

move

Wayfinding Plan



Washington County

*A great place to live, work,
and play... today and
tomorrow!*



Washington
County

move
Wayfinding Plan

*Funded in part by the Statewide Health
Improvement Partnership, Minnesota
Department of Health*



Prepared by HKGi



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01. INTRODUCTION

The *MOVE Washington County Bicycle and Pedestrian Plan* (MOVE) was adopted in February 2021. One of the primary reasons for developing *MOVE* was to create a future county-wide bicycle and pedestrian network. The network plan identifies opportunities for improving and expanding upon the existing network. Washington County is fulfilling one of its strategies from the Bike and Ped Plan by adopting a *Wayfinding and Signage Plan*.

PLAN PURPOSE

The purpose of this plan is to:



Provide identity and branding features to the Washington County trail system.



Identify the appropriate locations and type of wayfinding for off-street trails.



Enhance the user's (commuter and leisure) experience when walking or biking in Washington County.



Establish an implementation plan that coincides with the Future Network Plan (off-street trails only).

PLAN PROCESS

This Wayfinding and Signage Plan was directed by input from a Project Management Team (PMT). The PMT provided background knowledge, insight into current park and trail operations and maintenance, and reviewed project materials.

The following meetings were held during the plan development:

Table 1.1 Plan Process

MEETING	TOPIC AND PURPOSE
PMT Meeting #1 October 19, 2020	Review goals and tasks for Wayfinding and Signage Plan; Review project schedule; Discuss potential sign design elements; Review proposed wayfinding tiers and sign types
PMT Meeting #2 November 19, 2020	Review wayfinding hierarchy and proposed sign locations; Review sign concept options
Stakeholder Meeting December 8, 2020	Present proposed sign concepts and sign locations to Washington County administration and leadership for feedback
PMT Meeting #3 January 27, 2021	Review draft plan document
Washington County Board Workshop March 2, 2021	Present draft sign concepts and sign locations

PROJECT MANAGEMENT TEAM (PMT)

The members of the PMT include:

- » Emily Jorgensen, Planner
- » Connor Schaefer, Parks Planner
- » Joe Gustafson, Traffic Engineer
- » Andrew Giesen, Project Manager



PLAN ORGANIZATION

This plan is organized into the following four chapters:



INTRODUCTION

Purpose of the plan, process, and organization.



WAYFINDING HIERARCHY AND BRANDING

Description of types of wayfinding signs, sign concept designs, best practices and guidelines for wayfinding signage.



WAYFINDING PLAN

Phased approach to wayfinding sign locations in coordination with the existing and proposed future Washington County bike and ped network, including four route maps (Phases I-IV).



IMPLEMENTATION

Factors and considerations for implementation of wayfinding facilities: existing trail plans, roles and responsibilities, right-of-way, maintenance, trail use, active living and SHIP initiatives.



“Riding bicycles will not only benefit the individual doing it, but the world at large.”

- Udo E. Simonis



02. WAYFINDING HIERARCHY & BRANDING

INTRODUCTION

The primary purpose of developing a wayfinding system for the bicycle and pedestrian system in Washington County is to brand the system and provide easily accessible and legible wayfinding information and direction for those using the trails.

The wayfinding system will focus on off-road regional trails with the assumption that users on these trails are recreational users and may be interested in trail connections, recreation destinations, and activity destinations (e.g. food, entertainment, retail). On-road routes will typically not include wayfinding information unless it intersects with a regional or state trail.

Wayfinding signage will be placed on publicly-owned land in most cases. This will require Washington County to partner with local governmental jurisdictions, such as cities and school districts, in order to provide wayfinding facilities at schools, local parks, or local government facilities.

This chapter presents wayfinding sign types, concepts, and guidelines for the system. Several precedent images are included to offer ideas and examples for Washington County. The wayfinding system will evolve over time in order to best meet the needs of existing and future residents and visitors.

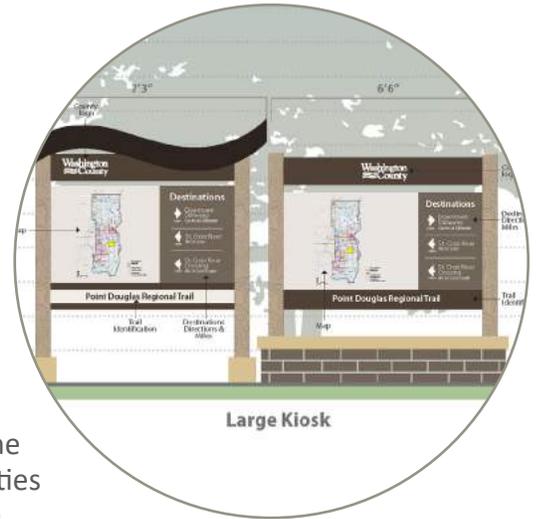
TIERED APPROACH

The sign designs and concepts in this plan are based on a tiered hierarchy. Organizing the wayfinding elements by tiers provides guidance for different situations. Trailheads and county parks will provide a higher level of wayfinding where more people will typically access trails. Trail intersections and rest stops are a lower tier that will provide basic amenities and limited wayfinding signage. The four tiers are listed below and described in the tables and images throughout this chapter. In Chapter 3, the wayfinding plan identifies preliminarily identified locations throughout the county for these four types of wayfinding.

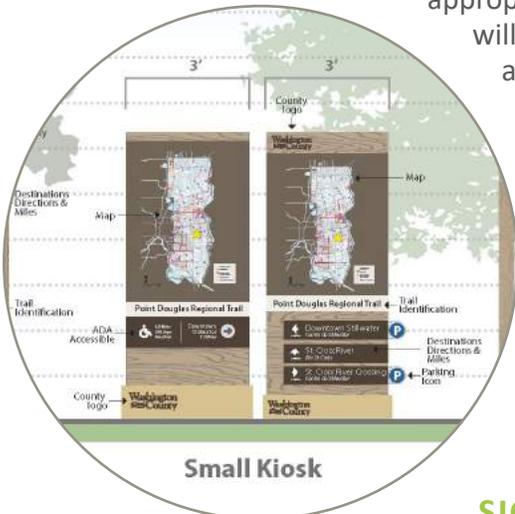
TIER 1 – TRAILHEADS

(typically will include a large kiosk)

- » County Parks – Trailheads should be located at existing county parks where existing parking lots and other amenities (restrooms, bike parking, picnic shelters, etc.) are located.
- » County Facilities - Trailheads at a county facility (e.g., service or license center) will take a different form based on the available space and trail connections. Bike parking should be included for trail users. Consider designated parking for bike commuters.
- » Shared Facilities – If the opportunity arises to share a trailhead with a state or other local government facility, the appropriate signage and other amenities will be considered based on space availability and trail connections.



Large Kiosk



Small Kiosk

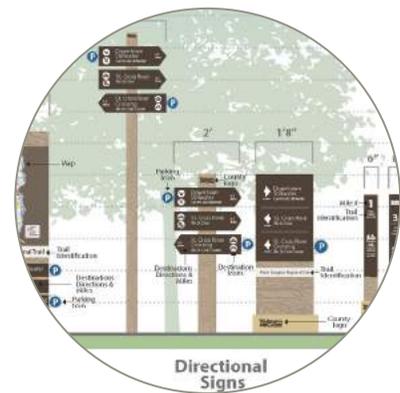
TIER 2 – REST STOPS

(typically will include a small kiosk)

Rest stops will be located along regional trails and in other locations where appropriate and where there may not be enough space for a full trailhead.

TIER 3 – DIRECTIONAL SIGNS

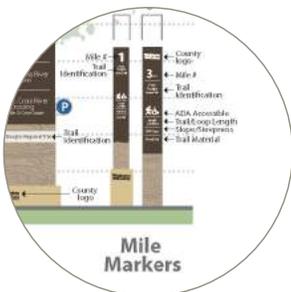
Directional signs will be placed at trail intersections and in places where destinations are located that trail users may find of interest.



Directional Signs

TIER 4 – MILE MARKERS

Mile markers may be located along regional trail corridors spaced one mile apart to identify the trail and mark distance for trail users. Alternatively, distance markers can be placed on directional and kiosk signs where appropriate.



Mile Markers

See Figure 2.1 for full sign family concepts

Table 2.1: Wayfinding Types identifies the four tiers of wayfinding types and includes other details, such as the purpose, location, trail connections, and available facilities and amenities. The associated Tier Characteristics matrix on the following page includes precedent images that represent how the sign types could look according to the wayfinding tiers.

WAYFINDING TYPE	LEVEL/PURPOSE	LOCATION	SPACING/ FREQUENCY THROUGHOUT THE SYSTEM	CONNECTIONS	DESIGN/AMENITIES
TRAILHEAD Example: Hardwood Creek Transit Center and Trailhead (Forest Lake)	Tier I; utilizes the existing parks and facilities system; primary wayfinding & trail access point; branding of county trail system	Primarily at Regional and County Parks and along state trails where existing parking facilities and trail connections exist	Located where there are existing County parks or other County or local facilities (e.g. schools, City Hall, parks)	Access to regional or state trail corridor; Access to recreation (parks, picnic facilities, restrooms, hiking trails, etc.)	Kiosk sign; Accommodates vehicles, walkers, bikers, runners, and handicap users; Shared parking, restroom, picnic, water, etc. facilities with existing destinations
REST STOP Example: Hardwood Creek Regional Trail kiosk at Hugo City Hall	Tier II; Secondary wayfinding point and rest stop along trail, branding of the trail system	Located at convenient intervals between Tier 1 nodes	Occur approximately every 2-3 miles along trail corridors, or at trail intersections	Access to local trail connection or trail intersection; Access to recreation destination or activity center (if logical)	Kiosk sign; May include bench, trash receptacles; Accommodates walkers, bikers, runners, handicapped users
DIRECTIONAL SIGN	Tier III; Tertiary wayfinding; branding of trail system and direction/distance to destinations	Located along off-street trail corridors or at regional/local trail intersections	Occur approximately every 1-2 miles or at logical decision points	Access to local trail connections, local parks, or activity center (food, entertainment)	Single post with flag signs or map attached; Accommodates walkers, bikers, runners, handicapped users
MILE MARKER	Tier IV; brand the trail; identify National Grid location for emergencies; help bikers walkers easily see how far they've traveled since last mile marker	Once per mile along regional trails; if a Directional sign or other wayfinding sign exists, place mile marker on that sign	Once a mile along regional/significant trails (e.g. Central Greenway Regional Trail, Hardwood Creek Regional Trail, Lake Links Regional Trail, St. Croix Valley Regional Trail, Point Douglas Regional Trail)	N/A	Single post with branded band one-two feet off the trail edge

Table 2.1 Wayfinding Types



DESIGN DETAIL CONSIDERATIONS

EXAMPLE IMAGERY

TIER CHARACTERISTICS	Image 1	Image 2	Image 3	Image 4	Image 5
<p>TRAILHEAD</p> <p><i>Primary wayfinding & trail access point</i></p> <ul style="list-style-type: none"> » Located near activity centers or major recreational destinations » Located near transit opportunities (if possible) » Occur approximately every 5-10 miles along regional trail corridors » Access to local trail connection or trail corridor intersection as well as regional trail corridor » Access to recreation (parks, views, water features, etc.) » Accommodates vehicles, walkers, bikers, runners, and handicap users » Share facilities where possible with existing services 	 <p><i>Dakota County, MN</i></p> <ul style="list-style-type: none"> » Wayfinding kiosk element » Water fountain, indoor restrooms, vehicle parking, bike parking, picnic shelter, benches, bike repair station » Park and water access 	 <p><i>Brown's Creek State Trail in Stillwater</i></p> <ul style="list-style-type: none"> » Wayfinding kiosk element » Bench seating, bike/vehicle parking, small shelter, trash/recycling, nearby restrooms » Near park and downtown attractions 	 <p><i>Mori Point Park in Pacifica, CA</i></p> <ul style="list-style-type: none"> » Wayfinding kiosk element » Indoor green-flush restrooms, trash and recycling receptacle » Unique park branding » Park access 	 <p><i>Bruce Vento Regional Trail, Saint Paul, MN</i></p> <ul style="list-style-type: none"> » Kiosk wayfinding element » Bike and vehicle parking, picnic shelter, restrooms, bench and table seating, etc. » Unique park/trail branding » Park and trail access 	 <p><i>Dakota County, MN</i></p> <ul style="list-style-type: none"> » Kiosk wayfinding element » Water fountain, outhouses, vehicle parking, bike parking, picnicking benches, bike repair station, etc. » Trail access » Consistent county branding
<p>REST STOP</p> <p><i>Secondary wayfinding & trail access point</i></p> <ul style="list-style-type: none"> » Located at convenient intervals between trailheads » Occur approximately every 3-5 miles along trail corridors, or at trail intersections » Share uses with other facilities where opportunities exist » Access to local trail connection or trail intersection » Access to recreation destination or activity center (if logical) » Accommodates walkers, bikers, runners, handicap users 	 <p><i>Three Rivers Park District</i></p> <ul style="list-style-type: none"> » Multiple wayfinding kiosks » Coordinating directional wayfinding signage » Coordinating regional trail branding, unique materials » Weather shelter/awning 	 <p><i>Dakota County, MN</i></p> <ul style="list-style-type: none"> » Wayfinding kiosk element » Bike parking, bench seating, trash and recycling mimic similar amenities at same-county sites. » Consistent county branding 	 <p><i>Grand Rounds, Minneapolis Park District</i></p> <ul style="list-style-type: none"> » Large wayfinding kiosk with multiple side displays » Nearby bench seating » Coordinating historical trail and parks branding » Optional informative handouts 	 <p><i>Pinterest - Location Unknown</i></p> <ul style="list-style-type: none"> » Modern wayfinding kiosk element » Unique built-in bench seating » Weather shelter/awning » Unique material use » Optional informative handouts 	 <p><i>Hardwood Creek Trail, Washington County</i></p> <ul style="list-style-type: none"> » Wayfinding kiosk element » Bench seating » Unique trail branding elements » Unique colors/cut-out detail » Trash/recycling receptacles
<p>DIRECTIONAL SIGN</p> <p><i>Tertiary wayfinding</i></p> <ul style="list-style-type: none"> » Located along trail corridors or at local trail intersections » Occur approximately every 1-2 miles or at logical decision points » Identifies trail corridor and network (branding) » Accommodates walkers, bikers, runners, handicapped users 	 <p><i>Brown's Creek State Trail</i></p> <ul style="list-style-type: none"> » Identifies nearby destinations/city locations » Simple information, easy to read while in motion » Lists mileage, shows direction » Unique shape vs. printed arrows 	 <p><i>Shangri La in Orange, TX</i></p> <ul style="list-style-type: none"> » Identifies nearby destinations and amenities (restrooms) » Combines simple directional information as well as a more detailed map option » Modern look/materials 	 <p><i>Grand Rounds, Minneapolis Park District</i></p> <ul style="list-style-type: none"> » Identifies brand/trail and park system » Lists nearby destinations, trails, and amenities » Simple directional information for users in motion 	 <p><i>Charleston County, SC</i></p> <ul style="list-style-type: none"> » Identifies trail system » Offers additional information including; trail length, material, size, slope, types of user accessibility (ADA friendly) » Simple modern materials 	 <p><i>Portland-Vancouver Metro Area</i></p> <ul style="list-style-type: none"> » Identifies trail/brand » Offers simple printed and diagram information for users in motion » Identifies nearby destinations and mileage information » Clean modern look



DESIGN DETAIL CONSIDERATIONS

Wayfinding signage can include a number of different elements, including a variety of colors and materials, lighting, tactile elements, bilingual/translation, symbology, and more. Some of these elements are shown below as examples and precedents.



Unique Lighting/Night Visibility



Tactile Elements



Solar Power/Environmental



Focus on ADA/Accessibility



Unique Look or Materials



Demographically Appropriate/Bilingual



All-Season Use Information



Complexity of Information

WASHINGTON COUNTY SIGN PRECEDENT IMAGES

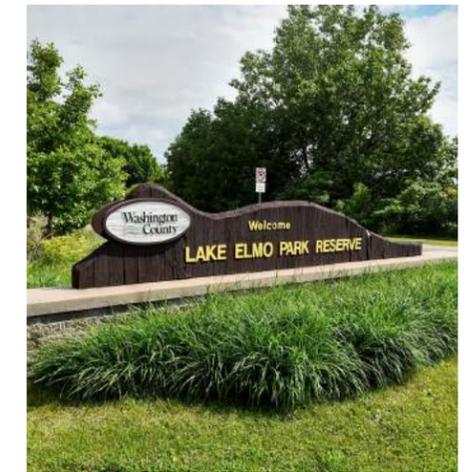
The images below depict some of the existing signage in Washington County. The images include state, county, and local park and trail signage. These signs serve as precedents and inspiration for the Washington County trail wayfinding signs.



Hardwood Creek Trail



Brown's Creek State Trail



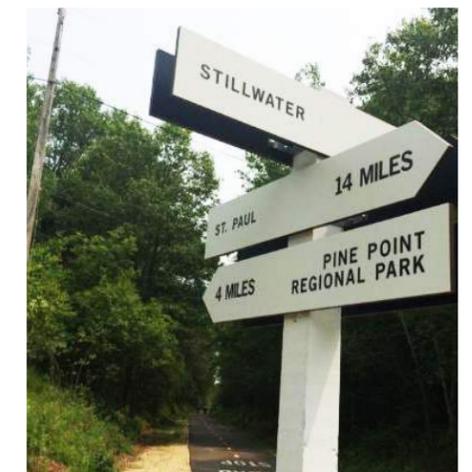
Lake Elmo Park Reserve



Bluestem Trail - Lake Elmo Park Reserve



Brown's Creek State Trail



Brown's Creek State Trail



Brown's Creek State Trail



Lake Elmo Park Reserve



Gateway State Trail

WAYFINDING BEST PRACTICES & GUIDELINES

Washington County trails should use the following best practices and guidelines to create a consistent wayfinding system that is easily recognizable and legible for trail users of all types.

Sign Concepts (Figures 2.1) are included in this chapter that represent proposed type, size, form, color, and content that should generally be included on Washington County trail wayfinding signage. Washington County branding has influenced these concepts and should be represented in the final sign designs when constructed. These concepts may be altered and adjusted prior to construction in order to best fit the desires of Washington County staff and representatives. Cross Section Diagrams (Figures 2.2-2.6) are included to identify where the various sign types should be installed within the trail corridor.

When developing detailed sign construction designs and selecting sign concepts and types for each location, the following guidelines and considerations should be kept in mind. The associated Design Detail Considerations images, on the previous page, include precedents and ideas for the types of elements and design details that could be included in the sign designs.

INTERPRETATION

Trail users have expressed interest in historic and cultural interpretation along trails and in parks in recent years. Interpretive elements could be 2D (signage) or 3D (sculptural, artistic) along trails or placed at trailheads and rest stops. Local historic groups, school groups, and residents could participate in identifying interesting and appropriate stories to tell along trails. Large and small kiosks have the opportunity to include narrative text descriptions and/or historic photos on a variety of topics:

- » Natural resources—plants and wildlife
- » Water resources—lakes, wetlands, streams, the St. Croix River
- » Historic and cultural resources—Native American settlement, European settlement
- » Parks and recreation—surrounding parks and trails, active living
- » Demographics and trends—surrounding

communities, suburban development, local schools and town centers, local events and festivals



Interpretive Sign Examples

DESIGN

- » Include branding of Washington County regional trail system through the use of consistent logos, fonts, colors, sign materials
- » Maps should be simple and clear – use symbology and icons as much as possible
- » Consider lighting at kiosk locations—if used, consider using sustainable power, such as solar power
- » Consider four-season use – year-round information for recreation and trail use
- » Consider including trail etiquette and safety signage or information on kiosks and directional signs (e.g. Share the Trail—keep right; Yield to peds; Announce passing on the left)

ACCESSIBILITY

- » Consider including space for bilingual information or links for other languages to find wayfinding information
- » Maps and information should be legible to those of all ages and abilities, including those in a wheelchair

CONSTRUCTION & MAINTENANCE

- » Consider materials and products that prioritize ease of installation
- » Use materials that require minimal maintenance
- » Consider flexibility of design for updating information and replacement of pieces over time as needed
- » Consider the possibility of vandalism and graffiti and use materials that are easy to repair and clean

TRAIL ETIQUETTE

Along multi-use and regional trails, trail etiquette signs may be incorporated into wayfinding signage or placed along the trail separately to help trail users avoid conflicts. Trail etiquette should consider the following types of trail users:



- » Fast bicyclists (single, fitness training)
- » Electric power-assisted bicycles
- » Slow bicyclists (families/groups, leisure bikers, children)
- » Inline skaters
- » Runners
- » Walkers
- » Walkers with pets
- » Wheelchair-assisted trail users
- » Equestrians (if allowed)
- » Snowmobiles (if allowed)

Types of trail etiquette signage and messaging that may be used includes:



Yield to Pedestrians



Trail Crossing Warning signage directed at vehicles and/or



Share the Trail—keep right



trail users
Announce Passing and Keep Right trail sign

WAYFINDING SIGN CONCEPTS:

The sign concepts below have been developed with input from Washington County staff and include ideas on form, material, size, color, and content. Final sign designs may vary from the images below.

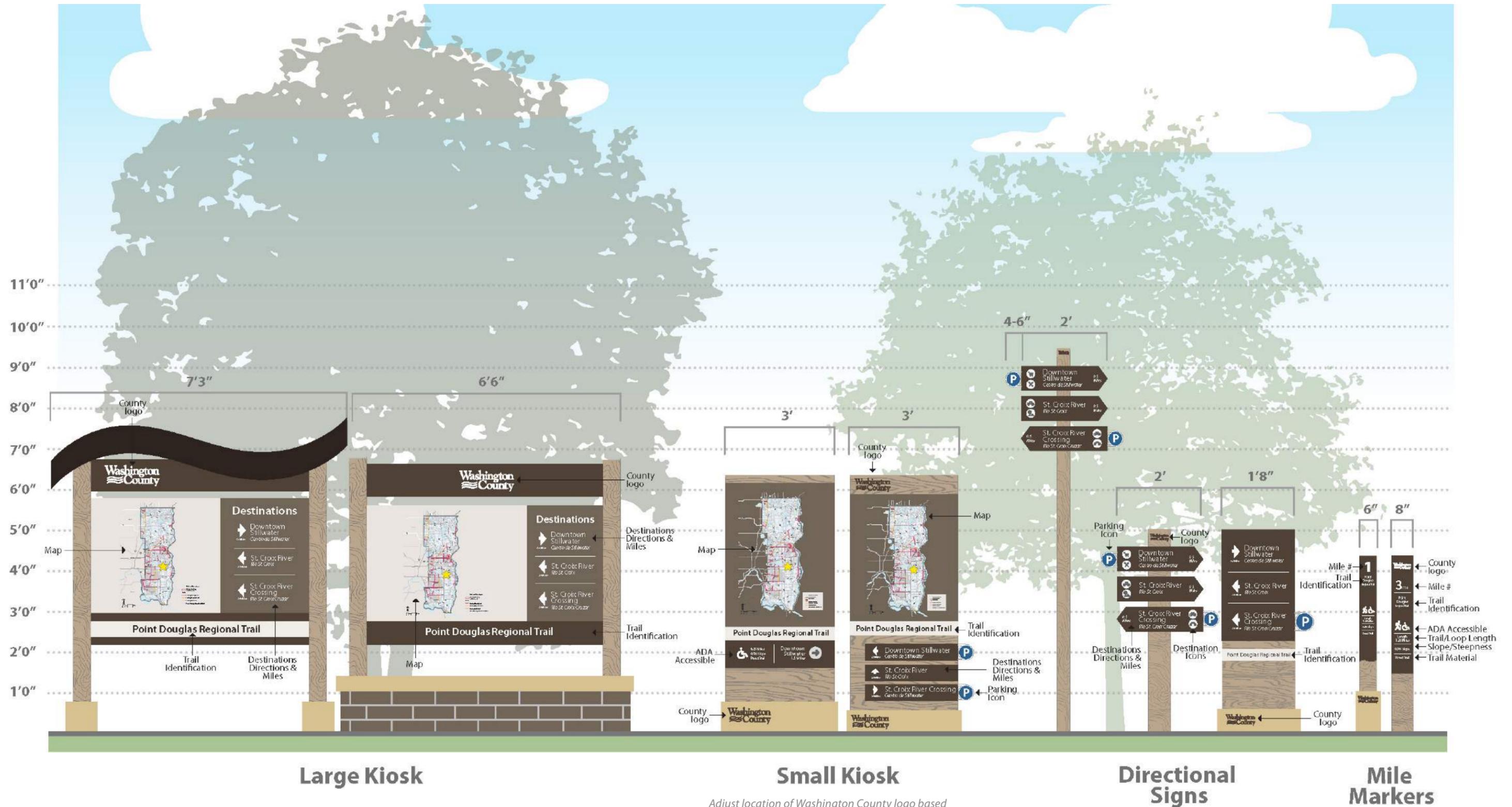


Figure 2.1 Sign Family Concept

Adjust location of Washington County logo based on surface placement (e.g. if located on grass, move logo up to be visible)

WAYFINDING SIGN SECTIONS:

The following sections represent examples of typical placement of the sign types along the trail corridor. Actual installation and placement of signs will vary by location.

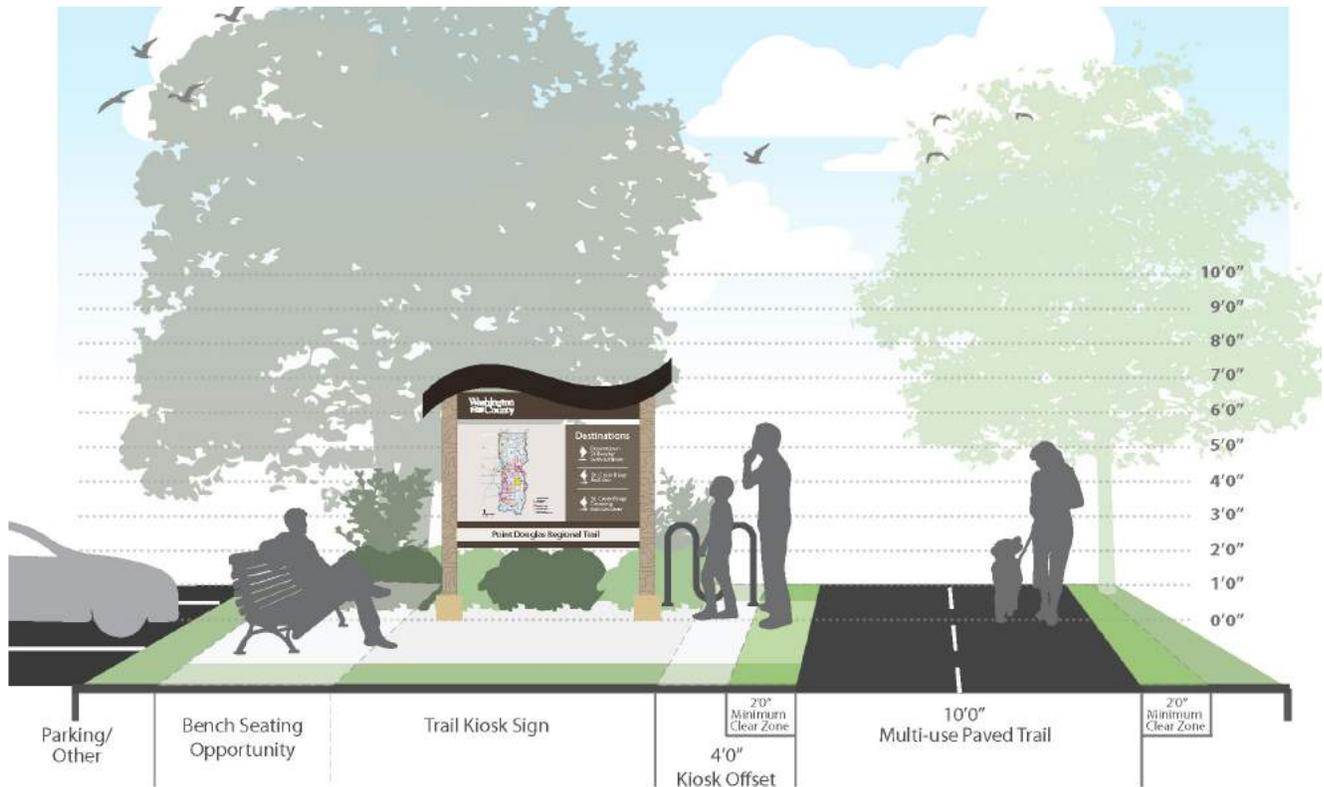


Figure 2.2 Large Kiosk at a Trailhead or Rest Stop

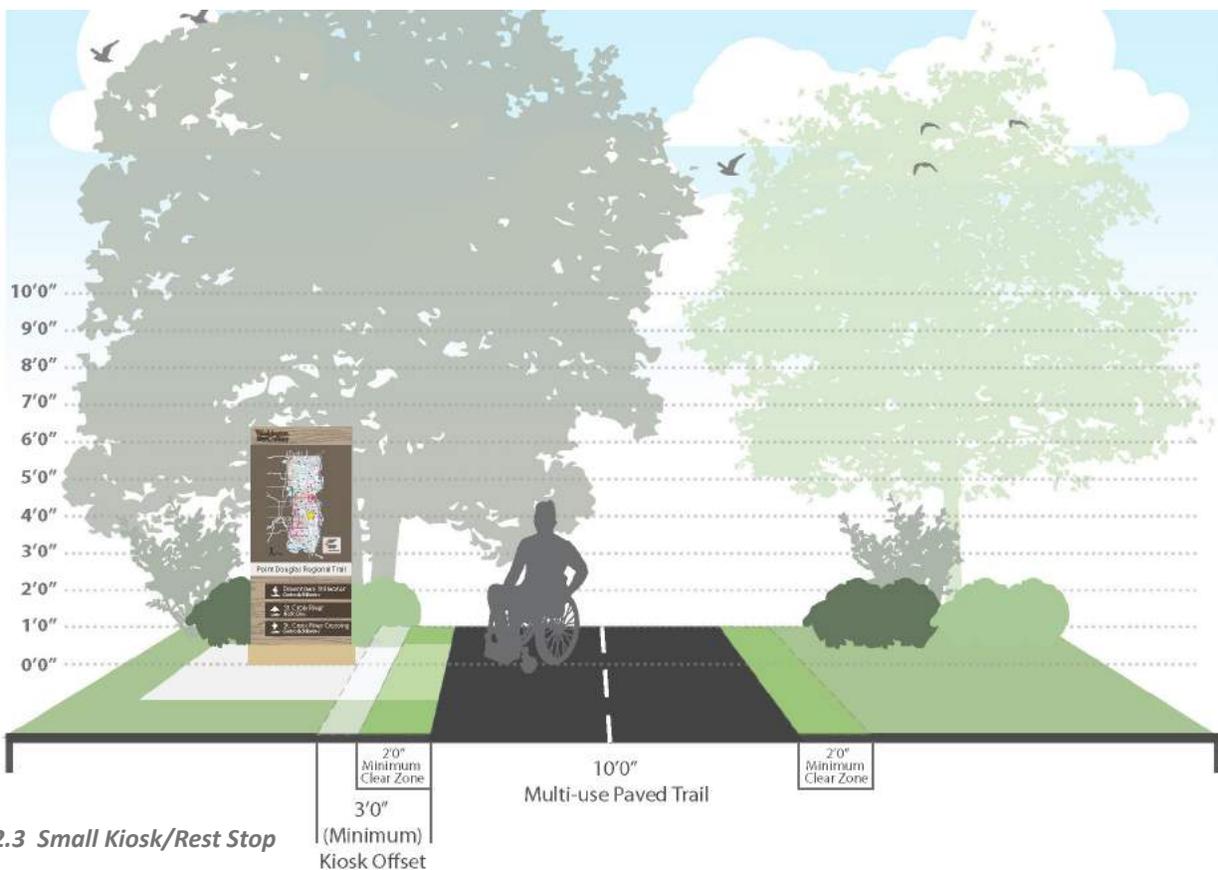


Figure 2.3 Small Kiosk/Rest Stop

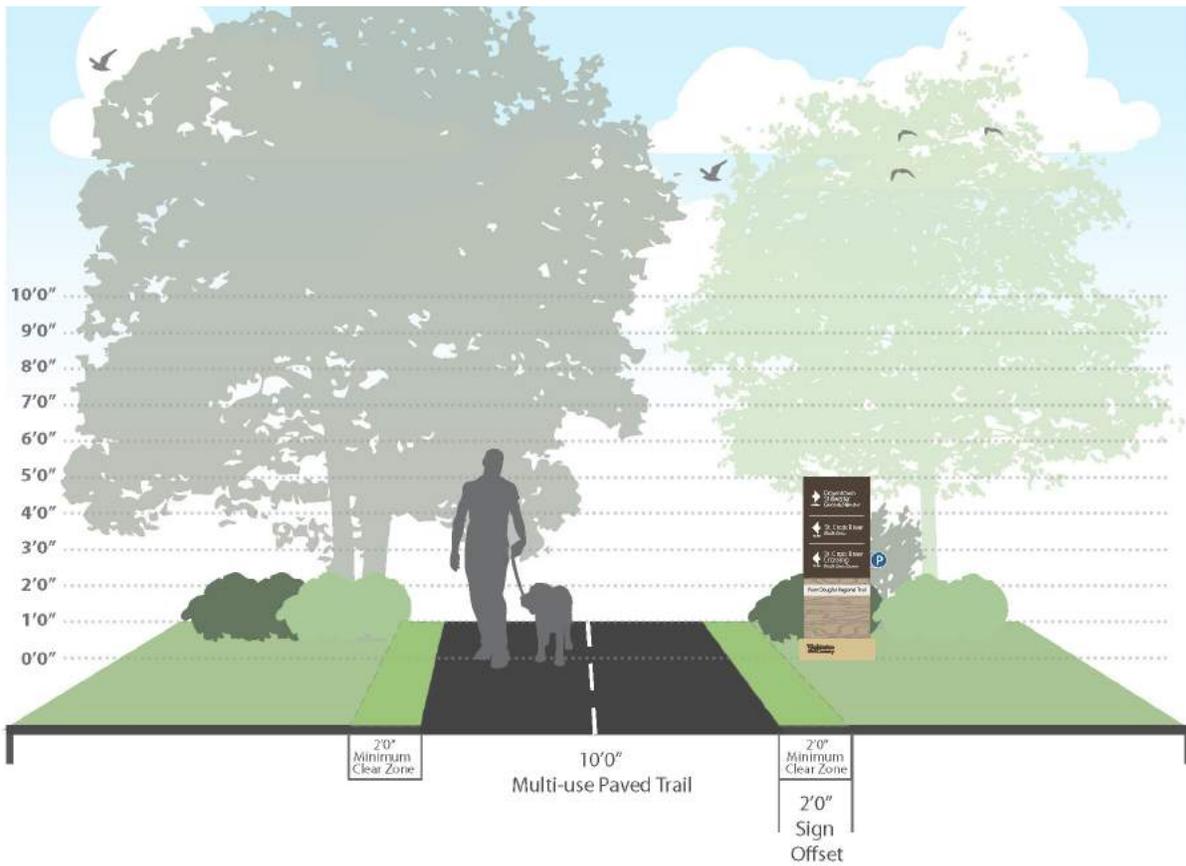


Figure 2.4 Directional Sign Cross Section



Figure 2.5 Directional Sign Cross Section, Adjacent to Roadway

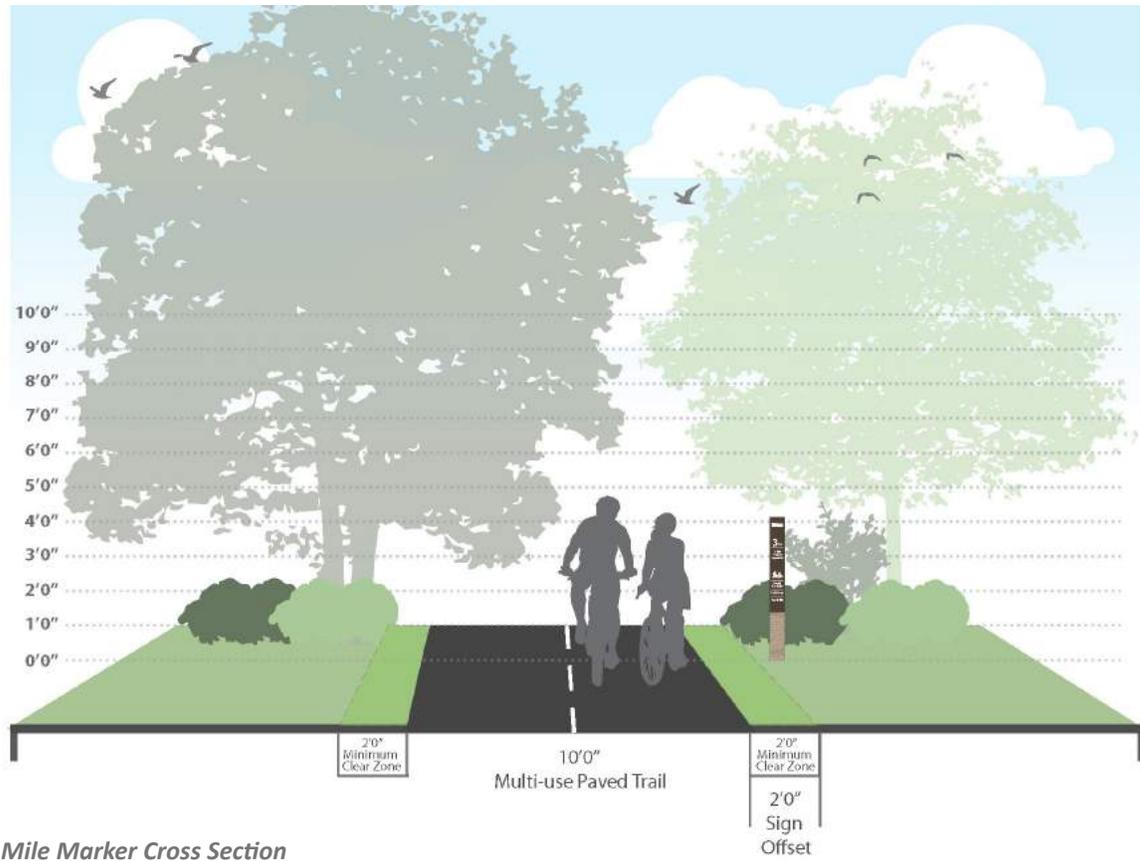


Figure 2.6 Mile Marker Cross Section



“I love walking because it clears your mind, enriches the soul, takes away stress and opens up your eyes to a whole new world.”

- Claudette Dudley



03. WAYFINDING PLAN

INTRODUCTION

A successful network for pedestrians and bicyclists consists of clearly defined routes that connect users to relevant destinations with a consistent experience throughout the start and end of their trip. These routes have been identified as part of the Washington County Pedestrian and Bicycle Plan, while the Wayfinding Plan (see Figure 3.1) works in tandem with the existing and future off-street network plan to enhance these routes through wayfinding signage. A cohesive network of wayfinding will help improve the user's experience when making trips, while encouraging new users to use the off-street trail system.

The proposed locations for wayfinding was determined through several methods and input from county staff. The design guidelines (see Table 2.1) discussed in Chapter 2 provided a foundation for selecting the appropriate locations. The pedestrian and bicycle demand analysis completed for the Washington County Bicycle and Pedestrian Plan was also used as another guiding element. The demand analysis identifies areas (e.g., commercial centers, neighborhoods, parks, and schools) likely to generate higher levels of bicycle and walking activity. These potential areas are depicted on Figures 3.1 – 3.5. This analysis provides a general idea of where signage may need to be installed to accommodate a larger number of trail users.

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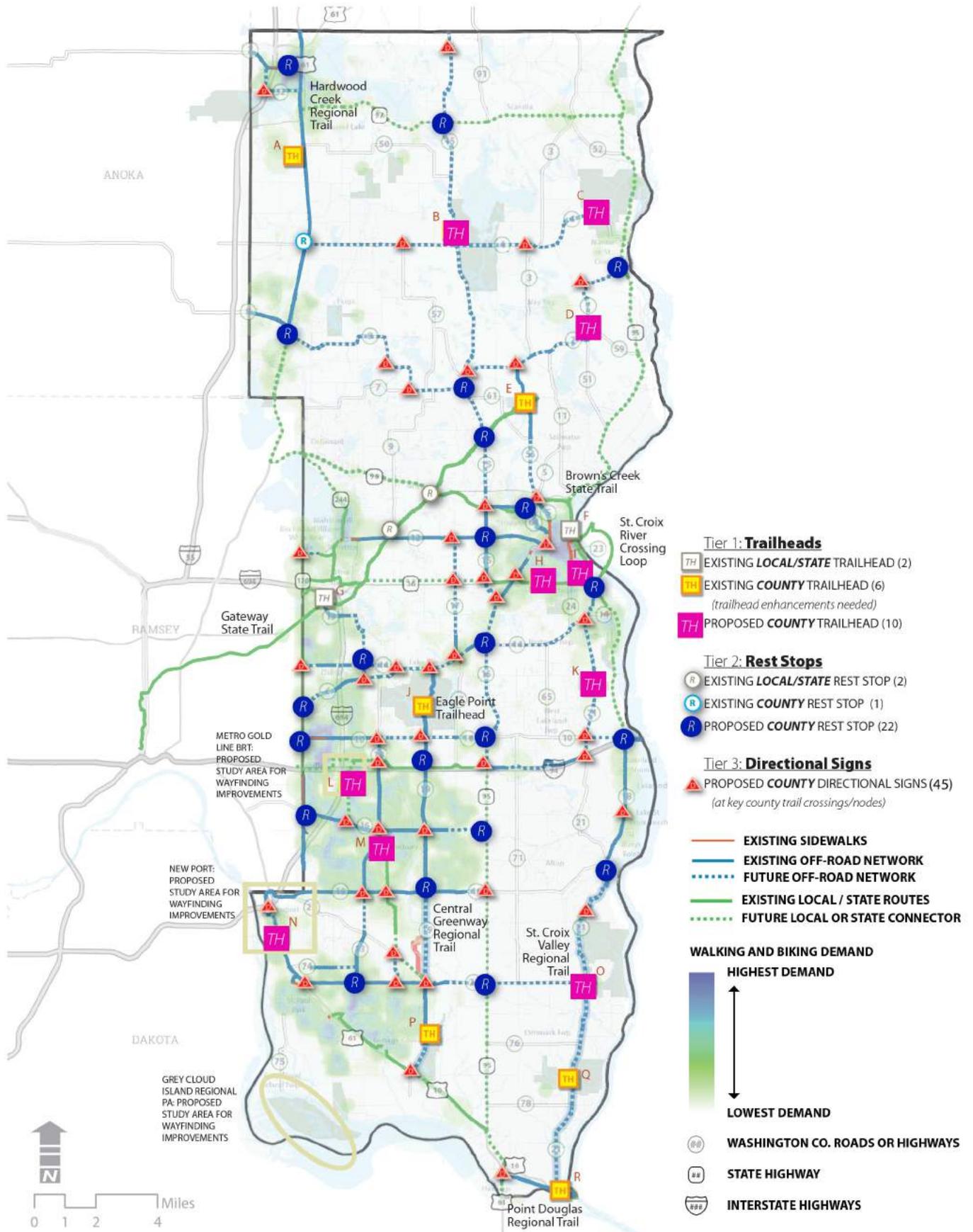


Figure 3.1 2040 Wayfinding Plan

PHASED APPROACH

The Wayfinding Plan (see Figure 3.1) provides a vision for wayfinding investments (i.e., trailheads, directional signs, and rest stops) that aligns with the county’s existing and future off-street network. These investments can be overwhelming when viewed across the entire county, which includes over 200 mile of existing and planned trails. In that respect, the Wayfinding Plan includes a phased approach to help plan and program for these investments over time. This phased approach is not intended to prohibit the development of a wayfinding project depicted on Figure 3.1; rather, they are recommendations based on a starting point to create momentum in developing a cohesive network of signs throughout the entire county.

Table 3.1 Proposed Trailheads (see pages 18 -19)

KEY	PROPOSED LOCATION	CITY/TOWNSHIP	OWNER	TRAIL CONNECTION	EXISTING TRAILHEAD AMENITIES	PHASE
A	Washington County Transit Station and Trailhead	Forest Lake	County	Hardwood Creek Regional Trail	Parking, warming shelter, and bathrooms	Phase I - Existing
B	Big Marine Park Reserve	Scandia	County	Proposed Off-Street (CR 15)	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phas IV - Proposed
C	William O-Brien State Park (proposed trailhead partnership with County)	Marine on St. Croix	State	Proposed Off-Street (CR 4)	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phas IV - Proposed
D	Square Lake Park	May Township	County	Proposed Off-Street (CR 7)	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phas IV - Proposed
E	Gateway State Trail/Pine Point Regional Park	Stillwater Township	County & State	Gateway State Trail @ CR 55	Parking, bathrooms, picnic tables, and benches	Phase I - Enhancements Needed
F	Browns Creek Trail Head - Downtown Stillwater	Stillwater	State/City	Browns Creek State Trail in Downtown Stillwater	Parking, wayfinding signage, bathrooms, picnic tables, picnic pavilions, and benches	Phase I - Existing
G	Gateway State Trail Parking	Oakdale	State	Gateway State Trail @ 55th Street North off of CR 13	Parking and portable bathrooms.	Phase I - Existing
H	Washington County License & Service Center	Stillwater	County	No direct trail connections available.	Parking and bathrooms	Phase I - Enhancements Needed
I	Washington County Government Center	Stillwater	County	Local access to the Browns Creek Trail and St. Croix River Crossing (Loop Trail)	Parking, bike racks, and bathrooms	Phase I - Enhancements Needed
J	Lake Elmo Park Reserve	Lake Elmo	County	Central Greenway Regional Trail/Existing Off-Street (CR 19)/ Proposed Off-Street (CR 10)	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phase I - Enhancements Needed
K	St. Croix Savanna Scientific and Natural Area (SNA) (proposed trailhead partnership with County)	Bayport	State	Proposed Off-Street (CR 21)	Informal parking lot	Phas IV - Proposed



KEY	PROPOSED LOCATION	CITY/TOWNSHIP	OWNER	TRAIL CONNECTION	EXISTING TRAILHEAD AMENITIES	PHASE
L	Gold Line BRT Connection	Woodbury	TBD	TBD - Proposed Local Off-Street Connector	None	Phas IV - Proposed
M	Washington County License & Service Center	Woodbury	County	Existing Off-Street at CR 13/Central Park Place	Parking and bathrooms	Phase I - Enhancements Needed
N	I-494/Highway 10 Crossing	Newport	County & City	Existing Off-Street along Hastings Avenue	Picnic tables	Phase I - Enhancements Needed
O	Afton State Park	Afton	State	Proposed Off-Street at CR 21/CR 22 / St. Croix Valley Regional Trail	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phas IV - Proposed
P	Cottage Grove Ravine Regional Park/ Washington County Service Center	Cottage Grove	County	Existing Off-Street (CR 19/90th Street) / Central Greenway Regional Trail	Parking, picnic tables, picnic pavilions, and benches (bathrooms at the service center)	Phase I - Enhancements Needed
Q	St. Croix Bluffs Regional Park	Denmark Township	County	Proposed Off-Street (CR 21)/ St. Croix Valley Regional Trail	Parking, bathrooms, picnic tables, picnic pavilions, and benches	Phas IV - Existing
R	Point Douglas Park	Hastings	County	Point Douglas Regional Trail/Proposed Off-Street (CR 21)/ St. Croix Valley Regional Trail	Parking, bathrooms, picnic tables, and benches	Phase I - Existing

“This phased approach is not intended to prohibit the development of a wayfinding project, rather, they are recommendations based on a starting point to create momentum in developing a cohesive network of signs throughout the entire county.”



*William O'Brien
State Park
Entrance Sign*



PHASE I: EXISTING NETWORK - TRAILHEAD ENHANCEMENTS

The county should concentrate its first efforts on building a network of trailheads that are located at county parks and county facilities (see Figure 3.2). In most cases, these locations have existing amenities (see Table 3.1) in place that support trailhead functions. Wayfinding signage at a trailhead typically include kiosks that display regional maps depicting the trail network and key destinations. This type of signage is likely located near the park entrance or in proximity to vehicle parking. Most of the county parks already have a kiosk displaying park information and internal trail routes to that park. These kiosks will need to be retrofitted or replaced with signage that depict external trail routes and connections to key destinations outside of the park.

The county facilities (e.g., service or licensing center) that are being proposed as a trailhead will accommodate a variety of trail user types. These users may include bicycle commuters and people accessing county services by transit, foot or bike. In that respect, these county facilities should be retrofitted to include bicycle parking and adequate signage depicting the area's bicycle and pedestrian network. This may require a more detailed map depicting the local trail system and transit routes.

Directional signs to the trailheads should also be implemented as part of this phase. To start, directional signs should be placed at key nodes within a mile of the trailhead. These signs will help create stronger awareness of nearby amenities, such as restrooms and shelters.



*Existing
Washington
County Trailhead
Signs and Amenities*

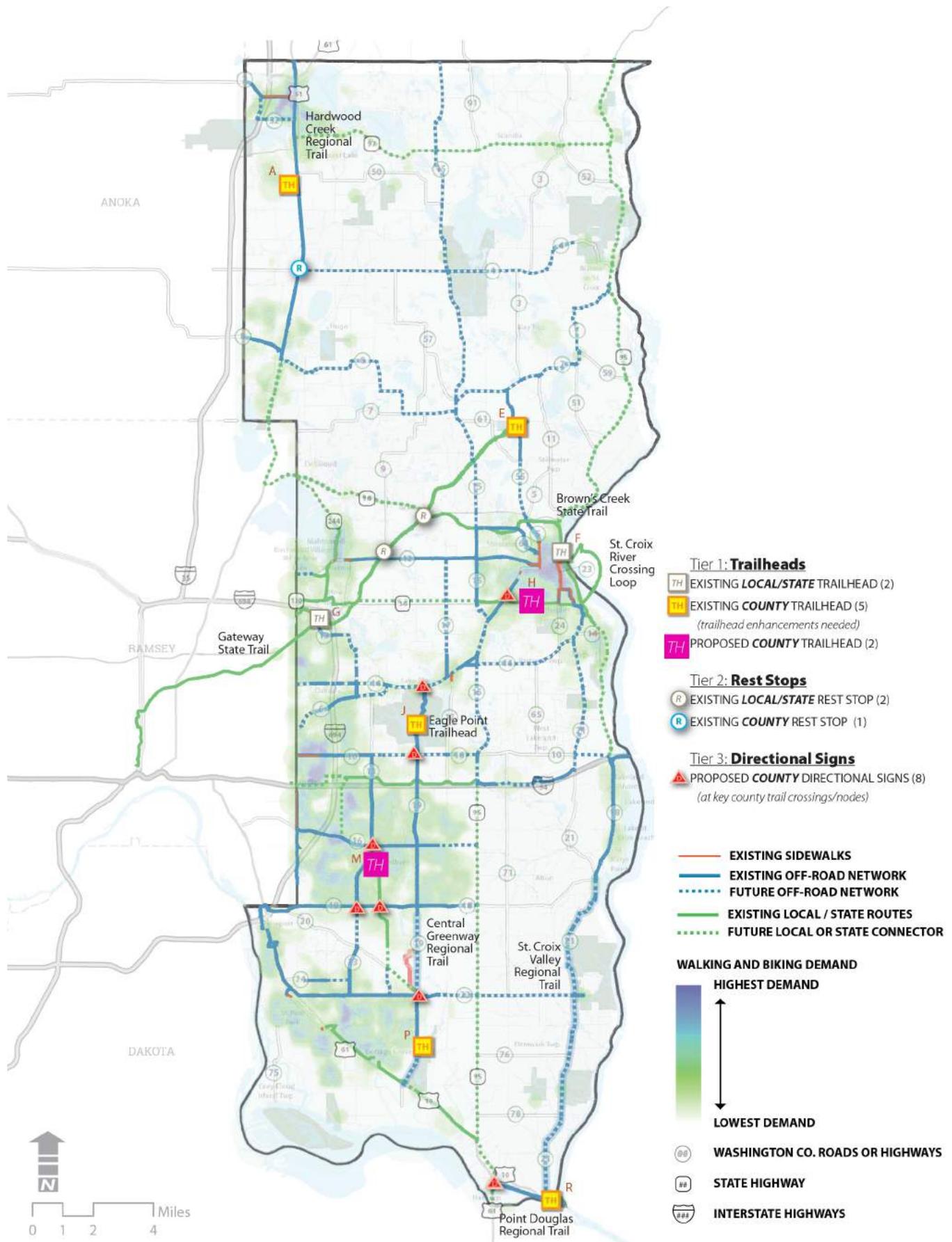
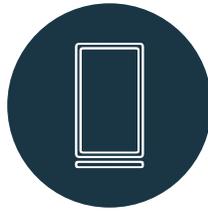


Figure 3.2 Phase I: Existing Network - Trailhead Enhancements



PHASE II: EXISTING NETWORK – TRAILHEAD ENHANCEMENTS & REST STOPS

Once the county has established a foundation of trailheads and directional signage to those locations, it should begin phasing in other improvements that supports the existing off-street trail network. This include additional directional signage and potentially mile markers to the trailheads (see Figure 3.3) that extend outward from the Phase I improvements. As part of this approach, the county should also start introducing rest stops. These improvements should be located a mile or two from the trailheads. Rest stops should also be located at key nodes that have multiple trail approaches. Wayfinding signage at these locations would provide additional information on where the trails lead you (e.g., other destinations beyond the trailheads).



Afton State Park Trail



Hardwood Creek Signs

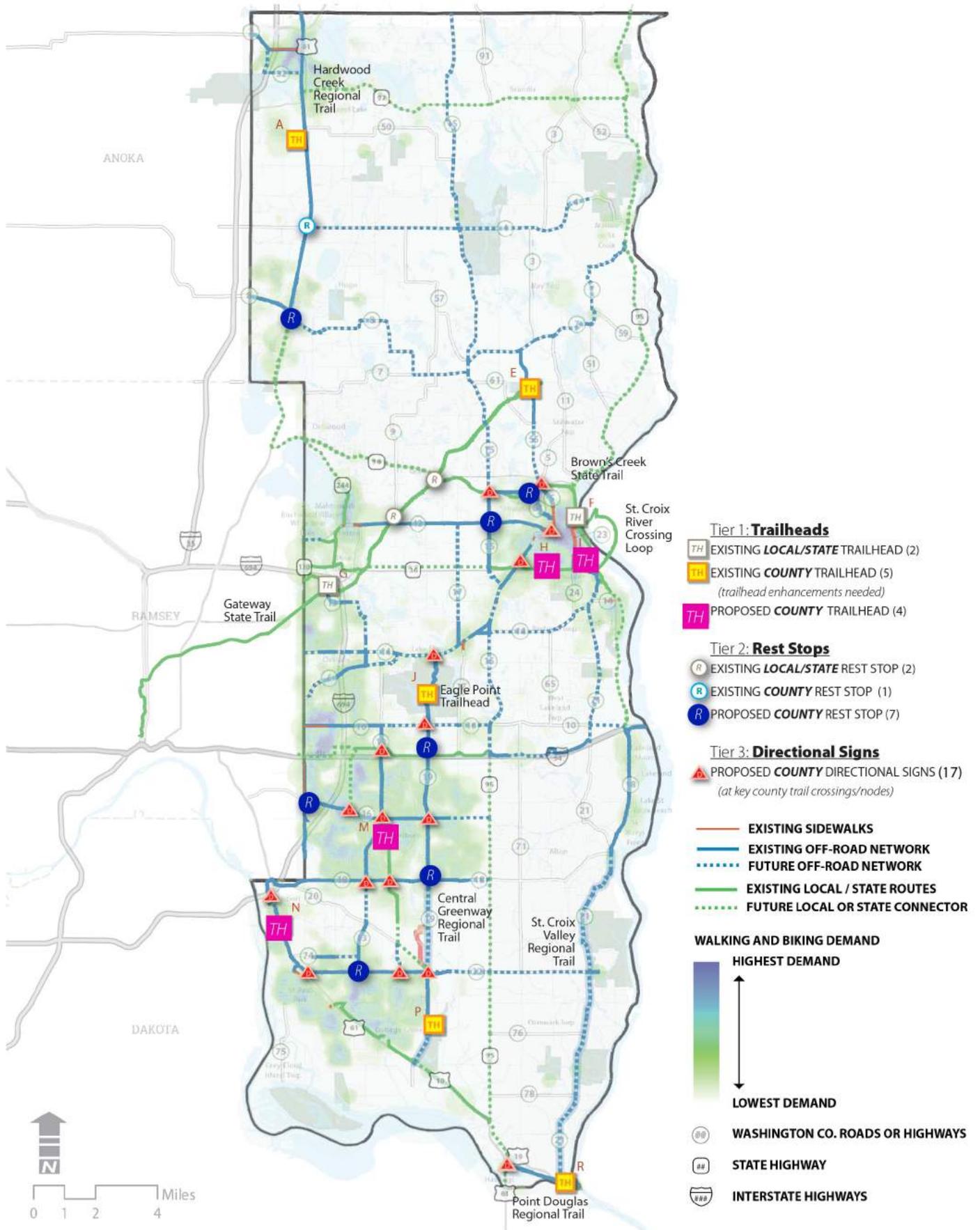


Figure 3.3 Phase II: Existing Network - Trailhead Enhancements & Integrating Rest Stops



PHASE III: EXISTING NETWORK - WAYFINDING PLAN

Phase III improvements are intended to finalize a comprehensive wayfinding system for the existing off-street trail network (see Figure 3.4). In essence, these improvements are closing the wayfinding gaps not addressed as part of Phase I and II. Many of the improvements can be considered mid to long-term in nature. The implementation of these improvements will likely depend on the success of other improvements accomplished under Phase I and II. For example, each phase of improvements are building outward from the previous phase. This approach helps support a cohesive network of wayfinding signs that work together. However, there are a few exceptions in the undeveloped/developing parts of county where spot improvements are recommended at key nodes that direct people to key destinations (e.g., trailheads and downtowns).

Figure 3.4 also identifies three areas that require a more detailed wayfinding assessment. These areas include:

- » METRO Gold Line BRT: Washington County and its local partners have been developing station area plans and master plans for the METRO Gold Line Bus Rapid Transit (BRT). The BRT project will connect people across the region to job centers, housing options, transit stations and key destinations along the I-94 corridor. The project will provide all day, bi-directional BRT service to the cities of St. Paul, Maplewood, Landfall, Oakdale and Woodbury. Wayfinding is part of the BRT planning efforts. Station area plans and master plans should be referenced for further wayfinding guidance.
- » City of Newport: The existing trail system located in the City of Newport along the Mississippi River and near the I-494/Highway 10/Baily Road interchange is difficult to navigate and understand. This issue was identified as part of the planning process for the Washington County Bicycle and Pedestrian Plan. Directional signs should be installed to help trail users navigate the trail system along Bailey Road to traverse over the I-494/Highway 10 interchange. This area is also viewed as an opportunity to install a trailhead or rest stop (see Table 3.1). However, locating a trailhead in this area may be challenging from a right-of-way perspective and will require additional study.
- » Grey Cloud Island Regional Park: Grey Cloud Island Regional Park has not yet been developed as Washington County is in the acquisition phase. The regional park is not yet open to the public. Existing uses on the island include gravel mining, residential, and agriculture. As this park develops over time, wayfinding will need to be considered. Additional wayfinding is also lacking along the Mississippi River where some trails exist today. Wayfinding improvements in this area should be explored by the county and its

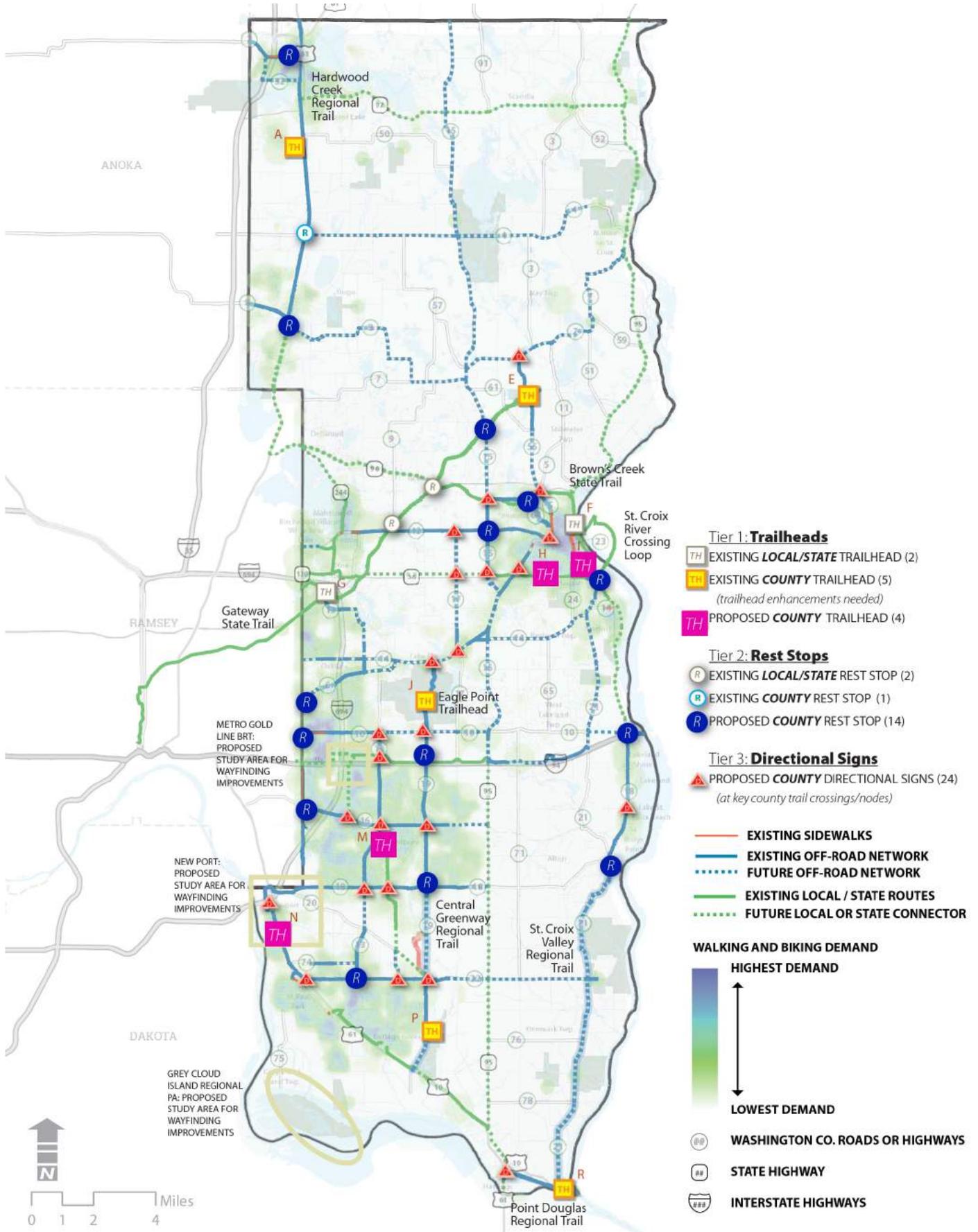
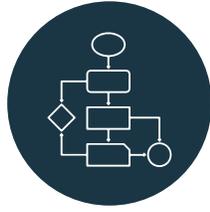


Figure 3.4 Phase III: Existing Network - Wayfinding Plan



local partners.

PHASE IV: FUTURE NETWORK - WAYFINDING PLAN

Figure 3.5 depicts a comprehensive wayfinding system for the future off-street trail network identified in Washington County’s Bike and Pedestrian Plan. This includes a combination of new trailheads (see Table 3.1), rest stops, and directional signs. Phase IV improvements are long-term in nature and will occur over time as the future off-street trail network is implemented. It is assumed a number of these routes will go through a separate master planning effort. At that time, the planning process should reevaluate recommendations depicted in Figure 3.5 to determine the appropriate location and type of wayfinding signage for the trail. This Plan should be used as a guide (e.g. Table 2.1) in helping inform those decisions.



“Phase IV improvements are long-term in nature and will occur over time as the future off-street trail network is implemented.”

Image from
St. Croix Bluffs
Regional Park

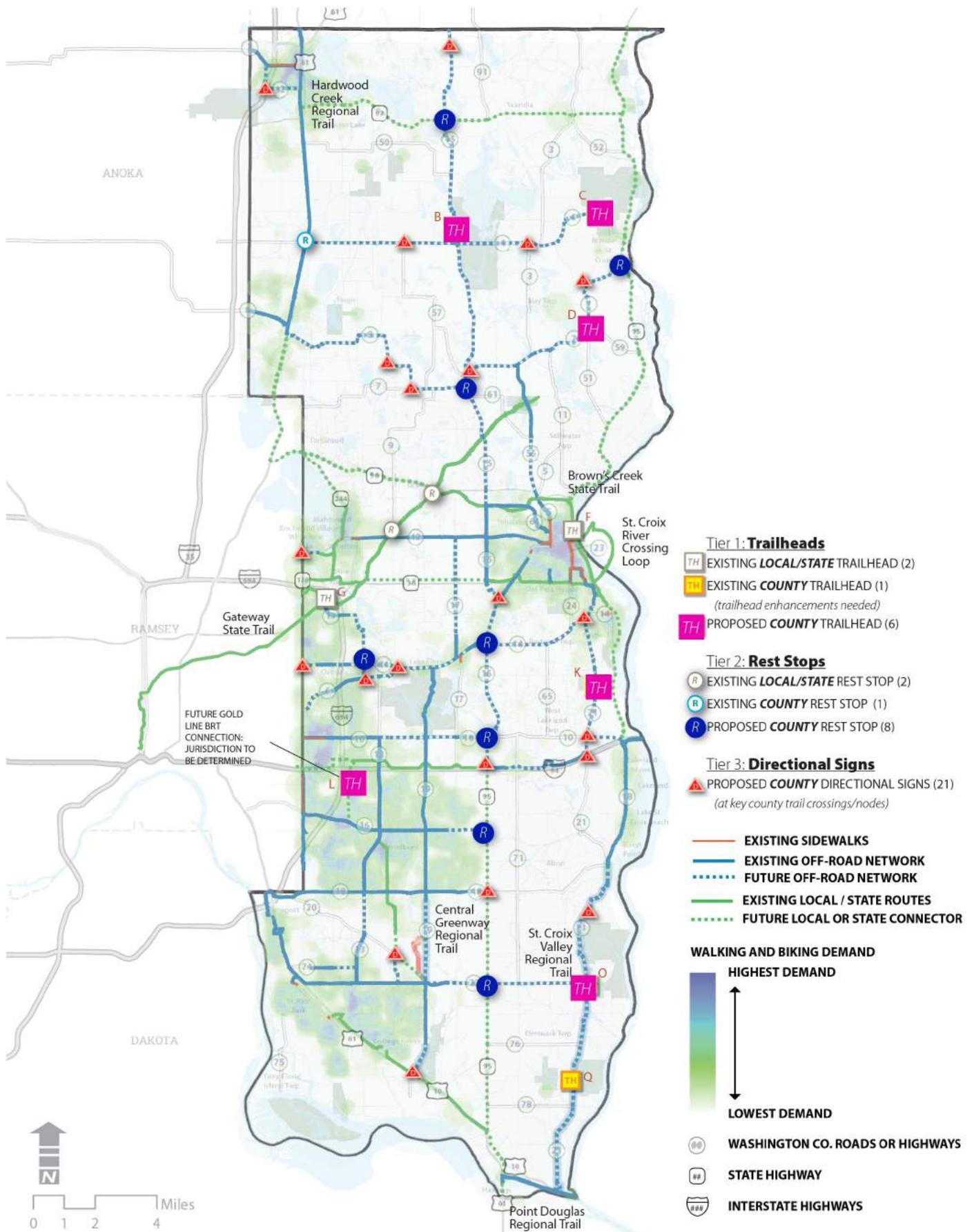


Figure 3.5 Phase IV: Future Network Wayfinding

Image
from
Gateway
State Trail



*“For tomorrow
belongs to the
people who
prepare for it
today.”*

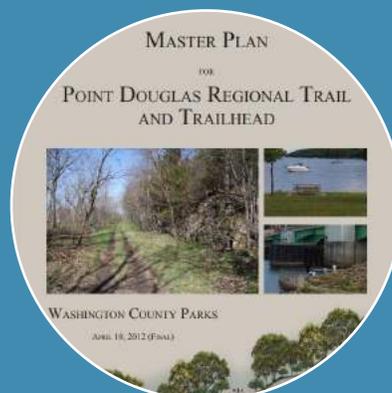
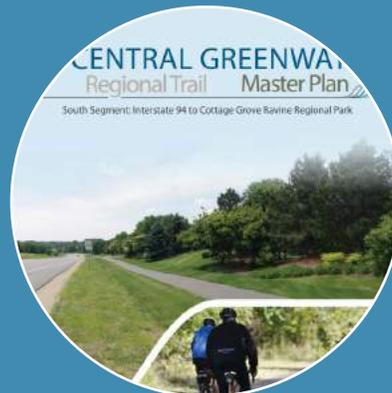
- African Proverb



04. IMPLEMENTATION

Implementing the Wayfinding Plan will take time and coordination with staff, elected leaders, and stakeholders. The implementation process will require some flexibility to allow this coordination to occur, while finding the right projects to program at the right time. This plan is meant to be a guide in helping facilitate that coordination and the conversations that will take place. The Implementation Chapter offers some factors to consider when planning and programming projects over time. These factors are also intended to help guide larger policy decisions and should be referenced in tandem when implementing MOVE Washington County Bicycle and Pedestrian Plan.





Approved Plans

1 CONSIDERATION FACTOR #1:

DOES THE TRAIL HAVE AN APPROVED MASTER PLAN THAT INCLUDES WAYFINDING RECOMMENDATIONS?

Washington County Bicycle and Pedestrian Plan has established a future network of on-street and off-street routes. Some of these routes will take time to implement and may require a separate planning process to determine their alignments, feasibility, and potential impacts (e.g., social and environmental). As part of these planning processes, wayfinding will need to be discussed in more detail. This is recognized as part of the Wayfinding Plan’s Phased Approach (see Phase IV). A more detailed wayfinding plan may also be required as part of the trail master plan according to state law (see Sidebar). For example, trails that hold a regional designation under the Metropolitan Council may be subject to these requirements.

Washington County has been active over the years in developing trail master plans that include wayfinding recommendations. Master plans play a critical role in guiding the future parks and trails system of Washington County. Master plans set a vision to guide long-term acquisition, development, and investment in a park or trail. These plans and others should be referenced and used when implementing MOVE, the Bicycle and Pedestrian Plan and Wayfinding Plan.

PARK MASTER PLANS (APPROVED PLANS)

- » Big Marine Park Reserve
- » Cottage Grove Ravine Regional Park
- » Grey Cloud Island Regional Park
- » Lake Elmo Park Reserve
- » St. Croix Bluffs Regional Park

TRAIL MASTER PLANS (APPROVED PLANS)

- » Central Greenway Regional Trail - Lake Elmo Segment
- » Central Greenway Regional Trail - South Segment
- » Hardwood Creek Regional Trail
- » Lake Links Regional Trail
- » St. Croix Valley Regional Trail
- » Point Douglas Regional Trail

TRAIL MASTER PLANS



Minnesota law requires each regional park implementing agency to develop a park master plan in consultation with all affected municipalities. While the statute requires only one master plan per regional park implementing agency, the Met Council requires individual master plans for each regional park, park reserve, regional trail, and special recreation feature. Master plans are critical in defining the specifics of acquisition, development, and operation of regional facilities.



The plans include the park agency's estimates of use and costs. The master plan process allows residents to help develop the plan and other units of government to learn how what is planned for a park will affect them. Collectively, these master plans form the regional park implementing agencies' part of the regional system plan.



The Met Council reviews master plans for consistency with the 2040 Regional Parks Policy Plan and other Met Council policy plans. Inconsistent plans will be returned with comments to the park agency, which must revise and resubmit their plans to the Met Council. For a park agency to receive a grant for acquisition or development, the proposed project must be consistent with a Met Council-approved master plan.

2 CONSIDERATION FACTOR #2:

DOES THE PROJECT HAVE ANY OBSTACLES TO OVERCOME?

Installing wayfinding signs throughout the county may require public land ownership or space within the right-of-way. In most cases, a trail corridor should have adequate public rights-of-way to install smaller improvements, such as directional signs. Larger improvements that correspond with trailheads and rest stops (e.g., kiosks, bike racks, and benches) typically require a larger area than a directional sign to install, which may mean the county needs to acquire land or utilize existing county land. The county will need to consider if an agreement is needed with a property owner (e.g., easement or right-of-way acquisition) before wayfinding signs are installed. Under these circumstances, the county will need to evaluate the cost-benefit in securing the appropriate land or right-of-way to implement a project.

Larger projects (e.g., trailheads) may require a sensitive test to determine their benefits or fatal flaws from a social, economic, and environmental perspective (SEE Scan). Typical screening criteria that is consistent with federal environmental documents include, but is not limited to the following:

- » Impacts to adjacent property (e.g., full or partial acquisition)
- » Benefits to surrounding businesses
- » Benefits to the physical and natural environment (e.g., noise and air quality)
- » Impacts to threatened and endangered species, wetlands, waterbodies, soils, and hazardous materials
- » Community and Political Support
- » Return on Investment (e.g., low-cost/high benefit vs. high cost/marginal benefit)
- » Project Readiness (right-of-acquisition, design, and permitting)
- » Social Equity Measures (ability to connect to underserved populations)



Existing wayfinding signage in Newport, MN

3 CONSIDERATION FACTOR #3:

DOES THE PROJECT REQUIRE COORDINATION AND COLLABORATION WITH ANOTHER AGENCY (E.G., CITY OR STATE) OR PRESENT OTHER UNIQUE PARTNERSHIPS?

The Wayfinding Plan projects may require additional coordination and collaboration with other agencies (e.g. cities and state). These agencies should have a vested interest in the implementation of wayfinding signage throughout the county. For example, some of the proposed routes identified in MOVE the Washington County Bike and Pedestrian Plan intersect with state or local routes. Wayfinding improvements are recommended at a few of these locations.

4 CONSIDERATION FACTOR #4:

DOES THE OFF-STREET TRAIL EXPERIENCE MODERATE TO HEAVY TRAIL USAGE?

Wayfinding signage should be paired with routes that experience or have the potential to experience large volumes of trail users. Tracking trail usage can be a simple and low-cost activity. For example, the Minnesota Department of Transportation (MnDOT) is a free resource to help with this effort. MnDOT offers free, easy to install, portable pedestrian/bicycle counters. The counters work around the clock to collect data without concern for weather, climate, or daylight. The counts help capture daily trail usage and seasonal trends, which leads to data-driven decisions that inform project planning and impact the implementation of safer and more convenient walking and bicycling facilities.

Beyond trail usage, other factors should be considered when prioritizing projects. The Washington County Bicycle and Pedestrian Network Plan prioritized trail routes based on a scoring system and their contribution to specific measures. Many of these measures considered a trail route's ability to connect people to employment centers, housing, schools, and activity centers. This scoring process should be reflected upon when prioritizing wayfinding improvements to ensure those improvements are aligned with high priority trail routes identified in MOVE the Bicycle and Pedestrian Plan (e.g., trails leading to transit stops, activity centers, and jobs).

5 CONSIDERATION FACTOR #5:

DOES THE PROJECT CONSIDER FUTURE OPERATIONS AND MAINTENANCE NEEDS?

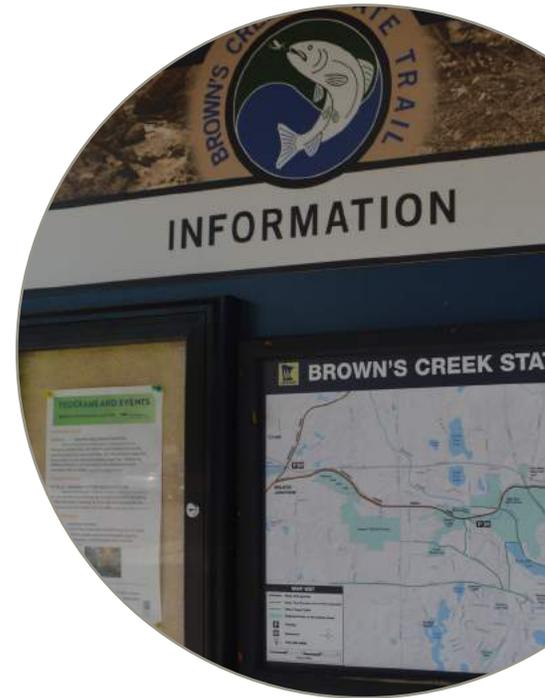
Implementation of the Wayfinding Plan should consider ongoing operations and maintenance needs. Each year as more wayfinding signs are installed throughout the system, more money will need to be budgeted for sign operations and maintenance activities.

These activities could include:

- » Repairing sign damage due to plowing, mowing, or sweeping
- » Mowing and trimming around sign bases and posts
- » Replacing maps, sign flags, and other information with updated information
- » Repairing, painting, or replacing parts of signs due to vandalism
- » Replacing signs at the end of their life cycle (20-25 years)

Replacement schedules are also an important factor to consider in developing annual work plans and Capital Improvement Programs (CIP). Regular maintenance schedules should be followed for larger investments (e.g., trailheads and rest stops) to extend their lifespans, while maximizing investments. Implementation of the Wayfinding Plan should consider long-term funding needs to ensure investments (projects) can be maintained over time.

Using proper installation techniques and following best practices for locating signs will help reduce the amount of maintenance needed over the long run. Potential costs for sign operations and maintenance activities are listed in the Table 4.1:



Existing wayfinding signage in Stillwater, MN

Table 4.1: Sign Maintenance

	SIGN MAINTENANCE			NOTES
	FIRST 10 YEARS	AFTER 10 YEARS	AFTER 20 YEARS	
Approximate # of signs installed	15	33	47	
Annual Sign Repair and Replacements	\$ 20,000.00	\$ 40,000.00	\$ 75,000.00	~10% of capital costs
Mowing, trimming, and trash removal around signs	\$ 5,000.00	\$ 10,000.00	\$ 15,000.00	~\$1,000 per 3 signs



Existing wayfinding signage in Hugo, MN

6 CONSIDERATION FACTOR #6:

DOES THE PROJECT HELP ADVANCE WASHINGTON COUNTY SHIP INITIATIVES?

The Wayfinding Plan should be viewed as a resource to help advance Washington County SHIP’s (Statewide Health Improvement Partnership) active living initiatives. For example, wayfinding should go beyond traditional signage to encourage exercise. SHIP could promote pre-designated routes for exercise and fitness/commuter challenges. These routes could be promoted at kiosks and rest stops, while leveraging directional signs to guide people on their routes. Friendly mobile applications (with QR codes) could also be developed to educate and inform people about these routes.

7 CONSIDERATION FACTOR #7:

DOES THE PROJECT ALIGN WITH FUNDING OPPORTUNITIES?

Similar to the MOVE Washington County Bicycle and Pedestrian Plan, funding is an importance factor to consider when prioritizing projects. Implementation of the Wayfinding Plan will occur as opportunities present themselves and as resources allow. The Move Washington County Bicycle and Pedestrian Plan provides a list of funding options (e.g., general funds and grants) to consider when building new trails. Several of these funding options are also appropriate to consider for wayfinding improvements. For example, county general funds can be used for construction and maintenance, while some grant programs (e.g., DNR Outdoor Recreational Program and the Metropolitan Council Regional Solicitation) support trailhead improvements and the installation of signs that coincide with a larger trail improvement. Washington County SHIP (see Consideration Factor #6) should also be considered as a potential resource when implementing a number of this Plan’s recommendations. Planning level-cost estimates are provided in Table 4.2 to help inform funding and programming decisions.

Table 4.2: Funding and Program Decisions

PHASE	SIGN TYPE	# OF SIGNS	COST ESTIMATE RANGE
Phase I	Trailhead (large kiosk)	7	\$239,000 - \$290,000
	Rest Stop (small kiosk)	-	
	Directional Sign	8	
Phase II	Trailhead (large kiosk)	2	\$241,000 - \$304,000
	Rest Stop (small kiosk)	7	
	Directional Sign	9	
Phase III	Trailhead (large kiosk)	-	\$175,000 - \$224,000
	Rest Stop (small kiosk)	7	
	Directional Sign	7	
Phase IV	Trailhead (large kiosk)	7	\$479,000 - \$596,000
	Rest Stop (small kiosk)	8	
	Directional Sign	21	



CONSIDERATION FACTOR CHECKLIST

The “Consideration Factors” help introduce larger policy decisions to consider when selecting a project for implementation. The factors should be weighed and considered heavily when implementing the Wayfinding Plan from a funding perspective to ensure the right investments are being made that achieve the highest benefit. Using the factors will also help create greater transparency in the decision making process. Table 4.2 can be used as a checklist to help determine if and when a wayfinding project should be programmed.

YES OR NO	CONSIDERATION FACTOR
Yes No	Factor #1: Does the trail have an approved master plan that includes wayfinding recommendations?
Yes No	Factor #2: Does the project have any obstacles to overcome?
Yes No	Factor #3: Does the project require coordination and collaboration with another agency (e.g., city or state)?
Yes No	Factor #4: Does the off-street trail experience moderate to heavy trail usage?
Yes No	Factor #5: Does the project consider future operations and maintenance needs?
Yes No	Factor #6: Does the project help advance Washington County SHIP initiatives?
Yes No	Factor #7: Does the project align with funding opportunities.



Existing directional signs in Washington County



“When the spirits are low, when the day appears dark, when work becomes monotonous, when hope hardly seems worth having, just mount a bicycle and go out for a spin down the road, without thought on anything but the ride you are taking.”

- Arthur Conan Doyle