

The Plan as a Guide

What Exactly is "The Plan?"

The Washington County Bikeway and Trail Network Plan (the Plan) was developed as a guide to help the County as it makes investments in bikeways and trails across the County for a wide variety of people—from school children to casual bicyclists to avid road cyclists. The centerpiece of the Plan is seven high-priority, "all ages and abilities" bikeway and trail corridors that will connect all of the incorporated cities and villages in the County.



Side path along Jackson Drive in Jackson, WI.

The Plan Was Developed to:

- Guide the County as it makes investments in bikeways and trails over next 30-40 years.
- Add to the existing bikeways and trails throughout the county.
- Create a Five Year Strategic Action Plan to narrow the County focus for implementing the plan.

Plan Vision

"Quality of life for Washington County residents is

enhanced by a comprehensive system of bicycling and walking routes connecting destinations throughout the County and neighboring communities. County bicycling and walking routes are safe, scenic, and serve people of all ages, abilities and circumstances."

Plan Goals and Practices

- 1. Fiscal Responsibility
 - Seek all potential funding sources, partnerships, sponsorships etc.
 - Stage new infrastructure investments to align with other construction projects.
- 2. Safety
 - Increase and emphasize safety for all road users
 - Promote safety through education and outreach.
- 3. Quality of Life
 - Serve people of all ages, abilities, and circumstances
 - Improve health, independence and quality of life.
- 4. Partnership
 - Partner with cities, villages, towns and the State
 - Regular collaboration and communication.







Alignment of Bikeway and Trail Network Plan with Washington County Vision and Goals

County Vision

Washington County strives to cultivate its rich heritage, vibrant economy and attractive communities through the distinct values that define us.

County Goals and Practices

- Well-Governed and Administered County
- A Safe and Secure Community
- Economic Growth and Vitality
- Effective Mobility and Reliable Infrastructure
- Access to Basic Needs

How Does the Bikeway & Trail Plan Align with these Goals and Practices?

Well-Governed and Administered County

- Seeks opportunities for collaboration and shared services with public and private partners.
- Provides responsive and accessible leadership while facilitating timely and effective communication.

A Safe and Secure Community

- Provides programs that support the physical, emotional, socio-economic, and safety needs of the community.
- Ensures a transportation network that is both safe and well-maintained.

Economic Growth and Vitality

- Provides a secure and desirable place to live and work that offers access to core services.
- Offers access to unique amenities and natural resources to attract businesses and visitors.
- Effectively plans for a transportation network that meets the current and future needs of the community.

Effective Mobility and Reliable Infrastructure

- Supports a multi-modal transportation network that will continue to meet the needs of the community.
- Invests in a safe and reliable, well-maintained transportation network.
- Provides a transportation network that allows for safe traffic flow and efficient mobility.
- Provides an interconnected transportation network that makes mobility easier and safer.

Access to Basic Needs

- Ensures access to services that provide for the community's health and well-being for all people.
- Fosters a safe, caring, well-kept and family friendly community that supports a positive quality
 of life.







Recommended Bikeway and Trail Network

The recommended bikeway and trail network went through several stages of development and iteration. The planning team developed an initial draft of a proposed network by considering the existing conditions, challenges, and opportunities. They came up with a draft that would connect all communities of over 5,000 people in Washington County and neighboring counties.



Eisenbahn State Trail

The Full Network Includes:

- Approximately 72 miles of trails
- 81 miles of side paths
- 195 miles of on-street treatments such as marked bike routes, bike lanes and paved shoulders
- At full build out, there are 348 miles of proposed bikeway and trails.



Rubicon River Trail

Throughout the planning process, it became clear that Washington County staff and residents desire a network of trails, side paths, and low-traffic, low-speed streets that could be used by "all ages and abilities".

This Network Will:

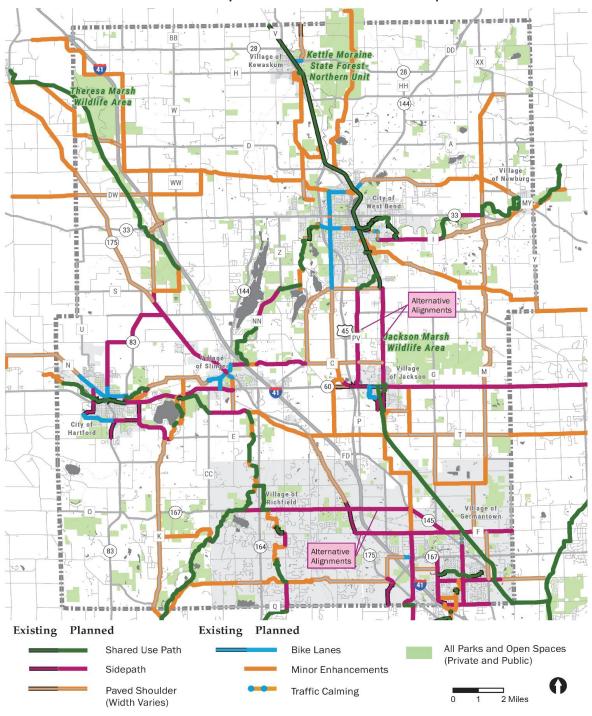
- Enhance the quality of life for County residents and families.
- At build out, this network will be 178 miles
- Connect all the cities and villages in the County.





Washington County

Recommended Bikeway and Trail Network Plan Map







Development of the Plan

What The County Did:

- Received a \$90,000 grant
- Worked with Toole Design Group and the Southeastern Wisconsin Regional Planning Commission
- Assembled an Advisory Committee
- Coordinated an internal workgroup
- Held extensive public outreach events
- Met with key stakeholders



Advisory Committee Meeting Discussing the Preliminary Draft Plan.



Members of the Public Attending the Public Open House on 2/13/19.

Public Involvement

- Two online interactive mapping exercises
- Traditional public meetings
- In-person "meeting in a box"
- Email Contact List
- Public workshop in August of 2018

Inter-Agency Coordination

- Route of the Badger Rails to Trails Conservancy (Nov. 2018)
- Multi-jurisdictional Meeting surrounding counties (Nov. 2018)
- Wisconsin DNR (March 2019)
- National Park Service (March 2019)
- Ice Age Trail Alliance (March 2019)
- Ozaukee-Washington Land Trust (March 2019)
- Cedar Lakes Conservation Foundation (March 2019)
- Opportunities to comment and edit planned routes
- Explored future collaboration and "win-win" scenarios



What We Found:

- Public wants connected bike network
- Trails located in scenic areas, even if indirect
- Facilities for "all ages and abilities"





Options for Bikeway and Trail Facilities

The planning team recommended specific types of bikeway and trail facilities for each segment by reviewing traffic counts, road context, and physical constraints, and by considering whether the segment was part of the "all ages and abilities" network. Below are the different types of bikeway and trail facilities that were considered for the recommended network as well as some additional information about each one.

Shared-Use Paths

- Part of the "all ages and abilities" network
- Fully separated from a street or road
- Typically paved and 10-12 feet wide
- Often installed along rail or utility corridors or next to rivers
- Low-stress experience for many types of users (bicyclists, pedestrians, joggers)





Side Paths (Shared Use Paths Along a Roadway)

- Part of the "all ages and abilities" network
- Fully separated and located immediately next to and parallel to a roadway
- Provide a comfortable space for pedestrians
- Typically paved and 10-12 feet wide
- Paths next to urban and suburban roadways can increase hazards to bicyclists if there are numerous driveways and intersections
- Typically used on medium and high-volume streets with few intersections or driveways

Rail With Trail

- Part of the "all ages and abilities" network
- Run parallel to an active railroad
- Usually have barrier separation between the path and the railroad
- Open lines of communication with the railroad can make this a viable option





Bike Lanes

- Designate space for bicyclists on medium-to-high volume streets with markings and signs
- Located next to motor vehicle travel lanes; goes in the same direction as motor vehicle traffic
- Usually 5 feet wide; can be wider with a painted "buffer" marking
- Typically can be added by removing on-street parking, reducing the number of travel lanes, or through reconstruction





Options for Bikeway and Trail Facilities

Paved Shoulders (3'-6' wide)

- Benefit all road users and lengthen roadway life
- Serve more experienced bicyclists used to fast-moving traffic
- Can be used by pedestrians
- Recommended paved shoulder width depends mostly on the anticipated average daily traffic (ADT)





Minor Enhancements/Shared Lane Markings (Sharrows)

- Used to indicate a shared bicyclist/motorist lane
- Indicate where bicyclists should position themselves in the lane
- Typically used on low-volume local streets

Minor Enhancements/Signed Routes

- Help bicyclists navigate low traffic, low-stress streets
- Quickly and affordably expand the bicycle network using existing residential and town roads
- Alert drivers that bicyclists may be present
- May include destinations, distance, and direction





Traffic Calming

- Usually used on neighborhood streets to slow speeds
- Can include curb extensions, speed humps, neighborhood traffic circles, and pedestrian islands
- Can be hazardous to bicyclists if not properly designed
- Fire departments and school bus operators may object to traffic calming treatments; they should be a part of the planning process





Priority Corridors

What Are They?

There are seven Priority Corridors that were determined from the results of the extensive public outreach. Scores were combined from the "Meeting in a Box" corridor prioritization exercise and the second interactive map, and then all the corridors were ranked by the total score. The planning team and County staff conducted a segment-by-segment analysis of the challenges and specific recommendations necessary to carry out



each corridor. When built, these seven corridors will create a nearly continuous "all ages and abilities" network of bikeways and trails across the County!



The Seven Priority Corridors

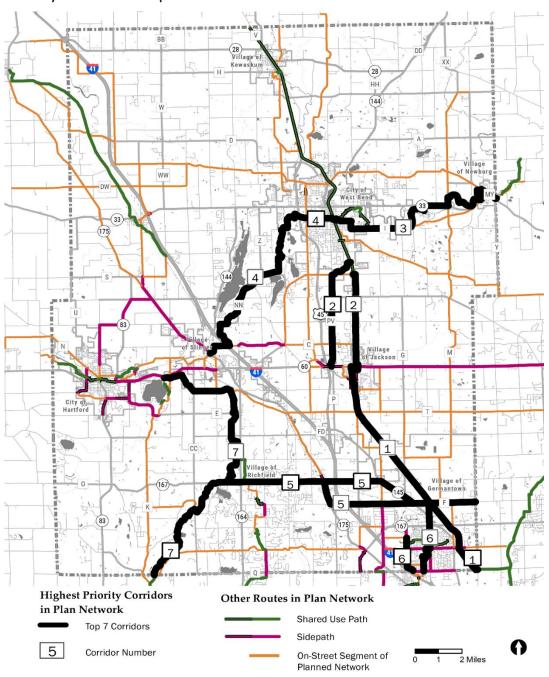
- 1) Jackson to Germantown via Eisenbahn State Trail Extension
- 2) West Bend to Jackson via Jackson Drive or CTH P
- 3) West Bend to Newburg via Decorah Road and Milwaukee River Path
- 4) West Bend to Slinger via Ridge Run Park and CTH NN
- 5) Holy Hill Road-Freistadt Road
- 6) Germantown to Bugline Trail via I-41 Pedestrian Overpass
- 7) Pike Lake Unit to Heritage Trails Park to Loew Lake Unit





Washington County

Bikeway and Trail Network Plan Priority Corridors Map



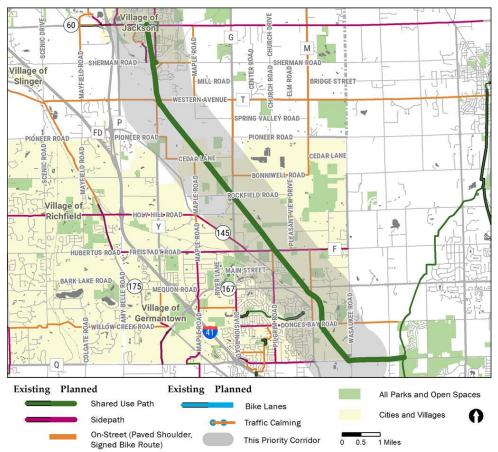




Priority Corridor 1: Jackson to Germantown via Eisenbahn State Trail Extension

Overview

Public input on priority routes revealed that this connection between Jackson and Germantown via a future extension of the Eisenbahn State Trail was—by far—the most important trail connection for Washington County to complete. Rail-trails have the advantage of being flat, removed from traffic, and, in this case, travel through rural farmlands to connect two important communities. However, this railroad is currently in use by Canadian National railroad. The alignment is based on the trail being built next to the existing rail line in the railroad right-of-way (ROW). In the interim, there are two on-road options for experienced bicyclists, which only require wayfinding signs and minimal investment in paving shoulders as roads are resurfaced or reconstructed.



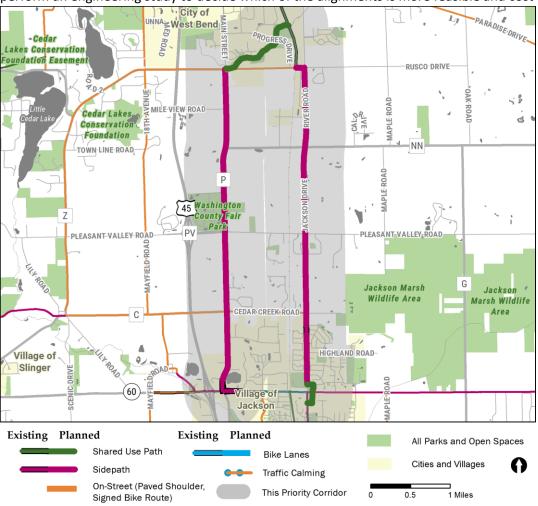




Priority Corridor 2: West Bend to Jackson via Jackson Drive or CTH P

Overview

Public input placed a high priority on continuing a bicycle or trail to connection from the Eisenbahn State Trail south from West Bend to Jackson. Initially, the planning team and County staff considered a "rail with trail" option next to the railroad. However, the initial analysis determined that it was unlikely that Canadian National would abandon the railroad and the steep slopes on either side of the railroad would pose many challenges to building a trail next to the existing rail line. Therefore, the two potential alignments presented here propose side paths built in the road right-of-way. The County will need to perform an engineering study to decide which of the alignments is more feasible and cost-effective.



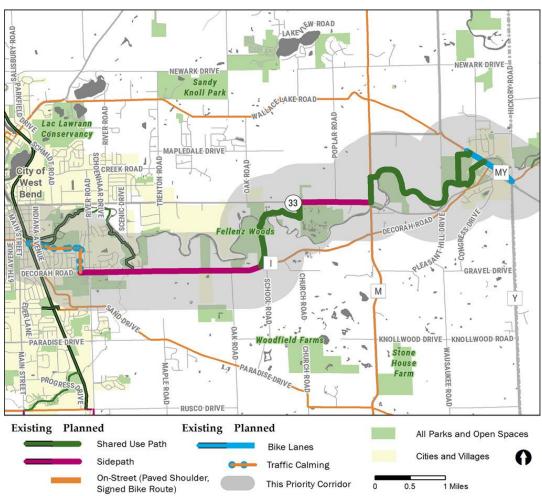




Priority Corridor 3: West Bend to Newburg via Decorah Road & Milwaukee River Path

Overview

This route from West Bend to Newburg would be a part of an eventual "all ages and abilities" bikeway and trail connection from the Eisenbahn State Trail in West Bend to the Interurban Trail in Ozaukee County. During the planning process, County staff determined that the previously planned alignment along the West Bend Municipal Airport was unfeasible due to Federal airport runway open space requirements. The proposed alignment connects West High School in West Bend to a variety of parks and residential areas. At Fellenz Woods, the route continues as a shared-use path across the Milwaukee River to STH 33, then as a side path along STH 33 and CTH M before following the river again, ending in the Village of Newburg.



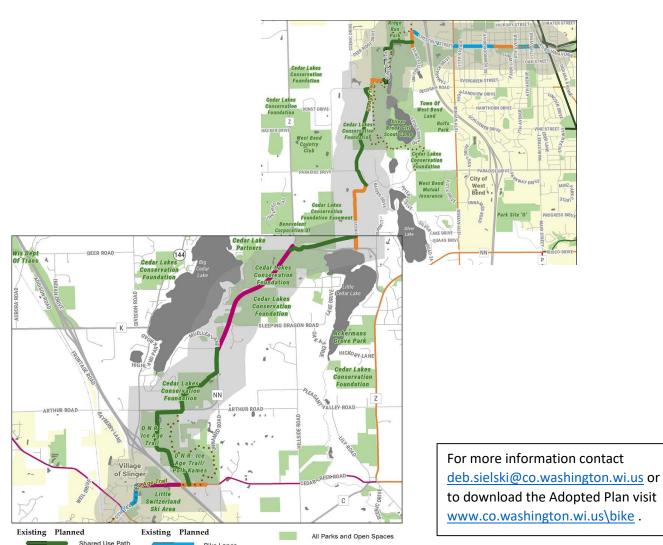




Priority Corridor 4: West Bend to Slinger via Ridge Run Park and CTH NN

Overview

This proposed route runs through some of the most scenic areas in Washington County and connects West Bend to Slinger via an "all ages and abilities" route. At the northern and southern ends of the route, the alignment runs parallel to existing hiking segments of the Ice Age National Scenic Trail, but has been adjusted in places to provide as much distance as possible between the hiking trail and the proposed path. Along CTH NN, the road ROW is wide enough in most places to allow a side path without the need to acquire many additional property easements. Due to the length in this route, the corridor is split into northern and southern sections.



Traffic Calming

On-Street (Paved Shoulder, Signed Bike Route)

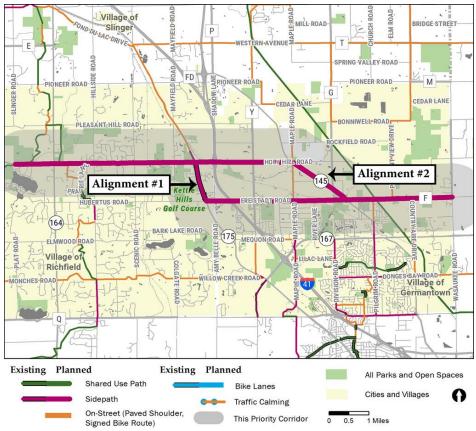




Priority Corridor 5: Holy Hill Road-Freistadt Road

Overview

This east-west route will serve as a gateway for Germantown and Richfield residents to access the scenic Holy Hill area. It also provides a connection to several important County parks and schools. Eventually, the route could extend into Ozaukee County and connect to the Interurban Trail. Some of the side path segments on Freistadt Road in Germantown are good candidates for grant funding due to their proximity to schools, residential areas, and parks. Initially, the planning team and County staff proposed a side path on Hubertus Road in Richfield. Further analysis revealed that the narrow right-of-way and tight curves near Friess Lake made a Hubertus Road side path unfeasible. This section presents two alternatives: the first uses Appleton Avenue (STH 175) to go from Holy Hill Road to Friestadt Road; while the second uses Fond du Lac Avenue (STH 145). The County will need to perform an engineering study to decide which alignment is more feasible and cost-effective.



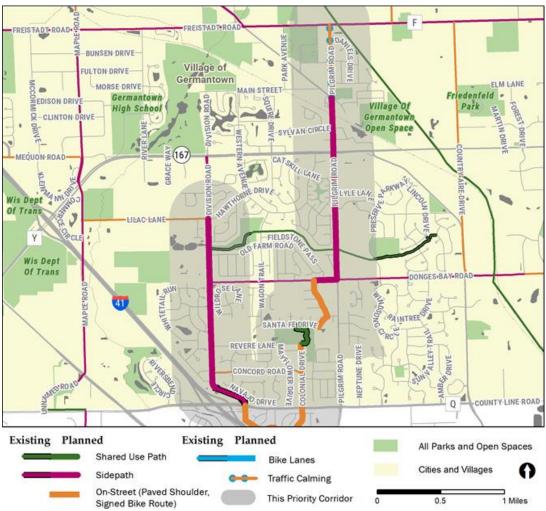




Priority Corridor 6: Germantown to Bugline Trail via I-41 Pedestrian Overpass

Overview

This corridor provides Germantown residents with a safe, all-ages-and-abilities route to access the Bugline Trail and Menomonee River Parkway in Menomonee Falls. The existing side paths on Division Road and Donges Bay Road need to be rebuilt to state design standards to safely accommodate bicyclists and pedestrians, which is why they appear as "Planned" side paths. Some of the planned side paths recommended on Pilgrim Road are within the road ROW and could be built as part of new development.



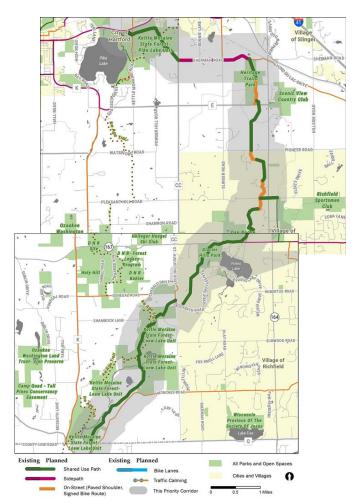




Corridor 7: Pike Lake Unit to Heritage Trails Park to Loew Lake Unit

Overview

This proposed route connects some of the most beautiful and scenic areas of the County, taking advantage of open space in Kettle Moraine State Forest units and several County parks. Between CTH E and Holy Hill Road (STH 167), the proposed alignment traverses land that is currently active farmland. The proposed alignment depends on the Village of Richfield and the Town of Polk providing on-street connections or easements for the future path if or when the agricultural parcels are subdivided. The corridor may traverse several of the same parcels as the Ice Age National Scenic Trail; the alignment has been adjusted to minimize the number of times the proposed path would cross the hiking trail, and to emphasize that trail crossings shall be perpendicular and clearly marked.







Existing Bikeways and Trails

Throughout Washington County, there are already several different types of bikeways and trails that are available for use and they are listed and described in more detail below.

Shared Use Paths

Washington County has several popular **off-street shared-use paths** (also referred to as "trails") forming the foundation of the recommended bicycle and pedestrian network in the County. They include:

- Eisenbahn State Trail
- West Bend Riverfront Parkway
- Rubicon River Bike Trail



Rubicon River Bike Trail



Side path along Jackson Drive in Jackson

Side Paths

- Shared use paths adjacent to roadways
- The City of Hartford, and the Villages of Germantown, Jackson, and Richfield have several miles of side paths within their jurisdictions

Wide Shoulders/Bike Lanes

- Provide space for people bicycling on the roadway
- Most existing on-street bikeways in Washington County are wide paved shoulders
- Can be useful to more-experienced bicyclists
- Do not serve "all ages and abilities"



Wide Shoulder Heading into West Bend



Ice Age National Scenic Trail

- Continuous footpath that extends approximately 1,200 miles across the State of Wisconsin
- Provides a natural corridor for wildlife and habitat
- Is an **Educational resource** for people to learn about the cultural and geological history of Wisconsin
- Walking and hiking only
- About 35 miles of completed footpath in Washington County





Policy and Program Recommendations

Implementation of this Plan depends on changes in policies and programs at the County and municipal levels. For a bikeway and trail network to be safe, paths, sidewalks, shoulders, and bike lanes must be built to the correct design standards.

Each of the recommendations include specific actions, a general timeline for implementation, and partners who may be involved with implementing each action.



	Policy Recommendation	Fiscal Responsibility	Safety	Quality of Life	Partnership
1.	Adopt design standards and implementation practices that will result in the creation of safe and well-designed walking and biking facilities.		✓	✓	✓
2.	Update other plans and ordinances to include Plan recommendations.	✓			✓
3.	Adopt a sustainable maintenance strategy and an evaluation program.	✓	✓		✓
4.	Pursue all potential funding sources for bicycling and walking projects.	✓			✓
5.	Increase coordination and communication between agencies.		✓		✓
6.	Provide training and education opportunities for County staff.		✓		✓
7.	Increase public outreach, awareness, and education.		√	✓	✓









Implementation and Funding

Implementation

- County has pledged to contribute \$250,000 in 2019 through 2023 (subject to an annual vote of the County Board)
- Plan implementation will be fulfilled over time in small, incremental steps
 - Review and approval of appropriate County Board committees and Supervisors throughout the processes

Construction Costs

- The total cost of constructing the entire Plan network is estimated at \$90 million
- Based on typical per-mile cost estimates
- Construction costs will vary based on the ultimate project scope, actual site conditions and constraints, schedule, and economic conditions at the time of construction
- Cost would not be borne entirely by the County; for example, WisDOT, local municipalities, the Wisconsin DNR, and other jurisdictions would all be significant contributors to the cost of building the network



County Level Funding

The infrastructure recommendations in the Plan cannot be implemented in a timely manner solely through grant funding.







Federal and State Level Funding

Washington County, municipalities, and advocates should continue to seek funding from alternative sources. Grant programs are one of the primary sources of funding bicycle and pedestrian infrastructure. However, state and federal funding sources are limited and highly competitive. The figure below summarizes some of these funding opportunities.

Federal and State Grant Programs							
Types of Funding	Eligible Bikeway Projects	Match Required	Availability/Timeline for Application				
Federal Transportation Alternatives Program (TAP)	On or off-road facilities	20%	Late 2019 or early 2020				
Federal Congestion Mitigation and Air- Quality Improvement Program (CMAQ)	Transportation projects that reduce the number of vehicle trips and/or vehicle miles traveled.	20%	2019				
Knowles-Nelson Stewardship Local Assistance Programs	Off-road facilities such as trails and trailhead facilities	50%	Annually				
Recreational Trails Program (RTP)	Development and maintenance of recreational trails and trail-related facilities	50%	Annually				





Next Steps – A 5-Year Strategic Action Plan

What Will the Five Year Strategic Action Plan Do?

Successful implementation of the Plan will depend on effective collaboration between County departments, and with local governments, advocacy and non-profit conservation organizations, businesses, and land owners. To facilitate this collaboration, it can be helpful to identify clear roles, responsibilities, and timelines for

high-priority actions. The County will be working on a detailed 5-year Strategic Action Plan that will outline the specific tasks and identify funding sources for implementing the Priority Corridors. The Strategic Action Plan will be updated on an annual basis outlining tasks for the upcoming year.

- Define the roles & responsibilities of the implementation team
- Outline external stakeholders and partnerships
- Prioritize tasks for implementation
- Set performance measures of success
- Plan for communication and marketing efforts
- Craft a consistent message



Tasks of the Plan:

- 1. Policy Implementation
- 2. Priority Corridor Network Implementation
- 3. Connector Network Implementation
- 4. Communication & Marketing
- 5. Public & Stakeholder Engagement
- 6. Funding



