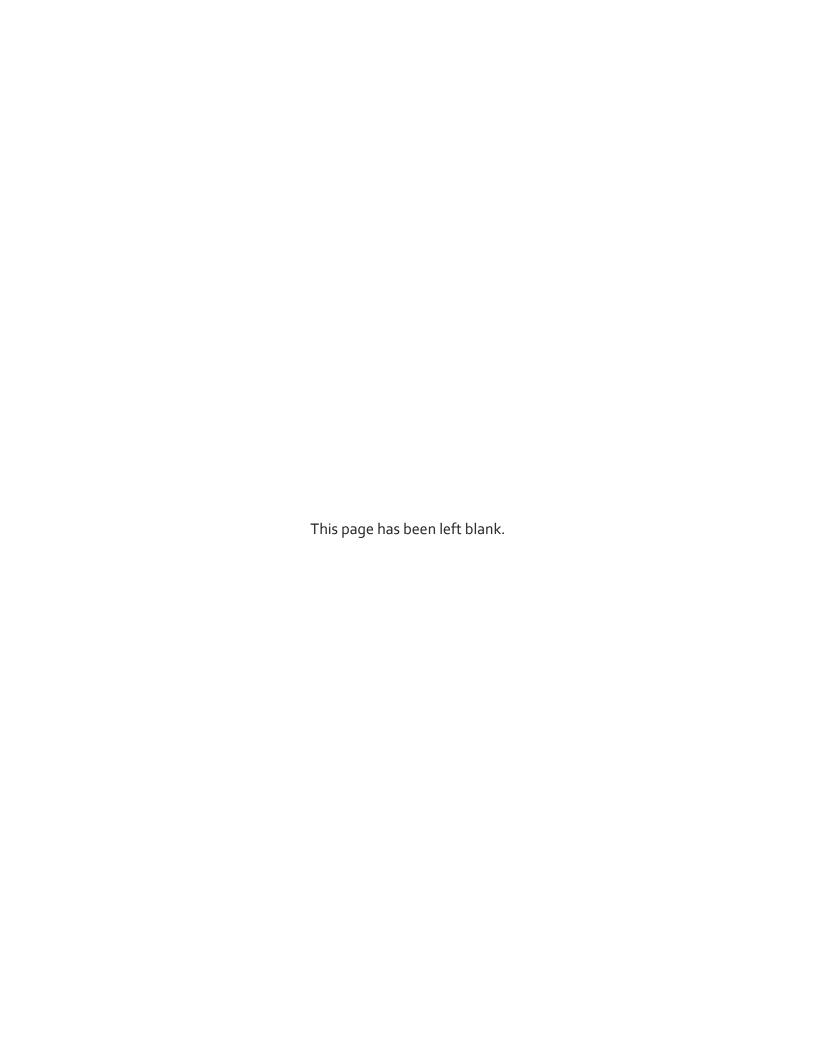


BICYCLE AND PEDESTRIAN MASTER PLAN

FALL 2012



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Stakeholder Meeting Participants

- City of La Crosse Engineering Department
- Wisconsin Department of Transportation
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- City of La Crosse Parks and Recreation Department
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- · Smith's Cycling and Fitness
- Bicycle Federation of Wisconsin
- Bikes Limited
- LAPC- Bicycle and Pedestrian Advisory Committee
- EMAG
- North La Crosse Business Association
- La Crosse Area Development Corporation
- City of La Crosse Police Department
- City of La Crosse Fire Department

- Aguinas Catholic Schools
- School District of La Crosse
- Safe Routes to School Program
- Viterbo University
- Western Technical College

Community Meeting Participants

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EXECUTIVE SUMMARY



The City of La Crosse is proudly recognized as a center for year-round outdoor recreation. Located between a seven-river ecosystem that includes the Mississippi River and the bluffs carved into the western edge of Wisconsin, the residents and visitors of La Crosse enjoy the benefits of a compact city and walkable downtown alive with street activity. With several miles of bicycling, walking, and hiking trails extending into the countryside, La Crosse has grown into a regional center for active living. It is a city recognized by the League of American Bicyclists as a silver level Bicycle Friendly Community for its recent advances in bike lanes, shared lane markings, trails, and numerous events and programs to encourage active transportation.

It is the vision of La Crosse to be a vibrant community that encourages walking and bicycling for transportation and recreation. With this vision, La Crosse aims high:

- Be recognized as a Gold Level Bicycle Friendly Community
- Be recognized as a Gold Level Walk Friendly Community

This Bicycle and Pedestrian Master Plan is prepared as an important step toward advancing the transportation network of La Crosse towards one that supports and encourages transportation for all users, ages, and abilities. It is one that promotes the concept of Complete Streets, which is a transportation system that makes necessary and adequate accommodations to ensure that all bicyclists, pedestrians, motorists, and transit riders are welcomed, protected, and respected.

The City's transportation network was reviewed and analyzed to determine the current state of affairs with respect to bicycling and walking. Programs, policies, and practices were reviewed. The analysis phase of this plan dug into current conditions in the categories known as the "Five E's": Engineering, Education, Encouragement, Enforcement, and Evaluation.

Upon this thorough examination of La Crosse, a series of benchmarks were established that comprise the to-do list of this Bicycle and Pedestrian Master Plan. The sections that follow summarize the key recommendations that will guide La Crosse in diversifying, strengthening, and improving the City to encourage walking and bicycling for transportation and recreation.

Top Ten Recommendations

The following recommendations in the Bicycle and Pedestrian Master Plan were popular among participants at public meetings, and include:

- 1. Appoint a Bicycle and Pedestrian Coordinator and establish a standing Bicycle and Pedestrian Committee.
- 2. Identify critical pedestrian crossings and improve with pavement markings, signs, and traffic control devices
- 3. Implement a plan to correct all curb ramps at intersections, eliminate tripping hazards, and sidewalk gaps
- 4. Reduce travel speeds on Losey Boulevard and West Avenue to the speed limit
- 5. Make connections between on-street bike facilities and the Gundersen Lutheran trail network
- 6. Begin transforming King Street into a Bike Boulevard
- 7. Begin work to create two additional Bike Boulevards on 17th Street and Farnam Street
- 8. Continue planning for a continuous, riverfront trail in La Crosse
- 9. Complete a connected network of on-street bicycle facilities and directional signs in the heart of La Crosse
- 10. Begin work on redesign of the US 14/61 Wisconsin 35 intersection

These benchmarks are intended to be met through an expansion of the city's current practices with respect to the sidewalk repair program, the La Crosse Safe Routes to School Plan implementation, and improved coordination with private development, state, and regional agencies, and would be implemented over several years. The Bicycle and Pedestrian Master Plan includes the following highlights:

Engineering

- Increase the number of on-street and off-street bicycle facilities.
 More than 90 miles of on-street and off-street bicycle facilities are recommended. This includes extending some of the city's existing bike lanes and shared lane markings.
- Complete a continuous, riverfront trail in La Crosse. The La Crosse riverwalk and riverfront trail is almost continuous from the City's northern limit to the south. The City should construct shared use paths or by providing on-street connections to fill in the remaining gaps in the trail.
- Develop a network of bike boulevards. Residents and agency representatives alike stated that adding a bike lane to a road doesn't necessarily make it bicycle friendly, and some people still won't feel safe, despite data pointing to improved safety conditions. For some, additional treatments are needed. The plan includes recommendations to transform some residential streets to bike boulevards. These streets still allow automobile traffic, but include innovative treatments to reduce speeding, cut-through traffic, and encourage travel speeds that are comfortable for everyone.

- Increase the number of streets with sidewalks or walkable, paved shoulders. There is a portion of the population that does not support the inclusion of sidewalks as part of complete streets in La Crosse, despite data showing an 88% reduction in crashes when sidewalks are added to roads. While sidewalks don't always solve the problem, this plan identifies where they are most needed. In some areas, revisions to the design of the road to include wide shoulders can address the need to accommodate pedestrians while also ameliorating winter snow maintenance and drainage concerns.
- Increase the number of intersections that are accessible in accordance
 with the Americans with Disabilities Act (ADA). This recommendation
 addresses the need to update the City's ADA Transition Plan, which
 seeks to complete the requirement improvements within public
 rights-of-way. Maps have been prepared showing how the City
 should prioritize its efforts at improving curb ramps, crosswalks, and
 sidewalk gaps or tripping hazards.
- Switch signals to pretimed cycles to better accommodate pedestrians and bicyclists, and also better control traffic speeds. Some signals in La Crosse include detector loops buried in the pavement to make traffic signals change in response to automobile traffic needs. While intended to maximize efficiency, detector loops do not accommodate pedestrians attempting to cross with the signal, and some loops cannot detect the presence of a bicyclist. Several recommendations are included in the plan to help the city switch some signals to pretimed cycles to correct this problem, or provide workarounds in the form of more sensitive loop detectors, "default to WALK" settings, and pedestrian push buttons.

Education

- Continue to provide bicycle and pedestrian safety training for school, city staff, and law enforcement officials. The City has several programs within various agencies that address pedestrian and bicyclist safety. This plan recognizes each program and recommends not only a continuation of these programs, but encourages interagency coordination to take advantage of not-for-profit and public agency educational resources.
- Conduct educational campaigns on bicycle and pedestrian safety. In addition to training professionals on safety, public education is an important part of keeping everyone up to date on the latest safety improvements as well as general information about new and changing rules of the road, best practices and behaviors that are shown to keep all roadway users safe.

Encouragement

- Continue to close streets to traffic for festivals and public events.
 Hosting special events helps to get residents and visitors out walking
 and helps increase the exposure of businesses in the areas where
 festivals and public events are held.
- Achieve 100% school district participation in Safe Routes to School.
 Safe Routes to School participation opens up funding opportunities and grants to address safety needs with respect to walking and bicycling to school, improving conditions for students, parents, and educators.
- Achieve Bicycle Friendly University status for all colleges and universities in La Crosse. La Crosse can continue to attract quality students who are increasingly looking for a campus that accommodates students who choose not to drive. Additionally, making college campuses more accommodating for bicycling and walking improves safety for students as well as faculty, staff, and visitors.

Enforcement

- Reduce travel speeds on major roadways to the speed limit. Speed limits may be enforced, but enforcement alone will not always reduce speeding by the most ardent offenders. Instead, the City should reclaim its streets through the design of the roadway and timing of the traffic signals. In fact, it is possible to maintain adequate roadway capacity while controlling for speed. When this is achieved, all roadway users benefit from improved safety.
- Increase the number of pedestrian patrols. Pedestrian police patrols
 in areas where pedestrian activity is observed or desired can help
 to make pedestrians feel more comfortable, and help the police
 department identify areas where additional enforcement may yield
 the best results.
- Set up mobile speed feedback signs along La Crosse streets to reduce speeding and determine where enforcement measures would be most beneficial. Police resources are limited, so installing speed feedback signs helps to collect data on where speeding may be a problem.

Evaluation (and Planning)

- Hire or designate the City's Bicycle and Pedestrian Coordinator.
 While the plan identifies various agencies and groups that have
 a stake in implementing the plan, a sole designee or office should
 be responsible for managing the implementation of the Bicycle and
 Pedestrian Master Plan.
- Conduct routine pedestrian and bicycle traffic counts in La Crosse to get an estimate of where people are walking and bicycling. If it can be measured, it can be improved. The City occasionally collects data on walking and bicycling, but a central, focused effort that collects data on an annual basis can provide useful data that helps the City get access to grants and other funding opportunities to improve bicycling and walking.

EXISTING CONDITIONS REPORT



INTRODUCTION

This report provides an overview of the existing conditions of the City of La Crosse with respect to its bicycle and pedestrian network. This background will set the stage for development of the Bicycle and Pedestrian Master Plan.

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The existing conditions review began with a week-long site visit, which included interviews with ten stakeholder groups from a variety of backgrounds, including school leaders, emergency services, and health providers. The stakeholder interviews provided insight to La Crosse's strengths in its bicycle and pedestrian networks and an introduction to what challenges the city faces. A summary of the stakeholder input is provided.

Included is a review of existing plans, as they relate to bicycle and pedestrian issues, current bicycling and walking trends in La Crosse, including crashes involving bicyclists and pedestrians, and La Crosse and/or Wisconsin policies, ordinances, and programs that impact bicycling and walking.

All of the above sections are summarized in a section that highlights the barriers and obstacles to making La Crosse more accommodating for bicycling and walking. This includes physical barriers, administrative or policy barriers, and cultural barriers.

To overcome these barriers, benchmarks were reviewed that will help La Crosse improve its bicycling and walking environment. The League of American Bicyclist Bicycle Friendly Communities (BFC) and the Pedestrian Bicycle Information Center Walk Friendly Communities (WFC) programs were reviewed.

Through implementation of the recommendations contained within these programs, La Crosse aims for gold-level status or higher as a bicycle and walk friendly city. These programs serve as a good guide for the steps communities should take to improve conditions for bicycling and walking.

1. STEERING COMMITTEE

The preparation of this plan was led by the Steering Committee, which was comprised of City, County, and La Crosse Area Regional Planning Committee staff, as well as stakeholders interested in improving the bicycling and walking environment in and around La Crosse. Meetings were held with the Steering Committee at regular intervals to review plan documents, receive progress updates on the plan, review public comments, and to collect comments on recommendations.

2. STAKEHOLDER INTERVIEWS

Ten group interviews were conducted with various stakeholders during the week of December 5, 2011. The interviews were conducted as group discussions and allowed stakeholders to recount the successes and the challenges with respect to walking and bicycling in La Crosse. These discussions also gave stakeholders the opportunity to suggest what this plan should address.

General Comments

There was consensus that La Crosse is well suited for bicycling and walking. The city is flat, has a well-connected street network in a grid pattern, and is compact, making distances between destinations manageable. The city already has a good base for the network with many sidewalks and good trail network. There is also a significant population of potential users of the system among the student population, as well as the outdoor enthusiasts.

However, one of the significant challenges to creating better bicycle and pedestrian networks is that there are only three north-south thoroughfares in the city and all three are heavily traveled by vehicles. They are intimidating or unsafe to many bicyclists and difficult to cross on foot or by bicycle.

Pedestrian Network

The city has a relatively good existing sidewalk network, which is an asset. With the exception of some of the newer developments, most of the residential neighborhoods have sidewalks and La Crosse residents are out using them. On the other hand, one of the challenges the city faces is to fill in the gaps where sidewalks were not installed during development or where new development occurs. New developments are now required to install sidewalks when the property is developed. However, where lots remain undeveloped, the sidewalks are not continuous. There is also resistance by some residents to installing sidewalks, due in part to concerns of keeping sidewalks clear and shoveling snow.

The primary concern raised for pedestrians was difficult street crossings and that many drivers do not yield to pedestrians in crosswalks. The city has been using in-street "yield to pedestrians" signs, which have been helpful, but crossing major streets like Losey, West, and Mormon Coulee remain a challenge due to the traffic volumes and speeds.

Bicycle Network

Stakeholders agreed that the recent bicycle facilities, bike lanes and shared lane markings on several streets, have improved conditions for bicyclists. Participants felt that facilities increased motorists' awareness and acceptance of bicyclists on the streets. The facilities, however, are not part of a complete network. Stakeholders expressed an interest in seeing additional facilities to connect the existing facilities, including the trail network. In addition, the design and installation of the bicycle facilities have not been consistent.

One of the primary concerns raised for bicycling was the lack of clear directional signs. The city has an extensive trail network, but it is difficult to find the trailheads for those unfamiliar with them.

Another concern was that too many adult bicyclists ride on the sidewalks in La Crosse instead of on the street. While this is permitted (except downtown), and often still is the best option for children who do not travel quickly by bicycle, it is less safe for bicyclists than bicycling on street due to frequent conflicts with cars exiting blind driveways, building and storefront doors opening onto the sidewalk, and pedestrians.

SPECIFIC CONCERNS/ PROBLEM INTERSECTIONS

In addition to the general concerns noted above, several specific locations were brought up repeatedly during the interviews:

- West Avenue: at Cass, King, Pine
- Losey Boulevard: at Ward, Mormon Coulee, corridor in general
- Jackson Street: at 9th, 1oth, Market
- 4th Street and La Crosse Street
- 7th Street and Cass Street
- Campbell Road and State Street
- Gillette Street and George Street
- 33rd Street: no sidewalks

These locations may require specific attention in the development of the bicycle and pedestrian master plan.

3. PLAN REVIEW

BIKEWAYS FOR THE LA CROSSE, WISCONSIN AREA (1975) Several plans have been developed by outside agencies that will have an impact on the bicycle and pedestrian network/planning process in the City of La Crosse. Those plans, as they affect the bicycle and pedestrian systems, were reviewed and are summarized here.

In June 1975, Bikeways for the La Crosse, Wisconsin Area was prepared by the La Crosse City Planning Department. This plan built upon the 1974-1976 Overall Program Design for the La Crosse Area and included a Bikeway System Plan element. The plan established the framework for bicycle planning in La Crosse and proposed the first bicycle facility network consisting of bicycle routes, bicycle lanes, and bicycle paths. The plan reviewed bicycle registration data, crashes involving bicyclists, and traffic violations issued to bicyclists. The goals presented are as follows:

- 1. Make bicycling safe in the La Crosse area
- 2. Promote the use of the bicycle as a means of everyday transportation
- 3. Encourage bicycling for recreation, sport, and physical fitness
- 4. Develop a continuous bikeway system for intercity and intracity travel

The plan identified objectives and principles intended to help La Crosse achieve these goals. In addition, the plan also suggested innovative bicycle treatments that are still considered to be very progressive today. This includes protected bicycle lanes, bicycle arterials (referred to today as "bicycle boulevards"), and a recommendation to include bikeway dedication or reservation of right-of-way to be included in a plat of subdivision.

The proposed bikeways map in the plan provided a network of bike lanes and paths, some parts of which have been incorporated to more recent plans that are discussed in more recent plans.

COMPREHENSIVE PLAN (2002)

The Comprehensive Plan was compiled in 2002. Ten years ago, La Crosse was looking to improve its nonmotorized transportation system. The Transportation Plan within the Comprehensive Plan outlines key elements for the transportation system in La Crosse:

- Managing congestion
- Creating environments that offer viable alternatives to driving while reducing travel distances
- Implementing transportation policies that enhance neighborhood livability
- Maximizing use and efficiency of existing investments and reducing future infrastructure construction, reconstruction, and maintenance costs
- Improving safety and mobility

Regarding pedestrian and bicycle travel, the comprehensive plan recognized walking and bicycling as important modes of transportation that require a connected network of facilities to support them. The plan noted that La Crosse has a higher than average level of residents walking and bicycling for transportation. However, the plan calls out a need for design standards for sidewalks and bicycle lanes.

Bicycle and pedestrian facilities combined with appropriate land uses are recognized as a component of developing neighborhoods. A recommended policy would require new residential or neighborhood developments to include a network of sidewalks and bicycle paths to connect residents to key destinations.

Two objectives in the transportation component focus on not just providing facilities for pedestrian and bicycle travel, but include providing amenities that make travel by these modes more appealing. Recommendations include developing a multi-modal transportation planto address, in particular, gaps in the pedestrian and bicycle networks; specific analysis of locations with high crashes; encouragement for walking and bicycling to manage congestion levels; and a focus on incorporating pedestrian and bicycle facilities on arterial and collector streets. Through its recommendations, the comprehensive plan seeks to ensure that walking and bicycling are supported as routine modes of transportation.

CITY VISION 2020 DOWNTOWN MASTER PLAN (2004) The City Vision 2020 Downtown Master Plan was developed in 2004 as an update to the City Vision 2000 Downtown Master Plan. Several of the goals and objectives of the Downtown Master Plan are directly related to bicycle and pedestrian improvements. A major emphasis of the plan is to create better connections to and along the river through the extension of the existing riverwalk, additional trails, a "riverfront drive", and street

connections from the east. A wayfinding system is also recommended, particularly to orient tourists arriving at the Riverside Park levy.

The Downtown Master Plan also presents recommendations for parking, which may have an impact on bicycles and pedestrians. Pertinent recommendations include:

- Reintroduce on-street parking to Second Street
- Determine locations for future parking structures
- Provide landscaped pedestrian connections through parking lots and alleys

HIXON FOREST COMPREHENSIVE PLAN (2005)

The Hixon Forest Comprehensive Plan, adopted in 2005, is the first managing document of the park's 92-year history. The Comprehensive Plan was developed to act as a guiding document in the management and use of Hixon Forest. Among the recommendations in the plan is to "limit the development of additional recreational facilities." Adding trails to the existing land is not recommended.

SOUTH LA CROSSE TRANSPORTATION STUDY (2005)

The South La Crosse Transportation Study was undertaken by the Wisconsin Department of Transportation (WisDOT), LAPC, City of La Crosse, and the Town of Shelby in 2005. The purpose of the study was to address traffic congestion and changing traffic and land use needs, safety concerns, facility deficiencies, and lack of multi-modal accommodation along three connected corridors:

- South Avenue/Mormon Coulee Road between Green Bay Street and US 14/61/State Highway 35 intersection
- 2. State Highway 35 between US 14/61 and the La Crosse/Vernon County line
- 3. US 14/61 between State Highway 35 and County M

The intent of this study was to provide a long-term vision of these corridors. As mentioned, one of the reasons for this study was increasing traffic congestion.

Table 1 shows the traffic projections from the study, based on counts recorded in 2002. The table also includes counts recorded in 2008 as a comparison to gauge the relevance of the projections. In most cases, traffic counts conducted in 2008 exceed or are on par with the projections for 2007. Two locations actually meet or exceed the traffic projections for 2017. Only one segment had a 2008 traffic count below the 2007 projection.

Table 1: South Avenue/Mormon Coulee Traffic Counts and Projections Source: South La Crosse Transportation Study, p. 8. Among the reasons for the study was inadequate multi-modal accommodation. The study reports that the challenges faced by pedestrians along South Avenue/Mormon Coulee Road include wide crossings and bus stops with no connecting sidewalks. Some portions of Mormon Coulee have sidewalks only on one side. The sidewalks were also noted to be narrow with no buffer zone.

Segment of South Avenue/Mormon Coulee	Traffic Counts		ffic ctions	Traffic Counts		Traffic Projections	
	200 <mark>2</mark>	2004	2007	2008	2017	2027	2030
33rd St - Shelby Rd	20,400	21,000	21,900	24,900	24,900	27,900	28,800
Shelby Rd - Birch St	<mark>22,1</mark> 00	22,800	23,900	29,400	26,300	31,000	32,100
Birch St - Losey Blvd	24,200	26,000	28,700	29,300	31,900	34,900	35,800
Losey Blvd - Victory St	22 <mark>,8</mark> 00	23,000	23,000	22,600	26,300	29,100	22,600
Victory St - Ward Ave	-	-	-	19,200	-	-	-
Ward Ave - 16th St	24,9 <mark>0</mark> 0	25,500	26,500	25,200	28,500	30,400	31,000
16th St - West Ave	25,000	25,500	26,300	26,400	28,500	30,400	31,000
West Ave - Green Bay St	16,700	17,200	18,000	18,500	20,500	23,000	23,800
Green Bay St - North	17,200	17,800	18,700	18,900	19,900	21,100	21,500

The other two segments studied had vastly different land uses along them. No sidewalks exist along US 14/61. The report notes that "there are no major pedestrian destinations...in the immediate vicinity along US 14/61." During field observations, however, a goat trail (a path worn by pedestrian travel) was observed on the south side of the street.

The Pammel Creek Trail is a paved shared use trail that parallels Mormon Coulee Road briefly and then continues north, using an underpass to separate the bicyclists and pedestrians from Mormon Coulee.

State Highway 35 has wide shoulders, which can accommodate bicycle travel and potentially pedestrian travel as well. Although, the report notes that in part due to the land use, pedestrian travel is less likely. None of the streets studied have formal bicycle facilities, although US 14/61 has paved shoulders that accommodate bicycling. However, it is intimidating to most bicyclists and is used by only a select group of skilled riders due to hills, high levels of traffic, and vehicle speeds.

Two transit routes operate on or in the vicinity of South Avenue/Mormon Coulee Road. The study notes that the transit stops are widely spaced and some are not connected to a sidewalk network nor have marked crosswalks for the pedestrian crossings.

LA CROSSE BLUFFLAND PROTECTION PROJECT MASTER PLAN (2007) Among the recommendations in this plan are recommendations to change the intersection of US 14/61/WIS 35. However, pedestrian accommodations only are mentioned in the crossing of WI 35 south of the intersection. No other accommodations are discussed between the US 14/61/WIS 35 interchange between Southern Bluffs Road and 33rd Street. Bicycle accommodations are not mentioned.

A master plan was prepared for the La Crosse Bluffland Protection Program in 2007 to preserve the blufflands surrounding the city of La Crosse and prevent development from degrading or eliminating the scenic, historic, and environmental resources of the blufflands. Additionally, the master plan prepared recommendations that would provide public access to the blufflands while diverting traffic and development away from the most sensitive and fragile ecosystem areas of the blufflands.

As part of the master plan, a conceptual blufflands trail was proposed, and recommendations were made to provide links to this trail from other trails in the area as well as from city roads. In addition, the recommendation of long-term stewardship of the blufflands identifies several entities, including local, county, and state agencies as potential partners in the preservation of the blufflands.

As the plan relates to this Bicycle and Pedestrian Plan, the recreational benefit recommendations included a proposed conceptual trail through the blufflands. This proposed conceptual trail provides guidance for where on-street bicycle facility connections and pedestrian connections should be made in order to connect and provide access to the bluffland trail network.

2008-2015 TRANSIT DEVELOPMENT PLAN FOR THE LA CROSSE MUNICIPAL TRANSIT UTILITY The Transit Development Plan (TDP) for the La Crosse Municipal Transit Utility (MTU) provides guidance for expanding and improving transit in the La Crosse area. The TDP identifies the needs for improved transit service, including providing service to currently underserved areas, providing mobility to employment for low-income persons, providing options in areas with significant amounts of commuter traffic, and to help alleviate traffic congestion.

MTU provides transit service, a transfer center, and manages park-andride facilities, as well as paratransit service. The three main purposes of the TDP are:

- 1. Complete a transit development plan
- 2. Continue transit planning activities outlined in the 2005 Metropolitan Transportation Plan
- 3. Recommend system and service improvements to fixed-route transit

The TDP provides recommendations to improve operational efficiency while also expanding transit's reach within the La Crosse region. MTU encourages bicycling and walking as a component of the transit network. Bicycle racks have been installed at the transit center, at park-and-ride locations, and all MTU buses have been equipped with bicycle racks and wheelchair lifts.

The plan also notes that the quality of transit service is affected by environmental factors, such as accessibility of the pedestrian environment, walking distance to bus stops, and amenities provided at bus stops. Chapter 4: Assessment of MTU Operations and Service included an assessment of existing sidewalks surrounding transit stops. Sidewalk conditions in the vicinity of all signed stop locations were assessed in 2005. Implementation of the TDP includes the recommendation to make improvements at bus stops, which was incorporated into the implementation strategy of this plan, located in Chapter 5.

Recommendations from the Transit Development Plan also included improvements to bus stops and bus routes to better serve transit riders. This bicycle and pedestrian master plan incorporates these recommendations and sought to develop a walking assessment that provided an inventory of bus stops within La Crosse to help the City track the improvement of sidewalks, crosswalks, and bus stops.

JOINT SUSTAINABLE PLAN (2009)

The City of La Crosse and La Crosse County Strategic Plan for Sustainability was adopted in 2009. The plan was undertaken to identify strategies for the city and county to reduce the economic impact of their services and practices.

One of the goals for the City of La Crosse was to develop a Complete Streets ordinance to ensure streets are designed to accommodate bicycles and pedestrians.

County goals related to pedestrians and bicyclists included in this plan were to incorporate bicycles into the County fleet for staff use, and plan for and fund better connections for pedestrians and bicyclists.

2035 COULEE REGIONAL BICYCLE PLAN (2010)

The 2035 Coulee Regional Bicycle Plan (Regional Bike Plan) was developed by the La Crosse Area Planning Committee (LAPC) in May 2010. The purview of the LAPC is the metropolitan planning area (MPA), which includes the City of La Crosse and portions of La Crosse County in Wisconsin and portions of Houston and Winona Counties in Minnesota. The Regional Bike Plan makes recommendations in support of the following goals:

- 1. Improve the mobility of bicyclists
- 2. Promote bicycling as a sustainable transportation alternative to driving
- 3. Increase the safety of all bicyclists in the region
- 4. Promote bicycle-friendly land use policies
- 5. Make the La Crosse area a bicycling destination

These recommendations cover the five E's: education, encouragement, enforcement, engineering, and evaluation. Recommendations for accommodating bicyclists on streets were developed considering a number of factors, including existing roadway width and number of lanes, traffic volumes and speeds, and land use. On-street bikeway recommendations consisted of bike lanes, shared bicycle/parking lanes, striped travel lanes, and signed routes. Trails were also recommended as off-road facilities. These facilities made up recommended local and regional bike routes.

Table 2: La Crosse Short-Range Infrastructure Recommendations (2011-2012) In total, more than 90 recommendations for facilities within the City of La Crosse were included in the Regional Bike Plan. These recommendations

Street	Recommended Facility
Clinton Street	Road Diet with Bike Lanes
3rd Street	Bike Lanes and Shared Lane Markings
4th Street	Bike Lanes and Shared Lane Markings
7th Street	Bike Lanes and Shared Lane Markings
La Crosse Street	Bike Lanes and Shared Lane Markings

include general recommendations to be implemented by all communities with the MPA as well as specific, community-based improvements, such as facility recommendations. The facilities that were recommended for La Crosse in the short term, to be implemented within one to two years, are listed in Table 2.

The LAPC included illustrations for the design of bike lanes and shared lane markings in Appendix E of the 2035 Coulee Regional Bicycle Plan, adopted on May 19, 2011. The recommended standards are based on American Association of State Highway and Transportation Officials (AASHTO), the Manual on Uniform Traffic Control Devices (MUTCD),

PARKS AND RECREATION OUTDOOR STRATEGIC PLAN 2010-2015

and other standards. The illustrations were selected to be specific to the recommendations in the 2035 Regional Bicycle Plan and do not represent the complete guidance offered by AASHTO.

The Parks and Recreation Outdoor Strategic Plan (Parks Strategic Plan) outlines a short-term strategy for the La Crosse Parks and Recreation Department. Among other assets, the department oversees La Crosse's existing 45 parks and 27 miles of shared use trails.

The Parks Strategic Plan identifies five additional trails, which would add approximately 11 miles to the existing trails system. The proposed trails are:

- Black River Trail (Copeland Park to Riverside Park)
- Goose Island Trail (Marion Road to County Road GI)
- Mormon Creek Trail (Highway 35 to Highway 61)
- North Bank Trail (Monitor Street to Copeland Avenue)
- Northside Connector (Livingston Street to Oak Street Connector Bridge)

The Parks Strategic Plan also establishes the objective of upgrading signs and maps for outdoor recreational facilities.

The Summary Master Plan for the La Crosse Bluffland Protection Program (LBPP) also included in the Parks Strategic Plan. The LBPP is a partnership between the City of La Crosse and the Mississippi Valley Conservancy to protect the scenic and diverse blufflands on the outskirts of the City, covering an area from County Highway B on the north to US 14/61 on the south. The project aims to maintain the land as a natural refuge for outdoor recreation. An 8-mile trail network is proposed through the blufflands with a trailhead connecting to County Highway B across the street from the La Crosse River State trailhead on the north. The trailhead at the southern end is yet to be determined.

4. BICYCLE AND PEDESTRIAN VOLUMES

One of the important indicators of the state of the bicycle and pedestrian system in a community is the current level of bicycling and walking. While robust data on bicycle and pedestrian volumes are hard to come obtain, some background information can be drawn from several sources.

La Crosse County has been conducting annual 12-hour bicycle traffic counts at locations where bicycle improvements were made. Funded by the Communities Putting Prevention to Work grant, these counts are conducted where shared lane markings were installed. The following table shows that, overall, bicycle travel at the locations identified below have doubled between 2010 and 2012:

Table 3: Bike Traffic Counts Source: La Crosse County http://bfw.org/2012/09/11/bikecounts-double-in-la-crosse/

Location	2010	2012
7th Street & Main Street	83	152
7th Street & Farnam Street	56	109
Nakomis Avenue & Clinton Street	77	221
3rd Street & Main Street (Onalaska)	61	77
Total	277	559

The Regional Bike Plan noted that the number of people commuting by bike to work in the La Crosse region decreased by 24.6% between the 1990 and 2000 Census. A survey conducted as part of the Regional Bike Plan revealed that 92% of riders were on the sidewalk and only 17% of riders wore helmets, confirming what the stakeholders reported.

The US Census American Community Survey records how people travel to work. According to these data, the number of people commuting to work by bicycle more than doubled from 2000 to 2007. However, biking and walking to work decreased 11% and 20%, respectively, between 2007 and 2010.

La Crosse has a very active Safe Routes to School program. A survey of parents conducted at nine schools provides additional background on how people are getting around. Roughly 20% of students are walking or biking to school. Among students who live within ¼-mile of their school, roughly 60% of them walk or bike to school. The percentage drops significantly for students living ¼ to 1-mile from school to between 18% and 28%. However, parents reported that over 60% of those students have asked permission to walk or bike to school. The top two concerns for parents were the amount of automobile traffic and the safety of intersections and crossings.

5. BICYCLE AND PEDESTRIAN CRASH ANALYSIS

As recently as September 2012, pedestrians in La Crosse have been struck and killed by motorists traveling on roadways where there are no accommodations for pedestrians. Pedestrians waiting for buses or attempting to cross the street to complete their trip are difficult to see and are afforded little or no protection from approaching motorists, many of whom are unaware of the requirement to or are unable to stop in the presence of pedestrians on major roads.

This highlights the need to make infrastructure improvements to La Crosse roadways that not only enhance the visibility of pedestrians to motorists, but also results in infrastructure that encourages safe behavior that is consistent with State Law.

This section contains a review of crashes involving pedestrians and bicyclists between 2000 and 2010. The data reviewed all crashes that occurred in La Crosse County. A portion of these data - crashes that occurred within the City of La Crosse between 2005 and 2009 were geocoded so that they could be shown on a map.

Crashes can help to identify locations that are unsafe for bicyclists and pedestrians or that are in need of improvements to make corridors or crossing safer for pedestrians, bicyclists, and motorists. The data also may reveal trends in behaviors contributing to the crashes.

Between 2005 and 2010, 43 pedestrians and 66 bicyclists were involved in crashes in La Crosse. Of those, two pedestrians were killed. No fatal bicycle crashes were recorded during this time. Crashes were geocoded for the years 2007 to 2009 and are shown in Map 1.

As can be seen on the map, a cluster of bicycle crashes occurred along La Crosse Street and West Avenue, with some additional bicycle crashes on 4th Street and Cass Street. Pedestrian crashes were clustered in the downtown along 3rd Street and 4th Street, along Jackson Street, and West Street.

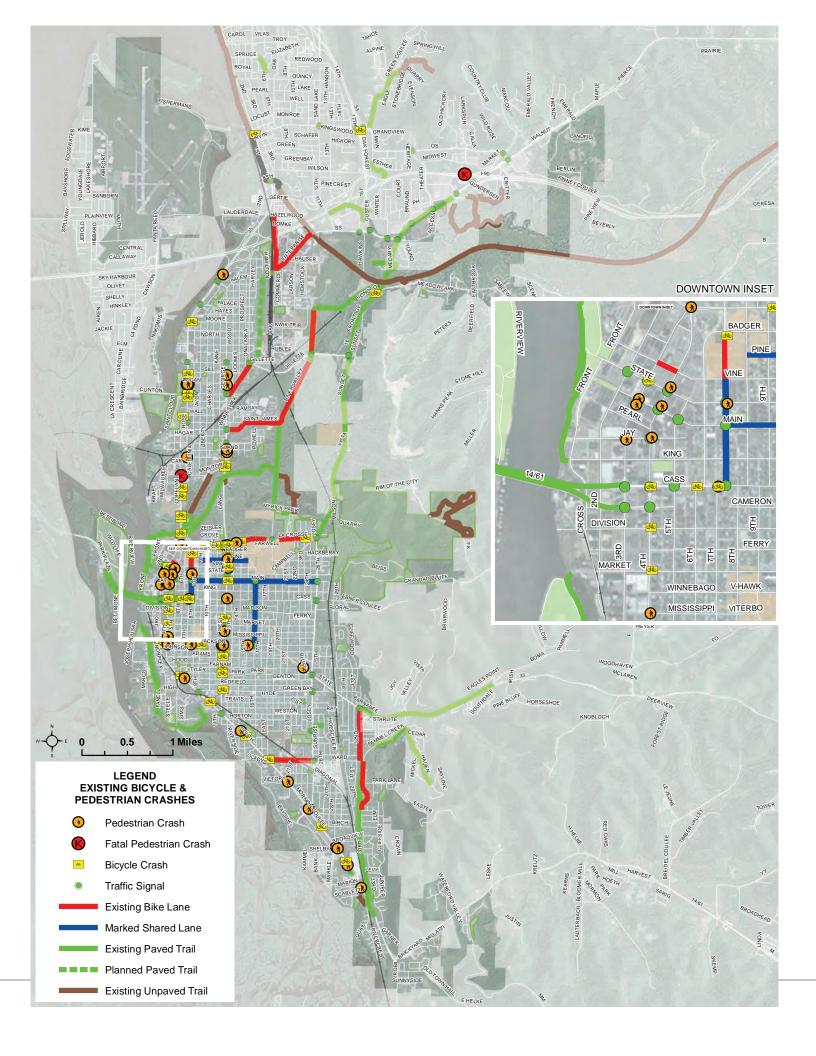


Figure 2: Crashes Involving Pedestrians and Bicyclists in La Crosse (2007 - 2010) Source: Cty of La Crosse

Figure 2: Crashes Involving Pedestrians and Bicyclists in La Crosse (2007-2010) shows that crashes increased for pedestrians and bicyclists between 2007 and 2010. This may be due to several factors including increased bicycling and walking or increased reporting. Data on the number of people walking and bicycling (exposure) are not available on an annual basis, so it difficult to determine to what extent exposure has to do with the increase. However, as indicated in the Census data and bicycle count data mentioned previously, bicycling volumes are increasing at a rate greater than crashes.

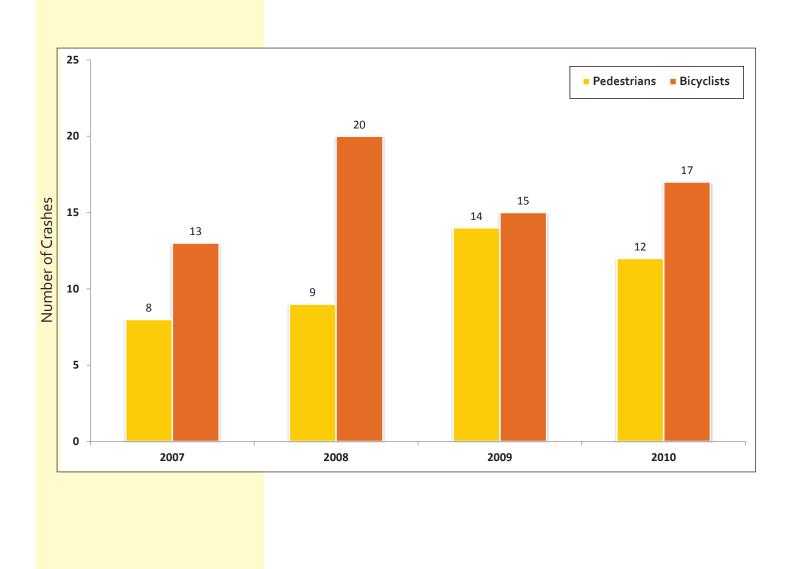


Figure 3: Pedestrian and Bicycle Crashes La Crosse by Time of Day (2007 - 2010) Source: City of La Crosse Figure 3 shows pedestrian and bicycle crashes by time of day for the years 2007 - 2010. The figure shows that pedestrian and bicycle crashes most frequently occur in the afternoon and evening hours. The peak hour for both types of crashes occurred between 4PM and 5PM.

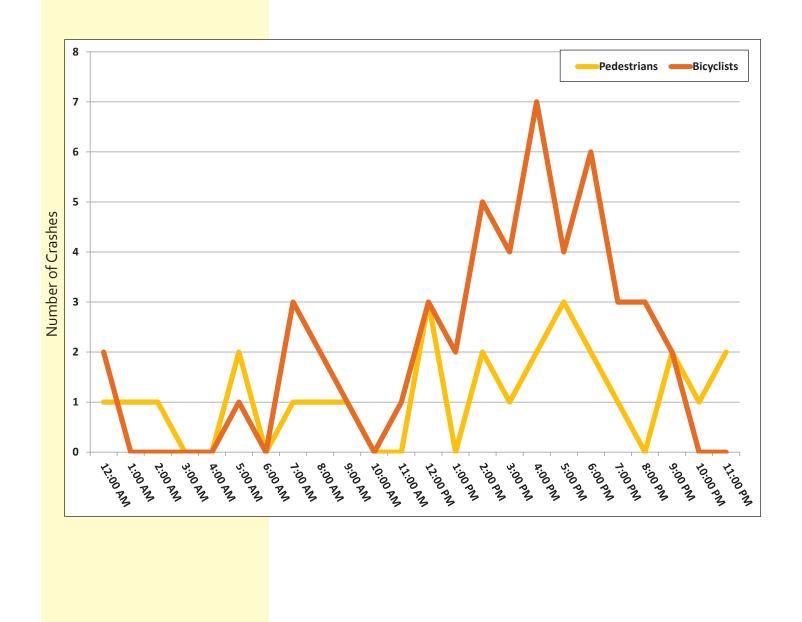
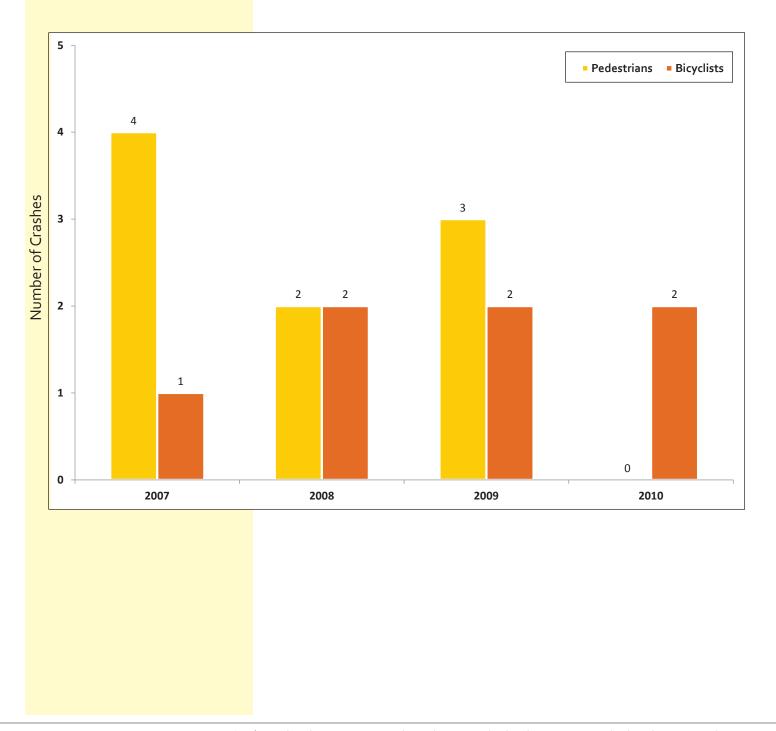


Figure 4: Hit and Run Crashes Involving Pedestrians and Bicyclists (2007 - 2010) Source: City of La Crosse

Figure 4: Hit and Run Crashes Involving Pedestrians and Bicyclists (2005-2010) shows that hit and run crashes range between one and four crashes per year for pedestrians and bicyclists.



6. INVENTORY ANALYSIS

BICYCLE NETWORK

The opportunities for off-street bicycling are extensive in and around La Crosse. Roughly 21 miles of off-street multi-use trails exist within the city limits. These trails are part of a larger regional network. Figure 5 on the next page shows existing bicycle facilities in La Crosse.

On-street Facilities

On-street bicycle facilities include 6.5 miles of bike lanes, 3.9 miles of marked shared lanes, and 0.44 miles of contra-flow bike lanes. Overall, La Crosse has 266 miles of roadway, 20 miles of which are designated as arterials. Approximately 25% of the City's arterials have a bicycle facility on them.

The Regional Bike Plan reported that the City had bike lanes on 0.5% of its streets, or 2.1% of road miles as of January 2010. The 6.49 miles that currently exist are a significant increase within the past two years. However, there are gaps in the network that limit bicyclist connectivity. Signed routes address some of the gaps in this system, but GIS data on total route miles are not available.

Bicycle Parking

Bicycle parking is an important element of the bicycle network. The city of La Crosse has 54 bike racks with capacity for 275 bicycles throughout the city, with a concentration in the downtown.

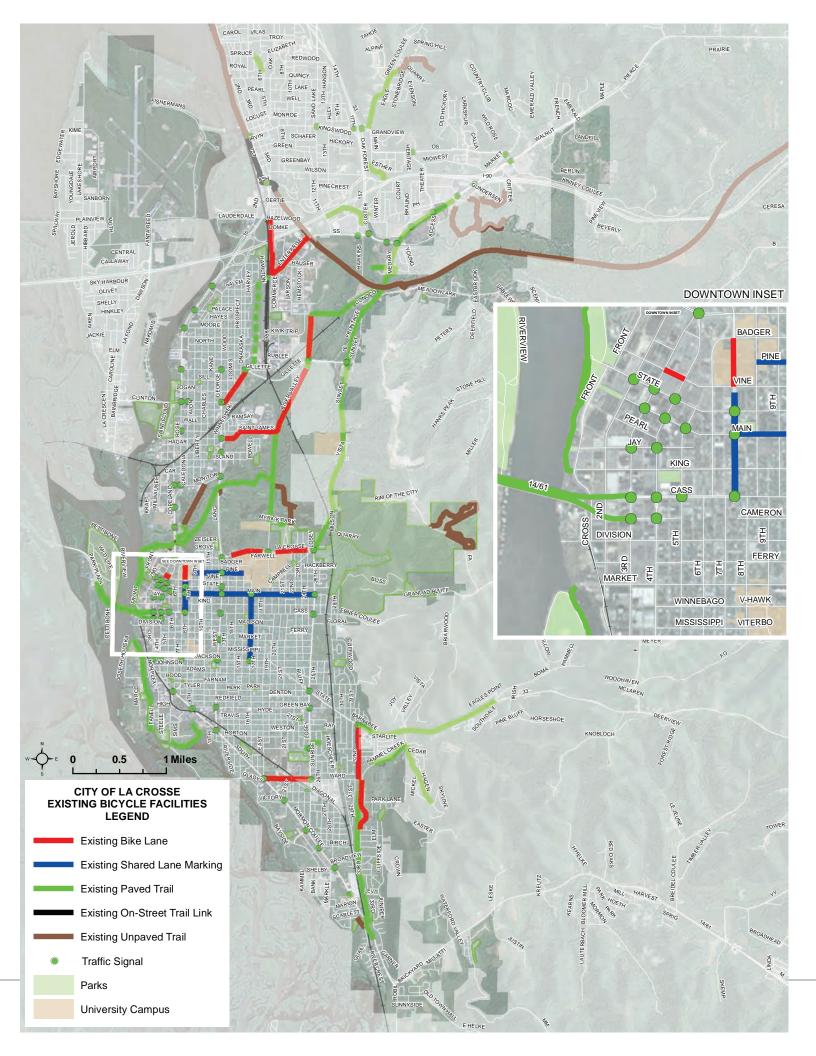
Recently installed racks are popular among bicyclists and business owners. Additionally, bike lockers are available at the transit center and are available to bicyclists interested in longer term parking or more secure parking than bike racks.

The La Crosse YMCA and La Crosse County contribute to Communities Putting People to Work (CPPW), which provided funding to install the city's first bike corral in La Crosse. The on-street bike corrals substitute an automobile parking space with room for 12 bikes. The bike corral is dismantled during the winter months to accommodate snow removal on the street. Due to their popularity, the city and business owners are considering additional bike corrals.

Bicycles and Transit

MTU installed bike racks on its bus fleet in 1999 to expand transit choices for residents in La Crosse. Early in implementation, use of the bike racks required a permit as a means to instruct bicyclists on proper use of the racks. As use increased and understanding proliferated, MTU eliminated the permit as a requirement for using the bus bike racks.

According to MTU, the bus bike racks were popular soon after their implementation and MTU estimates approximately 3,000 transit boardings include bicycles each year.



PEDESTRIAN NETWORK

The City maintains a GIS database of sidewalks that includes the width and condition of the sidewalks. Sidewalk condition was recorded in 2007. Sixty percent of the streets in La Crosse have sidewalks on one or both sides of the street.

Sidewalk Inventory

In April 2012, the City embarked on a major pedestrian assessment task to update these database and collected new data. Through the use of smartphone applications and web-based mapping services, residents, city staff, and others were able to map and collect data on the city's transportation network, including pedestrian crosswalks, bus stop locations, curb ramps, and gaps in the sidewalk network.

Table 4: Sidewalk Inventory

Streets With Sidewalks On:	Percent
Both Sides	52%
One Side	8%
None	34%
No Data/Unknown	6%

Table 5: Sidewalk Condition

Sidewalk Condition	Percent
Excellent	18%
Good	46%
Fair	1%
Poor	8%
No Condition Reported/ Unknown	31%

The City GIS database indicates that 64% of the streets have sidewalks in excellent or good condition. The sidewalk inventory indicates that 34% of streets have no sidewalks.

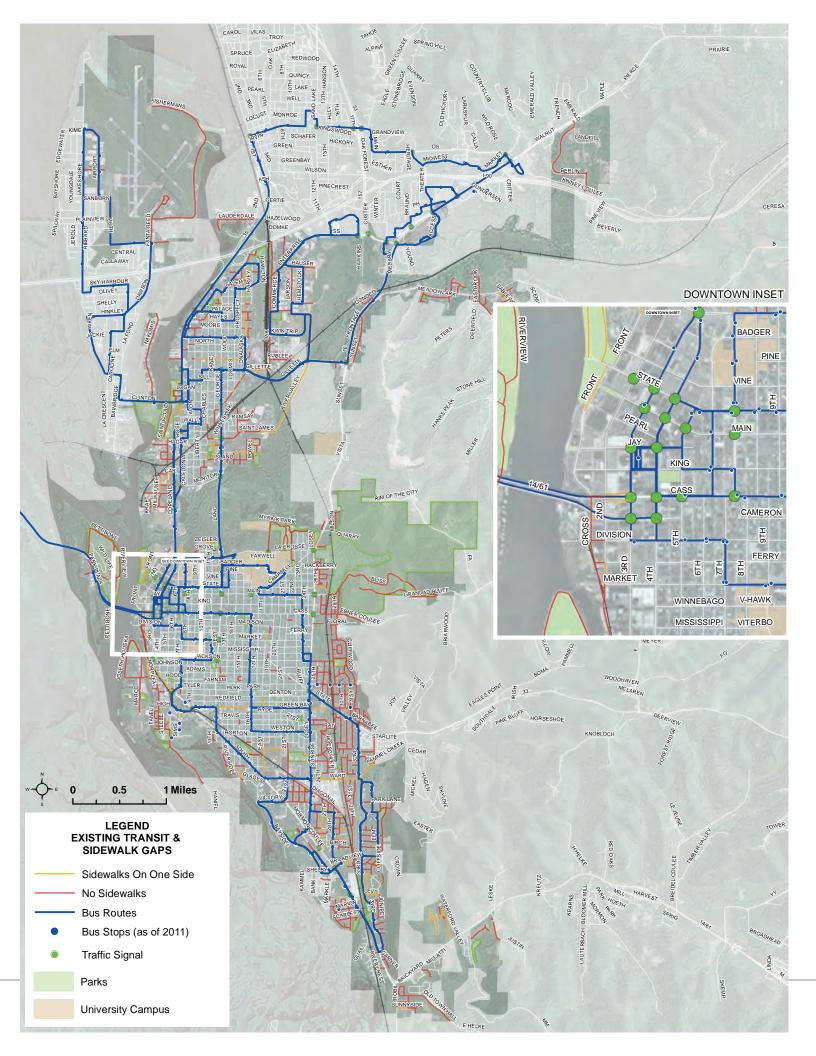
Pedestrian Crossings

La Crosse maintains an inventory of 266 marked crosswalk locations in the city. Twenty-four of those (9%) are mid-block crossings.

There are three rectangular rapid flashing beacons (RRFB) in the city. One is located towards the south end of Mormon Coulee Road and facilitates crossing near a school. There were some concerns over the RRFB on a major street that uses traffic signal progression to improve vehicular mobility.

Pedestrian refuge islands are also used to reduce crossing distances and to improve pedestrian safety while crossing. Two pedestrian refuge islands were installed on West Avenue where large volumes of students are crossing to the University of Wisconsin – La Crosse.





7. EXISTING POLICIES, ORDINANCES, AND PROGRAMS

The City of La Crosse has developed a variety of successful policies, ordinances, and programs which have improved safety and encouraged more people to walk and bike as a form of transportation and recreation. Other La Crosse area partners have also implemented policies and programs which have greatly contributed to the progress the City has made in promoting walking and bicycling.

CITY OF LA CROSSE POLICIES AND ORDINANCES

Green Complete Streets Ordinance

On August 11, 2011, the La Crosse City Council adopted a Green Complete Streets Ordinance that was incorporated into the Municipal Code Chapter 5.18, which reads, in part:

The purpose of this ordinance is to ensure that the streets of the City of La Crosse provide safe, convenient, and comfortable routes for walking, bicycling, and public transportation, encourage increased use of these modes of transportation, enable convenient travel as part of daily activities, improve the public welfare by addressing a wide array of health and environmental problems, and meet the needs of all users of the streets, including children, older adults, and people with disabilities.

Policy for Detection Loops at Traffic Signals

La Crosse has installed bicycle detection loops at traffic signals along bike routes. The city now requires the installation of video detection systems at all new fully actuated traffic signals.

Policy for Prioritizing the Installation of Sidewalks

In 2006, the La Crosse City Council passed a resolution that establishes the following priorities for sidewalk installation and that these priorities should be implemented through the Capital Budget Process:

Priority 1: Install sidewalks on routes to schools and leading to City Bus Stops.

Priority 2: Install sidewalks adjacent to or along any worn path in grass or dirt on City property.

Priority 3: Install sidewalks on all arterial and collector streets.

Priority 4: Fill in sidewaslk where blocks have partial sidewalks.

Priority 5: Install sidewalks on streets where no sidewalks exist on their side of the block only where nore than fifty (50) percent of the owners request the sidewalk.

Sidewalk Construction Ordinance

Municipal Code Chapter 5.02, Sidewalk Construction, lists the minimum sidewalk width to be six (6) feet, material to be concrete, and that construction must meet other specifications on file at the City Engineer's office. The Pedestrian Master Plan section of this plan contains prioritization criteria for where sidewalks should be installed first.

Sidewalk Snow, Ice, and Debris Removal Ordiance Municipal Code Chapter 5.08, Snow, Ice, and Debris Removal states that owners of any building fronting upon or adjoining any street shall clean the sidewalk of snow and ice, within twenty-four (24) hours after it ceases to fall. For corner lots or crosswalk locations, the owner shall also keep free from snow and ice any and all curb ramps, extending past the curb and gutter, to the edge of the street pavement.

Sidewalk Requirement for Subdivisions Municipal Code Chapter 14.23 (F), Required Improvements requires the construction of sidewalk on one side of all frontage streets and both sides of all other streets within the subdivision. The construction shall be in accordance with City Engineer Standards and wider sidewalks may be required in the vicinity of schools, commercial areas, and other places of public assemblage.

There are several locations in the city that were developed without requiring the installation of sidewalks as a condition of development. In recent years, there have been requests by property owners to remove portions of sidewalks that are viewed as not connected to the sidewalk network.

Pedestrian Route and Bike Parking Requirement for Private Development Municipal Code Chapter 15.46 (D) (E), Multi-Family Housing Design Standards, requires a paved pedestrian route from the sidewalk or street to the main building entrance and from the parking area to the nearest building entrance. In addition, bike parking shall be provided at one space per three bedrooms. The Code gives additional specifications for the bike parking style and location.

Municipal Code Chapter 15.47 (D) (E), Commercial Development Design Standards, requires a paved pedestrian route from the sidewalk or street to the main building entrance and from the parking area to the nearest building entrance. The bike parking requirement for Commercial Developments is one (1) space per ten (10) automobile parking spaces or one (1) space per 20 employees, whichever is greater.

Regulation of Bicycles

Municipal Code Chapter 9.15, Registration and Regulation of Bicycles, lists several definitions pertaining to bicycling and the requirements for bicycle registration. This Code section also lists also the operating rules for bicyclists, bicycle parking rules, and enforcement procedure for violations.

Traffic Calming Policy

The City of La Crosse Traffic Calming Policy, released by the Office of the City Engineer, is a policy that states,

"The immediate purpose of traffic calming is to reduce the speed and volume of traffic to acceptable levels ("acceptable" for the functional class of a street and the nature of bordering activity). Reductions in traffic speed and volumes, however, are just means to other ends such as traffic safety and active street life."

The City uses this policy to pursue improvements on City streets to reduce the negative effects of motor vehicle travel including speeding, or excessive cut-through traffic.

COUNTY AND STATE POLICIES

Wisconsin Department of Transportation Complete Streets Rules (Trans 75) The Wisconsin Department of Transportation (WisDOT) administrative code, updated in December 2010, states that WisDOT:

"Shall include bikeways and sidewalks in all new highway construction and reconstruction projects funded in whole or in part from sate funds or federal funds appropriated under s. 20.395 or 20.866, Stats."

Referred to as Trans 75, this ordinance makes clear the intention of the State of Wisconsin to incorporate bicycle and pedestrian facilities on Wisconsin roads. La Crosse County, the City of La Crosse, and the La Crosse Area Planning Committee followed suit with their own policies.

La Crosse County Complete Streets Policy The County of La Crosse adopted a Complete Streets Policy on April 19, 2011. The policy states in part:

"The county will strive to make Complete Streets a high priority to enhance safety, mobility, accessibility and convenience for all corridor users including pedestrians, bicyclists, transit riders, motorists, commercial and emergency vehicles, and for people of all ages and abilities."

The action language of the policy states in part "La Crosse County will conduct an inventory and assessment of existing corridors, and develop Complete Streets implementation and evaluation procedures. The Complete Streets policy and implementation procedures will be referenced in the Comprehensive Plan and other appropriate plans or documents.

Applicable design standards and best practices will be followed in conjunction with construction, reconstruction, changes in allocation of pavement space on an existing roadway, or other changes in a county La Crosse Area Planning Committee (LAPC) Complete Streets Policy

Traffic Regulations (Wisconsin State Statutes)

corridor (Reference Administrative Code Transportation 204, 205, 75 and the WisDOT Facilities Development Manual). Some exemptions exist.

The La Crosse Area Planning Committee (LAPC) Complete Streets Policy was adopted by resolution in July 20, 2011. It reads, in part:

The LAPC shall work with the Minnesota and Wisconsin Departments of Transportation; the Counties of La Crosse, Houston, and Winona; the communities within the metropolitan planning area; and the LAPC's other planning partners in Minnesota and Wisconsin to ensure that the needs and safety of all modes are considered in all roadway projects planned and programmed within the planning area.

LAPC included an overview of Traffic Regulations pertaining to bicycling, based on WI State Statutes. The regulations are listed in Appendix D of the 2035 Coulee Regional Bicycle Plan, adopted on May 19, 2011, with the introduction. Appendix D also includes a copy of the 2009 Wisconsin Act relating to passing parked motor vehicles and opening motor vehicle doors on highways and providing a penalty, "Anti-Dooring" Legislation.

Actuated signals in La Crosse that cannot detect the presence of bicyclists can limit connectivity in the system. Wisconsin State Code provides flexibility in overcoming this limitation by providing a law stating that:

A motorcycle, moped, motor bicycle, or bicycle facing a red signal at an intersection may, after stopping ...for not less than 45 seconds, proceed cautiously through the intersection before the signal turns green if no other vehicles are present at the intersection to actuate the signal... The operator of a motorcycle, moped, motor bicycle, or bicycle proceeding through a red signal under this subdivision shall yield the right of way to any vehicular traffic, pedestrian, bicyclist, or rider of an electric personal assistive mobility device proceeding through a green signal at the intersection or lawfully within a crosswalk or using the intersection.

PROGRAMS

Enforcement

The La Crosse Police Department's ongoing enforcement of traffic laws helps make the city a safer, more pedestrian/bike friendly community. The additional enforcement focused on crosswalk violations is important to keep pedestrians safe and to raise awareness.

Bicycle Lanes and Ways Designated

Municipal Code Chapter 9.17, Bicycle Lanes and Ways Designated, reads "It shall be unlawful for any motor vehicle driver or bicycle rider to fail to comply with the right of way of any and all bicycle facilities which are designated by pavement markings and/or applicable signage."

Bicycle facilities are written into the City's ordinance and are designated as facilities equal with the force of law as roads, sidewalks, crosswalks, signalized intersection, and traffic control devices.

La Crosse Safe Routes to School Plan The La Crosse Safe Routes to School (SRTS) Plan was completed by La Crosse in 2007. The plan compiled maps, public comments and recommendations for several high priority planning and infrastructure projects for the fifteen public schools and eight parochial schools. Shortly after completion of the plan, The City of La Crosse prepared a grant to hire a Safe Routes to School Coordinator for La Crosse County to assist with the SRTS Plan's implementation. Since that time, the La Crosse County SRTS Coordinator has written subsequent grants to provide continued funding for this position. La Crosse has been active in the implementation of the plan's recommendations.

The La Crosse School District has been actively teaching bicycle safety to students for over 15 years. With the help of the federal grant, they purchased bicycles, helmets, and supplies to teach children about bicycle safety. The program is intended to create lifelong bicyclists. Retired principal and chair of the La Crosse school district Health & Physical education curriculum committee noted, "We're thinking ahead to adult riders."

The two high schools (Central and Logan) have bicycling as a part of a summer physical education curriculum called Outdoor Pursuits as well during the school year. Before students ride, safety is reviewed, emphasized, and practiced in the classroom, gym, or parking lot. Longfellow Middle School, Lincoln Middle School, and Logan Middle School include bicycling as part of their physical education curriculum. Bicycle Safety is taught using a manual developed by physical education instructors.

In 2009, the Wisconsin Bicycle Federation assisted in the training of physical education teachers in La Crosse and provided one-day training

courses. In 2011, a two-day training course was developed to expand the program and enhance the curriculum. Since the training was held in 2011, many physical education instructors have added a bicycling unit to their schedule, and the La Crosse School District has partnered with the La Crosse County Health Department to purchase an additional fleet of bicycles and equipment to expand the program to more classrooms throughout the district. This includes two trailers of bicycles for high school classes, two trailers of bicycles for middle school classes, and one elementary school bicycle trailer.

Nine schools within the district have identified a Safe Routes to School Liaison who is responsible for implementing weekly walking and bicycling to school encouragement activities, including Walking School Buses and Bicycle Trains. Currently, there are 13 weekly walking routes to schools in La Crosse.

The La Crosse Police Department, the La Crosse County Health Department, and the Driftless Region Bicycle Coalition (DRBC) have partnered to hold bicycle rodeos during which bicycling safety is taught.

The ten elementary schools have access to a curriculum called Basics in Bicycling. However, because of the amount of time associated with this curriculum and the limited time for instruction, it is rarely taught in its entirety. This program has been taught at one elementary school during the summer in the past. In addition, one elementary school offers biking as part of a movement course.

Appendix C of the plan provides a summary of existing bicycle education programs occurring in La Crosse schools.

Myrick Hixon Eco Park Programs

The Myrick Hixon EcoPark is an independent, non-profit organization that works in partnership with the City of La Crosse Parks and Recreation Department. The park is a hub to the Hixon Forest and La Crosse River Marsh trails with access to hundreds of miles of bluffland and river hiking, biking, running and skiing trails. The Eco Park's Discovery Map, produced in partnership with the City of La Crosse Parks, Recreation and Forestry Department, is a great tool to learn how to access the trails and programs. Currently, the Parks department is working to adopt standards for trail markings using international standards for biking. Myrick Hixon EcoPark is a potential candidate to host a City bike sharing program.

La Crosse Municipal Transit Utility (MTU) MTU Works is an incentive program offering discount to University employees and students for bus passes to encourage the use of transit. MTU has bike racks on every bus, so it is easier to use a combination of transportation modes to commute. La Crosse was one of the first cities in Wisconsin to implement the bikes on buses program.

La Crosse County Stimulus Grant

The County was one of 44 sites in the country selected to receive a federal stimulus grant as part of Communities Putting Prevention to Work program to prevent chronic diseases. The county received the two-year \$2.2 million grant, which was used to fund healthy living initiatives from physical activity to better food choices. Resulting programs include: Complete Streets Campaign, Bike Pedestrian Coordinator, Educational Videos, and Public Service Announcements on sharrows, rapid flashing beacons, and bike lanes. The program also provided active commuting toolkits to employers. In addition, the grant funds a County Safe Routes to School Program, in which 13 La Crosse schools are participating. See the Get Active Campaign website at www.getactivewisconsin/lacrosse.

Driftless Region Bicycle Coalition Programs The Driftless Region Bicycle Coalition (DRBC) is a member-based organization with the following Mission:

"At DRBC we are about getting more people on bikes more often by advocating for bicycling infrastructure and creating a dynamic bicycling culture."

The Coalition has been instrumental in the success of area events such as Bike to Work Week, Bike Rodeos, Bike Valet, Bike Tours and Rides, Bike Winter Workshop, Winter Bike to Work Week, Complete Streets Campaign, and Bicycling Skills Training.

YMCA Pioneering Healthier Communities Bike Rack Program Pioneering Healthier Communities (PHC) is a local group and part of a national Y-USA effort known as Activate America. To date, 60 bike racks have been installed at businesses and public spaces throughout the city. Businesses have partnered with PHC, the City, and La Cross County to share the cost of purchasing and installing the racks.

Coulee Region Safe Kids

The Safe Kids La Crosse Coulee Region chapter formed in June 2005 and became a coalition in February 2011. They are led by Gundersen Lutheran and serve La Crosse, Vernon, Trempealeau, Jackson and Monroe Counties. The chapter focuses on pedestrian safety and helmet safety, in addition to other initiatives. They provide safety tips, training and offer free helmets for various events.

Coulee Region Childhood Obesity Coalition (CROCC)

The Coalition's mission is to improve the health of Coulee Region children by encouraging healthy food choices and regular physical activity. The coalition has managed many community "Get Active" challenges such

UNIVERSITY PROGRAMS

as the Walk Around the World program where families can log miles for chances to win prizes. Other challenges include the Walk to School and Wheel to School events in which schools log their student participation and compete against other schools for a traveling trophy.

In addition to the MTU U-pass program for university employees and students, La Crosse colleges and universities have additional programs to support and encourage bicycling.

University of Wisconsin La Crosse The University of Wisconsin – La Crosse started the Green Bikes Program in 2004. Through this program, they have refurbished over 200 bikes and rented them to students. Bike rental fee is \$15 plus a deposit which is refunded when the Green bike is returned. Information can be found at www.uwlax.edu/recsports.

Western Technical College

Western Technical College's Green Commuting Program offers advice and tools to commute without a car. MTU buses are free with a college identification card, and for the biking or walking commuters, there are shower passes available for the Wellness Center.

Viterbo University

Viterbo Bike Rental Program, Bike VU, is a rental program designed to better serve Viterbo students and faculty who would like to explore the city of La Crosse and the surrounding areas. Students and faculty may rent a bicycle for \$5 per day. Additionally, Viterbo has implemented a Safe Stop program that has organized business owners around supporting safe walking and bicycling on Jay, 4th, Market, and 8th Streets between the La Crosse Performing Arts Center and Viterbo University. Participating businesses have agreed to assist in providing guidance and directions around La Crosse as well as distributing educational materials related to the program.

CITY OF LA CROSSE EVENTS

[www.bicyclelacrosse.com]

The City of La Crosse is host to several bicycling special events, including weekend rides, fundraisers, and festivals.

The Labor Day Weekend Bike Festival, in its second year, is presented by the Mayo Clinic Health System and is sponsored by the Driftless Region Bicycle Coalition (DRBC), the La Crosse County Health Department, the City of La Crosse Planning Department, and the La Crosse Area Convention and Visitor Bureau. Weekend participants come to la Crosse from 10 states for the weekend festival

National Bike Month is celebrated through a city proclamation, public service announcements, commuter breakfasts and a commuter challenge.

La Crosse also acts as host city for events including Bike for Sight, a

Juvenile Diabetes ride, and other health-related fundraising events.

Bike For Sight is an event to support vision projects in the La Crosse area is presented by the La Crosse Lions. This annual event occurs in August each year and includes ride lengths and skill levels for all ages and abilities. It is sponsored by the Family Vision Center, Mayo Clinic Health System, Gundersen Lutheran, the YMCA, and several local businesses. Silent Sports, an initiative that was borne of the need for a central resource on nonmotorized aerobic activities, was started in 1984. Since that time, this group has grown to give rise to the Human Powered Trails group, which helps to promote hiking and biking trails in and around La Crosse. In partnership with Silent Sports, the Outdoor Recreation Alliance of the 7 River Region was organized to promote outdoor recreation activities of all kinds in and around the 7 River Region that includes La Crosse and surrounding areas.

Driftless Region Human Powered
Trails and Outdoor Recreation
Alliance

Human Powered Trails and the Outdoor Recreation Alliance organizes and assists with bicycling events in La Crosse, as well as promotion of regional outdoor recreation activities through their websites, www.silentsports.net.

These groups provide valuable information on trails, events, as well as updates about trail conditions, construction, or other weather-related issues.

8. SUMMARY OF MAJOR ISSUES IMPACTING WALKING AND BICYCLING IN LA CROSSE

While the City is taking several actions to improve bicycling and walking in La Crosse, barriers remain that will limit the extent to which residents and visitors can comfortably walk and bicycle for recreation and transportation. The barriers discussed below are grouped into physical barriers, policy barriers, and cultural barriers.

PHYSICAL BARRIERS

The City of La Crosse has an extensive off-street multi-use trail network that serves both bicyclists and pedestrians. However, the on-street bicycle network is not consistent and is unconnected.

Physical barriers that limit bicycling and walking in La Crosse include sidewalk gaps, unmarked crosswalks, long distances between signalized intersections, and a lack of exclusive bicycling facilities, such as bike lanes or trails. La Crosse's three main north-south thoroughfares are heavily traveled by automobiles and trucks, making them unappealing and unsafe for many bicyclists. This creates a barrier not only for north-south travel but also creates difficult crossings for east-west bicycling as well as walking.

Sidewalk Gaps

The City of La Crosse has a network of sidewalks in the majority of its neighborhoods. However, there are several areas where sidewalks are missing on one or both sides of the street. Pedestrians must then walk in the street. Regarless of traffic speeds and traffic volumes the need for separation of pedestrians and motorists becomes increasingly important near schools, parks, and other areas of pedestrian activity.

Unmarked Crosswalks

Marked crosswalks identify locations where pedestrians are expected to cross. However, many crosswalks in La Crosse are not marked. Wisconsin State Law permits pedestrians to cross at marked crosswalks, unmarked crosswalks, and at midblock locations outside crosswalks (Wisconsin Statutes Subchapter IV, Sections 346.23 - 346.25).

However, many pedestrians as well as motorists are unaware that pedestrians may cross at all of these locations, and pedestrians and motorists are unclear who shall yield the right-of-way in each of these cases. Furthermore, umarked crosswalks are difficult for pedestrians to recognize and are entirely invisible to approaching motorists.

There is a perception that if a crosswalk is not marked, it does not exist. Unmarked crosswalks give the impression that there is no legal crossing at an intersection or that motorists need not yield, which is in conflict with Wisconsin State Law. Additionally, even though the law states that pedestrians may cross at these locations, many pedestrians and motorists have expressed safety concerns. The protection of law is not sufficient; more is needed to improve pedestrian crossing conditions.

Long Distances Between Signalized Intersections

Traffic signals stop traffic and provide gaps for pedestrians. As a result, it often is more desirable for pedestrians to cross at signalized intersections. However, signalized intersections are sometimes several blocks apart and are not always convenient for pedestrians who want to cross the street. As a result, unsignalized intersections need to be improved so that they are safer for pedestrians and motorists.

Bicycle Facilities are Not Connected

Bicycle improvements including sharrows, bike lanes, and trails, are important components to the overall network. However, there are large gaps in the network, resulting in a disconnected system that does not adequately serve large portions of the population, particularly novice bicyclists and children. In order to unify the network, facilities must connect across and along the city's major thoroughfares. Bicyclists and pedestrians want and need to get to the same places as motorists.

Many traffic signals cannot detect the presence of bicyclists, resulting in long waiting times or a disregard for traffic control devices. Wisconsin State Law includes provision 346.37(1)(c)(4) that allows a bicyclist to proceed with caution through an intersection after the bicyclist has stopped and waiting for 45 seconds for a traffic signal change. While this addresses a shortcoming of the traffic signal. Gaps are created in the network when traffic signals do not accommodate bicyclists.

POLICY BARRIERS

Regarding bicycle and pedestrian policies, La Crosse has several plans and initiatives underway. The City's policies to fill sidewalk gaps, upgrade signalized intersections, and promote Green Complete Streets with each roadway project all provide the necessary support to increase bicycling and walking opportunities in La Crosse. All of the programs contain language with the goals and objectives of increasing awareness and support for bicycling and walking, increasing physical activity, and improving understanding and enforcement for existing bicyclists and pedestrians.

Many Gaps in the Network are Expensive to Fill

However, the greatest need that has been identified through the programs and through discussion with stakeholders in La Crosse is the need to connect the various facilities that currently exist. Capital improvements, largely the most expensive and extensive component of a network, is needed in order to fill in gaps that exist in the bicycle network, and to a certain extent in the pedestrian network.

However, there are areas of the city for which providing sidewalks or filling in gaps are challenging. It will be important to prioritize capital projects for areas that would most benefit from improvement.

Capital Improvements and Maintenance Improvement Funding are Limited

Current funding for capital improvements is limited. Federal grants are available to assist with the construction of new facilities, but nearly all Federal programs require a local contribution.

Maintenance funding is even more difficult to find from sources outside the city. Once facilities are constructed with the help of Federal grants, most local transportation facilities become the maintenance responsibility of the City. State and County programs are available to assist with maintenance; however, these largely only apply to roadway resurfacing and reconstruction. It is for this reason that on-street facilities are increasing in popularity - when built as part of a roadway, they are maintained as part of a roadway.

In addition, construction costs to maintain roads, traffic signals, sidewalks and existing bicycle facilities has increased more quickly than funding, and city budgets continue to be constrained. In order to grow the network, additional funding is needed. La Crosse already is experiencing challenges in maintaining the existing network, let alone growing or diversifying it.

CULTURAL BARRIERS

Cultural barriers also limit bicycling. La Crosse residents and members of the Steering Committee expressed concern that many of La Crosse's streets and motorists are hostile towards bicyclists and pedestrians. Wide roadways or fast moving automobile traffic is intimidating to bicyclists, no matter how much of a right they have to be there. The same safety concerns applied to pedestrians crossing roadways that have no accommodations to make pedestrians more visible or to encourage motorists to yield, despite laws that these responsibilities exist.

Many residents expressed concern that some streets simply are not well suited to accommodate bicyclists and pedestrians in their current condition and that facilities should be provided elsewhere to accommodate bicyclists and pedestrians. Destinations that are popular to all roadway users typically are on the least accommodating roadways for all users except motorists. Many felt that changing roadways to improve this situation would be difficult, often citing concerns over congestion. This highlights the challenge of balancing mobility and safety within a transportation network.

The goal is to provide facilities for all roadway users of all modes of travel in a manner that is balanced, safe, and accommodating.

9. OVERVIEW OF BENCHMARKS FOR BICYCLING

The League of American Bicyclists administers two programs as incentive and reward programs to communities and businesses that are making efforts to accommodate bicyclists: Bicycle Friendly Communities (BFC) and Bicycle Friendly Businesses (BFB). La Crosse currently is designated Silver as a community and has 13 BFB. La Crosse aims to increase its standing to a gold level designation or higher through implementation of the Bicycle and Pedestrian Master Plan.

The BFC program also serves as a good guide for what improvements should be made to a community to improve conditions for bicycling. A review of the BFC application helps to provide a framework for the bicycle and pedestrian master plan.

The application is structured into six main categories. The first covers basic details about the community's profile and background, such as population density, weather, and age and race distribution. This section also requests information about the community's bicycle coordinator, advisory committees and/or advocacy groups active in the community. Presence of these individuals and groups shows a strong commitment to improving bicycling.

This is followed by sections covering the five E's: engineering, education, encouragement, enforcement, and evaluation.

ENGINEERING

The BFC program application requests basic information about the community's bicycle network, including the use of various facilities, both common and innovative:

- Bike lanes
- Shared lane markings
- Bicycle boulevards
- Signed bike routes
- Paved shared use paths
- Unpaved shared use paths
- Singletracks
- Road diets
- Area-wide traffic calming
- Cycle tracks
- Contra-flow bike lanes
- Speed limits under 20 mph
- Bike cut-throughs
- Wayfinding signage with distance or time information

More specifically, the application asks the percentage of arterials that have bike lanes, the percentage of bridges and tunnels that are accessible by bicycle, and how bicyclists are accommodated at traffic signals. Arterials, bridges, and tunnels are important connections for bicyclists but are often inhospitable due to traffic volumes, speeds, and/ or the width of the roadway. Traffic signals are often timed for vehicles and in cases where the signals are actuated, bicyclists often cannot trip the signal.

The BFC program looks for a well-rounded bicycle network with abundant bicycle parking as well as bicycle accessibility on transit.

The bicycle network must be maintained, so the BFC application includes questions regarding street sweeping and snow clearance. Bicyclists are more vulnerable to the debris that can collect on the sides of streets, therefore making sure bicycle facilities are included in maintenance procedures is important.

Complete Streets policies will ensure that bicycle facilities are integrated into roadway planning, design, and maintenance, rather than requiring specific bicycle improvement projects.

EDUCATION

The BFC program inquires about education directed to bicyclists as well as motorists. Education programs for cyclists include Safe Routes to School, traffic skills 101, commuter classes, and seminars lead by League Cycling Instructors. Motorist education includes training for city staff, taxi drivers, transit operators, school bus drivers, and delivery drivers.

ENCOURAGEMENT

For encouragement, the BFC program looks for the types of bicycling-oriented organizations and programs that are active in a community. Advocacy organizations, bike shops, and bike rental or sharing programs are examples. Bicycle Friendly Businesses fall into this category as well. La Crosse has 13 Bicycle Friendly Businesses.

ENFORCEMENT

The BFC program asks about any enforcement campaigns that target bicyclist safety. It also questions whether the police department employs a bike patrol and what their general interaction is with the bicycling community, for instance, the application asks whether there is a designated point person for bicycling issues. A priority is placed on identifying ordinances that embrace bicycling and clarify the rights of bicyclists as roadway users.

EVALUATION AND PLANNING

The BFC program looks to recent data for evaluation and planning. This includes data on the level of bicycling from the U.S. Census and local sources. It also includes data on recent bicycle crashes and fatalities.

The application also asks whether a community has a bicycle plan and if there are specific strategies to reduce the number of crashes and fatalities.

10. OVERVIEW OF BENCHMARKS FOR WALKING

Similar to the Bike Friendly Communities, the Walk Friendly Communities (WFC) is a program that celebrates the achievements of cities and towns that have "made a commitment to improving walkability and pedestrian safety through comprehensive programs, plans, and policies." Participating municipalities are provided with access to resources and information about ways to improve walkability and pedestrian safety, professional guidance for conducting an assessment of current walking conditions in town, and national recognition for their efforts toward improving the pedestrian environment in the community. Currently, La Crosse does not participate in the WFC program.

Municipalities wishing to apply may fill out an application and work with program staff during the application process.

The application is both an assessment of existing culture and environment for municipalities with respect to pedestrian activity and provides a framework for improving upon the existing condition. Known as the Community Assessment Tool, the program asks the municipality to provide or estimate data on pedestrian activity to establish a baseline upon which to score an application.

The program focuses on the following metrics of pedestrian activity and accommodation in the same "five E's": engineering, education, encouragement enforcement, and evaluation.

ENGINEERING

The Community Assessment Tool asks the extent to which the following engineering principles are incorporated in a municipality's capital improvements program or equivalent:

- A target mode share for walking
- Establishing a pedestrian safety goal (e.g. a reduction in pedestrian crashes)
- Adoption of an ADA Transition Plan
- Adoption of a Complete Streets policy or ordinance
- Sidewalk construction/repair policy
- Sidewalk coverage estimates (Percent of roadways, bridges, overpasses with sidewalks on both sides)
- Access to transit estimates (Percent of population within ¼ to ½ mile of transit)
- Urban design/streetscape guidelines
- Sidewalk design specifications
- Pedestrian traffic signals and other pedestrian-supportive traffic control devices
- Crosswalk marking locations and styles
- Traffic calming practices

EDUCATION AND ENCOURAGEMENT

For the education and encouragement components, the Community Assessment Tool inquires about the existence of:

- Safe Routes to School Programs
- Education campaigns
- Training programs for school staff, public officials, law enforcement officials
- Walking tours, guides
- Sunday Parkways/Open Streets programs

ENFORCEMENT

Enforcement in the Community Assessment Tool examines the extent to which there is a policy within the police department to educate, address, and uphold laws with respect to pedestrians and pedestrian safety. This includes:

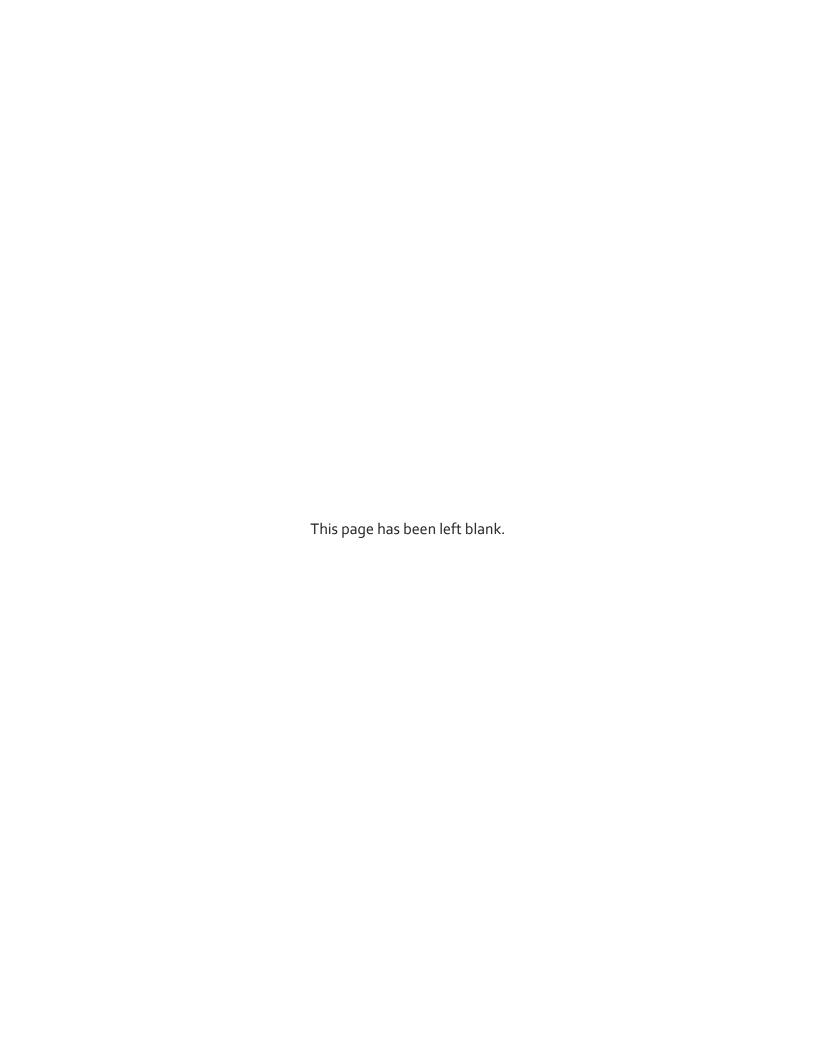
- Traffic safety officers within the police department
- Patrols on foot and by bicycle
- Targeted enforcement programs, crosswalk stings, "decoy pedestrian" officers
- Media campaigns to inform of traffic safety laws
- Speed enforcement, speed cameras
- Progressive ticketing
- Red light enforcement
- Emergency call boxes/crash reporting mechanisms
- Whether or not pedestrians are cited for infractions, how often
- Crossing guards
- On-going traffic crash and pedestrian safety review
- Fatal pedestrian crash analysis

EVALUATION

The Community Assessment Tool inquires about programs that facilitate reviewing all of the above programs and tracking progress for each. Among these are:

- Pedestrian traffic counts
- Walkability checklists
- Pedestrian level of service (LOS) tools or analysis
- Pedestrian safety audits
- Health Impact Assessments
- Web-based or smartphone applications to collect resident feedback
- Before/after analysis of roadway improvement projects
- Use of WalkScore[™] to assess the walking environment

The Community Assessment Tool is then used to rate municipalities on existing progress and plans for improvement. There is no cost to apply or to participate in the program, and information on communities currently participating in the program is available online at www.walkfriendly.org.



TOOLS AND BEST DESIGN PRACTICES



Bicycle facilities including bike lanes and bike route signs are already a common sight in La Crosse, and shared lane markings, known as "sharrows," are gaining visibility as they are installed at various locations around the city. Rectangular rapid flashing beacons, called RRFB for short, are also becoming more common at midblock pedestrian crossings around La Crosse, helping to improve pedestrian connectivity and safety.

X NILAME

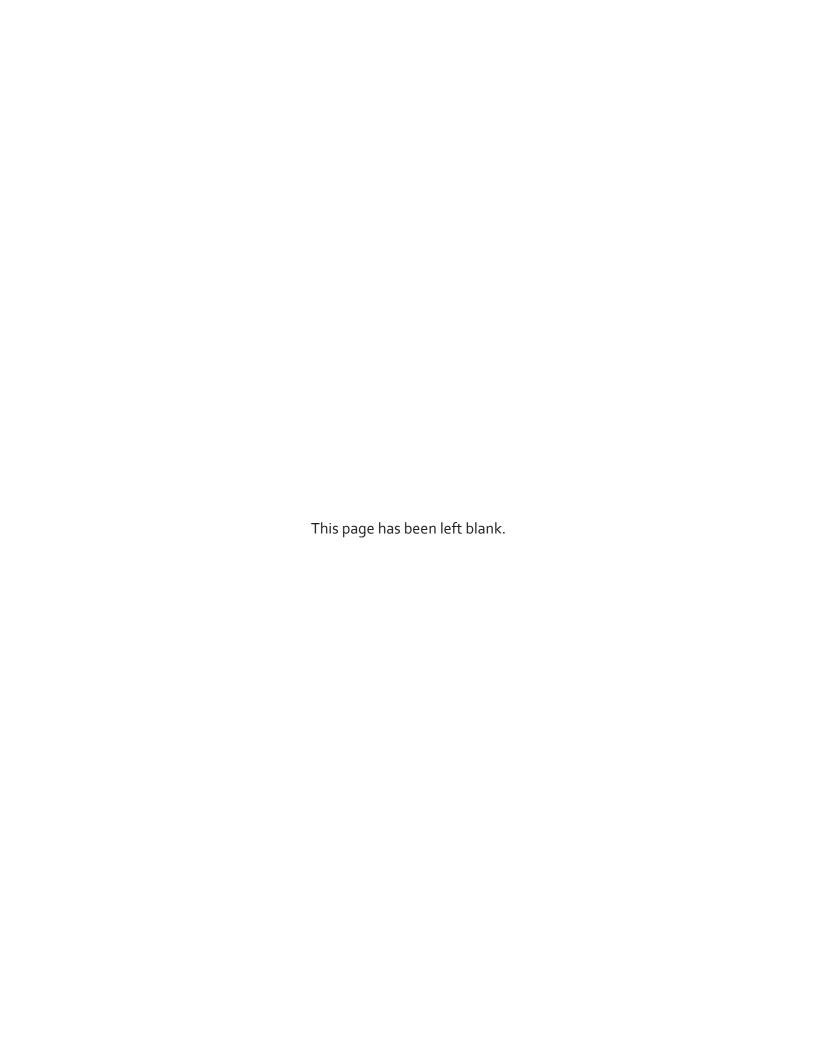
There are several other traffic control devices that are new and have the potential to take walking and bicycling to the next level in La Crosse. Cities across the country are incorporating safe, comfortable and innovative facilities in their transportation networks to provide all citizens with the option to walk and bicycle for transportation and recreation, regardless of age or ability. This section of the La Crosse Bicycle and Pedestrian Master Plan provides a toolbox of facilities, and highlights their key features that can help increase pedestrian and bicyclist comfort, encourage walking and bicycling, and address safety concerns between pedestrians, bicyclists, and motorists.

Pedestrian and bicycle design practices were taken from the 2004 AASHTO Guide for the Development of Pedestrian Facilities (AASHTO Ped Guide), the 2012 AASHTO Guide for the Development of Bicycle Facilities (Bike Guide), and the Pedestrian and Bicycle Information Center, a Highway Safety Research Center website funded by the Federal Highway Administration.

Additionally, the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide is another source of information for this toolbox. The NACTO Urban Bikeway Design Guide summarizes state-of-the-practice bikeway treatments from cities around the world and provides solutions to varied street and intersection environments.

All recommended traffic control devices are in accordance with the Manual on Uniform Traffic Control Devices (MUTCD).

The toolbox is divided into four groups: **signalized intersection improvements, unsignalized intersection improvements, corridor improvements,** and **parking improvements**.



SIGNALIZED INTERSECTION IMPROVEMENTS



PROPER WALKING SPEED



SIGNALIZED INTERSECTION IMPROVEMENTS

Pedestrian signal timing is calculated using a walking speed of 3.5 feet per second, or can be set to a slower speed where there is a significant population of elderly pedestrians, pedestrians with disabilities, or pedestrian pushing strollers/carrying young children who are using the signal.

All new or rehabilitated pedestrian signals should be timed with this signal timing according to the MUTCD. Studies have shown that the previous standard walking speed of 4.0 feet per second was an average walking speed and thus was not adequate time to allow most pedestrians to cross the street.

FIXED TIME SIGNAL VS. PEDESTRIAN PUSH-BUTTON



SIGNALIZED INTERSECTION IMPROVEMENTS

Fixed time signals have a pedestrian phase built into each signal cycle by default. Pedestrian push-buttons allow pedestrians to call up a pedestrian signal where they do not come up automatically.

Fixed time signals should be used where pedestrian traffic is routine. Pedestrian push-buttons should only be used where pedestrian crossings are infrequent and pedestrian signals are not automatic. Requiring pedestrians to call for the pedestrian signal increases their delay. Fixed-time signals increase mobility for pedestrians. Traffic signals may need to be re-programmed or re-timed to automatically bring up the pedestrian phase.

In addition, fixed time signals make it easier to coordinate signals and control traffic speeds, as signal cycles will not vary due to the presence of pedestrians or side street traffic.

PEDESTRIAN COUNTDOWN SIGNAL



SIGNALIZED INTERSECTION IMPROVEMENTS

Pedestrian countdown signals give pedestrians an indication of how much time is left to cross the street by accompanying the "flashing don't walk" signal with a countdown.

Pedestrian countdown signals are required anywhere a pedestrian signal is used whenever new signals are installed or existing signals are replaced per the MUTCD.

Pedestrian countdown signals have been shown to reduce all crashes at signalized intersections by 25%. They also increase the incidence of pedestrians completing their crossing before the end of the "flashing don't walk" phase.

Adding pedestrian countdown signals typically cost between \$10,000 to \$15,000 per intersection to replace all pedestrian signal heads, to as little as \$800 per intersection to just add a countdown clock to each existing pedestrian signal head.

EXCLUSIVE LEFT TURN (LEADING/LAGGING)



SIGNALIZED INTERSECTION IMPROVEMENTS

Left turning vehicles have an exclusive phase, indicated by a green left arrow. The phase can either be given before the green phase for opposing through traffic (leading) or after (lagging).

An exclusive left turn phase should be considered at intersections where left-turning traffic volumes are high. Exclusive left turn phases reduce conflicts between left turns and pedestrians.

A lagging left turn phase should be considered where there is a high number of conflicts between left turning vehicles and pedestrians. Pedestrians normally start to cross at the beginning of the through green interval. A lagging left-turn phase strategy allows pedestrians to clear the crossing before left-turning vehicles begin to turn.

Signal timing needs to be adjusted to allow for this exclusive phase.

PEDESTRIAN-ONLY PHASE (SCRAMBLE)



SIGNALIZED INTERSECTION IMPROVEMENTS

A pedestrian-only phase or pedestrian scramble allows pedestrians to walk in any direction across the intersection, including diagonally, during an exclusive phase in which only pedestrian traffic has the right of way.

This treatment should be limited to intersections where pedestrian volumes are higher than vehicular volumes and where a significant percentage of pedestrians would make a diagonal crossing. Pedestrian-only phases have been shown to significantly increase motor vehicle and pedestrian delay. Engineering judgement should be used in determining locations. Pedestrian-only phases have been shown to reduce pedestrian crashes by 34%.

A pedestrian-only phase adds a phase to the typical traffic signal sequence during which all directions of motor vehicle traffic have a red phase and all directions of pedestrian traffic have a WALK phase. The diagonal crossing sign image above can provide additional information to pedestrians and motorists. The MUTCD does not preclude the use of this sign. However, there is no specific MUTCD guidance for signs of this type.

PROHIBITED RIGHT TURN ON RED





SIGNALIZED INTERSECTION IMPROVEMENTS

Right turns on red are prohibited through the use of regulatory signs stating "No Turn On Red."

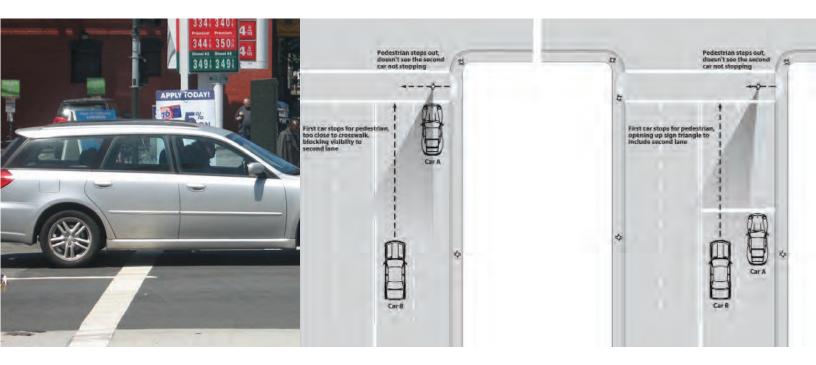
Right turn on red restrictions should be implemented at intersections where right-turning vehicles are involved with rear-end or angle crashes with other vehicles, or where there is conflict (or potential conflict) with pedestrians in the crosswalk.

Permitted right turns on red pose a threat to pedestrians crossing with the signal, as motorists wanting to turn right are looking to the left for a gap in traffic and may not see a pedestrian approaching from the right. Prohibiting right turn on red also benefits bicyclists in bike lanes, as it prevents right-turn vehicle crashes involving bicyclists.

At intersections with high levels of turning traffic, it is possible to impose No Turn On Red restrictions during certain times of day. This can be done either with specific posted times (e.g. 7AM to 7PM, Mon-Fri) or through the use of internally-illuminated signs that are turned on when the restriction is in effect.

Regulatory signs are posted at the intersection. See MUTCD, Section 2B.54.

ADVANCE STOP BAR



SIGNALIZED INTERSECTION IMPROVEMENTS

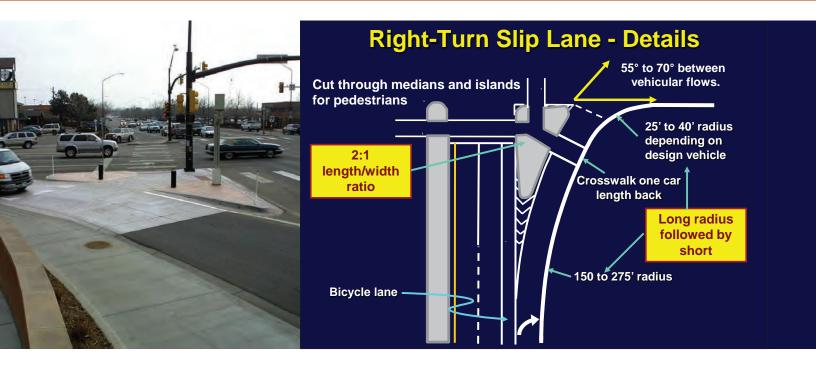
An advance stop bar is a stop bar that is marked 15 or more feet in advance of the crosswalk at a signalized intersection, as opposed to the minimum 4-foot setback.

Advance stop bars should be considered where there is a high number of conflicts between vehicles turning right on red and pedestrians. They could also be used at any intersection where improved visibility is desired.

Advance stop bars improve visibility of and for pedestrians. It also gives pedestrians a little more time to get into the crosswalk and establish their position before turning vehicles enter the crosswalk space. Conflicts between drivers and pedestrians were shown to be reduced by 90%⁷

This tool involves marking a stop line further from the crosswalk. However, there is a maximum allowable distance; guidance in Section 3B.16 of the MMUTCD suggests that the stop bar should be placed no more than 30 feet from the near edge of the intersecting roadway.

PORK CHOP ISLAND



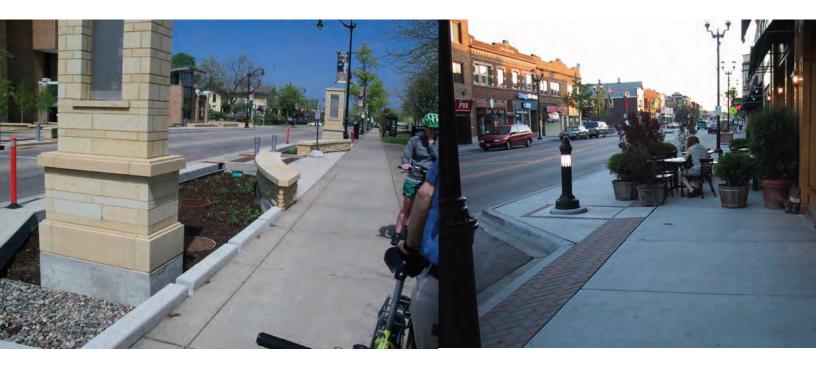
SIGNALIZED INTERSECTION IMPROVEMENTS

A pork chop island is a wedge-shaped island between a right-turn lane and through lanes at an intersection. Pork chop islands should be considered at wide intersections where channelized right turn lanes are desired, or where a large turning radius would otherwise be required to prevent large, right-turning vehicles from encroaching on opposing traffic lanes.

Pork chop islands break up a pedestrian crossing, making the crossing both safer and easier. They have been shown to reduce pedestrian crashes by 29%. On roads with bike lanes, bicyclists travel through the intersection and remain to the left of the island in the bike lane as shown. Right-turning bicyclists would follow traffic to the right and use the full turn lane, just like a motorist would.

Care should be taken to design the right-turn lane to encourage slow speeds and ensure yielding to pedestrians in the crosswalk.

BULB-OUT



SIGNALIZED INTERSECTION IMPROVEMENTS

Bulb-outs (also known as curb extensions or bump-outs) extend the sidewalk or planting space out into the existing roadway, taking up space in a parking lane.

Bulb-outs may be used anywhere with permitted on-street parallel or angle parking. They should be considered in particular where pedestrian crossings are too long.

Bulb-outs increase visibility between pedestrians and motorists. They also shorten the distance a pedestrian must cross to reach the other side of the street.

Curbs reconstructed to extend the pedestrian spaceshould not encroach the traveled way where bicyclists or motor vehicles may be traveling (i.e. don't create a bulb-out at the expense of a bike lane). Often, drainage structures must be moved when bulb-outs are constructed. It is for this reason that they are more cost effective when incorporated into roadway reconstruction or stormwater utility improvements. In La Crosse, curb-bulb outs have successfully been implemented midblock on 7th Street near Western Technical College along with a stormwater and runoff management project.

ROUNDABOUT



SIGNALIZED INTERSECTION IMPROVEMENTS

In place of a stop-controlled or signalized intersection, a roundabout directs straight and turning traffic through a circular intersection designed to ensure yielding upon entry and slow vehicle speeds through the roundabout to no more than 20 mph.

Roundabouts reduce the number of conflict points at a typical four-leg intersection and have been shown to significantly reduce motor vehicle crashes, as well as pedestrian crashes. Single-lane roundabouts can handle traffic volumes up to 26,000 vehicles per day. However, while multi-lane roundabouts can be used for traffic volumes up to 50,000 vehicles per day, they usually complicate pedestrian crossings. When roundabouts operate below the daily traffic volumes listed above, roundabouts tend to improve the efficiency of an intersection.

If future traffic projections identify a need for a multi-lane roundabout, the roundabout should first be installed as a single lane roundabout, with right-of-way reserved to add more lanes later when and if they become necessary. Refer to the *FHWA Roundabout Technical Summary* for more information.

BICYCLE SIGNAL DETECTION



SIGNALIZED INTERSECTION IMPROVEMENTS

As noted previously, fixed time signals eliminate the need for bicycle signal detection. However, if actuated traffic control is required at a signalized intersection, bicycles should be accommodated through the use of bicycle signal detection.

Bicycle signal detection is a modification to existing loop detectors or the addition of new loop detectors to detect the presence of bicycles at actuated and semi-actuated signalized intersections. Bicycle location markings and signage is often included to make sure bicyclists are positioned to ensure that they are detected at intersections. Conveniently-located push buttons at the curb line may be substituted for automatic loop detection, but they must be reachable by bicyclists without having to dismount. Bicycle signal detection may be used wherever bicycle connectivity is desired across signalized intersections.

La Crosse has adopted a policy that all new actuated signals will have optical vehicle detection. That is, no loop detectors will be required in the pavement. Instead, detectors will be mounted on the signal arms. These also can be adjusted to detect the presence of bicycles.

Guidance for installation of bike signal detection markings is provided in the AASHTO *Guide for the Development of Bicycle Facilities*.

INTERSECTION BIKE CROSSING MARKINGS



Chicago Image: Google

SIGNALIZED INTERSECTION **IMPROVEMENTS**

On streets with bike lanes, green colored pavement can be used to highlight complex areas or locations that involve merging or weaving sections, such as when right-turning motorists must cross a bike lane to reach a turn lane. Pavement markings can be continued through complicated intersections to indicate the intended riding location for bicyclists, as well as alert motorists that the bicycle facility is carried through the intersection.

Intersection crossing markings should be considered at wide intersections or intersections where the intended direction for bicyclists is complex or unclear. The markings encourage bicyclists to ride in the most visible position on the roadway, and also raises motorist awareness of the presence of bicyclists.

The intended path may be marked using shared lane markings, dashed lines, or some combination. For additional background and design details, refer to the NACTO Urban Bikeway Design Guide: www.nacto. org.

BIKE BOX

IMPROVEMENTS



SIGNALIZED INTERSECTION

Image: www.nacto.org

A bike box is a space for bicyclists to wait in front of vehicles stopped at a signalized intersection. An advance stop bar with markings for bicycles is applied in the space between the stop bar and the crosswalk. Bike boxes may include colored paverment.

Bike boxes usually are used in conjunction with bike lanes and may be considered where it may be helpful to provide additional space to bicyclists traveling straight or making right turns, where there is a high number of motorists making right turns, or where there are high volumes of bicyclists at intersections (e.g. near campus). No Turn On Red is required at intersections where bike boxes are used and separate signalization for rught-turning vehicles may also be needed.

Bike boxes can improve visibility of bicyclists at intersections, where they are most vulnerable. They reduce conflicts between right-turning vehicles and bicyclists waiting at a red signal. However, for motorists and bicyclists approaching on the green, bike boxes can encourage right hook turning maneuvers. Care should be taken to mitigate right-turning conflicts.

Bike bixes are not yet in the MUTCD and will require FHWA approval prior to installation. For design detail information refer to the NACTO Urban Bikeway Design Guide: www. nacto.org

TWO-STAGE TURN QUEUE BOX



SIGNALIZED INTERSECTION IMPROVEMENTS

A two-stage left turn queue box is a box marked on the far side of an intersection that provides a place for bicyclists to wait while making a left turn without having to move to the left-turn lane.

Two-stage left turn queue boxes should be considered where a bicycle facility crosses another facility and where bicyclists are making a left turn at an intersection with high traffic volumes that may make it difficult for bicyclists to get into the left lane. These may be installed at intersections with or without medians. The above image on the left shows a bike box on conjunction with a cycle track. The image on the right shows a bike box at an intersection with a median.

A two-stage left turn is helpful in providing bicyclists with flexibility in making a left turn where it may be uncomfortable or undesirable to move to the left-turn lane, or where multiple left-turn lanes exist.

Bicyclists enter a two-stage left turn by crossing the street on which they intend to make a left turn and wait in the queue box. Once across the street, bicyclists wait for the green light and continue with traffic, completing the left turn in two stages. Two-stage bike left turns are not yet in the MUTCD and will require FHWA approval prior to installation.

COMBINED BIKE LANE/TURN LANE



SIGNALIZED INTERSECTION IMPROVEMENTS

A combined bike lane/turn lane can be used at intersections where a bike lane and a right-turn lane are needed, but there is not enough width to provide them side by side. Instead, a combined bike lane/turn lane creates a shared lane condition.

The bike lane transitions to a shared lane condition with the motor vehicle turn lane. The bike lane is located to the left of the turn lane so that the bicyclist who is traveling straight through the intersection is located out of the path of the right-turning motorist.

Combined bike lane/turn lanes help to identify the presence and riding location of a bicyclist. Signs help communicate the shared lane condition and that motor vehicles shall yield to bikes in these locations.

Pavement markings denoting the shared lane condition and signs posted "RIGHT TURN ONLY EXCEPT BIKES" or shared lane signs are posted to clarify the shared lane condition. Current guidance in the MUTCD suggests a lane drop resulting in a shared through or turn lane. Combined bike/turn lanes are not yet in the MUTCD and will require FHWA approval prior to installation. For more information, consult NACTO *Urban Bikeway Design Guide*.

BICYCLE SIGNALS



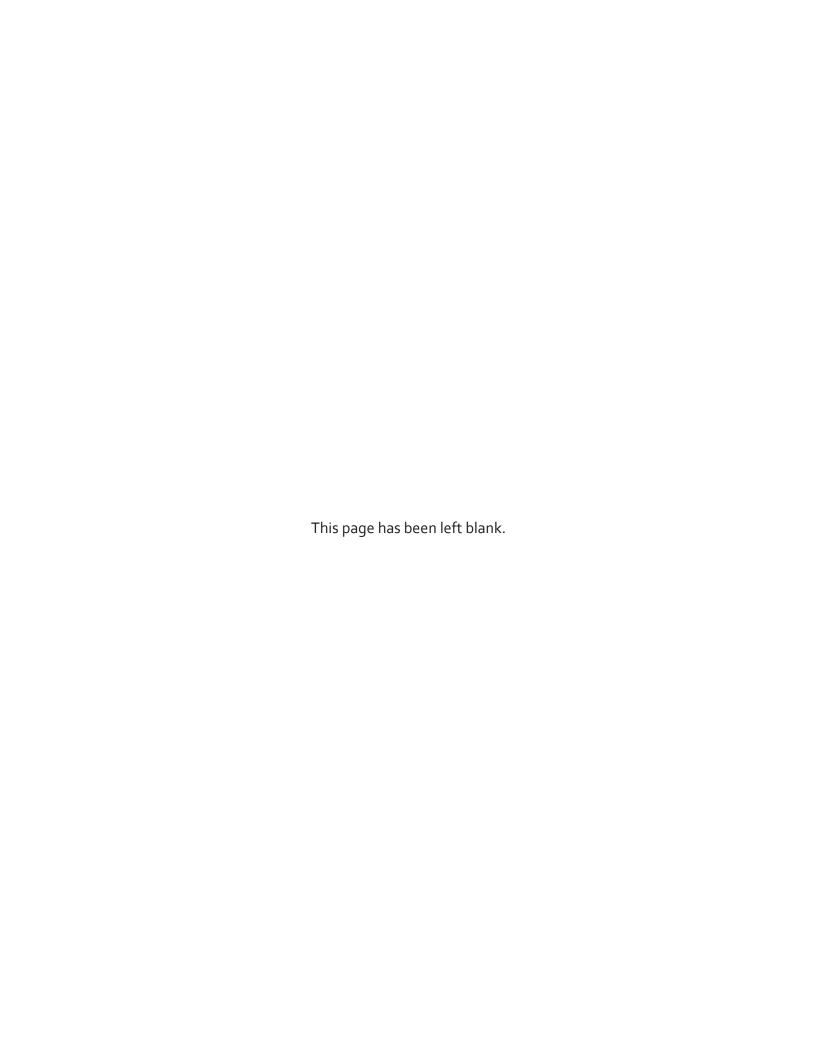
SIGNALIZED INTERSECTION IMPROVEMENTS

Bicycle signals are signals designated specifically for bicyclists. They may be actuated or pre-timed and may provide an exclusive signal phase for bicylists at an intersection.

Bicycle signals may be used in areas where bicyclists are subject to different traffic control than vehicles, such as at trail crossings, cycle tracks, or bicycle boulevards.

Bike signals are helpful to clarify the separation of bicycle and automobile traffic, to give bicyclists a head start in mixed traffic conditions, or where one bicycle facility transitions to another (e.g. when a shared use path transitions to an on-street bike lane.)

Bike signals are not yet in the MUTCD, but approval to install them can be obtained from the FHWA. Guidance for installation of bike signals is provided in the NACTO *Urban Bikeway Design Guide*.



UNSIGNALIZED INTERSECTION IMPROVEMENTS



MARKED CROSSWALK



UNSIGNALIZED INTERSECTION IMPROVEMENTS

Marked crosswalks direct pedestrians to the most appropriate locations to cross the street. They also increase the awareness of motorists to the presence of pedestrians. High-visibility pavement markings are recommended at unsignalized crosswalk locations because they are more visible to motorists.

Crosswalks should be marked to indicate the intended path for a pedestrian. At uncontrolled (no stop sign or traffic signal) crossings, crosswalks may be marked on two lane roadways or roadways with less than 12,000 vehicles per day. For roadways with four or more lanes and traffic volumes higher than 12,000 vehicles per day, marked crosswalks alone are insufficient to adequately accommodate pedestrians, and additional traffic control measures are recommended.

Refer to Federal Highway Administration, Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations for additional guidance on how and where to mark crosswalks.

ADVANCE YIELD MARKINGS



UNSIGNALIZED INTERSECTION IMPROVEMENTS

At midblock crosswalks, advance yield markings improve visibility of pedestrians on multilane roadways, particularly by the motorist in the inside lane.

Advance yield markings should be placed with pavement markings at midblock crosswalks on multilane roadways. The markings should be placed 20 to 50 feet in advance of the crosswalk.

On multilane roadways, if a motorist in the outside lane yields or stops close to the crosswalk, that vehicle may block the view of crossing pedestrians by motorists in the inside lane. By advancing the yield markings, visibility is improved and conflicts are reduced.

Advanced yield markings must be accompanied by a "Yield Here to Pedestrians" sign. See MUTCD Section 3B.16.

IN-ROADWAY YIELD SIGN



Image: www.pedbikeimages.org/Dan Burden

UNSIGNALIZED INTERSECTION IMPROVEMENTS

In-roadway yield signs are signs placed in the center of a roadway and/ or near the gutter pan to reinforce state law requiring motorists to yield to pedestrians in crosswalks (signalized and unsignalized).

To clarify the state law for yielding to pedestrians, it can be helpful to install in-roadway yield signs at unsignalized, marked crosswalk locations. Usually, they are placed in the center of roadways with only one lane in each direction and can be used as temporary signs by school crossing guards. They work well at BOTH midblock crossings and unsignalized intersections. In-roadway yield signs have been shown to significantly improve motorist yielding compliance and reduce pedestrian crashes

Refer to MUTCD Section 2B.11 for guidance on the placement of inroadway yield signs.

PEDESTRIAN/BICYCLE REFUGE ISLAND



Image: www.pedbikeimages.org/Dan Burden

UNSIGNALIZED INTERSECTION IMPROVEMENTS

Pedestrian/bicycle refuge islands are areas of the roadway where raised medians or curbs are constructed to protect pedestrians or bicyclists at crossings, allowing them to cross one direction of traffic at a time. Because refuge islands typically are installed at unsignalized intersection or midblock locations, they often are accompanied by high-visibility crosswalk pavement markings, as well.

Refuge islands should be considered at multilane pedestrian crossings, particularly where a painted or barrier median already exists or is proposed. At trail crossings, bicyclists also benefit from being able to cross one direction of traffic at a time. The placement of a refuge island on multilane roadways has been shown to reduce pedestrian crashes by 56%.

Guidance for the installation of a refuge island can be found in MUTCD Sections 31.06 and 4B.04.

RECTANGULAR RAPID FLASHING BEACON



Image: www.pedbikeimages.org/Michael Frederick

La Crosse Image: T.Y. Lin International

UNSIGNALIZED INTERSECTION IMPROVEMENTS

A rectangular rapid flashing beacon (RRFB) is a device that consists of two sets of high intensity light emitting diode (LED) lights mounted on poles on each side of an unsignalized pedestrian or bicycle trail crossing. The signals rest in the dark phase until activated by a push button and then flash in a rapid stutter flash pattern.

RRFBs currently are used at two locations in La Crosse and have been well received for their ability to assist pedestrians in crossing multilane roadways at midblock locations. (Additional information on the use of RRFB in La Crosse is available in Chapter 4 of this plan). RRFBs are recommended wherever an unsignalized crossing exists and it is necessary to provide additional notification to motorists of the presence of crossing pedestrians, or where there are insufficient gaps in vehicle traffic to provide a pedestrian crossing opportunity.

RRFBs have been shown to produce an average motorist yielding compliance rate of 80% to 95% at unsignalized crossings.

The FHWA provides guidance for the use of RRFB in conjunction with other unsignalized crossing improvements, such as advance yield bars and median refuge islands.

PEDESTRIAN HYBRID BEACON





Image: www.pedbikeimages.org/Mike Cynecki

Image: www.pedbikeimages.org/Mike Cynecki

UNSIGNALIZED INTERSECTION IMPROVEMENTS

A pedestrian hybrid beacon consists of two red lights above a yellow light. The lights remain dark unless activated by a pedestrian waiting to cross. When activated, the yellow signal flashes to warn motorists and then the red lights are illuminated, (first solid red, then flashing) indicating that the motorist must stop, but then can proceed through the crossing on the flashing red once the pedestrians have cleared the crosswalk.

Pedestrian hybrid beacons are appropriate where it is difficult to find a gap in traffic to make a crossing and there are a significant number of pedestrians wanting to cross at a particular location. Hybrid beacons may be used at locations with lower pedestrian crossing volumes than what is required for a standard midblock pedestrian signal.

Pedestrian hybrid beacons have been shown to reduce crashes up to 69% and motorist yielding compliance rates between 94% and 99%.

Guidance for the installation of pedestrian hybrid beacons is provided in the MUTCD.

MIDBLOCK SIGNAL



Image: gridchicago.com

Image: www.flickr.com/PEDS.org

UNSIGNALIZED INTERSECTION IMPROVEMENTS

A midblock signal is a full traffic signal for vehicles in one direction and pedestrians in the cross direction. It transforms an unsignalized crossing into a signalized location. The signal usually is pedestrian actuated and therefore only interrupts traffic flow at times when pedestrians are wanting to cross.

Midblock signals may be desired where large volumes of pedestrians are crossing midblock to access a particular destination, such as a college campus or major venue with high levels of periodic pedestrian activity. The MUTCD has guidelines for the pedestrian volumes warranting a midblock signal.

As a full traffic signal, a midblock signal has a very high compliance rate with motorists. The compliance rate for pedestrians decreases the longer a pedestrian has to wait for a WALK signal. The best compliance was found when pedestrians had to wait less than 30 seconds for the walk signal. Refer to MUTCD Section 4C.05 for guidance on midblock signals.

TRAIL CROSSING



UNSIGNALIZED INTERSECTION IMPROVEMENTS

Trail crossings are critical points along a trail because of the risk they pose to trail users and to motorists. Applying treatments to trail crossings helps to reduce the speed of approaching motorists, reduce the speed of approaching trail users, and improve visibility for all modes.

Updated guidance from AASHTO and the National Highway Traffic Safety Administration (NHTSA) recommends several treatments to minimize risk at crossings. This involves designing a curve into the path to slow bicyclists approaching the crossing, splitting the path into two smaller paths at the crossing with the use of landscaping, and providing improvements at the crossing such as detectible warning tiles, pedestrian hybrid beacons, RRFB, and a median refuge island on roadways where space permits.

Bollards are not recommended for trail crossings. Originally intended to restrict unauthorized vehicles from accessing the trail, it has been shown that bollards pose a crash risk to trail users. Instead of bollards, trails should be designed using landscaping and adding signage that pose less risk to bicyclists while still effectively restricting automobiles from entering onto the trail.

UNDERPASS/OVERPASS



Image: www.pedbikeimages.org/Sree Gajulia

UNSIGNALIZED INTERSECTION IMPROVEMENTS

Construction of an overpass or underpass completely separates autmobile movements from bicycle and pedestrian movements.

Due to their cost, overpasses and underpasses should only be considered when at-grade treatments are not feasible due to wide crossings, high volumes of automobile traffic, high speeds, or roadways ill-suited to traffic control, such as freeway crossings.

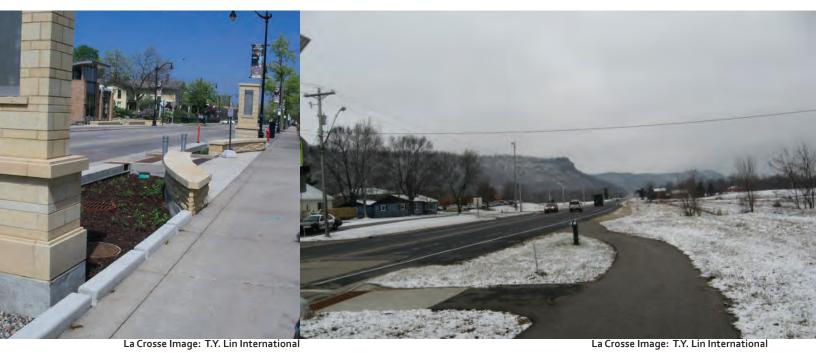
Overpasses and underpasses have been shown to reduce all crashes by 60% to 95%. However, if an overpass or underpass is designed in a manner that makes it inconvenient or unappealing, such as a long detour or tunnel effect, it will not be used.

Guidance for the placement of overpasses and underpasses can be found in the AASHTO *Guide for the Development of Bicycle Facilities*.

CORRIDOR IMPROVEMENTS



SIDEWALKS AND PAVED SHOULDERS



CORRIDOR IMPROVEMENTS

Sidewalks are facilites separated from the roadway by a curb and sometimes a setback for the exclusive use by pedestrians. Paved shoulders are paved extensions of the roadway outside the traveled way.

Sidewalks should be installed as part of every urban arterial and collector street where there is developed frontage. Paved shoulders should be considered on any roadway where sidewalk construction is not feasible due to grade or right-of-way constraints.

When sidewalks are added to a roadway, pedestrian crashes are reduced by 88%¹. When paved shoulders are added to the roadway, pedestrian crashes are reduced by 70%1. Additionally, paved shoulders can increase the pavement life of roadways and reduce cracking. Sometimes, it is possible to provide a paved shoulder by simply narrowing wide travel lanes and painting edge lines to create a shoulder.

Sidewalks and shoulders are most cost effective when incorporated as part of roadway construction. If sidewalks cannot be provided at the time of roadway design, right-of-way should be secured and proper grading should be done in anticipation of sidewalks at a later date. Whenever roadway drainage goes from an open swale to a closed drainage system, sidewalk construction should be considered as a low cost addition to the project.

ROAD DIET

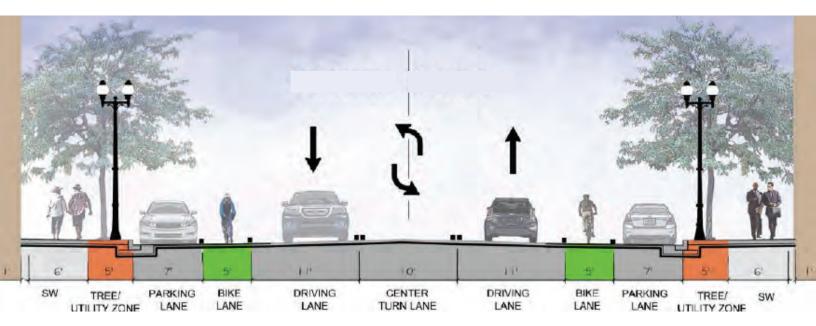


Image: Chicago Department of Transportation

CORRIDOR IMPROVEMENTS

A road diet reduces and reallocates the travel lanes of a roadway and usually adds a center two-way left-turn lane. A typical road diet reduces a 4-lane roadway to 3 lanes. The remaining space can then be used to add bike lanes, sidewalks, or widen existing sidewalks.

Typically, road diets can be implemented on streets with up to 20,000 vehicles per day without significantly impacting motor vehicle travel. However, between 15,000 and 20,000 vehicles per day, it is advisable to check intersection traffic volumes to determine if the intersections can accommodate traffic volumes after conversion. Right turn lanes may be necessary at certain intersections for road diets to work.

Road diets improve safety and mobility for all users by reducing rearend, sideswipe, and left-turn crashes, and freeing up one lane in each direction for uninterrupted travel. Total crashes are reduced by 18% to 44%.

RAISED (BARRIER) MEDIAN



Image: www.pedbikeimages.org/Dan Burden

CORRIDOR IMPROVEMENTS

Continuous raised medians provide a physical separation between lanes of opposing directions of travel. They often serve to provide a refuge in the middle of the street for pedestrians crossing.

Raised medians are useful on multi-lane roadways where there is a need to improve pedestrian crossings. Medians should also be considered where there has been a history of head-on collisions or pedestrians involved in crashes while crossing.

At unsignalized locations, raised medians were shown to reduce pedestrian crashes by 69%.

Guidance for the design of raised medians can be found in MUTCD Section 31.06.

ON-STREET PARKING



CORRIDOR IMPROVEMENTS

Image: www.pedbikeimages.org/Laura Sandt

On-street parking is the placement of parked vehicles on the roadway closest to the curb. On-street parking may be parallel or angle parking. The placement of on-street parking reduces travel speeds on the roadway and can reduce the severity of crashes by reducing vehicle speeds. On urban streets with posted speeds of less than 35 mph, streets that contain on-street parking have 50% fewer fatal crashes than streets without on-street parking.

On-street parking can be placed on most roadways in developed areas and should be considerend whenever it is desirable to provide parking for adjacent land uses and where a buffer between pedestrians and moving vehicles is desired.

Parallel parking lanes are usually 8 feet wide, but 7-foot parking lanes can be allowed, particularly where adjacent to a bike lane. If the travel lane adjacent to on-street parking is less than 12 feet wide and is used by bicyclists, shared lane markings may be used to encourage bicyclists to ride outside of the "door zone."

REAR-IN DIAGONAL PARKING



Image: www.pedbikeimages.org/Carl Sundstrom

Seattle, Washington Image: Nelson Nygaard Associates

CORRIDOR IMPROVEMENTS

Rear-in diagonal parking is the placement of angle parking where the front of the automobile is parked facing the travel lane with the back of the vehicle at the curb.

Rear-in diagonal parking should be considered wherever angle parking exists or is planned.

Rear-in diagonal parking eliminates the blind spots associated with angle parking, which particularly helps bicyclists traveling adjacent to the parking lane. Additionally, rear-in diagonal parking directs children exiting vehicles to the curb when the car doors are opened, and loading or unloading of items in the trunk takes place at the curb, rather than in the street.

BIKE LANE





La Crosse Image: T.Y. Lin International

La Crosse Image: Flickr.com/Dave Reid

CORRIDOR IMPROVEMENTS

Bike lanes are portions of the roadway that are delineated with pavement markings for the exclusive use by bicyclists. Normally, one bike lane is provided on each side of the roadway and travels in the same direction as the automobile lane. Bike lane signs can be used to supplement the pavement markings.

Bike lanes should be installed on collector or arterial roadways as part of a bicycle route to improve the visibility of bicyclists to motorists, provide space for bicyclists as part of a bicycle route, reduce the occurrence of wrong-way bicycling in traffic, and reduce the number of bicyclists riding on the sidewalk.

The addition of bike lanes has been shown to reduce bicycle crashes by 50%. Bike lanes are a much more cost-effective method of providing bicycle facilities than a sidepath, which typically requires additional right-of-way, is subject to drainage and alignment issues independent of the roadway, and can create conflicts between bicyclists and turning motorists.

Additional guidance can be found in the AASHTO *Guide for the Development of Bicycle Facilities*.

SHARED LANE MARKING



Image: www.pedbikeimages/Lyubov Zuyeva

La Crosse Image: Jack Zabrowski

CORRIDOR IMPROVEMENTS

A shared lane marking (or "sharrow") is a pavement marking placed on roadways that are recommended for bicycle travel but do not have adequate space for a separate bike lane. La Crosse has begun using shared lane markings to expand its bicycle network.

Shared lane markings can be used on any street recommended for bicycle travel where posted speeds are 35 mph or less, on shared roadways where it is helpful to remind motorists of the presence of bicyclists, or in transition areas where it is important to show the recommended bicycling location for bicyclists.

When applied to roadways, shared lane markings are shown to reduce the occurrence of wrong-way riding and bicycling on the sidewalk, and moving bicyclists out of the way of opening doors in the parking lane, all of which help to reduce crashes.

Guidance for the application of shared lane markings can be found in MUTCD Section 9C.07.

BUFFERED BIKE LANE



Image: www.pedbikeimages.org/Lyubov Zuyeva

Image: www.pedbikeimages.org/Steven Faust

CORRIDOR IMPROVEMENTS

A buffered bike lane is a bike lane that is separated from traffic by a painted median (with or without collapsible posts). It provides a greater horizontal separation between the bike lane and the automobile travel lane.

Buffered bike lanes should be considered wherever greater separation of bicycle and automobile traffic is desired. The buffer may be placed on either side of the bike lane (next to the through travel lane or the parking lane.)

Buffered bike lanes increase the separation between bicycles and automobiles, which may be helpful on roadways with posted speeds above 35 miles per hour.

Refer to the NACTO *Urban Bikeway Design Guide* for guidance on the design of buffered bike lanes.

CONTRAFLOW BIKE LANE



Washington D.C. Image: www.talesfromthesharrows.com

Madison, WI Image: Ann Friedwald, Schreiber Anderson

CORRIDOR IMPROVEMENTS

Contraflow bike lanes are bike lanes that run in the opposite direction as automobile traffic on a street. Contraflow bike lanes typically are used in cities with one-way streets where providing a traditional bike lane would result in excessive left turns, circuitous routes, or conflicts between motorists and bicyclists.

Contraflow bike lanes also can be considered where there is a need to close a gap in the bicycle facility network.

Contraflow bike lanes provide a bicycle facility where demand exists, as demonstrated by wrong-way riding. Additionally, by placing bicyclists in a contraflow lane, it reduces the likelihood of bicycling on streets not recommended for bicyclists or bicycling on the sidewalk.

Guidance for the placement of contraflow bike lanes is provided in the NACTO Urban Bikeway Design Guide.

LEFT SIDE BIKE LANE



Chicago Image: Google

CORRIDOR IMPROVEMENTS

Left side bike lanes are bike lanes painted on the left side of a roadway. Typically, left side bike lanes are placed on one-way streets, or on two way streets adjacent to a barrier median.

Left side bike lanes are appropriate on roadways with frequent driveways, transit service, or on roadway networks with one-way pairs.

Left side bike lanes reduce the need for a bicyclist to cross one or several lanes to make a left turn in areas where a bicycle facility continues to the left, or to avoid conflicting with pedestrians and transit vehicles at transit stops located on the right side of the road. However, right turns are more difficult with this design.

Guidance for the placement of left side bike lanes is provided in the NACTO Urban Bikeway Design Guide.

BICYCLE BOULEVARD



CORRIDOR IMPROVEMENTS

Portland Image: www.oregonlive.com

A bicycle boulevard is a roadway that has been designed to encourage bicycling by making the roadway more favorable to bicycling than to automobiles. This is done through the use of pavement markings, signs, traffic calming treatments such as diverter islands (pictured above), and in some cases signals that give signal priority to bicyclists.

Bicycle boulevards are recommended on streets with relatively low volumes and are particularly successful on roadway grid networks that provide ample alternate routes for automobiles.

Also referred to as "neighborhood greenways", bicycle boulevards often incorporate drainage improvements, such as open drainage swales, permeable paving materials, and rain gardens installed in curb bulb-outs to further enhance the aesthetics and environmental image of bicycle boulevards.

Design guidance for bicycle boulevards can be found online in the Bike Boulevard Planning and Design Guidebook from the Portland State University Initiative for Bicycle and Pedestrian Innovation (IPBI): www. ipbi.usp.pdx.edu/quidebook.php.

CYCLE TRACK



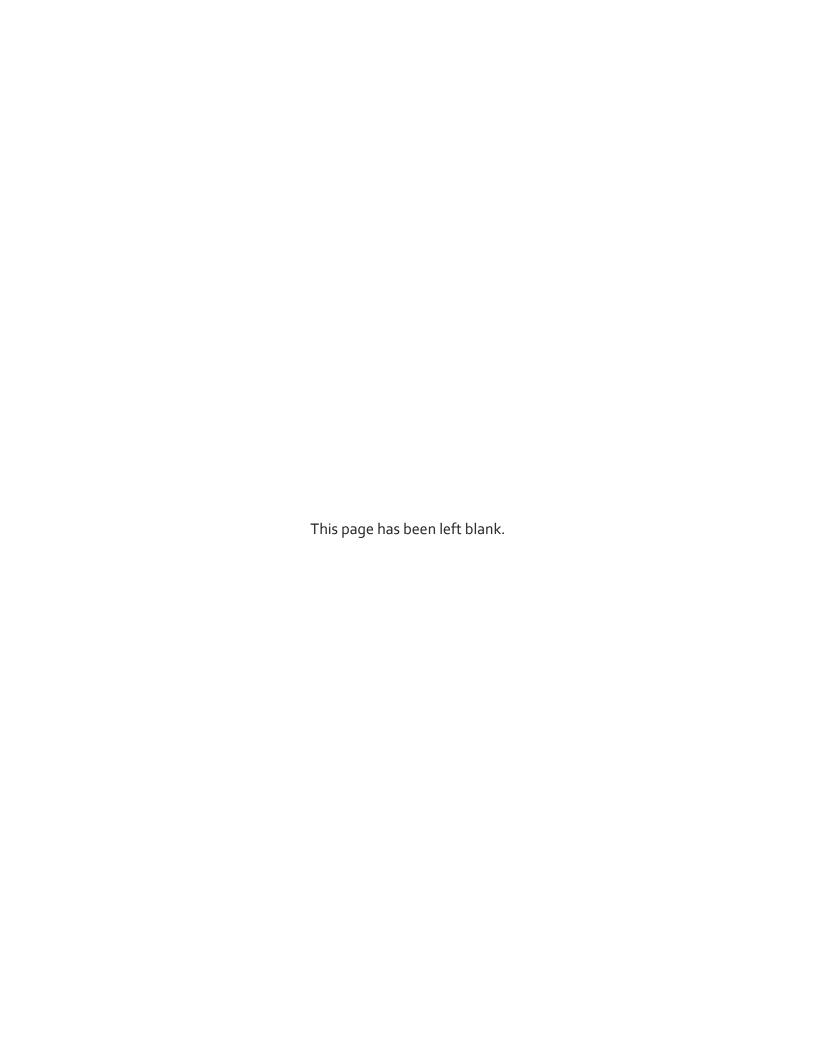
CORRIDOR IMPROVEMENTS

A cycle track is a dedicated bicycle facility for bicycles that is physically separated from traffic. It consists of a one or two-way facility for bicycles and is separated from automobile traffic with either a pavement marking buffer, collapsible posts, a curb, a change in elevation, or a combination of these items.

Cycle tracks can be considered for an urban street where a significant amount of protection and separation is desired between automobiles and bicycles. However, cycle tracks can pose a crash risk at intersections where turning automobiles cannot see bicyclists emerging from behind parked cars or standing pedestrians, or where the cycle track must cross or merge with a right turn lane for automobiles. In these cases, the use of bike signals or merging or crossing the bike lane with the right turn lane is recommended.

Cycle tracks physically separate bicycle and automobile traffic, which has been shown to reduce injury crashes by 28%.

Guidance for the placement of cycle tracks is provided in the NACTO *Urban Bikeway Design Guide*.





ON-STREET BIKE RACK



PARKING IMPROVEMENTS

On-street bike racks are the simplest way to provide convenient, regularly spaced bike parking in public rights-of-way and outdoor locations. Bicyclists secure bikes to the rack with their own lock, and a typical, inverted "U" bike rack can hold 2 bicycles.

On-street bike racks should be installed in the same locations where on-street automobile parking may be found, as these are typically the locations where both bicyclists and motorists want to visit.

A single inverted "U" bike rack should be installed parallel to the curb to provide 2 bike parking spaces while minimizing the footprint on the sidewalk. Two or more inverted "U" bike racks placed in series should be installed perpendicular to the curb. Multiple inverted "U" bike racks installed in series can be installed as a single unit, also known as a bike corral (see following page).

BIKE CORRAL



La Crosse Image: Erik Daily (for the La Crosse Tribune)

PARKING IMPROVEMENTS

Bike corrals are a form of bike parking where a series of bike racks are connected. They are installed as a single unit, which provides flexibility for seasonal, special event, temporary, or permanent installation.

Bike corrals may be used in public rights-of-way or installed on private property. One application of a bike corral is to replace an on-street automobile parking space with a bike corral to significantly increase the amount of parking in an on-street environment.

INDOOR BIKE PARKING





Image: T.Y. Lin International

PARKING IMPROVEMENTS

Indoor bike parking can be provided in a variety of ways, but indoor parking provides the added value of increased security, weather protection, and location convenience. Indoor bike parking is an element that is considered when awarding Bicycle Friendly Business (BFB) designation.

Indoor bike parking is popular for use in secure, private property locations. However, indoor bike parking may also be installed at transit stations, in parking garages, or other areas open to the public where automobile parking and/or pedestrian activity is common.

Wall-mounted, floor-mounted, and freestanding units are available for indoor bike parking.

BIKE GARAGE/BIKE TRANSIT STATION



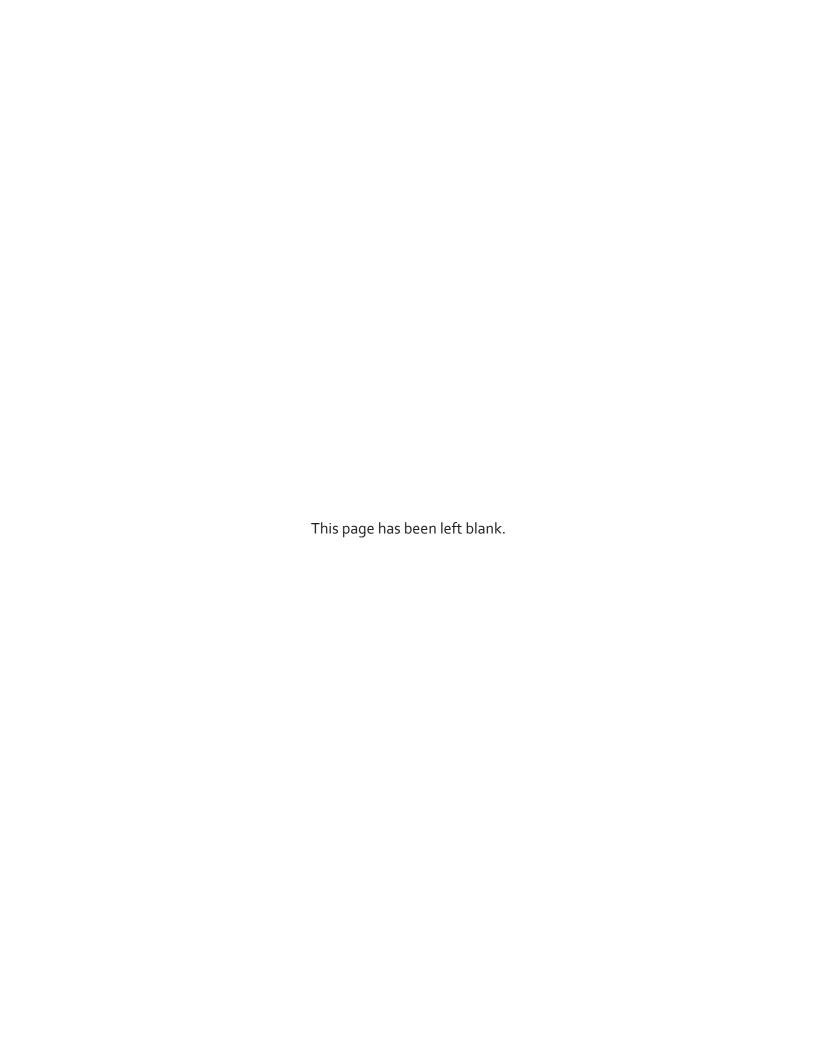
PARKING IMPROVEMENTS

Chicago Image: www.cityofchicago.org

Bicycle transit stations have become popular and can be found in many cities across the country including Washington D. C., Salt Lake City, and Chicago. The private, funding-assisted McDonald's Cycle Center in Chicago is located in Millennium Park. It includes 24-hour secure bicycle parking, showers, lockers, bicycle rentals, and bicycle repair. Other potential features are retail sales, electric vehicle charging, maps, and transit information. (www.chicagobikestation.com)

Bike stations can be in located in standalone buildings or may be part of an existing transit facility such as La Crosse's Grand River Station. Commuters are able to ride bus transit to the station and have their bicycle available to complete the trip to work and errands. recreational users and tourists, it is beneficial to have the station near an area of public gathering, such as Riverside Park, Myrick Eco Park, or other trailhead locations.

Possible funding or endorsement partners include local bicycle shops, who may lease space and provide public services at the station such as security, repairs, and concessions.



BICYCLE MASTER PLAN



The League of American Bicyclists administers two programs as incentive and reward programs to communities and businesses that make efforts to accommodate bicyclists called Bicycle Friendly Communities (BFC) and Bicycle Friendly Businesses (BFB). La Crosse is currently designated BFC Silver and has seven Bronze BFB. La Crosse aims to increase its BFC standing to gold level status or higher through the completion of the Bicycle and Pedestrian Master Plan and implementation of the recommendations provided in this plan.

In receiving the Silver designation in 2011, La Crosse was provided with recommendations to further improve the bicycling environment. To facilitate La Crosse's quest to improve its BFC status, the Bicycle Plan is formatted to follow the benchmarks that are contained in the League of American Bicyclists application.

These benchmarks can be used to guide the development of bicycle facilities, improve policies to facilitate and encourage bicycling in La Crosse, and achieve national recognition for its continued commitment to improving bicycling. Benchmarks are grouped into the five E's: Engineering, Education, Encouragement, Enforcement, and Evaluation/Planning.



ENGINEERING BENCHMARKS



Increase the number of on-street and off-street bicycle facilities.

Currently

The City's network of bicycle facilities is extensive. La Crosse maintains a network of nearly 40 miles of on-street facilities and off-road paved and unpaved trails. Additionally, the LAPC maintains a database of bicycle facilities and trails within the region that include facilities outside of La Crosse.

Recommendation

This plan proposes an additional 91 miles of on-street and off-street bicycle facilities, to be implemented over several years to expand the bicycle network. This includes family-oriented facilities suitable for younger bicyclists, or families wishing to pursue low-speed, recreational travel. Additionally, to advance La Crosse as a bicycling city, there are improvements aimed at appealing to a growing population of students and adults who desire bicycling as an alternative means of transportation to work, shopping, and travel around town. The bicycle master plan map is located at the end of this document. Table 3-1 on the following page shows the total existing and proposed bicycle facilities by type.

Table 3-1: Existing and Proposed La Crosse Bicycle Facilities by Facility Type

Bicycle Facility	Mileage¹		
	Existing ²	Proposed	Total
Bike Routes (Directional Signs) ³	10	22	32
Shared Lane Markings	7	17	24
Bike Lanes	11	33	44
Bike Boulevards	0	7	7
Shared Use Paths (paved)	14	12	26
Shared Use Paths (unpaved)	7	none proposed	7
Total	39	91	130

¹Mileage is calculated as the number of roadway miles containing bicycle facilities. For Shared Use Paths, total miles within the La Crosse City limits is provided.

²Miles of existing facilities were estimated using GIS data provided by the City of La Crosse and the La Crosse Area Planning Committee as of July 2012. This includes Human Powered Trails, Gundersen Lutheran Hospital Trails, signed regional routes and other trails maintained by other agencies within La Crosse. For the purpose of this plan, existing miles are calculated only for facilities that are located within the La Crosse City limits.

³Approximate

Benchmark

Increase the share of arterials that contain bike lanes.

Currently

Approximately 12% of the City's arterials contain bike lanes.

Recommendation

This plan proposes 33 more miles of bike lanes in La Crosse, which would increase the share of arterials with bike lanes to 43%.

Benchmark

Develop a network of bicycle boulevards.

Currently

La Crosse does not yet have a bike boulevard.

Recommendation

Seven miles of bicycle boulevards are planned, which expand the reach of bicycling to beginners and less confident bicyclists by providing a calmer environment with reduced traffic speeds and volumes.

Benchmark

Currently

Install wayfinding signs at strategic locations.

Bike route signs currently in place in La Crosse were part of the City's 1975 bike plan. Wayfinding information was not developed at that time.

Recommendation

Each proposed bicycle improvement includes recommendations for wayfinding signs to be placed at strategic locations to direct bicyclists to key destinations.

Increase the number of traffic signals that accommodate bicyclists.

Currently

Actuated traffic signals in La Crosse do not detect the presence of bicycles stopped at red lights. Wisconsin State Law allows bicyclists, when stopped at a red light, to wait 45 seconds and proceed with caution through a red light only if traffic is clear. However, traffic signals that do not accommodate bicyclists create gaps in the bicycle network.

Recommendation

Fifty-one roadway intersections, roadway-trail intersections, and trailheads and were identified as needing improvements in order to reduce the traffic stress level for bicyclists, reduce conflicts, and maintain network connectivity. Recommendations for these intersections include signs and pavement markings to highlight the presence of bicyclists and clarify their intended path, and signal improvements that are either converted to fixed time signals or make it possible for traffic lights to detect the presence of bicyclists. Additionally, bicycle roundabouts were recommended at trail intersections or at blind curves to help reduce conflicts involving bicyclists.

Benchmark

Increase the number of bridges that accommodate bicyclists.

Currently

The US 14/61 bridges across the Mississippi River accommodate bicycles. The Clinton Street bridge is planned for a road diet that will include bike lanes to better accommodate bicycles.

The Wisconsin Department of Transportation (WisDOT) is currently planning improvements to I-90 that include the US 53/WIS 35 interchange. The current interchange includes free flow ramps that make it difficult to accommodate on-street bicycle facilities on US 53/WIS 35 ramp crossings. When this interchange is reconstructed, various provisions are being considered to give bicyclists another major Mississippi River crossing. This may include wide shoulders, a sidepath, or buffered bike lanes, depending on available width and other design constraints.

The City of La Crosse supports the inclusion of bicycle facilities in the redesign of the bridge, the interchange, and ramps in order to make the crossings more bicycle friendly.

Identify weak links in the bicycle network. Use Bicycle Level of Service (BLOS) to assess conditions before and after improvements to strengthen these links.

Recommendation

Consistent with the Coulee Region 2035 Bicycle Plan, a trail is proposed along the spillway located in north La Crosse to connect French Island to Onalaska. Since this proposed improvement is located outside of the La Crosse city limits, La Crosse support this recommendation if and when it connects to the La Crosse bicycle facility network.

Currently

Bicycle Level of Service (BLOS) is not used when assessing existing streets for bicycle improvements. However, much of the City's street network can benefit from bicycling improvements that is consistent with the BLOS methodology.

Recommendation

Weak links in the bicycle network were identified, as well as problem intersections. To address these, additional treatments are recommended at these locations to strengthen connectivity and address motorist and bicyclist safety concerns. Additionally, when roadway or intersection reconstruction is planned, bicycle level of service (BLOS) should be considered when assessing bicycling conditions. To strengthen the City's Green Complete Streets Policy, La Crosse should adopt a policy that states that no roadway improvement project shall result in a deterioration of BLOS. Furthermore, roadway projects that improve BLOS should be given priority.

Benchmark

Establish review and coordination process between city planning and engineering staff, public works, state, and city contractors to ensure correct implementation of best design practices.

Currently

The planning department and engineering department has a Bicycle-Pedestrian Plan Steering Committee that guided the development of this plan. LAPC tracks the construction of bicycle facilities. However, there is no official position or committee within the City of La Crosse that coordinates bicycle facility inclusion in capital improvements.

Recommendation

The Bicycle Pedestrian Committee should be made into an official standing committee charged with the task of implementing the Bicycle and Pedestrian Master Plan. Tasks would include reviewing public agency and private development plans and proposals with respect to bicycle and pedestrian facilities, coordinating city, county, and state projects to ensure consistency with the Bicycle and Pedestrian Master Plan, and working with partner agencies to coordinate projects that involve multiple jurisdictions. This would allow the City to implement bicycle and pedestrian facilities concurrent with other city projects such as roadway resurfacing, reconstruction, sewer, stormwater, and utility projects.

Design and build facilities that adhere to local, AASHTO, MUTCD, and NACTO best design practices.

Currently

All planned bicycle facilities will include the installation of wayfinding signs consistent with the Manual on Uniform Traffic Control Devices (MUTCD) and the design guidelines in the soon-to-be-published 2012 American Association of State Highway and Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities (Bike Guide).

Recommendation

In addition to adhering to these best practices, this plan recommends upgrades to existing facilities that reflect the best practices from the National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide. The NACTO Urban Bikeway Design Guide provides design guidance for the implementation of innovative bicycle facilities in complex urban environments like La Crosse. For these and other best practices, refer to Section 2: Tools & Best Practices.

EDUCATION BENCHMARKS



Benchmark

Incorporate bicycle safety education as part of La Crosse school curricula.

Currently

The La Crosse School District has been providing bicycle safety education to students for the last 7-8 years. With the help of a federal grant, the school district purchased 80 bicycles, helmets and supplies to teach children about bicycle safety.

Central and Logan High Schools include bicycling as a part of summer physical education called Outdoor Pursuits. Before students ride, safety is reviewed, emphasized, and practiced in the classroom, gym, or parking lot. Longfellow, Lincoln, and Logan Middle Schools include bicycling in regular physical education classes. A bicycle safety manual was developed by La Crosse physical education instructors for use in La Crosse schools.

The city's 10 elementary schools have access to a curriculum called Basics in Bicycling. However, because of the amount of time associated with this curriculum and the limited time for instruction, it is rarely taught in its entirety. This program has been taught at one elementary school during the summer in the past. In addition, one elementary school offers biking as part of a physical education course.

Recommendation

Bicycle safety education should continue to be offered in La Crosse schools. Bicycle safety education could be offered outside La Crosse schools as part of driver education courses or as a component of continuing driver safety education courses that are provided to drivers who have received moving violations.

Benchmark

Expand the reach of bicycle safety education campaigns.

Currently

For the last three years during Bike To Work Week, the Driftless Region Bicycle Coalition has collaborated with local agencies and the La Crosse Public Library to hold bike safety rodeos at Hamilton School, the South Branch Library, and other locations. The Bicycle Federation of Wisconsin also teaches bicycling safety during events, upon request, or in partnership with public agencies.

The La Crosse Police Department used to host bicycle rodeos which incorporated safety education. The Police Department used two sites for this program: Franklin Elementary School on the north side of La Crosse and Spence Elementary School on the south side of La Crosse. Students from all elementary schools were invited to attend.

Recommendation

The City should continue to offer the bicycle safety rodeo on an annual basis to provide bicycle safety education to students. Basics in Bicycling can be taught over several years to students as they continue through school to address concerns over available space in the school curriculum. The summer school Outdoor Pursuits program should continue to be offered to students. The school district should consider bicycling education as an optional physical education class at the high school level, as well.

Benchmark

Increase the number of certified League Cycling Instructors who

live or work in La Crosse.

Currently

The Bicycle Federation of Wisconsin has trained all physical education instructors at the middle and high schools. The La Crosse School District is working on certifying its own instructors with one of their physical education teachers who has advanced training and certification. (A recently retired staff member had advanced training.)

Recommendation

The City should establish a goal to have a certified League Cycling Instructor (LCI) in each neighborhood in La Crosse and continue to certify instructors within the La Crosse School District. By offering periodic training, this would help keep staffing certified as teachers arrive and depart from the schools over time. The Wisconsin Bicycle Federation provides training and may be a potential partner in coordinating LCI training.

Provide bicycle safety training for bus and city vehicles, and law enforcement officers.

Currently

Bus operators and law enforcement staff participate in periodic safety training that includes bicycle safety. Currently, city staff who operate city vehicles are not provided with bicycle safety training.

Recommendation

The City should develop an education toolkit that would provide online video bicycle safety training. These videos should be part of basic orientation for employees who will operate city vehicles. The Wisconsin Bicycle Federation website provides bicycle safety information and links to other tools and videos. The City of La Crosse, the Wisconsin Bicycle Federation, Wisconsin Cycling Association, or other agencies should consider expanding the bicycle safety education resources available in La Crosse.

Benchmark

Add bicycling and motorist education messages at drivers education facilities or in media mailings, utility bill inserts.

Currently

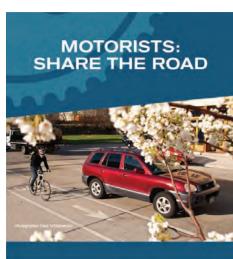
City residents are provided with bicycle safety education as part of the driver education programs. Recently, the La Crosse County Bicycle Pedestrian Coordinator developed video clips to address topics of concern with respect to bicycling in La Crosse, including shared lane markings (sharrows), bike lanes, and rectangular rapid flashing beacons (RRFB) for crosswalks. However, there is no continued bicycle safety training.

Additionally, the Wisconsin Bicycle Federation has prepared bicyclist and motorist safety education campaign materials. These printed materials conveninently summarize safe and desirable behaviors for both bicyclists as well as motorists.

Examples of Wisconsin Bicycle Federation safety education materials









Taxi, limousine, and other for hire transportation services are subject to safety regulations and licensing at the state level. La Crosse imposes no additional bicycle safety training beyond what is required by the State of Wisconsin.

Recommendation

The City of La Crosse should continue to promote bicyclist and motorist safety through television public service announcements and provide single-page safety summaries in mailings. These can be printed on the upper half of coupon pages for local businesses to increase their visibility in the mail, and increase the likelihood that they will be read and posted on the fridge before they are discarded.

Benchmark

Incorporate bicycle safety training in conjunction with Safe Routes to School (SRTS) application processes.

Currently

The La Crosse SRTS plan includes recommendations to improve coordination between the La Crosse Police Department and schools. The Police Department provides five school resource officers who provide education to students in various areas including traffic safety. A specific curriculum focused on bicycle safety is not currently part of this outreach program.

However, as part of the SRTS recommendations, school representatives expressed a desire to improve traffic conditions that would facilitate students walking and bicycling to school. This includes the creation of "bike trains" which are groups of students bicycling who are led by a parent or official designee, improved bicycle parking, improved pedestrian crosswalks that can be used by students riding or walking their bicycles, and improvements that would reduce the speed of vehicles on roadways near schools.

Recommendation

Part of the Safe Routes to School application inquires about education efforts to increase the number of students who bicycle to school. The La Crosse School District should continue to provide bicycle safety education in schools and document the total reach of these programs in applications and progress reports.

ENCOURAGEMENT BENCHMARKS



Benchmark

Increase the number of Bicycle Friendly Businesses (BFB) in La Crosse. Encourage and provide incentives for BFB to provide showers, secure bicycle parking, and other pro-bicycling amenities.





Currently

La Crosse now is home to a total of 13 Bicycle Friendly Businesses (BFB), more BFB per capita of any other city in Wisconsin. Congratulations to:

- Smith's Cycling and Fitness
- La Crosse Area Family YMCA
- Michaels Engineering
- SAP Labs La Crosse
- Three Sixty Real Estate Solutions
- Western Technical College
- Candlewood Suites
- Mayo Clinic Health System Franciscan Healthcare
- Dairyland Power Cooperative
- Gundersen Lutheran Health System La Crosse
- Logistics Health, Inc.
- School District of Onalaska
- Gundersen Lutheran Onalaska (honorable mention)

Recommendation

La Crosse should continue to encourage businesses to apply for BFB recognition and fast track business attempts to increase bicycle parking, provide assistance for businesses looking to provide showers and locker facilities for employees.

Achieve Bicycle Friendly University (BFU) designation for the University of Wisconsin La Crosse, Viterbo University, and Western Technical College.

Recommendation

Currently

Achieve BFU status for all universities colleges in La Crosse.

only college in La Crosse with this designation.

Benchmark

Increase the number of bicycling special events.

Currently

Bicycling events in La Crosse include road races and bike tours including the Cycling Criterium, bike tours during the La Crosse Fitness Festival, and the La Crosse Omnium. The City also closes roads temporarily for events such as the farmer's market on King Street between 4th and 5th Streets.

Western Technical College currently is designated as a Bicycle Friendly

Business (BFB) instead of the Bicycle Friendly University (BFU) and is the

Recommendation

La Crosse should continue to promote bicycling events and should consider a major road closure bicycling event to increase awareness of bicycling and provide bicyclists with a brief glimpse of bicycling on major roadways or bridges.

Inspired by movements such as *Ciclovía* gatherings where certain streets are closed to automobile traffic every Sunday in Bogotá, Columbia and Chicago's annual "Bike The Drive" event where Lake Shore Drive is closed for four hours on a Sunday morning, these special events provide a unique opportunity for people to experience bicycling in a city where perhaps some of them did not feel welcome or comfortable. Chicago also conducts "Sunday Parkways" events where some of its historic boulevards are closed to automobile traffic for four or more hours, temporarily transforming the parkways into linear parks for walking and bicycling. La Crosse should consider hosting Sunday Parkways events once or twice a year.

Benchmark

Increase the amount of bicycle parking at special events.

Currently

Bike corrals, valet bike parking, or temporary bike parking racks are used in La Crosse. Most promotional information for bicycling events in La Crosse covers automobile parking, but bicycle parking is not a major focus.

Recommendation

Special events in La Crosse should actively promote bicycling by providing large areas of secure parking, offer bike valet parking services, or provide bike corrals at special events. Additionally, for events that charge admission, La Crosse could offer discounted admission for those who bicycle to the event. The discount could be applied when attendees present their bike parking ticket at the entrance.

Recently

Include the local bicycling community in the bicycle planning process.

La Crosse has assembled a pedestrian and bicycle master plan steering committee to engage the local bicycling, pedestrian, health, and safety advocates in the planning process for this plan. The city website contains a Bicycle Friendly La Crosse page to keep the public current on the planning process and provides links to recent bicycling related news and information. While many residents of La Crosse are active in local bicycle projects, there is always room to further engage the public.

Recommendation

As mentioned in the Engineering section, the Bicycle Pedestrian Committee should be formally designated as the body assigned to review development plans and proposals with respect to bicycle and pedestrian facilities. Furthermore, through the development of a Facebook page or online group of residents who are interested in bicycle activities, the City would be able to maintain a constant avenue of communication with interested residents and participate in a continuous discussion forum about bicycle related city activity.

Benchmark

Recently

Organize bicycle rides to tour and celebrate recently-completed bicycle improvements.

The Driftless Region Bicycle Coalition (DRBC) celebrated the completion of bicycle facility improvements with organized rides and tours. In May 2012, Bike To Work Week included a guided tour with the Mayor of La Crosse to show off the recently-installed shared lane markings around La Crosse.

Recommendation

The City should offer a guided tour of bicycle facilities after they are completed. Specifically, the tours should be targeted to invite city officials, law enforcement officials, and residents near the improvement to increase awareness, understanding, and generate support.

Benchmark

Currently

Establish a bicycling mentorship or buddy program to assist inexperienced bicyclists.

The La Crosse County Health Department acts as the liaison between La Crosse County, municipalities within the county (including La Crosse), and the bicycling community. (This position is funded through an American Recovery and Reinvestment Act (ARRA) grant and is being phased out at the end of 2012.)

Recommendation

The City or County should pursue the creation of a permanent Bicycle Pedestrian Coordinator position. The Bicycle and Pedestrian Coordinator could work with the Police Department to teach bicycle safety in La Crosse schools.

Currently

Ensure that programs reach low income neighborhoods, areas isolated from downtown and near the colleges.

The City of La Crosse ensures that programs to encourage bicycling are offered city-wide and is committed to environmental justice, which is an executive order that requires Federal agencies and Federally-funded programs to include minority and low-income populations in the implementation of programs, including pedestrian and bicycling encouragement programs.

Recommendation

When implementing this plan, the city should actively seek meeting venues and facilities throughout the city to ensure that residents from all over the city are provided with access to safety and encouragement programs.

Additional Benchmark

Nationally

Increase citizen access to in-person bicycling encouragement and educational resources.

The City of Chicago's bicycling Ambassadors is a team of bicycle safety and education specialists who appear at events throughout Chicago to talk face-to-face with citizens. The City of Chicago's junior ambassador program is similar but involves a group of teenagers who deliver information to their peers. To qualify, the high school students must complete a 10-week bicycle safety and repair class. Chicago also has Safe Routes Ambassadors that teach children the benefits of walking and biking, and in 2009, began a teen safe driving campaign to educate teens on laws related to pedestrian safety.

(www.bicyclingambassadors.org)

The City of Minneapolis also has an ambassador program to provide education and outreach to work places, schools, and residents pertaining to biking and walking. The Minneapolis program is administered out of the Public Works Department. The ambassadors cover topics such as safety of gear and bicycles, riding instruction, and repairs. (www. bikewalktwincities.com)

Recommendation

La Crosse should pursue the development of a Junior Bicycle Ambassador program with the assistance of the City and the La Crosse School District, which may wish to incorporate public service clubs like the National Honor Society.

Additional Benchmark

Currently

Increase access to existing bike sharing programs or consider developing a new one in La Crosse Bike sharing in La Crosse is made possible by Viterbo University to students, faculty, and staff.

Recommendation

The City should consider ways to expand this program or develop one for La Crosse residents.

ENFORCEMENT BENCHMARKS





Benchmark

Continue to distribute bicyclist and motorist safety brochures.

Currently

The City of La Crosse has several bicycling safety brochures available free of charge at city hall and other public buildings.

Recommendation

The City should continue to develop and release bicycling safety materials. Additionally, the City could promote bicycling safety using social media as well as develop a city bicycling safety-oriented group for LinkedIn members.

Benchmark

Provide routine safety bulletins and safety training to law enforcement officials to stay current on traffic laws that affect motorists and bicyclists.

Currently

The Police Department briefs law enforcement officers at regular meetings to review known safety issues. This provides an opportunity to address or review safety issues with respect to bicycling, including ordinances that are designed to protect the safety of bicyclists.

Recommendation

The Police Department should provide regular updates on bicyclist safety issues, including any recent enforcement activities that involve the interaction of bicyclists with motorists and pedestrians. Additionally the Police Department should review bicycle traffic enforcement training materials, including recent videos prepared by the Portland Police Bureau and the Chicago Police Department from the Pedestrian Bicycle Information Center. These videos provide information on the types of enforcement activities that law enforcement officers encounter with regard to bicyclists and overall traffic safety. Information on these and other videos can be found at www.bicyclinginfo.org/enforcement/ training.cfm.

Additionally, the City should continue to develop and distribute bicycling safety and informational videos, and develop a page within the Police Department website to host or provide links to these videos.

Benchmark

Provide rewards or incentives for motorists and bicyclists who are observed operating bicycles and automobiles in a safe manner.

Currently

Currently, there is no program like this in La Crosse.

Recommendation

It is recommended that the city pilot a bicyclist "safety checkpoint" where bicyclists are greeted at a specific, clearly-identified checkpoint during bike to work week. At the safety checkpoint, bicyclists would be offered a free safety inspection of their bicycle, provided with safety information and rules of the road. The Police Department could distribute helmets and bike lights for free or offer coupons for discounted merchandise at local bike shops for bicyclists who do not have these items. Additionally, local businesses could offer discounts or promotions that are printed on educational materials.

Benchmark

Revise ordinances that confuse or deter bicyclists engaging in safe behaviors (e.g. clarify law that prohibits bicycling on downtown sidewalks, and encourage the use of downtown streets for bicyclists)

Currently

Bicyclists are not permitted to ride on sidewalks in the downtown business district. Sidewalks are marked with "Walk Your Bike" notices at corners to remind bicyclists of this law.

The language for the sidewalk notices were the result of striking a balance between "downtown friendliness" and the direct wording of the ordinance. However, during the bicycle workshop, some participants cited examples showing that some residents were under the impression that bicyclists are not permitted *anywhere* downtown. Clarification of the ordinance may be needed.

Recommendation

As part a social media campaign to encourage bicycling, messages to clarify or correct misunderstandings about the law should be offered

Provide warnings with education prior to ticketing for offenses such as failure to yield, passing too closely, failure to signal when turning, and communicate the safety benefits through brochures or face to face interactions.

on a regular basis. The City should remind business owners, residents, and law enforcement officials at regular intervals about this policy and incorporate it into promotional and educational materials, tourism advertisements, and in materials distributed during special events.

Currently

There is no official policy on whether educational materials are distributed as part of a warning or citation given during a traffic stop. The La Crosse Police Department provides verbal education of existing traffic laws as needed when giving a warning or citation.

Recommendation

The City should develop a one-page primer on bicyclist and motorist safety that can be distributed with a warning or citation. Additionally, some cities employ a practice where a warning is offered to motorists and bicyclists on the first traffic offense. As part of the warning, bicyclists and motorists are provided with safety information and informed that while they are only being given a warning, the next offense will be a citation and that the first warning will also be upgraded to a citation and fine. This arrangement is offered under the assertion that pending citations and fines help to clarify the laws and responsibilities of motorists and bicyclists and communicate the importance of safe driving and bicycling behaviors.

Benchmark

Improve bicycle registration processes to prevent loss and theft of bicycles.

Currently

The La Crosse Police Department reported that in 2012 there were 156 bicycles reported stolen, go bicycles found, and 4 bicycles returned. Recovered bicycles are stored in the City's bike barn where residents can claim lost or stolen bikes. The low recovery rate was attributed to the challenge of identifying lost or stolen bicycles and a lack of confidence that bicycles could be found or returned. One of the factors contributing to this is that bicycle registration is low.

However, the La Crosse Police Department is currently working to improve this process in the hopes of increasing bicycle registration, improving recovery rates to improve bicyclist confidence, and encourage more bicycling.

Recommendation

The Bicycle Pedestrian Committee should work with the Police Department to improve outreach related to bicycle registration and increase resident awareness about the bike barn.

EVALUATION/PLANNING BENCHMARKS



Benchmark

Go beyond U.S. Census data to get a more detailed look at bicycling traffic. Conduct regular annual bicycle traffic counts along major bicycle routes and along planned facilities. Maintain a rolling database of bicycle traffic information that is refreshed regularly (annually, every three years, etc.)

Currently

When traffic impact studies are required for certain developments, the city may require traffic counts to include bicycle and pedestrian traffic. However, bicycle and pedestrian counts currently are not collected on a regular basis by the City of La Crosse and there is no database that is updated regularly with respect to pedestrian or bicycle traffic. Currently, an origin-destination study is underway in La Crosse. The current study does not address bicycle travel.

Recommendation

The City should develop and maintain a bicycle traffic count database of bicycle traffic at specific locations throughout La Crosse. These counts should be performed on a rolling, multiyear basis so that the city can track the change in bicycling activity as improvements are completed. Volunteers from the bicycling community usually can be recruited to assist in this effort. Future traffic studies in La Crosse also should incorporate bicycle travel where it is observed to add to the database.

Utilize crash analysis tools, such as the Pedestrian Bicycle Crash Analysis Tool (PBCAT) to regularly review and report on the potential causes of crashes, and identify recurring crash locations or "hot spots."

Currently

PBCAT is not used in La Crosse. PBCAT typically requires data inputs that can be found in a crash report filed by the city.

Recommendation

The City of La Crosse should conduct an annual review of bicycle crashes that occur in La Crosse. This could be done using PBCAT, however the city may benefit more from conducting a standard crash analysis and reviewing the information with the Police Department and the Traffic Engineering department. Based on this review, the city should then make recommendations to remediate the potential contributing factors to the crash, including engineering improvements, law enforcement improvements, and other factors.

Benchmark

Establish a baseline of automobile trips and encourage businesses and residents to reduce the number of trips taken, or Vehicle Miles Traveled (VMT) by automobile.

Currently

VMT in La Crosse is collected and reported by the La Crosse Area Planning Committee in the 2035 La Crosse and La Crescent Metropolitan Area Transportation Plan. While the plan mentions a decrease in VMT from 2007 to 2008, a baseline of VMT is not established.

Recommendation

The City should establish a baseline of VMT and use this baseline to establish a goal of converting a portion of VMT to bicycle trips.

Benchmark

Assess the economic impact of bicycling in La Crosse. Identify the bicycle-related business activity in terms of revenue generated, number of jobs created, and spending related to bicycling in La Crosse.

Currently

The city of La Crosse and surrounding areas provide a wealth of bicycling opportunities, both as a form of transportation and outdoor recreation. The region is host to several bike shops, bicycling clubs, organized rides, parks, trails, and websites dedicated to providing information on bicycling, retail commercial bicycle businesses, and other companies and agencies that benefit from bicycling. However, there is no economic impact report or comprehensive resource that quantifies the financial impacts and incentives that exist with respect to bicycling in and around La Crosse.

Recommendation

There is potential for the bicycling and bicycle-related market to grow. The city should complete a bicycling market assessment to estimate the size and power of this market.

Employ a bicycle and pedestrian coordinator to manage the implementation of Bicycle and Pedestrian Master Plan recommendations.

Nationally

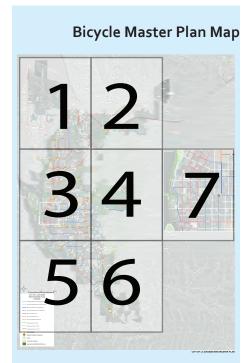
Cities around the country are incorporating bicycle and pedestrian projects and programs into city development processes and educational curricula.

Recommendation

The City should dedicate a bicycle and pedestrian coordinator to coordinate and oversee capital projects to ensure that bicycle and pedestrian improvements are implemented properly and in accordance with the La Crosse Bicycle and Pedestrian Master Plan. For more information on bicycle pedestrian coordinating staff, visit:

http://www.bikeleague.org/resources/reports/pdfs/why_bike_ped_staff_april_2010.pdf.

BICYCLE MASTER PLAN MAP



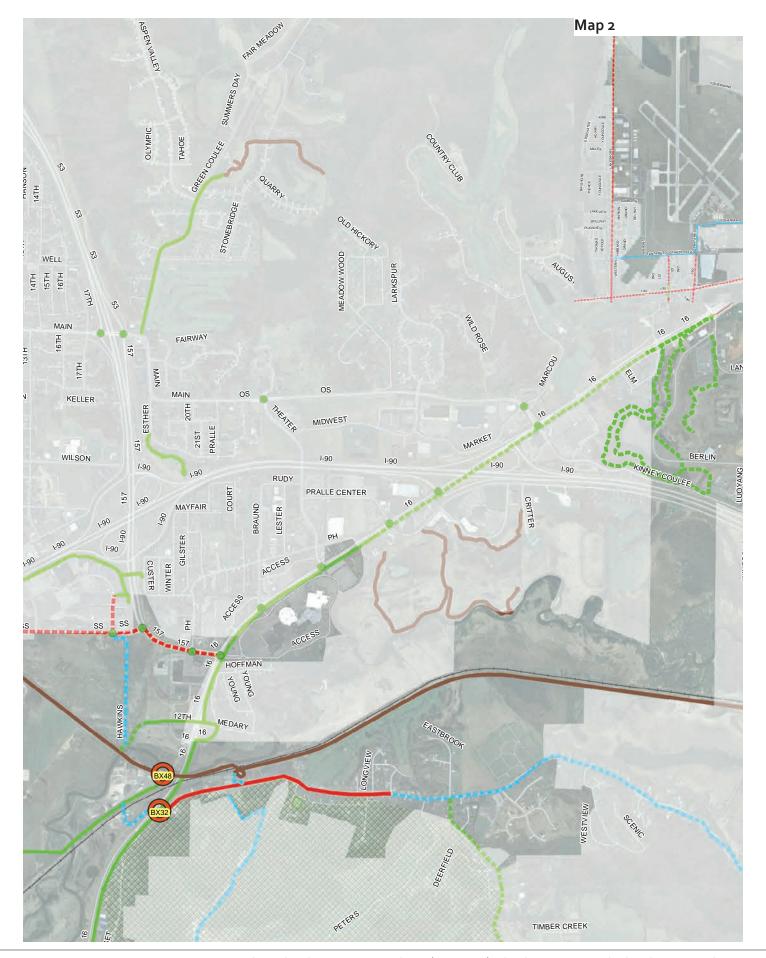
The Bicycle Master Plan Map shows recommended bicycle facilities including:

- Directional Signs for Signed Routes
- Shared Lane Markings
- Bike Lanes
- Bike Boulevards
- Shared Use Paths

The map also identifies problem intersections, which are parts of the existing or proposed bicycle network that would be difficult for bicyclists to cross without additional improvements. Proposed solutions are recommended for these intersections which may include additional signs, pavement markings, a proposed change in traffic control devices, or intersection reconstruction. Refer to Chapter 5, Implementation Plan, for a table containing these recommended improvements.



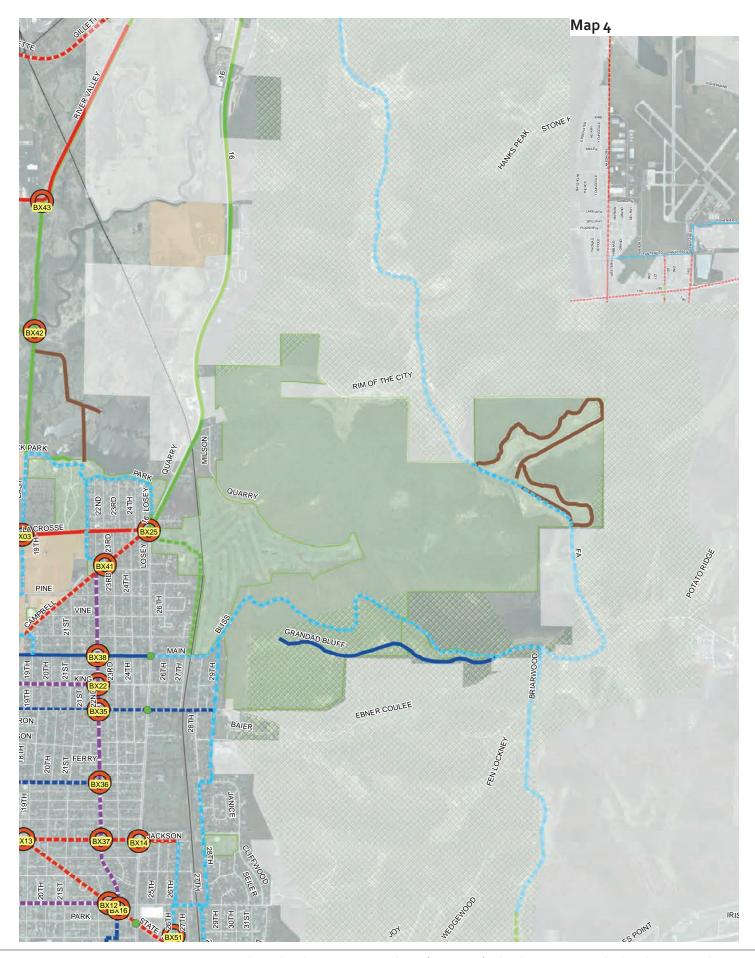
Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-22



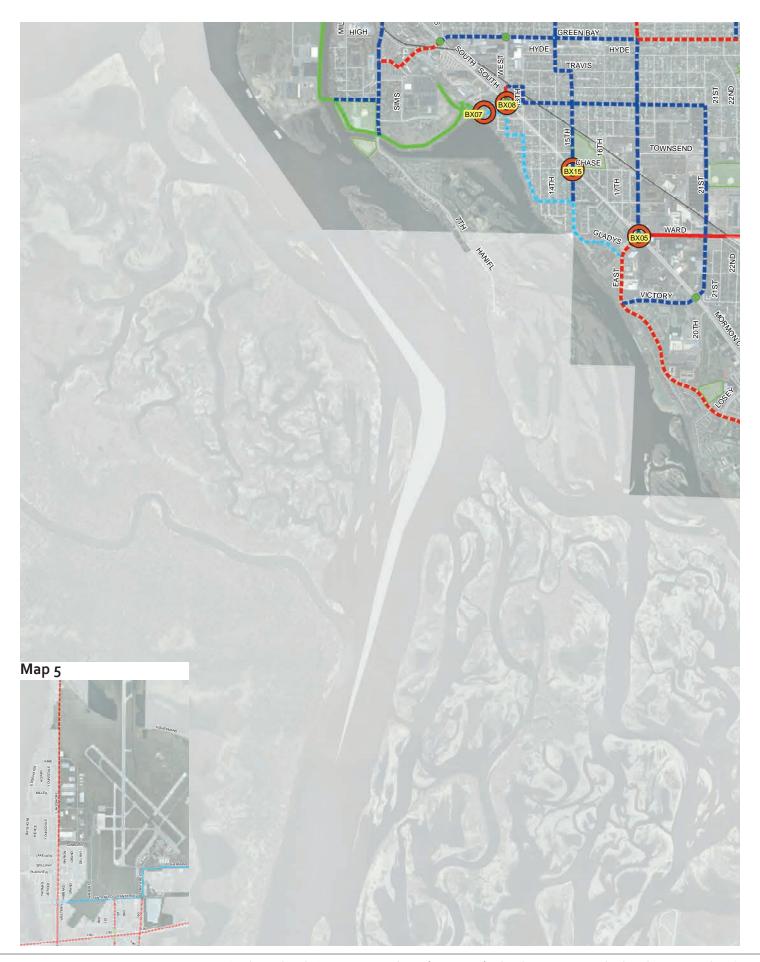
Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-23



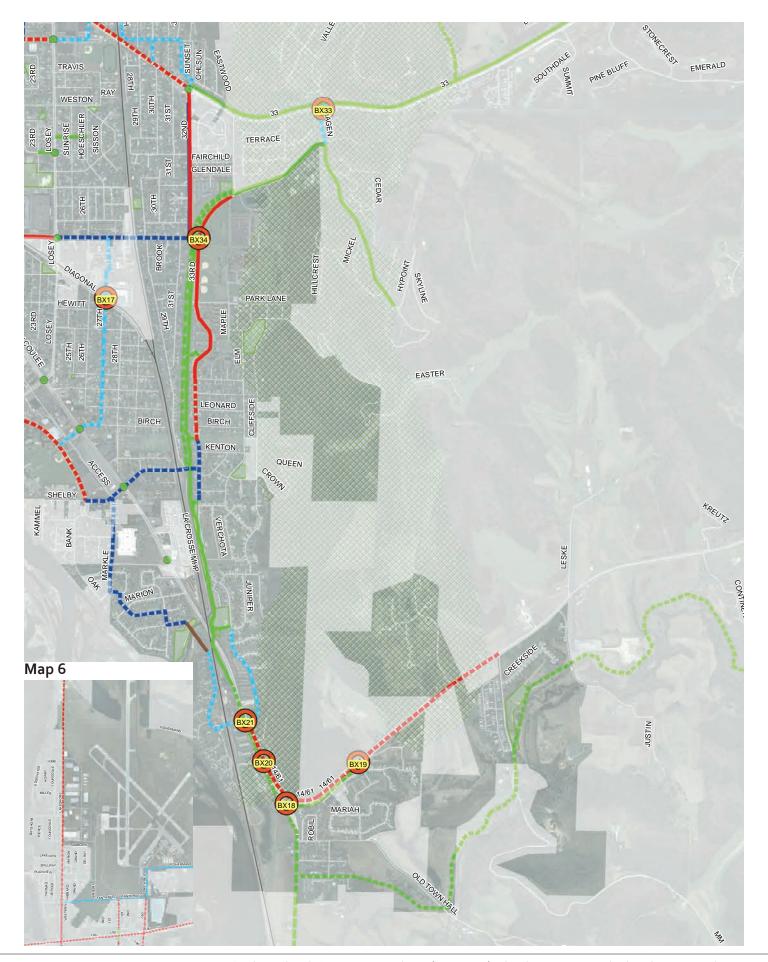
Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-24



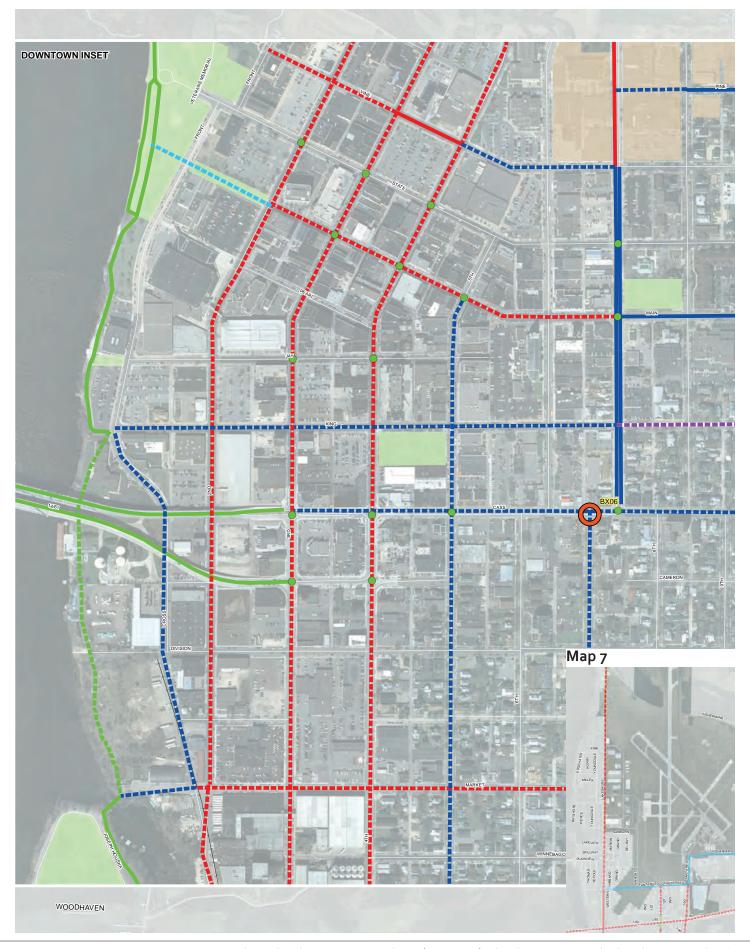
Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-25



Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-26



Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-27



Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 3-28





The La Crosse Pedestrian Master Plan follows benchmarks established by the Pedestrian and Bicycle Information Center's Walk Friendly Communities (WFC) Program. Similar to the Bike Friendly Communities, WFC celebrates the achievements of cities and towns that have "made a commitment to improving walkability and pedestrian safety through comprehensive programs, plans, and policies."

Participating municipalities are provided with access to resources and information about ways to improve walkability and pedestrian safety, professional guidance for conducting an assessment of current walking conditions in town, and national recognition for their efforts toward improving the pedestrian environment in the community.

To date, La Crosse has not participated in the WFC program. Municipalities wishing to apply may fill out an application and work with program staff during the application process.

The application is an assessment of existing culture and environment for municipalities with respect to pedestrian activity and provides a framework for improving upon the existing condition. Known as the Community Assessment Tool, the program asks the municipality to provide or estimate data on pedestrian activity to establish a baseline upon which to score an application.

The following sections of the Pedestrian Master Plan are organized into the "five E's": engineering, education, encouragement enforcement, and evaluation.



ENGINEERING BENCHMARKS



Benchmark

Increase the number of streets with sidewalks and/or walkable shoulders

Currently

The City of La Crosse maintains an extensive sidewalk network that covers most of the city. However, there are still streets where no sidewalks exist. While not all streets require sidewalks in order to be both accessible and walkable, there is still a need for some streets to be improved to address safety concerns.

This plan provides a walkability assessment that reviews the City's sidewalk network to identify the locations of sidewalk gaps and other issues including heaving, cracked or broken sidewalks, curb ramps that were not passable, and intersections without crosswalk markings. This provided the City with a large set of data that can be used to prioritize where improvements should be made.

Recommendation

This plan recommends sidewalks along selected streets where gaps exist in order to address safety concerns and provide connectivity near schools. While not all streets require sidewalks in order to be "complete", some streets may need engineering improvements in lieu of sidewalks in order to address safety concerns, reduce speeding, or provide adequate facilities for pedestrians. In outlying areas of La Crosse where homes and businesses are widely spaced, frequent walking trips are less likely.

Eliminate sidewalk gaps.

However, a facility <u>should</u> be provided wherever pedestrians are expected. In outlying areas or areas with low levels of pedestrian activity, paved shoulders are an acceptable alternative to sidewalks, as it is easier for the city to plow and maintain shoulders in these areas as opposed to sidewalks.

Currently

The City of La Crosse Engineering Department has a sidewalk repair program that addresses heaving or cracks in existing sidewalks. Repairs are made as they are spotted or reported, and the number of repairs is done based on a \$100,000 annual budget. An additional \$40,000 per year is spent on the installation of curb ramps at intersections. These programs are focused on areas of the city with existing sidewalks; this does not address new construction in areas of the city where sidewalks do not currently exist. A lack of local support in some areas is attributed to concern over keeping the sidewalks clear in the winter.

Additionally, the City's policy on prioritizing the installation of sidewalk states that sidewalk installation is resolved in the capital budget process.

Recommendation

A sidewalk gap map, as well as maps showing the prioritization of crosswalk and curb ramp improvements, is provided at the end of this chapter. As part of this plan, La Crosse city staff, consultants, and volunteers participated in a large scale data collection effort to document the presence and quality of sidewalks, curb ramps, and crosswalk markings within the city limits.

Sidewalk gaps, crosswalks, and curb ramps have been reviewed and prioritized for improvement. Not all streets require sidewalks in order to be "complete." However, this plan provides an assessment of the pedestrian environment to determine what streets may require safety improvements, which may include sidewalks. The entire city was checked for sidewalk gaps; single panels that were missing as well as entire city blocks and streets.

Sidewalk gaps have been identified and prioritized based on a number of factors, including proximity to schools, hospitals, location along major streets, proximity to downtown, and other factors.

The City should continue to review areas of the city that do not have sidewalks and monitor pedestrian activity, motorist speeds, and crashes to determine if and when sidewalks may be warranted to address safety concerns.

Establish a crosswalk marking program. Develop a policy on which types of crosswalk markings to use in La Crosse.

Currently

High visibility crosswalk markings were observed on most major roads, the bulk of which are highways, including West Avenue, State Road, Losey Boulevard, 3rd Street, 4th Street, South Avenue, Cass Street, Rose Street, George Street, and Highway 16. However, not all crosswalks were marked, including some crosswalks near schools.

Recommendation

High visibility crosswalk markings are recommended anywhere that the City wants to improve motorist visibility of crosswalks and crossing pedestrians. High visibility crosswalks use more paint and are visible from a greater distance than two transverse lines painted on the street. Improved visibility contributes to better sight lines which results in increased opportunity for motorists to stop, thereby improving motorist yielding behavior.

Benchmark

Increase the number of intersections that are accessible in accordance with the Americans with Disabilities Act (ADA)
Accessibility Guidelines and the Public Rights-of-Way
Access Guidelines

The City should establish a crosswalk marking program to prioritize the marking of crosswalks. High visibility crosswalks should be placed first near schools, parks, and at midblock locations. Second, crosswalks should be marked in business districts where pedestrian traffic is likely.

Currently

As signals are upgraded or replaced, La Crosse includes accessible pedestrian signals (APS) as part of the intersection reconstruction. APS are designed to be used by all pedestrians, including those with vision or hearing impairments. APS are required when a request is made for the City to make a specific route accessible to pedestrians with hearing or vision impairments. Additionally, whenever work is done at an intersection, pedestrian signals, as well as all other infrastructure located at the intersection, must be improved to "the maximum extent feasible" which typically includes the installation of APS.

(Below): Typical Crosswalk Markings. High visibility styles are "Continental,", "Zebra," and "Ladder."



Recommendation

The City should continue its policy for upgrading signals to accessible pedestrian signals (APS) when traffic signals are upgraded or replaced. Additionally, the City should establish a priority for installing new APS. First, APS should be provided at intersections where the city has received an official request for an accessibility accommodation. Second, when signals are upgraded or improved with roadway construction, APS should be provided. Third, for signalized intersections that do not have pedestrian push buttons because a walk phase is provided for every signal cycle, the Traffic Engineering department should review the intersection and prepare a revised layout plan to accommodate audible signal indicators in the future when the intersection is reconstructed.

Benchmark

Increase the number of pedestrian crossings that are enhanced with traffic control devices

Currently

The City has installed rectangular rapid flashing beacons (RRFB) at two pedestrian crosswalks on multilane highways where additional treatments were needed in order to get motorists to stop for pedestrians in the crosswalk.

Recommendation

This plan recommends intersection improvements at several intersections where additional treatments are needed in order to facilitate pedestrian crossings and motorist compliance. This includes RRFBs, pedestrian signals, pedestrian refuge islands, pedestrian warning signs, advance stop bars, and other approaches that have been shown to increase motorist compliance. The City should install traffic control devices to enhance pedestrian crossings, particularly on multilane highways, near schools and universities, and in the downtown.

Benchmark

Currently

Establish a target for the number of trips taken on foot.

The City of La Crosse currently does not have a baseline number of trips taken by pedestrians. However, the U.S. Census Bureau shows that nearly 8% of La Crosse residents walk to work. Another 2% take transit to work, which involves walking to access to transit.

Recommendation

The City should establish a zone in which pedestrian traffic data will be collected to establish a baseline of trips taken on foot. From this baseline, the City can establish a goal of increasing this share. It is recommended that the City designate an area of the downtown or near the University of Wisconsin - La Crosse as the initial data collection site.

Utilize crash analysis tools, such as the Pedestrian Bicycle Crash Analysis Tool (PBCAT) to regularly review and report on the potential causes of crashes, and identify recurring crash locations or "hot spots."

Benchmark

Develop streetscape guidelines incorporating pedestrian crosswalks, pavement markings, sidewalks, curb ramps, and other pedestrian facilities.

Currently

La Crosse does not use PBCAT to analyze the factors that contribute to crashes involving pedestrians.

Recommendation

The City should conduct some form of annual crash analysis, even if PBCAT is not used. The City could conduct a standard crash analysis and periodically review the information with the Police Department and the Traffic Engineering department to determine if intervention in the form of engineering improvements or targeted enforcement is needed.

Currently

Streetscape guidelines have been proposed in recent plans, including the 2035 Coulee Regional Bike Plan, the South La Crosse Transportation Study, and the La Crosse City Vision 2020 Downtown Master Plan. These plans provide best practices or area-specific guidelines that were provided to assist in creating a vision for property development or transportation facility design.

Recommendation

Now that the City has a Green Complete Streets Ordinance, design guidelines are necessary in order to get new infrastructure built correctly. The City should prepare and adopt a set of streetscape guidelines that emphasize the design of pedestrian facilities, including the sidewalk, curb ramps, and intersections.

Guidelines should be developed for various parts of the city, such as residential neighborhoods, along major roadways, and in the downtown. With a set of streetscape guidelines, La Crosse can provide specific guidance to developers and engineers for projects that involve street construction and site development. Guidelines do not have to be developed from scratch; components of model design guidelines can be incorporated from various cities around the country.

EDUCATION BENCHMARKS



Benchmark

Increase the number of schools active in the Safe Routes to School Program for La Crosse.

Recently

The 2006 Safe Routes to School Plan identified needs around 19 schools in La Crosse as well as a community-wide analysis that looked at crash data, the presence of crossing guards, and the presence of pedestrian infrastructure around schools in general. Since that time, the La Crosse County Health Department successfully obtained a grant and has hired a Safe Routes to School coordinator.

The La Crosse County Health Department Safe Routes to School Coordinator has been active at implementing the plan and monitoring the progress of Safe Routes to School activities, including outreach, education, and coordination of capital improvements that further the objectives of the Safe Routes to School Plan.

In 2012, the La Crosse Safe Kids Coalition was awarded a \$25,000 grant to form an environmental task force to identify pedestrian safety improvements near a La Crosse school.

Recommendation

La Crosse County should pursue 100% district involvement in the Safe Routes to School Program by the 2013-2014 school year. La Crosse County has been actively implementing the Safe Routes to School Plan through coordination with various city departments as well as the La Crosse County Health Department and the La Crosse School District.

The City should continue to track the implementation of the City's Safe Routes to School Plan and continue to encourage capital improvements

Conduct education campaigns on traffic laws and pedestrian safety. Incorporate educational materials for traffic signals, push buttons, midblock crossings, and crossing multilane highways.

that will improve walking and bicycling for students traveling to school through dedicated funding as well as locally-funded initiatives. The Safe Routes to School Annual Report should continue to serve as a key document of reference when applying for Walk Friendly Community status.

Currently

The City of La Crosse provides safety and education materials related to pedestrian safety and distributes these materials free of charge from city offices and other public buildings. Recently, the La Crosse County Bicycle Pedestrian Coordinator developed video clips to address topics of concern with respect to walking and bicycling in La Crosse, and one of these videos featured the rectangular rapid flashing beacons (RRFB) for crosswalks.

Recommendation

The City should continue to develop and promote these informational videos for additional pedestrian safety topics including pedestrian push buttons, audible pedestrian crosswalk signals, pedestrian countdown clocks, "yield to pedestrians in crosswalk" signs, and pedestrian refuge islands.

Additionally, the City should develop bus wrap advertisements depicting pedestrian and motorist safety messages, such as yielding to pedestrians in crosswalks, statements that "every bus stop is a crosswalk" and proper motorist behavior for overtaking buses in traffic, particularly at bus stops.

Benchmark

Provide pedestrian safety training for school, city, and law enforcement officials.

Currently

The La Crosse Safe Routes to School plan involves coordination with the La Crosse Police Department which provides five school resource officers who work to provide education to students in various areas including traffic safety. The Police Department assists with walking school buses, which are groups of students who are led by a parent or official designee. There are nine schools participating in the walking school buses which vary in length from 10 to 50 students.

Recommendation

The City should continue its pedestrian safety training for law enforcement officials, highlight recently installed pedestrian safety improvements, and prepare a press release regarding new traffic control devices, signs, and information that highlights key safety and operational elements to increase motorist and pedestrian awareness.

ENCOURAGEMENT BENCHMARKS



Benchmark

Develop weekend Open Streets or Sunday Parkways programs and festivals.

Currently

La Crosse hosts several festivals annually that make use of parks and the city's festival grounds. For example, the King Street Farmer's Market is held on Friday night's in the summer and fall and involves the closure of King Street between 4th and 5th Street next to Copeland Park (above right).

Recommendation

The Encouragement benchmark for bicycling also recommends the closure of streets for regular weekend festivals and special events. This City should consider a seasonal downtown street closures for weekend events on a monthly or quarterly basis. Additionally, bike valet parking is popular in La Crosse. The DRBC and other groups often staff the bike valet during La Crosse special events. The City also should include conveniently located bike valet parking for these events.

The City should list recurring farmer's markets, festivals, and other special events on its website and in recreation and tourism materials. For neighborhood groups interested in block parties or events that involve the temporary closure of streets, the City should develop an online information resource that explains the process and provides links to the necessary permits and forms.

Currently

Develop walking tours of areas of La Crosse, provide pedestrian maps to key destinations in the downtown and other areas. Footsteps of La Crosse is a partnership between the La Crosse Public Library, the Wisconsin Historical Society, the University of Wisconsin La Crosse, Wisconsin Hometown Stores, and Wisconsin Public Television to provide walking tours within La Crosse. Currently, Footsteps La Crosse has developed 21 walking tours posted at various locations throughout the City. Information on these tours can be found at www.footstepsoflacrosse.org.

Recommendation

The City should continue to support Footsteps of La Crosse and provide a link to this resource on the City's website.

Benchmark

Currently

Develop walk to school and walk to work events, promote annual or seasonal events.

The City of La Crosse celebrates Walk and Bike to School and Work events, including Bike to Work Week (BTWW), which is coordinated by DRBC in May of each year. The Coulee Region Childhood Obesity Coalition (CRCOC) and Gundersen Lutheran Hospital participate as well by providing walk to school and work tips.

The week includes a walk and wheel to work and school challenge, as well as Walk Around Downtown events structured to get families interested in events and activities that can be enjoyed as pedestrians.

Recommendation

DRBC and the City should continue to promote BTWW and the associated Friday Bike to Work Festival as a summary event to celebrate the week. Festival stakeholders include the organizations responsible for Footsteps of La Crosse, as well as the Chamber of Commerce, interested neighborhood groups, and Gundersen Lutheran Hospital.

Benchmark

Currently

Establish walking school buses as part of Safe Routes to School programs and walk to school events.

La Crosse has nine participating schools with 10-50 students per week who walk to school in walking school buses. The walking routes are posted on each school's website to allow parents to review the routes and consider participation in the program. Parents also are encouraged to participate by assisting in the walking school bus.

Recommendation

The La Crosse School District should continue to promote this program to increase the exposure of walking school buses to parents and students, as well as using the walking school bus to increase the visibility of pedestrian students to motorists in La Crosse.

Encourage community engagement by soliciting walkability audits from neighborhood groups, business associations, or other organizations.

Currently

This plan kicked off a data collection process that utilizes smartphone applications to collect data in real time assisted with the use of geographic information systems (GIS). At the pedestrian workshop, representatives from various agencies and community groups were invited to participate in the process. In addition to providing a baseline for improving pedestrian facilities in La Crosse, the City is exploring the possibility of future applications of the database.

Recommendation

The City should develop a portal or provide a link to the mobile and web-based application that provides view-only information to residents and interested stakeholders. As a long-term strategy, the City should consider using the mobile and web-based applications in future neighborhood planning, campus planning, or other small area planning efforts as a means of generating interest and allowing users to collect their own data. Paired with a training session as part of a planning process, the mobile and web-based applications have great potential to increase the speed and ease of the data collection process, and provide interested stakeholders with a "hands on" role in the planning process.

ENFORCEMENT BENCHMARKS



Benchmark

Increase the number of pedestrian police patrols.

Currently

Pedestrian patrols are conducted by the La Crosse Police Department. This includes police presence at outdoor and special events, as well as in the downtown. A grant provided by the Wisconsin Department of Transportation (WisDOT) provides funding for police departments to help officers conduct patrols that are centered on pedestrian safety. Patrols are conducted as officers are available, and locations of pedestrian patrols vary.

Recommendation

The City of La Crosse should continue to provide pedestrian patrols as WisDOT funding will allow. Additionally, the City should work with the Safe Routes to School Coordinator or Bicycle Pedestrian Coordinator to increase the visibility of police patrols by informing enforcement officers of special events, weekend festivals, and in areas with high levels of pedestrian traffic, including campus areas, parks, and downtown.

Benchmark

Establish a Traffic Safety Officer program and provide regular training.

Currently

The La Crosse Police Department currently has a traffic safety officer program that works with La Crosse schools to provide safety education. The traffic safety officer can present a discussion in classrooms on an asneeded basis depending on the availability of officers during the school day, and the class is customized depending on the age of students. Currently, this program is offered using existing resources at the Police Department.

Recommendation

La Crosse should continue to support officer traffic safety discussions and talks for different grade levels as students undertake more complicated tasks as pedestrians (i.e. early elementary education, when students cross streets while holding the hand of another pedestrian, middle school, when students cross streets under the supervision of a crossing guard, and junior high school, when students cross streets on their own.)

Benchmark

Continue to support an ongoing Crossing Guard training program for schools in La Crosse.

Currently

La Crosse currently has crossing eight paid crossing guards that provide crossing assistance for students at five of the La Crosse elementary schools.

Recommendation

La Crosse should continue to support and provide training for crossing guards at La Crosse schools. To expand the program, the City and school district should seek potential crossing guard volunteers through the La Crosse Education Association and La Crosse Parent Teacher Organization. The City should also approach the University of Wisconsin - La Crosse, Viterbo University, and Western Technical College for students with degree fields that are related to pedestrian and traffic safety.

Benchmark

Conduct seasonal or annual pedestrian safety enforcement campaigns through the use of targeted crosswalk warnings or stings to educate motorists of traffic laws that pertain to pedestrians.

Currently

Safe Kids Wisconsin-La Crosse Coulee Region coalition, formed in February 2011, provides access to the partner agencies that could coordinate a program of this type. Information Safe Kids Wisconsin can be found at http://safekidswi.org/SafeKidsWisconsin-LaCrosseCouleeRegion.asp. Currently, La Crosse does not have an annual or seasonal pedestrian safety program.

Recommendation

The City should work with Safe Kids Wisconsin to provide a seasonal pedestrian safety program in the fall of each year concurrent with the beginning of the school year. This should be conducted in coordination with Walk To School Day. Additionally, the City of La Crosse Police Department should conduct annual or biannual pedestrian crosswalk stings at predetermined locations to increase pedestrian safety by increasing motorist yielding compliance. Pedestrian crosswalk stings should be well advertised using the City's website, print mailings, a press release, and possible radio or YouTube spots informing residents of the upcoming effort.

Crosswalks should be clearly marked in advance of the targeted crossing so that motorists have ample warning of the sting and are reminded that the law applies at all crosswalks where pedestrians are

present. Furthermore, the sting location should be chosen based on the availability of a parking lane or a side street very close to the subject crossing to ensure that motorists who are pulled over do not impede typical traffic flow. Additionally, this location should be visible to passing motorists even if they are not pulled over.

Local television stations should be involved in this process to publicize the event. Advance notification followed by recorded coverage of the sting operation ensures that not only are residents informed of the operation beforehand, but also that the audience is much wider that only the offenders who are caught.

Benchmark

Acquire mobile travel speed signs to alert motorists of their travel speed. Use in conjunction with warnings and citations to reduce speeds on roadways where posted speed limits are often violated.

Currently

The City has one mobile speed sign that is capable of reporting the travel speed of approaching vehicles. It is owned by the La Crosse Police Department and is set up to record and provide speed feedback information to motorists at 5 locations.

Recommendation

The City of La Crosse, in partnership with neighborhood groups, schools, and colleges, should coordinate the purchase of mobile speed signs for use during construction projects, outreach and safety campaigns, or as part of neighborhood planning projects. With the assistance of the Safe Routes to School Coordinator, neighborhood association leaders and the City Traffic Engineer, the Bicycle and Pedestrian Coordinator should work with these groups to identify additional locations and evaluate the need to purchase additional feedback signs.

Benchmark

Reduce the 85th percentile travel speed on arterials and collectors to the posted speed.

Currently

The City of La Crosse Traffic Calming Policy for local residential streets states that traffic calming requests may be submitted to the city in writing, according to a set of guidelines. The City shall, at the discretion of the City Traffic Engineer, consider a request and determine if a study will be conducted. Among the reasons for requesting a study are pedestrian safety, vehicular collisions, speeding or reckless driving, bicycle encouragement, and other reasons. The City currently uses this policy to address speeding concerns on roadways under La Crosse jurisdiction.

The Wisconsin Department of Transportation (WisDOT) policy on traffic calming states that traffic calming measures typically are not used on State Trunk Highways (State Road, Rose Street, etc.). WisDOT assumes that many cities require 80-90% of community endorsement before implementing traffic calming. La Crosse does not state that this threshold is required in its Traffic Calming Policy.

Recommendation

The City should continue to support and expand the traffic calming program as a means of reducing speeding and/or cut-through traffic in neighborhoods where a need has been established by the City Traffic Engineer.

It is important for the City to consider all possible approaches to reducing travel speeds on residential streets, including engineering improvements. When speeding is observed on residential streets, pursuing engineering improvements above and beyond the installation of traffic control devices (e.g. stop or yield signs) can be a more effective means of reducing speeding than signs or traffic law enforcement efforts alone. As stated in the City's policy, engineering improvements with these objectives in mind are self-enforcing when it comes to reducing vehicle speeds.

The City also should consider corridor improvements on any collector or arterial roadways under La Crosse jurisdiction where the 85th percentile speed is more than five miles per hour above the posted speed. Collector and arterial corridor improvements also can include making adjustments to traffic signals to move traffic at desired travel speeds, informing motorists of the signal speeds that have been established, narrowing travel lanes and adding bike lanes, using road diets to eliminate underused travel lanes that facilitate speeding, and addition of on-street parking.

EVALUATION/PLANNING BENCHMARKS





Benchmark

Conduct routine pedestrian traffic counts and establish benchmarks for increased pedestrian activity in downtown and other key locations.

Benchmark

Conduct routine walkability assessments with neighborhood and community groups, near college and hospital campuses, and along major arterials.

Currently

La Crosse has no baseline of pedestrian counts in the downtown. However, the number of students walking to school is counted using classroom tallies done as a sample during the school year as part of the Safe Routes to School Plan.

Recommendation

The City should develop a database of pedestrian traffic counts in the downtown, near college campuses, and at schools. Residents and student volunteers should be asked to collect some of this information.

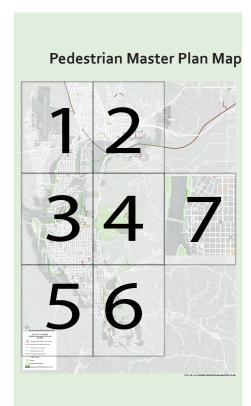
Currently

La Crosse currently is engaged in a walkability assessment pilot program that utilizes smartphone technology paired with geographic information systems (GIS) to collect data on sidewalks, curb ramps, pedestrian crossings, traffic signals, and bus stops. This information is being used to establish a baseline and to possibly coordinate with the city's continued efforts to repair sidewalks within La Crosse.

Recommendation

This recommendation is a continuation of the education benchmark for walking. The City should maintain the mobile and web-based applications as a tool that can be provided to groups of stakeholders when conducting walkability assessments. Following a brief training exercise with interested stakeholders as part of a planning project, the City should make the applications available for users who wish to participate in the data collection process.

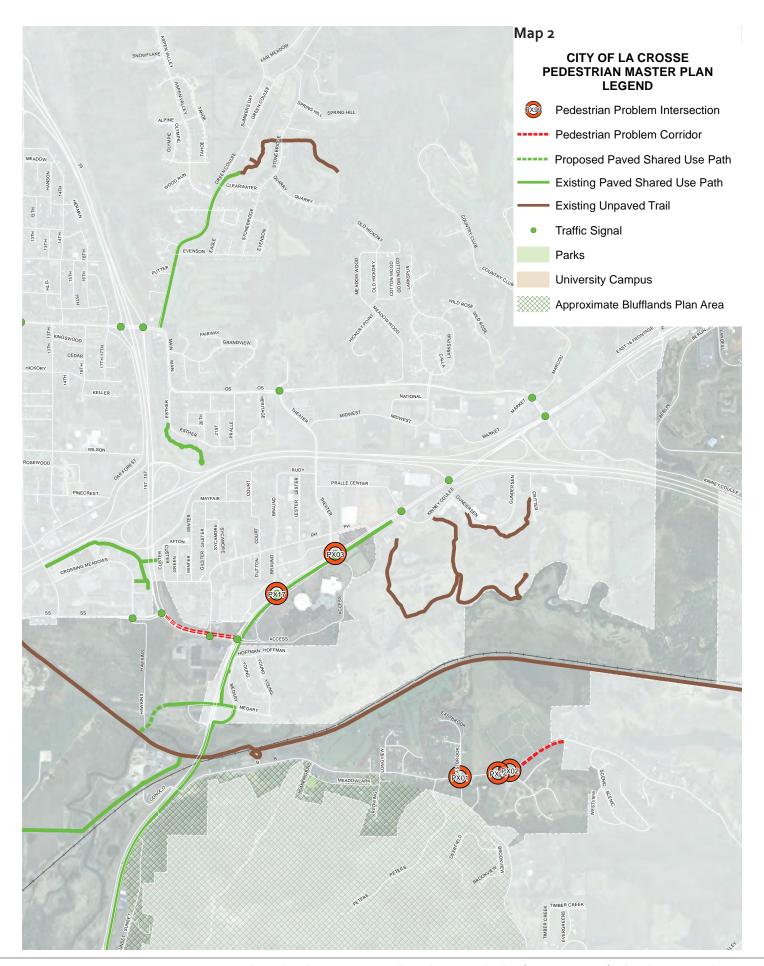
PEDESTRIAN MASTER PLAN MAPS



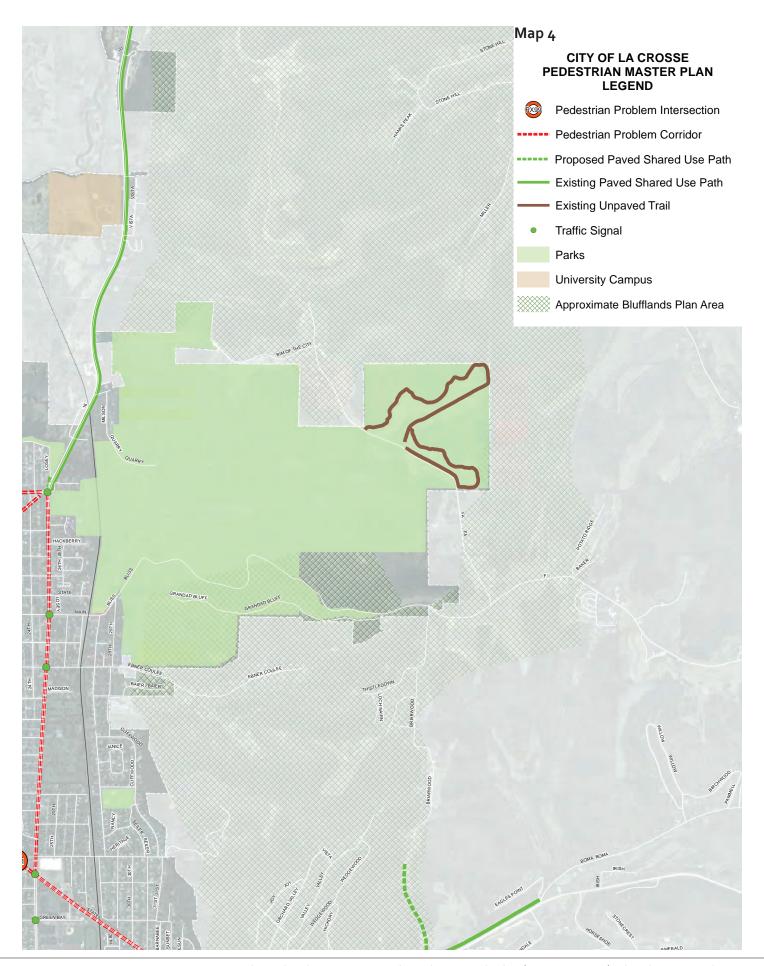
The Pedestrian Master Plan consists of four maps:

- 1. A Master Plan Map identifying problem intersections and problem corridors. These were identified by those who attended the pedestrian workshop, project stakeholders, or areas that were highlighted in other roadway and transportation plans in La Crosse. These specific problem areas were identified to receive specific attention related to issues raised during the planning process. These improvements were prioritized and included in the Implementation Plan.
- **2.** A Sidewalk Gap Improvement Map identified all of the sidewalk gaps that were identified during the pedestrian assessment. Sidewalk gaps should be filled on a rolling basis as funds are assigned. Using the prioritization criteria that were developed for this plan, the sidewalk gaps are listed as high, medium, and low priority to provide general guidance on areas where the city should focus its resources.
- **3. A Pedestrian Crosswalk Map** identified crosswalks that currently are unmarked in La Crosse. Pedestrian crosswalks should be marked on a rolling basis as funds are assigned. Every roadway intersection is a legal pedestrian crosswalk unless there is a sign posted expressly prohibiting pedestrian crossings at a particular location. According to Wisconsin state law, this applies even when the crosswalk is not marked. However, to avoid confusion on the part of motorists and pedestrians, this map identifies which pedestrian crosswalks are most in need of pavement markings. Marked crosswalks increase the visibility of crosswalks to motorists and help to indicate where pedestrians are encouraged to cross.
- **4. A Curb Ramp Map** identifies curb ramps in La Crosse that are missing or in need of repair. As part of making all public rights-of-way accessible, curb ramps should be repaired on a rolling basis as funds are assigned. The curb ramps were prioritized as low, medium, and high priority. Because curb ramps are largely dependent on sidewalks leading to them, the prioritization of curb ramps was reviewed and adjustments were made where possible to and align priorities of curb ramps with sidewalks.

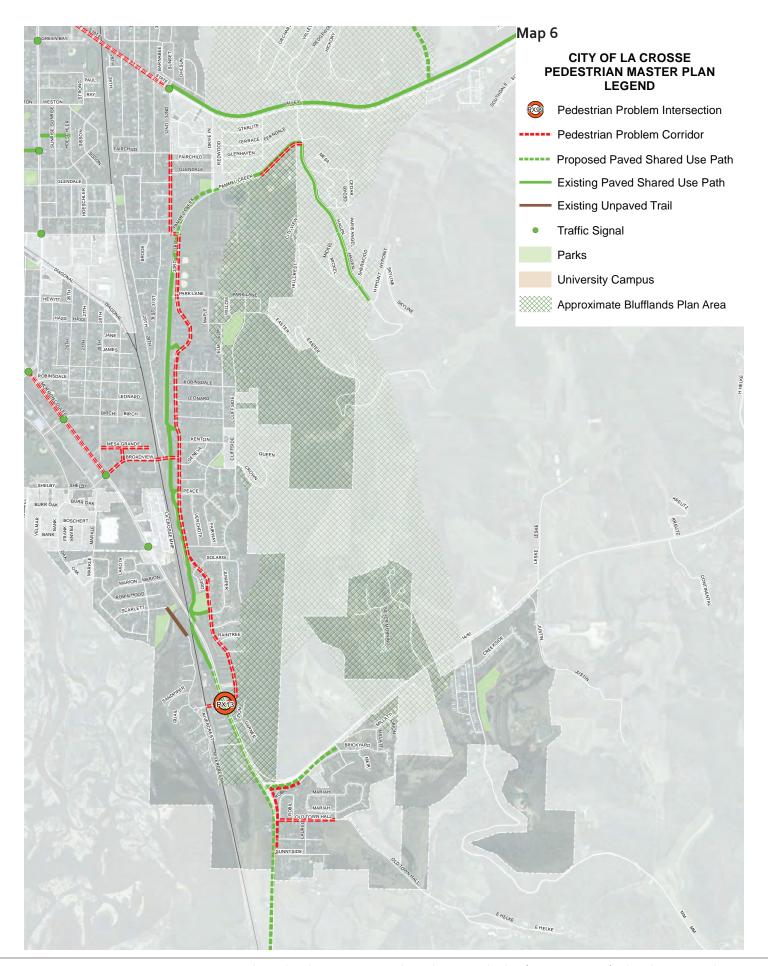




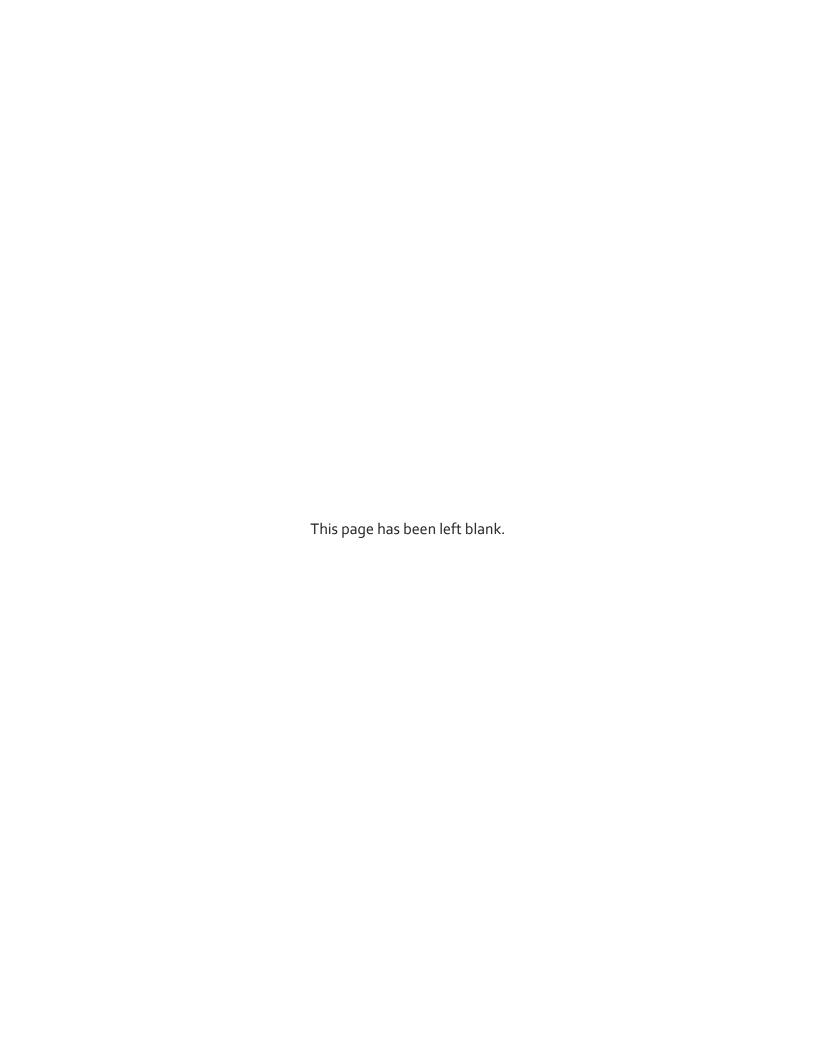


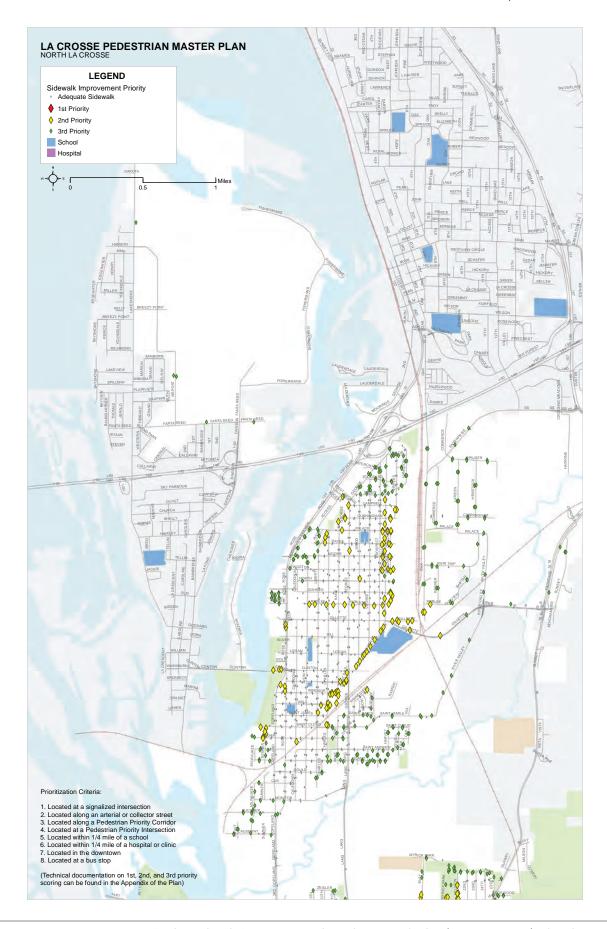


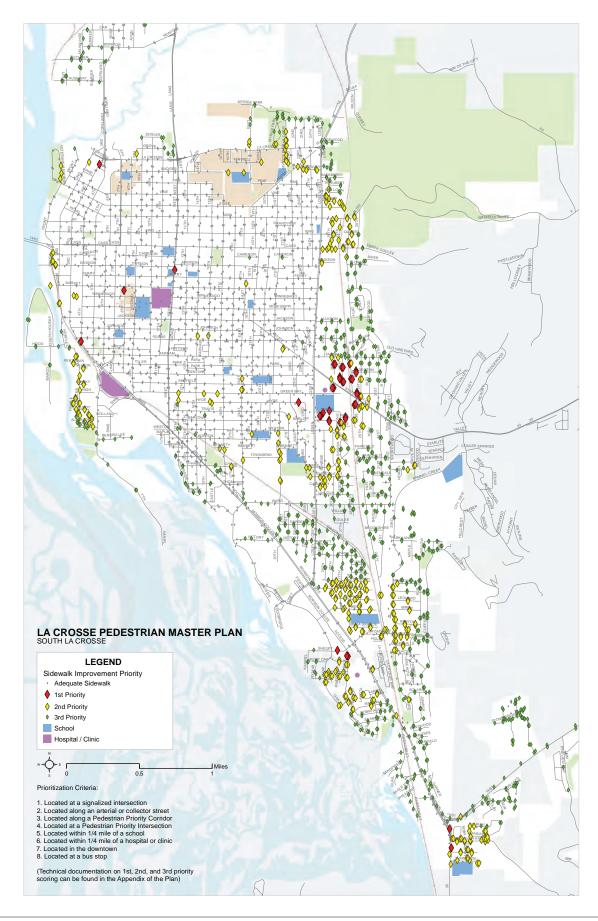


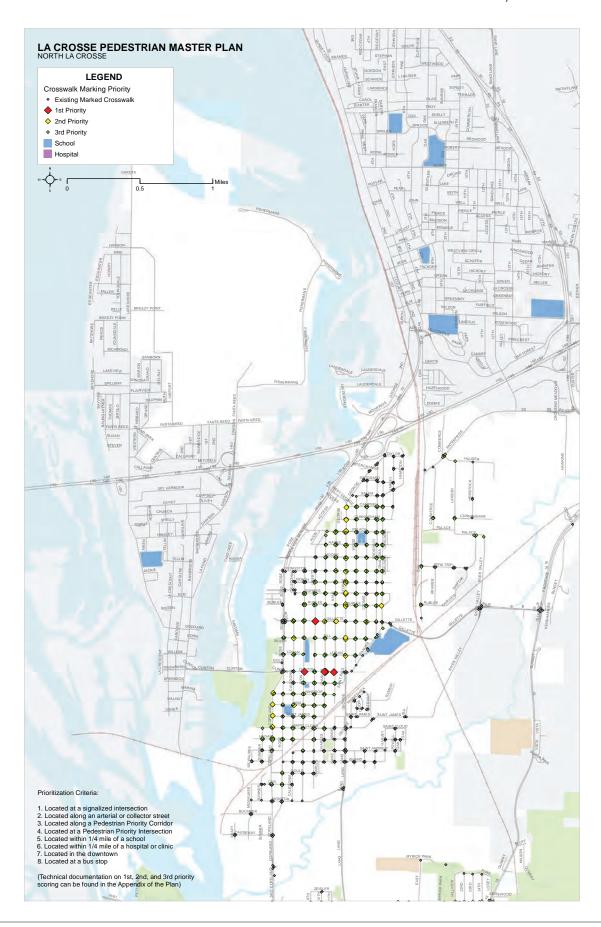


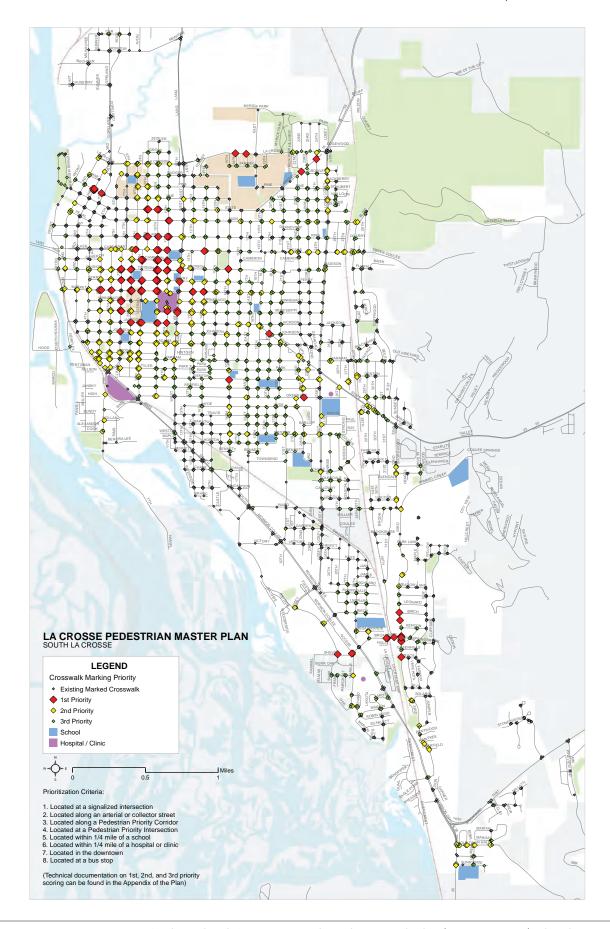


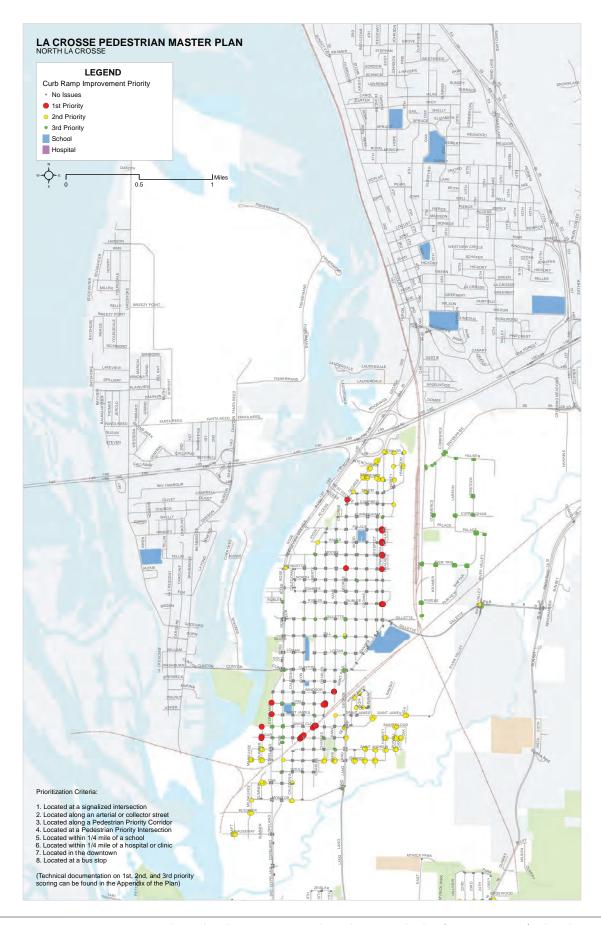


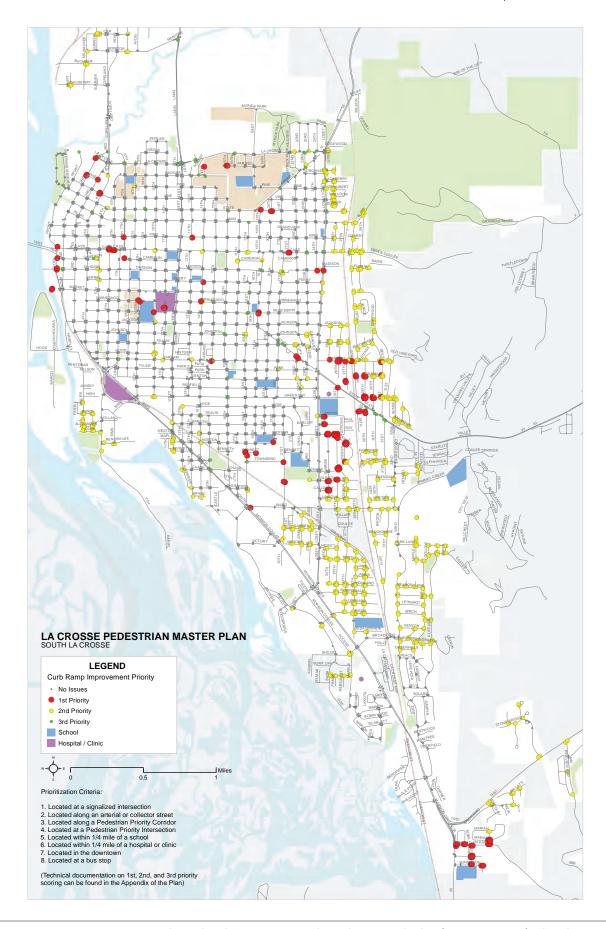


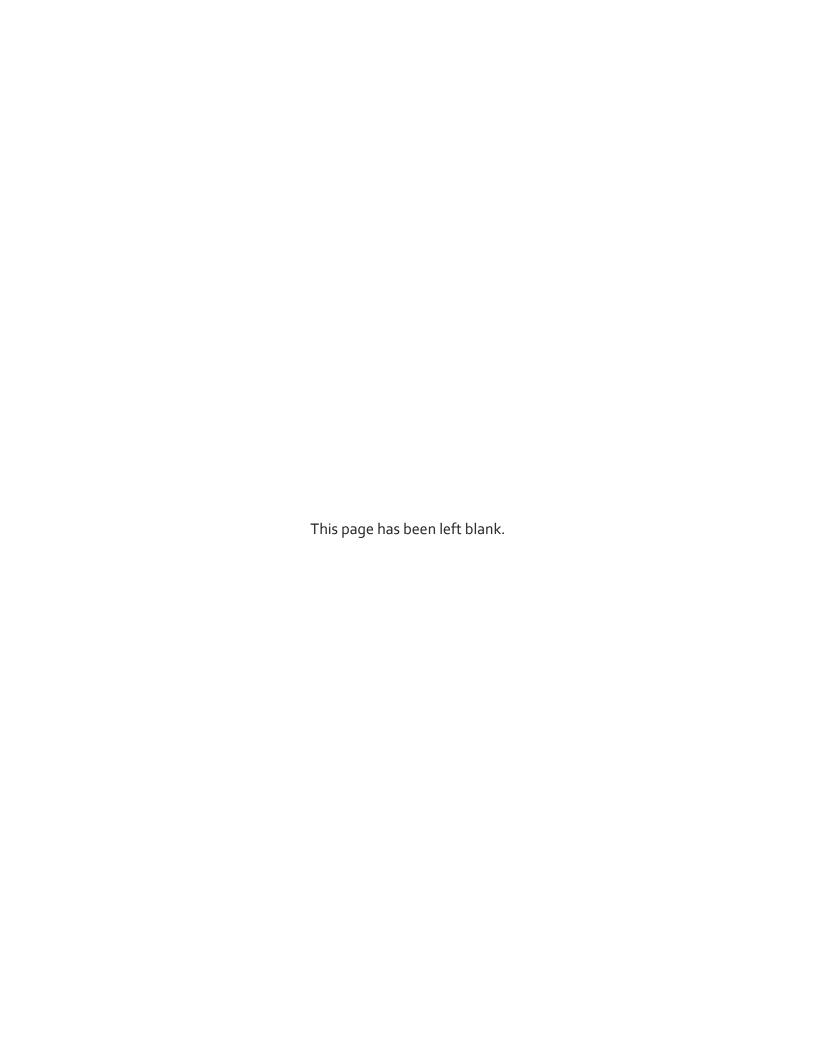
















The Bicycle and Pedestrian Master Plan contains more than \$7 million of proposed improvements. This section of the plan identifies the course of action for implementing recommended policies as well as capital improvements related to bicycling and walking.

The Implementation Plan is influenced by the following general principles:

Implement New Policies

Improving the way the City and other agencies accomplish tasks to accommodate bicyclists and pedestrians in everyday activities is of greatest importance. Formal adoption of the Bicycle and Pedestrian Master Plan is the first step to improving bicycling and walking in La Crosse.

Fix Broken Infrastructure

A commitment should be made to repairing infrastructure that currently exists but is broken or in disrepair.

Improve Unsafe and Unaccommodating Intersections

Unsafe intersections or places that appear hostile towards pedestrians and bicyclists create a negative environment for all nonmotorized users. This discourages walking and bicycling, and may contribute to a culture that is not supportive of nonmotorized activity.

Fill In Gaps

Filling in gaps identified in the network can be challenging and sometimes may require costly improvements. However, strategically filling in gaps can vastly improve the network.

Grow The Network

Lastly, improvements should be made to make the bicycle and pedestrian network larger and more intricate. To reduce project costs, new bicycle and pedestrian facilities should be implemented as roads are resurfaced or reconstructed. As funding is scarce, it will be important to identify opportunities for dedicated bicycle and pedestrian funding, as well as seeking funding sources at the county, state, and Federal level.

Funding

Securing adequate funding for programs, projects, and maintenance, continues to be a challenge for many cities. Potential funding sources and programs are discussed below that are administered by local, state, and the Federal government. Private sector funding opportunities are discussed briefly, as well.

The current infrastructure needs in La Crosse strain the city's already limited budget. Diversifying the city's transportation network to better accommodate bicyclists and pedestrians further highlights the need to dedicate adequate funding not only to maintain the city's existing infrastructure, but also to seek outside sources to make it possible for the bicycle and pedestrian network to grow.

All public agencies must ensure that pedestrian facilities on public rights-of-way are accessible to persons with disabilities. This requirement is based on Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act of 1990 (ADA) and its amendments. These amdendments also have resulted in the creation of ADA Accessibility Guidelines (ADAAG) and the U.S. Access Board Public Right of Way Access Guidelines (PROWAG), which apply more appropriately to city streets.

MAP-21 Federal Transportation Authorization Bill

The Bicycle Federation of Wisconsin (BFW) provides information on its blog regarding bicycle and pedestrian facility funding programs that are administered through the Wisconsin Department of Transportation (WisDOT). The most recent Federal transportation authorization is known as Moving Ahead for Progress in the 21st Century (MAP-21).

In August 2012, a BFW blog post was prepared that included a summary of grant programs under the latest transportation authorization bill, Moving Ahead for Progress in the 21st Century (MAP-21). With the recent authorization of this bill, BFW highlighted changes that occur in how WisDOT will administer grant programs under MAP-21 and how they differ from the previous Federal transportation authorization bill, Transportation Equity Act for the 21st Century (TEA-21). The latest blog post outlining MAP-21 can be found here: (http://bfw.org/2012/08/24/federal-bike-funding-cut-but-not-gone/)

With the commitment of City funds to leverage other funding sources, La Crosse will be able to capture the multiple benefits resulting from improved pedestrian and bicycle programs, projects, and maintenance. MAP-21 was signed into law on July 6^{th} , 2012. A summary of funding programs is provided below. (Note: Only sources for which La Crosse is eligible are included in this summary - Congestion Mitigation and Air Quality (CMAQ) and Ferry Boat and Terminal Facilities Programs are not included.)

MAP-21, Division A

Division A of The Act contains core formula programs are potential funding sources for bicycle and pedestrian facilities in La Crosse:

- National Highway Performance Program (NHPP)
 This can be used for improvements highways that are part of the National Highway System (NHS) in La Crosse
- Surface Transportation Program (STP)
 Funds from this program are provided through the state or Metropolitan Planning Organization for improvements in La Crosse.
- Highway Safety Improvement Program (HSIP)
 Projects that are described as safety improvements are eligible under this program. La Crosse would apply for funds through the State or MPO.
 - La Crosse currently is not eligible for funds through this program because it meets the Clean Air Act requirements.
- Railway-Highway Crossing (set-aside from HSIP)
 This is a subcategory or HSIP and applies to safety
 improvements that are implemented at railroad crossings
- Metropolitan Planning
 These funds are provided to the MPO
- Transportation Alternatives (TA) See below.

Transportation Alternatives

Transportation Alternatives (TA)

This new program combines the former programs of Transportation Enhancements, Recreational Trails, and Safe Routes to School. This is where the most common bicycle and pedestrian programs are found within MAP-21.

La Crosse is eligible to apply for these programs for projects that involve:

- Construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists...and other safety-related infrastructure, and transportation projects.
- Construction, planning, and design of infrastructure-related projects and systems that will provide safe routes for children, older adults, and individuals with disabilities.
- Conversion and use of abandoned railroad corridors for trails.
- Construction of turnouts, overlooks, and viewing areas.

- Community improvement activities, including inventory, control, or removal of outdoor advertising; historic preservation and rehabilitation of historic transportation facilities; vegetation management practices in transportation rights-of-way to improve roadway safety, prevent against invasive species, and provide erosion control; and archaeological activities relating to impacts from implementation of a transportation project eligible under this title.
- Any environmental mitigation activity, including pollution prevention and pollution abatement activities and mitigation to address stormwater management, control, and water pollution prevention or abatement related to highway construction or due to highway runoff.

This language highlights the opportunities for La Crosse to consider applying for these funds to pursue riverfront trail projects, improvements to Bliss Road, projects that can leverage funds from the recently established stormwater utility, as well as Safe Routes to School plan implementation.

MAP-21 - Divison B

Division B of MAP-21 authorizes additional federal funding for programs that can include bicycle and pedestrian infrastructure as part of infrastructure improvement projects, such as transit, access to jobs, or open space and recreation improvements.

Bus Facilities

The Bus Facilities program is now a formula grant program instead of a discretionary program. This capital program provides funding to purchase or rehabilitate buses and related equipment, and to construct bus related facilities such as pedestrian access and walkways; bicycle access, including bicycle storage facilities and installing equipment for transporting bicycles on public transportation vehicles; signage; or enhanced access for persons with disabilities to public transportation. This program requires a 20% local match.

Urbanized Area Formula Grant Program Urbanized area formula grants are based on factors such as the level of transit service provisions and population. Grants under this section have a local match and include capital projects; planning; job access and reverse commute projects; and operating costs of equipment and facilities for use in public transportation in an urbanized area with a population of fewer than 200,000 individuals, as determined by the Bureau of the Census. La Crosse may leverage funds to help implement part of its Transit Development Plan (TDP) which includes recommendations for improvements at bus stops.

Community Development

The City of La Crosse currently participates in this program, receiving

Block Grant (CDBG) Program

an annual grants based on a formula basis. The funds can be used for various programs and projects to provide decent housing and a suitable living environment, and expand economic opportunities, principally for low- and moderate-income persons. It is unknown whether CDBG funds are used for transportation improvements in La Crosse, although it may be possible to incorporate bike racks or transit stop improvements as part of this program.

Land and Water Conservation Fund (LWCF) Program

In Wisconsin, the LWCF program is administered by the Department of Natural Resources. La Crosse trails are good candidates for this grant. Grants cover 50% of eligible project costs, which include:

- Land acquisition or development projects that will provide opportunities for public outdoor recreation.
- Property with frontage on rivers, streams, lakes, estuaries and reservoirs that will provide water based outdoor recreation.
- Property that provides special recreation opportunities, such as floodplains, wetlands and areas adjacent to scenic highways.
- Natural areas and outstanding scenic areas, where the objective is to preserve the scenic or natural values, including wildlife areas and areas of physical or biological importance. These areas shall be open to the general public for outdoor recreation use to the extent that the natural attributes of the areas will not be seriously impaired or lost.
- Land or development within urban areas for day use picnic areas.
- Land or development of nature-based outdoor recreation trails.
- Development of basic outdoor recreation facilities.
- Renovation of existing outdoor recreation facilities which are in danger of being lost for public use.

State Funding Sources

Wisconsin Department of Natural Resources administers the Knowles-Nelson Stewardship local assistance grant program to support natural resource protection and nature-based outdoor recreation in Wisconsin. Local Governments are eligible to apply for the following four programs:

- Aids for the Acquisition and Development of Local Parks (ADLP)
- Urban Green Space (UGS) grants
- Urban Rivers (UR) grants
- Acquisition of Development Rights (ADR)

Local Funding Sources

Like many communities, the City of La Crosse must make difficult decisions regarding project priorities, and already is challenged by a lack of adequate funding to maintain its existing transportation network. Recent funding cuts and the state-imposed property tax levy limit creates a need to develop alternative revenue programs at the local level. The following is a list of potential funding sources to be considered:

- Set aside a portion of the existing room tax
- Sell annual trail or park user passes
- Sell advertising space in bike maps
- Acquire funding from a possible Regional Transportation Authority
- Establish an Infrastructure Improvement Bond Make bicycle and pedestrian improvements concurrent with infrastructure projects such as street and bridges.
- Solicit college and local business contributions

Private or Semi-Private Funding Sources

Bikes Belong has a competitive grant program to support facilities that improve health, strengthen bike businesses and enhance the quality of life. Eligible projects include paved bike paths, lanes, rail-trails, mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives.

American Trails and the National Trails Training Partnership provide a list of funding sources including public and private funding. The resources section of their webpage also includes updates on current legislation, grant writing resources, and more. See www.americantrails.org.

Methodology

The Implementation Plan recommends far more projects than the City can afford to implement in a single year. Therefore, a prioritization stragety was developed.

In order to prioritize projects, improvements from the Bicycle Master Plan are prioritized largely by the way they connect to existing facilities to quickle create a connected bicycle network. Because of this, most of the low cost bicycle improvements can be implemented in the Near Term. Pedestrian Master Plan recommendations relied more heavily on the prioritization matrix.

The pedestrian facility assessment is a review and assessment of the presence, quality, and accommodation of three types of pedestrian infrastructure: sidewalks, pedestrian crosswalks, and curb ramps. Since the number of identified improvements exceeds the financial resources of the City, it is important to prioritize where improvements are most needed. After the sidewalks, pedestrian crosswalks, and curb ramps were identified, they were analyzed using GIS to determine their proximity to the following priority considerations:

- Signalized intersection
- Arterial or collector street
- Pedestrian priority corridor (identified by stakeholders and members of the public)
- Pedestrian priority intersection (identified by stakeholders and members of the public)
- School (within a 1/4 mile radius)
- Hospital or clinic (within a 1/4 mile radius)
- Downtown
- Bus stop (and part of the 2008-2015 Transit Development Plan)

Pedestrian infrastructure improvements were scored based on their proximity to the items mentioned above. The maximum number of points a proposed improvement could receive is eight. Results were then grouped into three categories: Immediate Term (within the first year after adoption), Near Term (one to five years), and Long Term (six years or more).

Note: Curb ramp results were checked and compared to sidewalk priority results. Since the presence of curb ramps is dependent on the presence of sidewalks, curb ramp priorities were adjusted to match sidewalk priorities.

The pedestrian facility assessment yielded a large number of sidewalk gaps, unmarked crosswalks, and curb ramps that are in need of improvement. This prompted a recommendation to implement the

following rememdiation plan to improve sidewalks, crosswalks, and curb ramps. Separate maps were prepared showing the relative priority of these improvement recommendations.

Immediate Term (Year 1)

Immediate term improvements should be implemented within a year of this plan's adoption. These improvements generally scored highly during the prioritization strategy. However, adjustments were made to make meaningful connections to existing facilities and avoid the construction of improvements that lack connectivity. Additionally, policy changes are included in the immediate term as they are necessary in order to implement the rest of the plan.

Near Term (Years 2 - 5)

Near Term improvements scored highly in the prioritization strategy and are connected to Immediate Term improvements. Larger, more expensive improvements that could not be implemented in the Immediate Term are located in this group.

Long Term (Year 6+)

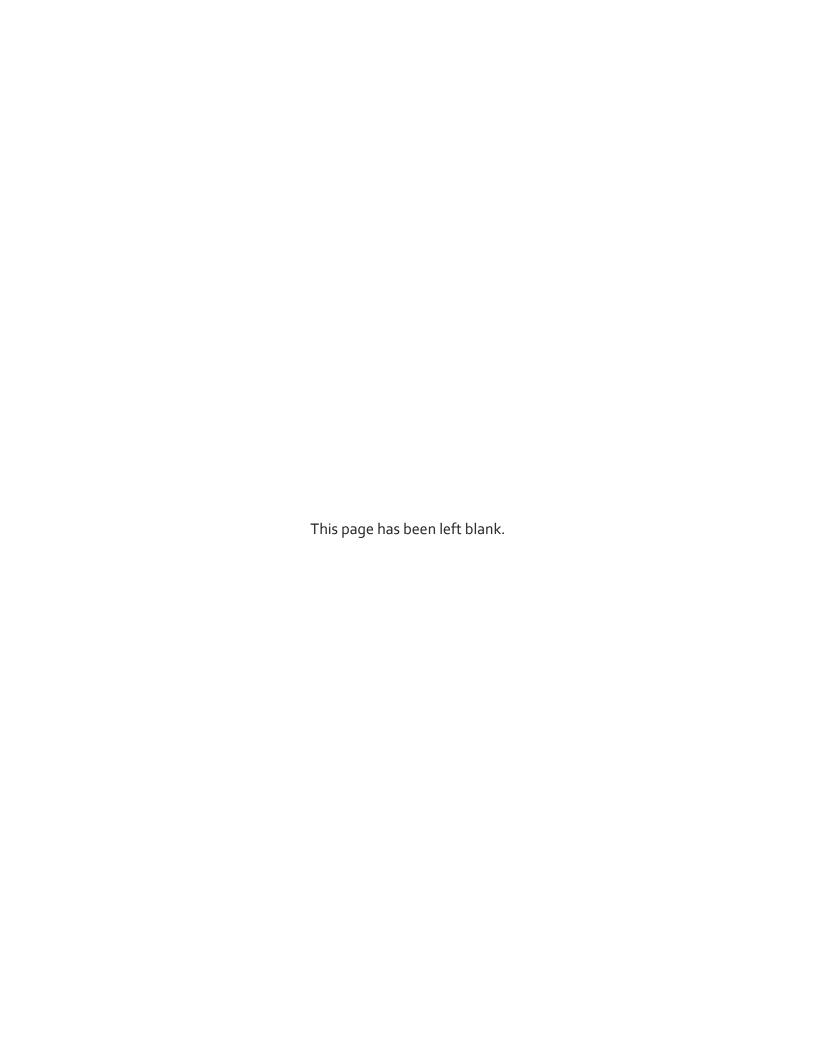
Long Term improvements are those that scored less highly than others during the prioritization strategy but are still important improvements for the overall plan. Large ticket items, such as bridges or new recreational trails, fall into this category.

Improvements from the pedestrian master plan also include the sidewalk gaps, pedestrian crosswalks, and curb ramps that were identified as in need of repair during the walkability assessment. Repair and construction of these facilities are included in the Implementation Plan and should be addressed on a rolling, annual basis.

Four policy recommendations are placed in the immediate term table of the Implementation Plan. In the Immediate Term, the Bicycle and Pedestrian Committee should be established as a standing committee in the City of La Crosse. This committee should be responsible for ensuring the coordination of infrastructure and non-infrastructure projects located within the Bicycle and Pedestrian Master Plans. A Bicycle and Pedestrian Coordinator should be hired or designated by the City to chair this committee and implement the plan. Additionally, upon implementing the first of many projects recommended within this plan, the Bicycle and Pedestrian Coordinator and Bicycle and Pedestrian Committee should reapply for Bicycle Friendly Community (BFC) status and apply for Walk Friendly Community (WFC) status.

Cost Estimates

Planning level cost estimates were prepared for improvement projects for which comparable data was available. Since the master plain contains several custom projects for which additional project scoping would be required in order to estimate costs, all projects were given a comparative cost estimate of high, medium, or low, based on the scale and complexity of the project relative to other projects recommended for the City. This allows stakeholders to review the relative costs of projects in cases where an actual estimate could not be provided.



IMMEDIATE TERM RECOMMENDATIONS

Includes a Bus Stop
Within 1/4 Mile of a Hospital or Clinic
Within 1/4 Mile of a School
Includes a Problem Intersection
Arterial or Collector Street
Includes a Signalized Intersection
Located Downtown
Relative Cost (High / Medium / Low)
Cost (\$Thousands)
Length (feet)
To (Left blank for intersections)
At or From
Street
Brief Description
Map Reference Number*

A001Form Standing Bicycle and Pedestrian CommitteeCITYWIDEA002Employ Bicycle and Pedestrian CoordinatorCITYWIDEA003Reapply for Bicycle Friendly Community StatusCITYWIDEA004Apply for Walk Friendly Community StatusCITYWIDEA005Dedicated accessibility improvement fundCITYWIDEBC003Bike LaneCILNTONBC004Bike LaneCLINTONBC017Shared LaneFRONTBC020Directional SignsEASTBC021Directional SignsEASTBC022Directional SignsL6TH STBC023Directional SignsL6TH STBC024Birectional SignsMAIN BLISSBC025Shared Lane/Parking LaneMARKETBC026Birectional SignsMARKET	Immediate Term	te Term								
Employ Bicycle and Pedestrian Coordinator Reapply for Bicycle Friendly Community Status Apply for Walk Friendly Community Status Dedicated accessibility improvement fund Bike Lane Bike Lane Shared Lane Directional Signs	A001	Form Standing Bicycle and Pedestrian Committee	CITYWIDE			l	0\$	\$0 Fow		
Reapply for Bicycle Friendly Community Status Apply for Walk Friendly Community Status Dedicated accessibility improvement fund Bike Lane Shared Lane Shirectional Signs Directional Signs	A002	Employ Bicycle and Pedestrian Coordinator	CITYWIDE				0\$	\$0 Low		
Apply for Walk Friendly Community Status Dedicated accessibility improvement fund Bike Lane Bike Lane Shared Lane Directional Signs	A003	Reapply for Bicycle Friendly Community Status	CITYWIDE				0\$	\$0 Low		
Dedicated accessibility improvement fund Bike Lane Bike Lane Shared Lane Directional Signs	A004	Apply for Walk Friendly Community Status	CITYWIDE				0\$	\$0 Low		
Bike Lane Bike Lane Shared Lane Directional Signs	A005	Dedicated accessibility improvement fund	CITYWIDE				\$50	\$50 Med		
Bike Lane Shared Lane Directional Signs	BC003	Bike Lane	CLINTON	ROSE	GEORGE	2.310	\$16	Med		
Shared Lane Directional Signs Directional Signs Directional Signs Directional Signs Directional Signs Shared Lane/Parking Lane Directional Signs	BC004	Bike Lane	CLINTON	BAINBRIDGE	ROSE	3,513	\$24	\$24 Med		
Directional Signs Directional Signs Directional Signs Directional Signs Directional Signs Directional Signs Shared Lane/Parking Lane Directional Signs	BC017	Shared Lane	FRONT	MARKET	KING	2.434	\$12	Med		
Directional Signs Directional Signs Directional Signs Shared Lane/Parking Lane Directional Signs	BC019	Directional Signs	15TH/VINE	PINE	16ТН	829	\$1	L		
Directional Signs Directional Signs Directional Signs Shared Lane/Parking Lane Directional Signs	BC020	Directional Signs	EAST	PINE	LA CROSSE	1.210	\$1	Low		
Directional Signs Directional Signs Shared Lane/Parking Lane Directional Signs	BC021	Directional Signs	PINE (UWLAX CAMPUS)	16TH (UWLAX CAMPUS)	EAST	926	\$1	L Low		
Directional Signs Shared Lane/Parking Lane Directional Signs	BC022	Directional Signs	16ТН ST	MAIN	PINE (UWLAX CAMPUS)	1,218	\$1	L		
Shared Lane/Parking Lane Directional Signs	BC023	Directional Signs	MAIN BLISS	LOSEY	29ТН	1,553	\$1	\$1 Low		
Directional Signs	BC025	Shared Lane/Parking Lane	MARKET	WEST	22ND	4,383	\$15	Low		
	BC028	Directional Signs	29ТН ST	CLIFFWOOD	BLISS	2,801	\$2	\$2 Low		

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IMMEDIATE TERM RECOMMENDATIONS

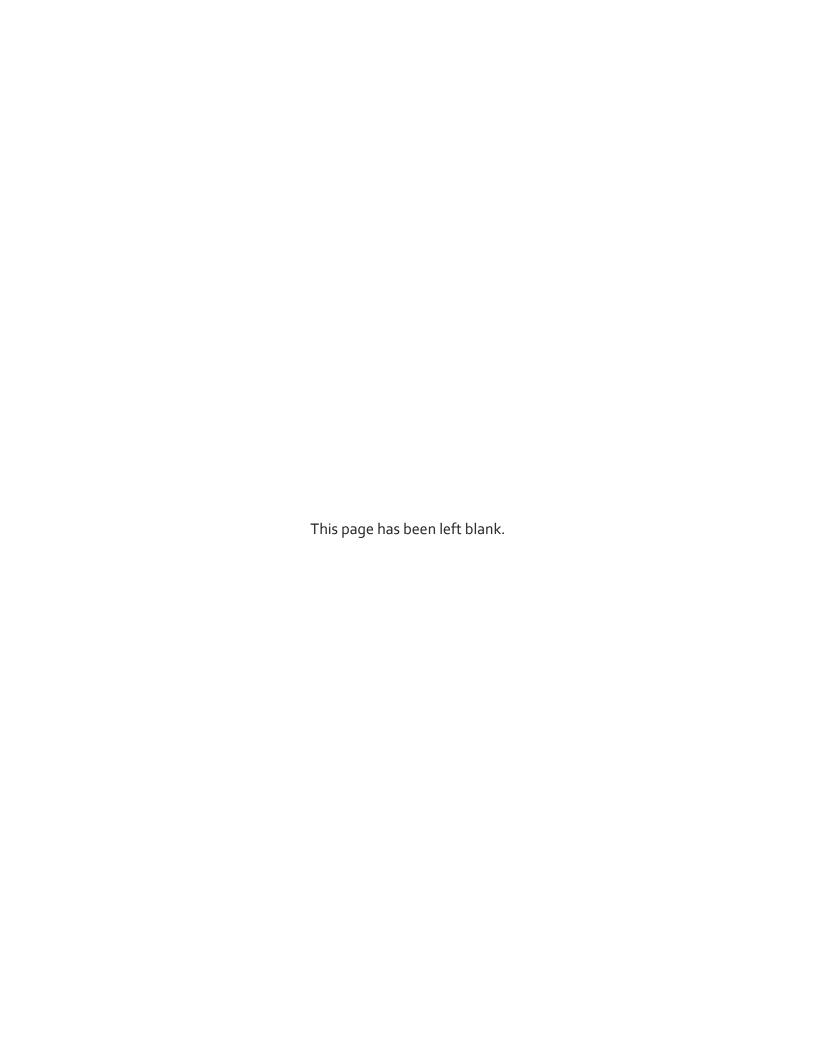
	Г													
Includes a Bus Stop	-													
Within 1/4 Mile of a Hospital or Clinic	-													
Within 1/4 Mile of a School	-													
Includes a Problem Intersection														
Arterial or Collector Street														
Includes a Signalized Intersection Located Downtown	-													
		>	>	>	>	>	h	p	>	>	>	ų.	ų.	>
Relative Cost (High / Medium / Low)		\$3 Low	\$1 Low	\$5 Low	\$1 Low	\$2 Low	0 High	3 Med	\$5 Low	0 Low	\$0 Low	0 High	0 High	\$0 Low
Cost (\$Thousands)							09\$	\$13		\$10	\$	\$150	\$150	
Length (feet)		3.885	1.312	7,536	1.520	2.285	6,245	2.720		1	,		,	1,131
To (Left blank for intersections)	-	DAWSON	FISHERMANS	SPILLWAY ROAD	TRAIL	HAMILTON	22ND	7ТН						HAGEN
At or From		LAKESHORE	FANTA REED/ DAWSON	FANTA REED	FISHERMANS	GEORGE	НТ	FRONT	BAINBRIDGE	EAST	16ТН	7ТН	CTY B/CONOCO	SHELBY WALKING TRAIL
Street		FANTA REED	FANTA REED	FISHERMANS	SPILLWAY ROAD	SALEM	KING ST	KING ST	CLINTON	LA CROSSE	MAIN	CASS	WI 16 FRONTAGE	PAMMEL CREEK RD
Brief Description		Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Bike Boulevard	Shared Lane	Two-stage bike turn box	Install bicycles may use full lane sign, continue a dashed bike lane through intersection, add shared lane marking on east on east leg	Convert signal to a pre-timed cycle	Convert jog in roadway into a single signalized intersection	Install actuated signal, include all legs and sidepath as part of intersection	School zone and speed feedback signs
Map Reference Number*		BC035	BC036	BC037	BC038	BC040	BC124	BC125	BX01	BX03	BX04	BX06	BX32	PC14

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IMMEDIATE TERM RECOMMENDATIONS

Includes a Bus Stop						
Within 1/4 Mile of a Hospital or Clinic						
Within 1/4 Mile of a School						
Includes a Problem Intersection						
Arterial or Collector Street						
Includes a Signalized Intersection						
Located Downtown						
Relative Cost (High / Medium / Low)	Low	Low	Med	Low	Low	
Cost (\$Thousands)	\$15	0\$	\$20	0\$	0\$	095\$
Length (feet)	1	-	,			
To (Left blank for intersections)						
At or From	ROSE	EAST	MYRICK PARK	4TH	4TH	
Street	LOGAN	LA CROSSE	LA CROSSE	CAMERON 14/61	CASS 14/61	
Brief Description	Install high visibility pedestrian crosswalks on all legs and add in-pavement YIELD TO PEDESTRIAN IN CROSSWALK signs	Provide a pedestrian phase during every signal cycle	Install RRFB and high-visibility pavement markings	Add crossing on west leg of intersection, provide a pedestrian phase during every cycle	Add crossing on west leg and provide a pedestrian phase during every cycle	Immediate Term Improvements Subtotal
Map Reference Number*	PX04	PX06	PX07	PX08	PX09	Immedia

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Within 1/4 Mile of a Hospital or Clinic
Within 1/4 Mile of a School
Includes a Problem Intersection
Arterial or Collector Street
Includes a Signalized Intersection
Located Downtown
Relative Cost (High / Medium / Low)
Cost (\$Thousands)
Length (feet)
To (Left blank for intersections)
At or From
Street
Brief Description
Map Reference Number*

Near Term	rm								
A006	Dedicated accessibility improvement fund	CITYWIDE				05\$	Med		
BX25	Eliminate channelized turn lanes, mark pedestrian crosswalks, and convert to a pretimed signal	LA CROSSE	LOSEY		-	\$250	\$250 Med		
BC001	Bike Lane	GILLETE	ROSE	WI 16	9.834	\$66	Med		
BC002	Bike Lane	GEORGE	GILLETTE	ROSE	5.023	\$34	\$34 Med		
BC009	Bike Lane	COPELAND	LA CROSSE	COPELAND SPLIT	3.142	\$21	Med		
BC010	One Way Bike Lane	COPELAND	COPELAND SPLIT	CLINTON	5,656	\$20	Med		
BC011	Bike Lane	ST CLOUD	COPELAND	WINNESHIEK	2.850	\$19	\$19 Med		
BC013	Shared Use Path	TRAIL	MARKET	KING	2,066	\$118	High		
BC014	Bike Lane	LA CROSSE	4ТН	OAKLAND	3,256	\$22	Med		
BC015	Bike Lane	LA CROSSE	17тн	19ТН	713	\$5	Med		
BC016	Bike Lane	LA CROSSE	24ТН	LOSEY	472		\$4 Med		
BC016	Directional Signs	GREEN BAY	LOSEY	26ТН	689	\$1	Low		
BC057	Directional Signs	CLIFFWOOD	28ТН	29ТН	276	\$1	Low		
BC058	Directional Signs	28ТН ST	FARNAM	CLIFFWOOD	2,499	\$2	\$2 Low		

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Includes a Bus Stop			1													
Within 1/4 Mile of a Hospital or Clinic																
Within 1/4 Mile of a School																
Includes a Problem Intersection		T	٦													
Arterial or Collector Street																
Includes a Signalized Intersection																
Located Downtown																
Relative Cost (High / Medium / Low)	70	- 1	Low	Low	Low	High	Low	Low	Low							
Cost (\$Thousands)	Ç	7	Ş1	\$3	\$1	\$64	\$1	\$1	\$1	\$1	\$1	\$\$	£\$	\$1	\$1	\$1
Length (feet)		1,382	1,107	4.888	886	869'9	1.023	155	968	421	443	7.340	3.825	734	400	808
To (Left blank for intersections)	EA BNIAN		BARNABEE	WESTON	27ТН	STATE	CAMPBELL	19ТН	STATE	STATE	GREEN BAY	GRANDAD BLUFF	WARD	2ND	LA CROSSE	THREE RIVERS TRAIL
At or From	N a N a N a N a N a N a N a N a N a N a	ONEEN DATE	28TH	EAST	EAST	7ТН	16ТН	CAMPBELL	MAIN	GREEN BAY	STATE	29ТН	ВІВСН	VETERAN'S MEMORIAL PARK	BADGER	LA CROSSE
Street	78TH CT		GREEN BAY	VARIOUS EAST SIDE	ВІВСН	FARNAM	STATE	STATE	19TH ST	26TH ST	30TH ST	BLISS	27TH ST	MAIN	7ТН	7ТН
Brief Description	Directions Cine		Directional Signs	Directional Signs	Directional Signs	Bike Boulevard	Directional Signs	Directional Signs	Directional Signs							
Map Reference Number*	BCOEG		BC060	BC062	BC069	BC074	BC077	BC078	BC079	BC092	BC093	BC095	BC100	BC103	BC105	BC106

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Includes a Bus Stop																
Within 1/4 Mile of a Hospital or Clinic	1															
Within 1/4 Mile of a School	1															
Includes a Problem Intersection																
Arterial or Collector Street																
Includes a Signalized Intersection	1															
Located Downtown]															
Relative Cost (High / Medium / Low)		Low	Low	Low	Low	Low	Low	Low	Low	\$1 Low						
Cost (\$Thousands)		\$1	8\$	1\$	\$1	2\$	\$5	\$\$	1\$	1\$	\$2	\$1	\$13	\$4	\$1	
Length (feet)		1,590	13,113	459	187	2.346	2.150	3.584	1.274	288	2,500	978	22.202	5,733	996	1 100
To (Left blank for intersections)		MYRICK PARK	COUNTY O	WEST	US 14/61	MORMON COULEE	JUNIPER	LOSEY (cul de sac)	WI 16	EXISTING TRAIL	COUNTY SS	BRIARWOOD	COUNTY B	COUNTY F	VALLEY	GREEN BAY
At or From		LA CROSSE	GREENWOOD	GUNDLUTHTRAIL	BRICKYARD	EXISTING TRAIL	MORMON COULEE	EAST	THREE RIVERS TRAIL	COUNTY B	THREE RIVERS TRAIL EXTENSION	BLISS/GRANDAD BLUFF	BRIARWOOD	HILLSIDE ANIMAL HOSP	PAMMEL CREEK	STATE
Street		EAST	COUNTY B	MAPLE	FIRECLAY	RIV CREST TO 33RD	33RD ST	PARK DR	CONOCO/CTY HWY B	GR ST TRAIL	HAWKINS/ DARLING	CTY ROAD FA	CTY ROAD FA	CTY ROAD FA	HAGEN RD	BARNABEE
Brief Description		Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs						
Map Reference Number*		BC107	BC109	BC113	BC117	BC121	BC122	BC126	BC132	BC133	BC134	BC136	BC137	BC138	BC140	BC141

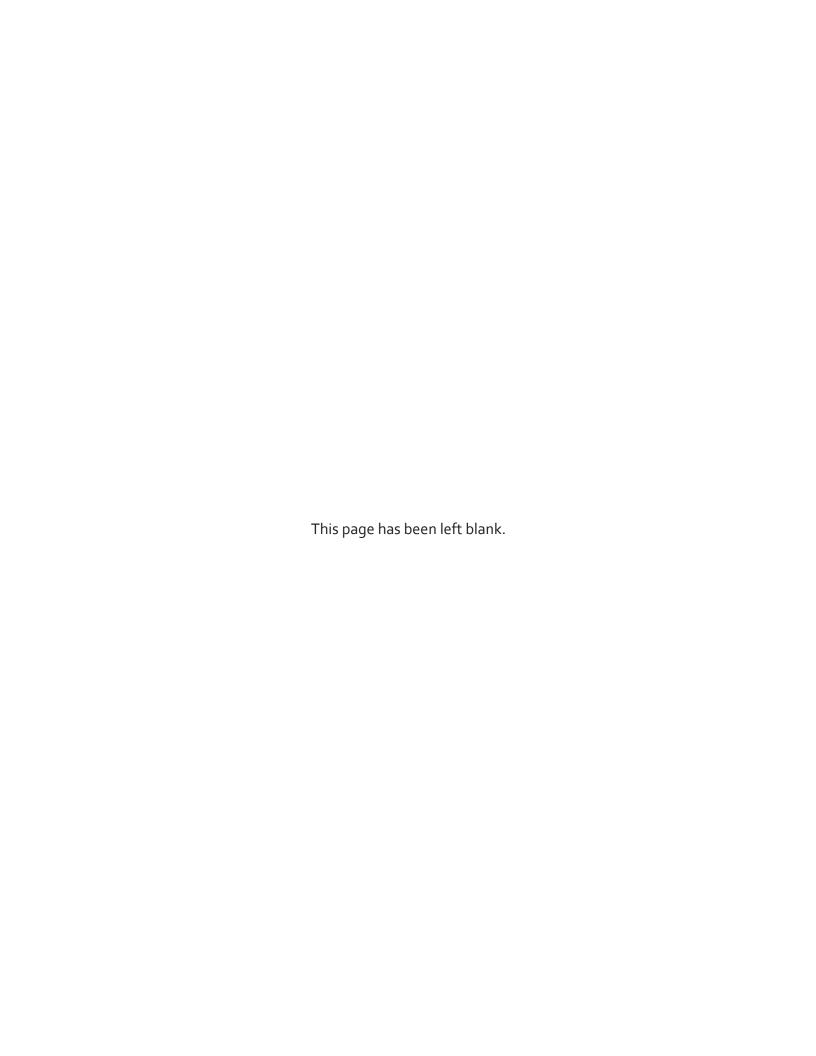
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Includes a Bus Stop															
Within 1/4 Mile of a Hospital or Clinic															
Within 1/4 Mile of a School															
Includes a Problem Intersection															
Arterial or Collector Street															
Includes a Signalized Intersection															П
Located Downtown															
Relative Cost (High / Medium / Low)	Low	Low	Low	Low	Low	High	High	Low	High	Low	Med	High	High	Med	\$0 Med
Cost (\$Thousands)	\$1	\$1	\$1	\$1	\$1	\$43	\$150	\$1	\$150	\$25	\$1	\$500	\$15	0\$	\$0
Length (feet)	467	970	1,013	1.291	672	4 475	,	1	ı			,	-		
To (Left blank for intersections)	ROSE	LA CROSSE	MYRICK PARK	JACKSON	28ТН	KING									
At or From	RIVERFRONT TRL	CAMPBELL	LA CROSSE	FARNAM	26ТН	FARNAM	AVON	AVON	AVON	AVON	AVON	COPELAND/ 2ND/4TH	6тн	CASS	MARKET
Street	LOGAN ST	22ND STREET MYRICK	HILLVIEW AVE	26TH STREET	FARNAM ST	17TH ST	MONITOR	ST CLOUD	CLINTON	GILLETTE	MOORE	LA CROSSE	3 RIVERS TRAIL	17TH ST	17th ST
Brief Description	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Directional Signs	Bike Boulevard	Install a signal to facilitate north-south movement for bike boulevard	stop sign on St Cloud, high viz xing north south	Install new pretimed signal	RRFB xing for north-south travel, high viz pvmt	Add BIKES MAY USE FULL LANE to Moore, and reduce Avon to one lane at Moore	Reconfigure La Crosse/Copeland/4th and signalized Copeland/2nd	Bicycle Roundabout	Bike boulevard intersection improvement	Bike boulevard intersection improvement
Map Reference Number*	BC146	BC152	BC153	BC154	BC155	BC160	BX26	BX27	BX28	BX29	BX30	BX39/ BX40/ PX05	BX44	BX45	BX46

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Includes a Bus Stop					
Within 1/4 Mile of a Hospital or Clinic					
Within 1/4 Mile of a School					
Includes a Problem Intersection					
Arterial or Collector Street	Į				
Includes a Signalized Intersection					
Located Downtown					
Relative Cost (High / Medium / Low)		Med	Med	High	
Cost (\$Thousands)		\$0	\$28	\$150	\$1,810
Length (feet)			4.209		
To (Left blank for intersections)			WEST		
At or From		JACKSON	FRONT	7ТН	
Street		17TH ST	MARKET	CASS	
Brief Description		Bike boulevard intersection improvement	Bike Lane	Convert jog in roadway into a single signalized intersection	Near Term Improvements Subtotal
Map Reference Number*		BX47	BC024	PX25	Near Ter

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Includes a Bus Stop
Within 1/4 Mile of a Hospital or Clinic
Within 1/4 Mile of a School
Includes a Problem Intersection
Arterial or Collector Street
Includes a Signalized Intersection
Located Downtown
Relative Cost (High / Medium / Low)
Cost (\$Thousands)
Length (feet)
To (Left blank for intersections)
At or From
Street
Brief Description
Map Reference Number*

Long Term	F								
A006	Dedicated accessibility improvement fund	CITYWIDE)5\$	\$50 Med		\vdash
BC005	Bike Lane	MONITOR	COPELAND	LANG	2,667	\$18	8 Med		
BC006	Bike Lane	ROSE	CLINTON	LIVINGSTON	3,658	\$2;	\$25 Med		
BC007	One Way Bike Lane	ROSE	COPELAND	CLINTON	5,654	\$20	\$20 Med		
BC012	Bike Lane	4TH ST	MARKET	LA CROSSE	4.799	\$32	2 Med		
BC018	Bike Lane	MAIN	ZND	7ТН	2.013	\$14	4 Med		
BC026	Bike Boulevard	22ND ST	MARKET	CAMPBELL	4.255	\$41	1 High		
BC027	Shared Lane	CASS	22ND	29ТН	2.365	\$12	2 Med		
BC029	Shared Lane	16TH ST	NOSNHOC	JACKSON	367	' \$	\$2 Med		
BC030	Shared Lane	NOSNHOC	16ТН	EAST	780	' \$	\$4 Med		
BC031	Contraflow Bike Lane	EAST	GREEN BAY	JOHNSON	2.281	\$16	5 Med		
BC032	Shared Lane	EAST	WARD	GREEN BAY	3,999	\$19) Med		
BC033	Bike Lane	BAINBRIDGE DAWSON	CLINTON	FANTA REED	9,428	\$63	3 Med		
BC034	Bike Lane	LAKESHORE GODDARD	BAINBRIDGE	NELSON PARK	18,840	\$12.	\$125 Med		

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Includes a Bus Stop																
Within 1/4 Mile of a Hospital or Clinic																
Within 1/4 Mile of a School																
Includes a Problem Intersection																
Arterial or Collector Street																
Includes a Signalized Intersection																
Located Downtown																
Relative Cost (High / Medium / Low)		High	Med	Low	Med	Low	Low	Med	Low	Med	Med	Med	High	Med	Med	Med
Cost (\$Thousands)		09\$	\$10	\$14	\$18	\$13	\$10	\$29	9\$	\$\$	\$4	\$2	\$11	\$46	\$42	\$21
Length (feet)		1,045	1.495	4.045	2.589	3.700	2.872	6.070	1.504	968	929	297	1.155	6.813	6.209	3,117
To (Left blank for intersections)		GREAT RIVER STATE PARK TRAIL	SOUTH	EAST	LOSEY	21ST	PAMMEL CREEK	CASS	SIMS	7ТН	WESTON	BARLOW	MARKET	STATE	SUNSET/32ND	26ТН
At or From		SPILLWAY ROAD	7ТН	SOUTH	EAST	13ТН	LOSEY	SIMS	RIVER TRAIL	RIVER TRAIL	WEST	SOUTH	JACKSON	FRONT	JACKSON	STATE
Street		TRAIL	SIMS	GREEN BAY	GREEN BAY	WESTON	WARD	7TH ST	7TH ST	COOK	13TH/BARLOW	WEST	22ND ST	JACKSON	STATE RD	JACKSON
Brief Description	-1	Shared Use Path	Bike Lane	Shared Lane/Parking Lane	Bike Lane	Shared Lane/Parking Lane	Shared Lane/Parking Lane	Shared Lane	Shared Lane/Parking Lane	Shared Lane	Shared Lane	Bike Lane	Bike Boulevard	Bike Lane	Bike Lane	Bike Lane
Map Reference Number*		BC039	BC041	BC042	BC043	BC045	BC046	BC048	BC049	BC050	BC051	BC052	BC053	BC054	BC055	BC056

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Within 1/4 Mile of a Hospital or Clinic																
Within 1/4 Mile of a School																
Includes a Problem Intersection																
Arterial or Collector Street																
Includes a Signalized Intersection																
Located Downtown																
Relative Cost (High / Medium / Low)		Low	Low	Med	Med	Med	Med	Med	Med	Med	Med	Low	Med	Med	Med	Med
Cost (\$Thousands)		\$15	2 \$	\$48	5\$	L \$	1\$	L \$	8\$	2\$	\$13	9\$	8£\$	22\$	9\$	\$13
Length (feet)		4.204	1.979	7.170	628	1.465	181	1,286	1,519	1,332	2.644	1.643	8.022	3,225	062	1.867
To (Left blank for intersections)		MARKET	WESTON	WARD	MORMON COULEE	33RD ST TRAIL	33RD	33RD ST TRAILHEAD	MORMON COULEE/21ST	WARD	WESTON	GREEN BAY	22ND	LA CROSSE	DAWSON	I-90 PED BRIDGE
At or From	-	GREEN BAY	THOMPSON	SHЕLВҮ	EAST	MORMON COULEE	33RD ST TRAIL	33RD ST TRAILHEAD	EAST	MORMON COULEE/ VICTORY	WARD	WESTON	3RD	STATE	BAINBRIDGE	DAWSON
Street		13TH ST	15TH ST	EAST	SHELBY	BROADVIEW	BROADVIEW	33RD ST	VICTORY	21ST PL	21ST PL	14TH ST	CASS	CAMPBELL	OLIVET	BAINBRIDGE
Brief Description		Shared Lane/Parking Lane	Shared Lane/Parking Lane	Bike Lane	Shared Lane	Shared Lane	Shared Lane	Shared Lane	Shared Lane	Shared Lane	Shared Lane	Shared Lane/Parking Lane	Shared Lane	Bike Lane	Bike Lane	Bike Lane
Map Reference Number*		BC061	BC063	BC064	BC065	BC066	BC067	BC068	BC070	BC071	BC072	BC073	BC075	BC076	BC080	BC081

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Within 1/4 Mile of a School																
Includes a Problem Intersection																
Arterial or Collector Street	1															
Includes a Signalized Intersection]															
Located Downtown																
Relative Cost (High / Medium / Low)		High	Med	Med	Med	Med	Med	Med	High	Med	Med	Med	Med	High	High	Med
Cost (\$Thousands)		\$31	6\$	\$8\$	\$23	\$12	\$19	\$\$	\$15	\$	\$\$	\$\$	\$13	\$74	\$588	6\$
Length (feet)		546	1.334	13,243	3.370	1.764	5.522	477	1.510	266	652	1.185	1.887	1.288	10.345	1.260
To (Left blank for intersections)		MITCHELL	FANTA REED	OAK	WI 157	WI 16	3RD	4TH	JACKSON	23RD	DENTON	MARKET	MARKET	DRIVE IN	ASH	MEADOW LANE
At or From		BAINBRIDGE	I-90 PED BRIDGE	MINNESOTA STATE LINE	ENTERPRISE	SS	MARKET	2ND	STATE	22ND	GREEN BAY	JACKSON	ADAMS	WARD	LIVINGSTON	33RD ST TRAILHEAD
Street		I-90 PED BRIDGE	BAINBRIDGE	I-90 SHOULDER	COUNTY SS	WI 157	2ND ST	LACROSSE	22ND ST	DENTON	22ND ST	2ND ST	4TH ST	PAMMEL CREEK	WI-35/US-53	33RD ST
Brief Description		Shared Use Path	Bike Lane	Bike Lane	Bike Lane	Bike Lane	One Way Bike Lane	Bike Lane	Bike Boulevard	Shared Lane	Shared Lane	One Way Bike Lane	Bike Lane	Shared Use Path	Shared Use Path	Bike Lane
Map Reference Number*		BC082	BC083	BC084	BC085	BC086	BC087	BC088	BC089	BC090	BC091	BC096	BC097	BC098	BC099	BC101

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Includes a Signalized Intersection															
Located Downtown															
Relative Cost (High / Medium / Low)	High	Med	Med	Med	Med	High	Med	High	Med	Med	Med	Med	High	High	Med
Cost (\$Thousands)	\$278	\$5	6\$	9\$	8\$	09\$	\$24	\$105	\$11	\$4	\$16	8\$	\$19	\$84	\$11
Length (feet)	10,156	387	1,899	1.078	1,663	1.051	3.522	1.847	1.517	608	3,229	1.147	332	8.869	2.197
To (Left blank for intersections)	EXISTING TRAIL	8ТН	CASS	MAIN	PINE	MAPLE	WATERFORD VALLEY	FIRECLAY	US 14/61 BIKE LANE	SHELBY	BOSCHERT	COUNTY MM	LOSEY (cul de sac)	MOORE	GEORGE
At or From	LA CROSSE CITY LIMIT	7ТН	MARKET	CASS	MAIN	GUNDLUTHTRAIL	US 14/61 BIKE LANE	WI-35	CALVERT	BOSCHERT	EXISTING TRAIL	WATERFORD VALLEY	LA CROSSE	MONITOR	ROSE
Street	WI-35	PINE THRU WTC	13TH ST	14TH ST	13TH ST	SWITCHBACK TRAIL	US 14/61	US 14/61	US 14/61	MARKLE	MARKLE TO ROBINHOOD	US 14/61	LOSEY (cul de sac)	AVON ST	MOORE ST
Brief Description	Shared Use Path	Shared Lane	Shared Lane	Shared Lane	Shared Lane	Shared Use Path	Bike Lane	Shared Use Path	Bike Lane	Shared Lane	Shared Lane	Bike Lane	Shared Use Path	Bike Boulevard	Shared Lane
Map Reference Number*	BC102	BC104	BC110	BC111	BC112	BC114	BC115	BC116	BC118	BC119	BC120	BC123	BC127	BC128	BC129

*Map reference numbers correspond to project and policy types: A - Policy; BC - Bicycle Corridor; BX - Bicycle Intersection; PC - Pedestrian Corridor; PX - Pedestrian Intersection ** Cost estimates are left blank for projects that require additional scoping.

Includes a Bus Stop																
Within 1/4 Mile of a Hospital or Clinic																
Within 1/4 Mile of a School																
Includes a Problem Intersection																
Arterial or Collector Street																
Includes a Signalized Intersection																
Located Downtown																
Relative Cost (High / Medium / Low)		Med	High	Med	High	High	Med	High	High	Med	Med	Med	Med	Med	Med	Med
Cost (\$Thousands)		\$22	\$51	9\$	\$120	\$426	\$\$	\$44	\$116	\$25	£\$	5 \$	\$\$	\$41	5 \$	9\$
Length (feet)		4.572	883	771	2,105	7.492	809	692	2.039	5,143	584	674	890	6.081	861	775
To (Left blank for intersections)	-	SALEM	12TH ST TRAIL	CROSSING MEADOWS	BRIARWOOD	SAINT CLOUD	COPELAND	LOGAN	CLINTON	MAIN	STATE	ADAMS	7ТН	LA CROSSE	7ТН	3RD
At or From	- -	GILLETTE	GREAT RIVER STATE TRAIL	COUNTY SS	WI 33	THREE RIVERS TRAIL	RIVERFRONT TRL	CLINTON	SAINT CLOUD	FARNAM	DENTON	FARNAM	SOUTH	JACKSON	4ТН	FRONT
Street	-	LOOMIS ST	MEDARY LN	CROSSING MEADOWS	HILLSIDE ANIMAL HOSP	RIVERFRONT TRL	ST CLOUD ST	RIVERFRONT TRL	RIVERFRONT TRL	5ТН	22ND ST	4TH STREET	FARNAM ST	3RD STREET	VINE ST	VINE ST
Brief Description	-	Shared Lane	Shared Use Path	Bike Lane	Shared Use Path	Shared Use Path	Bike Lane	Shared Use Path	Shared Use Path	Shared Lane	Shared Lane	Bike Lane	Shared Lane	Bike Lane	Shared Lane	Bike Lane
Map Reference Number*		BC130	BC131	BC135	BC139	BC142	BC143	BC144	BC145	BC147	BC148	BC149	BC150	BC151	BC156	BC157

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Includes a Bus Stop													
Within 1/4 Mile of a Hospital or Clinic	1												
Within 1/4 Mile of a School	1 [
Includes a Problem Intersection													
Arterial or Collector Street	1												
Includes a Signalized Intersection] [
Located Downtown													
Relative Cost (High / Medium / Low)		Med	High	Med	Med	High	Low	Med	Low	Med	Med	High	High
Cost (\$Thousands)		\$6	\$236	-\$	-\$	-\$	-\$	-\$	-\$	-\$	-\$	-\$	\$
Length (feet)		905	4.141		1	-	1	1	1	1		-	
To (Left blank for intersections)		33RD	ROSE										
At or From		CALVERT	LOGAN	GEORGE	EAST	MAPLE	WEST	WEST	14ТН	15ТН	STATE RD	STATE RD	LOSEY
Street		US 14/61	Riverfront Trail	ST CLOUD	WARD	GUND LUTH TRAIL	SOUTH	MISSISSIPPI	JACKSON	JACKSON	FARNAM	JACKSON	JACKSON
Brief Description	-	Bike Lane	Shared Use Path	Bike and pedestrian cut-through on west leg	Reconfigure intersection to allow southbound left turns on East	Obtain easement to construct a switchback ramp to connect trail to Maple	Convert signal to semi-actuated for rush periods only, allow to operate on a pretimed basis all other times	Reduce the length of left turn storage and reopen the east-west pedestrian crosswalks	Provide high-visibility pedestrian crossings, add in- pavement YIELD TO PEDESTRIANS IN CROSSWALK signs, and add BIKES MAY USE FULL LANE signs	Install in-pavement YIELD TO PEDESTRIAN IN CROSSWALK signs, add high visibility pavement markings	restrict southbound rt turn for auto	Install traffic signal	Install new pretimed signal
Map Reference Number*	1	BC158	BC159	BX02	BX05	BX07	BX08	8X09	BX10	BX11	BX12	BX13	BX14

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** Cost estimates are left blank for projects that require additional scoping.

Includes a Bus Stop													
Within 1/4 Mile of a Hospital or Clinic													
Within 1/4 Mile of a School													
Includes a Problem Intersection													
Arterial or Collector Street													
Includes a Signalized Intersection													
Located Downtown													
Relative Cost (High / Medium / Low)	High	High	High	Low	High	High	High	Med	Low	Low	High	High	Low
Cost (\$Thousands)	\$50	\$150	\$43	-\$	\$500	\$150	-\$	-\$-	-\$	-\$	\$175	\$50	\$25
Length (feet)	-		4,476	-				-			-	-	
To (Left blank for intersections)													
At or From	15ТН	22ND/23RD	KING	27ТН	WI 33	FIRECLAY	CALVERT	33RD	22ND	16ТН	WEST	ROSE	HAGEN/TRAIL
Street	зоитн	STATE RD	FARNAM	DIAGONAL	US 14/61	US 14/61	MORMON COULEE	MORMON COULEE	KING	KING	KING	LIVINGSTON	WI 33
Brief Description	Add medians on South near the intersection, provide pedestrian refuge islands within the median	Install signal and restrict northbound right turns	Bike boulevard	Restore the bicycle and pedestrian crossing	Reconfigure intersection to typical 90-degrees, provide high visibility pavement markings	Install actuated signal and add high visibility pavement markings at crossings	rcle refuge island and s	Install a signal or create pedestrian refuge medians on Mormon Coulee	Reduce east leg of intersection to one lane	Convert to two-way stop that gives priority to eastwest movement	Install actuated signal, give priority to east-west movements, and restrict automobile turns	Bike signals	RRFB and high viz xing
Map Reference Number*	BX15	BX16	BX160	BX17	BX18	BX19	BX20	BX21	BX22	BX23	BX24	BX31	BX33

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** Cost estimates are left blank for projects that require additional scoping.

	_									_	
Includes a Bus Stop											
Within 1/4 Mile of a Hospital or Clinic											
Within 1/4 Mile of a School											
Includes a Problem Intersection											
Arterial or Collector Street											
Includes a Signalized Intersection											
Located Downtown											
Relative Cost (High / Medium / Low)		High	Low	Med	High	High	Low	High	Med	Med	Med
Cost (\$Thousands)		-\$	\$5	₩.	-\$	\$150	\$20	\$15	ψ	\$41	-\$
Length (feet)		1	1	1	1		-	,		101.9	7,972
To (Left blank for intersections)										32ND/SUNSET	LA CROSSE/WI-16/ EDGEWOOD
At or From		PAMMEL CREEK	22ND	22ND	22ND	22ND	22ND/MYRICK PARK	3 RIVERS TRAIL	3 RIVERS TRAIL	19ТН	STATE
Street		WARD	CASS	MARKET	JACKSON	MAIN	CAMPBELL	3 RIVERS TRAIL	ST JAMES	STATE RD	LOSEY BLVD
Brief Description	Ina bile tend to close bire bire eliste and according Mend	Jog bike trail to slow bicyclists approaching ward Avenue, install high-visibility pavement markings, dash bike lanes at intersection for southbound right turns, install BIKES MAY USE FULL LANE signs	Convert to two-way stop by giving priority to north-south traffic, add high visibility pedestrian crosswalks	Convert to a two-way stop that is uncontrolled for north-south movements, install high visibility pavement markings	Install new pretimed signal and restrict turns onto 22nd	Install a signal to facilitate north-south movement for bike boulevard	RRFB	Bicycle Roundabout, Improved directional signs	Provide a slip ramp for bicyclists approaching from the west, widen the trail head to improve visibility, provide high-visibility pavement marking for bicyclists approaching from the north, install TRAIL CROSSING signs	Road diet with bike lanes	Convert to a boulevard with emergency access management provisions
Map Reference Number*		BX34	BX35	BX36	BX37	BX38	BX41	BX42	BX43	PC01	PC02

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Includes a Bus Stop													
Within 1/4 Mile of a Hospital or Clinic													
Within 1/4 Mile of a School													
Includes a Problem Intersection													
Arterial or Collector Street													
Includes a Signalized Intersection													
Located Downtown													
Relative Cost (High / Medium / Low)	High	High	High	High	High	Med	Low	Low	High	High	Med	Low	Med
Cost (\$Thousands)	\$45	\$35	\$129	\$158	\$\$	-\$	-\$	-\$	\$44	96\$	-\$	-\$	-\$
Length (feet)	1,683	1,294	4.864	5,934	177	2,693	3,719	3,119	1.645	1,685	1,110	1,104	1.133
To (Left blank for intersections)	FAIRCHILD	MESA GRANDE CUL DE SAC	WARD	BROADVIEW	PAMMEL CREEK	BROADVIEW	LOSEY/WI-16/ EDGEWOOD	LA CROSSE	33RD	WI-16	GEORGE	JACKSON	KANE
At or From	WARD	28ТН	BROADVIEW	RIVERCREST	32ND	LOSEY	LA CROSSE ST BIKE LANES	STATE	MORMON COULEE	COUNTY SS	LIBERTY	ноор	AVON
Street	32ND STREET	MESA GRANDE/ CHURCH	33RD STREET	33RD STREET	WARD AVE	MORMON COULEE	LA CROSSE ST	CAMPBELL	BROADVIEW AVE	WI 157	GILLETTE ST	7TH STREET	CLINTON ST
Brief Description	Sidewalks	Sidewalks	Sidewalks	Sidewalks	Sidewalks	Install medians along Mormon Coulee and provide high visibility pedestrian crossings	Install speed feedback signs near East Avenue, provide high visibility pedestrian crossings at Myrick Park and other unsignalized intersections	Install bike lanes or shared lane markings and install high-visibility crosswalks. Paint edge line along parking to narrow appearance of the lane.	Sidewalks	Construct a wide sidewalks/sidepath, add high visibility pedestrian crosswalks	Install school zone and speed feedback signs	School zone and speed feedback signs	Install school zone and speed feedback signs
Map Reference Number*	PC03	PC04	PC05	900d	PC07	PC08	PC09	PC10	PC11	PC12	PC13	PC15	PC16

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Includes a Bus Stop											
Within 1/4 Mile of a Hospital or Clinic											
Within 1/4 Mile of a School											
Includes a Problem Intersection											
Arterial or Collector Street											П
Includes a Signalized Intersection											
Located Downtown											
Relative Cost (High / Medium / Low)	Low	High	High	Med	Low	Low	Med	High	High	Low	Med
Cost (\$Thousands)	\$15	\$54	\$33	\$16	-\$	-\$	\$10	\$150	\$150	-\$	-\$
Length (feet)		2.010	1,223	1.166	,		1	1	,	1	-
To (Left blank for intersections)	LA CROSSE	BRICKYARD	RIO GRANDE	LA CROSSE CITY LIMIT							
At or From	DENTON	SUNNYSIDE	MORMON COULEE	SABLEWOOD	EASTBROOK	SABLEWOOD	тнеатек	22ND/23RD	22ND/23RD	9ТН	33RD
Street	WEST AVE	WI 35	OLD TOWN HALL RD	COUNTY B	COUNTY B	COUNTY B	WI 16	CAMPBELL	STATE RD	FERRY	MORMON COULEE
Brief Description	High visibility pedestrian crosswalks should be installed at every uncontrolled intersection where traffic stops at West Avenue. Signals should be retimed for 25 miles per hour and to provide gaps in traffic. Improve crossings to allow improved crossings every 1/4 mile b/w signals	Sidewalks	Sidewalks	Add sidewalks to south side	Install high visibility pedestrian crossings on all legs	Install high visibility pedestrian crossings on all legs	Provide sidewalk landings on all legs of the intersection, add high visibility pavement markings, install countdown clocks	Install a pedestrian-actuated signal	traffic signal, impr xings	Install high visibility pedestrian crosswalks on all legs and add in-pavement YIELD TO PEDESTRIAN IN CROSSWALK signs	Mark pedestrian crossings, ensure the WALK signal is provided in every signal phase
Map Reference Number*	PC17	PC18	PC19	PC20	PX01	PX02	PX03	PX10	PX11	PX12	PX13

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Existing Conditions | Tools & Best Practices | Bicycle Master Plan | Pedestrian Master Plan | Implementation | 5-28

Includes a Bus Stop													
Within 1/4 Mile of a Hospital or Clinic													
Within 1/4 Mile of a School													
Includes a Problem Intersection													
Arterial or Collector Street													
Includes a Signalized Intersection													
Located Downtown													Ш
Relative Cost (High / Medium / Low)	High	Med	Low	Med	Low	Low	Med	Med	Low	Low	High		
Cost (\$Thousands)	\$150	\$	-\$	-\$	-\$	-\$	-\$	-\$	\$20	\$20	\$20	\$6,430	\$8,800
Length (feet)	,		1			1			,	,			
To (Left blank for intersections)													
At or From	19TH/STATE RD	15ТН	GEORGE	BRAUND	WEST GEORGE	STODDARD	20ТН	20ТН	21ST	21ST	SCHOOL ENTRANCE		
Street	JACKSON	CHASE	GILLETTE	WI 16	GEORGE	GEORGE	REDFIELD	DENTON	GREEN BAY	GREEN BAY	COUNTY B		
Brief Description	Install a signal at this intersection, add pavement markings on all lags of the intersection	Install pedestrian refuge islands with crossings on South	Install pavement markings for crossings on all legs of the intersection, provide a pedestrian phase during every cycle	Mark the pedestrian crossings on all legs, provide a pedestrian WALK signal during every cycle	Reconfigure intersection to an all-way stop, install pedestrian crosswalks	Install high visibility pedestrian crosswalks on all legs and add in-pavement YIELD TO PEDESTRIAN IN CROSSWALK signs	Curb bump out	Curb bump out	RRFB	RRFB	RRFB	Long Term Improvements Subtotal	Implementation Plan Total
Map Reference Number*	PX14	PX15	PX16	PX17	PX18	PX19	PX20	PX21	PX22	PX23	PX24	Long Teri	Impleme

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