



# 2035 Coulee Regional Bicycle Plan



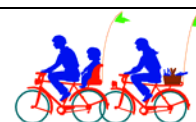
- 🚲 Creating several mapping products that would assist bicyclists and recreational enthusiasts identify where to visit and how best to get there.
- 🚲 Regionalizing the Bicycle and Pedestrian Advisory Committee.
- 🚲 Establishing bicycling as a sustainable transportation alternative to driving.
- 🚲 Encouraging tourism and economic development.

The geographic scope and area of interest for this plan is the metropolitan planning area (MPA) for the La Crosse Area Planning Committee (LAPC). The LAPC is a bi-state planning agency with a planning area that encompasses about two-thirds of western La Crosse County in Wisconsin and small areas of Houston and Winona Counties in Minnesota. The communities within the planning area include the town of Dresbach and the city and town of La Crescent in Minnesota; and the towns of Barre, Campbell, Greenfield, Hamilton, Holland, Medary, and Shelby; the villages of Holmen and West Salem; and the cities of La Crosse and Onalaska in Wisconsin.

## Public Process

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The LAPC standing committees—the Technical Advisory Committee (TAC) and the Bicycle and Pedestrian Advisory Committee (BPAC)—served as technical and public forums for input on the plan. Several public information meetings held at different locations within the planning area served to elicit comments from the general public regarding recommended bicycle accommodations.



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## Existing Conditions

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### Bicycling in the Planning Area

Part 1 Profile 1 from the CTPP compares mode to work from CTPP 2000 and the 2005-2007 American Community Survey (ACS). The profile reports that the number of commuting bicyclists in La Crosse County more than doubled from 360 (with a margin of error of +/- 77) to 791 (with a margin of error of +/- 303). This was an increase in mode share to work from 0.6% to 1.4%—a statistically significant change. (Data for Houston County in Minnesota are not available.)

A survey conducted for Active Living La Crescent revealed that 39% of the La Crescent respondents walked or biked for functional (i.e. errands, shopping) purposes and 3% walked or biked to work (they did not break out “walk” and “bike”). More than half of the respondents stated they would be more active if bike facilities were available.

### Existing Facilities

Designated bicycle facilities can take the form of bike lanes, shared bike/parking lanes, sharrows, shared-use paths and trails, sidewalks (not recommended by the Association of State Highway and Transportation Officials), and signed bike routes. These facilities are easily recognized as bicycle facilities by their pavement markings and signage or by their separation from the roadway.

Other accommodations for bicyclists include wide curb lanes, paved shoulders on rural roadways, and striped shoulders on urban roadways. Most of the urban roadways in the region are “shared roadways,” which require the motorist and bicyclist to share a lane. This is perfectly acceptable on low volume, low speed local streets;



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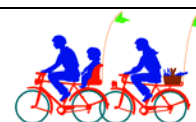
however, as traffic volumes and speeds increase, a higher level of bicycle accommodation is warranted.

Like on-road bicycle facilities, bicycle parking can be provided at various levels of accommodation. The two broader categories include short-term and long-term parking. Short-term parking is generally customer-based, consisting of a simple rack secured or unsecured along a wall near the entrance to the business. Long-term parking requires more investment, but it is the most secure and caters well to employees that spend eight or more hours at the business.

Table 1 summarizes the types of off-road and on-road bicycle facilities in one-way miles for each community in the planning area as of January 1, 2010. One-way miles [miles of one way roads + (2 x miles of two-way roads)] are used because 1) some roads are one-way roads and 2) different accommodations could be provided on each side of a two-way roadway (i.e. a bike lane for southbound bicycle traffic and a shared bike/parking lane for northbound bicycle traffic).

Overall, LAPC planning area communities have a dearth of dedicated on-road bicycle facilities. La Crescent ranks highest with over 6% of its roads marked with bike lanes while La Crosse ranks lowest with only 0.5% of its roads marked with bike lanes. The opposite is true of off-road trails. In total, the planning area has around 63 miles of off-road trails—66% of which are local trails. La Crosse has the most with nearly 19 miles or 44% of the local trails.

Table 2 provides a list of the locations of public bicycle parking at public parking structures and lots, the types of racks, and the number of spaces available as of January 1, 2010.



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**TABLE 1: PLANNING AREA DEDICATED BIKEWAY FACILITIES<sup>1</sup>**

Community	Off-road (miles)		On-road (miles)				
	Trails & sidepaths Local/State	Sidewalk bike-ways <sup>2</sup>	Shared bike/parking lanes			Total bike-way miles	% of road miles
			Bike lanes	parking lanes	Sharrows		
Barre (T)	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0
Campbell (T)	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dresbach (T)	2.4/0.0	0.0	0.0	0.0	0.0	0.0	0.0
Greenfield (T)	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0
Hamilton (T)	1.4/5.7	0.0	0.0	0.0	0.0	0.0	0.0
Holland (T)	3.9/2.5	0.0	0.0	0.0	0.0	0.0	0.0
Holmen (V)	2.7/0.0	0.0	0.7	0.0	0.0	0.7	1.0
La Crescent (C)	0.0/0.0	0.0	4.4	0.0	0.0	4.4	6.4
La Crescent (T)	0.0/0.0	0.0	0.0	0.0	0.0	0.0	0.0
La Crosse (C)	18.6/3.2	0.9	2.3	0.0	0.0	2.3	0.5
Medary (T)	1.2/0.8	0.0	0.0	0.0	0.0	0.0	0.0
Onalaska (C)	6.0/1.8	0.0	4.7	0.0	0.0	4.7	2.1
Onalaska (T)	2.6/6.8	0.0	0.0	0.0	0.0	0.0	0.0
Shelby (T)	2.3/0.0	0.0	0.0	0.0	0.0	0.0	0.0
West Salem (V)	1.0/0.2	0.0	0.0	0.0	0.0	0.0	0.0
<b>MPA</b>	<b>42.1/21.0</b>	<b>0.9</b>	<b>12.1</b>	<b>0.0</b>	<b>0.0</b>	<b>12.1</b>	<b>1.2<sup>3</sup></b>

<sup>1</sup>As of January 1, 2010.

<sup>2</sup>This represents only sidewalks designated by ordinance as a bikeway.

<sup>3</sup>This is 1.2% of the one-way road miles (over 1000 mi) in the urbanized communities of Campbell (54.6 mi), La Crescent (69.2 mi), La Crosse (473.1 mi), Holmen (109.8 mi), Onalaska (225.7 mi), and West Salem (68.2 mi). Urban-type on-road bicycle facilities generally are not provided on rural roads (those without curb and gutter); therefore, with the exception of Campbell, the one-way road miles for the towns have been excluded from the calculation.



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**TABLE 2: PUBLIC BICYCLE PARKING FACILITIES<sup>1</sup>**

Location	Bike lockers	Wave racks	Campus racks
Main St parking ramp	4	1 3-loop rack 5 spaces	1 rack / 6 spaces
La Crosse Center parking ramp	0	0	1 rack / 6 spaces
Market Square parking ramp	4	2 5-loop racks 10 spaces <sup>2</sup>	0

<sup>1</sup>As of January 1, 2010. These counts do not include racks installed in terraces near businesses that may be perceived as business-related parking instead of general public parking. U-racks can be found at many locations in downtown La Crosse.

<sup>2</sup>The Market Square ramp has one five-loop wave rack installed in a manner where bikes can only be parked from the front (3 spaces).

## Barriers to Bicycle Travel

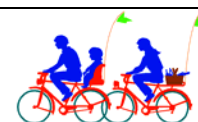
Barriers to bicycle travel include both manmade and natural barriers. Manmade barriers include arterial roads, road closures, and rail lines and yards, while the most significant natural barrier is snow.

### ARTERIAL ROADS

Arterial roads through the urban areas tend to be shared roadways with little accommodation for bicyclists. Through-lanes are generally 12-ft wide, with the outside lane edge abutting a 2-ft gutter. They act as barriers to bicycle travel by 1) being unfriendly to travel on and 2) being difficult to cross. High traffic volumes, high operating speeds, and no on-street accommodations push bicyclists up onto the sidewalks, which are designed for pedestrian use.

### ROAD CLOSURES

Roads may be closed to eliminate cut-through traffic or a roadway-railway grade crossing. While this may achieve the immediate goal of



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reducing traffic on the closed road or eliminating the possibility of a roadway-railway accident, closures create access and continuity problems. They close off the grid and force all roadway users (motorists, bicyclists, and pedestrians alike) onto the already busy and congested major roads.

## RAIL LINES & YARDS

The planning area is served by three major rail lines—the Burlington Northern & Santa Fe (BNSF) Railroad; the Canadian Pacific Railway (CPR); and, the Dakota, Minnesota & Eastern (DM & E) Railroad—and a large rail yard in the north industrial park of La Crosse. With federal regulations that require communities to mitigate or eliminate roadway-railway grade crossings in quiet zones and the railroads' desire to maintain a safe right-of-way, the crossing of rail facilities has become increasingly more difficult and more expensive. The cheaper solution has been to close off roads (discussed above). The most expensive solution is a grade-separated roadway. In any scenario, bicyclists and pedestrians are rarely considered and are forced to travel significantly out of their way.

## SNOW

The mounds of snow deposited at the corners of crosswalks and in parking lanes during plowing serve as significant barriers to travel for bicyclists and pedestrians (especially the elderly and persons with disabilities). The snow is often left several feet into the street which reduces the functional width of the street for motorists and bicyclists and requires property owners to work in the roadway to clear the curb ramp and crosswalk.



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## Physical Hazards to Bicycle Travel

Physical hazards to bicycle travel include such slip hazards as sand and gravel, broken glass, and ice and snow; and trip hazards like cracked and heaved pavement; rumble strips; above- or below-grade utility covers; drainage grates with inlets parallel to the street; and railroad tracks with wide flanges. Such hazards can result in a bicyclist losing control of the bicycle and crashing.

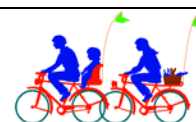
Sand, gravel, broken glass, ice, and snow can easily be addressed through routine maintenance activities. Infrastructure built into the roadway itself, on the other hand, is generally addressed when a capital improvement project is scheduled to construct, resurface, recondition, rehabilitate, or reconstruct a roadway.

## Bicyclist Safety

From 2005 through 2009, 200 motor vehicle/bicycle crashes were reported in the planning area. Only 0.5% (10) of the bicyclists involved in these crashes was uninjured. Eleven percent (22) incurred a disabling injury, 52% (102) incurred an obvious injury, and 33% (65) incurred a possible injury. One person died. Eight of the 200 crashes involved alcohol. Only 8.5% of bicyclists involved in crashes wore a helmet.

A count of bicyclists in September of 2009 revealed only 17% of the bicyclists wore helmets. Some 92% of riders used the sidewalk and most of them rode without a helmet. With 80% of the motor vehicle/bicycle crashes in 2008 occurring in a crosswalk or on a sidewalk at an alley, it stands to reason that most bicyclists in crashes are not helmeted.

Driver (bicyclist and motorist) behavior is a key factor in the cause of a crash. While some crashes occurred because of slippery street conditions, the top three causes for all drivers in the planning area during the 2005 – 2009 time period were disregard of the traffic control

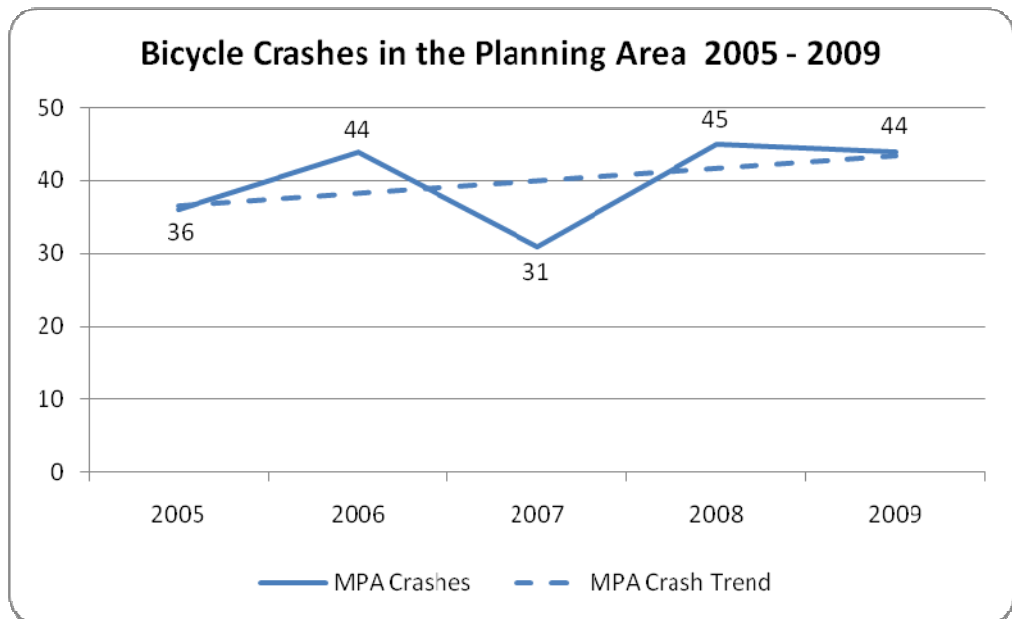


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(50%), inattentive driving (15%), and failure to yield the right of way (14%). In general, bicyclists tend to disregard traffic controls and motorists tend to fail to yield right of way.

Figure 1 provides the total number of bicycle crashes in the planning area communities for the years 2005 – 2009. The trend over the last five years is an increasing number of bicycle-related crashes. With 44 crashes, 2009 experienced a 10% increase over the 5-year average of 40.



**Figure 1:** Total number of bicycle crashes and crash trend for the years 2005 through 2009 for the metropolitan planning area.

## Recommendations

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### Process

The five E's of planning (education, encouragement, enforcement, engineering, and evaluation) are used as the framework for recommendations for improving bicycling conditions in the planning





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Five public workgroup meetings were held between January and August of 2009 to present and obtain feedback on recommendations for on- and off-road bicycle facilities in the region. In order to make the process of recommending accommodations and soliciting input on a regional bicycle network manageable, the metropolitan planning area was broke out into geographic regions:

- 📍 **Holmen and Onalaska**, which covers Holmen, Holland, Onalaska (city and town), and Brice Prairie (Table 4-2, Map 4-1);
- 📍 **West Salem**, which covers West Salem, Hamilton, and the STH 16 corridor between Onalaska and West Salem (Table 4-3, Map 4-2);
- 📍 **Rural La Crosse**, which covers the towns of Barre, Medary, Shelby, and Greenfield (Table 4-4, Map 4-3);
- 📍 **North La Crosse**, which covers La Crosse north of the La Crosse River and Campbell (Table 4-4, Map 4-4);
- 📍 **South La Crosse**, which covers La Crosse south of the La Crosse River (Table 4-6, Maps 4-5 and 4-6); and
- 📍 **La Crescent**, which covers the city and town of La Crescent and the town of Dresbach (Table 4-7, Map 4-7).

## Infrastructure

Recommended on-road bicycle accommodations include bike lanes, shared bicycle/parking lanes, sharrows (shared lane markings), striped and paved shoulders, striped travel lanes, and signage. A number of trails are recommended for off-road connections.

General signage and infrastructure recommendations include:

- 🚲 Installing
  - **Share the Road** signage along major arterials and county highways recommended for bicycle facilities. Alone, this





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Road signage should be included along routes on U.S., State, and County roads. Local routes that provide connections between accommodations or are determined to be preferred routes should be signed as bike routes.

## Financial Plan

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The financial plan offers potential funding sources and recommends specific projects for short-, mid-, and long-range implementation. The project cost is estimated in 2010 dollars and inflated by 2.8% each year to the recommended implementation year. Costs used to estimate project costs are provided in table 3.

**TABLE 3: 2010 COSTS FOR BICYCLE-RELATED IMPROVEMENTS**

Activity	Cost per Unit
Bike lane striping (epoxy paint)	50¢ per lineal foot (lf)
Removal of striping	50¢ per lineal foot (lf)
Pavement markings (symbols)	\$100 each
Removal of markings (symbols)	\$100 each
Signage	\$100 each
4-ft wide, paved shoulder	\$22,500 per mile
10-ft paved trail w/ 2-ft shoulders	\$146 lf

Projects recommended as short-range projects don't require substantial monetary investment for pavement rehabilitation or reconstruction or the controversial removal of parking to be implemented. The projects could be completed as part of the annual capital improvement program within one to two years of the adoption of this plan (2011-2012). Table 4 shows the projects recommended for short-range



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implementation. Costs are estimated for 2011 and 2012. The shaded cost is the recommended year of implementation.

**TABLE 4: SCHEDULE OF SHORT-RANGE BICYCLE PROJECTS AND COSTS**

Project	Treatment	2011	2012
Main St in Holmen	Bike lanes	\$5,839	\$6,003
Main St in Onalaska	Bike lanes & sharrows	\$5,423	\$5,575
Midwest Dr / Market Pl in Onalaska	Bike lanes & sharrows	\$5,716	\$5,876
Leonard St in West Salem	Bike lanes	\$1,681	\$1,728
Clinton St in La Crosse	3-lane w/bike lanes	\$15,492	\$15,926
3 <sup>rd</sup> and 4 <sup>th</sup> Sts in La Crosse	Bike lanes & sharrows	\$10,100	\$10,383
7th St in La Crosse	Bike lanes & sharrows	\$3,680	\$3,783
La Crosse St in La Crosse	Bike lanes & sharrows	\$3,922	\$4,032
Main St in La Crescent	Bike lanes	\$6,615	\$6,800

Mid-range projects are those that can reasonably be implemented within 2 to 10 years of this plan being adopted (2013-2022). They may either be constructed in coordination with larger roadway projects or as stand-alone bicycle facilities projects. Twenty-nine projects (12 on-road and 17 trail) are recommended as mid-range projects. They were identified as priority projects because of their importance to Safe Routes or the community, their status as part of a regional route, their association with a planned or programmed roadway project, or their ability to fill gaps within the existing network.

- 🚲 Signage for the regional bike route system and the Share the Ride program
- 🚲 Signage for the local bike route system
- 🚲 Bicycle/pedestrian railroad crossing at 27<sup>th</sup> St S in La Crosse
- 🚲 Bike lanes on Hagen Rd in Shelby
- 🚲 Bike lanes on Long Coulee Rd in Holmen

