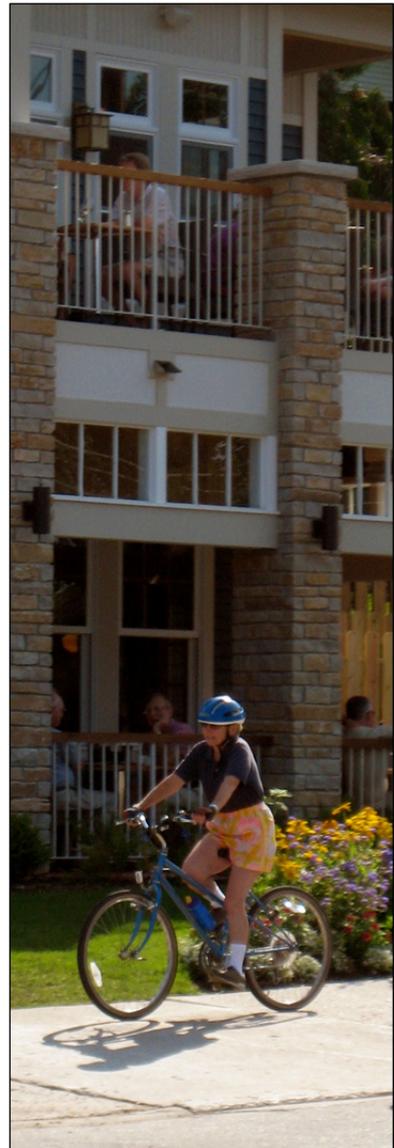


Town of Gibraltar 2010 Bicycle and Pedestrian Plan

Adopted February 3, 2010



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The Bicycle Federation of Wisconsin is a statewide nonprofit bicycle education and advocacy organization. The Bicycle Federation of Wisconsin's mission is to make Wisconsin a better place to bicycle. Bicycling is a viable, healthy, and environmentally sustainable means of transportation, recreation and sport. The Bicycle Federation of Wisconsin provides bicyclists of all ages with information on recreational rides, safety tips and commuting skills while educating decision makers about the importance of bicycling to our communities.

Learn more at <http://www.bfw.org>.

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1. Introduction

Communities across the nation are recognizing that facilities for bicycling and walking are an important part of their infrastructure. These facilities, including shared-use paths, sidewalks and on-street bicycle lanes offer transportation choices that are available to all ages and socioeconomic groups. Bicycle and pedestrian networks increase travel and recreational opportunities for residents. At the same time, a robust bicycle and pedestrian network can boost the local economy: urban bicycle greenways have a positive impact on home values, studies have shown that people walking or cycling to local businesses spend more than those who drive, and bicycle tourism can draw increased traffic to local businesses.

Bicycling and walking are important modes of transportation. Bicycling in particular is a convenient and efficient form of transportation, and for some people, their main mode of transportation. Like the automobile, a bicycle provides its user with autonomy and flexibility regarding travel schedules and destinations. Bicycling is also accessible to many people who cannot drive: the young, some elderly, and those who do not to own a car. A complete transportation system serves not only motorists, but also cyclists and pedestrians in a safe and efficient manner.

1.1 Purpose

Although there has been little focus on bicycle or pedestrian planning in the Town of Gibraltar or Door County as a whole, the Town has recently become more proactive in its comprehensive and bicycle and pedestrian planning efforts. With increased tourism and a growing local population, there has been an increase in traffic and congestion, particularly in Fish Creek and around Peninsula State Park. This has created a need for bicycle and pedestrian specific planning and facilities to create a safer environment for all road users. This plan will guide the development of shared-use paths, demarcate on-street facilities, provide design guidelines and policies for facilities, and highlight funding opportunities for the Town to pursue.

This plan should be updated every ten years to reflect the needs of the community and progress that has been made toward implementing the plan's goals.



1.2 Scope

The Town of Gibraltar Bicycle and Pedestrian Plan focuses on bicycling for transportation as opposed to recreational purposes. From this perspective, trip origins, destinations and purpose are of utmost importance (e.g. commuting to work or school, shopping, attending a social event, etc.), and the bicycle is simply the means to the end. Conversely, recreational bicycling trips are made expressly for the enjoyment of bicycling, and the destination, if there is one at all, is of minor importance. Most trips, and most facilities, serve both functions, but the bicycle facility network must be complete in order to serve the needs of transportation bicyclists while also serving recreational bicyclists and pedestrians.

Bicycle projects must be primarily for transportation purposes to be eligible for funding under most Federal aid programs. Federal guidelines generally consider any bicycle path other than a closed loop as being principally for transportation and eligible for funding.

This plan is a comprehensive approach to bicycle transportation planning that encompasses the “five E’s:”

- Engineering: facility creation and improvement
- Education: increasing cyclist and motorist awareness of the rules of the road
- Encouragement: programs to increase cycling
- Enforcement: applying the rules of the road to all users: motorists, bicyclists, and pedestrians
- Evaluation: continued evaluation of bicycle and pedestrian facilities, performance and need

When combined with facility improvements, education and encouragement can dramatically increase the levels of bicycling and walking. Educating both bicyclists and motorists on how to share the road safely is important. Education of elected officials, planners, engineers and others involved in land use and transportation development will help ensure that bicyclists’ needs are considered and accommodated when planning new neighborhoods and roadways. For enforcement to be effective, law enforcement officers need to know which illegal behaviors are the most common factors in crashes and make a concerted effort to enforce these violations. Regularly evaluation should take place to measure the effectiveness of facilities and programs that have been implemented as well as the continued needs of the community.

This plan identifies existing facilities and recommends new programs, policies, and facility projects including off-street paths, on-street facilities, signed routes and support facilities such as bicycle parking. Implementation of the plan will encourage bicycling and walking and increase safety, mobility and access to destinations such as schools, employment centers, commercial areas, public land uses and recreational areas. Recommendations are prioritized to rapidly expand the network.

1.3 Summary of Public Input

An effective planning effort requires the participation of the public. Public input allows local residents and facility users the opportunity to voice their opinion on bicycle and pedestrian issues as well as the direction of the planning effort and what they would like to see achieved by the plan.

Bicycle and Pedestrian Plan Steering Committee

A steering committee was established to oversee development of the plan and to provide input from different areas of the community. The steering committee included representatives of the Plan Commission, the School District, the Parks and Lands Committee, the Civic Association, the Town Board and local recreation facilities. The steering committee met monthly during the planning process to review progress and provide input on the plan.



Bicycling on the sidewalk is common in Fish Creek which creates conflicts with pedestrians.

Public Informational Meeting

An informational meeting for the public was held on Tuesday, August 11, 2009, from 7:00pm – 8:30pm at the Gibraltar Town Center. Notice of the meeting was provided through local media outlets and informational flyers at local merchants. Approximately 20 people attended the meeting in addition to members of the steering committee. After an introduction to the planning process and a description of potential bicycle and pedestrian facilities, the floor was opened for public comment. Comments were wide-ranging, but specific themes emerged repeatedly:

- **Conflicts in downtown Fish Creek:** During the peak tourism season, downtown Fish Creek is extremely congested with pedestrians, bicyclists and motor vehicles and conflicts are common.
- **Conflicts near Gibraltar School:** The school area is very congested, has no bicycle or pedestrian facilities and is on a highway with a sharp curve and hill. Residents are concerned about the safety of children in the area.
- **Conflicts at Peninsula State Park:** The park is a popular destination during the summer and conditions near the park entrances and within the park are hazardous to bicyclists due to congestion.
- **Signage and street markings:** An opportunity exists to improve bicycling with easy to implement and relatively low cost signage and street markings.
- **Connectivity:** The bicycle network should allow users to easily connect to nearby areas including Egg Harbor, Ephraim and Baileys Harbor.
- **Funding:** The plan should identify funding sources for proposed facilities.

Written comments that were received at the meeting are reprinted in Appendix A.

Survey of Public Opinion

A public survey was administered online to Town residents and others interested in bicycling and walking in the area. Notice of the survey was distributed at the public meeting and provided on fliers available from local merchants. A total of 37 people participated in the survey with the approximately one third of those people residing within the Town. Results of the survey helped guide the planning process and the full survey results are presented in Appendix B.

2. The Importance of Bicycling and Walking

Bicycling and walking are both important forms of transportation and recreation that provide numerous benefits to individuals and the community as a whole. Bicycling and walking are good forms of exercise and are nonpolluting forms of transportation that are accessible to all. By encouraging bicycling and walking, particularly for transportation, Gibraltar can provide social, health and environmental benefits to its residents.

2.1 Social and Health Benefits

Bicycling and walking offer low cost mobility. For those who do not use or have access to an automobile, such as school-age children, bicycling is particularly important. While bicycling may not replace all trips by motor vehicle it can be a practical mode for many trips.

Increased quality and quantity of bicycle and pedestrian facilities can provide those unable to drive or without access to a car more independence; reduce the need for parents to chauffeur their children to school, social, and recreational activities; allow households to meet their transportation needs with fewer cars and lower costs; and increase recreational opportunities and, by extension, improve public health.

Walking and bicycling are important forms of exercise for local residents. A total of 78% of respondents to the survey conducted for this plan reported that they bicycle regularly for exercise while 43% report regularly bicycling for transportation. Improving bicycle facilities for transportation purposes benefits those who bicycle for recreation and fitness as well. Recreational bicycle rides can begin at home and be combined with other, often utilitarian, trips. When linked with a larger bikeway system, off-street paths can provide important transportation linkages, and a complete bikeway network benefits everyone, regardless of how they use the road.

2.2 Environmental and Transportation Benefits of Bicycling

Bicycling is an important element of a transportation system. It is a convenient and efficient form of transportation, and for some, their primary mode of transportation. Bicycling is a popular mode of transportation because a bicycle provides its user with autonomy and flexibility regarding travel schedules and destinations, including multiple destinations. Bicycling is the most energy efficient form of transportation, and is often faster than driving for short trips. Multi-modal trips allow commuters to use their bicycles to reach a bus stop or to ride to their final destination from a convenient parking area. Although bicycling levels are higher during the warmer months, the development of inexpensive, more versatile bicycles and clothing have increased both the appeal and the practice of bicycling in wetter and colder weather.



Warning signs can remind motor vehicle drivers of the rights of pedestrians and cyclists.

Increasing bicycle opportunities improves the efficiency of the transportation system and therefore increases environmental benefits. It improves neighborhood livability by reducing motor vehicle traffic and its associated pollution and congestion, the need for motor vehicle parking, and motor vehicle crashes, injuries, and property damage.

When compared to a motor vehicle, bicycles take up very little roadway space. In most traffic conditions, bicycles do not significantly limit traffic flow. Providing adequate roadway width for all users, including bicyclists, will increase roadway capacity, reduce congestion and decrease trip times for everyone.

2.3 Economic Opportunities

Improving the bicycling environment can provide non-transportation related benefits as well. The community benefits from bicycle riders who purchase food and other needs locally. The tourism industry benefits as more bicyclists are attracted from outside the community. Most importantly, the quality of life of the community is enhanced by the presence of bicyclists and pedestrians, for example, when social interactions occur spontaneously or when people feel safer being outdoors.

Bicycle facilities have been shown to have a positive effect on both nearby property values,¹ and an increase in business reported by owners of businesses near bicycle facilities.² A study by North Carolina's Department of Transportation of bicycle facilities in the Outer Banks, a popular tourist destination like Door County, reveals an annual positive economic impact of the facilities that is six times greater than the one-time capital costs of the facilities.³ A study in Wisconsin showed 39% of responding businesses indicated increased business as a result of users of the Fox River Trail. The same study showed that a bicycle facility had positive effects on real estate values and therefore property tax revenues. Lots adjacent to the Mountain Bay Trail in Brown County, Wisconsin, sold faster and for an average of 9% more than similar property not located next to the trail. The study also suggests that by providing workers an alternative to driving to work, the trail became an inexpensive alternative to increasing road capacity.⁴ The conclusion that trail facilities generate increased revenue through higher property values is corroborated by the Consumer's Survey on Smart Choices for Home Buyers. In that survey, trails ranked the second most important amenity out of a list of 18 choices.⁵

¹ National Association of Realtors and National Association of Builders, *Consumer's Survey on Smart Choices for Home Buyers*, April 2002.

² Runge, Cole. *Fox River Trail Study*, Prepared for the Brown County Planning Commission, December 2002.

³ Lawrie, Judson, John Guenther, Thomas Cook, and Mary Paul Meletiou. *The Economic Impact of Investments in Bicycle Facilities: A Case Study of the North Carolina Outer Banks*, summary report, April 2004.

⁴ Runge, Cole. *Fox River Trail Study*, Prepared for the Brown County (WI) Planning Commission, December 2001.

⁵ National Association of Realtors and National Association of Home Builders, *Consumer's Survey on Smart Choices for Home Buyers*, April 2002

3. Existing Conditions

This chapter focuses on the existing conditions in the Town of Gibraltar. The chapter provides an overview of the region, demographic information, a summary of bicycle and pedestrian facilities and plans and policies that impact bicycle and pedestrian planning and facilities. It should be noted that much of the demographic information is drawn from the 2000 Census, and the 2010 Census will provide a more accurate picture of current conditions in Gibraltar when the data is released in 2011.

3.1 Regional Context

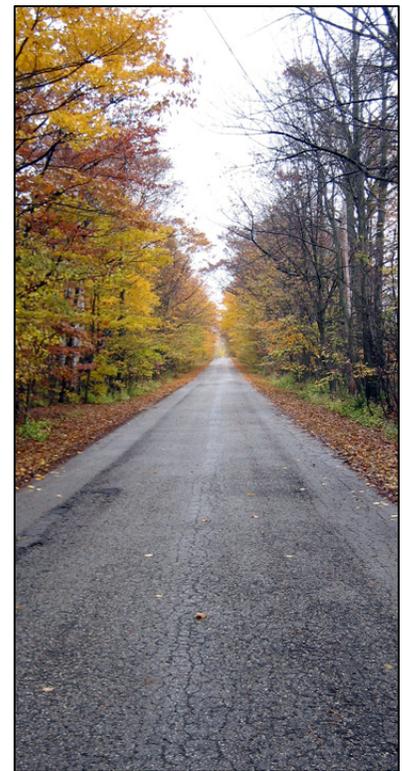
The Town of Gibraltar is a township in Door County, on a peninsula on the eastern side of Wisconsin extending into Lake Michigan. The county is split into northern and southern portions by Sturgeon Bay and a shipping canal, with Gibraltar located roughly in the middle of the northern portion of the county. The town faces onto Green Bay and has approximately 34 square miles of land mass. Largely rural in character, the town is a popular tourist destination and the population swells during the summer with partial year residents and visitors.

Fish Creek is the primary population center in Gibraltar. Located approximately 70 miles north of Green Bay and 180 miles north of Milwaukee, this unincorporated community is located on State Highway 42 along Green Bay. The majority of the town's 1,063 residents lives or works in or near Fish Creek where many restaurants and lodging and retail establishments are located. Residences and businesses are scattered throughout the town, although the most cluster near Highway 42.

Approximately 64% of the population over the age of 15 is in the labor force. Tourism and related businesses dominate employment in Gibraltar with 36% of employed residents working in arts, entertainment, recreation, food services or retail businesses.

State Highway 42 is the primary transportation facility through the town although County Highways A and F also carry significant traffic. These facilities provide access south to Sturgeon Bay and larger cities as well as smaller adjoining communities. Town roads make up the remainder of the road network in Gibraltar. The town roads provide reasonable facilities for bicycle travel, although they are rarely as direct as the State and County Highways. Most cyclists, particularly those riding with children, do not find Highways 42, A, or F to be suitable for bicycling, primarily due to heavy levels of high-speed traffic.

Neighboring jurisdictions include the Towns of Egg Harbor to the south, Baileys Harbor to the south and east, Liberty Grove to the north and east, and the Village of Ephraim to the north. None of these communities have adopted bicycle plans, although the Village of Egg Harbor is expected in early 2010.



3.2 Parks and Open Space

There are a number of parks and open spaces in or adjacent to the Town. These spaces offer residents the opportunity to participate in recreational activities, exercise in areas away from motor vehicles and simply enjoy nature. Residents should be able to safely and easily access these spaces on bicycle or foot.

Peninsula State Park

Peninsula State Park is a 3,776-acre park in the northern part of the town along Green Bay. The park is part of the Wisconsin State Park system and is administered by the Department of Natural Resources. Peninsula State Park is the top tourist destination in Northern Door County and offers camping, hiking, bicycling, boating, golfing and other recreational opportunities.

Although Peninsula State Park contains pedestrian and bicycle trails and other recreational opportunities, access on foot or bicycle can be difficult or intimidating during the peak season. The park's main entrance is on Highway 42 in Fish Creek, and the area is often heavily congested with motor vehicles including large recreational vehicles and trailers. Highway 42 leading to the park has narrow and congested traffic lanes in the area, and sidewalks only approach the park from the south. Additionally, there is concern about pedestrian and bicycle conflicts with motor vehicles within the park and concerns about roadway shoulders that drop off from the road and present a hazard.

Town Parks

The largest town park in Gibraltar is Fish Creek Park, across Highway 42 from the entrance to Peninsula State Park. Fish Creek Park offers hiking and recreational opportunities to users, although there are no formal recreational spaces there. The only formal recreation space in the town is a set of volleyball pits located off County Highway A between Gibraltar Road and Highway 42. The town is actively working on developing other recreation areas.

Numerous smaller parks exist in Gibraltar, nearly all of which are concentrated in Fish Creek. These parks offer smaller spaces where users can rest from a workout, enjoy local scenery or simply look at Green Bay. These parks include Clark Park, the public beach in Fish Creek, Sunset Beach Park and other public spaces surrounding the Town Hall, Town Center and Noble House.

3.3 Bicycle and Pedestrian Facilities

There is little in the way of specific bicycle facilities in the Town of Gibraltar. The primary road through the Town is State Highway 42, a heavily traveled, two-lane highway. The majority of the highway has 5 foot or wider shoulders that provide adequate width for bicyclists, but the high speed and volume of traffic on the road make it uncomfortable for all but the most dedicated cyclists.

Two County Highways also run through the town. Both provide direct routes to adjoining communities, but like Highway 42, are seen as unsafe by most cyclists due to heavy traffic volumes, high speeds and inadequate shoulder width.

Town roads make up the remainder of the road network in Gibraltar. Many of these roads have low traffic volumes and are safe and recommended for bicycling with no additional facilities.

Two sections of signed bicycle routes exist in the Town: Gibraltar Road and Peninsula Players Road, both from Highway 42 east to County Highway A. However, neither of these segments are designated on official Town or County maps, and both should have new signage added when the proposed bike routes are signed.

One short section of bicycle lane exists on Spring Road just south of County Highway F. However, the bike lane only exists on the west side of the road which can encourage cyclists to use the single lane for two-way traffic, which is extremely dangerous. It is recommended that the single bicycle lane either be removed or that a lane is added on the east side of the road.

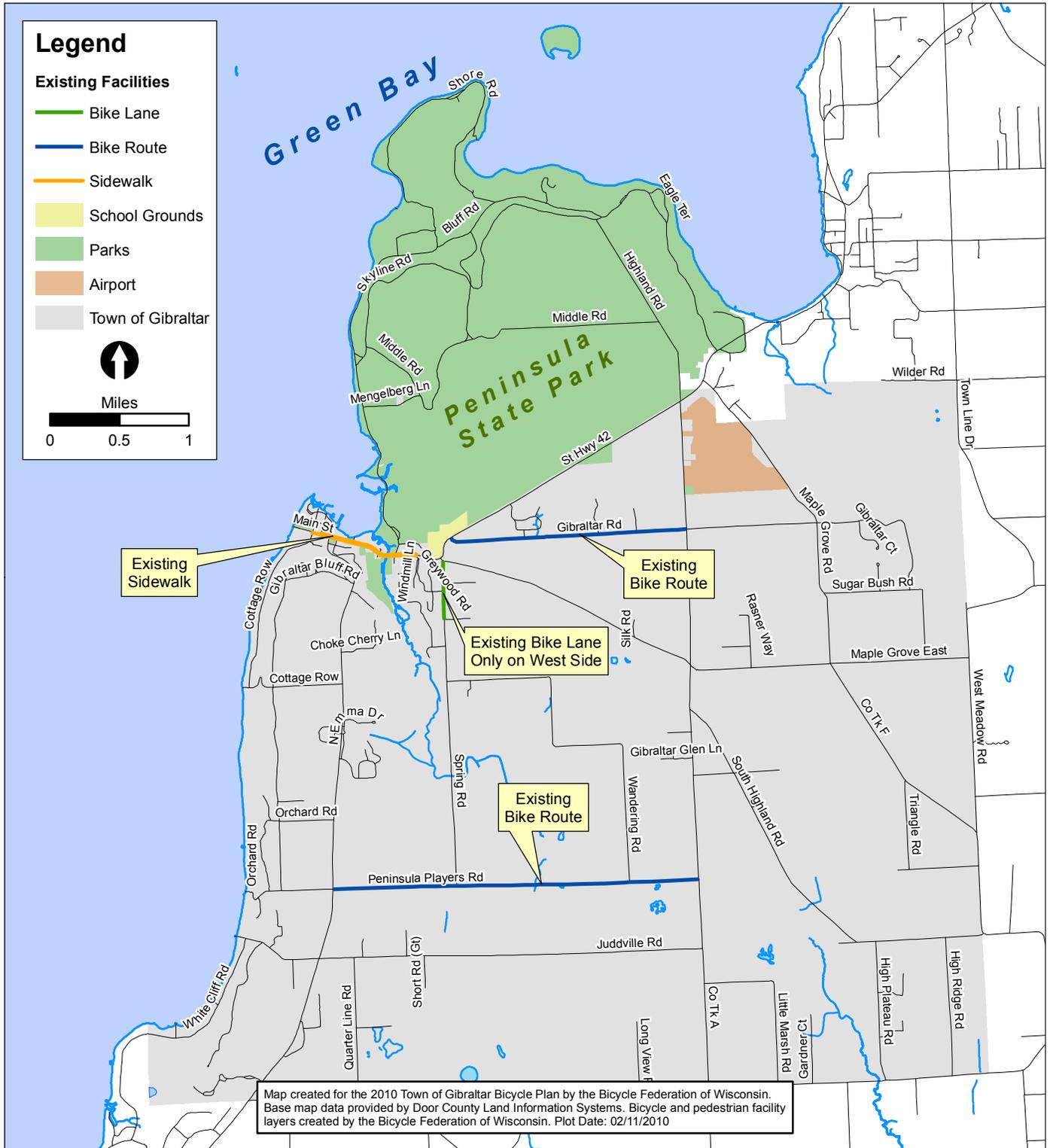
Most streets in Gibraltar have a rural cross-section with no curb, gutter or sidewalk. On low-traffic residential streets or rural roads, the roadway may be able to safely serve as a pedestrian facility. However, more developed areas with higher traffic levels, primarily downtown Fish Creek, need dedicated pedestrian areas. Much of Fish Creek has sidewalks along Highway 42, but the sidewalks do not extend to popular destinations including the local school and the YMCA.

Existing bicycle and pedestrian facilities are shown in Map 1.



Gibraltar Road is a low traffic street that is currently designated as a bike route.

Map 1: Existing Bicycle and Pedestrian Facilities



3.4 Existing Plans and Policies

Numerous plans exist at the federal, state, regional and local levels that impact bicycling and walking in Gibraltar. This section provides a brief summary of the most relevant of those plans.

Section 7.1 details federal and state guidance on the development of bicycle and pedestrian facilities.

Federal Plans and Policies

Congress firmly established the principle that the safe accommodation of bicycling and walking is the responsibility of state and local transportation agencies. This responsibility extends to the planning, design, operation, maintenance and management of the transportation system in federal transportation law, including the *Intermodal Surface Transportation Efficiency Act (ISTEA)*, and its reauthorizations, the *Transportation Equity Act for the 21st Century (TEA-21)* and the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)*.

http://www.americabikes.org/resources_policy_bicyclefriendly.asp

The Federal Highway Administration Program guidance on the federal transportation bills states that “In the planning, design, and operation of transportation facilities bicyclists and pedestrians should be included as a matter of routine and the decision not to accommodate them should be the exception rather than the rule. There must be exceptional circumstances for denying bicycle and pedestrian access either by prohibition or by designing highways that are incompatible with safe, convenient walking and bicycling.”

<http://www.fhwa.dot.gov/environment/bikeped/Design.htm>

Wisconsin Plans and Policies

The *Wisconsin Bicycle Transportation Plan 2020* (WisDOT September 1998) is intended “to establish bicycling as a viable, convenient, and safe transportation choice throughout Wisconsin.” The role of the state plan is “ensuring an interconnected transportation system across government boundaries and highway jurisdictions that can work safely for bicyclists....” The two primary goals of the state plan are doubling the number of bicycle trips by 2010 and reducing crashes involving bicyclists and motor vehicles by 10% or more by 2010.

<http://www.dot.state.wi.us/projects/state/bike2020.htm>

The *Wisconsin Pedestrian Policy Plan 2020* outlines statewide and local measures to promote pedestrian comfort and safety. The plan lays out a policy framework to better integrate pedestrians into the transportation network by 2020 and describes WisDOT’s role in meeting pedestrian needs.

<http://www.dot.wisconsin.gov/projects/state/ped2020.htm>



Regional Plans and Policies

The 2002 *Door County Bicycle Transportation Capital Improvement Plan* was officially adopted by the Door County Highway Committee and identifies suitable roads for biking throughout the county. The Plan specifically recommends providing 4' paved shoulders on County Highways A and F in the Town of Gibraltar. According to the Door County Highway Commissioner, it is Highway Department policy to install shoulders on county highways when funding is available according to the recommendations made in this plan. The plan also calls for:

- Developing off-road trails along State Highway 42 and County Highway A.
- Posting bicycle route signage on designated routes indicating the direction and distance to specific destinations.
- Including local bicycle transportation plans as addenda to the County Plan.

The 2002 *Bay-Lake Region Bicycle Facility Transportation Plan 2020* recommended a system of bicycle transportation routes and needed improvements connecting all municipalities throughout the eight county region. This plan also specifically recommended adding paved shoulders on County Highways A and F in Gibraltar.

Local Policies and Plans

The 2004 *Town of Gibraltar 20 Year Comprehensive Plan* makes numerous bicycling and pedestrian recommendations for the Town. Primary among these are:

- Constructing bicycle lanes or wide curb lanes on higher volume roads to provide a comfortable margin of safety.
- Require curb cuts on all sidewalk corners.
- Adopt a Bicycle Transportation Plan.
- Provide an ongoing awareness campaign to heighten awareness of the rights and responsibilities of pedestrians, bicyclists and motorists.

4. Education, Encouragement, and Enforcement

There is a common perception that bicycling on streets and crossing streets as a pedestrian is dangerous, when in fact it is not. This concern keeps people from bicycling and walking more, or at all. *Education, encouragement and enforcement* can all be used to effectively counter the perception that bicycling or walking is unsafe. When including *engineering* (facilities discussed in Chapter 6), the “four Es” are popular and effective components to achieving the goals of increasing the number of trips by foot or bicycle and improving the safety and convenience of the bicycling and walking environment.

4.1 Education

Educating motorists and bicyclists to share the road will establish safer, more inviting streets for bicycling. Educating motorists and pedestrians about proper yielding and crossing procedures will establish a more encouraging and safe environment for pedestrians. Safe Routes to School, Bike Rodeos and Bike Ed initiatives are three examples of established bicycle education programs.

Safe Routes to School

The Federal Safe Routes to School (SRTS) program addresses the decline in children walking and bicycling to school. In 1969, about half of all students walked or bicycled to school. Today, fewer than 15 percent of all school trips are made by walking or bicycling, while over half of all children arrive at school in private automobiles. This decline in walking and bicycling has had an adverse effect on traffic congestion and air quality around schools, as well as pedestrian and bicycle safety. In addition, a growing body of evidence has shown that children who lead sedentary lifestyles are at risk for a variety of health problems such as obesity, diabetes, and cardiovascular disease. Safety issues are a big concern for parents, who cite traffic danger as a reason why their children are unable to bicycle or walk to school. The SRTS program empowers communities to make walking and bicycling to school a safe and routine activity once again. The program funds a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school. A Safe Routes to School toolkit is available from WisDOT at:

<http://www.dot.wisconsin.gov/localgov/aid/saferoutes-toolkit.htm>

Bicycle and Pedestrian Education Efforts

Bike Rodeos can be effective tools for teaching children safe bicycling basics, but only when those running the rodeos know what the most common kinds of child bicycle crashes are, and the skills needed to avoid them. Teaching Safe Bicycling is a free course coordinated by WisDOT’s Bureau of Transportation Safety that provides instructors with this critical knowledge. For more information contact the WisDOT Bicycle and Pedestrian Safety Program Manager at 608-267-3154 or view course information at:

<http://www.dot.wisconsin.gov/safety/vehicle/bicycle/docs/tsb-brochure.pdf>



Bicycles can be a great way for kids to get to school if safe routes exist.

Bike Ed is a group of courses developed by the League of American Bicyclists (LAB) to suit the needs of any cyclist. LAB certifies, insures and equips League Cycling Instructors (LCI)s to teach anything from basic skills to college level courses. LCIs are the experts in bicycle education and safety. Courses offered include: Road I, Road II, Commuting, Motorist Ed, Kids I and Kids II. LCI's can also offer modified versions of these courses and design bike rodeos and provide general safety consulting. Residents can take these classes on their own, or community centers, senior centers, schools and employers can coordinate and host group classes. To find the nearest LCI, visit the League of American Bicyclists website:

<http://www.bikeleague.org/cogs/resources/findit>

Road I

This course provides cyclists with the confidence to ride safely and legally in traffic or on the trail. The course covers bicycle safety checks, fixing a flat, on-bike skills and crash avoidance techniques and includes a student manual. Recommended for adults and children above age fourteen, this fast-paced, nine-hour course prepares cyclists for a full understanding of vehicular cycling.

Road II

For more advanced students with an understanding of vehicular cycling principles, this twelve-hour course includes fitness and physiology, training for longer rides, advanced mechanics, paceline skills, advanced traffic negotiation, foul weather riding and night riding. Student manuals are included with each class.

Commuting

For adult cyclists who wish to explore the possibility of commuting to work or school by bike, this three hour follow-up to Road I covers route selection, bicycle choice, dealing with cargo and clothing, bike parking, lighting, reflection and foul weather riding. Included with the class are handouts and student materials.

Motorist Education

A 3-hour classroom session, this course can be easily added to a driver's education curriculum, such as diversion training for reckless drivers or a course designed for local bus drivers. Directed towards motorists in general, topics covered include roadway positioning of cyclists, traffic and hand signals, principles of right-of-way and left and right turn problems. Materials include Share the Road literature for bicyclists and motorists as well as other fact sheets.

Kids I

Designed for parents, instructors explain how to teach a child to ride a bike. Topics covered include how to perform a bicycle safety check, helmet fitting and bike sizing. The course includes the 10-minute "Kids Eye View" video and a brochure for parents.

Kids II

This 7-hour class for 5th and 6th graders covers the same topics as Road I, including on-bike skills as well as choosing safe routes for riding.



4.2 Encouragement

Publicizing bicycling and walking is education and encouragement. By producing and distributing bicycle and walking education materials, the Town can provide bicyclists, pedestrians and potential bicyclists with the information they need to bicycle and walk safely and comfortably. WisDOT provides a range of safety materials for free to anyone requesting them by their publication number.

Bicycling and pedestrian-related safety materials provided by WisDOT include:

- Wisconsin Bicycle Laws card (HS221)
- Wisconsin Pedestrian Laws card (HS224)
- Bicycle Safety – What Every Parent Should Know (HS239)
- From A to Z by Bike (HS214, for ages 11-adult)
- Bicycle Safety: A ‘Wheely’ Good Idea (HS213, handbook for ages 8-11)
- Bicycles & Traffic – Get Over Your Fear (brochure HS238)
- Two-Wheeled Survival (brochure HS227)
- Sharing The Road: Survival of the Smallest (brochure HS228)
- Street Smarts (updated brochure HS207)
- Share the Road with Bicycles (bumper sticker HS237)
- I Stop for Pedestrians (bumper sticker HS233)

Request materials from WisDOT by publication number using the form found at:

<http://www.dot.wisconsin.gov/forms/docs/dt1265.doc>

Partnering with other agencies and organizations will help deliver bicycle information more effectively. For example, bicycle education should be integrated into school curricula and park programs so that more children learn to bicycle safely and frequently. Partnering with media outlets and the private sector will further increase the reach of education campaigns.

Bike to Work Week

Bike to Work Week (BTWW) is a promotional campaign that has succeeded in increasing the numbers and safety of individuals who bike to work, shop, school or wherever they need to go in the communities where it has taken place. A recent BTWW campaign in Sheboygan County resulted in a 7% gain in bicycling mode share. The Bicycle Federation of Wisconsin produces a toolkit for concerned citizens to encourage bicycling in their community through Bike to Work promotions:

<http://www.bfw.org>

Bicycle Map

Producing and distributing a Town map for bicyclists can go a long way towards encouraging and educating citizens. 97% of respondents to the plan survey indicated that a bicycle map of the area would positively (63% “strongly,” 34% “moderately”) affect their decision to bicycle more. The Bicycle Federation of Wisconsin has produced a bicycle map for Milwaukee and has the capability of producing a bicycle map for Gibraltar. Such a map could educate citizens about the



Portions of County Highway A provide paved shoulders that are adequate for bicycle use.

best routes for bicycling and help teach them to safely share the road with motor vehicle traffic by using safety tips and illustrations on the reverse of the map itself.

In creating a bicycle map, it is important to gather information from the public regarding the map content. From previous bicycle mapping projects completed by the Bicycle Federation of Wisconsin, map users have expressed that it is important to include the following items:

- All bicycle facilities including signed routes, bike lanes, and bike trails
- Public amenities such as restrooms, parks, and emergency services
- Private amenities such as bike shops
- A map scale that is appropriate for users to easily determine travel distance with as many roads as feasible labeled
- A digital version of the map should be available on-line

Often some of the funds for a bicycle map can be procured from advertising fees from local businesses wanting representation on the map. It might also be possible to partner with the local tourism board or chamber of commerce for support. The Town could also charge for each copy of the map, but the administrative costs of charging for each copy may exceed the revenue gained. A bicycle map is also more likely to be an effective educational strategy if it is available for free.

Other Public Education Opportunities

In addition to a bicycle map and education programs described above, there are other ways to get the word out that bicycling is a viable means of transportation and recreation. The Town could work with the area chamber of commerce and the Wisconsin Department of Tourism to publicize bicycling.

Bicycle facility openings and other events also provide opportunities for education and outreach. "Earned media," e.g. a press release in conjunction with a ribbon cutting ceremony, is a great way to get publicity and to generate interest in expanding the bikeway network.

4.3 Enforcement

For enforcement to be effective, law enforcement officers need to know which illegal behaviors are the most common factors in crashes. Wisconsin's Pedestrian and Bicycle Law Enforcement training course, available through the Wisconsin Department of Transportation (WisDOT) Bureau of Transportation Safety, provides education for law enforcement officers. The course qualifies towards the training hours required of most law enforcement agencies. For more information, contact the WisDOT Bicycle and Pedestrian Safety Program Manager at 608-267-3154.

The rules for riding bicycles on the road (and rules for motorists sharing the road safely with bicycles) are available online:

<http://www.dot.state.wi.us/safety/vehicle/bicycle/rules.htm>.

WisDOT also distributes free printed safety materials such as a Summary of Wisconsin Bicycle Laws (HS226), and Bicycle (HS221) and Pedestrian (HS244) Law Cards that fit in a wallet. These materials may be requested using form DT1265:

<http://www.dot.wisconsin.gov/forms/docs/dt1265.doc>

WisDOT's Division of Motor Vehicles Motorist Handbook includes nearly ten pages of information on bicycling safely and on motorists sharing the road safely with bicyclists.

In addition to training police in law enforcement for bicycle safety, training drivers of commercial vehicles to model behavior can bolster enforcement by police officers. The Cities of Madison and Milwaukee educates all drivers of city vehicles about the state statutes that require drivers to yield to pedestrians in crosswalks and to give all vehicles (including cyclists) 3 feet of clearance when passing. By training Town staff the Town can increase compliance with traffic laws on its streets.

5. Goals, Objectives and Policies

In order to produce an implementable plan, it is necessary to have an overarching set of goals that are supported by specific objectives and policies. These goals, objectives and policies help guide the overall recommendations of the plan and emerged from the planning process including public input.

5.1 Policy Framework

Goals are broad statements that express general public priorities. Goals are formulated based on the identification of key issues, opportunities, and problems that impact bicycling and pedestrian issues in the Town.

Objectives are more specific than goals and are usually attainable through strategic planning and implementation activities. Implementation of an objective contributes to the fulfillment of a goal.

Policies are rules and courses of action used to ensure plan implementation. Policies often accomplish a number of objectives.

5.2 Goals, Objectives and Policies

Goal: Establish and maintain a safe, comprehensive, and integrated bicycle and pedestrian network that encourages the use of bicycles and walking for commuting, recreation and other trips.

Objective 1: Provide a network of facilities that meets the transportation and recreation needs of all users and links neighborhoods, schools, parks, employment centers and other key destinations.

Policy 1.1: Sign the proposed bike route network in this plan. Bike Route signs should be placed immediately before and after every intersection as well as every ½ mile on stretches not interrupted by intersections. Signage should meet all MUTCD guidance for size, color and placement.

Policy 1.2: Request that the State and County provide and maintain paved shoulders on highways in the Town. At a minimum, paved shoulders on State Highway 42 should be 6 feet in width while shoulders on County Highways should be at least 4 feet in width.

Policy 1.3: Request that the State provide shared lane markings (“sharrows”) on Highway 42 from the intersection with Spruce Street to the end of on-street parking in Fish Creek (approximately Greywood Road).

Policy 1.4: Request that the State provide bicycle lanes from the end of on-street parking in Fish Creek (approximately Greywood Road) to the crosswalk from Gibraltar School to the YMCA. Appropriate signage should be provided to prohibit parking in the bicycle lanes.

Policy 1.5: Maintain bicycle and pedestrian facilities to a level that provides year-round safe, comfortable and convenient usage for all users.



Wide shoulders should be provided on all State and County Highways.

Objective 2: Provide support facilities that encourage commuter and recreational bicycling and provide a safe and easy to use network.

Policy 2.1: Install bicycle parking racks at popular destinations in the Town. This should include Noble House, Fish Creek Public Beach, Town Hall, Founders Square, Gibraltar School, Fish Creek Park, Clark Park/Fish Creek Dock, Sunset Beach Park, and the Town Center/Library/Information Center. Bicycle parking needs should be regularly reevaluated.

Policy 2.2: Provide directional and informational signage for bicyclists throughout the Town. All Bike Route signs should include plaques that provide distances and directions to popular destinations such as Fish Creek, Gibraltar School, Egg Harbor, Ephraim, Baileys Harbor and Jacksonport.

Policy 2.3: Provide MUTCD compliant “Share the Road” signage (W11-1 and W16-1) where appropriate.

Policy 2.4: Provide “Welcome to Gibraltar, a bicycle-friendly community” signage on major roads following the implementation of the bike route signage and other warning signs.

Policy 2.5: Conduct annual bicycle counts throughout the Town to measure growth of bicycling and usage of facilities.

Objective 3: Increase the safety of bicyclists and pedestrians at intersections and hazardous areas.

Policy 3.1: Request that the State evaluate the intersection of Highway 42 and Spruce Street. This intersection in downtown Fish Creek may require a 4-way stop as opposed to the current 3-way stop. Safe access for bicyclists and pedestrians should be given equal weight to motor vehicle throughput.

Policy 3.2: Request that the State evaluate Highway 42 near County Highway F for safety improvements. This area contains a hill, an S-curve, an intersection with a County Highway, multiple school driveways and other business and residence entrances. According to the Town’s Comprehensive Plan, this area has the greatest number of crashes in the Town. Safety improvements, potentially including a full reconstruction of the area, should be considered before the upcoming resurfacing project.

Policy 3.3: Provide MUTCD-compliant “Bicyclists May Use Full Lane” signage immediately before downtown Fish Creek on Highway 42.

Policy 3.4: Provide “Dangerous Curve” and “Steep Hill” signage before the switchback on Cottage Row.

Objective 4: Provide a safe environment for pedestrians.

Policy 4.1: Request that the State provide sidewalks on both sides of Highway 42 from where they end in Fish Creek to Gibraltar School and the YMCA. This area is heavily traveled by pedestrians, is on a hill with an S-curve and has high traffic volumes and speeds. Appropriate pedestrian accommodations should be provided immediately.

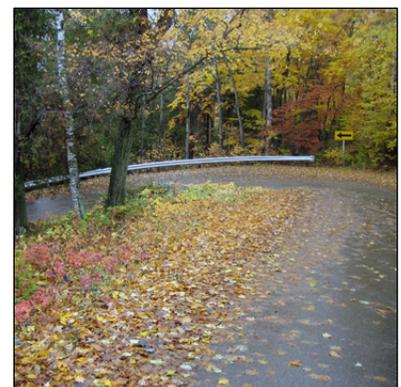
Policy 4.2: Request that the State provide a crosswalk meeting all state and federal guidance across Highway 42 in the area between the intersection with County F and the former intersection with Gibraltar Road.



Highway 42 approaching Highway F rounds a sharp curve with Gibraltar School on the left.



Highway 42 near the Highway F intersection rounds a curve and descends a hill with limited visibility.



Warning signs should be placed before the steep switchback on Cottage Row.



Ample bicycle parking should be provided at popular destinations.

Policy 4.3: Provide sidewalks on the west sides of Highway 42 between Main Street and Bay Lake Bank and on the east side of Highway 42 from Main Street to Bluff Lane in downtown Fish Creek in order to extend the pedestrian network to common destinations.

Policy 4.4: Provide a sidewalk into the Northhaven development from Gibraltar Road.

Objective 5: Provide shared-use paths that allow bicyclists and pedestrians to avoid congested or high-conflict areas.

Policy 5.1: Provide a path from the end of Bluff Lane, behind Fish Creek Town Center, to Fish Creek Park as an alternative route around downtown Fish Creek. Once implemented, Bike Route signage and shared lane marking should be installed on Bluff Lane.

Policy 5.2: Work with the Wisconsin Department of Natural Resources and Department of Transportation to provide a shared-use path along the north side of Highway 42 from Gibraltar School to the Town border with Ephraim. When implemented, work with the Village of Ephraim to extend the path into the Village.

Objective 6: Provide safe bicycling and walking education to local residents and conduct encouragement activities throughout the year to increase participation in bicycle commuting and recreation.

Policy 6.1: Include at least one piece of bicycle or pedestrian education in all Town communications to residents.

Policy 6.2: Provide bicycle and pedestrian safety and education materials on the Town webpage.

Policy 6.3: Form a Safe Routes to School (SRTS) committee to develop and implements a SRTS plan and apply for federal state-administered funding.

Policy 6.4: Provide bicycle and pedestrian education to all students enrolled in Gibraltar School through a Safe Routes to School program.

Policy 6.5: Consider sponsoring one or two major bicycle encouragement activities or events, especially ones targeted at local residents.

Policy 6.6: Work with the State Police and County Sheriff's Departments to better educate/enforce all traffic violations, particularly failure to stop/yield violations, speeding, and safe passing distance violations.

Objective 7: Pursue funding for bicycle and pedestrian facilities and education from outside sources.

Policy 7.1: Aggressively pursue funding for bicycle and pedestrian facilities and resources from federal, state and local sources.

Policy 7.2: Apply for federal funding for Safe Routes to School and other bicycle education programs targeted at students.



The shared-use path on Gibraltar School grounds is the only off-street path in the town.

6. Recommended Bike and Pedestrian Network

This section details the recommended bicycle and pedestrian facilities in the Town of Gibraltar. In addition to the descriptions below, five maps display the bicycle and pedestrian network in varying levels of detail. As shown in Table 1, the current bicycle and pedestrian network is small, with just over six miles of disconnected facilities. The proposed facilities bring the total network to nearly 40 miles, the majority of which will be signed bicycle routes.

Table 1: Existing and Proposed Bicycle and Pedestrian Network

Type	Existing	Proposed	Total
Bicycle Lanes	0.43	0.42	0.85
Bicycle Routes	4.36	28.42	32.78
Shared Lanes	0.00	1.01	1.01
Shared-use Path	0.09	2.26	2.35
Sidewalk	1.50	1.29	2.79
Total	6.38	33.40	39.78

6.1 Proposed On-Street Facilities



Bicycle Routes

The majority of the bicycle network in the Town of Gibraltar will be comprised of signed bicycle routes as described in Table 2. Bicycle routes guide users to specific destinations, although they can also be used for meandering, leisurely rides. These roads vary from scenic, low-traffic roads to higher volume, more direct routes.

Low traffic town roads do not require any special roadway design as cyclists and motor vehicles can easily share the same space. However, roads with higher traffic levels, including County and State Highways, should provide an adequate paved shoulder for cyclists to use. Paved shoulders should be at least 4’ wide, although 5’ is preferable on County highways and 6’ or wider on State Highway 42. This space benefits all road users: it allows cyclists to ride out of the primary traffic lanes, allows vehicles experiencing problems to stop out of the travel lane, and increases room for road maintenance crews.

Bicycle routes should be clearly and consistently signed so that users can easily identify their route. Signage should consist of a green “Bike Route” sign that is large enough for cyclists to identify and to alert motorists to the presence of cyclists. Additionally, directional arrows and way-finding signage should be provided at all intersections. Signage should be placed immediately before and after every intersection and every ½ mile on long straightaways.

Cost estimates include two signs for each segment, plus one additional sign for each ½ mile of length; the total is then doubled to sign both sides of the road. Based on costs from other Wisconsin municipalities, a cost of \$250 per sign is used.

Table 2: Proposed Bicycle Routes

Street	From	To	Miles	Cost Est.
Cottage Row	Main Street	Gibraltar Bluff Road	1.57	\$2,500
Gibraltar Bluff Road	Cottage Row	Peninsula Players Road	1.48	\$2,500
State Highway 42	Peninsula Players Road	Juddville Road	0.51	\$1,500
Juddville Road	State Highway 42	White Cliff Road	0.58	\$1,500
White Cliff Road	Juddville Road	Town Border	1.14	\$2,000
Spring Road	County Highway F	Peninsula Players Road	2.35	\$3,000
County Highway A	State Highway 42	Town Border	4.96	\$6,000
Maple Grove Road	State Highway 42	County Highway F	2.36	\$3,000
State Highway 42	YMCA (N of Gibraltar Road)	Town Border	2.02	\$3,000
Gibraltar Road	County Highway A	Maple Grove Road	0.94	\$2,000
County Highway F	State Highway 42	South Highland Road	5.37	\$6,000
Maple Grove East	Maple Grove Road	West Meadow Road	1.00	\$2,000
Shady Lane	County Highway A	South Highland Road	0.29	\$1,000
South Highland Road	Shady Lane	County Highway F	2.46	\$3,500
High Plateau Road	South Highland Road	County Highway EE	1.01	\$2,000
Peninsula Players Road	Gibraltar Bluff Road	State Highway 42	0.37	\$1,000

Bicycle Lanes

The only existing bicycle lane in the Town is a short stretch on the west side of Spring Road, from County Highway F to approximately Spring Court. Bicycle lanes on one side of a roadway are not recommended as they encourage bicyclists to ride the wrong way against traffic. It is recommended that the existing bicycle lane on Spring Road either be removed (with equal size shoulders provided on both sides of the road) or the road be widened to provide bicycle lanes on both sides.

Bicycle lanes are desirable on State Highway 42 through downtown Fish Creek; however, due to on-street parking and a narrow right-of-way, they will not fit in most of this corridor. It is recommended that bicycle lanes be added on Highway 42 from the end of on-street parking (approximately Greywood Road), north to the pedestrian crosswalk between Gibraltar School and the YMCA as described in Table 3. This section of road has high vehicle speeds as motorists enter or leave Fish Creek and has limited sight lines due to the hill and curve of the road. However, this section also provides adequate width for bicycle lanes. 5' or wider bicycle lanes will provide bicyclists with adequate road space in a high conflict area.

The cost estimates for bicycle lanes are for pavement markings and signage only. Based on costs provided by WisDOT and from recent City of Milwaukee projects, an estimate of \$5,000/mile is used for painted bike lanes on both sides of the road.



Adequate space exists for bike lanes on Highway 42 traveling from downtown to Gibraltar School and the YMCA.

Table 3: Proposed Bicycle Lanes (also signed bicycle routes)

Street	From	To	Miles	Cost Est.
State Highway 42	Greywood Road	YMCA (N of Gibraltar Road)	0.42	\$2,100



Shared Lanes

Shared lanes place specific markings on the road to indicate to bicyclists where it is recommended, but not required, they ride. These markings, often called “sharrows,” are placed in the travel lane outside of the “door zone” of parked vehicles. In addition to guiding cyclists who may not be accustomed to riding in traffic, these markings alert motorists to the potential presence of bicyclists and the right of those bicyclists to use the travel lane. Table 4 describes the proposed shared lanes. Because of the narrow right-of-way through downtown Fish Creek, it is recommended that shared lane markings be placed on Main Street and State Highway 42 from Gibraltar Bluff Road to the beginning of the bicycle lanes proposed above. Additionally, when the proposed Fish Creek Shared-Use Path is constructed, shared lane markings should be placed on Bluff Lane and Hill Street to guide cyclists to the path. All roads with shared lane markings should also be signed as bicycle routes.



A narrow right of way makes Highway 42 in downtown Fish Creek an ideal location for sharrows.

Cost estimates for shared lanes are \$4,000 per mile for both sides of the road. This cost includes pavement markings every 200 feet and signage every 500 feet.

Table 4: Proposed Shared Lane (also signed bicycle routes)

Street	From	To	Miles	Cost Est.
Main Street	Cottage Row	State Highway 42	0.13	\$520
State Highway 42	Spruce Street	Greywood Road	0.66	\$2640
Bluff Lane	State Highway 42	End	0.17	\$680
Hill Street	State Highway 42	Bluff Lane	0.05	\$200

6.2 Proposed Off-Street Facilities

Shared-use Paths

Two shared-use paths are proposed for Gibraltar as shown in Table 5. The first connects the end of Bluff Lane in downtown Fish Creek to Highway 42 near the entrance to Peninsula State Park. Running behind Fish Creek Town Center and through Fish Creek Park, this short path would allow bicyclists and pedestrians to bypass Main Street / Highway 42 in downtown Fish Creek which is often very congested. This path was specifically recommended in the Town of Gibraltar Comprehensive Plan:

“Immediate attention must be paid to the safety of bicyclists on STH 42 in Fish Creek. The Town should consider development of an off-road bicycle path through Fish Creek Park and easements south of STH 42 between the park and Bluff Street. This path would provide a path for bicyclists between Peninsula State Park and the Fish Creek Business district.” (5-4)



A second path is recommended from Gibraltar School, northeast along the edge of Peninsula State Park, parallel to Highway 42. This area provides an extended distance with no road or driveway crossings and would serve as the primary connecting route between Fish Creek and the Village of Ephraim. The route is more direct than the alternate route through Peninsula State Park and allowing children and less confident riders to safely ride without using the shoulder of Highway 42. The path should be set back as far as possible from Highway 42. Development and construction of this path will require close cooperation between the Town, DNR, and WisDOT.

Cost estimates for shared-use paths vary widely. Factors that impact the cost include types of soils, clearing needed, topography, drainage and other issues. The cost opinions provided below are based on a base cost of \$500,000/mile for a 10 foot wide paved shared-use path. This cost should not be used for planning purposes; detailed costs should be determined when specific facility planning begins.

Table 5: Proposed Shared-Use Path (also signed bicycle routes)

Street	From	To	Miles	Cost Est.
Bluff Lane Path	End of Bluff Lane	State Highway 42	0.37	\$185,000
Highway 42 Path	Existing path at Gibraltar School	County Highway A	1.89	\$945,000



Sidewalks abruptly end along Highway 42 in Fish Creek without extending approximately 1/3 mile to Gibraltar School.

Sidewalks

Currently sidewalks exist along much of Main Street and State Highway 42 through downtown Fish Creek. This area is heavily used by residents and visitors and is very congested during the peak tourist season. As shown in Table 6, it is recommended that the sidewalks be extended from where they currently end on State Highway 42 (near Greywood Road) to Gibraltar School on the north/west side of the road and North Northhaven Drive on the south/east side of the road. This section of State Highway 42 is heavily traveled by students and others on foot. The steep hill and turn on Highway 42 as it leaves Fish Creek produces hazardous conditions for pedestrians who are currently forced to walk in the street. Extending the sidewalk on the south/east side of Highway 42 to the entrance to the Northhaven development would allow residents safe and easy access by foot to the YMCA, Gibraltar School, and downtown Fish Creek.

Additional short segments of sidewalk are proposed on both sides of Highway 42 on the south end of Fish Creek. These segments would connect the current Bay Lake Bank to existing sidewalks and provide a sidewalk along the Noble House.

Cost estimates for sidewalks are not provided as they vary widely depending on the need for curb and gutter as well as grading and surface preparations. It should be noted that WisDOT may pay for up to 80% of the cost of providing sidewalks along Highway 42 with the demonstration of their necessity.



"Desire lines" across from Gibraltar School indicate heavy pedestrian usage and a need for sidewalks.

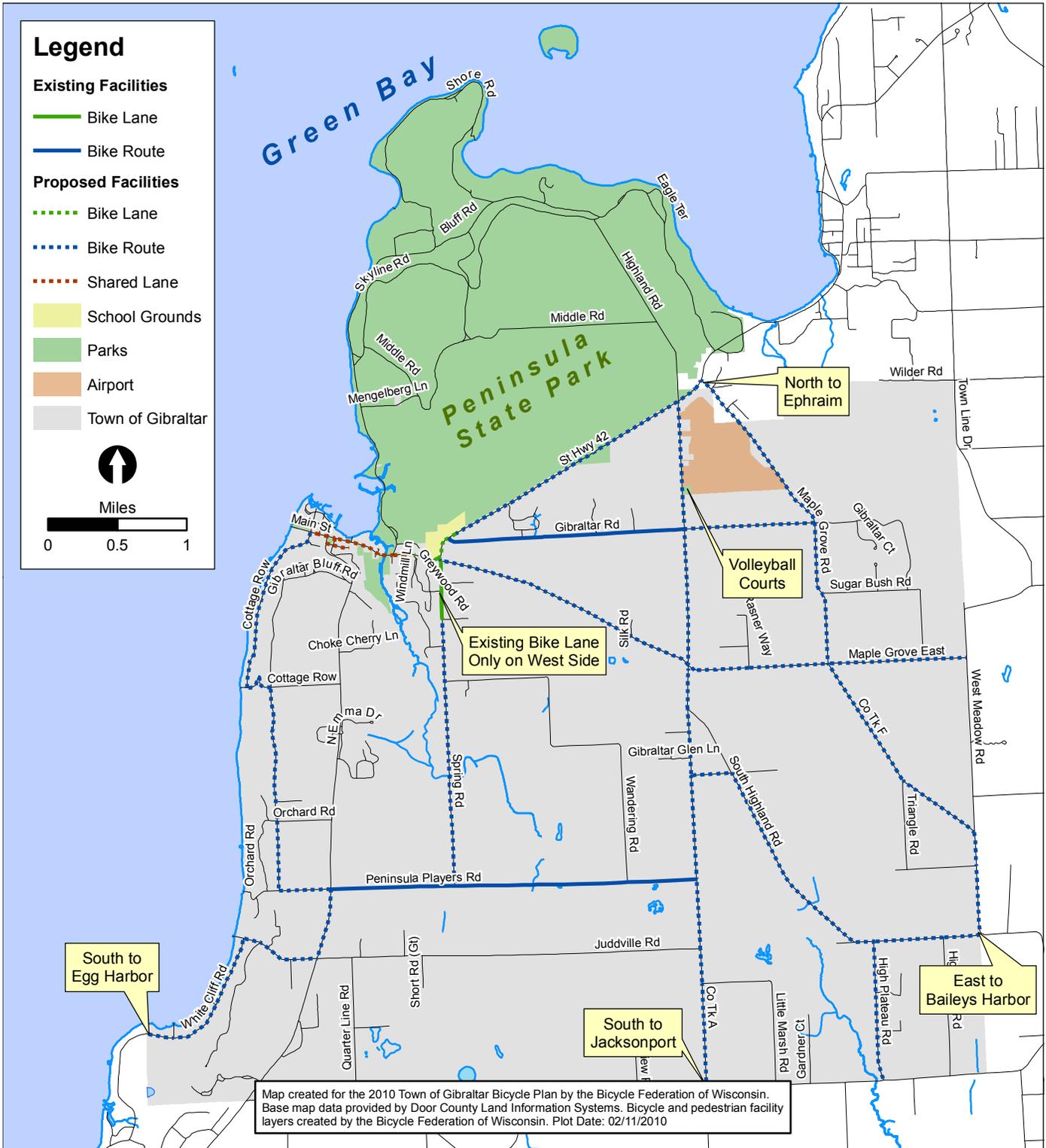
Table 6: Proposed Sidewalk

Street	From	To	Miles	Cost Est.
State Highway 42 (North/west side)	Existing sidewalk near Greywood Road	Existing path at Gibraltar School	0.33	N/A
State Highway 42 (South/east side)	Existing sidewalk near Greywood Road	YMCA (N of Gibraltar Rd)	0.42	N/A
State Highway 42 (South/east side)	YMCA (N of Gibraltar Road)	North Northhaven Drive	0.44	N/A
State Highway 42 (West Side)	Main Street	Bay Lake Bank (Bluff Lane)	0.05	N/A
State Highway 42 (West Side)	Main Street	Bay Lake Bank (Bluff Lane)	0.05	N/A

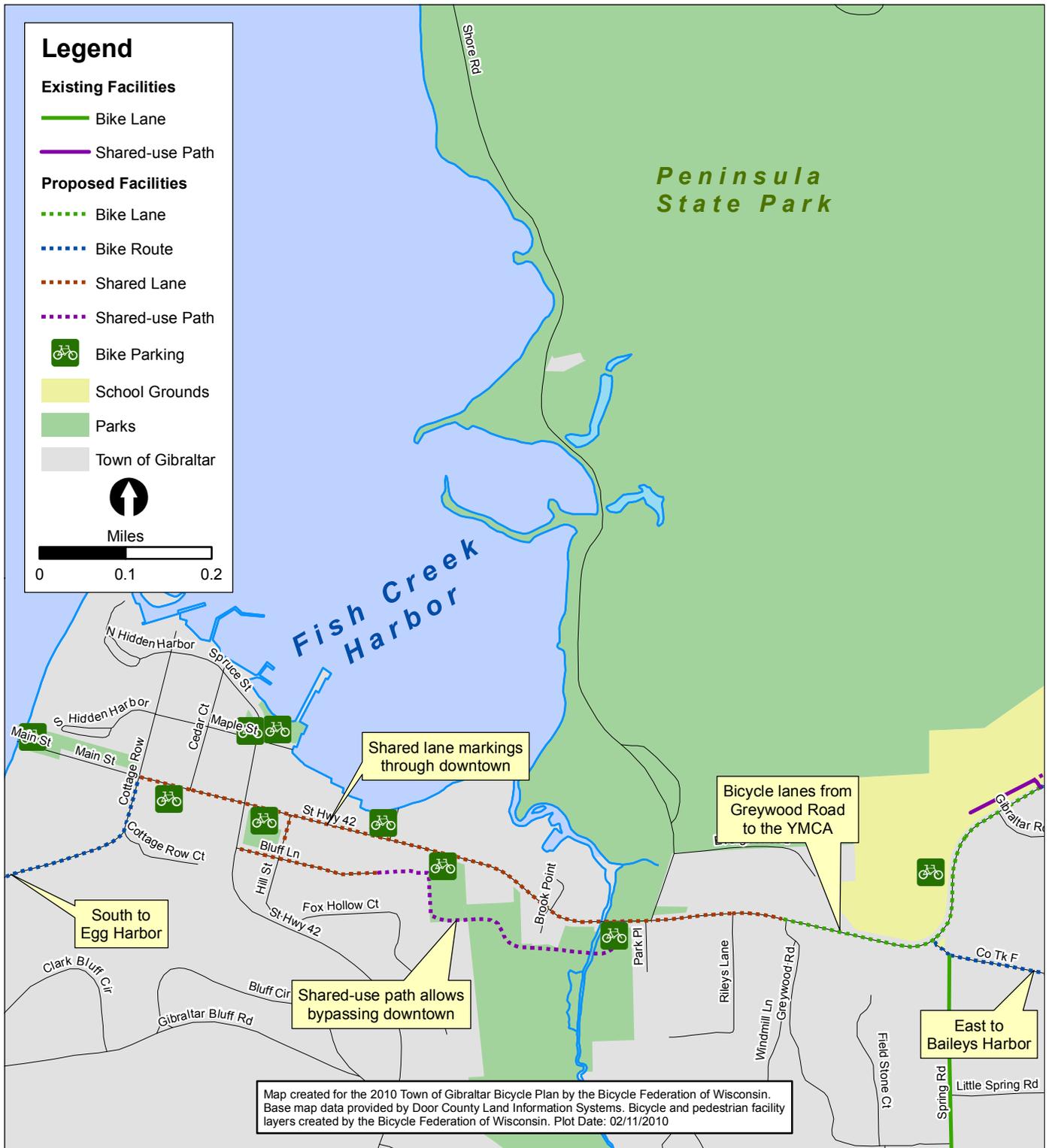


Sidewalks should connect from downtown Fish Creek to the pedestrian crossing at the YMCA.

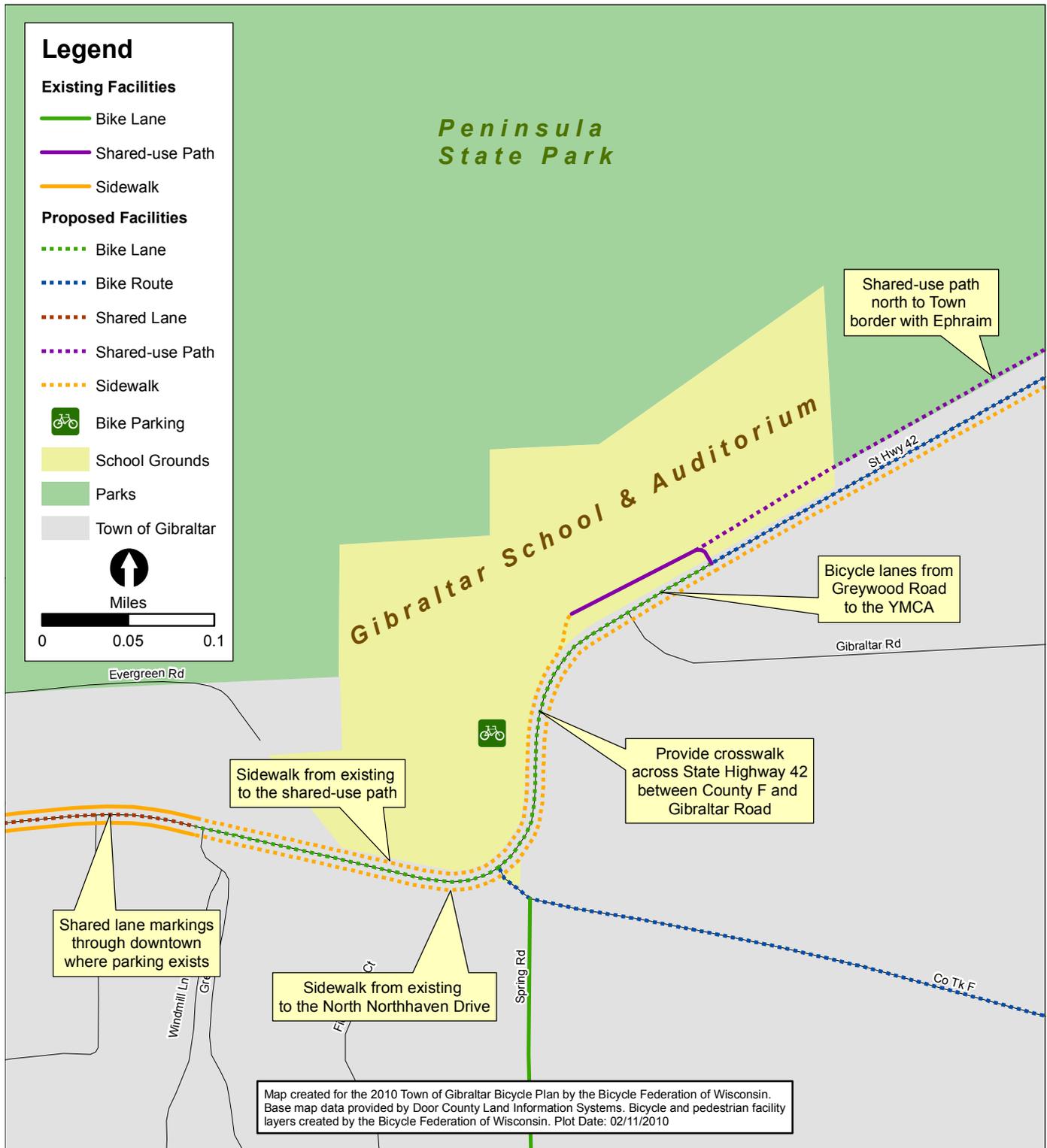
Map 2: Town of Gibraltar On-Street Bicycle Facilities



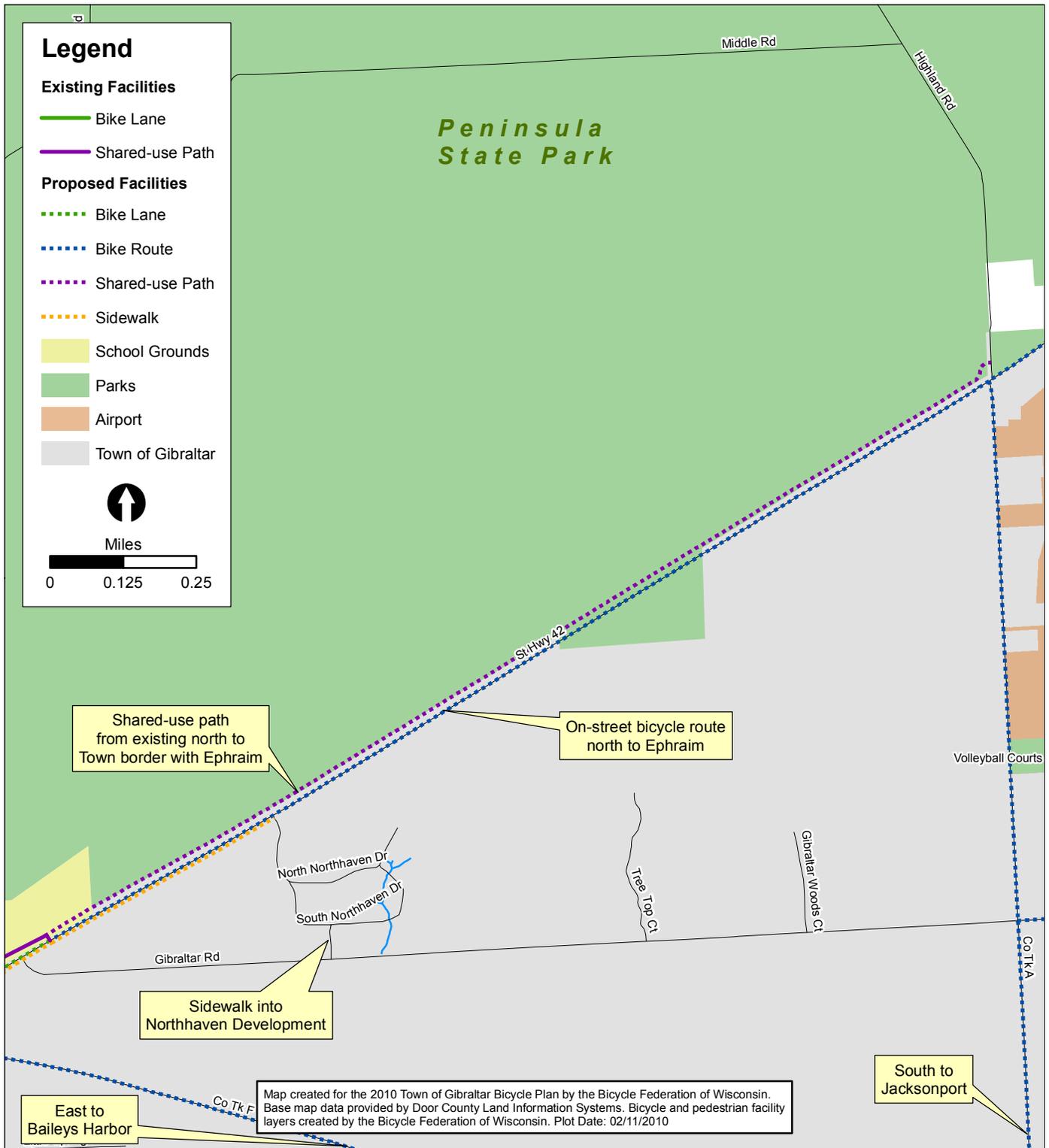
Map 3: Bicycle Facilities – Fish Creek Detail



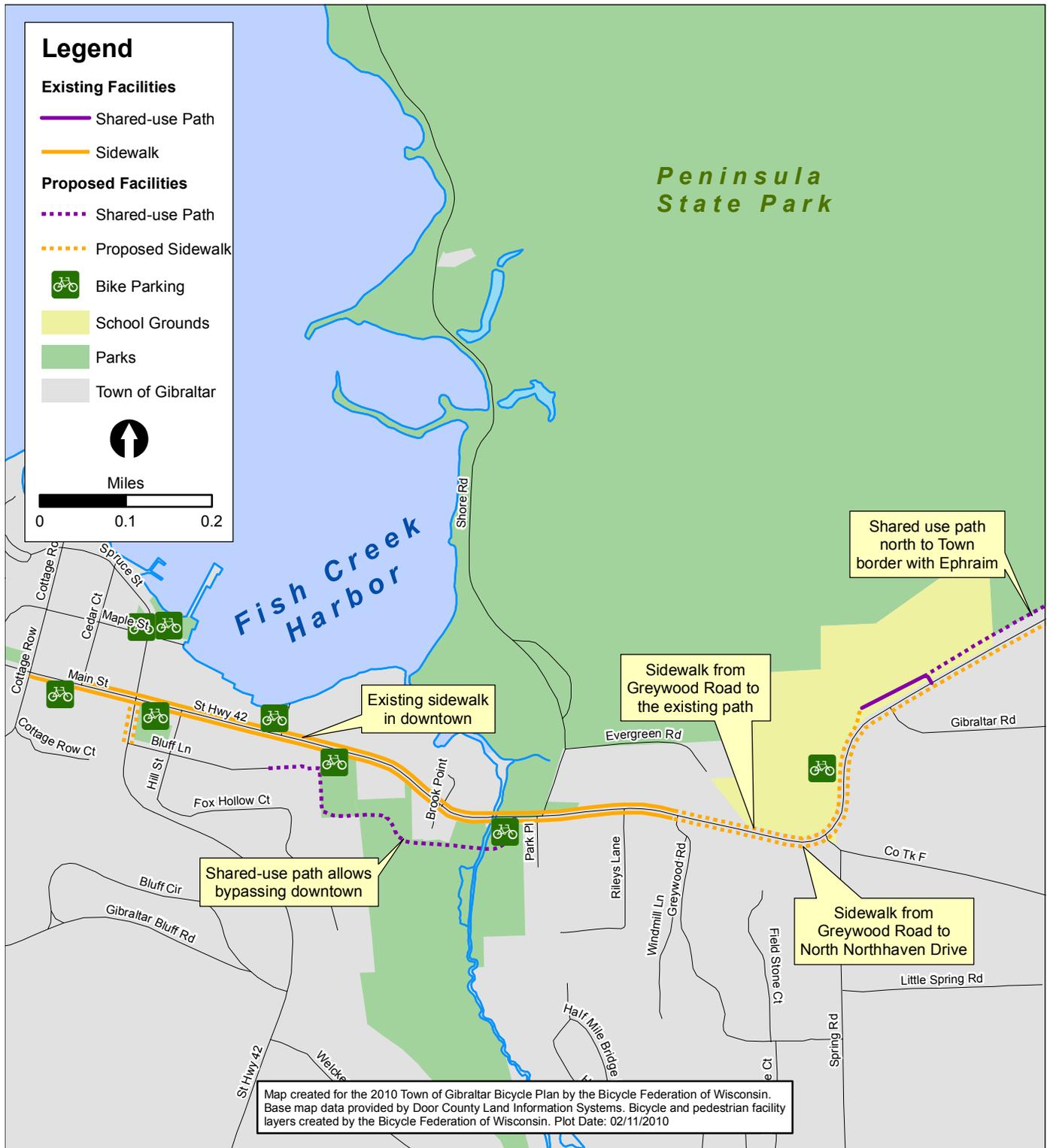
Map 4: Bicycle and Pedestrian Facilities – Gibraltar School Detail



Map 5: Highway 42 Shared-Use Path Detail



Map 6: Fish Creek Sidewalk and Shared-Use Path Detail



6.3 Implementation Priority

All of the proposals in this plan are important for improving bicycling and walking in the Town of Gibraltar. However, some will be easier to carry out than others. Some of the projects will be relatively inexpensive to complete, while others are more expensive and more complex. This section prioritizes the proposed projects into short, medium, and long-term categories. These assignments are for planning purposes only, and should not limit the ability of the Town to move forward with a project sooner than is recommended.



Additional bike parking should be installed in the near term, particularly in the popular downtown Fish Creek area.

Short-term Projects (1 – 2 Years)

- The Town Board should adopt this plan and forward it to the County for inclusion in the *Door County Bicycle Transportation Capital Improvement Plan*.
- All signage projects should be carried out as soon as possible. Formally signing the bike routes through the Town will add a high-visibility element to the bicycle network at relatively low cost. This project should include directional signage and appropriate warning signage.
- Request that the State provide sidewalks on Highway 42 from the existing sidewalks to Gibraltar School on the north/west side of the road and North Northhaven Drive on the south/east side of the road.
- Request that the state undertake a safety study of Highway 42 near Gibraltar School. This study should identify if there is a safer road alignment or intersection treatment that could be used and the best placement for a crosswalk in the area. This action is particularly pressing due to the State's plan to resurface this section of the highway in 2013.
- Request that the State install shared lane markings ("sharrows") and the appropriate related signage on Highway 42 through Fish Creek. Sharrows should be placed on Main Street from Cottage Row to Highway 42 at the same time they are placed on Highway 42.
- Install bicycle parking at the locations designated in this plan.

Mid-term Projects (2 – 4 Years)

- Install a shared-use path from the end of Bluff Lane, behind Fish Creek Town Center, through Fish Creek Park, to Highway 42.
- Install sidewalk on the west side of Highway 42 between Main Street and the Bay Lake Bank (approximately Bluff Lane).
- Install sidewalk on the east side of Highway 42 between Main Street and Bluff Lane.
- Install bicycle lanes on Highway 42 from Greywood Road to the crosswalk at the YMCA.

Long-term Projects (5+ Years)

- Install a shared-use path on the north side of Highway 42 from Gibraltar School to the Town border with the Village of Ephraim.

6.4 Funding Opportunities

Many funding sources are available for bicycle and pedestrian facilities. In order to be eligible for funding under most federal aid programs, bicycle projects must be primarily for transportation purposes. In general, federal guidelines consider any bicycle path or trail other than a closed loop trail as being principally for transportation and eligible for funds. State funding for the construction of on-street and off-street bicycle facilities is available through programs administered by the Wisconsin Department of Transportation (WisDOT), and includes funds provided directly by the state and “pass-through” funds provided by the Federal government.

Transportation-Based Funding Sources

The following is a summary of potential transportation-based funding sources for accommodating bicycles from WisDOT:

Local Transportation Enhancement (TE) Program

Bicycle and Pedestrian Facilities Program (BFPF)

The Transportation Enhancement Program funds projects that increase shared-modal transportation alternatives and enhance communities and the environment. Federal funds administered through this program provide up to 80% of costs for a wide variety of projects such as bicycle or pedestrian facilities, landscaping, streetscaping and the preservation of historic transportation structures. Examples of bicycle projects include shared-use trails, paved shoulders, bike lanes, bicycle route signage, bicycle parking, overpasses/underpasses/bridges and sidewalks.

The Bicycle and Pedestrian Facilities Program (BFPF) was merged with the TE program beginning with the 2008 application cycle. As the name implies, BFPF funds bicycle and bicycle/pedestrian facilities. Per state statute, BFPF cannot fund exclusive pedestrian projects or streetscaping projects even if they include some bicycle and pedestrian elements. Because the TE program also extensively funds bicycle and pedestrian facilities, the two programs share the same application, review and selection process.

- Central Office Program Manager: 608-264-8723

Congestion Mitigation and Air Quality Program (CMAQ)

The primary purpose of the Congestion Mitigation and Air Quality (CMAQ) Improvement Program is to fund projects and programs that reduce travel and/or emissions in areas that have failed to meet air quality standards for ozone, carbon monoxide (CO) and small particulate matter. Bicycle and pedestrian projects are eligible for CMAQ if they reduce the number of vehicle trips and miles traveled. Approved projects are reimbursable at 80% of the cost, and a local match of 20% is required. Almost all bicycle projects eligible for Transportation Enhancements are likely to be eligible, but a higher burden of proof that the project will reduce air pollution will be required for CMAQ funding. CMAQ is not a statewide program; only bicycle projects in Milwaukee, Kenosha, Racine, Ozaukee, Waukesha, Washington, Sheboygan, Kewaunee, Manitowoc, and Door Counties are eligible.

- Program Contact: John Duffe, 608-264-8723, john.duffe@dot.state.wi.us



Roads throughout Gibraltar present excellent riding conditions.

Hazard Safety Improvement Program

Bicycle and pedestrian projects are eligible for this program that focuses on projects intended for locations that have a documented history of previous crashes.

- Statewide Coordinator: 608-266-3341

Surface Transportation Program – Urban

Metropolitan areas receive an allocation of funds annually that can be used on a variety of improvement projects including bicycle and pedestrian projects. Most of the Metropolitan Planning Organizations (MPOs) that administer this program have used these funds to integrate bicycle and pedestrian projects as larger street reconstruction projects are taken on. The Bay-Lake RPC is the MPO for Door County.

Recreation-Based Funding Sources

The following information for potential recreation-based funding sources was culled from the Wisconsin Department of Transportation website.

Funding for the Recreational Trails Program (RTP) is provided through federal gas excise taxes paid on fuel used by off-highway vehicles. Towns, villages, cities, counties, tribal governing bodies, school districts, state agencies, federal agencies and incorporated organizations are eligible to receive reimbursement for development and maintenance of recreational trails and trail-related facilities for both motorized and non-motorized recreational trail uses. Eligible sponsors may be reimbursed for up to 50 percent of the total project costs.

Eligible projects include:

- Maintenance and restoration of existing trails
- Development and rehabilitation of trailside and trailhead facilities and trail linkages
- Construction of new trails (with certain restrictions on Federal lands)
- Acquisition of easement or property for trails

Wisconsin Department of Natural Resources (DNR) regional staff review and rank eligible projects; projects are then ranked in a statewide priority listing. The highest ranking projects will be funded to the extent that funds are available.

The Stewardship Local Assistance Grant Programs, the Federal Land & Water Conservation Fund Program, and the Federal Recreation Trails Program provide up to 50% funding assistance to acquire land or conservation easements and develop facilities for outdoor recreation purposes. Any project application submitted will be considered for each of the following programs that it is eligible for.

Under the Knowles-Nelson Stewardship Local Assistance Grant Program, the following programs provide 50% funding assistance to acquire land and easements and develop trails, facilities, etc. for nature-based outdoor recreation purposes.



Although often congested during the tourism season, Gibraltar roads present excellent cycling opportunities.

Aids for the Acquisition and Development of Local Parks (ADLP)

ADLP helps to buy land or easements and develop or renovate local park and recreation area facilities (e.g. trails, fishing access, and park support facilities). Applicants compete for funds on a regional basis.

Urban Green Space Grants (UGS)

UGS helps to buy land or easements in urban or urbanizing areas to preserve the scenic and ecological values of natural open spaces for outdoor recreation, including non-commercial gardening. Applicants compete for funds on a statewide basis.

Acquisition of Development Rights Grants (ADR)

ADR helps to buy development rights (easements) for the protection of natural, agricultural, or forestry values, that would enhance outdoor recreation. Applicants compete for funds on a statewide basis.

Land and Water Conservation Fund (LWCF)

LWCF provides 50% funding assistance for the acquisition and development of public outdoor recreation areas and facilities. Similar to the Stewardship ADLP program above except that active outdoor recreation facilities are eligible for grant assistance and school districts may be eligible project sponsors. Applicants compete for funds on a statewide basis.

Recreational Trails Act (RTA)

RTA provides 50% funding assistance for the development and maintenance of recreational trails and trail related facilities for both motorized and non-motorized recreational trail uses. Applicants compete for funds on a statewide basis.

These programs are administered by the Wisconsin Department of Natural Resources. The Stewardship Advisory Council, with representatives from local units of government and nonprofit conservation organizations (NCOs), advises the department on matters relating to the Stewardship program. Similarly the State Trails Council advises the department on matters relating to the Recreational Trails Program. The National Park Service plays the major role in working with the Department on the Land & Water Conservation Fund Program and the Department of Transportation plays a role with the Recreational Trails Program. Key components of the programs are cooperation and partnership between the Wisconsin Department of Natural Resources, the federal government, local units of government and NCOs. The programs recognize the important role each partner plays in meeting the conservation and recreation needs of Wisconsin residents and is designed to assist groups in meeting those needs. The application deadline for all of the programs is May 1 each year and complete applications should be submitted to the regional Community Services Specialist (CSS).

Pedestrian Specific Funding



Traffic Signing and Marking Enhancement Grants Program

The Traffic Signing and Marking Enhancement Grants Program provides funds to local units of government for the installation of traffic signing and roadway marking enhancements, with the goal of improving visibility to assist elderly drivers and pedestrians. The program distributed approximately \$3.8 million in state funding in 2005 and 2006. Funding for the TSMEGP was eliminated in the 2007-2009 State Biennial Budget, but continues by Wisconsin State Statute 85.027 through June 30, 2009. For more information contact Michael Erickson at (608) 266-0194 or michael.erickson@dot.state.wi.us.

Other potential funding sources

In addition to the funds administered by the state, funding for public bicycle and pedestrian projects can come from federal highway traffic safety programs, federal traffic safety (section 402) funds, the County), impact fees required of new development or redevelopment, public/private partnerships, or wholly from the private sector.

7. Design Standards

All bicycle and pedestrian facilities in the Town must meet state and federal design standards for such facilities. These standards help ensure that facilities are safe and meet guidance that has been vetted by professionals in the field. Additionally, meeting proper design standards may help lessen or remove the Town's liability should a crash occur on one of the facilities. Design standards presented on the following pages are intended as informational guidance. All facilities should meet the standards presented in the federal and state guidance noted below, particularly the *Wisconsin Bicycle Facility Design Handbook* and the *Manual on Uniform Traffic Control Devices*.

7.1 Federal and State Design Guidance

The *Guide for the Development of Bicycle Facilities* by the American Association of State Highway and Transportation Officials (AASHTO) is commonly accepted as the "best practices" for building bicycle facilities.

http://www.sccrtc.org/bikes/AASHTO_1999_BikeBook.pdf

The *Manual on Uniform Traffic Control Devices (MUTCD)* by the United States Federal Highway Administration (FHWA) contains currently acceptable signage for use on bicycle facilities as well as experimental signs.

<http://mutcd.fhwa.dot.gov/>

The Wisconsin Department of Transportation *Facilities Development Manual (FDM)* details bicycle facility design (Chapter 11, Section 45, Subject 10). The manual provides definitive guidance from the State on all facility design standards.

<http://roadwaystandards.dot.wi.gov/standards/fdm/index.htm>

The *Wisconsin Bicycle Facility Design Handbook* expands on the *FDM* and meets or exceeds AASHTO guidelines. The Handbook uses information from the AASHTO *Guide for the Development of Bicycle Facilities* and is tailored to Wisconsin's needs.

<http://www.dot.wisconsin.gov/projects/state/docs/bike-facility.pdf>

Wisconsin Pedestrian Planning Guidance provides guidelines for communities planning and developing pedestrian facilities.

<http://www.dot.wisconsin.gov/projects/ped.htm>

Although intended for larger communities, the *Wisconsin Bicycle Planning Guidance: Guidelines for MPOs & Communities in Planning Bicycle Facilities* contains useful information about the importance of planning a complete bikeway network.

<http://www.dot.state.wi.us/projects/bikes.htm>

All bicycle and pedestrian facilities shall meet the requirements of the Americans with Disabilities Act (ADA) Accessibility Guidelines.

<http://www.access-board.gov/adaag/html/adaag.htm>

7.2 On-Street Facilities

Under Wisconsin law, bicyclists are legal users of the roadway and are entitled to all of the rights and responsibilities of motor vehicles. All streets other than limited access highways are an important part of the bicycle transportation network, regardless of if they are specifically designated for bicycle use. However, there are specific on-street facilities that can make streets safer, more comfortable and more convenient for bicycles to use. These facilities are detailed below.



Bike Lanes

A bicycle lane is a portion of the roadway designated for exclusive or preferential use by bicyclists. Bicycle lanes are always one-way facilities and are identified with pavement markings and signing. On two-way streets, a one-way bicycle lane should be provided on each side. Bicycle lanes are the preferred bicycle facility on higher volume urban and suburban roadways (i.e., collector and arterial streets) but are seldom justified on residential streets. Bike lanes provide a significant benefit to safe and efficient bicycle circulation by providing separate identifiable areas on the street for bikes and autos. For more information and frequently asked questions regarding bike lanes, see the Pedestrian and Bicycle Information Center:

<http://www.bicyclinginfo.org/engineering/facilities-bikelanes.cfm>



Marked Shared Lanes

In urban areas where there is not sufficient space for bike lanes many communities have begun to provide shared lane markings, or "sharrows." Sharrows consist of the bicycle symbol used in bike lanes with a double arrow chevron shape above it to indicate to bicyclists where they should position themselves in the lane. The symbol also reminds motorists that bicyclists have the right to use the full lane, particularly in congested areas. Sharrows are intended to be installed on streets with speed limits of 35 miles per hour or less. Sharrows have not been approved for use by the Federal Highway Administration, although they appear in the draft of the next edition of the MUTCD which is expected to be adopted in 2010.

<http://www.bicyclinginfo.org/faqs/answer.cfm?id=972>



Bike Routes

Signed bike routes are on-street routes intended to provide connectivity and continuity to the bikeway system. Bike routes are usually established along through routes not served by bike lanes or as an alternative to bicycling on busy streets. Bike routes are designated by signs or permanent roadway markings and are shared by motorists. Bike routes should provide direct travel from one destination to another or connect discontinuous segments of shared use paths, bike lanes or bike routes. Efforts should be made, if necessary, to adjust traffic control devices to give greater priority to bicyclists on the route as opposed to other parallel streets. For more information and frequently asked questions regarding bike routes, see the Pedestrian and Bicycle Information Center:

<http://www.bicyclinginfo.org/engineering/facilities-roadways.cfm>

Wide Shoulders

On rural highways, smoothly paved shoulders can serve as a bicycle facility. Shoulders provide clearance between bicyclists and high-speed motor vehicle traffic and they reduce the “wind blast” effect of passing trucks. In addition to benefiting bicyclists, wide paved shoulders provide an area for vehicles to pull onto during emergencies and maintenance benefits due to elimination of rutting adjacent to the edge of travel lane, improved drainage, and lateral support for the roadway base. Wide shoulders also provide maintenance crew additional space to work outside of the flow of traffic. For more information and frequently asked questions regarding wide shoulders, see the Pedestrian and Bicycle Information Center:

<http://www.bicyclinginfo.org/engineering/facilities-shoulders.cfm>



Roundabouts

Although not specific bicycle facilities, roundabouts deserve a special mention due to design issues that can be problematic for bicycles. Although there are currently no roundabouts in Gibraltar, their use is increasing throughout the state and there are locations where they may be appropriate in the town. In general, single-lane roundabouts are excellent facilities for bicycles due to the relatively low speed of traffic and the ability of bicyclists to “take the lane” as they proceed through the roundabout. Double-lane roundabouts can be problematic due to higher motor vehicle speeds and lane changing within the roundabout.

Bicycle lanes should end before the roundabout with signage indicating that bicycle traffic may use the full travel lane. Additionally, a shared-use path should be provided around the circumference of the roundabout with bicycle entrance and exit ramps from the street; this allows bicyclists who are not comfortable moving into the travel lane through the roundabout to use the path instead. Signage on the path should indicate that it is a one-way facility for bicycles and the path should provide adequate width for pedestrians and bicyclists. It should be noted that WisDOT will fund 100% of construction costs for roundabout shared-use paths on projects the state is responsible for as long as the local municipality assumes maintenance for the facility. For detailed information on design see the WisDOT Roundabout Guide, found in Chapters 11, Sections 25 and 26 of the Facilities Development Manual:

<http://www.dot.state.wi.us/safety/motorist/roaddesign/roundabout-design.htm>

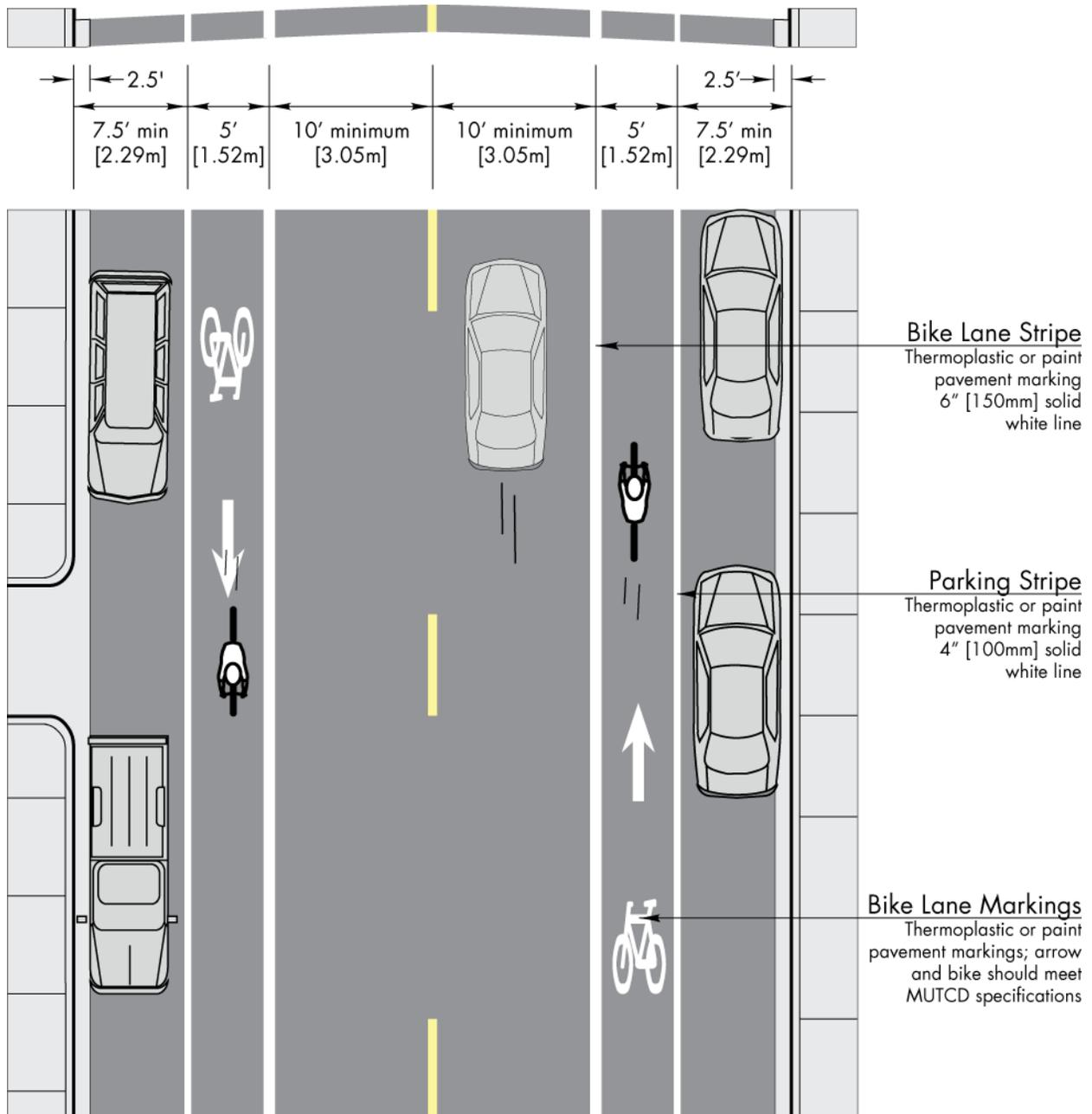


Urbanized Street Cross Section with Bike Lanes

This generalized cross section provides dimensions for an urbanized street with parking and bicycle lanes. It provides:

- One traffic lane in each direction
- One bicycle lane in each direction
- Parking lanes on both sides of the street although parking is not required

Refer to the *Wisconsin Bicycle Facilities Design Handbook*, *Wisconsin Facilities Design Manual (FDM)* and *Manual on Uniform Traffic Control Devices (MUTCD)* for full guidance and engineering specifications.

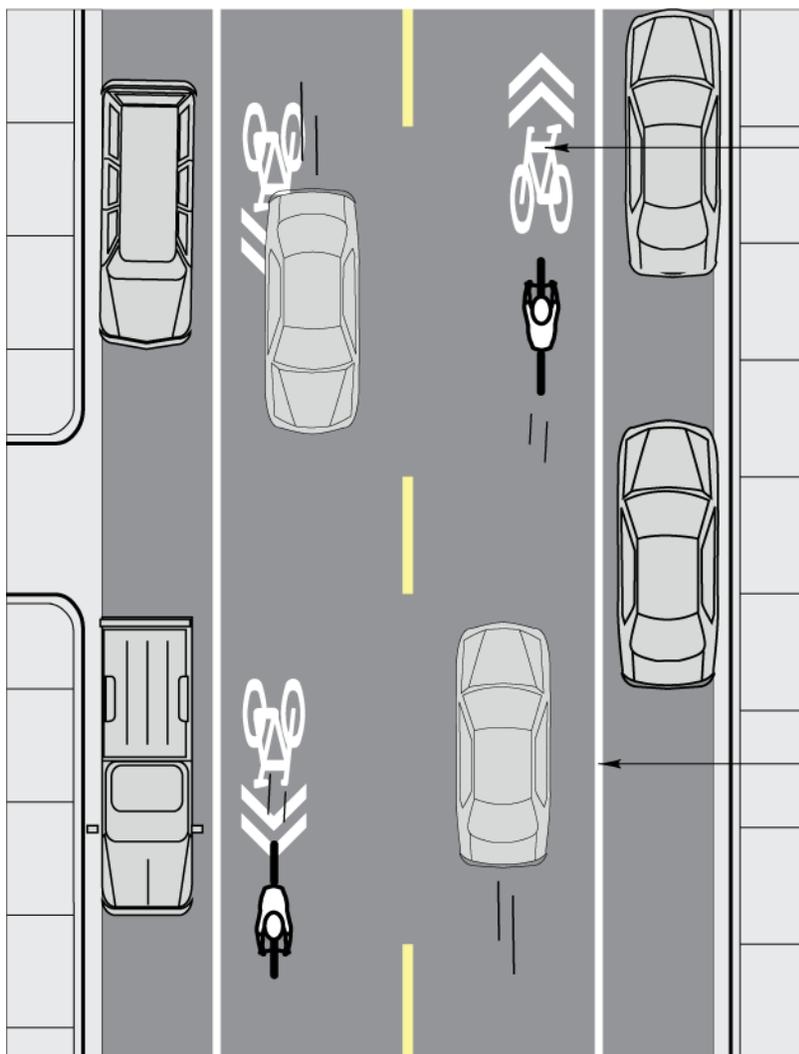
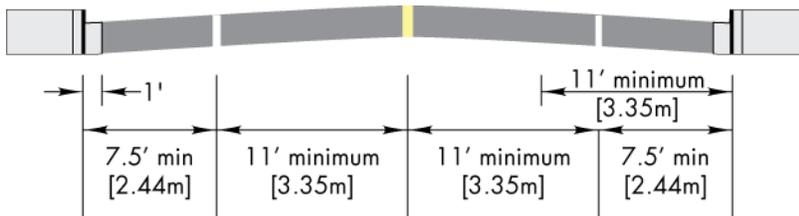


Urbanized Street Cross Section with Sharrows

This generalized cross section provides dimensions for an urbanized street with parking and marked shared lanes (“sharrows”). It provides:

- One traffic lane in each direction
- Shared lane markings placed at least 11 feet from the curb face
- Parking lanes on both sides of the street

Refer to the *2007 Notice of Proposed Amendments for the Manual on Uniform Traffic Control Devices* for full guidance and engineering specifications.



Shared Lane Markings
Thermoplastic or paint pavement markings placed at least 11' from curb face; sharrow and bike should meet MUTCD specifications

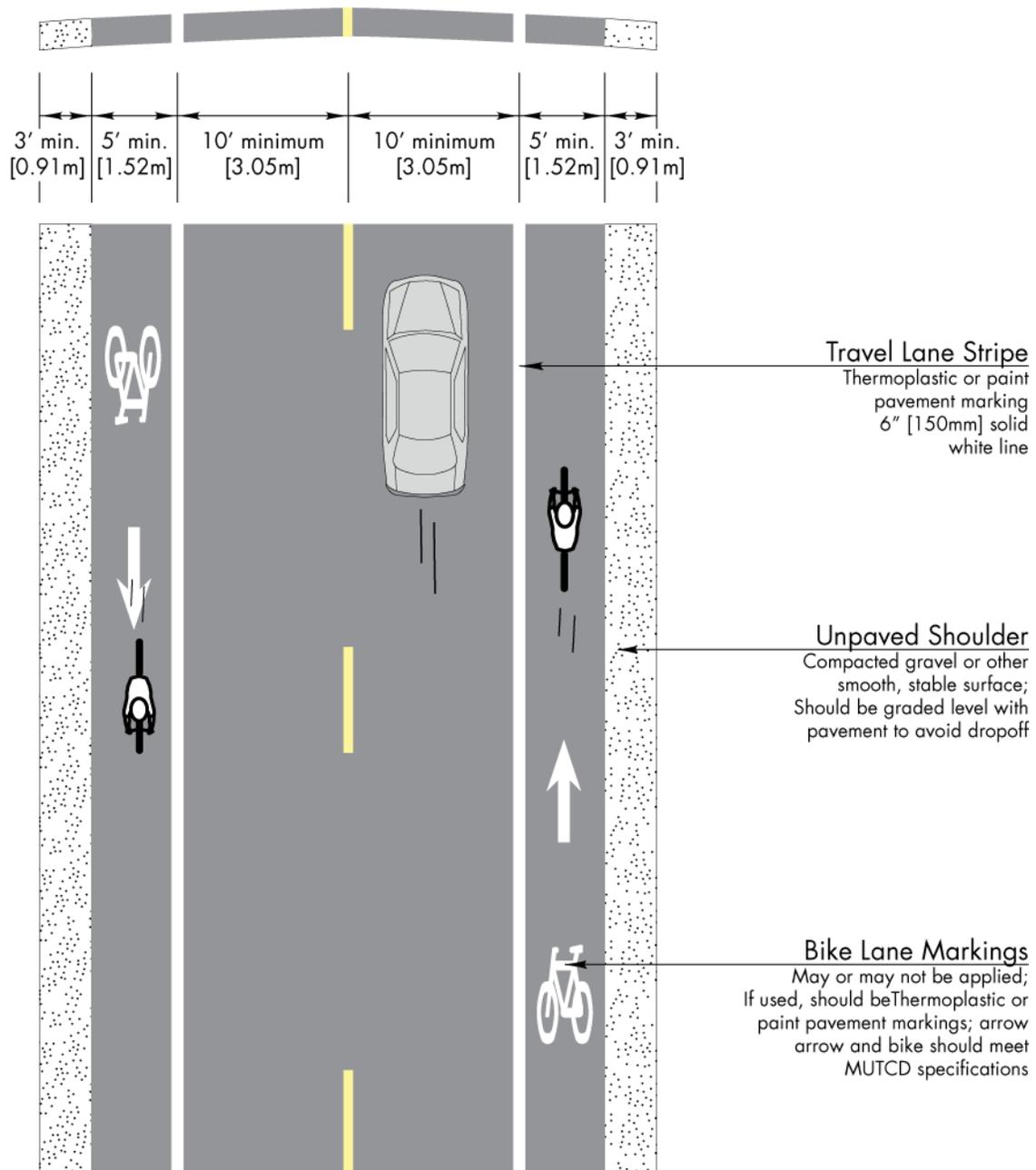
Parking Stripe
Thermoplastic or paint pavement marking 4" [100mm] solid white line

Rural Collector/Arterial Cross Section

This cross section provides dimensions for a rural collector or arterial street with wide paved shoulders. It provides:

- One traffic lane in each direction
- One bicycle lane/paved shoulder in each direction
- May include parking lanes on both sides of the street

Refer to the *Wisconsin Bicycle Facilities Design Handbook* and *Wisconsin FDM* for full guidance and engineering specifications.



Signed Bicycle Routes

Signed bicycle routes are typically designated on low traffic streets and do not feature any special on-street marking for bicycles. Signs for bicycle routes should be placed before and after every turn, at every signalized intersection, every ¼ mile in urbanized areas and every ½ mile in rural areas.

Bicycle route signage should be combined with directional signage that allows users to easily determine the distance to specific destinations. Common destinations include parks, schools, cultural centers, retail areas, and other popular locations.

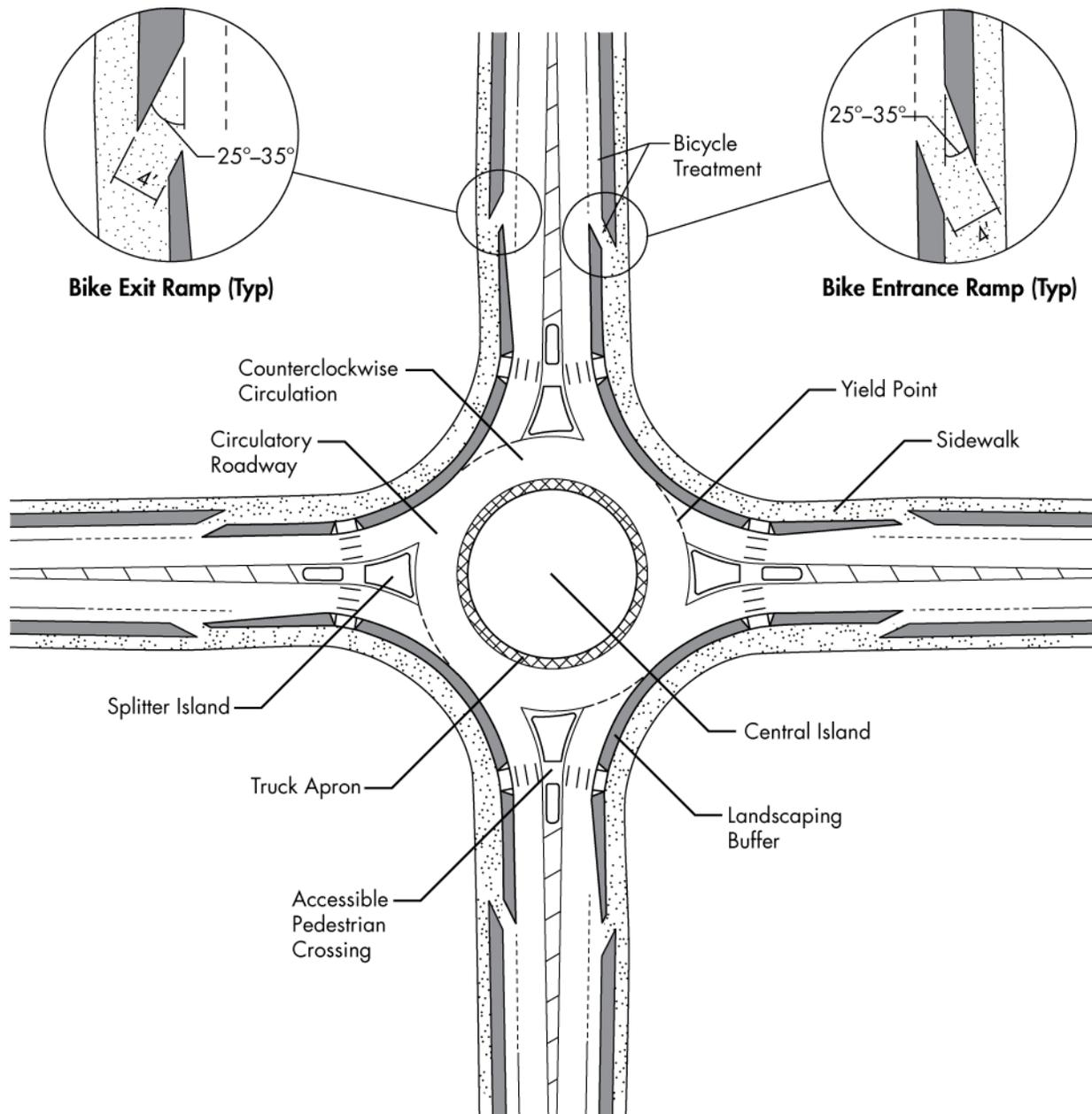
Refer to the *Wisconsin Bicycle Facilities Design Handbook*, the *MUTCD* and *Wisconsin FDM* for full guidance and engineering specifications.



Roundabouts

Roundabouts are increasingly replacing intersections of collector and arterial streets. These facilities provide numerous benefits, but can be challenging for bicyclists to navigate. When approaching a single-lane roundabout, bicyclists should be given the option to “take the lane” and proceed through the roundabout as a motor vehicle would, or to use a shared-use path around the exterior of the roundabout.

Refer to the *Wisconsin Department of Transportation Roundabout Guide* and *Wisconsin FDM* for full guidance and engineering specifications.



Source: Wisconsin Department of Transportation Roundabout Guide

7.3 Off-Street Facilities

Off-street facilities are a critical part of the bicycle and pedestrian network. For bicyclists, off-street facilities provide a supplement to on-street facilities and can provide more direct access to specific destinations than on-street facilities do. For pedestrians, off-street facilities can also provide more direct access to destinations. Both sets of users can benefit from facilities that are designed for their specific use without the use of motor vehicles. It should be stressed that as a part of the bicycle network, off-street facilities are a complement to, and not a replacement for, on-street facilities.

Shared-Use Paths

Shared-use paths are paved facilities located in a separate right of way, for the exclusive use of bicycles and pedestrians, with minimal cross flow by motor vehicles. Off-street paths are typically located within open space corridors along creeks, high voltage power line corridors and community/city-wide parks. They may also be located within greenways, which are landscaped areas created for the purpose of providing important bicycle and pedestrian linkages between uses. Shared-use paths offer important bicycle commuting opportunities, but on their own are not sufficient to fully support bicycle commuting because of limited connections to destinations. Shared-use paths provide an important recreational amenity for bicyclists, pedestrians, dog walkers, runners, roller blades and other non-motorized forms of travel.



Shared-use paths are paved facilities that should be wide enough to offer a wide range of users a comfortable and safe experience. They are also often located and designed to provide service vehicle access to utility corridors and emergency vehicle access to open space, including police and fire vehicles.

Recreational Trails

Recreational trails are typically non-paved, narrower trails designed specifically for pedestrian use. Such trails are appropriate in sensitive ecological areas, or areas where high levels of bicycle and pedestrian traffic are not desired. Recreational trails are designed primarily for recreational and not transportation purposes, although some may use them for transportation. These trails may be provided as a supplement to the off-street shared-use path network and the on-street bicycle facility network.



Sidewalks

Sidewalks are paved off-street facilities intended exclusively for pedestrian use. Sidewalks must meet ADA accessibility requirements. Sidewalks should be provided anywhere pedestrians may be expected to be present. WisDOT guidance specifically calls for sidewalks on *all* new urban and suburban streets with at least one housing unit per acre or any commercial or industrial use. Where sidewalks are not provided, a paved shoulder should be provided for pedestrian use.

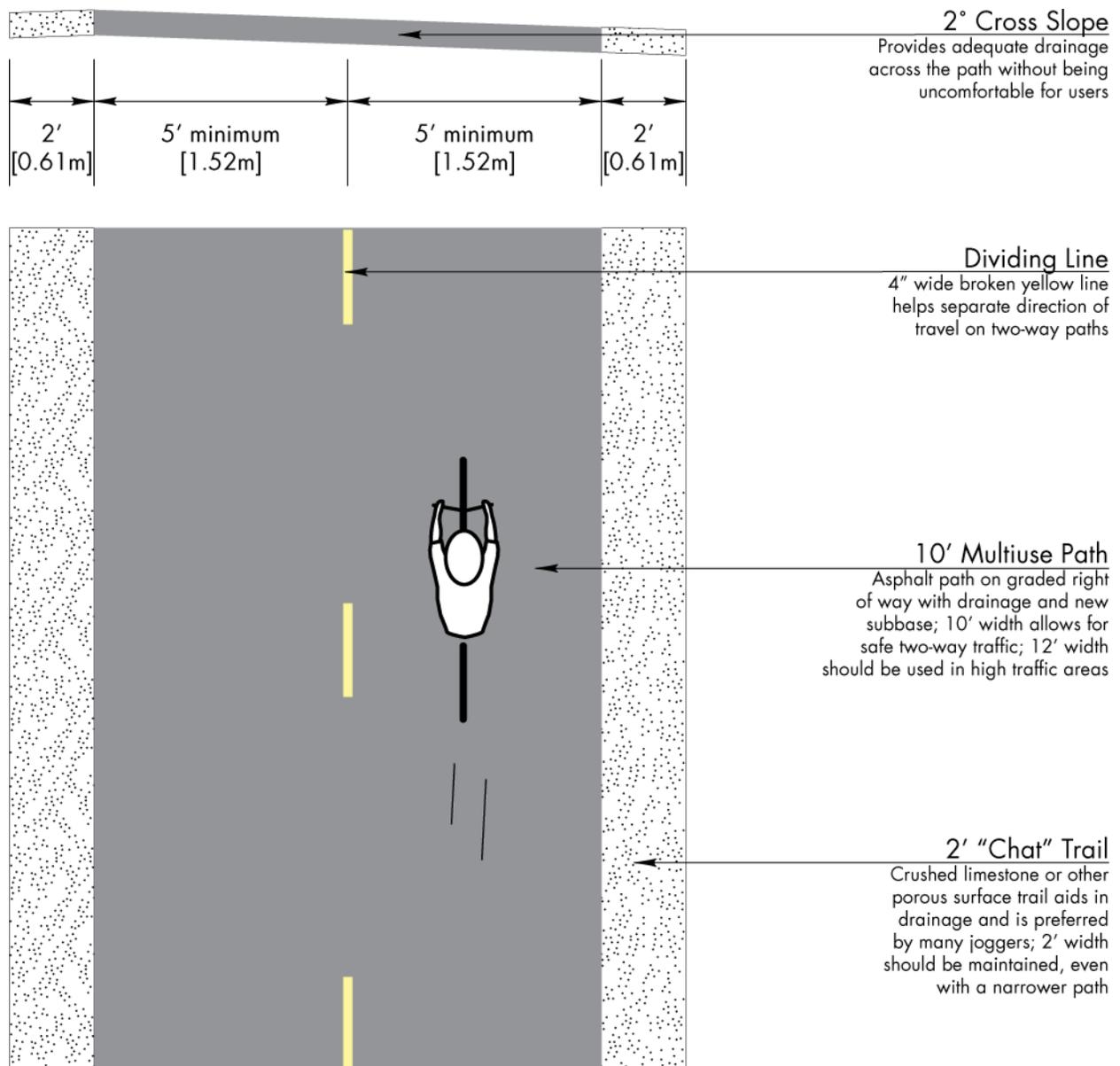
<http://www.dot.wisconsin.gov/projects/state/docs/ped2020-plan.pdf>

Shared-use Paths

Shared-use paths are off-street bicycle facilities that serve two-way bicycle and pedestrian traffic. Because shared-use paths are intended for pedestrian use, the design must conform to Americans with Disabilities (ADA) guidance.

Shared-use paths should be considered a supplement to, and not a replacement for, on-street bicycle facilities.

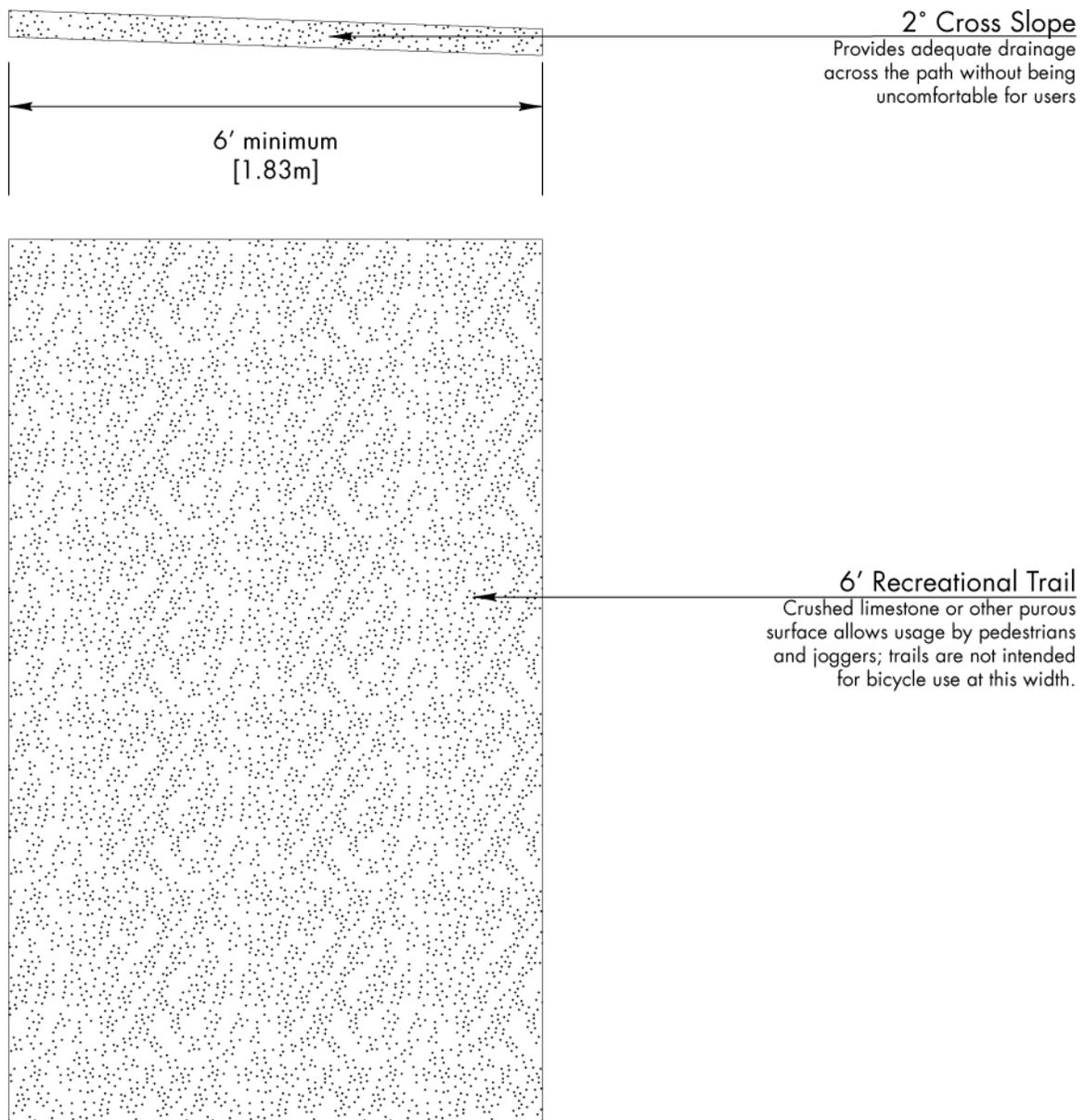
Refer to the *Wisconsin Bicycle Facilities Design Handbook*, *Wisconsin FDM*, and Americans with Disabilities Act regulations for full guidance and engineering specifications.



Recreational Trails

Recreational trails are dirt or gravel trails intended for pedestrian only use. These trails are appropriate in environmentally sensitive areas. Because shared-use paths are intended for pedestrian use, the design must conform to Americans with Disabilities (ADA) guidance.

Refer to the *Wisconsin Bicycle Facilities Design Handbook*, *Wisconsin FDM*, and Americans with Disabilities Act regulations for full guidance and engineering specifications.



7.4 Maintenance

With the provision of bicycle and pedestrian facilities it is critical that the Town offer support facilities and services to ensure that paths and roadways are safe and comfortable to use. These facilities and services include high-level maintenance and the provision of signage throughout the bicycle and pedestrian network.

Additionally, trailheads, lighting and parking areas can be appropriate in specific locations to ease access to the network and increase safety.

General Maintenance

Good maintenance is critical for the safe operation of bicycle and pedestrian facilities. Debris in bicycle lanes or on paths presents a hazard to users as bicyclists can easily fall or be pushed into traffic while pedestrians also risk falls.

On-street bicycle facilities should be maintained as part of regular street maintenance. However, due to the susceptibility of bicycles to damage and danger risks from debris or pavement damage, priority should be given to sweeping bicycle lanes and repairing potholes or other damage more frequently than standard travel lanes. Frequent sweeping of priority bicycle lanes and routes is particularly important because cars in adjoining lanes push rocks and other debris into the less traveled bicycle lanes.

Off-street bicycle and pedestrian facilities, including sidewalks, should also receive frequent regular maintenance. Off-street facilities should be swept as needed, with particular attention to areas adjoining gravel paths where gravel may spread onto the pavement and present a slipping hazard. Sweeping should also be conducted more frequently during the fall and spring seasons when leaves may present a hazard on trails and paths. The appearance of potholes or cracks is less common on off-street facilities, but those that do appear should be promptly patched and sealed. Regular inspection of sidewalks should check for cracking or lifting due to pressure from tree roots. Vegetation adjoining sidewalks and paths must be pruned to maintain visibility along the facility.

Appendices A.3 and A.4 of the *Wisconsin Bicycle Facilities Design Manual* provide additional details on maintenance of on- and off-street facilities



Snow Clearance

For bicycle and pedestrian facilities to serve as true transportation alternatives, they must be accessible and usable year round. Snow should promptly be cleared from all priority portions of the network. On-street facilities should be plowed when the street is cleared. It is critical that motor vehicle travel lanes are not plowed into the bike lane therefore forcing bicyclists into the regular travel lane, particularly on high-speed arterials. Sidewalks should be cleared of snow in a timely manner particularly in key corridors including areas around schools and commercial districts.

Priority off-street paths should be plowed at the same time as major arterials and collectors. These priority routes should be those that parallel major roadways, connect on-street facilities, or provide access to major destinations including employment centers, schools, and recreation facilities. Assigning snow clearance duties to the Parks or Recreation Departments allows path plowing concurrent to the plowing of streets. Plowing of minor off-street paths can occur after major paths and streets have been cleared, but should be cleared in a timely manner after each snowfall.



To serve as reliable transportation facilities, paths should be cleared of snow in a timely manner.

7.5 Support Facilities



Regulatory and warning signage can alert motorists to the presence of cyclists and pedestrians, but should not be overused.

Signage and Markings

Adequate signage is essential throughout the bicycle and pedestrian network. This signage provides regulatory, warning and other information to users on both on-road and off-road facilities.

Regulatory signage and markings should provide users with a clear indication of how they should behave. Common markings and signage indicates proper direction of travel, speed limits, and establishing right of way for users.

Warning devices alert users to potential hazards. These devices often warn of hazardous conditions including steep grades, sharp curves or changes in path conditions. Signage can also alert users to approaching intersections or railroad crossings. When used on off-street facilities, warning signage should be the same as MUTCD-approved on-road signage, although signage is often scaled down slightly in recognition of the lower speeds of path users compared to street users.

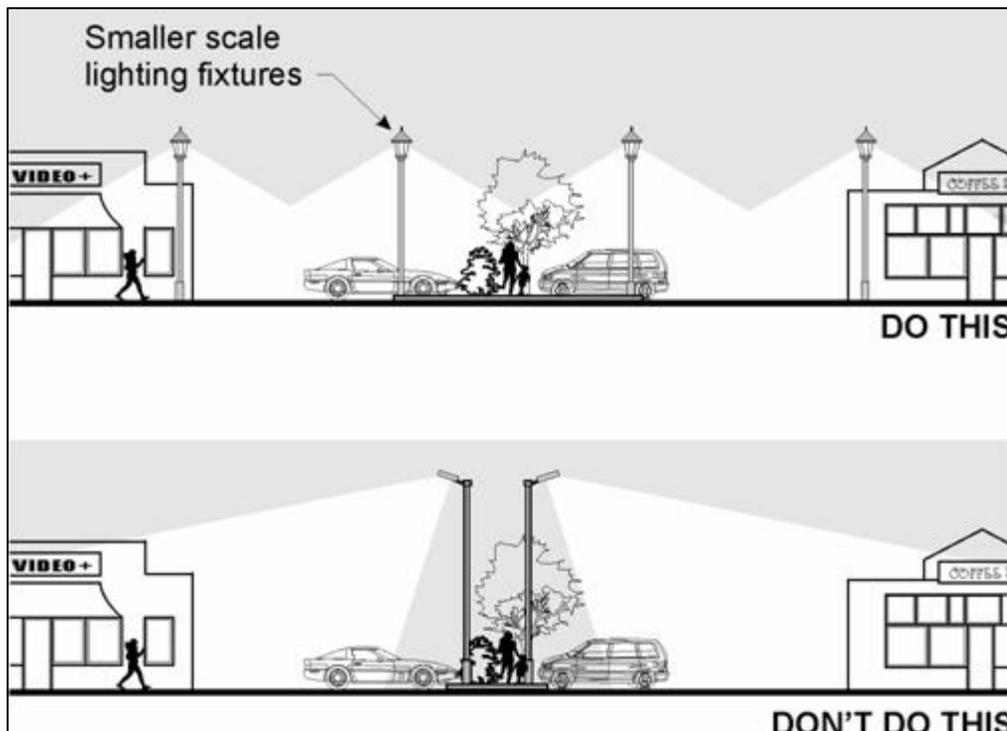
Users often consider informational signage the most important signage on a path or street. This signage commonly points users to popular destinations, orients users within the larger network and provides travel distances and approximate times to specific locations. Informational signage should generally follow MUTCD guidance, although there is more freedom to use custom colors or designs with this signage, particularly on off-street paths.

All signage and markings should comply with the *Wisconsin Bicycle Facilities Design Manual*, which details signage and marking requirements throughout the manual. Section 4.14 of the Manual presents guidance specific to off-street paths, although much of the signage detailed there is also relevant to on-street facilities.

Lighting

Bicyclists in the State of Wisconsin are required to use a front headlight when traveling between dusk and dawn. Despite this requirement, fixed-source lighting should be considered to improve visibility and safety along paths and at intersections with streets. Lighting allows bicyclists to better see their surroundings and observe potential hazards, while also providing pedestrians who may not have a light the same advantages. Lighting should be strongly considered where night use of paths is expected; the proposed path behind the Town Center is an example. Regardless if lighting is provided along paths, lighting should always be provided at intersections between paths and streets or other paths. Additionally, lighting should be strongly considered through underpasses or tunnels, on overpasses, and in areas where personal safety may be a concern, even if lighting is not provided on other portions of the path.

All path lighting should comply with the guidance provided in the Wisconsin Bicycle Facility Design Manual, section 4.13. Additionally, lighting should be provided at a scale that is appropriate for bicycles and pedestrians. Tall street lamps intended for lighting streets or parking lots are not appropriate for path or sidewalk lighting, although they may be used where paths intersect streets.



Appendix A: Public Comments

Written Public Comments from August 11, 2009, Public Meeting

The following written comments were submitted at the August 11, 2008, public meeting:

1. I have a suggestion to route people off Main Street toward Peninsula Park. The Main Street is VERY dangerous.
2. I strongly feel that there needs to be an alternate route for bicyclists through the village that is well marked. Perhaps through use of easements or summer use of snowmobile trails, use of the Fish Creek Park...? This is something the Town could accomplish, without much infringement on state roads.
3. Bicycles are an alternative means of transportation that should have equal rights with automobiles. Because of oil dependency cycling should be encouraged and preferred over the use of gas-burning vehicles. Because they alleviate the need for parking space the bicycle should be primary transportation in urban areas

Appendix B: Public Survey Results

An online survey was available for public input from August 11, 2009, to September 30, 2009, to gauge public opinion on bicycle and pedestrian facilities and usage. The survey was publicized at the initial public meeting and flyers with a link to the survey were distributed from local merchants. Because the survey was available online it was open to anyone who wanted to participate, regardless of if they live in Gibraltar.

The survey had a total of 37 participants. The results of the survey are printed below, as are verbatim responses to open-ended questions; personal information has been removed. Although there were 37 total participants, the number of responses to each question may not sum to 37 as some participants skipped some questions and some questions allowed participants to enter more than one response if appropriate.

Question 1: How important do you think it is to include bicycle issues in the Town's transportation planning process?

Very Important	Somewhat Important	Somewhat Unimportant	Very Unimportant	No Opinion	Did Not Answer
25	3	0	9	0	0
67.57%	8.11%	0.00%	24.32%	0.00%	0.00%

Question 2: Where do you live?

Town of Gibraltar	Village of Egg Harbor	Village of Ephraim	Elsewhere in Door County	Outside Door County	Did Not Answer
12	2	0	19	3	1
32.43%	5.41%	0.00%	51.35%	8.11%	2.70%

Question 3: Are you a year-round resident of Door County?

Yes	No	Did Not Answer
29	7	1
78.38%	18.92%	2.70%

Question 4: If you are not a year-round resident of Door County, how much time do you spend here each year??

Less than 2 weeks	2 weeks to 1 month	1 to 3 months	3 to 6 months	6 or more months	Not Applicable
0	2	1	1	2	18
0.00%	8.33%	4.17%	4.17%	8.33%	75.00%

Question 5: If you are employed, how far do you live from your primary job?

Less than 1 mile	1-2 miles	2-5 miles	5-10 miles	10+ Miles	I am not employed	Did Not Answer
6	6	10	3	9	2	1
16.22%	16.22%	27.03%	8.11%	24.32%	5.41%	2.70%

Question 6: Do you have access to a bicycle?

Yes	No	Did Not Answer
36	0	1
97.30%	0.00%	2.70%

If yes, do you (check all that apply)

Ride Regularly	Personal enjoyment	Exercise	Means of Transportation	Ride Year-Round	Did Not Answer
28	27	28	16	9	1
75.68%	72.97%	75.68%	43.24%	24.32%	2.70%

Question 7: What's the longest distance you would consider riding a bicycle?

0-1 Mile	1-5 Miles	5-10 Miles	10+ Miles	Did Not Answer
0	1	2	33	1
0.00%	2.70%	5.41%	89.19%	2.70%

Question 8: If you have school-age children in your household, do they regularly walk or bike to school?

Yes	No	Not Applicable	Did Not Answer
7	13	14	3
18.92%	35.14%	37.84%	8.11%

If you answered no, why not? (12 responses)

1. Too young (7 yrs) and would have to cross the highway bridge. When he is a couple years older and going to school on this side of the bridge he will ride his bike.
2. later teen years, rather use a car. although occasional bike use for work
3. 17 miles to school
4. School = winter; they take the bus mostly due to weather. Too far to walk.
5. We live only 4 miles away, but they would have to ride on highway 42 quite a bit.
6. Too far from the school
7. Unsafe route
8. It is not allowed because of State Highway and lack of sidewalks. Students who live as close as Fish Creek Condos, North Haven, Spring Road ride the bus to school. Thank you for considering these areas. It would be great to give these students the option to walk or ride their bike to school.
9. traffic
10. Our home is more than 8 miles from school, and my child is only 10 years old.
11. He is only 7 years old....but when he get older it would be nice to have safer options to be able to bike to school.
12. No children.

Question 8: Do you feel that Gibraltar is bicycle-friendly?

Yes	No	Did Not Answer
2	34	1
5.41%	91.89%	2.70%

If no, why not?

Personal Safety Concerns	Bad Weather	Automobile Traffic	Bad Driver Behaviors	Destinations are too far away	No Bike Lanes	Poor Road Conditions	Unsafe Intersections
22	0	26	13	2	32	7	22
59.46%	0.00%	70.27%	35.14%	5.41%	86.49%	18.92%	59.46%

Other Responses (9);

1. The town has no bike infrastructure whatsoever.
2. Downtown Fish Creek is terrible. County Hwy A lacks a bike lane south of EE.
3. needs more bike racks

4. I have biked through Gibraltar regularly during peak summer tourism for about 15 years. It is manageable as an adult but I made the mistake of trying to pull a child behind me and discovered how dangerous it can be. Bike Lanes are needed to safe biking with children. Adding adequate bike lanes between the Pen Park would increase business downtown as many more camping families would venture into town from bike rental shops and their camp sites. Living in Door County does not allow children to ride their bikes safely anywhere except Sunset Trail. There is so much traffic in the summer in Fish Creek I prefer to ride my bike because it is faster than driving. I think many people would choose this option if it were safer and less congested. I understand the point of the 3 way stop intersection to keep cars moving out of town but half of the cars do not know it is a 3 way stop and they pull out right in front of oncoming traffic. As a bike at this intersection it is better to avoid it and take the Bayside Alley but then you are stuck with no crosswalk and on the wrong side of the road with a busy sidewalk. There is not enough room to bike between parked cars and the highway. The only safe way to bike from the top of the hill by the school to downtown is in the middle of the road. There is a dangerous street drain just South of O'Meara's Irish Shop drive that forces bikes into the road on this hill. All of the pedestrian crosswalks do not have up ramps onto the sidewalk. I discovered this crossing the highway with a child bike carrier and a crashed my bike and child carrier on the side of the highway.
5. Lack of connectivity between destinations
6. With the state park available other riding in Gibraltar is not an issue and should not be for others!!
7. No bike lane through town is the major concern.
8. Loads of bikers primarily with-in Peninsula Park, but underutilized areas that could be made much more biker friendly.
9. Drivers who do not know where they are going.

Question 10: What places in or near Gibraltar would you like to be able to reach by bike? Check all that apply.

Peninsula State Park	Other Parks or Recreation Trails	The Lakefront	Schools	Fish Creek	Egg Harbor	Ephraim	Local Businesses & Restaurants	Did Not Answer
33	27	27	20	26	27	25	27	3
89.19%	72.97%	72.97%	54.05%	70.27%	72.97%	67.57%	72.97%	8.11%

Other Responses (10):

1. Everywhere.
2. Sister Bay, Baileys Harbor, Juddville, Liberty Grove, Ellison Bay...
3. YMCA and Peninsula School of Art
4. It would be nice if Egg Harbor would agree to put a bike shoulder on "E" towards Baileys Harbor, Baileys Harbor puts a shoulder on "Q" towards Sister Bay, Sister Bay puts a shoulder on Old Stage, Ephraim puts a shoulder on Townline, and Gibraltar puts a shoulder on Maple Grove/Airport rd. into Peninsula state park. We would end up with a loop at least in a few years.

5. Peninsula Players, other communities with-in Door County (Sturgeon Bay, Carlsville, Baileys Harbor).

Question 11: How would the factors below affect your decision to bicycle or walk?

More on-street bicycle facilities (bike lanes, paved shoulders, wide travel lanes, etc.)

No Affect	Moderately Affect	Strongly Affect
0	6	29
0.00%	17.14%	82.86%

More off-street trails or paths

No Affect	Moderately Affect	Strongly Affect
1	4	30
2.86%	11.43%	85.71%

More bicycle parking

No Affect	Moderately Affect	Strongly Affect
7	15	11
21.21%	45.45%	33.33%

Increased enforcement of laws applying to motorists and bicyclists

No Affect	Moderately Affect	Strongly Affect
6	19	10
17.14%	54.29%	28.57%

Education programs for bicycle safety

No Affect	Moderately Affect	Strongly Affect
14	14	4
43.75%	43.75%	12.50%

A map of bicycle facilities for planning routes

No Affect	Moderately Affect	Strongly Affect
1	12	22
2.86%	34.29%	62.86%

Question 12: Where do you feel comfortable bicycling?

Streets containing bike lanes

Yes	No
34	1
97.14%	2.86%

Streets signed as designated bike routes

Yes	No
28	4
87.50%	12.50%

Low traffic neighborhood streets

Yes	No
35	0
100.00%	0.00%

Main Town thoroughfares

Yes	No
12	18
40.00%	60.00%

Rural thoroughfares

Yes	No
30	2
93.75%	6.25%

Greenway trails

Yes	No
32	2
94.12%	5.88%

Question 13: Whenever possible, the Town will seek grants for development of bike routes and trails. Would you be willing to support this endeavor using tax dollars?

Yes	No	Did Not Answer
32	3	2
91.43%	8.57%	5.71%

Question 14: Do you have any additional comments or concerns about bicycling and bicycle planning in the Town of Gibraltar?

1. The town and county should do everything possible to create bike infrastructure. Signage and road marking alone would at least say "we know you're here and welcome you to ride your bike." Separate lanes in most cases would cost too much for little added benefit, except between Ephraim and Fish Creek. A marked lane or sharrows would be enough in most places.
2. Gibraltar Town roads are among the best in the state. Fish Creek is terribly unfriendly for bikes. A bike path from Fish Creek to Ephraim, while nice, would not be necessary as Town road and Pen Park are available. On street parking for bikers in Pen Park is out of hand. Users should be required to use park lots and pay park fees.
3. Please consider the environmental aspect of bike friendly communities... I love Door County.
4. Everyone benefits from investing in safe cycling routes. This is a terrific cause.
5. There are a growing number of us bicycle enthusiasts up here. The roads are so dangerous that in order to get a safe ride in, most days I rise by 5:30 or so. I would love to be able to go riding with my friends in the middle of the day.
6. A safe way to get through Fish Creek and Ephraim would be great.
7. I would very much like to see a comprehensive bicycle plan for Door County so that there is consistency and connectivity from one community to the next.
8. Thank you for taking leadership on this project. Gibraltar is such a beautiful place to bike and it is the hub and center of travel between other towns/villages and already has several bike events that go through annually. Thank you for considering the school and students ability to walk or ride their bikes to school. This would really give students the opportunity to get exercise and develop more independence.
9. I am both a bicyclist and motorist and believe the responsibility for SAFE bicycling must be shared by all. It upsets me when I am traveling as a motorist on Door County roads, and I come upon bicyclists who are riding 3-4 abreast on a 55 mph country road. After I give a courtesy "toot-toot", I expect them to move quickly, not turn around and laugh and continue on their path. It gives us bicyclists a bad name and I worry that, when I'm bicycling I will be the recipient of an angry motorist who is fed up with behavior like that. This is why the laws must be enforced - bicyclists and motorists should be given tickets when they violate the rules of the road.
10. For myself, I feel that I am able to ride anyway and of course I would prefer bike lanes, bike trails and educated drivers. For my child, I am terrified of the speed of the cars in 25 mile an hour zones- many drive 40 miles per hour and could not stop for a child. Crossing the highway anyway in Door County can be problematic even if there is a light. Educating and alerting drivers to the fact that they may encounter a bicyclist would help. Many drivers do not realize how scary it is for the cyclist to have them drive so close. Children get unsteady and unpredictable when cars pass them too fast and too close so bike lanes are a great idea.
11. With plenty of land available - bike paths or lanes should not be a problem.

12. Silent sports particularly bicycling should be heavily promoted to enhance the economy of Door County and to provide attractive and safe leisure for resident and visitors alike.
13. I would say the main concern is getting families through F.C. in a safe manner and being known as a bicycle friendly town. Then I would like to see a loop where each town takes part in putting in a shoulder. Work with Peninsula in a trail from the school to Ephraim along Hwy 42. Similar to sunset trail.
14. The Peninsula Park property located along Highway 42 is an ideal place that could be utilized for biking as well as opening up better access to that area of the park that is currently underutilized. A multi-use trail that could be used year-round would be most logical. Consideration should be given to combine snowmobiling, cross country skiing, snow shoeing AND biking trails. Long term consideration and planning should also be given for some sort of public transportation between communities in Door County such as a monorail or tram system. PLANNING SHOULD ALSO BE GIVING FOR SOME SORT OF PUBLIC(l [response truncated]
15. Great idea to make biking more safe.
16. "We go to Egg Harbor every weekend, year round. I hope this turns into a county effort and not just Gibraltar. It's such a beautiful county, it sure would be nice to have better bike access in every village. Thanks for asking.

Appendix C: Rules for Bicycling on the Road

The following information is drawn from the Wisconsin Department of Transportation Safety and Consumer Protection webpage.

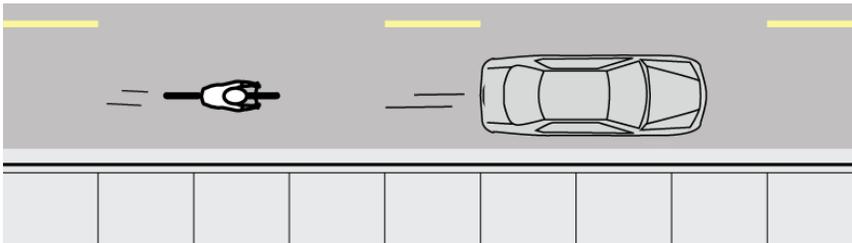
<http://www.dot.state.wi.us/safety/vehicle/bicycle/rules.htm>

General rules

- Bicycles are vehicles. They belong on the road.
- Ride at least three feet from the curb or parked vehicles.
- Ride in a straight line. Don't swerve in and out around parked vehicles.
- Always ride in the same direction as traffic.
- Sidewalk riding for bicyclists past the learning stage can be more dangerous than on the road obeying traffic laws; it is also illegal in most communities.
- Obey all traffic laws.
- Be predictable. Let other users know where you intend to go and maintain an understood course.

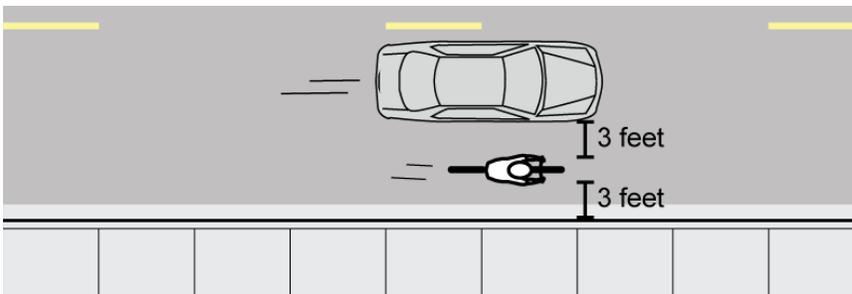
Narrow lanes

- Ride in the center of the lane.
- Keep at least three feet between yourself and passing or parked traffic.



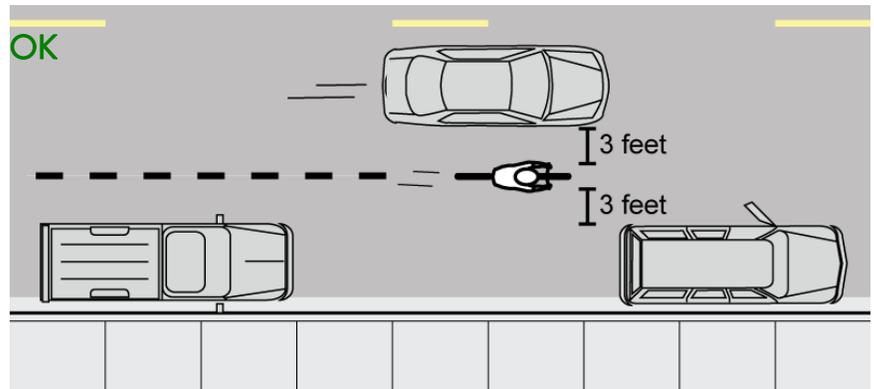
Wide lanes

- Ride just to the right of the actual traffic line, not alongside the curb.
- Keep at least three feet between yourself and the curb or parked vehicles.
- Motorists should be passing you with at least 3 feet of clearance.

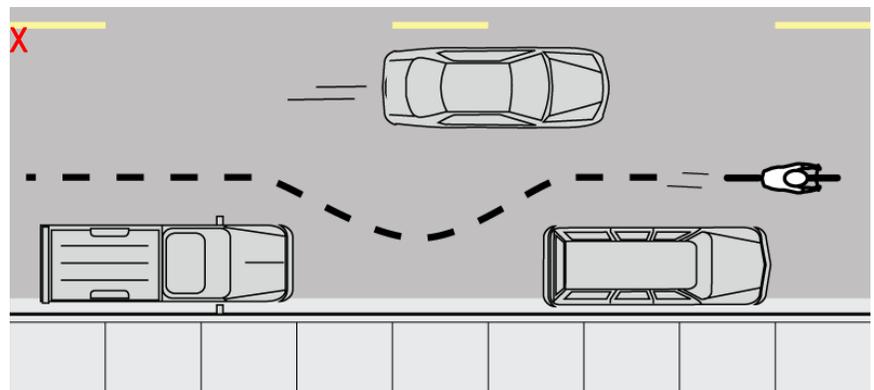


Don't get doored!

- Ride in a straight line three feet out from parked cars. You'll avoid car doors that open in front of you and you'll be more visible to other drivers.



- Don't pull into the space between parked cars. Ride just to the right of the actual traffic line, not alongside the curb.



Take the lane

You will fare better with other road users if you function like a legal vehicle operator, which you are.

- Right turning motorists can be a problem, but taking the lane or more of the right portion of the wide curb lane can prevent this. Take an adult bicycling course to learn skills and develop confidence in traffic.
- Left turning motorists are the cause of most adult bicyclists' crashes. Motorists claim not to see the cyclist who is traveling in a straight path in the opposite direction.

Bicyclists, when making your own left turn look over your left shoulder for traffic, signal your left turn and change lanes smoothly, so you are to the left side or center of the through lane by the time you reach the intersection. If a left turn lane is present, make a lane change to center of that lane. Do not move to left of that lane as left-turning motorists may cut you off.

- Do not wait until you reach the crosswalk, then stop and try to ride from a stop across other traffic. If you need to cross as a pedestrian, leave the travel lanes, then get into the crosswalk, walking or riding your bicycle like a pedestrian travels, not fast, and with pedestrian signals.

Lane positioning can be especially important in approaching a downhill intersection. Moving to the center makes you more visible to intersecting and left turning motorists in opposing lanes.

- Going downhill, your speed is likely to be closer to traffic speeds or posted speed limits. Hugging the curb when there are visual barriers increases your chances of being struck by a bigger vehicle, or of hitting a pedestrian or sidewalk riding bicyclist.
- Take the lane, be seen and see other traffic better if you are close to traffic speeds

How to ride

Wear bright colors during the day and retro-reflective items at night along with headlight and taillight to increase your visibility to other road users.

- Wear a bicycle helmet on every ride to reduce your chance of head injury in event of a fall or crash. Most serious injuries from a fall or crash are to the head and most frequently, the forehead, so wear helmet level with the ground, just above the eyebrows.

Be aware of changing road surfaces, new construction or unusual barriers on the roadway, distracters for both you and other vehicle operators.

- Leaves can be slippery in the early morning and are a hazard even when slightly damp. Distractions such as dogs, wild animals and even humans can draw attention from the roadway and lead to a crash. Expect them.

Motorist reminders

- Bicycles are vehicles. They belong on the road.
- Cyclists need room to get around potholes, sewer grates and other obstructions.
- Leave at least three feet when passing bicycles, more room at higher speeds.
- Change lanes to pass any bicycle traveling in a narrow lane.
- Train yourself to scan for fast moving (it's hard to tell speed) bicycles and motorcycles in the opposing lane to you when turning left, and scan sidewalks and crosswalks for pedestrians and bicyclists using the sidewalk and crosswalk as a pedestrian. Always scan to your right side sidewalk before you leave a stop light or stop sign. And to the left and right side sidewalks when on a one-way street.

Appendix D: Wisconsin State Bicycle Laws

The information below is a summary of current Wisconsin State Laws relating to bicycling. The numbers in brackets refer to the specific state statute; for the complete statutes, consult the Wisconsin Department of Transportation Summary of Wisconsin Bicycle Laws.

<http://www.dot.state.wi.us/safety/vehicle/bicycle/docs/bikelaws.pdf>

A. Vehicular Status

- The bicycle is defined as a vehicle. [340.01(5)]
- The operator of a vehicle is granted the same rights and subject to the same duties as the driver of any other vehicle. [346.02(4)(a)]

B. Lane Positioning

- Always ride on the right, in the same direction as other traffic. [346.80(2)(a)]
- Ride as far to the right as is practicable (not as far right as possible). [346.80(2)(a)]
- Practicable generally means safe and reasonable. 346.80(2)(a) lists a few situations when it is not practicable to ride far to the right:
- When overtaking and passing another vehicle traveling in the same direction;
- When preparing for a left turn at an inter-section or driveway;
- When reasonably necessary to avoid unsafe conditions, including fixed or moving objects, parked or moving vehicles, pedestrians, animals, surface hazards or substandard width lanes [defined as a lane that is too narrow for a bicycle and a motor vehicle to travel safely side by side within the lane].

C. One Way Streets

- Bicycles on a one-way street with 2 or more lanes of traffic may ride as near the left or right-hand edge or curb of the roadway as practicable (in the same direction as other traffic). [346.80(2)(b)]

D. Use of Shoulders

- Bicycles may be ridden on the shoulder of a highway unless prohibited by local authorities. [386.04(1m)]

E. Riding 2-Abreast

- Riding 2 abreast is permitted on any street as long as other traffic is not impeded. When riding 2 abreast on a 2 or more lane roadway, you both have to ride within a single lane. [346.80(3)(a)]

F. Hand Signals

- Bicyclists are required to use the same hand signals as motorists [346.35].
- Hand signals are required within 50 feet of your turn. It is not required continuously if you need both hands to control the bicycle [346.34(1)(b)]

G. Passing

- A motorist passing a bicyclist in the same lane is required to give the bicyclist at least 3 feet of clearance, and to maintain that clearance until safely past. [346.075]
- A bicyclist passing a stopped or moving vehicle is also required to give at least 3 feet of clearance when passing. [346.80(2)(c)]

H. Use of Sidewalks

- State Statutes allow local units of government to permit vehicles on sidewalks through local ordinances. [346.94(1)]
- When bicycles are allowed to be operated on sidewalks, bicyclists must yield to pedestrians and give an audible warning when passing pedestrians traveling in the same direction. [346.804]
- At intersections and other sidewalk crossings (alleys, driveways), a bicyclist on the sidewalk has the same rights and duties as pedestrians. [346.23, 24, 25, 37, 38]

I. Bicycling at Night

- Bicycling at night requires at least a white front headlight and a red rear reflector. The white front light must be visible to others 500 feet away. The red rear reflector must be visible to others between 50 and 500 feet away. A red or amber steady or flashing rear light may be used in addition to the required reflector. These are required no matter where you ride--street, path or sidewalk. [347.489(1)]

J. Duty to report accident

- The operator of a vehicle involved in an accident resulting in injury to or death of any person, or total damage to property owned by any one person of \$1,000 or more shall immediately give notice of such accident to the police. [346.70]
- "Injury" means injury to a person of a physical nature resulting in death or the need of first aid or attention by a physician or surgeon, whether or not first aid or medical or surgical treatment was actually received;
- "Total damage to property owned by one person" means the sum total cost of putting the property damaged in the condition it was before the accident, or the sum total cost of replacing such property.
- This section does not apply to accidents involving only vehicles propelled by human power.