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Wayfinding: The Design of Getting Lost and Found

By Katie Osborn

Wayfinding is an integral part of our everyday lives. In its purest form, it helps people get from point A to point B. It can also create a sense of safety while encouraging discovery of the unknown.

Wayfinding systems can be an asset and opportunity for communities with many positive outcomes. These can include an increased awareness of walkability for residents and visitors, resulting in health benefits, and an increase in patrons for shopping, eating, and drinking establishments. Wayfinding can reinforce a community's brand and help visitors to discover and explore the community. Finally, wayfinding can help enhance visual character, define districts, and create a sense of place and boundaries for the community.

In engaging with communities to develop wayfinding systems, planners can work with other design professionals and community stakeholders to define the goals, understand the opportunities, and outline the requirements that are needed for a successful wayfinding system.

This *PAS Memo* will introduce planners to the importance of wayfinding, the elements of a wayfinding system, and how to create a wayfinding system.

The Importance of Wayfinding

Experiences for both community residents and visitors can be strengthened through designing wayfinding systems that provide appropriate information at key decision points within the physical environment. Successful systems help people navigate to their destinations without realizing they used any wayfinding at all.

Additionally, wayfinding can help extend a community's brand within its jurisdiction or create boundaries in shared spaces, such as municipal buildings with multiple agencies. For example, transportation hubs used by multiple systems will need clarity of boundaries through placement of clear gateways and branding; however, consistency of messaging throughout the hub creates a consistent and comprehensive path of travel by the user.

The primary users of wayfinding systems are those visiting a location for the first time, but it's important to realize that "first-time

visitor" doesn't mean only tourists. Users of wayfinding systems may include residents who are discovering new areas of their communities, delivery persons, or part-time residents.

It is critical that users feel safe and comfortable getting to their destinations. The sense of getting lost, or feeling that the time it takes to locate a destination is longer than expected, can increase anxiety and influence the way someone feels about their experience. It can also reduce efficiencies of transportation and delivery and add extra time and costs to those economic functions.

Planning a wayfinding system begins with understanding how an area is organized and what patterns already exist. Important elements include pathways, districts, boundaries, nodes, and landmarks. These architectural features and structures allow people to create a sense of legibility of the space, as Kevin Lynch describes in the 1960 classic *The Image of the City*.

Legibility of a city encompasses the mental images people hold in their minds and is the basis for how they will navigate through a space using those pathways, districts, boundaries, nodes, and landmarks (Lynch 1960). Built environments with these features make wayfinding intuitive for visitors and are more likely to generate return visits. Lynch noted that color, shape, and light are cues that people use to orient themselves within the context of the city. Consistent use of these sensory cues from the external environment is the foundation of wayfinding. Today, digital platforms are also an integral tool for providing cues within the wayfinding process.

Features that make up a city act as a natural wayfinding system within the urban context. However, it works only over time with extended use of the city by regular users. People need more than architecture and structures to determine where they are going, and this is where developing a wayfinding system connects the structure of the city to the users.

In 2017, San Carlos, California, began developing a [down-town wayfinding system](#) based on feedback that municipal parking lots were difficult to find. In a city of just under six square miles and 30,000 residents, the downtown acts as the town "living room" where residents and those from nearby communities come together.

With the initial goal of making parking easier to find, city planners leveraged the need for better wayfinding to parking lots and expanded the system to include key city destinations such as parks, city hall, the airport, and the library. They also used the system to create “gateways” to visually define the entrances into San Carlos. The initial feedback from the downtown wayfinding program encouraged planners to broaden the program citywide to address the multimodal needs of pedestrians and cyclists and to decrease traffic by getting people to their destinations more directly (San Carlos DCD 2018).

As cities develop over time and new districts are added, or areas are rezoned impacting economic hubs, wayfinding systems can be used to enhance walkability and encourage exploration of these areas. If there is already a system in place, adapting the program or creating a distinctly different system to reflect changes will encourage seamless navigation throughout the growth and expansion of a municipality.

Minneapolis already had a downtown wayfinding system in place but created the [Riverfront District Signage & Wayfinding Master Plan](#) to help define and identify a section of riverfront near the downtown (Minneapolis DCPED 2004). The goals were to create a strong sense of place, help visitors find their way to and around the district, and enhance the experience of its many historical, recreational, cultural, and commercial amenities. These goals allowed the team to develop a system that defined the boundaries of the district with a distinctive design, communicated information at key decision points, and provided supporting information along the way to the user’s destination.

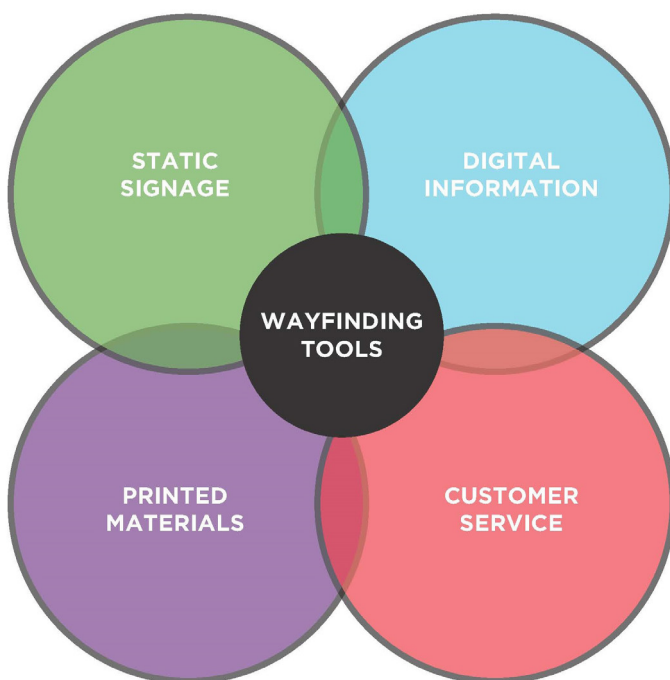


Figure 1. Wayfinding tools. Courtesy Via Collective.

Elements of a Wayfinding System

People often refer to wayfinding as signage, but wayfinding systems are composed of a number of different elements that should be thought of as wayfinding tools.

Because people absorb information using all five senses, wayfinding systems can be made up of a variety of solutions, including visual, tactile, or spoken. These solutions become the wayfinding tools. They can include signs, maps, lists of destinations, or direct assistance from other people. Wayfinding systems should reflect the audience’s needs, and because everyone absorbs information differently, the most effective systems will use a variety of different tools.

By conceptualizing the elements in a wayfinding program as tools, the program can focus on how people will obtain the information rather than the structures that the information will be placed on. This approach allows for a comprehensive strategy development versus a narrow focus on signage, which is only one element of a system. Static signage, digital information, printed materials, and in some cases, customer service can all make up the tools of a wayfinding system. The following categories are a variety of sign types that will assist people in getting to their destinations (see also Figure 1).

Static Signage

When people use the term “wayfinding,” static signage, or more specifically directional signage, is usually what comes to mind. Because these signs are only one type of tool that can provide information, they should be considered as part of but not the entire solution. Basic static signage types include gateway signage that defines the entrances or exits of a district, directional signage at decision points, and identification signage that confirms a user has arrived at the destination.

Static maps located between decision points within a downtown district can encourage exploration, identify key destinations, and list available amenities. Locating maps between decision points also encourages people to stop and confirm they are going in the correct direction. “Heads-up mapping,” the practice of depicting a static map as facing the same cardinal direction people are facing while reading it, can be helpful when major landmarks do not exist to anchor people within the context of the environment. This mapping approach, if considered, should be tested during the design phase to determine whether legibility of the locations and surrounding areas creates more clarity or confusion when reading a static map.

The design components of static signage include scale, color, and typography. The appropriate scale of the sign and size of the design elements are determined by the sign’s location and the mode of transportation from which it will be viewed: vehicular, pedestrian, or cyclist. It is important to consider consistent design qualities, determine the hierarchy of information within different types of signs, and ensure the placement of signs at key decision points.

The Federal Highway Administration’s [Manual on Uniform Traffic Control Devices for Streets and Highways \(MUTCD\)](#) provides guidelines for designing vehicular signs. A section specifically on community wayfinding includes recommendations on

colors, fonts, letter height, contrast, symbols, size, and shape. Pedestrian signage may be governed by local codes, which may include guidelines for the quantity, location, content, color, illumination, or size of signs. If a system includes interior signage, rules govern the typography, color, and contrast of certain interior sign types, such as door signs. These signs must adhere to [Americans with Disabilities Act \(ADA\) accessibility requirements](#) (ASI Sign Systems 2010).

Digital Information

Websites, smartphones, interactive signs, and variable messaging are all capabilities that need to be considered as part of digital signage. In general, digital signage is best used for highly variable information and can be a useful asset for systems in which information changes within less than six months, such as access points during construction, parking garage availability, or event destinations.

Websites and smartphone information should be considered for trip planning offsite and journey confirmation onsite. Because smartphones are now integrated into our everyday lives, apps and accessible websites are also considerations when communicating directions.

When determining the best use of digital media onsite, consider that placement of the sign will have the most impact on how users will perceive and interact with the variety of content and usability of the screen. Digital screens that are not interactive can serve many through overhead placement; however, interactive signage is best used to serve individuals one at a time. A ground-mounted digital screen will be perceived as touchscreen, even if it isn't, since it is within arm's reach. Conversely, a wall-mounted screen mounted above six feet will not be perceived as touchscreen, even if it is, because it is out of reach of so many. Therefore, considering the types of content provided and desired levels of interactivity are key to determining if digital signage is the best asset to the system.

Printed Materials

Printed maps and addresses with directions still provide valuable information and should not be overlooked as part of a wayfinding program.

Promotional materials for community events, such as festivals or farmers markets, may be mailed out or arrive as email and may be the first piece of information someone receives regarding this destination. Consistent addresses, driving directions, and coordination with maps and destination names that are located at the site provide a connection of information across multiple wayfinding tools. The visual style and information nomenclature presented in these materials should be consistent across the variety of tools used in the system.

Customer Service

General customer service programs should not be overlooked as they provide a human connection between people and their destinations. Listing the chamber of commerce or other welcome centers on maps and directional signage will be helpful for first-time visitors. Areas of the city with large tourist

attractions can benefit from an "on the street" presence. Customer service booths or assistants with branded uniforms can act as "ambassadors" to the city or district.

In Lower Manhattan, the Alliance for Downtown New York's [public safety officers](#) wear red-coat uniforms and caps with the Downtown Alliance logo (Alliance for Downtown New York 2018). These officers are part of the community-facing ambassador program to help locals and visitors with directions, provide a sense of safety, and assist in emergencies. They are the "eyes on the street."

Other Wayfinding Considerations

There are other important aspects of wayfinding systems beyond the informational elements of the system. Wayfinding systems offer opportunities to augment local character; tying them to any community branding programs that might exist is a way to mutually reinforce community character and identification of program elements. It is also important that wayfinding systems be accessible to all; planners should be cognizant of Universal Design principles to ensure that all populations are served by these systems.

Branding

Although a wayfinding system's core purpose is to get people from Point A to Point B, it may also be created as an extension of a community's brand and thereby help provide or reinforce a sense of place.

If a community has already undertaken a branding program (see ["An Introduction to Community Branding," PAS Memo, July-August 2013](#)), obtaining those brand guidelines at the beginning of the project will provide the baseline for the aesthetic direction of the program. Brand elements such as logo, colors, typography, and images should be considered when designing the wayfinding system, as it reinforces the unique personality of the community and helps reinforce a sense of place. Additionally, the brand guidelines may inspire the shape and materials of the signs, which extends the application and perception of the brand. This reinforcement of the brand values in the built environment versus just printed or web-based advertising and communications is another added benefit of implementing the brand properly across the wayfinding system.

Universal Design

As populations become more diverse with a range of abilities and people are living longer, wayfinding is an excellent opportunity to apply universal design standards for an inclusive and approachable wayfinding experience.

The term "universal design" was coined by the architect Ronald Mace to describe the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone, regardless of their age, ability, or status in life (NCSUCUD 2008). These broad-spectrum ideas are meant to produce environments that are inherently accessible to older people and people with disabilities, as well as people without disabilities.

Wayfinding systems can embrace universal design by the scale, typography, placement, and information displayed on

the signs. Table 1 explains how universal design principles may be applied within wayfinding systems.

Table 1. Universal Design Applied to Wayfinding

<i>Principle</i>	<i>Definition</i>	<i>Application within Wayfinding</i>
Equitable Use	The design is useful and marketable to people with diverse abilities.	A greater variety of tools provided within a system will increase the availability of information to the broadest audience; signs, maps, digital, print or customer service. This approach also allows for flexibility for a user to consult multiple tools to confirm their assumptions about how to arrive at the destination.
Flexibility in Use	The design accommodates a wide range of individual preferences and abilities.	
Simple and Intuitive Use	Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.	The use of universal iconography (images and symbols) can be an asset in communicating destinations on the system. Iconography can help facilitate wayfinding in areas where populations speak a variety of languages. Additionally, using iconography can reduce the need for long lists and can promote grouping of information by category. A set of 50 public-domain symbol signs was developed in the 1970s by AIGA, the professional association for design, in partnership with the U.S. Department of Transportation, for free use by all (AIGA 2018).
Perceptible Information	The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.	Large-scale graphics and the placement of signage will assist in the approachability of the sign or map. Good places for large-scale graphics include gateways, main entrances, or restrooms. The placement and scale of the sign or information will allow a variety of differently abled people to approach and consume the information.
Tolerance for Error	The design minimizes hazards and the adverse consequences of accidental or unintended actions.	When confronted with a level of confusion or when not able to interact with the sign or map, people will most likely turn to someone and ask for assistance. Deploying a customer service team at the gateway of a system—in a transportation hub, for instance, or in a central downtown district—can be a final step in helping people find the destination.
Low Physical Effort	The design can be used efficiently and comfortably and with a minimum of fatigue.	
Size and Space for Approach and Use	Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.	The location of the wayfinding tool impacts the ease of use. The placement strategy of locating signs in low traffic-flow areas can assist those that need time to digest information or are using walking devices and better allows multiple people to use the same sign at the same time. Having adequate space without crowding can help people feel comfortable and less anxious about decision making when they may need more time with the map or list of information.

Courtesy Via Collective.

Building a Wayfinding Project Team

Bringing together a cross-functional team is essential when creating a wayfinding system. Because a wayfinding system consists of the content that populates it, the structure of the static and digital tools, and the people who maintain and update the information, a variety of participants can contribute to a successful program. These can include:

1. City planners, city council members, or other public-sector actors to own and guide the project
2. Representatives of stakeholder groups to provide information and feedback on program goals and design
3. Wayfinding strategists and designers to understand the research, conduct audits, define nomenclature and hierarchy, determine sign types and placement of signs, and develop strategy and a design aesthetic
4. IT specialists to specify and provide system requirements for digital signage
5. Marketing and communications departments to connect branding elements and confirm user needs through research and surveys
6. Engineers and fabricators to create structurally sound and implementable systems

Before beginning the process of designing a system, it is important to define who will own and maintain it once it is complete. Throughout the life of the system, destinations will need updating, signs will be broken, and the growth of the city may require additional program expansion. Whether the owner is the planning department, city council, the department of transportation, or a downtown business association, it will need to establish requirements for maintenance and upkeep of the system.

Stakeholders can be broken down into two categories: anyone who represents the users of the information, such as community groups or business improvement district associations, and anyone who contributes to the information and physical nature of the design, such as wayfinding strategists or IT departments.

Both owners and stakeholders need to be at the table from the beginning of a project to establish goals, confirm the process, and define required outcomes. This process was well established for [the Haven Project](#), a master plan for the South Bronx developed by the New York Restoration Project where community members and project leaders brought together the stakeholders and project team to define the outcomes and ideas of how to accomplish them together (see Figure 2).

Wayfinding projects can be multiyear projects; therefore, clear documentation of goals, objectives, and requirements will ensure proper execution of the project throughout staffing and stakeholder changes.

Throughout the course of the project and across the area served by the wayfinding program, there may be physical boundaries where there are multiple owners, opposing goals, or conflicts of jurisdiction. However, it is important to remember that the average user does not perceive these boundaries. The visitor is merely looking to get from point A to point B



Figure 2. Stakeholders for the Haven Project discuss plan vision and goals. Courtesy New York Restoration Project.

and will become frustrated if the wayfinding system suddenly disappears within a space that appears to be part of the same area. It is critical that internal teams overcome differences and focus on how the goals of the system best serve the people.

Designing a Wayfinding System

Wayfinding systems address macro issues—navigation, walkability, economic vitality—at a micro level—lists of destinations, map design, structural design. The design of a wayfinding program is based on three key components: user groups, information requirements, and architectural conditions. Each of these elements inform the who, what, where, and why of creating a program.

Understanding the needs of user groups will help inform the overall goals of the program. User groups may include residents or those from nearby districts; tourists, including those for whom English is a second language; business visitors; or delivery companies. Each of these categories could be broken down further.

Understanding who the users are will help determine what kind of information they need. Within business districts, identifying key destinations such as landmarks, cultural institutions, parks, and recreational facilities is important. If it is determined that private businesses are to be listed, criteria should be established to determine which are to be listed. Identifying businesses, which can come and go at any time, will make for a higher level of variable information within the system, which will impact the types of tools that are most effective to include.

The architectural conditions of the environment will prescribe the sign type (gateway, directional, or informational) and strategic placement of the system. Tools can be one-on-one, such as digital assets and customer service, or can serve many, as is the case with static signage and printed materials. Sidewalk widths, traffic density, and type of approach (vehicular,

Case Study: Greater Helena Area Active Living Wayfinding System, Helena, Montana

By Karen Lane

Prevention Programs Manager | Lewis and Clark Public Health, Helena, Montana

The Healthy Communities Coalition in the greater Helena area of Montana developed a comprehensive plan for an Active Living Wayfinding System. The purpose of the community-wide system is to prevent chronic disease by improving access to nutritious food sources and directing people to parks and urban trails to increase participation in physical activity.

With a Plan4Health grant from the American Planning Association (APA) and American Public Health Association, the coalition was able to work at the intersection of planning and public health to build a more sustainable, cross-sector approach to healthy living. The system builds on the recently revised Greater Helena Area Transportation Plan, the City of Helena Growth Policy, the Lewis and Clark County Growth Policy, the Downtown Helena Master Plan, and the Community Health Improvement Plan. The lead team for the project included a member of the Western Central District of the APA, a Montana Public Health Association member who is the local health department's chronic disease prevention program manager, and a county community development staff member.

Additionally, a grant from the National Association of Chronic Disease Directors provided technical assistance and resources to ensure that the wayfinding system works for people with

disabilities. Although the diverse coalition of more than 30 members already included people with disabilities, this project underscored the importance of having inclusive communications from the outset of the design process. Representatives of the local Montana Independent Living Project were key to keeping the group on track.

The coalition hired Alta Planning and Design to work with them to define parameters and to create the system and communications plan. The broader community provided input through a public open house booth at a Saturday farmers market and through focus groups conducted with seniors, people with low incomes, and people with disabilities. The focus-group model was modified to gather input from people with low vision or blindness.

With the completion of the plan in March 2017 (see Figure 3), the community set about developing a demonstration site to show how the wayfinding signs will look when installed. Moving into 2018, public and private partners across the three-jurisdiction area are enthusiastic and are including the signage in their budgets.

Learn more about this project at www.lccountymt.gov/health/healthy-lifestyle/plan4health.html.

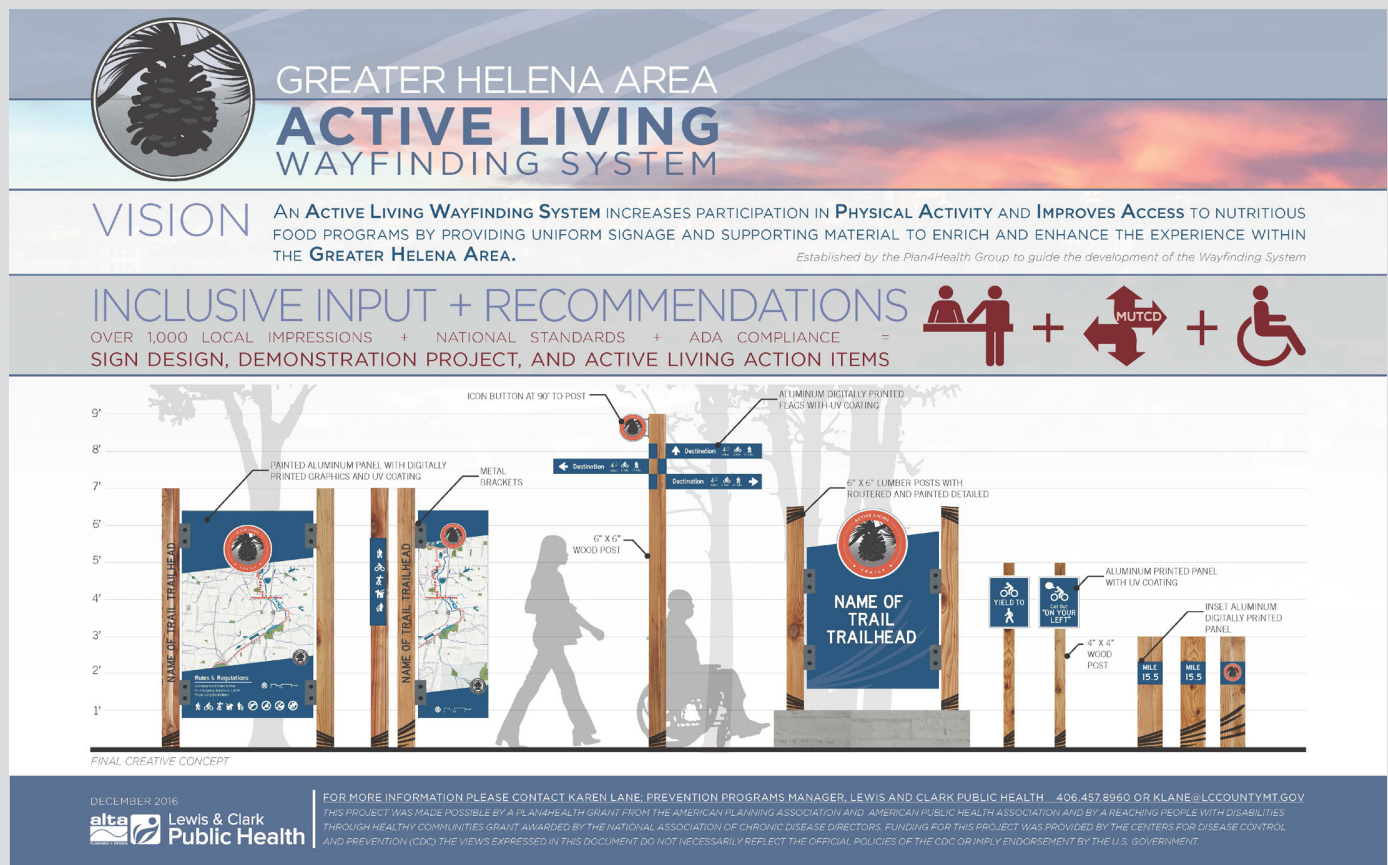


Figure 3. The Greater Helena Area Active Living Wayfinding System vision and creative concept. Courtesy Lewis and Clark Public Health.

pedestrian, or cyclist) will all impact decisions for types of sign and where they will go.

The process for building the system can be broken down into the following phases:

1. Goals and Audience: Articulating the reasons for creating a system and identifying who will use it
2. Inventory and Research: Auditing the current system, determining what's working, and confirming visitor needs through research
3. Strategy Development: Analyzing the needs of the user with the audit and research to develop an approach that meets the goals of the project
4. Design: Creating location plans, message programs, and determining physical design and fabrication approach
5. Construction, Implementation, and Maintenance: Building and installing the system and keeping it current and relevant into the future

Goals and Audience

The creation of a wayfinding system can be initiated for several reasons, including revitalization of civic spaces, new construction as a municipality grows, a rehab of an existing space with a new purpose, or to introduce a new brand. Developing wayfinding systems for such situations can allow for increased engagement by visitors, enhanced walkability of the area, and a greater sense of safety as people become more familiar with where and how to obtain information about the area.

Wayfinding can also be used to support other community values and goals. See the sidebar on p. 6 for a case study of how Helena, Montana, developed its [Active Living Wayfinding System](#) to help improve access to nutritious food and encourage physical activity for residents.

Establishing a set of clear goals that address how the wayfinding system should impact the way people use the surrounding area and what their needs are is important. These can

then be revisited throughout the process to confirm decisions and ensure details stay aligned with desired outcomes.

[London](#) and [New York City](#) created wayfinding systems in the last decade with goals of encouraging walkability (Applied Wayfinding n.d.; Pentagram n.d.). The systems also provided a greater sense of safety, allowing visitors to determine where they are and how far they must go to arrive at their destinations, which may not require public transit or a taxi.

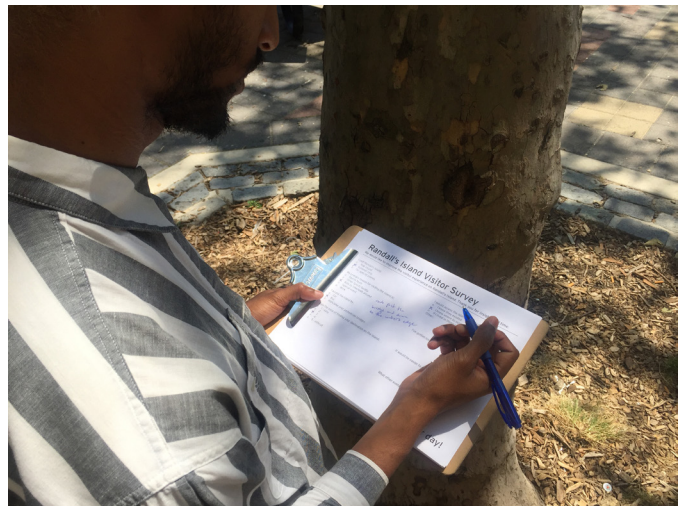
Goals of the program may be based on new development or changes to the built environment, but they may also come from surveys or research performed under other circumstances. Because this information may not have been gathered with the intent of developing a fully comprehensive wayfinding system, revisiting the goals may be advantageous after the next phase, inventory and research, is concluded.

Inventory and Research

Within existing environments, auditing the current wayfinding tools that people use to navigate, including physical signage, digital platforms, and printed communications, is important to understand the full extent of the existing system. This inventory can be used to determine how the system may or may not be currently meeting the goals of the project and what needs to be added to create a comprehensive system.

An auditing system includes photographic documentation and observations of how people are interacting with the current system. Documenting all forms of tools, including websites, apps, signs, and printed materials, will provide a comprehensive view of the program. This process will also provide the opportunity to review nomenclature, hierarchy, and consistency of information.

Performing qualitative and quantitative research will provide an inventory of users' needs and how they use the physical environment to orient themselves and navigate. Qualitative methods, such as interviews and observation studies, can provide the underlying reasons, opinions, and motivations for why people are using the system under current conditions and provide insights as to what an improved system would look



Figures 4 and 5. Conducting visitor surveys and mental mapping research in Randall's Island Park, New York City. Courtesy Via Collective.

Case Study: Randall's Island Park, New York

Randall's Island Park Alliance, Inc. (RIPA) was founded in 1992 as a public-private partnership that manages and develops Randall's Island Park, New York, in coordination with New York City Parks, Triborough Bridge and Tunnel Authority (TBTA), and New York City Department of Transportation (NYC DOT).

Randall's Island is a premier recreational destination, attracting 3 million visitors per year. The park provides sports fields, an outdoor special event space, and other private facilities open to the public as well as several city and state agencies with employees and daily visitors. The park is accessible by car, footbridge, and public buses, but there was a perception that it was difficult to reach and its destinations challenging to find.

Via Collective conducted a thorough audit of the 500-acre island including websites, social media, online communications, maps, directions, and signage (both on and off-island). On a busy spring Saturday, Via Collective conducted user research, collecting surveys from 400 people asking them a predetermined set of questions that provided insights on what they used this park for, what they used to navigate the park, and how easy or difficult it was to locate other destinations within the park. This information helped the firm to determine map design, key destinations, and iconography.

RIPA had always known that both the real and perceived difficulty of wayfinding was preventing the park from serving as many users as it could. The audit and design process enabled the identification of crucial access and decision points, and allowed for systematic thinking about best circulation routes, especially for local pedestrian and cyclists as distinct user categories.

Collaboration among various stakeholders, including RIPA's board of directors, NYC Parks, NYC DOT, TBTA, and the local community board helped to establish goals, research existing concerns, and recommend a strategic design approach to create an integrated wayfinding system. This process allowed the consultants to understand the full scope of the project, the roots of getting lost, and how to develop solutions across all communication mediums that were distinct for pedestrians, cyclists, and drivers to deliver a consistent, cohesive, and integrated wayfinding system.

The final signage program integrated sign types from TBTA, NYC DOT, and NYC Parks to create an identification program that was approved by the New York City Public Design Commission and was implemented by MS Signs in the fall of 2014. Figures 6 and 7 show the integration of three sign types—banner identification, TBTA regulatory signage, and map design—at the base of the Queens access point of the Triborough Bridge for pedestrian and cyclists.

Travelers not in vehicles depend on the signs and destination banners of the system to find their way to their destinations while also learning more about all the park can offer. RIPA has continued to develop the Island-wide pathway system and has seen a significant increase in cyclists commuting between the three surrounding boroughs. Improved access to and

around the park addresses both environmental and economic justice issues in adjacent neighborhoods.

RIPA has further extended the wayfinding rubric into tailored maps—special event maps, a running map, a garden tour map, a map of the park's restored wetlands and waterfront destinations—that are distributed in hard copy and can be downloaded from its [website](#). The wayfinding system has not only led to better access and circulation by the casual visitor and by nonvehicular commuters, it has facilitated new park uses and programming, helping RIPA pursue its goal of providing consistent, creative programming and recreational opportunities for the island's closest neighbors in East Harlem and the South Bronx. RIPA continues to work with Via Collective and various fabricators to address ongoing updates to park access and destinations on a quarterly or yearly basis.



Figures 6 and 7. Sign type integration at Randall's Island Park, New York. Photos by Jason Gardner.

like. Quantitative research can help confirm tool usage and, if multiple designs are tested, can provide insights into which system is easier to interact with.

Visitor surveys can be a quick and easy way to understand what visitors are looking for, how they interact with the current system, or what the current experience they are having navigating the environment. The use of “mental map” research (having people mark where they are, as well as two or three other destinations, on a map) can shed light on the current legibility of the place. Insights provided in the mental mapping exercise can influence the content and design elements of the design of the map. Both of these research techniques were deployed to understand the visitor experience in Randall’s Island Park, New York City (see Figures 4 and 5, p. 7). See the sidebar on p. 8 or a case study of the wayfinding system development process for Randall’s Island Park.

Strategy Development

Once the inventory and research phases are complete, a strategy for the wayfinding system can be developed. This is where the planning of the system takes place. The audit and research should have provided enough information to identify what is working and what issues must be addressed to align with the project goals. The strategy can be based on a variety of conditions including the complexity of the site, numbers of buildings, or the amount of primary versus secondary destinations. The strategy should include the framework of the system: content, location plans, message schedule, and sign types.

A solid understanding of user needs will help define the information content, its hierarchy, and nomenclature. Considerations such as multiple languages, iconography, and how to categorize the information will all be determined in this phase. The audit of the existing system, or a study of the site plans and conditions, will provide insights into where the key sign types are to be located: gateway signs at entrances/exits, directional signs at decision points, and identification signs at destinations.

Location plans map out decision points, destinations, and paths of travel. They show where physical signage will be placed and how additional tools, such as customer service or digital platforms, can support the visitor. Each of the sign types will require a unique identifier that denotes it on the plan. If there are more than one of those sign types, a unique location number is also required. This unique identifier and location number will also appear on a message schedule.

The message schedule connects the locations and the information required for each sign. This content, when combined with the sign location and how people will interact with it, will lead to the design of the system. Additionally, information on the number of sides on a sign, the height and width, and whether the sign is ground or wall mounted will also be added to the message schedule during the design phase.

Design

Following the development of the location and message plans, the next step is physical structure design. Signage connects visitors to destinations and helps them determine whether

they are in the right place, so it serves as an important extension of a community’s brand. The usage of elements such as logo, color, and typography impact the visual design of the wayfinding system. If a community does not have brand guidelines, discussions at the beginning of the project should outline key system branding elements, such as logos, color, and typography.

Of the branding elements, the typeface may need to be reconsidered for signage. As fonts are designed based on their usage, what is used for the logo and printed communications may not be appropriate for wayfinding applications. With the content and hierarchy determined in the strategy phase, studies with various fonts can be conducted during the design phase. Although there are many recommendations on font size based on where the sign is placed and how the user approaches it, if the size is not predetermined by law, then two or three font options should be considered in full-scale mockups to determine readability and legibility of the sign.

Determining which font to use is based on where and how it will be used: Is a sign at eye-level or is it posted overhead? Is it digital or static? Sans serif fonts have the best readability; typefaces such as [Frutiger](#), [Helvetica](#), and [Univers](#) are used across multiple systems in various countries.

This is also a good time for public feedback on sign design—an opportunity for all stakeholders to see the sign in the environment and build momentum for developing the full system.

Finally, material and fabrication specifications must be determined for the program. A drawing of each sign should include the size, material specification, and the intent of how it will be fabricated and installed. This, along with the location plan and message schedule, allows for a cost estimate of the full program.

Once the design is approved, it is important to combine the wayfinding strategy with the planning principles to create a set of wayfinding guidelines. The guidance document should include the goals, research, and design process of the wayfinding system as well as the outline of content nomenclature and hierarchies. These guidelines will assist in implementation, which may happen over several years or across multiple zones. Information on structural design, materials, and fabrication techniques complete the standards.

Construction, Implementation, and Maintenance

The final design specifications, location plans, and message schedule constitute the bid document. This is what will be used by fabricators to provide estimates.

Working with fabricators that are familiar with city permitting and other installation regulations is an important aspect of a successful implementation. Shop drawings are standard documents that will be created before any fabrication will occur. Obtaining color samples and in some cases a full-size mockup is recommended so that there are no surprises during the rollout of the system.

One thing that can seem surprising is the length of time fabrication can take. Depending on scale, quantity of signs, location of implementation, and complexity of the design,

from award of the program to full implementation it can be a minimum of four months before the first sign arrives.

Once the system is fully executed, it is important that there is a system in place for ongoing maintenance. The need to add names to a sign, update digital content updates, or repair a damaged sign can all occur within the first year and throughout the life of the system. The size of the owning organization and the scale of the system impact what the maintenance program looks like. For large-scale systems, a dedicated internal wayfinding manager or group may be most effective, especially when content is highly variable. For smaller systems, an ongoing relationship with the fabricator can be sufficient.

Often, a facility department owns the wayfinding program as there are structures that will need maintenance. In other cases, it will be the operations group because it holds the content that requires updating. However, considering a philosophy of “wayfinding as customer service,” marketing and communications departments may be the best people to manage, coordinate, and create operations around the wayfinding program for its long-term success.

Conclusion

As an extension of the brand of a community, wayfinding systems provide opportunities for increased walkability, positive economic impact, and higher levels of return visitors. Planners have the opportunity to consider how wayfinding, which is more than signage, impacts the vitality and walkability of cities and environments. Keeping a big-picture focus will assist in developing a system that addresses stated goals and that can enhance the visitor experience.

Planners should consider the following recommended practices for wayfinding projects:

1. Outline the project goals and get buy-in from stakeholders that will have final decision-making power to address the needs required for a successful program.
2. Create a cross-functional team that can work together and across the variety of project needs.
3. Understand your visitors through research and information gathering.
4. Create systems that align with existing aesthetic guidelines and zoning regulations.
5. Consider the long-term sustainability of the wayfinding system by developing wayfinding system guideline and having a maintenance plan in place.

When approached with clear goals, stakeholder engagement, and branded design, wayfinding can enhance the visitor experience in the built environment. Strategically based placement of signs, consistency of nomenclature, and tools that engage users on multiple levels and provide consistent and comprehensive information will provide success for the long term.

About the Author

Katie Osborn is the founder of Via Collective, a wayfinding design firm in Brooklyn, New York. Osborn's passion for wayfind-

ing strategy is at the heart of improving people's interactions with the built environment. She often speaks on the topic of wayfinding strategy, most recently at the Society for Experiential Graphic Design, Greenbuild International Conference & Expo, and the American Planning Association's 2016 National Planning Conference. She has over 20 years of experience in design and leads all strategy, research, and analysis required for the success of Via Collective's projects, which includes public and private clients. She holds a BFA from the University of Wisconsin-Stout; has taught typography and design at College of Visual Arts, St. Paul, Minnesota; is a past board member of AIGA Minnesota; is a member of APA, AIGA, and SEG; and is the director of communications for the AIA NY Transportation & Infrastructure committee.

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