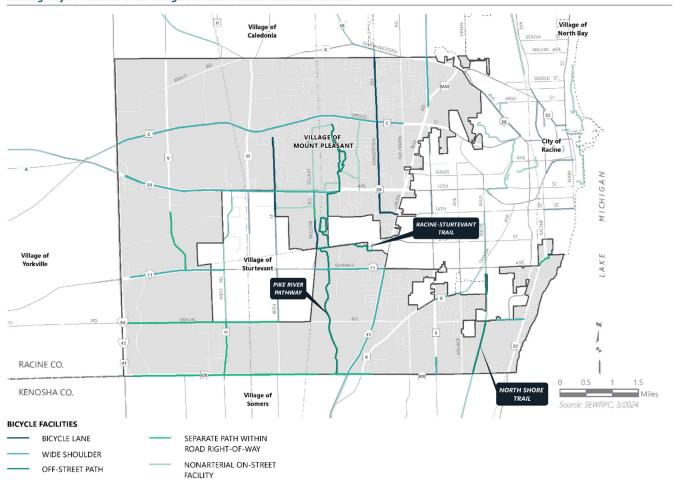
Section 2: Existing Conditions

The Village of Mount Pleasant (the Village) has several existing bicycle and pedestrian facilities that provide a good framework for a well-connected bicycle and pedestrian network. These facilities are the result of interconnected factors including land use and economic decisions, the location of civic and cultural amenities, and previous planning efforts. To understand where future bicycle and pedestrian facilities should be built, it is important to examine land use and economic factors within the Village and catalog where the existing bicycle and pedestrian infrastructure is located.

This section documents current bicycle and pedestrian infrastructure in the Village of Mount Pleasant, including off-street bicycle paths, and assesses their connections to public transit and relationships to land use patterns and employment density. This section also summarizes nonmotorized count data and travel patterns to, from, and within the Village. It concludes with a summary of bicycle and pedestrian crash locations and a gap analysis of the bicycle and pedestrian network. It highlights opportunities to improve connectivity that will be further explored in later sections.

Map 2.1
Existing Bicycle Facilities in the Village of Mount Pleasant and Environs: 2023



2.1 EXISTING ON- AND OFF-STREET BICYCLE FACILITIES

The existing on- and off-street bicycle facilities within the Village are shown in Map 2.1 and summarized in Table 2.1. Of the approximately 91 miles of arterial streets in the Village of Mount Pleasant, about 25 miles, or 27 percent, have on-street bicycle accommodations.

The Village has made considerable progress in implementing bicycle facilities since the 2030 Bicycle Master Plan was completed in 2007. The 2007 plan identified approximately 16 miles of recommended on-street bicycle lanes and 24 miles of off-street paths. Of those 40 miles, about 19 miles have been completed. Approximately 31 additional miles of bicycle facilities have been completed that were not identified in the 2007 plan, as shown in Table 2.2.

Two trails provide further connections to the Racine-Sturtevant Trail and other trails in northern Kenosha County, including through the County's Petrifying Springs Park. The first trail is the Pike River Pathway, a seven-mile off-street trail that runs through the Village from Old Spring Road to CTH KR at the county line. The second trail, the North Shore Trail, in the southeastern part of the Village links the City of Racine to Kenosha County. Altogether, these trail connections create an approximately 15-mile off-street trail loop among the Village and the City of Racine and Town and Village of Somers in Kenosha County.

Bicycle Lane



Bicycle lanes dedicate space for bicyclists through pavement markings. The most common type of bicycle lane in the Village is a conventional non-separated lane (pictured along Emmertsen Road). While appropriate for low to medium volumes of vehicular traffic, bicycle lanes that are separated or protected from vehicles with a buffer (white stripes painted up to four feet between the bicycle and travel lane) or curbs, bollards, or a parking lane may be appropriate in dense areas or on streets with higher traffic volumes and speeds to address actual and perceived rider safety.

Separated Path Within Road Right-of-Way



Separate paths provide a low-stress facility for bicyclists and pedestrians along roads but differ from off-street paths since they are located in the road right-of-way.

Off-Street Bike Path



Off-street paths provide comfort and safety to bicyclists and pedestrians by separating them from motorized vehicle traffic. The most prominent example in the Village is the seven-mile Pike River Pathway.

Wide Shoulder



Paved shoulders provide space for bicyclists along state and county roadways if the paved section is at least four feet in width.

Table 2.1
Existing On-Street Bicycle Facilities in the Village of Mount Pleasant

Facility Type	Street Name	From	То	Length
Bicycle Lane	16th Street	Emmertsen Road	Green Bay Road (STH 31)	0.35
	90th Street	Old Spring Street	Village Limits (south of 16th Street)	1.47
	Emmertsen Road	Northwestern Avenue (STH 38)	16th Street	3.11
	Willow Road	Approximately 1,300 ft south of 16th Street	Racine-Sturtevant Trail	0.81
Separated Path within	Sheridan Road (STH 32)	Durand Ave (STH 11)	24th Street	0.32
Road Right-of-Way	СТН Н	Village Limits (at Braun Road)	CTH KR	1.00
	CTH KR	IH 94	1st Way	3.30
	CTH KR	56th Avenue	Vicksburg Drive	0.79
	Braun Road	IH 94	90th Street	2.95
	International Drive	Approximately 0.4 mi N of Louis Sorenson Road	Durand Avenue (STH 11)	1.19
	Willow Road	16th Street	Approximately 1,300 ft south of 16th Street	0.25
Wide, Paved Shoulders	STH 11	IH 94 East Frontage Road	СТН Н	1.81
	Durand Avenue (STH 11)	Willow Road	Green Bay Road (STH 31)	1.37
	Washington Avenue (STH 20)	IH 94 East Frontage Road	Oakes Road	4.01
	STH 31	Northwestern Avenue (STH 38)	CTH MM	0.89
	Green Bay Road (STH 31)	Durand Avenue (STH 11)	CTH KR	2.16
	СТН С	IH 94	Newman Road	5.61
	Taylor Avenue (CTH X)	Meachem Road (CTH Y)	Village Limits (at Lathrop Ave)	0.51
	Meachem Road (CTH Y)	Approximately 0.5 mi north of CTH KR	CTH KR	0.50
	Chicory Road	North Shore Trail	STH 32	0.76
	Willow Road	Washington Avenue (STH 20)	16th Street	0.31
Nonarterial Bicycle Lane	16th Street	90th Street	Willow Road	0.75
	24th Street	Mead Street	Howe Street	0.03
	Airline Drive	Kinzie Avenue	N Frontage Road	0.13
	Kinzie Avenue	Airline Drive	Oakes Road	0.28
	Mariner Drive	Pike River Pathway	Sunnyslope Drive	0.42
	N Frontage Road	90th Street	Airport Drive	1.04
	Old Spring Street	Stuart Road	Pike River Pathway	0.38
	Stuart Road	Old Spring Street	Washington Avenue (STH 20)	1.18
	Sunnyslope Drive	CTH C	Washington Avenue (STH 20)	1.34

Source: SEWRPC, 7/2023

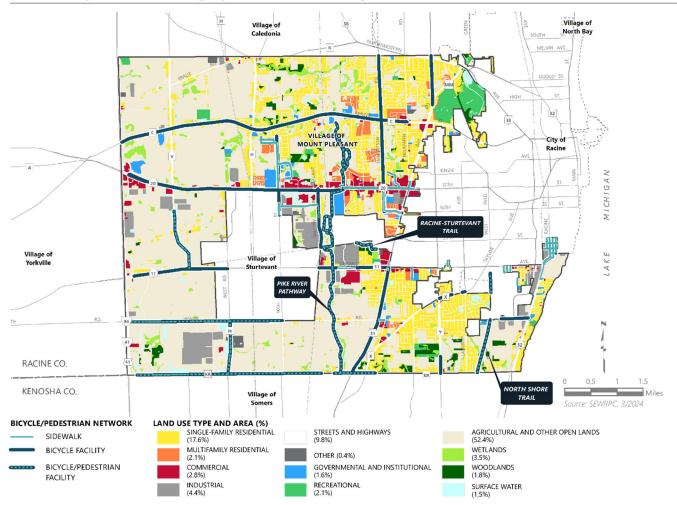
PRELIMINARY DRAFT 4

Table 2.2 Miles of Bicycle Facilities Completed in the Village of Mount Pleasant Since 2007

	Miles of Bicycle Facilities Completed			
Facility Type	ldentified in 2030 Bicycle Plan	Additional Not Identified in Plan	Total	
Bicycle Lane	4.3	6.9	11.2	
Wide, Paved Shoulders	5.1	14.2	19.3	
Separate Path in Road Right-of-Way		9.8	9.8	
Off-Street Path	9.3		9.3	
Total	18.7	30.9	49.6	

Source: SEWRPC, 8/2023

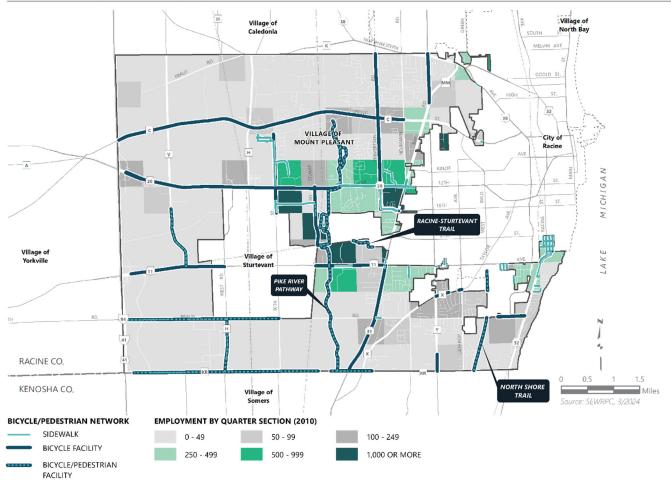
Map 2.2 2022 Land Use by Parcel and 2023 Existing Bicycle/Pedestrian Network, Village of Mount Pleasant



2.2 LAND USE AND EMPLOYMENT PATTERNS

As shown in Map 2.2, the land use characteristics in the Village of Mount Pleasant have distinct differences east and west of the Village of Sturtevant. While the Village is largely comprised of agricultural and open land by acreage in its western half, its developed lands display an organization typical of postwar suburban cities in the eastern half. Residential, commercial, and other development largely occurs along major arterials with uses increasing in intensity east of Sturtevant to the Village's border with the City of Racine. A cluster of industrial uses occurs immediately east of Sturtevant between STH 20 (Washington Ave) and STH 11 (Durand Ave). In areas with residential development, single-family predominates, comprising almost 18 percent of total acreage. Commercial development is more limited and clusters along STH 20, particularly at its intersection with STH 31 (Green Bay Road).

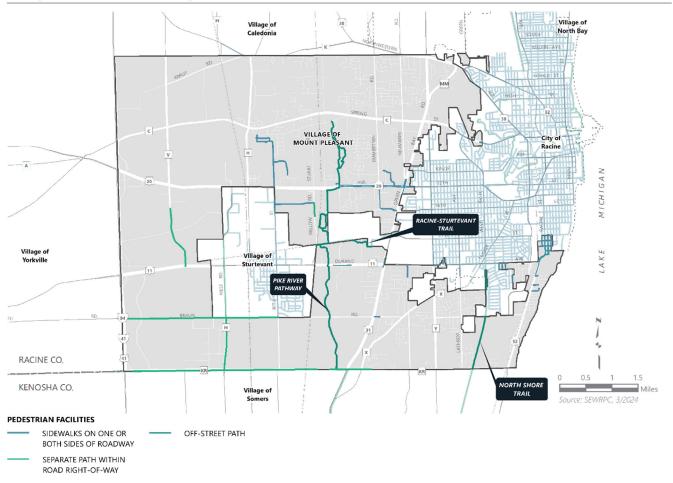
Map 2.3
Employment Density and 2023 Existing Bicycle/Pedestrian Network in the Village of Mount Pleasant



Employment density, as shown in Map 2.3, reveals similar patterns as the commercial and industrial land uses in Map 2.2. The areas of the Village with the highest employment density are located east of the Village of Sturtevant between CTH C (Spring Street) and STH 11 (Durand Ave). Specifically, some of the highest employment densities correspond with the locations of the industrial use cluster east of Sturtevant and the commercial developments at the intersection of STH 20 and STH 31.

As shown in Map 2.2 and 2.3, several bicycle lanes connect the Pike River Pathway to residential neighborhoods north of Washington Avenue (STH 20) and to businesses along STH 20. *Many arterial streets in the suburban eastern sections of the Village lack any bicycle accommodations, including the employment-dense commercial corridors in the vicinity of the STH 20 and Green Bay Road (STH 31) intersection and the residential communities east of STH 31.* The Pike River Pathway, particularly the sections north of the Racine-Sturtevant Trail, is centrally located and serves both residential, commercial, and industrial areas in the Village.

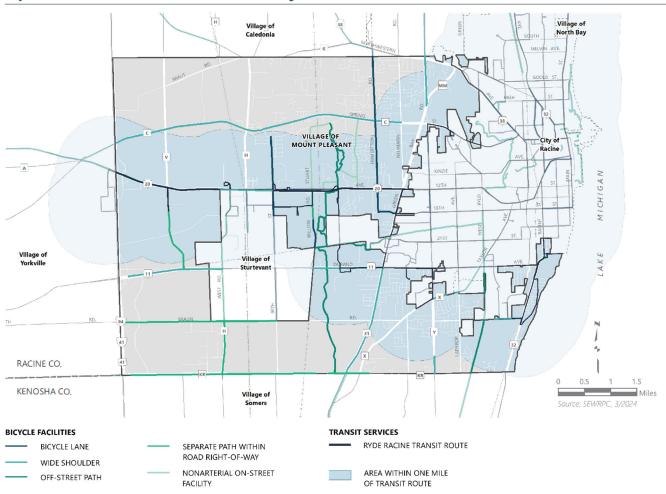
Map 2.4
Existing Pedestrian Facilities in the Village of Mount Pleasant and Environs: 2023



2.3 EXISTING SIDEWALK INVENTORY AND OFF-STREET PEDESTRIAN FACILITIES

Map 2.4 shows existing sidewalks in the Village of Mount Pleasant and surrounding communities, as well as off-street multi-use paths shared with bicyclists. The Village has approximately 10 miles of sidewalks. Mount Pleasant, like several towns and villages in Racine County, does not have an extensive sidewalk network. Its existing network does not adequately connect residential neighborhoods to other residential areas or commercial districts, and employment-dense areas have very few pedestrian facilities connecting to residential areas. To improve pedestrian connectivity, the Village adopted a sidewalk ordinance in 2020, requiring sidewalks or multi-use paths be provided along all sides of a lot adjacent to a public street unless certain conditions are met. The Village's sidewalk ordinances are consistent with VISION 2050 recommendations related to the provision of sidewalks along streets and highways in areas of existing and planned urban development. Additional guidance on sidewalks and pedestrian access to community facilities is described in Section 4.

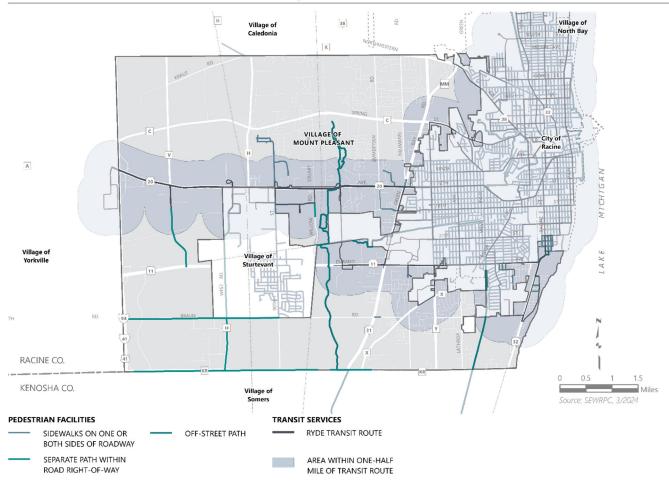
Map 2.5
Bicycle Facilities Within One Mile of Transit Routes in the Village of Mount Pleasant and Environs: 2023



2.4 CONNECTIONS TO TRANSIT

Transit services in the Village are provided by RYDE Racine, which is owned and operated by the City of Racine. The Village is served by Routes 3, 5, 7, and 27. As shown in Map 2.5, of the 49.6 miles of on- and off-street bicycle facilities in the Village, approximately 14.3 miles of on-street bicycle facilities and 7.6 miles of off-street paths are located within one mile of existing transit routes. Map 2.6 displays the existing pedestrian facilities located within one-half mile of a RYDE Racine transit route. The Village currently has a small number of sidewalks that connect to transit. Approximately 8.8 miles of sidewalks in the Village are located within one-half mile of a transit route. Since transit will rarely take users to their exact destination, users should be able to easily navigate a short distance (the "first-mile" travel shed) from their beginning point to the transit stop, and the "last mile" from the transit stop to the destination by foot or bike. To address first mile/last mile trips, all buses operated by RYDE Racine are equipped with bike racks to encourage multimodal trips. Additionally, VISION 2050 recommends gaps in the pedestrian network be addressed through neighborhood connections to transit. More guidance on improving connectivity between bicycle and pedestrian facilities and transit is described in Section 4.

Map 2.6
Pedestrian Facilities Within One-Half Mile of Transit in the Village of Mount Pleasant and Environs: 2023



2.5 NEAR-TERM BUDGETED AND PROGRAMMED BICYCLE AND PEDESTRIAN IMPROVEMENTS

Transportation projects of regional significance and those expected to be funded with Federal funding are described in the regional Transportation Improvement Program (TIP), which is managed by the Commission. The 2023-2026 TIP is a list of all the arterial highway, public transit, and other transportation improvement projects proposed in southeastern Wisconsin over the next four years. VISION 2050 recommends that bicycle accommodations be considered and implemented, if feasible, through bicycle lanes, paved shoulders, widened outside travel lanes, and enhanced bicycle facilities (e.g. protected or buffered bicycle lanes) as existing arterial streets and highways are resurfaced and reconstructed and as new arterials are constructed. The following road improvement projects in the TIP for the Village provide opportunities for bicycle and pedestrian improvements:

- Resurfacing of Washington Avenue (STH 20) from Oakes Road to Green Bay Road (STH 31)
- Reconstruction of Green Bay Road (STH 31) from Washington Avenue (STH 20) to Durand Avenue (STH 11)
- Reconstruction of CTH C (Spring Street) from Ohio Street to Fairway Drive

2.6 SUMMARY OF EXISTING VILLAGE, COUNTY, AND OTHER REGIONAL BICYCLE PLANS

Several bicycle and pedestrian plans in and around Mount Pleasant have been developed that recommend walking and biking improvements with direct impacts to the Village.

- The 2030 Master Bicycle Plan, developed for the Village by the Wisconsin Bike Fed in 2007, recommended the construction of several bicycle facilities for completing an on- and off-street bicycle network in and around the Village and identified actions for increasing the number of walking and biking trips.
- 2. The 2050 Parks and Open Space Plan for the Village of Mount Pleasant was developed by the Commission and the Village in December 2021. It assesses current and future park, recreation, and open space needs and guides the preservation, development, and acquisition of land for park and outdoor recreation. The plan also recommends several off-street paths and connecting on-street bicycle accommodations.
- 3. The City of Racine Bicycle and Pedestrian Master Plan was completed in 2019 and guides the development of a nonmotorized network for the city. It includes recommendations for bicycle and pedestrian facilities and new trails in the city as well as complete streets policies to encourage safe and comfortable roads for all users. It is intended to increase accessibility to all parts of the city and improve connections to adjacent communities, including the Village of Mount Pleasant.
- 4. The Rails to Trails Conservancy is leading the Route of the Badger (ROTB) initiative in cooperation with SEWRPC and the Wisconsin Bike Fed. The purpose of this effort, which identifies 700 miles of trails throughout southeastern Wisconsin, is to create a trail network that promotes social equity and strong economies, expands transportation options, improves public health and recreation, and lowers greenhouse gas emissions. The completed network will create new regional corridors that connect Milwaukee to the greater Madison area via the Glacial Drumlin State Trail and communities from Illinois to Sheboygan County. The Pike River Pathway, Racine-Sturtevant Trail, and North Shore Trail in the Village are part of the Route of the Badger network.

VISION 2050, the long-range land use and transportation plan developed by the Commission, makes recommendations to local and State government to shape and guide land use development and transportation improvement to the year 2050. It makes the following bicycle and pedestrian recommendations:

- As arterial streets and highways are reconstructed and resurfaced, and as new arterials are constructed, bicycle accommodations be considered and implemented, if feasible, through bicycle lanes, wide paved shoulders, or enhanced bicycle facilities.
- Regional enhanced bicycle facility corridors be constructed for the implementation of a network of protected, buffered, and raised bicycle facilities that provide additional safety and separation for bicyclists from vehicular traffic.
- A system of off-street paths for a well-connected regional network.
 The Pike River Pathway, the Racine-Sturtevant Trail, and the North Shore Trail in the Village are part of this regional network.

ESTIMATED ANNUAL BICYCLE/PEDESTRIAN VOLUMES

C3,000

12,001 - 24,000

SHORT-TERM

Map 2.7

Estimated Annual Rike/Ped Volumes and Off-Street Path Count Locations in the Village of Mount Pleasant and Environs

2.7 TRAIL AND NONMOTORIZED COUNT DATA

24 001 - 60 000

3.001 - 6.000

6,001 - 12,000 OFF-STREET PATH

The Commission conducts a regional count program that collects continuous and short term nonmotorized counts on trails in the Region. These counts were used to calibrate bicycle and pedestrian data from Strava Metro, which aggregates data from the Strava activity tracking platform, to estimate annual bicycle and pedestrian trips in 2022. These data provide a general estimate of nonmotorized travel patterns throughout the Village. Map 2.7 shows count locations within the Village and adjacent communities, as well as estimated annual nonmotorized volumes. As shown on the map, off-street paths, separate paths within the road right-of-way, and bicycle lanes in residential neighborhoods carry the highest nonmotorized traffic volumes. The data suggest that few users walk and bike on State and county highways.

COUNT LOCATION

CONTINUOUS COUNT

¹ Several recent studies suggest Strava's user population overrepresents middle-age and male demographics and underrepresents females, elderly, and lower-income demographics when compared to the general population. Others have found that despite this demographic bias, the spatial patterns of Strava ridership can be representative of actual travel patterns in aggregate. For a review of literature on this subject, please see: Nelson et al. (2020) "Crowdsourced data for bicycling research and practice," Transport Reviews, 41: 1, pp. 98-102.

Table 2.3 provides a summary of the short-term count locations and their annual estimated volumes. The northern section of the Pike River Pathway has some of the highest trail volumes, which is likely due to its proximity to several residential neighborhoods with direct access to the trail. The decrease in trail volumes on the southern sections of the Pike River Pathway can be attributed to considerably fewer residential neighborhoods in the vicinity as well as the surrounding industrial buildings and open space.

Table 2.3
Off-Street Paths and Estimated Annual Volume in the Village of Mt Pleasant and Surrounding Environs

			Estimated Annual Volume		
Path Name ^a	Location	Community	2019	2020	2021
North Shore Trail	South of 21st Street	Racine	39,100	42,700	40,400
Racine-Sturtevant Trail	East of Cozy Acre Lane	Racine	21,700		18,900
Pike River Pathway	Northeast of Oakes Road	Mt Pleasant		108,200	65,500
Pike River Pathway	North of Durand Avenue (STH 11)	Mt Pleasant		32,800	16,000

			Annual Volume		
Path Name ^a	Location	Community	2019	2020	2021
North Shore Trail	North of CTH KR	Racine	51,700	90,400	65,200

^a The first four locations in the table are short term locations. The remaining location is a continuous count location.

Source: SEWRPC, 8/2023

Willage of Culedonia

Willage of Torriville

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Map 2.8

Current Bicycle Facilities and Crashes Involving Bicycles in the Village of Mount Pleasant: 2017-2022

2.8 BICYCLE AND PEDESTRIAN CRASHES

SEPARATE PATH WITHIN

NONARTERIAL ON-STREET

ROAD RIGHT-OF-WAY

FACILITY

BICYCLE FACILITIES

BICYCLE LANE

WIDE SHOULDER

OFF-STREET PATH

Map 2.8 displays the locations of vehicular crashes involving bicyclists in the Village between 2017 and 2022, grouped by injury severity. 19 total crashes involved a bicyclist, of which 13 crashes (68 percent) occurred on streets without a bicycle facility. During this time frame 17 of the 19 total bicycle crashes were located on state or county highways. Two fatal crashes involving a bicyclist occurred on state or county highways that lack bicycle facilities: one along STH 32 in the southeastern corner of the Village, and the other along CTH H near its intersection with Kraut Road. Notably, an approximate one-mile segment of STH 32 between CTH KR and STH 11 contains a fatal crash, serious injury crash, and injury crash. A plurality of crashes, 47 percent, were injury-only crashes, including two crashes at the intersection of the Pike River Pathway and STH 20. A cluster of crashes occurred near the intersection of STH 20 and STH 31, an employment-dense commercial area.

VEHICULAR CRASHES INVOLVING A BICYCLE

SERIOUS INJURY (A)

INJURY (B)

NON-INJURY & PROPERTY

FATALITY (K)

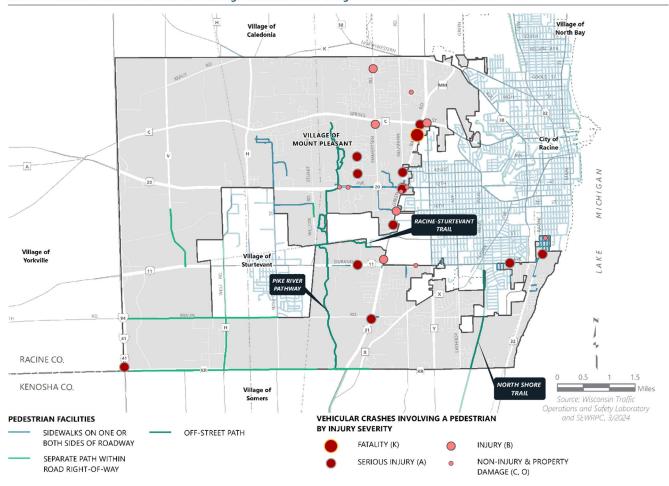
BY INJURY SEVERITY

Throughout the Village, 10 crashes involving bicyclists (53 percent) took place at an intersection, while the remaining nine took place along roadways segments outside an intersection. However, despite their lower prevalence, non-intersection crashes contained all fatal crashes and the only serious injury crash reported in Mt Pleasant since 2017. Guidance on strategies for improving bicyclist safety at intersections and along roadways outside of intersections is described in Section 3.

Operations and Safety Laboratory

Map 2.9

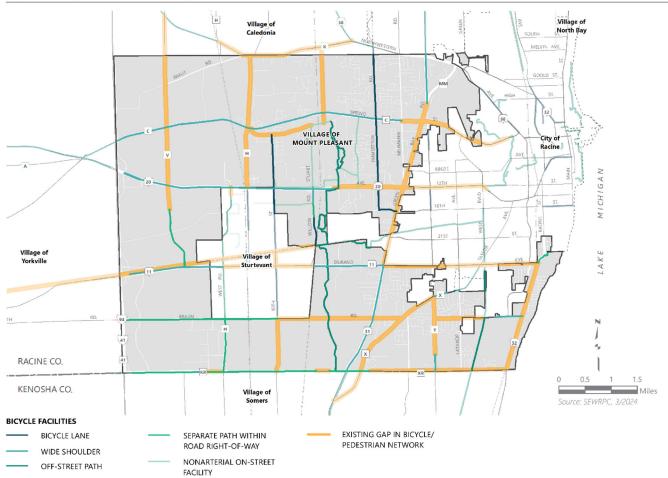
Current Pedestrian Facilities and Crashes involving Pedestrians in the Village of Mount Pleasant: 2017-2022



Map 2.9 displays crashes involving pedestrians between 2017-2022. During this period, 26 total crashes were recorded and of this total, 15 crashes (58 percent) were located on streets without sidewalks or other pedestrian facilities. Similar to the location of bicycle crashes, many pedestrian crashes are clustered around major intersections. A total of five crashes are clustered around the STH 20/STH 31 intersection and three are clustered around the CTH C/STH 31 intersection, including the only reported fatal pedestrian crash. Both are prominent intersections anchoring employment-dense commercial corridors. The plurality of pedestrian crashes, 12 (46 percent), were serious injury crashes, of which six took place along STH 31 along Mount Pleasant's border with the City of Racine. Five crashes (19 percent) were injury-only, and nine crashes (35 percent) were non-injury or property damage crashes. Notably, half of all reported pedestrian crashes in the Village took place along STH 31 between Braun Road and CTH C, a segment approximately four miles in length.

Unlike crashes involving bicycles, most pedestrian-associated vehicular crashes in the Village, 15 of 26 (58 percent), took place along a roadway segment outside an intersection. This includes the fatal crash along STH 31 and eight of the 12 total serious injury crashes. Such crashes may be due to insufficient facilities along roadways to accommodate pedestrian trips; while several major intersections, such as STH 31 and STH 20, have crosswalks and sidewalks around the intersection, sidewalks do not extend along the length of the roadway and do not form a connected network of safe places for pedestrians to walk. Guidance on strategies for improving pedestrian safety at intersections and along roadways outside of intersections is described in Section 3.

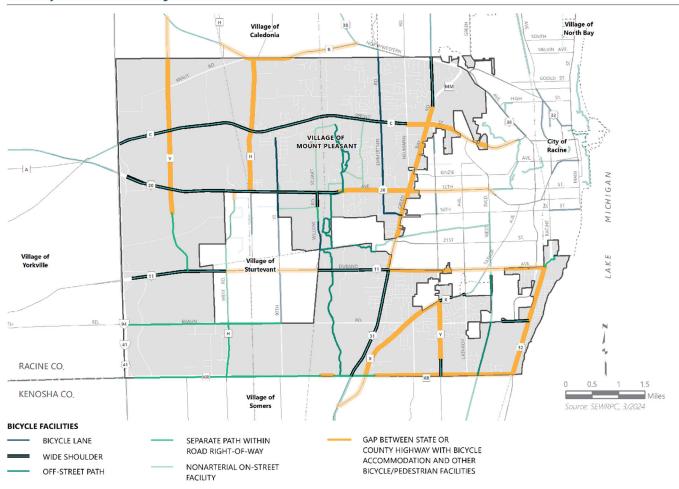
Map 2.10
Gaps in the Bicycle Network in the Village of Mount Pleasant and Environs: 2023



2.9 GAP ANALYSIS OF THE TRAIL NETWORK

The Village of Mount Pleasant has constructed the foundation of a well-connected bicycle and pedestrian network with the Pike River Pathway and the facilities that connect the trail to the Village Public Campus area, Smolenski Park, and the residential neighborhoods to the east. Additionally, the one elementary and high school in the Village are both connected by bicycle facilities and pedestrian facilities, which provide convenient, safe routes to school. But even with these facilities, gaps in the Village's bicycle-pedestrian network remain. Significant portions of the Village are disconnected from the larger bicycle-pedestrian network due to a lack of bicycle accommodation and sidewalks on arterial streets and connections to off-street paths and intermittent segments on arterial streets with no on-street bicycle facilities between existing bicycle accommodations, as illustrated in Map 2.10.

Map 2.11
Gaps Between State and County Highways with Bicycle Accommodations and Other Bicycle Facilities in the Village of Mount Pleasant and Environs: 2023



As described earlier in this section, in the Village's eastern residential areas, most streets do not have sidewalks or pedestrian facilities. Furthermore, in many areas of the Village with high levels of residential, commercial, and industrial density, these uses are not accessible by bicycle facilities or sidewalks. As shown in Map 2.11, several state and county highways in the Village provide wide paved shoulders, which is an adequate level of accommodation, but there are still considerable gaps between these facilities and the Pike River Pathway, other existing on-street bicycle facilities, and the commercial and industrial areas along STH 20 and STH 31.

To improve connectivity, VISION 2050 recommends addressing gaps in the regional bicycle network where on- and off-street bicycle facilities either do not exist or exist in intermittent segments as well as between two off-street path segments.

Bicycle facilities are recommended to be constructed where feasible on state and county highways, which would improve connections to the retail and commercial areas along the Village's main arterial corridors. Washington Avenue (STH 20), Durand Avenue (STH 11), CTH C, and CTH KR are also recommended in VISION 2050 as corridors for enhanced bicycle facilities, which would involve adding protected and buffered bicycle lanes or separated paths for additional protection (see examples in the pictures to the right). A near-continuous network of separated paths on CTH KR has already been constructed from IH 94 to Vicksburg Drive. The low-density development in





the western part of the Village also provides opportunities for regional trails that can be identified and planned prior to new development. New off-street paths could be identified in utility and natural resource corridors that provide connections to the Pike River Pathway and the potential extension of the White River State Trail through Racine County within the former CP rail corridor.

CTH/JMD/SAM/md #267707-6 1-9-2024; 11-3-2023; 8-28-2023