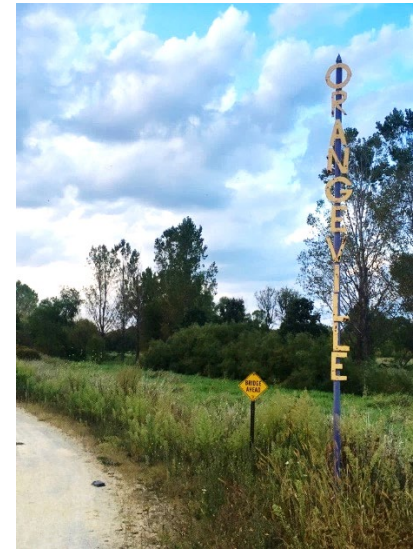


# NORTHWEST ILLINOIS TRAILS

## Wayfinding Sign Guide



## ACKNOWLEDGEMENTS

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The Northwest Illinois Trails Wayfinding Sign Guide was developed by Toole Design for the Blackhawk Hills Regional Council and the communities of Northwest Illinois that it serves.

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# INTRODUCTION

## About this Guide

This Guide provides a step-by-step process for any organization to follow when planning for and installing wayfinding signs on trails (particularly non-motorized ones) in the six-county Northwest Illinois region. It was developed with the expectation that the agencies and organizations who will undertake sign plans will not have a background in traffic engineering or sign design. Some of the trails in the region (such as the Jane Addams Trail) already have wayfinding and a strong established brand. This Guide is not meant to replace those signs; rather, it is meant to provide guidance and instructions for placing signs on trails without signs or replacing existing wayfinding signs that are weathered, worn, or damaged. The signs in this Guide provide trails in Northwest Illinois a unique regional brand that encourages residents and visitors to go farther on the trails with which they are familiar and explore other trails in the region that they may not regularly use. The [nwiltrails.org](http://nwiltrails.org) website URL is featured prominently on many of the trail signs. That website can also be used to strengthen the regional brand; it includes photos and other information about amenities and features along the region's top trails.

## Process

The Guide was developed under the oversight of the Blackhawk Hills Regional Council (BHRC), with input and guidance from the Northwest Illinois Trails Advisory G. The Advisory Committee members are listed on page ii and include stakeholders representing trails, communities, and interests throughout the six-county region. The Committee met two times in 2019 and provided input on Guide content, sign panel design, and maintenance considerations. The process for selecting the final sign included input from the Advisory Committee, other stakeholders, and feedback from BHRC staff.

## Why Trail Wayfinding is Important

Trail wayfinding is an effective and affordable way to guide and assist trail users, emphasize a local or regional brand, create a sense of place, promote community/economic development, and support existing trails. Trail wayfinding provides additional benefits:

- Encourages people to bicycle and walk for transportation by highlighting how easy it is to get to destinations on trails
- Gives trail users the confidence to explore farther than they ordinarily would
- Guides trail users to key destinations that may be slightly beyond the trail
- Reduces confusion at trail junctions
- Brings awareness to historical areas, landmarks, outdoor recreation, and natural areas for locals and visitors
- Helps first responders identify the location of a trail user in the event of an emergency by providing trail names and mileage

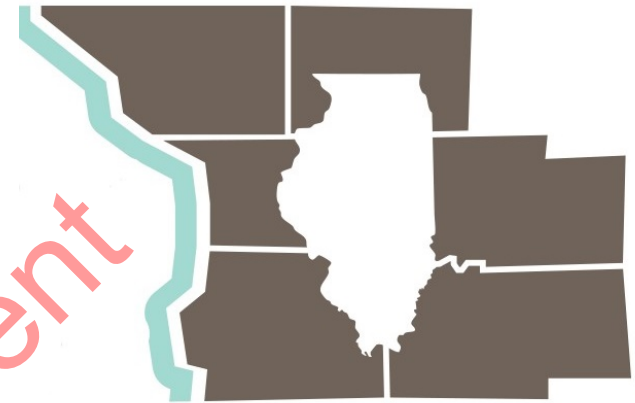


Figure 1: The Blackhawk Hills Regional Council covers Carroll, Jo Daviess, Lee, Ogle, and Stephenson Counties.

## Existing Signs and Branding from Northwest Illinois

At the outset of the project, existing signs and branding efforts in the region were reviewed for inspiration. Examples of existing materials, signs, and vistas from trails in the region are shown below in Figure 2. The elements of water, nature, weathering steel, and wood are reflected in the design of the signs for the region's trails.

Figure 2: Examples of existing materials, signs, and vistas from trails in Northwest Illinois.

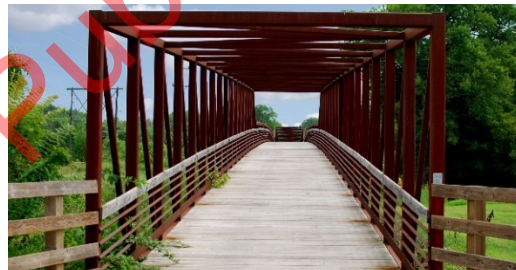
### Great River Trail



### Hennepin Feeder Canal Trail



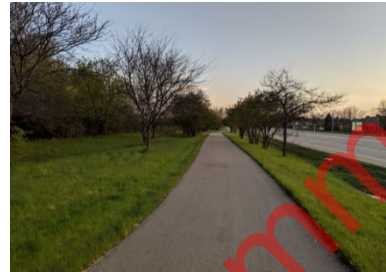
### Jane Addams Trail



### Joe Stengel Trail



### Lowell Parkway Trail



### Oregon Community Bike Path and Park East Trail



### Pecatonica Prairie Trail



## Core Wayfinding Principles

To create a successful wayfinding system, it is helpful to keep several guiding principles in mind. These principles can help focus the messaging and provide an overarching framework when difficult decisions need to be made about the placement of trail wayfinding signs and the destinations listed on them.

### Principle 1: Keep it Simple

Easy to use and intuitive wayfinding helps trail 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. Wayfinding must be concise, revealing enough information about routes and destinations without overwhelming the user. Information on each sign should be kept to a minimum to avoid confusion and facilitate understanding. Wayfinding should also be placed efficiently to minimize sign clutter.

### Principle 2: Be Consistent

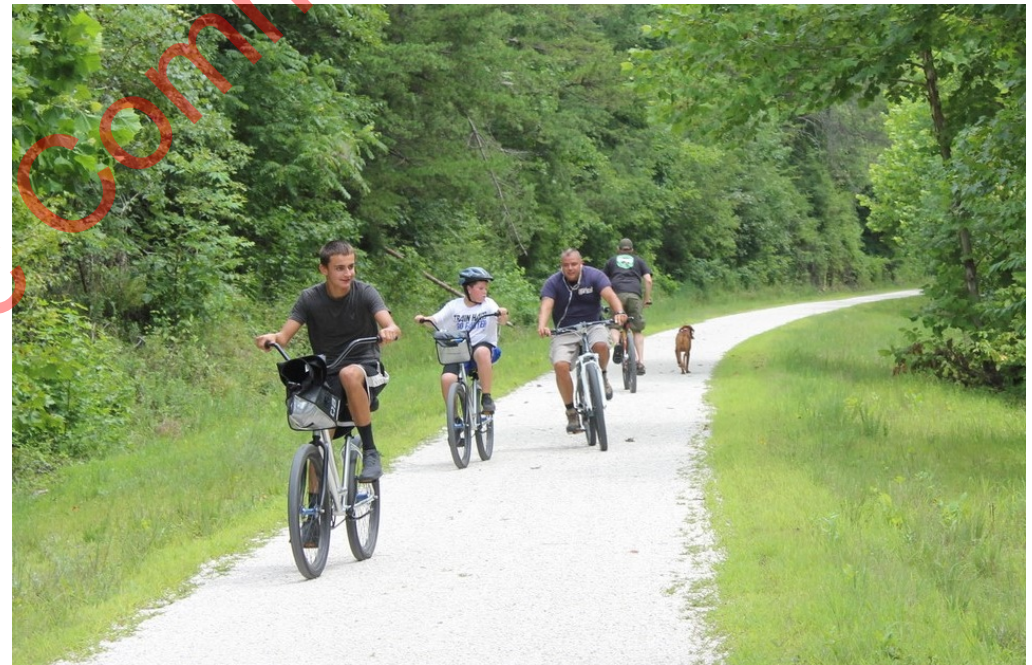
Wayfinding signs should be predictable and consistent. When information is consistent, it can be recognized and quickly understood. Wayfinding signs should have common styles, fonts, colors, and materials along a trail corridor to promote continuity and help users quickly understand and interpret messages. Sign frequency and placement along a trail corridor should be consistent as well so that users know what to expect.

### Principle 3: Design for the Casual User

Wayfinding on trails should be designed for people who are not experienced bicyclists and who prefer low-stress bicycling conditions, and for people who have not been on the trail before. This may include:

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

Figure 3. The “design user” of the wayfinding signs is a casual bicycle rider.



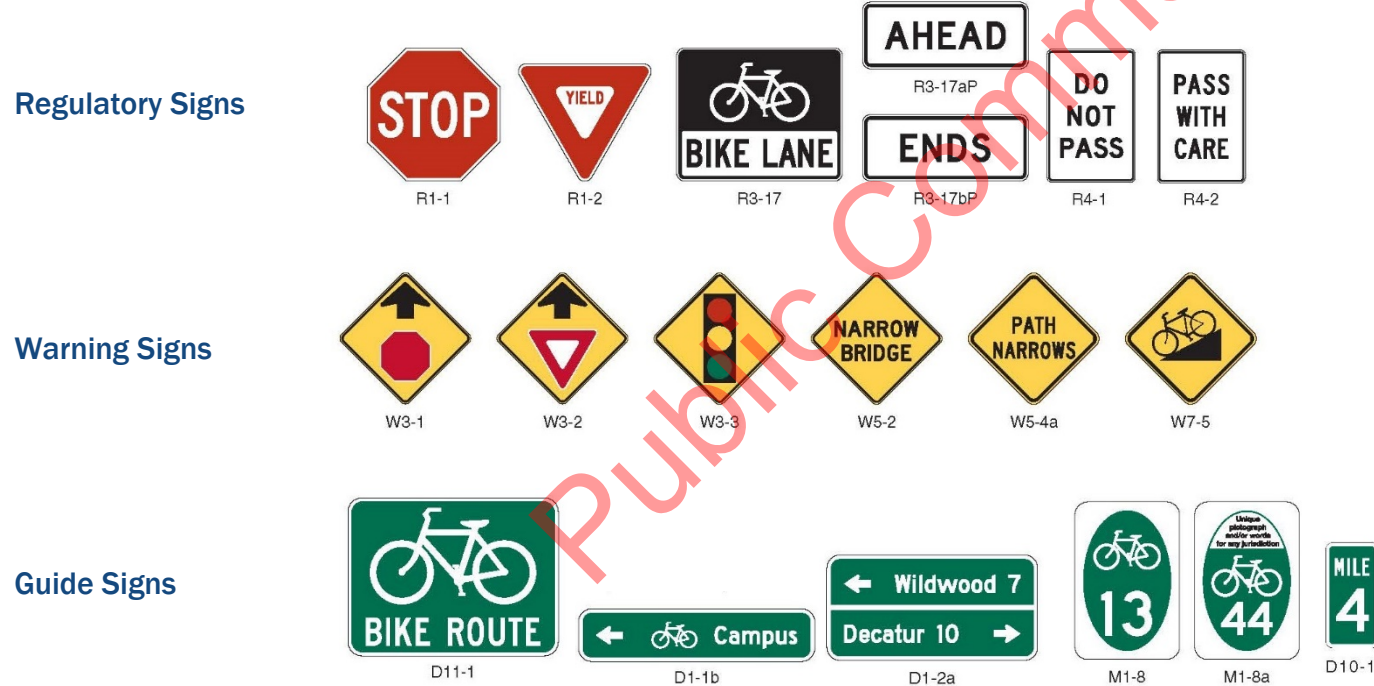
## National and State Guidance on Bicycle Wayfinding and Trail Signs

The following national manuals provide guidance on specific aspects of wayfinding. The guidance in these manuals helped define the creation of the sign design for this document. Included below is a brief description of the relevant guidance available in each manual.

### Manual on Uniform Traffic Control Devices (MUTCD) Guidelines

The Manual on Uniform Traffic Control Devices (MUTCD 2009 edition) defines the signs and standards for traffic control devices on all “public streets, highways, bikeways, and private roads open to public travel”. It is published by the Federal Highway Administration (FHWA). Having consistent sign and traffic control devices across the United States results in safer, more efficient travel. Part 9 of the MUTCD establishes standards and guidance for traffic control of bicycle facilities, including:

Figure 4: Different sign types from Part 9 of the MUTCD, which establishes standards and guidance for traffic control of bicycle facilities.





The MUTCD also has a section on Community Wayfinding which provides standards and guidance for customized, branded wayfinding signs, which may be used on roads that are not freeways. Section 2D.50 of the MUTCD states:

*Community wayfinding guide signs are part of a coordinated and continuous system of signs that direct tourists and other road users to key civic, cultural, visitor, and recreational attractions and other destinations within a city or a local urbanized or downtown area.*

*Community wayfinding guide signs are a type of destination guide sign for conventional roads with a common color and/or identification enhancement marker for destinations within an overall wayfinding guide sign plan for an area.*

Though the Community Wayfinding section currently only applies to roadways, the National Committee on Uniform Traffic Control Devices (NCUTCD) has recommended that it apply to trails and shared-use paths as well. According to this interpretation, communities may customize their *bicycle wayfinding signs* to include specific branding and flexibility in color and design, either as an element of one or more unique routes, or throughout their entire bicycle wayfinding system. The NCUTCD recommends that where wayfinding signs will be read by moving bicyclists, the lettering for destinations should be a minimum of 2 inches in height.

Figure 5 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. Prohibited standard colors include red, orange, yellow, purple, fluorescent yellow-green, and fluorescent pink. Enhancement markers (such as community logos or special branding elements) may be any color, but the MUTCD recommends that enhancement markers occupy no more than 20 percent 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.

The Illinois 2011 Supplement to the National MUTCD neither includes any revisions to the sections of the MUTCD referenced above, Part 9 or Part 2D, nor does it provide any additional guidance on bicycle wayfinding.

Figure 5: Community wayfinding signs in the MUTCD.



## MUTCD and 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 and trails usually do not follow strict MUTCD design standards. There are two main reasons for this:

- 1) The funding agencies for wayfinding systems on paths often lack the legal requirements to adhere to MUTCD standards. Frequently, funds for path wayfinding come from state departments of natural resources, local or regional parks agencies, or private organizations or individuals.
- 2) On paths and trails, many users are pedestrians, and some wayfinding systems are therefore designed exclusively for pedestrians. Part 9 of the MUTCD does not cover pedestrian traffic control for paths and trails. The MUTCD does note that pedestrian wayfinding signs may differ from bicycle wayfinding, such as by using smaller fonts and not including retroreflectivity.

Figure 6: Examples of signs along a "spectrum" of how well they follow MUTCD guidelines.



## US Fish and Wildlife Service Sign Handbook

The Great River Trail traverses some sections of the Upper Mississippi National Wildlife Refuge. Many of those sections are marked with the “Great River Trail” guide sign (pictured at right). In March 2019, The US Fish and Wildlife Service (USFWS) published its newest version of the Sign Handbook, which can be viewed at <https://www.fws.gov/policy/USFWSSignHandbook2019.pdf>. While this document includes guidance on different signs—such as advance notice signs, information signs, and interpretive signs—the section on guide signs (Section 2-1) is the most relevant for wayfinding.



Most of the design guidance and layout pertains to signs directed at people driving motor vehicles on USFWS lands. Generally, guide signs use a brown background with white Helvetica bold font (Figure 7).

## Army Corps of Engineers Sign Standards Manual

The Great River Trail also traverses land owned by the Army Corps of Engineers (“Corps”) along the Mississippi River. Those sections are also marked with the “Great River Trail” guide sign. The Corps has its own Sign Standards Manual, which is available at <https://corpsslakes.erd.c.dren.mil/employees/sign/manual.cfm>.

The Sign Standards Manual covers the full breadth of indoor signs, outdoor signs, and waterway navigational aids that may be used in Corps property. The parts of the Manual that are relevant for wayfinding include:

- Section 6: Directional Signs, which provides layout and font information for signs to direct visitors to recreation areas and guide them within each area
- Section 13: Interpretive Signs, which provides guidance in developing interpretive signs, trail panels, and wayside exhibits

Most of the design guidance and layout in those sections pertains to signs directed at people driving motor vehicles on Corps lands. Guide signs use a lighter brown background with white Helvetica medium font and have white borders on the top and bottom of the sign (Figure 8).

### “Recreation Brown”

The sign “toolbox” developed for Northwest Illinois trails include a sign family in recreation brown to ensure consistency with both USFWS AND ACE signage guidance.

Figure 7: An example of a guide sign that is oriented to people driving motor vehicles in US Fish and Wildlife Service lands.

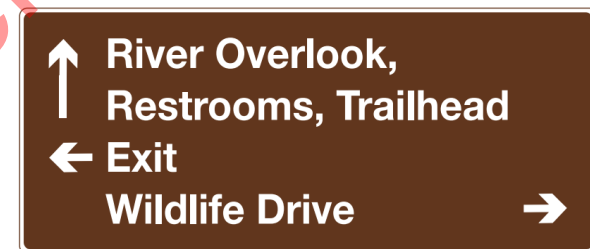
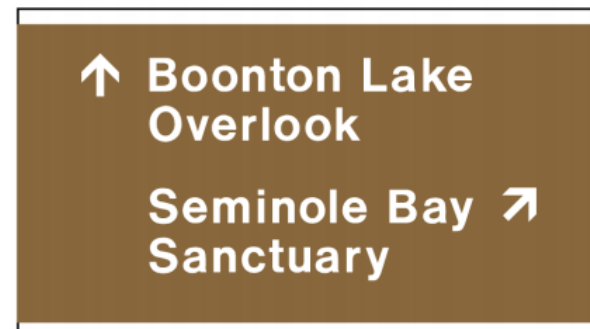


Figure 8: An example of a guide sign that is oriented to people driving motor vehicles in Army Corps of Engineers lands.



## Illinois Department of Natural Resources Sign Manual

The Illinois Department of Natural Resources (IDNR) manages two key trails in the region: portions of the Great River Trail; and the Hennepin Canal Parkway and Hennepin Feeder Canal Trail. The IDNR has a Sign Manual that provides general guidance on placement and size of many types of signs in IDNR properties. The most relevant wayfinding guidance is found in the guide sign section. The document specifies messages (type of text and number of allowable words), arrows (direction and placement on map), capitalization of letters, distance representation, letter size, and sign size. Specifications for guide signs are fairly flexible. IDNR makes most of its signs “in-house” at its own sign shop.

*Figure 9: An existing IDNR park gateway sign.*



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Public Comment

## STEP 1: PROJECT SCOPE

The first step in any project is to lay the foundation by setting expectations of project scope, doing an inventory to see what resources currently exist, and determining the path forward.

### 1.1 BHRC Resources and Sign Inventory

As part of the planning process for a wayfinding sign plan, it is helpful to inventory the existing signs and sign posts on the trail and approaches to the trail. An inventory can also identify existing posts that could be re-used for new signs.

- BHRC has several resources available. A study of many of the region's trails, including an inventory of the signs, amenities, and other features along the trails, is documented in the [2018 Northwest Illinois Trail Study Report](#). As part of that project, BHRC created the [nwilstrails.org](http://nwilstrails.org) website to promote the trails. It includes photos of many of the signs, amenities, and features along the region's featured trails.
- For on-road routes or places where trails cross roads, street-level photos available on online map services can sometimes show existing signs on roads. Be aware that road construction, traffic crashes, and road maintenance can result in signs being removed or moved.

#### Field Work

Most trail projects require some sort of field work to verify the online inventory. The following tools may be useful during field work.

- A small video camera that tracks GPS location as well as recording video can be mounted to a bicycle and can be used to record video along the bikeway or trail. After recording a video, the sign inventory can be entered into a spreadsheet or mapping software while replaying the video and checking GPS locations.
- A smartphone application like Fulcrum can be used to take pictures of existing signs and sign posts. To help keep track of each sign in the inventory, one person can write a unique identification number on a small whiteboard and hold it up while the other person takes a picture of the sign in the Fulcrum app (see example photo in Figure 1-1).

### 1.2 Project Committee and Scope

#### Sign Plan Project Committee

Many sign plans require coordination with other jurisdictions. Each jurisdiction needs to be involved in the decision to place signs on their road or trail—if a sign is damaged or vandalized, they are responsible for replacing the sign. For that reason, a committee of the relevant stakeholders and jurisdictions

*Figure 1-1: Including the sign ID number in a field work photo helps keep track of the signs in the inventory.*



should be established at the start of the sign planning process. A Memorandum of Understanding can help clarify who would be responsible for replacing and maintaining the planned signs.

### Consider the scope of the project

- **Existing signs:** Does the trail already feature some signs, and will this project add new wayfinding signs? Or will the project involve all new signs?
- **Off-trail destinations:** If there is a destination that is off of the trail (such as a park or a downtown), will the project include signs to guide people off-trail to and from the destination?
- **Type of wayfinding signs:** Will the project include the full set of sign types shown in Chapter 3 (Figures 3-1, 3-2, and 3-3)? Or will it only include a subset of signs, such as directional signs or map kiosks?
- **Regulatory signs:** If the project will include regulatory signs (such as stop or yield signs), warning signs to warn drivers of upcoming trail crossings (such as yellow diamond warning signs), or other warning signs along the trail, an engineer familiar with both the MUTCD and Illinois State Statutes that govern traffic control for vehicles, bicyclists, and pedestrians will need to decide the type of regulatory and warning signs to be used and their placement. The MUTCD can be found at [https://mutcd.fhwa.dot.gov/kno\\_2009r1r2.htm](https://mutcd.fhwa.dot.gov/kno_2009r1r2.htm)

Figure 1-2: The map kiosk shown below was created thanks to a donation from the Oak and Antler Tavern to Milwaukee County Parks Department. The lower panel includes their logo and a note to acknowledge their contribution.



### 1.3 Sponsorship Considerations

Funding for planning, making, and installing the wayfinding signs may come from a variety of organizations. Some organizations may be interested in having their name or logo appear on wayfinding signs as a form of advertisement or promotion. There are two approaches for acknowledging sponsorship on wayfinding signs:

- For public agencies that are involved in funding and maintaining the signs or the trail segment, the names and logos of the agencies may be included on the lowest panel of both Trail Map Kiosks and Trail Directional Signs
- For private businesses that helped pay for construction or installation of trails, trail segments, or signs, the names and logos may be included on a separate panel of Trail Map Kiosks (see Figure 1-2 for an example from the Milwaukee area)

## STEP 2: DESTINATION HIERARCHY AND NAMING CONVENTIONS

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The second step in the process of developing a wayfinding sign plan for a corridor is to select which destinations will be referenced on wayfinding signs, agree on abbreviations for the longer destination names, and decide which destinations will be “primary” destinations—appearing on almost all signs—and which ones will be less important destinations.

### 2.1 Destination Identification

A simple way to determine which destinations are the most important for wayfinding signs—and to identify potential abbreviations for those destinations—is to ask people who are familiar with the trail and the surrounding areas to sketch quick maps with prominent destinations. This is called “mental mapping” and is based on the process identified in *The Image of the City*, by Kevin Lynch (1960). An email to local “friends of the trail” organizations, bicycle clubs, business association, or other stakeholders should ask:

*I would like your help identifying destinations and landmarks along the trail corridor for the upcoming wayfinding signs. Please do me a favor by making a “mental map” of the trail:*

- 1) *Get an 8.5 x 11 sheet of paper and your preferred drawing or writing instrument.*
- 2) *Draw a quick map of the trail as if you were making a rapid description of the trail network to a stranger, covering all the main features and destinations. It doesn't have to be accurate—just a rough sketch.*
- 3) *Once you have completed your map (don't spend more than 15 minutes on it), take a picture of it with your phone and email it back to me at (email address).*

This process can also review existing maps or online maps to develop an initial list of destinations served by the trail, such as well-known landmarks, parks, municipalities, business districts, shopping areas, major trails or bikeways, and schools (university, high school, middle schools, and elementary schools) along or near the route. The Strava Global Heatmap (<https://www.strava.com/heatmap>) is also a helpful reference that shows where Strava users enjoy biking and jogging.

### 2.2 “Weeding” the Destinations and Organizing Them into a Hierarchy

Once the initial list of potential destinations has been developed, they will need to be “weeded” by removing destinations that should not be included on wayfinding signs. Consider the following:

- Individual businesses should usually not be listed as destinations because they can move, change names, or go out of business. Using individual names can also be seen as endorsing specific businesses over others. If there is a need to point to an important destination that happens to be a single business, it can be referred to generically, such as “Food”. Another approach is to use symbols for food or services instead of words.
- If there are several destinations that are close together (such as the Rock River, Martin’s Landing, and the Sinnissippi Dam Walkway), choose one destination that will serve as a “proxy” for all others (“Rock River”).



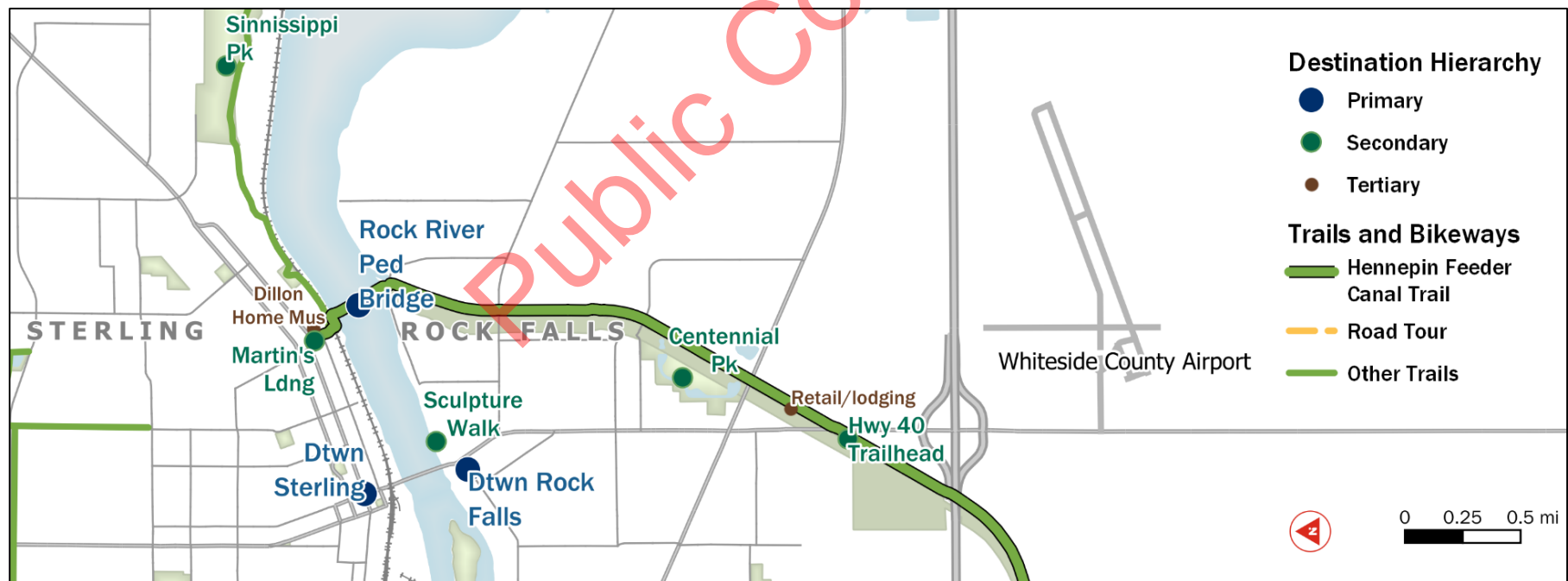
- Destinations that cannot be accessed comfortably by casual bicyclists who prefer low-stress bicycling conditions should be removed from the list.
- Destinations that are not easily reached from the trail because they require multiple turns should usually not be included, unless the scope of the project includes signs that guide users to the destination.

Once the list of destinations is narrowed down, they can then to be sorted into a hierarchy of Primary, Secondary, and Tertiary destinations. Organizing a hierarchy ensures that as users travel along the trail they encounter simple, legible, and consistent destinations. Creating a destination hierarchy will also help during the process of selecting destinations to include on wayfinding signs. To establish a hierarchy, the following factors should be considered:

- How well-known is the destination and how useful is it as a navigational reference? The most well-known destinations and most useful navigational references should comprise the Primary destination group.
- In rural areas, destinations are sparsely spaced. Small villages and local parks may be in the Primary destination group because they communicate the next available services such as water and bathrooms. Within cities and villages, however, local parks will usually be in the Tertiary destination group.

Using the method outlined above, a destination hierarchy was developed for the Hennepin Feeder Canal Trail and is shown as an example in Figure 2-1.

Figure 2-1: The destination hierarchy that was developed for the Rock Falls segments of the Hennepin Feeder Canal Trail.



## 2.3 Naming Conventions and Abbreviations

To make signs clear and legible, destination names should be kept short. The process of developing the destination hierarchy provides an opportunity to agree on acceptable abbreviations for destinations or trails with long names. Table 2-1 below lists some examples of naming conventions for some trails and destinations in Northwest Illinois. Table 4-1 in Step 4 will provide additional guidance on common abbreviations.

Table 2-1: Example naming conventions and abbreviations.

Full Name of Trail or Destination	Example of Abbreviation
Chestnut Mountain Resort	Chestnut Mtn
Elihu B. Washburne Home	Washburne Home
Galena Recreation Park	Galena Rec Park
Hennepin Feeder Canal Trail	Hennepin Feeder Trl
Historic Downtown Galena (west of River)	Main St, or Galena Main St
Rock River Pedestrian Bridge	Rock River Ped Bridge
Ulysses S. Grant Home	U.S. Grant Home

## 2.4 Standards for Measuring Distance

The destination hierarchy can also help planners when deciding at what distance to show destinations on wayfinding signs. Suggested distance guidelines for different trail contexts are displayed in Table 2-2. In practice, the distance at which each destination appears on wayfinding signs will require the judgement of the person or committee that is planning the wayfinding signs along the trail.

Table 2-2: Distance standards for primary, secondary, and tertiary destinations.

Trail Context	Primary Destinations	Secondary Destinations	Tertiary Destinations
City/Village	Up to 3 miles	Up to 1 mile	Up to 0.5 miles
Rural Area	No distance limit	Up to 5 miles	Up to 1 mile

## Measure-To Points

If the destination is a municipality, a large park, or destination with a large area, planners must establish a measure-to point. Google Maps' bicycle directions allow quick and easy distance measurement for planning purposes.

- For large parks, facilities, or school campuses, measure distance to the nearest main entrance relative to the approach direction.
- The distance to municipalities should be measured to the civic/commercial center, as is the practice in highway wayfinding. Google Maps' bicycle navigation feature usually measures distance to the civic/commercial center.
- For trails or bikeways, measure distance to the closest intersection to the trail.

Public Comment

## STEP 3: SIGN TYPES, PLACEMENT, AND SIGN LEGENDS

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Once the scope, naming conventions, and other standards developed in Steps 1 and 2 are established, planners can begin locating the signs along the corridor and specifying the sign legends, or text, for each sign. The wayfinding sign system to be used in Northwest Illinois uses a variety of different sign types. These will be described in detail on the next page.

### 3.1 Wayfinding Theory

People use many tools for wayfinding. These can include internet tools (tourism websites, Google Maps directions), print media (brochures, maps), the environment (recognizable buildings, mountains, or bodies of water), and signs. It is helpful to understand the basic theory of wayfinding when considering what kind of sign is appropriate in each situation. The basic process of wayfinding<sup>1</sup> for all modes of travel involves four steps:

- **Orientation:** Determining one's location relative to nearby landmarks and the destination. To improve orientation, wayfinding can rely on landmarks, which provide strong orientation cues. Maps, either at an entrance or along a trail, can also help in the orientation step
- **Route Decision:** Choosing a route to get to the destination. To aid in route decision making, minimize the number of navigational choices and provide signs or prompts at decision points. Maps can also help improve route decision making
- **Route Monitoring:** Confirming the chosen route will lead to the destination. "Breadcrumbs"—visual cues highlighting the path taken—can aid route monitoring, particularly when a wayfinding mistake has been made and backtracking is necessary
- **Destination Recognition:** Recognizing the destination. To aid users in destination recognition, give destinations along the route clear and consistent markers, such as large gateway signs announcing each destination name

The sign typology and placement recommendations in this Guide focus on the physical signs to use on trails and on-street connections. The signs in this Guide correspond to all four of the steps in the wayfinding process.

#### Common Theme

The distinctive theme of the signs for Northwest Illinois trails show a green oak savanna, green rolling hills, and a white river—which could also be a trail—flowing through the center. The dark blue and dark green in the background of the sign make it easy to read the white text, and also comply with color standards of the MUTCD. The bicycle symbol used for the on-street signs is consistent with the National Park Service recreation symbols.

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<sup>1</sup> Lidwell, Holden and Butler, *Universal Principles of Design* (2003)

### 3.2 Wayfinding Sign Types for Northwest Illinois Trails

The typical types of physical wayfinding signs in the “toolbox” of signs for wayfinding on Northwest Illinois trails are shown in Figures 3-1, 3-2, and 3-3. The remainder of this section will define each sign type and purpose, explain when it should be used, and illustrate placement guidance for the signs.

Figure 3-1: Trail wayfinding signs for Northwest Illinois trails.

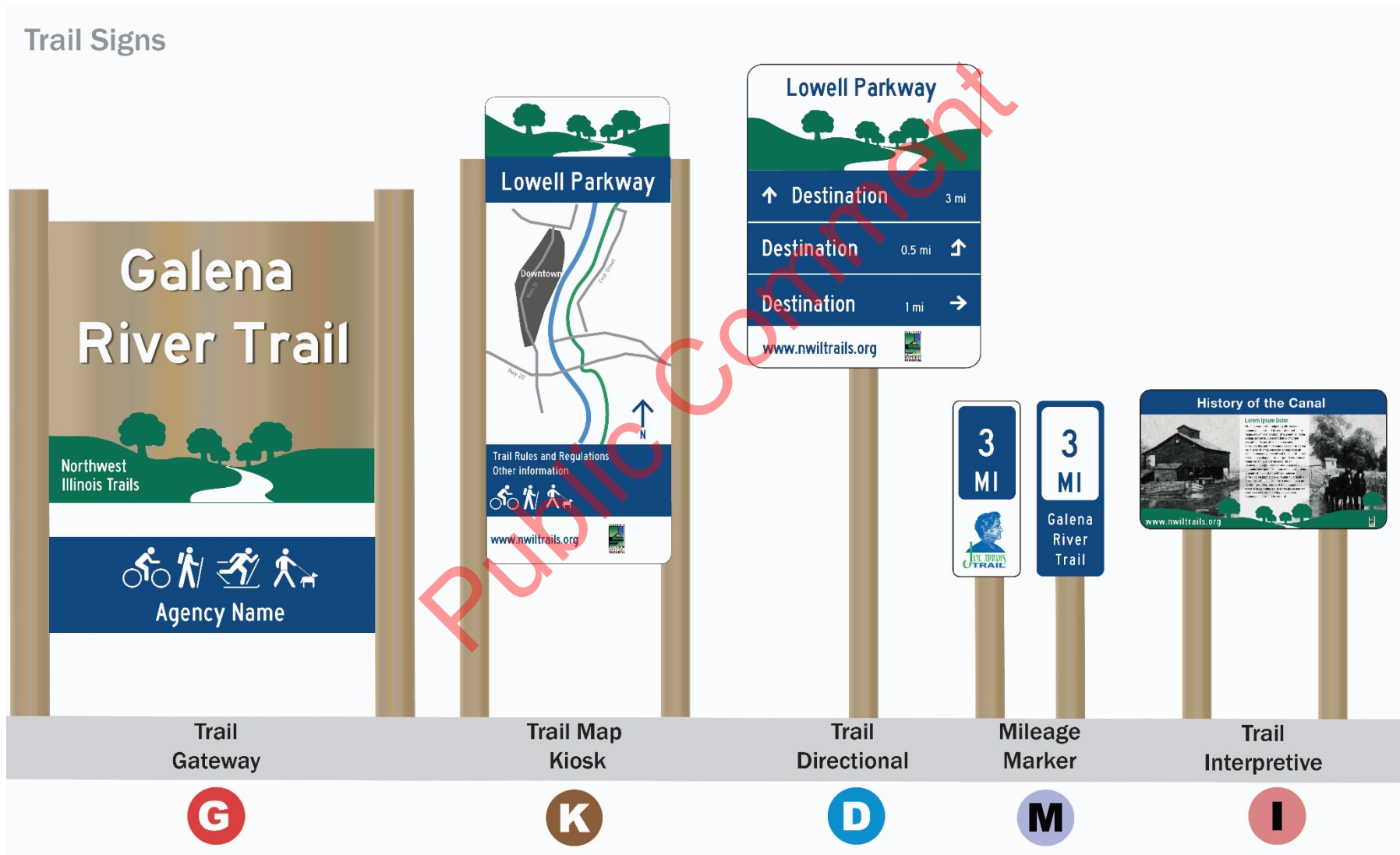


Figure 3-2: Wayfinding signs for on-road segments of Northwest Illinois trails.

### Variation for Streets and Roads

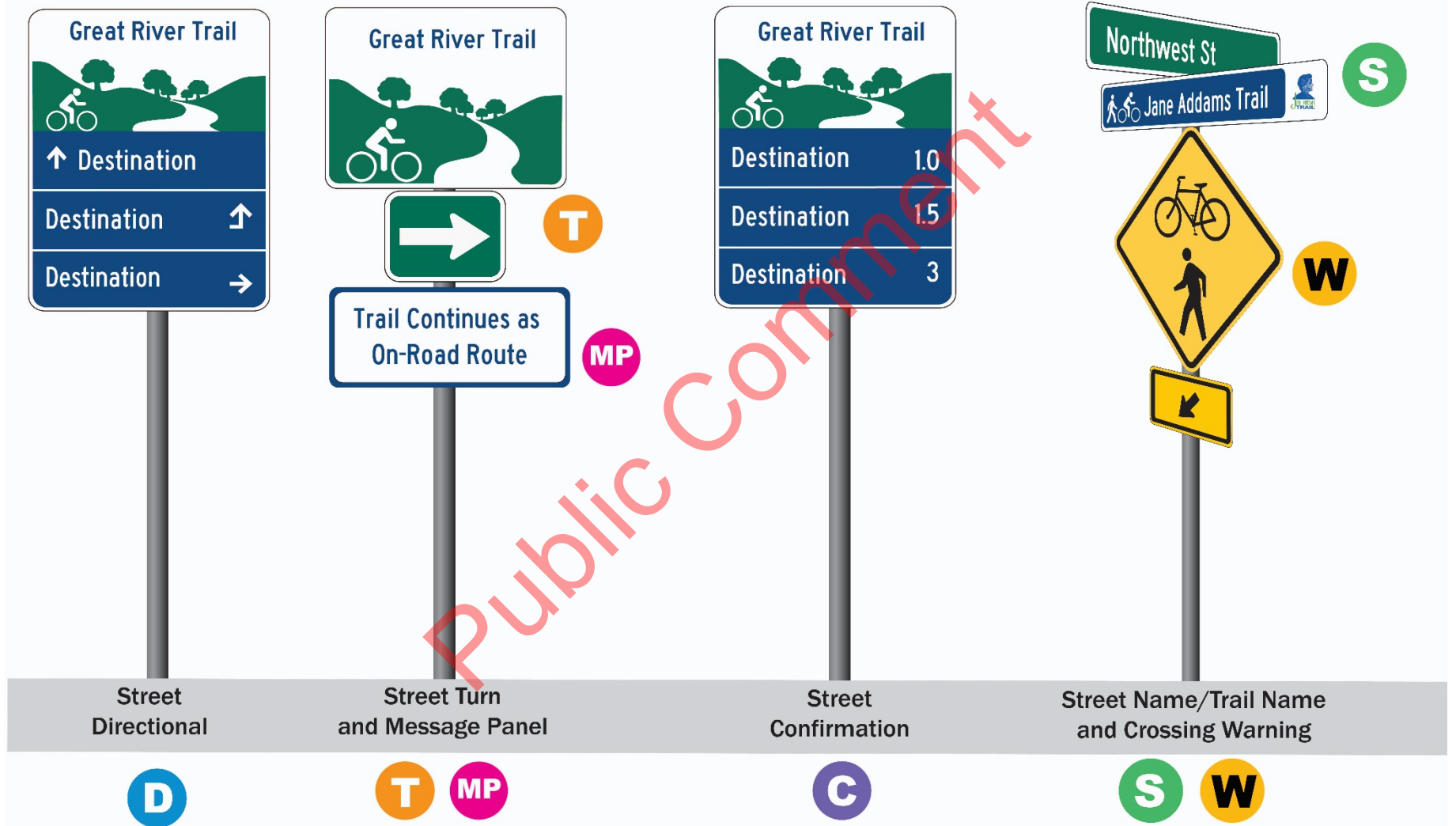
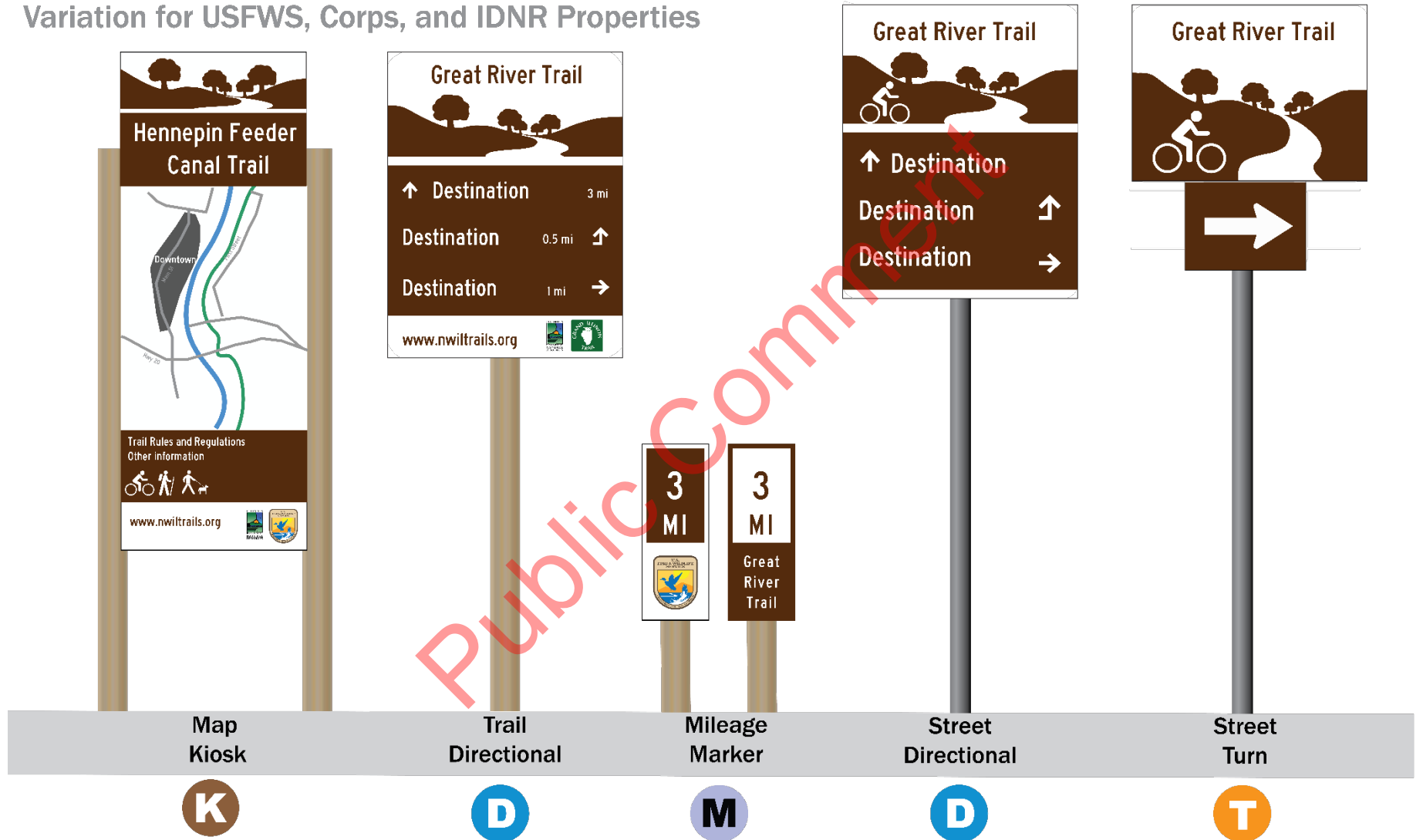


Figure 3-3: Variation in "Recreation Brown" for use on USFWS, Corps, and IDNR trails and properties.

### Variation for USFWS, Corps, and IDNR Properties



## **G** Trail Gateway Signs

Trail Gateway signs provide **Destination Recognition** by helping define the entry and mark important access points to a city, town, neighborhood, park, trail, or other destination. Some gateways may not be signs at all; large monuments or landscaping can introduce a park, place, or trail. When they are built as signs, Trail Gateways are usually oriented towards people driving cars. Figure 3-4 shows an example of a Gateway sign.

### Use a Gateway Sign:

- At trailhead parking lots, for people arriving by motor vehicles
- At important access points to trails, parks, and other destinations

### Placement and Assembly Guidelines

- The US Fish and Wildlife Service, US Army Corps of Engineers, and the Illinois Department of Natural Resources have sign handbooks that can be referenced for guidance on placement and assembly of gateway signs in their properties
- Where gateway signs are on the street, they should be quite large, retroreflective or illuminated with sufficient lighting, and placed in a highly-visible spot where they can be seen by passing motorists, as well as bicyclists
- Gateway signs are often constructed in a way that reflects the character of the neighborhood, park, or trail
- Gateway signs at trailheads can help strengthen the Northwest Illinois trail brand and help identify the types of activities that are permitted on the trail

Figure 3-4: Gateway sign for the Hennepin Canal Parkway.





## **K** Map Kiosk

Map kiosks, or information kiosks, present both pedestrians and bicyclists a map of the surrounding area, providing **Orientation**. They help users determine where they are and how to reach locations that are not adjacent to the trail. Map and information kiosks can also provide relevant rules and regulations, trail etiquette information, general safety tips, contact information for emergencies or maintenance, and sponsorship acknowledgements.

### Use a Map Kiosk Sign:

- At trailheads or other major trail access points or waysides
- Where regionally-significant trails intersect
- Where there is a gap in wayfinding signage because local jurisdictions oppose installing signs
- When there are important destinations that are nearby, but not directly on, the trail

### Placement Guidelines:

- Because people are used to reading maps that have north at the top, the map panel should be placed so that it will be read by a person facing north, or within 90 degrees of north whenever possible
- If the map panel must be placed so that it will be read by a person facing south, the map should be oriented in “heads up” orientation, with south at the top
- The map kiosk should be placed far enough off the trail so that people stopping to read the map will not block the trail

## Simple Sign Maps

Simple sign maps provide an inexpensive option for providing guidance and orientation in some situations.

### Use a Simple Sign Map:

- On roads, where there is not room for multiple users to cluster around the map
- Where there are important destinations that are nearby but not directly on the trail
- Where there is a gap in wayfinding signage that requires only two or three turns

### Placement Guidelines:

- Use “heads up” orientation, so the map is oriented in the direction that the trail user is facing, with a large north arrow
- Where possible, place the simple sign map in a location where users can easily and safely stop to read the map

Figure 3-5: Example of a Map Kiosk.

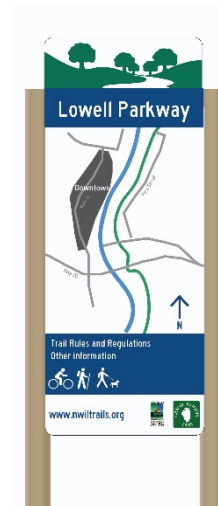


Figure 3-6: Example of a Simple Sign Map.



## D Directional Signs

Directional signs inform trail users about their route choices at a junction. They help **Orientation** and **Route Decisions** by presenting advance information about an upcoming decision. Figures 3-7 and 3-8 show examples of trail directional signs and street directional signs.

### Use a Directional Sign:

- At intersections, to show how to get to destinations that are easily reached from the bikeway or trail
- Where trails intersect with on-road bike routes or other trails to show the name of the intersecting route or trail and the destinations along it

### Placement Guidelines:

- On trails, to mark the start of a route
- On trails, trail directional signs may be placed within 5' to 25' of an intersection with a road
- On trails, place every 2 miles in rural areas if there are no other no directional or turn signs, to aid in **Route Monitoring**
- Where a trail intersects with another trail, three directional signs may be mounted to the same post at the junction
- On roads, directional signs should generally be located 25' to 75' in advance of the intersection with the trail; the distance may be greater (or less) depending on sight lines, slope, and the number of lanes a bicyclist is expected to cross to make a turn

### Assembly Guidelines:

- Street Directional signs include rows listing destinations and direction; Trail Directional signs also include distance
- Directional signs should list no more than three destinations
- Order the destinations from top to bottom as follows:
  - Straight destinations
  - Left-turn destinations
  - Right-turn destinations
- On roads and trails, directional signs should include the name of the trail or bikeway (if it is named) in large letters, and the bicycle icon. The bicycle icon helps identify the name of the route, communicates that the sign is for bicyclists, and alerts drivers to the potential presence of a bicyclist on the road.

Figure 3-7: An example of a Trail Directional Sign.

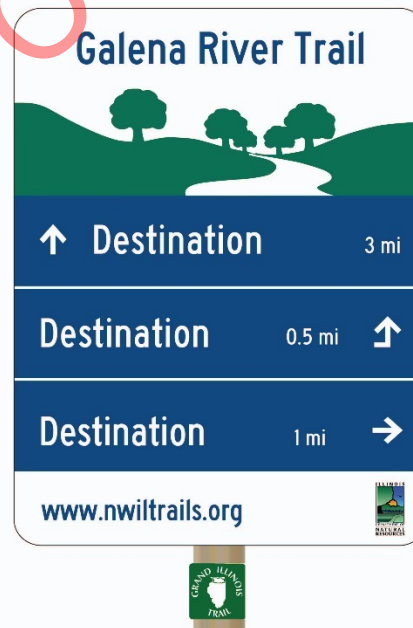


Figure 3-8: An example of a Street Directional Sign.



## **T** Turn Signs

Turn signs show when a bikeway or trail changes from a dedicated trail to a roadway and on roads, when the bike route turns to a different road. They can be used anywhere users may be confused about which direction the bikeway or trail follows. They provide **Route Decision** and **Route Monitoring** in wayfinding.

### Use a Turn Sign:

- On a bikeway or trail, in advance of a turn in the route

### Placement Guidelines:

- On trails, turn signs may be placed within 5' to 25' of an intersection with a road
- On trails, a turn sign may be mounted to the same post as other signs at the trail junction
- On roads, turn signs should generally be located 25' to 75' in advance of the intersection; the distance may be greater (or less) depending on sight lines, roadway slope, and the number of lanes a bicyclist is expected to cross to make a turn

### Assembly Guidelines:

- Turn signs should include the name of the bikeway or trail, supplemented with a large arrow
- On roads, turn signs should include the name of the bikeway (if it is named) in large letters and the bicycle icon. The bicycle icon helps identify the name of the route, communicates that the sign is for bicyclists, and alerts drivers to the potential presence of a bicyclists on the road.

## **MP** Message Panel

Message panels can provide extra information to help trail users use the preferred route or to convey other information.

### Use a Message Panel:

- To help trail users navigate complicated intersections
- To convey other (non-wayfinding) information such as fee requirements, trail etiquette, or warnings about trespassing on private land

### Placement Guidelines:

- Where supplementing another wayfinding sign, place underneath the wayfinding sign on the same post

Figure 3-9: An example of a Turn Sign with a Message Panel.



## **C** Confirmation Signs

Confirmation signs reassure a bikeway user that they are going the right direction. They provide **Route Monitoring** by providing information along a route or after a decision/turn has been made. In rural areas, confirmation signs may take the form of mileage markers, which is why Figure 3-11 shows a mileage marker sign.

### Use a Confirmation Sign:

- To mark the start of an on-road route
- When there are long stretches of an on-road bike route without any turns or other bike route signs, confirmation signs or mileage markers can be placed like “breadcrumbs” to aid in **Route Monitoring**

### Placement Guidelines:

- On trails, the confirmation sign should either take the form of a trail directional sign, or a mileage marker with the trail name on it. For a trail directional sign guidance, see page 22. For mileage marker placement guidance, see page 28.
- Place at the start of an on-road route
- On roads, place every ½ mile if there are no directional or turn signs; in rural areas with few crossings, place every 1 mile
- On roads, place at the edge of cities or villages when a route will travel more than 2 miles without any services; signs should alert users to the distance to the next developed area or services (on trails, the confirmation sign will take the form of a trail directional sign)

### Assembly Guidelines:

- At a minimum, confirmation signs should include the bikeway or trail name
- On roads, confirmation signs should include the name of the bikeway or trail (if it is named) in large letters, and the bicycle icon. The bicycle icon helps identify the name of the route, communicates that the sign is for bicyclists, and alerts drivers to the potential presence of a bicyclists on the road.
- Confirmation signs include supplementary rows that provide the distances to destinations along the road. The closest destination is listed on top and the furthest destination is on the bottom.

Figure 3-10: A road confirmation sign. On trails, the directional signs can be used as confirmation signs.



Figure 3-11: On trails in rural areas, mileage markers can serve as confirmation signs



## **S** Street Name/Trail Name Signs

For on-road bicycle routes, consider that there will already be street name signs at all road intersections. Bicyclists on the road can see and refer to these signs for wayfinding. Street names can be important reference points that help during the **Route Decision** and **Route Monitoring** steps in wayfinding. Therefore, a simple Street Name/Trail Name sign assembly placed at the intersection of a trail and a road can help trail users stay aware of their location within the larger road network.

### **Use a Street Name/Trail Name Sign:**

- To inform trail and street users of the name of the trail or street they are crossing at an intersection
- At all at-grade intersections of trails and streets, regardless of whether other wayfinding signs are present
- Signs with the trail name are modify the sign so that roadway users are able to distinguish it as a trail for pedestrians and bicyclists

### **Placement Guidelines:**

- Place at every intersection where a trail meets or crosses a street
- Posts for Street Name/Trail Name Signs should be placed within 10' to 12' of the intersection with the street (or as close as practical)
- Where trails cross wide or busy streets, signs should be placed on both sides of the street. In residential areas or rural roads, at least one street name sign should be mounted at each intersection.

### **Assembly Guidelines:**

- Street Name/Trail Name Signs may be placed above a regulatory STOP or YIELD sign, or a Bicycle/Pedestrian Crossing warning sign (as pictured in Figure 3-12)
- Street Name and Trail Name sign panels should be mounted with their faces parallel to the street or trail they name
- All sign panels facing the same direction should be grouped together, to avoid multiple perpendicular signs blocking each other when viewed at an angle

*Figure 3-12: A Street Name/Trail Name Sign placed above a Crossing Warning Sign*



## **W** Trail Crossing Warning Sign

Trail Crossing Warning Signs can help alert people driving of the presence of a trail crossing. If the project will include regulatory signs (such as stop or yield signs), warning signs to warn drivers of upcoming trail crossings (such as yellow diamond Crossing Warning signs), or other warning signs along the trail, the Manual on Uniform Traffic Control Devices (MUTCD) should be consulted for specific guidance related to those types of signs.

### **Use a Trail Crossing Warning Sign:**

- Where trails cross roads with higher levels of motor vehicle traffic
- Where trails have higher levels of bicycle-pedestrian traffic
- If it would be difficult for people driving to see people crossing the road with sufficient time to slow down
- If there have been crashes at the location, use a trail crossing warning sign in addition to other measures that improve visibility of the trail and trail users, and measures that slow down motor vehicles, guide drivers to yield to trail users, or allow trail users to use two-stage crossings

### **Placement Guidelines:**

- A traffic engineer who is familiar with both the MUTCD and Illinois State Statutes that govern traffic control for vehicles, bicyclists, and pedestrians should decide the type of regulatory and warning signs to be used and their placement

### **Assembly Guidelines:**

- The diamond-shaped, 18"x18" yellow panel can be taken from the "W" Series in the MUTCD Part 9
- The supplemental diagonal downward-facing arrow shown in Figure 3-13 indicates that the trail crossing is at that location

*Figure 3-13: An example of a Trail Crossing Warning Sign*



## M Mileage Marker

Mileage Marker signs are used on trails and help trail users estimate progress, assist in identifying the location of emergency incidents and crashes, and aid in bikeway maintenance and servicing. Mileage Marker signs correspond to the **Route Monitoring** step in wayfinding.

### Use a Mileage Marker:

- On trails only
- On trails that are longer than 4 miles that extend into rural areas with few street crossings

### Placement Guidelines:

- On trails within villages or cities, Mileage Marker should be placed every ½ mile
- In rural areas, Mileage Marker should be placed every 1 mile
- If a Mileage Marker cannot be installed in the correct location, it may be moved in either direction as much as 50'
- Mileage markers can be placed below Directional signs or Street Name/Trail Name signs on the same post, as long as they are within 50' of the correct location

### Planning Guidelines:

- Mileage Markers should include the trail name
- Mileage Markers should count up in one direction and down in the other and should be placed back to back
- “Mile 0” should usually begin at the south and west terminus points of trails, unless there are plans to extend the trail in the south or west direction. In that case, set “Mile 0” at the terminus point that is fixed. However, it may make sense to establish the “zero point” at a place where several trails intersect. The most important criteria in determining where to set the zero point is that it is a logical system that is easily understood by both maintenance crews and emergency-response crews
- When a trail name changes, it is a logical place to consider resetting the mileage system at zero, if it makes sense to do so

Figure 3-14: Examples of Mileage Markers



## I Interpretive Sign

Interpretive signs do not necessarily correspond to a step in wayfinding, but they can enhance the connection that trail users feel with the landscape. The National Park Service's *Wayside Exhibits: A Guide to Developing Outdoor Interpretive Exhibits* is an excellent reference for developing outdoor interpretive signs.

### Use an Interpretive Sign:

- Where there is a significant landmark visible from the trail that has unique significance or history
- When a historic image such as a photograph or painting can be placed on the landscape exactly where the original photographer or painter stood
- Where there is a safe, accessible area to view a wilderness area that is otherwise difficult to access

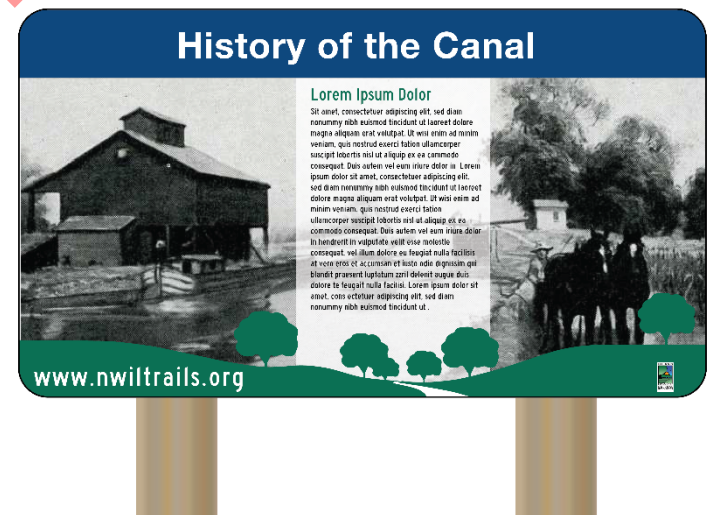
### Do Not Use an Interpretive Sign:

- If it will create clutter and intrude on natural areas
- In sensitive areas (such as archaeological remains or nesting sites)
- If the story you are trying to tell is too complex or dynamic to be effectively communicated on a sign

### Placement Guidelines:

- The interpretive sign placement should align in the intended direction of the trail users' gaze toward the significant landmark, landscape, or wilderness area that is described in the exhibit
- Place interpretive signs 3' to 4' from the trail, at enough distance so that the trail users are not blocking traffic while reading the sign
- A mounting height of 24" to 30" with a 30 to 45-degree angle toward the viewers will be accessible to most visitors

Figure 3-15: An Example of the Northwest Illinois Trail brand applied to Interpretive Signs.





### 3.3 Wayfinding Sign Placement Scenarios

The following examples show how the signs described above might be placed in some typical scenarios. In the diagrams that follow, generic wayfinding signs are used as placeholders for the actual wayfinding sign designs for Northwest Illinois trails.

#### Trailhead or Start of Trail

At major trail access points like trailheads, a **Gateway Sign** announces the trailhead to people on bicycles and in cars.

A **Map Kiosk** will be helpful for people starting their trip. Usually, maps should be located so that the viewer is facing north, but in this case, the trail continues south. The map should be located slightly off the main trail. In this example, the map should be oriented with east at the top.

The **Trail Directional Sign** just south of the parking lot can communicate distances of upcoming destinations along the trail and the **Trail Directional Sign** at the street can point people to destinations that can easily be reached from the trailhead.



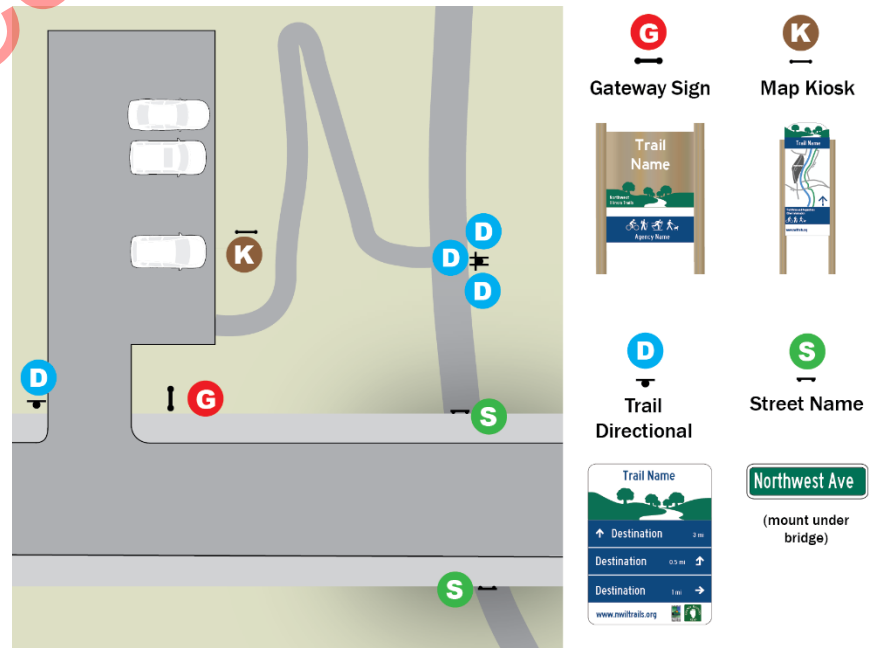
#### Trailhead (with Spur to Underpass)

In this case, the trailhead parking lot is connected to a trail below-street level via a spur trail. A **Gateway Sign** announces the trailhead to people on bicycles and in cars.

A **Map Kiosk** will be helpful for trail users who are both entering and exiting the trail. It is preferable to locate the map so that the viewer is facing north.

The three **Trail Directional Signs** mounted to the same post can communicate destinations, direction, and possibly distance.

When a trail goes underneath a bridge, a **Street Name** sign mounted on the underside of the bridge helps trail users orient themselves to the road network.



## Trail Continues as On-Road Connection

Where routes transition from a trail to a road (or vice-versa), a **Turn Sign** should be placed in advance of the turn to give bicyclists enough response time to react and safely make the turn.

The **Confirmation Sign** should be placed on the road within sight of the turning bicyclist. For on-road bike routes, bicyclists cannot easily stop to see if they have made the correct turn.

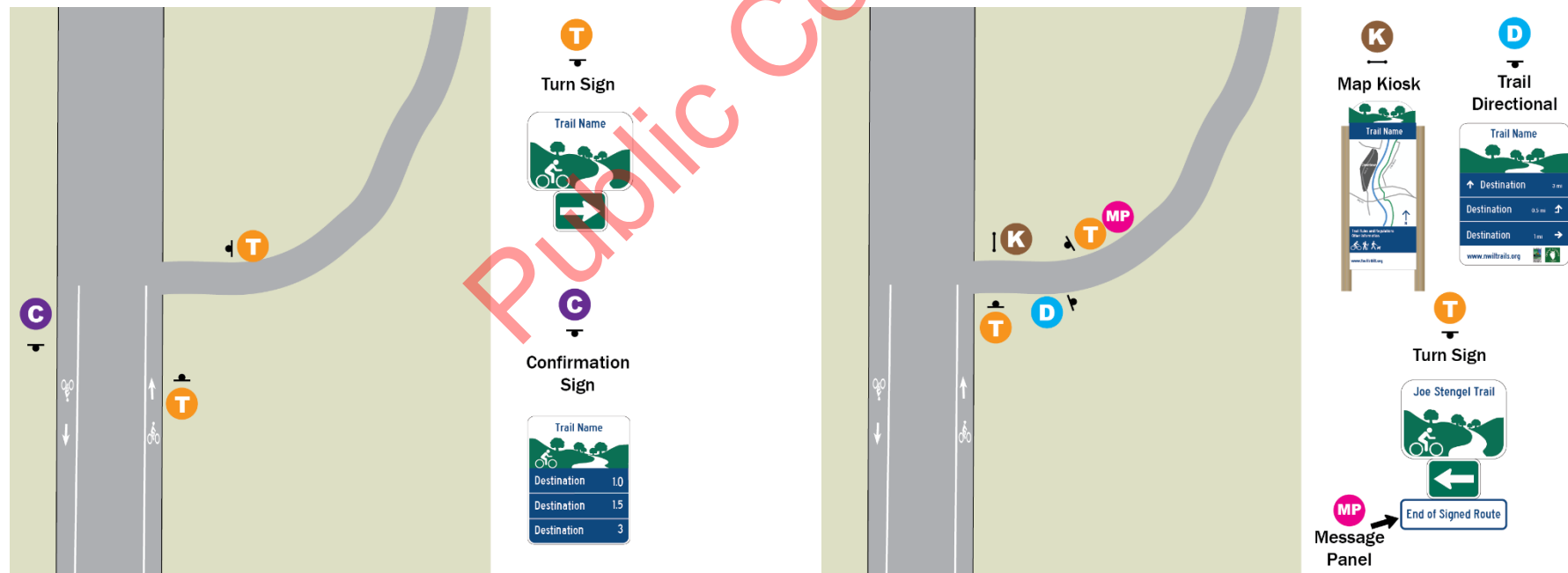
Optionally (but not pictured), a **Trail Directional Sign** placed at the entrance of the trail gives the bicyclist the confidence they made the correct turn and can provide distances to destinations.

## Trail Continues as On-Road Connection (Gap in Wayfinding Signage)

Occasionally, local jurisdictions may be opposed to placing or maintaining wayfinding signs on their local roads. If there will be a long gap in the wayfinding signage, it is critical to include extra wayfinding elements.

For bicyclists turning from the trail, the **Turn Sign** has an additional **Message Panel** to alert them that the wayfinding signs are ending. A **Map Kiosk** should also be placed where they can stop and pull off to the side of the trail. In this situation, the map should be as simple as possible, highlighting only the necessary road names and turns.

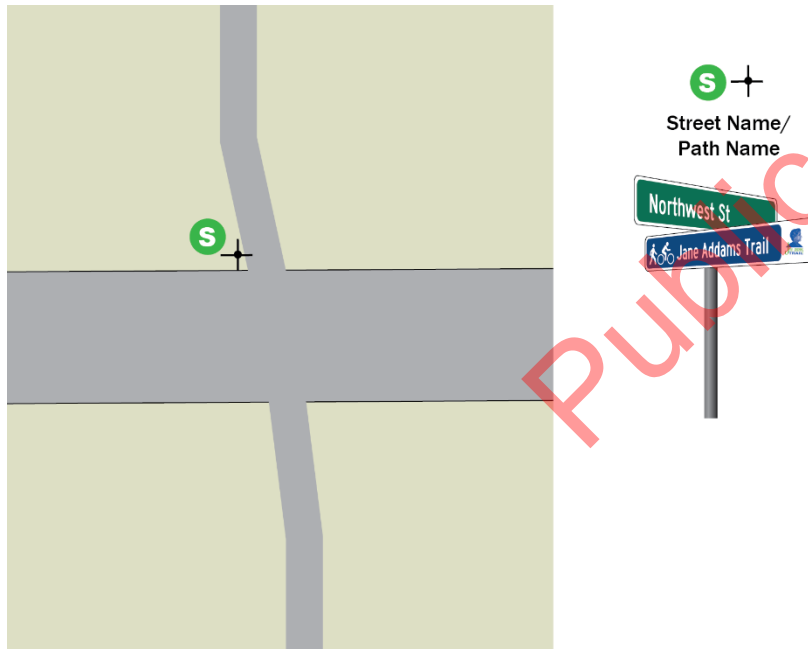
For bicyclists turning from the road, a **Turn Sign** that is placed in the trail right-of-way can help identify the trail. A **Trail Directional Sign** on the trail immediately after the turn gives the bicyclist the confidence they made the correct turn and can provide distances to destinations.



## Trail Crosses Rural Road (Not a Bike Route)

Where a trail crosses a road that is not a marked bike route, and there are no destinations that would require a directional sign, a simple **Street Name/Trail Name** sign helps trail users orient themselves to the road network. This scenario applies to many trail crossings in rural areas in Northwest Illinois.

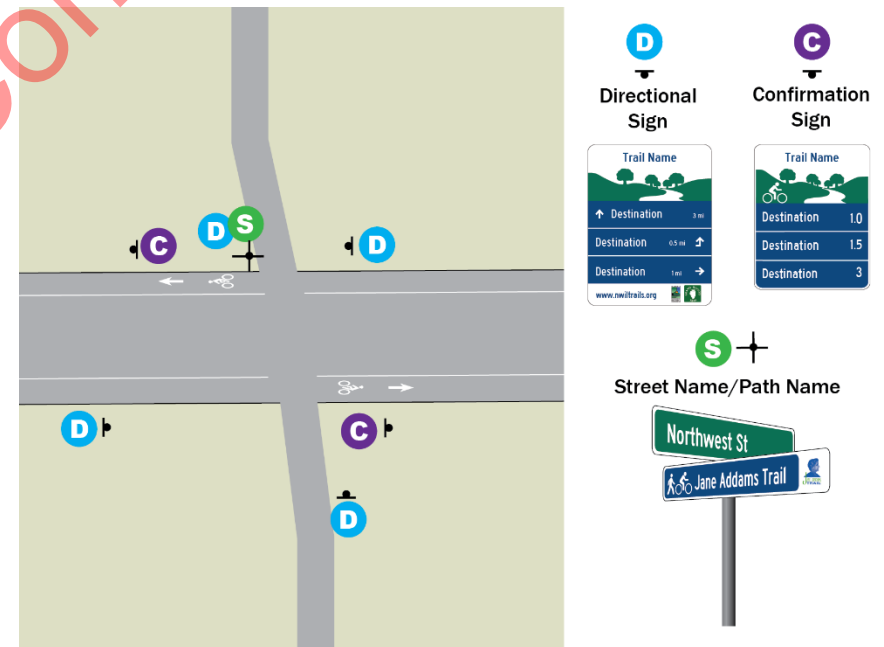
Optionally (but not pictured), **Trail Directional Signs** placed on the far side of the intersection can indicate distance to destinations. **Trail Crossing Warning Signs** placed on both sides of the street may also improve the visibility of the trail.



## Trail Intersects with On-Road Bike Route

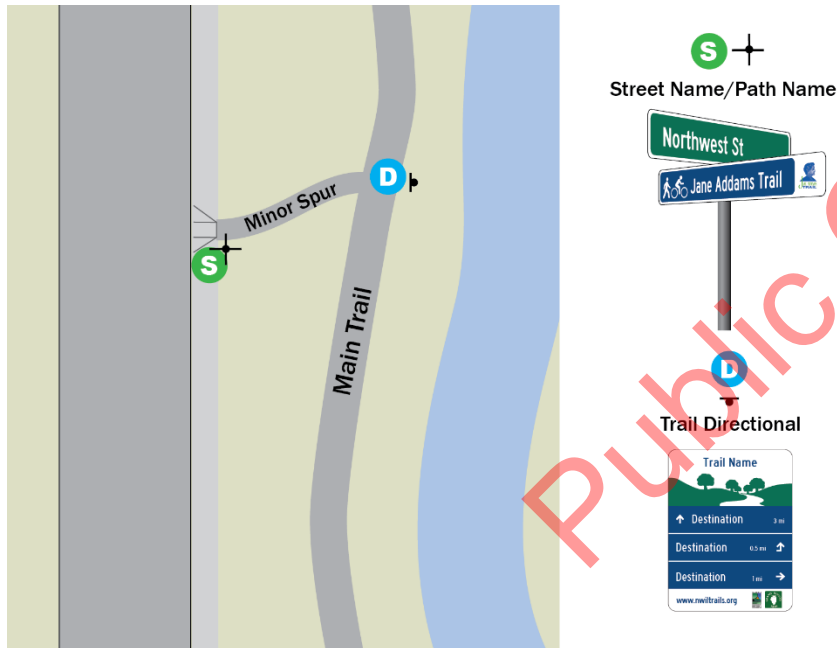
Where a trail crosses an on-road bicycle or pedestrian route, or there are destinations off the trail that can be accessed via the road, **Directional Signs** should be placed on the trail at or near the intersection with the road. **Directional Signs** should also be placed on the road to alert bicyclists and pedestrians of the upcoming trail, and destinations that can be reached from the trail. The **Street Name/Trail Name** sign should still be present (and optionally, **Trail Crossing Warning Signs** on both sides of the street).

**Confirmation Signs** are helpful on the road after the trail crossing, because they allow bicyclists to maintain momentum. For on-road bike routes, bicyclists cannot easily stop to see if they have made the correct turn. **Trail Directional Signs** are not necessary on the trail because the **Directional Signs** on all approaches will have identified both the trail name and the destinations that can be reached on it.



## Trail Connects to Road Network at a Minor Trail Spur

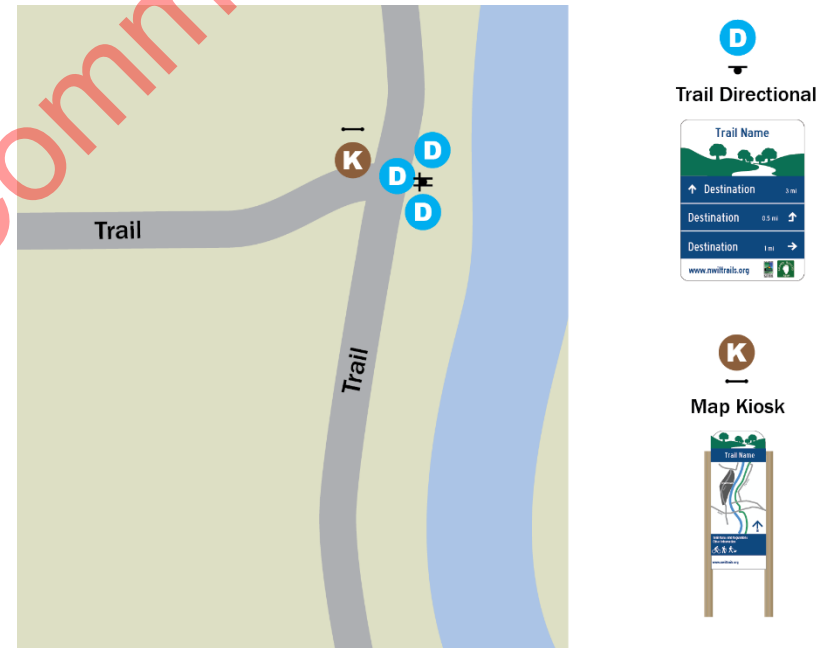
Where a trail connects to the road network via a minor trail spur, and there are no destinations that would require a directional sign, a **Trail Directional Sign** should be placed at the intersection with the Main Trail to help people entering the trail decide which direction they want to go. For people exiting the trail onto the road, a simple **Street Name** sign helps people orient themselves to their location. This scenario applies to many trail access points in small urban areas in Northwest Illinois, such as Sterling or Galena.



## Two Trails Intersect

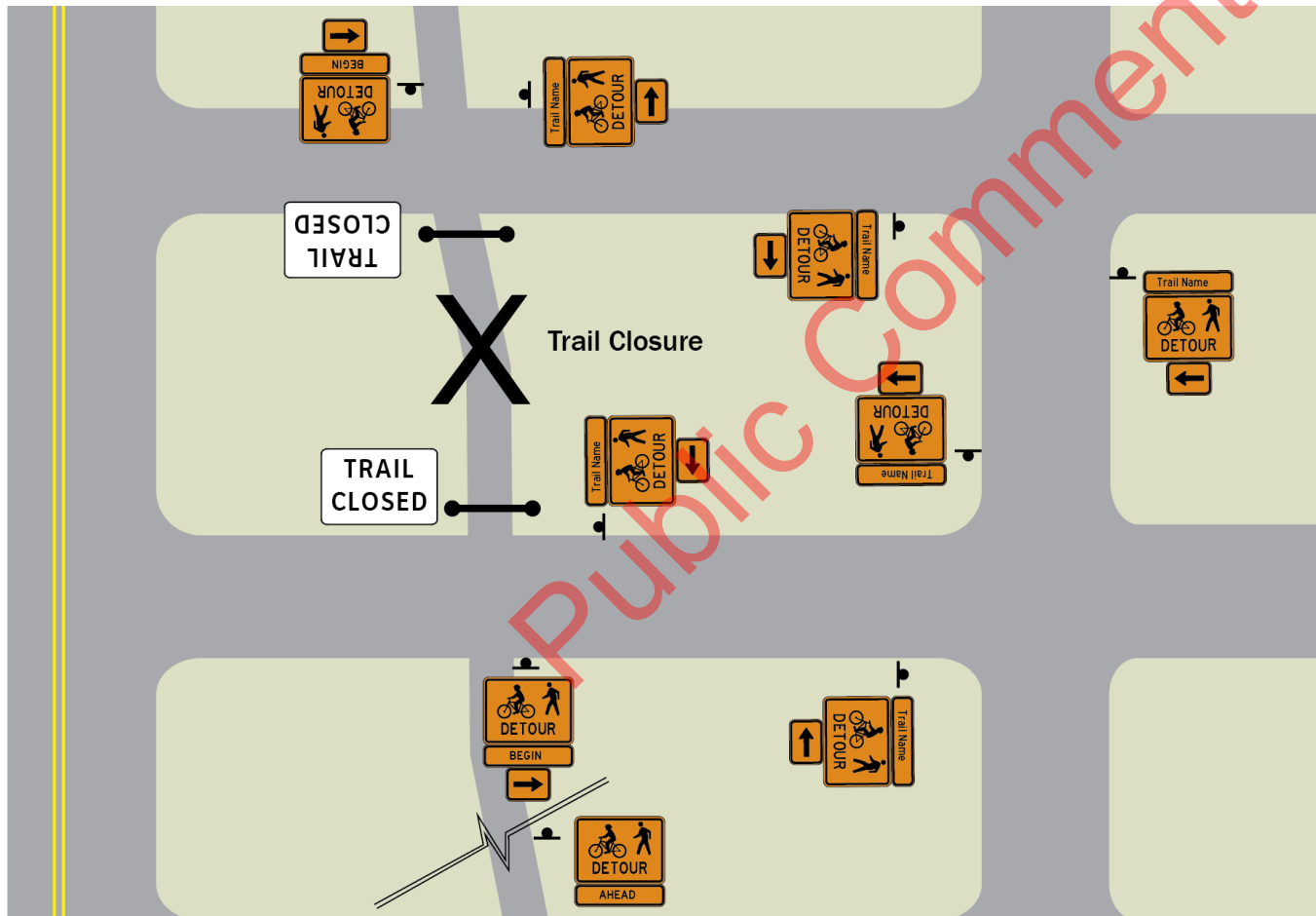
Where two trails intersect with each other, **Trail Directional Signs** can be mounted to the same post, communicating the trail name, destinations, direction, and possibly distance.

A **Map Kiosk** will be helpful at this location to help trail users orient themselves to their location. It is preferable to locate the map so that the viewer is facing north.



## Trail is Closed, Requiring Trail Users to Follow a Temporary Detour

National guidance on temporary traffic control is found in the MUTCD and in the “Operating Bikeways in Work Zones” section of the American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities. Detour signs specifically designed for bicyclists and pedestrians are useful when a trail or bikeway is temporarily closed due to construction, flooding, or other issues. The example signs and sign placement below use a modified MUTCD detour sign system to better communicate the temporary detour to trail users. For routes that are affected during construction, advanced warning should be provided to warn trail users that the trail is closed ahead. It is preferable to direct trail users to a route that is equal to or lower in traffic stress than the existing route. For example, the detour below shows that trail users are not directed to the “busy” street (with yellow centerlines), but to a parallel street.



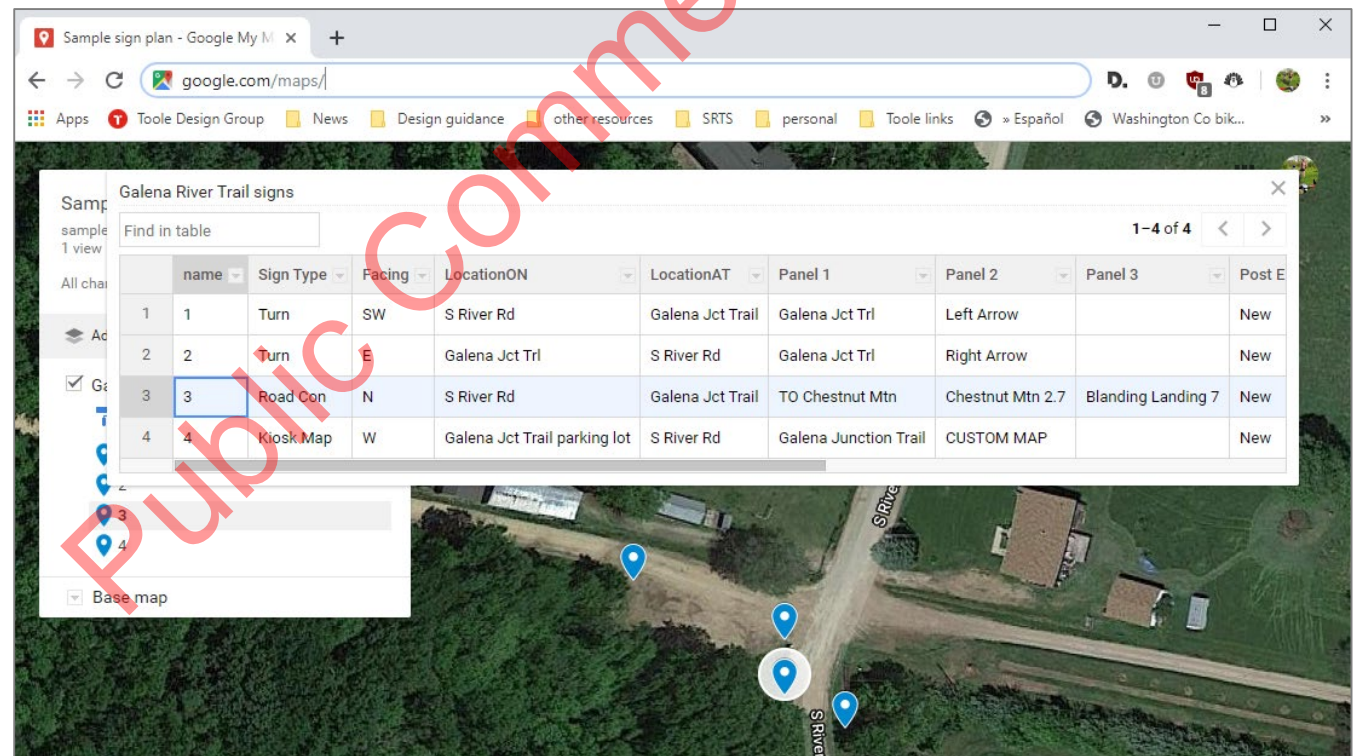
### 3.4 General Guidance for Sign Locations and Legends

- Do not include more than 3 destinations on any sign
- On roads, place wayfinding signs on the right side of the road; on trails, they may be placed on the left side due to space or other constraints if necessary
- Ensure that the arrows on a sign do not point to a driveway that could be mistaken for the intended turn
- Place signs in locations where they will not be blocked from view by tree limbs, vegetation, other signs, or parked vehicles
- Wayfinding signs can be mounted on the same posts as parking restriction signs, street lamps, and telephone poles (in some jurisdictions). Do not mount wayfinding signs on the same post as STOP signs, SPEED LIMIT signs, or traffic signals

#### Free mapping software

For organizations or agencies that do not have access to mapping software, Google's "My Maps" tool is a free web-based mapping software that can be used to develop a simple wayfinding sign plan. Users can place markers for each sign and designate fields in a data table that can include the sign type, sign legend, and post location.

Figure 3-16: A screenshot of the Google My Maps web-based mapping tool.



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Public Comment

## STEP 4: SIGN LAYOUT AND DESIGN

After deciding sign locations and legend text, the signs need to be designed. In most cases, the design and layout will be done by a sign shop as part of the fabrication process. The Adobe Illustrator files used to create the signs in this Guide will be provided to BHRC and can be shared with sign shops.

### 4.1 Layout and Dimensions for Signs

#### **G** Gateway Signs

This Guide does not provide detailed sign design and layout for Gateway Signs apart from the general recommendations below. A sign shop can develop concepts and design the structure of a gateway sign that uses the Northwest Illinois Trails' theme of the oak savanna, rolling hills, and white river or trail.

#### Size/Dimensions:

- Will vary depending on the name of the trail or trailhead to be featured on the sign
- Generally, at least 5' wide and 6' tall

#### Font:

- Trail Name should be in a wide Helvetica font such as the Highway Gothic Wide in the image at right. The name of the trail or trailhead should have a minimum 10" height for upper-case letters.
- All other fonts are in a normal or narrow Helvetica font, such as Highway Gothic Narrow

#### Notes:

The trail name letters and oak savanna shown on the trail gateway sign could be cut on aluminum blanks, painted and sealed in a clear-coat, and then mounted on an all-wood sign backing to add depth.





## **K** Map Kiosk

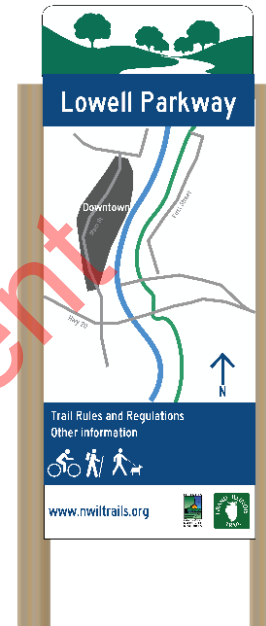
This Guide does not provide detailed sign design and layout for Map Kiosks aside from the general recommendations below. A sign shop can develop concepts and design the structure of a Map Kiosk that uses the Northwest Illinois Trails' theme of the oak savanna and rolling hills.

### **Kiosk Size: 3' to 5' tall x 2' to 5' wide**

#### **Design and Layout:**

- BHRC can help with the graphic design of a kiosk map or simple sign map; for assistance, contact the Blackhawk Hills Regional Council
- The National Park Service's *Wayside Map Standards* is a good reference for kiosk map design
- The area on the map should be as small an area as possible. The larger the map area, the harder it is for people to process
- Include both the "oak savanna" at the top of the sign and the Northwest Illinois Trail website URL ([www.nwiltrails.org](http://www.nwiltrails.org)) at the bottom of the sign next to any agency logos that are desired
- High contrast, simple graphics with only a few layers and colors are easier to read
- Place the legend and small text so that it is 2' to 4' off the ground, located close to eye level of someone who would be sitting in a wheelchair
- Trailhead facilities built with federal funds must state the length of the trail, surface type, and running and cross slopes. Refer to the *Accessibility Guidebook for Outdoor Recreation and Trails* for more information.
- Map kiosks can also include additional panels thanking sponsors or signs or trail sections, such as the panel shown on the lower right. See page 11 of this Guide for sponsorship considerations.

Figure 4-1: Examples of a 2' wide x 4' tall Map Kiosk and a 4' wide x 3' tall Map Kiosk



## Simple Sign Map

This Guide does not provide detailed sign design and layout for Simple Sign Maps aside from the general recommendations below.

**Panel Size: 18" tall x 24" wide**

### Design and Layout:

- Use “heads up” orientation, so that the map is oriented in the direction the user is facing, with a large north arrow
- Use no more than two colors in addition to gray. A white background and ½" dark blue border match the style of the other signs
- The main trail corridor can be displayed in dark blue; all other roads, water features, and base layers can be displayed in a muted gray color
- The map does not have to be to scale

Figure 4-2: Example of a Simple Sign Map



## D Trail Directional Signs

Panel Size: 30" tall x 24" wide.

### Font:

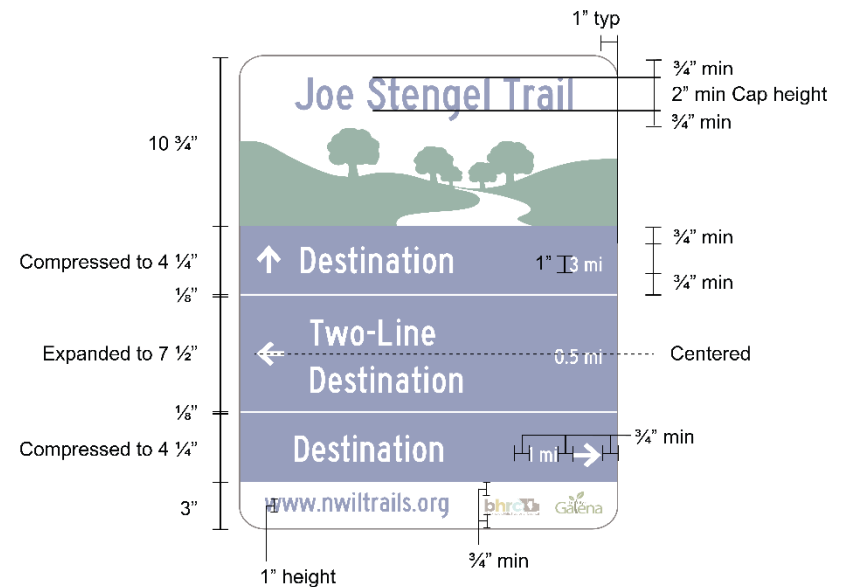
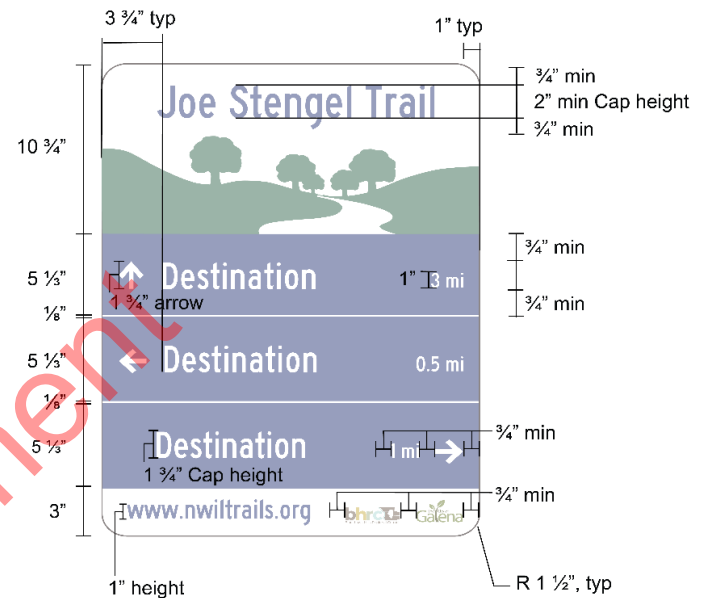
- Highway Gothic Narrow font, title case
- The name of the trail at the top of the sign should have a minimum 2" height for capital letters
- Destinations should have a minimum 1 3/4" height for capital letters
- Distances have a minimum 1" height for numbers

### Layout:

- Refer to the figures at right for typical layout dimensions
- For long names that do not fit on one line, try these steps before adding a second line:
  - 1) Use kerning to compress the font horizontally to no less than 90% of the standard size
  - 2) Use intuitive abbreviations (see Section 4.4)
- To insert a 2-line destination, the other destination rows can be compressed

### Order of Destinations

- Signs should not include more than three destinations. Destinations should be ordered from top to bottom as follows:
  - Straight destinations
  - Left-turn destinations
  - Right-turn destinations
- Multiple destinations in the same direction should be listed in order from nearest to farthest
- The right arrow should always be on the right-hand side of the sign for faster recognition

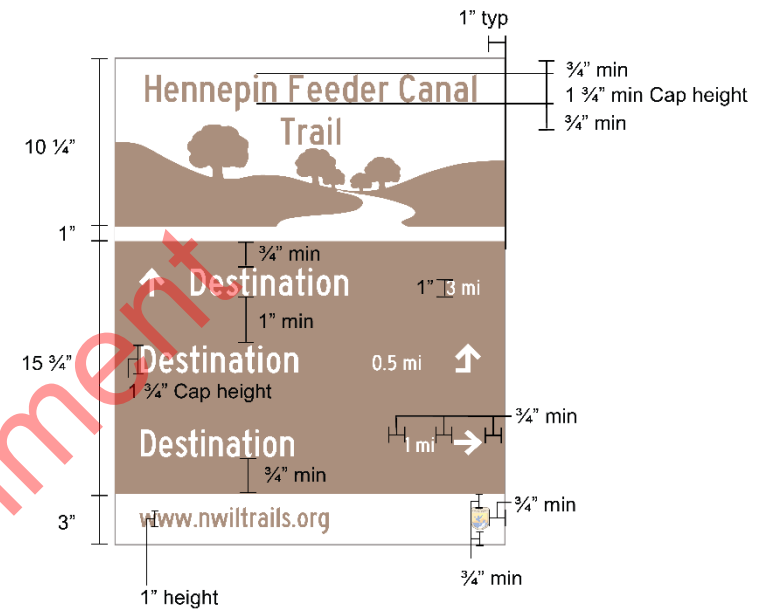


## Distance

- When distances are less than one mile, a zero is placed before the decimal, e.g. 0.5
- Rounding distance measurements:
  - Distances under 5 miles should be rounded to the nearest tenth of a mile, e.g. 4.3 mi
  - Between 5-10 miles, to the nearest half-mile, e.g. 5.5 mi
  - Over 10 miles, to the nearest mile, e.g. 11 mi
- For distances under 0.2 miles, use blocks, feet, or do not include the destination at all

## Logos

- Logos in the white panel at the bottom of the sign—if included—should be a minimum of  $\frac{3}{4}$ " away from other logos and the edge of the panel; for more guidance on logos, see Section 4.3



## D Street Directional and Confirmation Signs

Panel Size: 30" tall x 24" wide.

### Font:

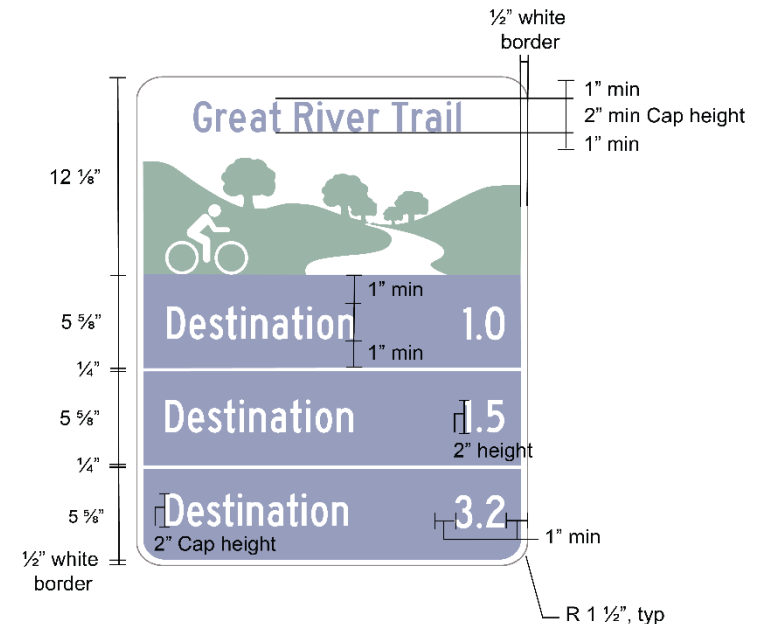
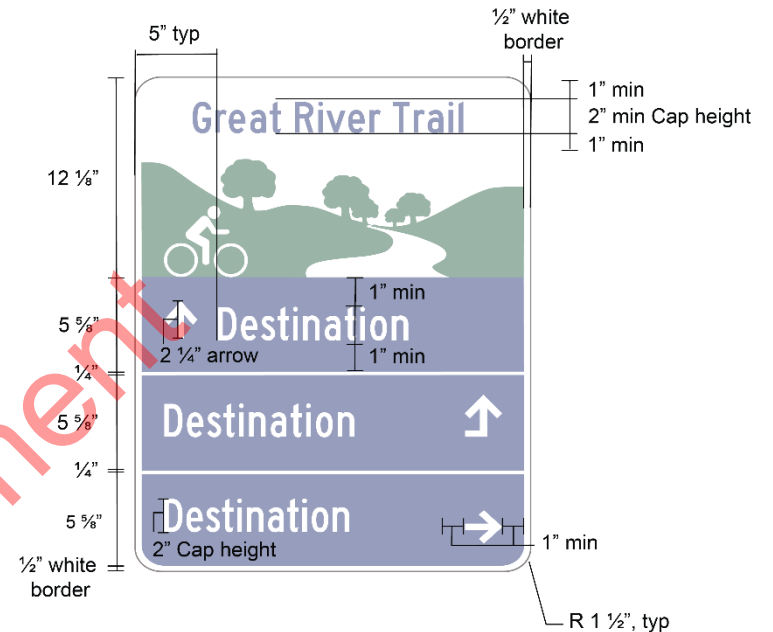
- Highway Gothic Narrow font, title case
- The name of the trail at the top of the sign should have a minimum 2" height for capital letters
- Destinations should have a minimum 2" height for capital letters

### Layout:

- Refer to the figures at right for typical layout dimensions
- For long names that do not fit on one line, try these steps before adding a second line:
  - 1) Use kerning to compress the font horizontally to no less than 90% of the standard size
  - 2) Use intuitive abbreviations (see Section 4.4)
- To insert a two-line destination, the other destination rows can be compressed

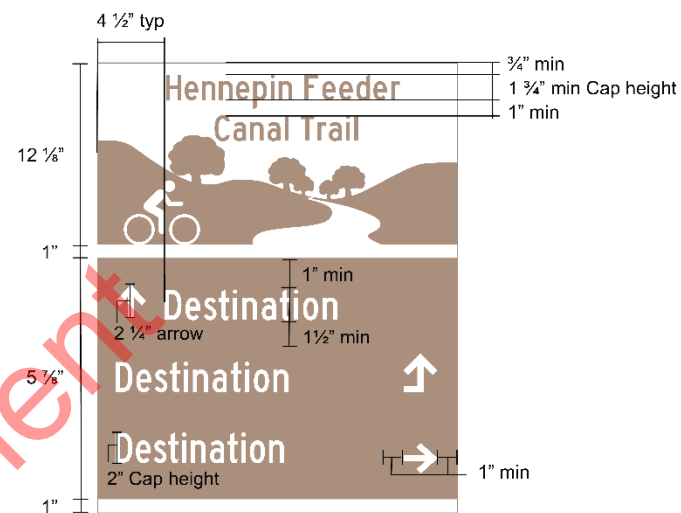
### Order of Destinations

- Signs should not include more than three destinations.
- Street Directional Signs show only the direction, not distance. Destinations should be ordered from top to bottom as follows:
  - Straight destinations
  - Left-turn destinations
  - Right-turn destinations
- Street Confirmation signs show only distance. Destinations should be ordered from nearest to farthest.



## Distance

- When distances are less than one mile, a zero is placed before the decimal, e.g. 0.5
- Rounding distance measurements:
  - Distances under 5 miles should be rounded to the nearest tenth of a mile, e.g. 4.3 mi
  - Between 5-10 miles, to the nearest half-mile, e.g. 5.5 mi
  - Over 10 miles, to the nearest mile, e.g. 11 mi
- For distances under 0.2 miles, use blocks, feet, or do not include the destination at all



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## T Turn Signs (Trail or Street)

### Panel Size:

- Route identification panel is 18" tall x 24" wide
- Arrow plaque is 9" tall x 12" wide

### Font:

- Highway Gothic Narrow font, title case
- The name of the trail at the top of the sign should have a minimum 2" height for capital letters

### Arrow Plaques:

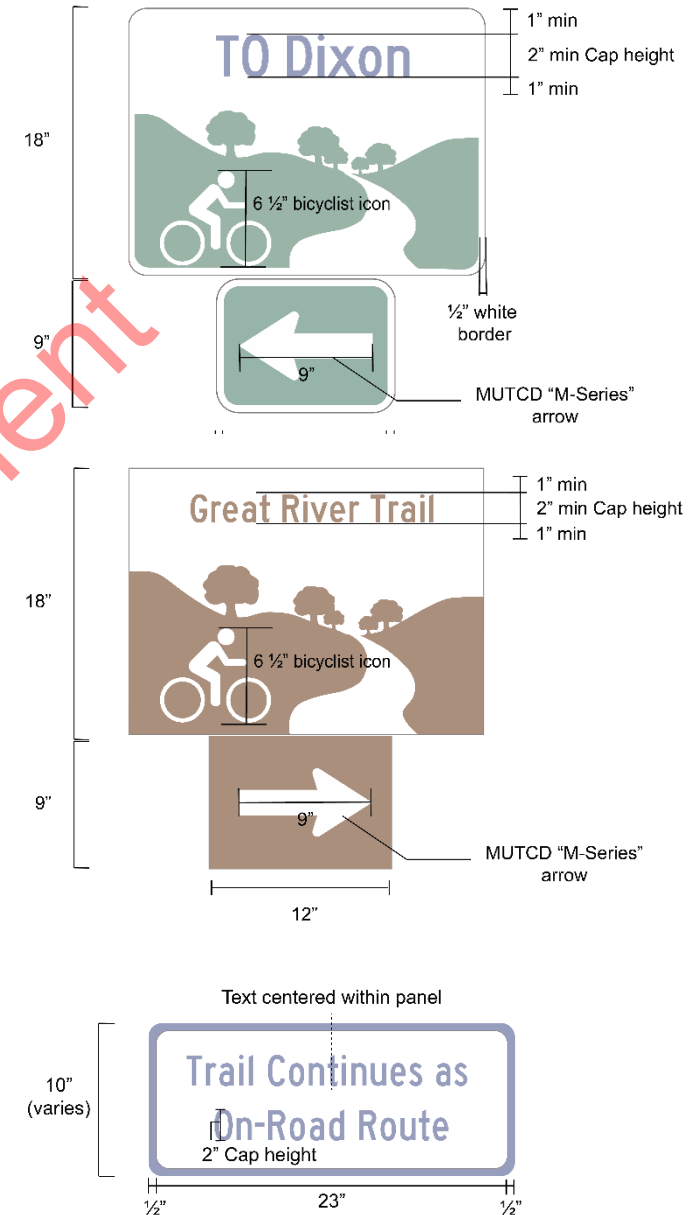
- For the typical green signs, any of the standard MUTCD "M-Series" directional arrow plaques may be used
- For the recreation brown signs for USFWS, Corps, and IDNR properties, a non-rounded arrow plaque in brown should be used

## MP Message Panel

Panel Size: 24" wide x varying height.

### Font:

- Highway Gothic Narrow font, title case
- Blue text on a white background
- Center-justify text
- The message panel text should have a minimum 2" height for capital letters



## S Street Name/Trail Name Signs

### Panel Size:

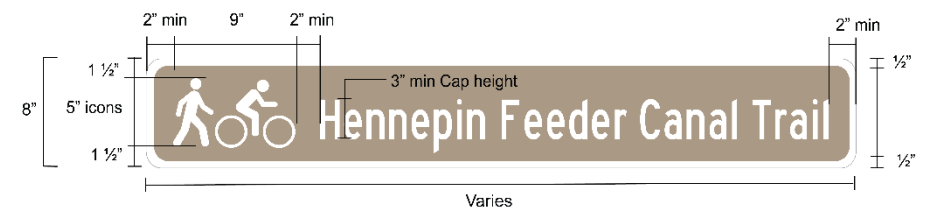
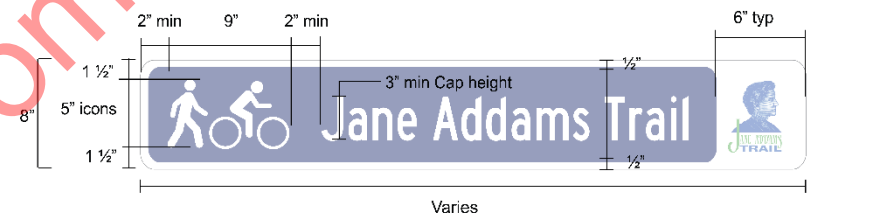
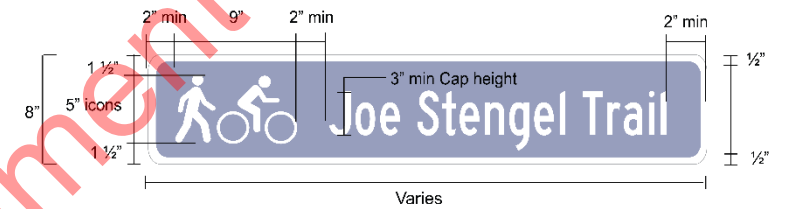
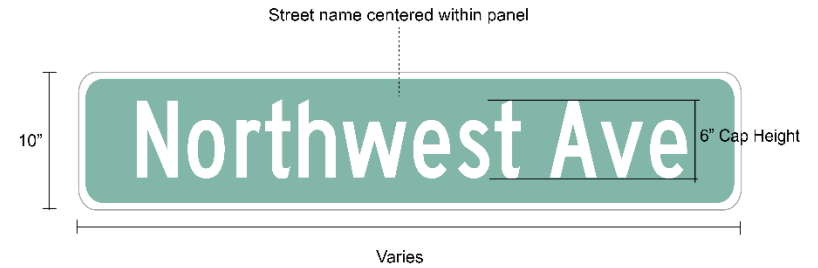
- Street Name signs are 10" tall x varying width
- Trail Name signs are 8" tall x varying width

### Font:

- Highway Gothic Narrow font, title case
- On Street Name signs, minimum 6" height for capital letters
- On Trail Name signs, minimum 4" height for capital letters

### Design and Layout

- Refer to the figures at right for typical layout dimensions
- For trail names with logos, the logo should go on the opposite side of the bicycle and pedestrian icons
- Trail Name signs should be on blue or brown background to distinguish them from Street Name signs



Public Comment



## **W** Trail Crossing Warning Sign

### Panel Size

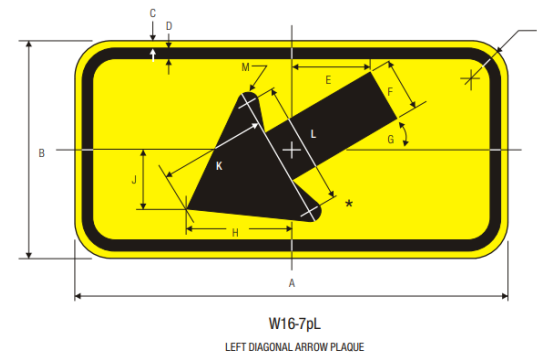
- Bicycle-Pedestrian Warning Sign: 18" x 18"
- Diagonal Arrow Plaque: 12" tall x 24" wide

### Layout

- Refer to the layout and dimensions for the sign and plaque in Standard Highway Signs, the 2012 Supplement for use with the MUTCD
- The Bicycle-Pedestrian Warning sign has MUTCD code W11-15
- The Diagonal Arrow plaque has MUTCD code W16-7P



- ★ See page 6-7 for symbol design.
- ★★ See page 6-10 for symbol design.



## M Mileage Marker

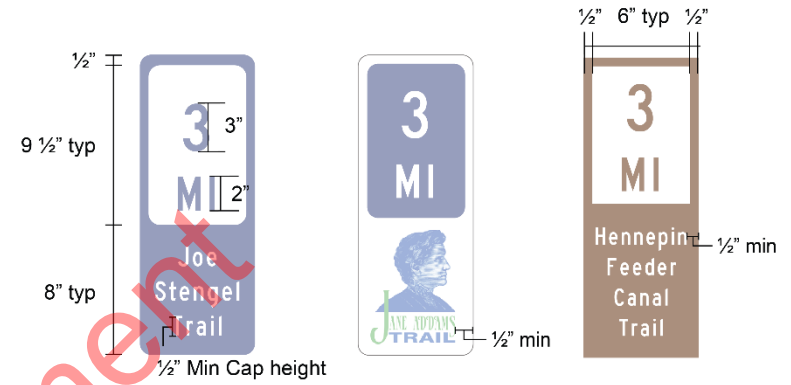
Panel Size: 18" tall x 7" wide, typical

### Font:

- Highway Gothic Narrow font, title case
- Mile number should be at least 3" tall; "MI" label should be at least 2" tall
- Trail Name should have a minimum of ½" for capital letters

### Layout:

- Refer to the figures at right for typical layout dimensions



## I Interpretive Sign

This Guide does not provide detailed sign design and layout for Interpretive Signs aside from the general recommendations below. A sign shop can develop concepts and design the structure of interpretive signs that uses the Northwest Illinois Trails' theme of oak savanna and rolling hills.

### Panel Size:

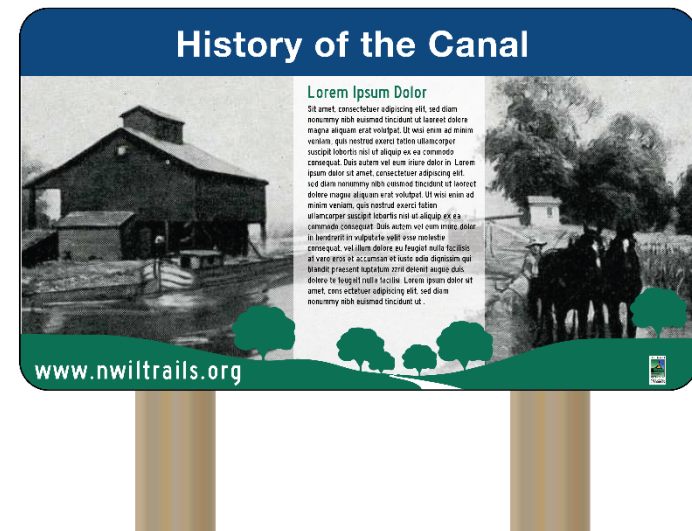
- 24" tall x varying width (Typically 3' to 4')

### Font:

- Titles on interpretive signs can be between 1" to 3" tall
- The main text on interpretive signs should be a minimum of ½" tall, or 36 points
- The name of the [www.nwilstrails.org](http://www.nwilstrails.org) website should be smaller than the titles, and larger than the main text, at least ¾" tall

### Notes:

- The National Park Service's *Wayside Exhibits: A Guide to Developing Outdoor Interpretive Exhibits* is an excellent reference for developing outdoor interpretive signs



## 4.2 Colors and Symbols

### MUTCD Colors and Pantone Matching Colors

The green, blue, and brown colors for the Northwest Illinois Trail signs use sign sheeting color specifications of the MUTCD as noted in federal rule 23 CFR 655. Sign fabricators will be familiar with the approved sign sheeting colors for green, blue, and brown. For printing purposes only, the Pantone and RGB values below closely match the MUTCD sign sheeting colors.

<b>Pantone 342</b>	<b>Pantone 294</b>	<b>Pantone 294</b>
RGB Values:	RGB Values:	RGB Values:
R: 0	R: 0	R: 105
G: 103	G: 47	G: 63
B: 71	B: 108	B: 35

### NPS Recreation Symbols

The symbols used in the signs are the recreation symbols used by the National Park Service. These symbols were created by the Society for Environmental Graphic Design (SEGD) and can be download from their website for free: <https://segd.org/symbols>.



## 4.3 Agency Logos and Route Plaques

### Logos on the Sign Panel Versus a Logos on Separate Plaques

This Guide has shown agency and route logos included as a separate route plaque, and also included directly on the main sign panel (see example Trail Directional signs to the right). The following factors should be considered when deciding which approach to use.

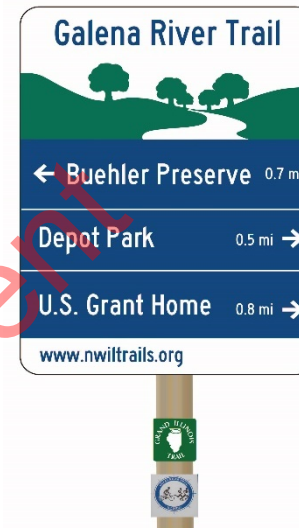
- In general, include agency logos on the sign panels if they are directly responsible for maintaining the trails. This helps trail users identify who to contact if there are maintenance or safety concerns.
- Route logos—such as the Grand Illinois Trail or the Great River Trail—can be included on the sign panel in the white logo area *or* as separate plaques mounted to the post of the sign. Including them on the sign panel has the benefit of reducing “sign clutter”. Mounting them as separate plaques has the benefit of being larger and easier to remove if the route or logo changes.

### Logo File and Format

Where possible, logos should be provided to the sign fabricator as vector files such as “svg” or “eps” extensions. This saves production costs and time. The Gateway Sign and Interpretive Sign designs in this Guide may require logos on blue or green backgrounds. If the logo does not have a transparent background or does not look acceptable on a dark background, the sign fabricator can test the following options:

- Create a transparent background for the logo by “tracing” it in a graphic software like Adobe Illustrator
- Reverse the logo so it stands out on a dark background: in the example at right, the Grand Illinois Trail and the National Wildlife Refuge logos have been reversed so they look good on the green background
- Finally, if a logo cannot be placed on a dark background (like the Jane Addams Trail logo to the right), the sign fabricator can alter the sign design by creating a white background where the logos can be placed

Trail Directional sign with separate route logos mounted as plaques on post



Trail Directional sign with route logo on the sign



### Original Logos, White Background



OK



OK



OK

### Logos on Green Background



Bad



Bad



Bad



OK



OK



Bad

## 4.4 Capitalization, Punctuation, and Abbreviation

Consistent capitalization, punctuation, abbreviations, and place names on all signs supports simplicity and consistency in wayfinding.

**Capitalization:** Use “title case” (upper-and-lower case) for all signs except Gateway Signs. Gateways signs should be in all-upper-case.

**Punctuation and Abbreviations:** Do not use periods for abbreviations (e.g. “Vlg”) unless necessary to distinguish an abbreviation from another word. For example, the word “Business” may be abbreviated as “Bus.” to distinguish it from the word “bus” (as in a transit vehicle).

Table 1. Common Abbreviations

Common Term	Abbrev.	Common Term	Abbrev.	Common Term	Abbrev.
And	&	Elementary School	Elem	Recreational	Rec
Avenue	Ave	Feet	Ft	River	Riv
Block	Blk	High School	High	Road	Rd
Boulevard	Blvd	Lake	Lk	South	S
Business	Bus.	Lane	Ln	State	State
Center	Ctr	Memorial	Mem	Station	Stn
Community	Comm	Middle School	Middle	Street	St
County	Co	Mile(s)	Mi	Terrace	Ter
Creek	Crk	Mountain	Mtn	Trail	Trl
Drive	Dr	Museum	Mus	Veteran, Veterans	Vet
Downtown	Dtwn	Path	Path	Village	Vlg
East	E	Pedestrian	Ped	West	W

## 4.4 Example Signs for Unusual Scenarios

In every sign plan, there is likely to be at least one intersection or situation that varies from the typical scenario sketches in Chapter 3. The example signs illustrated and described below were created as part of the test sign plans used in the development of this Guide. They may serve as inspiration for how to approach difficult situations.

On: Joe Stengel Trail  
At: Holden Street in Woosung  
Facing: North



At this location, a turn was used to show the turn on the bike route to Dixon. Snowmobilers and ATV users also use the trail, so the message panel includes the words "Bike Route" to emphasize that the route is not for snowmobile or ATV users.

On: Joe Stengel Trail  
At: Holden Street in Woosung  
Facing: South



The sign for trail users facing in the opposite direction clarifies that ATVs and snowmobiles are allowed on the trail.

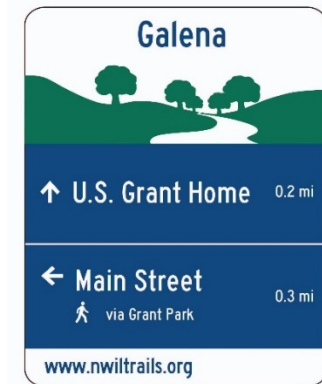
On: Galena River Trail  
At: Depot Park entrance  
Facing: South



At this location, the shortest route to Galena's Main Street is via a bridge in Grant Park. That bridge has many steps and is therefore usable by pedestrians only. The bicycle and pedestrian icons clarify which route should be used by pedestrians and bicyclists.

The Grand Illinois Trail and Great River Trail route logos are to be plaques mounted the post, not on the logo panel. This allows for future changes to the routes or logos, as well as larger sizing.

On: Bouthillier Street  
At: Park Street in historic Galena  
Facing: West



At this location just off the trail, the shortest route to Galena's Main Street is via a bridge in Grant Park. The top of the sign panel could read "TO Main Street" or "TO U.S. Grant Home" but without a full network of on-street wayfinding signs, the generic "Galena" was chosen for the header text.

On: Galena River Trail  
At: S River Road (Aiken Township)  
Facing: Northwest



The header for this sign says “Great River Trail” even though it is on the Galena River Trail where it ends in Aiken. The header conveys the information that the route continues, but with a new name.

The Grand Illinois Trail route logo is mounted as a plaque to the signpost. The Great River Trail name plaque is not necessary because it is conveyed in the sign header.

On: S River Road (Aiken Township)  
At: Galena River Trail  
Facing: Southeast



The sign for trail users facing in the opposite direction lists the Great River Trail name in the header (indicating that it continues). It also lists the Galena River Trail (the local name of the trail) in the first row.

This turn is shown on a directional sign (rather than a turn sign) so that other destinations could be included. The Grand Illinois Trail is mounted as a plaque on the sign post.

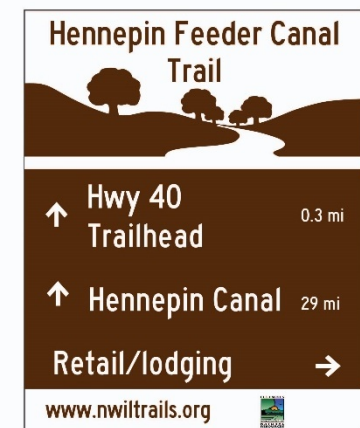
On: South River Road  
At: Chestnut Mountain Chairlift  
Facing: South



At this location at the base of Chestnut Mountain, the ski resort is clearly visible and does not need to be included as a destination on the sign. The chairlifts operate year-round, and bicyclists can ride the chairlift to get to the chalet and bathrooms at the top. A map kiosk at the top of Chestnut Mountain will help bicyclists navigate the road routes nearby.

The message panel at the bottom of the sign to announce the start of the signed route will give bicyclists the confidence to expect signs along the route.

On: Hennepin Feeder Canal Trail  
At: Trail spur to Walmart in Rock Falls  
Facing: North



This Guide recommends against including the names of specific businesses—like Walmart—because they may close, move away, or change names. Including specific business names could also give the appearance of favoring one business over another.

However, it is important to let trail users know that they might be close to services such as food or shelter. In this case, the generic “Retail/lodging” destination indicates the presence of the Walmart and several hotels just off the trail.

## STEP 5: FABRICATATION, INSTALLATION, AND MAINTAINENANCE

### 5.1 Sign Installation Plan

Once Steps 1-4 are complete, the information is compiled into a sign installation plan that is shared with the sign shop or work crews responsible for fabricating and/or installing the signs. A sign plan should include the following components:

#### Plan Maps

- Paper sizes can be 8.5" x 11", 11" x 17", or 22" x 34"
- Plan maps should use a standard sign symbol labeled with the sign ID number. It is useful to use a symbol that shows the orientation of the sign
- If using the Google "My Maps" tool, sections of the trail can be printed to include the sign numbers

#### Sign Schedule

A sign schedule is a table—such as an Excel spreadsheet—that lists all of the information about each sign on the corridor. If using the Google "My Maps" tool, the table can be exported to a KML file, which can then be imported into an Excel spreadsheet. A sign schedule should cover the following:

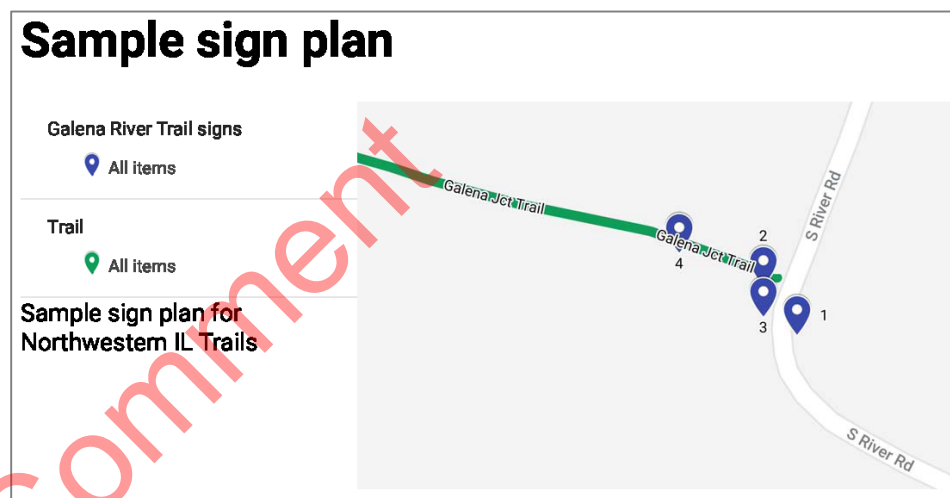
- Panel sizes and identification codes—such as MUTCD ID numbers and/or the letter codes used in Steps 3 and 4 of this Guide
- Panel facing direction
- Location on street or trail ("ON Galena River Trl AT S River Rd")
- Sign legends
- Post location and post type
- Mounting arrangements, adjustments to existing signs on posts, and other notes

#### Panel Fabrication Specifications and Details

Panel fabrication specifications and details include:

- Typical and variations for each sign panel size; layout of text and symbols; spacing, letter sizes, symbol sizes, symbol types, symbol enlargement or reduction allowances; colors, fonts, and borders. The information in Steps 3 and 4 of this Guide may be sufficient detail.
- Sign fabrication standards (in accordance with each jurisdiction's standards and specification)

Figure 5-1. If using the Google "My Maps" Tool, sections of the trail can be printed to include in the sign installation plan.





## 5.2 Post Types and Installation

Signs and sign posts should be installed in accordance with local jurisdiction standards.

### Posts for Streets and Roads

All posts along streets or roads should be breakaway to improve street and road user safety. The following posts are compatible with the signs for streets and roads in this Guide:

- 4" x 4", 4" x 6", or 6" x 6" treated lumber, with drilled holes to ensure that the post is breakaway; lumber should be treated to meet Illinois DOT specifications to prevent rot and should not simply be treated lumber from a home improvement store
- 2" square perforated galvanized metal pole
- 2 3/8" round galvanized metal pole

### Posts for Trails

For the natural wood post style recommended on trails, the following products are compatible with the signs in this Guide:

- 4" square treated lumber
- 3.5" or 4" square recycled plastic posts. Select a tan or light-wood color so that it is less intrusive on the natural trail environment. Suggested products include (in alphabetical order):
  - PolyForce Structural Recycled Plastic Lumber
  - Premium Plastic Lumber by American Plastic Lumber
  - SelectForce Plastic Lumber by Bedford Technology

## 5.3 Clearance Guidelines

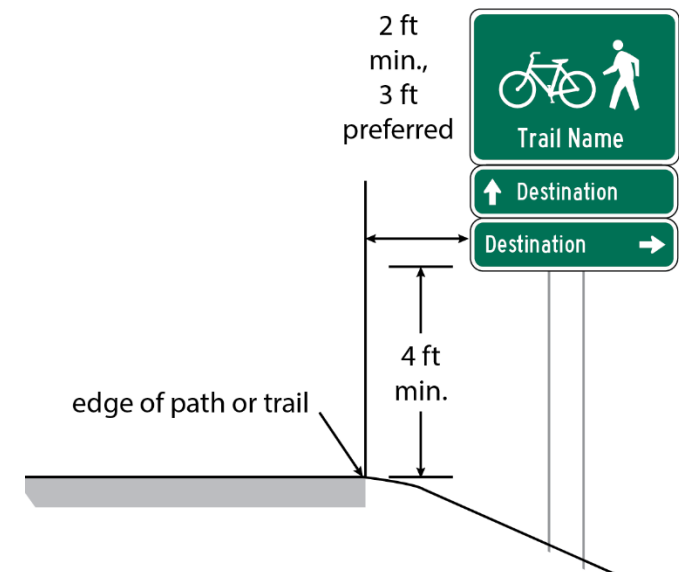
The sign mounting height and clearance guidelines in this Guide are drawn from the MUTCD (Part 2, Section 2A.18, and Part 9, Section 9B.01).

### Trails

- Minimum of 4' from the height of the trail to the bottom edge of the sign
- For signs placed overhead of trails, a minimum of 8' vertically over entire width of trail
- Mile markers on trails, if installed, should be installed so the bottom of the sign is 3' above the height of the trail
- Minimum of 2' from edge of trail or trail to the side edge of the sign

Figure 5-2: Minimum clearance requirements for signs on paths or trails.

### Minimum Clearances for Path or Trail



## Roads

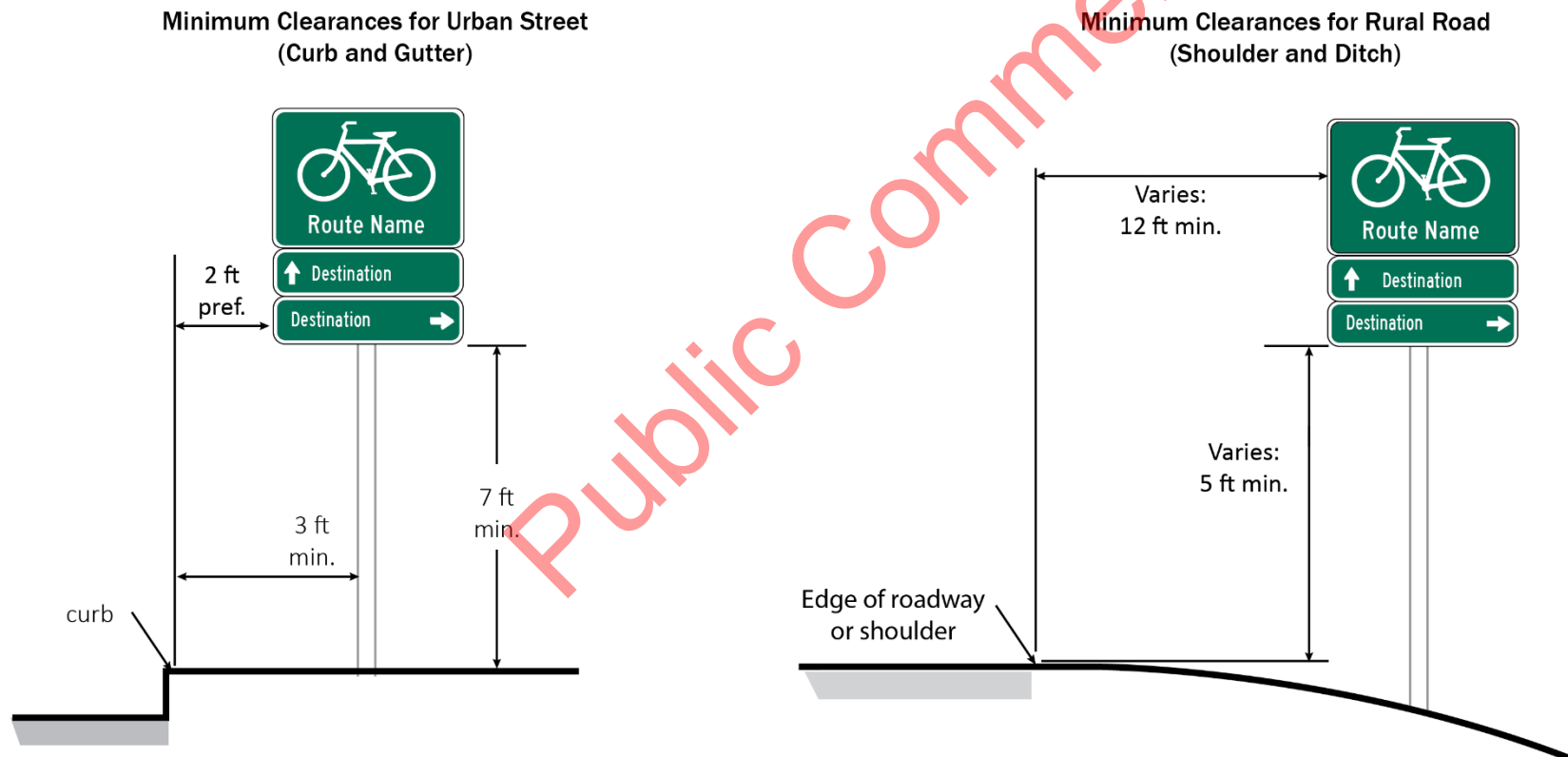
### Urban Streets:

- Minimum of 7' from the pavement to the bottom edge of the sign
- Minimum of 2' from the edge of the travel lane to the edge of the sign

### Rural Road:

- Minimum of 5' from the pavement to the bottom edge of the sign
- Minimum of 12' from the edge of the travel lane to the edge of the sign

Figure 5-3: Minimum clearance requirements for signs on streets and roads.



## 5.4 Maintenance

### Sign Replacement Costs as Part of a Trail Maintenance Plan

Agencies that maintain trails should have an overarching maintenance and management plan for the trail that includes strategies for dealing with vandalism and theft. A maintenance plan would include and budget for both routine and remedial maintenance and define responsibilities between the different agencies and jurisdictions that have responsibilities for different segments of the trail.

- **Routine Maintenance.** Routine maintenance should be scheduled and occur weekly, monthly, and annually. Routine maintenance includes mowing, sweeping, trash-clean up, graffiti removal, and vegetation management. The best trail routine maintenance programs perform routine trail inspections that both inspect and respond to maintenance issues at the same time. Responding to issues immediately saves time and provides a better trail experience for users but requires that maintenance staff have equipment (such as paint, saws, brooms or trail sweepers, weed killer, graffiti removal supplies, trash bags, etc.) at all times. Regular maintenance and quick repair or replacement of vandalized signs sends a message that vandals will not impact the trail. Routine trail 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 remedies a specific issue that cannot be addressed immediately such as trail wash-outs, damaged bridges, or—in the context of signs—replacement of trail amenities. Agencies should expect to replace about 5 percent of their signs every year. It is important to address trail amenity issues—especially those that take an amenity off-line—because in doing so, trail users can have confidence in the information being provided by wayfinding.

The Rails to Trails Conservancy's *Rail-Trail Maintenance and Operation Survey* ([www.americantrails.org/images/documents/railtrailmaint.pdf](http://www.americantrails.org/images/documents/railtrailmaint.pdf)) is a good resource for trail agencies to refer to when developing a trail maintenance plan. The report's Appendices include example maintenance schedules and maintenance budgets.

### Mitigate Maintenance Costs

When planning to purchase and install wayfinding signs, agencies can spend additional money during fabrication and installation on features that will help reduce future maintenance needs:

- **Anti-Graffiti Coating.** Graffiti overlays are available as film or liquid laminates. When these are overlaid on a sign, harsh solvents can be used to remove the graffiti without damaging the underlying sign. Some sign vendors may already include "Anti-Graffiti Overlay" as part of the cost of their standard sign fabrication. If they do not, it may be worth it to purchase overlays for an extra \$1-2 per sign.
- **Anti-Theft Sign Hardware.** A variety of theft-resistant sign hardware such as sloped nuts, security bolts, and special screws can help deter sign thieves. The additional cost of this hardware is an extra \$1-2 per sign.

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Public Comment

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