine barrens, protected bays, rich lowlands, grassy meadows, and winding rivers.

Centrally located at a crossroads of bird migration routes, New Jersey's diverse habitats support over 450 bird species—including over 200 that breed in the Garden State. Keep your eyes open! From songbirds to shorebirds, woodpeckers to waterbirds, and hummingbirds to hawks, you are sure to spot one of these beautiful birds. This hub of bird activity does not go unnoticed. About 1.9 million residents and visitors spent \$1.2 billion watching New Jersey's wildlife in 2001.

The U.S. Fish and Wildlife Service classifies about a quarter of the Nation's 836 species of migratory birds as endangered, threatened, or "of conservation concern." Habitat loss and degradation are the primary threats, but other sources of human-caused mortality exacerbate declining bird populations. Collision and electrocution at man-made structures, poisoning from environmental contaminants, and predation from feral and outdoor cats collectively kill many millions of birds each year.

**Text modified from US Fish and Wildlife Service.*

One of the greatest failings of interpretive sign systems is the presentation of too much information. Good interpretive writing is based on clear concepts, direct statements, and the presentation of key ideas. While it is tempting to include as much information as possible (especially when considering local pride in a resource and local knowledge levels), it must be remembered that the general public will not read beyond the 3 minute time—if that. Therefore, it should be the goal of the interpretive writer to leave the curious visitor wanting more. Good interpretive signage will inspire a thirst for knowledge and further education and experiences that can be fulfilled through some of the more advanced and supplementary interpretive opportunities mentioned before (guidebooks, websites, living history and specialty tours).

Graphic Design

The graphic design of an interpretive sign system should be consistent, handsome and easy to read. The byway's logo or shield should be prominently displayed. Images (photographs, maps and other illustrations) are popular with the public—good images may capture the visitor's attention before text. The graphic design of the interpretive sign system should be complimentary and compatible to wayfinding, logo/shield, gateway signs, and byway publications and other materials.

Design and Installation

Interpretive signs and panels should be attached to a sturdy, handsome and well designed frame or structure. The panel frame should be secure, but also designed to allow for the replacement of a panel due to updated information or vandalism. Interpretive panels and signs should have a suitable ground-level surface treatment to accommodate the foot traffic of sign readers. Lawn or ornamental plantings at the base of the sign will be trampled—especially if the panel is well written and informative. In urban or built environments, the sign installation should replace, replicate, or restore the pavement pattern or material in which the sign is being installed (brick, concrete, stone). In natural settings, asphalt, concrete, or mulch may be an appropriate base to accommodate foot traffic. Whenever possible, position the interpretive panel adjacent to an existing pavement or durable surface.

Orientation

Interpretive panels that point out significant sites or features visible from the location of the sign panel should be oriented facing the feature or attraction. Visitors reading the panel should not need to turn around, or look over their shoulder, to view the feature being described. In addition, all location maps and references should be oriented based on the visitor's perspective at the interpretive panel.

Accessibility

Interpretive panels and signs should meet the requirements of the America's With Disabilities Act (ADA) for accessibility. Sign and panel locations (avoid steep slopes or narrow approach routes), letter size, angle of the sign, and height should all be considered. Remember ADA addresses more than physical access—alternate interpretation such as large-print, Braille, and audio should be considered.

Interpretive Panel Shelf-Life

Good interpretive panels should have a life expectancy of 10 to 20 years. Given this period of time as a threshold expectation, panels should be careful not to include information that may become dated—telephone numbers, facility hours or opening dates, and websites may change or evolve over the life of the sign panel. Additionally, for a corridor, such as a scenic byway, avoid listing all visitor sites on a map of the byway route—if new sites are added (or sites removed) the map becomes inaccurate. A good rule-of-thumb is to include the byway route and identify the “you are here” site without referencing other sites. The inclusion of towns, landmarks and other stable resources can help to provide orientation on a byway interpretive panel map.

Branding

Each interpretive panel should prominently display the Pinelands National Reserve logo/shield to reinforce the wayfinding and gateway signs.

Acknowledgements

The byway interpretive signs and panels should acknowledge the many partners that have facilitated the byway project. Written acknowledgements and or logos/seals/shields should be included on the interpretive signs and panels, including, but not limited to:

- New Jersey state scenic byway logo shield
- New Jersey Pinelands Commission logo shield
- “America’s Byways” pennant logo (if the route is designated a National Scenic Byway)
- New Jersey Division of Parks and Forestry
- US Fish and Wildlife Service
- County parks, local historical societies
- Funding sources and panel sponsors

Supplementing Interpretive Signage

Other forms of interpretation such as guidebooks, podcasts, living history tours and education seminars are valuable additions to a good interpretive sign and panel system. While such methods of interpretation generally require advance planning (for example, purchasing a guidebook, or registering for a tour or education program), they can be valuable opportunities for enhanced and specialty education outreach for byway visitors. Many communities and sites (including Batsto Village) are now using cell-phone interpretation, a simple system where visitors can dial a number that provides a recorded message explaining the site and offering prompts for additional information (for example, press #1 to learn more about water quality, #2 to learn more about early water-based travel, #3 to learn more about...).



An example of an interpretive panel at Weymouth Furnace in Atlantic County. This interpretive sign does not follow the 3-30-3 rule for the hierarchy of information for interpretive signs. Additionally, prohibitions and regulatory information are included at the end of the text and in the same size font—regulatory information should not be included on interpretive panels—if absolutely necessary it should be distinguished by reduced font sizes and differentiated by another font or italics.

(Photo: Dan Marriott)



This interpretive sign for the Aetna Furnace along the SPNHT is located behind a guardrail on a curve. The location is difficult to access and not a safe. The sign is posted too high, and the text too small to be easily read.

(Photos: Dan Marriott)

This interpretive sign for the Boston Common provides a nice hierarchy of information, a useful map and historic illustrations. The panel structure is handsome and anchored with a well designed base that complements the structure of the sign panel.

(Photo: Dan Marriott)





This interpretive panel in Belleplain State Forest provides clear and effective graphic design, an evocative title (“Born of Fire”) and good before-and-after photographic images. The bar at the base of the panel is an effective technique for recognizing the partnering organizations (National Park Service, NJ State Forest, NJ Coastal Heritage Trail). However, the interpretive panel’s location (left) is easily lost in the roadside vegetation. Making panels visually accessible without cluttering the natural environment is a challenge. (Photos: Rick Taintor)



These two panels at Batsto Village share similar design features and clear graphics. However, the panel on the left is identified in the top bar as “Wharton State Forest” and the one on the right as “Pinelands National Reserve.” Neither panel identifies Batsto Village. This is an example of the potentially confusing messages presented in the Pinelands. A standard hierarchy of association (for example, Pinelands National Reserve / Wharton State Forest / Batsto Village) would ensure that all property managers are recognized. (Photos: Rick Taintor)

6. Tourist Oriented Destination Signs (TODS)

Introduction

Tourist Oriented Destination Signs, or TODS, provide basic visitor information. TODS are signs that are located in areas with high levels of tourism and visitation to provide traveler information that is reliable and consistent. In many communities TODS are utilized as an alternate to off-premise signs (billboards). TODS may be used to provide direction to private establishments (bed and breakfasts, antique shops or skiing areas) or public facilities (boat launches, public beaches, hiking trails, for example). In many places TODS are reinforced with a graphic (a spinning wheel for antiques, or a bed for lodging, for example) and an associated color with each graphic or family of graphics (a family of graphics may be all traveler services such as food, fuel and lodging).

While there are many visitor facilities along and proximate to the SPNHT, the routing and location of the byway route reinforces the rural character of the corridor and the Pinelands. It is possible for a traveler following the byway route to be unaware of lodging, food, fuel, and general visitor services and facilities (museums, equipment rental and farm markets, for example) that may be nearer than perceived. TODS would provide a visually responsible and user friendly program to advise byway visitors of basic services geared toward the leisure/travel market.

TODS are uniform in size, provide a standard graphic for basic service types (food, lodging, tourism related retail, historic sites), and are governed by standards to determine which businesses and services are related to visitor travel. Typical signs range from 12" x 48" to 16" x 72" depending on the road on which they are located. TODS may also be referred to as Official Business Directional Signs (OBDS)



Examples of OBDS (TODS) signs used by the Maine Department of Transportation. (Photos: Maine DOT)

TODS for the SPNHT Scenic Byway

TODS for the Southern Pinelands Natural Heritage Trail Scenic Byway could serve two distinct purposes:

1. Provide direction for essential visitor services located off the designated route, such as lodging, fuel and food.
2. Provide direction for visitor facilities, areas of interest, and public lands located off the designated route, which support the overall concept of the New Jersey Pinelands. Services and facilities such as farm markets, museums and historic sites, boat launches and hiking trails, fishing and boating access, and distinctive shopping (antique shops, craft markets, New Jersey-made products) could be included in a TODS system.

TODS Guidelines

In general, the guidelines for participating in a TODS program should reinforce the unique and authentic features and qualities of a region over national or regional service providers.

The following issues should be considered:

1. All visitor related businesses participating in the TODS program shall not be allowed any off-premise signs as currently allowed under sections 7.50-6.107 -6.108 of the Pinelands Comprehensive Management Plan.
2. A survey of byway traveler needs and definition of supporting business should be established for the TODS program. Emphasis should focus on essential travel services (food, fuel and lodging); businesses that provide access, education and interpretation for the natural and cultural features of the pinelands (tours, museums, and equipment rentals, for example), and business that support the rural character of the Pinelands or reinforce local crafts and businesses based on Pinelands resources (antique shops, environmental services, and agricultural products, for example). While the focus of the TODS program should be to support local and authentic businesses, it is recognized that some state or national service providers may provide necessary visitor services. The TODS program should prohibit corporate logos and identify all service providers by standard icons (a fuel pump representing a gas station or a bed representing a chain hotel).
3. As recommended for other signs along the SPNHT, TODS should have painted backs and be mounted on wood or metal posts painted (or coated) in a dark neutral color matching other signs along the byway.

Branding

It is recommended that the Pinelands National Reserve Shield be used as a small brand identifier on all TODS.

7. Regulatory, Warning, and Guide Signage

Regulatory, warning, and guide signs provide the basic driver information on our nation's highways. These signs are independent from the byway signs recommended for the SPNHT and are administered by county and state transportation departments.

Regulatory, warning, and guide signs are independent from byway signage, nevertheless their impact on the overall byway visitor experience cannot be underestimated. While their purpose may be more practical and utilitarian, they represent one of the most frequent features along the entire byway route. Every curve and intersection (and points between) along the byway route are noted, regulated and informed by highway signs.

A general goal for the SPNHT should be improved aesthetic sensibility to the installation and maintenance of standard highway signs, reduction of redundant and excessive signage, and uniformity among the counties and state for the installation of signage along the byway route.

All signs posted along the public right-of-way, including byway wayfinding and gateway signs (not interpretive panels), are subject to the policies outlined in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration.

MUTCD – Manual of Uniform Traffic Control Devices

The Manual of Uniform Traffic Control Devices - MUTCD is the nation's principal guidance for the provision of information on our highways. MUTCD establishes standards for highway signs, traffic signals, pavement markings, reflectivity, color specifications, and locations.

Sign types, locations and sizes are based on the type of highway facility. MUTCD recognizes: freeway, expressway (divided highway with partial or full limited access), conventional road (most typical roads except for low volume roads; ADT less than 400 vehicles per day) and special purpose roads (low volume roads such as recreational roads).

MUTCD recognizes three principal sign types: regulatory, warning and guide signs

- **Regulatory signs** give notice of traffic laws or regulations. Regulatory signs include: stop, yield; speed limit signs; turn prohibitions: no left turn, no right turn, no u turn; lane use control: right lane must turn right; exclusion signs: do not enter, no trucks; parking restrictions and others.
- **Warning signs** give notice of a situation that might not be readily apparent. Warning signs include: curves, winding road, stop ahead, yield ahead, narrow roadway, two way traffic, one way street, railroad crossing and others.
- **Guide signs** show route designations, destinations, directions, distances, services, points of interest, and other geographic, recreational or cultural information. Guide signs include: Interstate, US, state and county road markers (route number shields), bicycle routes, destination signs, rest area, parking area, welcome centers, scenic byways, state boundary, point of geographical interest, library, train station, hiking trails, marinas, and others.

MUTCD makes reference to sign clutter and unnecessary signage. The manual stresses that all signs posted along any roadway should be based on an engineering assessment, be reliable in message and consistent in installation. All signs erected within the defined clear zone of the road (an area free of any rigid hazards such as trees, rocks or utility poles—width of the clear zone varies by defined road type) should be on break-away posts (metal or wood). The manual notes that in areas of multiple signs that signs should not block one another, and that warning signs should take precedence over other sign types.

Some helpful MUTCD guidance for aesthetic and safety considerations for byways includes the following (section numbers and quotations from 2003 Edition, *Manual of Uniform Traffic Control Devices*):

Section 2A.03 Standardization of Application

Signs should be used only where justified by engineering judgments or studies.

Section 2A.04 Excessive Use of Signs

Regulatory and warning signs should be used conservatively because these signs, if used to excess, tend to lose their effectiveness. If used, route signs and directional signs should be used frequently because they promote reasonably safe and efficient operations by keeping road users informed of their location.

Section 2A.16 Standardization of Location

*Signs should be individually installed on separate posts or mountings, except where:
B. Route or directional signs are grouped to clarify information to motorists.*

Signs should be located so that they:

D. Do not obscure one another.

Guidance:

With the increase in traffic volumes and the desire to provide road users regulatory, warning and guidance information, an order for priority of sign installation should be established.

While MUTCD is specific about sign colors, reflectivity, font styles and locations, there is considerable latitude for aesthetic accommodations including painting the backs of signs and the selection of different sign posts (so long as they are break-away).

The Manual of Uniform Traffic Control Devices is available online at <http://mutcd.fhwa.dot.gov>.



Exit 58, Garden State Parkway. Sign clutter is a common problem, and these signs do not adhere to MUTCD standards. County route shields and destination signs should be the principal form of information at this location. Route shields and directional signs should be posted on the same sign, consolidating guide signs and reducing clutter. Signage for Tuckerton Seaport at this location should be provided either by inclusion on a brown background destination sign or on a TODS. The yellow warning arrow is unnecessary due to the presence of the other signs—clearly one cannot travel forward due to the sign assembly.

This intersection only needs two signs: a green background sign listing destinations (including the airport) with shields attached, and a brown background attractions sign (secondary) listing the county parks and Tuckerton Seaport.

(Photo: Rick Taintor)



This series of regulatory signs in an Atlantic County park is inconsistent in design. Each sign is of a different proportion, one sign does not have a border; and the no swimming text and icon are repetitive. Such signage detracts from the historic and natural character of the park, and is better clustered on a single sign and placed at the entrance to the park with a general list of prohibitions.

(Photo: Dan Marriott)



Chevron warning signs along a scenic route in Maryland are low to the ground (to better pick up headlights) and on wooden posts (better suited to the rural character). To further minimize clutter, each post accommodates two signs (right).

(Photos: Dan Marriott)



The City of Williamsburg, Virginia, to minimize sign clutter, clusters route shields (guide signs) on a single panel. On lower-volume roads the city uses smaller shields than on higher-traveled/higher-speed roads. Additionally, the backs of all signs in the city are painted to match the sign posts—minimizing the visual impact of signs when viewed from the opposite direction. Compare the Williamsburg route signs (left and center) to unpainted backs and individual shields (right) in New York.

(Photos: Dan Marriott)

Guide signs associated with the Boston Parkway system, are administered by the Massachusetts Department of Conservation and Recreation (DCR). The signs are distinguished by clean graphic design, a wide white border at the base and a simple logo at the lower right corner that identifies the parkway management.



8. Concepts/Relationships

The SPNHT will be noted more for its natural and historic resources than its signage. Nevertheless, signage, good orientation and well designed interpretation will enhance the intrinsic qualities of the byway and reinforce the quality brand of the New Jersey Pinelands.

It is important that the signage plan for the SPNHT work closely to introduce and define the key concepts, sites and attractions for which the byway route has been designated. The following concepts and relationships should be considered when developing a signage strategy and plan for the SPNHT byway.

Graphic Identity

The byway should be easily recognized through both a standard logo/shield and consistent graphic design. All byway visitor signs (interpretation, wayfinding, destination, and gateway) should have a common graphic design/look that is easily recognized and immediately associated by the public with the byway. A standard logo/shield, color family (color of panel and sign backgrounds), and font (letter type) should be designed for and associated with the SPNHT. The graphic identity should be used for both visitor signs along the byway route (gateway, wayfinding, destination and interpretive) and other byway resources (websites, publications and promotional materials). Through such a coordinated process, the potential visitor who learns of the byway through a print ad, sees the graphic identity of the advertisement reflected in the website as they seek more information on a potential trip to the pinelands, then, on arrival to the Pinelands sees the graphic identity reinforced at the byway's gateway and wayfinding system, and finally at the individual sites he/she selects to visit.

Graphic identity should also be applied to all byway corridor resource sites. While the graphic design may be independent in design, color, fonts and images, it should still be expressive of a quality, well-considered and well-designed graphic identity. All visitor sites wishing to utilize the graphic identity of the byway should be encouraged.

To ensure that the byway graphic identity maintains a clear and strong association with the quality brand of the SPNHT, the byway logo/shield, marketing slogans, and distinctive sign or interpretive structures should be licensed by the byway organization to ensure their appropriate and quality use and association. By maintaining close control over the use of the byway graphic identity, the byway can assure that the byway identity does not appear on inappropriate materials or at sham, marginal or environmentally reckless sites and facilities, or commercial establishments.

Parkway Concept

Signage is but one component of managing the byway as an attractive visitor resource. The entities responsible for managing the roads that make up the Southern Pinelands Natural Heritage Trail Scenic Byway should consider employing the comprehensive principles that are generally applied to parkway management. More than simply providing access to natural and cultural resources along the byway, a route managed as a parkway becomes a distinctive feature within the landscape. Traveling on a National Park Service parkway or park road, or the nearby Garden State Parkway, the road itself is an integral part of the visitor experience. As with a county or state highway, clear direction and safety is provided on a parkway. The parkway

concept additionally considers the aesthetic quality and appropriateness to natural and cultural resources and responds by identifying materials and management strategies that support the byway goals in addition to general transportation goals. Signage along a parkway is comprehensively managed and coordinated to provide necessary safety and information within a distinctive, unique corridor.

A parkway's standards for signage, landscape architecture, lighting and other highway and roadside features is consistent along the entire parkway corridor regardless of local jurisdictions. This management strategy reinforces the primacy of the landscape or natural systems by eliminating changes in management policy (different sign posts or guardrail, for example) from jurisdiction to another. While this plan does not suggest the SPNHT should be managed as a parkway, it does recognize that efforts at greater cooperation among the different jurisdictions that manage the byway road and roadside would enhance the aesthetic quality of the byway route.

The development of a byway highway design manual is recommended for use by the state and local transportation departments for managing the byway route. In addition to design details, the manual may recommend the collective purchase and stockpiling of recommended byway hardware (lighting, barriers, signs and sign posts) to reduce cost and facilitate maintenance and replacement. It is also recommended that a National Scenic Byways Program grant be secured to develop such a manual and transportation department training.

Signage to Promote Environmental Awareness and Stewardship

Basic signage along the SPNHT may be utilized for interpretive purposes by identifying essential boundaries, districts and resources. Through simple acknowledgement of such special resources the visitors to and residents of the New Jersey Pinelands are reminded of the special qualities of the area and the commitment by local, county, state and federal governments to recognize the natural and historical resources of the area.

Consider identifying all the boundaries of the different Pinelands management districts, including urban growth boundaries, and identifying the sub-environmental regions within the designated Pinelands. Such efforts will raise public awareness that the vast reserves of land are not accidental occurrences but a part of a comprehensive and complex program to preserve the ecosystem of the pinelands. Consider too identifying properties under conservation or preservation easements.

Such signs may be designed at a variety of sizes, from small identification signs to larger resource and boundary signs based on the development of recommendations from the SPNHT signage plan/manual.

Branding

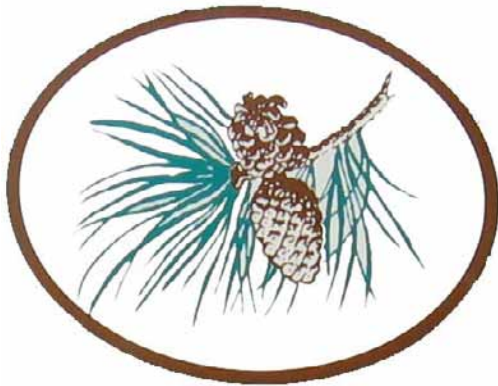
Branding the SPNHT is an important part of visitor information, direction and orientation, and for establishing the Pinelands as a comprehensive visitor destination made of many complex, interesting and unique destinations and features. From wetlands and woodlands, to museums and historic communities, to the roads (SPNHT byway route) that link all these resources together, a comprehensive and consistent brand logo/shield should be present.

This brand should cross municipal and county lines; park, forest and public lands; and sites of historical significance. The traveling public is generally uninterested in, and unaware of jurisdictional boundaries and ownership when focused on eco-tourism or heritage tourism. They view an area/region, such as the Pinelands as a complete destination—not a collection of individual pieces, but a whole. Therefore, a single byway brand will reinforce this concept and visitor reality. It will also better benefit all attractions and destinations in the Pinelands as visitors look for the logo/shield as a symbol of further areas to explore and new experience to engage.

Pinelands National Reserve Logo/Shield

It is recommended that the Pinelands National Reserve logo/shield serve as the principal brand identifier for the SPNHT. The logo/shield offers the following benefits:

- already recognized through use on gateway and some interpretive signs
- raises and validates the national significance of the Pinelands, and therefore all other associated destinations and corridors
- is easy to read due to simple clear graphic design
- may be easily modified for special uses: for example the Pinelands National Reserve text in the green band may be replaced with “Southern Pinelands Natural Heritage Trail”.



Pinelands National Reserve logo/shield is recommended for all SPNHT byway signage.

9. General Signage Concepts/Recommendations

SPNHT Signage Plan/Manual

The SPNHT should develop a comprehensive sign plan/manual for the byway route that addresses byway branding through gateway signs, wayfinding logo shields, destination signs, and interpretation; and establishes a standard program for general signage among state and county transportation departments for the byway (ensuring consistent direction to key communities and resources, standard application of safety and warning signs, and cooperative efforts to reduce redundant or unnecessary signage).

The signage plan should include the following:

For SPNHT Signs

Sign Criteria

The SPNHT signage plan/manual should establish standard criteria for the placement, quantity and location for all byway related signs, including:

- natural and historical features that should be recognized
- the distance from, and number of advance signs for different visitor attractions (depending on visitor numbers and counts)
- the prominence of signs (size/location) for different facilities and resources (a conservation easement boundary vs. a watershed boundary, for example).
- businesses, sites and services eligible for inclusion in a TODS program

Sign Locations

The SPNHT signage plan/manual should include a comprehensive map-GIS location program showing exact locations for all gateway, wayfinding, destination-wayfinding, and interpretive signs. Sign locations should address and define:

- gateway point signs
- gateway point interpretive pull-offs
- wayfinding signs (advance notice, turning movements and confirmation signs)
- destination wayfinding signs at locations where the byway route offers options for continued travel (byway continues straight *AND* turns left, for example, at an intersection).
- interpretive signs erected as a part of the official byway signage program
- reference to all county, state and US route numbers
- TODS

Standard Graphic Design

The SPNHT signage plan/manual should include standard graphic design guidance for all byway signs for the following:

- all colors (using standard PMS color system), images (use of logo/shield) and fonts (by sign type)
- standards for reflectivity for nighttime visibility
- standard spacing between letters, words and lines, and the use of borders

- standard abbreviations (abbreviations should be avoided if at all possible)
- adherence to applicable MUTCD standards

Sign Sizes and Locations

The SPNHT signage plan/manual should include standards for sign sizes and locations, including the following:

- standard sizes for signs based on location—speed and road width impacts the standard minimum size for a sign. For all segments of the SPNHT, the smallest effective sign size should be utilized to minimize sign clutter and visual impact on the landscape.
- identification of possible locations where byway signage (byway logo/shield in particular) may be combined with existing route number shields (either through adjacent placement or shared posts)
- adherence to applicable MUTCD standards

Installation

The SPNHT signage plan/manual should outline specific policies for the installation of all byway related signs, including:

- standard installation practices for all byway signs including post design, mounting and repair of any installation disturbance to the ground/surface.
- standard practices/design for break-away posts for highway safety.
- standard heights from ground plane to the top of the sign.
- standard spacing order for ancillary signs (such as arrows or advance turning movements placed below byway sign logo/shields).

Maintenance

The SPNHT signage plan/manual should outline specific maintenance policies to ensure that the byway signage is well maintained and reflective of a well organized byway organization, including:

- maintenance standards for regular inspection, repair, and replacement. Standards for adhering to the original design guidance in the signage plan/manual to ensure that replacement signs and materials, installed over time, are of the same size, materials and colors.
- a plan to stockpile signs, posts and other structures for repair and replacement.

For All Other Signs

In addition to recommendations for official byway signs, the SPNHT Signage Plan/Manual should make recommendations to seek coordination with existing local, county and state sign plans and policies, including:

- Recommendations for the removal of redundant and non-conforming signs along the route;
- Recommendations for coordination for all regulatory, safety and general information signs among state and county transportation departments having oversight for the SPNHT;

- Recommendations for coordinating with local, county and state governments for signs directed toward resource identification (such as watersheds and waterways, parks and public lands, and visitor services);
- Recommendations for the uniform installation of safety and regulatory signs along the byway corridor;
- Recommendations for general aesthetic treatments for signs along the byway corridor, including painting (coating or other treatments) the backs of signs to reduce reflective glare and minimize the visual impact on the landscape, uniform posts and installation, and uniform installation;
- Clarification of MUTCD guidelines regarding the placement of off-premise signs proximate to or at byway intersections, regulatory, safety and guide signs (such signs are allowed under the Pinelands Comprehensive Management Plan – see Appendix 2). Minimum distances from regulatory, safety and guide signs should be established.

SPNHT Sign Review Board

Establish a SPNHT byway sign review board to discuss and make recommendations for improved signage along the byway route. The board should include members of the following organizations, offices and professions:

- New Jersey Pinelands Commission
- National Park Service
- New Jersey Division of Parks and Forestry
- New Jersey Department of Transportation
- county transportation department representatives
- local township/municipal representatives
- a landscape architect
- a graphic designer

The SPNHT Sign Review Board/Commission should coordinate on the following:

- removal of redundant and unnecessary signage
- consistent application of MUTCD standards for all signs along the byway route
- outreach and education to municipal governments on signage
- promotion on aesthetic design guidance for all signs along the byway, including, the painting of sign backs and posts to minimize the visual impact on the natural landscape, the use of more attractive sign posts, and improved design and graphics for local and municipal interpretive signs and panels.

Additionally, consideration should be given to providing the SPNHT sign board with some oversight for signage for the byway route.

General Recommendations for SPNHT Signage

The following general recommendations for SPNHT represent both broad concepts and individual observations regarding the existing state of signage along the designated byway route and overall goals for a comprehensive signage system that is worthy of a nationally and internationally recognized region. Consider the following:

Reduce Sign Clutter

- Reduce redundant, excessive and unnecessary signage. Consolidation of messages and information. Visual reduction of transportation maintenance and identification signs.
- Remove all “adopt-a-highway” signs along the byway to reduce visual clutter. Byway “adopt” sponsors may be recognized in byway publications or at waysides and scenic pulloffs (as developed). If well developed, byway sponsors will receive greater recognition as their sponsorship will be identified beyond their particular segments as is the current practice.
- Removal of non-essential signs (for example, 9-1-1 emergency signs at town borders are unnecessary now that the entire nation operates under the 9-1-1 system).
- Investigate options to improve safety warnings while also minimizing sign clutter (for example, by using reflectors and rumble strips on the pavement for nighttime hazards as a replacement for chevron signs).

Improve Signage Installation/Maintenance Practices

- Standardize installation and compatibility among signs. At present many standardized signs placed side-by-side, such as route shields, may have up to 12” variance at the top edge.



Example of poor sign installation on Historic Route 66 in Oklahoma. The panels should be of equal height, with the ancillary signs (arrows, notes, directions) above or below the two panels (of equal height).

(Photo: Dan Marriott)

- Establish a minimum distance between signs along the byway to end the “blocking” of subsequent signs—a frequent problem along the route.

Establish Byway Wayfinding and Direction Sign System

- Develop a standard practice for posting byway logo/wayfinding signs and byway direction/distance signs for points-of-interest for the byway traveler (currently only state/regional destinations are identified along the route, and most of these are on state and US routes, not the county routes).
- Develop a TODS program to enhance visitor awareness for resources and traveler facilities.

Establish Byway Gateway Points

- Develop a recognizable gateway feature at each of the byway's principal entry points (consider NPS park entry signs/structures as a model). Treat the byway entries as comparable to the entrance of a regional or national park, with a notable entry feature, then a sense of a distinct district beyond, reinforced by consistent treatment of the principal visitor access point, i.e., the road.

Establish Guidance for Sign Aesthetics/Visual Quality

- Identify uniform sign posts for all signs along the byway (metal or wood) that are painted (or coated by a manufacturer) a dark or neutral color (dark brown, charcoal, or dark green). Paint the back of all signs to match the sign post.
- Improve the visitor welcome factor by redesigning and minimizing signs prohibiting specific activities. Too many large "NO" signs send an unwelcome tone to visitors. The legal obligation may be met by using the word "prohibited" (and in the same point size as the prohibited activity).



Painting (coating or other treatments) posts and the backs of signs helps to minimize the visual impact on the landscape. George Washington Memorial Parkway, National Park Service (left), City of Williamsburg, Virginia commercial district (right). (Photos: Dan Marriott)

Inconsistent signs, graphics and haphazard locations at this location along the SPNHT do not present a logical hierarchy of information among signs.

(Photo: Rick Taintor)



Along the Historic Columbia River Highway (National Scenic Byway—All-American Road) uniform signage was agreed to by all the byway partners. All signs are uniform in color, shape and font, but the different managing agencies are recognized with their logos/shields based on ownership of different sites along the byway, Oregon Department of Parks, for example (left) and US Forest Service, for example (right). This system provides consistency and reinforces the singular nature of the historic highway while also showcasing the different byway partners.



Signs at Morristown National Historical Park in New Jersey provide consistent quality graphic identity for the park at all levels of identification, interpretation, and information.

10. Sign Hierarchy Concepts for the Southern Pinelands Natural Heritage Trail Scenic Byway

The following sign concepts represent a possible hierarchy for signage, information, direction, wayfinding and orientation along the Southern Pinelands Natural Heritage Trail Scenic Byway. They are presented as concepts only and designed to initiate and inform a full conversation among all byway and Pinelands entities regarding the need and possible options for a more uniform visitor signage system.

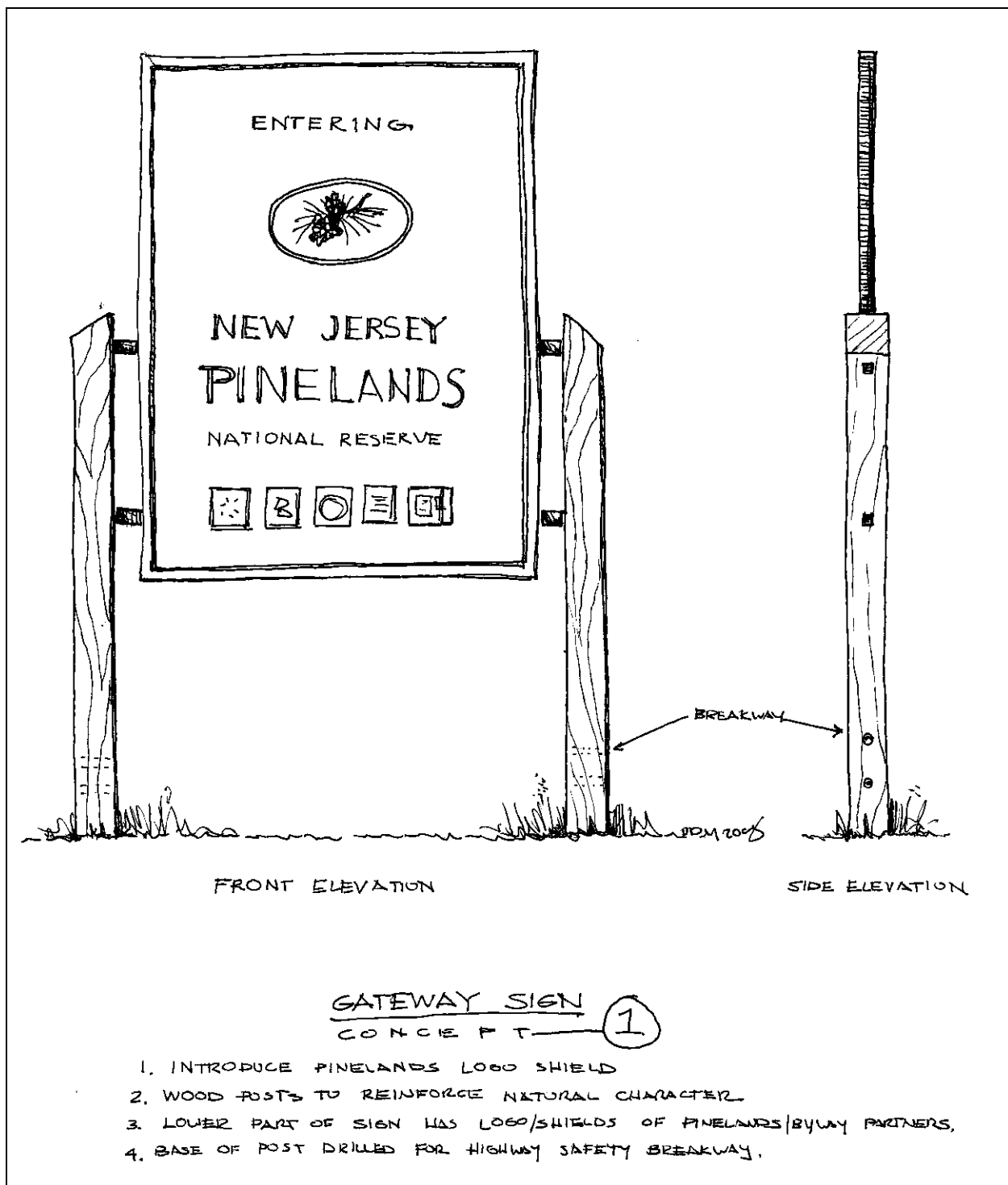
Gateway Signs

The New Jersey Pinelands **gateway sign** concept (Concept Drawing 1 – see Figure 1) suggests how gateway points to the Pinelands National Reserve may be identified by a significant feature sign. The sign is distinguished by natural materials (wood) to reinforce the natural qualities of the region, and designed to be a commanding presence signifying arrival to a special and unique region. Text is kept simple. Unlike the existing gateway signs, “New Jersey” is added to better recognize the state. The logo shield is introduced (to be used for all wayfinding, destination, interpretive and TODS signs). Key national and state partner agencies in the Pinelands are recognized by shields at the base of the concept sign (e.g., Pinelands Commission, National Park Service, New Jersey Division of Parks and Forestry, NJDOT/ Byways, National Scenic Byways Program). The SPNHT, as a subset of the Pinelands National Reserve land area, will be associated with this gateway concept.



Compare the existing Pinelands National Reserve gateway sign to the gateway sign for Olympic National Park (inset).

Figure 1: Gateway Sign Concept



(Concept sketches: Dan Marriott)

Wayfinding and Destination Signs

Wayfinding and destination signs will provide the principal direction and orientation for the SPNHT byway route. These include byway destination signs, byway introduction/gateway signs, and wayfinding signs.

Byway designation signs (Concept Drawing 2 – see Figure 2) are posted in advance of intersections where the byway traveler is offered a choice/option of alternate routes/directions to travel on the byway. Concept drawing 2 signs provide destination information to allow the byway traveler to make a more informed decision—a state forest or a community destination depending on the direction chosen, for example.

The **byway introduction/gateway sign** (Concept Drawing 3 – see Figure 3) would be posted immediately after a gateway sign (Concept 1) or at significant byway gateway points within the Pinelands National Reserve. The signs will introduce “byway route” and identify the route name “Southern Pinelands Natural Heritage Trail.” The signs prominently display the Pinelands logo, associating the logo with the wayfinding signs erected along the route.

Wayfinding signs (Concept Drawing 4/5 – see Figure 3) reinforce the logo/shield just introduced on the gateway sign or byway introduction sign, and associate the logo/shield for all subsequent wayfinding signs marking the byway route. The concept 4/5 signs are easily recognized by shape and provide effective wayfinding with minimal visual impact on the landscape. Concept Drawing 4 signs are used as confirmation signs, as described in the text. Concept Drawing 5 signs are used to provide notification of advance turns or turn locations.

Byway Signs Location Concepts

Figure 4 illustrates recommended locations for the above signs based on the Pinelands National Reserve boundary and the location of the byway route and turns.

Figure 2: Byway Destination Sign Concept

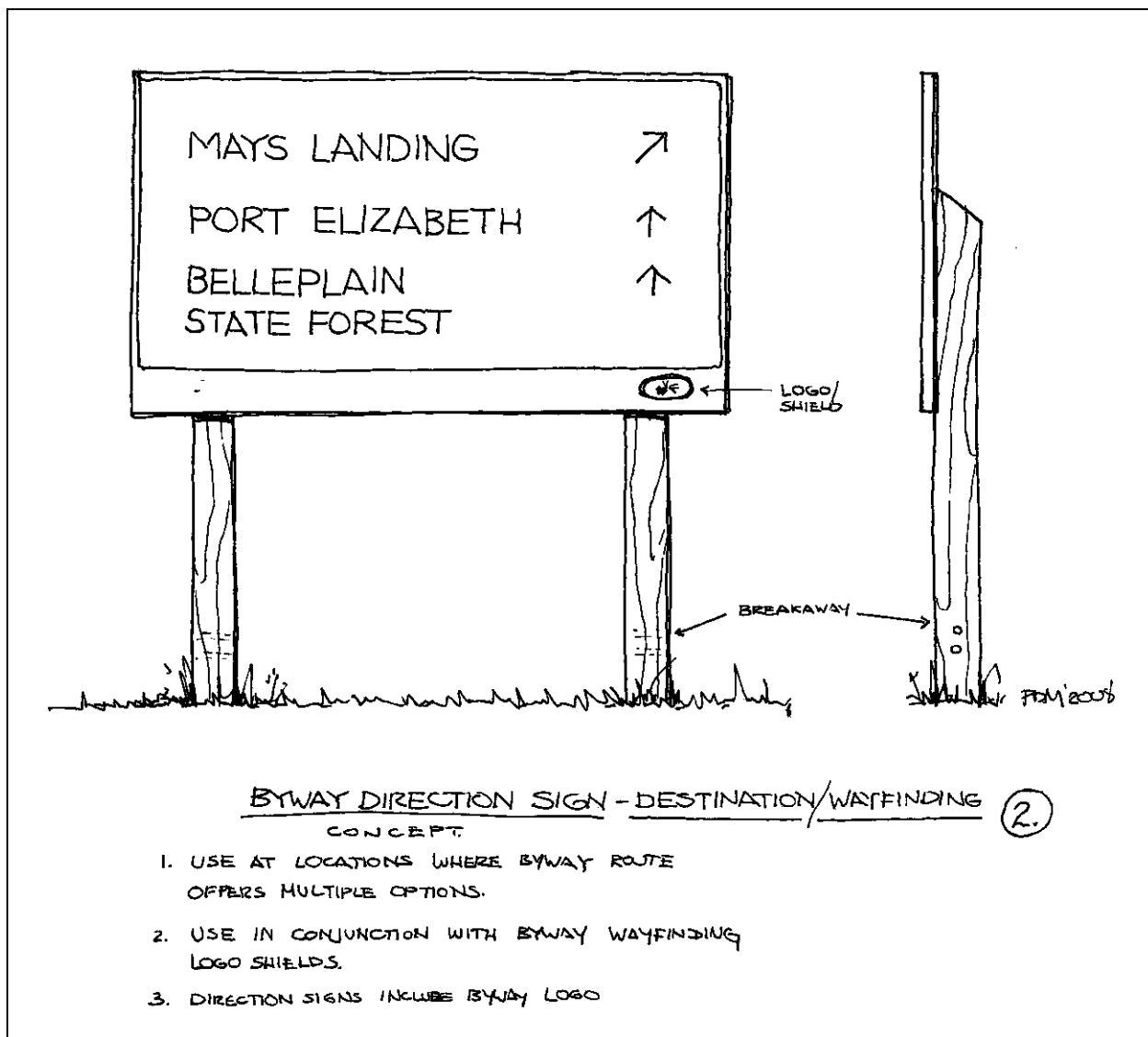


Figure 3: Byway Introduction/Gateway and Wayfinding Sign Concepts

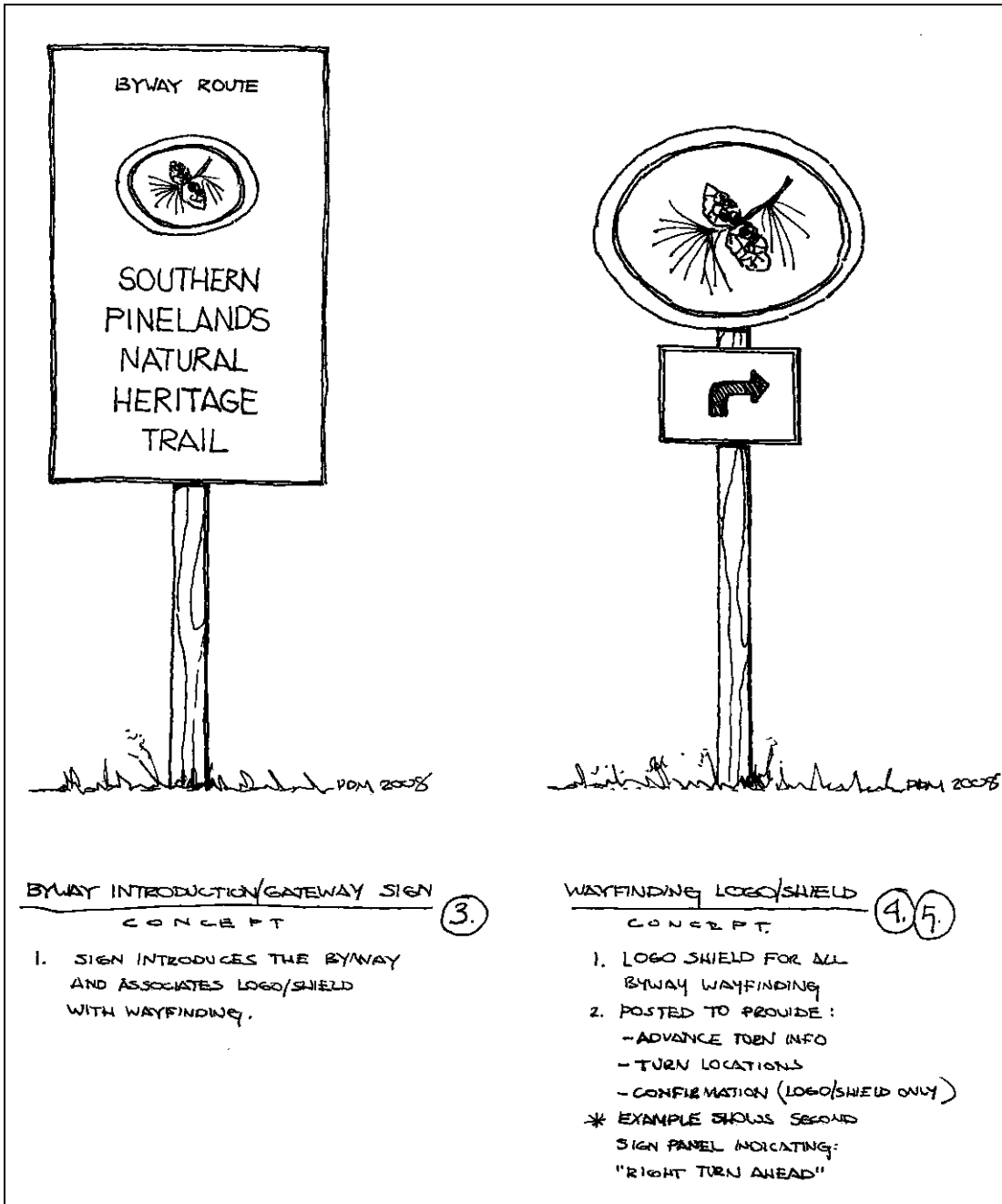
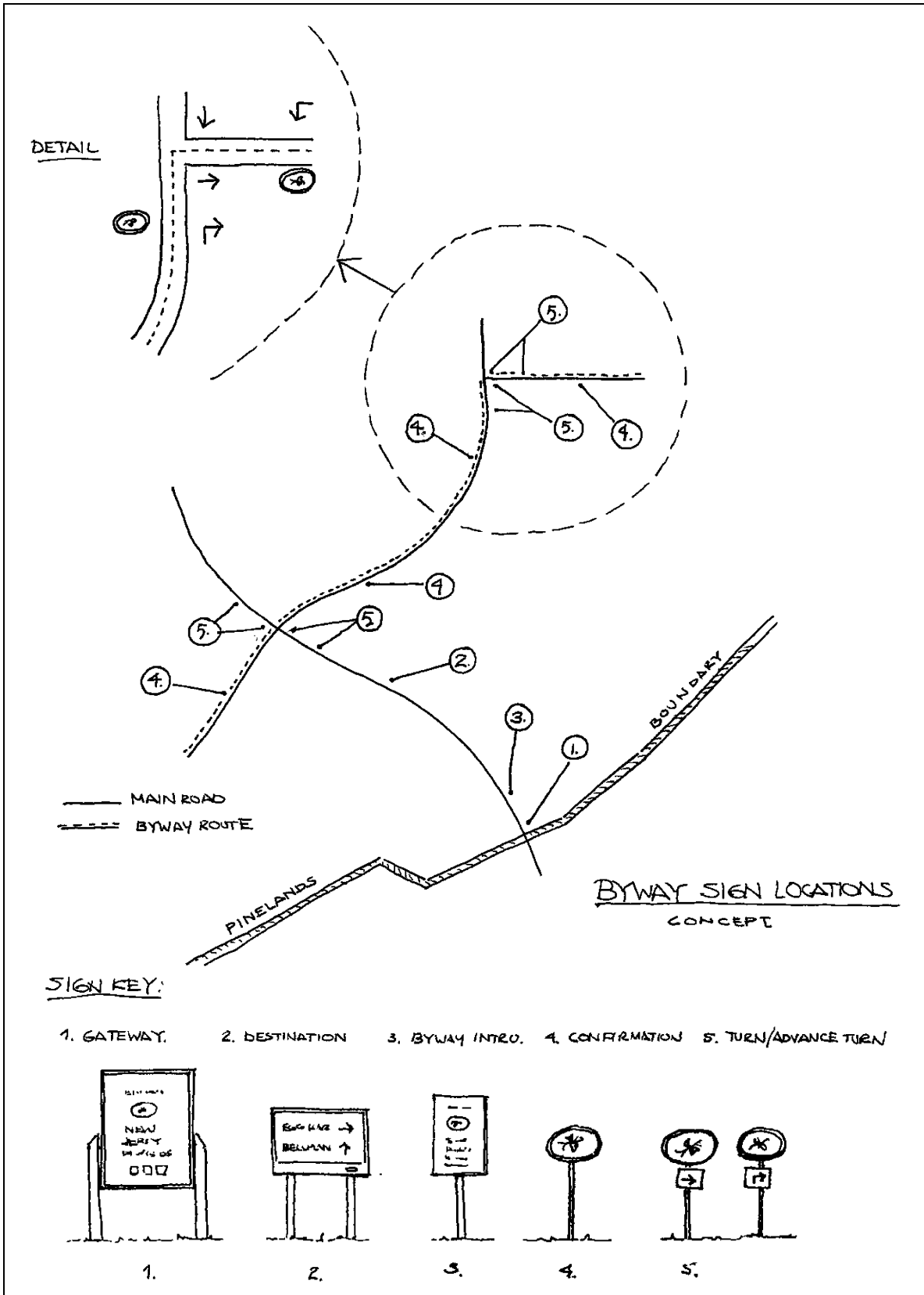


Figure 4: Byway Signs Location Concepts



Appendices

Appendix 1: MUTCD Use of America's Byways[®] Logo/Shield

Section 2D.52 National Scenic Byways Signs (D6-4, D6-4a)

Support:

Certain roads have been designated by the U.S. Secretary of Transportation as National Scenic Byways or All-American Roads based on their archeological, cultural, historic, natural, recreational, or scenic qualities.

Option:

State and local highway agencies may install the National Scenic Byways (D6-4 or D6-4a) signs at entrance points to a route that has been recognized by the U.S. Secretary of Transportation as a National Scenic Byway or an All-American road. The D6-4 or D6-4a sign may be installed on route sign assemblies (see Figure 2D-14) or as part of larger roadside structures. National Scenic Byways Signs may also be installed at periodic intervals along the designated route and at intersections where the designated route turns or follows a different numbered highway. At locations where roadside features have been developed to enhance the traveler's experience such as rest areas, historic sites, interpretive facilities, or scenic overlooks, the National Scenic Byways Sign may be placed on the associated sign assembly to inform travelers that the site contributes to the byway travel experience.

Figure 2D-14. Examples of Use of the National Scenic Byways Sign



Standard:

When a National Scenic Byways Sign is installed on a National Scenic Byway or an All-American Road, the design shown for the D6-4 or D6-4a sign in Figure 2D-14 shall be used. Use of this design shall be limited to routes that have been designated as a National Scenic Byway or All-American Roads by the U.S. Secretary of Transportation.

If used, the D6-4 or D6-4a sign shall be placed such that the roadway route signs have primary visibility for the road user.

Source: U.S. Department of Transportation, Federal Highway Administration, Manual on Uniform Traffic Control Devices, <http://mutcd.fhwa.dot.gov/index.htm>.

Appendix 2: Pinelands Comprehensive Management Plan Sign Standards

Subchapter 6 – Management Programs and Minimum Standards

Part X – Scenic

Sections 7:50–6.106 through 7:50–6.109

7:50-6.106 Signs

Each municipality shall adopt provisions governing signs in its municipal master plan and ordinances. N.J.A.C. 7:50-6.107 contains provisions which must be included in all municipalities; N.J.A.C. 7:50-6.108 contains mandatory provisions for municipalities in the Preservation Area District and Special Agricultural Production Areas; and N.J.A.C. 7:50-6.109 contains suggested guidelines for additional sign provisions for other areas of the Pinelands.

7:50-6.107 Mandatory sign provisions

- (a) No sign, other than warning or safety signs, which is designed or intended to attract attention by sudden, intermittent or rhythmic movement, or physical or lighting change, shall be permitted in any area.
- (b) No sign, other than warning or safety signs, which changes physical position by any movement or rotation or which gives the visual impression of such movement or rotation shall be permitted in any area.
- (c) No outdoor off-site commercial advertising sign, other than those off-site signs specifically authorized in N.J.A.C. 7:50-6.108 and 6.109, shall be permitted in the Pinelands except as follows:
 - 1. Off-site outdoor signs advertising agricultural commercial establishments shall be permitted in Agricultural Production Areas and Special Agricultural Production Areas and may be permitted in any other management area. All such off-site signs shall be subject to the following conditions:
 - i. A maximum of two signs may be placed in any one direction along each road directly approaching the stand, and
 - ii. Each sign along four lane State or U.S. highways shall be limited to a maximum of 50 square feet in area; each sign along all other roads shall be limited to a maximum of 32 square feet in area.
 - 2. Off-site outdoor directional signs may be permitted in any management area, provided that such signs do not contain advertising and are restricted to the name of the public or private use and any necessary directions, the number of signs per use is the minimum necessary to give adequate directions and the size of such signs does not exceed that necessary to convey directions.
 - 3. Existing lawful off-site commercial advertising signs, in existence as of January 14, 1981, shall be permitted in:
 - i. Regional Growth Areas;
 - ii. Pinelands Towns; and
 - iii. Certified municipal non-residential zones in Rural Development Areas and Villages in existence as of December 5, 1994 if the sign is located within 1,000 feet of a Regional Growth Area or Pinelands Town and is located on a United States Highway.
- (d) Any existing sign that violates (a) or (b) above shall be removed immediately. Any existing off-site commercial advertising sign which does not conform to (c) above shall be removed no later than December 5, 1996.

- (e) To the maximum extent practical, the character and composition of construction materials for all signs shall be harmonious with the scenic values of the Pinelands.

7:50-6.108 Mandatory sign provisions in the Preservation Area District and Special Agricultural Production Areas

- (a) No sign shall be constructed, repaired or maintained except in accordance with the provisions of N.J.A.C. 7:50-6.107 and this section.
- (b) The following signs are permitted in the Preservation Area District and the Special Agricultural Production Areas:
1. Official public safety and information signs displaying road names, numbers and safety directions;
 2. On-site signs advertising the sale or rental of the premises, provided that:
 - i. The area on one side of any such sign shall not exceed 12 square feet;
 - ii. No more than one sign is located on any parcel of land held in common ownership.
 3. On-site identification signs for schools, churches, hospitals, or similar public service institutions, provided that:
 - i. The size of any such sign shall not exceed 12 square feet;
 - ii. No more than one sign is placed on any single property.
 4. Trespassing signs or signs indicating the private nature of a road, driveway or premises, and signs prohibiting or otherwise controlling fishing or hunting, provided that the size of such signs does not exceed 12 square feet;
 5. On-site professional, home occupation, or name signs indicating the profession and/or activity and/or name of the occupant of the dwelling, provided that:
 - i. The size of any such sign shall not exceed 12 square feet;
 - ii. No more than one sign is permitted for any individual parcel of land.
 6. On-site business or advertising signs, provided that:
 - i. No more than two signs are located on any one premise or on the premises leased or utilized by any one business establishment;
 - ii. The total area of such signs shall not exceed 20 square feet per side, with the maximum height to the top of the sign not to exceed 15 feet from ground level.
 7. Temporary signs advertising political parties or candidates for election, provided that the size of any such sign does not exceed four square feet.
 8. Temporary on- and off-site signs advertising civil, social or political gatherings and activities, provided that the size of such signs does not exceed four square feet.

7:50-6.109 Guidelines for sign provisions outside the Preservation Area District and Special Agricultural Production Areas

- (a) The following guidelines may be used in formulating municipal sign ordinances:
1. Official public safety and information signs displaying road names, numbers and safety directions may be permitted;
 2. On-site signs advertising the sale or rental of the premises may be permitted, provided that:
 - i. The area on one side of any such sign does not exceed 12 square feet;
 - ii. No more than one sign is located on any parcel of land held in common ownership.
 3. On-site identification signs for schools, churches, hospitals, or similar public service institutions may be permitted; provided that:
 - i. The size of any such sign does not exceed 12 square feet;
 - ii. No more than one sign is placed on any single property.

4. Temporary signs advertising political parties or candidates for election may be permitted, provided that the size of any such sign does not exceed 12 square feet;
5. Temporary on- and off-site signs advertising civil, social or political gatherings and activities may be permitted, provided that the size of such signs does not exceed 12 square feet;
6. Trespassing signs or signs indicating the private nature of a road, driveway, or premise, and signs prohibiting or otherwise controlling fishing or hunting may be permitted, provided that the size of such signs does not exceed 12 square feet;
7. On-site professional, home occupation, or name signs indicating the profession and/or activity and/or name of the occupant of the dwelling may be permitted, provided that:
 - i. The size of such sign does not exceed four square feet;
 - ii. No more than one sign is permitted for any individual parcel of land.
8. On-site business or advertising signs may be permitted provided that:
 - i. No more than two signs are located on any one premise or on the premises leased or utilized by any one business establishment;
 - ii. The total area of such signs does not exceed 20 square feet per side with the maximum height to the top of the sign not to exceed 15 feet from ground level.
9. New off-site commercial advertising signs may be permitted by certified municipalities in Regional Growth Areas and Pinelands Towns provided that the applicant can demonstrate that for each new sign an existing lawful off-site commercial advertising sign has been removed by the applicant pursuant to N.J.A.C. 7:50-6.107(d).

Appendix 3: Historic Markers

New Jersey Historical Marker Program

In the 1930s New Jersey, like many states, established a historical marker program. The program, however, is no longer active. A nationwide inventory of historical markers (in progress) lists 40 markers in New Jersey. As of this date, the only county on the SPHNT to have historical markers inventoried is Burlington County. Six markers identify sites in Moorestown and Medford Village—no original markers, to date, have been identified along the byway route in Burlington County. The 1930s markers are of cast aluminum with raised letters and were manufactured by Sewah Studios (established 1927) in Marietta, Ohio. Sewah can, and does, recreate lost or damaged historic markers based on the 1930s New Jersey design.

Information on the nationwide historic markers inventory is available at <http://www.historicmarkers.com/>.

Information on Sewah Studios is available at <http://www.sewahstudios.com/product.htm>.

New Jersey Tercentenary Celebration

During the 1964 New Jersey Tercentenary Celebration, the state placed approximately 400 18" x 24" aluminum blue and buff historical markers along New Jersey's roadsides.

Appendix 4: Resources/Publications

Accessibility

Uniform Federal Accessibility Standards

Architectural and Transportation Barriers Compliance Board. Washington, DC

www.access-board.gov

Uniform Access to Outdoor Recreation

PLAE, Inc., Berkeley, CA, 1993

Interpretation

Applied Interpretation: Putting Research Into Practice

Doug Knapp, InterpPress, 2008

Authenticity: What Consumers Really Want

James H. Gilmore and Joseph Pine II, Harvard Business School Publishing, 2007

Environmental Interpretation: A Practical Guide for People with Big Ideas and Small Budgets

Sam H. Hill, Fulcrum Publishing, 1992

Interpretation by Design: Graphic Design Basics for Heritage Interpreters

Paul Caputo, Shea Lewis and Lisa Brochu, InterpPress

Interpretation for the 21st Century

Larry Beck and Ted Cable, Sagamore Publishing, 2002.

Interpretation of Cultural and Natural Resources

Douglas M. Knudson, Ted T. Cable and Larry Beck, Venture Publishing, 1999.

Interpreting for Park Visitors

William J. Lewis, 2001.

Interpreting Our Heritage

Freeman Tilden, University of North Carolina Press, 1977

Interpretive Master Planning

John Veverka, 1994

Interpretive Planning: The 5-M Model for Successful Planning Projects

Lisa Brochu, InterpPress, 2003

Personal Interpretation: Connecting Your Audience to Heritage Resources

Lisa Brochu and Tim Merriman, InterpPress, 2007

The History of Heritage Interpretation

Tim Merriman and Lisa Brochu, InterpPress, 2006

Roadside

Flexibility in Highway Design

US Department of Transportation, Federal Highway Administration, 1997

A Guide for Transportation, Landscape and Environmental Design

American Association of State Highway and Transportation Officials, 1991

Manual of Uniform Traffic Control Devices

US Department of Transportation, Federal Highway Administration, 2000

Saving Historic Roads

Paul Daniel Marriott, Wiley and Sons, 1998

Signage

Architectural Graphic Standards

John Ray Hoke, Jr. AIA, Editor, John Wiley and Sons, 1990

Essex National Heritage Area Commission: Sign Manual

<http://essexheritage.org/commission/signs.shtml>

Manual of Uniform Traffic Control Devices

US Department of Transportation, Federal Highway Administration, 2000

Wayfinding: People, Signs and Architecture

Paul Arthur and Romedi Passini. McGraw-Hill, 1992

Historic Columbia River Highway Sign Manual (Requested, 11-08-08)