

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

INTRODUCTION



Greenville has an extensive multimodal network featuring over fifteen miles of bicycle and pedestrian accommodations. This network consists of the following facilities: off-road paved and unpaved trails, on-street routes, and sidewalks. Having a dedicated plan for multimodal transportation will ensure the expansion and appropriate placement of facilities to create a balanced network for all modes of transportation, including driving, bicycling, and walking.

BENEFITS OF MULTIMODAL FACILITIES

There has been significant research on the benefits of multimodal transportation facilities. Providing opportunities for physical activity improves public health, increases safety for all roadway users, enhances economic vitality, promotes equity, and reduces congestion and pollution.



Equity

One-third of the population does not have a driver's license or does not drive¹; this includes the elderly, children, people who cannot afford a vehicle, people with physical disabilities, and those who choose not to. Designing roadways with only vehicles in mind creates an unsafe environment for people who do not drive, and limits community members' opportunities for social activities, employment, education, shopping, and entertainment.

Increasing the options for transportation provides a sense of community by allowing for people to get out and about to see the area in which they reside. The increased sense of place gives way to greater social interaction accompanied by improving the livability and economic vibrancy of the street. This heightened number of people out and about can also increase the community's safety by creating opportunities to have eyes on the streets.



Economic

Walking and bicycling are affordable forms of transportation, whereas a vehicle is the second highest household expense after housing in the United States². When safe facilities are provided, community members are more likely to bike or walk to their destination. In Wisconsin, tourism and events related to walking and bicycling have significant economic impacts. In 2010, bicycle recreation and tourism contributed \$924M to Wisconsin's economy³. Real estate values can be bolstered by the presence of bicycle and pedestrian facilities. Bob McNamara, a Senior

¹ Federal Highway Administration. <https://www.fhwa.dot.gov/policyinformation/pubs/hf/pl11028/chapter4.cfm> (2011)

² Bureau of Transportation Statistics, Household Spending on Transportation. <https://www.bts.gov/browse-statistical-products-and-data/transportation-economic-trends/tet-2018-chapter-6-household> (2018)

³ Valuing Bicycling's Economic and Health Impacts in Wisconsin www.sage.wisc.edu/igert/download/bicycling_final_report.pdf

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Policy Representative for the National Association of Realtors, stated that realtors sell more than houses, they sell communities⁴.



The built environment can play a crucial role in a community's or individual's health. Bicycling and walking levels fell 66% between 1960 and 2009, while obesity levels increased by 156%⁵. In the United States, only 50% of adults meet the Center for Disease Control's recommended 150 minutes of physical activity per week (30 minutes a day for five days a week). In fact, nationally, nearly 72% of adults are overweight or obese⁶; and 75% of adults in Wisconsin's Fox Valley region are overweight or obese⁷. It has been noted that not only are adult obesity rates on the rise, but also childhood obesity continues to be on the rise. Over the past 40 years, rates of obesity have soared among children of all ages in the United States and more than 1/3 are now overweight or obese⁸.



Bicycle and pedestrian facilities can help to reduce the number of injuries and fatalities by those who bicycle or walk. Bicycle and pedestrian infrastructure is crucial in providing accommodations to users. Seniors, children, and the disabled are considered the most vulnerable user groups; while seniors, people walking in low-income communities, and people of color tend to have a disproportionately higher rate of death in pedestrian-vehicle crashes. Adults over 65 make up 10% of walking trips, yet comprise 19% of pedestrian fatalities; they make up 6% of bicycling trips, yet account for 10% of bicyclist fatalities⁹. In 2015, more than one-fifth of children killed in traffic crashes were pedestrians. In Wisconsin, 15.5% of the population is people of color; however, 26.8% of pedestrian deaths are people of color¹⁰.



In addition to bicycling and walking reducing the number of vehicles on the roadways, these activities also improve the air quality of an area. Children exposed to traffic pollution are more likely to have asthma, permanent lung deficits, and a higher risk of heart and lung problems as adults. Sixty percent of pollution created by automobile emissions happens in the first few

⁴ McNamara, Bob. Senior Policy Representative for the National Association of Realtors, National Bike Summit, Complete Streets panel discussion, March 11, 2009

⁵ Bicycling and Walking the United States: 2012 Benchmarking Report
www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012_benchmarking_report

⁶ Centers for Disease Control and Prevention, National Center for Health Statistics. <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>

⁷ Weight of the Fox Valley, Weighty Problem in the Fox Valley. <http://www.weightofthefoxvalley.org/about/about-weight-of-the-fox-valley/shared-bmi-data/>

⁸ Ogden, C.L. et al., "Prevalence of Overweight and Obesity in the United States, 1999-2004." Journal of the American Medical Association, 295, no 13 (2006)

⁹ Bicycling and Walking the United States: 2012 Benchmarking Report
www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012_benchmarking_report

¹⁰ Smart Growth America, Dangerous by Design. <https://s3.amazonaws.com/cdn.smartgrowthamerica.org/dangerous-by-design-2016.pdf> (2016)

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

minutes of operation, before pollution control devices can work effectively. Since "cold starts" create high level of emissions, shorter car trips are more polluting on a per-mile basis than longer trips. The 2009 National Household Travel Survey found that approximately 28% of all trips are one mile or less and 40% are less than two miles in length. Providing opportunities for people to bicycle and walk, especially in denser environments, can reduce vehicle-related pollution¹¹.

PROCESS

In conjunction with the comprehensive plan update, the Greenville knew a bicycle and pedestrian plan would be a vital resource in creating a vibrant community for residents and creating connections to surrounding areas. To facilitate the process of developing a plan, a steering committee, comprised of a variety of stakeholders, was formed. Stakeholders included the following representatives:

- Residents
- Farmers and landowners
- Greenville Planning Commission member
- School district representative
- Outagamie County Health Division staff
- Outagamie County Sheriff's Department staff
- Greenville staff
 - Department of Community and Economic Development
 - Department of Public Works
 - Parks, Recreation, and Forestry
 - Geographic Information Systems

The steering committee provided feedback and input throughout the plan development process, and it worked through various exercises to develop the recommendations found throughout this plan.

The planning process was divided into the following five major tasks:

1. Public outreach and stakeholder coordination
2. Data collection and existing conditions assessment
3. Program and policy recommendations
4. Network recommendations
5. Prioritization, implementation, and funding strategies.

PLAN VISION

Greenville will be a community which encourages sustainable growth through a connected, multimodal network to enhance travel and recreation. Attentive and inclusive planning for all modes of transportation will ensure the health, safety, and enjoyment of all individuals.

¹¹ Bicycling and Walking the United States: 2012 Benchmarking Report
www.peoplepoweredmovement.org/site/index.php/site/memberservices/2012_benchmarking_report

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

PLAN GOALS

Education: Increase public and political awareness of the need for and the benefits of multimodal transportation facilities and a well-connected multimodal transportation network.

Encouragement: Encourage more residents to use non-motorized means of transportation to reduce dependence on automobiles, conserve resources, increase physical activity, and enjoy the outdoors.

Enforcement: Improve safety, reduce conflicts, and build awareness and respect between motorists, bicyclists, and pedestrians by improving enforcement of bicycle and pedestrian laws, and raising awareness of the need and ways to share roads and off-road facilities cooperatively.

Engineering: Improve the multimodal facility connections to destinations within the Greenville and to surrounding communities and links.

Equity: Ensure multimodal facilities and programs do not negatively impact vulnerable and underserved populations, and ensure that equitable opportunities for facilities and programs are accessible for all community members.

Evaluation: Establish criteria to evaluate the education, encouragement, enforcement, engineering, and equity components of existing and future multimodal facilities and programs.

CURRENT CONDITIONS AND INVENTORY ANALYSIS

A thorough analysis of the existing resources for multimodal transportation was conducted by looking at the use of these facilities, facilities that are planned or programmed for construction in the near future, popular origins (such as residential areas) and destinations (such as schools, leisure areas and employment centers), and existing opportunities and barriers that might shape how bicycle and pedestrian facilities and programs are implemented.

CRASH DATA

Safety is often cited as the primary reason people do not bike or walk more. Creating a safer environment for these activities is an important focus that requires an understanding of safety issues and proven actions that can be taken to improve safety. Crashes involving motor vehicles that result in injuries or fatalities to bicyclists and pedestrians have been recorded at the state and federal levels for many years. Transportation safety officials prefer the term “crash” rather than “accident” to describe these incidents, as the latter implies that they are unavoidable. Today we know that nearly all encounters between motor vehicles with each other or with bicyclists and pedestrians could have either been prevented or, at a minimum, significantly reduced.

Transportation safety experts acknowledge that statistical data and analysis at all levels is incomplete. Not all incidents are reported; these include crashes that do not involve a moving vehicle, crashes that do not occur on a public roadway, incidents that aren’t reported, and near-misses.

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Another major limiting factor in conducting detailed bicycle crash analysis is that, unlike motor vehicle trips, very little is known about the trips people make by bicycle. Among the variables are the age of the bicyclists, the time they spend on their trips, trip distance, and trip frequency. Unlike motor vehicle crash rates, which can be easily calculated, crash rates for bicycles are difficult to determine because data is incomplete or unavailable.

While the database for crashes involving bicyclists and pedestrians has some shortcomings, it nonetheless contains some useful information for helping the committee develop appropriate recommendations and strategies. Some of this information is general in nature, perhaps even intuitive, and provides a statistical overview of crashes involving bicyclists and pedestrians. Other information, particularly that which relates to specific types and characteristics of bike crashes, enables us to focus our county and local priorities in addressing safety-related issues and determine effective strategies from the palette of engineering/design, educational, and enforcement tools available.

Seniors, children, and disabled residents are considered the most vulnerable users as it relates to bicycle and pedestrian facilities and safety. When designing facilities and routes, these users should be kept in mind; if bicycle and pedestrian facilities cater to vulnerable users, the needs of all users should then be met.

Federal Highway Administration (FHWA) Statistical Data

The FHWA maintains a composite record of crash records from each of the fifty states and the District of Columbia on an annual basis. According to its data, pedestrian and bicyclist fatalities comprised nearly 20% of all roadway-related fatalities each year.

Wisconsin Pedestrian and Bicycle Crash Analysis

Pedestrians

Over the past 20 years, the number of pedestrians injured during a vehicular-pedestrian crash in Wisconsin has steadily declined; however, the fatality rates have stayed relatively consistent over this same period of time. In 2016, 1,252 crashes involved pedestrians; 49 were killed and 1,181 were injured¹². Analysis by the WI Department of Transportation notes that a majority of pedestrian crashes occur in the roadway or at a crosswalk. Street crossings put a pedestrian in the path of a driver who may not be paying attention or not have time to avoid a pedestrian who suddenly steps into traffic.

Bicyclists

As with pedestrians, the number of bicyclists injured during a vehicular-bicyclist crash has steadily declined; however, there have been year-to-year fluctuations. The number of fatalities has remained relatively consistent over this same period of time. In 2016, 918 crashes involved a bicyclist; 11 were killed and 849 were injured¹³. Analysis by the WI Department of Transportation notes that the most common types of bicycle crashes involve motorists failing to

¹² WI Pedestrian Safety, 2016; <https://wisconsindot.gov/Documents/safety/education/crash-data/pedfacts-2016.pdf>

¹³ WI Bicycling Safety, 2016; <https://wisconsindot.gov/Documents/safety/education/crash-data/bicyclefacts-2016.pdf>

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

yield the right of way to a straight-through bicyclist when making a left turn; motorists failing to yield at a controlled intersection; bicyclists failing to yield at a controlled intersection; and motorists turning on a red light.

Greenville Crashes

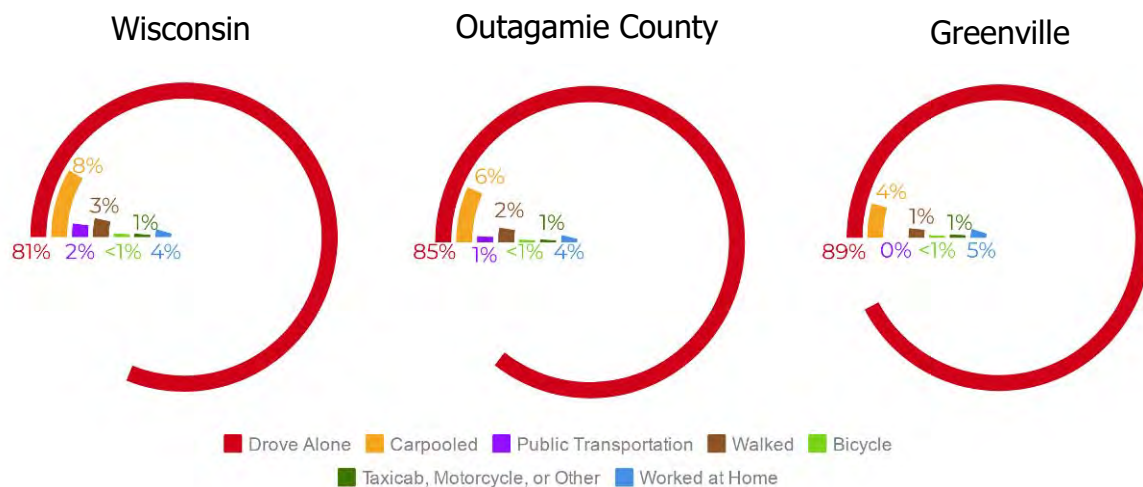
From 2009 to 2017, there were seven crashes in the Greenville involving bicyclists or pedestrians. Three crashes were at intersections along Highway 76, one was at the intersection of School Road and Julius Drive, one was at CTH CB and CTH BB, and the remaining two were in residential neighborhoods. Map I-1: Bike & Ped Incident Locations shows the locations of these incidents.

COMMUTE MODE SHARE

The American Community Survey (ACS) asks respondents how they usually traveled to work in a week. Though the data is limited to one week and only to the respondent's employer, it provides insight on current travel trends.

For the Greenville, the data revealed a majority of respondents (88%) travel alone to work in a vehicle. Fewer than 3% of respondents travel to work via walking, bicycling, motorcycle, or taxicab. Figure I-1 shows how the Greenville compares to Outagamie County and the State of Wisconsin for commuting trends.

Figure I-1: Commuting Trends



Source: S0801, 2017 American Community Survey 5-Year Estimates

HEALTH

There is strong correlation between the built environment and the health of individuals. For example, the physical environment impacts an individual's ability to be physically active and access healthy, nutritious foods. Through looking at the relationship between the built

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

environment and the health of a community, we can better understand the contributing factors to chronic illness and preventable diseases.

The County Health Rankings and Roadmaps program is a collaborative effort between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The purpose of the rankings is to help communities focus on factors that affect health. Outagamie County's overall rank compared to other counties in the state is 16 (with 1 being the best and 72 being the worst). This rating is based on both health outcome and health factors. Health outcomes include how long people live and how healthy people feel while alive. Health factors represent what influences the health of a county, including health behaviors, clinical care, social and economic conditions, and the physical environment. Factors influencing this overall number include the following: adult obesity (29% in Outagamie County), physical inactivity (16% for Outagamie County), and driving alone to work (85%).

COUNT DATA



In the fall of 2018, East Central Wisconsin Regional Planning Commission placed infrared counters throughout the Greenville. Infrared counters detect passersby (walkers, runners, cyclists) as they pass the device, which is typically mounted to a tree, post, or pole. These counts provide data on the number of people using the roadways, the times of day most traveled by bicyclists and pedestrians, and can provide insight on use patterns when done on a consistent basis. For the purpose of this plan, counters were placed for a two-week period to gauge daily use trends. Ten counters were placed on trail segments, roadways, and county/state highways in Greenville. Count locations and totals (in average annual daily traffic) are found in Map I-2: Bicycle and Pedestrian Counts and Audit Locations.

SURVEY RESULTS

In the fall of 2018, three surveys were distributed: community-wide, students in grades 6-8, and parents of students in grades 6-8.

Community-wide Survey

The community-wide survey was distributed through Greenville's newsletter, the website, and through social media. In total, 734 respondents participated in the survey. Respondents were asked a series of questions to understand their bicycling and walking trends, destinations, and how they perceive safety and the current conditions of walking and bicycling in the community.

Trends

- 78% walk at least a few times a week
- 42% bike at least a few times a week
- 61% walk on the trails at least a few times a week
- 34% bike on the trails at least a few times a week

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Destinations

- 43% stated they cannot get to many destinations or travel anywhere using bicycle and pedestrian amenities
- Top destinations visited via bicycling and walking:
 - Lion's Park
 - Jennerjohn Park
 - YMCA
 - Greenville Elementary and Middle School
 - Town Hall
 - Community Park

Safety and Current Conditions

- 31% feel slightly safe or not safe walking or bicycling in Greenville
- Top safety concerns include:
 - Lack of bicycle and pedestrian amenities
 - Speed of traffic
 - Volume of traffic
 - Safety concerns about street crossings or intersections

Parent Survey

The parent survey was distributed to parents in the Hortonville Area School District with children attending Greenville schools, 572 parents participated in the survey. The purpose of this survey was to determine how many parents allow their children to bicycle or walk to school and to discover the factors that determine whether parents allow or don't allow their children to walk or bicycle to school.

Survey results indicate 21% of parents allow their children to bicycle or walk to school on at least an occasional basis. Table I-1 displays the factors involved in determining whether parents allow or don't allow their children to bicycle or walk to school.

Table I-1: Factors Involved when Parents Determine to Allow Children to Bicycle or Walk

Reasons to Allow Children to Bicycle or Walk	Reasons to Not Allow Children to Bicycle or Walk
Distance	Distance
Weather/climate	Speed of traffic
Presence of sidewalks or paths	Amount of traffic
Safety of intersections	Lack of sidewalks or paths
Convenience	Safety concerns about intersections

While some of the reasons given by parents who allow their children to walk or bicycle to school are the same reasons as those who do not allow their children to walk or bicycle to school, this can be attributed to proximity to destinations and the presence (or lack thereof) of bicycle and pedestrian facilities.

Student Survey

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN



The purpose of the student survey was to learn obstacles, barriers, and opportunities Greenville students in grades 6-8 face in their travels to school. Relatively consistent with the parent survey results, 23% of middle school students reported walking or bicycling to school. Forty-one percent (41%) of students state they have trails or sidewalks most of their way from school to home, while 33% reported that most of their way does not have trails or sidewalks. Top identified barriers identified by students include the following: busy intersections, speed of vehicles, lack of bicycle and pedestrian amenities, and distance.

AUDITS

Bicycle and walk audits were conducted at four locations in the Greenville. Locations were determined based on the surveys and by the committee. The purpose of the audits was to observe and document any conflicts between pedestrians, bicyclists, and motorists. The results of the audits are detailed in the bike and walk summary sheets at the end of this appendix.

Table I-2: Bicycle and Walk Audit Locations

Audit Number	Location
1	Parkview Drive and STH 76
2	Hyacinth Lane and STH 15
3	School Road and STH 76
4	STH 76 and Glenview Drive/Pasture Parkway

RECOMMENDATIONS

NETWORK RECOMMENDATIONS

This plan takes a comprehensive look at multimodal transportation planning to develop a connective bicycle and pedestrian network, a safe and comfortable transportation environment, and an increased standard of living for Greenville community members. Communities considered the friendliest to bicyclists and pedestrians have a wide range of facilities for all skill levels. The successful blend of facility types (including both on-road and off-road) makes up a connected network that appeals to all user groups.

PLANNING FOR BICYCLE AND PEDESTRIAN FACILITIES

Pedestrian Users

The term pedestrian includes people who walk, run, or use a wheelchair or other mobility device. The needs of most in the pedestrian category can be met with the same facility types since state and federal law mandate all sidewalks and paved paths to be usable for people with disabilities.

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Bicyclists

When it comes to bicyclists, there are four categories: No Way No How, Interested but Concerned, Enthused and Confident, and Strong and Fearless which are described in Figure 1-2. By building bicycle networks that serve the Interested but Concerned category, the largest percentage of users would benefit, and benefiting the least confident user group would benefit all bicyclists by providing the greatest options in facilities.

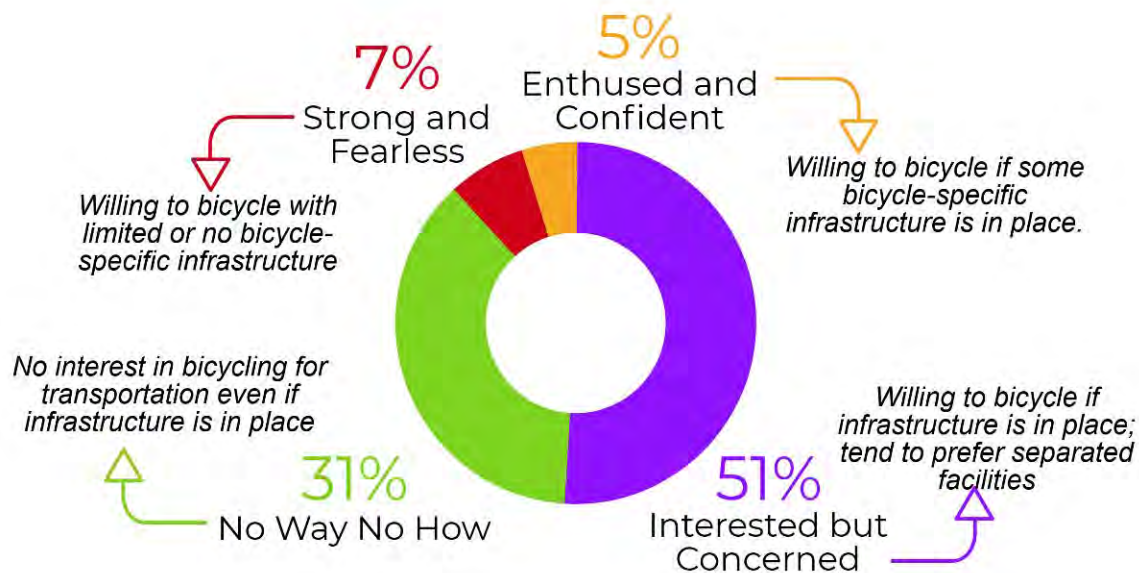
Roadway Conditions and Facility Types

In addition to considering the types of users, it's equally as important to examine the roadway conditions for the most appropriate facility.

Bicycle and pedestrian facilities range from full separation from vehicles through trails and paths to shared-road facilities such as bike lanes and wide paved shoulders.

Although specific facility types are not specified in this plan, Greenville should consider the appropriate facility type for each project on an individual basis based on volume of traffic, speed of traffic, right-of-way, and potential user groups. These facilities range from fully separated from the roadway, such as off-road trails, to on-road facilities, such as bike lanes. Figure I-3 provides a description of various facility types to be considered for the Greenville.

Figure I-2: Bicycle User Types



Source: Dill, Jennifer. <https://jenniferdill.net/types-of-cyclists/> (2015).

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Figure 1-3: Facility Types

Path or Trail

A shared-use path can be located along a road (called a “sidepath”) or in an independent right-of-way such as a greenway, along a utility corridor, or an abandoned railroad corridor. Paths should be at least 10 feet wide and 12 feet or wider where higher use is expected.



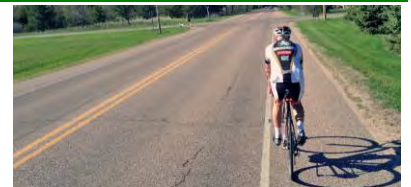
Bike Lane

A bike lane designates a portion of a street for use by people on bicycles, usually in cities and villages on slower, low-traffic streets. The minimum width of a bike lane is 4 feet, with a preferred width of 5 feet to 6 feet. Wider bike lanes and/or painted buffers can be beneficial when traffic volumes or speeds are higher.



Paved Shoulder

Paved shoulders should be a minimum of 4 feet to serve as a bicycle accommodation. Higher traffic volume roads with increased speed limits should consider expanding paved shoulders to 6 to 8 feet. In rural areas, paved shoulders can also serve pedestrians; however, they are not a legal pedestrian facility under Wisconsin State Statute.



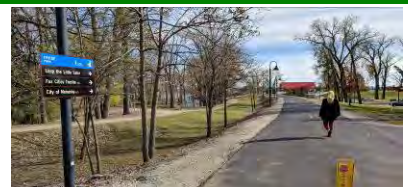
Sidewalk

A sidewalk is a paved path along the side of a roadway. Sidewalks are commonly installed along urban roadways with a curb and gutter, but can also be installed along rural roadways. Sidewalks provide a dedicated space for pedestrians that is removed from motor vehicle traffic.



Minor Enhancements

Low-cost, strategically-placed pavement markings and signage can enhance bike routes and existing trails. Shared lane markings (also known as sharrows) alerts drivers that bicyclists could be on the road and provides lane positioning for bicyclists. Consistent signage can aid in wayfinding and raise awareness of the rules of the road.



APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Street Crossings

Street crossings can pose as a barrier to pedestrians. Enhancements such as painted crosswalks, signage, rectangular rapid flashing beacons (RRFBs), and pedestrian hybrid beacon signals (HAWK signal) alert drivers to the presence of pedestrians and increases the visibility of pedestrians as they cross streets.



Further guidance on proper application of facility types can be found in the following resources:

- National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide
- American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities
- Manual on Uniform Traffic Control Devices
- Wisconsin Manual on Uniform Traffic Control Devices
- Federal Highway Administration (FHWA) Small Town and Rural Multimodal Networks
- WisDOT Facilities Development Manual
- Appleton (Fox Cities) Transportation Management Area & Oshkosh Metropolitan Planning Organization Bicycle and Pedestrian Plan—2014

Network Considerations

Communities considered the friendliest to bicyclists and pedestrians have a wide range of facilities for all skill level of users; these facilities range from signature trails and greenways to bicycle lanes and accessible walkways. The successful blend of every available facility type makes up a connected network of on-street and off-street options. Communities should limit abrupt transitions in the network by connecting neighborhoods to destinations and link multiple types of infrastructure.

When planning at the municipal level, efforts should be made to coordinate with the county, state, and surrounding jurisdictions to ensure cohesion across municipal lines. Just as drivers do not adhere to municipal boundaries, bicyclists and pedestrians often cross to different communities, so it is important to consider connections both within and throughout the communities in the region. Map I-3: Regional Bike and Ped Network shows the existing bicycle and pedestrian network adjacent to the Greenville.

ADA and Accessibility

Vulnerable roadway users—those who are most at risk for serious injury or death when they are involved in a vehicular collision—include those with disabilities. The safety of these individuals depends on roadway and bicycle and pedestrian facility design that is compliant with Americans with Disabilities Act standards. According to the U.S. Federal Highway Administration, Title II of

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

the ADA of 1990 prohibits states and other public entities from discriminating on the basis of disability, including access to the public right-of-way. Without proper design, those with disabilities may have to choose between using facilities that are potentially dangerous or not traveling to certain destinations. Guidance on creating bicycle and pedestrian accommodations that are ADA compliant can be found in WisDOT's Standard Detail Drawings and Facilities Development Manual.

Street Crossings

Pedestrians may feel especially vulnerable when crossing at intersections or traveling across the street, especially at high speed or high volume streets. By observing areas where pedestrians may wish to cross, such as trail crossings or to key destinations, Greenville can determine if measures are necessary to assist in creating safer street crossings. These measures include painted crosswalks, signage, beacons, traffic calming, safety islands, and, in certain circumstances, overpasses or underpasses.

Safe Routes to School

Safe Routes to School (SRTS) is a national and international movement to create safe, convenient and fun opportunities for children to bicycle and walk to and from schools. The goal of the program is to enable and encourage children Kindergarten-8th grade, including those with disabilities, to walk and bike to school. The program facilitates the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution. The program also plays a role in reversing the alarming nationwide trend toward childhood obesity and inactivity.

East Central Wisconsin Regional Planning Commission has a region wide Safe Routes to School program that works with schools throughout eight counties in east central Wisconsin. One component of this program is working with local school districts and municipalities to devise action plans that address safety concerns at and around schools.

INFRASTRUCTURE AND NETWORK RECOMMENDATIONS

Infrastructure Recommendations

Greenville's recommended bicycle and pedestrian network should be designed to meet the needs of all current roadway users and the needs of future bicyclists and pedestrians. This Plan develops a network that expands around current trails, neighborhoods, and key destinations to create a connected and cohesive network to move people places. While this plan does not recommend specific facility types, it does recognize the importance of a mix of facilities that serve the different potential users and these users' differing abilities; several general policies are recommended for implementation of this plan:

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

- Roadways that function as arterials or collectors, which urban street cross-sections are being completed, shall have pedestrian and bicycle facilities where none exists and pedestrian and bicycle facilities repaired or replaced where the existing facility is unsafe, defective, or insufficient, and/or where grades no longer match new street grades.
 - The Board may determine that pedestrian and bicycle facilities are not required when any one or more of the following conditions apply:
 - There is insufficient right-of-way
 - The installation encourages pedestrian or bicycle traffic in an otherwise dangerous area.
 - The installation abuts industrial zoned lands, unless situated between other pedestrian generating areas.
 - There is justification from the Greenville's Engineer determining that pedestrian and bicycle facilities are not feasible based on physical or environmental circumstances.
- A minimum of five (5) foot sidewalks shall be installed on both sides of all local urban cross section streets at the time of construction or reconstruction.
- A minimum of five (5) foot bicycle lane or a bicycle lane reserve area shall be installed on both sides of all bridges, overpasses, under passes at the time of construction or reconstruction.
- The use of side-paths may be used along arterial roadways and greenways as a substitution for sidewalks. Side-paths should only occur where the side-path is rated "most suitable" according to the side-path suitability analysis (Attachment H-1). Side-paths shall be installed at the time of street construction or reconstruction. Side-paths shall be made of paved (asphalt or concrete) surface at least 10 feet in width.
- Rural roadway cross-sections that function as arterials or collectors shall have a minimum four (4) foot paved shoulder installed where none exists and repaired or replaced where the existing paved shoulder is unsafe, defective, or insufficient, and/or where shoulder grades no longer match new street grades at the time of road repaving or reconstruction.
- A snow removal policy for bicycle and pedestrian facilities should be developed.

Shared-use facilities serve as transportation and recreational corridors, and these facilities may attract an array of potential users. In addition to serving bicyclists and pedestrians, the following user groups should be considered when constructing, reconstructing, or maintaining shared-use facilities:

- ATVs
- Snowmobiles
- Horses
- Winter recreation (fat biking, cross country skiing, snowshoeing)

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

When determining the allowed mix of users on the trail, considerations such as the surface of the shared-use facility, winter maintenance, and potential conflicts among user groups should be discussed prior to designing the trail or path.

Greenville's proposed bicycle and pedestrian network can be found on Tables I-2 and I-3 and on Map I-4: Existing and Recommended Facilities.

While the map is comprehensive, it shall not be reason to preclude the construction of bicycle and pedestrian facilities on other streets not identified in this plan. A GIS analysis should be conducted during street construction/reconstruction to determine if there are "hot spots" for bicyclists and pedestrians that warrant consideration of additional bicycle and pedestrian accommodations.

Non-infrastructure Recommendations

Recommendations guide the work that will accomplish the goals identified in this plan. Guided by the goals laid out in this plan, a comprehensive and integrated approach is used to create a more walkable and bikeable community. These recommendations range from short-term to long-term, and should be evaluated on an annual basis; best-practice in implementing these plans is to establish an annual action plan based on the goals below. Non-infrastructure recommendations complement the infrastructure recommendations and are essential to developing a multimodal community.

Goal 1: Education. Increase public and political awareness of the need for and the benefits of multimodal transportation facilities and a well-connected multimodal transportation network.

ACTION	TIMEFRAME	RESPONSIBILITY
Establish an informational website showing routes and locations of bicycle and pedestrian facilities	0-5 years	Parks, Recreation, and Forestry and GIS
Educate drivers through social media, newsletters, website, etc. (including young drivers) about interacting/sharing the road with bicyclists and pedestrians	0-5 years	Community & Economic Development Wisconsin Bike Federation Safe Routes to School
Promote and encourage land development decisions that provide an appropriate mixture of land uses that are supportive of increased active transportation based on individual land uses	0-5 years	Community & Economic Development
Create signage and public service announcements focused on pedestrian awareness and safety in school zones	0-5 years	Department of Public Works Hortonville Area School District Safe Routes to School
Promote resources to educate community members on where to ride their bikes to get to bike racks	0-5 years	Parks, Recreation, and Forestry and GIS
Work with Safe Routes to School and the Hortonville Area School District to implement a youth engagement program that may include youth-led education	5-10 years	Hortonville Area School District Safe Routes to School

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Promote summer bicycling classes/groups through Greenville's webpage	0-5 years	Parks, Recreation, and Forestry
--	-----------	---------------------------------

Goal 2: Encouragement. Encourage more residents to use non-motorized means of transportation to reduce dependence on automobiles, conserve resources, increase physical activity, and enjoy the outdoors.

ACTION	TIMEFRAME	RESPONSIBILITY
Promote the bicycle and pedestrian programs	0-5 years	Parks, Recreation, and Forestry
Develop and host an open streets event	5-10 years	Community & Economic Development

Goal 3: Enforcement. Improve safety, reduce conflicts, and build awareness and respect between motorists, bicyclists, and pedestrians by improving enforcement of bicycle and pedestrian laws, and raising awareness of the need and ways to share roads and off-road facilities cooperatively.

ACTION	TIMEFRAME	RESPONSIBILITY
Partner with law enforcement in bicycle and pedestrian education efforts	0-5 years	Greenville Hortonville Area School District Safe Routes to School
Increase the presence of law enforcement near school during arrival and dismissal times	0-5 years	Outagamie County Sheriff's Department

Goal 4: Engineering. Improve the multimodal facility connections to destinations within the Greenville and to surrounding communities and links.

ACTION	TIMEFRAME	RESPONSIBILITY
Continue to increase the number of bicycle and pedestrian facilities in the Greenville through both public infrastructure and private development projects by constructing facilities based on this plan	Ongoing	Department of Public Works Community & Economic Development Parks, Recreation, and Forestry
New specifications should be reviewed to ensure they agree with recommendations that are made in this plan.	0-5 years	Department of Public Works
Develop a dedicated funding source and/or budget line item to implement bicycle and pedestrian facilities and programs	0-5 years	Department of Public Works Parks, Recreation, and Forestry
Develop criteria for prioritizing projects that include bicycle and pedestrian facilities	0-5 years	Department of Public Works Parks, Recreation, and Forestry
Evaluate each project for maintenance	0-5 years	Department of Public Works Parks, Recreation, and Forestry
Create a policy for maintenance of	0-5 years	Department of Public Works

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

transportation-based trails and multimodal facilities		Parks, Recreation, and Forestry Community and Economic Development
Create a process to ensure multimodal facilities connect to all key and priority destinations (i.e. schools, grocery, employment centers, health care, etc.)	0-5 years	Department of Public Works Parks, Recreation, and Forestry Community & Economic Development
Review and revise development ordinances in order to implement land use policies identified in this plan	0-5 years	Community & Economic Development
Continue to determine locations to install high visibility crosswalks that emphasize the recommended path of crossing an intersection	0-5 years	Department of Public Works
Implement wayfinding signage for bicycle and pedestrian facilities	5-10	Parks, Recreation, and Forestry
Install street furniture, such as benches, shelters, trash receptacles, and water fountains	5-10	Parks, Recreation, and Forestry

Equity: Ensure multimodal facilities and programs do not negative impact vulnerable and underserved populations, and ensure that equitable opportunities for facilities and programs are accessible for all community members.

ACTION	TIMEFRAME	RESPONSIBILITY
Create a process to ensure all voices and perspectives are considered when planning for facilities or programs	0-5 years	All departments

Evaluation: Establish criteria to evaluate the education, encouragement, enforcement, engineering, and equity components of existing and future multimodal facilities and programs.

ACTION	TIMEFRAME	RESPONSIBILITY
Develop a bicycle and pedestrian count process to keep counts on a regular basis	0-5 years	Parks, Recreation, and Forestry
Develop an annual benchmarking report	0-5 years	Parks, Recreation, and Forestry
Update bicycle and pedestrian mileage annually	0-5 years	Parks, Recreation, and Forestry GIS
Create signage and public service announcements focused on pedestrian awareness and safety in school zones	0-5 years	HASD
Track progress of bicycle and pedestrian facilities in conjunction with requirements to receive Bicycle Friendly Community and Walk Friendly Community designations.	5-10 years	Parks, Recreation, and Forestry
Conduct audits at key locations before and after bicycle and pedestrian facility improvements/enhancements/additions	Ongoing	Community & Economic Development Parks, Recreation, and Forestry Department of Public Works

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

IMPLEMENTATION AND FUNDING

For the purpose of cost-effectiveness, implementation should be addressed on an “as road projects arise” basis, when roadways are considered for reconstruction, expansion, or repair. In addition to the facilities recommended in this plan, each roadway project should consider whether it would be appropriate to include bicycle and pedestrian accommodations. Other activities in this plan that do not involve roadway projects may be completed through funding and financing of a bicycle and pedestrian infrastructure project depends on the individual project and if it coincides with a roadways reconstruction project. It is recommended that the Greenville funds bicycle and pedestrian facilities at the time of roadway reconstruction projects and build the cost of those facilities into their capital improvement program.

Funding

Funding and financing of bicycle and pedestrian infrastructure projects depend on the individual roadway project and if it coincides with a reconstruction or resurfacing project. Typically, it is more efficient at the county or local level to build the cost of bicycle and pedestrian accommodations into a reconstruction project rather than retrofitting. It is recommended that Greenville funds bicycle and pedestrian infrastructure through their local capital improvement programs and build the cost of the facility into the cost of the roadway project and works with local communities on local bicycle and pedestrian facilities.

State and federal funding may serve as opportunities for certain bicycle and pedestrian projects. When pursuing these funds, it is recommended that Greenville coordinate with ECWRPC, Outagamie County and the WisDOT Northeast office to ensure the proposed project is eligible for those funds.

The following sections describe the potential funding sources.

County and Local Capital Improvement Programs (CIPs)

As roadways are scheduled for reconstruction or resurfacing, bicycle and pedestrian infrastructure accommodations should be considered as it is much more cost effective to include these facilities as part of the project. These costs can be included in the CIP as part of the overall roadway project's cost.

Surface Transportation Block Grant Program

The Surface Transportation Block Grant program (STBG) provides flexible funding that may be used by States and localities for projects to preserve and improve the conditions and performance on any Federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects, including intercity bus terminals. (<https://www.fhwa.dot.gov/specialfunding/stp/>)

Transportation Alternatives Program

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

The Transportation Alternatives Program (TAP) is a federal program for projects that meet eligibility criteria for bicycle- and pedestrian-related projects used for transportation purposes. TAP projects within the jurisdiction of a Transportation Management Area are selected at the regional level by TMAs. (<https://wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/tap.aspx>)

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is intended to develop and implement, on a continuing basis, stand-alone safety projects designed to reduce the number and severity of crashes on all streets and highways (both state and local). The federal funding ratio for the HSIP funds is usually 90% federal funds and a 10% match of state and/or local funds. The HSIP Program currently prioritizes sites that have experienced a high crash history with an emphasis on low-cost options that can be implemented quickly. (<https://safety.fhwa.dot.gov/hsip/>)

Recreational Trails Aid Program (RTA)

The Recreation Trails Program provides funds to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. Project sponsors may be reimbursed for up to 50 percent of eligible project costs. (<https://dnr.wi.gov/Aid/RTP.html>)

East Central WI Regional Planning Commission's Technical Assistance Program

The Technical Assistance Program is available to member counties and local municipalities within the East Central Region. This application-based program provides local municipalities and counties with staff resources and support for a variety of small-scale projects.

Wisconsin Department of Natural Resources Knowles-Nelson Stewardship Funds

The Knowles-Nelson Stewardship Funds help fund land acquisition and recreational facility development. (<https://dnr.wi.gov/topic/stewardship/>)

The Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation seeks to improve the health and health care of all Americans. One of the primary goals of the Foundation is to "promote healthy communities and lifestyles." Specifically, the Foundation has ongoing "Active Living by Design" grant programs that promote the principals of active living including non-motorized transportation. Other related calls for grant proposals are issued as developed, and multiple communities nationwide have received grants related to the promotion of trails and other non-motorized facilities. (<https://www.rwjf.org/en/how-we-work/grants-explorer.html>)

Local Hospitals and Healthcare Organizations

A majority of hospitals and health care organizations within the United States currently operate as nonprofit organizations and are exempt from most federal, state, and local taxes as a result of this status. To maintain this status, hospitals and health care organizations need to complete a number of requirements, including developing a Community Health Needs Assessment (CHNA) and support community initiatives that are consistent with their CHNA.

APPENDIX H: BICYCLE AND PEDESTRIAN PLAN

Public Private Partnerships

As federal and state funds become more competitive for local communities, it is recommended that Greenville works with the private sector to help secure funds for various types of bicycle and pedestrian projects. The private sector could help to provide the local match for state and federal grant program, making the local grant application more competitive for funding.

Additionally, local businesses have a vested interest in bicycle and pedestrian accommodations, as healthy active employees help reduce the business' health insurance costs and the employees are also more productive. Local health insurance companies are interested in having healthy employees, as it reduces their health insurance claims related to chronic diseases.

Attachment H-1: Sidepath Suitability Analysis

Index created by League of Illinois Bicyclists; specific examples provided by Green Bay Metropolitan Planning Organization.

Determining the Safety of Bicyclists on Parallel Trails Using the Sidepath Suitability Index

A method of estimating the relative safety of bicyclists on trails (or paths) that run parallel to streets was developed by the League of Illinois Bicyclists (LIB). This “Sidepath Suitability Index” is designed to enable communities and other entities to rate the safety of existing parallel paths, determine if a new path would be an appropriate option, and identify methods for making existing or planned paths as safe as possible.

To assess the suitability of placing a path along a road segment, the following factors are considered:

1. **Intersection traffic**, which considers vehicle volumes, vehicle speeds, the number of driveway and street intersections, and other conditions.
2. **Path continuity**, which measures the impact of gaps (unpaved areas, etc.) that exist along the path.
3. **Curb cuts**, which considers whether or not curb cuts exist at street and driveway crossings.
4. **Pedestrian use**, which considers the level of pedestrian use and the conflicts that exist or could exist between walkers and bicyclists.
5. **Crosswalks**, which measures the visibility of crosswalks at intersections.
6. **Separation between intersections and sidepaths**, which considers the proximity of the path’s intersection and driveway crossings to the parallel road.

Each of these factors is assessed and scored, and the final score is used to determine the overall suitability of the path by comparing the score to the categories in the following table:

<u>Sidepath Suitability</u>	<u>Points</u>
Most Suitable	0-7
Somewhat Suitable	8-9
Least Suitable	10-11
Not Suitable	12+

If communities intend to emphasize the construction of parallel paths, it is important that those who will be involved in developing these paths carefully consider where the paths should and should not be built. The following two examples illustrate how the suitability index works.

Example 1: *A street segment with very few access points that has curb cuts and highly visible crosswalks at intersections. The sidepath crosswalks are close to the parallel street at the crossings, and pedestrian use of the path is moderate.*

After completing the analysis shown in Appendix 1, this segment’s suitability rating was found to be 4, which falls within the Most Suitable category. This result suggests that a path along this segment that includes the features summarized in Example 1 would be acceptable.

Example 2: *A street segment that intersects often with commercial driveways and streets. This segment has curb cuts and highly visible crosswalks at street intersections. The sidepath crosswalks are close to the parallel street at the street intersections, but the driveway crossings are not close to the parallel street. Pedestrian use of the path is moderate here as well.*

After completing the analysis shown in Appendix 1, this segment's suitability rating was found to be 11, which falls within the Least Suitable category. This result suggests that a path along this segment that includes the features summarized in Example 2 would not be as safe as on-street bicycle lanes because of the relatively high number of street and driveway crossings and the possibility that drivers will not see oncoming bikers because the drivers will tend to look for gaps in traffic instead of bicyclists on the path.

In situations where parallel multi-use paths are found to fall within the Not Suitable or Least Suitable categories, communities should strongly consider adding on-street bicycle lanes and sidewalks instead of the paths. Communities should also consider choosing on-street lanes and sidewalks over multi-use paths in situations where the parallel paths fall within the Somewhat Suitable category. However, if communities still want to build paths when undesirable conditions exist, they should try to maximize the paths' suitability by minimizing the number of conflict points and making the paths as visible as possible to drivers.

Appendix 1: Calculations for Sidepath Suitability Analyses

Example 1 Calculations

1. Intersection Traffic Score

R = Number of residential driveway intersections: **0**

A = Number of minor street/minor commercial driveway intersections (< 1,000 ADT): **3**

B = Number of major street/major commercial driveway intersections (≥ 1,000 ADT): **2**

M = Street segment length (in miles): **1 mile**

Spd = Posted speed limit on parallel street (≤ 30 mph = 1, 35-40 = 2, ≥ 45 = 3): **35 mph**

Vol = Average daily traffic (ADT) on parallel street (≤ 2,000 = 1, 2,000-10,000 = 2, ≥ 10,000 = 3): **11,000**

$$\text{Intersection Traffic Score (ITS)} = \text{spd} \times \text{vol} \times (R + [2A] + [4B]) / M$$

$$\text{ITS} = 2 \times 3 \times (0 + 6 + 8) / 1$$

$$= (6 \times 14) / 1$$

$$= 84 / 1$$

$$= 84$$

<u>Int. Traffic Score (ITS)</u>	<u>0</u>	<u>1-40</u>	<u>41-80</u>	<u>81- 120</u>	<u>121- 160</u>	<u>161- 200</u>	<u>201- 240</u>	<u>>240</u>
Suitability Points	0	1	2	3	4	5	6	7

Number of suitability points = 3

2. Path Continuity

No pavement gaps exist along the sidepath.

Number of suitability points = 0

3. Curb Cuts

All of the intersecting streets have curb cuts.

Number of suitability points = 0

4. Pedestrian Use

The path has a moderate amount of pedestrian use and is 10' wide.

<u>Low Pedestrian Use</u>	<u>Medium Pedestrian Use</u>	<u>High Pedestrian Use</u>
Path 0' – 5' = 1 point Path > 5' = 0 points	Path 0' – 5' = 2 points Path 6' – 7' = 1 point <i>Path > 7' = 0 points</i>	Path 0' – 5' = 4 points Path 6' – 7' = 2 points <i>Path > 7' = 1 point</i>

Number of suitability points = 0

5. Crosswalks

The crosswalks along the segment are prominent at each street intersection.

Number of suitability points = 0

6. Separation Between Intersections and Sidepath

The path is brought close to the parallel road at each street/driveway crossing.

<u>Crossing Condition</u>	<u>Points</u>
Crossings go through stopped traffic at intersecting streets/driveways	5
Crossings not “close enough” to the parallel streets	3
<i>Crossings brought close to the parallel streets</i>	1

Number of suitability points = 1

Total Suitability Score

<u>Sidepath Suitability</u>	<u>Most Suitable</u>	<u>Somewhat Suitable</u>	<u>Least Suitable</u>	<u>Not Suitable</u>
Points	0-7	8-9	10-11	12 or more

Total number of suitability points = 4
Sidepath Suitability Rating = Most Suitable

Example 2 Calculations

1. Intersection Traffic Score

R = Number of residential driveway intersections: **2**

A = Number of minor street/minor commercial driveway intersections (< 1,000 ADT): **12**

B = Number of major street/major commercial driveway intersections (≥ 1,000 ADT): **2**

M = Street segment length (in miles): **1 mile**

Spd = Posted speed limit on parallel street (≤ 30 mph = 1, 35-40 = 2, ≥ 45 = 3): **35 mph**

Vol = Average daily traffic (ADT) on parallel street (≤ 2,000 = 1, 2,000-10,000 = 2, ≥ 10,000 = 3): **11,000**

$$\text{Intersection Traffic Score (ITS)} = \text{spd} \times \text{vol} \times (R + [2A] + [4B]) / M$$

$$\text{ITS} = 2 \times 3 \times (2 + 24 + 8) / 1$$

$$= (6 \times 34) / 1$$

$$= 204 / 1$$

$$= 204$$

<u>Int. Traffic Score (ITS)</u>	<u>0</u>	<u>1-40</u>	<u>41-80</u>	<u>81-120</u>	<u>121-160</u>	<u>161-200</u>	<u>201-240</u>	<u>>240</u>
Suitability Points	0	1	2	3	4	5	6	7

Number of suitability points = 6

2. Path Continuity

No pavement gaps exist along the sidepath.

Number of suitability points = 0

3. Curb Cuts

All of the intersecting streets have curb cuts.

Number of suitability points = 0

4. Pedestrian Use

The path has a moderate amount of pedestrian use and is 10' wide.

<u>Low Pedestrian Use</u>	<u>Medium Pedestrian Use</u>	<u>High Pedestrian Use</u>
Path 0' - 5' = 1 point Path > 5' = 0 points	Path 0' - 5' = 2 points Path 6' - 7' = 1 point <i>Path > 7' = 0 points</i>	Path 0' - 5' = 4 points Path 6' - 7' = 2 points <i>Path > 7' = 1 point</i>

Number of suitability points = 0

5. Crosswalks

The crosswalks along the segment are prominent at each street intersection.

Number of suitability points = 0

6. Separation Between Intersections and Sidepath

The path is not close to the parallel road at each street/driveway crossing.

<u>Crossing Condition</u>	<u>Points</u>
Crossings go through stopped traffic at intersecting streets/driveways	5
Crossings not "close enough" to the parallel streets	3
<i>Crossings brought close to the parallel streets</i>	1

Number of suitability points = 5

Total Suitability Score

<u>Sidepath Suitability</u>				
	<u>Most Suitable</u>	<u>Somewhat Suitable</u>	<u>Least Suitable</u>	<u>Not Suitable</u>
Points	0-7	8-9	10-11	12 or more

Total number of suitability points = 11
Sidepath Suitability Rating = Least Suitable



STH 15 & Hyacinth Ln
Bike/Walk Audit Results Map

- Existing Facility
- Potential Facility
- Cross Walk
- Parcel Boundary

Audit Conducted: 04/9/2019
3:00 p.m. - 4:00 p.m.
Weather: 65 degrees,
partly sunny, windy

Bikes & Pedestrians Observed During Audit:	
Bikes	Pedestrians
0	6

Source: Orthophotograph - Outagamie County GIS, 2019;
Trails, Audit information - Greenville, 2019



Scale in Feet

0 200 400

Scale is approximate and is not based
on legally recorded or surveyed data.

This map provides data containing geographic information about Greenville.
The data was obtained from multiple sources and agencies. Greenville provides
this information with the understanding that it is not guaranteed to be current,
correct or complete and assumes no responsibility for the accuracy of this map
or its use or misuse. The map is intended for use as a general reference only.

Prepared April 1, 2019 By: Greenville GIS Department



Audit #2

STH 15 & Hyacinth Ln

TOP CONCERNS

Motorist speed/volume creates uncomfortable walking/biking environment

Due to lack of control measures on STH 15, motorists are confused when pedestrians are present, creating an unsafe crossing

Students cross STH 15 to get to and from Greenville Middle/Elementary School

Street type:	STH 15: Arterial Hyacinth Ln: Local
Average daily traffic:	No Data
Intersection type:	STH 15: No traffic control Hyacinth Ln: Stop sign
Posted speed limit:	STH 15: 45 mph Hyacinth Ln: 25 mph
Number of travel lanes:	STH 15: Four, plus 1 turn lane Hyacinth Ln: Two
Sidewalks present:	No
Shared-use path present:	Yes
Bike lanes present:	No
Bike route signs present:	No
Crosswalks present:	STH 15: Yes Hyacinth Ln: No
School zone adjacent:	No
On-street parking:	No
Along bus route:	No
Bike/ped count:	Bike: 0 Ped: 6

STH 76 & School Rd
Bike/Walk Audit Results Map

- Existing Facility
- Potential Facility
- Cross Walk
- Parcel Boundary

Audit Conducted: 04/11/2019
8:30 a.m. - 9:00 a.m.
Weather: 35 degrees,
overcast

Bikes & Pedestrians
Observed During Audit:
Bikes 0
Pedestrians 2

Source: Orthophotograph - Outagamie County GIS, 2019;
Trails, Audit information - Greenville, 2019

N

W

E

S

Scale in Feet

0200400

Scale is approximate and is not based
on legally recorded or surveyed data.

This map provides data containing geographic information about Greenville.
The data was obtained from multiple sources and agencies. Greenville provides
this information with the understanding that it is not guaranteed to be current,
correct or complete and assumes no responsibility for the accuracy of this map
or its use or misuse. The map is intended for use as a general reference only.

Prepared April 1, 2019 By: Greenville GIS Department

GREENVILLE

WISCONSIN

Audit #3
STH 76 & School Rd

TOP CONCERNS

No marked crosswalk and several wide lanes to cross STH 76

Motorist speed/volume creates uncomfortable walking/biking environment

High traffic volume on School Rd

Street type:	STH 76: Arterial School Rd: Major Collector
Average daily traffic:	STH 76: 8700 School Rd: No Data
Intersection type:	STH 76: No traffic control School Road: Stop sign
Posted speed limit:	STH 76: 45 mph School Road: 25 mph
Number of travel lanes:	Two, plus turn lanes
Sidewalks present:	No
Shared-use path present:	No
Bike lanes present:	No
Bike route signs present:	No
Crosswalks present:	No
School zone adjacent:	No
On-street parking:	No
Along bus route:	No
Bike/ped count:	Bike: 0 Ped: 2

jt: F:\GIS\Maps\Jennifer\CED\CompPlan

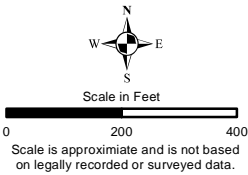
STH 76 & Glennview Dr/Pasture Pkwy
Bike/Walk Audit Results Map

- Existing Facility
- Potential Facility
- Parcel Boundary

Audit Conducted: 04/11/2019
8:30 a.m. - 9:00 a.m.
Weather: 35 degrees,
overcast

Bikes & Pedestrians Observed During Audit:	
Bikes	Pedestrians
0	1

Source: Orthophotograph - Outagamie County GIS, 2019;
Trails, Audit information - Greenville, 2019



This map provides data containing geographic information about Greenville. The data was obtained from multiple sources and agencies. Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.
Prepared April 1, 2019 By: Greenville GIS Department



Audit #4

STH 76 & Glennview Dr/Pasture Pkwy

TOP CONCERNS

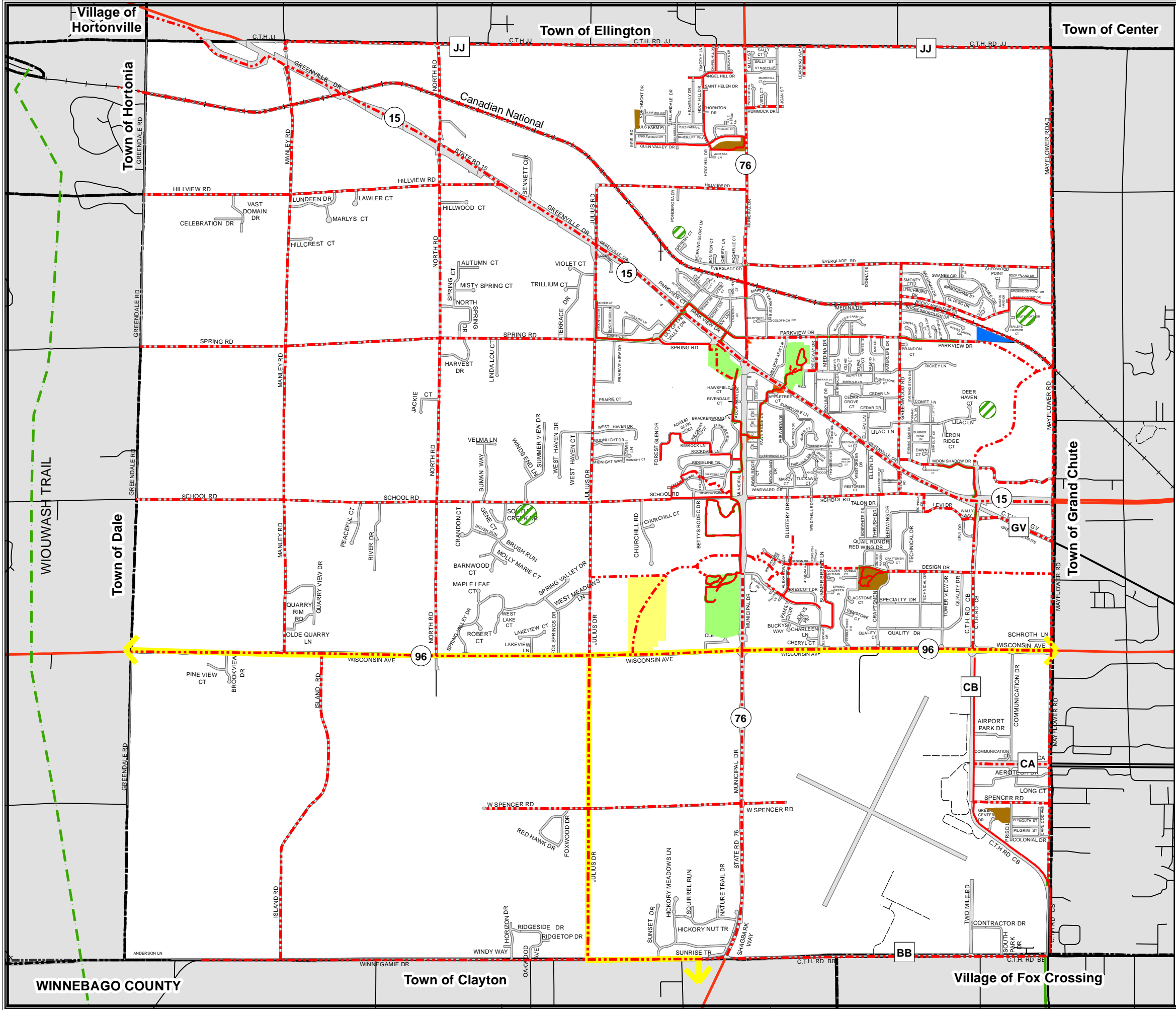
No marked crosswalk and several wide lanes to cross STH 76

Motorist speed/volume creates uncomfortable walking/biking environment

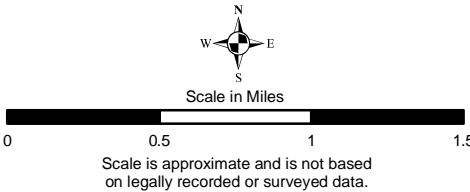
High population neighborhoods to the East are unable to safely cross STH 76 to get to Lions Park

Street type:	STH 76: Arterial Glennview/Pasture: Local
Average daily traffic:	No Data
Intersection type:	STH 76: No traffic control Glennview/Pasture: Stop sign
Posted speed limit:	STH 76: 45 mph Glennview/Pasture: 25 mph
Number of travel lanes:	Two
Sidewalks present:	No
Shared-use path present:	Yes
Bike lanes present:	No
Bike route signs present:	No
Crosswalks present:	No
School zone adjacent:	No
On-street parking:	No
Along bus route:	No
Bike/ped count:	Bike: 0 Ped: 1

Map H-1
Bicycle and Pedestrian Facilities



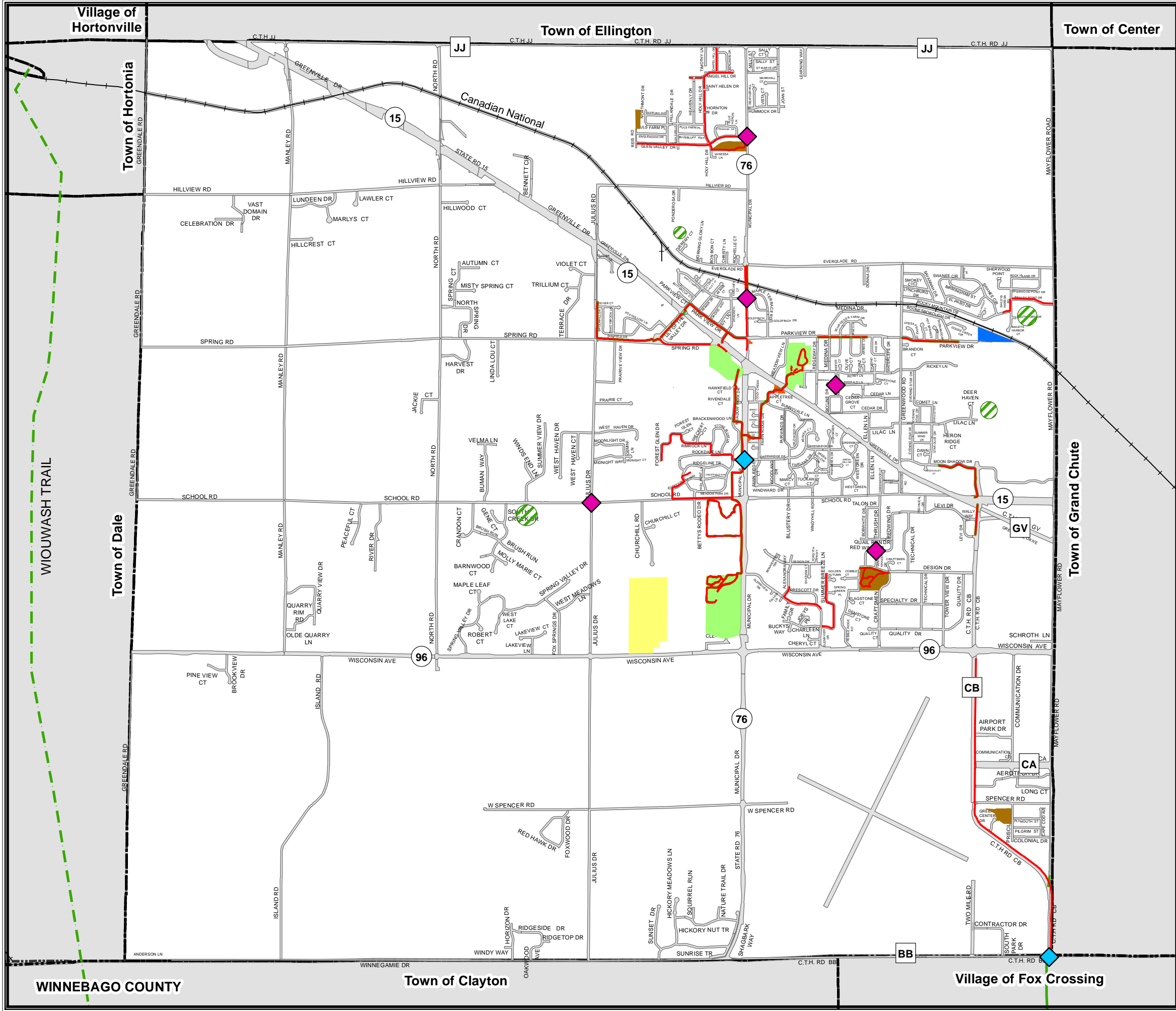
- Yellowstone Trail
- Facility Type - Greenville**
 - Existing Bike/Ped Facilities
 - Potential Bike/Ped Facilities
- Facility Type - Outside of Greenville**
 - Off Road Paved Trail
 - Off Road Unpaved Trail
- Park Type**
 - Community Park
 - Neighborhood Park
 - Mini-Park
 - Open Space
 - Other
 - Proposed Park Development
- Railroad
- Municipality



Source: Transportation & Boundaries - Outagamie County, 2018; Parks & Facilities - Greenville, 2018

This map provides data containing geographic information about the Town of Greenville. The data was obtained from multiple sources and agencies. The Town of Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.

Prepared April 1, 2019 By:
Greenville - GIS Department
W6860 Parkview Dr.
P.O. Box 60
Greenville, WI 54942
(920)757-7276 Phone
(920)757-6342 Fax
Website: www.townofgreenville.com
Email: gis@townofgreenville.com



Map H-2

Bicycle and Pedestrian Incident Locations

Bike/Ped Incident Type

- ◆ Bike (5)
- ◆ Ped (2)

Facility Type - Greenville

- Existing Bike/Ped Facilities

Facility Type - Outside of Greenville

- Off Road Paved Trail
- - - Off Road Unpaved Trail

Park Type

- Community Park
- Neighborhood Park
- Mini-Park
- Open Space
- Other
- ▨ Proposed Park Development

Scale in Miles

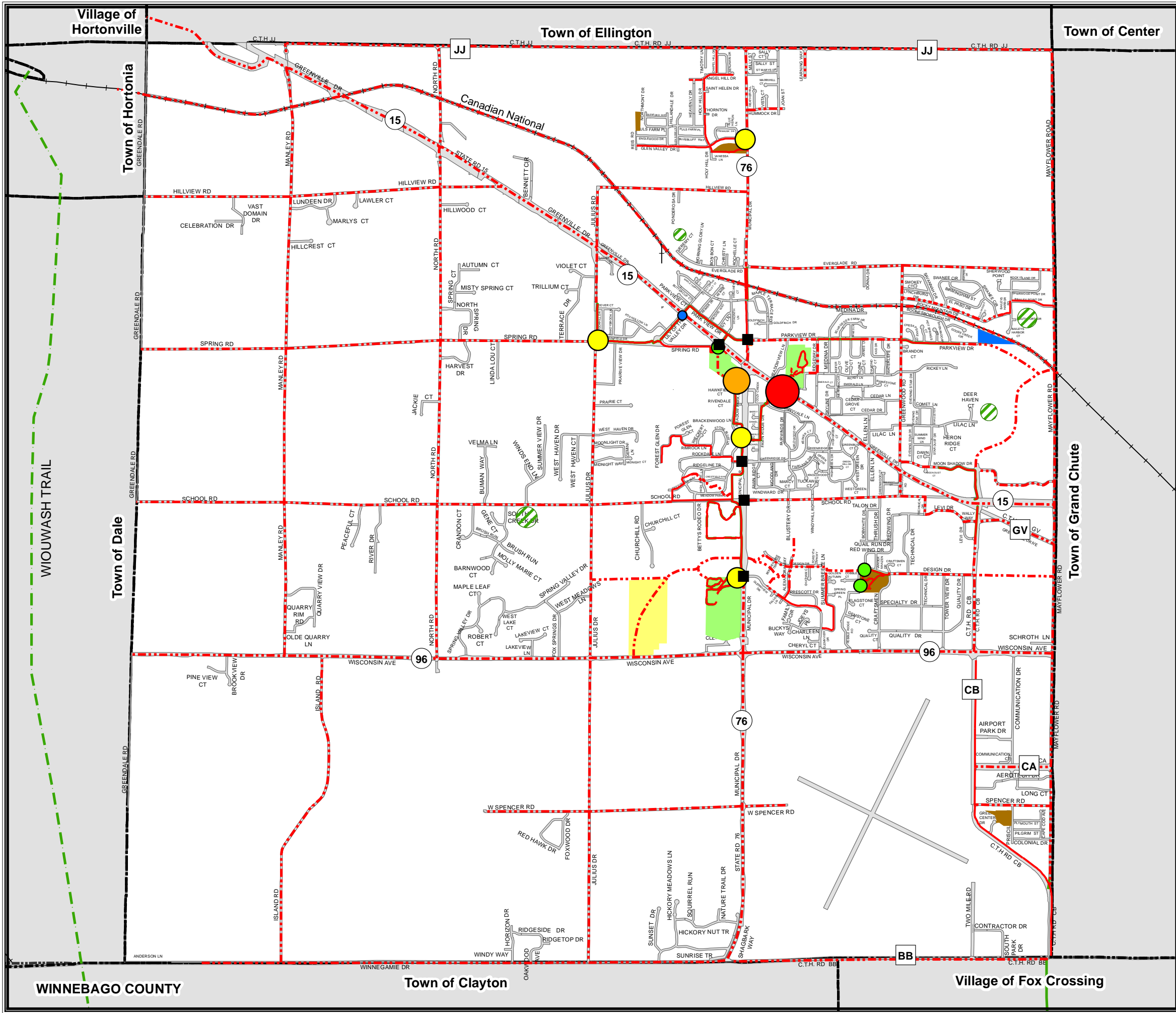
0 0.5 1 1.5

Scale is approximate and is not based on legally recorded or surveyed data.

Source: Transportation & Boundaries - Outagamie County, 2018;
Parks & Trails - Greenville, 2018; Bike/Ped Incident Locations 2008 - 2018; Greenville Fire & EMS, 2018

Prepared March 19, 2019 By:
Greenville - GIS Department
W6860 Parkview Dr.
P.O. Box 60
Greenville, WI 54942
(920)757-7276 Phone
(920)757-6342 Fax
Website: www.townofgreenville.com
Email: gis@townofgreenville.com

This map provides data containing geographic information about Greenville. The data was obtained from multiple sources and agencies. Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.



Map H-3 Bicycle and Pedestrian Count and Audit Locations

■ Audit Location (5)

Bike/Ped Count

- 10
- 23 - 44
- 70 - 94
- 135
- 320

Facility Type - Greenville

- Existing Bike/Ped Facilities
- - - Potential Bike/Ped Facilities

Facility Type - Outside of Greenville

- Off Road Paved Trail
- - - Off Road Unpaved Trail

Park Type

- Community Park
- Neighborhood Park
- Mini-Park
- Open Space
- Other
- Proposed Park Development



Scale in Miles

0 0.5 1 1.5

Scale is approximate and is not based on legally recorded or surveyed data.

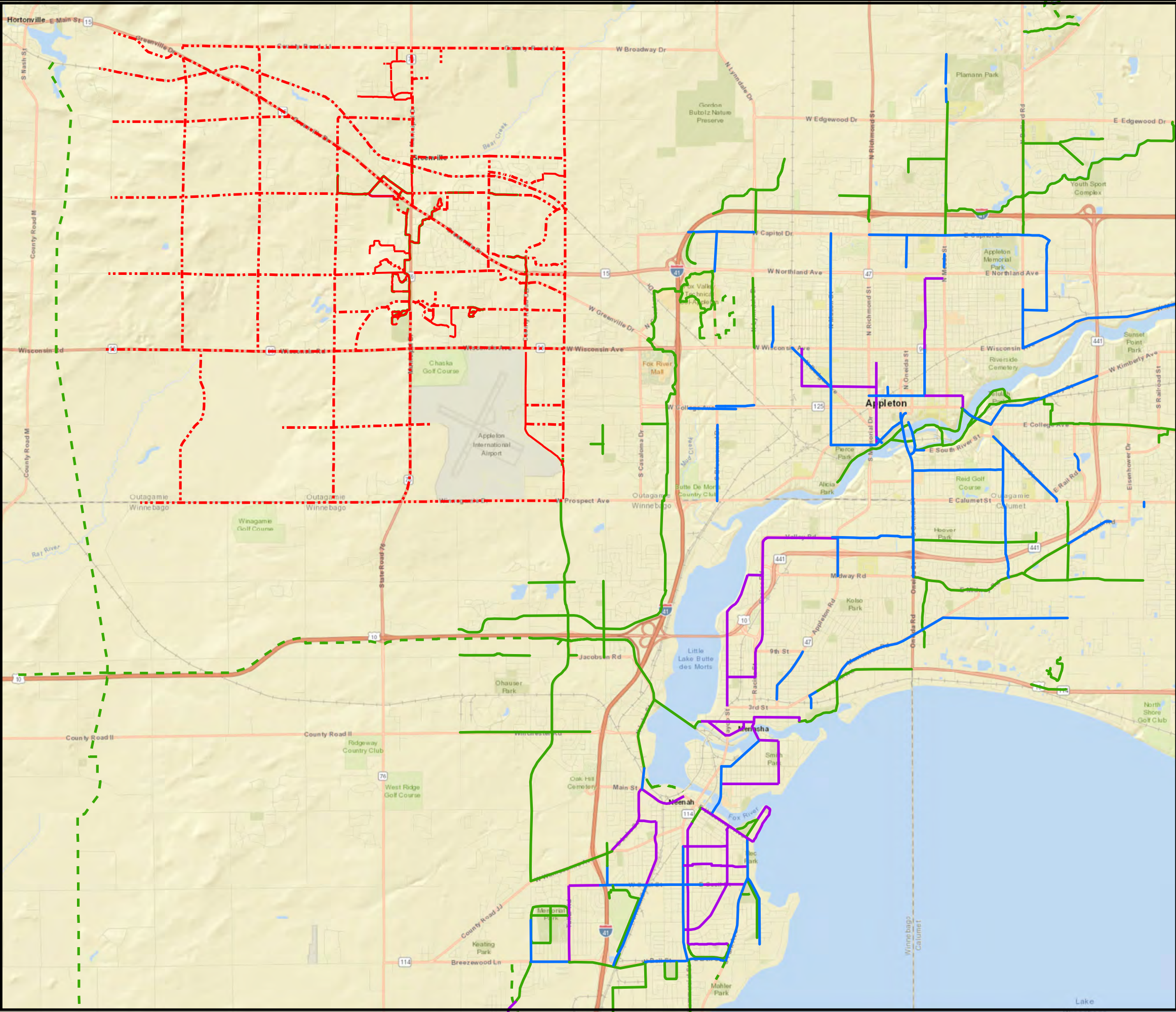
Source: Transportation & Boundaries - Outagamie County, 2018;
Parks & Trails - Greenville, 2018; Audit Locations - Greenville, 2019;
Bike/Ped Counts - ECWRPC, 2018

This map provides data containing geographic information about Greenville. The data was obtained from multiple sources and agencies. Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.

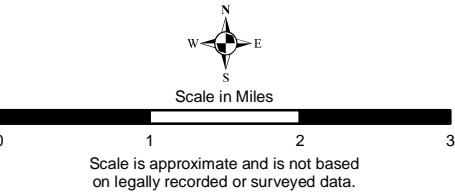
Prepared March 19, 2019 By:
Greenville - GIS Department
W6860 Parkview Dr.
P.O. Box 60
Greenville, WI 54942
(920)757-7276 Phone
(920)757-6342 Fax
Website: www.townofgreenville.com
Email: gis@townofgreenville.com



Map H-4
Regional Bicycle and
Pedestrian Network



- Facility Type - Greenville**
- Existing Bike/Ped Facilities
 - Potential Bike/Ped Facilities
- Trail Type - Outside of Greenville**
- Paved Trail
 - Unpaved Trail
 - Bike Lane
 - Bike Route

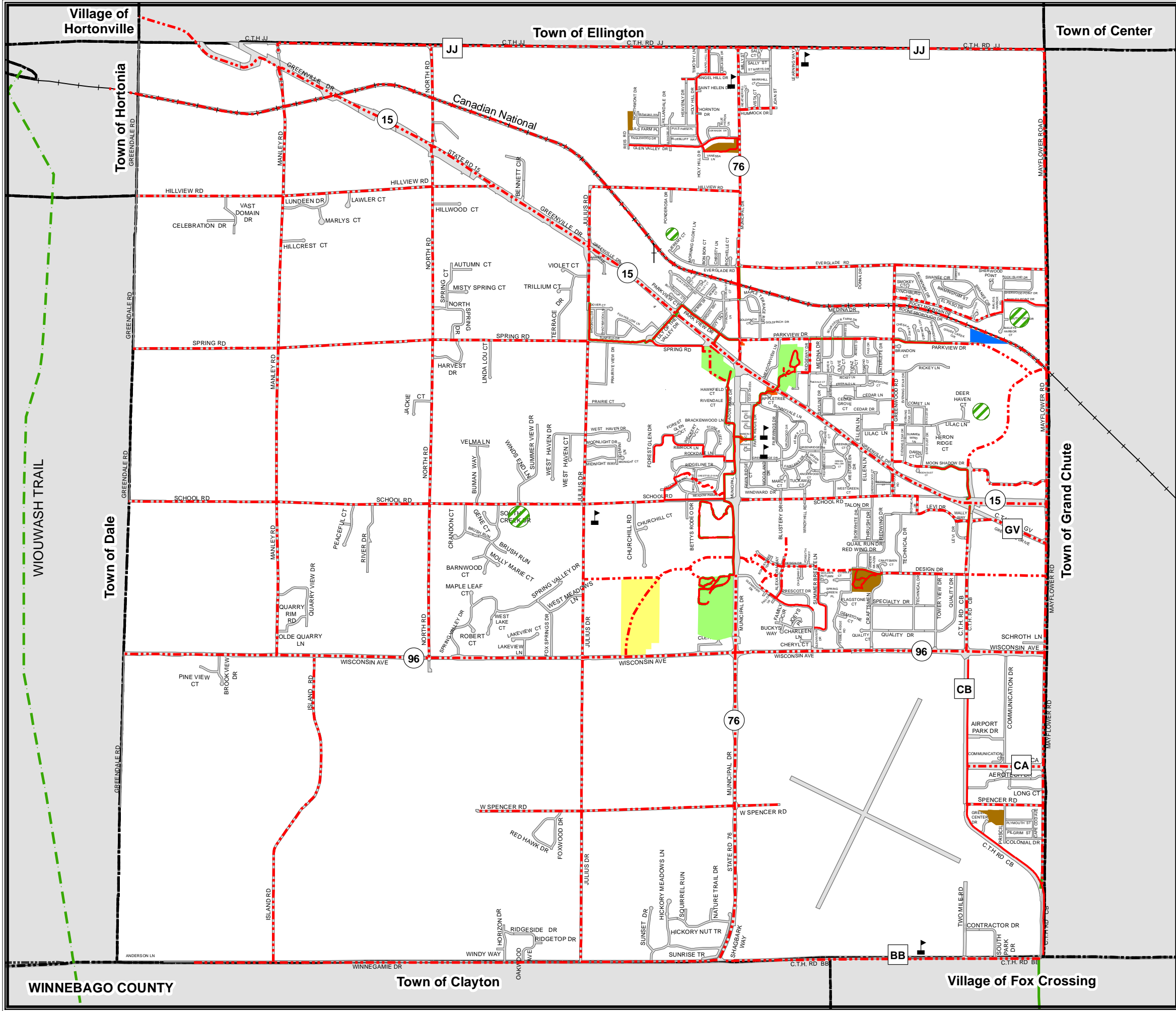


Source: Basemap - Esri, 2019; Trails - Greenville & City of Appleton, 2018

This map provides data containing geographic information about Greenville. The data was obtained from multiple sources and agencies. Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.

Prepared March 19, 2019 By:
Greenville - GIS Department
W6860 Parkview Dr.
P.O. Box 60
Greenville, WI 54942
(920)757-7276 Phone
(920)757-6342 Fax
Website: www.townofgreenville.com
Email: gis@townofgreenville.com

Map H-5
Existing and Recommended Facilities



Schools

Facility Type - Greenville

- Existing Bike/Ped Facilities
- Potential Bike/Ped Facilities

Facility Type - Outside of Greenville

- Off Road Paved Trail
- Off Road Unpaved Trail

Park Type

- Community Park
- Neighborhood Park
- Mini-Park
- Open Space
- Other
- Proposed Park Development

Scale in Miles

0 0.5 1 1.5

Scale is approximate and is not based on legally recorded or surveyed data.

Source: Transportation & Boundaries - Outagamie County, 2018; Parks, Trails & Schools - Greenville, 2018

This map provides data containing geographic information about Greenville. The data was obtained from multiple sources and agencies. Greenville provides this information with the understanding that it is not guaranteed to be current, correct or complete and assumes no responsibility for the accuracy of this map or its use or misuse. The map is intended for use as a general reference only.

Prepared March 19, 2019 By:
Greenville - GIS Department
W6860 Parkview Dr.
P.O. Box 60
Greenville, WI 54942
(920)757-7276 Phone
(920)757-6342 Fax
Website: www.townofgreenville.com
Email: gis@townofgreenville.com