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Wayfinding
Frequently Asked Questions

Ohio Department of Health

What is wayfinding?

Wayfinding is the process of locating and following a route through and to a given place. A wayfinding system is a set of signs or information that helps people navigate to where they want to go. Providing wayfinding systems in a community welcomes and orients bicyclists and pedestrians, provides rules and regulations, promotes destinations and amenities, and encourages people to be more active. Wayfinding systems can be used to orient travelers within downtown areas, along trails and bicycle routes, and elsewhere in a community. Wayfinding systems can be used by people walking, biking, using mobility devices, snowmobiling, snowshoeing, skiing, canoeing, kayaking, and more. However, the general guiding principles are the same for all users. In addition to promoting active living and providing directions, wayfinding systems can support economic development by drawing people into villages/cities, promoting towns and villages as trail towns, and directing travelers to bicycle -friendly local businesses.

What are the guiding principles of wayfinding systems?

To create a successful wayfinding system, it is helpful to keep four core guiding principles in mind. The following principles can help focus the messaging and provide a framework when implementing wayfinding signage:

Principle 1: Keep it Simple.

Easy-to-use and intuitive wayfinding signage helps users navigate and understand where they are in relation to nearby landmarks and destinations. Information should be clear, legible, and simple enough to be understood by a wide audience. Information on each sign should be kept to a minimum to avoid confusion and facilitate understanding without overwhelming the user. Signs should also be placed efficiently to minimize the number of signs at any location.

Principle 2: Be Consistent.

Wayfinding signs should be predictable and consistent. When information is consistent, it can be recognized and quickly understood. Wayfinding signs should have common styles, fonts, colors, materials, and placement throughout the region to promote continuity and help users quickly understand and interpret messages. Sign frequency and placement should be consistent, so users know what to expect.

Principle 3: Design for the Inexperienced User.

Wayfinding should be designed for all types of users. This may include:

- People new to bicycling or people who only bicycle a few times a year.
- Those unfamiliar with the area through which they are traveling.
- Visitors and tourists.

Principle 4: Be Inclusive.

Signs that consider the needs of people with vision impairments or people with limited English proficiency benefit everyone. Using large fonts that can be read from far away and by the intended audience (pedestrians and bicyclists), strong contrasts between colors that make it easy to read, the use of icons and graphics that aid in instant recognition, and using braille where appropriate are key to creating inclusive signage. To ensure signs are ADA accessible and meet tactical and visual requirements refer to the Guide to the ADA Accessibility Standards | Chapter 7: Signs. Adding languages other than English is recommended for some signs, such as trailheads or kiosks. This is particularly important in communities where languages other than English are commonly spoken or where there are popular tourist destinations. Also, consider the positioning of content on pedestrian-orientated signs so that critical information can be read by children or people using mobility devices.

Choosing Colors

The The Manual on Uniform Traffic Control Devices (MUTCD) reserves certain colors for specific uses. Specifically, colors such as red, orange, yellow should be used with caution or used minimally, while shades of green, blue, and brown are typically allowed.

***Color Contrast* – Using an online color contrast calculator as a quick check to make sure signs are achieving the required 70% color contrast ratio can be beneficial.**

What is the basic process of wayfinding?

According to the Universal Principles of Design, the basic process of wayfinding for all modes of travel should involve four steps:

Step 1: Orientation

A user should be able to determine their location relative to nearby landmarks and the destination. To improve orientation, wayfinding can rely on landmarks, which provide strong orientation cues. Maps can also help in the orientation step.

Step 2: Decision Making

A user should be able to easily choose their route to get to a destination. To aid in route decision making, minimize the number of destination choices and provide signs or prompts at decision points. Maps and signage with arrows and mileage can help improve route decision making.

Step 3: Confirmation (Route Monitoring)

A user should be able to confirm that they chose the correct route that will lead them to their desired destination. “Breadcrumbs” – visual cues highlighting the path taken – can aid route monitoring, particularly to help people avoid backtracking to check if they are on the right path. Mile markers and confirmation signs can assist with route monitoring.

Step 4: Destination Recognition

A user should be able to tell what types of destinations are nearby. To aid people in destination recognition, give destinations clear and consistent markers, such as large gateway signs announcing each destination name.[1]

1. Orientation

2. Decision Making

3. Confirmation

4. Destination Recognition

Source: Friends of the Hank Aaron State Trail

Source: Milwaukee County Parks

Photo Credits: Milwaukee County Parks (left), © Toole Design Group LLC (middle three), Friends of the Hank Aaron State Trail (right)

1 Lidwell, Holden and Butler. *Universal Principles of Design* (2003)

What are common types of wayfinding signs?

There are many types of signs that can be combined in various ways to create a complete wayfinding system. Below are examples of common types of signs:

Trailhead Signs – located at major access points along trails and typically include the trail name, address, rules and regulations along with amenity icons, and maps.

Kiosks – similar to trailhead signs, these can be found within cities and are geared toward pedestrians. Kiosks typically include the street name and/or crossing, maps, amenities, and any nearby destinations and the walking distance and/or times. Kiosks can also include a larger list of nearby attractions without distances, events, and nearby trails.

Directional signs – aid travelers at route decision points as they indicate key destinations, allowing users to make the decision on which route to take.

Mile Markers – allow users to track where they are on a trail or path. Mile markers are beneficial in case of an emergency as they pinpoint a specific location. Mile markers should include the trail name and the mile. They can also include an emergency response phone number and maintenance phone number.

Photo credit: FHWA, Manual on Uniform Traffic Control Devices

Temporary Signs – Temporary signs are quick and cost-effective ways of implementing wayfinding. They are typically made from coroplast and can be any type of sign but are often directional signs or signs confirming the direction or destinations. Temporary signs can be implemented:

- In the interim before permanent signs are available.
- To test out locations and sign content.

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- Seasonally, such as during the summer when more people may be walking or biking or there may be visitors.

Walk [Your City] provides temporary sign templates that are editable.

How do we select destinations for signs?

Directional signs typically include destinations along with an arrow pointing in the correct direction, amenity icons, and the mileage to the destination. Deciding what types of destinations are included on signage is important for users. Types of destinations may include parks, districts, major event venues (stadiums, concert venues, and theatres), well-known landmarks, schools, universities, cultural institutions (libraries and museums), and major trails and bike routes. To stay impartial and due to turnover, it is common practice not to include private businesses on signs.

An easy and quick way to determine destinations and potential abbreviations is to ask those who are familiar with the area such as local "friends of the trail" organizations, running and bicycling clubs, chambers of commerce, or other partners to draw a simple map of the area and label destinations. This is called "mental mapping" and is based on the process identified in The Image of the City by Kevin Lynch (1960).

How should we begin designing our signs?

(MUTCD) published by the Federal Highway Administration (FHWA) is the national standard for design and implementation of all traffic signs, signals, and pavement markings on any roadway or bikeway open to public travel.

Traffic Control signage – Part 9 of the MUTCD establishes standards and guidance for traffic control of bicycle facilities which relates back to wayfinding signage standards. Part 9 of the MUTCD includes standards and guidance on:

- Regulatory Signs, such as stop signs and bike lane signs.
- Warning Signs, such as stop ahead or narrow bridge signs.
- Bicycle Guide Signs, such as Bicycle Route signs and auxiliary plaques.

Community Wayfinding – The MUTCD also has a section on Community Wayfinding (Section 2D:50) which provides standards and guidance for customized, branded wayfinding signs, which may be used on roads that are not freeways. Figure # illustrates the features of a community wayfinding sign. The background color of the sign may be customized but cannot use standard MUTCD colors that convey specific meanings to roadway users, such as red indicating stop. Enhancement markers may be any color, but the MUTCD recommends that enhancement markers occupy no more than 20% of the sign face on the top or side of the sign. Other features of the sign legend, such as the directional arrows, fonts, and layout are as dictated by the MUTCD.

Photo credit: FHWA, MUTCD.

Design Flexibility for Shared Use Paths and Trails – Though the MUTCD states that its standards apply to all traffic control devices on bikeways, in practice, wayfinding signage systems on paths usually do not follow strict MUTCD design standards. Frequently, funds for path wayfinding come from State Departments of Natural Resources, local or regional parks agencies, or privately raised funds, which do not have to follow MUTCD standards. If federal funds are used for wayfinding, then MUTCD standards do apply.

How do we maintain a wayfinding system?

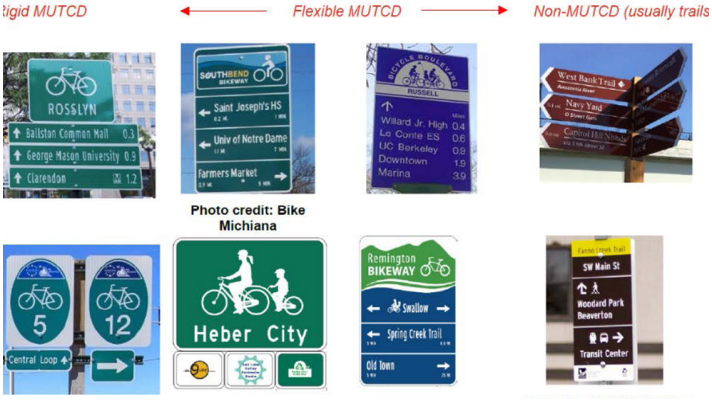

Photo credit: Bike Michiana

Photo

Jurisdictions should include wayfinding signs in their overarching maintenance and management plan, so they are prepared to deal with signage vandalism and theft. A maintenance plan would include and budget for both routine and remedial maintenance.

- **Routine Maintenance** – Routine maintenance should be scheduled and occur weekly, monthly, and annually. Routine inspections should remove graffiti from signs and identify which signs need to be replaced due to damage, fading, or other issues.
- **Remedial Maintenance** – Remedial maintenance is maintenance that fixes a specific issue that cannot be addressed immediately such as sign replacement. Jurisdictions and agencies should expect to replace about 5% of their signs every year. It is important to address sign issues because in doing so, users can have confidence in the information being provided by wayfinding.

When planning to purchase and install wayfinding signs, jurisdictions and agencies can make additional investments during fabrication and installation on features that will help reduce future maintenance needs, such as anti-graffiti coating and anti-theft sign hardware.

How do you start a new wayfinding system?

It is helpful to involve people who understand and are knowledgeable of the MUTCD, sign maintenance, and sign implementation when designing and implementing wayfinding. People who could be wayfinding experts include engineers, planners, urban designers, or those in the sign industry. A good place to start is contacting your City or Village Department of Public Works, Department of Public Service, Parks Department or similar department, since most of these departments will be familiar with installing some type of signs, such as street signs or park signs.

Where can I find out more?

- American Association of State Highway and Transportation Officials. (2012). AASHTO Guide for the Development of Bike Facilities. https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf.
- FHWA. Manual on Uniform Traffic Control Devices (MUTCD) Guidelines. https://mutcd.fhwa.dot.gov/.
- FHWA. Standards for Bicycle Guide Signs in Part 9 of the MUTCD: MUTCD Community Wayfinding Section 2D.50. https://mutcd.fhwa.dot.gov/htm/2009/part9/part9_toc.htm.
- NACTO. NACTO Bike Route Wayfinding Signage and Markings System. https://nacto.org/publication/urban-bikeway-design-guide/bikeway-signing-marking/bike-route-wayfinding-signage-and-markings-system/.