

# Bicycle Route Planning Guide





## Acknowledgements

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## Table of Contents

Introduction.....	pg 4
Step 1: Getting Started .....	pg 7
Step 2: Early Coordination & Communication .....	pg 8
Step 3: Public Engagement .....	pg 10
Step 4: Produce a Draft Route within the Corridor .....	pg 13
Step 5: Revise and Finalize Route.....	pg 15
Step 6: Designate and Map the Route .....	pg 17
Step 7: Manage the Route .....	pg 20
Appendices	

## Introduction

The Bicycle Route Planning Guide (Guide) serves as a blueprint to develop and designate long distance bicycle routes in Minnesota, including United States Bicycle Routes (USBR) and the Minnesota Bicycle Route Network (MBRN). The Guide details seven steps for designating a route from route planning inception to management. An overview of the route designation steps is displayed below.



### STEP 1 | GETTING STARTED

- Determine Route Leader
- Develop Scope & Timeline
- Determine Staff Resources



### STEP 2 | COORDINATION & COMMUNICATION

- Identify Partners
- Designate a Project Advisory Committee
- Introduce the Project to Road and Trail Authorities
- Early Coordination



### STEP 3 | PUBLIC ENGAGEMENT

- Establish Engagement Goals
- Determine Target Audiences
- Determine Engagement Type & Frequency
- Establish Outreach & Engagement Methods
- Establish a Public Outreach & Participation Plan
- Determine Need and Method to Document Results
- Use Engagement Comments to Refine the Route
- Share Results
- Refine Contact Lists



### STEP 4 | PRODUCE A DRAFT ROUTE

- Evaluate Route Options Using Criteria
- Identify a Draft Route



### STEP 5 | REVISE & FINALIZE ROUTE

- Seek Feedback & Support
- Present Draft Route
- Revise the Draft Route
- Produce a Final Route
- Prepare Resolution of Support Maps



### STEP 6 | DESIGNATE & MAP THE ROUTE

- Seek Route Approvals
- Produce Turn-by-Turn Directions
- Produce Route Maps
- Apply for Route Designation
- Produce Maps for Ride Planning & Navigation



### STEP 7 | MANAGE THE ROUTE

- Partner Communications
- Route Realignment & Amendments
- Amending Route Designations
- Route Signs

## Audience

The Minnesota Department of Transportation (MnDOT) developed this guide primarily for staff, although additional audiences may find the Guide useful. For example, local route planning partners and organizations involved in developing or supporting long distance or inter-city bicycle routes may apply the Guide to their work or use the Guide to understand procedures.

## United States Bicycle Route System (USBRS)

The U.S. Bicycle Route System (USBRS) is a national bicycle route network designed to connect people to places, featuring long distance routes which connect states to states as well as states to Canada and Mexico. In the early 1980s the American Association of State Highway and Traffic Officials (AASHTO) designated the first USBR and continues to designate routes. The USBRS is a network of broad route corridors across the country. State Departments of Transportation are responsible for selecting and planning specific routes within the corridors and applying to AASHTO for route designation. The [National Corridor Plan](#) is a map that identifies where to develop and designate future USBRS

and provides an overview of the existing and future USBRS; Figure 1 displays the National Corridor Plan; see Appendix A for a larger corridor map.

In Minnesota, AASHTO officially designated USBR 45, the Mississippi River Trail, after MnDOT submitted an application in 2013. USBR 45 follows the Mississippi River from its headwaters to the Iowa border. In Fall, 2016, AASHTO approved MnDOT’s application to designate USBR 41. USBR 41, also known as the North Star Route, runs from St. Paul north to the Canadian border. MnDOT will pursue its next USBR based on Minnesota [Statewide Bicycle System Plan](#) recommendations (See the System Plan route network map in Appendix A).

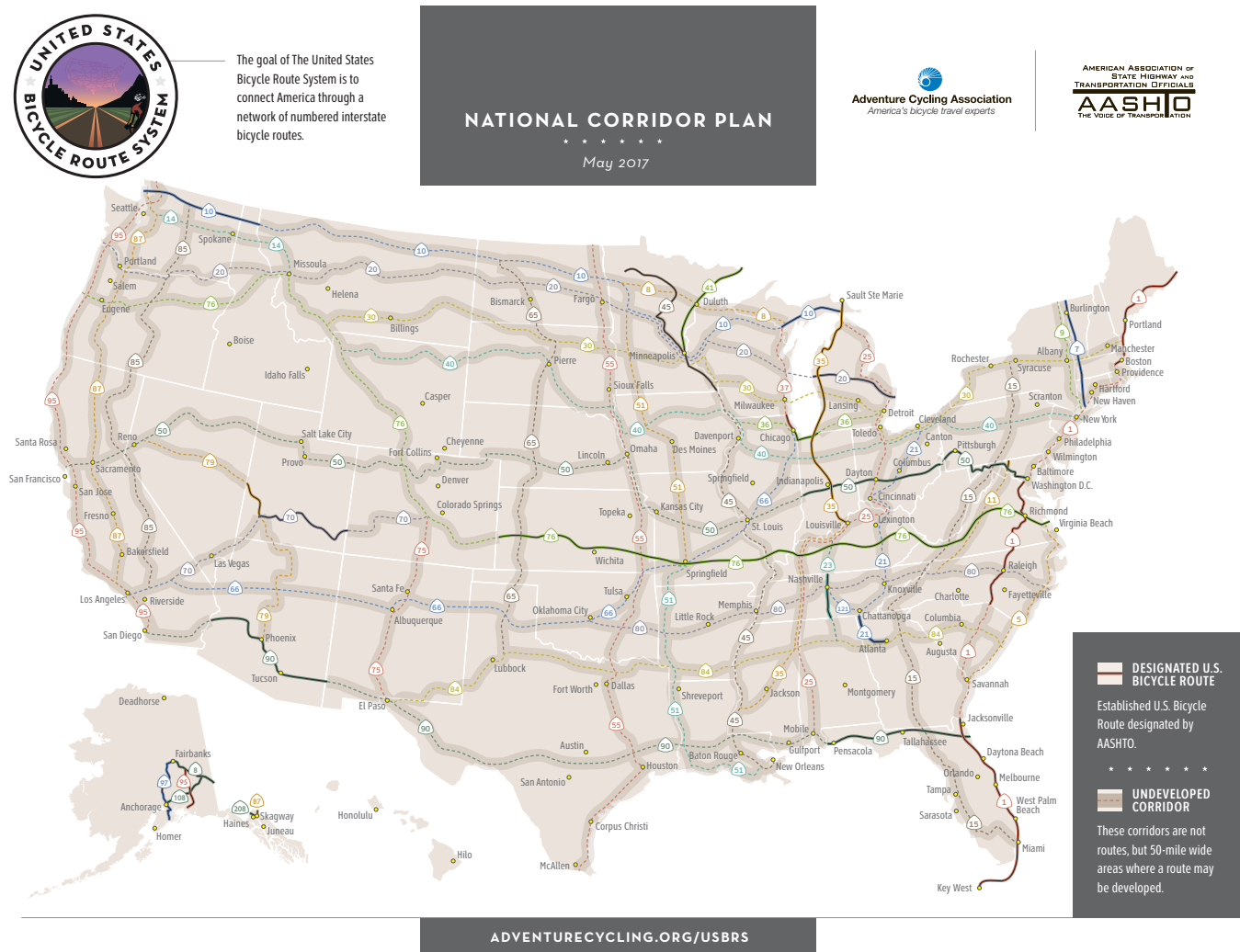


Figure 1: USBR National Corridor Plan map.

## Minnesota Bicycle Route Network (MBRN)

MnDOT adopted its Statewide Bicycle System Plan (Plan) in 2016. The Plan describes the future Minnesota Bicycle Route network (MBRN), including priority corridors the public identified for development. The MBRN represents envisioned connections that link destinations throughout the state by bicycle. The MBRN does not describe the actual facilities that will form these connections. Rather, this Plan presents the MBRN as a set of corridors throughout the state that link destinations. The Plan calls for MnDOT to lead work related to state bicycle route planning and legislative authorization. At the time of writing this guide, MnDOT is developing bicycle plans for each district. Those plans will result in specific routes (based on the corridors), investments and priorities, and clear guidance regarding future plan updates. Minnesota Bicycle Routes (MBRs) will not exclusively use State Highways; therefore, MnDOT will need to coordinate closely with other road and trail authorities.

The Plan identifies four “high priority” corridors for official designation:

- Twin Cities to the Grand Portage State Park, via Hinckley and Duluth – USBR 41
- Itasca State Park to Iowa, via the Mississippi River Trail – USBR 45
- Twin Cities to Mankato loop, via the Minnesota River Valley and Northfield
- Moorhead to St. Cloud, via Detroit Lakes, Fergus Falls and Alexandria

MnDOT will typically develop routes commonly identified within the USBRS and MBRN simultaneously. Figure 2 and Appendix A display a map of the MBRN.



Figure 2: Minnesota Bicycle Route Network map.

## » STEP 1 | Getting Started

The first step to develop and designate a U.S. Bicycle Route and/or a State Bicycle Route is to determine who will principally lead the route work, develop a project scope and timeline, and determine staff resources.

### Determine Route Leader

Once a route is selected for development, MnDOT will typically lead the project work. If other agencies and/or organizations wish to develop a route before MnDOT is ready or develop a route not on the high priority list, MnDOT will consider working with groups who can clearly show organization and initiative to lead necessary project work. Such groups will need to closely coordinate their effort with MnDOT and other key partners.

### Develop the Project Scope and Timeline

In developing a project scope and timeline with targeted milestones, identify the proposed route length, route termini, major route supporters and potential planning participants, and describe logical steps to follow. The scope should include these four major tasks:

1. Community engagement (includes soliciting project support);

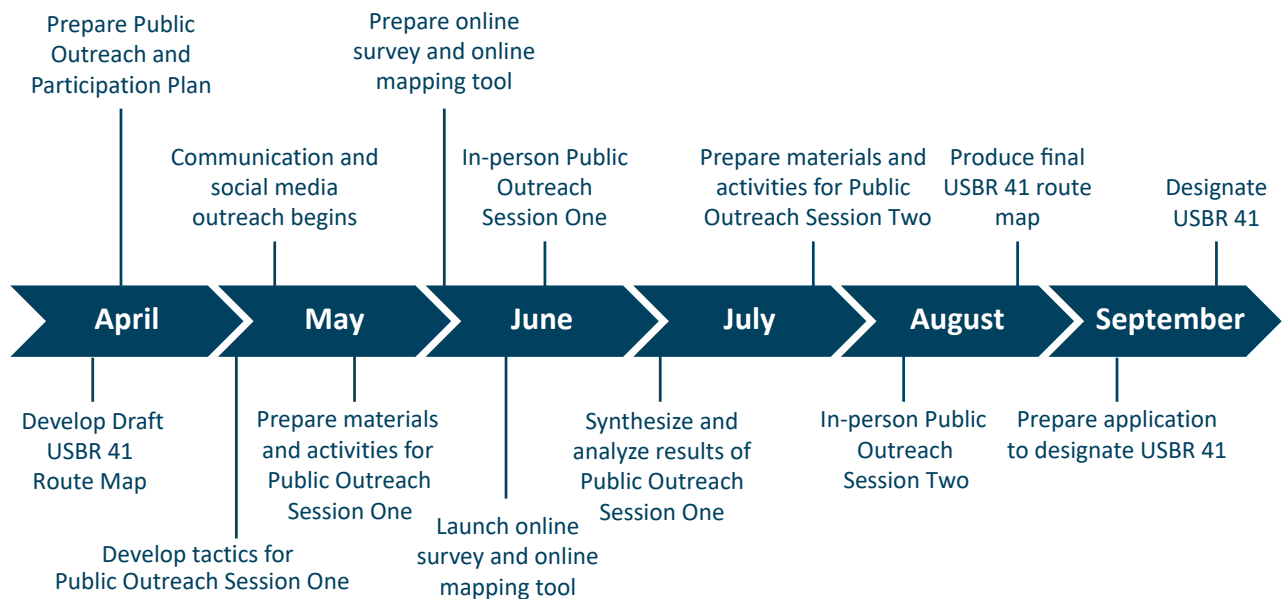
2. Evaluate route options;
3. Select a draft and final route; and
4. Designate the route.

See Figure 3 for the USBR 41 timeline and milestones.

*NOTE: Planning and designating USBR 41 occurred under an accelerated schedule. The process would typically take approximately one year to complete.*

### Determine Staff Resources

While developing the project scope and timeline, determine the staff hours needed to complete the work within the proposed timeframe. This will help determine if there is enough staff capacity internally, or if a consultant with bicycle route planning experience or outside resources (volunteers or another agency) are necessary. If hiring a consultant, determine if a request-for-proposal is required, and factor in time for the proposal solicitation, review time, and contract authorization. Follow the standard steps required by MnDOT Consultant Services.



**Figure 3: Timeline and target milestones to plan and designate USBR 41.**

## » STEP 2 | Early Coordination & Communication

This step sets early coordination and communication with key partners in motion.

### Identify Partners

Planning USBRs and MBRs involves strong ties amongst many; the word partner is used throughout this guide to refer to different agencies, organizations, and others involved in route planning and implementation. Partnerships will be necessary at all project stages and it is important to identify potential partners and begin forging relationships at the earliest opportunities. Key partners may include MnDOT districts, counties, cities, regional development commissions, the Minnesota Department of Natural Resources, local bicycle clubs, the Bicycle Alliance of Minnesota, Adventure Cycling Association staff, and others. Key steps to identifying partners include:

- Review the potential route corridor alignment to create an initial list of list of road and trail authorities and municipal partners;
- Use the partner list to identify potential project advisory committee members (see PAC below)

### Designate a Project Advisory Committee (PAC)

The purpose of a Project Advisory Committee (PAC) is to inform staff and guide decisions while developing and designating the route. Include MnDOT district staff and key partners such as local engineers and planners, regional development organization staff, DNR planners, a State Non-Motorized Transportation Advisory Committee representative, and Explore Minnesota Tourism staff. Look for PAC members during early outreach. Convene and communicate with the PAC regularly throughout the project.

### Introduce the Project to Road and Trail Authorities

Because it's likely any long-distance bicycle route will be on roads and trails under the jurisdiction of a variety of road and trail authorities, the authorities are

important long-term partners. As a courtesy, contact road and trail authorities where the route may be located as early as possible and prior to informing the general public of project specifics. Introductory communication may help indicate initial support for the route and potential issues to consider. The initial contact may be brief. For example, an introductory email or phone call, followed with a one-page project info sheet, may suffice; See Appendix B for a sample introductory letter and project information sheet. Provide a summary of how public engagement will occur, invite participation in the project, and direct authorities to project resources, including a project webpage. For project efficiency, any communications should include:

- A request for local bicycle and trail plans (and data if appropriate), looking for route segments that are planned or exist
- Route suggestions, based on local knowledge
- Expectations/requirements (i.e. resolution of support required to designate route, etc.)
- Inquire if interested in participating in the PAC (if appropriate)

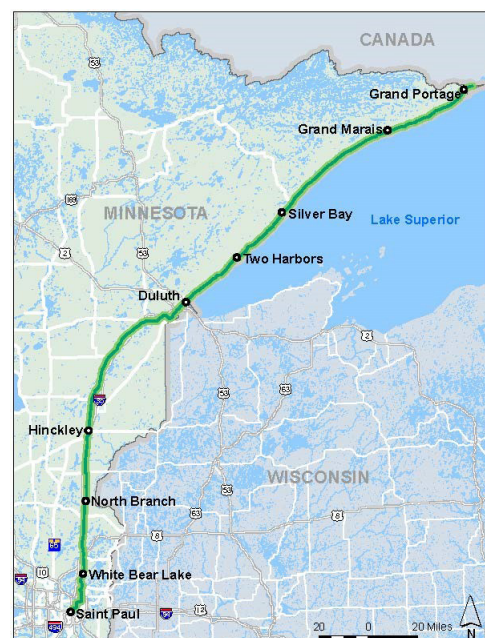


Figure 4: Draft route map of USBR 41.



## Early Coordination

Early coordination tasks include:

- Develop a contact database of primary contacts (road/trail authorities, municipalities, adjacent states, etc.) and secondary contacts (elected official, advocates, etc.); this database will be updated throughout the project.
- Produce initial media communications; this may include a “one-pager”/project info sheet, a project webpage, and social media posts; Figure 5 displays a screen capture of the MnDOT USBR 41 website.
- Introduce the project using social media, meetings, and workshops.

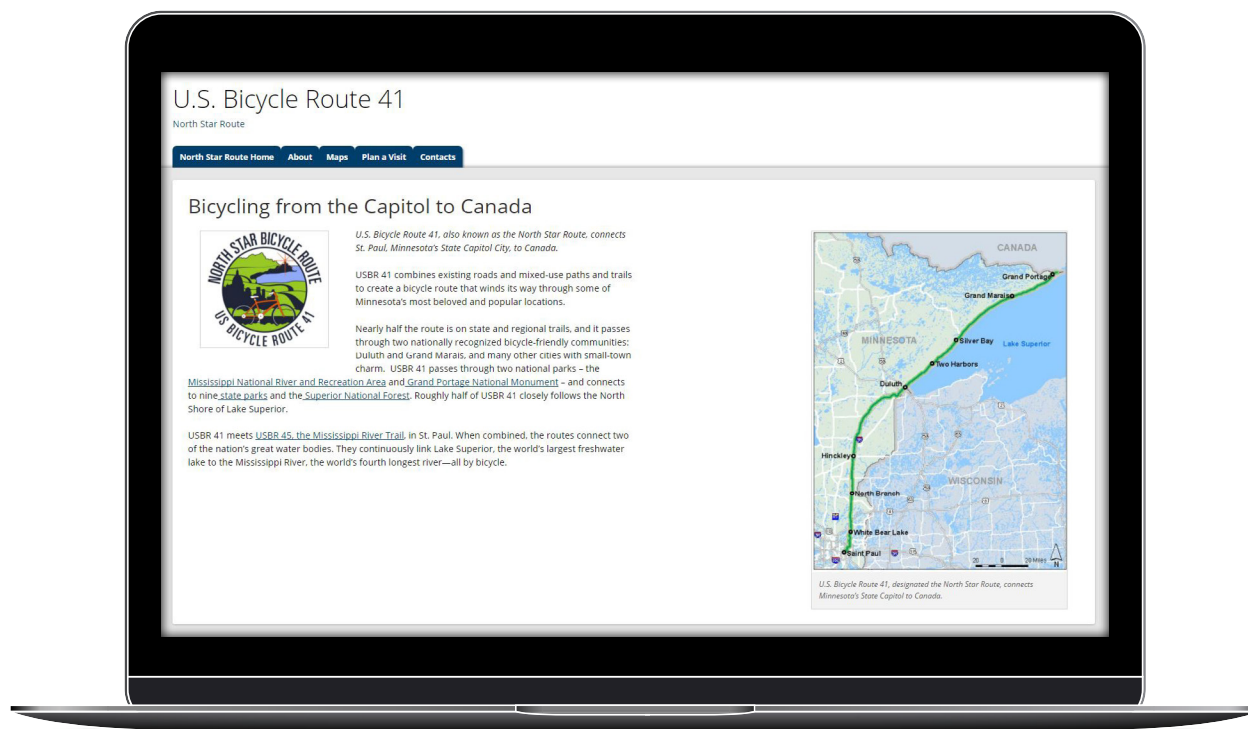


Figure 5: MnDOT USBR 41 website.

## » STEP 3 | Public Engagement

Public engagement forms the foundation to successfully plan and designate a USBR or an MBR. Engagement includes communicating with the general public, road and trail authorities, and other partners. This step focuses on preparing a Public Outreach and Participation Plan (POPP) and describes engagement goals and desired outcomes, the target audience, and the process for communicating with that audience. Engaging the public and key partners occurs at various levels in Steps 2, 4, 5, 6, and 7.

### Establish Engagement Goals

Engagement goals will vary, but generally will focus on:

- Engaging key partners;
- Gaining and documenting support from road and trail authorities;
- Ensuring route decisions are beneficial to local communities and bicyclists; and
- Determining a name for the route (if applicable).

### Determine Target Audiences

Partners can generally be divided into three categories:

1. Decision-makers;
2. Project partners; and
3. Community members.

The partners in each category will vary from route to route, but at a minimum, should include all groups that have ownership or authority of any roadway or trail that may become part of the final route. Use the list of partners from the USBR 41 project in Appendix B as an example.

### Determine Engagement Type & Frequency for Each Step/Partner

After establishing target audiences, select specific engagement efforts for each potential project partner. Consider the number of times to engage; some partners may only need to be engaged once, while other partners may be engaged multiple times over the course of the project. Recommended engagement phases include, but are not limited to:

- When corridor evaluation begins;
- Following draft route development;
- Following final draft route selection; and
- Designation and any associated opening/ribbon-cutting events.



Figure 6. MnDOT Central Office and District 1 staff with partners at Tofte workshop.

### » EXAMPLE PARTNER TYPES

- Adventure Cycling Association staff
- Road and trail authorities
- Regional planning authorities (RPCs, MPOs)
- Municipalities and counties
- Relevant state agencies (DNR, Tourism)
- Relevant Tribal governments
- Elected officials
- Bicycle advocacy and promotion groups
- Bicycle clubs
- Trail associations
- Railroads
- Businesses

Engage road and trail authorities early in the process to allow sufficient time to address any concerns they may have. The public and other partners are best initially engaged after identifying a draft route, which allows people to respond with specific route-related comments to something tangible.

## Establish Outreach and Engagement Methods

Apply a variety of engagement methods:

- **Direct outreach:** Includes mail, email, and telephone contact; best used to reach specific partners such as road and trail authorities.
- **Online outreach:** Includes project website, social media, surveys, mapping tools; best used to provide general project information and solicit input across large geographic areas and populations.
- **In-person forums:** Includes open houses, workshops, focus groups, and interviews. Open houses and workshops are best used in more densely populated areas where people do not have to travel far to attend the event or in a specific community where the route alignment is complex and/or it is difficult to identify one route alignment; focus groups and interviews are best used to solicit information from specific groups or individuals.

Select a variety of outreach and engagement methods to ensure broad input on the project. Where practical, participate jointly in other planned meetings or events that may offer efficiencies and more diverse/focused engagement (see Figure 7 and Combining Public Engagement sidebar).

Clearly identify the intended engagement method for each future recommended engagement phase. For example, engagement to review and comment on the draft route may have been at an open house and online, but reviewing and commenting on the final route may be only online.

### » COMBINING PUBLIC ENGAGEMENT

There may be opportunities to combine public engagement with other organizations. For example, as MnDOT began communicating with potential partners to inform them of the upcoming USBR 41 planning, it learned from the Minnesota Department of Natural Resources (MnDNR) that the MnDNR was developing a state trail master plan in a similar geographic area to the proposed USBR 41 route. After discussing route options between agencies, MnDOT and MnDNR held joint open houses to inform its partners of each other's projects. The joint open houses were arranged with the intent to expand each agency's partner-base, reach a broader audience than if meeting separately, eliminate the need for some partners to attend two meetings.



**Figure 7: MnDOT and MnDNR co-hosted a meeting to jointly discuss agency projects.**

## Establish a Public Outreach and Participation Plan (POPP)

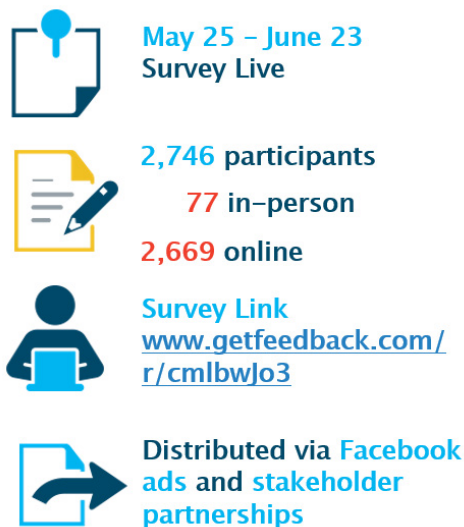
Organize engagement goals, target audiences, and engagement methods into a plan. The plan should be succinct, but should include sufficient detail for a reader to understand public engagement goals and the steps necessary to achieve those goals. Before each major engagement phase, prepare a detailed work plan for outreach communications, engagement tactics, and other logistics.

## Determine Need and Method to Document Results

Document information received during engagement to evaluate comments, make decisions, and justify project decisions and recommendations. Record participant interactions including comments from the various outreach and engagement methods and identify early what documentation to retain in long-term project files.

## Use Engagement Comments to Refine the Route

Use comments from public engagement to refine the route. In particular, review and consider input from local road and trail authorities as their support for the final route alignment is required. Consider comments from the public and other partners, particularly comments regarding local road or trail conditions and suitability for bicycling—local bicyclists and partners generally have a good understanding of area bicycling conditions.



## Share Results

Produce a summary of engagement efforts to share and highlight input received. The summary should use graphics and charts to summarize input clearly and succinctly. Consider using maps, charts, and other infographics to summarize engagement comments, and to highlight how input shaped the plan and affected recommendations. Share the results first with the PAC and, as a courtesy, with trail authorities who may benefit from reviewing pertinent engagement comments; then share information broadly on the project webpage to those on the project contact database and via social media (see Figure 8 for an example public engagement results infographic).

## Refine Contact Lists

Add or remove people from the project contact database throughout the project. Ask participants in engagement events if they wish to be added to the project email list and receive specific project communications. A more general method is to invite people to receive information at key points and be informed of other bicycle projects by signing up for [govdelivery \(MnDOT’s agency-to-citizen email communication\)](#). Update the project contact list after each engagement event.



Figure 8. On-line engagement results infographic.

## » STEP 4 | Produce a Draft Route within the Corridor

This step identifies methods to produce a draft route within the project corridor. This involves considering both road and trail options, leading to a recommended draft route alignment. See Figure 9 for a sample segment of the draft USBR 41 route.

### Evaluate Route Options Using Defined Criteria

Apply route criteria to help determine the best route option. To begin, evaluate and/or map all relevant locally planned and existing bicycle facilities and routes; this may narrow down route options within the corridor. Many of the criteria below are loosely defined as conditions and what is considered acceptable may vary significantly across the state.

Primary route evaluation criteria include:

- **Roadway/trail suitability:** Trail or on-road bicycle facilities exist (paved shoulders or bike lanes) or the roadway has low or very low traffic volumes and posted speeds. In some cases there may be only one road option and it may have higher than desired traffic volumes or speeds.
- **Local interest and connections:** Route follows or connects to popular points of interest (scenic, historic, cultural, and recreational value) or makes strong local route connections (routes are part of an existing or planned local or regional bicycle network). Also consider the popularity of existing routes. For instance, the alignment receives considerable support during public engagement or is popular based on existing use.
- **Services and amenities:** Daily services, including water, food, and overnight accommodations are available at appropriate intervals along the

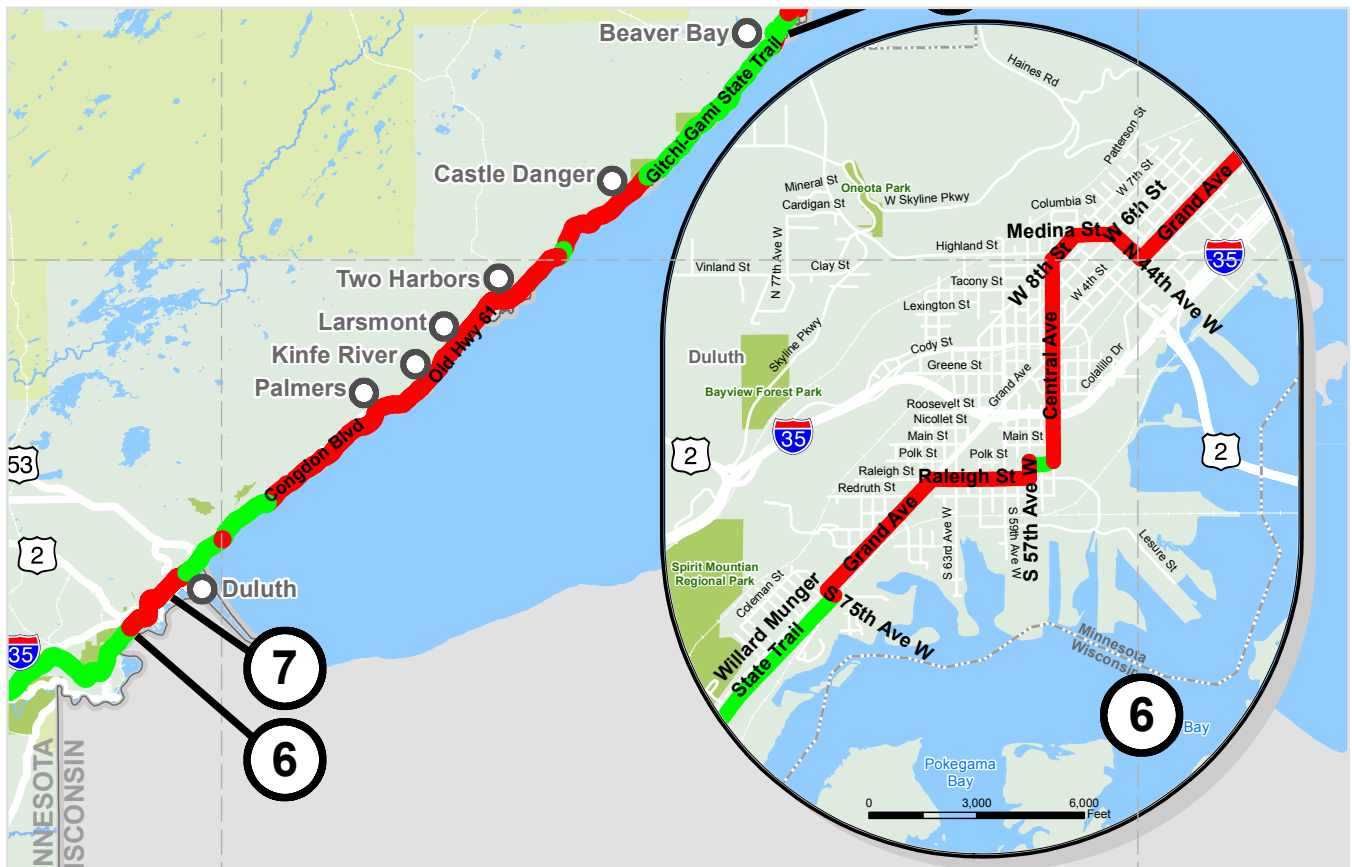


Figure 9. Segment of draft USBR 41 Route.

route (40-60 miles or more frequently). Non-daily services, such as bicycle shops and libraries, can be considered using longer intervals.

- **Directness:** Route is reasonably direct and easy to follow with limited turns (both on bicycle and on maps).
- **Continuous:** Route facilities should be continuous, especially trails. Long lengths of trails are preferred in contrast to routes where bicyclists must frequently transition from on-road to off-road and back again.
- **Multi-modal:** Routes connect to transit and transportation hubs, preferably on a daily basis (every 50 miles). Multi-modal connections are especially helpful for bicyclists travelling in a linear “A to B” direction vs. those travelling a loop. Multi-modal connections are sometimes not an option.

Some criteria must be on a case-by case basis. For instance, “reasonably direct” and “continuous” may differ when a route is in a rural vs. urban area. See Appendix C for detailed criteria information used in USBR 41.



**Figure 10. Bicycle trail photo used for public engagement materials.**

## Identify a Draft Route

A draft route alignment will likely emerge after applying the primary criteria to the map showing existing and planned bicycle facilities and routes within the corridor. Often the first criterion – roadway/trail suitability – will narrow options significantly enough for a draft route to emerge. Where multiple route options exist or multiple route options are very closely rated using the primary criteria, apply secondary criteria.

Secondary criteria include:

- **Bicycle friendliness:** Connects to a designated bicycle-friendly community.
- **Terrain:** Avoids very hilly areas, unless other criteria supersede terrain.
- **Traffic control:** Bridges, underpasses, or traffic controls are present to assist crossing busy roadways.
- **Surface condition:** Trail and roadway surfaces in good condition and receive routine maintenance. May include short stretches of high quality and maintained unpaved roads.
- **Emergencies:** Consider routes that can be used for evacuation routes during emergencies.

As necessary, use online mapping tools and field reviews to fine tune the draft route.

## » STEP 5 | Revise and Finalize Route

After presenting the draft route(s) to road and trail authorities and the public, evaluate and incorporate comments to create a final route.

### Seek Feedback and Support

The goal of this step is to create a final route that partners will support and road and trail authorities will formally support for designation by passing a resolution.

### Present Draft Route

After identifying and mapping a draft route, present it to the public for broad input:

- Solicit comments using public outreach and engagement methods from the POPP;
- Using the contact database, personally invite road and trail authorities with jurisdiction over segments of the draft route to attend an open house or provide online comments (see Road and Trail Authority Participation sidebar). Be sure to inform each authority that a letter or resolution of support will be required. The invitation ensures the authorities were informed appropriately.

These actions are important tools to gain support from local governments, especially if the route uses local roads and trails.



**Figure 11. Participants providing route comments at workshop in Tofte.**

### » ROAD AND TRAIL AUTHORITY PARTICIPATION

For USBR 41 public engagement, invitations appeared to increase road and trail authority participation—particularly at open houses where a county engineer, city planner, etc. could hear and participate in open discussions with a diverse audience.

### Revise the Draft Route

- Evaluate public engagement comments, reapply route criteria, and consider and apply valid comments to the draft route.
- Particularly address route suggestions and objections from road and trail authorities.
- If appropriate, consult with experts or conduct field work to verify or further evaluate localized information brought to the project staff's attention. For instance, high truck volumes to serve mining operations or large farms may be reported on otherwise low volume roadways. As appropriate or possible, adjust the route around these facilities. In some cases, MnDOT or local road agencies or public works departments may be able to address concerns and improve facilities for bicycling along the route segment in question (i.e. widen shoulders pavement, add bike lanes or trails/shared-use paths). However, often these improvements take years to plan, program, and construct.
- Include facilities in the final route that are programmed and will be constructed by the designation announcement. As a service to bicyclists, it is better to err on the side of revising maps the following year rather than creating navigation confusion. Address exceptions on a case-by-case basis, for example:
  - » If a spring designation, consider including work that will be constructed within

- approximately one month after designation; or
- » If a fall designation, work will be completed before the next active bicycling year begins.

If there are route deficiencies that can't be overcome or known imminent route improvements, create a list of these issues and changes to consider for inclusion in the MnDOT State and District Bicycle Plans. A list may be helpful if funding or project opportunities arise; the project manager or road and trail authorities can consult the list for potential improvements, which may lead to some cost efficiencies or faster improvements.

### Produce a Final Route

After making changes based on feedback, present a recommended final route to the public. It is especially important for partners and the general public to see how routes have been adjusted based on comments. Appropriately contact people and agencies on the contact list informing them of the recommended final route and designation status. As before, communicate with partners based on their role in the project. Road and trail authorities, PAC members, elected officials, and agencies may merit a different message or communication method than those who just want to keep abreast of project progress. Sample communications are provided in Appendix B.



Figure 12. Resolution of support map.

### Prepare Resolution of Support Maps for Road and Trail Authorities

Prepare a map for each road and trail authority where the route is located, showing the final route on their specific facilities. This map may bring to light ownership discrepancies. If so, revise and resubmit to authorities as an attachment for each authority's resolution of support. See Figure 12 for a sample resolution of support map and Appendix D for an example resolution of support.



## » STEP 6 | Designate and Map the Route

The route may be formally designated after selecting the final route alignment and once all road and trail authorities with jurisdiction over route facilities have submitted letters or resolutions of support.

### Seek Route Approvals

Route designation requires formal approval from all road and trail authorities that own the road or trail where the route is located. Comments from road and trail authorities should have been solicited and reviewed while planning the route (Steps 4 and 5). At that time, authorities should have been informed of the approval requirements associated with designating the road or trail as a USBR or authorizing it as an MBR. Approval can come in the preferred form, a resolution of support, a memorandum of understanding (MOU), or an interagency agreement, or in isolated cases, a letter of support. See Appendix D for a sample resolution of support. MnDOT’s project representative or project staff may need to attend city council or county board meetings to present the route to officials for approval.

If any resolutions of support from road and trail authorities are pending, follow up with the authorities in a timely manner; seek assistance from the PAC, as necessary.

Before submitting documents to designate a route, ensure all managing authorities have submitted approval. If an authority chooses not to provide formal route approval,

the recommended action is to consider relocating the route and seeking approval from any new authorities. Ideally, this will have come to light before this step.

### Produce Turn-by-Turn Directions

After finalizing the route and collecting approvals from all required road and trail authorities, create turn-by-turn directions. Turn-by-turn directions should start at the northern-most or eastern-most point of the route. If applicable, identify where the route enters and exists the state. Be sure to use the most common name or number for roads and/or use names/numbers that match any signs along the route. Consult with local experts; if uncertain, err by including multiple names/numbers rather than too few. AASHTO turn-by-turn directions must be submitted in a specific format. See Figure 13 for the general AASHTO format.

Turn-by-turn directions to accompany navigation maps and ride planning and are typically presented in a variation of the AASHTO format. See the USBR 41 website for the turn-by-turn format used on navigation maps (<http://www.dot.state.mn.us/bike/usbr41/index.html>). Turn-by-turn directions from the USBR 41 AASHTO application are in Appendix E.

Starting Point of Route or Realignment	Miles traveled on this facility	Cumulative miles	Turn location and road name/designation	General Direction of Travel
~~~~~	~~~~~	~~~~~	~~~~~	~~~~~
Terminus:	Total Mileage:			

Figure 13. AASHTO turn-by-turn directions format example.

## Produce Route Maps

The AASHTO designation application requires a route map. Produce a map in an electronic format that is easily printable. The route map used for designation need not provide the same level of detail as a user map, but it should provide a view of the overall route. Turn-by-turn directions supplement the map. The map used for USBR designation is shown in Figure 14 and Appendix E.

## Apply for Route Designation

### Complete the AASHTO Application for US Bicycle Routes

MnDOT must electronically submit an application to AASHTO’s Special Committee on Route Numbering approximately 5-6 weeks before its annual fall or spring meeting. The [application schedule and instructions are available from the Adventure Cycling Association](#). Though the work to develop the route may be lengthy, the application is brief. The application includes:

- A brief route description ;
- Turn-by-turn directions;
- The application route map; and
- MnDOT’s Commissioner of Transportation signature.

MnDOT need not submit resolutions of support or other approvals from road and trail authorities or support from neighboring states (if applicable) to AASHTO, but must retain the approvals in its files. See a complete AASHTO route application for USBR 41 in Appendix E.

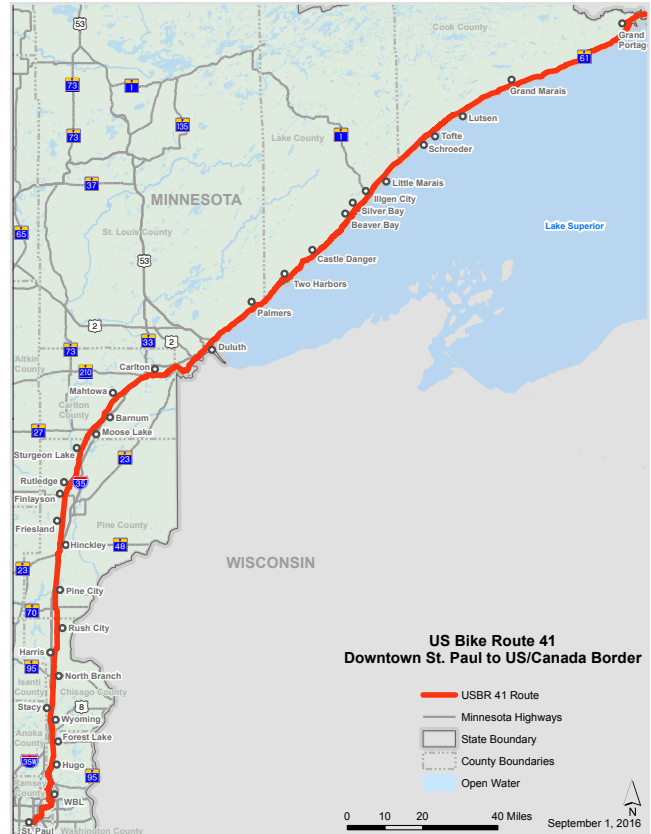


Figure 14: USBR 41 route designation map.

## Approve and Authorize the Minnesota State Bicycle Route

The items developed for U.S. Bicycle Route designation should be sufficient for state bicycle route approval: a brief route description, turn-by-turn directions, the route map, approval from road and trail authorities, and approval from neighboring states (if applicable). There is no application for state routes; MnDOT reviews the route and local route support, and has the authority to approve all final routes. To authorize the route in state statute, MnDOT (or a legislator) proposes the state route on the legislative agenda; if passed, the route is authorized. The state authorization need not occur simultaneously with a USBR designation.

## Produce Maps for Ride Planning and Navigation

Create maps for users of the newly designated route. Once the route is final and designated a national or state route, coordinate within MnDOT to make electronic files available for department use (shapefiles, MPK, etc.) and include the route on the state bicycle map. Also prepare standalone navigation maps with sufficient detail for users to discern which road or trail to follow, location of amenities along the route, and

other pertinent information (such as route deficiencies or alerts). Ideally, the maps should be available online as a scalable map and as a printable product. Also publish the route with a file that bicyclists can load into a GPS unit for navigation. Reformat the AASHTO turn-by-turn directions, as necessary, for navigational use.

Map users will primarily be bicyclists, but road and trail planners, municipalities, and tourism groups may also use maps. See Figure 15 for an example USBR 41 map panel.

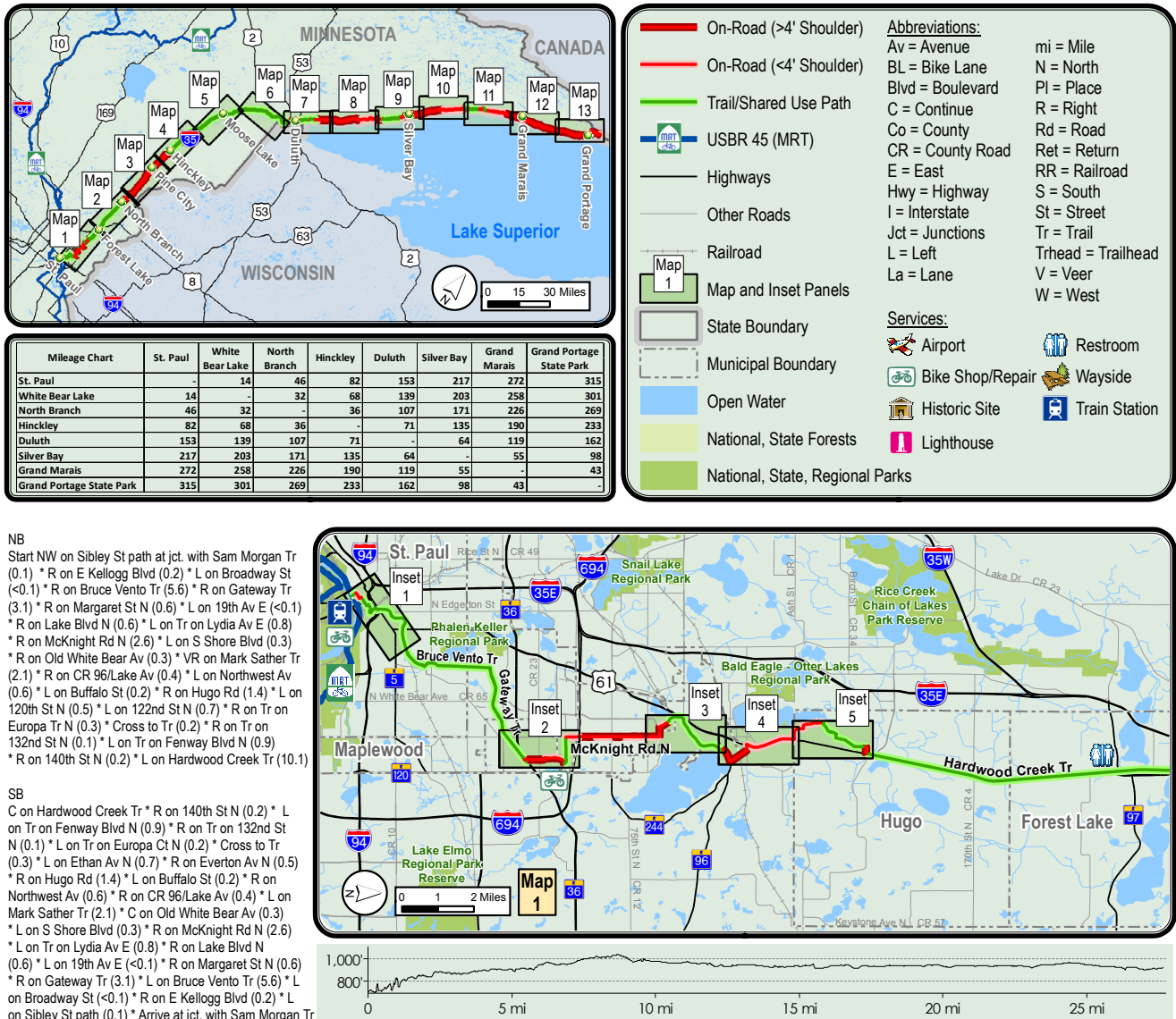


Figure 15. Example panels from the USBR 41 navigation map.

## » STEP 7 | Manage the Route

Communicate routinely with partners for information related to changes, improvements, opportunities, and concerns along the route.

### Partner Communications

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Each bicycle route is different and involves various types of partners. MnDOT will communicate with USBR and MBR partners while coordinating updates to the Statewide Bicycle System Plan and District Bicycle Plans; Plan updates are scheduled to occur every five years. In between the scheduled updates, partners may contact MnDOT staff anytime about issues related to routes on an as-needed basis.

### Route Realignments and Amendments

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For various reasons, routes may need to change after official designation. Among others, reasons may include a change in conditions on a roadway or trail or opening (or closing) a roadway or trail. Realignments may be temporary, minor, or significant.

#### Temporary Route Realignments

It may be necessary to temporarily realign a route when construction or other activities temporarily restrict access to the route. In these cases, a route designation amendment is not necessary. Communicate with each road and trail authority to understand if activities may still allow safe bicycle access. If not, work with the authorities to identify an alternate route. The road or trail authority should post route detour signs along the route and detour details online where route maps and general information are available. Temporary route realignments, even if lasting a year or longer, do not require edits to printed route materials. Public engagement is also not required for temporary route amendments. Evaluate detours and temporary routes using the route criteria.

### Minor Route Realignments

Through routine partner communication, MnDOT will learn of the need or opportunity for minor route realignments. This may include shifting the route over a street or two in an urban area when new bicycle facilities are added or including a new section of trail when a trail is extended. Evaluate changes using the route criteria.

If a local road or trail authority initiates changes, the authority is best served through preliminary communication with MnDOT to at least conceptually discuss route changes. Assuming realignment approval from MnDOT and pertinent partners, the authority should plan to:

- Submit a letter or email to MnDOT detailing the requested change;
- Identify ownership for all road and trail segment changes;
- Submit support documentation for the realignment (resolutions of support from all owners);
- Submit an adequately detailed map showing on- and off-road segments;
- Submit amended turn-by-turn directions; and
- If navigation signs exist, identify locations and methods to re-sign route.

MnDOT will typically update maps, as necessary.

If MnDOT initiates changes and the change only involves MnDOT facilities, route changes are approved internally. Unless determined contentious or time-sensitive, MnDOT will inform partners in its routine communications.

## Significant Route Realignments

No matter who initiates, if route conditions may significantly change, or a new facility such as a state trail opens, consider a significant realignment or a spur/alternative route for a previously designated route. All of these occurrences require a more involved process, similar to the original route designation steps. This process includes:

1. Evaluate the potential change using route criteria; document justification for/against the route realignment.
2. If a decision is made to move ahead with the route realignment, identify who will lead each step;
3. Produce a draft revised route (see Step 4).
4. Conduct an appropriate level of public engagement to solicit input from agencies, partners, and the public (see Step 3).
5. Revise and finalize the realigned route (see Step 5).
6. Amend the designated route (see Step 6 and below).

## Amending Route Designations

To revise USBRs, MnDOT must amend its route application with AASHTO. See Step 6 for the required submission materials. MnDOT need not submit an amendment for every route change; it can approve changes and submit an amended application to AASHTO at a logical and suitable time. For MBRs, the state statute authorizing the route should be general enough that a legislative amendment is not required.

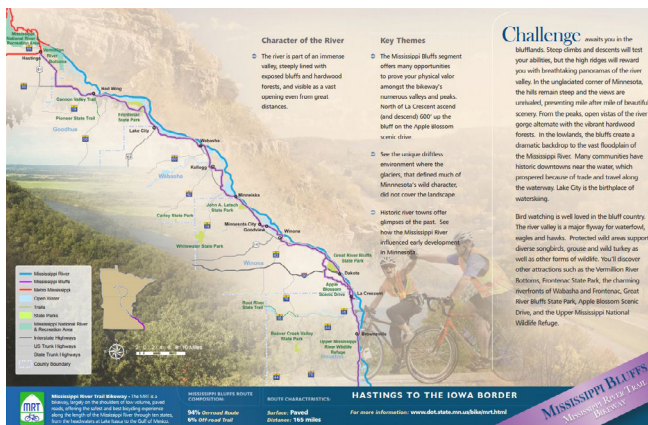


Figure 16. A promotional page from the Mississippi River Trail Bikeway Marketing Toolbox.

## Route Signs

It is recommended, but not required, that USBRs and MBRs be signed. Route signs supplement maps and offer easier navigation for route users, inform motorists that bicyclists may be on roads, and can also serve as a tourism or promotional tool. Planning for and installing route signs can be complex and time-consuming, particularly if involving multiple road and trail authorities' jurisdiction, even if MnDOT or another agency agrees to fund a sign project. To ensure project efficiencies, discuss intentions regarding signs early in any project coordination and communication. See Figure 17 and Appendix F for more information about route signs.



Figure 17. USBR sign. (FHWA interim approval)

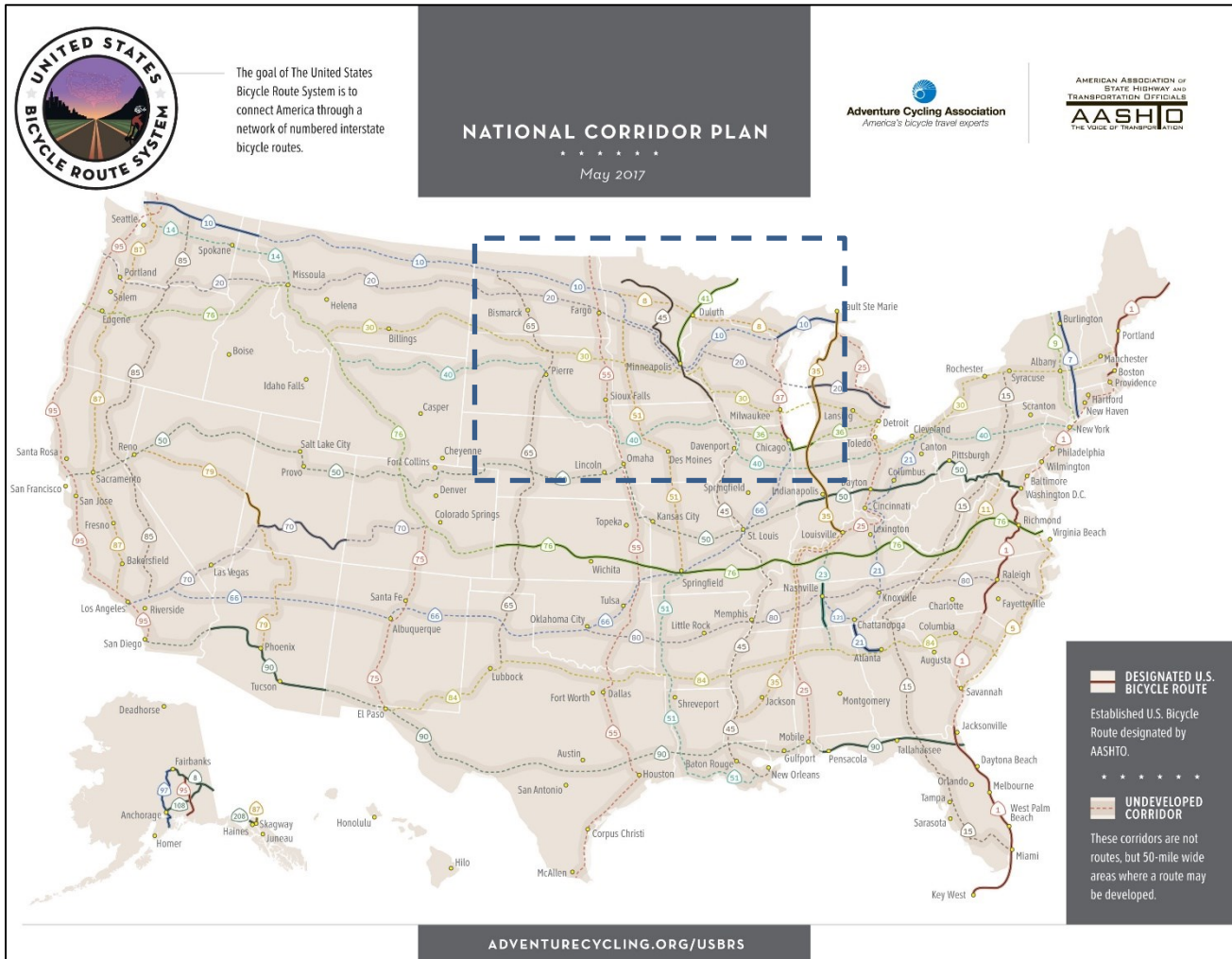
## Route Promotion

Following designation, promote the route. Statewide organizations such as Explore Minnesota Tourism, or local departments of tourism and chambers of commerce are logical partners to promote routes. A name and logo created for USBR 41/North Star Route is available to incorporate into marketing materials (Figure 18). See Figure 16 and Appendix G for more information about route promotion.

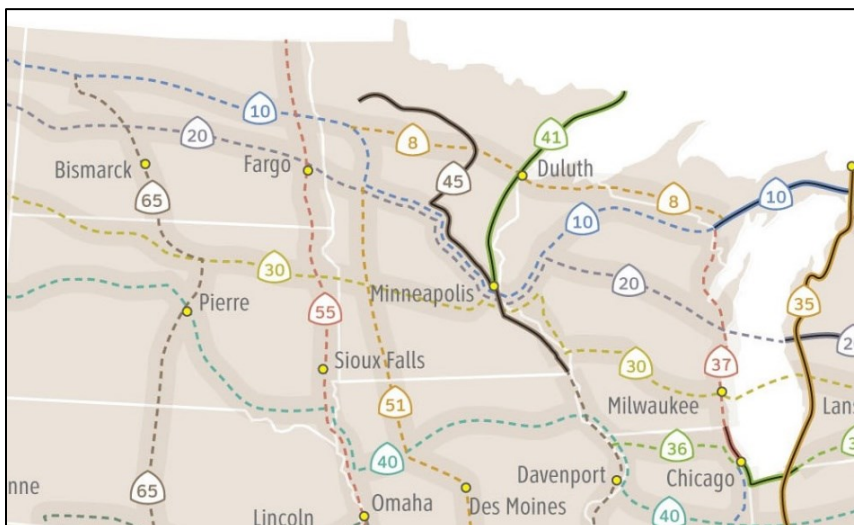


Figure 18. USBR 41/ North Star Route Logo.

# Appendix A: National and Minnesota Corridor Maps



USBR National Corridor Plan



Detailed inset map showing U.S. Bicycle Routes in Minnesota.



Minnesota State Bicycle Route Network map.

## Appendix B: Sample Outreach and Communication Materials

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This appendix provides sample outreach materials used during the USBR 41 designation process

### Sample Introductory Letter

Dear City Engineers, Public Works, Planners, and staff:

**The Minnesota Department of Transportation (MnDOT) is developing a new bicycle route in Minnesota: U.S. Bicycle Route 41 (USBR 41). The route will connect Saint Paul to Grand Portage State Park (at the Canadian border).** This email is to inform you of the project and MnDOT's desire to work with you and other partners over the summer to combine existing roads and trails to create a continuous bicycle route that's "ride-ready". USBR 41 is a designation. It is intended to complement local bicycle facility planning and to build upon communities' efforts and help move local bicycle plans forward. It is also intended to introduce bicyclists to local culture, history, scenery, and adventure. Please see the attachment "About USBR 41" for additional information.

MnDOT identified USBR 41 as a high priority corridor in its [Statewide Bicycle System Plan \(pg. 33\)](#). The proposed route was developed based on comments from a cross-section of people statewide from 2013 - 2015. We've developed a draft USBR 41 route that is available for public comment. **The draft route passes through your municipality or jurisdiction and may include using one or more of your existing roads and/or trails.** I've attached the draft route for your review in a: 1) general pdf map and 2) detailed digital route file that you can download in Google Earth (see MnDOT's USBR45/Mississippi River Trail website for [instructions](#) on downloading and viewing with Google Earth).

**I invite you to attend one of four upcoming public open houses and to extend the invitation to your colleagues and partners** you believe may be interested in learning about the bicycle route (see attached open house flyer). At the open house, people will have the opportunity to:

- Help identify which roads and trails to connect to create the new route;
- Suggest a name for the new route; and
- Identify route map preferences.

**For anyone not attending an open house, an online survey and route-comment tool are available at [www.mndot.gov/bike/usbr41](http://www.mndot.gov/bike/usbr41)** for comments until June 23rd.

#### Public open houses will be held:

- Tuesday, June 7, 4-6 p.m. at Hinckley Community Room, [106 First St. SE, Hinckley](#)
- Thursday, June 9, 4-6 p.m. at the White Bear Lake Police and Fire Building, [4700 Miller Ave, White Bear Lake](#)
- Tuesday, June 14, 3:30-5:30 p.m. at Duluth Central Library, Gold Room, [520 West Superior St., Duluth](#)
- Thursday, June 16, 4-6 p.m. at Bluefin Bay On Lake Superior, Tofte Room, [7192 West Highway 61, Tofte](#)

**After the public comment period closes, I will follow up with you on next steps**, including confirming the route location on your facilities, answering any questions, and obtaining a resolution of support. If all USBR 41 planning and map work is completed this summer, MnDOT intends to designate the route in October, 2016.

MnDOT seeks willing partners as success depends on partnerships—from developing to promoting the route. I very much look forward to working with you.

Sincerely,

#### Attachments:

- About USBR 41 – route information
  - Draft route maps: pdf map and kmz (opens in Google Earth)
  - Open house flyer
-



## Sample Project Information Sheet



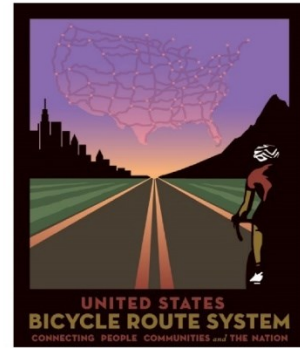
We all have a stake in **A10B**

### DEVELOPING U.S. BICYCLE ROUTE 41 - ST. PAUL TO GRAND PORTAGE STATE PARK

#### U.S. Bicycle Routes – Background

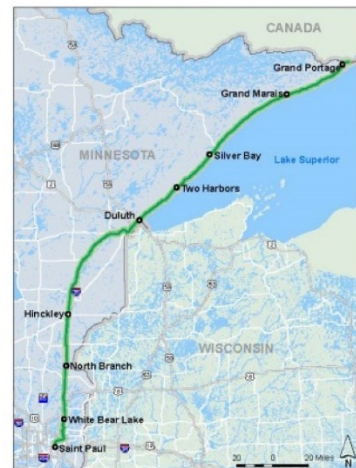


- The [U.S. Bicycle Route System](#) is an emerging network of numbered cross country bicycle routes developed to connect people to cities and places.
- The AASHTO (American Association of State Highway and Transportation Officials) Special Committee on Route Numbering officially designates each numbered route in the USBRS.
- MnDOT identified U.S. Bicycle Route 41 as a priority corridor in its [Statewide Bicycle System Plan](#).
- The Statewide Bicycle System Plan illustrates routes people can use to travel to and between Minnesota cities by bicycle. The proposed routes were developed based on comments from a cross-section of people statewide.
- USBR 41 will be Minnesota's second USBR. USBR 45/[Mississippi River Trail](#) is the first. As of October 2015, 11,053 miles of U.S. Bicycle Routes have been established in 23 states.
- Adventure Cycling Association is working with all 50 states to develop the U.S. Bicycle Route System. A U.S. bicycle route can create more visibility for cycling across the country and help expand [bicycle tourism](#) and enhance [local economies](#) with little investment.

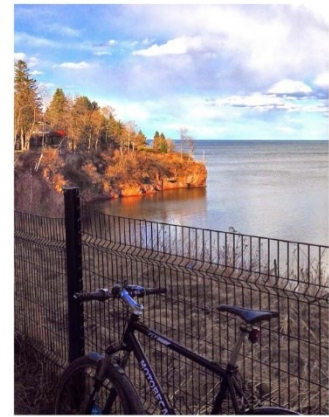


#### Planning U. S. Bicycle Route 41

- USBR 41 will link St. Paul to Grand Portage State Park, via Duluth. It will be approximately 325 miles long.
- U.S. Bicycle Route 41 is a designation only; it is intended to complement—not compete—with local bicycle facility planning. It is intended to build upon communities' efforts and help move local bicycle plans forward.
- Using route-selection criteria prioritized through public input, MnDOT will work with partners to combine existing roads and trails to create a continuous bicycle route that's "ride-ready".
- USBR 41 will be planned with adjacent network connections in mind. It will connect to communities, points of interest, and businesses/services bicyclists need. USBR 41 will be developed to enhance local communities through:
  - **Network connections.** Where practical, USBR 41 will be part of a local bikeway network, connect to a local network, or enhance the network to serve visitors and residents for transportation and recreation.
  - **Serving bicyclists' needs.** Connects to or near local services, such as lodging/camping, grocery stores, restaurants, bike shops, hardware stores, libraries, etc.



- **Enhancing local economy.** Represents a modest opportunity for businesses to profit from new or more frequent bicyclists seeking local services.
  - **Improving health.** Encourages healthy, active transportation and recreation. In addition, seek to reach a new audience of bicyclists, particularly those identified as “interested but concerned”, to help create a demographic mode shift.
  - **Improving neighborhoods and communities.** Includes equity and diversity as factors in route planning and decision-making, with the intent to help increase bicycling in underserved/non-traditional neighborhoods.
  - **Cost effectiveness.** Uses existing bicycle facilities, which require no additional land acquisition or development costs.
  - **Adventure.** Introduces visitors and residents to exploration and new experiences.
  - **State and national significance.** Connects communities to the state bikeway network and to the [U.S. Bicycle Route System](#).
- For those most comfortable bicycling off-road, USBR 41 will include many segments of continuous trails and paths. Maps will clearly identify those segments.



### Designating and Promoting U. S. Bicycle Route 41



- MnDOT seeks willing partners; success depends on partnerships—from developing to promoting the route.
- Designation requires a resolution of support from local road and trail authorities where USBR 41 is located.
- USBR 41 will be part of Minnesota’s statewide bicycle network. MnDOT will continue to lead USBRS work. As part of the USBR 41 project, MnDOT is developing a Minnesota guide that will identify protocol for planning, implementing, managing and promoting state and U. S. bicycle routes.
- If all U.S. Bicycle Route 41 planning and map work is completed this summer, MnDOT intends to designate the route in October 2016. If not complete, MnDOT will submit an application to designate the route at the next scheduled date: May 2017.

### Relationship to State and Local Trails and Bicycle Facilities

- U. S. Bicycle Route 41 will combine existing roads and trails. In some cases, USBR 41 may provide an interim roadway connection within a local or state bicycle trail network, closing a gap until funding is available to fully build continuous trail segments.
- USBR 41 may bring additional value to existing and planned bicycle facilities. For example, a local trail typically serves bicyclists from nearby, but if common with USBR 41, it also may serve bicyclists from afar or travelling long distances. By serving multiple users under a joint purpose, USBR 41 may help future local bicycle initiatives more easily raise funds and be constructed more quickly.
- USBR 41 will evolve. It will change as viable, locally-led improvements occur that are compatible with USBR 41 route criteria and better-serve a broad range of bicyclists.



USBRS 41 info: <http://www.dot.state.mn.us/bike/usbr41/>

Contact: Liz Walton; Minnesota Department of Transportation. [liz.walton@state.mn.us](mailto:liz.walton@state.mn.us); 651-366-4186

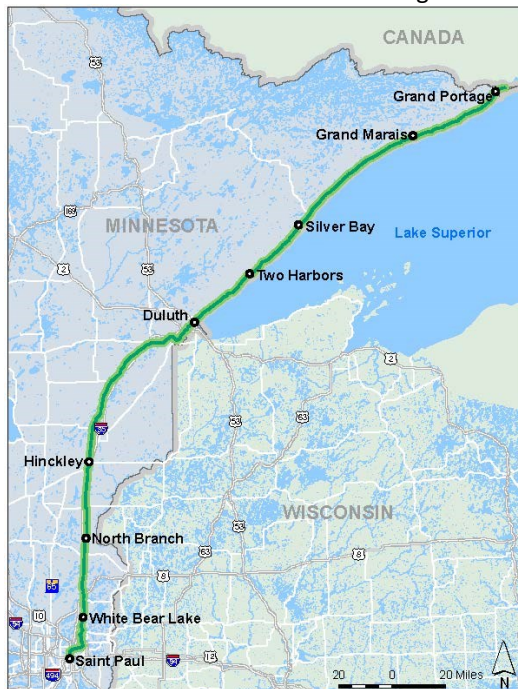
## Sample Final Route Communications

### **For road and trail authorities:**

Dear road and trail authorities near U. S. Bicycle Route 41:

**MnDOT and its many partners have made much progress in planning and implementing USBR 41. This email is to keep you abreast of project progress.** Here's a summary:

- **Public Engagement.** Completed second route of public engagement in August. Engagement was both online and in person at open houses (Grand Marais, Duluth, Pine City, White Bear Lake). People received a project update and provided input by:
  - Reviewing/commenting on the final route alignment. Based on input during public engagement and with road and trail authorities when soliciting route support, MnDOT made additional route revisions. Approximately 47% of USBR 41 is on trails, including a short segment of the Gateway State Trail and the complete Willard Munger and Gitchi Gami State Trails. It also includes the regional Bruce Vento, Hardwood Creek and Sunrise Prairie Trails, as well as various local trail segments.
  - Voting on preferred route name. The name will be announced shortly.
  - Identifying preferred bicycle route connections between Minnesota and a future Wisconsin segment (top two locations selected = Stillwater Lift Bridge and Duluth's Bong Bridge).



- **Route designation.** In mid-September MnDOT submitted an application to AASHTO (American Association of State Highway and Transportation Officials) for the full USBR 41 route, which is from St. Paul to Grand Portage State Park (315 miles). Adventure Cycling, with AASHTO, will nationally announce the USBR 41 designation on/about December 6<sup>th</sup> through a news release. MnDOT will issue a local news release at the same time (including announcing the route name).
- **Website.** MnDOT created a [USBR 41 website](#) to assist in route communication during planning/public engagement. MnDOT is revising the website to include information such as general route info and maps. If all goes as planned, the website will be ready for viewing the same time the designation announcement is made on December 6<sup>th</sup>.
- **Promotion: ribbon-cutting and USBR 41 bicycle tour.** MnDOT plans to celebrate USBR 41 with a ribbon-cutting event the morning of May 20<sup>th</sup> in St. Paul at the junction with USBR 45, the Mississippi River Trail. The event will be coordinated with day-one of a planned five-day USBR 41 bicycle tour (May 20-25; St. Paul to Grand Portage). Details are still evolving; MnDOT will post information on the USBR 41 website.
- **Bicycle Route Planning Guide.** MnDOT is developing a bicycle route planning guide. The guide will outline steps for MnDOT staff and others to consistently and effectively develop future state and U.S. bicycle routes.

**An easy way to stay abreast of USBR 41 in the future, as well as other bicycling projects, is to subscribe to email updates.** You can subscribe from the pop-up box that appears when you open the link on the MnDOT main web page: <http://www.dot.state.mn.us/>.

Please let me know if any USBR 41 questions. Thanks for your interest and help in developing the route.

---

## **For the general public:**

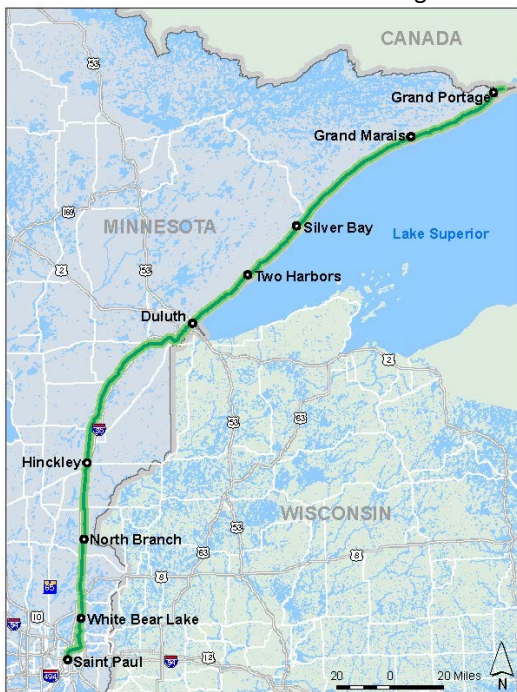
You are receiving this email because you attended a U. S. Bicycle Route 41 (USBR 41) open house in June or August and noted that you were interested in receiving project updates.

USBR 41 is a bicycle route that connects St. Paul to Grand Portage State Park, using existing roads and trails.

## **PROJECT UPDATE**

**MnDOT and its many partners have made much progress in planning and implementing USBR 41.** Here's a summary:

- **Public Engagement.** Completed second round of public engagement in August. Engagement was both online and in person at open houses (Grand Marais, Duluth, Pine City, White Bear Lake). People received a project update and provided input by:
  - Reviewing/commenting on the final route alignment. Based on input during public engagement and with road and trail authorities when soliciting route support, MnDOT made additional route revisions. Approximately 47% of USBR 41 is on trails, including a short segment of the Gateway State Trail and the complete Willard Munger and Gitchee Gami State Trails. It also includes the regional Bruce Vento, Hardwood Creek and Sunrise Prairie Trails, as well as various local trail segments.
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- **Bicycle Route Planning Guide.** MnDOT is developing a bicycle route planning guide. The guide will outline steps for MnDOT staff and others to consistently and effectively develop future state and U.S. bicycle routes.

**An easy way to stay abreast of USBR 41 in the future, as well as other bicycling projects, is to subscribe to updates (email or text).** You can subscribe by selecting email updates in the “connect with us” box on MnDOT’s main web page: <http://www.dot.state.mn.us/>.

Please let me know if any USBR 41 questions. Thanks for your interest in the project.

## Sample Target Audiences

It is important to gather input from a wide variety of partners. The target audiences for the USBR 41 project are listed below, and have been divided into three categories: 1) decision-makers; 2) project partners; and 3) community members.

### Decision-Makers

- Road and trail authorities
  - Counties along potential route (engineer, public works director, planner, parks and recreation director, and/or pedestrian and bicycle coordinator)
  - Cities along potential route (engineer, etc.)
  - Townships along potential route (engineer, etc.)
  - Tribal governments along potential route
  - MnDOT District planners along route
- Elected officials
  - City Councils
  - County Commissioners

### Project Partners

- Regional Development Commission planners
  - State trails coordinator
  - National and state parks
  - National and state forests
  - MnDOT Tribal Liaison
  - MnDOT State Nonmotorized Transportation Advisory Committee (SNTC)
  - Public Health and Active Living Groups
  - U.S. Fish and Wildlife
  - U.S. Forest Service
  - Bicycle advocacy and promotion:
    - Adventure Cycling/U.S. Bicycle Route System
    - Bicycle Alliance of Minnesota
    - Minnesota Trails/Jan Laser
    - Parks and Trails Council of Minnesota
  - Bicycle Clubs
  - Explore Minnesota Tourism/Pedal Minnesota
  - Chambers of Commerce and Visitors Bureaus
  - Environmental organizations
  - Historical Societies
  - Railroads
  - Nearby state or country (Canada) planners/pedestrian and bicycle coordinator
-

- Adjacent landowners/residents/area citizens
- Resorts/businesses
- Scenic Byways
- Trail associations
- Tour operators

#### Community Members

- Businesses along or near the route
  - Bicyclists
  - Other target demographics (e.g. children, women, low-income populations, etc.)
  - Homeowners
-

## Appendix C: USBR 41 Route Criteria

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This appendix lists criteria used to select the USBR 41 route.

### Primary Criteria\*

#### 1) Roadway/Trail Suitability

**Facilities exist that meet recommended design guidelines or Rural Bicycle Level of Service/Stress thresholds:**

- a) Facilities meet accepted state or local design and operations guidelines.
  - i) Identify recommended and minimum facility dimensions for shoulder width, bike lane width, etc.
  - ii) Not all segments may meet guidelines, but represent best-choice overall (identify circumstances: i.e. low volume or low speed roads or high volume roads for short distances).
  - iii) Trails meet recommended design guidelines.
- b) Traffic (volume, speed, visibility). Considers appropriate combinations of low daily motorized traffic volume, low truck traffic, lane widths, presence and width of paved shoulders, lane striping, adequate sight distance/reaction time, and traffic speed (provide local examples for reference).
- c) Crossings. Consider crossing frequency and complexity, including both route directions.

#### 2) Local interest/Connections

- a) Follows/connects to points of interest/high tourism potential (scenic, historic, cultural, and recreational value).
- b) Local connections. Facility is part of a local or state network, connects to a bicycle network, part of a local or state bicycle plan, or enhances network.
- c) Popularity. Alignment receives much support during public outreach or is currently considered popular based on existing use (Strava heat map, public comments, etc.).

3) **Local services and amenities at appropriate intervals.** Daily needs: food, water, overnight accommodations (no more than 40-60 miles apart, where possible). Non-daily needs: bike shops/parts, library, showers, etc.

4) **Directness.** Route is reasonably direct/intelligible (easy to follow with limited turns—both on bicycle and on maps).

5) **Continuous** (especially off-road facilities; identify desired minimum length).

6) **Multi-modal.** Connects to transit and transportation hubs. \* Will most greatly determine bicyclists' skill level/desired audience

### SECONDARY CRITERIA

1) **Bicycle friendliness.** Connects to a designated bicycle-friendly community

- a) In urban areas, suitable for utility cycling (commuting, access to shopping, schools and universities, recreation centers, etc.).
- b) Connects adjacent neighborhoods (equitably distributed/increase mode share)
- c) Connects to adjacent cities/communities

2) **Terrain.** Considers terrain difficulty (avoids extremely hilly and limited visibility winding roads, when feasible and balanced with access to services, points of interest, traffic, directness, etc.)

3) **Traffic control.**

- a) Includes traffic control devices where practical (signal, signs)
- b) Includes efforts to adjust devices to give greater priority to bicyclists.

4) **Surface.** May include short stretches of high quality and maintained unpaved roads if needed to connect highly desirable paved road sections

5) **Emergencies.** Consider routes that can be used for evacuation routes during emergencies.

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## REFERENCES

1. Adventure Cycling Association: <https://www.adventurecycling.org/routes-and-maps/us-bicycle-route-system/implementation-resources/>
  2. Met council: <http://www.metrocouncil.org/Transportation/Publications-And-Resources/RBS-AppendixB.aspx>
  3. MnDOT Statewide Bicycle System Plan: <http://www.dot.state.mn.us/bike/system-plan/index.html>
  4. Mississippi River Trail public outreach
  5. FHWA. Transportation's Role in Advancing Ladders of Opportunity: <https://www.transportation.gov/fastlane/50th-spotlight-transportation-and-opportunity>
    - a. ...good transportation doesn't just connect residents to opportunities outside their community, but attracts opportunities into their community and helps revitalize the community.
    - b. We have learned ... that when a community invests in transportation, the private sector invests in the community.
-

## Appendix D: Resolution of Support Template

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**A RESOLUTION OF (TOWNSHIP, CITY OR COUNTY) STATING ITS SUPPORT TO DEVELOP AND IMPLEMENT U.S. BICYCLE ROUTE 41.**

**WHEREAS**, bicycle tourism is a growing industry in North America, presently contributing approximately \$47 billion dollars a year nationally to the economies of communities that provide facilities for said tourism; and

**WHEREAS**, the American Association of State Highway and Transportation Officials (AASHTO) has designated a corridor connecting Saint Paul, to Grand Portage State Park, via Duluth, to be developed as United States Bike Route 41; and

**WHEREAS**, the Minnesota Department of Transportation has convened several public open houses and offered online public comment opportunities throughout the corridor to gather information and review route alternatives; and

**WHEREAS**, the Minnesota Department of Transportation in cooperation with road and trail authorities have proposed a specific route to be designated as United States Bike Route 41, a map of which is herein incorporated into this resolution by reference; and

**WHEREAS**, the proposed United States Bike Route 41 traverses through (TOWNSHIP, CITY OR COUNTY) and is expected to provide a benefit to local residents and businesses; and

**WHEREAS**, the Minnesota Department of Transportation will continue to maintain statewide mapping and information regarding United States Bike Route 41, convene meetings and facilitate resolving issues and future alignment revisions within the State,

**WHEREAS**, the (TOWNSHIP, CITY OR COUNTY) has duly considered said proposed route and determined it to be a suitable route through the (TOWNSHIP, CITY OR COUNTY) and desire that the route be formally designated so that it can be appropriately mapped and signed, thereby promoting bicycle tourism locally and throughout Minnesota along the corridor.

**NOW THEREFORE IT IS HEREBY RESOLVED** by the (TOWNSHIP, CITY OR COUNTY) hereby expresses its approval and support for the development of United States Bike Route 41 and requests that the appropriate government officials take action to officially designate the route accordingly as soon as possible.

---

## Appendix E: Designation/Authorization Documents



### Minnesota Department of Transportation

395 John Ireland Boulevard  
Saint Paul, MN 55155

September 16, 2016

AASHTO Application Review Committee  
American Association of State Highway & Transportation Officials  
444 North Capitol Street N.W., Suite 249  
Washington, DC 20001

RE: U.S. Bicycle Route 41 AASHTO Application

Dear Committee:

With this letter, the Minnesota Department of Transportation (MnDOT) is pleased to submit an application for U.S. Bicycle Route 41 (USBR 41) between the City of St. Paul and the Minnesota/Canadian international border, near the Community of Grand Portage.

Minnesota affirms that this application and associated documents comply with the current United State Bicycle Route policies and pledges that it will seek consent and approval from the *Standing Committee on Highways of the American Association of State Highway and Transportation Officials* if it proposes changes or additions to route 41.

MnDOT, the implementing agency, has worked collaboratively with regional and local agencies that have ownership or operational authority over any part of this proposed U.S. Bicycle Route as well as the general public, local communities, and others to create this bicycle route. MnDOT has on file letters and resolutions of support from road and trail authorities along the route; these documents are available for review upon request.

USBR 41 is 315 miles long. Nearly half the route is off-road on shared-use paths and trails, which is attractive to a broad bicycling audience for both transportation and recreation. In addition, the route passes through three nationally recognized bicycle-friendly cities: St. Paul, Duluth, and Grand Marais and roughly half the route is adjacent to Lake Superior, the world's largest freshwater lake.

This is Minnesota's second U.S. bicycle route. USBR 41 connects to USBR 45, the Mississippi River Trail, which is a ten-state bicycle route that originates at the Mississippi River's headwaters within Minnesota's Itasca State Park and continues through nine other states to the Gulf of Mexico. The Mississippi River is the world's fourth longest river. Through these now-joined routes, Minnesota links two of our nation's greatest scenic, cultural, and natural resources together by bicycle.

An Equal Opportunity Employer



If you need additional information, please contact Mark Gieseke, Office Director for the Office of Transportation System Management at 651-366-3770 or email [Mark.Gieseke@state.mn.us](mailto:Mark.Gieseke@state.mn.us)

Sincerely,



Charles A. Zelle  
Commissioner  
Minnesota Department of Transportation

Enclosures

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**APPLICATION FOR DESIGNATION OF A**

**U.S. BICYCLE ROUTE**

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Member State Submitting Application: Minnesota

USBR No. 41

Date: September 16, 2016

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**This is an application for (please check):**

- Establishment of a new U.S. Bicycle Route or segment
- Realignment of an existing U.S. Bicycle Route
- Deletion of a U.S. Bicycle Route or segment

Route Connects St. Paul (at jct. of existing USBR 45 - Mississippi River Trail Bikeway) and Grand Portage State Park at the US/Canada international border

(e.g., State Border, International Border, Existing US Bicycle Route, etc.)

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The following state or states are involved: Minnesota

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**Map and Route Log**

**Attachment A: Map** (PDF the map in color and attach to this form)

**Attachment B: Route Log**

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Minnesota Department of Transportation  
Bicycle Route Planning Guide

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Use the following form (or similarly formatted spreadsheet file labeled "Attachment B" and submitted with your application) for turn-by-turn details of the U.S. Bicycle Route you are proposing for designation.

<b>Starting Point of Route or Realignment</b>	<b>Miles traveled on this facility</b>	<b>Turn location and road name/ designation</b>	<b>General Direction of Travel</b>
Sibley Street Path & Samuel Morgan Regional Trail in Downtown St. Paul/USBR 45 jct	0.1	Go northwest on Sibley Street path	Northwest
Sibley Street & E Kellogg Blvd	0.2	Turn right on E Kellogg Blvd	Northeast
E Kellogg Blvd & Broadway St	< 0.1	Turn left onto Broadway St bike lane	Northwest
Broadway St & Bruce Vento Regional Trail along E Prince St	5.6	Turn right on Bruce Vento Regional Trail along north side of E Prince St	Northeast
Bruce Vento Regional Trail & Gateway State Trail	3.1	Turn right on Gateway State Trail	East
Gateway State Trail & Margaret St N	0.6	Take left-side path just before Margaret St. N; cross under Margaret St. N bridge; then turn right to loop onto Margaret St N bike lane	North
Margaret St N & 19 <sup>th</sup> Ave E	< 0.1	Turn left on 19 <sup>th</sup> Ave E	West
19 <sup>th</sup> Ave E & Lake Blvd N	0.6	Turn right on Lake Blvd N	North
Lake Blvd N & Lydia Ave E	0.8	Turn left on trail along west side of Lydia Ave E	West
Lydia Ave E & McKnight Rd N	2.6	Turn right onto McKnight Rd N	North
McKnight Rd N & South Shore Blvd	0.3	Turn left on South Shore Blvd	West
South Shore Blvd & Old White Bear Ave	0.3	Turn right on Old White Bear Ave	Northwest
Old White Bear Ave & Cottage Park Rd	2.1	Veer right at TH 61/96 & Lake Ave to continue on Mark Sather Trail	Northwest
Mark Sather Trail & Lake Ave/Hwy 96	0.4	Turn right on Lake Ave/Hwy 96	Northeast
Lake Ave/Hwy 96 & Northwest Ave	0.6	Turn left on Northwest Ave	Northwest
Northwest Ave & Buffalo St	0.2	Turn left on Buffalo St	West
Buffalo St & Hugo Rd	1.4	Turn right on Hugo Rd	North
Hugo Rd & 120 <sup>th</sup> St N	0.2	Turn left on 120 <sup>th</sup> St N	West
120 <sup>th</sup> St N & Everton Ave N	0.3	Turn right on Everton Ave N	Northwest

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Minnesota Department of Transportation  
Bicycle Route Planning Guide

Everton Ave N & 122 <sup>nd</sup> St N	0.1	Turn left on 122 <sup>nd</sup> St N	West
122 <sup>nd</sup> St N & Ethan Ave N	0.6	Veer right on Ethan Ave N	North
Ethan Ave N & Europa Trail N	0.3	Turn right onto trail on north side of Europa Trail N	Northeast
Europa Trail N & Europa Ct. N	0.2	Cross Europa Ct. N to continue on trail along east side of Europa Ct. N	North
Europa Ct. N & 132 <sup>nd</sup> St N	0.1	Turn right on trail along south side of 132 <sup>nd</sup> St N	East
132 <sup>nd</sup> St N & Fenway Blvd N	0.9	Turn left on trail along west side of Fenway Blvd N	Northeast
Fenway Blvd N & 140 <sup>th</sup> St N	0.2	Turn right on 140 <sup>th</sup> St N	East
140 <sup>th</sup> St N & Hardwood Creek Trail	10.1	Turn left on Hardwood Creek Trail at intersection of 140 <sup>th</sup> St N & Forest Blvd/TH 61	Northeast
Hardwood Creek Trail & Sunrise Prairie Trail	15.0	Continue; Hardwood Creek Trail becomes Sunrise Prairie Trail	North
Sunrise Prairie Trail & Hwy 95/Main St	< 0.1	Turn right onto concrete side path on TH 95 and cross Forest Blvd/CR 30	East
Hwy 95/Main St & Forest Blvd/Co Rd 30	0.2	Turn left onto concrete side path on east side of Forest Blvd/CR 30 and continue two blocks to Sunrise Prairie Trail at Cedar St.	North
Forest Blvd/Co Rd 30 & Cedar St	2.0	Continue across Cedar St onto Sunrise Prairie Trail	North
410 <sup>th</sup> St & Forest Blvd	9.2	Veer left off trail onto 410 <sup>th</sup> St and turn immediately right onto Forest Blvd	North
Forest Blvd & S Bremer Ave	1.4	Continue on S Bremer Ave	North
S Bremer Ave & Forest Blvd/Co Rd 30/Co Rd 61	7.3	Continue on Forest Blvd/ Co Rd 30/ Co Rd 61	North
Forest Blvd/Co Rd 30/ Co Rd 61 & 6 <sup>th</sup> St S/Co Rd 61	2.4	Continue; Forest Blvd becomes 6 <sup>th</sup> St S/ Co Rd 61	North
6 <sup>th</sup> St S/Co Rd 61 & Main St N/ Co Rd 61	2.1	Continue; 6 <sup>th</sup> St becomes Main St N/ Co Rd 61	North
Main St N/ Co Rd 61 & Co Rd 61	8.2	Continue on Co Rd 61	North
Co Rd 61 & TH 23 & I-35 Bridge	0.1	Turn left to cross I-35 bridge	West

Minnesota Department of Transportation  
Bicycle Route Planning Guide

TH 23 & I-35 Bridge & Co Rd 61	3.1	Turn right on Co Rd 61	Northeast
Co Rd 61 & 2 <sup>nd</sup> St NW	< 0.1	Turn left on 2 <sup>nd</sup> St NW/Co Rd 18	West
2 <sup>nd</sup> St NW/ Co Rd 18 & Willard Munger State Trail	32.2	Turn right onto Willard Munger State Trail	North
Willard Munger State Trail & Moose Lake city trail	0.1	Continue as Willard Munger Trail becomes Moose Lake city trail	Northeast
Moose Lake city trail & Industrial Rd	0.1	Turn right on Industrial Rd	Northeast
Industrial Rd & Folz Blvd/Hwy 27	< 0.1	Turn right on Folz Blvd/Hwy 27	East
Folz Blvd/Hwy 27 & Industrial Rd	0.2	Turn left on Industrial Rd	Northeast
Industrial Rd & 7 <sup>th</sup> St	< 0.1	Turn right on 7 <sup>th</sup> St	Southeast
7 <sup>th</sup> St & Arrowhead La/ Co Rd 61	0.1	Turn left on Arrowhead La/ Co Rd 61	Northeast
Arrowhead La & 8 <sup>th</sup> St	< 0.1	Turn left on 8 <sup>th</sup> St	Northwest
8 <sup>th</sup> St & Willard Munger State Trail	37.3	Turn right onto Willard Munger State Trail	Northeast
Willard Munger State Trail & S 75 <sup>th</sup> Ave W	< 0.1	Turn left on S 75 <sup>th</sup> Ave W	Northwest
S 75 <sup>th</sup> Ave W & Grand Ave	0.8	Turn right on Grand Ave	Northeast
Grand Ave & Raleigh St	0.6	Turn right on Raleigh St	East
Raleigh St & Central Ave	0.4	Turn left on Central Ave	North
Central Ave & Bristol St	0.2	Turn right on Bristol St	East
Bristol St & Colalillo Dr	0.6	Veer left on Bristol St, which becomes Colalillo Dr	Northeast
Colalillo Dr & W 1 <sup>st</sup> St	0.5	Continue on W 1 <sup>st</sup> St	Northeast
W 1 <sup>st</sup> St & W Superior St	0.3	Continue as W 1 <sup>st</sup> St becomes W Superior St	Northeast
W Superior St & S 38 <sup>th</sup> Ave W	< 0.1	Continue right as W Superior St becomes S 38 <sup>th</sup> Ave W	Southeast
S 38 <sup>th</sup> Ave W & W Michigan St	0.3	Turn left on W Michigan St	Northeast
W Michigan St & W Superior St	0.2	Continue as W Michigan St becomes W Superior St	Northeast
W Superior St & Carlton St	4.8	Continue onto Lake Walk Trail along southeast side of W Superior St	Northeast



Minnesota Department of Transportation  
Bicycle Route Planning Guide

Lake Walk Trail & E Water St	0.2	Exit trail to continue on E Water St	Northeast
E Water St & S 23 <sup>rd</sup> Ave E	4.3	Turn left onto Lake Walk Trail	North
Hwy 61/Congdon Blvd & Brighton Beach Rd	0.8	Veer right onto Brighton Beach Rd	Northeast
Brighton Beach Rd & Congdon Blvd	4.1	Turn right onto Congdon Blvd	Northeast
Congdon Blvd & N Shore Dr	7.7	Continue as Congdon Blvd becomes N Shore Dr	Northeast
N Shore Dr & Scenic Dr	7.3	Continue as N Shore Drive becomes Scenic Dr	Northeast
Scenic Dr & Hwy 61	0.5	Turn right on Hwy 61	Northeast
Hwy 61 & 7 <sup>th</sup> Ave/ Hwy 61	1.1	Continue on 7 <sup>th</sup> Ave/ Hwy 61	East
7 <sup>th</sup> Ave/ Hwy 61 & Hwy 61	4.2	Continue on Hwy 61	Northeast
Hwy 61 & Town Rd 614/ Cliff Point Road/Silver Cliff Rd/Old Hwy 61	0.2	Turn right on Cliff Point Road and immediately to Town Rd 614/Silver Cliff Rd/Old Hwy 61	Northeast
Town Rd 614/Silver Cliff Rd/Old Hwy 61 & Gitchi-Gami State Trail	0.6	Continue onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Hwy 61	7.7	Turn right onto Hwy 61	Northeast
Hwy 61 & Co Rd 1	< 0.1	Turn right on Co Rd 1	Southwest
Co Rd 1 & Gitchi-Gami State Trail	10.2	Turn left onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Pine Bay Loop	0.4	Continue onto bike lane on Pine Bay Loop	Northeast
Pine Bay Loop & Gitchi-Gami State Trail	1.1	Continue onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Algoma Way	0.2	Continue onto bike lane on Algoma Way	Northeast
Algoma Way & Gitchi-Gami State Trail	1.1	Continue onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Co Rd 4/Lax Lake Rd & Hwy 61	0.2	As trail ends turn left onto Hwy 61	Northeast
Hwy 61 & West Rd	0.6	Turn left on West Rd	Northeast
West Rd & Gitchi-Gami State Trail	2.3	Turn left onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Outer Dr/Co Rd 5	0.8	Turn Right onto Outer Dr/Co Rd 5	Northeast
Outer Dr/Co Rd 5 & Hwy 61	24.9	Turn left on Hwy 61	Northeast

Minnesota Department of Transportation  
Bicycle Route Planning Guide

Hwy 61 & Gitchi-Gami State Trail (approximately 1,170' past intersection with Buckman Ln and Co Rd 32)	2.8	Turn left approximately 450' past parking lot on northwest side of Hwy 61 to enter Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Co Rd 24/Tofte Park Rd	0.6	Cross Hwy 61 to continue on Co Rd 24/Tofte Park Rd	Northeast
Co Rd 24/Tofte Park Rd & Hwy 61	0.6	Turn right on Hwy 61	Northeast
Hwy 61 & Gitchi-Gami State Trail (just past mile post 83)	4.7	Veer right onto Gitchi-Gami State Trail	Northeast
Gitchi-Gami State Trail & Rollins Creek Rd	1.0	Continue onto Rollins Creek Rd	Northeast
Rollins Creek Rd & Gitchi-Gami State Trail at Co Rd 34	1.6	Turn left onto Gitchi-Gami State Trail	North
Gitchi-Gami State Trail & Co Rd 5	< 0.1	Turn right on Co Rd 5	Southeast
Co Rd 5 & Hwy 61	17.4	Turn left on Hwy 61	Northeast
Hwy 61 & Fall River Rd/Co Rd 13	1.8	Veer right onto Gitchi-Gami State Trail	Northeast
End of Gitchi-Gami State Trail 250' east of Hwy 61/N Shore Scenic Dr & W Wisconsin St intersection	0.2	Exit trail to continue on bike lane on W Wisconsin St	East
W Wisconsin St & N Broadway	0.1	Turn left onto N Broadway bike lane	North
N Broadway & Hwy 61	33.8	Turn right on Hwy 61	Northeast
Hwy 61 & Casino Rd	< 0.1	Turn right on Casino Rd	East
Casino Rd & Casino Dr & Bay Estates Dr	0.4	Continue onto city trail on east side of Casino Dr	Northeast
Casino Dr & Marina Rd	0.2	Continue on city trail on north side of Marina Rd	Northeast
Marina Rd & entrance to mobile home park	0.2	Veer left to continue on city trail	Northeast
City trail & Mile Creek Rd	0.5	Veer right and cross Mile Creek Rd to continue on city trail	Northeast
Mile Creek Rd & Store Rd	0.7	Turn left onto Store Rd	Northwest
Store Rd & Hwy 61	5.0	Turn right on Hwy 61	Northeast
Finish at Grand Portage State Park Visitor Center before US/Canada Border		Visitor Center is on north side of Hwy 61	

Minnesota Department of Transportation  
Bicycle Route Planning Guide

<b>Terminus:</b>	<b>Total Mileage:</b>  <b>314.7</b>		
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**By signing below, the applicant attests to the following statements:**

The state affirms that this application complies with the current *Purpose and Policy in Establishment and Extending United States Bicycle Routes*.

The State agrees and pledges its good faith that it will not erect, remove, or significantly alter any U.S. Bicycle Route, including markers and/or maps, without the authorization, consent, or approval of the *Standing Committee on Highways of the American Association of State Highway and Transportation Officials*, notwithstanding the fact that the changes proposed are entirely within this State.

The state affirms concurrence from all regional and local agencies that have ownership or operational authority over any part of the proposed routing of the U.S. Bicycle Route within this state.

\_\_\_\_\_  
**Member State**

\_\_\_\_\_  
**Signature of State DOT Chief Executive  
Officer or other authorized official**

\_\_\_\_\_  
**Date**

*(A letter from your Member State Chief Executive Officer with a signature is sufficient for the completion of this application, if the agency chooses not to include the signature on this form.)*

**Member State contact person:**

Name: Mark Gieseke

Title: Director, Office of Transportation System Management

Agency: Minnesota Department of Transportation

Address: 395 John Ireland Blvd; MS 440

City / State / ZIP: St. Paul, MN 55155

Minnesota Department of Transportation  
Bicycle Route Planning Guide

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Telephone: 651-366-3770

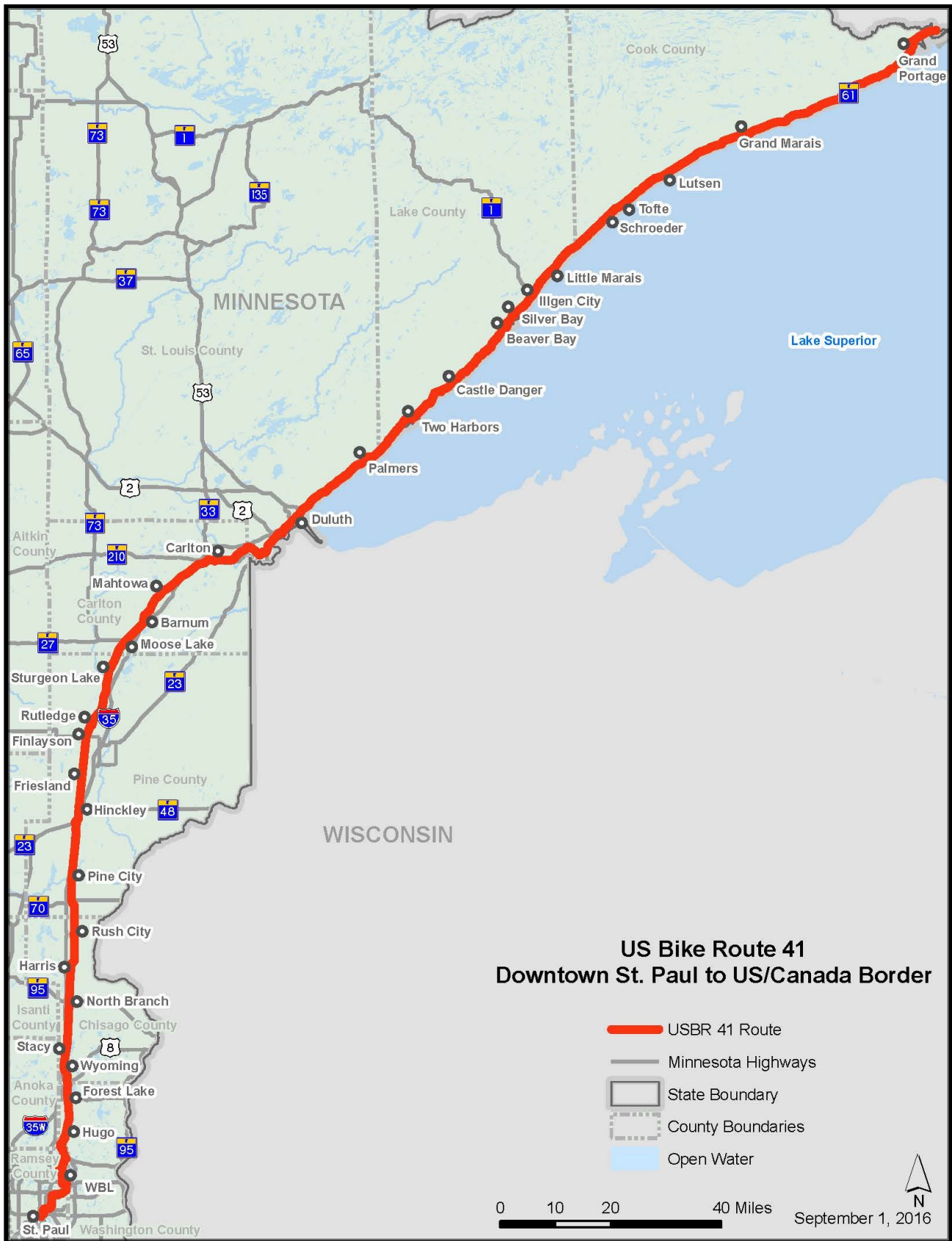
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FAX: 651-234-7960

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E-Mail: [Mark.Gieseke@state.mn.us](mailto:Mark.Gieseke@state.mn.us)

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USBR 41 designation application map

## Appendix G: Route Signs

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Creating final route maps and installing signs along a route should not occur until the route has been designated at the national level or approved at the state level. Until the route alignment is final, planning for or installing signs prior to designation may result in significant and costly sign plan changes. Physically signing a designated route is not required. Signing routes must proceed with the support and approval of the jurisdiction that owns the designated roadway or trail segment; jurisdictional authorities ultimately control whether or not signs can be installed on their facilities. Benefits to signing designated routes include providing easier navigation for bicyclists, alerting motorists they may encounter bicyclists on the route, and signs may assist in overall route promotion. If routes are proposed to be signed, consider and discuss frequency, installation method, and maintenance with partners. For best success, address the potential for signs during the early communication and coordination and public engagement steps (see Steps 2 and 3). Depending who fabricates and installs signs, work may require agreements and permits, which require additional coordination and time.

As with motorized transportation and recreation routes, signs are desirable for navigation ease and a priority on route segments where there are many turns and it is easy for bicyclists to lose their way. Signs are most effective when fully installed along a route. If not able to fully install signs, seek to install in long stretches or distinct, logical segments, rather than sporadically. Developing sign installation plans often calls for collaboration amongst jurisdictions. For example, signing the route through an entire county likely includes coordination with the cities within the county.

If intending to install signs, develop a comprehensive document to guide the work and schedule. MnDOT installed signs along USBR 45, the Mississippi River Trail. MnDOT has sample sign plans, agreements, and pertinent documents on file.

### Guidance

The Manual on Uniform Traffic Control Devices ([MUTCD](#)) outlines sign requirements and guidance for how to sign USBRs and bicycle routes in general. The [NCHRP 20-07 Task 350: U.S. Bicycle Route Signing Final Report](#) provides additional guidance for signing USBRs. State bicycle routes should be signed in the same manner as USBRs for consistency across the state, although state route marker signs are different than USBRS signs.



State Bicycle Route sign and US Bicycle Route Sign

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## Appendix G: Route Promotion

Once a route is officially designated, at a minimum it should be broadly mapped and presented on statewide materials (state bicycle map, state plans, etc.). In addition, make route documents and information available to those interested in including the route in regional, county, and local materials and to bicycle tour operators. Broad promotion will help communicate a route's existence to the public. Promoting a designated bike route may provide benefits to regional and local economies. For more information and resources to promote routes, see the [Mississippi River Trail Marketing Toolbox](#), Adventure Cycling Association's [promotion checklist](#), and MnDOT's report, [Assessing the Economic Impact and Health Effects of Bicycling in Minnesota](#).

MnDOT hosts [websites for its bicycle routes](#). On the websites, people can find general route information, maps, some local attractions and tourist information, and an opportunity for the public and road and trail authorities to submit comments to MnDOT with information that affects the route or to request information.

### Mississippi River Trail Bikeway Marketing Toolbox Contents

- MRT Bikeway Vision & Setting
- Why Market
- The MRT Product
- The Target Audience
- Marketing Strategies
- Marketing Partners
- Supporting Information – samples, templates, and checklists
  - Press release
  - Ride itinerary
  - Ride ideas
  - Ride event planning guide
  - Social media plan
  - Bicycling and tourism websites, contacts and organizations

