Janesville Area
2015-2050 Long Range Transportation Plan

Bicycle & Pedestrian Section

Photo by Den Adler

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ACRONYMS

MPO – Metropolitan Planning Organization
MPA – Metropolitan Planning Area
WisDOT – Wisconsin Department of Transportation
FHWA – Federal Highway Administration
FTA – Federal Transit Administration
WIDNR – Wisconsin Department of Natural Resources
NPS – National Park Service
IAT – Ice Age Trail

AADT – Average Annual Daily Traffic (sometimes simply ADT for Average Daily Traffic)
GIS – Geographic Information System
LRTP – Long Range Transportation Plan
MAP-21 – Moving Ahead For Progress in the 21st Century
FAST – Fixing America's Surface Transportation (FAST) Act

1. INTRODUCTION AND PURPOSE

The Janesville Area MPO Bicycle and Pedestrian Plan serves as a long-range action plan for development and construction of on-street and off-street bicycle and pedestrian facilities within the urban area. The plan proposes extensions to the linear trail system already established along the Rock River and throughout several greenbelt areas within the MPO planning boundary, and it initiates a recognizable on-street system designed to promote bicycle use and safety for cyclist traveling on arterial streets. This plan provides an overview of existing and funded street and mixed-use trail projects, outlines goals and objectives for enhancing multimodal travel and recreation within the urban area, and identifies an improvement program for implementation between 2015-2050

The bicycle and pedestrian plan has been developed for the Janesville area for several reasons. The plan responds to the increased public interest in trails, walkways, and on-street bike facilities for both recreation and transportation access by defining corridors where bicycles and pedestrian accommodations would most benefit the community. The plan also documents the strengths and weaknesses of the current system and the policies which guide active transportation planning in the urban area. Finally, the plan addresses the goals of the Moving Ahead for Progress in the 21st Century (MAP-21) which places great emphasis on non-traditional modes of transportation and requires that States and MPO's develop transportation plans that include bicycle and pedestrian projects and programs.

2. GOALS AND OBJECTIVES

Janesville's existing bicycle and pedestrian system provides a strong foundation for improving mobility and offering an enjoyable form of recreation. This plan seeks to encourage and provide for continued growth in the number of trips taken by bicyclists and pedestrians for all transportation purposes while also maintaining proper safety standards. Both off-road trails and shared roadway bicycle/pedestrian facilities are important to a balanced transportation network that serves the needs of all potential user groups. The following goals and objectives reflect what the MPO expects to accomplish over the next twenty years in regards to developing an effective, efficient bicycle and pedestrian network.

GOAL: Develop a multi-modal transportation network within the Janesville Metropolitan Planning area that accommodates all modes of transportation and recreation and provides for the safe, efficient movement of people and goods.

OBJECTIVES:

- Develop an on-street and off-street bicycle facility network that serves as a viable transportation option for beginning to advanced cyclists.
- Provide bicycle and pedestrian facilities between residential areas and existing and planned employment and commercial centers, school facilities, parks and recreational facilities, and other public facilities.
- Encourage and facilitate the provision of appropriate end of trip facilities such as bike racks, lockers, and showers at employment and commercial centers.
- Provide cyclists with safe and convenient travel by making streets "bicycle friendly" and well designed to accommodate both motorized and non-motorized modes of transportation.
- Coordinate planning, programming, events, and advocacy with organizations that have similar goals.
- Gain input from bicyclists and the public in the planning and development of bicycle and pedestrian facilities.
- Develop education and safety programs aimed at children (for walking and biking), experienced bicyclists, and motor vehicle operators.
- Encourage active enforcement of existing laws for motor vehicle operators regarding the rights of bicyclists and pedestrians.

3. EXISTING CONDITIONS

Rock County

Rock County has recreational trails in several of its parks, including Beckman Mill, Carver-Roehl, Gibbs Lake, Happy Hollow, Lee, and Magnolia Bluff. In addition, the Pelishek Nature Trail from Clinton to Allens Grove, the Ice Age Trail Connector between Janesville and Milton, and the Glacial River Trail from Janesville to Fort Atkinson provide regional off-road trail connections.

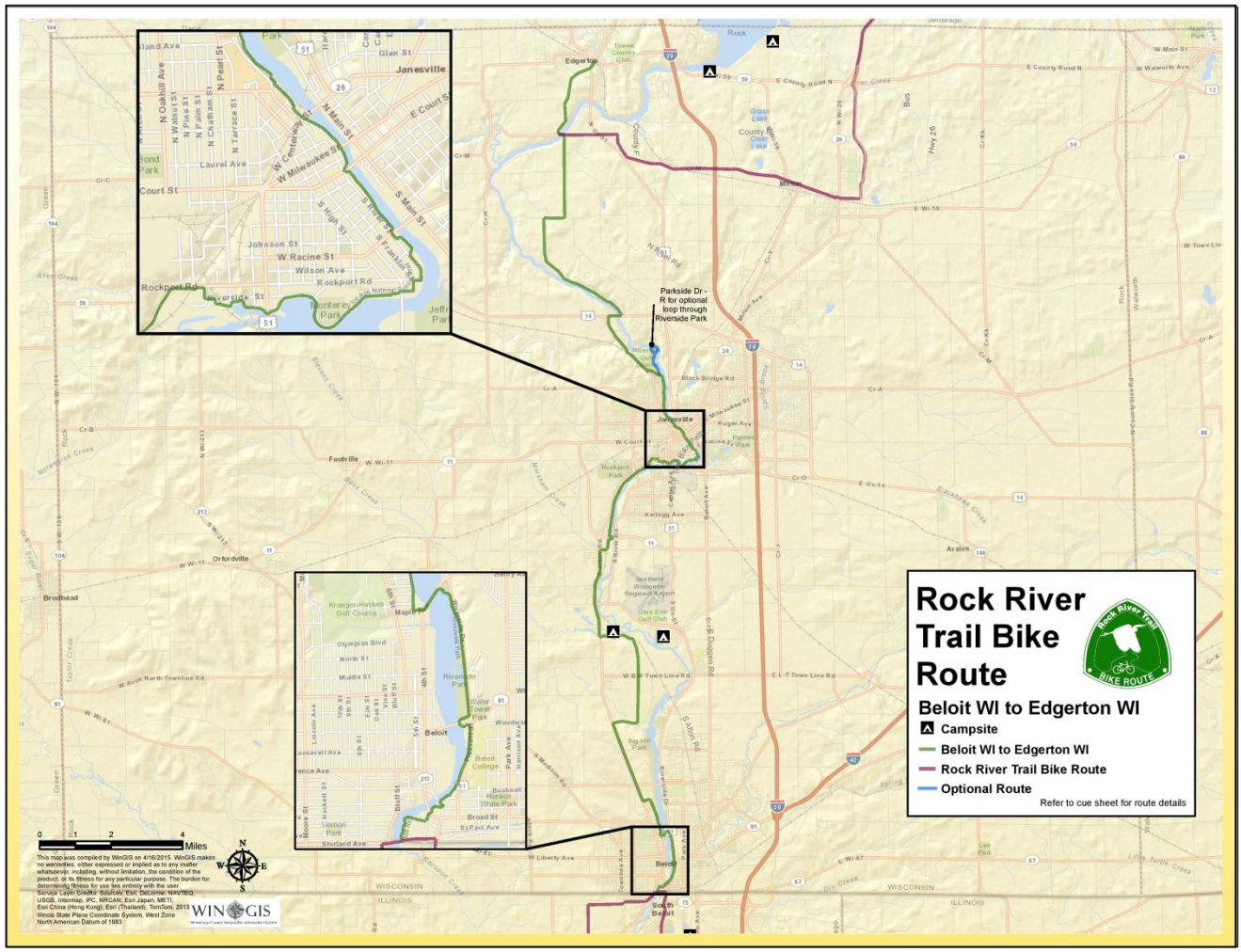
Rock County is a partner in the multi-stakeholder effort to connect the cities of Janesville and Beloit. Rock County was one of the planning stakeholders in the development of the Beloit to Janesville Bicycle Corridor Plan and Feasibility Study conducted by SAA Design Group in 2012. The 2015-2020 Parks Outdoor Recreation and Open Space Plan serves as the blueprint for continued development and maintenance of Rock County's trail system.

ROCK RIVER TRAIL

The Rock River Trail is the first National Water Trail to be designated by the US Department of the Interior in Wisconsin and Illinois as an effort to preserve, restore, and appreciate the river's natural and historic attributes. The Rock River Initiative was established to support water and terrestrial routes along the 320-mile Rock River from the headwaters in Fond du Lac County to the Mississippi River at Rock Island, Illinois. The vision of the initiative is to promote the Rock River for recreational paddling, hiking, biking, and scenic driving experiences. The signed on-road bicycling route was determined with consultation with local cyclists. This section of the plan integrates and adopts Rock River Trail's on-road recommended bicycling route through Rock County.

Figure 1 identifies the bike route that has been designated as part of the Rock River Trail.

Figure 1: ROCK RIVER TRAIL BIKE ROUTE FROM BELOIT WI TO EDGERTON WI

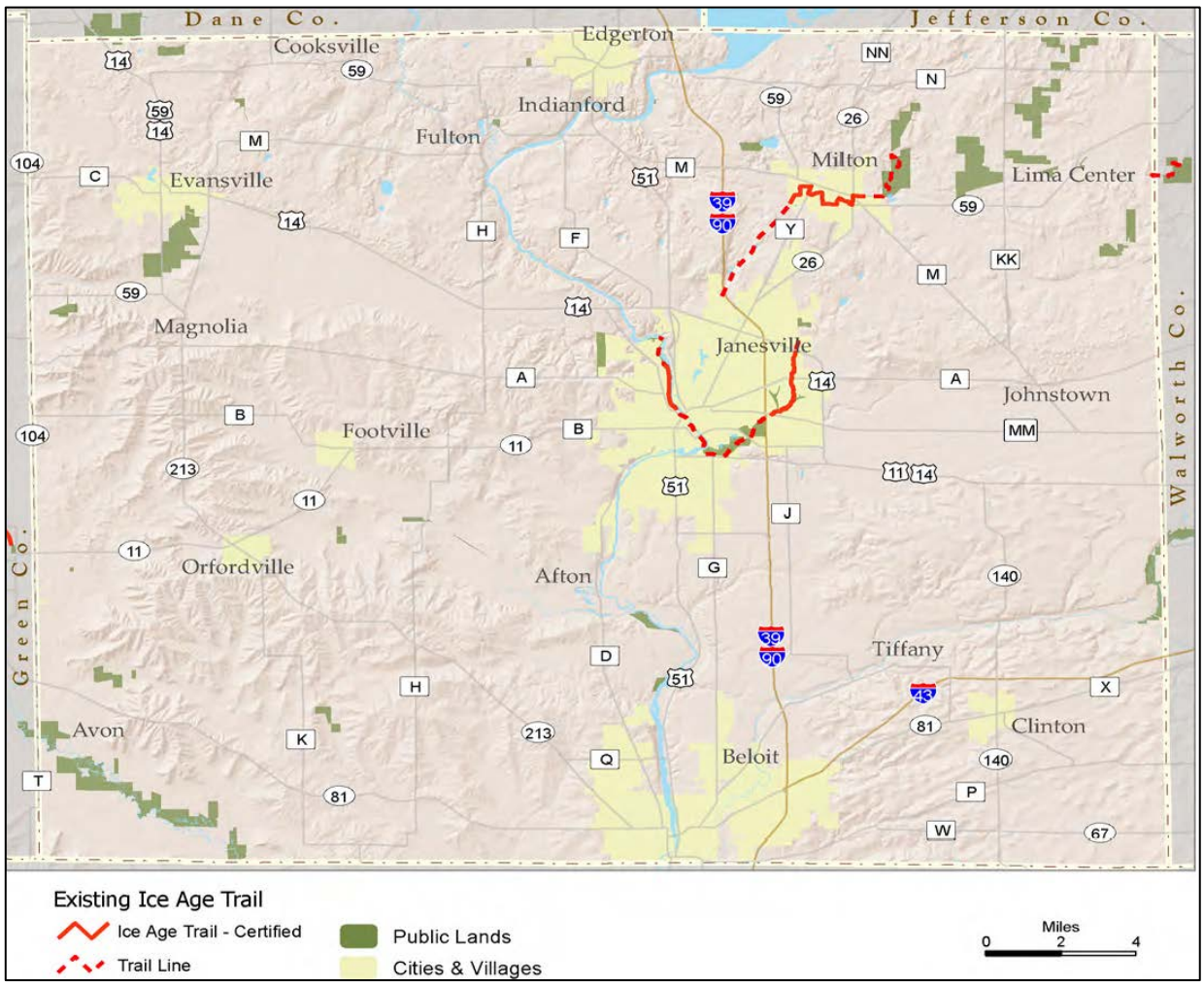


Source: Rock River Trail (www.RockRiverTrail.com)

ICE AGE TRAIL

The National Park Service (NPS) serves as the lead agency in the effort to develop the Ice Age Trail as an off-street trail through Rock County. Partners in the planning effort include Rock County Parks and Land Conservation Departments, Ice Age Trail Alliance, Janesville Area MPO, Department of Natural Resources, and interested individuals. The planning effort builds upon the certified miles within Janesville and Milton and seeks to connect to Magnolia Bluff County Park on the west side of the county and Clover Valley State Wildlife Area on the east side of the county. To date, the Ice Age Trail planning effort has developed a two mile wide preferred corridor but no alignment has been chosen.

Figure 2: EXISTING ICE AGE TRAIL



Map Courtesy National Park Service

City of Beloit

The City of Beloit lies just south of the Janesville Metropolitan Planning Area (MPA) and the State Line Area Transportation Study (SLATS) provides planning services to the Beloit MPA. Due to the proximity between the two planning areas, a brief summary of the Beloit bicycle and pedestrian infrastructure and planning efforts are necessary to gain a regional understanding of the bicycle and pedestrian network.

The *Stateline Area Bicycle and Pedestrian System Plan* was adopted in February of 2004 and updated in 2010. The planning area encompasses the City of Beloit and the surrounding cities, villages, and towns in Wisconsin and Illinois. The States of Wisconsin and Illinois and Rock County (WI) and

Winnebago County (IL) were involved in the plan development. SLATS is due to adopt a new plan in October 2016.

SLATS is a partner in the multi-stakeholder effort to connect the cities of Janesville and Beloit with regional trail and participated in the development of the Beloit to Janesville Bicycle Corridor Plan and Feasibility Study.

City of Milton

The City of Milton has a linkage to the Glacial River Trail, a regional trail that parallels STH 26 and extends from Janesville to Fort Atkinson. The Ice Age National Scenic Trail passes through the City following local streets from West High Street on the west side of the City to Storrs Lake Road on the East. The on-road network consists of bike lanes on Madison Avenue and STH 59.

City of Janesville

The City of Janesville boasts roughly 30 miles of off-road trail. Much of the network is along the linear open space corridors fronting the Rock River and Spring Brook. Figure 3 shows existing and funded trails and the following descriptions provide detail on existing trails and projects that have been funded for construction.

OFF-STREET TRAILS

The naming of the many trail segments in the area has changed over the years. A more consolidated and consistent naming scheme is now in use in the most current Janesville Trail maps. All of the former names of trail segments are included in the description below in parentheses. A more detailed discussion of Janesville's trail history and conditions of the trail system can be found in the Implementation Steps.

Ice Age Trail (Spring Brook Trail / East Greenbelt) – Beginning at the corner of Rockport Road and Franklin Street, this 4.8 mile ten-foot wide paved trail follows Spring Brook connecting downtown Janesville to Dawson Field, Rotary Gardens, and Palmer Park. The Trail divides just west of Wright Road to continue on in north and east directions. The east bound trail section continues to follow Spring Brook, eventually connecting to the Youth Sports Complex and terminating at the corner of

STH 11 and Wuthering Hills Drive. The north bound trail section follows the eastside greenbelt network, eventually connecting to STH 14 and terminating at Sandhill Drive.

Ice Age Trail (Rotamer Connector) – The Ice Age Trail along the Spring Brook Creek branches after the HWY 14 underpass, with one branch terminating at Sandhill Drive. The other segment turns northwest, parallels HWY 14 for roughly ½ mile, then passes along the backside of a major commercial development. The trail passes over STH 26 and terminates at John Paul Road. A signed on-road route connects the user to the Glacial River Trail.

Ice Age Trail (Kiwanis Trail & Downtown Connector) – The Kiwanis/Downtown Trail is a segment of Ice Age Trail that primarily follows the west bank of the Rock River between Riverside Park and the central business district. The Kiwanis/Downtown Trail is a 3 mile paved trail from Riverside Park south to Mercy Hospital where a paved trailhead and parking lot are provided for users. The trail consists of 1.5 miles of paved/on-street trail from the Rockport Rd./Franklin St. intersection north to Milwaukee Street, and 1.5 miles of trail connecting downtown Janesville with Riverside Park. It is important to note that from Rockport Road to Milwaukee Street the trail uses primarily city streets.

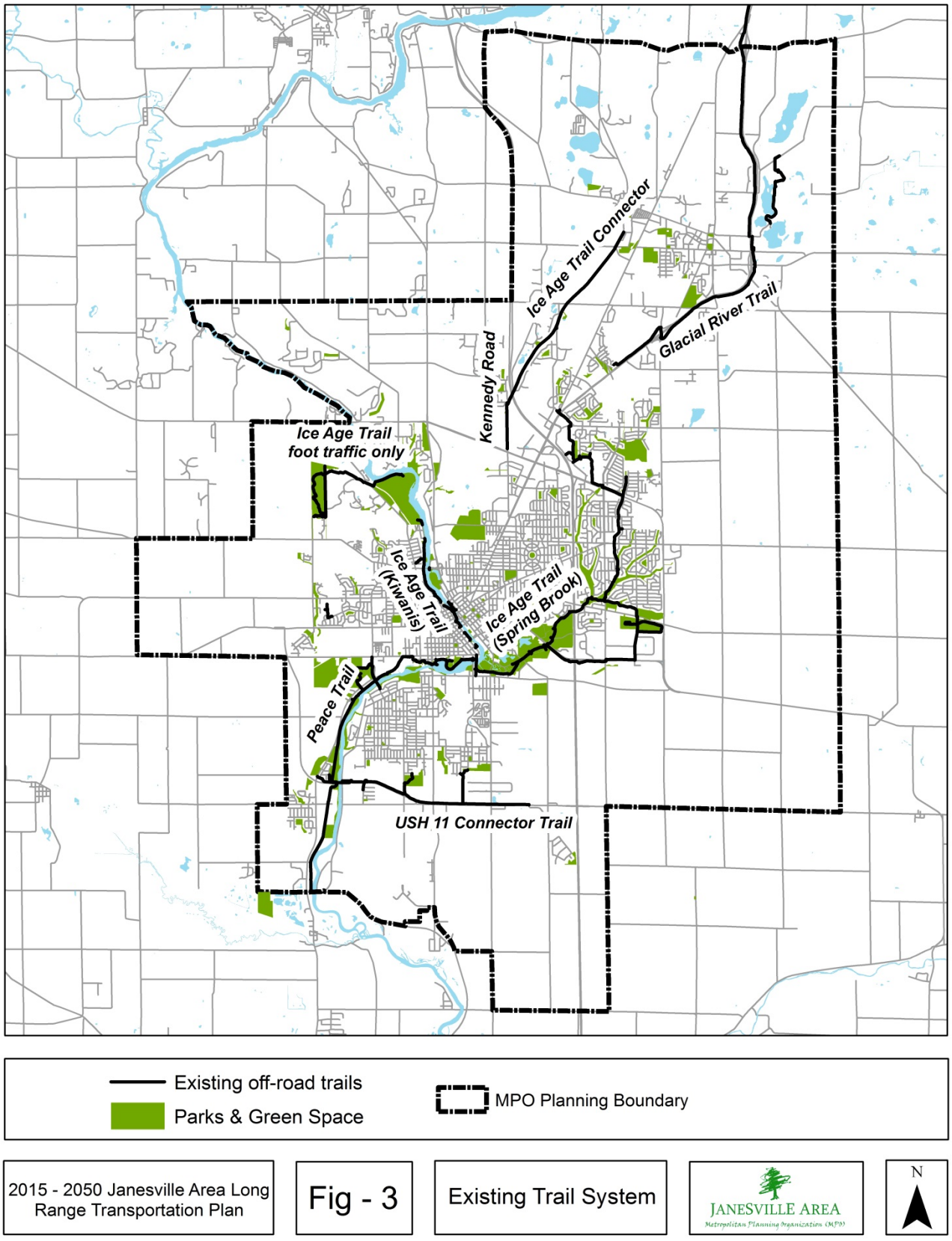
Peace Trail (Rock Trail) – the paved section of the Peace Trail follows the contour of the Rock River extending from the Rockport Rd./Franklin St. intersection, through Monterey Park, to Rockport Park down the west bank of the Rock River and terminates at Tripp Road. The section from Rockport Rd./Franklin St. to Rockport Park used to be called the Rock Trail. From Tripp Road, the Peace Trail continues as a crushed limestone trail along the former railroad grade to the Village of Afton.

USH 11 Connector Trail – Beginning at Afton Road and Highway 11, this 3 mile trail section heads east following the Highway 11 Bypass to Read Rd. From the Bypass, Read Rd. provides an on-street connection to Sharon Road where the trail eventually connects with the Ice Age Trail (Spring Brook) in Palmer Park.

Kennedy Road/Ice Age Trail Connector – off road paved trail/sidewalk on the West side of Kennedy Road from HWY 14 to the Ice Age Trailhead, then transitioning to a crushed rock trail to Brentwood Drive.

Glacial River Trail – Beginning at the Wright Road overpass and STH 26, the trail parallels STH 26 from northeast Janesville to Fort Atkinson.

Figure 3: EXISTING TRAIL SYSTEM

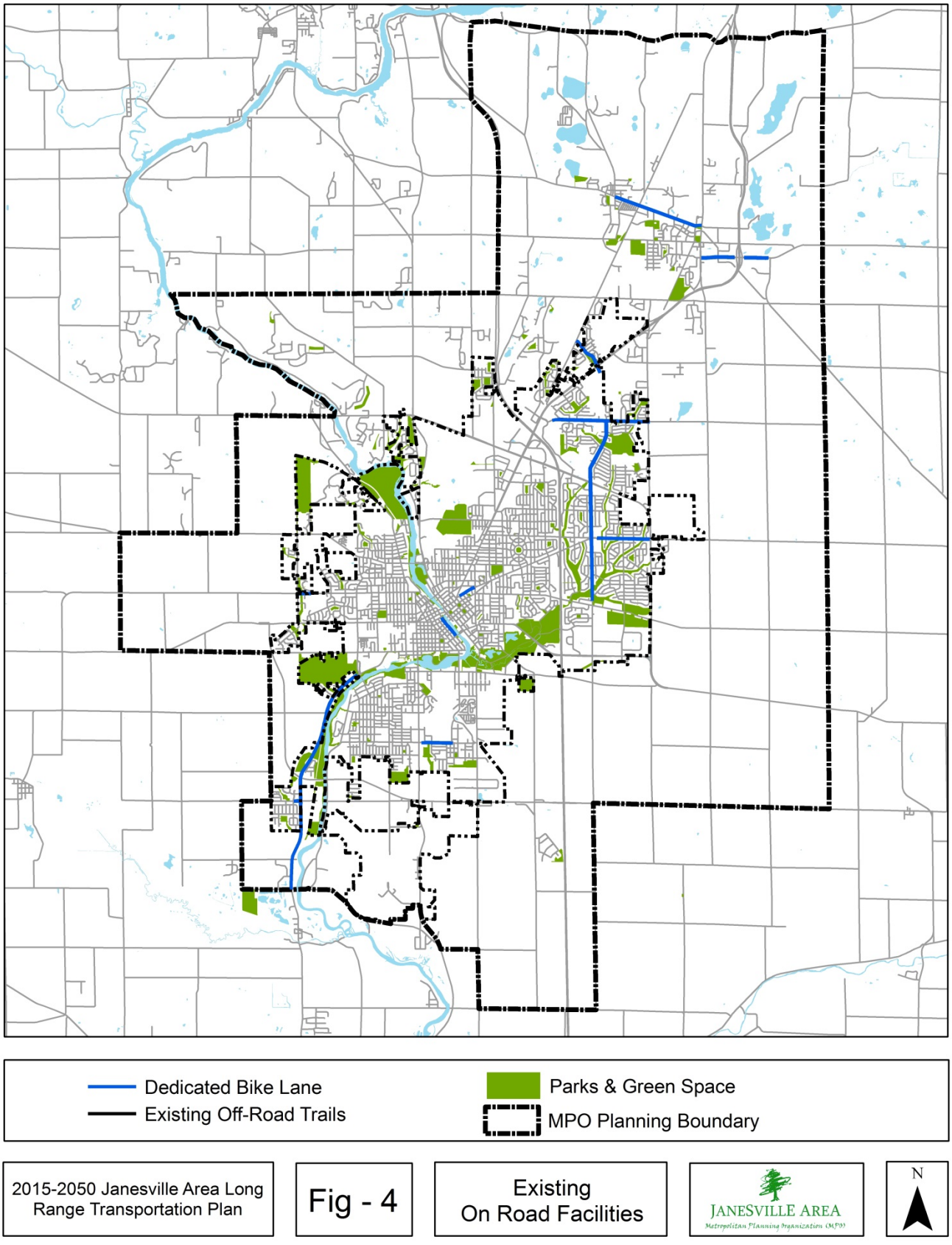


ON-STREET ROUTES

Janesville has roughly 20 miles of on-street designated bicycle lanes within city limits and Milton has roughly 2.5 miles of bicycle lanes. Additionally, paved shoulders extend beyond city limits and the MPO boundary along Afton Road and CTH G, adding nearly 5 more miles to the entire system. The two cities have made significant progress establishing bike lanes through reconstruction and retrofitting existing streets where appropriate, as seen in Figure 4. All of the mileage has been established since the 2005 Long Range Transportation Plan except a less than one-mile segment in Janesville.

The MPO does not have officially designated and signed off-street routes, except when gaps in the trail system require the user to travel on-street for short segments to connect to an off-street trail. An example of this is the gap in trail between the STH 26 overpass north of Kettering St. and the Glacial River Trail approximately one mile north of the overpass.

Figure 4: EXISTING ON-ROAD FACILITIES



BICYCLE AND PEDESTRIAN ACTIVITY IN THE JANESVILLE MPO AREA

How many people in the planning area actually ride bikes on a regular basis? This question is difficult to answer, and Census data only provides means of transportation to work data. 2000 Census data reported 0.2% of City of Janesville workers 16 years and older bicycled to work. The ACS 2009-2013 estimates that percentage has grown to 0.34%, which is not a statistically significant change.

Nationwide and state studies show bicycling and walking is increasing as a mode of transportation for all purposes. The Wisconsin Department of Transportation estimates 9% of all Wisconsin trips are made by walking or bicycling[1].

In 2010, the MPO developed a standard methodology for counting and surveying users on the trail system. The survey asked questions about purpose for using the trail (school, work, recreation, etc.), age, safety, how the user got to the trail and number of miles traveled to get to the trail as well as opinion questions such as level of satisfaction, destinations the trail should serve, and trail improvements. The survey also asked questions about frequency of use in the summer months versus winter months, which were used in conjunction with trail counts to develop an estimate of total annual trips on the system. The annual trail usage for 2010 was estimated to be 200,000 trips.

The MPO conducted the same study in 2013 and estimated total trips grew to 258,000. Since 2010, nearly two miles of trail have been added to the system, and the new mileage connected to system to a major retail area. The 2013 survey added a count location but the methodology remained consistent with the 2010 study. Several questions were added to the survey in order to better understand travel behavior and economic impact of the trail.

During the 2013 trail survey, 96% of surveyed trail users indicated they were using the trail that day for recreation/exercise/fitness training. Only 2% said they were using the trail to commute to school or work and another 2% said they were using the trail for shopping. Users were also asked if they ever use (even if rarely or infrequently) the trail to make purchases or commute to work or school. 37% of respondents indicated that they do use the trail to make purchases, while some who responded “no” said they would like to or “not yet”. 14% of respondents indicated that they have used the trail to commute to work or school.

The trail survey in 2010 included a separate special count to estimate the number of children using the trail system to travel to and from school. Staff counted two mornings and two afternoons near Kennedy and Harrison Elementary Schools and the intersection of East Milwaukee Street at the trail. Only a small number of children were observed using the trails to get to or from school. The MPO did not replicate this special count in 2013.

As part of the Janesville Safe Routes to School Plan, adopted 2010, travel surveys indicated 18% of elementary and middle school students walk to/from school, and 4% bike. Walking and biking varied widely from school to school, as can be seen in Table 1 below.

[1] http://www.dot.state.wi.us/modes/bicycles.htm

Table 1: MODE OF TRAVEL BY SCHOOL:
AVERAGE FOR MORNING AND AFTERNOON TRIPS

School	Walk	Bike	School Bus	Family Vehicle	Carpool	Transit	Other
Van Buren	15%	1%	31%	48%	4%	0%	1%
Kennedy	16%	1%	2%	69%	11%	1%	0%
Adams	18%	5%	2%	67%	7%	1%	0%
Madison	21%	1%	5%	65%	8%	0%	0%
Lincoln	33%	2%	3%	57%	4%	0%	0%
Roosevelt	14%	5%	9%	65%	7%	0%	1%
Harrison	9%	4%	5%	72%	11%	0%	0%
Washington	19%	4%	9%	59%	9%	0%	0%
Wilson	27%	2%	2%	69%	0%	0%	0%
Jefferson	12%	6%	1%	75%	6%	0%	0%
Monroe	19%	2%	7%	65%	6%	1%	0%
Jackson	5%	1%	33%	54%	6%	0%	0%
Edison	20%	7%	20%	43%	7%	2%	1%
Marshall	15%	9%	3%	54%	17%	2%	0%
Franklin	22%	2%	11%	51%	9%	4%	0%

Bicycle and Pedestrian Traffic Generators

Corridors used by bicyclists and pedestrians typically link major generators and activity centers. Schools and recreational facilities serve as destinations for a large number of bicyclists and pedestrians in Janesville and Milton, and are evenly distributed to meet community needs in each city.

Figure 5: EXISTING SCHOOLS, PARKS & OPEN SPACE

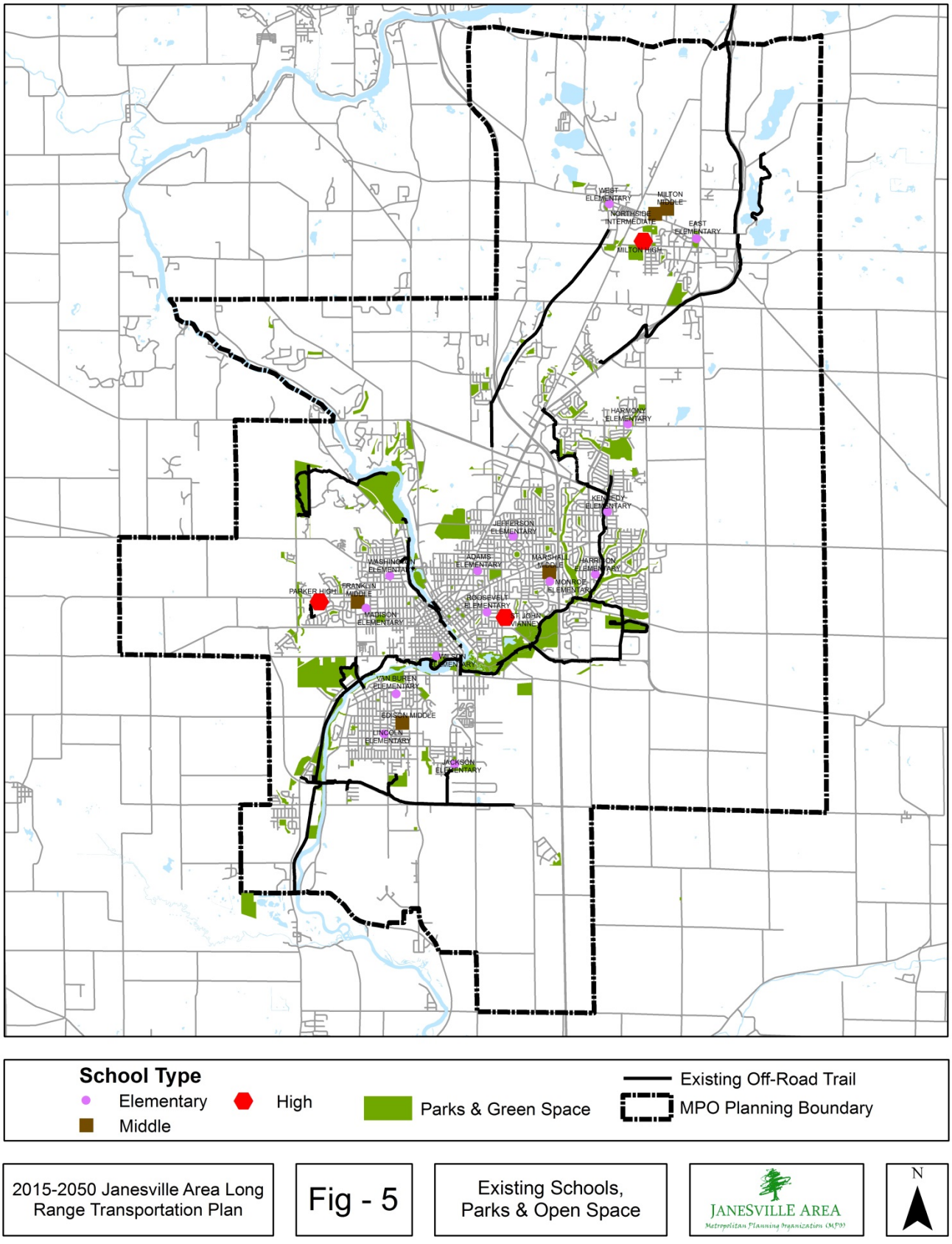
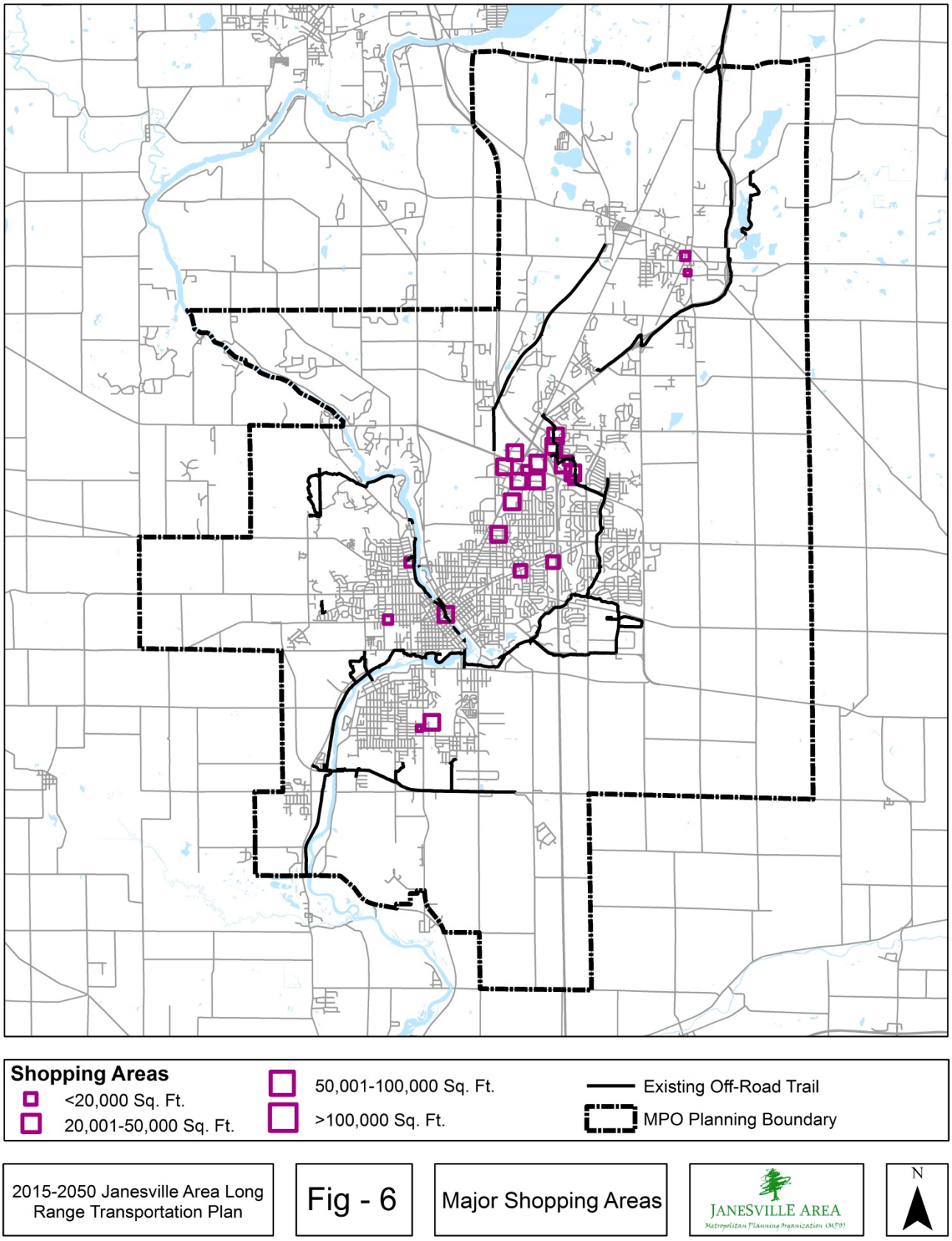


Figure 6: MAJOR SHOPPING AREAS



4. PUBLIC PLANNING PROCESS

The MPO Public Participation Plan provides procedures for public involvement in the Long Range Transportation Plan (LRTP). The Bicycle & Pedestrian Section has been prepared in accordance with the Public Participation Plan with additional public involvement opportunities designed specifically for this section. The Chair of the MPO Technical Advisory Committee appointed a special sub-committee of the TAC in order to advise the creation of this section. The sub-committee was made up of several TAC members, WisDOT staff, and interested members of the public. Agendas and minutes from the meeting are in the Public Participation Appendix. Tasks of the Bicycle/Pedestrian Sub-Committee included:

1. Evaluate Transportation goals and objectives.
2. Identify barriers to walking and bicycling.
3. Advise Public Participation Process.
4. Make recommendations for improvement; prioritize recommendations.
5. Review draft Bicycle/Pedestrian Plan.

In June, 2014, MPO staff conducted planning visioning exercises with the Sustainable Janesville Committee, a city committee with an expressed interest in walking and biking. The committee tested the exercises, provided valuable input for this plan, and made recommendations to improve the exercises for public open houses held in August.

The August public open houses held at the Janesville and Milton libraries solicited input from the public early in the planning process. Each open house had three interactive displays designed to spark discussion. One display asked for ideas to improve biking and walking, with some suggestions that participants could indicate their desire for by putting a “thumbs up” sticker next to the idea. The poster also had space for writing other ideas.

Attendees viewed paper maps showing existing bike lanes, trails and future trail projects listed in the 2005-2035 Long Range Transportation Plan. Participants drew on the maps, identifying key biking and walking destinations, drew in new trail ideas, and prioritized the identified future trail projects.

August 20, 2014 Public Open House. photo by Den Adler

The fiscal prioritization exercise was designed to get input regarding what types of improvements should be a priority. Each participant received $100 in fake money, in $5 increments. The participant allocated the $100 to the various improvement options as they saw fit. A person could choose to spend all $100 on one type of improvement, or split up the money. Improvement options were:

- Off-Street Facilities
- On-Street Facilities
- Bike Routes (signs designating route and providing direction)
- Re-Paving and other improvements to local roads
- Sidewalks on existing roads
- Sidewalks on streets leading to schools
- Safer Crossings at streets

RESULTS SUMMARY

A total of 38 individuals from the public participated between the three public meetings. All of the comments and input are detailed in the Public Participation Appendix but a summary of the input is provided here as well as a description of how the advisory committee used the input when developing recommendations.

Ideas Poster
Ideas that garnered several "likes" included rules of the road training for new drivers, water fountains, and informational kiosks. Added suggestions included trail etiquette signage, bike route signage, and concerns with the safety of specific areas and crossings. All comments regarding specific safety concerns were summarized and presented to the Bicycle/Pedestrian Sub-committee at their second meeting when the sub-committee considered recommendations.

Maps
The maps generated a lot of discussion about safe corridors, unsafe corridors, and ideas for trail connections. The ideas were mapped and presented at the second meeting of the Bicycle/Pedestrian Sub-committee. Discussion regarding the elimination or alteration of project ideas may be found in section 7.2 after the off-road recommendations.

The maps also asked participants to rank their top three future trail projects listed in the 2005-2035 Long Range Transportation Plan. The members of the Sustainable Janesville Committee largely favored completing trail connections in downtown Janesville, giving few votes to other projects. Participants attending the public open house held at Janesville's Hedberg Public Library voted for several projects throughout the Janesville area but the majority ranked the Glacial River Trail as their number one priority. Other projects receiving many votes included downtown connections and the Westside Fisher Creek Trail.

Participants attending the public open house held at the Milton Public Library overwhelmingly felt the Glacial River Trail should be the top priority. Individuals made various suggestions for making the connection, and MPO staff discussed the difficulty in closing the gap due to existing development and other physical constraints. Some individuals felt the extension of the trail through NE Regional Park and to the Wright Road overpass would be a more feasible solution to connect to the Glacial River Trail.

Fiscal Priorities

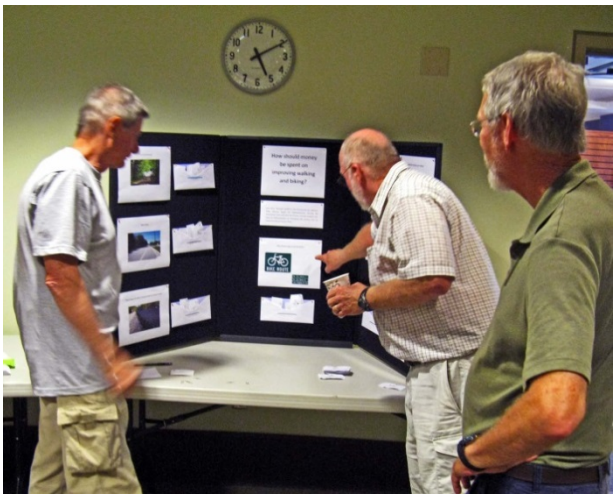
Trail improvements and bike lanes tended to receive the most "money" from meeting participants, while sidewalks tended to get less money from participants. Below are the results from the three public meetings.

Sustainable Janesville Committee

- Bike lanes - $130
- Repaving local streets - $120
- Off street facilities - $95 (this option was renamed "Trail improvement" for the public open houses)
- Safer crossing at streets - $85
- Signs and direction - $65
- Sidewalks near schools - $50
- Sidewalks in existing areas - $50

Bicycle Pedestrian Open House 8/20/14 Janesville Hedberg Library

- Trail improvement - $450
- Bike lanes - $330
- Safer crossing at streets- $195
- Signs and direction - $195
- Street improvement (repaving) - $175
- Sidewalks on existing roads - $130
- Sidewalks leading up to schools - $100



August 20, 2014 Open House photo by Den Adler

Bicycle Pedestrian Open House 8/25/14 Milton Public Library

- Bike lanes - $320
- Signs and direction - $215
- Trail improvement - $210
- Sidewalks leading up to schools - $195
- Street improvement (repaving) - $105
- Safer crossing at streets - $105
- Sidewalks on existing roads - $9

5. FACILITY DEVELOPMENT PROCESS

Input from the public plays a crucial role in identifying transportation issues and prioritizing improvements. The objectives of this plan help to define *where* bicycle and pedestrian facilities will be developed and *what type* of bicycle and pedestrian facilities will be constructed. Connections between parks, specialized recreation facilities, and public centers are very important to the Janesville Area MPO. Convenient access, safety, varying levels of bicycling experience, and of course financial resources including grants, will affect the decision as to what type of facilities will be constructed within the Janesville Area MPO planning area. In regards to bicycle facilities, bike paths are often preferred means of travel for less-experienced or younger bicyclists. The Bicycle/Pedestrian Sub-committee took into account the level of comfort a less experienced bicyclist would have when considering recommendations. Planning criteria determine the best kind of facilities to develop for both pedestrian and bicyclists. The following two sections discuss factors taken into account when deciding what type of bicycle and pedestrian facilities to construct.

BICYCLE FACILITIES

There are three steps in the decision-making process of locating trail or on-street bike routes. The three steps are:

1. Identification of a bicycle corridor
2. Site the bicycle route along a street network or publicly accessible land such as a greenbelt
3. Selection of bicycle facility type

1. Identification of a Bicycle Corridor

Factors to consider when identifying potential corridors for bicycle routes include:

A. Usage

Potential use of facilities is best determined by identifying land uses that generate bicycle traffic. Examples of such uses include:

- Employment centers
- Retail and commercial facilities
- Mode transfer points (transit center, intercity bike routes)
- Parks and recreational facilities
- Schools and colleges
- Neighborhoods

Two other elements taken into consideration include:

- Area demographics
- Trip length (varies according to skill and trip purpose)

B. Accessibility/Spacing

Convenient bicycle access is important to the location of a designated bicycle route. An appropriate distance is established that measures how far a trip origin or destination is located away from a bicycle route. As a rule, the routes will be planned so that major residential areas within the city are within approximately ½ mile of a designated bicycle route facility. (Physical barriers, such as the Rock River, may require adjustments to this general rule.) In addition, primary destinations within the city such as downtown, schools, major employment and shopping areas and parks and recreation facilities should be served by bicycle facilities.

C. Directness

Bicycle facilities should connect major traffic generators along the best line for users. It is important to note that cyclists or pedestrians, similar to any motorist, usually prefer the most direct route in linking origin and destination. This is especially true of the utilitarian trip purpose as opposed to the recreational trip. If the pavement quality or directness of a designated route is inferior to an adjacent route, the likelihood of route usage will diminish. Over a short distance, most cyclists will not deviate more than two blocks off a direct route just to use a designated route.

D. Continuity

The MPO's bicycle system should be free of missing links or gaps and connect, at the periphery to designated bikeway routes of the county system. If barriers exist within the city, these should be addressed as planned improvements targeted for future implementation.

E. Barriers

Janesville's physical boundaries to route development are the Rock River and I-39/90. Narrow pavement on bridges or at interstate underpasses combined with limited right-of-way may restrict the type of facilities that can be constructed at these locations without major reconstruction. Terrain is another physical barrier that limits the number of routes used by bicyclists. There are several grades within the City of Janesville that could be considered steep by inexperienced bicyclists especially in the Courthouse Hill area.

F. Aesthetics

Though not of primary importance, this factor should be considered along with all other factors in selection of a designated route. For example, within the City of Janesville, most off-road facilities will be traveling through wooded or park settings providing an enjoyable pleasing environment for the user.

G. Security

Though not too much of a problem within the MPO Area at this time, care will be taken to choose routes that are located in areas that are perceived as relatively safe for all ages to use. Problems with bicycle routes that are too remote or vandalism along a route or in a parking area will be considered in corridor selections.

2. Site Bicycle Route along a Street Network

A. Directness

Directness is a factor to consider when identifying a bicycle corridor and is also important when establishing a bike route on a street. It is understood that bicyclists prefer a through route even if that route might be a busy thoroughfare. A route that shifts the user off the main road onto an adjacent, less traveled street will often add distance to the trip that the bicyclists is not willing to accept. Additionally, the main road will likely have more destination points that the bicyclist will be accessing which makes the less-traveled routes less attractive to use.

B. Delays

Bicyclists have a strong desire to maintain momentum. A less-traveled route may require the bicyclists to stop more frequently at every intersection which decreases route attractiveness. The number of stops on less- traveled roads should be reduced if designated as a bike route. Travel on the designated route will then entail fewer stops and, in general, decrease potential conflict points for bicyclists.

C. Safety

The most appropriate bicycle facility should be chosen for each specific section of roadway to ensure that the facility is both safe and operational. Traffic factors to consider in selecting a bicycle facility along a given corridor include: traffic volumes, average motor vehicle speeds, traffic mix (car, truck, and bus), on-street parking (turnover rate, average number of parked cars), sight distance, and the number of intersections and driveways.

D. Street Design

The type of on-street bicycle facilities recommended is partially based on the width of the street being considered for designation as a bike route. Streets can be selected for signing or striping without major reconstruction if the existing cross-section accommodates AASHTO guidelines for wide curb lanes or bike lanes or if parking is removed from one or both sides of street. The Janesville Planning Area street standards recommend that primary arterials are constructed with a minimum 52-foot wide pavement width, and two-lane standard arterials are constructed at 44 to 56-foot width. Collector streets are typically 40 feet wide and local streets are constructed at a 28 or 36-foot width. AASHTO recommends a 14 foot width for wide curb lanes from the pavement joint at the gutter pan to the center lane stripe. Local streets with low volumes may have adequate widths to accommodate bicyclists and vehicles on a shared roadway. When possible, streets with wide lanes should be considered for bicycle routes since the cost of signing those streets as bike routes would be significantly lower than reconstructing narrower streets. In the Janesville area, options exist to remove parking from one or both sides, decrease gutter pan widths, or re-stripe center lines to increase available pavement for bicyclists and vehicles. A more detailed discussion of street standards and roadway accommodations for cyclists are discussed in the highway section of the long range plan.

E. Cost

The chosen type of bicycle facility for a specific route will depend on certain cost considerations. Limitations on funding could limit the choice of bicycle facilities. The cost of maintaining a facility is a further factor in bicycle facility type.

F. Implementation

Factors affecting ease of implementing a recommended bicycle facility are many. Often neighborhood concerns come into play as well as more tangible factors such as traffic conditions, on-street parking, and amount of bicycle space or right-of-way available. Compromises are ultimately made that result in projects proceeding when deemed favorable by all parties or when funds become available.

3. Selection of Bicycle Facility Type

Once a route is identified as a potential bicycle facility corridor, a facility type must be selected. Facility types depend on the characteristics of a specific street or trail right-of-way and ridership levels expected on the facility.

There are five basic types of bicycle facilities:

- Shared Roadway
- Wide Curb Lanes
- Paved Shoulders
- Bike Lanes
- Bike Paths/Multi-use Trails

There are also enhanced bicycle facilities, such as Protected or Buffered Bike Lanes, Bike Boulevards, and bike lanes with colored pavement.

As stated previously, bicycle facilities are recommended according to traffic volumes, the ratio of cars to trucks or heavy vehicles using the roadway, and speed limit. Each of the five types of bicycle facilities are briefly described and illustrated below.

Shared Roadway

On a shared roadway facility, bicyclists and motorists are accommodated in the same travel lane. Narrow roadway widths or parked cars make it necessary for vehicles to cross over into the oncoming travel lane when passing a bike. This facility type is common along low volume city streets and narrow town roads. A shared roadway is appropriate for an urban street with less than 3,000 ADT or a rural road with less than 700 ADT. Most bicyclists feel comfortable sharing a roadway when ADT is very low.

Shared lane markings, or “sharrows” can be added to shared roadways to assist bicyclists with positioning in the lane, alert motorists to the presence of cyclists, encourage safe passing, and reduce the incidence of wrong-way bicycling. Standards for installing sharrows are described in the Manual for Uniform Traffic Control Devices (MUTCD).

Wide Curb Lane

A curb lane of 14 feet (minimum) in width, not including the standard 2 foot gutter pan, is necessary to accommodate both the bicyclist and motor vehicles. This is measured from the centerline of the roadway to the longitudinal joint with the gutter section of the curb where no

parking is permitted in the curb lane. Approximately 2.0 feet is allowed for a gutter pan, with 14 feet allowed for the driving lane even without a longitudinal joint. On a 4-lane arterial, the inner lane may be decreased to 11 feet. For this calculation, the distance from the curb face to the joint line is considered unsuitable for bicycle riding. When parking is permitted in the curb lane, a minimum width of 13 feet, measured from the gutter pan to the through travel lane stripe should be available. Motorists should not have to change lanes when passing a bicyclist. A wide curb lane is not striped. This facility type is most common on multi-lane arterials and collectors with higher traffic volumes.

Bike Lane

A bicycle lane is delineated by an actual painted mark on the roadway that provides a dedicated area for bicycle riders. A bike lane is a one-way facility. The minimum width for a bike lane is 5 feet to the left of a parked motor vehicle or 4 feet minimum from the gutter edge where no parking is permitted. Bike lanes are common on urban arterials or collectors when right-of-way is available.

Paved Shoulders

A paved shoulder of 6-8 feet in width is a good accommodation for bicyclists along rural highways, especially along major arterials that radiate from the urbanized area. A roadway with paved shoulders less than 4 feet in width should be carefully considered for designation as a bike route, however, shoulder width is ultimately dependent on traffic volume and speed. The minimum width allows motor vehicle traffic to overtake the rider without having to swerve.

Bike Path/Trail

This type of facility is physically separated from motor vehicle traffic by open space or barrier. A bike path is usually a two-way facility and should be placed where there are few intersecting roads or driveways. Bike paths or multi-use trails are appropriate for abandoned railroad lines, greenbelts, and along graded river banks but rarely along urban roadways. The recommended minimum width for paved bike path is 10 feet. A 2-foot clear zone adjacent to both sides of a bike path is also recommended. Trees should be 15 feet from the trail in order to minimize root reflections caused by growing tree roots. Trees bearing fruit or nuts, such as mulberry or oak, should be setback at least 15 feet. An open space or barrier of 5 feet in width (minimum) is required when a bike path parallels a roadway in order to safely separate motor vehicles from bikes. If the minimum width cannot be accommodated, a separation barrier is required.

Buffered bike lane photo by Dave Schlabowske, Wisconsin Bike Fed

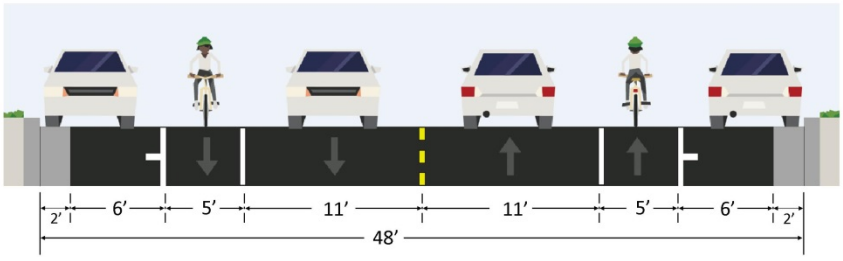
Enhanced Bike Facilities

Some relatively new bike facility designs are gaining popularity for the extra level of safety, visibility and protection afforded to bicyclists. Such enhancements may include colored pavement, extra buffering space between vehicle lanes and bike lanes, physical barriers such as flexible bollards separating vehicle lanes from bike lanes, and dedicated bicycle boulevards. Design may vary from place to place based on a community's preferences and the specific challenges of a project.

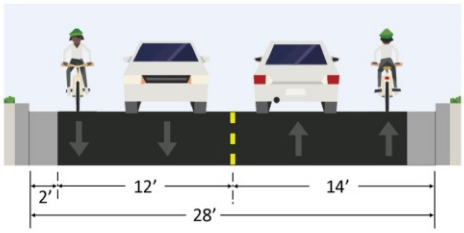
Facility Design Flexibility

FHWA published the Bicycle and Pedestrian Facility Design Flexibility memorandum on August 20, 2013, which reflects support for flexibility in the design of pedestrian and bicycle facilities in order to encourage the development of connected and context-sensitive pedestrian and bicycle networks. The American Association of State Highway and Transportation Officials (AASHTO) bicycle and pedestrian design guides are the primary national resources for planning, designing, and operating bicycle and pedestrian facilities. The National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide and the Institute of Transportation Engineers (ITE) Designing Urban Walkable Thoroughfares guide builds upon the flexibilities provided in the AASHTO guides. FHWA supports the use of these resources to further develop non-motorized transportation networks.

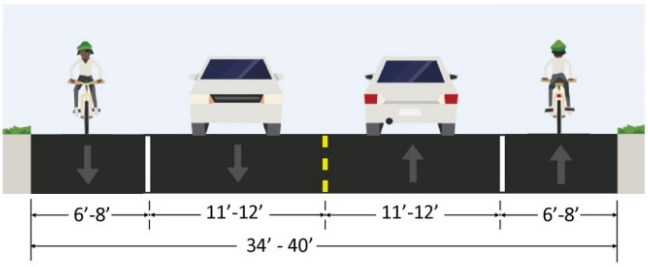
Figure 7: EXAMPLES OF BICYCLE FACILITY STREET CROSS SECTIONS



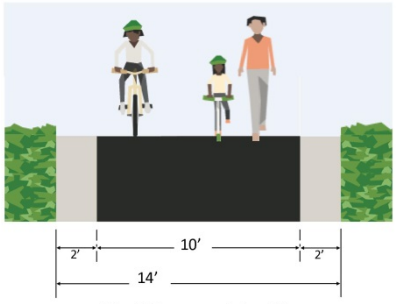
Bike Lanes



Wide Curb Lanes



Paved Shoulders



Multi-use Trails

Source: www.streetmix.net

TRAFFIC VOLUMES AND FUNCTIONAL CLASSIFICATION

The final factors that should be considered when analyzing existing bicycle conditions are the functional classification of routes and the amount of vehicular traffic that travels on the routes. Functional classification, average daily traffic volumes, and speed limits are interrelated and affect bicyclists' route preferences, thus road type ultimately affects the type of bike facilities to be constructed. If the option is available, it is preferable that bicyclists are able to reach their destination on streets classified as minor arterial or lower as these streets have lower traffic volumes than principal arterials. When the most direct route is a principal arterial with higher traffic volumes, however, improvements such as bike lanes or combination transit/bike lanes may need to be installed. Wide curb lanes are usually adequate for minor arterials with higher ADTs. Lower volume urban streets may be treated as shared roadway, and in rural areas, lower volume roads may be made safer by constructing paved shoulders.

Although functional classification and volumes are important factors to consider when designating on-street bike facilities in the planning area, it should be noted that local conditions may be weighed against general guidelines. On rural roads within the planning area, paved shoulders are typically the only type of on-road bike facilities constructed and the construction typically occurs during road widening, reconstruction, or new construction. Five feet is the standard width for accommodating bikes on the shoulder, but the width can be widened for principal or minor arterials. As with urban streets, local knowledge of terrain, driving habits, traffic patterns, and right-of-way constraints will ultimately decide the type of facilities appropriate for each community.

PEDESTRIAN FACILITIES

The most common type of pedestrian facility in the Janesville Area MPO is the sidewalk. Pedestrians also make extensive use of the trail system, primarily for recreation purposes. In addition to sidewalks, dedicated public walkways connect residential districts to neighborhood, community, and regional parks. Provision of public access walkways within the Janesville Area MPO is governed by local policies determined by the City of Janesville, the City of Milton, and each township.

Additional pedestrian facilities include walkways, raised or colored crosswalks, pedestrian medians or refuge islands, curb extensions or bulb outs, signal timing and pedestrian push buttons, pedestrian bridges, and a multitude of traffic calming measures that are beneficial to pedestrian safety and convenience. In addition, the land development and site planning process provides an opportunity to improve the pedestrian environment. Encouraging building that is more appropriate to the pedestrian scale than the automobile scale will result in more pedestrian friendly environments where people will not be afraid to walk.

The decision making process for locating pedestrian facilities is less involved than for identifying and providing bicycle facilities. In general, all urban areas have the need for a linked pedestrian network of sidewalks and off road paths. In addition, rural areas with residential development should also provide pedestrian facilities that ensure safe and convenient linkages between complimentary land uses. These facilities should adhere to the concept of universal design, or for the majority of all users – including the elderly, children and people who are disabled.

6. PROPOSED BICYCLE AND PEDESTRIAN FACILITIES

The bicycle route system proposed for the Janesville Area MPO combines off-street and on-street facilities to provide access to a large portion of the MPO planning area. Multi-use trail segments take advantage of riverfront property and abandoned rail corridors. The focus of the /multi-use trail system is primarily on interconnecting major recreational facilities and providing key linkages for the on-street bicycle transportation network. The overall goal is to develop a comprehensive off-street and on-street bicycle network that provides direct routes to major residential, employment, educational and recreational activity nodes and connects to the regional trail system.

The recommendations contained in this section are based on public feedback and the facility development process described in the previous section. The Bicycle/Pedestrian Sub-committee reviewed the recommendations of the 2005-2035 Long Range Transportation Plan and affirmed many of the recommendations. One significant change from the previous plan is the specificity of some of the recommendations. Where the previous plan identified important bicycle corridors but recommended either a wide curb lane or a bike lane, this plan often recommends a bike lane. There are two reasons for this change: there is growing research indicating cyclists' prefer a separate delineated space and local public feedback indicated a desire for bicycle lanes.

The following development strategy consists of on-street improvements that complement the existing and proposed off-street or trail facility recommendations and with the purpose of creating a bicycle facility network within the MPO. The on-street recommendations will occur primarily with street resurfacing and reconstruction projects while the off-street recommendations are split into two phases with general completion dates falling between 2016-2025 for Phase I, and 2026-2050 for Phase II. It should be noted that completion of the Phase II projects will require significant amounts of work during the Phase I period in order for them to be successfully completed. Specific projects in the City of Milton and Rock County are also included with no specific time frame identified other than 2016-2050. Figure 9 shows the recommendations for the proposed on-street network and Figure shows the proposed off-street/trail construction projects. Future extension of bike trails not identified on Figure 10 may be proposed through updates of neighborhood plans or development proposals within the MPO area.

STREET PROJECTS

City of Janesville – Proposed Bicycle Lanes

- Court Street – Academy Street to Main Street
- Austin Road – Court Street to W. Memorial Drive
- Mineral Point Avenue – Parker High School to Franklin Street and the Ice Age Trail
- Kellogg Avenue – South River Road to Center Avenue
- Pontiac Drive/Morse Street – E. Milwaukee Street to Ryan Road

Hilltop Drive & Northside Drive: Townline Road to Northside Drive Terminus (City of Milton)
A north-south and east-west spine through the City of Milton was identified as a potential location for bicycle lanes in the City of Milton Comprehensive Plan. This north-south spine would run through the center of the City and generally follow the alignments of North Side Drive and Hilltop Drive, from a planned extension of Sunset Drive on the north to Town Line Road on the South.

SAFETY CONVERSIONS

A safety conversion is the reconfiguration of an undivided four-lane roadway into two driving lanes and a center two-way left turn lane. The resulting roadway, with one driving lane in each direction and a two-way left turn lane is commonly called a TWLTL (pronounced "Twiddle"). The reduction of driving lanes allows part of the roadway to be reallocated for other uses such as bike lanes, pedestrian crossing islands, and/or parking. FHWA guidance indicates roads with 15,000 ADT or less and with peak hour traffic counts of less than 1,000 per hour per direction are good candidates for a road diet. Some of the potential benefits of a three lane TWLTL over a four lane undivided road are:

- Improving safety for bicyclists.
- Improving speed limit compliance and decreasing crash severity when crashes do occur.
- The two-way left turn lane reduces the number of mid-block and intersection conflict points thereby reducing rear-end and side swipe crashes.
- The two-way left turn lane can be used by vehicles traveling in either direction for deceleration and refuge while making a midblock left turn maneuver.
- The two-way left turn lane can be used as an acceleration lane for vehicles turning left to enter the street from mid-block driveways.
- The two-way left turn lane can allow for easier and safer emergency vehicle movement, particularly during peak hour periods.

Driveway density, transit routes, the number and design of intersections along the corridor, public input, as well as operational characteristics are some considerations to be evaluated before deciding to implement a safety conversion. The following roadway segments were identified as candidates for consideration of a conversion due to high driveway density, ADT volume, and other factors.

E. Milwaukee Street – Garfield to Wright Road

This segment should be evaluated for a safety conversion in order to provide on-street bike lanes. This segment of E. Milwaukee Street remains a four lane undivided roadway, while segments of the street on either side have previously been reconfigured to include bike lanes. The segment between Milton and Garfield is west bound traffic only and was converted from two travel lanes to one travel lane and two bike lanes on either side. This conversion was implemented primarily to improve traffic operations. The segment between Wright Road and USH 14 was reconfigured in order to provide a center refuge island where the Ice Age Trail intersects with E. Milwaukee Street.

The addition of bicycle lanes is recommended in the event of reconfiguration for several reasons. Bike lanes would complete bike accommodations for the entire corridor from USH 14 to downtown. It would also provide a connection to the Ice Age Trail. East Milwaukee provides a direct route to neighborhood

commercial destinations and Marshall Middle School that is currently fairly well traveled by pedestrians and cyclists. Bicycling on the sidewalk is very hazardous in this area due to many commercial and residential driveways and areas where there are vision obstructions in the terraces.

For the segment between Garfield and Wright, 2013 ADT ranges from 10,300 to 12,400 along the corridor. Maximum total peak hour traffic is 1,100 per hour (2010 ADT), but available data does not split the traffic counts by direction. Surrounding land uses are primarily single family residential and some neighborhood commercial. Marshall Middle School and Monroe Elementary School are in close proximity to the intersection of E. Milwaukee Street and Pontiac.

E. Memorial – Milton Avenue to Memorial Bridge; Washington to Oakhill

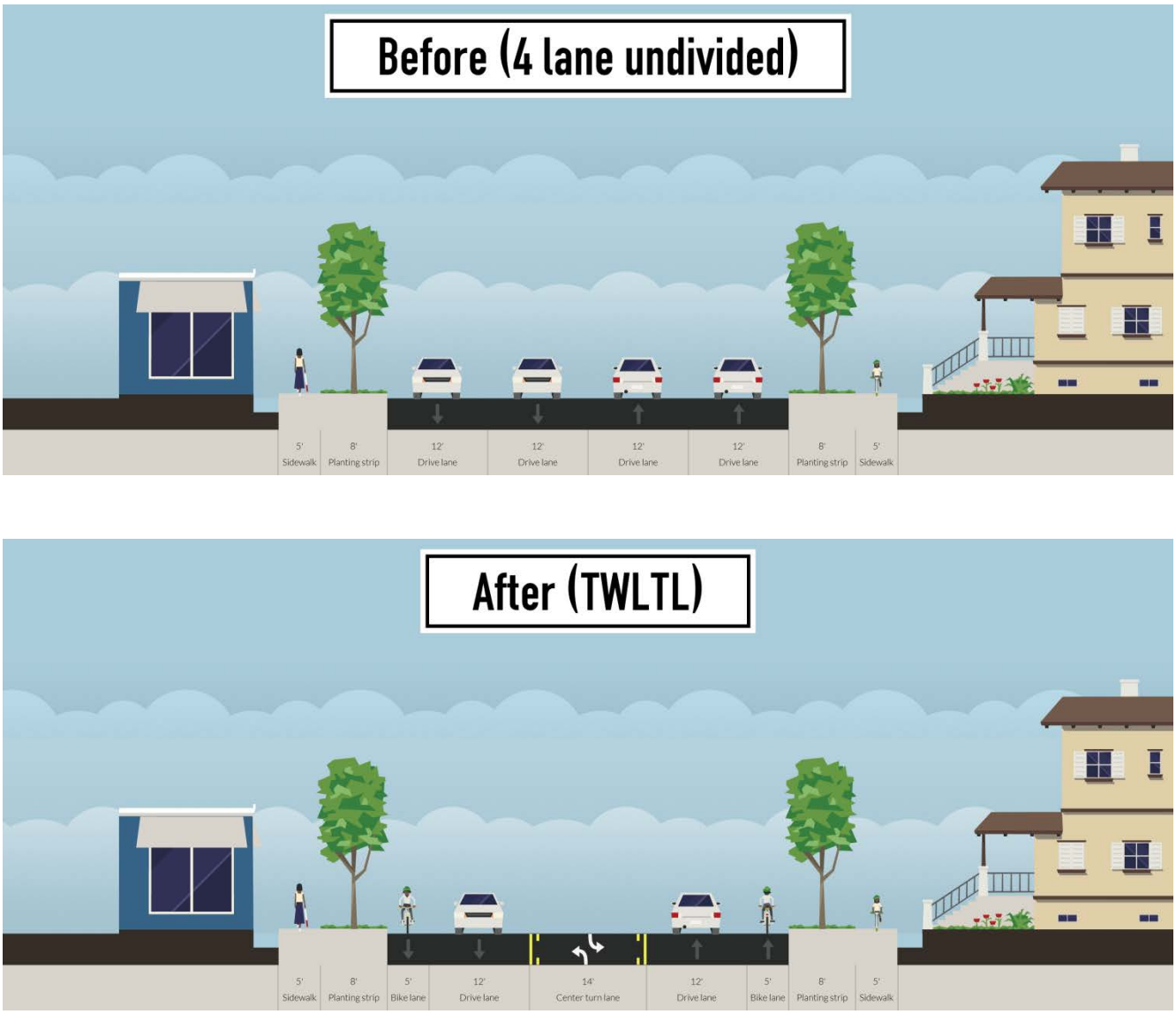
These two road segments should be evaluated for a safety conversion in order to improve safety and calm traffic speeds. The Memorial Bridge is largely avoided by bicyclists because it is not a comfortable crossing. Therefore, an evaluation of on-street parking may be a more appropriate addition rather than bike lanes.

This roadway segment has ADT of roughly 10,500 and total peak hour traffic is less than 1,000 (2010 ADT). Surrounding land uses include single family residential and multi-family residential as well as some neighborhood commercial.

W. Court – Pearl to Austin

This road segment should be evaluated for a safety conversion in order to improve safety and calm traffic speeds. This roadway segment has ADT ranges of 10,600 to 11,200 and maximum total peak hour traffic of roughly 1,300 (2010) per hour.

Figure 8: EXAMPLE SAFETY CONVERSION



Source: Streetmix.net

ON-STREET ROUTES

The remaining on-street recommendations are grouped into two categories indicating different comfort levels for the cyclist. Recommended on-street routes were identified as major streets connecting different activity centers, such as schools and shopping centers, to each other and to the off-street trail network. In some cases, the streets are collectors or major roads that also accommodate a higher amount of automobile traffic. Recommended on-street routes that have even higher automobile traffic were identified as a separate category. Bicyclists using these routes should be experienced and confident in riding with vehicular traffic.

Shared Use Streets and Urban Escape Routes

The remaining on-street bicycle network consists of all residential roads which have a low level of automobile traffic and are considered safe shared roadways for all modes of travel. Finally, a number of "urban escape routes" were identified on the maps which indicate the best routes out of town for recreational cyclists that prefer to ride and train on rural roads.

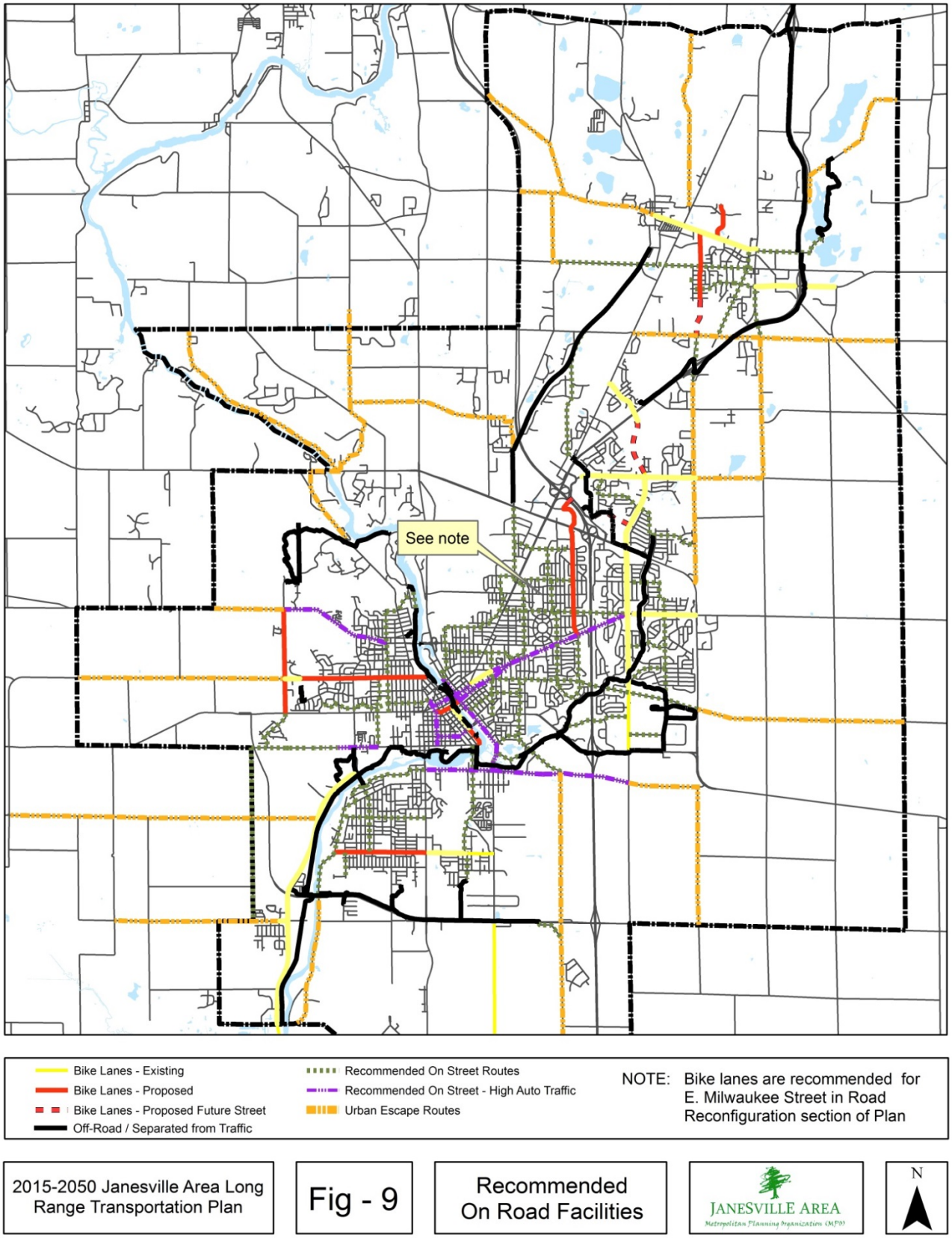
2015-2050 State and County Highway Projects

State and County highway projects in the Janesville Planning Area using state or federal funding are subject to Trans 75 (modified as part of the 2015-2017 Wisconsin budget bill Act 55) and therefore shall be given due consideration in the reconstruction of paved shoulders or separated trails. The exemption are if the project is 1) located on highways with laws prohibiting bicyclist and pedestrian use, 2) funded in whole or in part with state funds where the governing body and each municipality the project is in adopts a resolution establishing bicycle and pedestrian use, and 3) using federal funds with written notice of the conditional use attached to the funds to establish bicycle and pedestrian use. If there is cost associated with construction of paved shoulders roadways it will be incorporated into the total project cost for these roads. These highway projects are included in the Streets and Highways section of the long range plan.

On - Street Bicycle Facility Improvement Schedule

While the off-street /multi-use trail recommendations are categorized into phases, the implementation of on-street improvements will be more dynamic in nature. The on-street improvements are tied directly to the street reconstruction and maintenance schedule and will be more cost effective to implement at that time. In order to facilitate bike lanes on many streets, parking may need to be restricted on one or both sides. This will require approval from residents and property owners along the street and therefore does not allow for accurate estimates or targets for completion. Upon completion these projects will provide an identifiable network of designated on-street bike routes that, when combined with the off-street trail network and the residential shared use streets, will create a safe and efficient transportation system for bicyclists.

Figure 9: PROPOSED ON STREET BICYCLE NETWORK



OFF-STREET TRAIL PROJECTS

Off-street sections of the proposed bicycle path system are designed to meet AASHTO guidelines and WisDOT recommendations. A 10-foot two-directional paved path with a 5-foot minimum separation from adjacent roadways is the intended design for most sections. Where feasible and where space allows, these off-street segments should include a two-foot wide crushed gravel or grass shoulder on at least one side to accommodate runners and walkers. These trail routes have been selected for their scenic and functional attributes to link the employment and residential centers. It is expected that the trails will be used primarily for recreational purposes; however they are also designed to serve commuters and school trips. Where feasible and when opportunities arise, the MPO, the Cities of Janesville and Milton, and the townships should utilize available funding, or seek additional funds to purchase easements or development rights for future off-street trails identified in this plan.

More detailed project descriptions are listed below for short range and long range projects grouped by major responsible jurisdiction. The projects identified in Phase I are focused on the completion of and connection to existing facilities that will finalize the core network of trails and connect to the major on-street bicycle corridors. The number in parentheses refers to the map identification number referenced in Figure 10.

Phase I: Short-Range Trail Plan – 2015-2025

The first phase of the Bicycle & Pedestrian Plan consists of those projects that will hopefully be constructed within the next 10 years. The 10-year plan consists of off-street trail segments and on-street bike lanes designed to connect four priority areas within the city. MPO staff identified the following four areas as top priorities for extension of the existing bicycle and pedestrian network:

1. Downtown Janesville
2. Glacial River Trail
3. Northeast Regional Park
4. Westside Fisher Creek

COMMITTED PROJECTS

HWY 14 West Connection: Deerfield Drive to Milton Ave. (1)
The Wisconsin Department of Transportation will make connections in the area of the USH 14/Humes Rd. and the STH 26/Milton Ave. interchanges as part of the I-39/90 reconstruction project. Either sidewalk or asphalt trail will make connections to existing networks.

RECOMMENDED PROJECTS

City of Janesville Short-Range Projects

Downtown Bicycle/Pedestrian Bridge – Between Milwaukee and Court Bridges (2)
A bicycle/pedestrian bridge is recommended to provide connectivity in the downtown that will be lost through the removal of the parking deck that spans the Rock River. The bridge would be located between the Milwaukee and Court Street bridges. This project is also identified in the *Rock Renaissance Area Redevelopment & Implementation Strategy* (ARISE).

Downtown Riverwalk Town Square (3)
This project establishes new riverwalk as well as modifies existing riverwalk along the east and west sides of the Rock River in the core of downtown. It also establishes riverwalk between Milwaukee Street and Court Street at the time of Parking Plaza removal where no trail currently exists on the east side and on the west side of the river the Ice Age Trail is delineated on the Parking Plaza with paint. The project elements include cantilevered walk on both sides of the river from roughly Milwaukee Street Bridge to Dodge Street, then on land walk from Dodge Street to Court Street. This project is included in downtown plans, including the *Rock Renaissance Area Redevelopment and Implementation Strategy* (ARISE).

Traxler Park Trail Extension (4)
An extension of the existing riverwalk on the east side of the Rock River will connect the downtown to Traxler Park. The project includes an at-grade crossing at Centerway and Main Street, and a potential boardwalk or tunnel crossing under the railroad trestle. This project is included in downtown plans, including the *Rock Renaissance Redevelopment and Implementation Strategy* (ARISE). A 2014 feasibility study explored several options for this improvement.

Ice Age Trail –West Side Downtown (5)
There are two small segments of missing Ice Age Trail in the downtown on the west side of the Rock River between Court Street and the pedestrian bridge near the Jackson Street Bridge. These connections will likely be made incrementally as redevelopment of riverfront property occurs.

Valley Park Connector (6)
This approximately ¼ mile off street trail connection from Valley Park south to the HWY 11 Bypass trail will provide connection between UW Rock County and the City's trail system.

Westside Fisher Creek Trail (7)
A 2.7 mile 10- foot wide trail extending from Rockport Park along a cross-country ski trail, and the Fisher Creek corridor and under the railroad bridge to Rockport Road. It would then continue north along the Fisher Creek corridor under Rockport Road to West Court Street and then continue north to Mineral Point Avenue. The trail includes a connection to Parker High School.

Westside Greenbelt Trail (8)
This trail would extend from the terminus of the Westside Fisher Creek Trail (project 7) near Parker High School north to Memorial Drive/CTH A and the Cook Arboretum utilizing land dedicated for greenbelt stormwater conveyance.

Glacial River Trail – HWY 26 Overpass to Glacial River Trail (9)
The HWY 26 Bypass project, completed in 2012 by the State of Wisconsin, extended the Glacial River Trail south from Fort Atkinson to Janesville when the neighboring jurisdictions agreed to maintain the trail. The Glacial River Trail was not connected to the HWY 26 Overpass at the time of the bypass project due to physical constraints and existing development, although a signed on-street route provides direction to bicyclists. Two separate trail segments

plus the use of existing bike lanes will complete the connection. The first segment is from the STH 26 overpass to Wright Road via a trail parallel to John Paul Road. Users would cross John Paul Road and use N. Wright Road bike lanes to connect to the second short segment of trail near the Wright/STH 26 overpass.

Spring Brook Trail - NE Regional Park Extension (10)
An extension of the Spring Brook Trail north from its current terminus at Sandhill Drive within a planned greenbelt area through Northeast Regional Park to Rotamer Road.

City of Milton Short-Range Project

Crossridge Park Trail Extension (11)
This paved trail extension connects the existing Crossridge Park Trail to the YMCA. Additionally, the trail would provide easier access, for all individuals, to reach the park amenities such as the playground.

Phase II: Long-Range Trail Projects – 2025-2050

Long-range trail projects are those that will take a somewhat longer period of time to design and to locate funding sources. Depending on funding opportunities, some of these projects may be upgraded to short range projects or may not occur if no funding source is identified.

City of Janesville Long-Range Projects

Downtown Pedestrian Bridge – Between Court and Racine (12)
The second bicycle/pedestrian bridge is located between Court Street and Racine Street. The bridge is identified in the Downtown Vision and Strategy as a possible driver to support downtown revitalization efforts through connectivity of pedestrian and bicyclists to downtown activities and attractions (such as Hedberg Public Library, Janesville Performing Arts Center, Transit Transfer Center). Furthermore, it provides an additional connection between the Ice Age Trail to Downtown activities.

Eastside Riverwalk – Court Street to Racine (13)
This segment is an extension of the downtown riverwalk along the east side of the Rock River from Court Street to E. Racine. This segment is expected to be constructed as redevelopment and revitalization of the downtown occurs. This project is included in downtown plans, including the *Rock Renaissance Redevelopment and Implementation Strategy* (ARISE).

Sports Complex Loop – Wuthering Hills to USH 14 Underpass (14)
An extension of the Sports Complex Loop branching off at Wuthering Hills Drive and following the public greenbelt east to USH 14. An existing bridge at USH 14 would provide a grade separated crossing (underpass) for a future trail extension to the east of USH 14.

Spring Brook Trail – NE to Harmony Town Hall (15)

An extension of the Spring Brook Trail where it branches from the main trail near Brunswick Lane and travels northeast along the greenbelt and terminates at USH 14 north of E. Milwaukee Street. An underpass at USH 14 is planned for construction at the time of USH 14 improvement.

Spring Brook Trail - Rotamer Rd. to Highway 26 (16)
This trail is a continuation of the Spring Brook Trail from the terminus of project 10 that ended at Rotamer Road. The trail will intersect with the future Wright Road and use the overpass as a crossing, and then intersect with the Glacial River Trail on the north side of HWY 26. The Wright Road overpass was constructed as part of the HWY 26 bypass and the road has sidewalk and bike lanes.

City of Milton Long-Range Projects 2025-2050

Highway 26/59 Recreation Area (17)
Recreational, multi-use trails will be included in the stormwater management and land use planning for the area as it develops.

Bowers Lake – Sunset Drive Trail (18)
Beginning on the East side of Milton near the Storrs Lake Wildlife Area the trail would head westward into the City roughly along Bowers Lake Road. The trail would then wind through the Park Place Estates neighborhood, crossing Highway 26 at Nelson Road and the planned extension of Sunset Road, eventually connecting to John Paul Road and the proposed Clear Lake Trail.

Janesville-Milton Ice Age Trail (19)
Utilizing the abandoned Railroad right-of-way, extend the existing Ice Age Trail Connector from W. High Street, through Merchant Row to Serns Road. The proposed trail would be a 10 foot wide unpaved multi-use trail.

Mud Lake Trail (20)
A multi-purpose trail connecting the Mud Lake recreational area and residential neighborhoods north of the current developed area of the City.

Undetermined Sponsor 2025-2050

STH 11 Trail Extension (21)
The reconstruction of the Avalon Road interchange will provide right-of-way for future trail from the current terminus of the trail at Read Road through the Diverging Diamond Interchange.

Rock County Projects 2016-2050

Peace Trail – To Beloit

This trail will link the existing Peace Trail in the Village of Afton to the City of Beloit following the Rock River and Afton Road/County Highway D. The trail will primarily follow abandoned railroad right-of-way and connect with the City of Beloit and the SLATS area trail systems. This trail project is outside of the Janesville Area MPA and is listed here to demonstrate support and consistency with Rock County Plans.

Figure 10: FUTURE OFF-STREET TRAIL PROJECTS

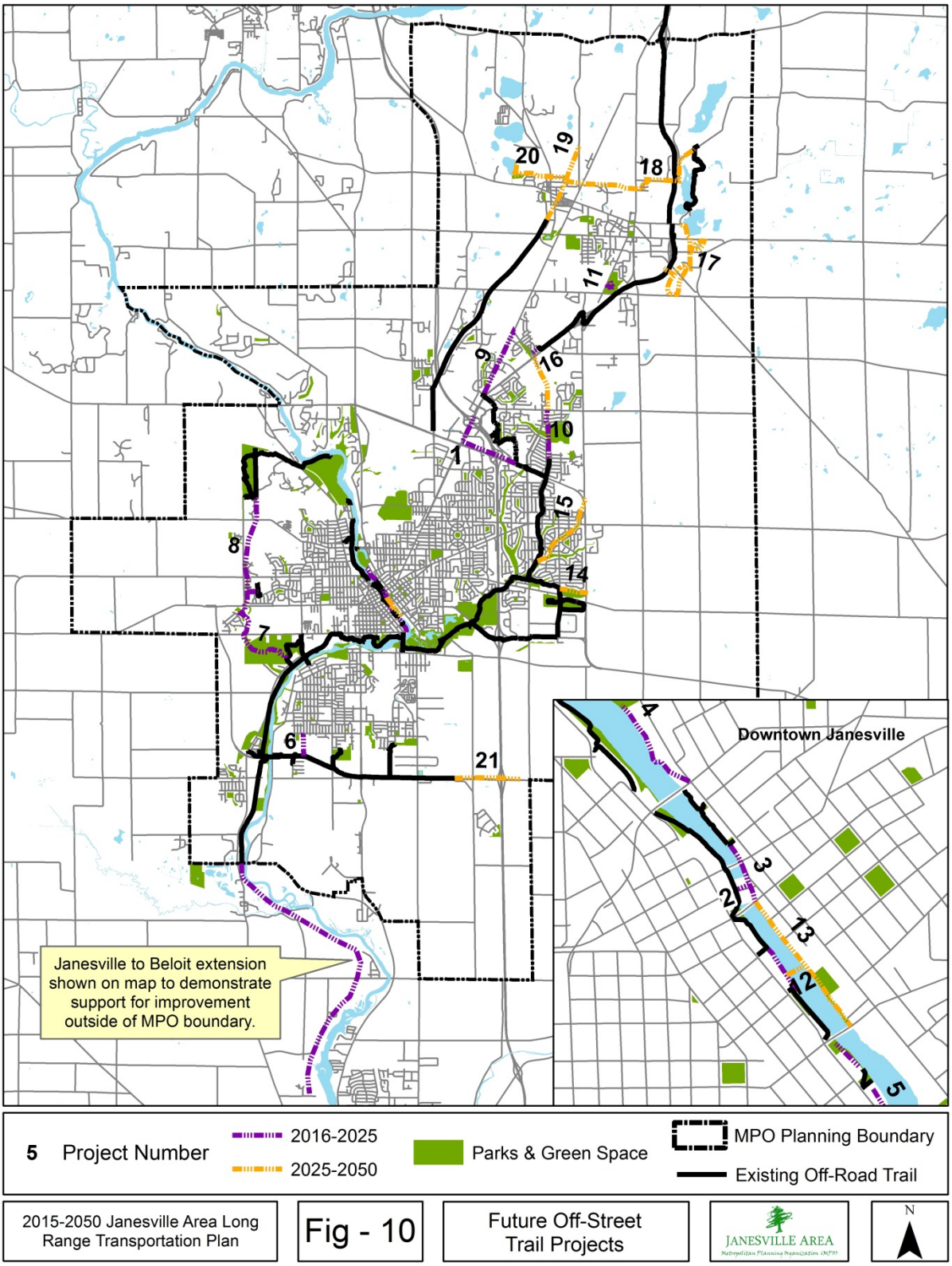


Table 2: FUTURE OFF-STREET TRAIL PROJECTS

Project #	Project Name	Timeframe	Estimated Cost 2015$
	Committed		
1	Deerfield Dr. to Milton Ave. connection	2016-2025	see note 1
	Short Range Projects		
2	Downtown Bicycle/Pedestrian Bridge - Town Square	2016-2025	$1,200,000
3	Downtown Riverwalk Town Square	2016-2025	$1,506,822
4	Traxler Park Extension to Centerway	2016-2025	$356,868
5	Ice Age Trail: Court to trail hub (Rockport Rd.)	2016-2025	$231,840
6	Valley Park Connector	2016-2025	$154,560
7	Westside Trail - Fisher Creek to Mineral Point	2016-2025	$2,015,000
8	Westside Trail - Mineral Point to Arboretum	2016-2025	$1,081,000
9	Glacial River Trail connection from HWY 26 overpass	2016-2025	$1,060,000
10	Cross Ridge Park Connection	2016-2025	$113,505
11	NE Regional Park Extension to Rotamer Rd.	2016-2025	$444,360
	Long Range Projects		
12	Downtown Bicycle/Pedestrian Bridge - Court/Racine	2025-2050	$1,200,000
13	Eastside Riverwalk: Court to Racine	2025-2050	$1,407,600
14	Wuthering Hills Connection HWY 14 underpass	2025-2050	$241,500
15	Springbrook Trail - NE to Harmony Town Hall	2025-2050	$811,440
16	Rotamer Rd. to HWY 26	2025-2050	$502,320
17	HWY 26/59 recreation area	2025-2050	$869,400
18	Bowers Lake/Sunset Trail	2025-2050	$1,159,200
19	Janesville to Milton Trail	2025-2050	$724,500
20	Mud Lake Trail	2025-2050	$579,600
21	STH 11 @ Avalon Interchange	2025-2050	unknown
	Notes		
1	Funding for project included in committed I-39/90 reconstruction project		

Project Ideas Not Recommended or Altered

Two projects (3 & 4) suggested by members of the public were deemed a low priority by the Bicycle/Pedestrian Sub-committee due to their lack of connectivity. Either of these projects may be pursued as local connectors as development or redevelopment occurs. Projects 1 and 2 describe ideas for potential alignments to connect the approximately one mile gap between the HWY 26 bicycle/pedestrian overpass and the Glacial River Trail; these ideas were generated from various members of the public. After further research, a preferred alignment parallel to John Paul Road was chosen. Projects are described below and shown in Figure 11.

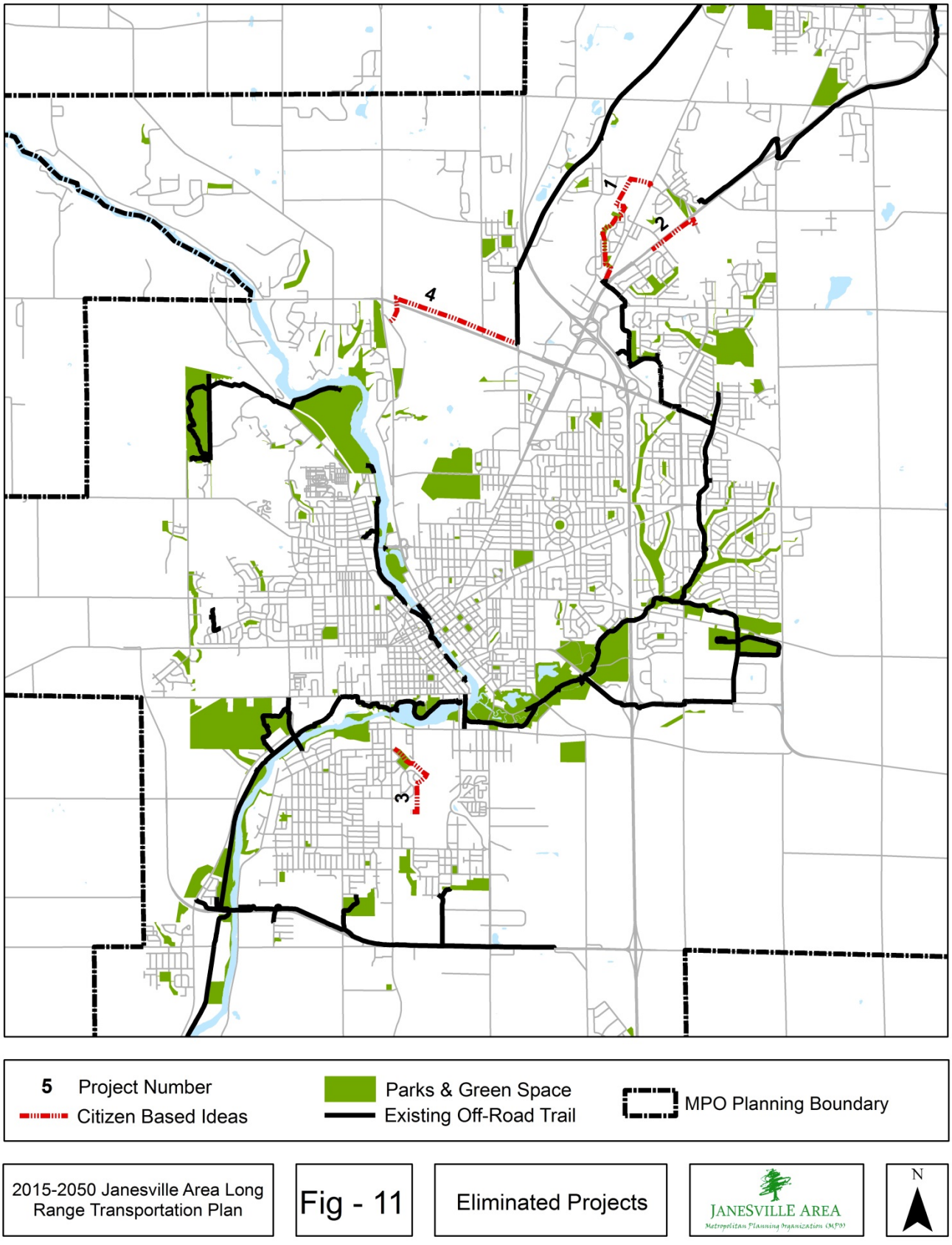
Glacial River Trail Connection: Greenbelt & WSOR Right-Of-Way (1)
The proposed alignment follows the existing public greenbelt north of John Paul Road in a northeast direction. Trail then utilizes public greenbelt adjacent to the right-of-way that is owned by the State of Wisconsin and operated by Wisconsin Southern Railroad (WSOR). Trail would follow private property lines to John Paul Road/CTH Y, cross at Walnut Grove Road, extend along local residential streets, and connect with the southerly terminus of the Glacial River Trail at Fairmont Drive behind the veterinary clinic. Obtaining permission for easements from private property owners would be needed for this alignment. The alignment described in the recommended projects is the preferred alignment.

Glacial River Trail Connection: South side of HWY 26 to N. Wright Road Overpass (2)
This connection would utilize an on-street connection from the existing trail using Tanglewood Drive and possibly other frontage roads on the south side of HWY 26 to reach McCormick Drive. Trail paralleling HWY 26 between McCormick to the Wright Road overpass would provide a safe connection over the highway. The rationale for this idea is to use local roads to shorten the length of the gap. Easements or use of ROW would be needed for this alignment.

Southside Trail: Marquette Street to Conde Street (3)
This trail segment would extend existing recreational trails at Mocha Moments coffee shop, through Marquette Park, to roughly the backside of Pick ‘n Save grocery store possibly connecting to Conde Street. This trail would require use of Union Pacific Railroad ROW easement. The Bicycle/Pedestrian Sub-committee believe this idea is a low priority because it is a relatively short segment that does not connect many land uses.

County Connection (4)
This trail segment would parallel HWY 14 from Kennedy Road, cross under HWY 14 utilizing a existing concrete box culvert and connect to CTH F and the Rock County Institutional Complex. The Bicycle/Pedestrian Sub-committee feel CTH F is not a safe road for bicycling.

Figure 11: PROJECT IDEAS NOT RECOMMENDED OR ALTERED



HAZARDOUS INTERSECTIONS AND AREAS

Dangerous intersections and corridors may be areas with a large number of crashes, or areas that users perceive to be dangerous. Factors such as speed, traffic volume, and visibility, topographic features such as hills or sharp curves contribute to risk of a crash involving a motorized vehicle.

Stakeholder Identified Hazards

Centerway Avenue & Ice Age Trail Crossing
Centerway is a four-lane undivided highway with high traffic volumes. The road also curves, which limits the sight distance for the person crossing the street. Multiple stakeholders made comments about this intersection.

Wright Road & Ice Age Trail Crossing
Wright Road has two driving lanes, two bike lanes, and two parking lanes in this location. There is signage and a painted crosswalk where the trail crosses. There is concern that if one car does stop for a person in the crosswalk, the vehicle behind the stopped car could maneuver around the stopped car and crash into the person crossing.

Afton Road & Peace Trail Crossing
Speed along Afton Road is likely a factor in users' concern with this crossing. Young families visiting Rockport Park also use this crossing and may be concerned with speed. There are no sight distance concerns.

Palmer Drive: Ice Arena to Rotary Gardens
There is no connecting sidewalk along Palmer Drive from the Janesville Ice Arena on Beloit Avenue to Rotary Gardens. Rotary Garden's staff has made multiple requests for transit service to the gardens for patrons and voters (Rotary Gardens is a polling station). The closest transit service is the Wright Road route, which serves the corner of Main Street and Tyler Street. Multiple recreational destinations and opportunities along Palmer Drive make this area attractive to non-motorized users.

John Paul Road – STH 26 Bicycle/Pedestrian Overpass to Wright Road
This section of John Paul Road is the signed on-street connection between Janesville's trail system and the Glacial River Trail. John Paul Road is a rural road with narrow shoulders and varying traffic speeds. Many attendees at public meetings voiced concern about this roadway. This roadway does not feel safe or comfortable to ride on. The segment of concern is highlighted on Figure 12 as a dashed red line.

Madison Avenue & John Paul Road
This intersection is a concern due to the volume of motorized traffic. The intersection is controlled by stop signs on John Paul Road. This intersection is also a high crash location, with two crashes occurring between 2005 and 2013, one fatal crash in 2011 involving a pedestrian and another injury crash involving a bicycle.

High Street & John Paul Road
This intersection is a concern due to the volume of motorized traffic and the proximity of Milton High School and Schilberg Park. The intersection is controlled by stop signs on High Street.

Madison Avenue & N. Clear Lake Avenue (Hwy 59)
This intersection is a concern due to volume of traffic. Temporary stop signs are used during school crossing guard hours.

Northside Drive & E. Madison Avenue (Hwy 59)
This intersection is a concern due to volume of traffic. Temporary stop signs are used during school crossing guard hours.

High Crash Locations
The MPO analyzed crash data using MV4000, a web-based search tool developed and maintained by the Wisconsin Traffic Operations and Safety Laboratory (TOPS). The MPO searched for crashes between motorized vehicles and bicyclists and pedestrians. The MPO analyzed crash data 2005-2013.

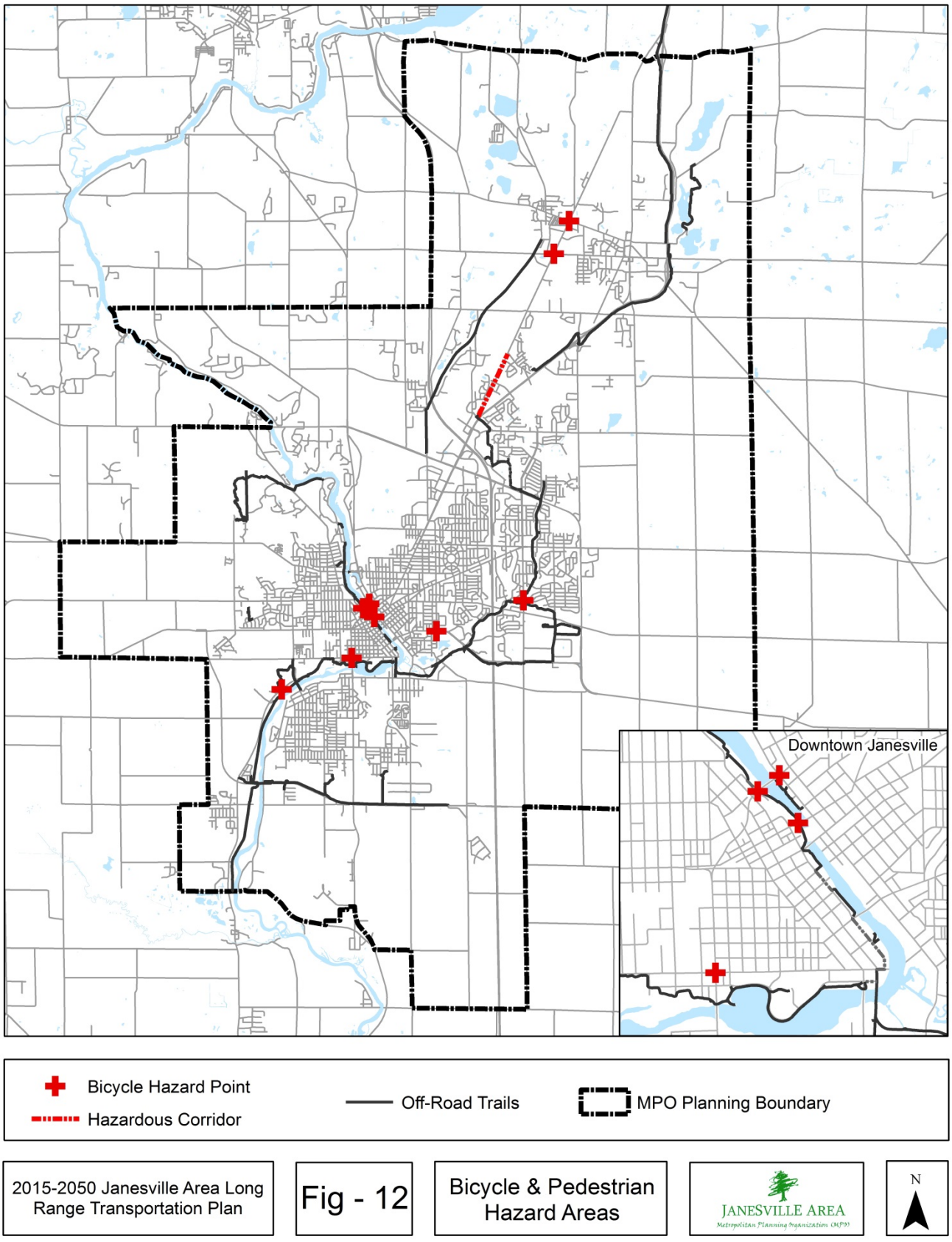
Center Avenue & Rockport Road – 8 crashes
Racine & Main – 6 crashes
Racine Avenue & Randall Road – 6 crashes
Centerway & Main Street – 5 crashes

Design and Safety Improvements

In order to address dangerous intersections and other locations identified above a further analysis of the contributing factors must be examined. There are many examples of what can be done to improve bicycle and pedestrian safety at high risk locations throughout the MPO. MPO communities have implemented various treatments in order to improve safety for all users, including road diets, signage, and pedestrian crossing islands. No specific recommendations to address these hazards are contained in this plan because communities must evaluate available data and seek public input in order to develop a context sensitive solution.

Safety improvement at E. Milwaukee Street and Ice Age Trail Crossing. Photo by MPO staff

Figure 12: BICYCLE & PEDESTRIAN HAZARD AREAS



OTHER FACILITIES AND AMENITIES

Customer feedback from trail surveys indicate trail users wish to see more water fountains, bathrooms, directional signage, benches, and bicycle maintenance stations along the trail. The City of Janesville Parks Department considers public comment when adding amenities to the trail system. Amenities are added as funding and donations allow.

Bikes on Buses

The Janesville Transit System has installed bike racks on the front of the majority of the bus fleet. These bike racks accommodate up to two bicycles at a time and allow bicycle commuters to use the bus as a portion of their daily commute. For safety reasons, riders are required to receive training and certification prior to using the racks. JTS will continue to install bike racks on the remaining vehicles and new vehicles as funding becomes available.

Bike Racks

End of trip facilities such as bicycle racks are an important component of the bicycle network. The City of Janesville has bicycle rack guidelines for type and placement of racks for new commercial development. Racks are also located at most public buildings, parks, and schools. A 2014 inventory of racks identifies gaps in the system.

PEDESTRIAN FACILITY DEVELOPMENT STRATEGY

The most common type of pedestrian facility in the Janesville Area MPO is the sidewalk. Pedestrians also make extensive use of the trail system and a number of hiking trails throughout the planning area. In addition to sidewalks, dedicated public walkways connect residential districts to neighborhood, community and regional parks. Provision of public access walkways within the MPO are governed by City and County Subdivision Ordinances and neighborhood planning processes. Sidewalk construction on local streets outside of the Janesville and Milton City limits is addressed in the Rock County Planning and Development subdivision review process and can include comments from the City of Janesville or the City of Milton if the subdivision is located within either of the City's three mile extraterritorial plat approval jurisdiction area.

Sidewalk Construction

Janesville City Ordinances require that new sidewalk for any new plat, certified survey, or other division of land, or subdivision shall be funded, as a condition of approval, by the sub-divider or other interested person. Funded sidewalk installation is required for affected parcels in accordance with the following:

1.) Sidewalk installation must be completed within 12 months of the issuance of the Final Occupancy Permit for a given parcel.
2.) In the event that 80% or more of the parcels, per side of street, within a block are developed, the remaining sidewalk shall be installed.

There are three classifications for sidewalks that do not currently exist:

- Planned, Funded Sidewalk: New sidewalks are required for any new development and are pre-paid by the developer when the land is sub-divided.
- Planned, Unfunded Sidewalk: By direction of the City Council, new sidewalks are required for installation as delineated on the Pedestrian Transportation Corridor Plan (PTCP) Map.
- Unplanned, Unfunded Sidewalk: These properties may be subject to new sidewalk requirements in the future as determined by the PTCP.

The City of Milton sidewalk policy is somewhat different than the City of Janesville. The following criterion for new construction of sidewalks inside the Milton City limits is taken from Ordinance #163 Design and Layout Standards.

- Sidewalks shall be planned on both sides of arterial streets
- Sidewalks shall be planned on both sides of collector streets
- Sidewalks shall be planned on both sides of local streets
- Industrial streets, frontage roads and alleys are installed per Plan Commission option
- It shall be the duty of the City to construct sidewalks in areas developed before July 25, 1996 and to pay the entire cost of thereof.
- Plan Commission recommends sidewalks be placed on both sides of streets abutting school property, along designated safe walking routes, and streets that connect residential areas to parks, schools, places of public assembly, or commercial areas. Sidewalks are designated on the final plot.
- The City Council has authority to order sidewalk installation on any street that meets criteria for construction.

Other Pedestrian Facility Considerations

- Marked crosswalks should be considered where an evaluation of pedestrian counts and surrounding land uses warrant this type of safety device.
- Pedestrian-friendly site design measures, such as connections to greenbelts, overpasses or underpasses, pedestrian islands, connections between adjoining subdivisions and other traffic calming devices should be incorporated into the subdivision and site development process.
- Designated bus stops and passenger waiting shelters should have adequate accommodations for pedestrians to ease the transition between walking and transit. More discussion and analysis regarding provisions for transit riders can be found in the Transit Section of this plan.
- Provision of sidewalk ramps at corners to improve pedestrian safety, especially for easy access for individuals in wheelchairs. Curb ramps should be installed in accordance with ADA compliance guidelines.
- Consideration should be given to placement of pedestrian control devices, such as walk signals or crosswalk push-buttons, where pedestrian safety would be improved. Installation of signals and control devices would be determined by pedestrian volumes and surrounding land uses.

Sidewalk Recommendations

Figure 13 indicates where there are sidewalk deficiencies, sidewalks are planned for one or both sides of the street within the City of Janesville based on the City Sidewalk Policy. Planned sidewalk construction is shown only for existing streets. New streets will include sidewalks in accordance with City Ordinance.

Sidewalk construction in the City of Janesville is funded through assessments paid by developers based on the linear feet of the proposed sidewalk frontage. The City Engineering Department updates the assessment rates on an annual basis. As the sidewalk costs are borne by adjoining property owners, no estimated costs for sidewalk construction are contained in this document.

Figure 14 identifies existing and proposed sidewalk locations in the City of Milton. Recommended sidewalk installations in the City of Milton are reviewed on a regular basis by the Public Works Committee and considered by the Common Council as part of the annual budget deliberations. The final guidance on recommended sidewalk construction is based on the policies established in the City of Milton sidewalk construction ordinance.

Sidewalk construction within the planning area but outside the City limits is the responsibility of individual property owners. Rock County and the townships do not address sidewalk construction in land use planning and the subdivision review process. Roads in the township area of the MPO are constructed to rural standards without curb, gutter, and terrace area, therefore accommodations are not made for sidewalks. At this point in time, there is not a sidewalk plan or map for the portions of the five townships within the Janesville MPO Area.

Figure 13: JANESVILLE SIDEWALK DEFICIENCIES

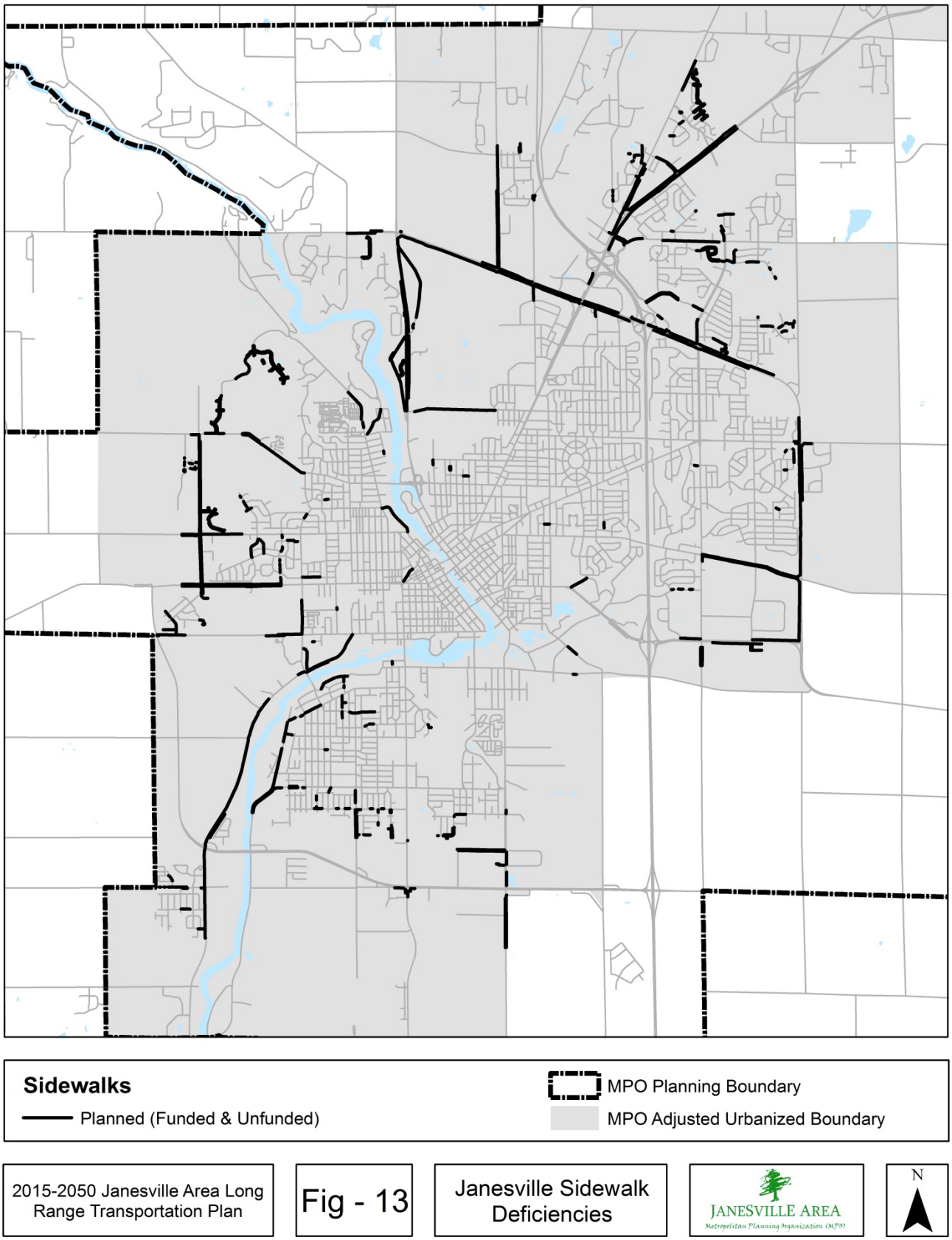
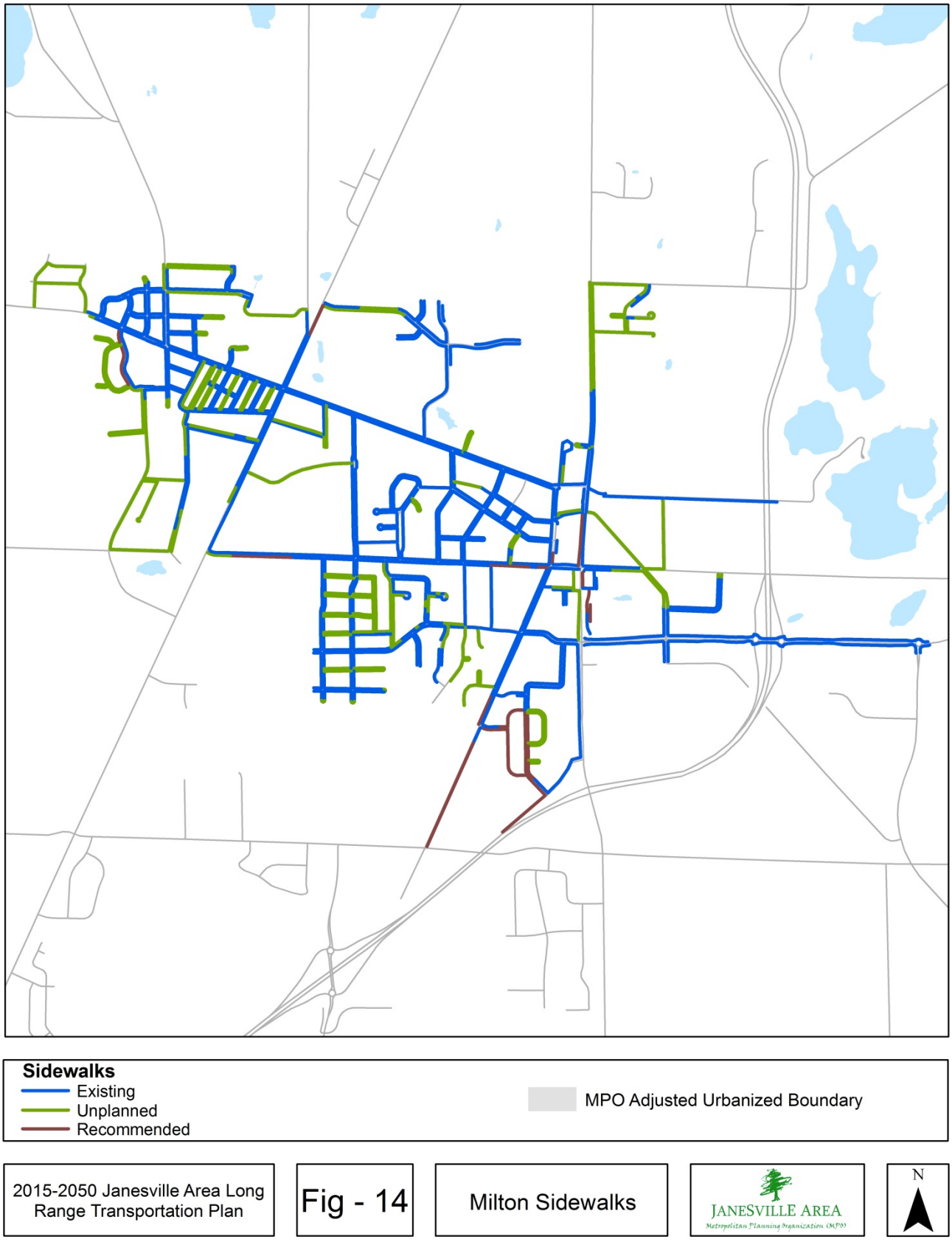


Figure 14: MILTON SIDEWALK RECOMMENDATIONS



7. SAFETY AND EDUCATION

In addition to recommendations for the physical improvement of the bicycle and pedestrian environment, safety and education play just as important a role in upgrading this element of the transportation network. Safety is primarily addressed through the physical design and maintenance of the bicycle and pedestrian facilities, while education can be addressed to bicyclists, motorists, parents, peers, teachers, law enforcement official, and many others. Education opportunities, especially at an early age, will reduce accidents, encourage greater use of bicycling, and make the streets safer for all users.

EDUCATION

The City of Janesville Police Department has an organized Bicycle Safety Program aimed at elementary school students and their parents. Most schools have some type of safety course, with some involving a "hands-on" approach that helps reinforce proper behavior. The City should continue to promote the availability of educational programs and brochures for elementary and secondary school-aged students. This would involve working with the teachers and administrators from Janesville area schools to update existing safety programs, if necessary.

Maintain and Distribute Bike Brochures for Janesville and Milton

The MPO first developed a bike route brochure for the City of Janesville in 2011. The brochure includes a map showing the trail system and recommended on-street system based on the 2005 LRTP. The MPO developed a similar map for Milton in 2015. The MPO should continue to update maps and brochures for the cities as improvements are made.

CURRENT SAFETY EDUCATION PROGRAMS

The following summarizes safety education programs in the City of Janesville. Efforts should be made to coordinate and expand these efforts to the City of Milton and schools in the five townships.

Officer Friendly Program

The Officer Friendly Program teaches bicycle safety as one of several issues to school-age children in grades Kindergarten through Five. Other issues taught in this program include the use of seatbelts and pedestrian safety. Officer Friendly will also conduct a classroom presentation dedicated solely to bicycle safety when requested by one of the local schools.

Bike Rodeos

The Janesville Police Department works with the local PTA groups and service organizations to sponsor "bike rodeos". An obstacle course is set up in a parking lot with appropriate pavement markings and safety cones to outline a route. Bicyclists are guided through the course to test their skills in bicycle control, use of hand signals, anticipating hazards and looking for other traffic. These events can be set up for any grade level and are usually organized and sponsored by outside groups with the help of the Police Department's school safety officer.

PTA Presentations

Adult audiences are reached through presentations to PTA groups and other organizations that connect the Police Department with the general public. The focus of these presentations is to promote and obey bicycle safety rules. Parents are encouraged to serve as good role models by obeying traffic signs when bicycling or driving. In addition, parents are encouraged to wear bike helmets as examples for their children.

Police Department Bike Patrol

The Janesville Police Department operates a bike patrol during the summer months. Uniformed officers cover their beats on bicycles and patrol the trail system, greenbelts, and adjacent neighborhoods. The bike patrol improves department access to city parks, increases visibility of the police force and promotes awareness of bicycle safety and serves as a demonstration of proper on street riding.

ENFORCEMENT

Rock County and the Cities of Janesville and Milton Traffic Ordinances address enforcement of bicycle and pedestrian safety. State traffic laws are adopted per City and County ordinance; therefore, motorists driving within the MPO are subject to the regulations and penalties of traffic laws outlined in Chapters 3340-348 of the Wisconsin State Statutes. State Statutes govern Rules of the Road and address vehicles overtaking and passing bicycles, respective rights and duties of drivers, pedestrians and bicyclists, bicycle use on shared facilities, and designated bicycle facilities. City ordinances specifically address bicycle registration, bicycle use restrictions, and parent/guardian responsibilities for bicyclists under age 18.

Penalties for violating the State Statutes or City ordinances are subject to enforcement by City police. Police officers only issue a small number of bicycle warnings each year for violations they observe while on patrol. In general, the Janesville Police Department currently emphasizes bicycle safety education much more than enforcement.

8. SYSTEM PERFORMANCE

The MPO has been analyzing and integrating a number of data sets into plans for many years. The 2005-2035 LRTP contained thorough crash analysis and identified safety concerns. The minor update and reaffirmation adopted May 2011 established additional indicators to be used in the evaluation of the system. The MPO continues to work with its WisDOT and FHWA partners to identify appropriate indicators to measure progress in meeting transportation goals. This section discusses trends in system performance

ECONOMIC VITALITY

Typical indicators measuring economic vitality of an area are region wide employment and development statistics. For the Bicycle/Pedestrian system, tourism may be one indicator of the attractiveness of the system. The trail surveys in 2010 and 2013 asked users if they were residents of Janesville. In 2010, 10% of trail users were not Janesville residents. In 2013, 11% of trail users were not Janesville residents.

SYSTEM PRESERVATION

WisDOT maintains the Wisconsin Information System for Local Roads (WISLR), a website to manage local road data used to improve decision-making. The Pavement Surface Evaluation and Rating (PASER) system is used by County and local governments to evaluate the condition of the roads under their jurisdiction every two years as required by State Statute. This data is consistent, regular, and easily accessible to the MPO for planning purposes. PASER data is an excellent indicator for the condition of the on-road bicycle system. At this time, there is no metric for assessing the surface of the trail system akin to PASER.

EFFICIENT MANAGEMENT AND OPERATIONS

This planning factor deals mainly with congestion and easing congestion. Congestion is not an issue for bicycle/pedestrian infrastructure in the Janesville area and therefore there are no measures to address this factor.

SAFETY

Crash statistics offer an indication of locations where high bicycle or pedestrian volumes exist, provide information about age groups that may need to be targeted for safety and enforcement programs, and identify specific street or intersections that may need to be targeted for safety improvements.

Data on bicycle and pedestrian crashes for Rock County were obtained from the Wisconsin Traffic Operations and Safety Laboratory (TOPS) MV4000 Wisconsin Motor Vehicle Accident Report system. The major limitation with this data is the fact that it only summarizes "reportable" crashes, those that involved at least one motor vehicle and resulted in an injury, possible injury, death, or property damage of $1,000 or more. In general, approximately two-thirds of bicycle-motorist crashes are not reported to state or local officials.[2] In addition, most crashes that do not involve a moving motor vehicle, such as a bicyclist hitting a fixed object or a pedestrian, are not reported at all. Despite these limitations, the MV4000 information does provide some insight into the type and location of crashes that have occurred

[2] Stutts, Williamson, Whitley, and Sheldon – *Bicycle Accidents and Injuries: a Pilot Study Comparing Hospital and Police Reported Data* (1990).

in the Janesville Area MPO and can be used to determine where safety improvements might be necessary and where to focus efforts on safety education.

The MPO collects crash summary data on an annual basis for each of the MPO communities and Rock County. This data is available from 1995 through 2015. The number of crashes varies, but the long-term trend shows a decline for both auto vs. pedestrians and auto vs. bicyclists, as can be seen in Table 3 and 4, and Figure 15 and 16.

Table 3: AUTOMOBILE VS. PEDESTRIAN CRASHES 1995-2015

Janesville MPO Pedestrian Crash Summary																						
	Total	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Rock County	**816**	49	65	46	48	43	38	39	36	47	30	40	38	37	37	31	34	30	33	33	30	32
MPO Jurisdictions*	**401**	27	32	21	24	20	21	16	16	28	12	19	19	17	14	17	12	19	18	18	16	15
City of Janesville	**356**	21	30	20	22	18	21	14	15	25	11	19	14	16	14	14	12	15	14	13	14	14
City of Milton	**20**	4	1	0	0	0	0	0	1	1	0	0	2	1	0	1	0	3	3	3	0	0
Town of Harmony	**2**	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Town of Janesville	**4**	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Town of La Prairie	**4**	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0
Town of Milton	**9**	0	1	0	1	1	0	1	0	0	1	0	3	0	0	0	0	0	0	1	0	0
Town of Rock	**6**	0	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0	1	1	0	0	0
Injuries	**850**	53	71	47	47	48	38	42	40	47	34	46	42	37	39	34	33	27	32	32	30	31
Fatalities	**17**	0	1	1	1	1	0	1	1	2	2	2	0	1	0	1	0	3	0	0	0	0

*Includes entirety of townships and does not end at the MPO boundary

Figure 15: AUTOMOBILE VS. PEDESTRIAN CRASHES WITHIN MPO JURISDICTIONS 1995-2015

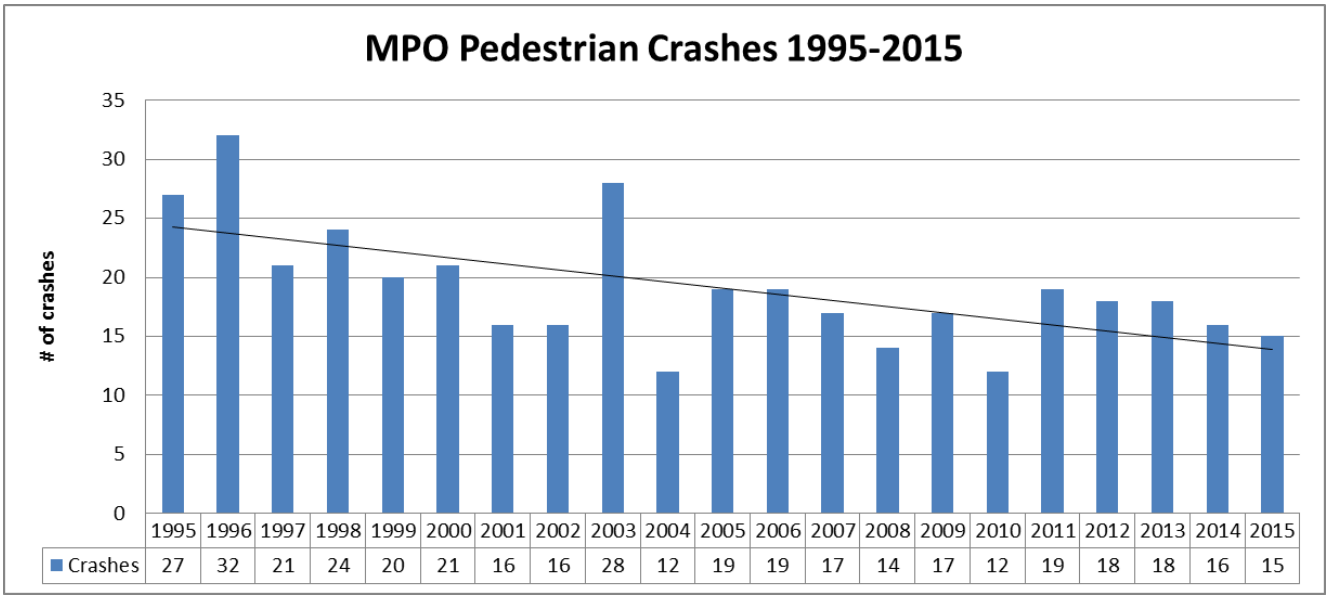
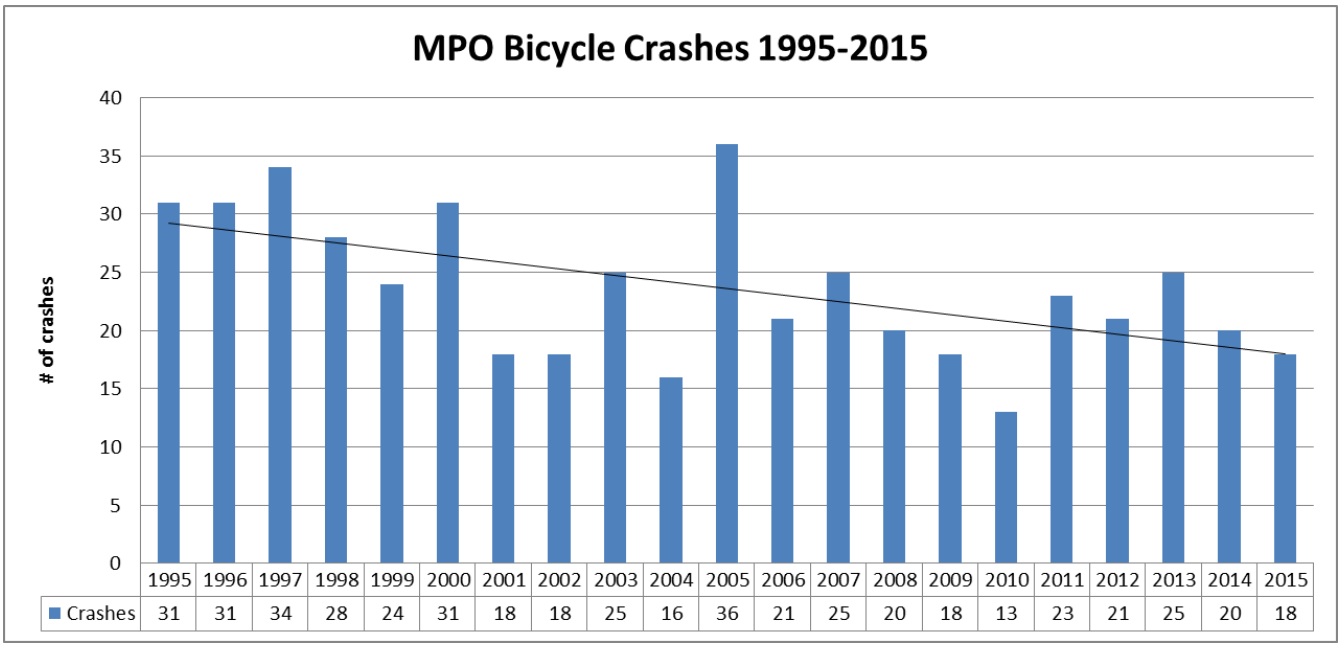


Table 4: AUTOMOBILE VS. BICYCLE CRASHES 1995-2015

Janesville MPO Bicycle Crash Summary																						
	Total	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Rock County	**933**	59	63	60	51	49	55	39	36	49	39	62	39	41	38	31	32	39	38	42	34	37
MPO Jurisdictions*	**496**	31	31	34	28	24	31	18	18	25	16	36	21	25	20	18	13	23	21	25	20	18
City of Janesville	**465**	30	30	31	25	22	29	17	16	24	15	36	18	23	20	16	12	21	20	23	19	18
City of Milton	**15**	1	0	0	2	1	1	1	1	0	0	0	1	1	0	1	0	2	1	1	1	0
Town of Harmony	**3**	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Town of Janesville	**4**	0	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Town of La Prairie	**1**	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Town of Milton	**3**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Town of Rock	**5**	0	0	0	1	0	0	0	0	0	1	0	2	0	0	1	0	0	0	0	0	0
Injuries	**901**	59	67	59	50	48	54	37	38	46	39	58	37	41	36	28	31	34	35	39	32	33
Fatalities	**10**	0	1	1	1	0	1	1	0	1	2	1	0	0	0	0	0	0	0	0	0	1
*Includes entirety of townships and does not end at the MPO boundary																						

Figure 16: AUTOMOBILE VS. BICYCLE WITHIN MPO JURISDICTIONS 1995-2015



Crash data can only tell us so much without exposure data. Without knowing how many people are riding, where they are riding, and how far they are riding, there is no way of knowing whether the drop in crashes is because conditions are actually safer, fewer people are bicycling and walking, or they're bicycling and walking in different locations. Because there is no reliable source of exposure data, there is no way to draw a conclusion regarding whether walking and bicycling is getting safer.

The MPO has begun to collect exposure data for streets scheduled for major rehabilitation or reconstruction. The MPO collected pre-construction and post-construction bicycle and pedestrian counts for River Street in downtown Janesville using the methodology outlined in the National Bicycle and Pedestrian Documentation Project. The purpose of the project is to measure the impact of adding

bicycle lanes to the street. The MPO intends to conduct pre and post construction counts on major projects like River Street.

SECURITY

There are no security measures for the bike/pedestrian mode at this time.

ACCESSIBILITY AND MOBILITY

The MPO maintains GIS layers for bicycle lanes and trails for the urbanized area, and maintains a sidewalk inventory for the City of Janesville. Mileage of the system is recorded every two to three years since 2010. The City of Milton is in the process of establishing GIS that will enable them to maintain a sidewalk inventory and report data to the MPO. This data will be reported in future plans.

The number of miles of trail increased significantly between 2013 and 2015 due to the extension of the Glacial River Trail built as part of the STH 26 bypass. The "on-street paved" category includes designated on-street routes used to connect off-street trails. The increase in the on-street paved category is partly due to the designation of John Paul Road as the connector between the terminus of the Glacier River Trail at Wright Road and the STH 26 overpass.

Table 5: JANESVILLE SIDEWALK

Facility Type	2010	2013	2015
existing sidewalks	317	325.32	336.73
planned funded sidewalks	22	20.4	10.3
planned unfunded sidewalks	101	57.35	54.1
unplanned unfunded sidewalks	213	221.65	225.29
TOTAL	**653**	**624.72**	**626.15**

Table 6: BICYCLE/PEDESTRIAN FACILITIES

Facility Type	2010	2013	2015
paved off road trail	23	29.6	36.9
on street paved		5.1	10
designated bike lane	13.16	14.5	14.5
TOTAL	**41.26**	**49.2**	**61.4**

INTEGRATION AND CONNECTIVITY

The MPO has begun to inventory end of trip facilities within the urbanized area in order to identify gaps in infrastructure. To date, MPO staff has inventoried Janesville and Milton destinations such as government buildings, parks, schools, and major shopping areas. The inventory includes the type of rack and the number of bike parking spaces. This data collection is in process and therefore no appropriate target has been set for end of trip facilities.

As mentioned previously in this Plan, most of Janesville Transit System buses have a bike rack on the front for carrying up to two bicycles. This section sets forth a target for equipping all buses with racks. The goal assumes that all new buses will be equipped with bike racks.

PROTECT AND ENHANCE THE ENVIRONMENT

The Bicycle/Pedestrian Plan will enhance and protect the environment by providing safe accommodation for non-motorized travel, thus reducing vehicle miles traveled and greenhouse gas emissions (GHG). The MPO conducts trail counts and a survey every three years to measure the growth in trail usage. MPO staff has considered utilizing automated counters in order to expand data collection efforts but resource constraints and reliability of technology has kept the MPO from investing in automatic counters.

Census data is one of the only sources of reliable and regular travel data. Bicycling and walking to work has not grown in mode share over the last decade in the Janesville/Milton area, according to Census data. Part of the reason may be related to commuter patterns in Rock County, in which 8-9,000 workers commute to Dane County for work. Therefore, the target for increasing biking and walking to work is very conservative.

PERFORMANCE TARGETS AND INDICATORS

This section proposes **draft** performance targets for the Janesville Area MPO that meets the spirit of MAP-21 and FAST Act. *The MPO expects to revise performance targets and indicators as necessary in order to meet requirements of FAST Act or subsequent federal transportation legislation.*

The target setting process involved the analysis of trends and past performance in the MPA, examined bicycle and pedestrian recommendations contained in Section 7 of this Plan, and considered available data sets for measuring progress.

Table 7: DRAFT PERFORMANCE TARGETS AND INDICATORS

Target	Indicator	Data Source	Data Frequency	Justification
Economic Vitality				
3% increase in non-residents using trail system every 3 years	# estimated trips/year	MPO	3 years	23% increase from 2010 to 2013
5% increase in total trail usage every 3 years	# estimated trips/year	MPO	3 years	23% increase from 2010 to 2013
System Preservation				
Decrease # of miles of street in poor or failed condition	PASER	MPO/ WisDOT	2 years	poor/failing roads increase cost to reconstruct
Maintain majority of trail mileage in fair or better condition	TBD Currently no PASER equivalent for trails.	MPO jurisdictions	5 years	Industry standard
Efficient Management and Operations (System Operation and Usage)				
No measures at this time				
Safety				
Reduction in injury crashes	# crashes/year	TOPS Lab MV4000	Annual	Past performance
Reduction in fatal crashes				
Security				
No measures at this time				
Accessibility and Mobility				
5% reduction in sidewalk gaps every 5 years	Miles of planned or recommended sidewalk	MPO	5 years	Past performance
.86 miles/yr. new trail	# of miles of trail	MPO	5 years	25.8 miles recommended over 30 plan horizon
Integration and Connectivity				
100% of public transit buses equipped with bike rack in 10 years	# or % of buses with bike racks	JTS	Variable	Aging buses to be replaced within 10 years
Protect and Enhance the Environment				
Increase biking and walking as mode to work to 3% over 10 years	Census American Community Survey 5 year data	Census	Annual	ACS 2006-2010

Caveats about performance targets and indicators:

- Bicycle lanes are usually added during street reconstruction or rehabilitation projects. The ability to meet bike lane target will depend heavily on the availability of funding for streets.
- The ability to meet trail target will depend heavily on ability of the MPO communities to secure competitive grants.
- The filling of sidewalk is strictly a local issue dealt with by the two cities using non-federal/non-state funding. The MPO role in sidewalks is data related only.

- Trail usage target is conservative because the increase in activity from 2010 to 2013 (23%) could have been partly due to a critical linkage built between the two data collection time periods.

9. IMPLEMENTATION

Projects recommended in this plan have been prioritized in two phases, short-range (2015-2025), or long range (2025-2050). Administration, maintenance, and planning for Janesville projects will involve members of the MPO staff, Public Works Engineering, Planning and Parks Divisions, and the Janesville Police Department. In addition, the City of Milton, Rock County, and the Townships will be included in the implementation of many of the recommended improvement projects.

Tables 8 summarizes the Janesville Bicycle & Pedestrian Plan projects and provides an estimate for the cost of each improvement. The estimated costs for proposed bicycle facilities include a 20% contingency factor but do not include any applicable land acquisition costs. Cost estimates for constructing the projects contained in this plan are based on several sources, including figures provided by SAA Design Group in 2014 and Costs for Pedestrian and Bicyclist Infrastructure Improvements, developed by the UNC Highway Safety Research Center. The unit costs are listed in Table 8 below.

Table 8: BICYCLE FACILITY UNIT COSTS

Item	Unit	Unit Cost	Comments
Cantilever riverwalk	Sf	$100.00	
Railing	Lf	$300.00	Simple decorative painted steel railing
Sidewalks – concrete	Sf	$5.00	
Sidewalks – Special pavement premium	Sf	$12.00	Above typical sidewalk cost
10’ asphalt path	Lf	$70.00	Assumes no boardwalk alignment
Lighting	Each	$7,000	Assume 70’ on center
Trees	Each	$450	
“Squiggly Tree” bike rack – hitching post	Each	$700	Specially made with Janesville’s brand (estimate from Main Street Rehabilitation)
Basic Hitching Post bike rack	Each	$130 - $300	Structure only.
Multi-bike rack	Each	$300-$2,000	Structure only. Cost varies with size, type
Pavement Marking – Shared Lane “Sharrow”	Each	$180	
Signed Bike Route	Mile	$5,500	Estimates range $5,000 - $64,000. Cost adjusted by Janesville Engineering.
Crossing Island	Sf	$10	
Rectangular Rapid Flashing Beacon	Each	$10,000-$15,000	Estimates range $4520 - $52,310. Cost adjusted by Janesville Engineering.

Janesville's "Squiggly Tree" bike rack

Implementation Steps

There are several steps and implementation tools available for the recommended bicycle and pedestrian improvements. The following summarizes the implementation tools available for these recommendations beginning with tools for the short-range projects and a description of some of the processes that will assist in implementing longer-term projects.

MPO/Local Adoption: The bicycle/pedestrian element of the Janesville Area Long Range Transportation Plan must first be adopted as part of the larger transportation plan and then be adopted by each community in the planning area as part of their comprehensive plan.

Transportation Improvement Program (TIP): The major project recommendations in this element will be included in the Janesville Area MPO Transportation Improvement Program. These projects will then be eligible for federal funding that is available or may become available in the future.

Capital Improvement Program (CIP) or Capital Budget Program: The short-range projects, 2015-2020, should be listed in the capital improvement programs of the communities in the MPO area. A specific line item in the budget should be established for these improvements. This will allow for local construction of facilities as well as matching dollars for federal and state programs or grants that are available for larger capital projects.

State and Federal Funding Sources: There are a number of state and federal funding sources available to assist in the construction of the bicycle and pedestrian facilities that are recommended in this plan. Many of these funding sources cover 80% of project costs and require a 20% local match. The amount of funding available through these programs fluctuates from year to year depending on the status of state and federal budgets. The MPO and the communities in the planning area should coordinate their efforts and application for funding the projects identified in this plan.

Local Ordinances: Several of the recommendations in the plan may require, or may be more effectively enforce, with changes to local ordinances and zoning codes. Revisions to these ordinances that included detailed design standards for pedestrian and bicycle facilities will assist in planning new developments so they address the needs of bicyclists and pedestrians.

Local Funding Sources: The MPO should seek partnerships with local businesses and nonprofit groups to assist in implementing some of the recommendations in the plan. In addition, these local groups could be used as local "in-kind" matching dollars for state, federal, and other grants that may be sought and awarded to area communities.

Funding to Establish Facilities

The projects outlined in this element will be planned and constructed over a thirty-year period. Typically, only one project or less will be under construction during a calendar year and projects with secured funding are listed in the MPO Transportation Improvement Program. Funding for on-street bicycle and pedestrian improvements will typically be provided by local jurisdictions through their city, town, or county annual Capital Improvement Program or through STP Urban or Rural allocations. Additional funding through various state, federal, and private funding sources will also be sought to assist in implementing the projects in this element.

The following is a summary of traditional funding sources that have been used in the past by Wisconsin MPOs to fund bicycle and pedestrian improvement projects. Many of these funding sources are subject to the state or federal budgeting process and the total amount of funding available can be highly variable from budget year to budget year. The Janesville MPO will continue to apply for construction assistance if funding programs continue. Local funds supplement assistance, and if federal aid is limited in future years, local funds may be used as a source to fund small bicycle/pedestrian projects. The general types of funding available for bicycle and pedestrian facility development are described below.

Federal/State Funds

Transportation Alternatives Program. Under MAP-21, several programs under SAFETEA-LU were consolidated into TAP, and the overall funding level is less than what was previously available under the separate SAFETEA-LU programs. TAP eligible activities include construction, planning, and design of on-road and off-road facilities for non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act. TAP funds activities previously funded under the separate Safe Routes to School Program, including planning, encouragement and education activities, and infrastructure improvements within a ½ mile of K-8 schools.

Surface Transportation Program Urban Funds. Metropolitan areas receive an allocation of funds bi-annually. These funds can be used on a variety improvement projects including bicycle and pedestrian projects. The Janesville Area MPO has historically used STP funds for major road projects. Bicycle/pedestrian accommodations are given due consideration as an incidental improvement when Trans 75 requires them.

Incidental Improvements. Bicycle and pedestrian projects are broadly eligible for funding from most of the major federal-aid programs. One of the most cost-effective ways of accommodating bicycle and pedestrian accommodations is to incorporate them as part of larger reconstruction, new construction and some repaving projects. Generally, the same source of funding can be used for the bicycle and pedestrian accommodation as is used for the larger highway improvement, if the bike/ped accommodation is “incidental” in scope and cost to the overall project. Overall, most bicycle and pedestrian accommodations within the state are made as incidental improvements.

Knowles-Nelson Stewardship Program (WI DNR) - Local Assistance Grants
Eight million dollars is available each year under the programs listed below for grants to local units of government and NCO's. Most grant funds are awarded to local governments for acquisition of land or development of recreational facilities. NCOs are eligible for land acquisition projects only.

- Acquisition and Development of Local Parks: Stewardship sets aside 50% of the funds in the Local Assistance Program for projects that improve community parks and acquire land for public outdoor recreation. Funds are available to towns, villages, cities, counties, Indian tribes, and Nonprofit Conservancy Organizations (NCOs).

- Urban Rivers: Stewardship allocates 20% of the funds available in the Local Assistance Program annually to restore or preserve the character of urban river ways through the acquisition of land or easements adjacent to rivers. Funding will be provided for projects that are part of a plan to enhance the quality of a river corridor.

  The purposes of the program are: to improve outdoor recreational opportunities by increasing access to urban rivers for a variety of public uses, including but not limited to, fishing, wildlife observation, enjoyment of scenic beauty, canoeing, boating, hiking and bicycling; to preserve or restore significant historical, cultural, or natural areas along urban rivers.
  UR provides grants to municipalities and NCOs. There is a cap of 20% which means that no sponsor can receive more than 20% of the funds that are available in any fiscal year.

  The deadline for receipt of applications for this program is May 1. Applications received after this date cannot be considered until the following year.

- Urban Green Spaces: The intent of the Urban Green Space Program (UGS) is to provide open natural space within or in proximity to urban areas; to protect from urban development areas that have scenic, ecological or other natural value and are within or in proximity to urban areas; and to provide land for noncommercial gardening for the residents of an urbanized area.

  UGS provides grants to cities, villages, towns, counties, and public inland lake protection and rehabilitation districts, and NCOs. Twenty percent of the funds available in the Local Assistance Program are allocated to the Urban Green Space Program.

- Acquisition of Development Rights: The purpose of the Acquisition of Development Rights Program is to protect natural, agricultural, or forest lands that enhance nature-based outdoor recreation. "Development Rights' are the rights of a landowner to develop their property to the greatest extent allowed under state and local laws. The goals of the program are achieved through the purchase of those development rights and compensating landowners for limited future development on their land. Ten percent of the funds available in the Local Assistance Program are allocated to this program.

Priority is given to projects that have one or more of the following characteristics in addition to providing or enhancing nature-based outdoor recreation, not listed in priority order:

- Property with frontage on rivers, streams, lakes or estuaries.
- Property that creates a buffer between land that has been permanently protected for natural resource and conservation purposes and potential or existing residential, commercial or industrial development.
- Property that is within the boundaries of an acquisition project established by the DNR, a government unit or a NCO where the uses of the property will complement the goals of the project and the stewardship program.
- Property that is within an environmental corridor that connects 2 or more established resource protection areas.

Land and Water Conservation Fund (LWCF): The objective of this program is to encourage nationwide creation and interpretation of high quality, outdoor recreational opportunities. The program funds both state and local outdoor recreation projects. Funding levels are dependent upon annual availability of federal funds. Counties, cities, villages, towns, school districts, and Indian tribes with approved Comprehensive Outdoor Recreation Plans are eligible for funding. The funding is up to 50% matching grants to state and local units of government. Priority projects involve the acquisition of land where a scarcity of outdoor recreational land exists.

Eligible activities include acquisition of land for public outdoor recreational areas and preservation of water frontage and open space, development of public outdoor park and recreational areas and their support facilities.

Other Funding Sources

Highway Safety Improvement Program. Eligible projects under this program include intersection safety improvements, installing warning signage at bicycle/pedestrian crossings, and other spot improvements that would increase safety for both motorized and non-motorized users . This program focuses on projects intended for locations that have a documented history of previous crashes.

Local Funds

General Fund. The primary source of General Fund revenue is the property tax levy. The General Fund has historically been used for street construction and maintenance and transit operating assistance. It is likely that general fund monies will be used more extensively in the future either independently or as a supplement to federal dollars in order to construct bicycle and pedestrian facilities. Other General Fund revenue sources that are potential resources for transportation projects include the hotel/motel room tax and leasing fees for public parking spaces, however, revenue from special taxes is not likely to provide an extensive source of bicycle facility funding.

Special Assessments. Special assessments are charged to developers for sidewalk installation and street construction when residential and commercial lands are developed. Developers may also pay a share of the cost for traffic signal improvements on streets adjoining their properties.

Private Funds

Private non-profit organizations, such as the Rock Trail Coalition and the Ice Age Trail Chapter of the Rock County, provide sources of funding or volunteer labor for bicycle and pedestrian trail improvements. The trail coalition works to preserve scenic corridors through membership dues and fundraisers. Private interests that have funded recreational projects include the Lions Club, Jaycees, Optimist Club, and the Kiwanis. Corporate sponsorship of trail construction is another option that the City may wish to pursue with local businesses in the near future.

Long Term Maintenance

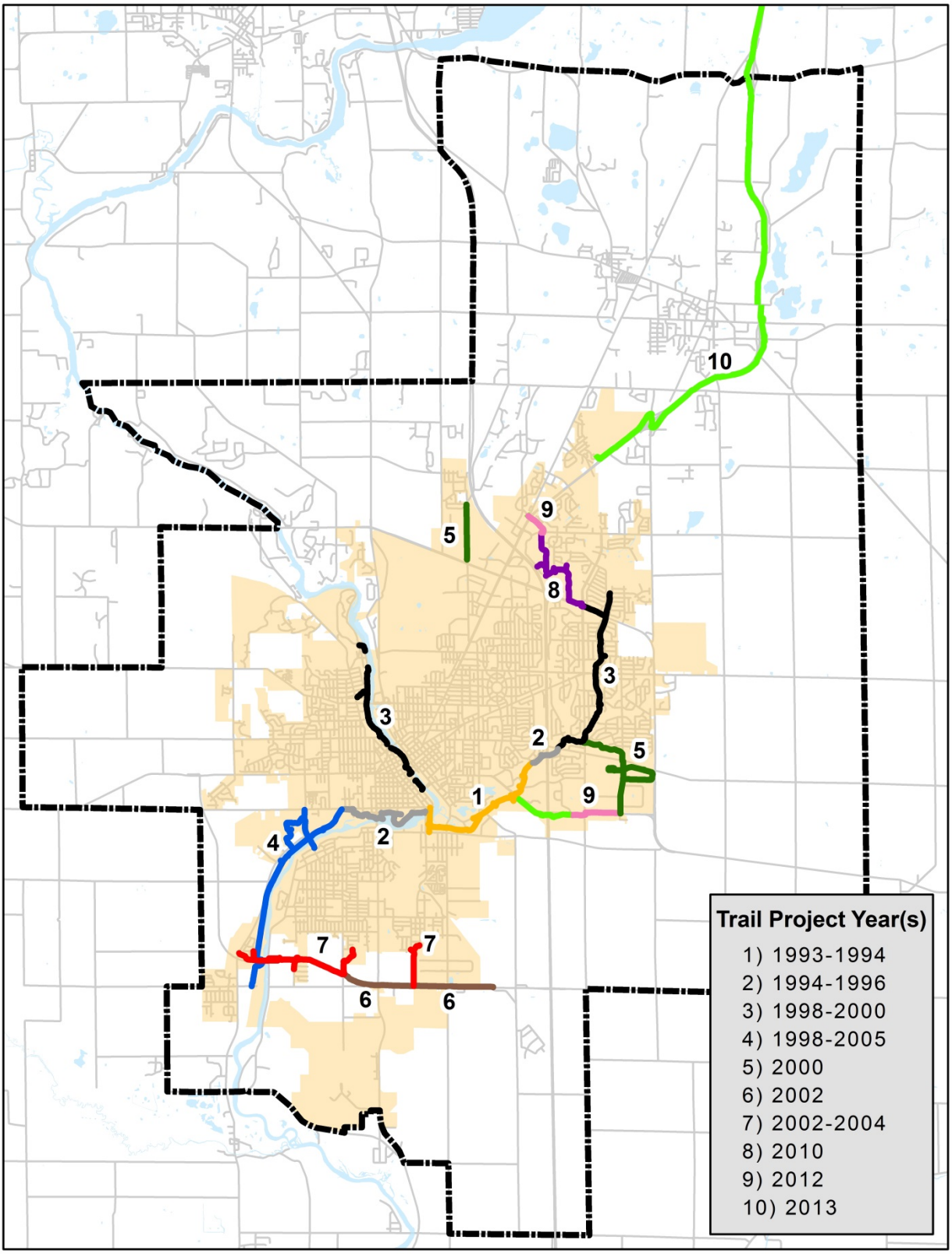
Local jurisdictions maintain trails and on-street facilities with General Fund or capital borrowing monies, which is separate from the MPO transportation budget. Identifying the long-term costs of maintaining improvements are an important component of the decision-making process. While grant funds may assist with the construction of trails, local governments bear the majority of the long-term costs to maintain the infrastructure, including tree cutting and brush clearing, signage, amenities, and patching/resurfacing.

Janesville began constructing asphalt trails in 1993/1994 with the Springbrook Trail (now Ice Age Trail) from Rockport Road to Palmer Park. A steady stream of construction followed from the mid 1990's through mid-2000's until the late 2000's when construction slowed due to the competitiveness of grant funds. The Glacial River Trail was built as part of the STH 26 bypass and long-term maintenance of the trail that falls within the MPA is split between the City of Milton, City of Janesville, and Rock County. Table 9 shows the approximate construction date of Janesville's trail segments.

Table 9: TRAIL CONSTRUCTION HISTORY

Project #	Year	Name (Old/New)	Limits
1	'93-'96	Springbrook/ Ice Age Trail	Rockport Rd. to Ruger Ave.
2	'98-'00	E. Greenbelt/ Ice Age Trail	Ruger Ave. to Wright Rd.
3	'98-'05	Rock Trail/ Peace Trail	Intersection Afton & Rockport to Tripp Rd.
4	'98-'00	Downtown & Kiwanis/ Ice Age Trail	W. Racine to Riverside Park
5	'00	Wuthering Hills Trail/ Sports Complex Loop	Wright to S. Wuthering Hills at Ruger Ave.
6	'00	Kennedy Rd.	HWY 14 to IAT parking lot
7	'02-'04	USH 11 Connector Trail	Beloit Ave to Rock River & Doe Dr.
8	'04	USH 11 South Side Connectors	STH 11 extensions to Prairie Knoll Dr. & Jackson School
9	'10	Rotamer Connector/ Ice Age Trail	HWY 14 to Tanglewood Dr.
10	'12-13	HWY 26 Overpass	Tanglewood Dr to John Paul Road
11	'13?	Glacial River Trail	Wright Rd to Fort Atkinson
12	13	E. Racine connection	Palmer Dr. to Wuthering Hills

Figure 17: TRAIL CONSTRUCTION YEAR



Most of Janesville's trails are 10' wide and constructed of asphalt with 2' crushed limestone shoulders or grass. Portions of the trail are wide concrete sidewalk, including areas of the downtown or near street crossings. Concrete sidewalk may last 40 years or more. Cantilevered areas of the trail are built similar to bridges and may have a lifespan up to 50 years. Asphalt trail is expected to remain in good condition for 20 years before needing patching or resurfacing, but environmental conditions such as trees can affect surface life. Large trees located within 15 feet of a trail may cause root reflections in the trail surface, causing the trail to become uneven or broken.

In 2013, the City spent $40,000 patching and crack sealing the oldest portion of the trail from Rockport Road to Lexington/Mohawk. The areas is heavily wooded and root reflections affected the trail surface. The Kiwanis Trail from Centerway to Riverside Park will be patched in 2016 due to the same reason. The South Side Connector from USH 11 to Jackson School is scheduled for repair in 2016 because poor sub-soils led to the base to fail prematurely.

Much of Janesville's trail system will reach 20 years of age around 2020. The City of Janesville's Capital Improvement Program (CIP) includes a $50,000 line item for trail resurfacing in years 2016, 2017, and 2018. This CIP item is a placeholder indicating intent to borrow, but it is not a firm financial commitment.

Based on previous work completed, the City of Janesville can expect to spend roughly $7,500-$8,000 per mile on trail surface maintenance. This cost may vary widely based on the condition of the surface and the extent of work needed. Areas likely needing maintenance within the next five years includes the Rock/Peace Trail (2.5 miles) from roughly Jackson Street to Rockport Park; Spring Brook/Ice Age Trail (3.3 miles) from Lexington/Mohawk to HWY 14. At $7,500-$8,000 per mile, the cost of maintenance ranges from $43,500-$46,400.

10. POLICY RECOMMENDATIONS

The following recommendations provide guidance for promoting bicycle and pedestrian awareness, safety, and efficiency in accordance with the goal and objectives of this plan.

Coordination

1) Encourage public participation in the bicycle and pedestrian planning process.
- Ensure that local groups (e.g. Rock Trail Coalition) and the general public are informed and provided opportunity to comment on proposed projects and plans through the MPO's established Public Participation Procedures.

2) Ensure cooperation of property owners adjacent to existing and planned bicycle facilities.
- Notify future property owners of planned bicycle and pedestrian facilities by placing notes on proposed subdivision plats.
- Notify property owners of planned bicycle and pedestrian facilities prior to construction.

Infrastructure

1) Plan bicycle routes that connect to other systems in Rock County and trails in adjacent counties.
- Develop Janesville's bike and pedestrian system to efficiently connect to planned and existing trails in Beloit and rural Rock County. Promote construction of wide shoulders on rural arterials at the city limits to promote accessibility for travelers and commuters from surrounding communities.

2) Consider bicycle/pedestrian movements during site plan and development review process.
- Ensure preservation of pedestrian access from residential subdivisions to adjacent commercial developments, similar to pedestrian access to greenbelt system. Require dedication of right-of-way for future bicycle/pedestrian facilities as a condition of approval during subdivision development phase.

3) Consider bicycle/pedestrian requirements during bridge improvement design phase.
- Construction or reconstruction design projects for Rock River bridges should incorporate adequate lane widths or joint pedestrian/bicycle lane for future use.

4) Encourage preservation of railroad right-of-way for future off-street facility use. Fund and conduct the research and assessment of active, inactive, or abandoned rail and rail right-of-way within the City limits.
- The city should maintain records of railroad right-of-way status, availability, and evaluate abandoned Rock River rail bridges for future bicycle facilities.

5) Install railroad crossing sign/safety equipment where applicable (e.g. rubber railroad crossing).
- Caution signs should be provided for cyclists approaching problem at-grade railroad crossings.

6) Utilize the Federal Highway Administration PEDSAFE and BIKESAFE countermeasure selection system to review locations with high crash rates to identify potential engineering or safety improvements.

- The National Highway Research Center has developed guidelines to assist in identifying potential engineering solutions for intersections, roadways, or other locations that are unsafe for bicyclists and pedestrians. The PEDSAFE and BIKESAFE guides should be used as one of the first tools in improving these high risk locations.

7) Construct new facilities using, at minimum, AASHTO guidelines and bring existing facilities into compliance.

- AASHTO guidelines are used for all new bicycle facilities in the Janesville area. Any deficiencies on older, existing segments should be identified and evaluated for improvement.

8) Promote implementing recommended projects when streets are scheduled for construction or reconstruction. Amend street standards as necessary to ensure that on-street facilities meet AASHTO guidelines.

- To minimize cost and effort, paving and re-striping to accommodate bicycle traffic may be completed during scheduled reconstruction or surface improvements. Standard roadway cross-sections will be amended on a project basis to accommodate on-street bike lanes or wide curb lanes. Where construction of a bike lane or wide curb lane on a recommended bike route is not feasible due to engineering constraints, justification for not constructing the bicycle facility will be documented during project design.

Facilities Support

1) Ensure that bike parking facilities (racks/shelters) and benches are available at all public facilities and new developments.

- Bike parking facilities should be made available, if not already, at all commercial and industrial buildings and public facilities identified as traffic generators in this plan. Bike racks should be located in accessible, secure locations at the sites. This recommendation should be encouraged through the site plan review process.

2) Ensure maintenance of on-street routes by keeping shoulders clear of debris and vegetation. Ensure tree and shrub clearance per AASHTO guidelines on operation and maintenance. Maintain bicycle trails and signs through regular Parks Division maintenance schedule.

- Streets designated as on-street bicycle routes should be prioritized for leaf removal and trimming during the summer months. Clearing, mowing, and maintenance for bicycle trails should continue through Parks Division maintenance program.

3) Provide adequate lighting for routes known as frequently used bicycle/pedestrian routes.

- Additional street lighting should be provided, when deemed necessary, for streets with designated on-street bicycle facilities.

Awareness

1) Extend sources of cycling information.

- Continue Police and Parks Department public awareness programs regarding bicycle safety and bicycle registration. Provide opportunities for bicycles to be registered at schools, fairs, or other public facilities throughout the year.

Map Production

1) Produce an urban area map that identifies bicycle and pedestrian facilities.

- Bicycle route maps and brochures identifying bicycling and pedestrian facilities should be regularly updated as the City's bike system expands.

11. SUMMARY

The Janesville Area Bicycle and Pedestrian Plan has been designed to enhance bicycling and walking as efficient, attractive, and realistic modes of transportation for bicyclists and pedestrians in the area. The construction projects and policy recommendations outlined in the plan focus on extending and completing the existing trail system, introducing a network of on-street bike lanes that complement the off-street system, and ensuring the consideration of multimodal movement when planning new developments. In addition, the Plan focuses on promoting safety awareness of users and motorists, and the examination of alternative facility design to improve bicycle and pedestrian safety.

The objectives of the plan may be met by improving connections between residential areas, parks and recreation facilities and major commercial employment centers. Providing adequate bicycle and pedestrian facilities is expected to offer additional recreation opportunities and promote biking and walking as viable alternatives to driving. Facility improvement and new construction are only part of the effort to accomplish the goals of the bicycle and pedestrian plan. The policy recommendations outlined in this document encourage public awareness, education, and participation that is necessary to implement plan concepts.

Through the implementation of the ideals set forth in this document, and the construction of the major facility improvement projects, the cities and towns that make up the Janesville Metropolitan Planning Area will have an integrated transportation system that provides true alternative transportation options to all of its residents.

REFERENCES

American Factfinder. United States Census Bureau. 2014-2015. http://factfinder.census.gov

Wisconsin Department of Transportation. 2014-2015. www.dot.state.wi.us/modes/bicycles

National Bicycle and Pedestrian Documentation Project. 2015-2016. www.bikepeddocumentation.org

City of Janesville Comprehensive Plan. 2009. Vandewalle & Associates. Madison, WI
City of Janesville, WI.

Costs for Pedestrian and Bicyclist Infrastructure Improvements: A Resource for Researchers, Engineers, Planners, and the General Public, 2013. UNC Highway Safety Research Center.

Wisconsin Traffic Operations and Safety Laboratory (TOPS) WisTransPortal System. 2014-2016. http://transportal.cee.wisc.edu/categories/crash-data.html

The Rock Renaissance Area Redevelopment & Implementation Strategy: A Brownfields Area-Wide Plan (ARISE). 2015. SAA Design Group. Madison, WI.
City of Janesville, WI.

Guide for the Development of Bicycle Facilities, 2012. American Association of State Highway and Transportation Officials (AASHTO)

Stateline Area Bike and Pedestrian System Plan, 2010. Vandewalle & Associates. Madison, WI.
Stateline Area Transportation Study. Beloit, WI.

Wisconsin Bicycle Planning Guidance - Guidelines for MPO's and Communities in Planning Bicycle Facilities, 2003. Wisconsin Department of Transportation. Madison, WI.

Wisconsin Bicycle Transportation Plan 2020, 1998. Wisconsin Department of Transportation, Division of Investment Management, Bureau of Planning. Madison, WI.