BICYCLE & PEDESTRIAN MASTER PLAN 2019

A BRIEFING MEMORADUM

DATE: September 25, 2019

SUBJECT: Bicycle & Pedestrian Master Plan 2019

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EXECUTIVE SUMMARY:

The City of Racine Bicycle and Pedestrian Master Plan is intended to guide the future development of the City-wide non-motorized transportation network. The improved network will make bicycling and walking a more viable mode of transportation, and will contribute to economic development opportunities and enhanced quality of life for residents and visitors to the City of Racine.

Vision

The City of Racine will enhance transportation and recreation opportunities by developing a continuous network of on-street and off-street bicycle and pedestrian facilities that provide connections to destinations throughout the city. Through these efforts, the City will encourage healthy transportation choices for both residents and visitors.

Why Bicycling?

Bicycling is a low-cost means of transportation that is non-polluting, energy-efficient, versatile, healthy and fun. It is a simple way to help build physical activity into daily life while reducing traffic congestion, air pollution and saving money. The many advantages bicycling include:

- Bicycling is good for the economy. Bicycling makes up \$133 billion of the US economy, funding 1.1 million jobs.
- Bikeable and walkable neighborhoods are more livable and attractive, with increased home
- values and property tax revenue.
- Bicycling can save money. By replacing short car trips, bicycling can help lessen personal
- transportation costs, and improve air quality.
- Bicycling is good for public health. Bicycling for exercise can reduce the cost of spending on
- health care by as much as \$514 per person every year.
- More people bicycling or walking increases safety for others. In a community where twice as
- many people walk, a person walking has a 66 percent reduced risk of being injured by a
- motorist.
- Bicycling in Wisconsin adds \$1.5 billion to the state economy and provides more than 14,000 jobs.

Public Involvement

The planning process included many opportunities for residents of Racine to share their experiences and knowledge of biking in the area as described below. People shared detailed information on where they ride, things they would like to see improved and program ideas to encourage more people to bike and recreate. The information gathered from residents inspired the recommendations for both on-road and off-road improvements, and ideas for programs to encourage citizens to use active transportation modes and to educate them on how to do so safely.

Plan Advisory Council

The Plan Advisory Council guided the plan development, and met ten times throughout the planning process: August 12, 2015, November 18, 2015, February 17, 2016, April 20, 2016, July 20, 2016, October 19, 2016, January 18, 2017, May 17, 2017, July 12, 2017, November 22, 2017, and August 29, 2018.

Public Meetings

Three public meeting series were held throughout the planning process. Meetings were held on the following dates: October 22, 2015, August 17, 2016, March 23, 2017. Comments were solicited and

collected at the public meetings. They are compiled in Appendix A. Each public meeting was very well attended with at least 60 participants representing a variety of interests.

Implementation

The recommended bikeway network will make biking for recreation and transportation an everyday, safe activity that is enjoyed by residents and visitors alike. The recommended network builds upon previous and on-going local and regional planning efforts and reflects the input offered by city personnel, the Advisory Council, stakeholder groups, and public meeting attendees. The implementation strategy presents a targeted methodology for how the City of Racine can institutionalize bicycle improvements into local and regional planning processes and projects.

The following strategies and action items are provided to guide the vision identified in the plan:

Key Programs and Policies

- Establish a permanent Pedestrian and Bicycle Advisory Committee (PBAC) to focus on non-motorized transportation in the public right of way. Formalizing the PBAC emphasizes the City's commitment to making walking and bicycling safer and more appealing, and has the potential to assist the City in securing funding for bicycle and pedestrian projects.
- Partner with municipalities, bicycle and other user groups to implement supporting programs in the city with an emphasis on programs that address bicycling equity issues.

Key Projects

- Intersection improvements as detailed in the Network Recommendations in Chapter 7, Table 9.
- Formalizing the recommended Neighborhood Greenway with signage noted in Chapter 7, Table 10.

BACKGROUND & ANALYSIS:

City of Racine

Racine is the fifth largest city in the state. Bicycle and pedestrian facilities include the popular Root River and Lake Michigan Pathways, the County Bike Trail and the MRK Trail. These trails and neighborhood streets allow residents to access destinations such as the lakefront, downtown, employers and workplaces.

Racine's existing roadway network is comprised of a dense urban grid closer to the lakefront and a more suburban/rural development pattern west of STH 31. STH 31 runs north/south through Racine and is served by STHs 11, 20 and 38 and CTHs K and C. These roadways carry the greatest volumes of motor vehicle traffic at the highest speeds. The Root River winds through Racine providing a great recreational opportunity for users along the Root River Pathway.

Exiting Multi-Use Trails

Current City facilities include the 14 mile long Lake Michigan Pathway, The 4 mile long Root River Pathway. Regional facilities include the 4.5 mile long MRK Trail, the 3 mile long North Shore trail, the 100+ mile long Oak Leaf Trail, the 10.2 mile long Pike River Trail, the 2 mile long We Energies Trail.

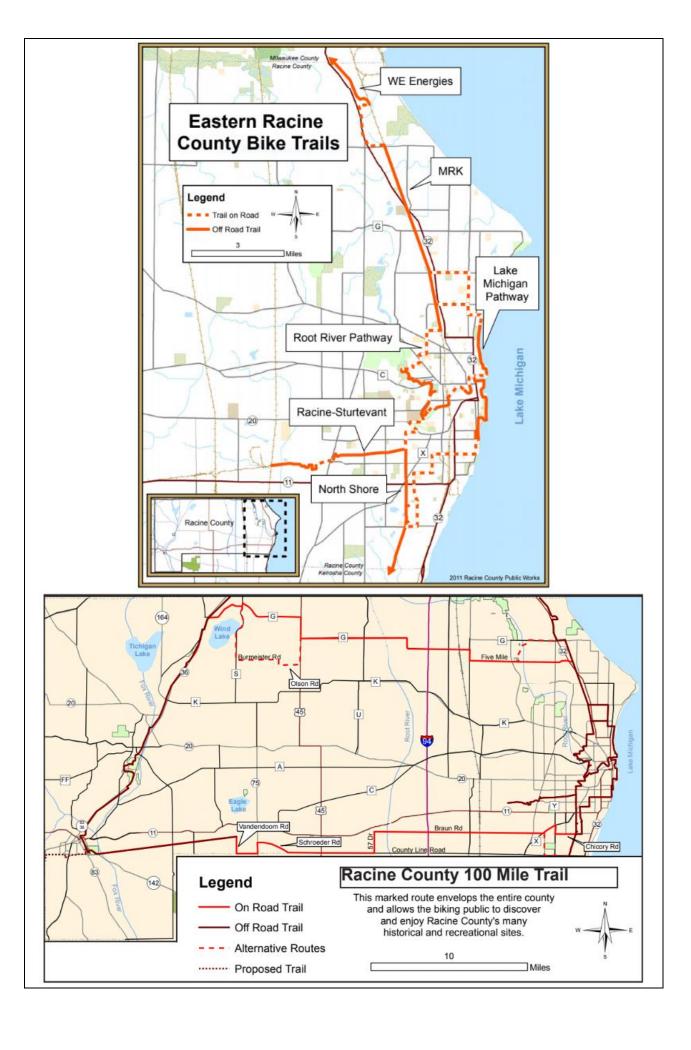
Existing Bike Facilities

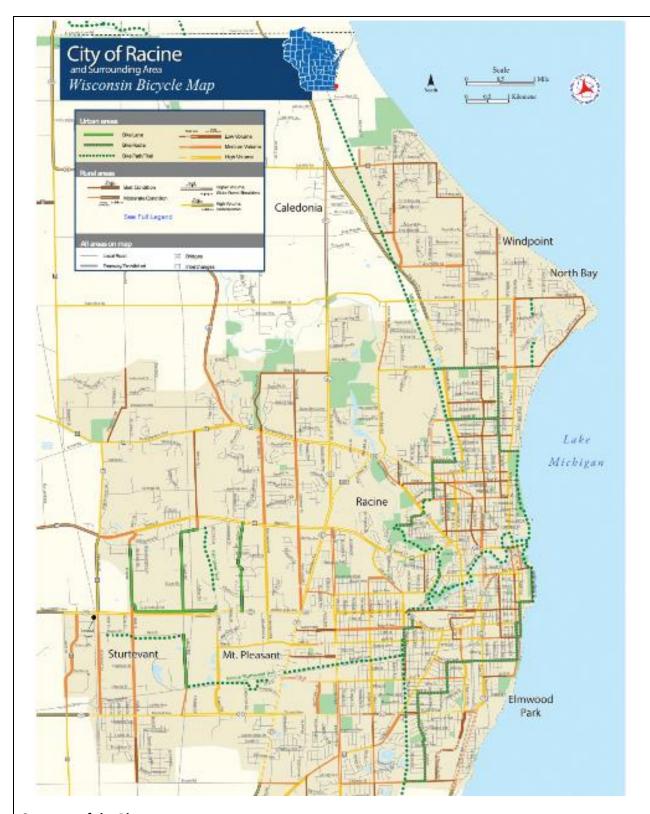
Bike Lanes

The City of Racine has designated bike lanes on Northwestern Ave., Dr Martin Luther King Dr., Washington St., 7th St., Ohio St. and Graceland Blvd.

BIKE ROUTES

The City of Racine has signed bike routes, including painted sharrows, as part of the on-street connections for Racine County's 100 mile Trail, a signed, one-hundred mile loop around the county.





Contents of the Plan

The City of Racine Bicycle and Pedestrian Master Plan provides a planned strategy for developing a functional bicycling and recreational network in the City of Racine. The Plan is organized as follows:

Chapter 1: Introduction provides a plan overview, its purpose, and the context within the City of Racine, Racine County and Wisconsin.

Chapter 2: Existing Conditions describes the City's existing bikeway network and summarizes strengths and weaknesses of the system.

Chapter 3: Recommended Bikeway Network describes the recommended system of bikeways and facility types to provide opportunities for cycling throughout the area.

Chapter 4: Recommended Pedestrian Policies supports a Complete Streets policy to support development of the bicycling and pedestrian environment.

Chapter 5: Recommended Programs describes education, encouragement, enforcement and evaluation measures the City of Racine and/or other local agencies to promote bicycling, increase bicyclist safety, and increase the awareness of bicycling and walking as viable travel modes.

Chapter 6: Implementation presents evaluation criteria for facilities and programs and details top-priority projects. This chapter provides cost estimates for the recommended bikeway projects and programs, and identifies potential funding strategies and supporting policies.

Goals, Objectives. Actions & Benchmarks

Goals and objectives direct the way public improvements are made, where resources are allocated, how programs are operated, and how priorities are determined. The accompanying objectives to enhance the infrastructure for bicyclists and pedestrians in the context of daily transportation for those who cannot drive or do not own cars as well as for those who make the choice to bike or walk for exercise or to enhance their personal health.

Goal 1. Support bicycling and walking as viable transportation modes in the City of Racine. Objective 1.1.

Implement the City of Racine Bicycle and Pedestrian Master Plan recommendations to provide bicycling and walking routes to key destinations.

Action 1.Complete the high-priority bikeway network and sidewalk gap projects in the next five years (2018-2022).

Benchmark: Miles of new bikeways and sidewalks completed; percentage of high-priority projects identified in the Master Plan completed.

Objective 1.2. Seek new and stable funding sources and strategies to support the implementation of the City of Racine Bicycle and Pedestrian Master Plan.

Action 1.In the case where grant requirements or construction are part of another project make construction of a lower priority project possible or required by law, pursue funding for that project regardless of priority.

Benchmark: Proportion of transportation facility reconstruction and construction projects that include bicycle and/or pedestrian improvements.

Action 2. Seek funding for bicycle and pedestrian transportation projects through grant opportunities.

Benchmark: Number of grants applied for and received; amount of grant funding acquired.

Objective 1.3.Improve bicyclists' and pedestrians' safety and comfort by accommodating these modes during construction or facility repair activities.

Action 1. Minimize disruption to bicycle and pedestrian travel by providing alternate routes during construction or repair activities.

Benchmark: Development of guidelines/policies for providing bicycle and pedestrian access through or around construction zones.

Objective 1.4.

Maintain existing and future bicycle and pedestrian facilities.

Action 1.Formalize the process for regular maintenance of bicycle and pedestrian related facilities for pavement markings such as crosswalks, bike lane stripes and symbols and shared lanes markings.

Benchmark: Identify and implement an annual budget to be allocated to on-going maintenance of the facilities.

Goal 2. Integrate bicycle and pedestrian planning into City of Racine's planning processes.

Objective 2.1. Institutionalize bicycle and pedestrian planning into all of Racine's planning efforts.

Action 1.Review and update the Bicycle and Pedestrian Master Plan project and program priorities every two years, update of the entire plan every 5-10 years. Familiarize all city departments and personnel with the plan and subsequent updates. Solicit community feedback.

Benchmark: Revised project priorities list every two years.

Action 2. Assign Bicycle and Pedestrian Coordinator duties to an existing staff person in each of the following City Departments: Administration, City Development, Health, Parks and Recreation, Police, and Public Works

Benchmark: Staff is assigned and begins duties.

Action 3. Department Head meeting to discuss plan highlights.

Benchmark: Meeting held and documented.

Action 4. Adopt a Complete Street policy to consider the needs of pedestrians and bicyclists in new development and roadway reconstruction.

Benchmark: Adopted Complete Streets Policy.

Goal 3. Promote bicycling and walking in the City of Racine by improving awareness of bicycle and pedestrian facilities and opportunities.

Objective 3.1. Improve public awareness of the bicycle network and presence of bicyclists.

Action 1. Install signs along all local and regional bikeways to assist with wayfinding and to increase awareness of bicyclists by motorists.

Benchmark: Develop and implement a wayfinding signage plan.

Action 2. Make bicycling and walking resources available through the City of Racine website.

Benchmark: Develop a map and biking/walking guide for the City of Racine as well

as web content for the city's website proving information about walking and bicycling.

Action 3. Increase action by law enforcement in regard to bicycle and pedestrians related violations by motorists, bicyclists and pedestrians.

Benchmark: Number of informational warning and citations issued related to bicyclist or pedestrians; number of crashes involving bicyclists or pedestrians.

Recommendations

This chapter lays out a 10-year plan for completing the system of bikeways, shared-use paths and spot improvements in Racine. The recommended network builds upon previous and on-going local and regional planning efforts and reflects the input offered by city personnel, the project Advisory Council, bicycle and stakeholder groups, and Racine area residents and visitors. Pedestrian policy recommendations are also outlined.

The recommended bicycle and trail network includes bicycle and multi-use path facilities connecting key destinations in and around the City of Racine. System improvements include establishing a more comprehensive on-street bikeway system, upgrading intersections for safer path and designated bicycle route crossings, improvements to specific bicycle facilities and projects to enhance safety and encourage bicycling. Suggested improvements include low-cost measures yielding immediate results, such as restriping of streets to accommodate bike lanes, bike map development and wayfinding signage. Other improvements, such as installing key bicycle/pedestrian bridges, represent longer-term strategies for transforming the City of Racine into a truly bicycle-friendly community.

Table I: Proposed Bike Lanes

#	Street	From	То	
1	Erie St.	3 Mile Rd.	Melvin Ave.	
2	Durand Ave.	Meachem Rd.	ST Hwy 31	
3	Meachem Rd.	Durand Ave.	Chicory Rd.	
4	Mt. Pleasant St.	County Bike Trail	St Hwy 31	

Table 2: Proposed Paved Shoulders

#	Street	From	То
1	3 Mile Rd.	N. Green Bay Rd.	La Salle St.
2	Chicory Rd.	Wood Duck Way	Lathrop Ave.

Table 3: Proposed Shared Use Paths (Connectors)

#	From	То
1	Augusta St.	County Bike Trail
2	Olive St.	County Bike Trail
3	Cleveland Ave.	County Bike Trail
4	Blaine Ave.	County Bike Trail
5	Roosevelt St.	County Bike Trail
6	West Blvd.	County Bike Trail

Table 4: Proposed Signage Improvements

#	Layard Ave.	Sign Type
1	Mt. Pleasant and Layard Ave.	Wayfinding
2	County Bike Trail and Layard Ave.	Wayfinding
3	Kinzie Ave. and Root River Pathway	Wayfinding
4	Liberty St. and Root River Pathway	Wayfinding
5	12th St. and Root River Pathway	Wayfinding
6	Kentucky St. and Root River Pathway	Wayfinding

Table 5: Proposed Intersections

Intersection #	Location	Recommendation
1	South Street and MRK County Trail	Colored pavement intersection crossing markings
2	Mt Pleasant Street and Rapids Orive	Through travel colored pavement bike lane on Mt Pleasant on north side of intersection (Goold St)
		Stripe crosswalks
		Install countdown pedestrian timers that can be activated by cyclists on road
3	Mt Pleasant Street and High Street	Colored pavement intersection crossing markings
4	State Street and Erie Street/Ontario Street	Extend median on State Street to create a refuge island for southbound bicycle traffic
		Colored pavement intersection crossing markings for northbound cyclists
5	Lake Michigan Pathway and Christopher Columbus Causeway	Expand curb cut to include entire section of connector sidewalk on the north side of CC Causeway
		Add sharrows from Lake Avenue to the Racine Pier
		Stripe pedestrian crosswalk
		'Bicycle may use full lane' signage MUTCD R4-11
6	Mound Avenue and Root River Pathway	Construct curb cut on the north side of Mound Avenue
		Colored pavement intersection crossing markings
		Colored pavement left turn bike lane for southwest bound cyclists
		Replace existing signage with 'Trail Crossing' signage MUTCD W11-15a
7	Washington Ave and Quincy Ave/Root River Pathway	Extend curb ramp the length of the transit stop
		Stripe the pedestrian crosswalk
		Extend trail and widen further east to align with Quincy Avenue at 90 degrees
		Left turn bike lane to access trail from Quincy Avenue
8	West Blvd and 16th St	Add pedestrian activated push buttons on all corners
		Stripe the crosswalks
9	Lathrop Ave and County Bike Trail	Colored pevement intersection crossing markings
		Activated Rectangular Rapid Flash Beacon
		Time the traffic signals on Taylor Avenue and Drexel Avenue to create gaps
		Add trail crossing signage
10	Taylor Ave and Pierce/West Blvd	Colored pavement intersection crossings across Pierce Boulevard and Taylor Avenue
		Trail crossing signage at the stop sign on Pierce
		Stop bar painted on Pierce Boulevard
		Widen curb cut on southwest comer across Pierce Boulevard
11	Durand Ave and WI 31	Potential Engineered redesign when road is reconstructed
12	Durand Ave and County Bike Trail	Colored pavement intersection crossing markings
		Activated Rectangular Rapid Flash Beacon
13	Chicory Rd and WI 32	Potential Engineered redesign when road is reconstructed
14	County Bike Trail and 21st St	Colored pavement intersection crossing markings

Table 6: Proposed Neighborhood Greenways

#	Street	From	То	Recommendations
1	South St.	County Bike Trail	Erie St.	Pavement; Signage
2	Augusta St.	County Bike Trail	Michigan Blvd.	Pavement; Signage
3	Layard Ave.	Mt. Pleasant Rd.	County Bike Trail	Pavement; Signage
4	Mt. Pleasant Rd.	Romanyne Ave.	High St.	Pavement; Signage
5	Melvin Ave.	Erie St.	Michigan Blvd.	Pavement; Signage
6	Erie St.	Melvin Ave.	State St.	Pavement; Signage
7	Ontario St.	State St.	Root River Pathway	Pavement; Signage
8	Westwood Dr.	Northwestern Ave.	Jefferson St.	Pavement; Signage
9	Jefferson St.	Westwood Dr.	W. High St.	Pavement; Signage
10	W. High St.	Root River Pathway	Jefferson St.	Pavement; Signage
11	12st St.	Washington Blvd.	Lake Ave.	Pavement; Signage
12	S. Main St.	12th St.	16th St.	Pavement; Signage
13	16th St.	S. Main St.	Wisconsin Ave.	Pavement; Signage
14	Wisconsin Ave.	16th St.	De Koven Ave.	Pavement; Signage
15	De Koven Ave.	Wisconsin Ave.	Case Ave.	Pavement; Signage
16	Case Ave.	De Koven Ave.	Gilson St.	Pavement; Signage
17	Gilson St.	Case Ave.	Drexel Ave.	Pavement; Signage
18	Drexel Ave.	Gilson St.	Maryland Ave.	Pavement; Signage
19	Maryland Ave.	Drexel Ave.	Knoll Pl.	Pavement; Signage
	Knoll Pl.	Maryland Ave.	Chicory Rd.	Pavement; Signage

BUDGETARY IMPACT:		
RECOMMENDED ACTION:		