

# THE TRAIL SIGN MANUAL:

## A PLANNING GUIDE FOR PARKS AND TRAILS SIGNAGE



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# INTRODUCTION

In 2013 the Sign Research Foundation published the Urban Wayfinding Planning and Implementation Manual, which introduced the concepts, processes, and best practices for urban sign programs. The manual was updated in 2020 to focus on new trends and more recent developments. After extensive feedback from designers and planners on the manual, it was found that park and trail development was a specialty area in its own right with associations, advocacy groups, landscape architects, and planners. Like with urban signs programs, there has been innovation in this area, particularly over the last decade, but there is little guidance on best practices.

Park and trail projects are fundamentally different than urban projects in that they are often supported by extensive grassroots networks of civic leaders, private citizens, and planners that provide advocacy and financial, construction and maintenance support. This has resulted in a diversity of projects, ranging from historic trails to trails that connect neighborhoods to state and multi-state paths that cover hundreds of miles. These projects are covered extensively in magazines, websites, and conferences.

Yet, like with urban wayfinding, there has not been a single source of methodologies and best practices for sign projects for parks and trails. These projects require a wide integration of landscape, sign, brand identity, print, and digital display, yet there are few resources to review design approaches to consolidate these areas. In addition, there are specific durability, maintenance, and management issues particular to park projects.

The manual will project guidance on practical areas and also provide greater social context. What are the cultural and economic trends driving these projects? How can signs help connect parks and trails to neighborhoods, towns, and the larger landscape? The manual will explore these larger issues with the goal of supporting stakeholders in their efforts to utilize signs to enhance their community.

Like the Urban Wayfinding Planning and Implementation Manual, this report will cover an extensive topic area and include organizations, books, and other resources across a range of areas. We hope we can do justice to such a large area and spur more conversations.

# TRENDS IN PARKS AND TRAIL SIGNAGE

The rise of the comprehensive and high-quality park and trail signs have grown in close concert with the expansion of these projects in most cities and regions in North America. A review of leading trends indicates we are at the beginning of a long-term change in people's expectations of their park environment and their interactions with it daily.

## TRAILS AS A REGIONAL AND STATE INITIATIVE

As trails are being seen as a major driver of tourism, cities and states, have been expanding their initiatives to encompass entire cities, regions, states, and even multiple states. As projects have grown, this has impacted sign initiatives to encompass a vocabulary that can be flexible and consistent across large areas.

## THE WALKABLE CITIES MOVEMENT

The Walkable Cities movement started in the 1960s by Jane Jacobs' with her book, *Jacobs's The Death and Life of Great American Cities*, which promoted a pedestrian and neighborhood-focused city. This movement continued in different forms over the next sixty years, from the New Urbanism movement (which focused on the idea of new walkable suburban communities) to the public spaces' movement, which explored innovative ways to create more exciting and usable places. There is extensive popular support in many states and the federal government for improved pedestrian infrastructure.

*Walk!Philadelphia was a pedestrian sign program that started in Philadelphia PA in 1996 to highlight city destinations for pedestrians. Over 25 years, it expanded organically across neighborhoods and into city parks.*



*When Jane Jacobs wrote her seminal book, an elevated highway broke the city of Boston in half. Placing the highway underground created long stretches of parkland that connected neighborhoods while creating a large pedestrian-only corridor.*



## ENVIRONMENTAL SENSITIVITY AND EDUCATION

The environmental movement began with the creation of National Parks, and over 100 years of efforts to restore beaches, wetlands, forests, and lakes have created the expectation that developed areas are attractive and clean. Today, park and trail projects are integral to large environmental projects. These often include interpretive elements to provide an educational component.

The Great Salt Lake Shoreline Preserve by Sea Reach Ltd. is an educational trail that informs visitors of the rapid loss and importance of critical wetland habitats.

## INCREASE IN PARK AND TRAIL TOURISM

In the last twenty years, there has been a 20% increase in National Park Projects, while state trail programs have also seen a marked increase in users, often from far away. These increases have spurred regions and states to use park and trail recreation as the centerpiece for future tourism efforts.

The State of Maine is one of many states centering their tourism efforts around outdoor recreation.

## GREATER INVESTMENT IN BRAND IDENTITY

In the 1930s, the National Park Service began to establish a powerful graphic brand that still resonates today through maps, illustrations, and signs. This dedication to conveying brand identity across a wide range of signs, streetscape, and graphic elements is becoming more of a central part of current projects as marketing agencies and experiential designers create collaborative teams.



*Studio Matthews graphic and environmental program for Waterfront Park in Seattle shows the sophistication of current projects with a simple type-oriented identity that can be adapted towards map, architectural, landscape, and interpretive elements.*





## AN UNDERSTANDING OF UNDERSIGNING

Until recently, most trail systems had few, if any, sign elements beyond the most rudimentary identifier, with signs seen as clutter in the environment. Trails stayed natural but were often confusing. Designers today have employed a wide range of options to resolve undersigning sensitively, including post markers, ground identifiers, rail signs, and shelter signs.

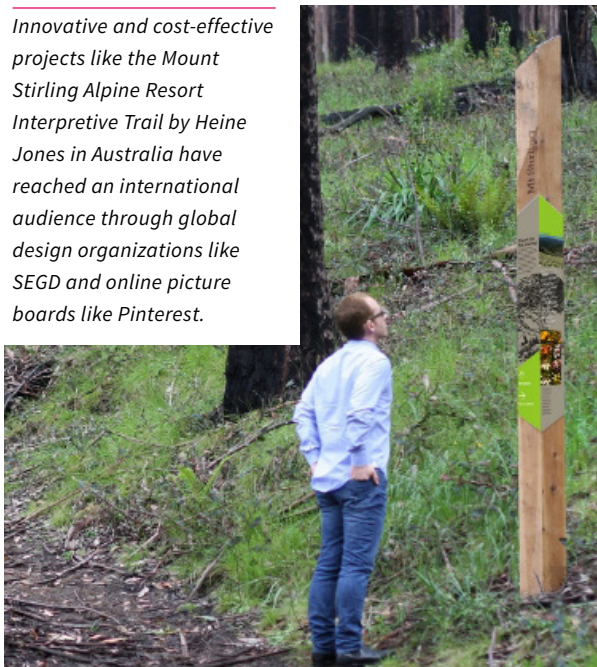


*Cary, North Carolina provided a simple platform for their interpretive and wayfinding signs by using railings as a platform.*

## SIGN QUALITY AND BRANDS ARE STARTING TO RISE IN TRAILS

Until recently, trail signs were often made by volunteers or bought in catalogs. Starting about twenty years ago with projects like the Blackstone Heritage Corridor by Selbert Perkins and Delaware and Erie wayfinding system by Cloud Gehshan, design firms began to view park signs on the same level as urban and transportation wayfinding. Social media has also driven the trend, with projects from Australia, Europe, and Asia being seen by a wider audience. Today, branding and identity have become essential to the park experience.

*Innovative and cost-effective projects like the Mount Stirling Alpine Resort Interpretive Trail by Heine Jones in Australia have reached an international audience through global design organizations like SEG D and online picture boards like Pinterest.*



*High Falls Gorge is a privately run trail and nature walk in the Adirondacks designed by Trampoline Advertising and Design Company. The quality of branding and digital and print design found in ski resorts and themed environments is being seen in trail projects.*



## A SEARCH FOR AUTHENTICITY

Every community looks for elements that are unique and special to a specific place. Trail signs allow for much greater creativity in developing elements that fit the architectural and cultural context of the community. In many newer communities, trail signs define an architectural approach that will be a touchstone for future development projects.



*The West Orange Trail, designed by AECOM, fits closely with the architecture and graphics of the Winter Garden, Florida area, with wrought metal and brick pavilions that mark points of interest in the community.*

## TRAIL TO REINFORCE A CAUSE OR MOVEMENT

Not all trails support real-life places and spaces. Several institutions use trails to highlight a movement or cause using art, landscape, and exhibitions, using location as a foundation for narrative development.

*The Birmingham Civil Rights Trail, designed by Big Communications, builds on the foundation of the 1963 Civil Rights March to highlight moments in civil rights history.*



## TRAIL PLACEMAKING AS BEAUTIFUL INFRASTRUCTURE

In addition to an investment in signs, several communities have begun to see high-level placemaking projects as key to trail success. These include large gateways, promenades, public restrooms, bridges, and lounging areas. Landscape architecture firms have promoted many of these interventions, resulting in these projects forming highlights among a large-scale trail plan.

## STITCHING TOGETHER NEIGHBORHOODS FOR ECONOMIC ADVANCEMENT AND PLACEMAKING

Neighborhood trails have been a central toolkit in neighborhood cultural development since creating the Freedom Trail in Boston in the 1960s. Today's neighborhood trails can outline both past and current neighborhood development.



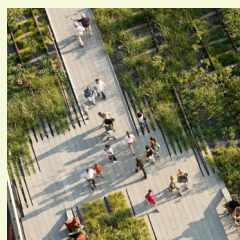
*Brewer's Heritage Trail by FRCHNelson highlights Cincinnati's brewery's past and current revitalization initiatives.*



## FOUR SIGN SYSTEMS THAT REFLECT TODAY'S PARK AND TRAIL TRENDS

### 1 **COMMUNITY VALUES: THE CHANGE IN THE VALUE PROPOSITION FOR URBAN TRAILS AND SIGNS**

The High Line in New York was built in phases from 2009 to 2014, but early on, the success of the 1.5-mile elevated line was evident. The elevated trail with graphics and placemaking, designed by world-renowned design firm, Pentagram, reshaped the city. Over five million visitors per year utilize the trail, making it one of the largest tourist attractions in the city and moving an entire tourism infrastructure to the area around it. In addition, property values along the line escalated, and developers worldwide look to the line as a model for both urban and suburban trails, with high-quality branded placemaking and



public art. Many of these projects multiplied through the approach, though they quickly created controversy as fears arose of beautiful trails being the leading edge for gentrification.

### 2 **THE INCLUSIVE TRAIL**

The desire to spread urban trail signs to a range of communities that could also stitch together neighborhoods and entire cities prompted designers to consider more inclusive approaches. This led to designs like the recently completed Memphis River Parks Sign System. Designed by Champions Design, the vocabulary of gateways, maps, and identifiers stitch together city parks and trails across a range of areas, encouraging use by the entire population and supporting neighborhood improvement. The signs also serve



as support for park initiatives in underserved communities. This approach is being followed in several cities and suburban areas that combine identity, interpretation, and wayfinding to raise a regional profile.

### 3 **TRAILS TO SUPPORT GRASSROOTS COMMUNITY ENGAGEMENT WITH PLACE**

Ever since the 1800s, with the introduction of historic landmark interpretive signs, there have been efforts to use interpretive signs as a narrative approach to creating an urban trail network. In recent years, this idea has become a way for local communities to focus on combining signs, trails, and public places. A great recent example is the African American Heritage Trail in Lexington, Kentucky. The project resulted from leadership from a community newspaper and a grant, which supported the development of a narrative and wayfinding-based trail and map system designed by Solid Light and EHI Consultants.



Photo credit: Stu Johnson WEKU

### 4 **SIGNS AS REGIONAL ECONOMIC DEVELOPMENT FOR TRAILS**

The idea of a large trail system identity serving as an economic development leader for an entire region started with the Delaware and Lehigh Trail thirty years ago and is now considered a prominent approach. What is newer today is the creation of a consistent identity across ever larger trail areas. The trail markers also reinforce a larger identity through websites, print collateral, and local visitor centers. The Essex County Scenic Byway is a recently developed regional trail project designed



by OMLoop as a trail marker system that links 14 towns along a 90-mile coastal corridor north of Boston. The signs interpret each specific town while linking the corridor into one attraction.

# HISTORY AND ANATOMY OF PARK AND LANDSCAPE SIGNS

Park and Trail sign projects have been a source of sign innovation worldwide. While this manual mainly focuses on sign development in North America, there are best practices to emulate worldwide. There is an overlap among all the elements described; in some examples, there can be a combination of the three or more vocabulary elements.

## VISITOR CENTERS

Seen in large national and heritage parks as well as regional trail systems, visitor centers can provide larger interpretive and orientation features. Visitor centers can also serve as congregation areas for trail support groups and provide a location to garner more trail support.

*The Brunswick Byways Visitors Center by HealyKohler*

*Design is an anchor to the region and supports trip planning.*



## GATEWAYS

A trail gateway can serve many functions. It can serve as an entry landmark, mark a multi-modal entrance for cars or transit, or frame scenic points along the trail.



*Birmingham's Rotary City trail has a large gateway that serves as an anchor and a civic landmark.*



*The Canberra Centenary Trail Gateway by Screenmakers serves several functions, including an interpretation, a scenic frame, a rest area, and a landmark.*



## TRAILBLAZERS

Among the most effective trail elements, trailblazers can help highlight the information essential to defining the trail by using distance, color coding, and icons. Trailblazers can reduce clutter when integrated with other signs, maps, and applications.



*West Chester County Trails by Smart Outdoor Inc. is built around simple trailblazer posts that include both visual information and links to a mobile application.*

## DIRECTIONAL ELEMENTS

Directional signs can take on multiple roles and be incorporated into various elements, including posts, pole-mounted signs, ground markings, and kiosks. Directional information can often mediate between different modes of transportation, including vehicular elements directing to parking and destination information for bikers and pedestrians.

*Walk Rio by Applied Wayfinding uses a combination of human scaled signs to convey directional information.*



## ARRIVAL AND IDENTIFICATION INFORMATION

Signs and landmarks that identify destinations along a trail can be as simple as a marking for an individual location or a landmark that can incorporate streetscape elements, public art, or even shelters.



The Summit Bechtel Reserve is a trail system designed by RSM for the Boy Scout Jamboree. There are various arrival sign types in different styles and thematic approaches.



The Appalachian Trail is famous for its shelters which, on average, appear every 8-10 miles along the trail. The shelters also take on the role of serving as a landmark and arrival sign.

## INFORMATION, SAFETY AND REGULATORY SIGNS

Information signs include regulatory, safety, and other support information. This information can be incorporated into several elements, including posts, kiosks, brochures, and digital support.

*Terrabilt is a leading expert in park and trail signs. The company has developed modular directional, safety, and visitor information systems. Consistency in iconography and typography is essential when including comprehensive information.*





## PUBLIC ART

Artwork is an excellent feature for both landmarking and placemaking. Art pieces raise public awareness of trails and provide easy-to-remember location markers. Public art can also integrate easily into unique landscape features like walls, buildings, shelters, or vistas.

*Tanner Springs Park has a trail defined by The Artwall that runs along the park's east edge. It comprises 368 railroad tracks set on end and integrates 99 pieces of fused glass inset with images of dragonflies, spiders, amphibians, and insects. The images were hand-painted by Herbert Dreiseitl*



## LANDSCAPE AND INFRASTRUCTURE

Landscape architectural features, including bridges, causeways, dams, and outlooks, can serve as landmarks and support additional wayfinding features.



*The Mill River Park and Greenway by the Olin Partnership has few signs, but landscape features provide identity and orientation.*



*The Jackson Street Reconstruction on Saint Paul by Toole Design includes a bike corridor separated from traffic by landscape features that also enhance the definition of the separation of the transportation modes.*



## PLACEMAKING

Placemaking are areas of congregation that also support the identity of the trail. These can include amphitheaters, cafes, fountains, and sitting areas.



*Romare Beardon Park in Charlotte by 505 Design combines interpretive signs and public placemaking to celebrate the life of African American Artist Romare Beardon.*

## TRAIL FURNITURE

Like placemaking, trail furniture can serve as a landmark, gateway, or placemaking piece and include seating, bike support, and playground elements.



*CV Link in the Coachella Valley, designed by Alta, includes placemaking elements, street furniture, and ground markings to produce an incredible integration.*



## TRAIL MAPS

Maps provide context and often an overview of the iconography and destinations that will be incorporated into directional, identity, and informational signs. For large park and trail projects, maps are often segmented to work at various levels of complexity.



*Trails in Bartram's Gardens by the Gecko Group are color-coded and connected to the map graphic approach.*

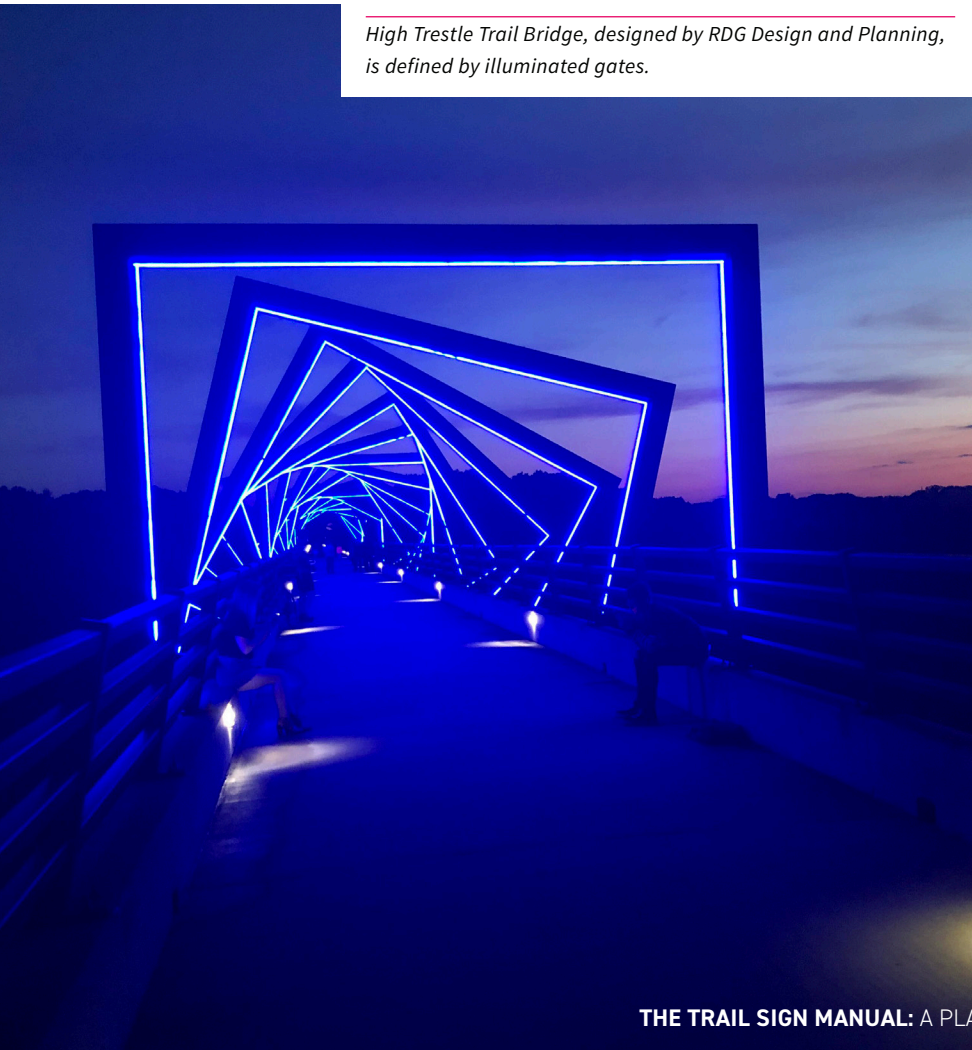


*Massimo Vignelli's graphic standards for the National Park Service included a powerful mapping approach that can be applied to kiosks, print maps, and websites.*

## ILLUMINATION

Urban and suburban trails often are used at dusk or in the evening. Illuminating landmarks and display features can enhance those elements and redefine the trail's identity.

*High Trestle Trail Bridge, designed by RDG Design and Planning, is defined by illuminated gates.*



*The revolution in small solar batteries has created an off-the-grid vocabulary for trail lighting. Solar LED is an example. A solar-powered LED delineator is used for bike lanes, walking, and hiking trails.*



## GROUND MARKINGS

Markings can serve a variety of trail roles, including gateway, trailblazers, public art, or directional elements. A consistent ground marking approach can also maintain brand consistency throughout the trail.



*Bikeway Belém in Lisbon, Portugal by P-06 Atelier uses simple ground markings to serve as wayfinding and identity elements.*

*The Shanghai Trail by 100 Architects exemplifies ground marking's power to define a trail and serve as the foundation for street furniture and other placemaking elements.*

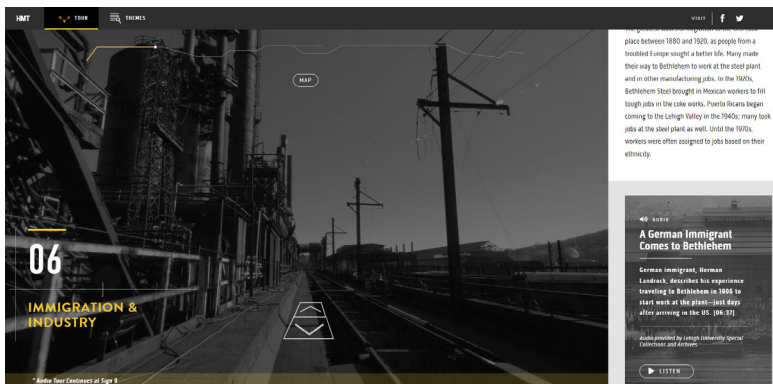






## MOBILE APPLICATIONS

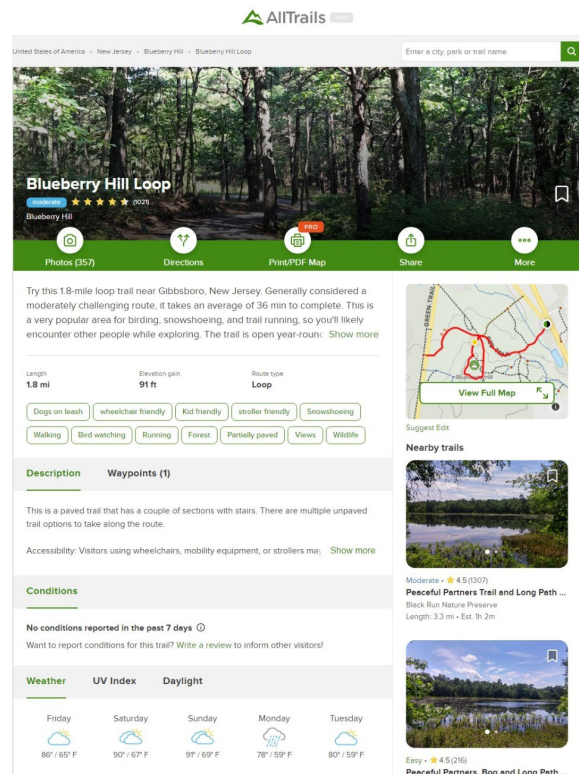
Mobile applications are quickly becoming essential to most trail projects, and some companies are designing map and information application systems for trails. These are often linked to trail signs through QR codes or augmented reality systems.



## PRINT MAPS

Print maps are central to most trail programs, providing additional information on parking, safety, and support features. Due to the prevalence of smartphones, most maps are designed to be viewed easily on a smartphone and still be available in printed form.

*The Eastern Trail in Southern Maine is made of three trail areas. Splitting the trails into sub-areas makes it easier to read on kiosks, print maps, and mobile applications.*



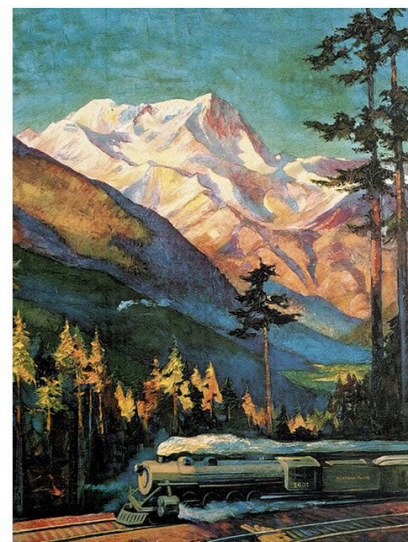
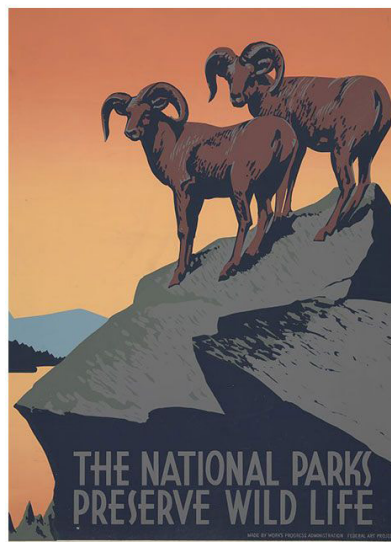
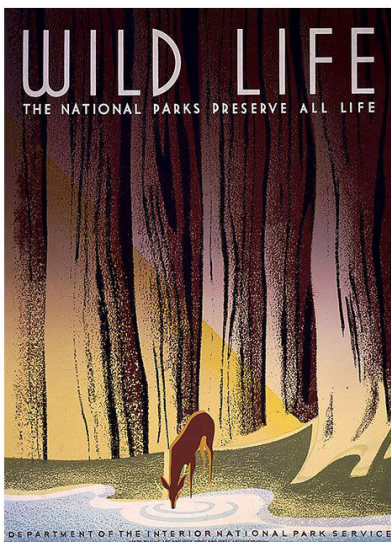
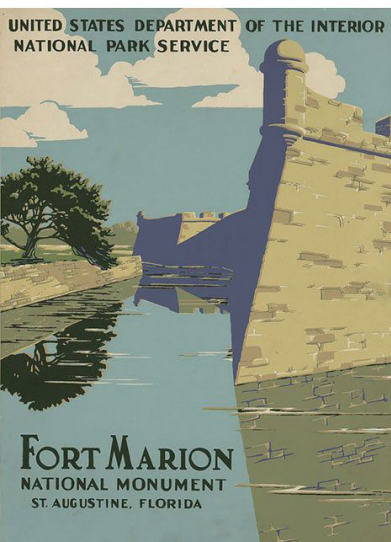
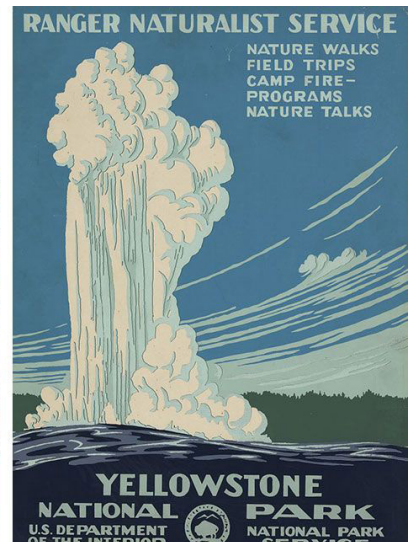
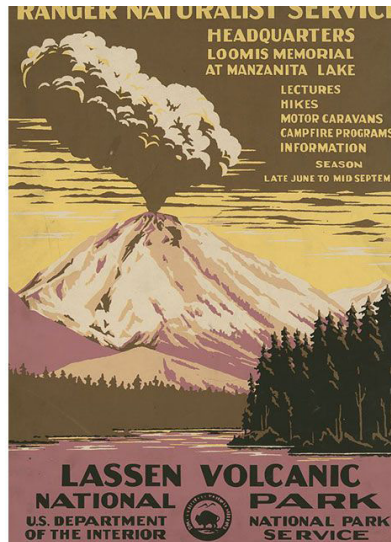
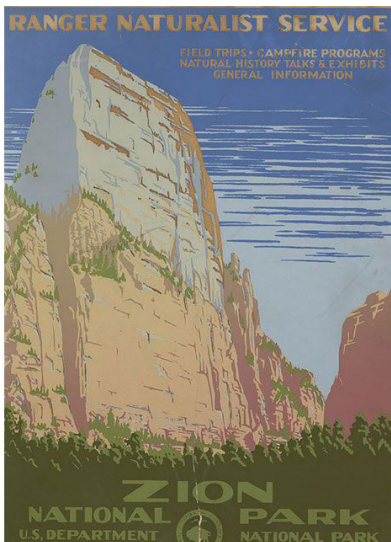
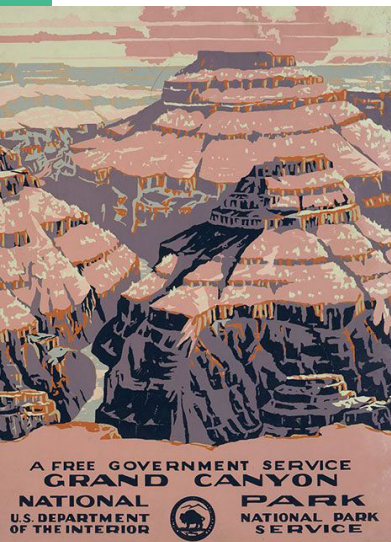
The AllTrails website, [alltrails.com](https://alltrails.com), is the largest website and mobile application devoted to trails, with over 200,000 trail maps.

The Hoover Mason Trestle interrupts the Bethlehem Steel Mill with an elevated trail. Signs are combined with an augmented reality application designed by Bluecadet.



## MERCHANDISE

T-shirts, mugs, and caps are not just for marketing. Branding can also support wayfinding by creating greater awareness for trail iconography.



*Based on the Park Posters of the 1930s, The National Park Service has continued to reinforce its identity through various merchandise, including cards, t-shirts, and mugs.*

## TRAIL TYPES

Trails can be part of urban or rural environments and be individual or part of a network. While there is an endless variety of trails, these four approaches fit in most cases.



## REGIONAL TRAILS

These individual trails or trail networks cover multiple jurisdictions. They can include towns in a county, large multi-county regions, an entire state, or even multiple states. While some of these trails include limited access paths incorporating former railbeds, canalways, or river paths, many also incorporate existing auto roadways to connect larger systems. Regional trails tend to have a central identifying brand identity with sub-brands for smaller jurisdictions. Regional trail administration can be part of a heritage region, state park, county, or part of a consortium of towns. In many places, regional trails are also administered by non-profit organizations that provide community support.

Regional trail signs are often built around trailhead gateways and trailblazers that identify distance and overall trail context. In addition, regional trails can incorporate extensive kiosks, maps, public art, and landmark elements. Because of their size and jurisdictional differences, most of these trails are built around a basic framework of sign elements with unique variations in many different areas.



## REGIONAL TRAIL CASE STUDY

*The Intertwine is a regional trail network comprising over 30 jurisdictions across two states. Designed by Mayer/Reed, the trail system is built around a powerful set of guidelines that can be easily followed and supports consistency. There is also guidance for fabrication and planning costs. In addition, the trail sign system is designed to connect both on-road and off-road trail accessibility. The goal is to connect over 1000 miles of trails. 500 signs have already been installed.*



## URBAN/SUBURBAN PARK AND TRAIL NETWORK

These networks can encompass a county, or an individual or small group of municipalities, built around that community's distinct architectural or landscape features. These trail networks have evolved over the years. In the 19th century, landscape architects created large-scale parks with trail networks, long parkways, and promenades that would support multiple modes of transportation. The 20th century augmented these parks with river and mountain trails, and the 21st century added promenades and infrastructure.

Localized trail networks focus on unique identity features like streetscape elements and public art. They also use various ground, architectural, and illumination features to convey a distinct personality.





## PARK AND TRAIL NETWORK CASE STUDY

Run by the Mecklenburg County Department of Parks and Recreation, the Cross Charlotte Trail is built around a distinct and powerful sign system and elements that reflect the urban and suburban nature of the Charlotte area. In the city, the trail is built around multi-modal transportation, as well as public art on walls, pavement, fences, and public places. In the larger county, distinct streetscape, bridges, and landmark features tie the system together.

## PROMENADES AND INFRASTRUCTURAL TRAILS

Promenades and infrastructural trails are built around artificial elements like elevated railways, canalways, docks, dams, or greenways. Trails and wayfinding features are closely integrated with the architectural and natural elements they are connected to and are incorporated as part of their development. These trails often utilize extensive art, illumination, and interpretive features linked to the element.

## PROMENADES AND INFRASTRUCTURAL CASE STUDY

The recently built Mario Cuomo Bridge was built for multi-modal use, including a 3.6-mile-long trail for bikes and pedestrians. In addition to a dynamic illumination program, the bridge includes a wayfinding and placemaking program designed by Exit. The trail comprises distinct blue trail markings, a café area, landmarks, and interpretive elements. The trail is closely connected to the bridge, sharing the same palette, materials, and illumination.



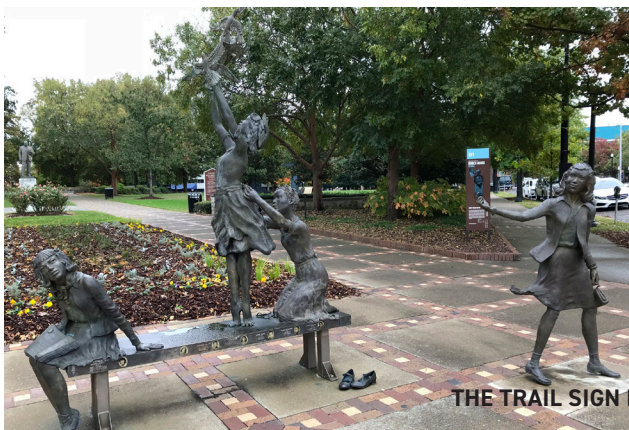


## HERITAGE AND INTERPRETIVE TRAILS

These trails are built around interpreting history, place, culture, nature, or industry. These trails started becoming popular in the 1960s with Boston's Freedom Trail and have advanced and evolved over the years, including historic and theme-based parks starting in the 1990s and neighborhood-oriented trails in the last twenty years.

These trails often take on two distinct forms: virtual trails built around signs and maps connected thematically and interpretive elements built around a physical trail. Virtual trails can be sponsored by advocacy or community groups with considerable freedom to place elements in connection with buildings or places. Physical interpretive trails can also employ signs by these groups but are often closely integrated with the trail itself.

## HERITAGE AND INTERPRETIVE CASE STUDY

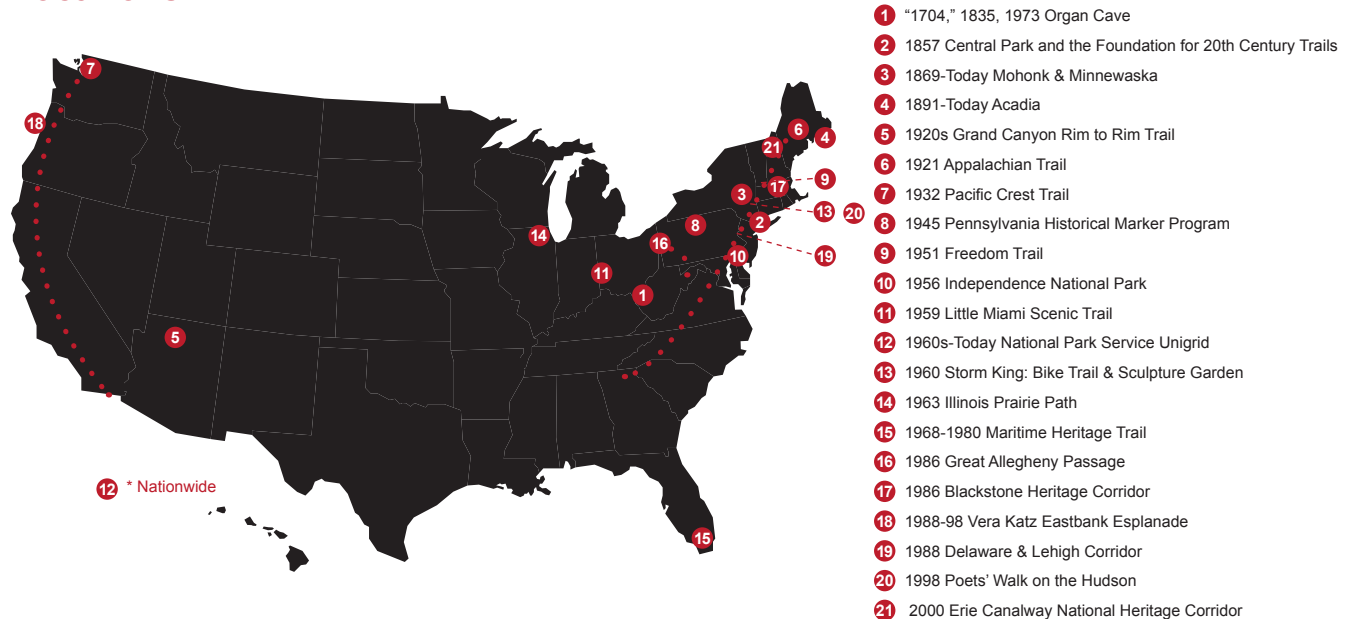


*The Birmingham Civil Rights Heritage Trail, designed by Big Communications, follows the same path as the 1963 Civil Rights march. Features include quotes, pictures, histories, and dramatic cut-outs. The trail is supported by the United States Civil Rights Trail Association, which supports other trails, interpretive centers, and museums.*



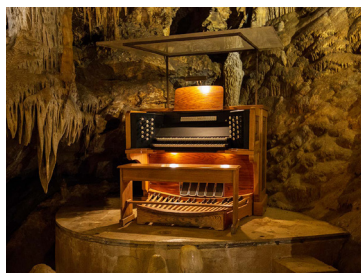
# HISTORY OF AMERICAN TRAILS

## Locations



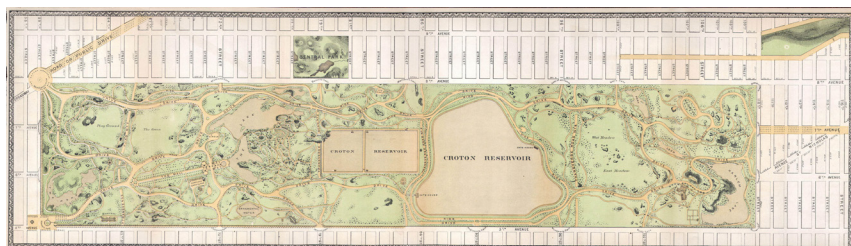
## TWENTY FAMOUS TRAILS FROM THE 20TH CENTURY

Trails have captured the American imagination since America's founding. Early explorers and pioneers captured the imagination of the public, but with the closing of the American frontier in 1890, trails transitioned from transportation to recreation. Twentieth century trail design combined practices built on 50 years of urban park development with an eye toward expansive vistas and regional links.



### "1704," 1835, 1973 ORGAN CAVE

A National Natural Landmark with 38 miles of surveyed cave passage, The Organ Cave was established as an early tourist site and early interpretive trail destination.



### 1857 CENTRAL PARK AND THE FOUNDATION FOR 20TH CENTURY TRAILS

Designed by famous landscape architect Frederick Law Olmstead, Central Park covers 843 acres with miles of woodland trails and ring "roads" twisting through landscapes augmented with art, landmarks, and recreation facilities separated from the city.





### 1869-TODAY MOHONK & MINNEWASKA

The 19th-century hotels served as the foundation for the 20th-century park network. The 85 miles of trails are New York State's largest not-for-profit preserve. Pavilions and pagodas anchor the trailheads.



### 1891-TODAY ACADIA

This national park is located on two Maine peninsulas and three islands, comprising over 55,000 acres with 45 miles of carriage roads and 150 miles of trails. The trail included an early integration of carriage roads and hiker wayfinding. Rusticators in the 1930s created stone stairs and ladder trails marked by cedar signs.



### 1920S GRAND CANYON RIM TO RIM TRAIL

The trail varies from 23 to 42 miles, with a 5,761-foot elevation loss from North Kaibab trailhead to Bright Angel Campground with a gain of 4,380 feet back to the South Rim. The lodges and cabins built around the trail inspired future National Park Service signs and gateways.



### 1921 APPALACHIAN TRAIL

A 2,192-mile path from Springer Mountain in Georgia to Mount Katahdin in Maine, the Appalachian Trail is the longest hiking-only trail in the world. Over two million visitors per year use the trail corridor. Conceived in 1921, the trail was put in place by 1937. Trail highlights include the 250 shelters that also serve as landmarks.



### 1932 PACIFIC CREST TRAIL

This 2,631-mile-long hiking & horse-riding route starts at the Canadian border and runs along Cascades & Sierras through Washington, Oregon, and California to the Mexican border. The path was conceived in 1932 and designated a National Scenic Trail in 1968. Local communities and enthusiasts built their own unique trail markers.



### 1945 PENNSYLVANIA HISTORICAL MARKER PROGRAM

The Pennsylvania Historical and Museum Commission administers a program of more than 2,000 cast aluminum historical markers. They tell stories important to the history of Pennsylvania.





### **1951 FREEDOM TRAIL**

Marked by a red brick line, this 2.5-mile trail in Boston, MA connects a unique collection of museums, churches, meeting houses, burial grounds, parks, a ship, and historic markers that tell the story of the American Revolution and the founding of America.



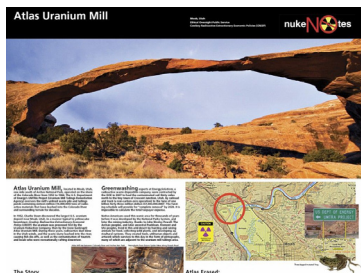
### **1956 INDEPENDENCE NATIONAL PARK**

The park includes four square blocks in the city of Philadelphia, PA. Interpretive and directional signs tell the story of the Revolution through historic buildings and objects.



### **1959 LITTLE MIAMI SCENIC TRAIL**

The trail is defined by refurbished train stations along the Little Miami River from Springfield to Cincinnati, OH.



### **1960S- TODAY NATIONAL PARK SERVICE UNIGRID**

Designed by Massimo Vignelli, the Unigrid System supported consistent graphics, interpretation, and wayfinding for the National Park Service. The guidelines have been continually updated for the last sixty years.



### **1960 STORM KING: BIKE TRAIL & SCULPTURE GARDEN**

Storm King is a 500-acre, non-profit art center that places sculpture directly in the landscape. It allows pedestrians and bikers to experience over 100 works of modern art.





### 1963 ILLINOIS PRAIRIE PATH

The inverted Y of the trail brandmark implies the rough map of the route, and the three symbols represent the intended transportation methods on the path.



### 1968-1980 MARITIME HERITAGE TRAIL

This heritage trail is a large, protected portion of both land and water, home to coral reefs and other terrestrial and marine life. Most sites can only be accessed by boat, but guests can visit six mapped-out shipwrecks by scuba diving or snorkeling.



### 1986 GREAT ALLEGHENY PASSAGE

The Great Allegheny is the central trail of a 334-mile multi-use trail network connecting Pittsburgh, PA to Washington, D.C., marked by consistent wayfinding signs.



### 1986 BLACKSTONE HERITAGE CORRIDOR

Approximately 400,000 acres of mill towns stretching across 24 cities along the Blackstone River between Worcester, MA, and Providence, RI, are dedicated to the history of the early American Industrial Revolution. The corridor features an interpretive and wayfinding program designed by Selbert Perkins.



### 1988-98 VERA KATZ EASTBANK ESPLANADE

This waterfront park in Portland, OR connects the east and west sides of the city along the Willamette River. It features docks, piers, overlooks, a plaza for festivals and gatherings, floating walkways, fountains, public art, and connections to neighborhoods and bridges. Design firm Mayer/Reed developed urban markers for the project.





### 1988 DELAWARE & LEHIGH CORRIDOR

The corridor preserves the industrial history of the 165-mile transportation route between Wilkes Barre and Bristol, PA. Design firm Cloud Gehshan developed the interpretive planning and signage plan.



### 1998 POETS' WALK ON THE HUDSON

A woodland path with intentional landscape work, the visual integrity of the park is protected by the Scenic Hudson Land Trust's conservation efforts on the surrounding 800 acres. The park features art, furniture, and landscape as an interpretive device.

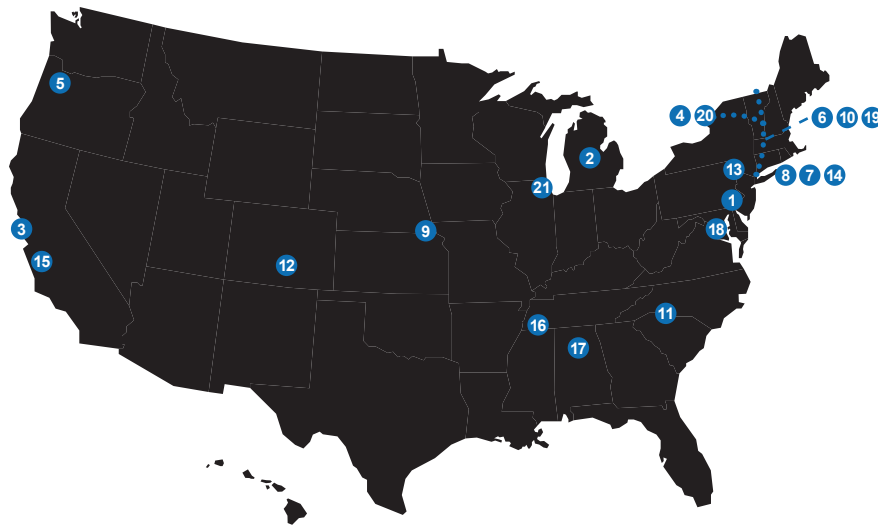


### 2000 ERIE CANALWAY NATIONAL HERITAGE CORRIDOR

The Heritage Corridor was established in 2000, spanning 524 miles across the full expanse of Upstate New York. This trail includes 34 national historic landmarks and 234 local municipalities. The trail combines common design elements with signs and gateways unique to each municipality.



## Locations



- 1 1820-2010 Fairmount & Wissahickon Valley Park
- 2 2001 Pere Marquette Rail Trail
- 3 2006 Golden Gate National Recreation Area
- 4 2007 Buffalo's Erie Canal Commercial Slip
- 5 2009 The Intertwine
- 6 2009 Scenic Hudson's West Point Foundry Preserve
- 7 2009 High Line
- 8 2010-2018 Brooklyn Bridge Park
- 9 2010 Raccoon River Valley Trail
- 10 2012 Putnam History Center Exhibit & Video
- 11 2015-2021 Charlotte Arts Trail
- 12 2015 Northwest Corridor Trail
- 13 2016 Newark Walks
- 14 2017 Rockaway Beach Boardwalk
- 15 2017 City of San José Trail Program
- 16 2018 Memphis River Parks
- 17 2019 Birmingham Civil Rights Heritage Trail
- 18 2020 Maryland's Jefferson Patterson Park
- 19 2020 Gov. Mario M. Cuomo Bridge Shared Use Path
- 20 2020 Empire State Trail
- 21 2020 Cook County Forest Preserves

## Twenty-One Famous Trails from the 21st Century

Chapter one illustrated many trends that have impacted trail wayfinding in recent years. The following projects reflect these trends and serve as a model for the future.



### 1820-2010 FAIRMOUNT & WISSAHICKON VALLEY PARK

The park encompasses over 9,000 acres along Philadelphia's Schuylkill River and its watershed creeks. The Centennial Exposition is one of its landmarks. A wayfinding system designed for the urban Fairmount Park by Sussman Prejza was updated and complemented with a system by Cloud Gehshan that fits within the raw and natural Wissahickon Park. Public art also plays a central role in the park's design.



### 2001 PERE MARQUETTE RAIL TRAIL

The Pere Marquette Rail Trail is 30 miles of paved, flat, scenic trail between Midland and Clare, MI. The wayfinding program combines a robust graphic palette, type, and iconography incorporated into the infrastructure. The design was based on guidelines developed by Corbin for the Michigan Department of Natural Resources.



### 2006 GOLDEN GATE NATIONAL RECREATION AREA

This redesigned system includes a new welcome center and signage. Directional and interpretive signage, designed by Hunt Design, connects the rural, urban, and historical destinations of the park to serve its 17 million annual visitors better and elevate the trail experience to the National Park standard.





### 2007 BUFFALO'S ERIE CANAL COMMERCIAL SLIP

This interpretive historic outdoor landscape trail is designed by C&G Partners around the re-watered slip where steamships transferred goods to canal boats. Archeological research guided this waterfront re-creation.



### 2009 THE INTERTWINE

The Intertwine trail network connects and protects the Portland-Vancouver region's network of parks, trails, and natural areas. There are over 1,250 miles of pedestrian and bike trails. The Intertwine Alliance aimed to increase awareness of the Intertwine through a distinct style and color palette designed by Mayer Reed. There are now over 500 signs installed throughout the Metro area.



### 2009 SCENIC HUDSON'S WEST POINT FOUNDRY PRESERVE

This 87-acre interpretive landscape experience, designed by C&G Partners, includes a quarter-mile accessible trail at the site of a factory that produced cannon and industrial cast iron in the late 1800s. The Preserve's trails link to the intact historic company town's Main Street and rail station.



### 2009 HIGH LINE

The High Line is an elevated public park in Manhattan, NY, transformed into a rail trail from a former freight train line. The wayfinding system, developed by Pentagram, complements street furniture, public spaces, and art incorporated into the park's landscape.



### 2010-2018 BROOKLYN BRIDGE PARK

These 84 acres of the industrial waterfront were re-purposed into a contemporary destination resplendent with native plants. The park incorporates wayfinding and interpretive elements into the structures built for the park, highlighted by the Squibb Bridge and Janes Carousel.



### 2010 RACCOON RIVER VALLEY TRAIL

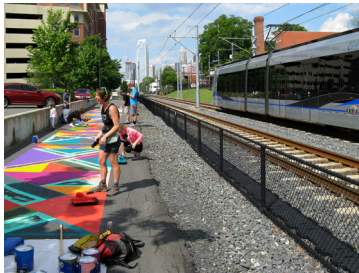
The trail traverses 89 miles through forests, prairies, and rural towns south to Des Moines, IA. Illumination plays a central role in the design of the trail's public spaces, wayfinding, and infrastructure.





### 2012 PUTNAM HISTORY CENTER EXHIBIT & VIDEO

A 3D-printed iPad viewer and historic stereoscopes present a collection of antique company town photographs. A video shows a steam turbine sugar cane crusher at full size, conveying the enormous scale of foundry-made machinery.



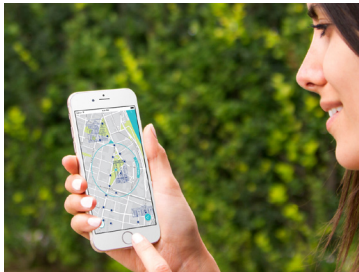
### 2015-2021 CHARLOTTE ARTS TRAIL

The Charlotte Rail Trail is an ongoing project connecting the communities and neighborhoods of Charlotte, NC. Funded by ArtPlace America and the Charlotte Mecklenburg Community Foundation, implemented in 2015, the Public Art Master Plan offers guidance and inspiration to anyone creating public art along the trail.



### 2015 NORTHWEST CORRIDOR TRAIL

The Colorado multi-regional trail is highlighted by an extensive bike and transit wayfinding and street furniture system designed by Cloud Gehshan.



### 2016 NEWARK WALKS

Newark Walks is an interactive pedestrian walking tour of Newark, NJ, consisting of an app and physical landmarks. Merje Design developed the wayfinding system in unison with Newark's 350th anniversary. The project's digital partner, Winfield & Co., helped design and develop a mobile tour app for the city.



### 2017 ROCKAWAY BEACH BOARDWALK

Rockaway is a public beach and boardwalk in Queens, NY. It was fully restored in 2017 after severe hurricane damage in 2012. The former wooden plank boardwalk was replaced with steel reinforced concrete supported by a colorful wayfinding program integrated into the structure.



### 2017 CITY OF SAN JOSÉ TRAIL PROGRAM

The City of San José, CA, is developing a 100-mile trail network across 40 trails. The majority of the system is off-road and paved. Their signage system was designed for easy communication with 911 operators. Regulatory, warning and wayfinding signage all follow the same format and are deliberately stackable for easy implementation.





### 2018 MEMPHIS RIVER PARKS

The five miles of Memphis River waterfront have been completely reimagined by Champion Design. This project unified previously disconnected public parks by creating a new brand, signage, and wayfinding identity that plays on the vision of a catalytic and fun waterfront.



### 2019 BIRMINGHAM CIVIL RIGHTS HERITAGE TRAIL

The trail winds through downtown, marking significant locations along the 1963 Civil Rights march routes. Designed as a self-guided tour, the route directs visitors along this historic pathway by maps at each location.



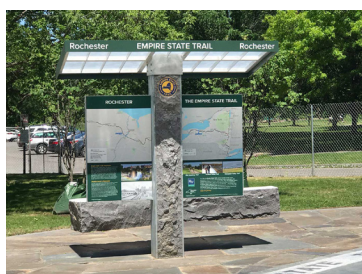
### 2020 MARYLAND'S JEFFERSON PATTERSON PARK

The Layers of Time is a quarter-mile accessible trail designed by C&G Partners that reveals habitat and a site mapped in 1612 by Captain John Smith. Done in collaboration with the onsite Archeological Lab, interpretation uncovers Native, Colonial, and African American settlements.



### 2020 GOV. MARIO M. CUOMO BRIDGE SHARED USE PATH

As part of the new bridge in Tarrytown, NY, a shared use pedestrian and cyclist path stretches 3.6 miles across the Hudson River, designed by Exit. Six overlooks along the bridge path have internet hotspots and informative kiosks.



### 2020 EMPIRE STATE TRAIL

The EST is the longest multi-use state trail in America, stretching across 750 miles and costing \$200 million. The route hosts visitors from NYC to Canada and Albany to Buffalo along the Erie Canal. The trail is featured in chapter 7.



### 2020 COOK COUNTY FOREST PRESERVES

The preserve in Cook County, IL for Killdeer Wetlands Forest Preserve and Deer Grove East Forest Preserve is an ecologically diverse group of open spaces in one of the most densely populated counties in the United States. Studio Blue designed a trail to make the preserve functional but also as undeveloped as possible.

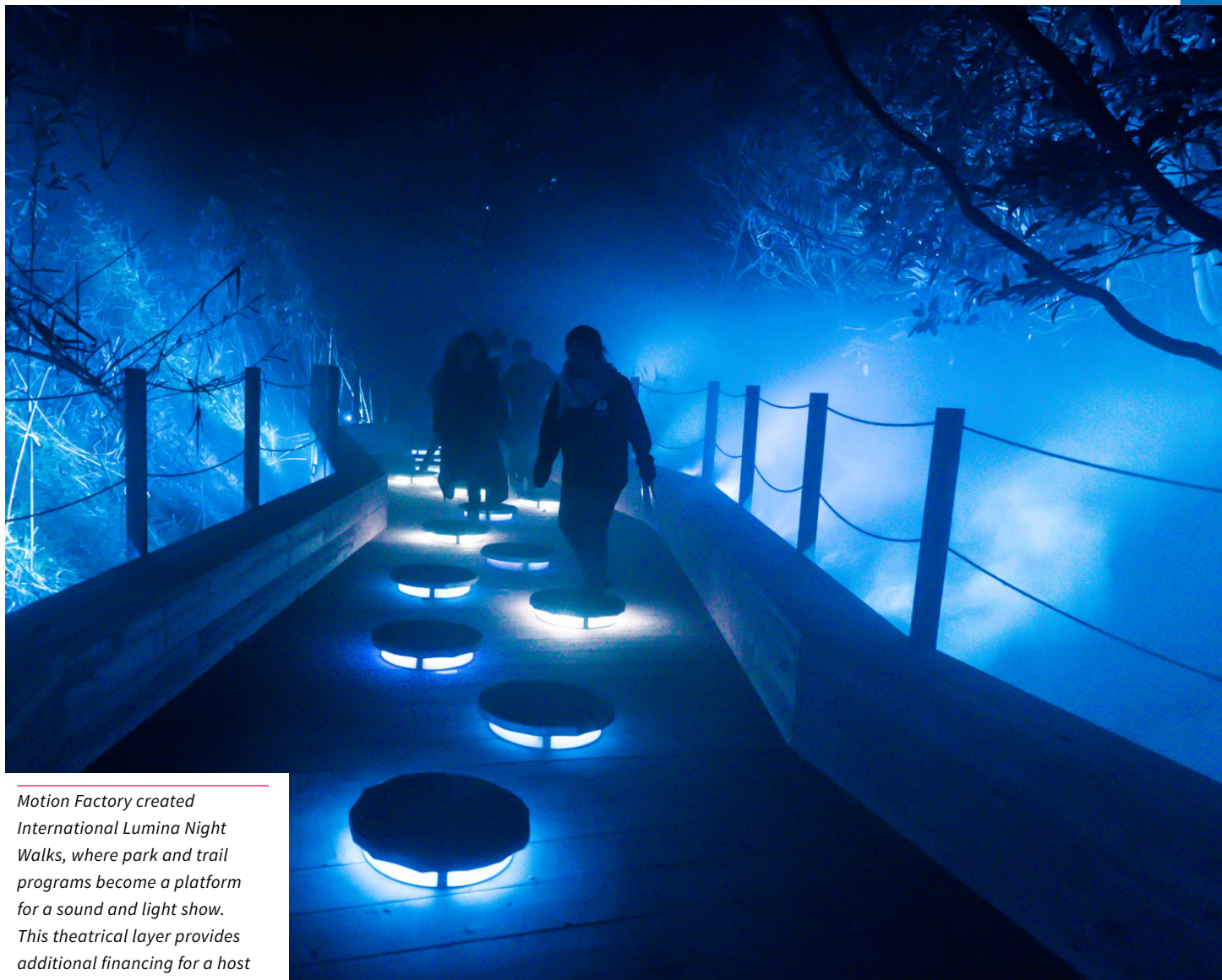
# 5 FINANCING & DEVELOPMENT

Financing a park or trail system has a wide variety of possible approaches. Currently, there has been expansive local, state, and federal government funding (over 100% increase in the last decade), but in the end, the most successful development efforts have come from stakeholder vision and leadership. This chapter will focus on best practices in grassroots leadership at the local and regional level.

## LOCAL LEADERSHIP

### PUT ON A SHOW

A trail is a perfect platform for shows, events, and theatrical productions that can be used to fund further development. Many trail and park programs include space for paid events and programs as part of their mission.



*Motion Factory created International Lumina Night Walks, where park and trail programs become a platform for a sound and light show. This theatrical layer provides additional financing for a host of programs.*



## SPONSORSHIP AND NARRATIVE

Many linear park projects utilize multiple narratives that welcome the communities in each of the areas that the park supports. This both expands the stakeholder network and the funding opportunities to include community grants and foundation funding.

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*Lord Cultural Resources developed the concept for the Bentway in Toronto, a linear urban park that sets a curatorial agenda for areas in the park that support community engagement. Each of these areas received substantial private donations and support.*



## COMMUNITY AND TRANSPORTATION BLOCK GRANT FUNDING

Many park and trail infrastructure programs are supported by a combination of community and transportation grants meant to support local projects. These funding approaches are particularly powerful when linked to leadership from a local planning commission or a private non-profit stewardship group.

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*The Ohlone Greenway Wayfinding Project, designed by Fehrs and Pears, serves to support community recreation and multi-modal transportation in the East Bay region of the San Francisco Bay Area. The project is funded by Contra Costa Transportation Authority's Measure J Transportation for Livable Communities and California's Affordable Housing & Sustainable Communities Program grant funds.*





## INSTITUTIONAL PARTNERSHIPS

Universities, hospitals, and even resort developments can serve as financial support for community trail programs and provide additional fundraising support.



*The Napa Valley Trail utilizes signs as a foundation of a sponsorship program to gain individual, commercial and institutional support. Shelters and signs can be sponsored for donations of \$25,000 to \$100,000.*





## ATTACHING TO INFRASTRUCTURE

Street furniture, wayfinding, and landmark programs can easily fall under the umbrella of a larger greenway, beltway, or mass transportation infrastructure program. These can either be funded and managed by the transportation authority or a linked “friends” organization.



*The Rose Fitzgerald Kennedy Greenway is a direct extension of the Massachusetts Department of Transportation's multi-modal infrastructure, with wayfinding projects falling under the larger umbrella of the multi-modal architecture.*



## REGIONAL AND NATIONAL LEADERSHIP

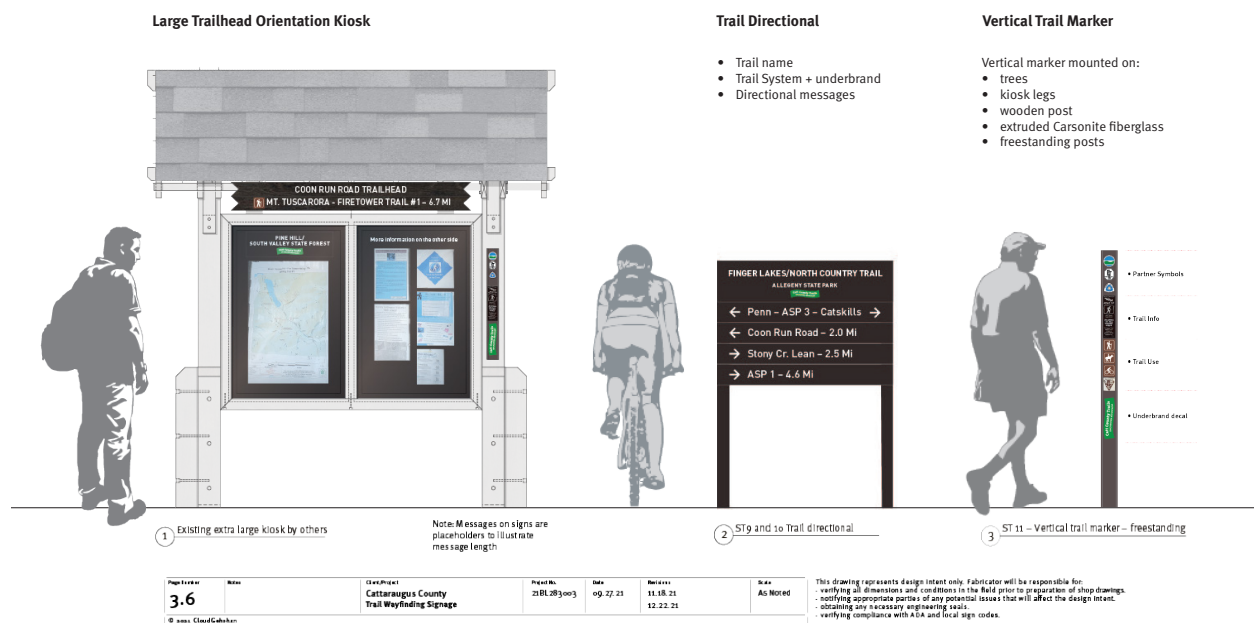
Designing for trail environments requires a strategy developed in advance to balance budget and labor costs.

## COBRANDING AND UNDER-BRANDING

Local authorities can collaborate with regional and statewide trail networks to fund signs, maps, and other wayfinding elements. The approach allows for larger state and regional grant funding to flow to the local level while providing greater consistency across a large regional network.



### Signage and Underbrand Applications



Catt County in Northern New York worked with the Enchanted Mountains Region and Allegheny State Park to develop signs and branding for their trail network developed by Cloud Gehshan and Barton & Loguidice. This also included an innovative app for wayfinding in the region.



## REGIONAL AND NATIONAL CONSERVANCY FUNDING

Conservancies are set up by large regional trail networks to support specific projects along the network. Wayfinding and identity projects often serve as part of the larger goals of the conservancies.



*The Appalachian Trail Conservancy is one of the country's oldest and awards funds of up to \$500,000 for land protection and capacity-building projects that support communities along the trail.*



*The National Rail-to-Trails Conservancy has a grant program that has distributed over two million dollars in small grants intending to connect communities to larger trail networks. One grant provided \$60,000 for the rehabilitation of the Pinkerton Tunnel along the Allegheny Rail Trail.*



# MANAGEMENT & MAINTENANCE

Parks and trail signs must face an extreme environment. From weather conditions to vandalism, these signs must withstand a wide range of conditions, often in places not easily accessible for maintenance. Designing a system that can withstand these vigors requires both a design and management strategy.

## THE ADVANTAGES OF LOW MAINTENANCE AND HIGH MAINTENANCE

Today's material technologies are capable of a long life with minimal maintenance. Aluminum with powder-coated wood grain and durable embedded printing create signs, kiosks, and architectural elements that can last years with minimal maintenance. These materials come at a higher cost, both in the materials themselves and the labor for fabrication and installation. Less expensive materials like wood and direct digital printing are much cheaper but need frequent maintenance and review. Before selecting an approach, it is vital to have a clear strategy for funding, maintenance, and change.



*The Brickyard Trail sign design by Sue Steele Landscape Architecture and ID Signsystems is a low maintenance strategy. Signs are welded together as one piece with minimal need for change, reflected in the premium, durable graphics used. Masonry seating adds to the permanence approach.*





## OFF-THE-SHELF, MODULAR, CUSTOM, AND IN-BETWEEN

For trail signs, there are endless off-the-shelf and modular products available, from simple posts and panel systems to sophisticated kiosks and streetscape elements. These elements can be cheaper and easier to maintain, only they do not give room for creativity. Completely custom systems may be more expensive but can also be integrated into landscapes and architectural environments. A successful trail strategy can combine different approaches, including customizing off-the-shelf systems and combining modular and specially designed elements.



*For the Golden Gate National Historic Area, Hunt Design used a variety of modular approaches, from low-cost poles with straps for signs to durable steel structures for mounting more permanent elements. The combination of approaches fits different needs for change, durability, and human contact along the busy trail.*

## LOCATION AS A STRATEGY

Simple placement approaches can extend the life of a sign. Placement away from the sun prevents fading and ultraviolet degradation of materials. Putting signs in more visible locations lowers the chance of vandalism.

## PERMANENCE OR CHANGE

Park and trail projects combine elements that do not see much change, like destination and interpretive signs, with kiosks that may see monthly changes in information. Designing for change can include display case systems that are both tamper-proof and easy to access, as well as connection details that allow for changing parts.

## ON-AND OFF-THE-GRID

There has been a revolution in off-the-grid technologies, including solar electrical generators and Wi-Fi hubs. These technologies can be expensive or vulnerable to damage unless properly thought out. At the same time, an on-the-grid strategy can also be effective, particularly for promenades and urban trails. Building a wiring system into a trail can result in flexibility down the road.



*The Haxton Way Trail in the Lummi Nation in Washington State is built around solar lighting integrated into the infrastructure of bridges and railways. The density of lights has transformed the system into a wayfinding device by serving as a node for additional activities.*

## CONNECTION DETAILS

An overlooked detail in trail sign development is how elements are connected. A mounting pole on a foundation can last a decade longer than the panels attached to it, but how those panels are attached, and the ease of attachment can mean thousands of dollars when change occurs. At the same time, some elements may never need change and can be welded or sublimated together. With trail projects, connections are usually between two different materials, so an understanding of connector materials is important to ensure long-term durability.



*Old Croton Aqueduct Trail by Nancy Owens Studio LLC and Laurel Marx Design is designed for permanence but has some ability to change. Utilizing a landmark sign approach with durable powder-coated graphics on aluminum, the three-part signs can be demounted for replacement with tamper-proof bolts. The signs themselves are placed in more trafficked and highly seen areas to minimize damage.*



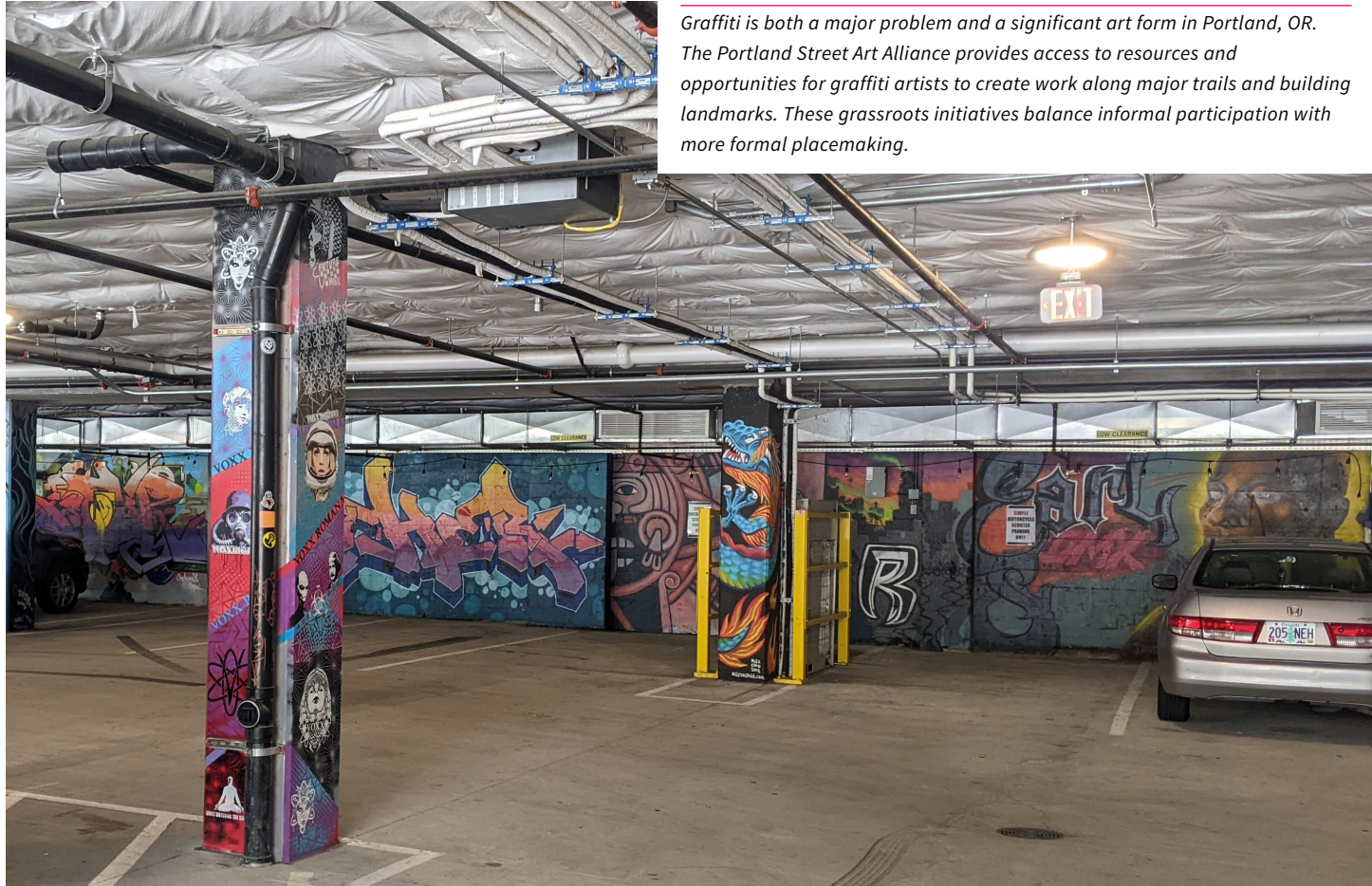
## MANAGEMENT STRATEGY

Robust design strategies start with a realistic management approach.

## GRASSROOTS, PROFESSIONAL, AND VENDOR MANAGEMENT

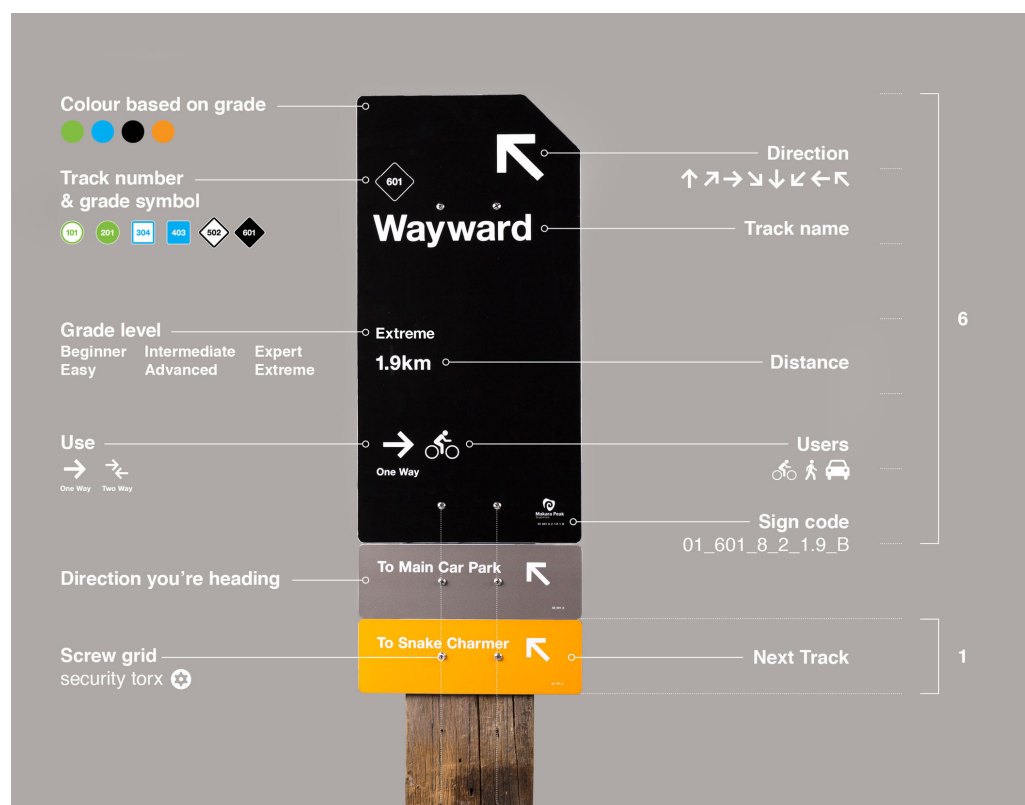
The human resources available for maintenance considerably impact the design approach. Volunteers can do basic tasks like painting posts, removing stickers, and replacing temporary information, but the design must use materials and mounting methods that allow for an easy approach to maintenance. Systems maintained by in-house staff or outside vendors can have more complex maintenance and replacement approach using modular systems and connections that are difficult to access.

*Graffiti is both a major problem and a significant art form in Portland, OR. The Portland Street Art Alliance provides access to resources and opportunities for graffiti artists to create work along major trails and building landmarks. These grassroots initiatives balance informal participation with more formal placemaking.*



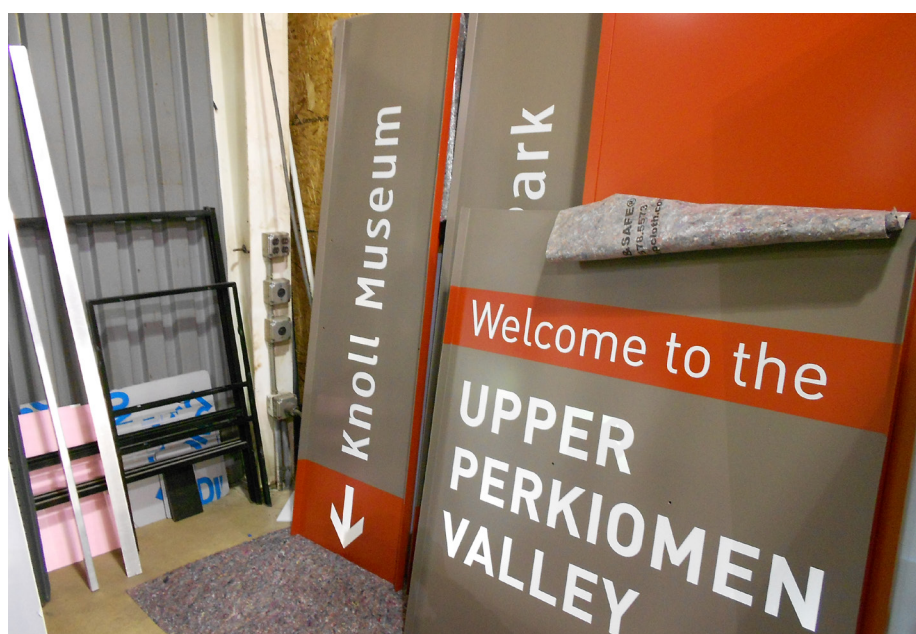
## KIT OF PARTS AND MATERIAL INVENTORY MANAGEMENT

Part of long-term development is keeping an inventory of replacement parts available. Building into a project a supply of elements along with a storage plan can save considerable money over the project's life. This strategy should be developed based on the scarcity and uniqueness of parts. Some elements, like flat panels, can be easily ordered with minimal additional cost.



The Makara Peak trail was developed in conjunction with the park's volunteer group, recreational users, the local council, and Massey University's School of Design team. The tight budget and volunteer-oriented approach resulted in several innovations for sign management. The individual signs align to a consistent screw grid. A template was provided for volunteers to pre-drill holes. A scalable coding system was developed that sits at the bottom right of each sign containing the sign type, track name, distance, users, arrow direction, etc., for easy sign creation and replacement in the future.

Developing a system of interchangeable parts and keeping an inventory can save thousands of dollars over the life of the system.



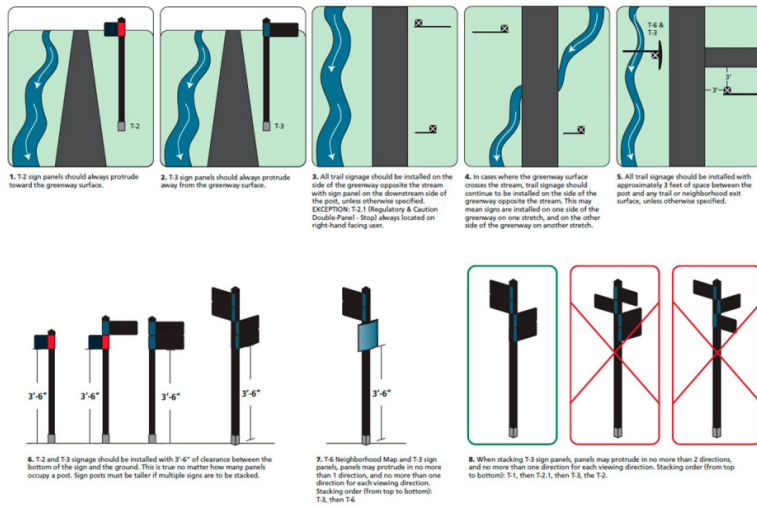


## REGIONAL OR LOCAL CONTROL

The location of the central managing authority can impact how signs are maintained. Local organizations tend to have more daily oversight of their systems (when well run), while larger regional authorities may have weekly or monthly maintenance reviews.

## SHORT- AND LONG-TERM STRATEGY

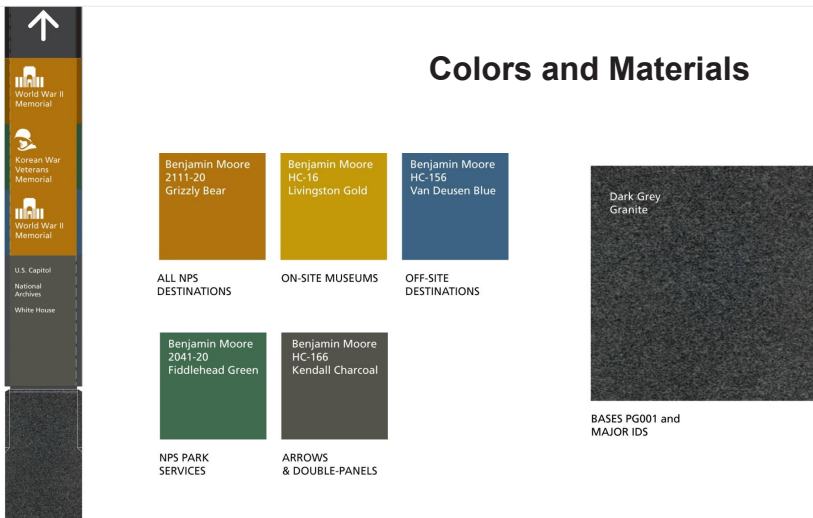
Management approaches contain short-term maintenance, like cleaning and repair, and long-term expansion and replacement. Long-term strategies have a significant impact on design. Systems implemented at one time can be more complex since they have more active control at that time, while systems designed in stages need a more flexible design approach that encompasses lessons learned and existing repairs combined with new elements.



For the Mecklenberg County Wayfinding system, strong guidelines by Corbin Design and Dawa lead to impressive design approaches.



## Colors and Materials



The National Park Service has relatively simple standards since they must be interpreted in thousands of different ways by parks around the country. Hunt Design developed totems for the National Mall based on NPS standards.

## GUIDELINES AND DOCUMENTATION

A core management approach is the packaging of documentation and guidelines with projects. While this is a clear necessity, updating guidelines regularly based on lessons learned while implementing and managing the system is vital.

# DESIGN DEVELOPMENT

Park and trail sign projects require extensive planning and stakeholder development to be successful. Designers and planners must balance various issues when developing a program, including budgetary, management, and community needs.

## LEADING DEVELOPMENT ISSUES DURING THE DESIGN PROCESS

### STAKEHOLDER INCLUSIVITY AND DESIGN

The largest issue when developing a stakeholder program for design development is the inclusivity of the participants. The formation of the stakeholder group defines every aspect of the planning and design process. One central criterion for selecting a design and planning firm is their understanding of how stakeholder teams work as a vehicle, not only for design but also building support for the project.



Formed in 2005, Atlanta BeltLine Partnership is the non-profit organization that helps keep the Atlanta BeltLine vision on track by enabling the construction of more parks and trails; engaging the public through tours, health and fitness programs, and special events; and empowering Atlanta BeltLine residents to connect with affordable housing, economic development, and a healthy lifestyle. Lord Cultural Services developed a plan for the organization that leveraged their inclusive grassroots approach to develop dozens of different projects.



## THE DESIGN BRIEF

The design brief is the roadmap for project development and a guide for project scope and approach. The design brief establishes the goals of the project, the audience, the design vocabulary, design attributes, budget, and implementation approach. The brief is a working document that project stakeholders can change and adapt to larger project changes.

## EXPERIENCE DESIGN STRATEGY

A core part of the design brief is articulating the complete wayfinding experience, including how the multiple elements of the design will work together to provide one cohesive experience. By mapping individual “touchpoints,” or each specific engagement between the visitor and trail, an inventory of elements can be developed, as well as how all those elements work together.

*The State of Victoria in Australia created a large-scale design guideline for potential trail projects that encompasses every aspect of the visitor experience to provide a complete toolkit for people developing trails.*



## CHOOSING A DESIGNER

The choice of design firm will closely reflect the stakeholder team’s attitude and approach to the project. Several design specialists develop sign programs, including planners, landscape architects, experiential graphic designers, advertising agencies, exhibition designers, public artists, and even multimedia specialists. These specialists can also work in teams on the same project. The selection of the design firm should be rooted in a clear extension of the goals and design vocabulary being developed in the brief.



*Winfield & Company specializes in digital app design for large wayfinding projects. They work with other design firms to develop programs that integrate digital and physical wayfinding.*



*Toole Design is a national landscape architecture and planning firm. Their wayfinding programs encompass landscape features, lighting, and streetscape elements in addition to signs. Their work for Anacostia Riverwalk Trail combines all these elements in one project.*

## BUDGET SCENARIOS

Budget determines almost every aspect of how a project will come together, from the selection of design elements to how the project will unroll over time. As part of the design brief, the budget should be used as part of the project implementation plan, with an approach for rolling out the project based on how many final resources are available. Budget approach can also play a prominent role in the project's design, with elements designed based on the availability of financial resources.



*For the Boxers' Trail in Philadelphia, a limited budget was focused on one interpretive shelter that would serve as a landmark, interpretive and orientation element.*

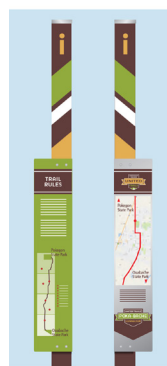


## PROJECT SCOPE

Trails can encompass a single park or be connected to a town, regional or even state network. The network's reach can closely define how individual design elements are developed and how unique individual community elements are connected to the larger network. Project scope can also influence what information should be included in the program, including maps, distance markers, and gateways.



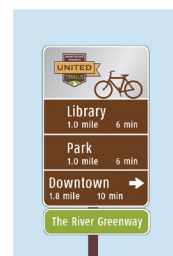
*Design firm Merje developed a trail wayfinding system for Northeast Indiana. As part of the project, the designers created a number of unique trail identities connected to one distinct identity. The element also serves as a foundation for future development.*



Trail Info Pylon



Banners  
Utility Pole Mtd



Enhanced MUTCD Bicycle  
Directional



*Large regional networks have far-reaching wayfinding needs. The Schuylkill River Trail covers over 120 miles and connects dozens of towns. Their trailblazer system requires distance, town, and amenity information. Other map, identity, and distinct wayfinding programs highlight specific towns and districts.*

## LEGIBILITY AND INFORMATION MANAGEMENT

System legibility is an essential factor for a system that, by its very nature, is multi-modal and encompasses a number of different landscape conditions. Part of system development will be to establish how different sign elements can fit as a vocabulary of parts that can fit a variety of conditions. There are also regulatory requirements to consider, including roadway legibility and clear differentiation between vehicular, bike, and pedestrian information.



*Tangram Design created a series of photo montages for the regional wayfinding program in Ogden Valley, UT. Visualization is an excellent way to review legibility, placement, and interaction with the landscape. The final sign installation closely matched the finalized visuals.*



Moosehead Lake, Maine

AVIA DESIGN GROUP | BRANDS | WAYFINDING | VIDEO

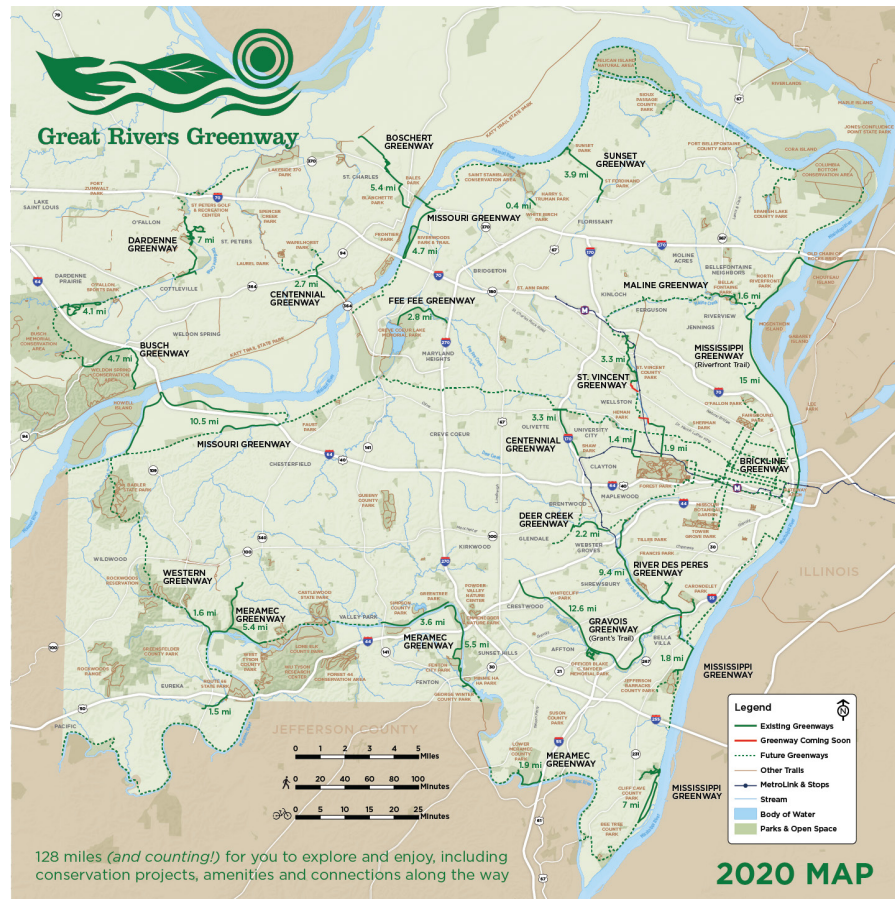
*Creating a family of signs is a powerful tool for developing wayfinding programs. Avia Design Group specializes in large-scale programs that encompass regional wayfinding and trail signs. For Moosehead Lake in Maine, the system includes identity and wayfinding for villages, as well as parks and trails.*



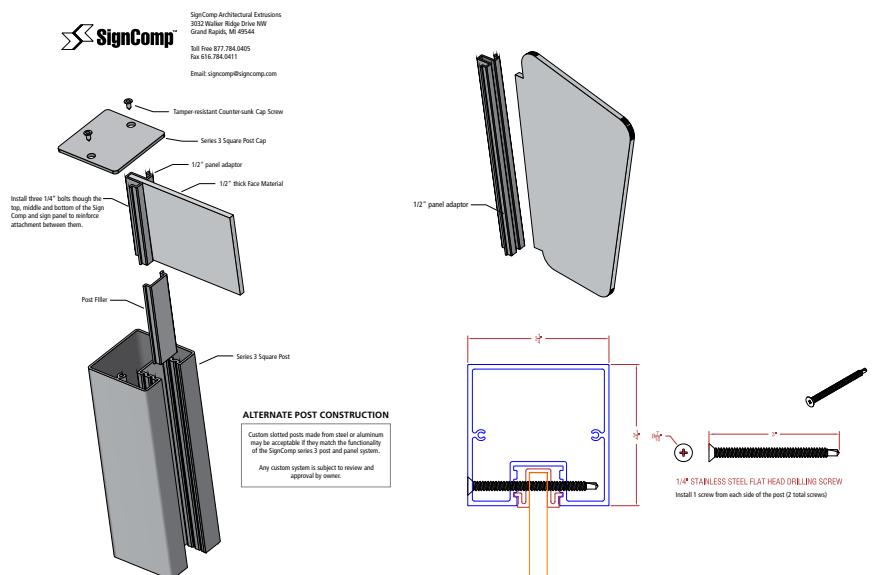
## GUIDELINES AND DESIGNING FOR EXPANSION

An important part of the design development process is designing for program expansion. This requires developing design guidelines that can readily support access to expanded programs over time. Successful guidelines are readily accessible, provide documentation that can be directly built from and can even provide additional design ideas and approaches for further development.

*The Great River Greenway is a collection of 128 miles of trails in the St. Louis, MO area. The organization has a comprehensive system for communicating design and planning intent. Guidelines include signs by Corbin Design, streetscape elements, and placemaking. They include profiles of all the existing greenways developed and a list of new projects that can be bid as part of the Greenway. The system is encapsulated in an open website containing technical details, instructions for the development, and news on upcoming and recently completed projects.*



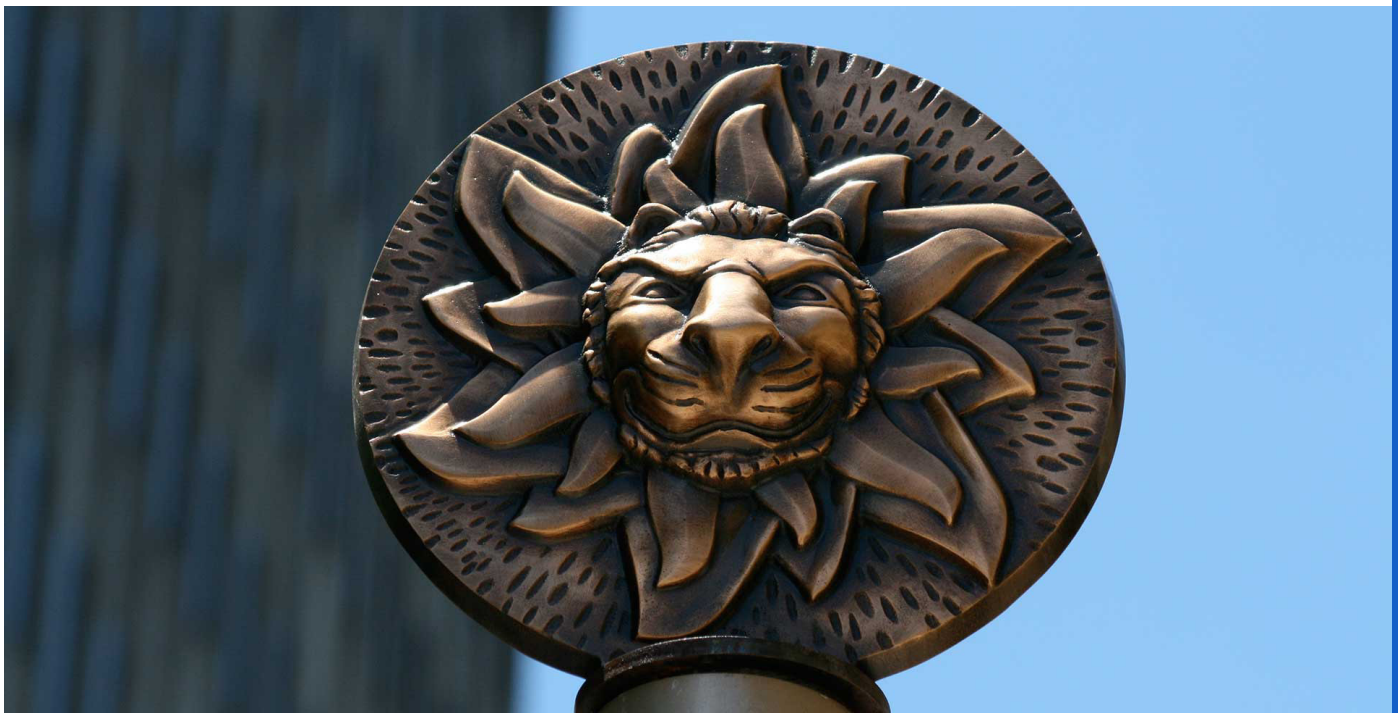
Great Rivers Greenway Sign Array: Post and Panel Assembly





## LANDMARKS AND HIGHLIGHTS

In addition to wayfinding elements like signs and gateways, successful programs should also leave room for creative initiatives, including lighting, public art, and placemaking. These approaches can be integrated into the design brief, as well as the design guidelines, incorporating standards and best practices for integration into the complete system.



*The Asheville Urban Trail employs a public art program and incorporates art into the specific wayfinding elements on the trail.*



## VISUALIZATIONS AND PROTOTYPES

When designing a program, realistic renderings and prototypes can serve multiple purposes. They can help promote the larger program, serve as a mockup for final system changes, test interactivity, match colors for vinyl and paint, or provide illustrations for fabricators that will be expanding the program.



Realistic renderings and prototypes were designed and fabricated by students Suki Wong, Jolie O'Brien, and Wang Ching Wong in the Spatial Experience Design Program at the Fashion Institute of Technology.

# 8 CASE STUDY

The Empire State Trail is among the most expansive trail in an individual state. Integrating existing trail systems and adding hundreds of miles of new trails, the program was developed by a large collaborative team of public officials, landscape architects, experiential graphic designers, and fabricators.

## THE KICKOFF

Many elements that would become the Empire State Trail already existed, with long continuous trails along the Erie Canal and the Hudson Valley. The State of New York decided that an initiative to tie together the trails under one leading identity would both promote trail tourism and serve as a trigger for local trail initiatives. The state initiative would use both trail branding and gateway projects to link the expansive trail network.

*The Empire State Trail was an ambitious project to extend and connect an existing trail network from 300 to 750 miles.*



## FORMING THE DEVELOPMENT TEAM FOR THE TRAIL AND SIGNS

The Hudson Valley Greenway, led by Director Andy Beers, was tasked with leading the Empire State Trail Program. The organization added three staff members and expanded the role of landscape design and planning firm Alta from managing the Greenway to the entire Empire State Trail Initiative. The Greenway coordinated with project management teams at participating state agencies (NYS Canal Corporation, NYS Department of Transportation, NYS Parks, and others). Trail construction contracts were administered by seven state agencies and 14 local governments that manage individual trail segments.

Through a competitive bidding process, the team of planning and design firm Starr Whitehouse and experiential graphic designers C&G Partners were brought in to create design guidelines for the trail graphics, gateways, and interpretive elements. Starr Whitehouse later managed the implementation of many of these gateways with an engineering firm, Bergmann Associates.

Finally, the fabrication of the signs was bid in separate projects, with fabricators ID Signsystems and ASI taking responsibility for many of the projects. This management includes coordination with landscape architecture firms for the final implementation of the signs.



## PLANNING

To complete the statewide route, the Hudson River Greenway managed the state agencies and local governments. Alta provided support through 35 public meetings at town boards, high schools, and historical societies and met individually with more than 150 landowners owning property adjacent to the trail. There were 58 separate projects to construct new off-road trail segments and improve on-road bicycle route connections. The Hudson River Greenway also administered the construction of one section, the 36-mile “Albany-Hudson Electric Trail” segment in Rensselaer and Columbia Counties. Other state or local entities managed local projects.

The Starr Whitehouse/C&G Partners team was tasked with creating a wayfinding system to link these different initiatives into an integrated and consistent system. This required a delicate balance between creating a singular identity and complementing the design of existing trails, many with a long history. Co-branding became a hallmark of the planning process. The State of New York redeveloped its own icon identity to better fit into the system, and an overall approach was developed that would incorporate most of the trail icons into the system.



The planning process envisioned 45 small-scale gateways with small gathering areas and amenities, such as benches, restrooms, potable water, information kiosks, bike repair, and charging stations. The gateways would be at important points along the trail in large cities like Rochester, Syracuse, and New York, as well as towns like Lockport and Tonawanda. The gateways would combine signs, street infrastructure, and landscaped placemaking.

The overall plan required design guidelines for signs and landmarks, including a few pilot projects designed directly by Starr Whitehouse, which would serve as touchpoints and vocabulary for the larger project. These gateways would cost \$500,000 or less and be funded as part of the trail investment through foundations.

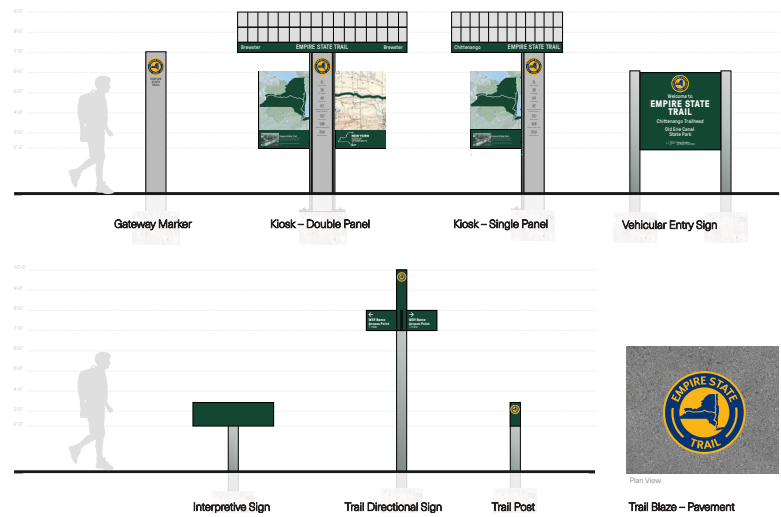
*The Erie Canal Trail and the Harlem Valley Trail had a long history before becoming part of the Empire State Trail.*

## THE DESIGN

C&G began the process with a research stage focused on design elements of early iconic trails in New York. This would serve as a foundation for a design palette with common materials and colors that could meld into one identity. Starr Whitehouse and C&G worked together to develop a kit of parts approach that would allow for consistent identity but could also contain unique placemaking elements that would signify characteristics of the regional areas, including native plants and stone.

*The design vocabulary was developed to work across a wide range of trail types and systems, from large trailheads to isolated trail routes.*

## OFF-ROAD SIGNS



The material and landscape palette were designed for consistency but also durability, with galvanized steel, granite, and powder-coated metal being the core elements employed. All printed materials employed were either integral phenolic surfaces or cut metal. Engraving was also employed for key identity elements on the stone surfaces. The signs and landscape elements were designed to see heavy use with minimal maintenance.

*Starr Whitehouse and C&G Partners created a kit of parts that could fit both the trailhead signs and other modular components for different parts of the trail.*





Starr Whitehouse worked with Bergmann to design six major gateways at Syracuse, Rochester, Lockport, Tonawanda, and Buffalo that would serve as prototypes for the entire program and demonstrate how to employ the balance of graphic consistency oriented towards the local community. The design of these gateways began with rendered views and plans that would articulate the individual design approaches.

## TYPICAL GATEWAY SITE PLAN ELEMENTS



Starr Whitehouse produced renderings and plans for the major gateways that would illustrate best practices for the other gateway areas being developed.



With Alta in the lead role, the team developed a final set of comprehensive design guidelines for the entire program. The guidelines encapsulated many of the lessons learned in the design and development of the project and were made available on a dedicated Empire State Trail section of the New York State website.



## DONOR RECOGNITION

Contributions from private entities can aid in building Gateways, Trailheads, Access Points, and the main trail alignment. Private and corporate donors can also purchase or fund key trail elements from sign benches and trees to packages of multiple elements including shade structures, vegetation, benches, and picnic tables. Creation of a donor recognition program will encourage support of initial construction and maintenance of the Empire State Trail. Larger donations can be encouraged by providing a tiered system of available options and levels of recognition.

"Discrete" and "Integration" are key concepts to remember when creating opportunities for recognition. Plaques or other "naming" features should not distract from the trail or Trailhead experience. Any naming features should also be well integrated into the existing design features with consideration for application on existing site features such as benches or other interpretive elements. Placement and design should be finalized prior to construction and consider the possibility of additional donors after construction is complete.

### SAMPLE NAMING FEATURES



*Guidelines encapsulated the entire developed program.*

## FINAL DESIGN AND FABRICATION

Fabrication incorporated large-scale placemaking by bringing together a team spearheaded by the landscaper and the fabricators, ID Signsystems and ASI. The final approach started with full documentation and detailing, including connection and material specifications. Alta designed each of the 70 interpretive sign panels that were fabricated using iZone phenolic panels, as well as the final message schedule for the suite of signs. Comprehensive inspections during the nine-month fabrication process included site inspections and final inspections in the field. Several challenges were overcome during fabrication, including creating a methodology for etching the logo into stone bases and establishing the tolerances for the metal structure.

At the same time, New York State Parks fabricated trailblazer and crosswalk signs in large blocks of 300-400 signs at a time to be distributed through the park system or the Department of Transportation.



*Material methodologies and tolerances were tested as part of the implementation process.*



## THE FINAL TRAIL SIGNS

On December 31, 2020, the state unveiled the complete trail. The final trail spans 750 miles, with 350 additional miles added, from New York City through the Hudson and Champlain Valleys to Canada and from Albany to Buffalo along the Erie Canal. Over 600 miles of the 750-mile trail is off-road with key anchors around the 45 trailheads and additional interpretive elements. The trail is expected to have over 8.6 million visitors in its first year. Most notably, the trail has been spurring the development of local branches that expand its reach into communities throughout the state.



### EMPIRE STATE TRAIL PARTICIPANTS AND PROJECT STAKEHOLDERS

#### STATE OF NEW YORK

Project Initiator and Financer

#### HUDSON VALLEY GREENWAY

Project Manager and Stakeholder Coordinator

#### ALTA

Lead Planner for Trail Initiatives and Designer for Interpretive Elements and Coordinator for Design Guidelines.

#### STARR WHITEHOUSE AND C&G PARTNERS

Gateway and Wayfinding Program Design Team and Developer of Design Guidelines

#### STARR WHITEHOUSE AND BERGMANN

Design Team for the first six gateways

#### ID SIGNSYSTEMS AND AGI

Principal fabricators for key gateway placemaking and signs.

# 9

## APPENDIX & CREDITS

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## CREDIT LIST

The Sign Research Foundation would like to thank the following groups for their support on this research project:

The International Sign Association for their support towards research and education on the societal benefits of signage.

The Society for Experiential Graphic Design who identified many urban best practices.

The advisory council for identifying key projects.

## RESOURCES UTILIZED FOR THE MANUAL

As part of development of the manual several organizations were consulted that provide review and background resources for the manual.

### NATIONAL DESIGN AND PLANNING ASSOCIATIONS

- Rails to Trails Conservancy
- Society for Experiential Graphic Design
- Sign Research Foundation
- International Downtown Association
- American Trails
- American Planning Association

### REGIONAL AND CITY BASED ASSOCIATIONS

- Hudson River Valley Greenway
- Canadian Trails Federation
- Friends of the High Line
- Atlanta Beltline
- Art Walks CLT
- Toronto Trails
- Schuylkill River Greenways National Heritage Area
- The Intertwine

### BOOKS WITH SECTIONS FOCUSED ON PARK AND TRAIL WAYFINDING DESIGN

- Cameron Cartiere and Martin Zebracki. *The Everyday Practice of Public Art: Art, Space, and Social Inclusion*. Routledge, 2015
- Chris Calori and David Vanden-Eynden. *Signage and Wayfinding Design: A Complete Guide to Creating Environmental Graphic Design Systems (2nd Edition)*. Wiley, 2015.
- Craig M. Berger. *Wayfinding: Designing and Implementing Graphic Navigational Systems*. RotoVision, 2005.
- Craig Berger. *Urban Wayfinding Manual*. Sign Research Foundation, 2020
- Julia Czerniak (Editor) and George Hargreaves. *Large Parks*. Princeton Architectural Press. 2007

- Ronald Lee Fleming. *The Art of Placemaking: Interpreting Community Through Public Art and Urban Design*. Merrell Publishers, 2007
- Wayne Hunt. *Environmental Graphics*. Collins Design, 2004.
- William Birchard and Robert Proudman. *Appalachian Trail Design, Construction, and Maintenance*. Appalachian Trail Press, 2020

#### **GUIDELINES AND BEST PRACTICES (ALL ARE AVAILABLE ONLINE)**

- Cattaraugus County, *Barton & Loguidice and Cloud Gehshan Design*
- Delaware and Lehigh National Heritage Corridor Sign Guidelines, *Cloud Gehshan Design*
- Empire State Trail Design Guide, *Alta Planning + Design, C&G Partners, and Starr Whitehouse Landscape Architects and Planners*
- Great Rivers Greenway Exterior Sign Standards, *Corbin Design*
- Mecklenberg County Greenways, *Corbin Design and DAWA*
- National Mall and Memorial Parks Signage Guidelines, *Hunt Design*
- National Park Service UniGuide Program, *Meeker and Associates*
- Makara Park New Zealand Bike Trail Design Guidelines, *Massey University School of Design*
- State of Victoria Australia Park Design Guidelines
- The Intertwine Regional Trails Sign Guidelines, *Mayer Reed*

#### **INTERVIEWS AND TOURS**

- Kelly Pack, Kevin Belanger, and Molly Riddle of the Rails to Trails Conservancy. Interviewed by Craig Berger and India Adolfsson. August 26, 2021
- Jon Bosio of Merje, Interviewed by India Adolfsson. August 16, 2021
- Mark Vevle and Kelly Jennings of Exit Design. Interviewed by India Adolfsson. August 4, 2021
- Virginia Gehshan of Cloud Gehshan Design. Interviewed by Craig Berger. March 20, 2022
- William Sprengnether of Alta Planning, Paul Dudley of ID Signsystems, Gail Wittwer Laird of Starr Whitehouse, and Andy Beers of the Hudson Valley Greenway. Interviewed by Craig Berger, India Adolfsson and Keith Helmetag. October 15, 2021
- Paul Dudley of ID Signsystems and Debbie Fuller of Village of Fairport. Tour of Erie Canal and Empire State Trail for Craig Berger. December 20, 2021
- SEG.D. Portland City Bike Tour for Craig Berger. June 15, 2022

#### **PROJECT CREDITS**

Unless otherwise stated all photos credits are to the design firms listed. These credits are limited to the designers of the specific elements being profiled and not the entire built project.



## CHAPTER 2: TRENDS IN PARKS AND TRAIL SIGNAGE

- Walk!Philadelphia  
*Designer: Joel Katz Design Associates*
- Great Salt Lake Shoreline Preserve  
*Designer: Sea Reach Ltd.*
- West Orange Trail  
*Designer: AECOM*
- Birmingham Civil Rights Trail  
*Designer: Big Communications*
- City of Cary, NC  
*Designer: Ashworth Environmental Design*
- Mount Stirling Alpine Resort Interpretive Trail  
*Designer: Heine Jones*
- Seattle Waterfront Park  
*Designer: Studio Matthews*
- High Fall Gorge  
*Designer: Trampoline Advertising and Design Company*
- Brewer's Heritage Trail  
*Designer: FRCHNelson*
- High Line  
*Designer: Pentagram*
- Memphis River Parks:  
*Designer: Champions Design*
- Lexington, Kentucky African American Trail  
*Designer: Solid Light and EHI Consultants*  
*Photo credit: Stu Johnson WEKU*
- Delaware and Lehigh Trail  
*Designer: Cloud Gehshan*

### CHAPTER 3: HISTORY AND ANATOMY OF PARK AND LANDSCAPE SIGNS

- Brunswick Visitor Center  
*Designer: HealyKohler Design*
- Canberra Centenary Trail Gateway  
*Designer: Screenmakers*
- West Chester County Trails  
*Designer: Smart Outdoor Inc.*
- Mecklenberg County Greenway  
*Designer: Corbin Design*
- Summit Bechtel Reserve  
*Designer: RSM*
- Terrabilt Modular System  
*Designer: Terrabilt*
- Tanner Springs Park  
*Artist: Herbert Dreiseitl*
- Mill River Park and Greenway  
*Landscape Architect: Olin Partnership*
- Jackson Street Reconstruction on Saint Paul  
*Designer: Toole Design*
- Romare Beardon Park  
*Designer: 505 Design*
- CV Link in the Coachella Valley  
*Planner and Designer: Alta*
- Bartram's Garden Trail  
*Designer: Gecko Group*
- National Park Service Design Guidelines  
*Designer: Massimo Vignelli*
- High Trestle Bridge  
*Designer: RDG Design and Planning*
- Bikeway Belém of Lisbon  
*Designer: P-06 Atelier*
- Shanghai Trail Proposal  
*Designer: 100 Architects*
- Hoover Mason Trail  
*Designer: Bluecadet*
- The Intertwine  
*Designer: Mayer Reed*
- Mario Cuomo Bridge  
*Designer: Exit Design*
- Birmingham Civil Rights Heritage Trail  
*Designer: Big Communications*



## CHAPTER 4: HISTORY OF AMERICAN TRAILS

- Central Park, New York  
*Designer: Frederick Law Olmstead*
- Freedom Trail  
*Developer: Bill Schofield*
- Storm King Art Center  
*Developer: Stuart Ogden*
- Independence National Historic Park  
*Design Overseen by Edmund Bacon*
- National Park Service Graphic Guidelines  
*Designer: Massimo Vignelli*
- Blackstone Heritage Corridor Signs  
*Designer: Selbert Perkins*
- Portland, Oregon Eastbank Esplanade  
*Designer: Mayer Reed*
- Pere Marquette Rail Trail  
*Designer: Corbin*
- Buffalo Erie Canal Commercial Slip  
*Designer: C&G Partners*
- Golden Gate National Heritage Trail  
*Designer: Hunt Design*
- High Line  
*Designer: Pentagram*
- The Intertwine Trail  
*Designer: Mayer Read*
- Fairmount and Wissahickon Park  
*Designers: Cloud Gehshan and Sussman Prejza*
- Northwest Corridor Trail  
*Designer: Cloud Gehshan*
- Putnam History Center  
*Designer: C&G Partners*
- Newark Walks  
*Designers: Merje and Winfield & Company*
- Rockaway Beach Boardwalk  
*Designer: Pentagram*
- City of San Jose Trail  
*Designer: Callander Associates*
- Memphis River Parks  
*Designer: Champions Design*
- Birmingham Civil Rights Trail  
*Designer: Big Communications*
- Maryland's Jefferson Patterson Park  
*Designer: C&G Partners*
- Gov. Mario M. Cuomo Bridge Shared Use Path  
*Designer: Exit Design Studio*
- Empire State Trail  
*Designer: See Empire State Trail Participants and Project Stakeholders; Chapter 8, Case Study*
- Cook County Preserve  
*Designer: Studio Blue*

## CHAPTER 5: FINANCING & DEVELOPMENT

- Lumina Night Walks  
*Designer: Moment Factory*
- Toronto Bentway  
*Planner: Lord Cultural Services*
- Ohlone Greenway Wayfinding Project  
*Designer: Fehrs and Pears*
- Rose Fitzgerald Kennedy Greenway  
*Planners: Utile, Greenberg Consultants, HR&A Advisors, Nelson/Nygaard*
- Catt County Wayfinding System  
*Designers: Cloud Gehshan and Barton & Loguidice*
- Pinkerton Tunnel  
*Engineer: LRL Construction*

## CHAPTER 6: MANAGEMENT & MAINTENANCE

- Brickyard Trail  
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- Golden Gate National Historic Areas  
*Designer: Hunt Design*
- Haxton Way Trail  
*Designer: LDES*
- Old Croton Aqueduct Trail  
*Designer: Nancy Owens Studio LLC, Laurel Marx Design*
- Makara Peak Trail  
*Designer: Massey University's School of Design*
- National Mall Sign Standards  
*Designer: Hunt Design*
- Mecklenberg County Wayfinding  
*Designer: Corbin Design and Dawa*

## CHAPTER 7: DESIGN DEVELOPMENT

- Atlanta Beltline  
*Planner: Lord Cultural Services*
- Anacostia Riverwalk  
*Designer: Toole Design*
- Northeast Indiana Trail Wayfinding  
*Designer: Merje*
- Boxer's Trail Wayfinding  
*Designer: Little Giant Creative*
- Ogden Valley Utah Trail  
*Designer: Tangram Design*
- Great Rivers Greenway Wayfinding  
*Designer: Corbin Design*
- Fashion Institute of Technology Capstone Projects  
*Students: Suki Wong, Jolie O'Brien, and Wang Ching Wong*

## CHAPTER 8: CASE STUDY

- See Empire State Trail Participants and Project Stakeholders; Chapter 8, Case Study  
*Design and Fabrication Team: Alta (Lead Planner), Starr Whitehouse and C&G Partners (Lead wayfinding sign designers), Starr Whitehouse and Bergmann (Gateway designers), ID Signsystems and AGI (Documentation for final fabrication)*



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