



Pennington County Bike & Trails Plan

A comprehensive trails plan for future growth.

Pennington County

February, 2020

Acknowledgements

The following key people/entities participated in the trails planning efforts for this bike and trails plan. Their creativity, energy, and commitment were critical to the success of this effort.

A cross-section of the population was involved in the creation of this plan by phone, plan reference, meeting or other engagement and are not listed below. Attendance at monthly Bike TRF meetings in order to update on plan/mapping progress also occurred. The Pennington County Bike and Trails Plan was displayed as part of the Community Expo in Thief River Falls where a survey was passed out to attain information from the public about trails and biking. Once MnDOT’s approval of this plan is attained, the plan will be brought to the Pennington County Board for approval.

Bike TRF

Organization with multiple county/local/elected participants

Andy Mueller

Bike TRF

Glen Kajewski

Bike TRF

Mark Borseth

Thief River Falls

Kjelsy Stueber

Director at Sanford Wellness Center - TRF

Cheryl Lee

Cycling advocate – TRF Resident

Laura Stengrim

Visit Thief River Falls

Meg Kolden

Community Education Director – TRF School District

Fran Tougas

SHIP Partnership – TRF Resident

Jake Rantanen

Vice President – Northern State Bank

Mike Flaagan

Pennington County Engineer

Ashley Nerhus

Chamber of Commerce Executive Director / Extension

Contents

Acknowledgements	2
Introduction to Trails Planning.....	4
The Eight Trail Types.....	4
Navigating this Plan	5
The Purpose	6
The Intent.....	6
The Vision.....	6
SMART Goals.....	6
Pennington County.....	7
Pennington County Destinations.....	8
Introduction to Trails.....	12

Bike Trail Programs	13
Bike Program Recommendations.....	13
Walking, Cross Country Skiing and Multi-Use Trail Programs.....	26
Walking, Cross Country Skiing and Multi-Use Trail Program Recommendations	26
Snowmobile Trail Programs	28
Snowmobile Trail Program Recommendations.....	28
ATV Trail Programs.....	31
ATV Trail Program Recommendations	31
Scenic Byway Programs.....	33
Scenic Byway	33
Recommendations	33
Equestrian Trail Programs	35
Equestrian Trail Recommendations	35
Water Trail Programs	36
Water Trail Recommendations	37
Introduction to Infrastructure.....	39
Table 1. Infrastructure Recommendation List	40
IMPLEMENTATION.....	45



Introduction to Trails Planning

THE EIGHT TRAIL TYPES

Trails are defined as established paths or routes that inter-connect destinations. In addition to improving community health/quality of life, established trail systems also aid in local economic development, recreation and transportation. The trail system in Pennington County, Minnesota is not limited to a particular mode of transportation, and includes the following:

Bicycle Trails

Paved and unpaved trails specifically for the use of bicycles.

Walking/Multi-Use Trails

Trails that are either specifically for pedestrian use, or trails that can be shared by bicycle and other modes of transportation

Snowmobile Trails

Winter season trails specifically for the use of snowmobiles.

All-Terrain Vehicle Trails (ATVs)

Trails that are for the use of ATVs. Depending on the trail, can be multi-use for fat tire and mountain biking.

Cross Country Skiing Trails

Winter season trail that has been laid out, constructed and maintained specifically for cross-country skiing.

Scenic Byways

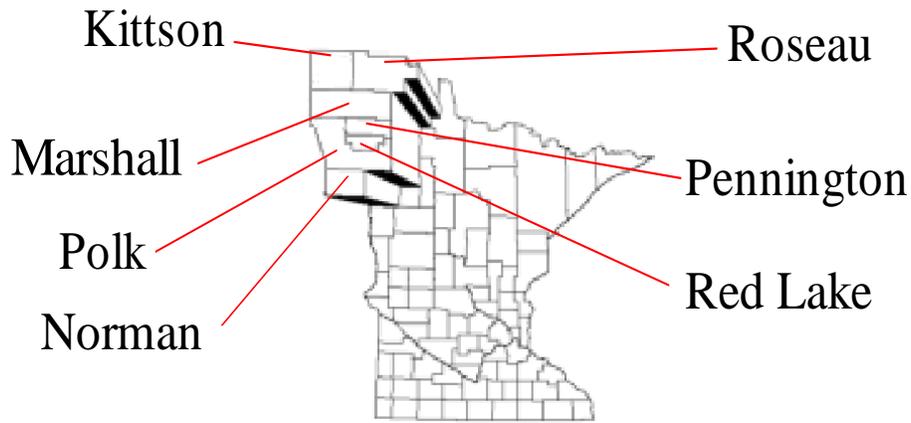
A trail recognized for one or more intrinsic qualities: archeological, cultural, historic, natural, recreational and scenic.

Equestrian Trails

Paths, trails or other thoroughfares that are used by people riding on horses.

Water Trails

Trails and routes on navigable waterways such as rivers, lakes, canals and coastlines for recreational use.



NAVIGATING THIS PLAN

Below is a roadmap for navigating the way through this plan. Use it to find all the information you need for the promotion of active trails planning for Pennington County.

Programs

Trails planning often requires fun and engaging programs to introduce and encourage continuous trail usage. Turn to this section for recommended events, activities, and strategies that will assist in the development and maintenance of local trails.

Infrastructure

There are numerous types of infrastructure developed to make walking, cycling and other forms of trail transportation convenient, pleasant and safe.

How to get involved

The more people involved with a local bike and trails planning process, the more successful it will be! Use this section to find out how you can be a part of this important initiative.

Appendices

There is more information available than could fit in this plan. For additional resources, turn to this section

The Purpose

The purpose of this project is to provide a county-wide, long-term vision for the funding and sustainment of a varied, multi-purpose trail system for Pennington County. When completed, the Pennington County Bike & Trails Plan will be a high-level view into future development. Enhancement of cost-effectiveness, available resources, potential projects and local economic development are all planned side-effects of the completed plan. In addition, opportunities to apply for and secure future projects will be increased due to the completed pre-planning.

The Intent

The intent of the Pennington County Bike & Trails Plan is to identify current and future trail corridors within the county that link destinations.

It will focus on the identification and funding of desired travel corridors throughout the area, as well as the enhancement of safety, quality of life, alternative transportation and access for all individuals.

The Vision

The vision of the Pennington County Bike & Trails Plan is a comprehensive and safe system of trails that promotes transportation between destinations, promotes health, encourages outdoor activities and boosts economic development.

SMART Goals

This plan will offer recommendations for programs and infrastructure that are consistent with the concept of SMART Goals, which provide a framework for an effective and sustainable SRTS plan. SMART Goals for this plan will be:

Specific: the recommendations will communicate what needs to be accomplished and by whom.

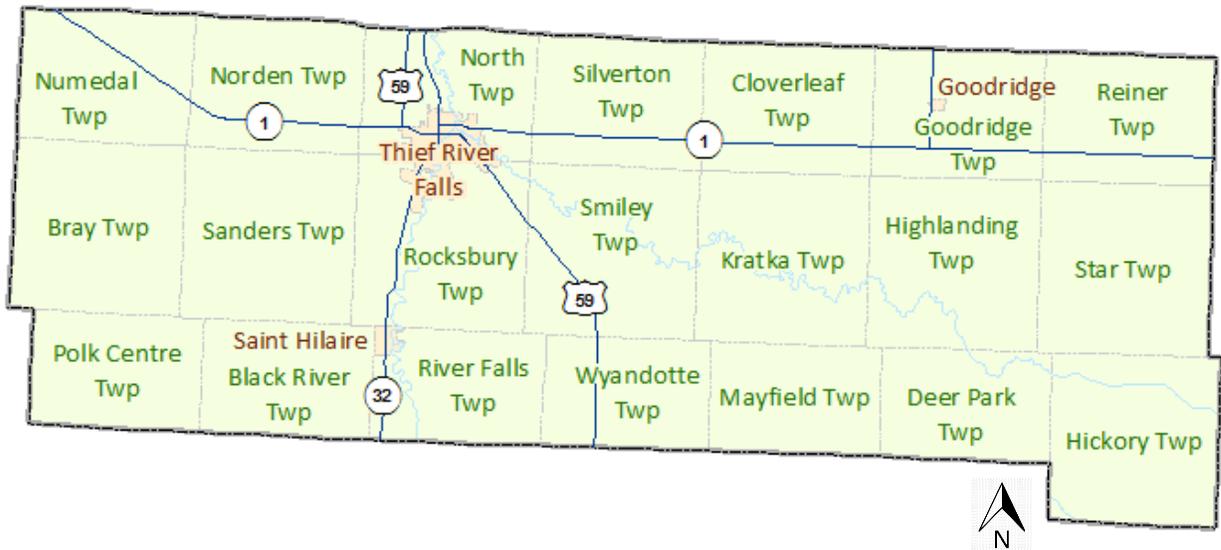
Measurable: the outcomes from the recommendations will be quantifiable.

Attainable: the recommendations will be ambitious but reasonable.

Relevant: the recommendations will be responsive to the needs of the school and community.

Timely: the recommendations will have a specific timeline.

1. Establishment and maintenance of safe, direct and convenient trail and road systems across Pennington County
2. Connection of local trail systems with other county, regional and state-wide efforts
3. Promote usage of Pennington County established trail systems and alternative modes of transportation
4. To the maximum extent possible, trails should be developed to accommodate the access needs of all users.
5. Local trails will be developed in a sustainable manner, reducing long-term cost of operations and maintenance where possible.
6. Lessened impacts to natural resources and the environment



Pennington County

Pennington County is found in Minnesota, near the northwest corner. This county has an area of 622 square miles, or 398,080 acres. Dimensions are approximately fifteen miles in length and forty-three miles in width. It is bordered to the east by Beltrami and Clearwater Counties. There are three cities residing in Pennington County: Thief River Falls, Goodridge and St. Hilaire.

The topography of Pennington County can be aptly described as flat, with slopes of less than two percent. This is due to the presence of Lake Agassiz and glacial activity in the region. Two major rivers are found within its boundaries: The Thief River and the Red Lake River. Other river systems include the Black River and the Clearwater River.

The geology of Pennington County was influenced by glaciation that occurred many years ago. This glacier blocked all North flowing rivers in the late

Wisconsinan. Glacial Lake Agassiz was formed because of this large glacier. In turn, glacial Lake Agassiz caused three distinct regions to form in Pennington County: the glacial lake plain, the beach ridge area, and the Red Lake area. The dominant use of land within the county is for agriculture. Crop land and water are both valuable resources for Pennington County.

Three incorporated cities found within Pennington County include Thief River Falls (8,804 pop), Goodridge (130 pop) and St. Hilaire (270 pop). Other unincorporated cities include Erie, Hazel, High Landing and Mavie. The estimated population of Pennington County in 2017 is 14,238. Due to local businesses and economic opportunities, the county sees a population swell related to employment, and is primarily centered around the Thief River Falls area.

County/City	Route System	2017 Centerline Mileage	2017 Lane Mileage
Pennington County - Nonmunicipal	U.S. Trunk Highway	14.38	28.76
Pennington County - Nonmunicipal	Minnesota Trunk Highway	53.68	107.36
Pennington County - Nonmunicipal	County State-Aid Highway	256.33	512.66
Pennington County - Nonmunicipal	County Road	371.28	742.56
Pennington County - Nonmunicipal	Township Road	336.35	672.70
Goodridge	Minnesota Trunk Highway	0.21	0.43
Goodridge	County State-Aid Highway	0.79	1.58
Goodridge	Municipal Street	2.21	4.42
Saint Hilaire	Minnesota Trunk Highway	0.99	1.97
Saint Hilaire	County Road	0.33	0.65
Saint Hilaire	Municipal Street	4.33	8.66
Thief River Falls	U.S. Trunk Highway	2.46	6.20
Thief River Falls	Minnesota Trunk Highway	5.50	11.00
Thief River Falls	County State-Aid Highway	1.96	3.93
Thief River Falls	Municipal State-Aid Street	16.14	32.28
Thief River Falls	County Road	1.01	2.02
Thief River Falls	Township Road	0.46	0.92
Thief River Falls	Municipal Street	45.94	91.88
Total		1114.35	2229.98

The local transportation system is an integral part of the trails plan, as most of the trails below either integrate directly on or near existing roadways. The chart found above details roadway miles in Pennington County, subdivided into US Trunk Highways, Minnesota Trunk Highways, County State-Aid Highways, County Roads, Township Roads and Municipal Streets.

Pennington County has heavy daily roadway traffic counts which can be partially attributed to employment at Digi-Key and Textron, several schools and health facilities as well as other resources located within Thief River Falls. Thief River Falls is a major hub for Northwest Minnesota. Maps and counts completed by the Minnesota Department of Transportation depict traffic volume on roadways. Maps can be viewed at <http://www.dot.state.mn.us/traffic/data/maps-county-alpha.html#57> and incorporate multiple years of traffic counts.

High levels of traffic can deter bicyclists and pedestrians, as well as can cause an increased risk for crashes. The highest daily traffic count roadways were around the Thief River Falls area, as well as on US Highway 59, Minnesota Highways 32 and 1, County State Aid Highway 3 and 310th Ave. NE.

Multiple traffic studies and counts reflect these findings, with a 2016 bicycle map from MnDOT at <https://www.dot.state.mn.us/maps/gdma/data/mapfinder/countyHTMLs/pennington.html> listing mapped vehicle counts on the major roadways in Pennington County and showing similar results. By far, the heaviest vehicle counts in Pennington County are in Thief River Falls, as well as the roadways that directly connect to it.

Pennington County Destinations

The following are destinations that residents and visitors may use a trail to go visit. This list excludes privately owned commercial destinations such as restaurants or shopping, as these localities can be susceptible to ownership or use transitions. From the listings below, it was determined that Thief River Falls was a high priority trails destination, St. Hilaire and Goodridge were moderate trails destinations and Pennington County locations not included as part of a trail were ranked as low.

Parks:

Goodridge:

- City Park & Lions Park
- AC Tvedt Park

St. Hilaire:

- St. Hilaire City Park
- Northwest Grain

Thief River Falls:

- Alan-A-Dale Park
- Annie Street Park
- Boy Scout Park
- Centennial Park
- Elks Park
- Engelstad Park
- Finsbury Park
- Floyd B. Olson Park
- LB Hartz Park
- LaFave Park
- Lions Park
- Millyard Park
- Multi-Events Complex (The MEC)
- Northrup Park
- Oakland Park
- Red Robe Park
- Thief River Falls Tourist Park
- Greenwood Recreation Area

Existing trails:

Riverwalk – pedestrian and bike trail – Thief River Falls
Snowmobile Trails – Thief River Falls, St. Hilaire, Goodridge and Pennington County
Pine to Prairie International Birding Trail
Red River / Pembina Oxcart Trail
Red Lake River State Water Trail

National Register Properties of MN Historical Society & other historic sites:

Thief River Falls:

- Minneapolis St. Paul & Sault Ste. Marie Depot (with Steam Locomotive No. 1024)
- Carnegie Public Library Building
- Peder Engelstad Pioneer Village

Goodridge:

- Historical buildings preserved/renovated in the downtown area include: Country Store Museum, Pioneer Living History Center, Log Barn/House, School Museum and Train Depot.

Educational facilities and libraries:

Thief River Falls:

- Challenger Elementary School
- Franklin Middle School
- Lincoln High School
- St. Bernard's Catholic School (Preschool to 5th Grade)

- St. John Lutheran School
- Northland Community and Technical College
- Thief River Falls Public Library

Goodridge:

- Goodridge Public School (Preschool, elementary and high school)

Cities: (Local Businesses Included)

Thief River Falls:

- Pennington County Seat
- Digi-Key
- Textron Specialized Vehicles
- Sanford Health
- Forsberg's
- Airport
- City Hall
- Seven Clans Casino
- Walmart
- Hugo's
- L & M Fleet Supply
- Northern Woodwork
- Northern Pride

St. Hilaire

- Scoular
- City Hall
- Northwest Grain
- Kruse In
- CHS Northland Grain
- B & B Auto Recycling
- St. Hilaire Supply Company

Goodridge

- City Hall
- Cenex

Wildlife Management Areas (WMAs)

Higinbotham WMA – 3.5 Miles West of St. Hilaire on County Road 55

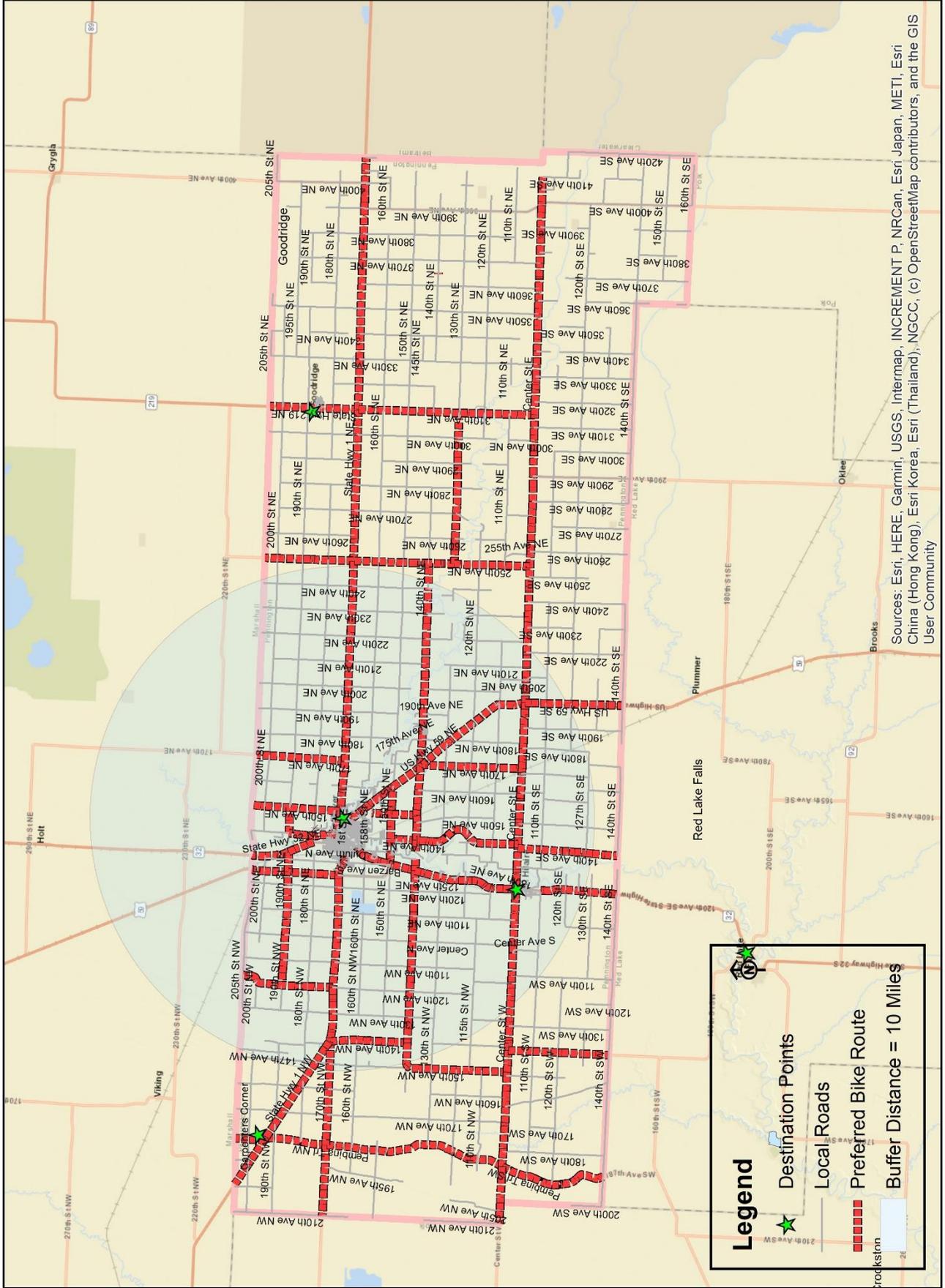
Jacksnipe WMA – 4 miles SE of Thief River Falls on US Highway 59

Oriniak WMA – 7.5 Miles SE of Thief River Falls on US Highway 59, 4 Miles East on CSAH 3 then south

Pembina WMA – 2,251-acre WMA in Pennington, Red Lake and Polk Counties

Renier WMA – 9 miles east of Goodridge near County Road 28.

Destination Points from Thief River Falls, Pennington County



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Introduction to Trails

Imagine stepping out of your front door and being close to a trail that leads throughout Pennington County. Communities, local businesses, parks and other localities are interconnected and at your fingertips as you travel outdoors. A connected system that allows urban and rural views, whether it be by foot, bike or canoe.

Trails are a highly desired feature for residents, visitors and businesses. This plan is envisioned to be an addition to the recreation and transportation planning systems of the county. Trails are a vital element of livability, becoming even more important as energy and healthcare costs continue to increase.

Health – trails create healthy transportation and recreation opportunities by providing people of every age with attractive, safe, accessible and feasible places to cycle, walk, etc. The incorporation of exercise into an everyday routine is made easier by connecting people with places that they would need or like to go to.

Transportation – established trails also serve as viable transportation corridors. This can be a crucial element to a multi-modal system of travel. Livability is enhanced by a community seeking out ways to avoid congested streets utilizing various modes of travel.

Environment – trails also can provide an important link to the natural environment. Parks and other outdoor areas are often connected by trails, and the greenspace is an important part of what attracts residents to a community

Economy – the presence of trails within a community can help define an area by being an amenity. People will choose to move to an area, work and raise a family by what amenities are offered by an area.

Bike Trail Programs

The development of bicycle trails within Pennington County is aided by the Bike Thief River Falls (Bike TRF) group. Bike TRF, a chapter of the Bicycle Alliance of Minnesota, is a working group encouraging active living and community connections through bicycle access, education, and infrastructure. Bike Thief River Falls a group of stakeholders and individuals working together to make Thief River Falls and the surrounding area more bike friendly and welcome all to participate.

Bicyclists can tour the Thief River Falls area by road or trail year-round.

- The gravel roads on the ridges west of Thief River Falls offer sight-seeing and wildlife viewing opportunities.
- The paved Greenwood Trails and the River Walk can be enjoyed year-round.
- Some light and easy off-road riding can be found on the grassy Northland and Greenwood Trails.
- Fat bike riding opportunities can be found in the winter on the Red Lake and Thief Rivers.

There are approximately 4.5 miles of constructed trails in Thief River Falls, described below through Bike TRF. This is in addition to the paved portions of the River Walk as well as through Red Robe Park and bike lanes constructed on local roadways.

Constructed Trails - 2012 - 2018 (approximate distances)		
Trail Name	City	Distance
Greenwood Trail	Thief River Falls	1 Mile
Challenger SRTS Trail	Thief River Falls	3600 ft (.7 miles)
Mark Boulevard	Thief River Falls	1220 ft (.23 mile)
1st Street West	Thief River Falls	1750 ft (.33 mile)
8th St.	Thief River Falls	1 mile
Greenwood St. Realignment	Thief River Falls	1000 ft (.2 mile)
Greenwood St. East of Highway 59	Thief River Falls	2150 ft (.4 mile)
Nelson Drive Trail	Thief River Falls	990 ft (.2 mile)
Southtown Trail	Thief River Falls	160 ft (.03 mile)

Bike Lanes (2017 - 2018)		
Street Name	City	Distance
Greenwood Street	Thief River Falls	8750 ft (1.66 miles)
Spruce Avenue	Thief River Falls	2660 ft (.5 mile)
Oakland Park Road	Thief River Falls	6370 ft (1.21 miles)
Columbia Avenue	Thief River Falls	4778 ft (.9 mile)

Bike Program Recommendations

Pennington County has a newly formed group (Bike TRF) that is actively striving to increase local and county bicycling opportunities. Multi-use trail systems currently in place allow bicycle traffic and serve as a starting point for future enhancements.

Recommended Programs List:

- Bike TRF
- Safe Routes to School Participation
- Participation in SHIP Program initiatives (State Health Improvement Program)
- Private/public agency support
- Walk! Bike! Fun! Curriculum and Ambassador trainings hosted
- Able to utilize regional bike fleet
- Local upgrades of infrastructure that include bike-friendly trails and traffic
- Willingness to provide pedestrian and bicycling trail upgrades when feasible.
- Bike rental opportunities available in Thief River Falls.

There are multiple ways for bicycles and roadways to coexist. The following is taken from the Bikeway Selection Guide, written by the US Department of Transportation. It is important to remember that not all the options below may work for Pennington County. Existing road design, available space, feasibility, public preference, existing usage, current economics, cost and plans in place will all assist in determining what will work best.



2-Lane Roadway (Base Condition)

Bicyclists: The lack of separation from traffic moving at 45-50mph limits is an unforgiving design that decreases comfort and safety during passing events and while operating in darkness. Fewer driveways and intersections reduce conflict points, but locations with limited sight lines increase crash risk. Interested but concerned bicyclists will not feel comfortable operating on the roadway, feeling the highest Level of Traffic Stress. Confident cyclists are also moderately uncomfortable due to the 45mph operating speed and relatively high percentage of trucks.

Motorists: Motorists do not have safe options for overtaking cyclists except to wait for a break in oncoming traffic and move into the opposing travel lane. This may create motorist discomfort and frustration when bicycle and motor vehicle traffic is heavy, especially at locations with limited sight distance.

Pedestrians: No physical separation from traffic moving at 45-50mph limits is an unforgiving design that decreases comfort and safety. Pedestrians must walk in the road.

Transit Operators and Riders: Buses may require in-lane stops and riders may have difficulty accessing the stops.



2-Lane Roadway (Shared Use Path Option)

Bicyclists: Physical separation and a buffer greatly increase comfort and safety for cyclists, resulting in lowest stress conditions, especially during periods of darkness. Low pedestrian volumes will result in minimal conflicts on the side path. A path width of 8 to 10 feet comfortably services volumes of up to 300 users per hour. A side path constructed to a high-quality standard (smooth and level) that is cleared of debris will accommodate touring and recreational bicyclists. A poor-quality side path will result in those cyclists continuing to operate in the roadway.

Motorists: The lack of shoulders does not improve motorist safety. Motorist discomfort and frustration is reduced when bicycle and motor vehicle traffic is heavy, especially at locations with limited sight distance. However, if confident and faster cyclists feel they must operate in the roadway due to path conditions, this may result in some conflicts with motorists who expect the bicyclists to be operating on the path. Motorists will need to be aware of counterflow bicyclists.

Pedestrians: The path creates a comfortable and safe place for people to walk. High pedestrian or cyclist volumes may lead to conflicts on the side path.

Transit Operators and Riders: Buses may require in-lane stops but riders will have an improved ability to access stops along one side of the roadway. Stops on opposite sides of the path would benefit from the provision of crossings and stop amenities.



2-Lane Roadway (Wide Shoulder Option)

Bicyclists: Wide paved shoulders (>5 feet in width) are operationally similar to bike lanes on rural roads. Paved shoulders 7 feet or more in width result in a highly comfortable route for confident cyclists; interested but concerned cyclist traffic stress remains high. Rumble strips may be located on or near the shoulder line if a minimum of 4 feet of operating space remains for bicyclists.

Motorists: Wider shoulders are more forgiving for driver error, increasing their safety. However, if the shoulder is obstructed or rumble strip placement is not correct, bicyclists operating in the lane may result in unexpected conflicts with motorists who expect the bicyclists to be operating on the shoulder.

Pedestrians: The wide shoulder creates a more comfortable place for people to walk. High pedestrian or cyclist volumes may lead to conflicts, requiring bicyclists to occasionally operate in the traveled lane.

Transit Operators and Riders: Buses may be able to stop fully outside the travel lane within the shoulder. Riders will have an improved ability to access stops on both sides of the roadway.



2-Lane Roadway (Narrow Shoulder Option)

Bicyclists: Narrow paved shoulders (4-5 feet) are operationally similar to bike lanes on rural roads. Paved shoulders 4 feet or more in width result in a very comfortable route for confident cyclists; interested but concerned cyclist traffic stress remains high. Paved shoulders less than 3 feet in width will not accommodate bicyclists. If rumble strips are present, they should be at the edge of the paved surface to maximize the width of the shoulder.

Motorists: Narrow shoulders can be forgiving for driver error, increasing their safety. However, if the shoulder is obstructed or rumble strip placement is not correct, bicyclists operating in the lane may result in unexpected conflicts with motorists who expect the bicyclists to be operating on the shoulder.

Pedestrians: The narrow shoulder creates a more comfortable place for people to walk. High pedestrian or cyclist volumes may lead to conflicts, requiring bicyclists to occasionally operate in the traveled lane.

Transit Operators and Riders: Buses may be able to stop partially outside the travel lane within the shoulder. Riders will have an improved ability to access stops on both sides of the roadway.



2-Lane Roadway (Bike Lane Option)

Bicyclists: Narrow bike lanes (5 feet) can create a very comfortable route for confident cyclists as well as interested but concerned cyclists due to the relatively low operating speed and volume of the roadway (LTS = 2) and the provision of dedicated operating space for bicycling.

Motorists: Motorists can easily overtake cyclists on the roadway and have decreased stress operating around bicyclists as they have greater awareness for where bicyclists are expected to operate.

Pedestrians: If sidewalks are not provided with the bike lanes, pedestrians are likely to walk in the bike lane to improve their safety. This may lead to conflicts, requiring bicyclists to occasionally operate in the traveled lane. Where sidewalks are provided, the bike lanes create a buffer to traffic lanes improving pedestrian comfort and safety.

Transit Operators and Riders: Buses may be able to stop partially outside the travel lane but within the bike lane, which can create conflicts with bicyclists where transit routes operate with higher frequency. Riders will have difficulty accessing stops on both sides of the roadway depending upon sidewalk and crossing conditions.



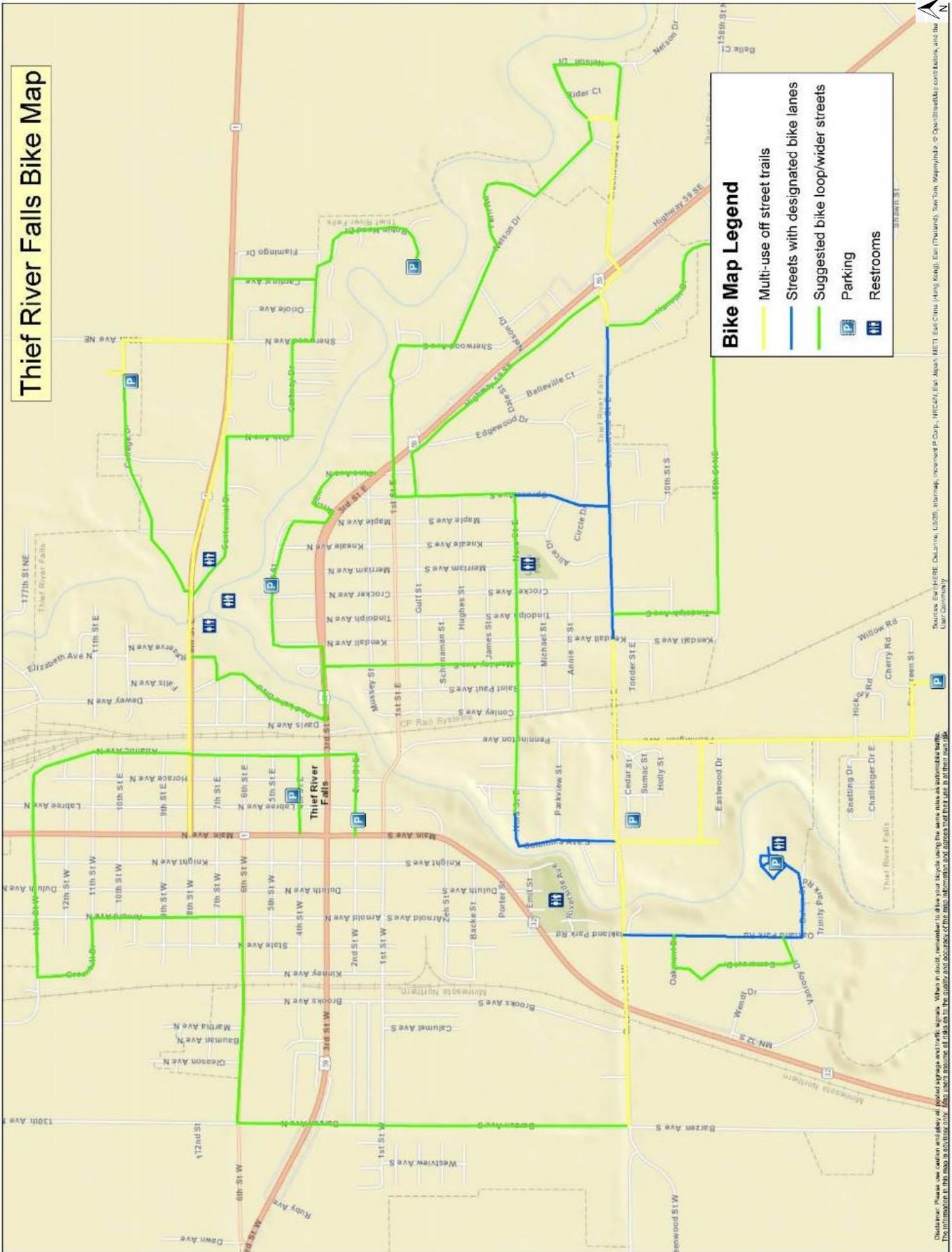
2-Lane Roadway (Separated Bike Lane Option)

Bicyclists: Separated bike lanes (5 feet) with a buffer (2 feet minimum) can create a very comfortable route for confident cyclists as well as interested but concerned cyclists due to the relatively low operating speed and volume of the roadway and the provision of dedicated operating space for bicycling. While this is a narrow buffer, the effective width of the bike lane can be increased by placing vertical separation close to vehicle travel lane. Vertical separation is relatively constant because of the infrequent driveways.

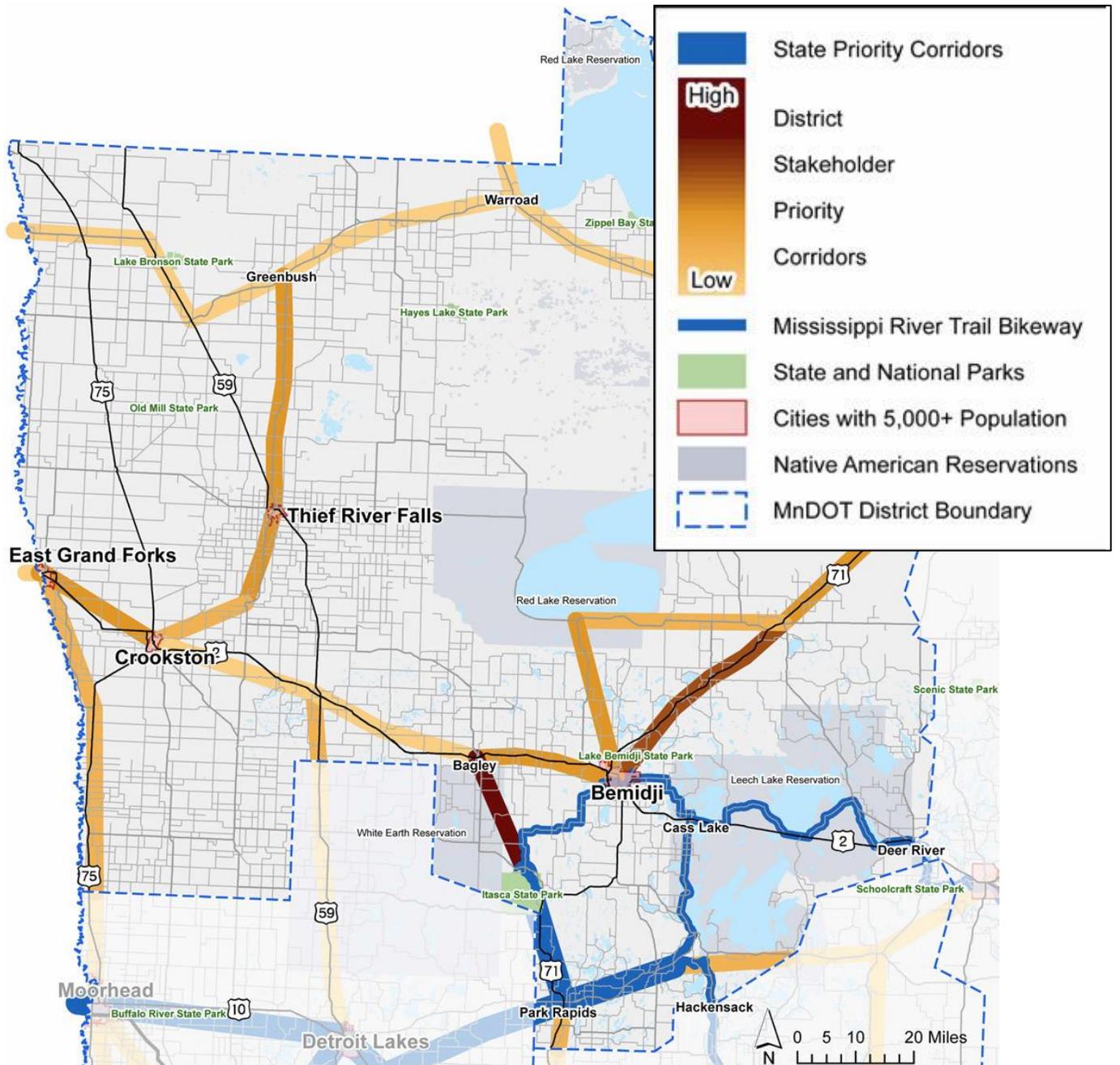
Motorists: Motorists can easily overtake cyclists on the roadway and have decreased stress operating around bicyclists as they have greater awareness for where bicyclists are expected to operate.

Pedestrians: If sidewalks are not provided with the separated bike lanes, pedestrians are likely to walk in the bike lane to improve their safety. This may lead to conflicts, requiring bicyclists to occasionally operate in the traveled lane which can be more challenging due to the barriers. Where sidewalks are provided, the separated bike lanes create a buffer to traffic lanes improving pedestrian comfort and safety.

Transit Operators and Riders: Buses may be able to stop partially outside the travel lane but within the separated bike lane, which can create conflicts with bicyclists where transit routes operate with higher frequency. Riders may have difficulty accessing stops on both sides of the roadway depending upon sidewalk and crossing conditions.



A higher detail pdf map can be downloaded [HERE](#).



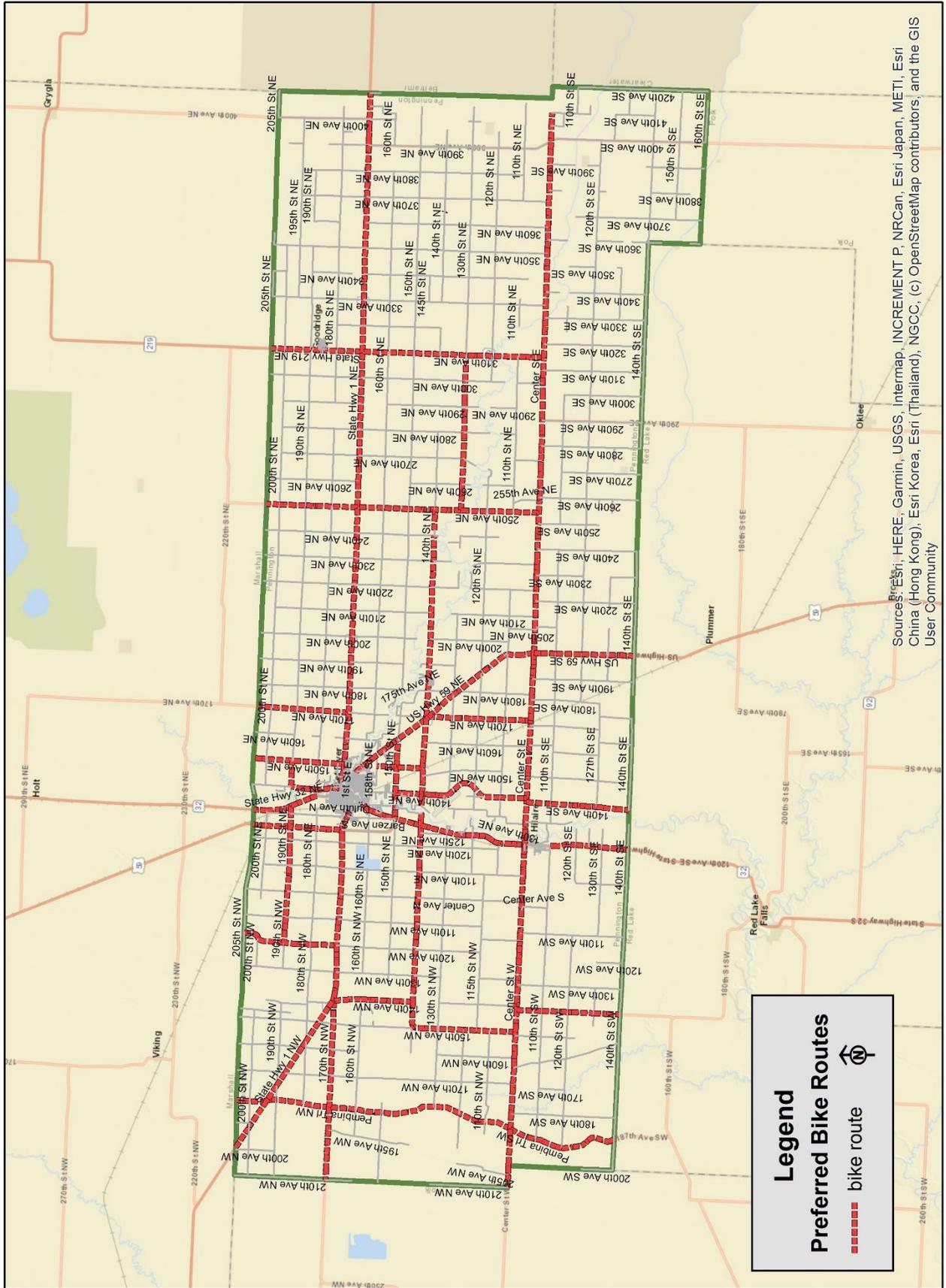
The map below from the [Minnesota Statewide Bicycle System Plan](#) lists the state of Minnesota network priority bicycle corridors for Minnesota. This network consists of statewide destination locations that can be reached by bicycle. The map above is a starting point to guide future efforts between MnDOT and local partners. Within District 2, Thief River falls has a higher priority than some of the surrounding roadways.

In the [Minnesota Statewide Bicycle System Plan](#), Thief River Falls and Pennington County are also listed as cycling destinations. Local infrastructure improvements and enhancements will positively affect this map and build/enhance cycling-related infrastructure and traffic.

The following is a portion of the statewide map that details cycling destinations. To view the entire map as well as the Minnesota Statewide Bicycle System Plan, please click the link in the paragraph above. The arrow below denotes the location of Thief River Falls, MN.



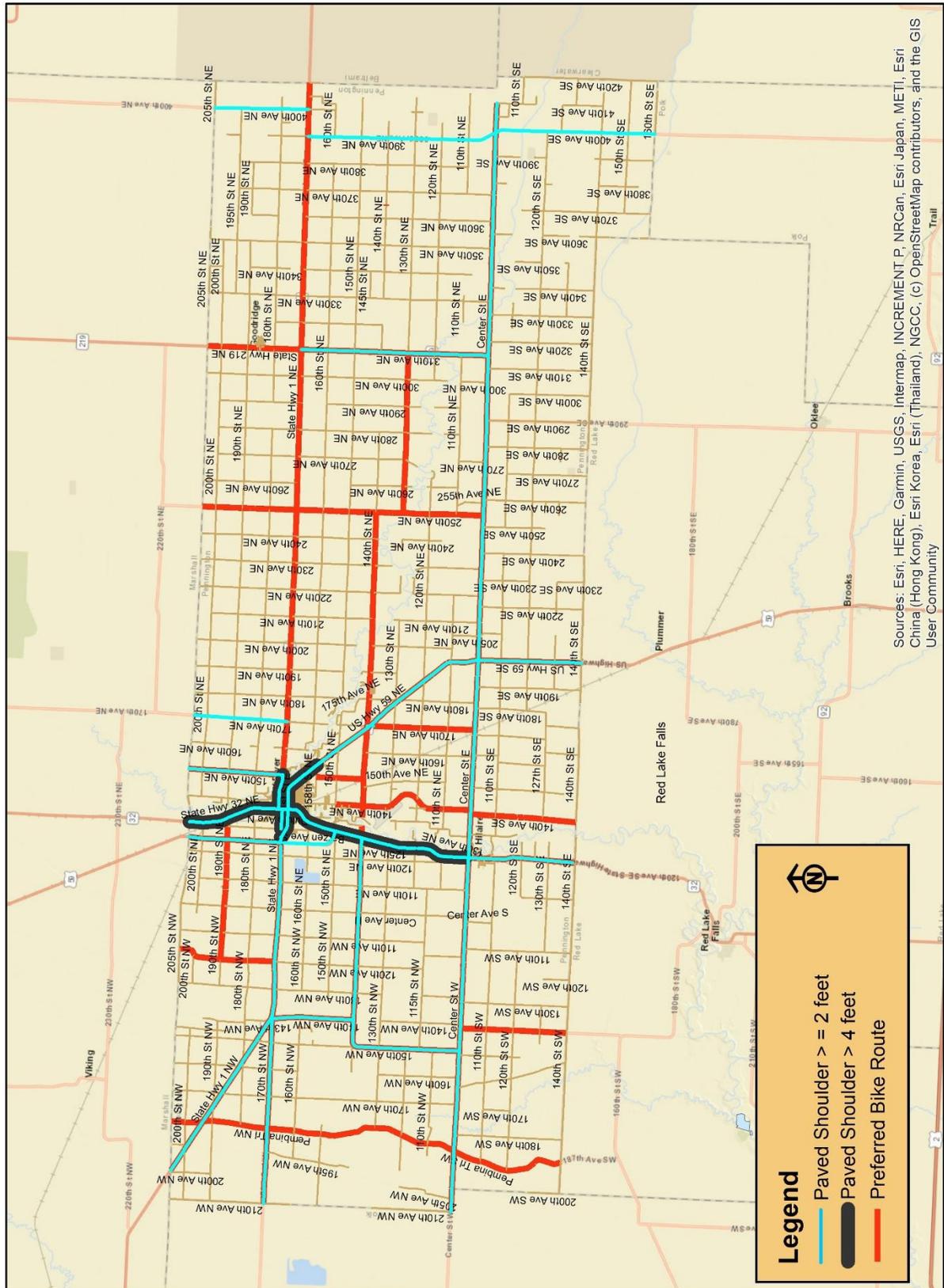
Pennington County Preferred Bike Corridors



Source: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

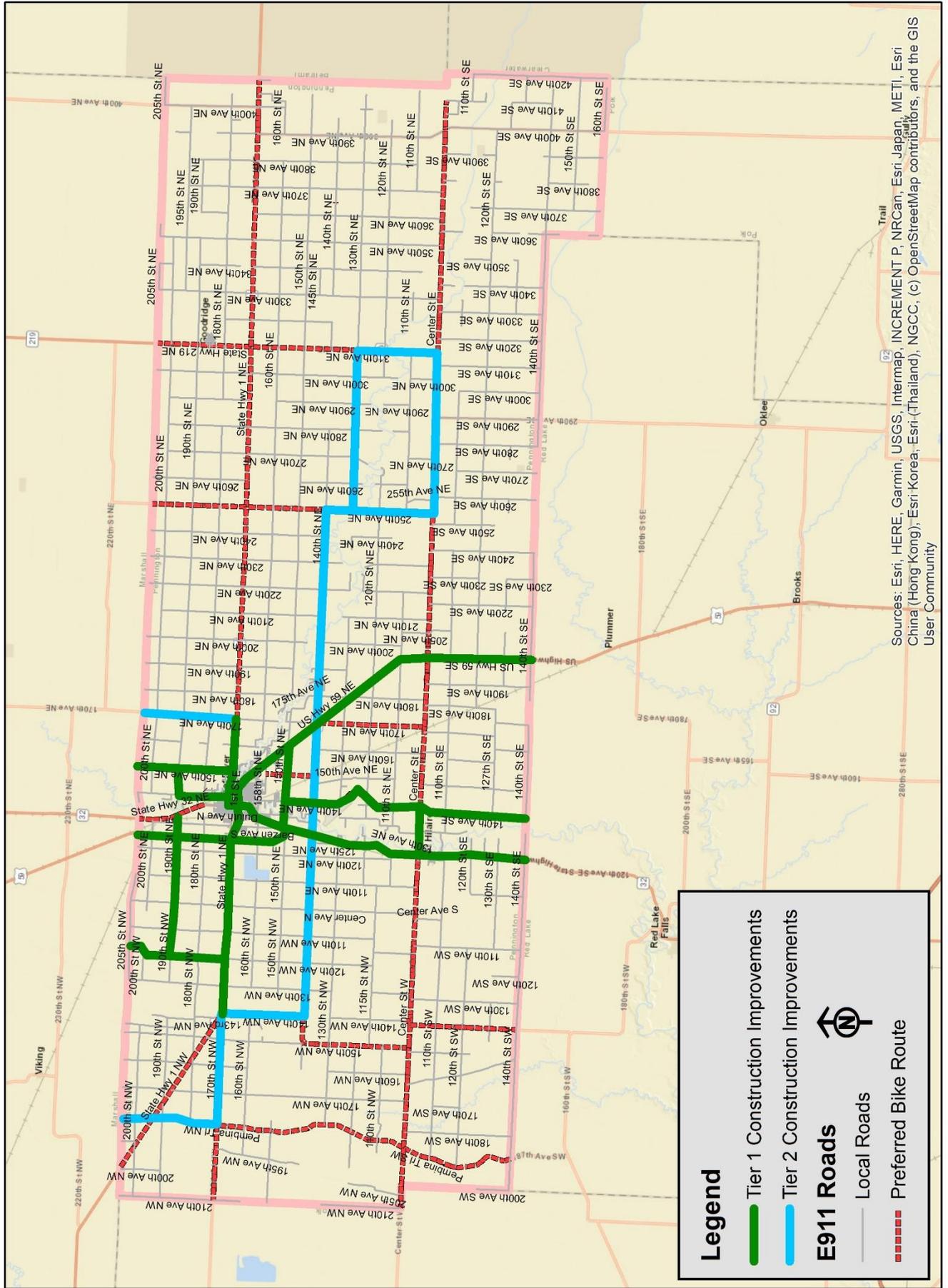
This map represents all the potential preferred bike corridors for Pennington County as chosen by members of Bike TRF, Pennington County and the public. Construction routes were ranked and are shown in a later map.

Pennington County Roads with Paved Shoulder > = 2 Feet & 4 Feet



Four-foot paved shoulders are the preference for bicycling in Pennington County. The map above lists the 2- and 4-foot shoulder roadways. Two-foot shoulder roadways may need additional shoulder enhancement, especially where medium and high priority roadways occur. Tier 1 (high) and Tier 2 (medium) priority corridors are listed on the following page

Pennington County Preferred Bike Corridor Construction Improvements



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Walking, Cross Country Skiing and Multi-Use Trail Programs

Thief River Falls River Walk

This seven-mile trail is a historic walk along the Red Lake and Thief Rivers, one of the reasons the city of Thief River Falls got its start over 100 years ago. This trail traverses through nine city parks and three forest trails. 15 pictographs along the route give additional historic information about the area. The trail starts at Centennial Park, going in a mostly southern direction until the end of the trail at Oakland Park. Near the trail's end, there is an optional loop that travels through the Greenwood Trails Recreation Area. One mile of paved trails combined with unpaved trails allow hiking, walking, mountain biking, snowshoeing and cross-country skiing opportunities in this area.

Greenwood Trails Recreation Area

This recreation area boasts of 48 acres of paved/unpaved trails. Located on the east side of the Red Lake River on Greenwood Street, this area is great for hiking, biking and cross-country skiing. This is also mentioned as an incorporated part of the River Walk system above. Development has taken place with multiple organizations through the years included the development of an environmental learning lab by a local school district and an Eagle Scout Project which renovated shelter, trail improvement, identification signs and a parking lot upgrade. Daily sightings of wildlife occur in recreation area.

TRF New Vision for Downtown Community Masterplan.

A community asset mapping session in 2017 listed the following things as assets for Thief River Falls. These have a positive correlation to local trails planning:

- River Walk
- Walkability
- Parks
- Trees and landscape

There are two groomed cross-country ski trails in Thief River Falls. Both include wooded areas and small hills. Rental equipment is available.

- One trail follows along the Thief River
- Trails are located within the Greenwood Trails Recreational Area. This area is described in greater detail in the walking/multi-use trails section above.

Parks

Trail systems can be found in Elks, Hartz, Millyard, Centennial, Northrop, Oakland, Red Robe and Tourist Parks as well as Michelson PRP/Greenwood Trails in Thief River Falls. Walking and hiking trails are also in St. Hilaire City Park.

Walking, Cross Country Skiing and Multi-Use Trail Program Recommendations

Pennington County and local cities plan to incorporate walking and multi-use trails as part of their comprehensive development. The availability of these systems are sought after by residents and add to the livability of a community. Several local parks include trails, and the existence is a nod to local economic development and the importance in which trails planning plays a part.

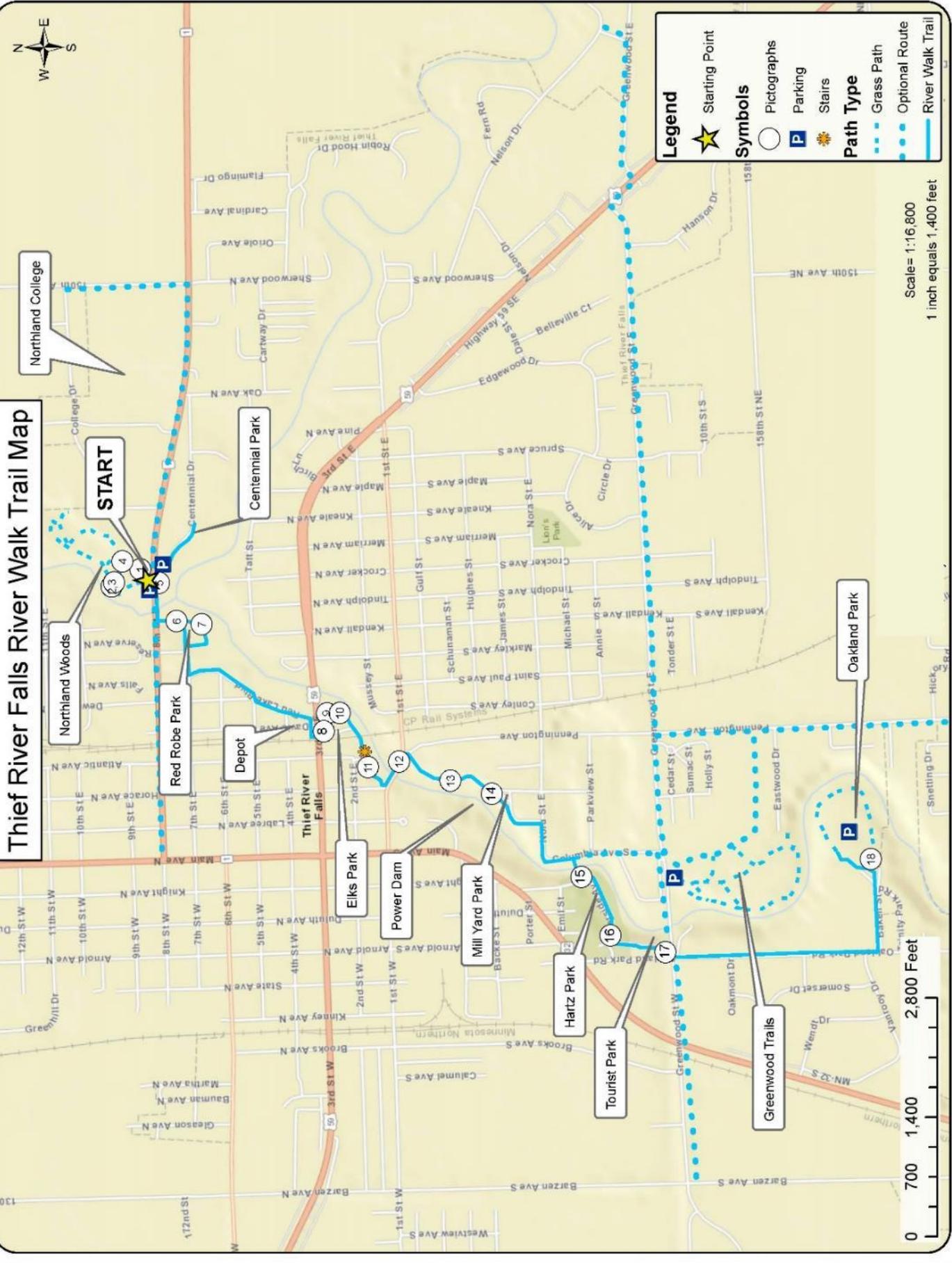
Most cross-country ski trails within Pennington County is done through private land or established through multi-use trail systems.

Recommended Programs List:

- Thief River Falls River Walk
- Greenwood Trails Recreation Area
- Sidewalk and transportation infrastructure assessments happen regularly
- Snowshoe rental opportunities in Thief River Falls.



Thief River Falls River Walk Trail Map



Snowmobile Trail Programs

Minnesota has a vast amount of trails that cross throughout the state, of which Pennington County is connected. Over 22,000 miles of groomed trails are present, with over 21,000 maintained by local club volunteers. Pennington County has two active snowmobile clubs:

- Thief River Falls Sno Drifters – This club was incorporated in 1968. Typical winters see an abundant snowfall pack that lasts well into March. This club grooms 75 miles of trail in Pennington and Marshall Counties.
- Goodridge Trailblazers – This club meets monthly and hosts the Goodridge Grygla 500 race.

Local clubs are important for snow trails in Pennington County, and have a positive effect upon local usage. Important functions include local trail grooming, trail/snow condition reports, training/education opportunities, races, group rides, club meetings and other winter trail events

Pennington County is well-connected through its developed snowmobile network. Depending on the direction and trail, a variety of landscapes and terrain are encountered.

- Trails to the west connect with the North Dakota trail system near the communities of Oslo and Hallock.
- Trails to the north connect to the Community of Roseau and to the Canadian border as well as to the Warroad and Baudette trail systems.
- Trails to the south/east connect to Bemidji and Detroit Lakes.

Goodridge/4G Snowmobile Trails – This system connects with the Wapiti Trail system out of Thief River Falls, the Fourtown trail system, the Riverland trail system, Clearwater and Gully.

Riverland North Trail – Groomed trail connecting Thief River Falls with Red Lake Falls

Wapiti Trail – Connects with Big Red Lake Bog and McTrail System Trails. Trails cut through willow and poplar stands. Sightings of wildlife possible.

Below are two maps that show the snowmobile trail network as it travels throughout Pennington County. For more detailed maps, please visit https://www.dnr.state.mn.us/snowmobiling/interactive_map/index.html for an interactive trail map of snowmobile trails across Minnesota. Trail maps and weekly snowmobile trail reports can also be found by contacting Visit Thief River Falls (visittrf.com).

Adding to the development of snowmobile trails throughout Northwestern Minnesota is Textron Specialized Vehicles. Arctic Cat snowmobiles have been manufactured in Thief River Falls for over 50 years. In addition, The Textron Specialized Vehicles plant



has been listed as having one of the top 250 plant tours in the nation in a book entitled “Watch It Made in the USA: A Visitors Guide To The Companies That Make Your Favorite Products.” These tours are free of charge and are offered weekdays at specified times.

Snowmobile Trail Program Recommendations

Snowmobile trails in Pennington County as well as Northwestern Minnesota are well developed and have several active clubs. Many trails interconnect within the region and with surrounding states. Snowfall and winter weather conditions will cause trails to be under-utilized, but this is not often able to be controlled.

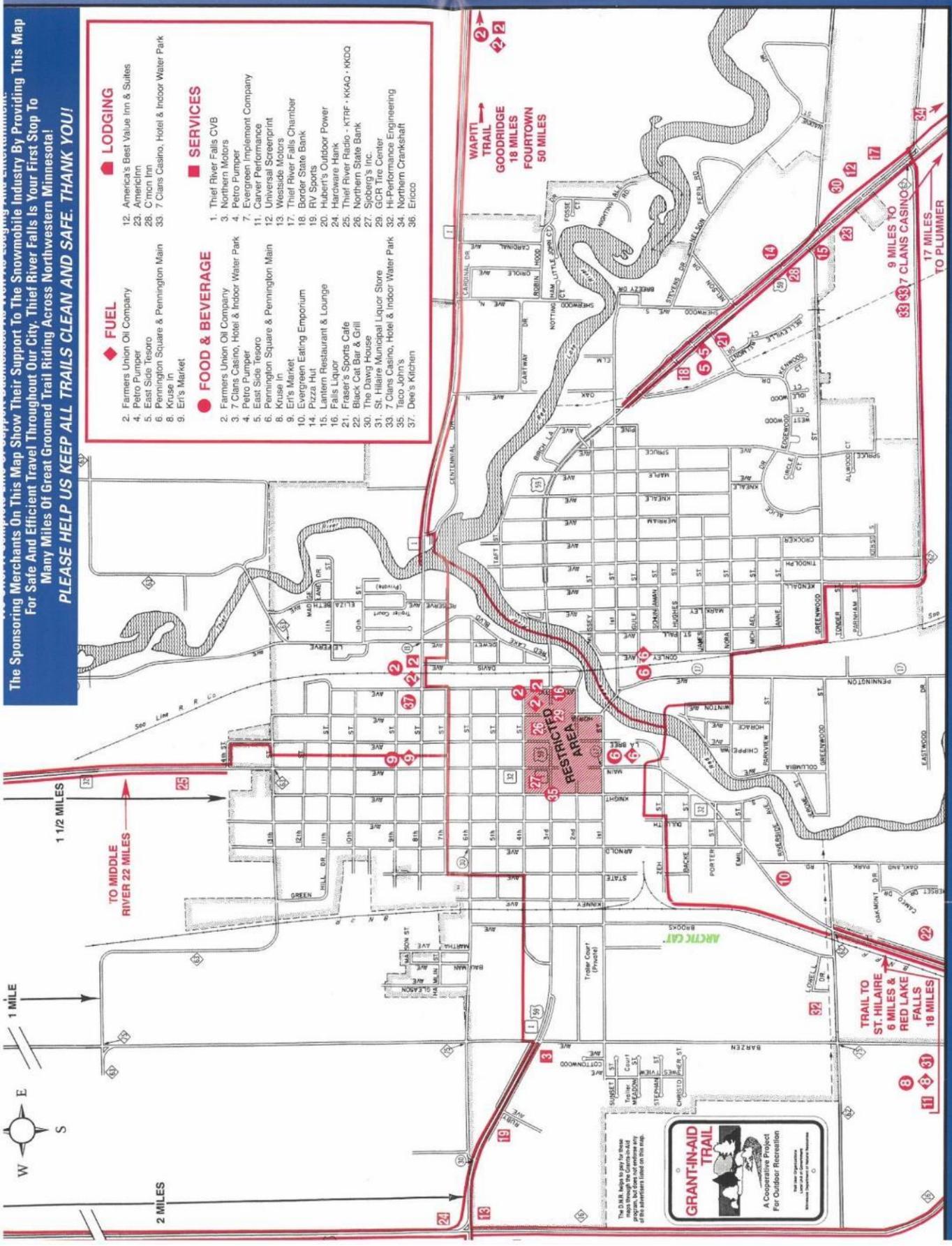
Recommended Programs List:

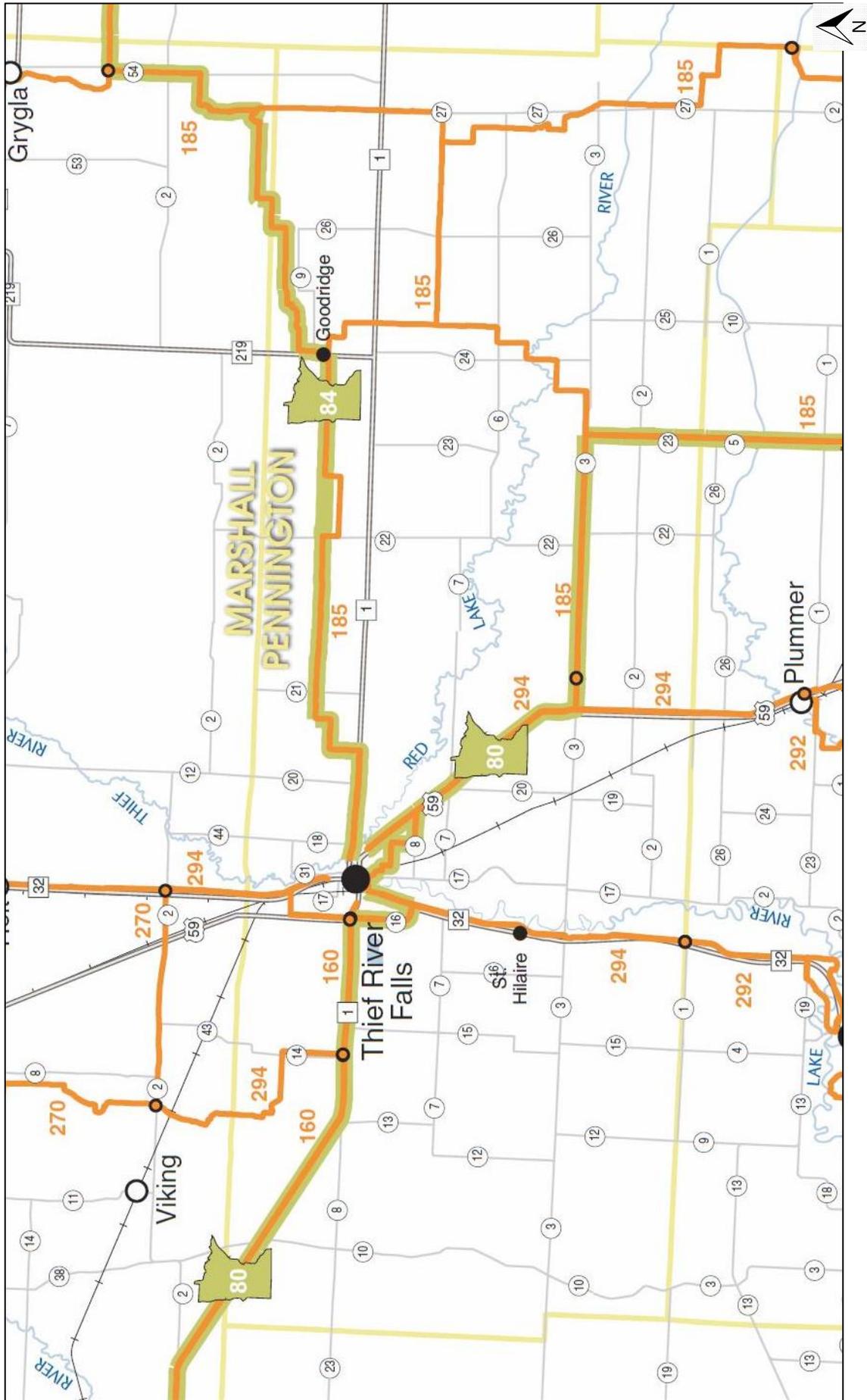
- Local clubs – TRF Snowdrifters & Goodridge Trailblazers
- Well-developed trail system
- Textron Specialized Vehicles and other local businesses affiliated with snowmobile usage.
- Connection of trails to community assets.
- Local events and agencies promoting trail usage such as St. Hilaire Vintage Snowmobile Show, Goodridge Grygla 500 and Visit TRF.

The Sponsoring Merchants On This Map Show Their Support To The Snowmobile Industry By Providing This Map For Safe And Efficient Travel Throughout Our City. Thief River Falls Is Your First Stop To Many Miles Of Great Groomed Trail Riding Across Northwestern Minnesota!

PLEASE HELP US KEEP ALL TRAILS CLEAN AND SAFE. THANK YOU!

- FUEL**
 - 2. Farmers Union Oil Company
 - 4. Petro Pump
 - 5. East Side Tesoro
 - 6. Pennington Square & Pennington Main
 - 8. Kruse In
 - 9. Erli's Market
- FOOD & BEVERAGE**
 - 2. Farmers Union Oil Company
 - 3. 7 Clans Casino, Hotel & Indoor Water Park
 - 4. Petro Pump
 - 5. East Side Tesoro
 - 6. Pennington Square & Pennington Main
 - 8. Kruse In
 - 9. Erli's Market
 - 10. Evergreen Eating Emporium
 - 14. Pizza Hut
 - 15. Lantern Restaurant & Lounge
 - 16. Falls Liquor
 - 21. Fraser's Sports Cafe
 - 22. Black Cat Bar & Grill
 - 30. The Dawg House
 - 31. St. Hilaire Municipal Liquor Store
 - 33. 7 Clans Casino, Hotel & Indoor Water Park
 - 35. Taco John's
 - 37. Dee's Kitchen
- LODGING**
 - 12. America's Best Value Inn & Suites
 - 23. Americhn
 - 28. C'mon Inn
 - 33. 7 Clans Casino, Hotel & Indoor Water Park
- SERVICES**
 - 1. Thief River Falls CVB
 - 3. Northern Motors
 - 4. Petro Pump
 - 7. Evergreen Implement Company
 - 11. Carver Performance
 - 12. Universal Screenprint
 - 13. Westside Motors
 - 17. Thief River Falls Chamber
 - 18. Border State Bank
 - 19. RV Sports
 - 20. Hubert's Outdoor Power
 - 24. Hardware Hank
 - 25. Thief River Radio - KTRF - KKAO - KKDQ
 - 26. Northern State Bank
 - 27. Sjoberg's Inc.
 - 29. GCR Tire Center
 - 32. Hi-Performance Engineering
 - 34. Northern Crankshaft
 - 36. Ericco





ATV Trail Programs

ATVs are not permitted on state highways in Pennington County. With the correct permit (3-year permit for a household), ATVs can be ridden on the streets of Thief River Falls. Minnesota statutes regulate the usage of all-terrain vehicles within the right-of way for trunk highways, state-aid highways and county roads. Specific roadways are named in the Pennington County ATV ordinance.

Adding to the development of ATVs throughout Northwestern Minnesota is Textron Specialized Vehicles. While well known for the manufacturing of the Arctic Cat Snowmobiles, this company found in Thief River Falls, MN also manufactures Arctic Cat side-by-sides and ATVs.

Seven Clans Casino has a motocross track, but it is open for riding only during a scheduled practice or race event. Moto-cross is a form of off-road motorcycle racing that is held on enclosed off-road circuits. Nearby open track can be found in Brooks at the Brooks International Raceway. A local series can be found that incorporates the Seven Clans Casino as well as locations at nearby Brooks, MN and Finley and Fordville, ND.

Potential recreation areas exist in Pennington County for the progression of further ATV trail development.

Fourtown Grygla Sportsmans Club

This local club involves Pennington County and currently maintains snowmobile and atv trail systems. ATV systems are close to Pennington County, but are not within the borders.

- Regular meetings
- Training and education
- Trail system maintenance and development
- Active membership
- Fun runs and other events that promote trail usage

ATV Trail Program Recommendations

Minimal ATV trails are available throughout Pennington County. Several individuals own ATVs and motorcycles, and a well known manufacturer resides in Thief River Falls (Textron).

Nearby ATV trails are found in locations surrounding Pennington County, including offerings at the Fourtown-Grygla trail – one of the state’s longest at 170 miles. Well-developed systems can be found in Marshall and Beltrami County systems to the north. Please see the map below for additional information from MnDNR.

Recommended Programs List:

- Textron Specialized Vehicles
- Motocross racing series and other locally hosted events
- ATV Training by partners including the Minnesota DNR and ATV clubs
- Local permitting and ordinances by cities, Pennington County and law enforcement
- Fourtown Grygla Sportsmans Club

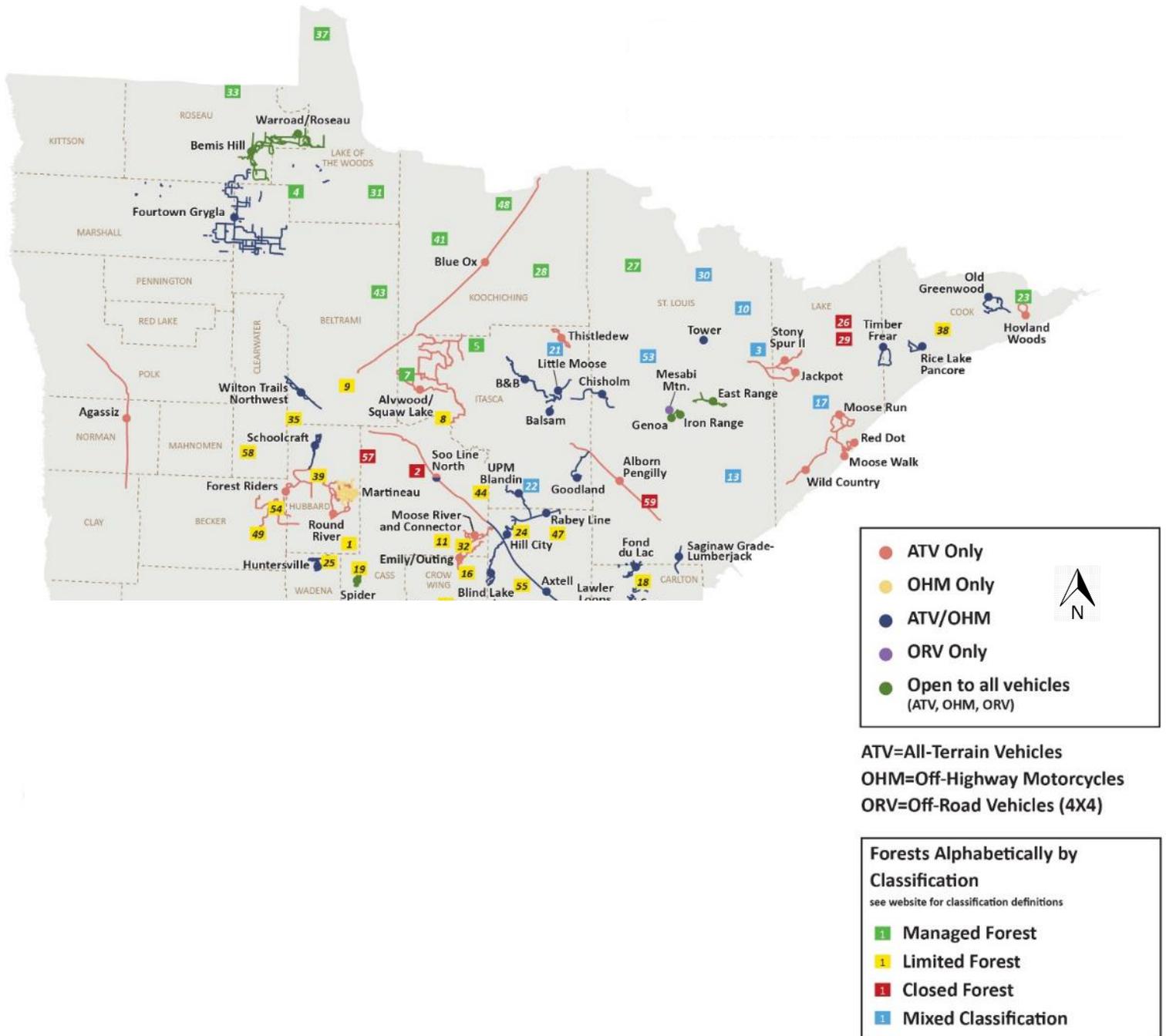
DMC MOTORSPORTS
MOTOCROSS CHAMPIONSHIP

2019 RACING STARTS AT 10:00

MAY 4	BROOKS, MN
MAY 5	BROOKS, MN
MAY 18	BROOKS, MN
MAY 19	BROOKS, MN
JUNE 1	FORDVILLE, ND
JUNE 2	FORDVILLE, ND
JUNE 8	FINLEY, ND
JUNE 9	FINLEY, ND
JUNE 22	7 CLANS CASINO
JUNE 23	7 CLANS CASINO
JULY 13	BROOKS, MN
JULY 14	BROOKS, MN
JULY 27	7 CLANS CASINO
JULY 28	7 CLANS CASINO
AUG 10	BROOKS, MN
AUG 11	BROOKS, MN
AUG 24	7 CLANS CASINO
AUG 25	7 CLANS CASINO
AUG 31	FINLEY, ND
SEPT 1	FINLEY, ND
SEPT 14	BROOKS, MN
SEPT 15	BROOKS, MN

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To see the full OHV map from MnDNR, click [HERE](#).





Thief River Falls Wastewater Treatment Ponds Bird Trail (mnbirdtrail.com)

Scenic Byway Programs

A map of all the Minnesota's Scenic Byways can be found on the following page. No byways currently are found within Pennington County but two are nearby. Two similar trail systems however are included in this section.

Pine to Prairie International Birding Trail

The Pine to Prairie International Birding Trail is an over 500-mile trail going through portions of Minnesota and Manitoba. More than 50 specifically signed sites in Minnesota (more than 70 internationally) offer individuals the chance to view over 275 species of birds while being immersed in the natural landscape. Offerings in local communities along the route add to the experience. For a map of all the sites, please visit <https://mnbirdtrail.com/trail-sites/>.

Pennington County is part of the Pine to Prairie International Birding Trail. The Thief River Falls Wastewater Treatment Ponds site consists of two primary ponds each encompassing 131 acres each along with a secondary pond of 88 acres.

- Best Times to Visit: April – November
- Birds to Look For: Waterfowl, gulls and shorebirds. Rarities include little and California gulls.
- Notes: Roads may be extremely muddy during wet weather.

Red River / Pembina Oxcart Trail

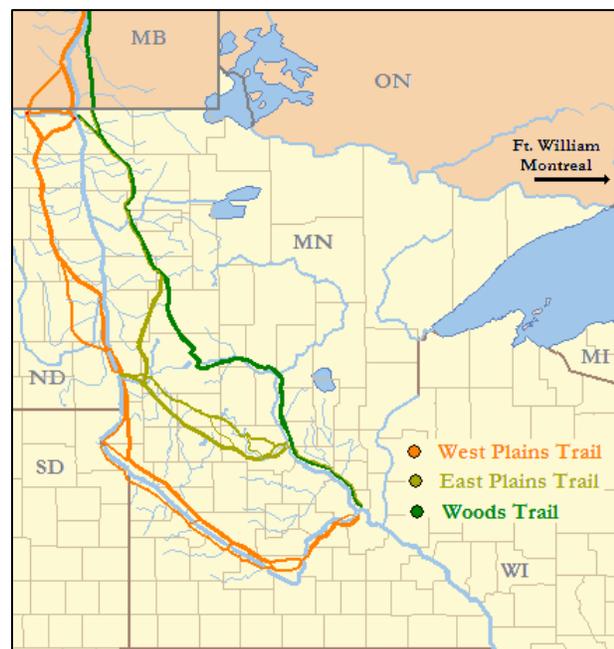
This historic trail can still be seen throughout much of the region. It was used by the first settlers as a trading corridor connecting St. Paul to rural Minnesota. This trail does not follow current highways, but runs diagonally from Pembina, ND to Mahnomen, then to St. Paul.

Scenic Byway Recommendations

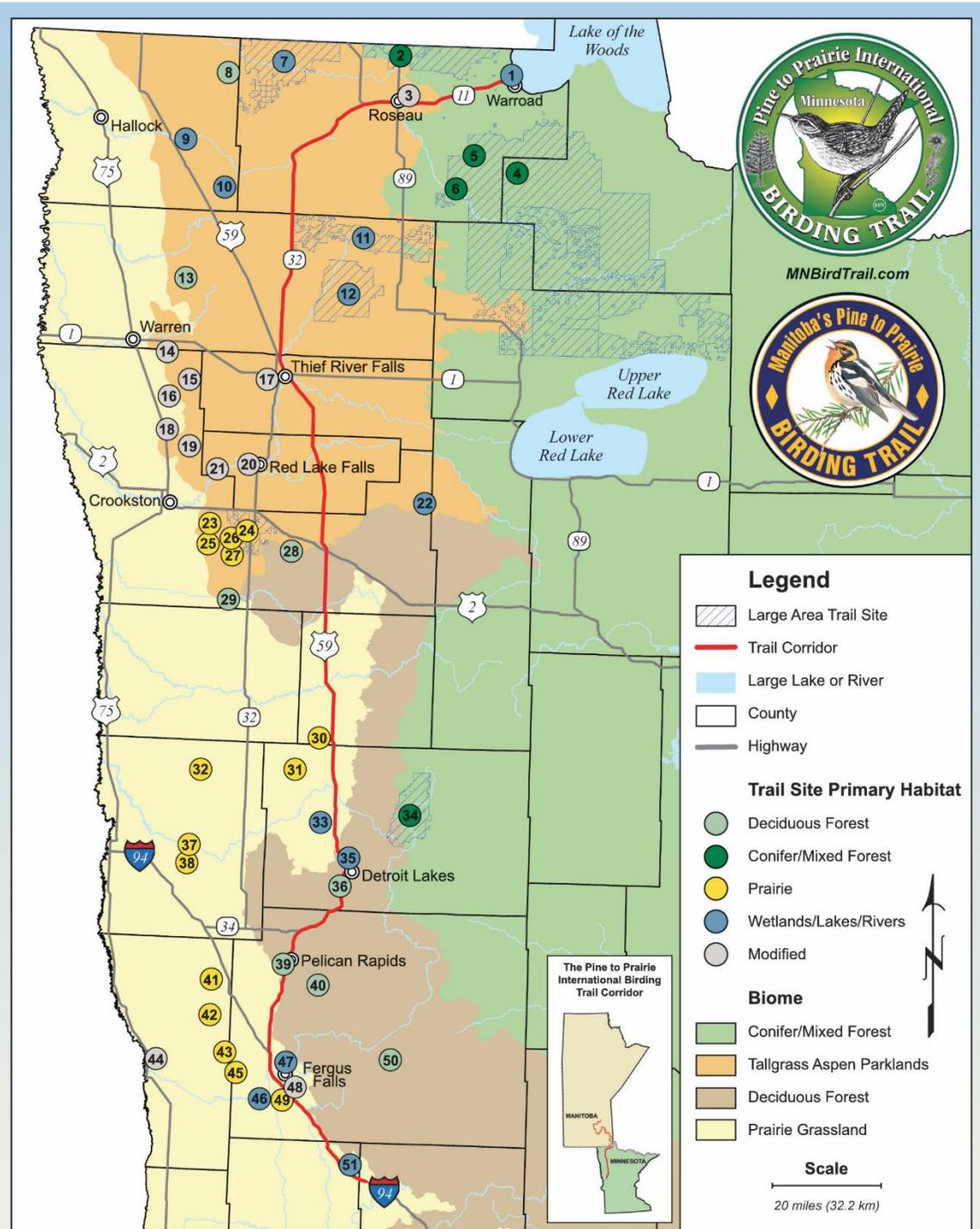
Scenic byways can be defined as a road corridor that is recognized as having resources worth preserving. Economic development is also encouraged through tourism and recreation. These routes often connect cities, trails and other interesting recreational, historic and natural amenities. These scenic/regional byways often have multiple locations promoting a singular trail structure, benefiting all on the route.

Recommended Programs List:

- Pine to Prairie International Birding Trail
- Red River / Pembina Oxcart Trail

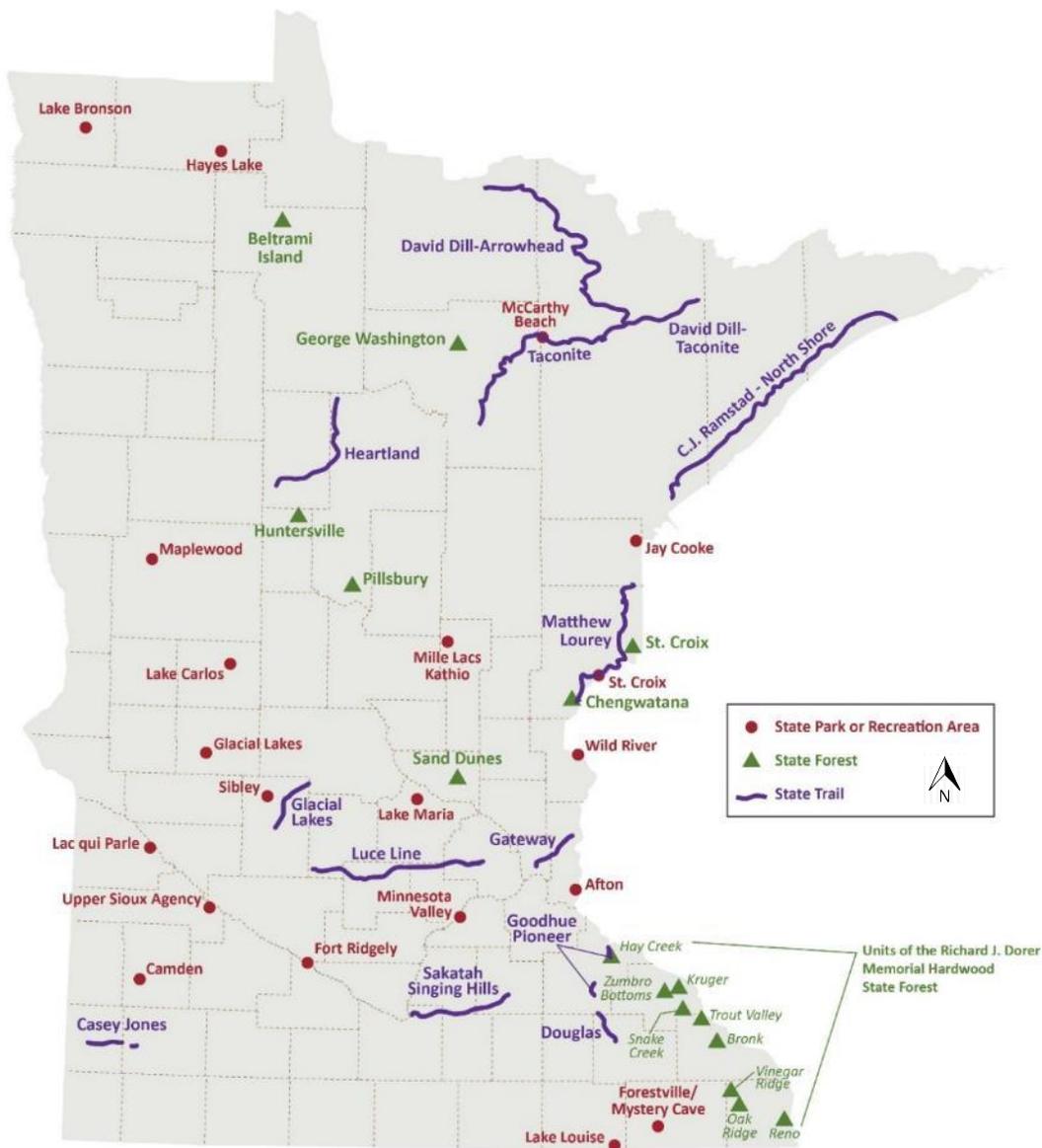


Red River/Pembina Oxcart Trail



DISTANCE (miles)	Crookston	Detroit Lakes	Fergus Falls	Hallock	Pelican Rapids	Red Lake Falls	Roseau	Thief River Falls	Warren	Warroad
Crookston		92	113	72	101	24	104	41	31	126
Detroit Lakes	92		46	159	24	84	155	95	123	176
Fergus Falls	113	46		206	22	117	200	135	144	221
Hallock	72	159	206		195	81	61	64	42	83
Pelican Rapids	101	24	22	195		98	178	118	128	199
Red Lake Falls	24	84	117	81	98		82	19	40	104
Roseau	104	155	200	61	178	82		64	77	22
Thief River Falls	41	95	135	64	118	19	64		29	85
Warren	31	123	144	42	128	40	77	29		100
Warroad	126	176	221	83	199	104	22	85	100	

Map and above information can be found [HERE](#)



Equestrian Trail Programs

Currently, there are no official horseback-riding trails found within Pennington County (see the MnDNR map above of all the horseback riding trails in Minnesota). Minimal opportunities exist within Northwestern Minnesota when compared to other areas. Unofficial smaller trails exist but are dependent upon landowner permission.

Rodeo events are held within the county, and horse showmanship and handling is demonstrated at the Pennington County Fair.

Demand for this trail is not currently high within Pennington County. This demand will be assessed again in future years and addressed as needed.

Equestrian Trail Recommendations

Horses are raised within Pennington County on local farms. Horses, training and education is often displayed at county fair events and is prevalent within local 4-H clubs. Local ranchers raise horses and are an important component of the local agricultural system.

Pennington County Extension Office performs public education that can involve horses

Nearby Old Mill State Park has horse trails available and is near Pennington County.

Water Trail Programs

Red Lake River State Water Trail

The Red Lake River is one of the few canoeing and kayaking rivers in Northwestern Minnesota. It begins at the Upper and Lower Red Lake and flows in a westward direction until it joins the Red River of the North in East Grand Forks. Landscapes viewed along this route include farmland, marshy wilderness, towering eroded cliffs and steep, wooded banks.

It is a smooth flowing river for the most part, except for some easily navigable boulder-field rapids and pools in a section located between St. Hilaire and Crookston. While there are no major rated rapids along this route, during high and/or low water levels, the previously described seventeen-mile portion of the trail has the potential to be classified in spots as Class II rapids.

The map below shows major amenities available to people utilizing the Red Lake River State Water Trail. Specific to Pennington County are the following trail points, highlighted by trail mile:

- 114.5-66 – Intermittent class I-II rapids
- 114.8 (right side) – St. Hilaire trailer access, camping and rest area. Drinking water and supplies available in the city.
- 117.1 – County Road 3 bridge
- 123.3 (left side) Thief River Falls Regional Airport
- 127.5 – Dam, portage right
- 128.1 (left side) – LaFave Beach has restrooms, drinking water and public parking available.
- 128.6 (right side) Centennial Park has trailer access at the Highway 1 bridge, along with a picnic shelter, restrooms, drinking water, fishing pier and public parking.
- 140.9 (right side) – Smiley Bridge carry-in access at County Road 7 bridge
- 150.6 (right side) – Kratka Crossing carry-in access at County Road 22 bridge
- 158.5 – County Road 23 bridge
- 163.4 (right side) – High Landing trailer access at County Road 24. This site also is a historic timber landing from the early 1800's.
- 166.8 (right side) – County Road 3 bridge carry-in access

- 175.1 (right side) – Neptune Bridge trailer access at County Road 27.
(<https://www.dnr.state.mn.us/watertrails/redlakeriver/index.html>)

Red Lake River Corridor

The Red Lake River Corridor represents a collaborative effort of six towns along the Red Lake River (East Grand Forks, Fisher, Crookston, Red Lake Falls, St. Hilaire and Thief River Falls). Planning not only looks at adding improvements to the Red Lake River for canoe/boat access, but also additional campgrounds and hiking/biking trails.

Red Lake Watershed District

The Red Lake Watershed District is an active watershed group present within Pennington County. Active planning by this organization positively affects water trails, as well as water quality and engineering strategies for problems. They have a “One Watershed One Plan” that details strategies relating to surface water quality, erosion, sedimentation, drainage, flood damage, source water/ground water protection and other hydrological concerns for a 10-year time span.

Pennington County Soil & Water Conservation District (SWCD)

The Pennington County SWCD's mission is to provide landowners with technical assistance in identifying and improving resource issues. This group is important in keeping local water quality protected and improved when necessary. Several plans are currently in place including a side water inlets and buffer inventory, city stormwater assessment, drainage system outlet analysis and water quality reports. 2019 goals benefiting local water trails include:

- Protect and improve surface water quality
- Reduce water and wind erosion
- Protect groundwater resources
- Promote and educate the public
- Conservation of wetlands and wildlife areas.
- Flood damage reduction
- Participate in decision making

Parks

Canoe/Kayak/Kayak launches can be found at the Boy Scout, Centennial, Elks, Finsbury, Hartz, Lafave, Oakland and Red Robe Parks in Thief River Falls and in St. Hilaire City Park.

Boat docks can be found at Boy Scout and Centennial Parks in Thief River Falls.

Fishing piers can be found in Millyard Park and Red Robe Park, Thief River Falls. Fishing can also be done at St. Hilaire City Park.

Plans/Projects

- Red Lake River Corridor Enhancement Project: a project that aims to protect and restore the river's natural corridor to enhance water quality and fish/wildlife habitat. This in turn will have a positive effect on educational, recreational and economic opportunities.
- Red Lake River WRAPS: A watershed wide assessment of the water quality, biology and stream channel stability in the Red Lake River and its major tributaries. Completion of this study also included report and protection plans.
- Community events promoting river recreation and usage.

Water Trail Recommendations

Water trail planning is active in Pennington County, and positively affects recreation and community development. Amenities related to water trail planning positively affect communities, and are often tied to multiple parks, campgrounds and recreational events.

Recommended Programs List:

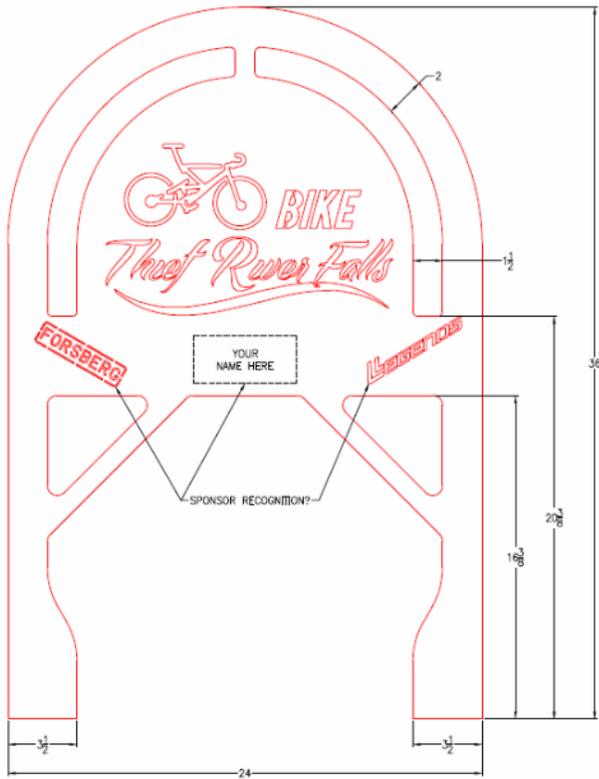
- Red Lake River Corridor
- Red Lake Watershed District
- Pennington County SWCD
- MnDNR
- MPCA
- Red Lake River State Water Trail
- Rentable kayak/paddleboard rental opportunities in Thief River Falls
- Boat launches for the Red Lake & Thief Rivers

The map of the Red Lake River State Water Trail on the next page can be found by accessing the Minnesota Department of Natural Resources website (<https://www.dnr.state.mn.us/>) or by downloading a detailed map [HERE](#).

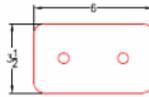


Red Lake River State Water Trail (Minnesota Dept. of Natural Resources)





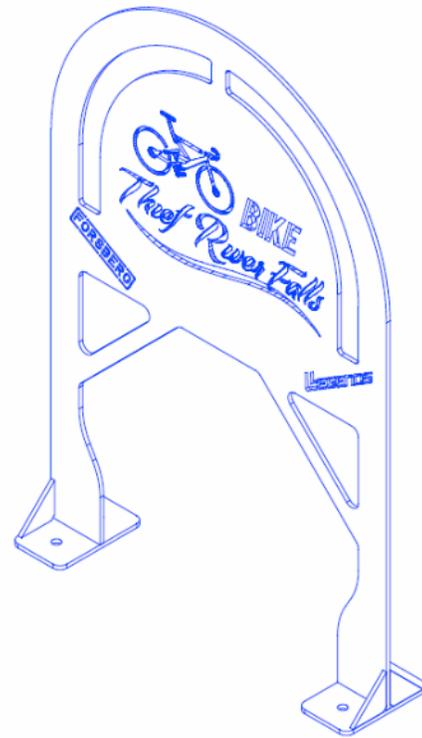
1 MAT'L - 1/4 PLATE
QTY - 1
REVISIONS



2 MAT'L - 1/4 PLATE
QTY - 2
REVISIONS



3 MAT'L - 1/4 PLATE
QTY - 4
REVISIONS



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P.O. Box 416, Thief River Falls, MN 56201-0416

DATE	PRICE	1/2	REV	DATE	03.08.1
QUANTITY	1	REVISION	1	REVISION	
QUANTITY	1	REVISION	1	REVISION	
QUANTITY	1	REVISION	1	REVISION	

REVISIONS

Introduction to Infrastructure

In addition to program recommendations, changes to the streetscape are essential in the development of trails through Pennington County

Trails planning is based on a complete transportation system and how it relates to and serves the land use patterns in the community. This system encompasses several modes, including automobile, pedestrian, bicycle, roadways, waterways and equestrian trail riders

Trails planning infrastructure ties together various land use activities in the community along with the transportation system. Growth and expansion has an effect upon trails planning infrastructure.

According to comprehensive planning efforts within Thief River Falls, local trails and sidewalks will be constructed on a priority basis with the following objectives:

- Trails/sidewalks along major streets which focus on pedestrian and bicycle safety and that provide direct access to city/regional destinations and parks
- Trails/sidewalks that provide looping and interconnection with the River Walk
- Trails/sidewalks that will serve the most intensely used areas
- Trails/sidewalk construction within existing parks and upon municipal property
- Trail /sidewalk inclusion within new park/subdivision development
- Completion of aspects of the Red Lake River Corridor Enhancement Project
- Development of safe pedestrian trail/sidewalk crossings whether on grade, below grade or as overpasses.

TABLE 1. INFRASTRUCTURE RECOMMENDATION LIST

Goal 1: Establishment and maintenance of safe, direct and convenient trail systems across Pennington County

Goal 2: Connection of local trail systems with other county, regional and state-wide efforts

Goal 3: Promote usage of Pennington County established trail systems and alternative modes of transportation

Goal 4: To the maximum extent possible, trails should be developed to accommodate the access needs of all users.

Goal 5: Local trails will be developed in a sustainable manner, reducing long-term cost of operations and maintenance where possible.

Goal 6: Lessened impacts to natural resources and the environment

These are the high priority recommendations that have been suggested to enhance/improve trails within Pennington County. Please note these are just suggestions and are contingent upon funding, approval and local capacity.

Goal #	LOCATION	PROBLEM/ISSUE	POTENTIAL SOLUTION/RECOMMENDATION	ANTICIPATED OUTCOME	LEAD	PRIORITY
1.1	Pennington County	Some roadways in local cities and Pennington County present a heightened danger for bicyclists. Additional infrastructure upgrades are necessary.	Installation of bike lanes, shared lanes and sharrows Local biking advocates are favorable concerning the provision of input at state/county/local levels for trail enhancement and infrastructure projects in Pennington County.	Increased bicycle usage and greater safety from motor vehicles	MnDOT, Pennington County, cities	High (1-2 years) Planned for 2019
1.2	Thief River Falls, Pennington County	Heavily traveled areas are lacking biking and multi-use trails. Individuals wish to be able to use alternative modes of transportation to walk/bike to work. Surveyed participants also wish to see trails that connect with each other, to local amenities (rivers, parks, playgrounds) and to other locations outside of Pennington County.	Planned update: <ul style="list-style-type: none"> ➤ Highway 1/Highway 59 trail – 1-mile addition ➤ Franklin School – 0.6 miles of trail added through Safe Routes to School ➤ Oakland Park Trail – 0.5-mile trail addition ➤ 2019 County bridge construction project – additional 3900 feet of trail ➤ Greenwood to Technology Drive – planned trail development near Digi-Key Comprehensive planning lists a policy to create a city-wide trail and sidewalk system that is designed to minimize conflicts with vehicular traffic.	Increased bicycle usage and an increased bike/pedestrian/water/snowmobile trail system in Pennington County	MnDOT, Pennington County, Thief River Falls	High (1-2 years) Planned for 2019-2020

Goal #	LOCATION	PROBLEM/ISSUE	POTENTIAL SOLUTION/RECOMMENDATON	ANTICIPATED OUTCOME	LEAD	PRIORITY
1.3	Highway 59, Highway 1 and Highway 32	Shoulder widths on portions of Highway 59, Highway 1 and Highway 32 are narrow and prevent safe travel on a bicycle. Rumble strips that are not bike friendly can also be an issue.	Increase paved shoulder widths in combination/coordination with MnDOT and local road projects (cost and local economics considered.) 10 Year Capital Highway Investment Plan: <ul style="list-style-type: none"> • MN 32 (South Limits of Thief River Falls to 8th St. in St. Hilaire) mill and overlay • MN 32 (South limits of St. Hilaire to US 2) overlay, bridge replacement • Intersection of W. Junction of MN 1/US 59 MN 1 from CSAH 16 to Kinney Ave – grade and bituminous surface. • US 59 (MN 92 in Brooks to S. CR 62 TRF) Bituminous mill and overlay • MN 1 (Pennington CSAH 18 to MN 219) Bituminous reclaim • MN 1 (MN 219 to Beltrami Co. Line) Bituminous mill and overlay • MN 219 (Pennington CSAH 64 to MN 89) Bituminous mill and overlay. Promote bike-friendly rumble strips along roadways. Comprehensive planning efforts support the assurance that proper right-of-way widths are dedicated for sidewalks and trails	Heightened bicycle travel within Pennington County as well as the ability to safely bike to nearby cities/counties/trail systems.	MnDOT, Pennington County	Long-Term
1.4	Trail Infrastructure in Pennington County	Not all trail infrastructure in the county is signed	Once infrastructure has been expanded, look at the identification of existing trails through placards and signage. Study liability issues before signage.	Increased usage of trail systems within Pennington County. Correctly labeled road structures.	County, cities	Long-Term
1.5	Downtown Thief River Falls, La Bree Ave., 2 nd Street	Downtown parking can present a challenge for walkers, drivers, bikers and shoppers	Recommendation from Downtown Community Masterplan A mix of parallel and angled parking would increase access to stores while creating a better environment. Paint intersection bump outs restripe to angled parking. Traffic Study might be needed before implementation.	Increased safety and access to stores.	From TRF New Vision for Downtown Community Masterplan. City of TRF.	Long-Term
1.6	Wooded airport property in Thief River Falls From Riverbend Trail south Westside of airport property connecting to wooded airport property. Finsbury park Greenwood	Area that has potential for development	Possible ideas for trail development in wooded airport property include: <ul style="list-style-type: none"> • Mountain bike trail development • Kayak/canoe landing Trail development on other listed properties. Greenwood area could see trail development for mountain bikes and skiing.	Additional trails developed in the future for residents and visitors of Pennington County and Thief River Falls	Bike TRF	Long-Term

Goal #	LOCATION	PROBLEM/ISSUE	POTENTIAL SOLUTION/RECOMMENDATON	ANTICIPATED OUTCOME	LEAD	PRIORITY
2.1	Pennington County, cities	Identified potential for local biking corridors/infrastructure to be improved.	<p>Increase of cycling-related infrastructure for Pennington County.</p> <p>Upgrading of priority ranked corridors. (HERE)</p> <p>Coordination with other projects currently ongoing to improve local trail development and share economic cost. (All types of trail)</p> <p>Individually construct segments of local trails instead of the entire trail. (All types of trail).</p> <p>Additional studies may be needed to address shoulder widths throughout the county.</p>	<p>Heightened bicycle traffic along bicycle corridors.</p> <p>Presence of a biking trail corridor system within Pennington County.</p> <p>Coordination of currently ongoing projects can assist with funding allocation and allow additional partners.</p> <p>Individually constructing segments of a trail can influence construction speed, as well as funding availability.</p>	MnDOT, County/City Staff, Bike TRF	Long-Term
2.2	Pennington County, cities	Minimal international trail efforts within the region	<p>Continue Pine to Prairie Birding Trail incorporation of Minnesota and Manitoba birding locations.</p> <p>Long-term planning to fix narrow shoulders along with tourism/marketing could encourage/develop an international bike travel.</p>	Possible development of an international bike trail and the enhancement of international birding trail efforts.	Pine to Prairie Birding Trail Bike TRF, MnDOT, Pennington County	Long-Term
2.3	Pennington County	Public is not aware of local trails present in Pennington County. Navigation systems that are dependent upon google and other internet-based systems may not recommend local opportunities.	<p>Development, upgrading and submission of ESRI shapefile and mapping information available online and through google software.</p> <p>Local education and promotion of trails, parks and events.</p> <p>Hosting of community events that involve walking, running, biking, swimming, canoeing, etc.</p>	Increased local and regional knowledge about trails present in Pennington County. Higher trail usage. Community involvement.	Bike MN, NWRDC, Businesses, Bike TRF	Continuous
2.4	Pennington County	Upgrade the bike-friendly status in Pennington County	Incorporate local bike-friendly measures to become a “bike friendly” county such as reaching out to major employers, promoting more cycling activities, promoting commuting by cycle and attaining more bike-friendly businesses	Attaining the bike-friendly status for Pennington County	Bike TRF, Local Businesses	Long-Term
3.1	Thief River Falls	Local businesses do not have the infrastructure to support bicycle traffic.	Install bike racks throughout Thief River Falls. Racks are being designed and produced locally to ensure that all sizes can be secured by a lock and that frames/wheels are not bent. Removal of the structure in winter also should be factored in.	Increased bicycle travel within Thief River Falls.	Bike TRF	High (1-2 years)
3.2	Thief River Falls	Minimal to no bike rental opportunities available within Thief River Falls.	<p>Identification of locations that are interested in hosting a bike rental (hotels/consignment store so far).</p> <p>Maintenance of bicycles donated/locally received to utilize in a fleet for local business rental usage.</p> <p>Creation of a waiver agreement for participants to sign before riding.</p>	Increased bicycle travel and trail usage within Thief River Falls	Bike TRF, Businesses	Medium (2-4 years)
3.3	Thief River Falls	No bike-related law enforcement patrol of Thief River Falls	Grant opportunities exist for the provision of specialized bikes for law enforcement. Bike TRF is researching opportunities and ways to partner with the Thief River Falls Police Department.	Bike-related law enforcement patrols of Thief River Falls	Bike TRF, TRF Police Department	Medium (2-4 years)

Goal #	LOCATION	PROBLEM/ISSUE	POTENTIAL SOLUTION/RECOMMENDATON	ANTICIPATED OUTCOME	LEAD	PRIORITY
3.4	Red Lake River and Thief River Systems	Appropriate and controlled access to the local river systems is encouraged	Continue to work with the MnDNR and the Red Lake Watershed District to see if there are low cost measures available to increase access to local waterways in coordination with bridge/culvert or other related projects.	Increased access to local waterways, additional usage.	MnDNR, Red Lake Watershed District	Continuous
4.1	Thief River Falls	Bike TRF is not affiliated with Bike MN	Attain a chapter agreement and affiliate with the Bicycle Alliance of Minnesota (Bike MN)	Benefits of this agreement include <ul style="list-style-type: none"> • Able to operate under BikeMN's 501c3 designation • Aids in the provision of infrastructure that can be difficult to maintain/provide locally • Allows Bike TRF to spend more time on local projects • BikeMN assists by doing book-keeping/accounting • Flexible working arrangement 	Bike TRF	High (1-2 Years)
4.2	Pennington County	Events not held regularly regarding trails, are not highly attended, or are not known about.	Promote local club and trail activities for all listed trails. Examples: 30 days of biking, Walk/bike to school day, local 5k/10k running events, community health events, snowmobile club rides/races etc. Advertising on local social media, media and other partner platforms (Bike MN, etc.)	Increased public knowledge and usage of local trails	Visit Thief River Falls, Thief River Falls Chamber of Commerce, local businesses, local clubs, media, Bike MN	Continuous
4.3	Pennington County	Public education may play a factor in trails not being utilized	Promote and host trainings related to bike and trail usage (Examples: Walk! Bike! Fun!, Regional Bike Fleet, youth snowmobile training, law enforcement safety-related trainings, running clubs, etc.)	Increased education and usage of local trails	All	Continuous
4.4	Pennington County	Ensure that individuals of all access levels can experience and enjoy the natural environment	Design trails to the maximum extent feasible to accommodate access needs of all users in accordance with the Americans with Disabilities Act (ADA).	Individuals of all abilities able to enjoy trail systems in Pennington County	All	Continuous
5.1	Pennington County	Expense plays a large part in the creation, maintenance and upkeep of local trails	Identify local funding options for Pennington County Trails Development (State bonding, MnDNR, County State Aid Construction funds, Federal funds, Minnesota Parks and Trails Legacy Grant Program, Safe Routes to School, County/city funds, private/public partnerships, grants, donations and organizational opportunities). Participate in 5-year planning process completed by the Pennington County Highway Department and MnDOT 10-year Capital Highway Investment Plan (plan charts found below). Comprehensive planning lists a policy to minimize trail/sidewalk construction costs when possible by constructing trails in conjunction with State, County and City street improvements.	Increased trail opportunities as well as well maintained, existing trails. Shared expenses and grants for trails that are associated with Pennington County.	All	Continuous

Goal #	LOCATION	PROBLEM/ISSUE	POTENTIAL SOLUTION/RECOMMENDATON	ANTICIPATED OUTCOME	LEAD	PRIORITY
6.1	Pennington County	Lack of local tracks for gravel and/or fat-tire bicycles	Collaborate with ATV clubs to allow access to gravel and/or fat-tire bicycles on trails (may not be able to access all trails due to environment). Develop local ATV club infrastructure within Pennington County.	Increased opportunities for gravel and fat-tire bicycles	Bike TRF	Long-Term
6.2	Pennington County	Traffic patterns and speed can prohibit safe usage of local trails	Promote education and training for people utilizing bicycles, being pedestrians, driving a motor vehicle, snowmobiles and ATVs. Enforce laws and regulations to keep people utilizing local trails safe.	Increased safety and education. Increased walk and bike friendly Pennington County.	All	Continuous

IMPLEMENTATION

Biking: By performing the potential upgrades listed below, this plan aims to not only grow bicycle-related traffic in Pennington County and the region, but to also increase the potential for higher priority bike corridors to be located in Northwestern Minnesota through Pennington County.

High priority roadways were chosen based on connections to highly populated areas and existing trails. These roadways will allow connections to other areas with developed bike trail systems. Development of the following strategies should start with the high priority corridors, as these routes will connect with other heavily biked areas and start the development of bike infrastructure in Pennington County. High priority roadways can be seen on the map linked in the document [HERE](#).

Moderate priority implementation roadways aid in the establishment and growth of a continuous biking trail system for Pennington County. These roadways provide connections to all cities and destinations not listed as high priority. When upgraded, these roadways help to provide a connecting infrastructure within Pennington County for bicyclists. Moderate priority roadways can be seen on the map linked in the document [HERE](#).

Low priority bicycle corridors (when upgraded) will allow a complete biking infrastructure within Pennington County.

Walking and multi-use Trails – Municipal sidewalks present create an existing trail system for walking. Multi-use trails are present within Pennington County, and some of these encourage pedestrian and biking activities.

Development strategies below also include municipal partners, Bike TRF, agencies, businesses, etc. While roadway infrastructure items are important to the creation of a high-priority bike corridor in Pennington County, simultaneous growth exhibited by the completion of the other strategies will create a healthy, active environment with well utilized trails. These strategies can be accomplished concurrently to infrastructure upgrades as funding and opportunities allow.

1. Upgrade high/medium priority (Tier 1 and 2) designated corridors in Pennington County (**High Priority**)
 - a. Paved, four-foot minimal shoulder upgrades (including mill and overlay when necessary). High priority roadways currently are the only roads in Pennington County to have at least 4-foot paved shoulders.

High priority (Tier 1) roadways can be seen on the map linked in the document [HERE](#).

Tier 1 (High) Preferred Bike Corridors: (Approximations of Cost and Mileage – May Vary)

- 120th Ave. NW – Northern Pennington County – 3.5 Miles - \$210,000
- 190th St. NW/NE – Northern Pennington County – 6.5 Miles (2 spots) - \$390,000
- State Highway 1 NE – Central Pennington County – 8.5 Miles - \$510,000
- US Highway 59 – Central Pennington County - 11 Miles - \$660,000
- 125th Ave. NE – Central Pennington County – 2.5 Miles - \$150,000
- 140th Ave. NE – Central Pennington County – 2 Miles - \$120,000
- 150th Ave. NE – Central Pennington County – 3.5 Miles - \$210,000
- MN Highway 32 – Southern Pennington County – 4 Miles - \$240,000
- 140th Ave. NE – Central Pennington County – 9.5 Miles - \$570,000
- Central St. East – Southern Pennington County – 2 Miles – \$120,000
- 150th St. NE – Central Pennington County – 3 Miles - \$180,000

Tier 2 (**Medium**) Preferred Bike Corridors: (Approximations of Cost and Mileage – May Vary)

- Highway 10 – NW Pennington County – 3.5 Miles - \$210,000
- 170th St. NW – NW Pennington County – 4 Miles – \$240,000
- 140th Ave NW – Western Pennington County – 3 Miles – \$180,000
- 140th St. NW/NE – Central Pennington County – 19 Miles – \$1,140,000
- 250th Ave. NE – Eastern Pennington County – 4 Miles – \$240,000
- 130th St. NE – Eastern Pennington County – 6 Miles – \$360,000
- Center St. East – Eastern Pennington County – 6 Miles - \$360,000
- 310th Ave. NE – Eastern Pennington County – 3 Miles - \$180,000
- 170th Ave. NE – Northern Pennington County – 3.5 Miles - \$210,000

Medium (Tier 2) priority roadways can be seen on the map linked in the document [HERE](#).

- b. Movement of rumble strips closer to the fog line to maximize riding space. Inclusion of periodic gaps to allow for bicyclists to maneuver, turn or to pass other bicyclists. This strategy is good for all roadways in Pennington County that want to encourage bike traffic and can be accomplished during already planned road upgrades. (**Low** priority)
2. Create a bike friendly and walking friendly Pennington County (Throughout Pennington County) **Medium** Priority. (Costs are related to staff time or incurred by Bike TRF and partners).
 - a. Increased offered bike, road and trail safety/education opportunities and increased promotion of existing classes through BikeTRF and local partners.
 - b. Growth, promotion and advancement of BikeTRF group and community projects listed in the chart above.
 - i. Community rides, training and education
 - ii. Increased bike rental availabilities with local businesses
 - iii. Custom bike rack creation and placement at local businesses
 - iv. Incorporation into the Bicycle Alliance of Minnesota
 - v. Promotion of bicycling as a viable local lifestyle
 - vi. Incorporation of local and county partners
 - vii. Participation (via feedback/attendance) in future county, municipal and state plans and meetings regarding bicycle trail development.
 - c. Upgrade online mapping and public awareness of available biking, pedestrian and multi-use trails in Pennington County and creating new maps when necessary. (Bike TRF, Local partners, NWRDC)
3. Create a bike-able and walk-able Pennington County (Throughout Pennington County). This along with above strategies will lead to a county-wide informal trail system that can be utilized for bicyclists and pedestrians of all abilities. **Medium** Priority
 - a. Municipal upgrades including sidewalk, multi-use trails, sharrows, bike lanes and shared lanes when possible. Includes safety features and follow city planning and comprehensive documents.
 - b. Continue development and maintenance of biking and multi-use trail development in Pennington County. (Includes Thief River Falls trails near Highway 1/Highway 59, Franklin School, Oakland Park, Greenwood to Technology Drive and a county-bridge construction project)

- c. Performance of traffic-related studies when necessary to ensure safety of pedestrian, bicycle and vehicular traffic. (Continuous priority)
- d. Addition of four-foot shoulder upgrades on **low**-priority roadways when feasibility and other planned projects determines a positive cost-benefit ratio.
 - State Highway 1 NW – Northwest Pennington County – 7 miles - \$420,000
 - State Highway 1 NE – Northeast Pennington County – 24 miles - \$1,440,000
 - 170th St. NW – Northwest Pennington County – 3 miles - \$180,000
 - Pembina Trail – Western Pennington County – 12 miles – \$720,000
 - Center St (E and W) – Central Pennington County - 33 miles – \$1,980,000
 - 150th Ave. NW – Western Pennington County – 4 miles – \$240,000
 - 140th Ave. SW – Southwest Pennington County – 4 miles - \$240,000
 - 140th St. NW – Western Pennington County – 1 mile - \$60,000
 - 170th Ave. NE – Central Pennington County – 4 miles - \$240,000
 - 250th Ave. NE – Central Pennington County – 6.5 miles – \$390,000
 - State Highway 219 NE – Eastern Pennington County – 7.5 miles – \$450,000
 - 150th Ave. NE – Central Pennington County – 2 miles – \$120,000

Low priority roadways can be seen on the map linked in the document [HERE](#).

- e. Encourage biking (and pedestrian) amenities alongside existing trails to increase traffic
 - i. Red Lake River State Water Trail
 - ii. Fat tire and mountain biking along applicable ATV trails
 - iii. Promote trails that connect local amenities (rivers, parks, playgrounds, cities, trails etc.)
 - iv. Maintain awareness of abandoned railroad tracks within Pennington County. Purchase and conversion to multi-use trail systems has occurred in Northwest Minnesota in the past.
 - f. In the future, connect to other nearby heavily biked areas in Minnesota/North Dakota and encourage regional bicycle traffic (Bemidji, Grand Forks, Detroit Lakes, etc.) to Pennington County. (**Low** priority)
 - g. In the future, encourage international bike traffic from Manitoba and Ontario to Pennington County. (**Low** priority)
 - h. Continuously identify areas in Pennington County that could be developed in the future. (Continuous priority)
4. Incorporate discussions regarding the cost of implementing and maintaining new trails before construction. (Throughout Pennington County). Continuous priority with staff-time cost).
- a. Incorporated the above strategies into an existing construction project when possible to minimize cost.
 - MnDOT Capital Highway Investment Plan projects can be seen on page 53
 - Pennington County 5 Year Plan projects can be seen on page 54
 - b. Incorporate transparent discussions of how implemented projects will be maintained with all partners.

- c. Participate in local planning processes completed by MnDOT, Pennington County Highway Department, municipal planning departments and other agencies.
- d. Utilize grant opportunities when available to build/maintain local trails in Pennington County.

Snowmobile Trails – Snowmobile trails are well-developed in Pennington County and the area is part of a network that crosses throughout the state. Service dealers are present within Pennington County as well as neighboring areas to service and tune-up snowmobiles. Two active clubs and a major manufacturing company residing within Pennington County also increase the usage of current trails. Local winter weather conditions are conducive to local trail usage.

Local trails are well connected to local restaurants, hotels, gas stations, entertainment and other local businesses.

1. Continue to support Thief River Falls Sno Drifters and the Goodridge Trailblazers in Pennington County:
 - a. Local trail grooming and condition reports
 - b. Snowmobile training/education for the public
 - c. Promotion and usage of local snowmobile trails
 - d. Races, group rides, club meetings and other winter trail events
2. Continue to encourage public usage of snow trails and winter outdoor activities through coordinated efforts of local cities, businesses, clubs and the public.
3. Maintain and improve current snow trails in Pennington County

All-Terrain Vehicle Trails – Well developed ATV trails can be found north and east of Pennington County. Service dealers are present within Pennington County as well as neighboring areas to service and tune-up ATVs. Rising local interest may have a positive correlation to future growth and opportunities. A major manufacturing company residing within Pennington County also increases the usage of all-terrain vehicles.

1. Assess and monitor ATV usage within Pennington County, developing local trails as needed with the support of county/city officials, local clubs and the public.
2. Perform ATV safety, usage and public education classes in coordination with the MnDNR, local clubs and other partners.
3. Continue to allow local usage of all-terrain vehicles on Pennington County roadways utilizing information contained in county/city ordinances and permits.

Scenic Byways – While not officially designated by MnDOT, two trail systems within Pennington County are included in this section.

The Pine to Prairie International Birding Trail is located on a roadway that is a medium and high priority biking corridor.

1. Continue to support, promote and utilize the Pine to Prairie International Birding Trail, connecting it to existing amenities and other trail opportunities.
2. Continue to support and promote the Red River / Pembina Oxcart Trail
3. Work with MnDOT, DNR, Explore Minnesota Tourism, local organizations, and county/city personnel if a scenic byway opportunity for Pennington County is available in the future.

Equestrian Trails – Currently, major public equestrian trails are in areas surrounding Pennington County.

1. Continue to monitor and assess future needs regarding equestrian trails within Pennington County, updating and developing local trails as needed.

2. Support local equestrian events held within Pennington County:
 - a. Pennington County Fair
 - b. Rodeos
 - c. 4-H
 - d. Ranching and agriculture farms
 - e. Pennington County Extension
 - f. Livestock judging

Water Trails – Water trails are well-developed due to the Red Lake River State Water trail crossing through most of Pennington County. Several plans are in place to protect the local water systems from pollution, invasive species and erosion. This protection enables continued and further usage and enjoyment of waterways within Pennington County.

The Red Lake River State Water Trail is highly connected to local parks and pedestrian/biking/multi-use trails. Further development and correlation will lead to further development and increased use.

1. Continue to support and develop the Red Lake River State Water Trail in coordination with the Minnesota Department of Natural Resources and local partners.
2. Continue to support local water protection and enhancement planning efforts done by the following partners/organizations:
 - a. Red Lake Watershed District
 - b. Pennington County Soil and Water Conservation District
 - c. Minnesota Department of Natural Resources
 - d. Minnesota Pollution Control Agency
 - e. Red Lake River Corridor
3. Utilize bridge or culvert reconstruction projects in the future to reduce cost of projects such as improved access points.
4. Incorporate pedestrian and/or biking projects along waterways when feasible.
5. Promote water safety training for the public, including ways to lessen a personal footprint upon the local waterways and water quality protection involvement.

Note: Implementation suggestions in this plan do not supercede current state, county and municipal planning processes in place. Local approval for all appropriate parties/partners is necessary before any implementation occurs.

Costs:

Costs for the projects listed above are summarized on the tables below (Source: Minnesota’s Best Practices for Pedestrian/Bicycle Safety). Please know although best intentions were intended in order to ensure approximate and complete - cost estimates for trails planning, right-of-way acquisition, wetland/utility mitigation, landscaping, drainage modification, extensions and other factors will increase cost. On-going costs such as maintenance and operation also need to be factored in. Conversely, planning in coordination with a scheduled project may decrease actual costs.

	Strategies	Pages	Crash Reduction/ Crash Features	Proven/Tried/ Experimental	Operational Effects (Mobility)	Candidate Locations	Design Features	Construction Costs
Pedestrian Safety Strategies	Sidewalks	1-2	50 to 90% reduction in “walking in roadway” pedestrian crashes	Proven	N/A	Urban arterials & collectors	Curb ramps, cross slope, buffer zones	\$4 to \$5 per square foot
	Crosswalks and Crosswalk Enhancements	3-8	Varies	Proven/Tried	N/A	Intersections	Should be part of package including crosswalk enhancements	\$200 per crosswalk
	Medians and Crossing Islands	9-10	39 to 46%	Proven	May provide operational benefits	Wide 2-lane roads and multi-lane roadways	4 to 8 feet wide	\$15,000 to \$30,000 per 100 feet
	Curb Extensions	11-12	39 to 46%	Proven	Potential reduction in speeds	Urban arterials and collectors with curb parking	Roadway with parking or shoulder	\$5,000-\$10,000 per extension
	Pedestrian Hybrid Beacon System	13-15	60%	Tried	Additional delay for vehicles stopping for pedestrians	Mid-Block Crosswalk locations — Not at intersections	Pedestrian activated	\$80,000
	Rectangular Rapid Flashing Beacon	16-17	78 to 100% yield to pedestrian rate	Tried	Additional delay for vehicles stopping for pedestrians	Mid-Block Crosswalk	Passive or active pedestrian activation	\$10K to \$15K
	Crosswalk Lighting	18-19	33 to 44%	Proven	N/A	Isolated crosswalks not along a continuously lit roadway	Require a power source	\$10k to \$25K per intersection
	Traffic Signals	20-22	Leading Pedestrian Interval — 60%	Tried	Increases delay and reduces mobility of major roadway	Intersections that meet signal warrants	Short cycle lengths, countdown timers, easy accessibility	New Signal - \$175,000 to more than \$300,000 per intersection

	Strategies	Pages	Crash Reduction/ Crash Features	Proven/Tried/ Experimental	Operational Effects (Mobility)	Candidate Locations	Design Features	Construction Costs
Ped and Bicycle Safety Strategies	Grade Separated Crossing	23-24	80 to 90% in fatal and injury crashes	Proven	May provide operational benefits for locations with high pedestrian traffic	Limited access/high-volume roadways	Install barriers or landscaping to discourage at-grade crossing	\$500,000 to \$4 million
	Crossing Guards	25-26	NA	Tried	Higher compliance with guard	School crossings	Training required	NA
	Shared Space and Complete Streets	27-28	NA	Tried	Equal travel speeds for all users	Low speed/high pedestrian and bicycle volumes	Limited or no traffic control devices	NA
Bicycle Safety Strategies	Road Diet	29-31	30% all crashes (benefits to pedestrians)	Proven/Tried	Potential speed reduction	4-lane undivided roadways with ADT <20,000	Variations of distribution of cross section available	\$16,000 per mile for restriping \$500,000 for overlay \$5 million for reconstruction
	On-Road Bicycle Lane	32-34	-30 to +13%	Tried	NA	Urban and suburban	4 to 8 feet wide	\$16,000 per mile for restriping
	Shared (Paved) Shoulder Bicycle Lane	35-37	NA	Tried	NA	Rural roadways	4 to 10 feet wide	\$60,000 per mile for 4-foot shoulders \$100,000 per mile for 8-foot shoulders
	Bicycle Boulevards	38-40	60%	Tried	Reduces conflict with vehicles on parallel arterial	Local streets	Traffic-calming features often used	Minimal — Signs and Markings
	Bicycle Boxes	41-42	NA	Experimental	NA	Signalized intersections	14-foot-wide rectangle	\$1,000 per box (see page 7 for information on pavement marking life cycles)

	Strategies	Pages	Crash Reduction/ Crash Features	Proven/Tried/ Experimental	Operational Effects (Mobility)	Candidate Locations	Design Features	Construction Costs
Pedestrian and Bicycle Considerations	Roundabouts	43-44	Lower speeds and medians for pedestrian refuge	Proven — Vehicles Tried — Pedestrians	Slows traffic entering roundabout	Arterials and major collectors	Splitter islands help pedestrians by separating entering and exiting traffic	more than \$1,000,000
	Bicycle-friendly Edgeline Rumbles	45-47	30 – 35% of Road Departure Crashes	Proven	N/A	Lower volume rural roadways	48-foot strip with 12-foot gap	\$3,000 per mile
	Speed Reduction Measures	48-51	Low-speed roads have higher crash rates and higher fraction of pedestrian crashes	Tried	Limited reduction of speed without changing driver's perceptions of roadway	School zones, speed transitions	Road diets, curb extensions and streetscaping help change driver's perceptions	Varies by strategy \$250 to more than \$1,000,000

*It is difficult to estimate the actual funding that will be available in the future as a portion will need to be obtained from state/federal sources. Cost, scheduled projects and resources will determine timelines for any trail system build-out and/or construction. Operating costs are length and material dependent. Trail conditions that require surface repairs, crack filling and stripe replacement may be additional to identified operating costs.

Local trail funding sources include:

- State bonding
- Safe Routes to School
- Minnesota Parks and Trails Legacy Grant Program
- Minnesota Department of Natural Resources (including trail grant program)
- County State Aid Construction funds
- Health-related organizations
- Federal funds
- County/city funds
- private/public partnerships and philanthropic organizations
- grants, donations, fundraising and club-based funds
- Minnesota Department of Transportation



*More information found at <https://www.dot.state.mn.us/planning/10yearplan/>

The following projects are being done as part of the 2020-2029 10-Year Capital Highway Improvement Plan and are documented on the map above.

Construct roundabout at west junction of Hwy 1 and Hwy 59 in Thief River Falls; resurface on Hwy 1 from Pennington CR 16 to Kinney Ave

Project Year: 2020

Project Cost: \$4.80 M

Resurface Hwy 32 between St. Hilaire and Thief River Falls

Project Year: 2020

Project Cost: \$1.27 M

Resurface Hwy 32 between Red Lake Falls and St. Hilaire

Project Year: 2029

Cost Range: \$2.4 M-\$3.2 M

Resurface Hwy 59 from Brooks to Thief River Falls

Project Year: 2023

Project Cost: \$8.40 M

Resurface Hwy 1 from Pennington CR 18 to Hwy 219 in Thief River Falls

Project Year: 2021

Project Cost: \$6.40 M

Resurface Hwy 1 between Goodridge and Beltrami County line

Project Year: 2028

Cost Range: \$2.2 M-\$3.0 M

Resurface Hwy 219 between Goodridge and Hwy 89

Project Year: 2027

Cost Range: \$2.9 M-\$3.9 M

**PENNINGTON COUNTY
FIVE YEAR PLAN
5/3/2018**

Road	Location	Description	CSAH			Local
			Construction	Maintenance	Other	
2018						
1	CR 75	Over CD 21				
2	CSAH 3	From CSAH 17 to TH 59	\$800,000		\$100,000	\$25,000
3	CSAH 20	From TH 1 to County Line	\$400,000			
4	College Drive	West of CSAH 18	\$74,000	\$30,000		
5	CSAH 17	Near the Red Lake County Line		\$150,000		
	County Wide	CSAH 7, 12, 23, 14 and Johnson Drive		\$125,000	\$60,000	
	County Wide			\$125,000		
	County Wide			\$430,000		
		Total	\$1,274,000	\$430,000	\$160,000	\$25,000
2019						
6	CSAH 17	CSAH 3 to City Limits of TRF			\$162,000	
7	CSAH 8	CSAH 17 to TH 59			\$75,600	
8	CSAH 8	TH 32 to CSAH 17	\$2,500,000		\$1,000,000	
9	CSAH 8	Over Red Lake River	\$1,500,000	\$150,000	\$2,000,000	
	County Wide			\$125,000		
	County Wide			\$275,000	\$3,237,600	\$0
		Total	\$4,000,000	\$275,000	\$3,237,600	\$0
2020						
	County Wide	Shouldering		\$125,000		
	County Wide	Crack Seal		\$125,000		
	County Wide	Striping		\$125,000		
		Total	\$0	\$830,000	\$3,397,600	\$0
2021						
10	CSAH 6	CSAH 22 to CSAH 24	\$800,000			
11	CSAH 30	TH 59 to Barzen	\$400,000			
12	CSAH 10	South County Line to TH 1	\$1,800,000			
13	CSAH 1	Polk County to CSAH 10	\$100,000	\$75,000		
	County Wide			\$125,000		
	County Wide			\$200,000	\$0	\$0
		Total	\$3,100,000	\$200,000	\$0	\$0
2022						
14	CSAH 15	CSAH 3 to CSAH 7	\$1,400,000			
15	CSAH 22	Over Red Lake River	\$3,500,000			
16	CSAH 22	CSAH 3 to TH 1	\$925,000	\$150,000		
	County Wide			\$125,000		
	County Wide			\$125,000		
	County Wide			\$400,000	\$0	\$0
		Total	\$5,825,000	\$400,000	\$0	\$0
Total 2018 through 2022			\$14,199,000	\$2,135,000	\$6,795,200	\$25,000

