

IMPROVING THE EFFECTIVENESS OF WAYSHOWING FOR AMERICA'S BYWAYS® USING A "VISITOR'S EYE" PERSPECTIVE: CONCEPTS AND TECHNIQUES TO INCREASE APPRECIATION AND ACTION BY BYWAY PROVIDERS

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ABSTRACT

Byway providers—the local staff, organization leaders, and volunteers who sustain a highway’s designation as one of America’s Byways®—face challenges of overcoming habituated ways of viewing their byways especially as they provide for wayshowing elements of safe travel such as maps, guide signs, directions, and information about traveler services and amenities so that first-time byway travelers can have successful and rewarding byway experiences.

The locally based and geographically rich knowledge byway providers possess is often much more complete than the relatively vague or non-existent knowledge held by byway travelers and visitors. Byway providers need their intimate geographic knowledge to effectively conserve, plan, promote, and interpret the intrinsic resources of a byway. However, their in-depth knowledge shaped by frequent, habitual experience on their byway can hinder them in developing effective wayshowing materials aimed at assisting non-local travelers because the perspective of seeing their byway through a first-time visitor’s eye is a difficult one to refocus.

Although technical instructions and materials describing how byway providers should assess their guidance systems are valuable, the assessment process often is incomplete if byway providers fail to see apparent needs from a non-local traveler’s perspective. The America’s Byways Resource Center is exploring theoretical models that make concepts about the visitor’s experience more explicit and conducting awareness-building exercises designed to help byway providers take more of a visitor’s eye perspective. Preliminary assessments of this initiative indicate productive and positive results.

INTRODUCTION

The purpose of this paper is to provide an overview of a byway provider program that has developed over time in response to the needs of byways visitors. A second purpose is to describe the theory as well as significant concepts and exercises that have evolved to help byway providers attune to the needs of byways visitors. A limited examination of the outcomes of these exercises and concepts reveal their efficacy, but as yet they have not been fully tested. Opportunities for future research are identified.

The program is a nation-wide initiative of the America's Byways Resource Center, Duluth, Minnesota and some of the early successes are highlighted in this paper. The America's Byways Resource Center is a division of the Arrowhead Regional Development Commission (ARDC) in partnership with the Federal Highway Administration (FHWA). Further information on byways and the National Scenic Byways Program of the Federal Highway Administration can be viewed on the website, www.bywaysonline.org (1). The America's Byways Resource Center assists byway providers, state byway coordinators and others to help create sustainable byway organizations and visitor experiences. One of the Center's programs aims to improve the overall effectiveness of highway guide signs, maps, and travel directions—for travelers on America's Byways as well as other designated byways so that the experiences visitors have when touring these treasured routes will be more rewarding, safer and successful.

Based on repeated communications with the community of byway managers and providers who daily deliver their byway's experiences to travelers, one priority became apparent for the America's Byways Resource Center: travelers need more effective assistance to find their way to and along byways. This widespread need was identified in a 1994 study of Iowa's Byways, as documented in a Transportation Research Board paper, where byway managers and byway travelers alike identified the need for effective navigational assistance (2).

Byways provide unique and rewarding experiences, benefits, and memories for the traveling public. While the roadside scenery, interpretive themes, content, and stories contribute to providing different byway experiences for each traveler, one common characteristic prevails across all byways: byway travelers must be able to find the byway and follow the byway to effectively participate in any byway experience. The byway experience simply would not exist without guidance and effective communication of route information. This characteristic of self-directed travel is described by various terms and titles such as wayfinding, self navigation, sign following, map reading, route following, etc.

Dr. Reginald G. Golledge, Professor of Geography, University of California, Santa Barbara, defines wayfinding as *the process of determining and following a path or route between origin and destination* (3). As summarized by Golledge, for travel to be successful, it is necessary for travelers to:

- Identify origin and destination,
- Determine turn angles,
- Identify segment links and directions of movement,
- Recognize on-route and distant landmarks, and
- Mentally embed or visualize the route to be taken in some larger reference frame

known as a cognitive map.

For byway wayfinding, this definition is particularly accurate. Byway travelers define travel goals through destinations—the next town, a well-recognized scenic overlook, an historic landmark, an interpretive stop, or the entrance/exit points of the byway. Yet for travel between

an origin (where you are now) and a destination (where you want to go next) to be successful, wayfinding requires a considerable mental exercise.

For the purposes of this initiative the America's Byways Resource Center uses two primary terms: *Wayfinding* is the mental process, performed by byway travelers, that turns a traveler's goal into decisions, actions, and behaviors. Signs, maps, and brochures are not wayfinding: they are aids to assist travelers in finding the desired way. Wayfinding is continuous problem solving under uncertainty. *Wayshowing* is the communication of information, intentionally undertaken by byway providers, to aid travelers in setting desired goals, making decisions, and taking appropriate actions. Wayshowing involves planning, design, implementation, deployment, and maintenance of theme, image, content, and the physical means of conveying these to the intended audience.

In short, the America's Byways Resource Center differentiates the two terms as: *wayfinding is what travelers do*, and *wayshowing is what byway providers do*. Figure 1 provides further comparison of the distinctions between wayfinding and wayshowing.

Background And Context Setting

Since the 1930s, there have been initiatives based in transportation, parks, tourism, heritage, and community development to conceive, plan, map and sign, fund, regulate, and promote special highways and roads. These special routes offered exceptional opportunities for people seeking experiences in driving for pleasure. The values and characteristics embodied in great motor routes such as the Great River Road/Mississippi River Parkway, the Natchez Trace, the Blue Ridge Parkway and others inspired the recognition that all states and regions possess truly exceptional and treasured roads. These roads offer travelers access to authentic and intrinsic qualities of archeological, cultural, historical, natural, recreational, and scenic significance.

“Scenic Highway,” “Rustic Road,” and “Scenic Byway” were among the terms used to identify such routes—today the term “Byway” is the generally accepted way to identify these special routes. But byways are much more than named lines on maps and commemorative signs on roads.

Byway traveling (and the advanced planning involved that leads one to a rewarding byway experience) has characteristics that are quite different than visiting destination-based attractions. Whereas visiting a park, for example, is a destination experience, the byway experience is lineal travel with a motor vehicle through dynamic landscapes along a prescribed route. In being so, byways present travelers and byway providers (paid staff, resource managers, volunteers, leaders of local byway organizations, and partner agencies), with unique opportunities, needs, and requirements.

Important characteristics of the byway experience for this discussion include:

- The majority of the experience occurs from in or on a moving motor vehicle.
- Planned, as well as spontaneous stops along route that afford scenic overlooks; interpretive exhibits and places that tell stories; and vehicle and personal services are typical.
- The vehicle driver combines the experience of viewing the sites and scenery as well as performing critical motoring skills and following local traffic regulations.
- Pre-trip planning by the travel party is needed to determine route selection and duration of travel as well as in-route and end-of-experience destinations.
- The primary ‘product’ of a byway experience is the array of ‘takeaway’ or take-home memories.

The byway experience is a *leisure* and *educational* experience on wheels. With few exceptions, the experience is available to everyone, there is no charge or fee, and participants are in complete control of how much time they wish to engage in the activity.

For the byway providers and managers, these are among the needs related to effective wayshowing:

- Anticipate the route-finding and route-following needs of the traveling public.
- Plan, develop, and sustain the resources and components that support the byway experience (i.e., signage, information, wayside exhibits, scenic overlooks, parking areas, etc.).
- Provide information at all stages of the byway visitor experience.
- Assure that the desired byway experience does not interfere with the needs for travel safety.

Recognizing these needs, as well as the high level of interest expressed by the byway community, the America's Byways Resource Center developed a program initiative to foster and improve the communication of essential information to byway travelers. While the actual delivery of byway navigation media—brochures, maps, signs, etc.—continues to be the responsibility of state and local byway organizations, this initiative focuses on providing federal, state, and local organizations with an array of information and services designed to support the delivery of byway experiences to the traveling public. In 2006, the America's Byways Resource Center commissioned a consultant with expertise in wayshowing to identify apparent visitor's needs and opportunities for improved byway navigation information and to prepare and deliver materials to byway providers and sponsoring organizations. At the onset of these activities, Michelle Johnson, Executive Director of the America's Byways Resource Center noted, "effective wayshowing for travelers is a critical element to the success of the National Scenic Byways Program. Wayshowing exemplifies the planning required by byway providers to create successful visitor experiences. Successful visitor experiences allow engagement of travelers with the special intrinsic qualities of byways" (Johnson, unpublished data).

THE WAYSHOWING INITIATIVE AND CORE WAYSHOWING CONCEPTS

The program initiative being undertaken by the America's Byways Resource Center is designed to improve the effectiveness of wayshowing for byway travelers. This section describes concepts that have been developed and refined by the America's Byways Resource Center and are considered part of the core body of knowledge for byway providers that is presented in workshops and communication. Byway providers need to understand these essentials of cognitive wayfinding behavior and apply that knowledge to their particular byway settings. As detailed in *Developing Effective Wayshowing for Byways (4)* four key premises underpin this effort:

- Effective wayshowing must provide a reliable and consistent guidance system on all byways
- Effective wayshowing must respond to the unique characteristics of each byway
- Effective wayshowing must be integrated with pre-visit, visit, and post-visit stages of the byway travel experience
- Effective wayshowing must contribute to a safe roadway and travel environment

Premise 1: Effective Wayshowing Must Provide a Reliable and Consistent Guidance System on All Byways

Every byway needs to provide items to communicate with travelers, just as every motor vehicle needs components, such as an engine, wheels, a steering wheel, a passenger cabin, and so forth. The motor vehicle operator relies on these components functioning each and every time the vehicle is driven. Similarly, as travelers attempt to find their way along a byway, they need certain components in order to successfully travel the desired route. For byways, five components make up the Guidance System. On-route components consist of elements found within the roadway environment visible to travelers along the byway corridor.

1. Entrances, Exits and Gateways Components that identify where to enter and exit so that travelers know their position relative to entering and leaving a byway environment.

2. Orientation Stops Pull-offs, turn-outs and other places that allow motorists to stop and help them create, refresh, and expand their mental maps of a byway corridor, its intrinsic qualities, and overarching interpretive theme with exhibits, maps, and other means of communication.

3. Repetitive Route Markers A sequence of visual cues allowing motorists to follow along a byway's entire route.

4. Directional Signage to Planned Destinations Roadside signs that alert and guide motorists to featured stops and attractions along and near a byway.

5. A Portable Byway Map A carry-on map of a byway corridor and its various attractions and amenities. A portable, carry-on map should work in conjunction with the on-route elements of the Guidance System.

Figure 2 shows a Conceptual Diagram that illustrates the four on-route components.

A fundamental principle of transportation information systems that support highway travel is **reliability and consistency**. For example, motorists rely on stop signs being where they need to be, and that stop signs always look like stop signs look everywhere. Motorists know to stop wherever the need is manifested by a stop sign. The principle of reliability and consistency runs through all traffic control systems and devices. Based on the observations of Byway Specialists of the America's Byways Resource Center and as reported in *Developing Effective Wayshowing for Byways* (4) the attribute of reliability and consistency in wayshowing components for byways (entrance identification, orientation stops, route markers, directional signage, and byway maps) is found on only a few individual byways and certainly is not a currently shared characteristic among the national collection of designated byways.

Travelers have come to rely on consistency and uniformity in traffic control devices on all roads, and the byway experience needs to be recognized for its reliability and consistency in communicating wayshowing information on byways. The *Manual on Uniform Traffic Control Devices* (MUTCD) (5) includes the national standards for traffic control devices that regulate, warn, and guide motorists, bicyclists, pedestrians, and other uses of public roads and highways. Just as the MUTCD recommends that professional judgment be exercised in applying highway sign design standards to achieve the effect and appearance of consistency, professional judgment needs to be exercised in achieving reliability and consistency in the application of the guidance system for byways.

Premise 2: Effective Wayshowing Must Respond to the Unique Characteristics of Each Byway

Wayfinding, perhaps more so than in most other outdoor recreation experiences, is at the heart of the byway experience. While all designated byways meet certain thresholds for effective

corridor management and organization, any similarity among byways stops there. Length and configuration of route, landscape, jurisdictional control, theme and story, etc. all color each byway with a unique set of wayshowing challenges for the byway provider. Each byway is unique and each byway provider needs to recognize the unique challenges they face in providing effective wayshowing for their particular byway.

Premise 3: Effective Wayshowing Must Be Integrated with Pre-Visit, Visit, and Post-Visit Stages of the Byway Travel Experience

Wayfinding inherently involves building cognitive maps—mental or internal spatial representations of the physical environment in which travel will occur. Before, during, and after travel, a traveler's cognitive map continually evolves, becoming more accurate, more useful, more trusted, and more valuable. Travelers acquire (learn) more information; experience the surrounding landscape (encode); and recall the travel experience (update). In short, the act of wayfinding relative to byways is not limited to the time a visitor spends traveling along a byway route. Byway providers should not limit their focus on helping travelers only when those travelers are on the byway.

The byway experience, like many other leisure travel experiences, has distinct stages that precede and follow the time one physically spends participating in the experience on site. Pre-visit, including the decision to participate and the planning needed to participate, are two stages that are essential for the actual experience to be possible, rewarding, and meaningful. Wayfinding by travelers occurs in the pre-visit, visit, and post-visit stages, and byway providers need to take advantage at each stage in assisting travelers to learn and process information as well as build and use their cognitive maps. The America's Byways Resource Center and the Federal Highway Administration work to increase the success of market development and promotion efforts from byway providers, when those efforts are coupled with providing essential wayshowing information. Enabling visitors to visualize the travel environment and the benefits that can be associated with the byway can eventually lead to the repeat visitation by byway travelers.

Figure 3 illustrates the pre-visit, visit, and post-visit stages in the byway experience and a brief description of each stage and the implications for byway wayshowing.

Communicating with travelers is essential at all five stages of the wayfinding experience, even in the stages that follow the on-site Travel/Visit stage. The America's Byways Resource Center encourages byway providers to deploy a comprehensive mix of media for communicating with travelers. Certain types of media are expected to be more useful in certain stages than in others. For instance, web sites and print media are inherently more effective for travelers as they begin to build their cognitive maps in the Selecting and Planning stages than are components of the byway guidance system described above. Signs and wayside exhibits are generally more effective for travelers during the Travel/Visit stage of wayfinding on a byway. All media needs to reinforce critical information, messages, and themes that support creating and manifesting travel goals into action. Likewise all media has differing levels of relevancy and usefulness dependent upon which stage a traveler might be in. Figure 4 illustrates this concept.

Premise 4: Effective Wayshowing Must Contribute to a Safe Roadway and Travel Environment

Research reported by the Institute of Transportation Engineers indicates that driver error may account for approximately 90% of all vehicle crashes (6). Further, a report indexed by the Transportation Research Board on the Transportation Research Information Services website suggests that the lack of effective wayshowing elements, “represent(s) a threat to driver safety and mobility, leads to wasted time and fuel, contributes to traffic congestion, and causes drivers stress and embarrassment” (7).

All byway providers must do their utmost to assure that wayshowing for byway travelers is designed, installed, and sustained in an effective manner to support safe driving and navigation. It can be argued that byway travelers are particularly at risk since this group includes a higher portion of drivers who have never traveled a byway’s corridor and consequently they have unreliable cognitive maps (experience) to draw upon when executing driving maneuvers. Further, these are commonly drivers who may be preoccupied (e.g., with family) or may have a different mind set than local roadway users (e.g., commuters or commercial traffic). The America’s Byways Resource Center along with the Federal Highway Administration continue to stress the importance of safety and the benefits that effective wayshowing for byways can provide.

The body of knowledge that supports effective wayshowing is emerging and various interests and professionals contribute to growth and practice of the body of knowledge. Each local byway organization assumes the responsibility for employing the means and methods of communicating with the traveling public. In turn among the various services the America’s Byways Resource Center provides to byway organizations, the “Visitor’s Eye Perspective” is currently the most focused on improving the effectiveness of wayshowing for America’s Byways.

VISITOR’S EYE PERSPECTIVE

This section presents the development of a collection of interactive and experiential techniques and early results of using these techniques to help a sampling byway providers overcome assumptions about how visitors view their byway. The techniques reflect the theory that the best long term planning and development of effective travel products occurs when byway providers consider a *visitor’s eye perspective* during the design of websites, travel brochures, driver navigation maps, roadside interpretive panels, or audio media intended for travelers. A sample of workshop participants who experienced these activities and concepts, revealed a level of transformation in perception and described impacts to their ongoing byway work. The strength of their stories suggests that further testing of the curriculum outcomes is warranted.

Included within the description of the activities are observations of changes in learner awareness that will be further tested as the activities are further developed. As part of the development of the activities, we have conducted a limited formative outcome evaluation of these activities. A purposive sample of seven byway providers who had participated in the activities were interviewed by Dr. Jean Eells, E Resources Group. The sample was chosen to include people who could reflect on their awareness and understanding of the visitor’s eye perspective and describe uses of the concepts in their byways work. Signed waivers of confidentiality to use quotations were obtained prior to developing this paper, and all further quotations by individuals are presented with their permission and verification.

People who form the organized groups to support designation of a byway have keen interest in their communities, in the resources that exist along the byway, and in preserving or protecting roadside features, viewsheds or cultural or historic qualities. They are familiar with

the details of route navigation in their areas. Some, but not all groups include members of their communities who can help manage promotion or incorporate marketing into their efforts. In all cases, familiarity with the visitor experience needs to be understood before groups embark on developing their promotional and traveler products.

Byway providers on designated byways represent many different levels of understanding about planning for a traveler's experience. Byway providers can include paid byway staff, volunteers, or governmental agency staff who are very familiar with their own roads, resource sites and visitor facilities, but they can have difficulty seeing as a visitor sees. Therefore, an important early task when introducing concepts of effective wayshowing is to help byway providers address and question their own assumptions that a new visitor is likely to see the community or road navigation in the same way a local does.

These techniques are employed individually or in combination depending on the situation. In summarizing the techniques, they will be described in this order:

- Good Trip–Bad Trip exercise
- Downloadable Map exercise
- Front Seat–Back Seat observations
- Byway visitation assessment exercise

Good Trip–Bad Trip Exercise

This exercise is most effective with diverse groups including a range of byway leaders and advocates. The immediate objective of the exercise is to have participants visualize, through their own experiences, a connection between their emotions (good or bad feelings about a personal trip) and the physical attributes of that trip's environment; that is, friendly service people equated to a good trip emotion or lack of directional signs led to getting lost and a bad experience. Ultimately, the exercise often generates new comprehensive lists of attributes, services, amenities and features the group realizes should be included in their byway visitor plan but hadn't previously considered. Having available bathrooms would be an example.

Small groups of 2–3 participants, are asked to recall, think about, and discuss a recreational driving trip taken other than on the byway, and list the elements or features that made the trip experience a good one. Conversely, people are asked to think of elements or features that contributed to a bad trip experience. Each small group is then asked to share their ideas with the large group for a good trip and bad trip. The ideas are tabulated in two columns. Duplicate ideas are removed and the group begins to visualize the list as a checklist of important services, resources or travel tools they would want to see on their road, based on their personal travel experience.

In this activity, the importance of visitor needs are reinforced for learners through repetition when a good trip attribute of "have marker guide signs" is complemented by a bad trip saying "no guide signs to follow" or "got lost without signs." A longer example list or paired comments can be found in the January/February 2009 issue of *Vistas* (8)

On the Flaming Gorge Scenic Byway in Utah, the group included these terms among the Good Trip attributes:

- Informative signage
- Clean, well-maintained facilities
- Good food
- Safe experience
- Handicap accessibility (also accessibility in general-not just for handicap)

- Convenient and easy to identify resources

They included these descriptions among their Bad Trip list:

- Bad directions and travel information
- Bad customer service
- Not authentic
- Getting lost

During the discussion following the exercise and presentation, the group discussed how they should repackage their existing brochures so that one is a lure piece and the other is available for those travelers actually visiting the byway.

The Good Trip–Bad Trip exercise has been used most often. Groups discovered a number of features they need to incorporate into their planning. In some cases, groups discover the obvious needs that have been overlooked. In one case a group began talking about having several brochures with different levels of detail and then when they examined their own brochures they discovered that one of their existing brochures had been designed to provide introductory information while the other was intended for travelers.

This technique appears to generate insights that can be readily transferred and adapted by byways providers to serve their own needs for planning. Don Jaques, Partnership Coordinator for Ashley National Forest, describes an outcome of this experience for the Flaming Gorge Scenic Byway group in Utah. “We’re very much focused on wayshowing. Our byway group has determined that we need to adapt this exercise and do it with two groups on our own byway. One team should be made up of people who have traveled on these roads but haven’t traveled it as a byway experience, and the other team with people who haven’t seen it before” (Eells, unpublished data).

Downloadable Map Exercise

The principal value of this technique is to help byway leaders develop an understanding of how byway visitors might use choose and plan a byway visit. In considering Figure 3 and 4, leaders are encouraged to focus on the media a potential traveler will consult before making a decision to travel a byway. It is reasonable to assume that some travelers arrive at a byway serendipitously with no information while others arrive with considerable background information (9).

In Figure 4, the availability of internet service and devices is indicated as being more common as an on-the-road travel tool. Several byway groups are actively developing materials directed at these connected travelers. “More people are looking to the Internet for information than ever before,” according to Janet Kennedy of Lakes to Locks Passage, Inc., New York. “You could be an arm-chair traveler with this technology, so we are focusing our efforts on developing effective interpretation to go with the mapping technology” (Eells, unpublished data).

In setting up this exercise, groups are divided into several families who are charged with making travel decisions about a byway visit the following day. Each “family” receives a set of downloaded materials that constitute all that is available about their byway. Each group is assigned a set of tasks and evaluations of the available material including:

1. **Make decisions** on the planning roles of family members
2. **How will you spend your day?:** With your family, outline a day-long itinerary.
3. **The Byway Experience:** Does the map give clues to the byways intrinsic qualities?

3. Assess the Map: Acknowledge that this byway has taken the initiative to create a downloadable tool for their visitors. What can you learn from them?

4. Important Map Considerations: Brainstorm as a group important considerations and elements that should be included in maps like these.

With this exercise, the resulting discussion and observations produce a clear direction for more comprehensive visitor planning and design features that need to be included in a byways media options. Melissa Hendricks, byway coordinator for Illinois DOT, observed the reaction of learners at a conference, “A lot of people were really engaged in looking at the maps at their table. Some of the maps were a real eye-opener on the difficulties a map that lacks necessary details can cause” (Eells, unpublished data).

Two participant insights emerge with some consistency from this exercise. Participants recognize it is important to provide information about the time needed both to drive the route and to experience places along it. Participants comment that they better understand how to present their resource information and activity sites so a traveler can make good judgments about the value of different sites.

The Downloadable Map exercise was first conducted in April of 2009. Anecdotal responses were positive. One state coordinator said she’d wished that their state had conducted the exercise a month earlier as they would have designed their byway maps in very different ways. The exercise is effective at creating an “ah hah moment” that helps byway providers generate new criteria for examining the effectiveness of their own downloadable maps. At least three states have wanted to incorporate the exercise into upcoming statewide byway conferences. A more complete discussion of this exercise can be found in the May/June, 2009 issue of *Vistas* (9).

Front Seat–Back Seat Exercise

Leaders of a byway or tourist route can gain immediate insights by directly testing their assumptions about how easy it is to find sites or follow a route. The wayshowing objective is to provide signs, maps or other media that help unfamiliar travelers navigate locations where they must make decisions. Recognizing issues of safety when drivers are in unfamiliar settings, it is particularly important to identify locations of confusion or indecision. These are critical points where effective wayshowing information will be required.

The Front Seat–Back Seat exercise requires a driver and navigator who are completely unfamiliar with the area and roads. The front seat team obtains the available route information from a visitor center and can only use the available maps or descriptions to follow a byway. No added navigation tools can be used. Back seat observers simply observe the behavior and tabulate results.

Observation of new travelers using the byways materials to find sites on the byway provides important lessons about what byway vistas and features can actually be experienced while navigating the road. Shirley Fredericksen of Golden Hills Resource Conservation and Development, Inc., describes her experience navigating the Loess Hills Scenic Byway in western Iowa with two women much older than age 65:

We drove and asked the older passengers to find their way using the maps, written instructions, and following the signs, and then we recorded where the problems were at on the Byway. There was one place where we took the same loop twice because they could not figure out which way to go when they returned to the byway spine. We also

had decision issues when we got into larger cities where there were many more distractions and they had more difficulty finding directional signs quickly among all the of the other signs. If your byway demographics show you have predominantly older travelers, you'd better test your byways with older travelers. (Eells, unpublished data)

Testing traveler information before final production is an essential step in making certain the media produces the desired results. A valuable back seat observation when using this technique has been that travelers can spend an inordinate amount of time navigating and less time actually experiencing the byway. The Front Seat–Back Seat exercise has been most influential in drawing attention to the importance of better addressing the wayfinding needs of byway travelers through effective wayshowing planning. The first exercise was conducted in September, 2007, and produced a video which shows two drivers unfamiliar with the byway struggling to navigate while investing more time in navigation than appreciation of the landscape.

This video has also been used to provide groups with a realistic idea of how unfamiliar byway travelers can struggle to follow a combination of maps or brochures. In January, 2008, planners in southeastern Colorado conducted a multi-route set of exercises. In this case, a total of eight driver-navigators formed two teams and drove each route. The Colorado Department of Transportation traffic engineer for that region was an observer in one car. The multiple approach yielded good quality information.

Byway Visitation Assessment Exercise

This technique is used when a byway group has established a goal of developing traveler materials (e.g., signing, brochures, interpretive design, mapping, websites, etc.) for their road. Typically, a workshop setting provides an overview of the concepts and principles of Effective Wayshowing for Byways.

An important added step with this technique involves gathering visitor impressions of the byway. A group of individuals associated with the byway are recruited to actually drive their route with the instruction to identify aspects of a fresh visitor's perspective. Ideally, a non-byway individual is recruited as the navigator or "fresh visitor."

One outcome of this exercise was a heightened awareness of inadequate maps on the byway. Utilizing the visitation assessment on the Ashley River Road in South Carolina included producing a set of individual comprehensive assessments instruments. The byway coordinator developed a drive recording form and a set of travel instructions to develop consistency. For this particular byway, participants were directed to select a single route to, along, and off the byway and to coordinate this single route with each of four visitor centers. Using the driver recording forms participants collected information on locations where teams got lost, their experience asking about the byway at a visitor center, effective key words used when asking about the byway and the sequence of events for travel (e.g., missing or covered signs, complex intersections, or inadequate maps). One unique outcome is that one visitor center provided a hand drawn map with street names and landmarks specifically addressing apparent complaints from drivers about getting lost.

TOPICS FOR FURTHER RESEARCH

The initiative of the America's Byways Resource Center to improve the effectiveness of wayshowing to meet the needs of travelers to and on America's Byways has identified several topics that would benefit through additional research and development of the body of knowledge

that now supports the essentials of cognitive wayfinding behavior as applied to byway settings. These topics include but are not necessarily limited to:

- Effective methods for communicating with and training byway providers regarding the importance of effective wayshowing for byways and approaches for local byway representatives to bring about delivery, implementation and maintenance of byway guidance system components.
- Identifying the information needs of byway travelers at pre-visit, visit, and post-visit stages of the byway travel experience as well as the specific relevance of various media at each stages.
- Best practices for updating jurisdictional policies and practices for implementing uniform highway guide sign systems on federal lands roads, primary and secondary highways, and local roads and streets.

At the time of preparing this paper the Iowa Department of Transportation and the Louisiana Department of Culture, Recreation, and Tourism were in the process of undertaking integrated, statewide, multi-byway projects to implement effective wayshowing improvements for state-designated byways based on the premises described in this paper. Additionally, the National Park Service is preparing a wayshowing plan for the 6,000-mile auto tour route associated with the Lewis and Clark National Historic Trail that will include primary research aimed at identifying needs and desires of travelers for wayfinding-related directions and information for travel along the route and to its various attractions.

SUMMARY/CONCLUSIONS

The program the America's Byways Resource Center implemented to improve the effectiveness of America's Byways included development and use of theoretical models that make concepts about the visitor's experience more explicit and has used exercises that assist byway providers in creating new self awareness of the visitor's experience of navigating and spending time on their byway. More plainly, the models help byway providers understand how travelers plan, do, and reflect upon a byway trip, and the exercises help the byway providers to develop their own skills and a sense of urgency to systematically assess their own byways.

The byway providers interviewed who had participated in events where these concepts, models, or exercises were presented, demonstrated their understanding of the visitor's experience in ways that suggest learning occurred that transformed their approach or the approach of their fellow byway providers. The interviews yielded common themes and awareness between the respondents. Importantly, each one differentiated between the terms wayfinding and wayshowing and felt the terms were useful to them as they work with other byway providers—meaning the terms are quickly understood and help clarify their mutual work goals. Additionally, they acknowledged that the whole visitor experience includes stages which exist outside the Travel/Visit stage, and most described their compelling stories of commitment to improving an aspect of their byways that were catalyzed by experiences similar to those actually presented by the Byways Specialists.

Although these assessment results are preliminary, there is enough evidence of success to warrant further testing of the theories and educational evaluation of the exercises in order to develop the curriculum.

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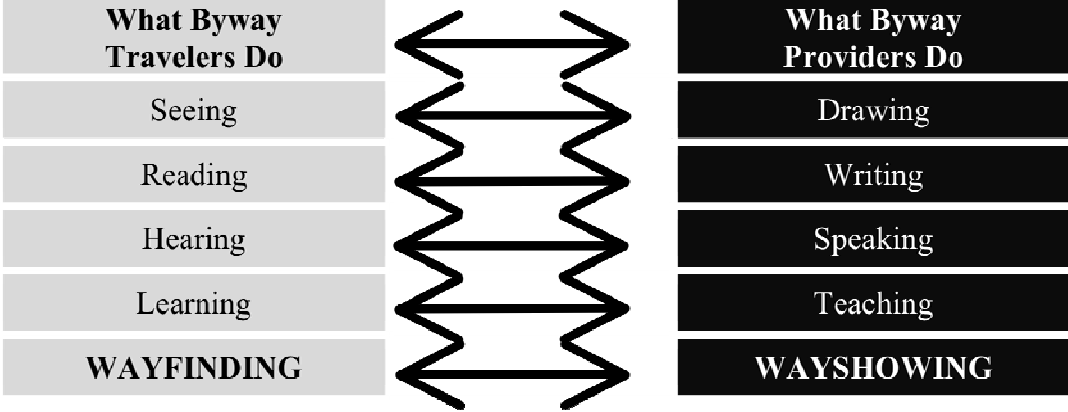


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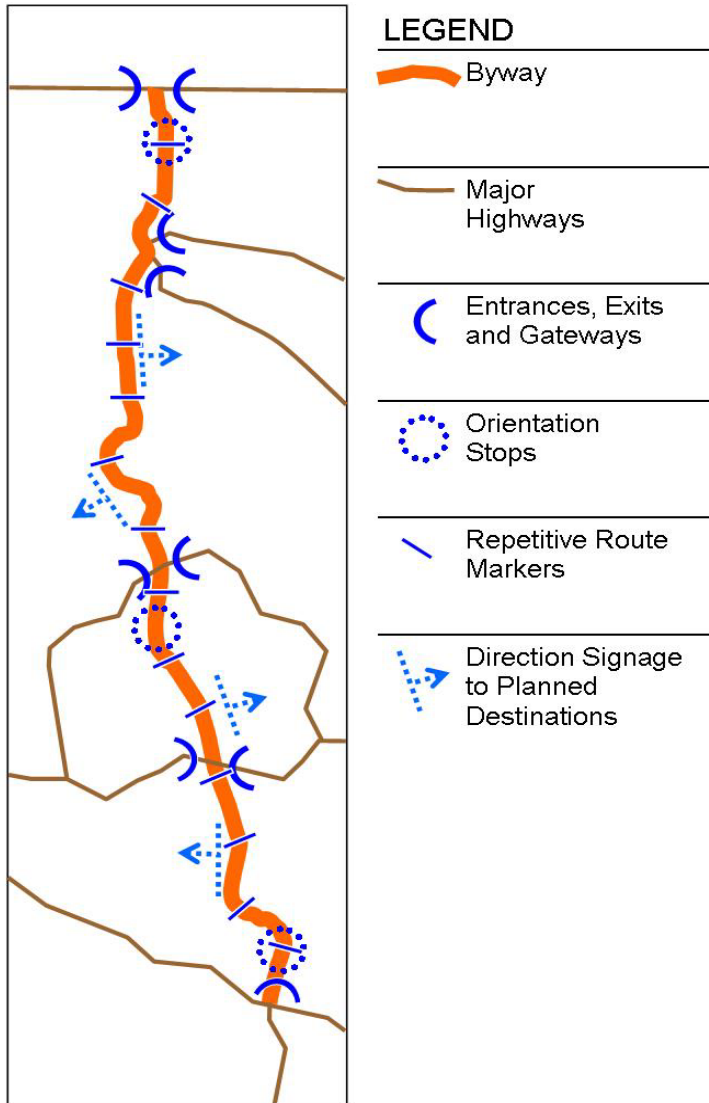


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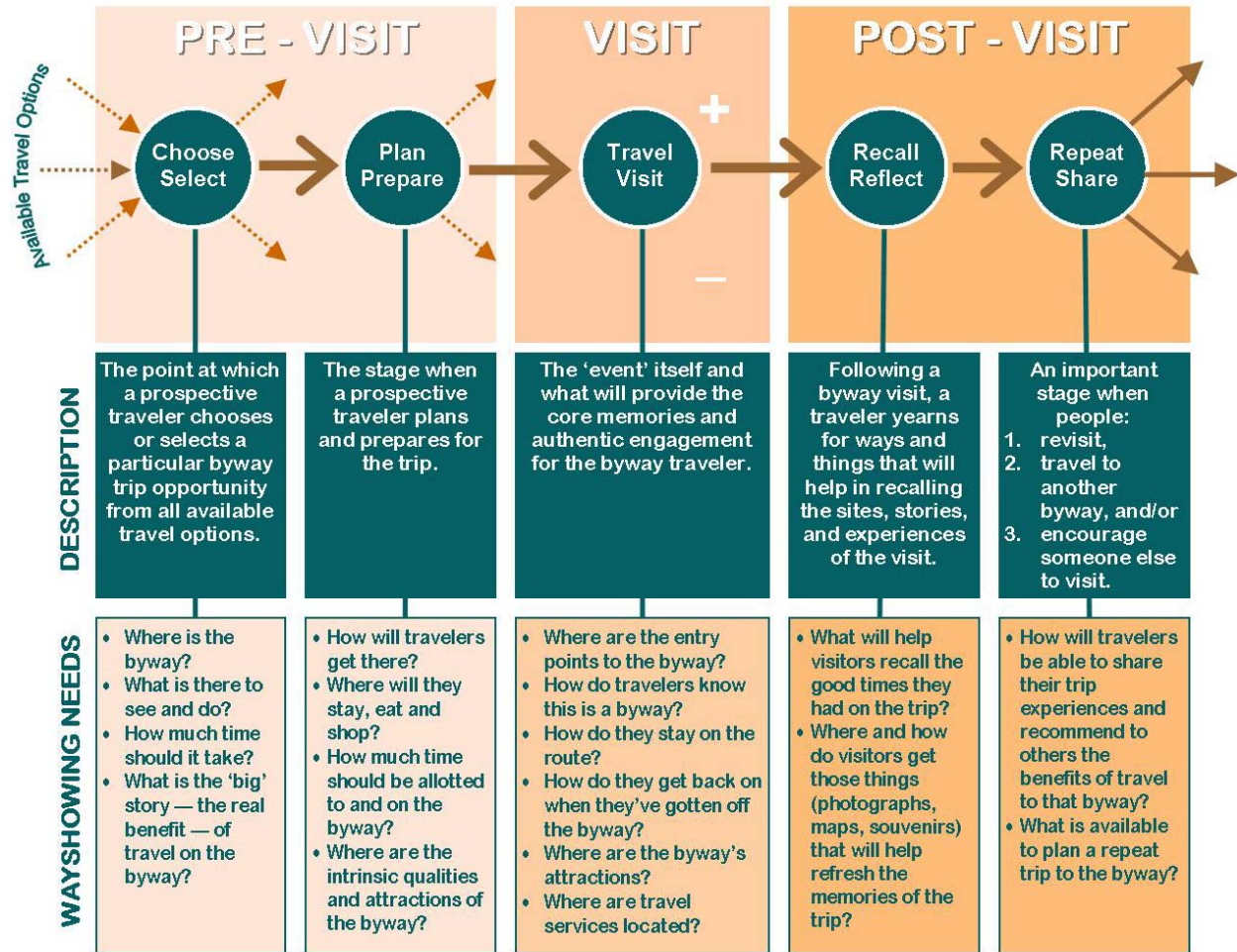


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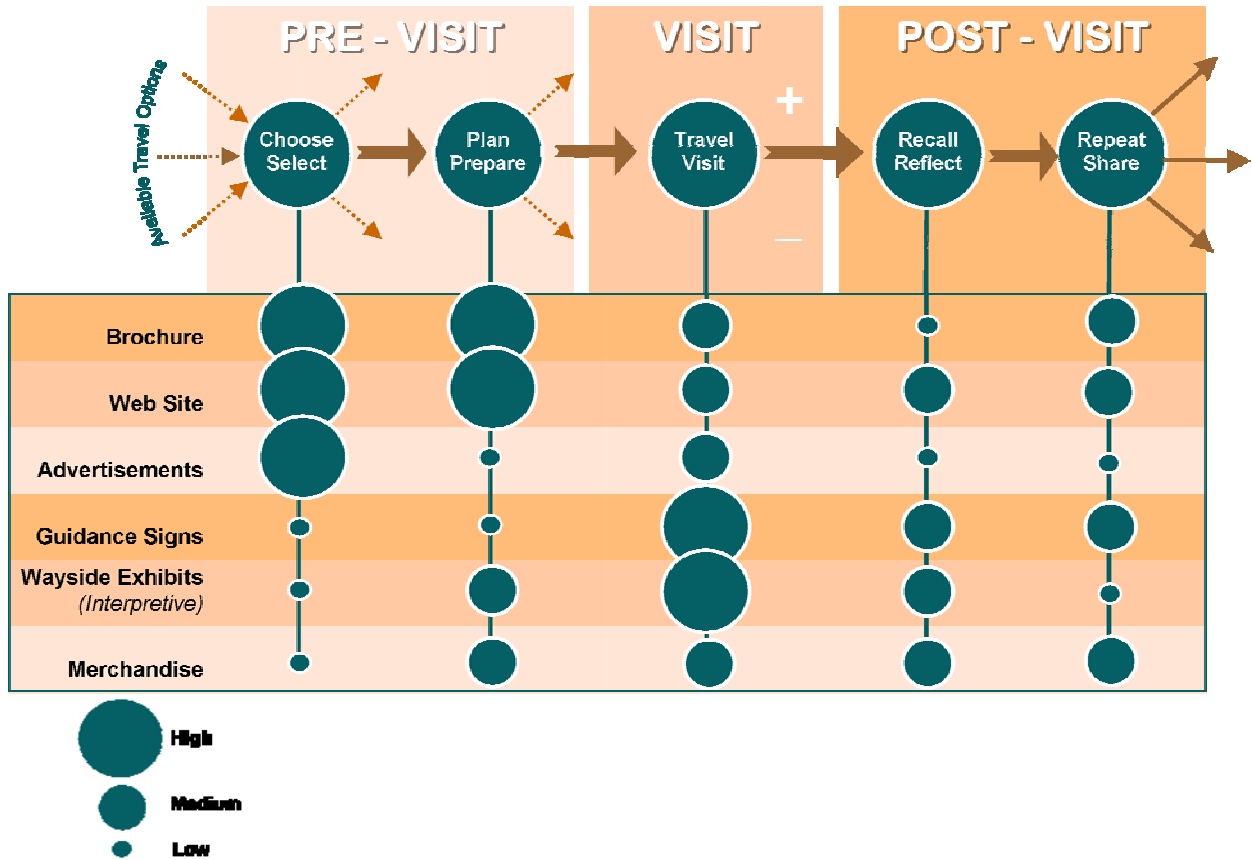


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