What is The Wayside Companion?

The National Park Service is known for quality interpretive programming and exhibits, including outdoor exhibits (waysides). National Park planners receive many requests from projects outside the National Park System for interpretive training, assistance, and planning. The Wayside Companion is an outgrowth of such requests. We provide this manual thanks to guidelines created by Lake Champlain Basin Program, Lewis & Clark NHT in Montana, National Park Service’s Harpers Ferry Center, Delaware & Lehigh National Heritage Corridor and our own experience.

The Wayside Companion is offered to cooperators who are developing their own waysides. It will help you determine if wayside exhibits are right for your project; how to define your interpretive themes, goals and objectives; how exhibits are fabricated and produced; and how to create the exhibits you want.

Why Wayside Exhibits?

Wayside exhibits can effectively convey three types of messages:

- Natural and historical interpretation of specific sites and stories
- Orientation and wayfinding for visitors to the watershed
- Information on resource management activities, policies and safety issues.

By engaging visitors at the times and places they want information, their experience can be made more meaningful and rewarding. Well designed and properly placed waysides can give people new understanding, insights, and interests in a resource, place, or story.

Waysides can also provide information about park or public facilities, services and management policies. They can alert and educate visitors on safety and resource management issues at the point of danger or environmental impact. They can provide orientation and wayfinding information which helps the visitor plan and have an enjoyable experience.

Waysides can help protect resources by establishing an official presence at remote and unstaffed locations. The simple presence of a wayside exhibit can sometimes be an effective resource protection tool and help instill a sense of consistent and unified management.
Welcome

Land, rivers, and trails, form much of the foundation for Michigan’s 21st century economy. Genesee, Lapeer, and Shiawassee counties are rich in each of these resources, but many people don’t know they are there and what they are missing. Separately and together, conserving land, restoring rivers, and building trails saves money, makes money, and assures a way of life. Planning for land, water, and trail conservation, as well as investing in their improvement must be a priority, not an afterthought for this region.

In the fall of 2003, the Center for Applied Environmental Research’s Greenlinks Program was formed to assure great places – to assist communities and organizations focus on land conservation, water resource protection, and trail and recreation development. Funding for Greenlinks has been made possible through the generous support of the Ruth Mott Foundation, the Saginaw Bay Watershed Initiative Network, Flint Rotary, the Kodak American Greenways Program, and the Michigan State University Land Policy Institute.

Greenlinks, in cooperation with the National Park Service – Rivers, Trails, and Conservation Assistance Program, is encouraging the understanding and stewardship of the Genesee, Lapeer, and Shiawassee Region’s natural, historical and recreational resources through the development and implementation of interpretive wayside exhibits.

By focusing on those areas that preserve mid-Michigan’s natural history, as well as the places people frequent for recreation and enjoyment, this Wayside Companion is designed to assist in planning for and constructing interpretive wayside exhibits. Through interpretation comes understanding; through understanding comes appreciation; through appreciation comes stewardship.

A theme is an over-archsing or unifying concept that is important to understanding the significance or context of a particular resource, place or event. It provides the framework or context for the stories you want to tell. The Greenlinks Program has adopted the theme, “Assuring Great Places.” The theme describes both the natural and human communities which interact with and are influenced by this region’s natural resources in the past, present, and future.
Overview

How do you know when you are “there”? Whether you are walking through town, driving back roads, hiking or biking a trail, how do you know you have arrived at your destination? Trails, heritage areas, and waterways ignore political boundaries by following a landscape feature or a storyline or both. Unlike a park with a clear boundary, these places are living spaces where landscapes can vary greatly as you pass through them.

Developing visible connections between landscape features and/or a storyline can help to define a region and acknowledge a sense of place. This visual link is known as a visual environment. A visual environment greets people, both residents and visitors alike, leads them to the special places and quietly sets the stage for people to look for the signs to know they are still in the right place. If done well, the visual environment can unify and strengthen regional identity through signage standards and stories.

Developing an easily navigable and understandable connection between people and places is a complex process. The wayside exhibit (outdoor exhibit) is a key tool for making this connection. This manual, Wayside Companion, navigates teams through the process of creating a visual environment for pedestrians through the use of wayside exhibits.

What is a Wayside?

Wayside exhibits are a means for exploring, learning about, enjoying, and conserving your special place, neighborhood, park or community. They combine provocative text with vivid graphics to tell a story and encourage a visitor to think about the landscape and events that happened there.

Colorful exhibit panels with interesting graphics are proven to lure readers by attracting their interest. Usually found within parks, trails, downtowns or neighborhoods, they indicate that this place is special and worth a pause. If you have enjoyed such an experience, you have personally been waysided!

What is Interpretation?

Interpretation is more than facts or stories; it is information that builds connections between personal interests and a place, event, resource, or landscape. The result is a deeper sense of history and appreciation for the place, resource, or landscape. This heightened appreciation can lead to protection and preservation of a person’s special place or thing. A place so loved stands the test of time.

Why Bother?

Carefully planned and developed waysides can quickly draw our attention to a place or landscape. The panels can reveal stories behind the landscape and encourage us to think about those special places, resources and events. Through interpretation comes understanding; through understanding comes appreciation; through appreciation comes stewardship.

People Remember...

10% of what they hear; 30% of what they read; 50% of what they see; 90% of what they do.

When an exhibit encourages interaction and stimulates thought it touches its readers.
Wayside Exhibit Messages

Wayside exhibits deliver three types of messages:

1. Interpretation of natural, cultural, historical resources, specific sites and stories.
2. Orientation and wayfinding to help visitors plan and enjoy their experience.
3. Management objectives such as safety and resource stewardship to help direct visitor behavior and protect resources.

Questions to Consider
Before You Begin:

- What is the message or story you expect to convey (theme)? What are your expectations (goals)? How will you measure success (objectives)?
- What will visitors expect? How will you meet the expectations of both local and visiting audiences?
- What special considerations will be made for children, families international visitors, and the impaired? How will you address the American Disabilities Act Guidelines (ADA)?
- What resources already exist and how accessible are they to everyone (other signage, publications, audiovisual shows, and audio cassettes)? How will your exhibit relate to the other available media?
- Who are your prospective and current partners? What will their role be in the project? How will your exhibit/s relate to your partners and their projects?
- Do you need sign permits, ordinance changes or policy adjustments?
- What are your budget constraints?
- What is your timetable? When do you want to break ground? What preparations have to be made for installation?
- Can you establish a successful routine maintenance schedule?
Project Steps - Planning Through Installation

Specific steps for successful completion of a wayside exhibit project are outlined on this page. Further detail and explanation of these steps follow throughout the Wayside Companion.

Gear Up...
Planning

- Form a wayside exhibit team – Project coordinator
- Survey resource and exhibit site/s – Team
- Brainstorm & determine most compelling themes and stories – Team
- Match stories and sites, select site/s and exact locations – Team
- Select exhibit planner for each prospective story – Project coordinator/team

- Develop a Wayside Exhibit Plan – Project coordinator/team
- Identify a budget – Project coordinator

Charting the Way...
Design & Development

- Tell the story – draft the text – Individual exhibit planners
- Research information, graphics, photos, quotes to support stories/sites – Individual exhibit planners
- Select graphics and/or artist/illustrator for panel design – Project coordinator/team
- Select panel size, material, orientation, and base – Project coordinator/team
- Review & revise text – Project coordinator
- Compile map info, select map maker – Project coordinator
- Finalize panel design & text – Project coordinator – Team for final approval

- Select fabrication contractor – Team
- Assemble and coordinate production package – Project coordinator

Taking It to the Street...
Fabrication, Installation, Maintenance

- Final panel review – Team
- Coordinate panel fabrication – Project coordinator
- Coordinate base fabrication – Project coordinator
- Coordinate assembly & storage – Project coordinator
- Establish maintenance schedule – Site staff/volunteers

- Secure necessary permits, approvals – Project coordinator – Team
- Prepare installation site – Site staff/volunteers
- Installation – Site staff/volunteers

- Obtain maintenance agreement/s – Site staff
- Maintain exhibit – Site staff/volunteers
Introduction

Landslips evolve as each influx of new residents creates their own personal imprints. Natural systems react to each change, also affecting how landscapes work and look. While landscapes may change dramatically over time, clues remain behind, bookmarks of earlier stories grown silent.

Well chosen graphics, captions and quotes tell stories better than any written material and make connections with the readers. When creatively designed and well placed, outdoor exhibits build personal connections with the surrounding landscape. Otherwise, well written waysides may miss the intended audience because they do not successfully compete with the real reason the visitor is in the area.

Anyone can create a book on a stick, a long list of important dates, facts, statistics and technical terms. While all are important to the writer, even the most curious passerby has other things on their mind.

Your challenge is to create a sign that clearly must be explored, if only for a moment.

This section, “Gear Up”, provides the steps for identifying, planning and initiating successful panels. You are ready to embark on an exciting adventure – creatively enhancing your visitor experience and raising the appreciation for resources you personally hold dear.

The Wayside Exhibit Team

Project Coordinators typically select the team members from a list similar to that found in the example box on this page. Clarification of each team member’s role is essential to assure diversity of available resources and story approaches.

Project Team – Tasks:
- Identifies the prospective stories
- Inventories the selected areas, looking for contributing landscapes, natural systems, structures and remnants
- Provides advice and personal insight to Project Coordinator
- Identifies theme, goals and objectives
- Develops design and layout of wayside panel templates
- Reviews final drafts for accuracy

Project Coordinator – Tasks:
- Team Leader
- Finalizes interpretive themes (stories), goals and objectives
- Facilitates panel development
- Reviews drafts
- Keeps the project on track/time
- Assures completion of the Wayside Exhibit Plan and Fabrication Package
- Edits and approves text, captions and graphics
- Tracks approvals and theme/goal compliance

Exhibit Panel Leader(s) – Tasks:
- Responsible for initial research of individual panels
- Drafts initial text
- Locates and recommends choice of graphics
- Coordinates reviews by Wayside Exhibit Team
- Coordinates team effort for assigned panels

Exhibit Designer – Tasks:
- Develops the design/layout template for the panels
- Identifies the fabrication specifications
- Establishes the process for using the template to lay out individual panels
- May layout individual panels for Exhibit Panel Leaders
- May prepare the fabrication package for the project

Example List of Team Members:
- Librarian
- Historian
- Naturalist
- Scout leader
- Home school teacher
- High school student
- Vo-tech instructor
- Civic leaders
- Students of all ages
Inventory the Region

After assembling the team, a thorough inventory of the project area is essential. Uncovering layers of stories requires sleuth-like skills. Seek mysteries to solve, clues of hidden stories and unseen contributors that shaped the current landscape. Here are the steps:

The Walk-through
Allow plenty of time for each location. Walk slowly through each area, documenting stories that most find interesting. Digital cameras are great for noting view shed and possible panel locations. Do not discount stories during the walk-through. That comes later. Do not worry about having too many signs or the budget yet.

Narrowing the List
As you check through the different sites and their stories, one or more themes (storylines) will become obvious. All the locations that support that story in some way become your “A” list. Stories that could fit within the main theme with some work – or further research become the “B” list. The “C” list holds the rest. While you may still have too many signs on the “A” list, it will change as you move forward.

The Assignments
Each team member will select a few panels to investigate further. Hopefully you have enough team members so at least two people can champion each panel. If even luckier, they will have differing interests and perspectives.

Panels will be eliminated during this process, typically based on:
- Lack of strong graphics or artwork that can depict or enhance the story
- Too much text needed to flesh out the story
  (more than a three or four sentence paragraph)
- Artwork too expensive to produce or not available
- The rights to the artwork exceed a sensible amount
- The only graphic depicts what people can already see

“Uncovering layers of stories requires sleuth-like skills.”

Example
Walk-through Inventory:

- Round brick tower – old water tower for steam locomotives – remnant of old coal bins nearby
  (location – right by bend in the river on old RR bed)
- Trickle waterfall – appears to begin on Sam’s farm property near cliff – research water origin and see if there is a story
- Beaver dam on Tipple Creek 1/4 mile from river entry – first beaver reported in region since 1957 – may be story here about why they disappeared or why they returned – perhaps settlement patterns story here as well as what attracts beavers to an area
Themes, Goals and Objectives

A unified theme can provide a broader context for individual exhibits and help visitors better understand a place or event’s significance. The theme should be the central idea or main plot of the story that can be discovered or uncovered through the region’s resources and landscape.

The best recipe for success is for all regional team members to agree upon their region’s themes, goals and objectives. Teams build success by applying these steps.

**THEMES**

The theme is the central idea or message you want to convey. It is what you are going to tell your audience about your topic in one simple sentence. For example:

*Mining attracted hundreds of new residents to the region, changing the landscape from rugged mountains into the hamlets and villages you see before you.*

From the long list of possible stories you developed collectively, identify the most compelling storyline – the story that the broadest number of people would select and one that includes the most locations within the region (or along the trail). Identify all possible components of the story, including different perspectives. Questions that might help:

- Is this story already told somewhere else?
- Are graphics available that tell or enhance the story?
- Is the story better told in a brochure, booklet or tour tape?
- Is this a story that many people would find interesting?

**GOALS**

Goals are broad concepts and deal in general terms rather than specifics. There are three sets of goals.

1. **Organizational:** Why are you doing this? What do you hope to accomplish?
2. **Management:** Resource stewardship, safety, orientation, wayfinding or other desired behavioral changes.
3. **Visitor:** What do you expect the visitor to leave with?

Visitor goals are what you hope your visitors will understand or feel. Using the mining theme for example, the visitor goals may include:

- Understanding why people settled in the region
- Knowing where new settlers came from
- Acknowledging how different the landscapes were then vs. now
- Identifying with the new settlers and their hardships

**OBJECTIVES**

How will you measure success? Objectives are your measuring stick – the way to know if you are meeting your goals. For example, our goals will be met when:

- Visitation increases
- Early names for places begin reappearing
- The “old-time” wreaths are made in classes and appear once more on graves in the cemetery

Life Along the Canal is the regional wayside theme for the Delaware & Lehigh Canal NHC, Mules and Men is this panel’s theme
Interpretation: Telling the Story
Wayside exhibits are used to display three different types of messages; information, orientation and interpretation. While it seems efficient and a good way to eliminate signs by putting all three types of messages on one panel, it confuses the reader. Key safety tips could go unnoticed.

Understanding the difference between information and interpretation is the key to a successful interpretive panel.

Interpretation:
- **Connects** the place, story and reader through powerful graphics, short analogies, quotes, metaphors and simple examples. A unified theme (storyline) connects physically unconnected places and provides the reader with a better understanding of the site’s significance or relationship.
- **Lures** one into self-education. It uses a few words to draw readers in and provoke them to ask new questions. Rather than simply providing information, set readers up to draw their own conclusions and leave them with ideas to ponder.
- **Headlines the story.** Make sure your theme gets across even to people who don’t read the text, by telling the story in the headlines, sub-headlines, and graphics. Fill in the details in the text.
- **Shows** instead of telling. Use photos, relief maps, illustrations and drawings to tell your story for you. Well done, art doubles the impact of your story and reduces the words you need.
- **Engages** the senses. Success is measured through visitor interaction and curiosity:
  - “Look for the…”
  - “Touch the…”
  - “Can you hear the…”?
  - “See if you can find the…”
  - “Imagine the…”
  - “Smell the…”
  - “Imagine…”
  - “Picture this…”
- **Uses** metaphors and comparisons. A metaphor or comparison conveys your idea in very few words. It helps place the reader right into a comparable situation.

“If you think you are too small to make a difference, try sleeping in a closed room with a mosquito.”
— African Proverb
Teaching Tolerance Spring 2003
When is an Exhibit Panel Like a Mime?

Ever watched a mime at work? The good ones gather crowds and the bad ones are alone – even with their best efforts. It is the same with panels. No matter how good the intentions, panels do not succeed unless they draw an audience.

Waysides compete with landscapes, activities, family members, time and any other distraction you can imagine. Only 1% of the people who pass a wayside are actually there to enjoy whatever it has to share. Everyone else will be an “accidental” participant.

If you can get a few people to pause long enough to grasp the message, you are accomplishing a challenging feat. You did something right!

Three Learning Styles

We learn through a variety of methods but each of us usually has one type that is stronger. The three methods that most of us use in varying degrees are:

- **Visual** – People who learn through observation, visualization and imagination.
- **Auditory** – People who learn by connecting sounds, voices and life experiences.
- **Kinetic** – People who learn by touching and feeling everything around them to connect to the information.

If you can explain a complex process with a graphic… go for it! Our familiar terms are jargon to others.

What is a watershed?

Who Are Your Visitors?

While you can undoubtedly describe your audiences and their interests, can you also describe their learning styles, recreational priorities and/or their hobbies? No? Neither can we, however, we can simplify who we want to reach:

- **Studiers** enjoy learning and seek out any learning opportunity. Studiers are 3-5% of the population yet would eliminate 95% of the prospective readers if written for them.
- **Strollers** are our target group. As 75-80% of the population, strollers are enticed when the panel is appealing. They will then pause, glance at the graphic(s) and perhaps even read the first couple of words of the captions. If the captions or the catchy title tweaks their interest, they may stand still for at least 15 to 25 seconds.
- **Streakers** rarely stop. They will, however, glance around and might pause if something really catches their attention. As 15-20% of the audience, they can be totally distracted by thoughts, keeping an eye on their children or pets, or on some other goal. An attractive panel may slow them down enough to be considered a stroller.

“Only 1% of the people who pass a wayside are actually there to enjoy whatever it has to share.”
Writing - Steps to Success

Research
Look for stories that haven’t been told. Even a well-know landmark or a familiar story present opportunities for revealing an unexpected twist or highlighting an overlooked detail.

When we participate, we learn better. If there is any way to create a mystery or present differing points of view do it! Be sure you present these views in an unbiased way so the panel-observer forms an opinion on their own.

Write It Up
Write up the story, including everything you feel is germane. Next, count the facts. Eliminate every fact you can and still tell the story. Example:

Augustus Stern, third generation family owner, used this field in the same way his ancestors did until he died. His children will continue the family tradition and continue growing wheat. This will make 211 years this field has been plowed. His grandchildren expect to continue the family business in a few more years.
(From 53 to 24 words)

Say what is necessary not all that can be told. Try to limit the main text to about 100 words, or 4 to 6 sentences.

Graphically Speaking
Locate strong graphics to replace words. The right graphic is worth a thousand words.

Quotable
In the example below, a strong quote replaced the draft text.

“Sterns farmed here 211 years so far – and my grandchildren are now committing to the next 200.”
— Augustus Stern, 2003
From his personal farm journal

Rethink your text
Evaluate whether or not the panel requires text (label copy) and/or captions.

Initial Test
Do a draft layout. Does it work for you? Make adjustments until it works for you, and then take it to the next level.

Neighborhood Test
Does it work for friends, family, neighbors, and those who share the story? Make adjustments until it works for the “non-informed” and take it to the final test level.

Final Test
Does it work where you want to place it? The best interpretation prompts readers to see the landscape in a new way and gain a deeper understanding than they would if the sign were not there.
**Principles of Successful Panels**

Successful panels attract the eye by guiding people to a landscape filled with stories and secrets. These panels trigger a desire to know more and connect people to place. Here are some tips to achieve that success:

- Identify the results you want. After you identified the theme for your signs, specify what you want your readers to know, feel or do after they read them. Make sure every sentence in your text sticks to the purpose of the sign.

- Name the experience offered by the panel instead of the topic it introduces. Example: Instead of “Mystic Swamp” call it “Home to Millions”

- Use photos, maps and images to tell the story. Use stimulating graphics that avoid duplicating the view at hand. Uncover the story, don’t repeat the obvious.

- Text supports the graphics, headings, and captions, not the other way around. Typically, text introduces the idea, sets the context or leads the reader to further experiences down the line. Avoid creating a textbook on a stick.

- Effective wayside exhibits contain less than 100 words and feature no more than 4 graphic images.

- Fire up your text, use active verbs and avoid descriptive adjectives.

- Help readers relate the story to their own lives, use familiar terms and personal language. Avoid jargon.

- Logos and organizational names may be important to you and your organization, but the reader is only interested in the experience. Balance these different audiences in favor of the reader.

- Make a mock-up of the final draft – if you see lots of words when you glance at it, start again. If the graphics do not catch your eye first, it is not designed correctly.

- Accuracy is essential. Make sure your facts are correct - mistakes on interpretive panels survive a very long time – sometimes even outliving the story itself!

- Engage the senses; create an experience, not a lecture.

- If you have more than three facts on one panel, re-evaluate. If people make a connection or gain curiosity, they will seek further information about the story.

- Test your mocked-up panel on friends, neighbors or family members unfamiliar and/or not interested in the topic. If they actually want to know more, smell the scent of success.
Jumping Through the Hoops

Many municipalities and agencies have established sign standards or ordinances. Whether you want to install wayside exhibits along a trail in the city or within a local, state, or national park you need to find out if standards and ordinances exist and how they affect your wayside plan and exhibit design. Your wayside exhibit design and plan may have to incorporate certain design standards before the plan is approved for installation. Involve these stakeholders early on in the project, failure to do so may cause project delays and increase costs.

City or municipal ordinances may have to be amended before the wayside exhibit plan is approved and exhibits installed. Check in with your city manager or public works officials as the project is gearing up and before starting the design phase.

Sample Ordinance

Michigan's Downriver Linked Greenways Initiative is working with individual municipalities to augment or revise municipal sign ordinances to allow wayside exhibits along their greenway corridors. The City of Flat Rock, Michigan is generously offering sections of their sign ordinance amendment as an example or template to other municipalities who wish to install wayside exhibits.

Sample Wayside Exhibit Sign Ordinance

DEFINITIONS:

Wayside Exhibit: A freestanding sign with single or multiple faces for the purposes of relaying directional, historical, environmental, cultural, or educational information to persons utilizing designated non-motorized pathways and are subject to design regulations as noted in this Ordinance.

Non-Motorized Pathway: A minimum 10 foot wide paved pathway, designated by the City on the Non-Motorized Pathway Master Plan, for the purposes of accommodating transient bicyclists, pedestrians, and other forms of non-motorized transportation throughout the City. The pathway shall be constructed to City Engineering standards.

SECTION 5.01B GENERAL PROVISIONS

E. Non-Motorized Pathway Signs

Purpose. These regulations are intended to permit signs and other displays that are needed for the purposes of providing identification, historical information, directional and mapping along designated non-motorized pathway systems, subject to the following:

Permitted Placement. Non-motorized pathway signs shall be permitted in all zoning districts, which contain a non-motorized pathway as indicated on the City’s Non-Motorized Pathway Master Plan, as amended (See Map).

Number. The number of non-motorized pathway signs shall not exceed one (1) Upright (Kiosk) sign for every one- half (.5) mile of linear path and no more than two (2) Low Profile signs on privately owned property. The location and spacing of Low Profile signs shall be determined by the Planning Commission.

Size. The maximum size of each such sign shall be as follows:

Upright. Single or Multiple Faced Vertical Kiosk-Style Exhibits Shall not exceed twelve (12’) feet in height; no larger than twelve (12) square feet (24” X 36” or 36” X 48”), limited to a maximum of three (3) panels for each exhibit, constructed to approved industry standards, setback a minimum of five (5) feet from the edge of the designated trail on an accessible pad with roof edges a minimum of three (3) feet from the trail edge.

Low Profile Exhibits. Individual exhibit sizes shall not exceed five (5’) feet in height, no larger than six (6) square feet, limited to one (1) panel for each exhibit, be constructed to approved industry standards, a minimum of thirty-two (32”) inches in height from the bottom of the exhibit panel to the finished grade, angled at thirty (30) degrees or forty-five (45) degrees and meet ADA standards.

Location. Signs shall comply with the setback requirements as noted above. Wayside exhibits shall have accessible hard-surfaced pads.

Panels. Panels shall be constructed of porcelain enamel, silk-screened or digitally printed. The latter two will be either fiberglass embedded or encased in some other proven protective coating, all subject to Planning Commission Approval.

Bases. Bases will be made of cast aluminum or other material proven to withstand the local climate changes and other typical natural forces found in the region.

Advertising. Non-motorized pathway signs shall not be permitted on a parcel for the purposes of advertising events, the sale of merchandise, commercial business.
“Charting the Way” offers some basic tips and guidelines that will help create wayside exhibits that present information in a more interesting and professional manner. They will also help visually link individual sites into a cohesive whole, a visual environment, through a consistent design system.

Guidelines on panel design and development include; panel layout and design, selection of graphics, color, typography, mapping, panel and base fabrication. These guidelines are advice and have built in flexibility so you can explore the possibilities of arranging the basic elements of an interpretive wayside panel.
The Low Profile Grid and Panel

Low profile panels often tell a story or interpret a specific site or feature. The most popular sizes are 36” wide by 24” tall and 24” X 18”. The grid provides consistent elements such as title zone, outside dimensions, columns and margins. This 36” x 24” (216 X 144 picas) low profile grid consists of horizontal and vertical lines that form 36 small rectangular boxes or modules. Each module, placed 3 picas (1/2”) apart is no less than 32 picas (5” x 2 5/8”) in length to accommodate the minimum line length requirement for secondary text. Bottom margin (2 1/8”), outside margin (13/16”). This system is only a basis for arranging elements.

The Layout

Design grids are used as an underlying organizational device to help the designer organize text and graphic elements into a strong and attractive composition. It also avoids clutter by assuring open space.

The wayside panel grid, below, was developed for the National Park Service Unigrid System for all outdoor signage, brochures, and printed material. It has since been revised through the NPS Identity Project and a new grid design and standards have been issued. The unigrid system is now commonly used across the country.

Use of the grid system along with other graphic elements, such as logo placement, color and typography templates will help link each sign with one another visually from one wayside site to another. From the reader’s viewpoint, a consistent layout provides an at a glance recognition and conveys a sense of place or identity.
Unigrid Layouts

Steps for placing elements on the grid and selecting the squares include:

**Title** – Select location, color, size, font typography, background, title bar shape, grid squares.

**Graphic** – Will it cover the entire panel or not, color or black and white, require caption and/or credit. If two or more are overlaid, are separators required? Locations and squares needed.

**Quotes and/or text (label copy)** – Where will they be located? What color(s) for the lettering? What typography? Background color (or none)? Shape? Number of squares?

**Other doodads** – What are they, where will they go, what color(s), background?

Examples of Unigrid Layout and Placement of Identifier

Placement of the Identifier should be standard for each interpretive wayside panel. In this Lewis and Clark National Historic Trail example, the uppermost edge and the right side of the identifier falls within the upper right corner of the first row and sixth grid box column.
Upright Grid and Panel

Upright panels provide practical travel information, orientation (You Are Here), safety tips and special destinations. They are typically 36” wide and 48” tall. They are usually found at trailheads and entryways or gateways. Three panels are often placed in a triangle or kiosk so people circle around them as they read the material. They are rarely used for interpretation along a trail, outside a historic site or in front of a key landscape where they block the view of the resource they are interpreting.

No matter which way they are used, they require careful design – sometimes more challenging than the low profile panels. Here’s an example of a Downriver Linked Greenways upright panel layout based on the grid system with the following elements:

- Title Bar
- Regional Identifier Map
- City Map
- Emergency and Contact Information
- Points of Interest

Upright panel - 36” X 48”

Travel information, safety tips, and illustrations of special destinations
Laying It All Out

Panel layout is critical to attracting and engaging the reader. A good layout helps the eye find where to go next. It emphasizes main points, highlights the most important elements, and creates a path that guides the eye through all aspects of the sign.

Even if the team plans to design the panel using the template that is developed, it is usually a good idea to have a graphic designer or artist produce the finished camera ready files. If a design firm is hired, they finalize each panel’s layout and produce the fabrication specifications once their client approves the work.

Tip: Your designer is visually oriented, examining label copy and images from the appearance perspective. They rarely proof-read copy or evaluate the panel’s effectiveness.

They are excellent at selecting the best images that you provide, based on industry clarity and quality standards. Always furnish the designer with original artwork or photographs and leave the image scanning to the designer.

The team is responsible for drafting and finalizing the text (label copy). Edit and review of label copy by others is always a good idea before final giving final approval.

The most successful panels are those reviewed by “outsiders” of different ages and backgrounds, particularly when unfamiliar with the subject. Either exhibit planner and/or exhibit team can appoint the review team.

“The most successful panels are those reviewed by “outsiders” of different ages and backgrounds, particularly when unfamiliar with the subject.”
Selecting Just the Right Graphic

The graphics provide the “eye candy”; they either individually or collectively need to meet the “a picture is worth a thousand words” challenge. Here are a few helpful tips:

- **Resizing.** The human eye rarely recognizes whether a graphic will remain clear and solid when increased in size. Graphics are typically resized to fill the larger panel space.

- **Black and white photographs.** The stronger the contrast between shades, the better. Using a color tint for the graphic in place of black, improves its visual appeal. The more the photo connects the reader to the place, the better.

- **Color photographs.** Select color graphics, when possible, as good “eye candy”.

- **Simplifying Ideas.** Create a graphic to demonstrate a complex process – always find a visual way to state what you would prefer to write – the less text and more graphics, the better chance of someone looking at the panel.

- **Selection.** Choose photos to show “then” not “now” since “now” is right in front of them – or – show something about the landscape not within view.

- **Caution.** Only about 1% of the people strolling or rolling past a wayside stop unless you create the BEST eye candy you can!

To Quote or Not to Quote

While there is no right answer to this question, quotes are becoming more popular every day. People connect when the quote stirs up a memory, feeling, or personal story. Many times, the quote will not only complement the place and the panel, it will be the only label copy needed. Do not use a quote unless it reaches friends, relatives or neighbors who know nothing of the topic.

> Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.

— Margaret Mead
Type Size and Style = Typography

Typography is selected to achieve a legible and inviting appearance. It should also be treated as a graphic element creating a balance with other graphic imagery.

A type font is a complete assortment of characters of one type face in one style. It is important to select a font that has enough variation for your text, quotes, captions and subheads. Odd or fancy type fonts are best for headlines. A simple serif font is best for text. Generally it is best to use no more than two fonts in one sign.

The choice of type size is related to the reading distance, height and relative importance of the information. This Downriver Linked Greenways panel is an example of a typography template showing hierarchy and selection of type size and style.

Manageable line lengths are important to readability. Research shows that the ideal line length is 7 or 8 words or 45 to 55 characters per line. Flush left /ragged right margins and skipping a line between paragraphs rather than indenting are also recommended for readability.

Wayside Upright Panel Template, 36” x 48” – Downriver Linked Greenways Initiative (DLGI)
Colors

Color sets the stage for your interpretive message. It can draw the viewer in and create mood for the story. It can project an identity or association. Color draws the eye; therefore it is a powerful tool in interpretive design. Use of color on a panel can help indicate change of subject, highlight information, and make the text more readable.

The Lake Champlain Basin Program Color Template

The template includes three standard colors: blue, black and beige. Blue is used exclusively for the lake graphic; beige for the text, picture frame and aluminum frame around the panel; black is used for text and background on banner and lake column. There are four colors to choose from for the background color of the main block, in this example Pantone 3155 C is used.

Color Tips

- Keeping to a specific color or color template helps identify that the signs are part of a larger story or system.
- The use of color for the background is essential and should contrast greatly from the type color for highest readability. White backgrounds in most wayside exhibits appear too stark and have a tendency to glare.
- Background colors can indicate a new theme or highlight different elements of a panel. Varying background is a subtle way to separate information. By placing text and graphics in blocks of color, the reader has immediate recognition of change in subject or story. More than a few color changes are confusing.
- Ultraviolet rays interact with inks in creative ways. Typically, yellows will fade to beige, thus greens with lots of yellow may not hold their color. Reds tend to head toward either pink or blue depending upon the ink mix. Some shades of blue may begin looking grey while white also fades to beige. The fading time and amount of color change depends on many factors; altitude, length of time in direct sun, types of inks and/or materials used, and how the panels are incased.

Colors shown on computer monitors or printers may not match the final printed color. Pantone Color Selector and Matching System provide an accurate method of selection, specification, reproduction, matching and control of Pantone Colors.
The “Right” Panel Material

When choosing a panel-imaging process, there is no perfect product – not even a single “best” product. The challenge is in selecting the product most appropriate to your needs and circumstances. Establish your criteria before selecting the material. While there are many more materials on the market, proven longevity is one criterion the National Park Service applies so this information is limited to those tested materials.

Environment

Ultraviolet rays cause inks to fade. The higher the altitude, the quicker the inks fade. Orientation and whether the panel is vertical or angled also contribute to the amount of ultraviolet damage. High heat and fluctuating temperatures warp or delaminate some materials. Wind-blown sand, tree residue, dirt, bird droppings, and moisture also impact the life of an outdoor exhibit. Consider compatibility with the setting.

Graphic Reproduction Quality

Simple comparisons of DPI (dots per inch) and LPI (lines per inch) for graphic clarity and quality are confusing, and don’t always apply to each imaging process. View a panel (in natural light) and determine for yourself whether it is a clear and accurate likeness of the original images. Require the fabricator to make samples for your review from materials that you supply.

Vandalism

There are no destruction proof materials. The behavior of your visitors is a critical consideration in selection. Vandalism may require frequent panel changes, thus the least expensive panel may be best.

Cost

Cost is determined by weighing initial cost against durability. A panel that is inexpensive to purchase but does not last is not a bargain. If you expect content to change soon or often, choose a material that allows changes to be made quickly and less expensively. Ordering several copies of signs at the time of the initial order to install in the future may be more cost effective. Expensive color fast materials if installed in a well monitored area may require less maintenance and be more cost effective.

Maintenance

A panel’s lifespan also depends on your ability to care for it. Panels last longer when well maintained. Periodic monitoring and maintenance is required for all panel materials.

Panel Imaging

Panels are typically fabricated through three popular types of panel material; fiberglass embedded screenprints, porcelain enamel, and digital (inkjet) prints.

Screenprints

Prints are made by forcing vinyl inks through polyester screens to create images on high quality paper. For outdoor use, screenprints are typically embedded in liquid polyester reinforced with glass fibers (i.e., fiberglass) which is hardened into a rigid panel.

Porcelain Enamel

Panels are made by applying mineral oxide pigments suspended in a ground glass frit to a steel substrate. The frit is applied to the panel by spraying, brushing, or screen printing. After each application, the panel is fired at high temperatures to bond the colorant to the metal substrate.

Digital (inkjet) Prints

Prints are made by computer-driven printers that apply ink through small nozzles (jets) to a variety of surfaces. The resulting print can be embedded in fiberglass, consolidated within phenolic and melamine resins and covered with a hardened optical coating, or mounted onto the front of a rigid material (lexan or aluminum) and covered by an acrylic over-laminate. Many carry a 5-10 year guarantee.

For a list of NPS panel fabricators and contacts: http://www.nps.gov/waysite/pdf/Directory_Production.pdf
Orientation and Wayfinding

Orientation and wayfinding panels help visitors locate themselves in the region, landscape or on a trail. They can also involve the reader in the landscape by highlighting points of interest and opportunities in the area. They can be designed to be used or adapted at several sites and help establish that sense of place and identity.

Wayside maps throughout a park, a region or on a trail should look, feel, and function the same way. Consistency is critical in guiding visitors throughout their visitor experience by providing familiarity and comfort when navigating unknown and complex places. Establish map standards that guide the mapping process. Keep in mind that size, length and configuration of the route always influence the format of a published map.

What’s Unique About Wayside Maps?

Wayside maps cannot be carried away and used for further reference and typically relate to immediate locations. Wayside maps are always used as orientation maps with the “You Are Here” as the most important feature. Provide only necessary information that the user needs to know, such as where they are, where they are going and how long it will take (distance between points). Only use geographic elements relevant to orienting the user.

Tips for Orientation and Wayfinding Panels

You must first define your visitor objectives and think like a visitor who is not familiar with the area. Here are some helpful questions and map tips:

- Who is your audience? Who are your users?
- What does the user need to know?
- How can the user orient (you are here) themselves at first glance?
- What pieces of information are relevant to the immediate experience?
- How do we provide consistency in our maps and wayfinding information throughout the project area so the visitor experience is enjoyable?
- Detail maps at very large scales may confuse distances to the user.
- Assure the wayside map information doesn’t conflict with signage already in the area or even labels used within the exhibit text.
- Labels must be clear and easily read.
- Avoid placing maps within maps. Readers don’t know where one ends and the other starts.
- Avoid placing non-map information on maps.

“You must first define your visitor objectives and think like a visitor who is not familiar with the area.”
General Map Rules

- Maps work best when north is at the top of the map and oriented in the same direction as the viewer.
- Maps should be oriented north if used in kiosks or upright panels and in more than one location with a different “You Are Here”.
- International symbols (pictographs) used on a map must be identified in a legend.
- Pictographs should be limited to no more than six per map. Any feature which appears only once or twice should be labeled.
- Always use an accurate scale that is suitable to the situation, distance should be expressed in both feet and meters.
- Trails and roads must have accurate intersections, i.e. showing whether a trail junction will be a fork or a t-intersection.
- For NPS Map Standards – recommended typography, lines, colors, pictographs, symbols, legends, and orientation...please see “Wayside Exhibit Map Standards” Harpers Ferry Center, National Park Service – www.nps.gov/waysite

“Provide only necessary information that the user needs to know, such as where they are, where they are going and how long it will take.”
Congratulations! You have successfully inventoried resources, researched information and graphics, developed text and designed panels. You are now ready for the next steps, decisions that effect budget, fabrication, and installation. Soon, you’ll be “Takin’ It To the Streets”.

**Estimating a Budget**

Every wayside exhibit project has its own set of costs for planning, panel design, fabrication, installation and site preparation. The following cost estimates may be useful as a starting point and may help you identify where in-kind contributions and partnering opportunities can help reduce your budget.

**Factors which impact the size of your budget include:**

- Type of panel materials and fabrication process selected
- Artwork such as graphic design, original artwork, photography, map making, etc.
- Number of panels fabricated, number of duplicate panels fabricated (typically less expensive).
- Size, materials, design of base
- Number of bases
- How many panels and bases are ordered at a time
- Shipping costs
- Installation costs
- Site preparation costs
- Maintenance costs

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**Planning**

Deciding on who needs to be involved, what stories to tell, where to place the signs can be time consuming. Even a simple project may require two or three weeks of several people’s time. If you hire a contractor to take on these planning aspects, expect to spend $30 per hour or more. Budget $2400 to $3600 and adjust upwards for more complex projects.

**Writing and Design**

Expect to pay a contractor a minimum of $30 per hour to write the label copy, design and layout the panel, create or find appropriate artwork and develop the fabrication package. Budget $1200 to $3600 per sign design and layout.

**Artwork**

Rights to existing graphics are sometimes purchased or artwork, photos or maps are developed specifically for panels. Include a budget line for graphics. Plan on spending around $200/rights and $400/original artwork.

**Preparation and Installation**

Frequently overlooked as a cost item, site preparation and installation may require from one to several days per sign depending on the style of base and amount of site preparation necessary. Costs will vary here significantly but every site will require some level of survey and site preparation.

**Placement and Accessibility**

The primary considerations for placing wayside exhibits are accessibility and impact on the landscape or setting. Unless the trip to the wayside is marked as challenging, all panels and their bases are to meet ADA accessibility standards.

The recommended height for a low profile exhibit from the bottom of the panel is 30” to 34”. Panel angle is 30 degrees so children and people sitting can read them. The recommended height for a vertical upright exhibit from the bottom of the panel is 24” to 28”, depending on panel size.

Typically an exhibit is placed on an asphalt pad to the side of the trail or walkway so the reader is safe from the traffic flow.

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**NPS Harpers Ferry Center Cost Estimates for Panel and Base Fabrication.**

<table>
<thead>
<tr>
<th>Panel Size</th>
<th>Screen Prints*</th>
<th>Porcelain Enamel</th>
<th>Digital Prints*</th>
<th>Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>36” x 24”</td>
<td>$2,200</td>
<td>$2,300</td>
<td>$600</td>
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</tr>
<tr>
<td>42” x 24”</td>
<td>$2,400</td>
<td>$2,500</td>
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<td>$600</td>
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<tr>
<td>36” x 48”</td>
<td>$3,000</td>
<td>$3,200</td>
<td>$840</td>
<td>$800</td>
</tr>
</tbody>
</table>

*Prices for screen print panels are for 15 prints, two embedded in fiberglass. Unit prices depend on the number of prints that are eventually used.

*Prices for digitally imaged wayside are for one original single sided panel, duplicate panels cost about $40 per square foot.

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25 | TAKIN’ IT TO THE STREET
**Bases: Panel Display Units**

The base and frame the National Park Service uses are durable cast aluminum. It generally consists of: 1) legs and a backing plate, or 2) legs with a backing plate that also frames the panel with a 3/4” lip.

Using the frame option, the exhibit panel slides directly into the frame against the backing plate, making it easy to assemble and replace. The frame is attached to one or two legs, depending on the size of the exhibit. The legs are set in concrete three feet into the ground.

When not using a frame, the panel is screwed directly into a backing plate attached to the legs. The choice is primarily an aesthetic preference; however the frame does offer a little more durability and is more difficult to vandalize. While the difference in initial cost is not significant, a 1/2” panel replacement costs more to replace without the frame.

A railing-mounted frame requires no legs since the frame and/or a backing plate is attached directly to a railing.

The National Park Service contracts with firms who meet their specifications. Other federal and state agencies use the same specifications based on their track record. The bases tend to last from 20 to 30 years unless extreme circumstances prevail. 

Visit www.nps.gov/waysite for more information on panel development and fabrication

Directions for Graphics

Cropping
When selecting a graphic, especially a photograph, you may use only one section or eliminate a section. Paste a copy of the graphic on the fabrication sheet, and then draw red lines through it like in the example below. The fabricator will know to only use the section(s) within the red lines.

Tinting
While black and white (B&W) photographs are strong contributors to a story, they do not attract people to an exhibit panel as other color graphics. Using a color other than black enhances its appeal. To match your color request, provide the fabricator a pantone color reference or number for the desired tint.

Other Examples
The fabricator can produce computer generated artwork from a graphic, increase size, fade or “pop out” sections. Just about every thing you can imagine, they can do. Since each request increases the fabrication price, agree upon what needs to be done and the cost before requesting artwork production.

In the panel at right, the figure to the bottom right was cropped from a photograph. Two of the photographs were tinted (top right).
Wayside Exhibit Plan

Wayside exhibits are a long-term commitment as they are only as successful as their lifespan allows. Not only do they require a properly maintained routine schedule, they also sometimes need updating, corrections and/or replacement. Should care and upkeep plans fail, vandals will seize this opportunity to put their destruction talents to the test.

Current and future colleagues will use this plan as a reminder of their obligations and responsibilities as well as the record of the program and its growing pains. The background and history of the process will protect them from unnecessary planning efforts.

A wayside exhibit plan provides a forum for all parties to agree on standard operating procedures and selecting who is responsible for what. The plan is also a place to keep all documents pertaining to the project and a way for all parties to refresh their memories. The process of developing a plan is actually more valuable than the document itself!

“Wayside exhibits are a long-term commitment as they are only as successful as their lifespan allows.”

The Wayside Exhibit Plan

The Plan
ing Process

- Introduction
- Who are the team members?
- What are organizational goals?
- What are the management goals?
- What are the visitor experience goals?
- What are the visitor takeaways?

The Fabrication Package

- Introduction
- Legend and glossary
- Elements in common for all panels
- Specific directions for each panel

The Site Placement Plan

- Document exact location
- Document exact placement
- Document orientation (where it faces)
- Document exact height and angle
- Document installation process
- Specify requirements needed to meet ADA standards

The Maintenance Plan and Signed Agreements and Permissions

The Site Placement Plan

1. Section One: Site Plan
   a) Indicate wayside number at each location on the map
   b) In legend, indicate name of panel for each number
   c) Indicate exact position and placement of panel front for each location

2. Section Two: Site Preparation Directions
   a) Describe how each site is to be prepared
   b) Include ADA standards that need to be met
   c) Include individual base installations

3. Section Three: Location Drawings
   a) Number each site to correspond with the number of each panel
   b) Place each site drawing in numeric order
   c) Each site drawing will indicate the exact location of each panel installation and the site preparation details
   d) Indicate exact POSITION AND PLACEMENT of panel front for each location

4. Section Four: Draft Panel
   a) Furnish layout of each panel to accompany each site drawing
   b) Make installation notes at each site as it occurs so there is a record for the team that follows behind you
   c) This becomes a permanent record for the institutional memory
The Finish Line

Site preparation and installation may require from one to several days and may involve a site manager, public works department, landscape architect, engineer, or general contractor. Be sure to include these factors in your timeframe and costs in your budget.

Exact locations and orientation must be planned ahead of time. The project coordinator will typically visit the site with the site manager to determine the best location and orientation.

Place the wayside so people are drawn into the landscape yet minimize the exhibit’s impact on the landscape as much as possible. In remote areas, install with as little disturbance to the surface as possible. In not-so-remote areas, wayside exhibits can draw many people. In those cases, locate exhibits on level, hard surfaced pads to minimize the impact and provide safety for the reader.

Bases are relatively easy to install. Specific installation instructions can be obtained from the manufacturer.

Maintenance

After all your hard work, please do not neglect your wayside exhibit. A little maintenance can go a long way to improve the appearance and increase the exhibit’s life. Periodic maintenance using the following cleaning tips greatly improves how visitors will view and remember your message and presentation.

Cleaning Tips

- For simple cleaning, mild soap and water is best. Rinse with clean water after washing. Avoid using abrasive cleaners or acids.

- Graffiti (paint, crayon, felt tip markers) can be removed using an organic solvent, such as Simple Green, or similar non-abrasive citrus-based cleaners.

- Very stubborn graffiti may require something stronger, such as mineral spirits. Do not use lacquer thinner or acetone, as they may damage the surface of your panel. Always rinse with clean water.

- Minor blemishes, nicks, marks, or burnishes and very light scratches can be concealed using a polymer based car wax.

- Persistent stains may be removed with a two minute exposure to household bleach. Always rinse with clean water after this procedure.

- Clean the drainage holes at the bottom of the panel so debris does not collect.
Credits and Thanks!

The Grandfather, Visually Speaking
In 1992, The Delaware & Lehigh National Heritage Corridor, Pennsylvania Heritage Parks Program, National Endowment for the Arts and the National Park Service formed an alliance to answer a question that had never been asked before. How do you take a large set of landscapes bound together only through stories and establish a visual environment that allows each individual contributor to maintain their own identity as well. The answer to that question took two years of hard work by a large contingency of individual stakeholders throughout a five county area. Visually Speaking was born. Close to two thousand copies were sent across the United States to communities, regions, established heritage areas and emerging heritage areas, long distance trails, consultants and any one else who was interested. That book began a process that has evolved across the nation.

Second Generation, Unlocking the Legend
The New York State Canal Corporation, New York State Thruway Authority, produced the next generation, using Visually Speaking as the model but adding “lessons learned” and a few ideas of their own. John DiMura coordinated this effort and a new model was born.

The How To Manual is Born
Lake Champlain partners formed an alliance to present a unified identify – a visual environment. John DiMura (Senior Project Development Specialist, New York State Canal Corporation) collaborated with them to create a guide for developing waysides. An outcome of the Visual Environment concept, it was the third generation to Visually Speaking and first generation of the How To Guide.

As Montana anticipated and prepared for the Lewis and Clark Bicentennial, a coalition of 18 federal, state, and local organization came together to develop The Montana Lewis and Clark Interpretive Sign Strategy. This “How To Guide” helps communities, organizations, and agencies develop high quality and identifiable interpretive signage along the Lewis and Cark trails.

The Wayside Companion
That is how this book was born. Partners from trails, communities, regions, emerging heritage areas, developing heritage areas and others were all excited about creating their own visual environment. This workbook is designed so collaborative partners can take a tool, add their own information here and there, and move forward. Our thanks to all that have gone before – and a nod to the generations that follow.
About Us

The Center for Applied Environmental Research (CAER) provides effective leadership in addressing environmental concerns, develops methods for understanding natural resource issues, identifies innovative funding opportunities, and assists communities with planning for land use, conservation, and water quality. CAER provides state of the art technical tools, techniques, and learning to conserve land, water, and other natural resources in Michigan.

As a multi-disciplinary center of University Outreach at the University of Michigan-Flint, CAER consults, educates, facilitates, conducts research, and furnishes creative solutions to citizens, communities, and organizations. CAER's mission is to serve Michigan with knowledge and strategic guidance to both secure and leverage natural resources as essential assets in strengthening the economy, and improving our state's quality of life.

The Greenlinks program, formed in the fall of 2003, is one CAER's core programs and reflects the Center's strong interest in regional natural resource and land use issues. Greenlinks builds awareness about the value of green and open space, and uses a science and community-based approach to assure great places in Genesee, Lapeer, and Shiawassee counties.

The National Park Service – Rivers, Trails, and Conservation Assistance Program (RTCA) works with community groups and local, state, and federal government agencies to conserve rivers, preserve open space, and develop trails and greenways. The RTCA program implements the natural resource conservation and outdoor recreation mission of the National Park Service in communities across America. RTCA works in urban, rural, and suburban communities with the goal of helping communities achieve on-the-ground conservation successes for their projects.