



AGENDA
Bike and Pedestrian Planning Committee
Wednesday, September 12, 2018 - 3:00 PM
Public Agency Center - Suite 3224
333 E. Washington Street, West Bend, WI 53095

The following business will be brought before the Committee for initiation, discussion, deliberation, and possible formal action subject to the rules of the Board, which may be inspected in the office of the County Clerk.

- 1. Call to Order and Affidavit of Posting**
- 2. Roll Call**
- 3. Pledge of Allegiance**
- 4. Consent Agenda**
 - a. Minutes of August 15, 2018
- 5. Discussion Items**
 - a. Wikimap Update
- 6. Action Items**
 - a. Existing Conditions Analysis Discussion
 - b. Visioning Discussion
- 7. Next Meeting Date**
- 8. Adjournment**

It is possible that individual members of other governing bodies of the County government may attend the above meeting. It is possible that such attendance may constitute a meeting of any such other governing body pursuant to State ex rel. Badke v. Greendale Village Board, 173 Wis. 2d 553, 494 N.W. 2d 408 (1993). This notice is given solely to comply with the notice requirements of the open meeting law. No action will be taken by any other governmental body except by the governing body noticed in the caption above.

AFFIDAVIT OF POSTING

This agenda was posted in the office of the County Clerk on the 5th day of September, 2018. Notice was sent to the West Bend Daily News, Express News, WIBD/WMBZ Radio, WTKM Radio, My Community NOW, Hartford Times Press, Kewaskum Statesman, Milwaukee Journal-Sentinel. Individuals with disabilities requiring special accommodations for attendance at the meeting should contact the County Clerk at (262) 335-4301 at least 48 hours prior to the meeting.

ATTACHMENTS:

Description	Type
☐ Minutes of August 15, 2018	Minutes

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August 15, 2018
4:00 p.m.

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26 Mr. Elbe nominated Mr. Zignego to be Chair of the committee. Mr. Kist seconded the nomination. **Ms. Bishop**
27 **moved to pass a unanimous ballot to approve the nomination of Mr. Zignego, seconded by Mr. Kist. All**
28 **voted in favor of the nomination of Mr. Zignego as Chair via a voice vote.**

30

32 Chairperson Zignego asked for nominations for Vice-Chair. **Mr. Elbe nominated Mr. Kist, seconded by Ms.**
33 **Valentino. Mr. Zignego called for a voice vote to approve the nomination of Mr. Kist. All voted in favor**
34 **of the nomination of Mr. Kist as Vice-Chair via a voice vote.**

36 Mr. Zignego noted that neither he nor Mr. Kist could attend the October meeting of the Bike and Pedestrian
37 Planning Meeting as scheduled for October 24. Mr. Betry agreed to reschedule the date of the October meeting.

39

40 Ms. Sielski described how Washington County went through the process of obtaining the services of the Toole
41 Design Group team for the Washington County Bicycle and Pedestrian Plan.

Ms. Sielski emphasized that the Washington County Board is very interested in the Plan, and the implementation of the Plan is a high priority.

Ms. Sielski also mentioned that the County is contracting with Epic Creative to create a name, a logo, and slogan for the current—and future—network of trails and shared use paths in Washington County.

PROJECT OVERVIEW, SCHEDULE AND ADVISORY COMMITTEE ROLES/RESPONSIBILITY

Ms. Haeckel gave a PowerPoint presentation providing an overview of the Washington County Bicycle and Pedestrian Plan process and schedule, as well as the roles and responsibilities of Advisory Committee members. It is anticipated that the project will finish in the spring of 2019, with a target of County Board approval in April 2019.

VISIONING EXERCISE

Ms. Keller asked participants to write answers to two questions on cards that were distributed to each attendee. The answers to these questions would help the Toole Design Group team craft a vision statement for the Plan. The two questions were:

- “In 20 years, I can bike safely from _____ to _____ in Washington County”
- “20 years from today, what would you love to hear your children tell their children about growing up bicycling and walking in Washington County?”

Ms. Ludovic pointed out that the County Board is interested in implementing Plan recommendations within the next five years, and asked whether a 20-year vision timeline was too long. Ms. Haeckel explained that vision statements are often aspirational, and may be long-term, even if the plan includes short-term recommendations.

Ms. Keller asked participants to share their answers aloud; many did so. Ms. Keller explained that the consultant team would collect the responses and develop several alternative vision statements for the Committee to consider at the September 12 meeting.

DISCUSSION OF PUBLIC KICKOFF WORKSHOP

Ms. Haeckel said there would be a public kickoff workshop in the same meeting room the following day (August 16) at 5:00 p.m. and invited Committee members to attend the meeting, and to invite other stakeholders and interested parties.

DISCUSSION OF WIKIMAP LAUNCH

Ms. Haeckel showed the Committee the online interactive mapping tool that the Toole Design Group team developed. The interactive map, located at <https://tinyurl.com/Washco-map1>, is a place for the public to provide input on destinations, barriers, bicycle or walking routes in Washington County. The map will be available through the first week of September. Ms. Sielski encouraged Committee members to provide input on the mapping tool and to share the link with other interested parties.

DISCUSSION OF EXISTING CONDITIONS ANALYSIS

Ms. Haeckel said that the Toole Design Group consultant team will prepare a memo on existing conditions for walking and biking in Washington County in the upcoming weeks. As part of that memo, the Toole Design

86 Group team will be referencing relevant plans, such as community comprehensive plans or park and open space
87 plans, that may have included recommendations for bicycle or pedestrian trails. She said that some of the
88 members of the Committee may be contacted to request GIS (mapping) data so that those recommendations can
89 be displayed on maps in the Plan.

90
91 **NEXT MEETING DATE**

92 Mr. Zignego confirmed that the next meeting of the Committee would be on Wednesday, September 12, in the
93 same location. Ms. Ludovic asked Committee members whether they would prefer meeting from 3-5 p.m.
94 instead of 4-6 p.m. Most Committee members preferred the earlier time. Ms. Sielski agreed to schedule future
95 meetings for 3-5 p.m.

96
97 **ADJOURNMENT**

98 Mr. Zignego adjourned the meeting at 5:15 P.M.

99
100 Daniel Zignego, Chairperson
101

ATTACHMENTS:

Description	Type
▣ Existing Conditions Analysis Discussion	Backup Material
▣ Existing Conditions Analysis Discussion	Map(s)

Memorandum

Date: 9/4/2018
To: Debora Sielski
From: Sonia Haeckel, Evan Moorman, Kit Keller, and Joe Delmagori
Re: Memo on Existing Conditions, Opportunities, Challenges, and Needs

This memo lays out existing conditions for bicycling and walking in Washington County, including opportunities, challenges and needs present in the County. This report forms the basis for a chapter in the Plan and will be discussed by the Advisory Committee on Wednesday, September 12, 2018.

Existing Conditions, Opportunities, Challenges and Needs

The Case for Bicycling and Walking

Increasing bicycling and walking opportunities can improve the health and safety, quality of life, economic growth, and economic and social accessibility of Washington County and its citizens. In this way, relatively modest fiscal investments in bicycling and pedestrian facilities can yield significant advantages for the community.

Health and Safety

Making it easier for people to bicycle and walk can improve the health and well-being of Washington County residents in several ways.

- *Increasing daily levels of exercise in the community.* In Washington County, about 31% of the adult population have a body mass index (BMI) over 30 and about 20% of adults do not engage in any physical activity.¹ The Centers for Disease Control and Prevention recommends changing the built environment in communities to make it easier for people to bicycle and walk as a strategy to prevent chronic disease.²
- *Reducing crash risks through greater visibility and protection.* For bicyclists, treatments such as bicycles lanes and off-street paths are associated with reduced risk of crashes. For pedestrians, sidewalks are proven to reduce crashes. Generally, facilities that physically separate bicyclists and pedestrians from cars (e.g. off-street paths, sidewalks, and protected bicycle lanes) offer the

¹ University of Wisconsin Population Health Institute. *County Health Rankings and Roadmaps*, 2018, www.countyhealthrankings.org/app/wisconsin/2018/rankings/washington/county/outcomes/overall/snapshot

² Centers for Disease Control and Prevention – Division of Community Health. *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease*, US Department of Health and Human Services, 2013.

greatest actual (and perceived) safety and comfort.³ The more bicyclists and pedestrians there are, the lower the crash risk, due to a “safety in numbers” effect. This is likely due to greater driver awareness of bicyclists and pedestrians.⁴

Quality of Life

Building more paths and trails is one way to make sure that Washington County residents have desirable places to live and work. They complement one of Washington County’s unique strengths: access to natural resources and scenic vistas. Communities that offer better access to bicycle or walking infrastructure generally have higher property values, indicating that people value those amenities.⁵ Building new bicycle and pedestrian facilities can also help maintain quality of life by providing alternatives to driving and limiting air pollution.⁶

Cost-Effectiveness

Bicycling and walking infrastructure is relatively low-cost compared to other modes and can be built as part of planned resurfacing and reconstruction of existing roads, or through incremental extensions of the path network.

- *Reducing traffic by diverting short trips.* Washington County’s population is growing quickly, and the traffic levels are growing as well. Nationally, 28% of trips are of one mile or less and 40% of trips are of two miles or less.⁷ Nonetheless, most short trips—to nearby schools, stores, or restaurants—are made in motor vehicles. If more residents can make such trips on foot or by bicycle, Washington County can better manage the increased traffic that accompanies population growth.
- *Incremental investments.* Bicycle and pedestrian facilities can often be added into regular road resurfacing or reconstruction projects for as little as 1% increase in the cost of the overall project, and up to 20% (under the most constrained situations).⁸ This efficiency is particularly important considering that the Wisconsin Department of Transportation (WisDOT) is spending very little on road expansion. Most local road funds are available only for resurfacing and

³ Monsere Christopher et al., “Lessons from the Green Lanes: Evaluating Protected Bike Lanes in the U.S.” *Transportation Research Board*, 2014, www.trb.org/Society/Blurbs/170880.aspx

⁴ Jacoben, P.L., “Safety in Numbers: More Walkers and Bicyclists, Safer Walking and Bicycling.” *Injury Prevention*, vol. 9 (3), 2003, pp. 205-209, injuryprevention.bmj.com/content/9/3/205

⁵ Urban Land Institute. *Active Transportation and Real Estate: The Next Frontier*. Washington, D.C: The Urban Land Institute, 2016

⁶ Ngo, Victor Douglas, et al., “Effects of New Urban Greenways on Transportation Energy Use and Greenhouse Gas Emissions: A Longitudinal Study from Vancouver, Canada.” *Science Daily*, 5, 2018, www.sciencedaily.com/releases/2018/07/180705110056.htm

⁷ Flusche, Darren, “National Household Travel Survey—Short Trips Analysis.” *League of American Bicyclists*, 22 January 2010, www.bikeleague.org/content/national-household-travel-survey-short-trips-analysis

⁸ Federal Highway Administration. *Incorporating On-Road Bicycle Networks into Resurfacing Projects*, March 2016, www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/resurfacing/resurfacing_workbook.pdf

reconstruction projects, where bicycle lanes can be added economically. Funding for off-street paths is also very limited, and those types of projects are more expensive. However, such paths can be built in incremental stages over time, lessening the impact on local budgets.

Recreation and Tourism-Oriented Development

Two major studies—one conducted in Wisconsin in 2010⁹ and the other conducted in Iowa in 2011¹⁰ attempted to quantify economic impacts from bicycling. The Wisconsin study found that bicycling contributed about \$550 million to the state economy, while the Iowa study found that bicycling contributed over \$900 million. Both studies found that catering to bicyclists could create significant numbers of jobs, many located in rural locations where other jobs can be difficult to create and maintain.

Washington County can increase economic development through investing in bicycling. This opportunity can be leveraged by the development of the *Route of the Badger*. This route will be discussed more in the following section, but it has the potential to create a cohesive bicycle network that could draw visitors from other parts of Wisconsin and Illinois into Washington County for recreational bicycling.

Economic and Social Accessibility

Finally, improving active transportation infrastructure helps widen choice and access to jobs and destinations, especially for households with no vehicles or only one vehicle. How large is this group in Washington County? About 27% of County households have only one vehicle. An improvement in bicycle and pedestrian conditions offers more opportunities and choices to this group by allowing them to avoid purchasing an additional vehicle.

Additionally, 4% of County households lack any vehicle at all.¹¹ While such households comprise a relatively small proportion of the population, they struggle the most to access jobs and destinations. Providing alternative transportation options for this group will help them find and keep jobs while also ensuring that businesses keep workers.

Existing Bicycle and Pedestrian Facilities.

Map 1 at the end of this memo shows the existing on-street bicycle facilities and shared use paths in the County as solid orange and green lines. Washington County has several popular off-street shared-use

⁹ Grabow, M. et al. "Valuing Bicycling's Economic and Health Impacts in Wisconsin." Nelson Institute for Environmental Studies and the Center for Sustainability and the Global Environment at University of Wisconsin-Madison, ResearchGate, 2010, www.researchgate.net/publication/242569776_Bicycling's_Economic_and_Health_Impacts_in_Wisconsin

¹⁰ Lankford, Jill et al. "Economic and Health Benefits of Bicycling in Iowa," *Iowa Bicycle Coalition*, 2011, iowabicyclecoalition.org/wp-content/uploads/2012/04/2012-Economic-Impact-Study.pdf

¹¹ "Income in the Past 12 Months (in 2016 Inflation-Adjusted Dollars): 2012-2016 American Community Survey 5-Year Estimates." *United States Census Bureau: American Fact Finder*, 2017

paths (also referred to as “trails”) which will form the foundation of the recommended bicycle and pedestrian network in the County.

- *Eisenbahn State Trail (and West Bend Riverfront Parkway)*. This north-south trail runs through the north-central portion of the County for approximately 12.5 miles. The southern terminus of the trail is in West Bend at Rusco Road. The trail runs north through the City of West Bend and the Village of Kewaskum, roughly paralleling the Milwaukee River. The trail ends in the Village of Eden in Fond du Lac County. It follows a former rail corridor that fell into disuse in the 1990s. At that time, the State of Wisconsin bought the land and in 2006 an agreement was reached with Washington County in which the County would maintain and develop the portion of the right-of-way within its jurisdiction. The County opened the trail in 2006, when it was still unpaved. The next year, the City of West Bend paved 5 miles of the trail, but it is still unpaved north of Barton Road in West Bend. Snowmobiles and ATVs are permitted on unpaved portions of the trail north of the City during the winter, when conditions are right.

The City of West Bend has built the Riverfront Parkway along the Milwaukee River, which connects to the Eisenbahn Trail in some areas, creating an extensive network of paths in the downtown area.

- *Rubicon River Bike Trail*. In 1982, the City of Hartford began acquiring land to create the Rubicon River Parkway along the riverfront, with the eventual goal of connecting the path to Pike Lake State Park east of the City. This goal was achieved when a sidepath next to State Highway 60 was built as part of a reconstruction project. Some of the path segments are paved but in poor condition.

Bicycle and Pedestrian Facilities Proposed in Previous Plans

Before developing a recommended bicycle and pedestrian network in Washington County, it is helpful to refer to previous planning efforts. Proposed networks from previous bicycle or pedestrian planning efforts are shown on Map 1.

Proposed Regional Networks

There are two important proposals for a regional network of low-traffic and off-street paths that should be considered for this Plan. Both are shown with specific symbols on Map 1.

- *VISION 2050*. This is a regional plan adopted in 2016 by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). This long-range plan encompasses both thorough analysis and recommendations for land-use and transportation networks for the seven-county region. As such, the plan is regional in scope, focusing on connections between cities and villages over 5,000 in population. VISION 2050 recommends that bicycle facilities be provided, if feasible, on all arterial streets and highways as they are resurfaced or reconstructed. In addition, VISION 2050 recommends expanding the off-street bicycle path system, connecting paths with low-traffic local roads, and in some places, connections along arterial streets that have bicycle lanes

or paved shoulders. The 2020 Washington County Open Space Plan includes this proposed off-street bicycle path network.

- *The Route of the Badger* is a proposed path network in southeastern Wisconsin promoted by the Rails-to-Trails Conservancy, a national organization that advocates for the conversion of disused or lightly-used rail rights-of-way into active transport paths. The *Route of the Badger* aims to link southeastern Wisconsin's 340 miles of existing paths into a connected 500-mile network. In Washington County, many of the connections are based on the VISION 2050 Plan.

Other Relevant County, City, Village, Town, and Open Space Plans

In addition to the regional networks described above, staff reviewed County and local plans that have been developed since 2003 to determine if there were any recommendations that would have bearing on the current planning effort. Table 1 lists the plans that were reviewed, and whether they had content that would be of use during this planning process. The planning team will refer to these documents during the subsequent development of the recommended bicycle and pedestrian network. If there were path network recommendations or on-street bikeway recommendations in the County or local plans, those proposed facilities are shown as dashed orange or green lines on Map 1. The map shows local planned bicycle routes and paths for the City of Hartford, the City of West Bend, and the Village of Slinger. The planning team was unable to obtain the digital mapping data to show the planned bicycle routes and paths for the Villages of Jackson, Richfield, and Germantown, but will consult the hard copy versions of those plans when developing recommendations that connect to those communities.

Table 1: Matrix of Relevant Previous Plans with Bicycle and Pedestrian Recommendations

Relevant Plans Adopted Since 2003, by Jurisdiction		Path Network Recom.	On-Street Bikeway Recom.	List of Priority Projects	Specific Policy Recom.
Washington County					
A Multi-Jurisdictional Comprehensive Plan for Washington County: 2035		✓	✓		✓
Adoption Date:	April 2008				
Plan Horizon:	2008-2035				
A Park and Open Space Plan for Washington County		✓			
Adoption Date:	March 2004				
Plan Horizon:	2004-2020				
A Jurisdictional Highway System Plan for Washington County					
Adoption Date:	December 9, 2008				
Plan Horizon:	2008-2020				
2017 Washington County Community Health Improvement Plan					
Adoption Date:	September 2017				
Plan Horizon:	2017-				
2050 Transportation Network Sustainability Plan				✓	
Adoption Date:	August 2018				
Plan Horizon:	2018-2050				

Relevant Plans Adopted Since 2003, by Jurisdiction		Path Network Recom.	On-Street Bikeway Recom.	List of Priority Projects	Specific Policy Recom.
Town of Addison					
A Comprehensive Plan for the Town of Addison: 2035					✓
Adoption Date:	June 2009				
Plan Horizon:	2009-2035				
Town of Barton					
A Comprehensive Plan for the Town of Barton: 2035				✓	
Adoption Date:	April 2008				
Plan Horizon:	2008-2035				
Town of Erin					
A Comprehensive Plan for the Town of Erin: 2035					
Adoption Date:	December 2009				
Plan Horizon:	2009-2035				
Town of Farmington					
A Comprehensive Plan for the Town of Farmington: 2035		✓			✓
Adoption Date:	January 2010				
Plan Horizon:	2010-2035				
A Comprehensive Plan Update for the Town of Farmington: 2050					
Adoption Date:	May 2018				
Plan Horizon:	2018-2050				
Town of Germantown					
Town of Germantown Comprehensive Plan					
Adoption Date:	May 2008				
Plan Horizon:	2008-				
Town of Hartford					
A Comprehensive Plan for the Town of Hartford: 2035					✓
Adoption Date:	April 2009				
Plan Horizon:	2009-2035				
Town of Jackson (see Village of Jackson)					
Town of Kewaskum					
A Comprehensive Plan for the Town of Kewaskum: 2035					
Adoption Date:	October 2009				
Plan Horizon:	2009-2035				
Town of Polk					
A Comprehensive Plan for the Town of Polk: 2035					✓
Adoption Date:	September 2009				
Plan Horizon:	2009-2035				
Town of Trenton					
A Comprehensive Plan for the Town of Trenton: 2035					✓
Adoption Date:	April 2009				
Plan Horizon:	2009-2035				
Town of Wayne					
A Comprehensive Plan for the Town of Wayne: 2035					✓
Adoption Date:	March 2009				
Plan Horizon:	2009-2035				

Relevant Plans Adopted Since 2003, by Jurisdiction		Path Network Recom.	On-Street Bikeway Recom.	List of Priority Projects	Specific Policy Recom.
Town of West Bend					
Plan Name:	N/A				
Adoption Date:					
Plan Horizon:					
Village of Germantown					
Village of Germantown: 2020 Smart Growth Plan		✓	✓	✓	✓
Adoption Date:	August 2004				
Plan Horizon:	2004-2020				
Village and Town of Jackson					
Opportunity Analysis and Redevelopment Plan		✓			
Adoption Date:	March 2017				
Plan Horizon:	2017-				
Village and Town of Jackson Comprehensive Plan: 2035		✓	✓	✓	
Adoption Date:	August 2009				
Plan Horizon:	2009-2035				
A Joint Parks, Recreation & Open Space Plan for The Village of Jackson and The Town of Jackson - 2008		✓	✓	✓	
Adoption Date:	Revised March 2009				
Plan Horizon:	2009-				
Village of Kewaskum					
A Comprehensive Plan for the Village of Kewaskum: 2035					✓
Adoption Date:	2009				
Plan Horizon:	2009-2035				
Village of Newburg					
A Comprehensive Plan for the Village of Newburg					✓
Adoption Date:	2014				
Plan Horizon:	2014-2035				
Village of Richfield					
Village of Richfield Comprehensive Plan: 2014-2033		✓	✓		
Adoption Date:	June 2014				
Plan Horizon:	2014-2033				
The Village of Richfield Northeast Corridor Opportunity Analysis					
Adoption Date:	June 2016				
Plan Horizon:	2016-				
Village of Slinger					
Village of Slinger Comprehensive Plan		✓	✓	✓	✓
Adoption Date:	November 2017				
Plan Horizon:	2017-2040				
City of Hartford					
City of Hartford 2030 Smart Growth Plan					
Adoption Date:	Unknown				
Plan Horizon:	2030				
City of West Bend					
Bicycle Plan for the City of West Bend			✓		
Adoption Date:	N/A				
Plan Horizon:	2017-2025				

Relevant Plans Adopted Since 2003, by Jurisdiction		Path Network Recom.	On-Street Bikeway Recom.	List of Priority Projects	Specific Policy Recom.
2020 Comprehensive Plan for The City of West Bend		✓	✓		✓
Adoption Date:	March 2004				
Plan Horizon:	2004-2020				
A Park and Open Space Plan for the City of West Bend:2020		✓	✓		
Adoption Date:	March 2008				
Plan Horizon:	2008-2020				
OTHER PLANS					
Ice Age Trail					
Ice Age Trail Strategic Plan					
Adoption Date:	November 2017				
Plan Horizon:	2018-2020				
Southeastern Wisconsin Regional Planning Commission					
VISION 2050: A Regional Land Use and Transportation Plan		✓	✓		✓
Adoption Date:	July 2016				
Plan Horizon:	2016-2050				

Roadway Bicycle Compatibility

The results of a WisDOT formula that estimates bicycling conditions on rural Washington County roads are displayed on Map 2 at the end of this memo. Darker lines represent better estimated bicycling conditions. In the rural north and west of the County, many of the rural roads are predicted to be “best condition”. In the more suburban sections and in many of the transition areas between urban areas and rural areas, many roads are “not recommended” for cyclists. In general, WisDOT estimates the conditions for federal, state, or county highways, because there is insufficient data available to estimate the conditions on local roads (those that are owned and maintained by cities, villages, or towns). As part of the 2015 State Bicycle Map update, WisDOT did prepare roadway bicycling conditions maps for the Wisconsin municipalities with populations greater than 25,000, which includes the City of West Bend. Consequently, West Bend’s bicycling conditions on major streets are shown on Map 2, but none of the other municipalities’ major streets are shown.

Methodology to Determine Roadway Bicycle Compatibility

The draft roadway bicycle compatibility ratings shown on Map 2 are from two sources:

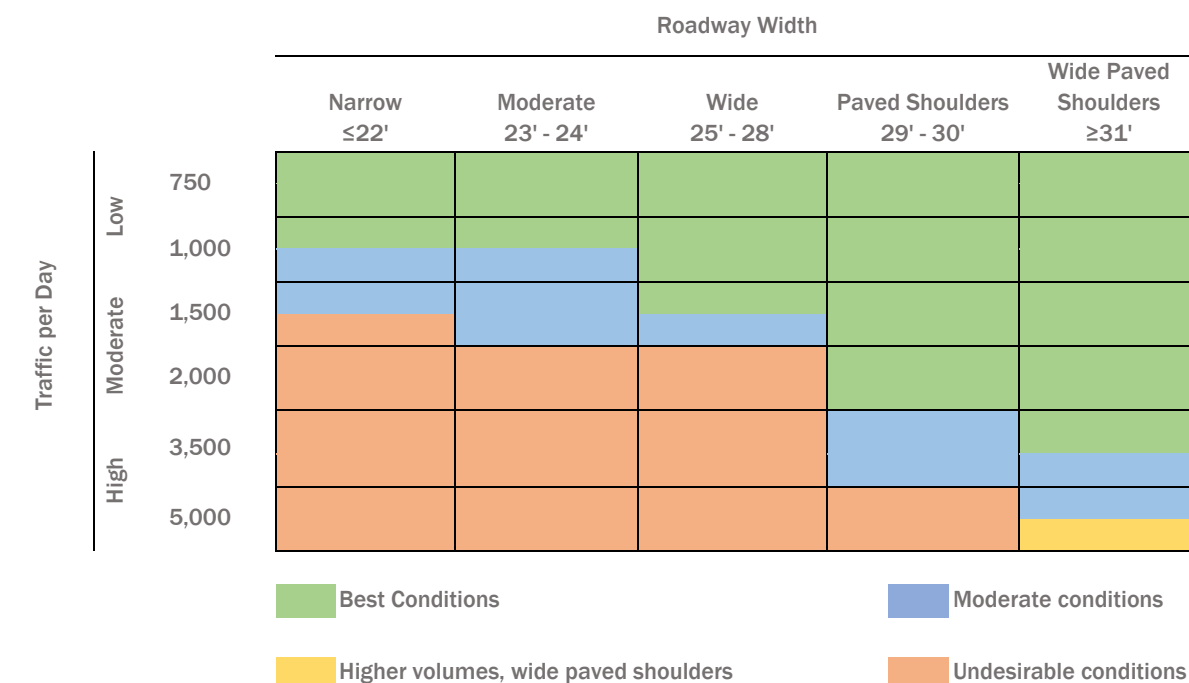
- For federal, state, and local roads, the planning team used map layers provided by WisDOT showing the most recent compatibility ratings, based on WisDOT’s 2015 update to the [State Bicycle Map](#). Those ratings were modified where there was a known change in the bicycling conditions (such as an increase in truck traffic or a road project that added paved shoulders in the past three years).
- For Washington County roads, the planning team used road centerline data provided by the Washington County Highway Department with 2018 pavement width and traffic volumes. The planning team then estimated the bicycling conditions using the methodology described below.

WisDOT develops the compatibility ratings using a formula to estimate rural road bicycle compatibility. The formula was designed to be sensitive to the conditions of low- and moderate-volume rural roads, such as those found throughout Wisconsin and Washington County. The model was based on the probability of a conflict, defined as two opposing motor vehicles meeting to pass each other when a bicyclist is present. This impacts the suitability of a road for safe shared use; very few rural roads in Wisconsin have space for two cars and a bicycle. There is an exponential relationship between traffic volumes and conflicts. For example, a bicyclist can expect to encounter nine times as many conflicts on a road with 1,500 vehicles daily, compared to a road that has 500 vehicles daily.¹²

WisDOT's bicycle compatibility rating assessment uses the following factors: average daily traffic volume; roadway width; percent yellow center line (which measured passing restrictions); and percent heavy truck traffic. Based on these factors, roadway segments are rated "good," "moderate," or "undesirable." The provided ratings are for adult bicyclists over 16 years of age who are generally comfortable with at least lower volumes of higher traffic speed motor vehicle traffic.

Figure 1 displays a generalized depiction of the methodology results. As traffic volumes increase, roadway width must also increase to maintain bicyclist comfort levels. A similar pattern exists for truck volumes and speed increases; as these factors increase, wider paved shoulders are needed to maintain comfort levels. A more detailed description of how the rating is calculated is documented in [Appendix A of the Wisconsin Rural Bicycle Planning Guide](#).

Figure 1: Roadway Ratings by Width and Volume



¹² *Wisconsin Rural Bicycle Planning Guide*. Madison, WI, Wisconsin Department of Transportation. April 2006, 15.

Bicycle and Pedestrian Crash Analysis

Map 3 at the end of this memo shows the bicycle and pedestrian crashes that were reported to police in Washington County between 2006 and 2016. It should be noted that many non-fatal bicycle and pedestrian crashes are not reported to police; bicycle and pedestrian crash data typically undercounts the actual number of crashes.

- *Bicycle crashes.* There were 191 bicycle-related crashes reported between 2006 and 2016. Most of these crashes (104) occurred in the City of West Bend, the most populous city in the County. The Village of Germantown (with 31 crashes), and the City of Hartford (with 23 crashes) contained most of the remaining crashes. This may be an indication of higher numbers of bicyclists, destinations, and intersection density in those communities, resulting in higher chance that a bicyclist will be in a crash.
- *Pedestrian crashes.* There were 141 pedestrian-related crashes reported between 2006 and 2016. As with bicyclist-related crashes, these collisions were concentrated in the City of West Bend (60 crashes), the Village of Germantown (20 crashes), and the City of Hartford (30 crashes). As explained above, this may be an indication that there are more pedestrians, destinations, and intersection density in those communities, resulting in a higher chance that a pedestrian will be in a crash.
- *Common crash locations.* The streets with the highest number of crashes are STH 33 (West Washington Street) and South Main Street in the City of West Bend, Mequon Road in the Village of Germantown, and North Main Street and STH 60 (Sumner Street) in the City of Hartford. Many of these high-crash areas are in commercial zones where people may be walking to and from work or shopping destinations. These streets also have four or more lanes of traffic, making it difficult to cross as a pedestrian or bicyclist.
- *Serious injuries and fatalities.* Urban areas tend to report more *total* bicyclist and pedestrian crashes than rural areas, but relatively few *serious* injuries and fatalities, a result of slower collision speeds in urban areas. Washington County is no exception; bicycle- and pedestrian-related crashes are overwhelmingly clustered in the most urbanized sections of the County although crashes causing fatalities or serious injuries more often occur in suburban and rural areas. For bicyclists, 21 out of 31 fatalities or serious injuries occurred in either suburban or rural areas, while for pedestrians, 21 of 39 fatalities or serious injuries occurred in suburban or rural areas.

Past Public Comments and Surveys

This section summarizes past comments and survey results collected from previous outreach efforts in Washington County. Full reports of the summaries below can be found on the [Washington County Planning and Parks Department website](#). A full report of the Public Kickoff Workshop held on August 16, 2018 as part of this planning effort will be included as an appendix to the final Plan document.

Comprehensive Planning Telephone Survey (2006)

This survey was done in February and March 2006 with 1,205 surveys completed. As part of the survey, residents rated the expansion of bicycle paths and lanes as being either a “high priority” (46%), or a “medium priority” (31%). Only 21% of respondents stated that the construction of such a network was a “low priority.”

Eisenbahn State Trail User Survey (2008)

This survey was completed by 582 summer users and 150 winter users of the Eisenbahn State Trail. Key findings include:

- Users expressed safety concerns about trail crossings at Highway 33 (Washington Street), Decorah Road, and Paradise Drive.
- Users were asked to rate their preference for different trail types. As would be expected, summer users (primarily people walking and biking) preferred paved trails; winter users (primarily people snowmobiling) preferred unpaved trails. There were more summer users than winter users, so overall, more users preferred paved trails.
- Users suggested extending the Eisenbahn State Trail southward to the Village of Jackson and to the Village of Germantown, STH 167, and eventually to Waukesha County. Users also suggested new connecting trails along STHs 33 and 60, which would support more east-west recreational travel in the County.

Public Outreach for the Open Space Plan for Washington County: 2035 (2014)

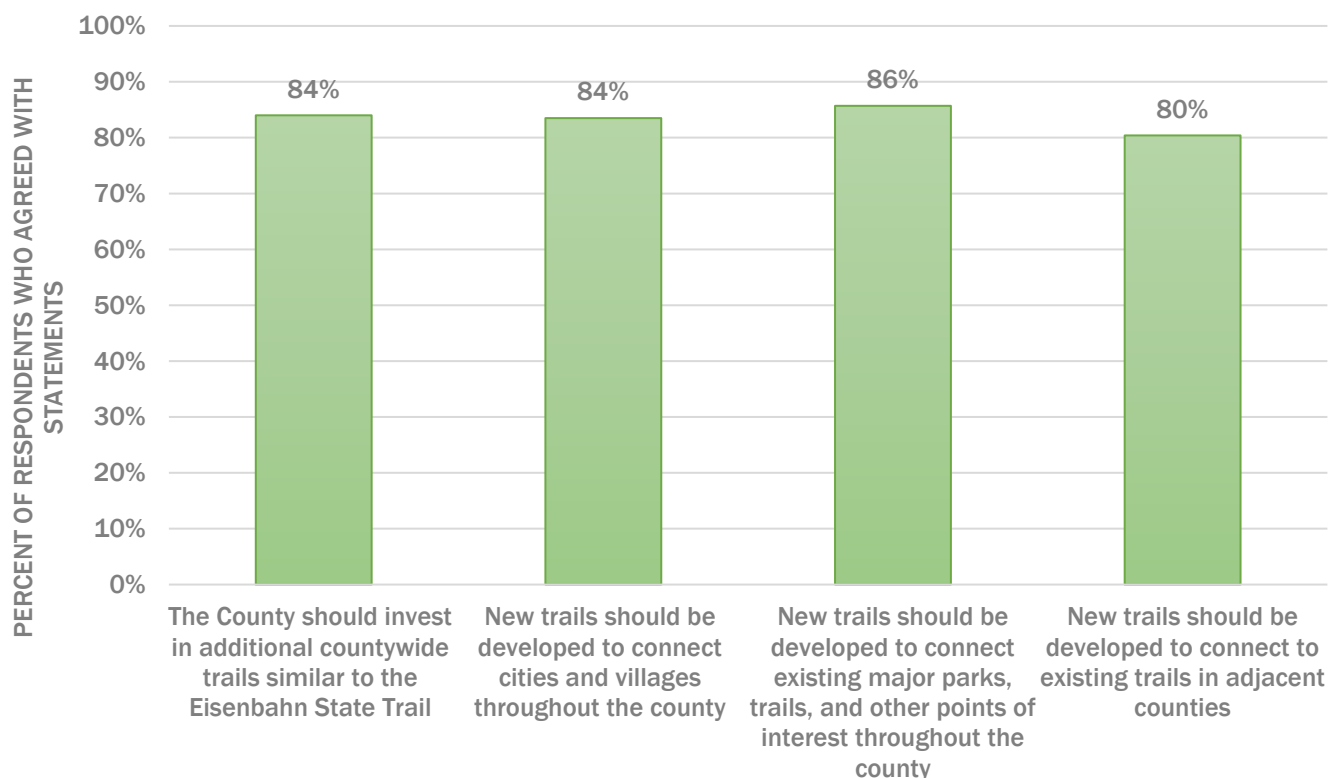
Over 300 participants attended seven different public outreach events in October and November 2014 to provide input on the 2035 County Open Space Plan. The public was supportive of the County’s existing trails and supported expansions and improvements of the system. Specifically,

- More than half of participants (55%) said the County should invest in a countywide trail system.
- More than half (56%) agreed that the County should invest in additional trails similar to the Eisenbahn State Trail.
- Almost two-thirds of participants (62%) agreed that new trails should be developed to connect to existing trails in adjacent counties;
- Regarding funding sources and levels, more than two-thirds of the attendees (67%) agreed that parks and trails are a public service that should be funded by County government.

Washington County Parks and Trails Telephone Survey (2015)

This survey was done in October of 2015 by the UW-Milwaukee Center for Urban Initiatives and Research. As part of the survey, residents were asked about their level of agreement or disagreement with certain statements, including statements about trail development. As Figure 2 shows, support for trails is very high.

Figure 2: Level of Support and Opposition for Trail Expansion in Washington County



Eisenbahn State Trail User Counts (2016, 2017, 2018)

Passive infrared counters collected trail user count data at different points and times along the Eisenbahn State Trail in 2016, 2017, and 2018. Key findings include:

- There are many more users of the trail in downtown West Bend than in more rural locations
- The trail sees fewer users during the week (Monday-Friday) than weekends, in a typical recreational pattern.
- The paved portions of the trail generally have more users than the unpaved portions of the trail.

Public Workshop for Washington County Bicycle and Pedestrian Plan (August 2018)

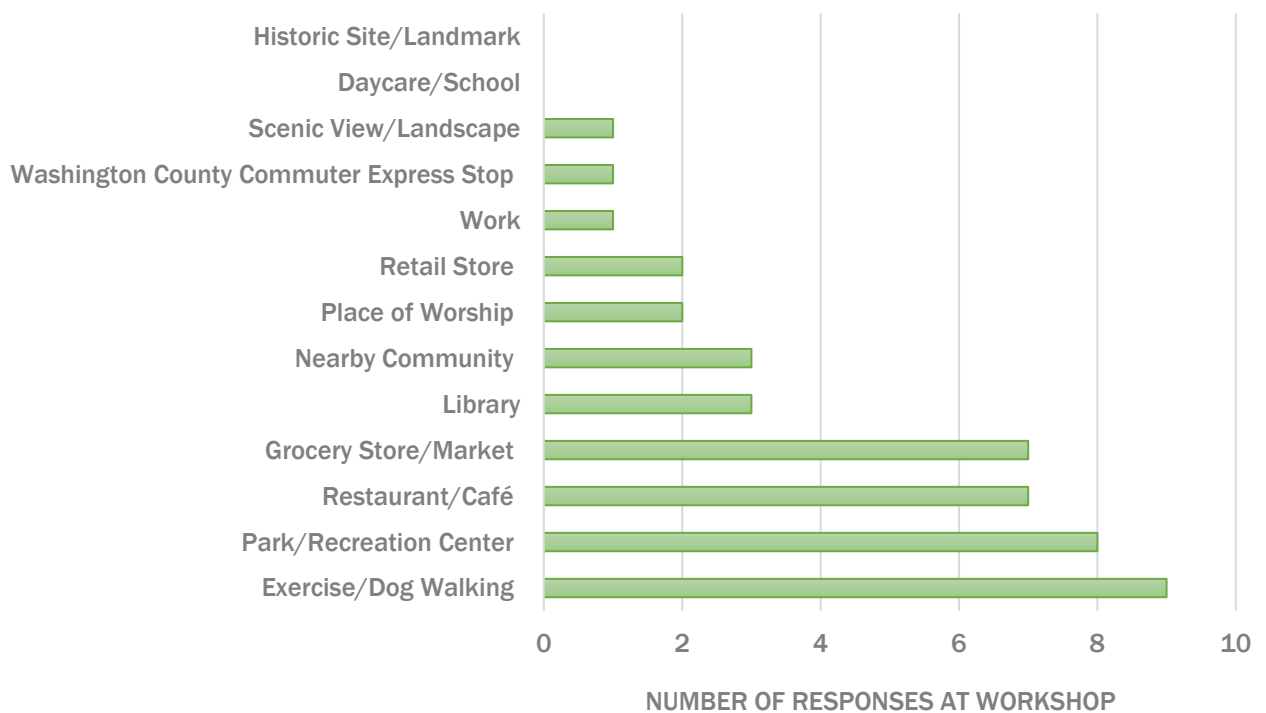
A total of 18 people attended the public workshop on August 16, 2018. Attendees were asked to contribute to several interactive posters and boards to help identify residents' preferences, identify opportunities, challenges and needs, and inform the process of determining County priorities for future bicycle and pedestrian projects. Key findings from the workshop include:

- Attendees wanted a connected network of bicycling and walking facilities. When asked what factors discourage bicycling and walking in the County, the top-selected option was "Lack of Connected Multi-Use Trails/Sidewalks". When asked what was most important to improve walking and biking, the top-selected option was "Close Network Gaps". This may reflect the

support, stated by of many attendees, for extending the Eisenbahn State Trail southward, the City of West Bend paths along the Milwaukee River further west, and extending the Rubicon River Trail in Hartford west to Slinger.

- When asked what destinations were important, the top-selected option was simply “Exercise/Dog Walking”, indicating that recreational bicycling and walking may be more important than any specific destinations (see Figure 3). The next three top-selected destinations were “Park/Recreation Center,” “Restaurant/Café,” and “Grocery Store/Market”.

Figure 3: Public Workshop Responses to “How Important is it to You to be Able to Walk or Bike to Each of the Following Destinations in Washington County”?



- Attendees were presented with a table showing different types of bicycle and pedestrian facilities, including cost and safety considerations. They were then assign a priority to each facility type. For workshop attendees, the highest-priority facilities were “Paved Shoulders 4’ Wide” and “Shared-Use Paths along a Roadway” (see Table 2).

Table 2: Public Workshop Responses to “Types of Bicycle and Pedestrian Facilities”

Types of Bicycle and Pedestrian Facilities (Poster Included Description, Cost, and Safety Considerations)	Low Priority (number of responses)	Medium Priority (number of responses)	High Priority (number of responses)
Signed Routes	4	7	2
Shared Lane Markings (Sharrows)	7	4	2
Paved Shoulders 4' Wide	0	1	13
Wide Paved Shoulders 6'-8' Wide	3	2	8
Bike Lanes (in Cities, Villages)	1	6	7
Separated Bike Lanes (in Cities, Villages)	8	3	1
Sidewalks (in Cities, Villages)	2	7	5
Shared-Use Paths Along a Roadway	1	2	11
Shared-Use Paths in Own Corridor	1	6	7
Roadway Crossing Signals	4	2	2

Points of Interest and Destinations

In the next step of the planning process, the planning team will develop a preliminary network of recommended bicycle and pedestrian routes across the County. During that phase, it will be necessary to make sure important destinations and points of interest are on that network; therefore, as part of the data gathering process, the planning team has collected the locations of parks; major employers (which includes hospitals and large medical clinics); all public and private K-12 schools in the County; tourist attractions; the three stops of the Washington County Commuter Express; and the location of UW-Washington County. These locations are presented on Map 4 at the end of this report.

It will be important to sort these locations into high- and low-priority destinations for the recommended network. According to attendees of the Public Workshop, parks are important, but work and school are not (see in Figure 3). The planning team will review the types of “destinations” identified on the [online interactive map](#) to determine whether they are consistent with the responses from the Public Workshop, and will prioritize destinations during the next phase of the process.

Opportunities & Gaps

Gap Analysis

As part of the VISION 2050 regional planning effort, SEWRPC conducted an analysis of bicycle network connectivity to identify how well the bicycle facilities in the VISION 2050 plan would address gaps in the regional network. Map 5 at the end of the report presents that analysis. It shows the existing gaps in the overall bicycle network (both on-street and off-street connections) between Cities and Villages with populations of 5,000 or more. There are gaps between almost all the incorporated Cities and villages in Washington County, as well as many gaps across the County lines. As part of this Plan,

connectivity and gaps to communities in Dodge, Fond du Lac, and Sheboygan Counties were also considered and added to Map 5. There are gaps between Hartford and Watertown, and between West Bend and Mayville.

Some existing paths have small gaps that require bicyclists to use streets to reach the next segment of path. Although these streets make a connection, some streets may not be perceived as safe or comfortable for a bicyclist. VISION 2050 proposed to address these gaps by constructing connecting path segments or by providing adequate on-street bicycle facilities for these connections. These segments are shown as smaller darker areas—they can be seen along segments of the Ozaukee Interurban Trail.

Opportunities

Map 6 shows some potential corridors that should be examined to determine whether they might address those gaps in the bikeway network. Existing shared-use paths and existing roadways with the “best” bicycle compatibility are overlaid with potential corridors that might present opportunities for building shared-use paths to connect the existing Eisenbahn State Trail, the paths along the Milwaukee River in West Bend, and the Rubicon River Trail network in Hartford.

- *Existing active railroad lines* currently connect both West Bend and Hartford to the Village of Germantown. Further research will be needed to determine if any of the active railroad rights-of-way include space for a path next to the trail, or a “rail with trail”, such as that shown in Figure 3.
- *Electric transmission lines* can also be good corridors for shared-use paths, such as the one shown in Figure 4. The New Berlin Trail and the Lake Country Trail in Waukesha are both built along transmission line corridors in cooperation with the owner of the right-of-way. Residents benefit from this arrangement by getting a

Figure 3: A “Trail with Rail”, or shared-use path next to a rail corridor, in Seattle, WA



Figure 4: A shared use path built along an Electric Transmission line trail in Loudoun County, VA



shared-use path; the transmission line company benefits from having a paved access road to maintain its assets. Of note are the east-west electrical transmission lines north of the Villages of Jackson and Slinger. Further research will be needed to determine if this might be a feasible shared-use path connection. Transmission line corridors can traverse rugged terrain, farms, and wetlands, so caution must be used before assuming the corridors can be easily adapted for bicycle and pedestrian use.

- *Gas and petroleum pipelines* can also be good corridors for shared-use paths, such as the one shown in Figure 5. The pipes are generally underground. In rural areas, they may be nearly undetectable because property owners may have an easement to continue farming over the right-of-way; however, in urban areas they can sometimes accommodate a path. The ANR natural gas pipeline goes north-south through Washington County and the West Shore petroleum pipeline goes diagonally through the county, roughly parallel to IH-41. Further research will be needed to determine if these pipelines are feasible or desirable shared-use path connections.

- *The Ice Age Trail corridor* can provide occasional opportunities. Where terrain allows, the natural area around the Ice Age Trail may be sufficient to add a paved shared use path in the same corridor. In many parts of the state, the Ice Age Trail runs along an existing trail or a shared use path for several miles. Dane County Parks developed the Ice Age Junction park and path area to the west of Madison, including both a paved bicycle path and the typical hiking trail in the same corridor. The two trails join briefly to share a newly-built overpass over Dane CTH PD (McKee Road), which is shown in Figure 6.

- *Public Open Space.* Finally, parks, forests, and open space that are

Figure 5: A shared use path follows a natural gas pipeline in Mays Landing, New Jersey



Source: www.pedestrians.org

Figure 6: A new overpass in Verona, WI was built over Dane CTH PD (McKee Road) in Madison to connect the Ice Age Junction Path system



Source: Ayres Associates

owned by state, county, and local governments provide an opportunity for to expand the path network in floodplains, parks, and in protected conservation areas. The planning team will determine if there are any corridors where shared use paths in these publicly-owned open spaces might be strung together with on-street connections. The open space data acquired by the planning team also includes private open space parcels such as those owned by nature conservancies, gun clubs, and golf clubs. Those private open spaces are not shown on Map 6 but will be used by the planning team as the recommended network is refined and developed.

Next Steps

The analysis of existing conditions for bicycling and walking presented in this memo, including a review of past plans, the summaries of public opinion, and the analysis of as gaps and opportunities in the bicycle and pedestrian network will help inform the development of the recommended network in the next phase of the planning process.

Map 1: Existing and Planned Bicycle and Pedestrian Facilities

Washington County Bicycle and Pedestrian Plan

Existing Facilities^{a,c}

Shared Use Path

Sidepath

On-Road Bike Lane or Wide Shoulder

Proposed Regional Networks

VISION 2050 Proposed Off-Street Path Network^a

Route of the Badger Proposed Paths^b

Proposed Facilities in Local Plans^c

Proposed On-Street Bikeway

Proposed Trail or Shared-Use Path

County Boundary

Municipal Boundaries

N

00.51234

Miles

Sources: ^aSEWRPC, ^bRails to Trails Conservancy, ^cBike Friendly West Bend, City of Hartford, Village of Slinger

Map 2: Roadway Bicycle Compatibility

Washington County Bicycle and Pedestrian Plan

Off-Street Bicycle Facilities^a

- Shared Use Path
- Sidepath

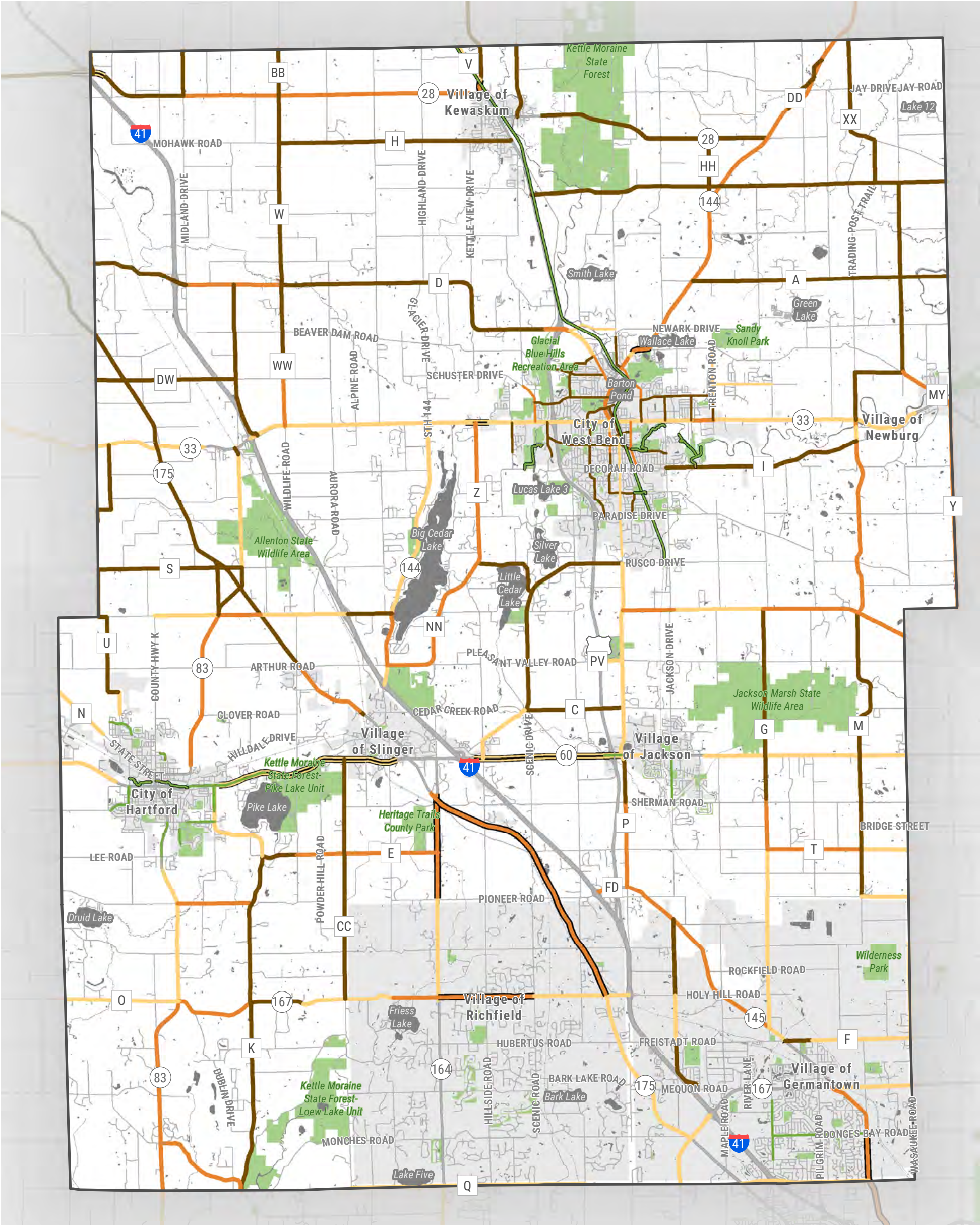
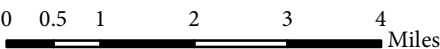
Draft Washington County Roadway Compatibility^b

- Best Conditions
- Moderate Conditions
- Not Recommended
- High Volume Wide Paved Shoulder
- Divided Highway, Not Recommended

Highway Types

- Interstate
- US
- State
- County

- County Boundary
- Municipal Boundaries



Sources: ^aSEWRPC, ^bWisDOT provided 2015 Federal and State highway data. Washington County Highway Department provided 2018 County highway data.

Map 3: Bicycle and Pedestrian Crashes, 2006-2016

Washington County Bicycle and Pedestrian Plan

Off-Street Bicycle Facilities

- Shared Use Path
- Sidepath

Crashes, 2006-2016

- Bicycle Crashes
- Pedestrian Crashes

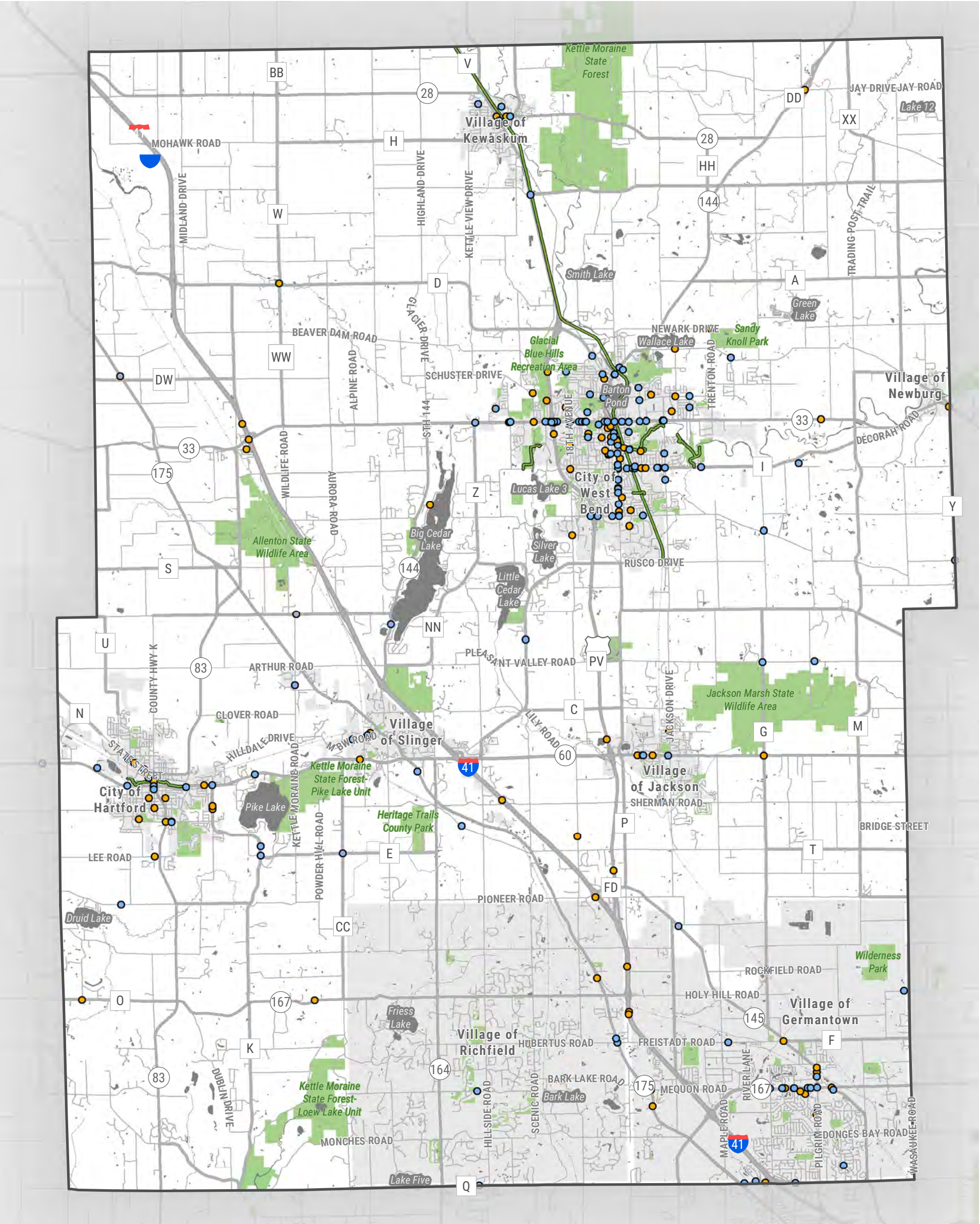
Highway Types

- Interstate
- US
- State
- County

- County Boundary
- Municipal Boundaries



0 0.5 1 2 3 4 Miles



Source: Wisconsin Traffic Operations and Safety Laboratory (TOPS)

Map 4: Points of Interest and Important Destinations

Washington County Bicycle and Pedestrian Plan

Existing Off-Street Bicycle Facilities

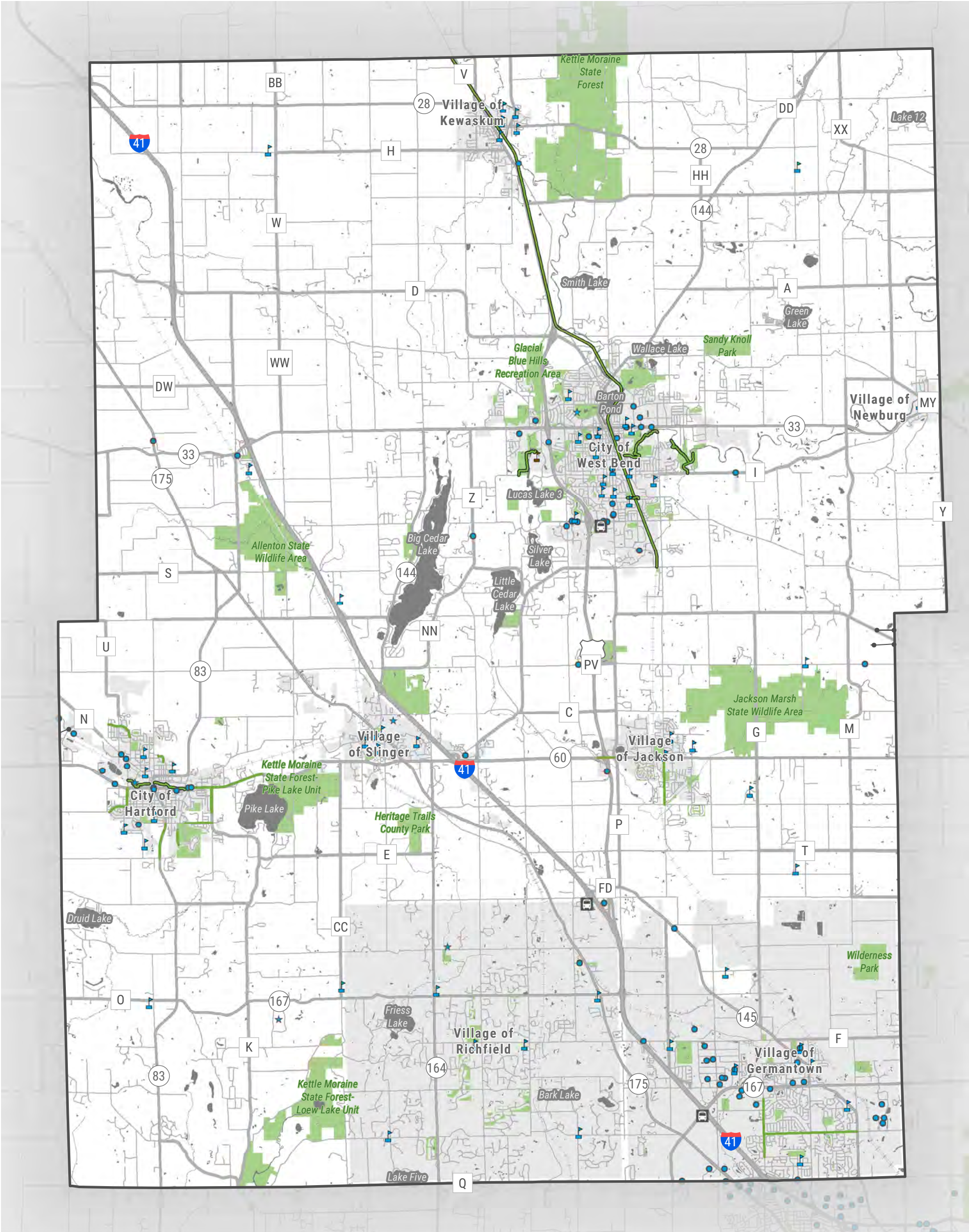
- Shared Use Path
- Sidepath

Points of Interest and Important Destinations

- Major Employers with Over 100 Employees (Includes Hospitals and Large Clinics)
- Public and Private K-12 Schools
- UW-Washington County
- Tourist Attractions
- Washington County Commuter Express Transit Stops
- State, County, City, and Village Parks



0 0.5 1 2 3 4 Miles



Map 5: Regional Bikeway Gap Analysis

Washington County Bicycle and Pedestrian Plan

Existing Bike Facilities

- Shared Use Path
- Sidepath
- On-Road Bike Lane or Wide Shoulder

Gap Analysis


- Existing gap in the overall bicycle network between cities or villages with populations of 5,000 or more
- Existing gap in the off-street bicycle network

Highway Types

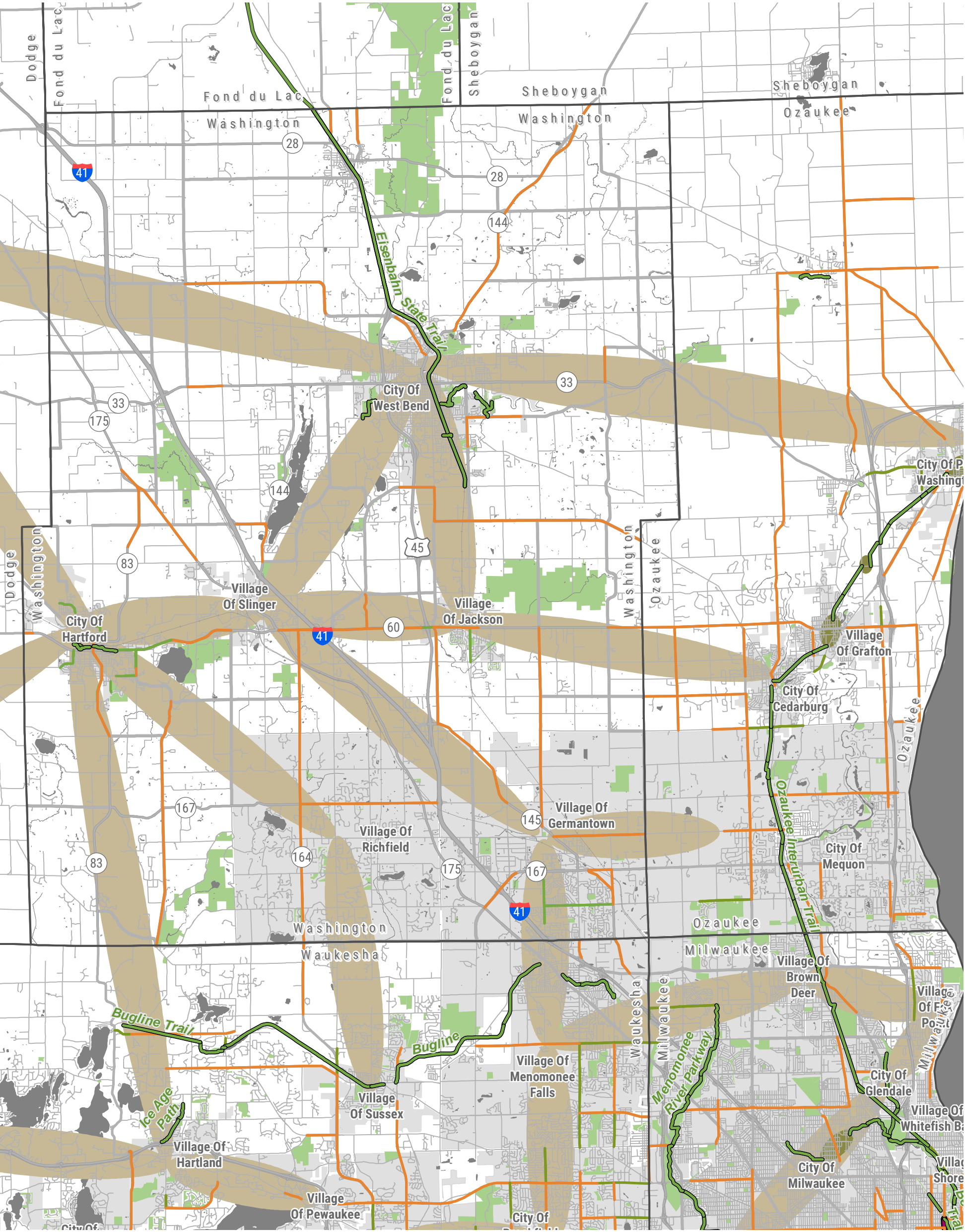
- Interstate
- US
- State

City or village with a population of 5,000 or more

County Boundaries



0 0.5 1 2 3 4 Miles



Source: SEWRPC and Toole Design Group

Map 6: Opportunities for Expanding the Bicycle and Pedestrian Network

Washington County Bicycle and Pedestrian Plan

Existing Off-Street Bicycle Facilities

- Shared Use Path
- Sidepath

Draft Roadway Compatibility

- Best Conditions

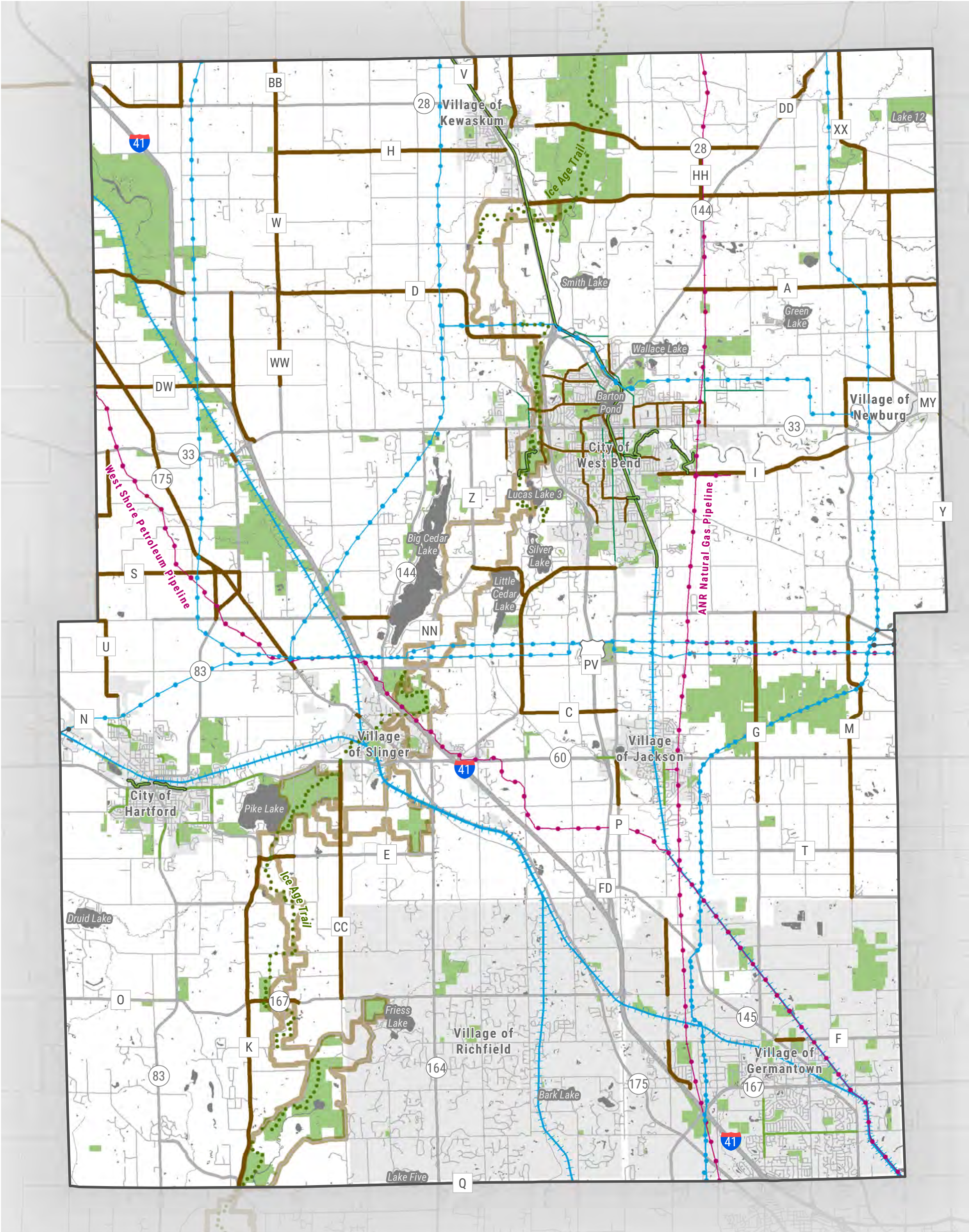
Opportunity Corridors

- Electrical Transmission Lines
- Gas or Petroleum Pipelines
- Existing Railroad Line

- Open Space Owned by State, County, and Local Governments
- Current Ice Age Trail
- Ice Age Trail Corridor



0 0.5 1 2 3 4 Miles



Source: SEWRPC and Washington County Planning and Parks Department

ATTACHMENTS:

Description	Type
▣ Visioning Discussion	Backup Material



Memorandum

Date: 9/04/2018
To: Debora Sielski
From: Kit Keller and Sonia Haeckel
Re: Draft Vision Statement for the Washington County Bicycle & Pedestrian Plan

At the August 15, 2018 meeting of the Washington County Bike and Pedestrian Planning Committee, participants were asked to respond to two questions designed to inspire Committee members' ideals and goals related to walking and biking in the County. This memo summarizes those responses, displays Washington County's 2017-2019 Strategic Priorities, and includes a proposed vision statement for the Advisory Committee to consider.

Responses to the Visioning Questions

Summary of responses to Question 1

In 20 years, I can walk or bike safely from _____ to _____ in Washington County

- from home to parks, other communities in Washington County and surrounding counties, as well as activities, church, grocery, library, pool, school, shopping areas, and work;
- from work to home and local businesses;
- between most places in Washington County, including communities, lakes, parks, schools, and trails; and,
- to places outside Washington County, including communities in Milwaukee/Ozaukee/Waukesha Counties, and to trails in other counties and statewide.

Summary of responses to Question 2

Twenty (20) years from today, what would you love to hear your children tell their children about growing up bicycling and walking in Washington County?

Children say that bicycling and walking in Washington County is a safe, respected, normal, fun activity that creates family memories. It helps them develop their sense of independence, discovery, and adventure. They have a choice of trails, paths, sidewalks and lanes that are well-maintained year round, and open during snow season. They love that their County has the best trail system in the region so they can (and do) bike and walk with friends anywhere they want to go in the County, without their parents worrying about traffic or crime. They return home healthy and happy from walking and biking to parks, schools, stores, or jobs, and no one ever has a near-miss story!

Strategic Priorities for Washington County

In 2015, the Washington County Board of Supervisors identified a vision, mission and four strategic goals for County services that are provided directly to citizens along with a set of practices designed to achieve each goal. The County Board also established a goal and related practices for programs that do not provide direct services to citizens, but that support the direct services provided by other County programs.

Washington County Vision

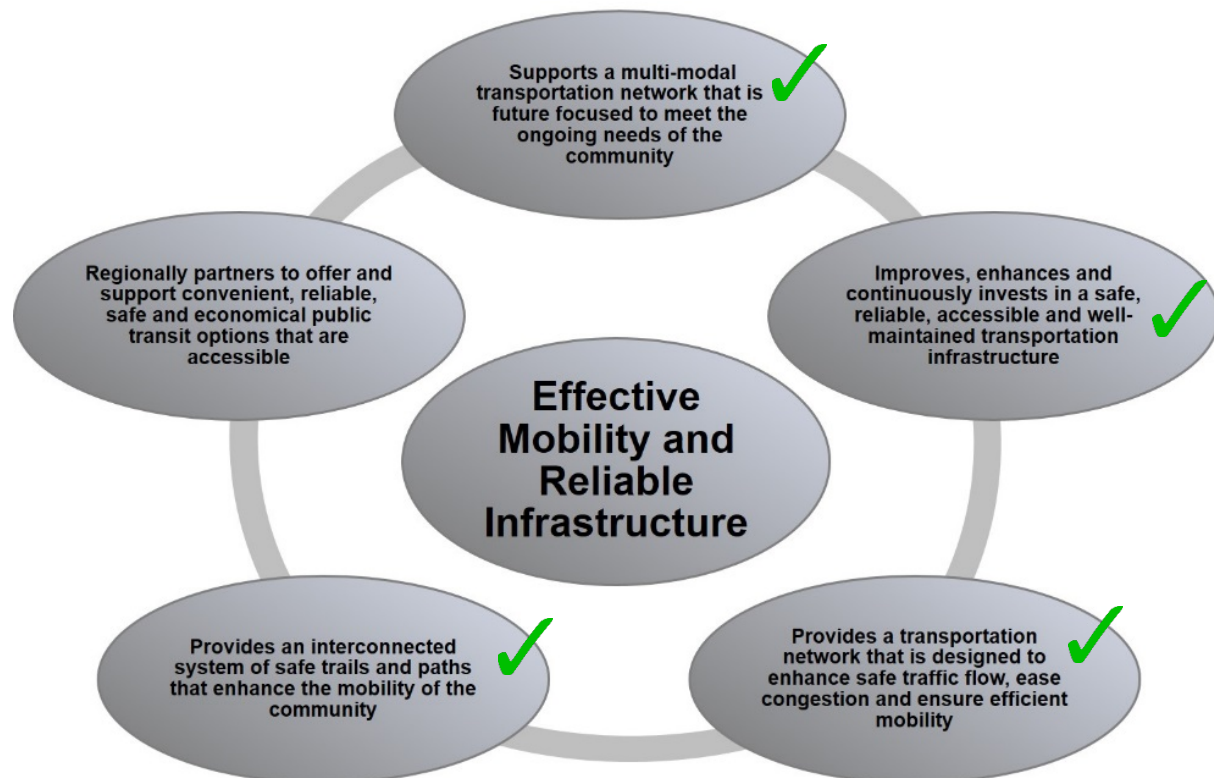
As trusted stewards of Washington County's future, we provide innovative and cost effective core public services.

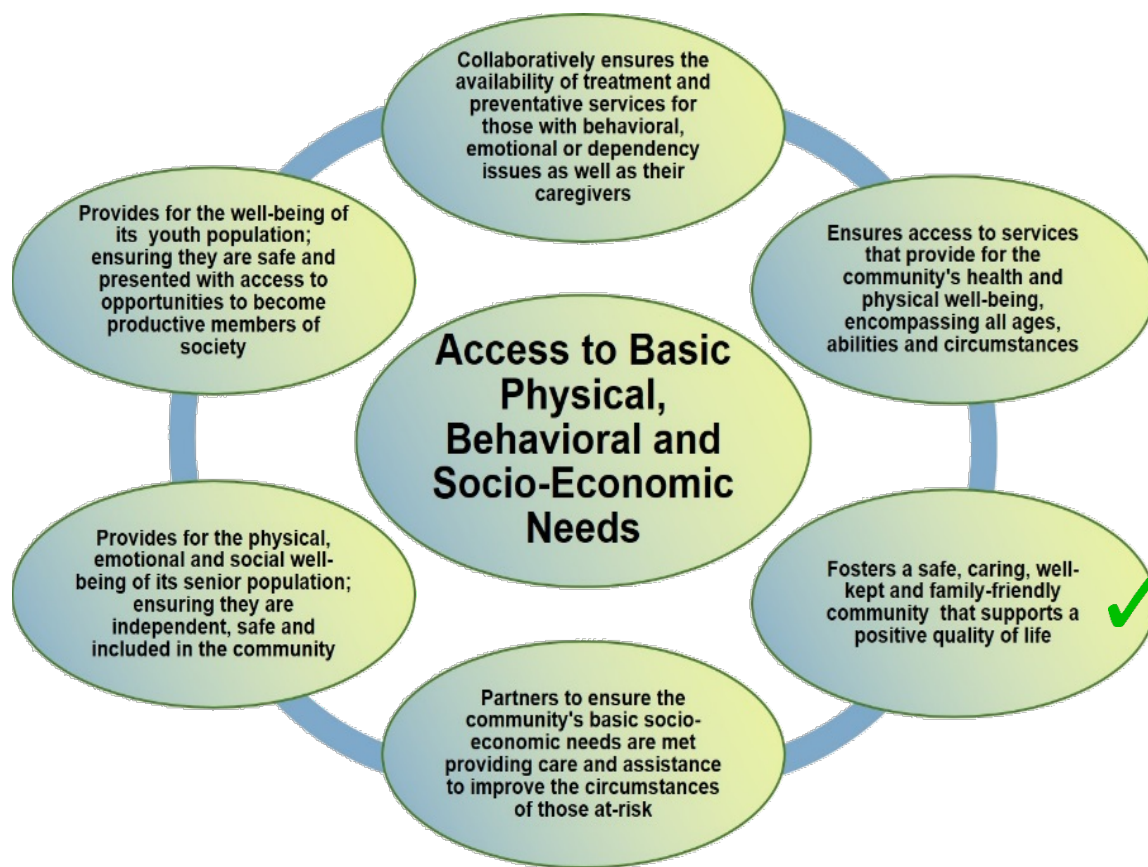
Washington County Mission

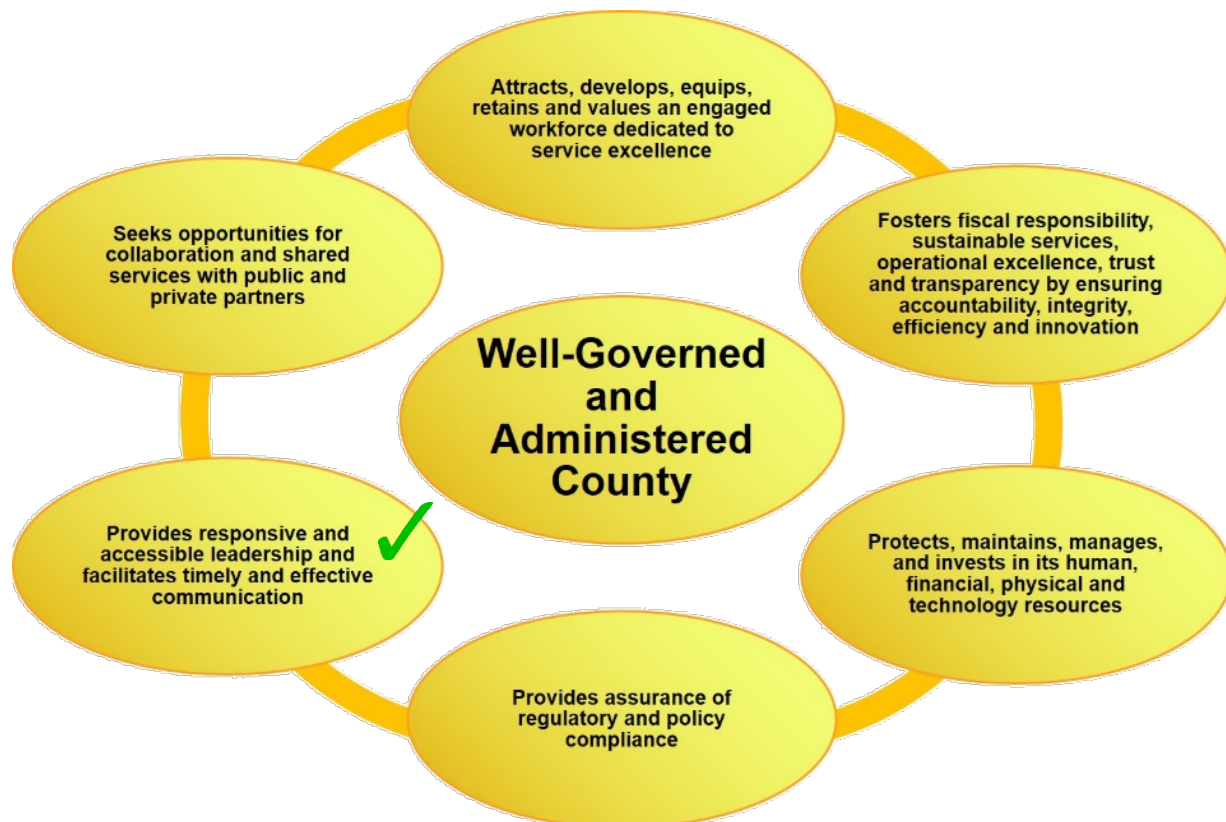
Washington County is a collaborative leader in providing efficient and effective public services for the well-being of our citizens.

Goals and Practices

The goals and practices for County services are shown below. Practices that align with bicycle and pedestrian goals are marked with green checkmarks.







Proposed Vision Statement for Washington County Bicycle & Pedestrian Plan

Quality of life in Washington County is enhanced by a comprehensive system of bicycling and walking routes connecting destinations throughout the County and neighboring communities. Health, safety and increased community mobility are strategic goals in developing the system. Known as the best in the region, the network draws ever-increasing investments through public and private collaboration.

Other potential key phrases:

- children can bicycle and walk safely with their friends
- healthier lives and a heightened sense of independence, discovery and adventure
- safe crossings make it easy and comfortable to cross busy roadways
- county's scenic beauty and rural character
- routes are well-designed and appropriately marked
- significant connections are incorporated readily into future planning and construction
- investments from families, businesses, foundations, and state funds to grow and enhance community mobility and commitment to safety