City of Fitchburg Bicycle & Pedestrian Plan

Adopted January 27, 2026

Fitchburg

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Fitchburg MSA planning + design studio

Contents

Executive Summary

A Walkable, Bikeable Fitchburg

Walking and bicycling are simple and sustainable forms of transportation that, when adequately accommodated, provide healthy, affordable, and enjoyable mobility options for people through a wide range of ages, abilities and incomes. Walkable, bikeable places are those that provide comfortable, interesting, and useful walking and bicycling routes and destinations.

The *Fitchburg Bicycle and Pedestrian Plan - 2025 Update* (referred to henceforth as the Plan) offers infrastructure and programming recommendations to improve walking and bicycling conditions in Fitchburg and make walking and riding a bicycle more convenient and enjoyable travel choices for people who live, work, and play in the city.

This 2025 update of the Plan represents the third iteration of a bicycle and pedestrian plan adopted by the City of Fitchburg. Both the 2008 and 2017 Bicycle and Pedestrian Plans were utilized to track the completion of improved facilities/initiatives and update the projects and priorities for the 2025 Plan iteration.

What's in the Plan

This Plan envisions a citywide pedestrian and bicycle network based on community guidance, network analysis, and best practices.

The Plan includes:

- An expanded bicycle network that addresses gaps and enhances connectivity with on- and off-street bikeways, with consideration for commuter travel and priority transportation corridors, neighborhood recreational loops, and future recreational paths in rural areas of the city;
- Pedestrian improvements near schools, public transportation, and community destinations to allow for children and people of all ages to safely walk to popular amenities;
- Guidance for policy and programming improvements including wayfinding, bicycle parking, and educational, encouragement, and enforcement programs;
- Identification of priority locations for corridor and intersection improvements;
- Recommended performance measures to help the city track progress during implementation.

Plan Organization

The Fitchburg Bicycle and Pedestrian Plan 2025 Update is organized into the following chapters:

1. Approach

The Plan is based on an Active Living approach to create conditions that invite Fitchburg residents to walk or bicycle more often to meet their transportation, recreation, and mobility needs - connecting Fitchburg residents to schools, parks, commercial areas, employment centers, transit corridors, city services, and community gathering places through a network of reasonably direct, comfortable, and inviting routes. This chapter also outlines the community engagement approach taken during the planning process, as well as outlines the major goals of the plan.

2. Existing Conditions

A thorough review of existing conditions in Fitchburg was completed as an initial part of the Plan Update process. This review included an examination of population and census data, current and future land uses, transportation and destination locations, as well as a review of existing and adopted plans that impact the future of bicycling and walking in Fitchburg.

3. Network Recommendations

This chapter presents the recommended bicycle network and pedestrian improvements and explains the methodology and facility types used to propose route network recommendations for bicycling and walking in Fitchburg.

4. Program and Operations Recommendations

Infrastructure and facility improvements are supported and implemented through recommendations related to programs, operations, maintenance, and continued community engagement. This chapter explains these recommendations as well as recommendations related to policy, wayfinding, and bicycle parking.

5. Implementation

Specific guidance is given in this chapter related to implementation of the network and program recommendations. This chapter also provides a table outlining program recommendations described in Chapter Four, along with evaluation programs matched with anticipated outcomes, timelines, and responsible agencies.

Appendices

The Appendices contain supplemental information and documentation to be used as reference for users of the Plan update. The Appendices contain an Infrastructure Toolkit (design criteria for specific facilities); the approving Resolution for this Plan (Resolution R-174-25); a map showing existing neighborhoods not subject to sidewalk and shared-use path installation guidelines; a Resolution from 2016 setting the criteria by which those existing neighborhoods would have sidewalks or shared use paths added (R-185-16); and a Resolution approving the 2017 update to this plan (R-69-17).

Goals for the 2025 Plan Update

These goals were revised from the 2017 Plan based on feedback from the Bicycle and Pedestrian Plan Working Group (consisting of the City's Bicycle and Pedestrian Commission and local advocy group Bike Fitchburg) and city staff. The Plan's recommendations are guided by these major goals:

Expand Options

- Create a plan that makes walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach, including a variety of infrastructure and program recommendations to provide safe, comfortable, and inviting places to walk and bicycle
- Establish network and programming recommendations that are implementable within the lifetime of this plan (approximately 10 years)

Strengthen Connections

- Develop connections to the regional trail networks, adjacent communities, new developments, and historically underserved neighborhoods within the city
- Improve walking and bicycling connections to public transportation and to community destinations, including park and recreation facilities, schools, employment centers, and shopping areas

Improve Networks and Intersections

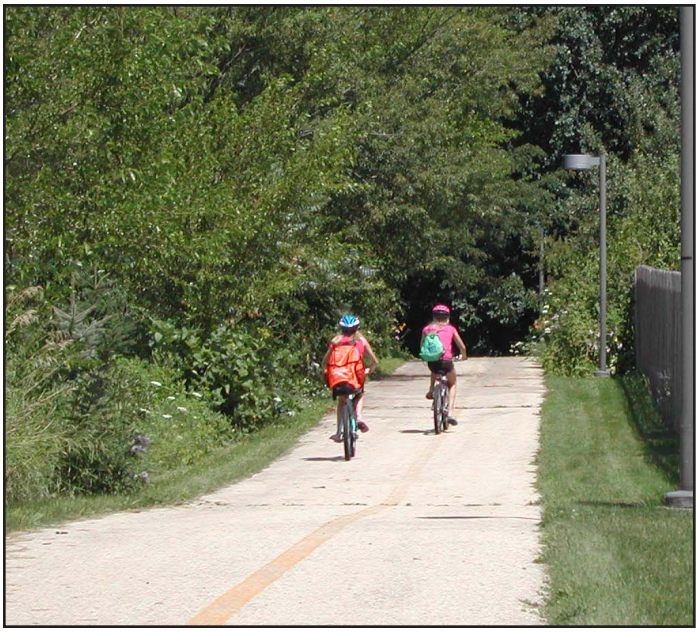
- Improve the existing bicycle and pedestrian network, prioritizing primary and critical intersections to increase safety and comfort for all people who walk, bicycle, or move in the city

Engage Stakeholders

- Strengthen, enhance, and promote education and encouragement activities through local engagement with residents, businesses, employers, and city employees
- Tailor outreach and engagement efforts that are inclusive of historically underrepresented groups in planning and decision-making processes, ensuring that the benefits of a well-connected bicycle and pedestrian network are shared by everyone

Ensure Equity

- Prioritize equitable access to walking and bicycling infrastructure in Fitchburg's Healthy Neighborhoods, ensuring all residents, regardless of income, race, or ability, have safe and convenient options for transportation



1. Approach

This chapter contains the following sections:

1.1 – Why Walking and Bicycling?

Walking is a foundation for individuals' health, well-being, and sense of connection. Walking is free and accessible for people through the widest range of ages, income levels and physical abilities. It is the most basic form of transportation - at some point during every trip, everyone is a pedestrian. Like walking, bicycling offers mobility and connectivity at a relatively low cost for residents young and old alike.

Benefits of Walking and Bicycling

Communities that provide safe, comfortable and convenient facilities for active transportation enjoy increased levels of health and equity as more people can access school, transit, employment, services, recreation, and everyday needs. A robust pedestrian and bicycle network in Fitchburg will support all people traveling within the city (including those who drive) through the following benefits:

Safety

The pedestrian and bikeways system will improve safety by providing a more interconnected network with fewer gaps, more separation from motor vehicle traffic, and calmer streets.

Livability

Increasing transportation options will help achieve broader community goals including access to jobs, neighborhood schools, and services.

Mobility

Increased walking and bicycling options in Fitchburg will enhance mobility for people of all ages and abilities, allowing everyone to reach destinations throughout Fitchburg. These destinations include public transportation, schools, retail and commercial locations, parks, and community assets like libraries and community centers.

Health

Active transportation options, like walking and bicycling, will provide an opportunity for residents to build physical activity into their daily lives. In general, communities with higher rates of walking and bicycling have higher rates of residents meeting weekly recommended physical activity levels and lower rates of obesity, diabetes, and other chronic health conditions.

An Active Living Approach

Health starts in the communities where we live, work, and play. The way communities are planned and designed plays a significant role in the physical, emotional, and financial well-being of community members. Active Living policies and initiatives seek to make physical activity (like walking or bicycling) a useful, easy, fun and normal part of everyday life for a community's residents.

Initiatives based on an Active Living approach are important for a community because they can:

- Improve physical and mental health
- Make walking and bicycling safer
- Bring people together to build safer, stronger communities
- Reduce traffic congestion, improve air quality, maximize green space, and reduce transportation costs for families
- Decrease the risk and severity of chronic disease and medical costs

Household and Community Prosperity

Walking and bicycling are affordable transportation options that reduce the cost of transportation for all. People who walk or bicycle for some of their trips are able to avoid some (and in some cases all) of the many costs associated with vehicle ownership and operation, freeing up budget for other necessities and luxuries.

Cleaner Air

When more people can walk, bicycle, or take transit to meet their transportation and mobility needs instead of driving, all residents will benefit from cleaner air and reductions in harmful pollutants caused by motor vehicles. The most harmful pollutants are emitted within minutes of starting a car. Short trips pollute more per mile, so providing safe walking and biking options that replace short trips can have a substantial benefit to environmental and physical health.

Recreation

According to a survey performed during the planning process for the City of Fitchburg Parks, Open Space, and Recreation Plan: 2015-2020, walking, hiking, jogging, and bicycling were among the top outdoor recreational uses or activities that interest and engage Fitchburg residents, especially those with families. The 2025-2030 Parks, Open Space, and Recreation Plan notes the importance of accentuating Fitchburg's unique attributes—including trails/biking, natural resources, and agricultural lands— to enhance the city's park and recreation system.

Results from a survey performed during the planning process for the City of Fitchburg Bicycle and Pedestrian Plan - 2017 Update showed that Fitchburg residents identified conditions for walking and bicycling to connect to parks and trails as a top priority. According to survey respondents, 30% biked and 54% walked recreationally four or more times per week during fair-weather months. A robust and connected network will continue to support recreational activities throughout the city.

Parking and Congestion Alleviation

Over 25% of trips in the U.S. are shorter than one mile. That's a 15-minute walk, or a 5-minute bicycle ride, an approachable distance for most people. Yet, as many as two thirds of those short trips are taken in private motorized vehicles. Providing active transportation options also means less congestion on existing roadways, less demand for parking, less time and money spent waiting in traffic, and safer conditions for people who choose to walk or bicycle. A continued effort to provide options for people to walk and bicycle can help alleviate parking and traffic congestion.

Regional Economic Competitiveness

Trails and other safe walking and bicycling infrastructure create more attractive and desirable communities and benefit from increased economic activity. Businesses that can be easily accessed by foot or bicycle are perceived as being more convenient and can benefit from customers who have additional ways to access stores.

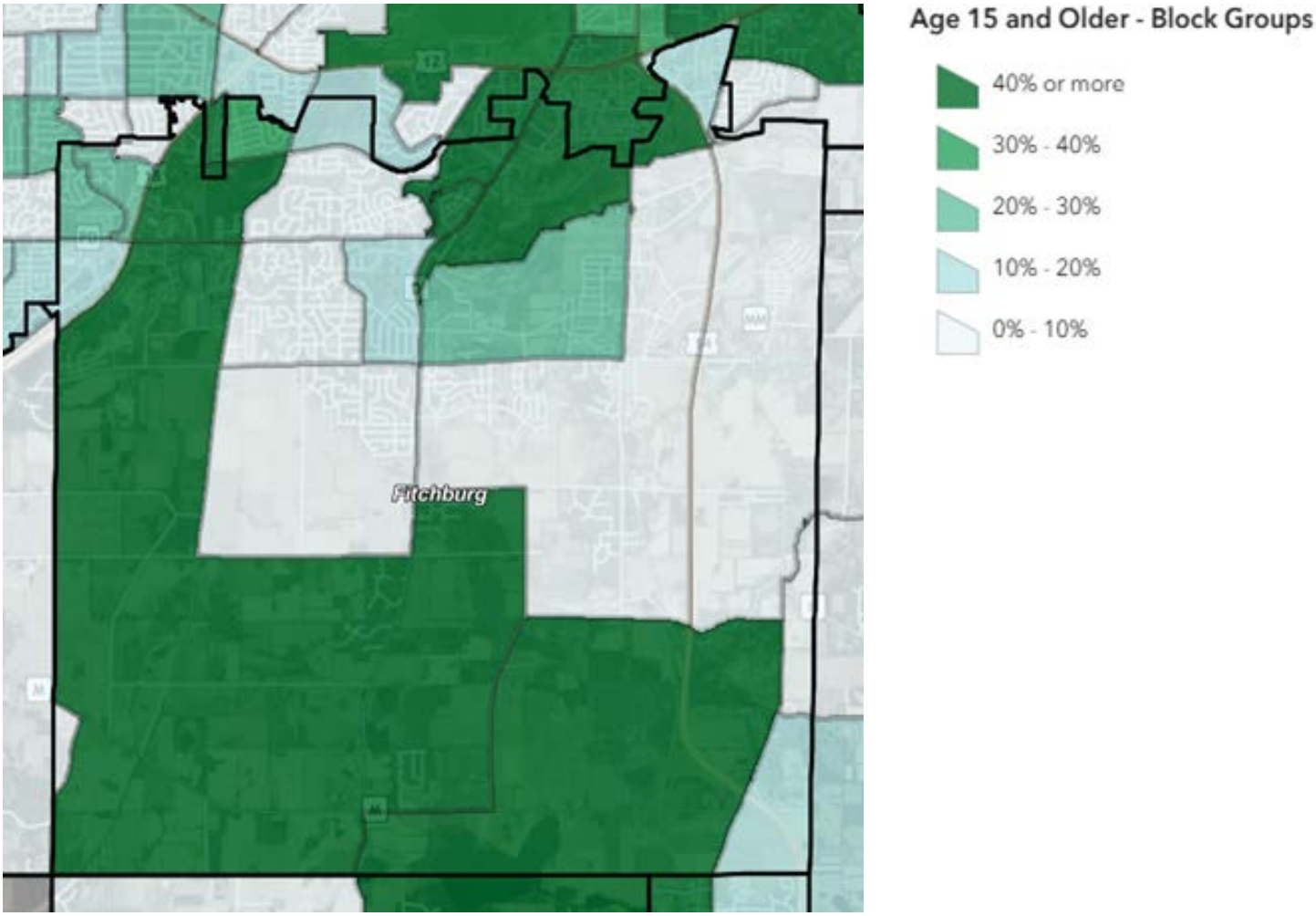
Replacing driving trips with walking and bicycling keeps more money in the local economy by not exporting it to purchase fuel. If each household in Fitchburg were able to buy two fewer gallons of gas each month at $2.91/gallon (the cost of gas at the writing of this plan) by walking and bicycling more, they would save a combined $1,041,733 a year that could be spent in the local economy.

Providing Equitable Mobility Options

For some Fitchburg residents, walking or biking may be their only option for transportation. According to the Wisconsin Department of Transportation's non-driver map, considerable portions of Fitchburg are areas where 20-40% of the residents ages 15 and older may be non-drivers. Many of these areas are also home to households of lower income which exasperates the ability to afford transportation. Combined with reduced transit service from the City's contract with Metro Transit in recent years, these households may be forced to rely on alternative transportation options like walking or biking. Providing equitable transportation options is another reason to prioritize walking and biking infrastructure.

The image below illustrates the percentage of Fitchburg's population over the age of 15 that are non-drivers. *The full interactive map created by the Wisconsin Department of Transportation (WisDOT) can be found at:* https://experience.arcgis.com/experience/afd5879501f344039f2c2482e959cdf5

Percentage of Population Age 15 and Older that are Non-Drivers
(Source: WisDOT GIS)



1.2 – Planning for a Variety of Users

The Fitchburg pedestrian and bicycle network aims to provide safe, comfortable, and inviting routes and places for walking and bicycling. Increased use will depend not only on improving the network for those currently walking and bicycling, but also on attracting new users (who may find the current system uncomfortable and therefore don't use it), especially for short trips. When evaluating implementation strategies, it is important to consider and understand general attitudes toward walking and bicycling, as well as address changing trends.

Attitudes Toward Walking and Bicycling

People have an increasing desire to live in places where they can comfortably walk or bicycle more often for recreation, health and fitness, or transportation. The Oregon Transportation Research and Education Consortium identified four general categories regarding attitudes and perceptions about bicycling. These categories are imprecise and fluid; someone might behave in a manner consistent with one category one day, and another the next based on purpose, who they are bicycling with, familiarity, or whim. As people gain experience bicycling, their attitudes and perceptions may also change. *The quotes below were gathered directly from Fitchburg residents from the 2017 Bike and Pedestrian Plan public engagement process.*

Strong and Fearless *(about 1% of people)*

"I am an advanced, confident rider who is comfortable riding in most traffic situations"

People in this group are undeterred by any roadway condition or design. They typically self-identify as bicyclists, and tend to wear specialized gear and ride high-performance bicycles. They often take the shortest route when bicycling for transportation, and seek challenges when bicycling recreationally. Separation from people walking is more important to these riders than separation from people driving. Their passion for bicycling can make them vocal advocates, but their bicycling experience differs from that of most people.

What People Want

In 2017, hundreds of Fitchburg residents shared their experiences, ideas, and priorities for improving walking/bicycling conditions in the city. Their guidance was incorporated into the Plan's network and programming recommendations.

This is what they said:

- Walking and riding a bicycle are valued activities in Fitchburg, and many residents are proud of the successes achieved over the last few years to create a community of active bicyclers and trail-users
- Closing network gaps for bicycling and walking are important
- Greater separation from motor vehicles for people walking and bicycling is desired
- Safety for pedestrians and bicycle riders at intersections is an existing concern
- Corridors with the most use are also those where safety is the biggest concern for pedestrians and bicycle riders
- Existing trees and landscape are highly valued in Fitchburg neighborhoods, especially in neighborhoods that have been established for many years

Enthusiastic and Confident
(about 9% of people)

"As a bicycling enthusiast and regular rider, I use on-street lanes and off-street trails..."

People in this group are comfortable sharing the road with motor vehicle traffic, but they prefer bicycle lanes or other designated bikeways. They may go a little out of their way for a better bikeways. Bicycling is often an important part of their identity, and they will bicycle to maintain this status. They may wear clothing that works well for bicycling, but is also wearable as everyday clothing.

Interested But Concerned
(about 53% of people)

"I could bicycle to work, but this intersection is uncomfortable"

This group represents the largest potential market for increases in ridership. People in this group prefer off-street paths, and may ride for transportation if bikeways feel safe. Comfortable conditions while bicycling are a priority. Interested but concerned riders do not self-identify as bicyclists, and would not feel guilty if they never bicycled again. Many people in this group could easily become more or less active riders - a good network may bump them into the enthusiastic and confident group, while an incomplete network or a few bad experiences may push them into the not able or interested group.

Not Able or Interested *(37% of people)*

"I live too far away to bicycle or walk to destinations"

This group includes people who have no current interest in bicycling, or who are physically unable to bicycle. Some of this group could transition into the interested but concerned group if environmental or personal circumstances changed.

Changing Trends

Connecting walking, bicycling, and transit

Nearly every transit trip involves a walking trip at the beginning, end, or both. Improving bicycle access to transit stops and stations increases the number of people served by transit catchment areas.

The City of Fitchburg is serviced by several City of Madison Metro Transit bus lines connecting residents and visitors from the northern portion of Fitchburg (Urban Service Area) to Madison. Metro Transit buses are equipped to carry two to four bicycles at a time, and strollers are allowed on the buses. See Figure 2.2 in Chapter 2 for a map of current Metro Transit service routes and stops. The proposed second North-South Madison Metro Bus Rapid Transit (BRT) line is anticipated to begin service in 2028, featuring a segment through Fitchburg.

Driving habits are changing

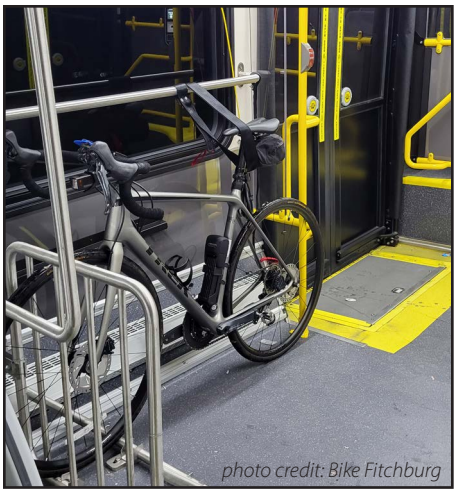
For nearly 45 years from 1960 onward, per capita vehicle-miles traveled (VMT) increased at a steady rate. Then, in 2004, the predictably upward trend changed, as Americans started driving less. Initially, the reversing trend was hypothesized to be a consequence of higher gas prices and an economic downtown. However, the trend has continued through the economic recovery. Nationally, VMT per capita has declined 1.03% percent since its peak in 2004. In Dane County, VMT per capita fell 1.1% from about 9,930 miles per person in 2004, to 8,840 miles per person in 2024. Statewide, VMT per capita has increased, though experienced a significant drop significantly during the height of the Covid-19 pandemic in 2020 (Wisconsin Department of Transportation).

More people are walking and bicycling

Countywide American Community Survey (ACS) trends show a significant increase in the number of workers who are choosing alternative modes of travel than driving when commuting to work. From 2011 to 2023, the percentage of workers aged 16 and older driving to work decreased from 81.5% to 71%, respectively. During that same period, the percentage of workers biking or walking to work in Dane County increased slightly from 7.8% to 8.1%. Much of this decrease in commuting by car is attributable to the rise of remote work in the aftermath of the Covid-19 pandemic.

In light of the pandemic's social distancing indoors policies, many more people took to biking and walking outdoors for recreational and social purposes. This is seen in the Bike League's Nation Household Travel Survey (NHTS) data. From 2017 to 2022, the share of walking and biking trips for the purpose of recreational or social activities increased from 37% to 43.5%.

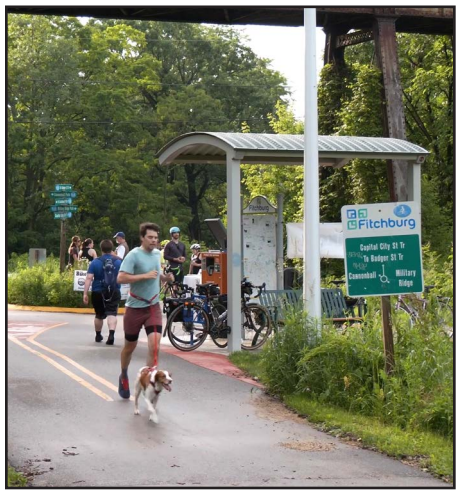
More people are also bicycling casually, wearing everyday clothing and riding bikes because it fits into their lives. The demographics of people who bicycle are also beginning to better reflect the population as a whole, including increasing rates among non-white groups, women, and seniors according to the Bike League's NHTS.



Bike parking on a Madison Metro bus

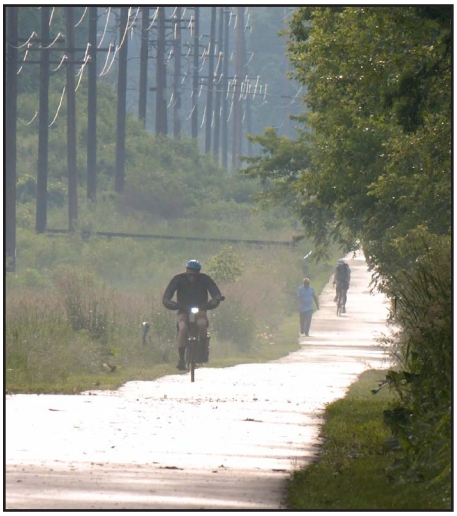
People are using existing trail systems differently

The City of Fitchburg has over 93 miles of sidewalks and approximately 55 miles of shared-use paths and trails within the city. Major commuter paths include the Capital City State Trail, Military Ridge Path, Military Ridge State Trail, the Southwest Path, Cannonball Path, and the Badger State Trail. The number of people using these trails both recreationally and for transportation purposes has increased over the last decade. See Figure 2.6 for the Existing Pedestrian Network in Fitchburg.



The approach to pedestrian and bicycle planning is changing
Today, communities, cities, counties, and states are making a shift in the approach to pedestrian and bicycle planning. Planners and policymakers are re-learning the importance of balancing the needs of all roadway users including people walking, bicycling, driving, and taking transit. Communities across the country are adopting pedestrian and bicycle plans, Safe Routes to School initiatives, and Complete and Living Streets policies - all of which work towards a common goal of making walking and cycling better for people.

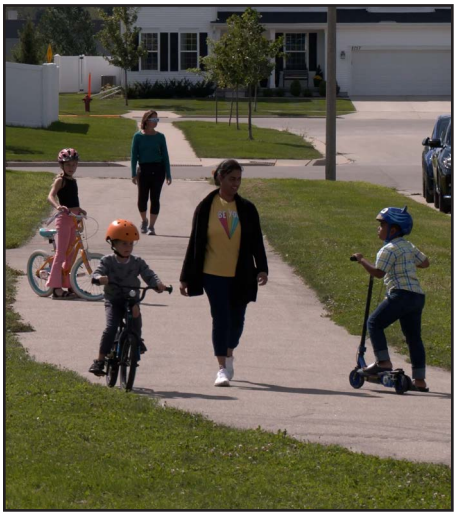
Planning and implementing networks that make walking and bicycling safe, convenient, and inviting encourages more people to try walking and bicycling. As more people walk and bicycle, use of (and demand for) quality infrastructure increases, fostering a community culture that encourages and accepts walking and bicycling as a normal, enjoyable part of everyday life.



Increasing prevalence of micromobility

The 2017 plan recommended the exploration of partnership to introduce a bike share system to the City of Fitchburg. In 2023, the Madison-based BCycle bike share company introduced its first set of stations to the City. At the time of this plan being developed, there are 22 BCycle stations with over 160 docks, and over 100 electric bikes available in Fitchburg. Through this partnership, Fitchburg joins an established bike share program in Madison, Monona, and McFarland, making e-bikes available through hourly or monthly/annual passes to residents, employees, and tourists.

This recent development follows the nationwide adoption of bike and scooter sharing systems that promote micromobility modes of travel. Micromobility refers to small, low-speed vehicles used for personal transportation, including bicycles, electric scooters, and bike share systems, typically utilized for short distance trips. These types of micromobility vehicles are becoming increasingly common across the US. In 2015, there were only 67 US cities that had adopted a type of shared micromobility system. As of 2023, this number has increased to well over 200 cities, with dockless e-scooters leading the way as the most adopted micromobility system type.



1.3 – The 6 E's of Pedestrian and Bicycle Planning

One effective way of thinking about and implementing pedestrian and bicycle planning initiatives is to consider six categories that proposed interventions may fit into: Engineering, Education, Encouragement, Enforcement, Evaluation, and Equity - commonly known as the 6 E's.

About the 6 Es

Engineering

Engineering recommendations are "on-the-ground" improvements. Engineering involves the planning, design, construction, and maintenance of infrastructure including roads, walkways, bikeways, intersection treatments, signage, and end-of-trip facilities.

Education

Education programs teach people about the benefits associated with walking and bicycling investments, about rules of the road, and how to access and use existing amenities. Education programs include pedestrian and bicycle safety trainings, promotional campaigns, and network maps.

Encouragement

Encouragement programs inspire more people to try walking or bicycling through fun and inviting activities including friendly competitions, incentive programs, inclusive group rides, and community-wide events like Open Streets.

Enforcement

Enforcement programs often include participation from local law enforcement with a focus on enforcing traffic safety laws like speed limits, parking regulations, and general roadway behavior.

Evaluation

Evaluation programs measure the success of investments at achieving desired outcomes. Evaluation takes place before and after programming and infrastructure improvements to establish a baseline and measure progress overtime. Examples of performance measures that may be evaluated include public perception, behavioral changes and modal shifts, and network safety.

Equity

Equity focuses on distributing facility and programming improvements fairly throughout a community to ensure that residents of all neighborhoods and population groups have equal access to high quality infrastructure and programs. Equity efforts include intentionally focusing engagement efforts to reach diverse populations, and equitably implementing infrastructure and programs throughout a community to overcome economic, geographic, social, and physical barriers to walking and bicycling.

1.4 – Community Engagement

Public engagement was was limited for this 2025 Plan update, due to budgetary and other resource constraints. A Working Group, consisting of the Bicycle and Pedestrian Commission (BPC) and two members of Bike Fitchburg, worked with City staff and the MSA project team, to guide and provide feedback for this update. Additional feedback was requested from elected officials and additional City committees.

Using online and in-person methods, the Working Group consulted and advised the project team on existing conditions, user routes, needs and destinations, and priorities for bicycling and walking.

2017 Community Outreach

The following events and activities were hosted by the 2017 planning team to garner community feedback:

- 9 in-person events invited people to share experiences and ideas for improving walking and bicycling in the city
- Over 100 unique users logged into the interactive online map
- More than 190 map comments, including destinations, routes, barriers, and ideas shared in person and online
- 347 project surveys completed online

Public input session for the 2017 Bicycle and Pedestrian Plan update at McKee Farms Park

Key feedback from these efforts included:

- The most popular reasons for walking and bicycling in Fitchburg are for pleasure or exercise, and most people stated that they walk for this purpose two or more times per week.
- Walking to work, school, or to connect with public transportation is not a popular reason for Fitchburg residents to walk, with a majority of survey participants reporting that they never walk for these purposes. However, over half of participants reported bicycling beyond the city limits two or more times per week.
- A barrier to walking and bicycling identified by many residents is a lack of walkways or trails to the places where they would like to go.
- Corridors that raise the most safety concerns for bicyclists and pedestrians are also the same corridors that are used the most by bicyclists and pedestrians (such as McKee Road, Lacy Road, Fish Hatchery Road, Syene Road, CTH M, and Whalen Road).
- Residents who live in established neighborhoods where sidewalks do not currently exist have concerns that the construction of sidewalks will result in the destruction of mature street trees or disrupt the existing streetscape.
- Connecting gaps in the current bicycle and pedestrian network is of highest priority for most respondents.

- A barrier for many people walking and bicycling are long distances between popular destinations, such as schools and places of work. A large portion of the City in the Urban Service Area developed in a suburban land use pattern with separated uses and a hierarchical street network. Many people in Fitchburg commute outside of the city every day.
- Conditions for pedestrian connections to public transit are a priority, especially for people who are elderly or disabled.
- Some residents feel that there is already enough infrastructure and bicycle/pedestrian facilities in Fitchburg.
- Many people feel unsafe crossing busy intersections, many of which are along McKee Road and Lacy Road.
- In general, the cross-city network of trails that run north-south are serving the recreational and commuter bicycling population well. However, east-west connections are more difficult and less frequent.

The complete processes and results of the 2017 Plan community engagement efforts were included in the 2017 update of this Plan as *Appendix C: https://www.fitchburgwi.gov/DocumentCenter/View/15653/Fitchburg_BikePedPlan_2017?bidId=*.

Bicycle and Pedestrian Commission (BPC)

The charter of Fitchburg's Bicycle and Pedestrian Commission reads as follows:

> *"This commission shall encourage and promote bicycling and pedestrian activity at all levels in Fitchburg by identifying bicycle and pedestrian routes, promoting the safe use of roads, trails, and road crossings, and making recommendations for making the city more walkable. This commission shall also work to identify social and economic barriers to cycling and walking and identify opportunities to make cycling and walking more accessible for everyone. This commission shall use the Bicycle and Pedestrian Plan as a map to accomplish these goals and will be the lead body for the periodic review of this document."*

For the 2025 Plan update, the Bicycle and Pedestrian Commission (BPC) was tasked with guiding the direction of the project, offering guidance for the plan recommendations and serving, along with members of Bike Fitchburg, as community experts on biking and walking in Fitchburg. The BPC is comprised of one Alderperson, one Fitchburg Chamber of Commerce representative, and six Fitchburg residents.

Working Session

The project team hosted a visioning workshop on March 14th, 2025, for members of the Plan Working Group to review the City's progress since the 2017 Plan and provide feedback for future improvements. Workshop activities included a presentation, a group SWOT analysis of Strengths, Weaknesses, Opportunities, and Threats (**Table 1.1**), and maps of the city's bicycle and pedestrian network, on which attendees could identify the specific locations of hazards and network gaps.

Figure 1.1 illustrates the quantity, distribution, and general themes of the 57 total comments received from the mapping exercise. This input generally fit into one of four categories:

- Safety hazards for pedestrian crossings and bicycle visibility
- Desirable amenities, including bicycle parking, B-Cycle and charging stations
- Expanding recreational opportunities with mountain biking trails
- Improving connectivity by identifying network gaps

Figure 1.1 – Map of Working Session Responses
(MSA Professional Services)

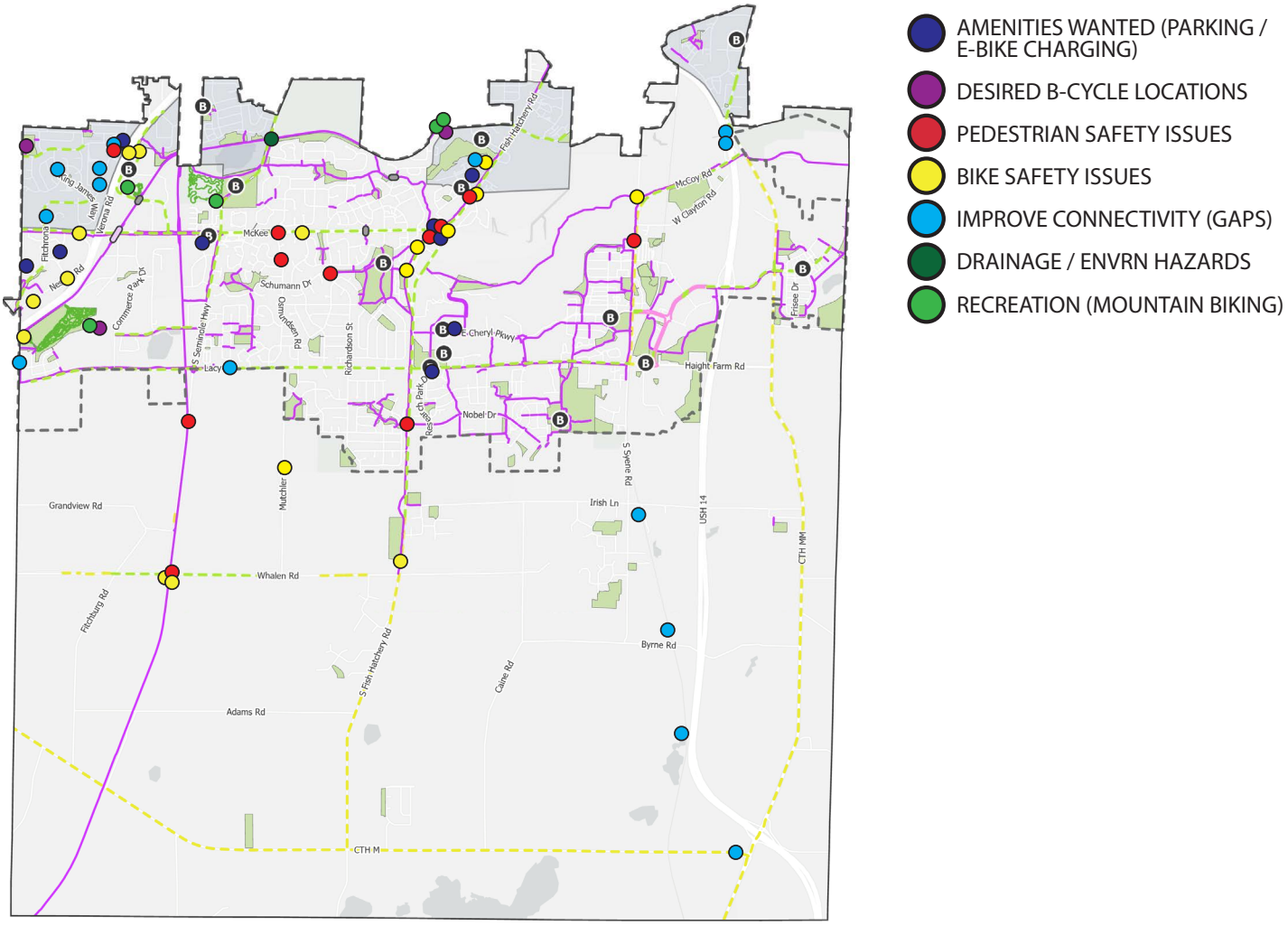


Table 1.1 – BPC Workshop SWOT Analysis

Strengths

- B-Cycle partnership
- Established advocacy group
- Well-maintained infrastructure and shared use paths network
- Recreation system is well-connected and well-used (especially for a cold climate)
- Natural advantages (historic rail line corridors and ample open space)
- Regional identity while maintaining unique local character through events, charities, Chamber of Commerce
- Award-winning City for bicycle facilities
- "Active Living" focus
- Support from local businesses and community
- New neighborhoods development pattern inclusive of recreation spaces and bike and pedestrian accommodations

Opportunities

- Partnerships with community organizations/ nonprofits to spread information, togetherness, and mutual support
- Work with schools to provide safe routes for children (new source of funding) and volunteer programs like bike buses/walking school buses
- Connect with HUB community center programming for events like weekly rides
- Capitalize on current momentum in the community for public events and improvement projects
- Work with Chamber of Commerce to attract bike-related businesses
- Opportunities to align bike/ped efforts with the Sustainability Plan, complete streets initiatives, and regional efforts such as Madison's bus rapid transit (BRT) line
- Consider needs and desires of future users/new neighborhoods/ developments

Weaknesses

- Strict sidewalk resolutions limit ability to add sidewalks to existing neighborhoods and are a barrier to community building, create a "two-tiered" system between old and new neighborhoods
- Size constraints of Fitchburg, lack of certain amenities that are tied to density
- Gaps in network on major arterial roadways (Lacy Road, Verona Road, etc)
- Hazards to pedestrian safety, including paved shoulders, need more sidewalks and pedestrian-ways, and high-speed motor vehicle traffic
- Need for action and education
- Need for representation- prioritize actions that will benefit the highest number of people

Threats

- Unpredictable federal funding opportunities
- "NIMBY"-ism and general resistance to change
- Suburban sprawl and continued low-density growth
- Lacking education for rider safety and drivers sharing the road
- Lack of Fitchburg-specific School District with whom the BPC could connect directly
- Need for communication between City and public
- Lack of bike repair stations and bike shops within city limits

In addition to input garnered from the SWOT analysis outlined in **Table 1.1**, key themes emphasized by the BPC included:

- General Comments
  - Desire for more measurable, concrete goals wherever possible
  - Opportunities to indicate a price range (cost) or possible incentives (federal/state/local) wherever possible
- Bicycle-Specific Comments
  - Need for stricter enforcement of speed limits in hazardous areas, especially paved shoulders on high-speed roadways to the south
  - Reduce the length of passing zones and consider reducing speeds in areas with on-road bike lanes or paved shoulders
  - Add more visible paint, striping and signage to encourage bike visibility for drivers
- Pedestrian Specific Comments
  - Replace RRFB's w/ HAWKS (safer and more inclusive for pedestrians)
  - Slow traffic down where possible
  - Need for more controlled intersections (accessible pedestrian signals, raised crossings, and leading pedestrian indicators, no turn on red, protected only left turns)
  - Paint streets in all areas without sidewalks (as in painted pedestrian walkways)
  - Assess drainage at key intersections
  - Engage with residents from the identified healthy neighborhoods to provide education on walking imperatives and safety

City Board/Commission Presentations

The 2017 Plan and a final draft of the 2025 Plan update were presented to several ad-hoc, advisory and City boards/committees to solicit feedback before Common Council's final vote for approval. The following committees were presented with drafts of the Bicycle and Pedestrian Plan:

- Bicycle and Pedestrian Commission (BPC)
- Transportation and Transit Commission (TTC)
- Community Equity Advisory Committee (CEAC)
- Healthy Neighborhoods Advisory Commission

City Council Member Interviews

City council members were invited respond to the following questions presented by the Committee:

- *How has the 2017 Bicycle and Pedestrian Plan served you and your constituents? What are some of the outcomes that you have seen as a result of this plan? What are some of the challenges that this plan has faced?*
- *What do you see as the biggest opportunity for this Plan Update?*
- *What are some goals/visions/priorities that you would like to be included in the Plan Update?*
- *What do you see as the biggest challenge or roadblock in your district to providing safe and accessible places to walk and bicycle?*
- *Which intersections or roads are the biggest priority to address, when trying to provide safe and accessible places to walk or bicycle?*
- *What intersections, roads, paths, etc. (whether in Fitchburg or not) do you see as examples of what a bike- and pedestrian-friendly Fitchburg would ideally look like?*

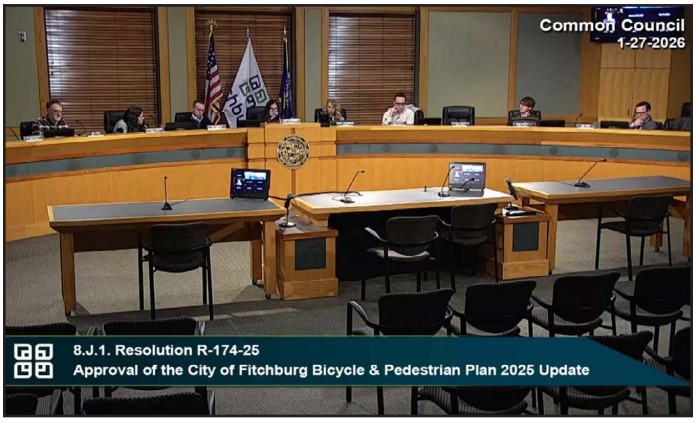
One former City council member and current State Representative participated in this exercise, providing this insight:

- There is an opportunity to emphasize intersection safety and low-cost measures (painting crosswalks/curb ramp replacement/stop block painting/etc, opposed to complete overhaul of street design)
- McKee Road is a major barrier for cyclists and pedestrians wanting to reach paths around the Arboretum
- Notable intersections for improvements:
  - Osmundsen Road / McKee Road (should consider an RRFB with overhead gantries such as those installed in the City of Madison)
  - Lacy Road /Richardson Street (fix the curb ramp on the south side and paint the crosswalk across Lacy Road
  - Paint crosswalks at priority intersections: Fish Hatchery Road / Nobel Drive, East Cheryl Parkway / Hollyhock Street and Crinkle Root Drive, Rimrock Road / Burroughs Drive, Pembroke Drive / Richardson Street
  - Paint [*stop boxes*] (like those at the Pembroke Drive / Raritan intersection) at other City intersections with stop signs
  - Consider removal of unnecessary/poorly-enforced stop signs where cul-de-sacs meet a main street (Seminole Forest, Seminole Ridge, and Wildwood neighborhoods)
- Additional projects identified as priorities:
  - Extend bike lanes further on Whalen Road
  - Construct a continuous sidewalk on south side of Lacy Road from Osmundsen Road to Fish Hatchery Road
  - Improve connections to Rimrock Park and the Southdale Neighborhood
- Examples of successful projects in the City:
  - Syene Road improvements
  - Ladder-style painted crosswalks on Schumann Drive at Park Hill Circle
  - HNI Neighborhoods

Plan Adoption

At their December 9, 2025 meeting, Fitchburg Common Council referred the final Plan draft to the Bicycle & Pedestrian Commission (December 7, 2026), the Transportation and Transit Commission (January 8, 2026), and the Community Equity Advisory Commission (December 15, 2025). Both BPC (at a special January 21, 2026 meeting) and TTC recommended approval of the Plan to Common Council, while CEAC tabled a vote and requested future opportunities to discuss equitable implementation of the plan and development of metrics to track said implementation.

At their January 27, 2026 meeting, Fitchburg Common Council unanimously approved the final draft of the Bicycle and Pedestrian Plan, requesting a series of final technical and clerical corrections before its publication.



1.5 – Goals for the Plan

Recommendations are guided by the following major goals, which were developed through the 2025 Plan update process:

Expand Options

- Create a plan that makes walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach, including a variety of infrastructure and program recommendations to provide safe, comfortable, and inviting places to walk and bicycle
- Establish network and programming recommendations that are implementable within the lifetime of this plan (approximately 10 years)

Strengthen Connections

- Develop connections to the regional trail networks, adjacent communities, new developments, and historically underserved neighborhoods within the city
- Improve walking and bicycling connections to public transportation and to community destinations, including park and recreation facilities, schools, employment centers, and shopping areas

Improve Networks and Intersections

- Improve the existing bicycle and pedestrian network, prioritizing primary and critical intersections to increase safety and comfort for all people who walk, bicycle, or move in the city

Engage Stakeholders

- Strengthen, enhance, and promote education and encouragement activities through local engagement with residents, businesses, employers, and city employees
- Tailor outreach and engagement efforts that are inclusive of historically underrepresented groups in planning and decision-making processes, ensuring that the benefits of a well-connected bicycle and pedestrian network are shared by everyone

Ensure Equity

- Prioritize equitable access to walking and bicycling infrastructure in Fitchburg's Healthy Neighborhoods, ensuring all residents, regardless of income, race, or ability, have safe and convenient options for transportation

2. Existing Conditions

This chapter contains the following sections:

2.1 – Fitchburg in Context

The City of Fitchburg is located in Dane County, Wisconsin, directly south of the City of Madison. The city is in the southern part of the Madison Metropolitan Statistical Area. It is bounded by the City of Verona to the west and the Village of Oregon to the south. At 35 square miles, Fitchburg has the largest area of any suburban municipality in the Madison area. The City's estimated 2024 population was 35,125 people. See **Table 2.1** for census population information for Fitchburg.

Regional Corridors

Roadways

Principal arterials in Fitchburg include US Highways 14 and 18/151 (Verona Road), County Highway D (Fish Hatchery Road north of McKee Road) from the Beltline to McKee Road, and County Highway PD (McKee Road). These roadways are not under the jurisdiction of the City of Fitchburg.

The roadway network follows a typical suburban development hierarchy: minor arterials (generally county roads spaced about every mile) provide automobile-oriented connections to commercial areas, employment centers, and other important destinations. Neighborhood streets provide limited connectivity within the larger grid - sometimes ending in cul-de-sacs or dead ends, and funneling traffic out onto high-speed, high-volume arterials.

- Minor arterials in Fitchburg include County Highway M, County Highway MM, Rimrock Road, and McCoy Road.
- Major collector roads include Lacy Road, South Syene Road, Seminole Highway, Irish Lane, and Whalen Road.

Shared Use Trails and Paths

The City of Fitchburg is well known throughout the region and the state for having a successful and growing bicycle and path infrastructure. Several state bicycle corridors are in Fitchburg. The Capital City State Trail (17 miles total) runs east-west through the Urban Service Area of the north side of Fitchburg. The Military Ridge State Trail (40 miles total) connects Fitchburg to the communities to the west, such as Verona, Mount Horeb, and Blue Mounds. The Badger State Trail (40 miles total) runs north-south through the western side of Fitchburg, connecting to Belleville, Monticello, Monroe and the Jane Adams State Trail (Illinois) to the south.

These three state trails converge at the Dunn's Marsh Roundabout, also connecting to the Cannonball Path and City of Madison's Southwest Path. The Dawley Bicycle Hub, located east of the Roundabout, off Seminole Highway, has a small parking lot for cars as well as a bicycle repair station, an informational kiosk, restroom facility, water-bottle filling station, and an observation deck. The observation deck offers views of Dunn's Marsh and the surrounding prairie.

Fitchburg also offers numerous shared use paths that connect pedestrians and bicyclists to the state and regional trails, as well as to parks, schools, places of employment, and other neighborhood and commercial destinations.

The City of Fitchburg is a recipient of the Bicycle Friendly Community Award, given by the League of American Bicyclists, with Silver Status in 2023, following an initial bronze designation in 2012 and subsequent silver designations in 2015 and 2019.

Table 2.1 - Fitchburg Population by Numbers
(Data is from the American Community Survey (ACS) 2023 5-Year Estimate, unless otherwise noted)

SELECTED CHARACTERISTIC	FITCHBURG	DANE COUNTY
POPULATION		
Population estimates, 2023 ACS-5 Year	31,566	564,777
Population, 2020 Census	29,609	561,504
Population Projection for 2030 (WI DOA)	37,798	627,215
GEOGRAPHY		
Population per square mile (2020 Census)	847.9	469.3
Land area in square miles (2020 Census)	34.9	1,196.5
AGE AND SEX		
Persons under 5 years, percent	5.6	5.2
Persons under 18 years, percent	17.3	20.0
Persons 65 years and over, percent	14.4	14.7
Female persons, percent	46.7	50.0
RACE AND HISPANIC ORIGIN		
White alone, percent	65.2	79.0
Black or African American alone, percent	9.8	5.1
American Indian and Alaska Native alone, percent	0.3	0.3
Asian alone, percent	9.8	6.0
Two or More Races, percent	9.6	7.8
Hispanic or Latino, percent	16.3	7.6
White alone, not Hispanic or Latino, percent	59.9	76.7
POPULATION CHARACTERISTICS		
Veterans	933	20,586
Foreign-born persons, percent	15.6	8.7
HOUSING		
Total housing units	15,274	254,880
Owner-occupied housing units, percent	45.9	57.7
Median value of owner-occupied housing units, dollars	389,400	366,100
Median selected monthly owner costs - with a mortgage, dollars	2,365	2,141
Median selected monthly owner costs - without a mortgage, dollars	1030	877
Median gross rent, dollars	1302	1345

SELECTED CHARACTERISTIC	FITCHBURG	DANE COUNTY
FAMILIES AND LIVING ARRANGEMENTS		
Total households	14,916	245,736
Average household size, persons	2.06	2.24
Language other than English spoken at home (>5 years age), percent	19.2	11.0
COMMUTING TO WORK		
Drove alone, percent	72.0	65.2
Carpooled, percent	7.1	5.8
Public transit, percent	0.4	3.1
Walked, percent	4.2	5.2
Other means, percent	2.5	2.9
Worked at home, percent	13.7	17.8
Mean travel time to work, minutes	20.2	20.8
INCOME AND POVERTY		
Median household income, dollars	85,420	88,108
Per capita income, dollars	55,926	51,486
Persons in poverty, percent	7.5	10.5

Development Patterns

The pattern of development in Fitchburg is characterized by urban and suburban development in the northern portion of the city (also known as the Urban Service Area, which is supplied with city water, fire hydrants, sewer and other urban services) and rural farmland and abundant open space in the southern portion. This pattern is likely to remain for many years, as the City is committed to maintaining a balance of rural and urban areas. A goal, as stated in the 2020 Comprehensive Plan, is to "Plan transportation infrastructure in both redevelopment projects and new developments to encourage compact, urban development patterns." See **Figure 2.1** for Existing Land Use in Fitchburg.

Recent urban development areas have been located adjacent to or within existing developed neighborhoods. There are neighborhood plans in place for the pre-existing neighborhoods of Arrowhead, Anton Drive, and Southdale. There are also neighborhood plans for several greenfield neighborhoods in various stages of development, including the Northeast, North Stoner Prairie, and McGaw Park North neighborhoods. Under a joint agreement between the City of Madison, Town of Madison, and the City of Fitchburg, two land areas in the former Town of Madison became a part of Fitchburg in 2022, one of which was the Southdale neighborhood.

The future urban development areas of Greenfield and South Stoner Prairie neighborhood areas are currently undergoing a neighborhood planning process at the time of this plan being developed.

Figure 2.1 - Fitchburg Existing Land Use Map

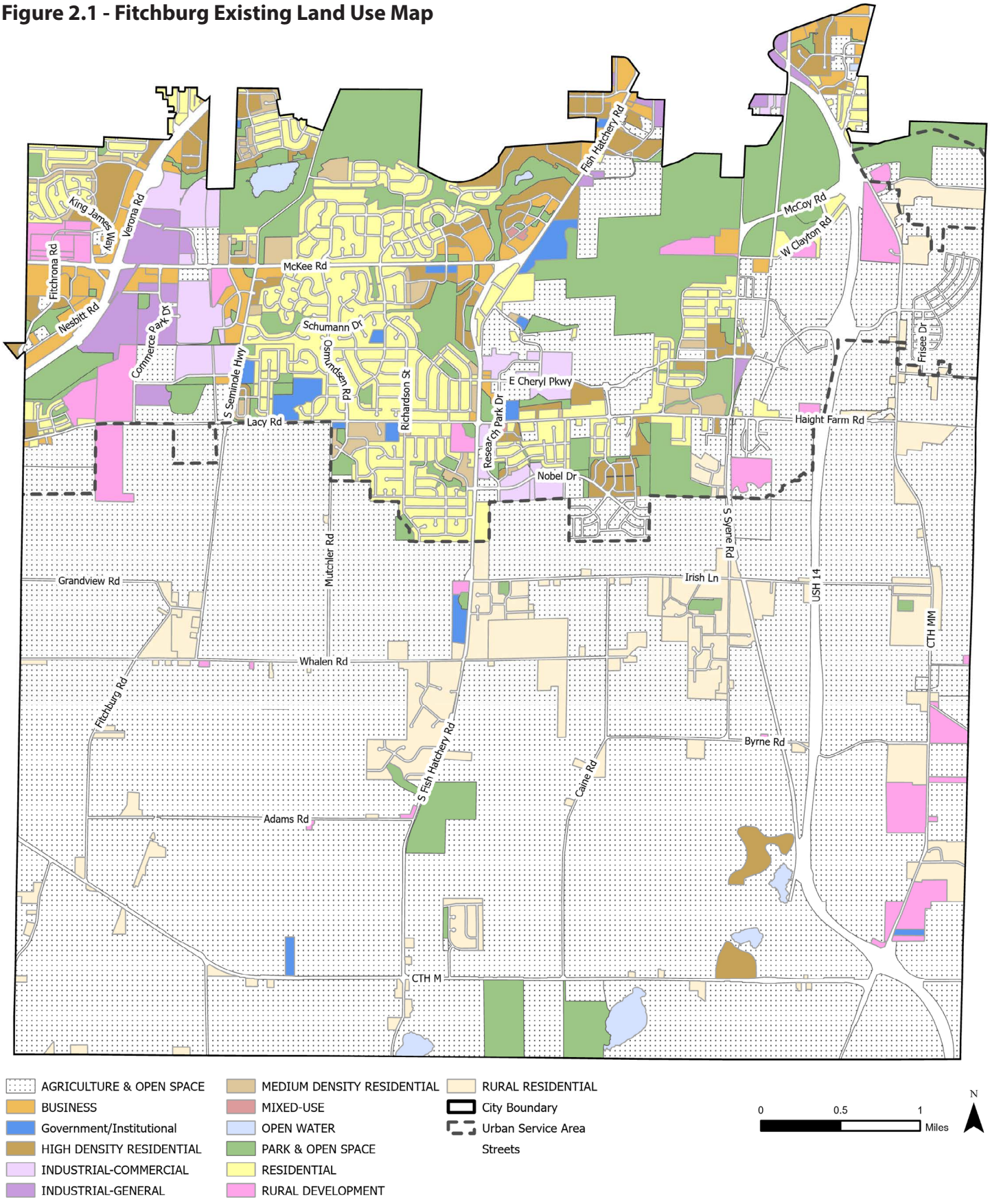



Photo credit: Bike Fitchburg

Connections to Transit

The City of Fitchburg is serviced by several City of Madison Metro Transit bus lines connecting residents and visitors from the northern portion of Fitchburg (Urban Service Area) to Madison. Metro Transit buses are equipped to carry two to four bicycles at a time, and strollers are allowed on the buses. The routes which service Fitchburg primarily travel along Verona Road, Fish Hatchery Road, East Cheryl Parkway, and CTH MM. Notably, due to reconfiguration of the bus system in 2023, some routes have been eliminated, reducing coverage for certain neighborhoods in Fitchburg, while increasing the frequency of other routes, particularly the B-Route. B-Route ridership has increased by 110% between 2023-2024. See **Figure 2.2** for Existing Metro Transit Routes and Stops.

The proposed second North-South Madison Metro Bus Rapid Transit (BRT) line was initially anticipated to begin service in 2027, however, changes to federal transit grant programs may cause delays in implementation. This route would run north to south from the north side of Madison, down through the capitol area, and south along Park Street, eventually terminating in Fitchburg off of South Fish Hatchery Road. This BRT line would improve transit travel times, convenience, and connectivity between Fitchburg and Madison.

Connections to Schools

Three school districts operate in Fitchburg, including Madison Metropolitan, Oregon and Verona Area school districts. Within the city limits, Savanna Oaks Middle School and Stoner Prairie Elementary School are a part of the Verona Area school district, while Forest Edge Elementary School is part of the Oregon school district. Also located within the city limits is the EAGLE School, an independent K-8 school. Immediately adjacent to the Fitchburg city limits, located in the north Fish Hatchery Road area is Aldo Leopold Elementary School, a public school serving the Madison Metropolitan district. See **Figure 2.3** on the following pages for Community Destinations and Walk Sheds, which include school locations in and near Fitchburg.

Figure 2.2 – Existing Metro Transit Routes and Stops

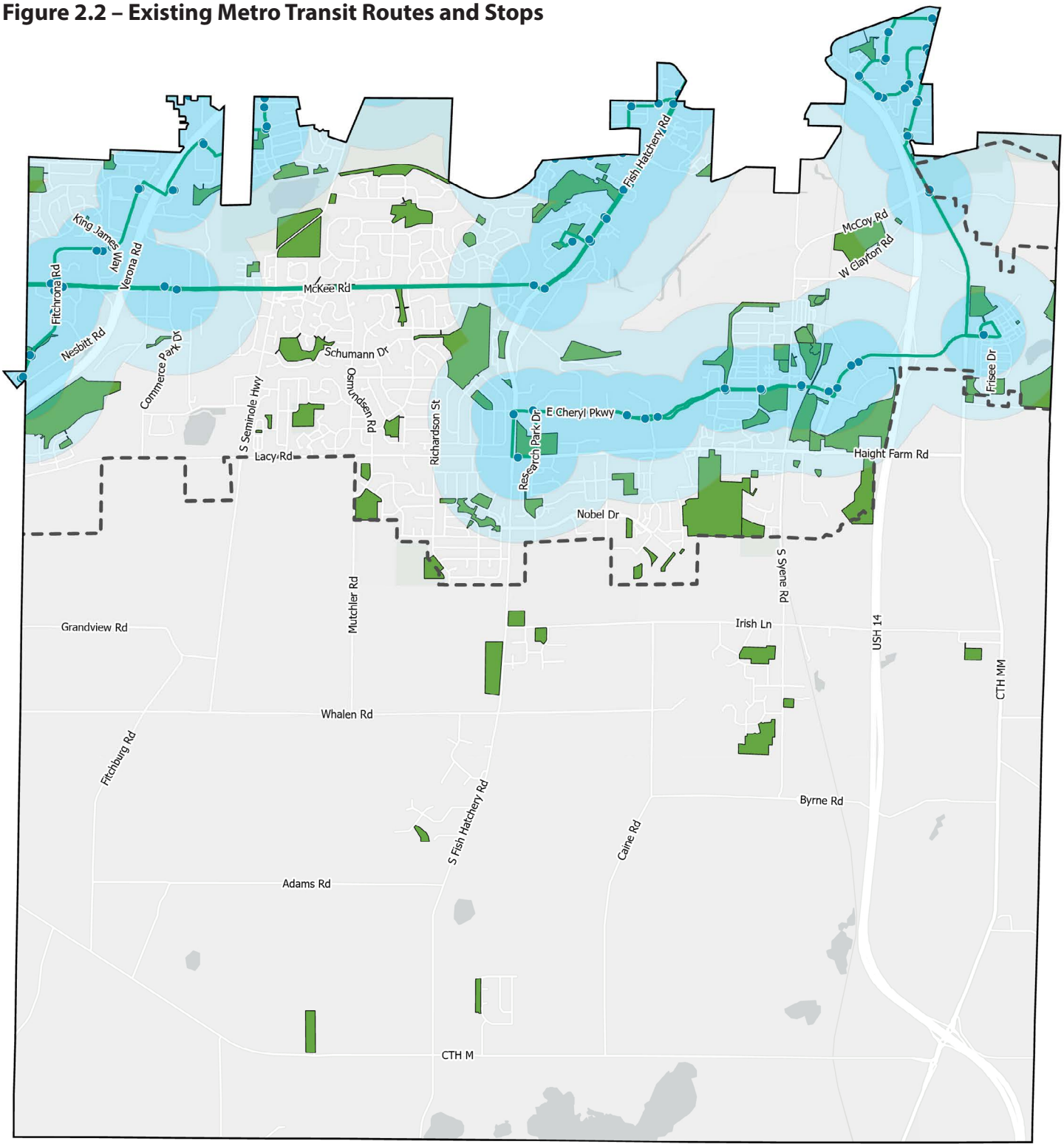
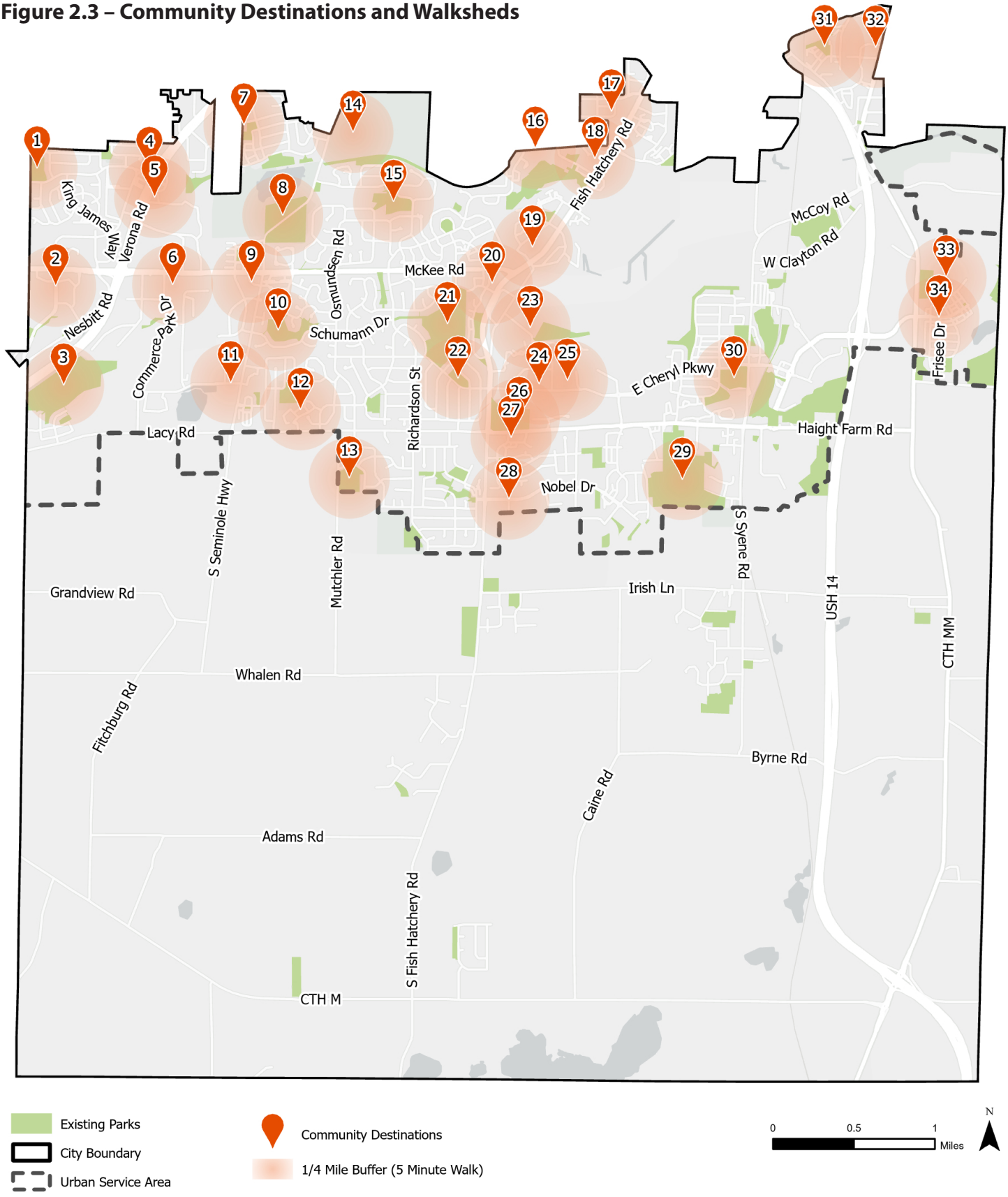


Figure 2.3 – Community Destinations and Walksheds



Community Destinations Map IDs.

Map ID	Destination
1	Huegel-Jamestown Park
2	Commercial Center
3	Quarry Ridge Recreation Area
4	Commerce and Multifamily
5	McKenzie Regional Workforce Center
6	Cinema
7	Boys and Girls Club of Dane County
8	Dawley Conservancy and Bike Hub
9	Commercial Center
10	Seminole Glen Park
11	Commerce and Sub-Zero/Wolf Campus
12	Schools (Savannah Oaks MS and Stoner Prairie ES)
13	Wildwood South Prairie Park
14	UW Arboretum South
15	Chicory Meadows Park
16	Aldo Leopold Elementary School
17	Commerce and Multifamily
18	N Fish Hatchery Hub/Commercial Center
19	Commercial Center
20	Commercial Center
21	McKee Farms Park
22	Tower Hill Park
23	Eagle School
24	Commercial Center/Farmers Market
25	Promega Campus
26	Fitchburg Civic Campus
27	Commerce and Multifamily
28	Industrial Center
29	McGaw Park
30	Swan Creek Park
31	Southdale Park
32	Commerce and Multifamily
33	Forest Edge Elementary School
34	Terravessa Commerce

Connections to Parks and Trails

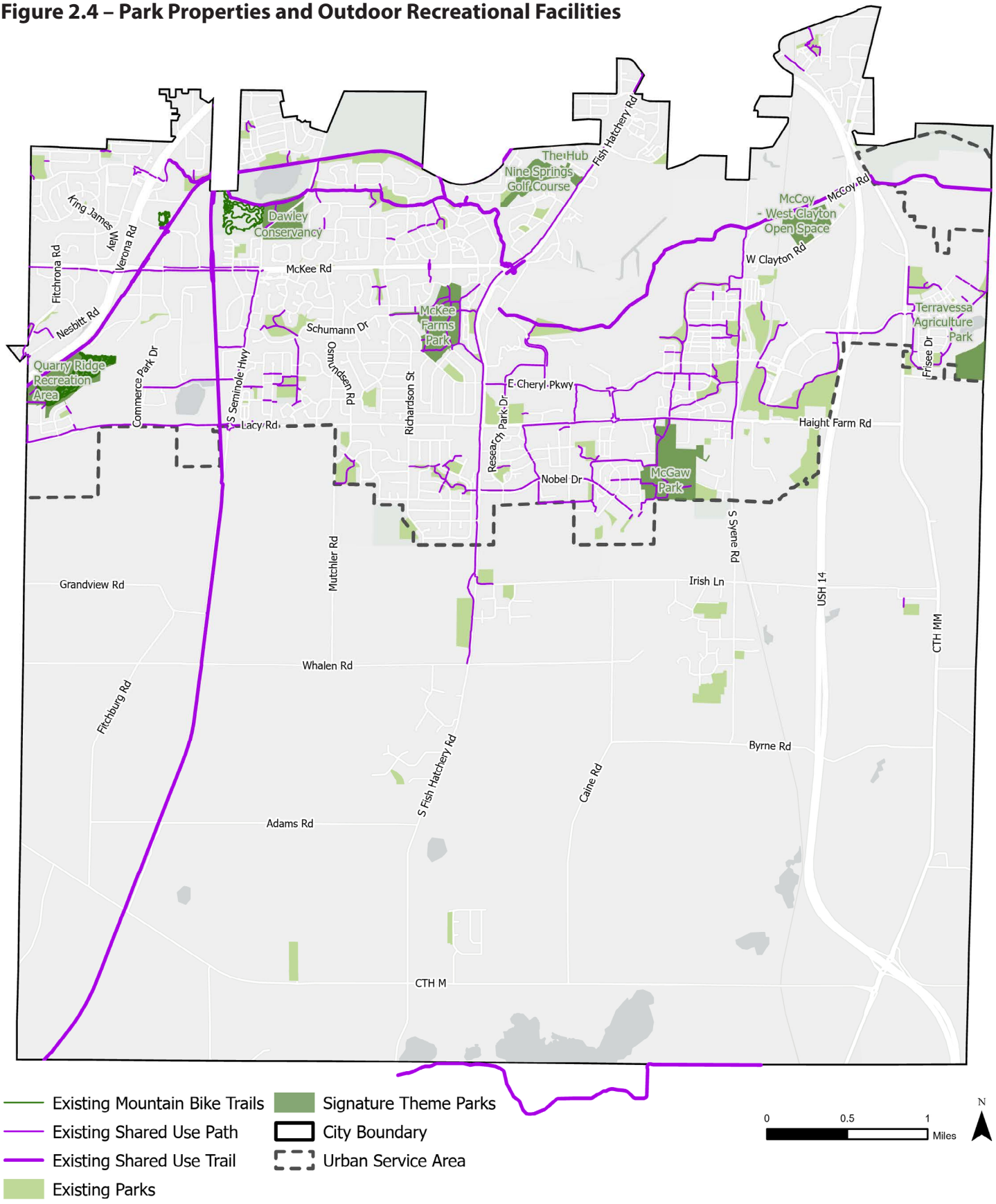
The City of Fitchburg contains numerous parks and trails that provide recreational, fitness, and transportation opportunities to people walking and bicycling in the city. In total, there are 815 acres of parks and open spaces, along with 54 miles of shared use trail and paths. These parks, open spaces, and trails include public parks, natural areas, stormwater facilities, a golf course and a cemetery. Fitchburg parks and open spaces are overseen by the Fitchburg Parks, Recreation, and Forestry Department.

The following existing and potential future City park sites are identified, per the Comprehensive Parks, Open Space, and Recreation Plan: 2025-2030, as Signature "Themed" Parks, with future development at each site to accentuate, where feasible, a specific park and outdoor recreation use "theme":

- McKee Farms Park
- Quarry Ridge Recreation Area
- Nine Springs Golf Course
- McGaw Park
- Dawley Conservancy
- Badger State Trail/Old Fitchburg
- McCoy/West Clayton Open Space
- N. Fish Hatchery Road Hub

Both Quarry Ridge Recreation Area and Dawley Conservancy have been designated with a biking theme including an enhanced bike hub, bike "waystop," and bike trail connections. The other Signature Themed parks support various bike and pedestrian facilities including trailheads, bike parking, and repair stations. See Figure 2.4 on the following pages for park properties and outdoor recreational facilities.

Figure 2.4 – Park Properties and Outdoor Recreational Facilities



2.2 – Existing Bicycle and Pedestrian System

Fitchburg's existing pedestrian and bicycle system provides a strong foundation for next steps of development for the city's network; currently, residents use shared use trails and paths for fitness and recreation, as well as to occasionally run errands to nearby commercial destinations. By upgrading existing facilities, addressing gaps in the network, and paying close attention to the safety and comfort of pedestrians and bicyclists, Fitchburg can increase opportunities for more people to walk and bicycle more often for health, recreation, and transportation. See **Figures 2.5** and **2.6** for the Existing Bicycle and Pedestrian Network.

Assets & Opportunities

Existing Walking /Bicycling Facilities

Fitchburg's existing bike and pedestrian facilities already compare favorably with similar-sized cities, to which the city's bicycle-friendly designations attest. A dedicated effort over the last couple of decades to improve sidewalks, bicycle lanes, improved shoulders, shared use trails and paths has laid the groundwork for a robust network.

The introduction of the BCycle bike share system to the city in 2023 has increased access to bicycle transportation to those who might not own a bicycle, as well as providing a bicycling option to Fitchburg visitors. The 22-station and 100-plus-bike BCycle network is located near neighborhoods, schools, parks and trails, and other community destinations. This form of micromobility is an opportunity for the city to grow the existing BCycle system within the Greater Madison network, providing greater connectivity and more convenient access to bicycle facilities.

Future Infrastructure and Planning

There is a significant opportunity to grow the existing walking and bicycling facilities within the city. Currently, all new developments, built and planned, include facilities for bicyclists and pedestrians, and the existing road network in the Urban Service Area provides connections between neighborhoods.

Additional opportunities exist to align bike and pedestrian improvement efforts with other planning and engineering projects such as street reconstruction and resurfacing, the Fitchburg Sustainability Plan, Fitchburg Complete Streets initiatives, and regional efforts such as the Madison MPO's Regional Transportation Plan, and the City of Madison's North-South bus rapid transit (BRT) line. There is strong momentum within the community and surrounding areas for bike and pedestrian projects and targeted investment to neighborhoods that have been underserved with mobility access.

Figure 2.5 – Existing Bicycle Network

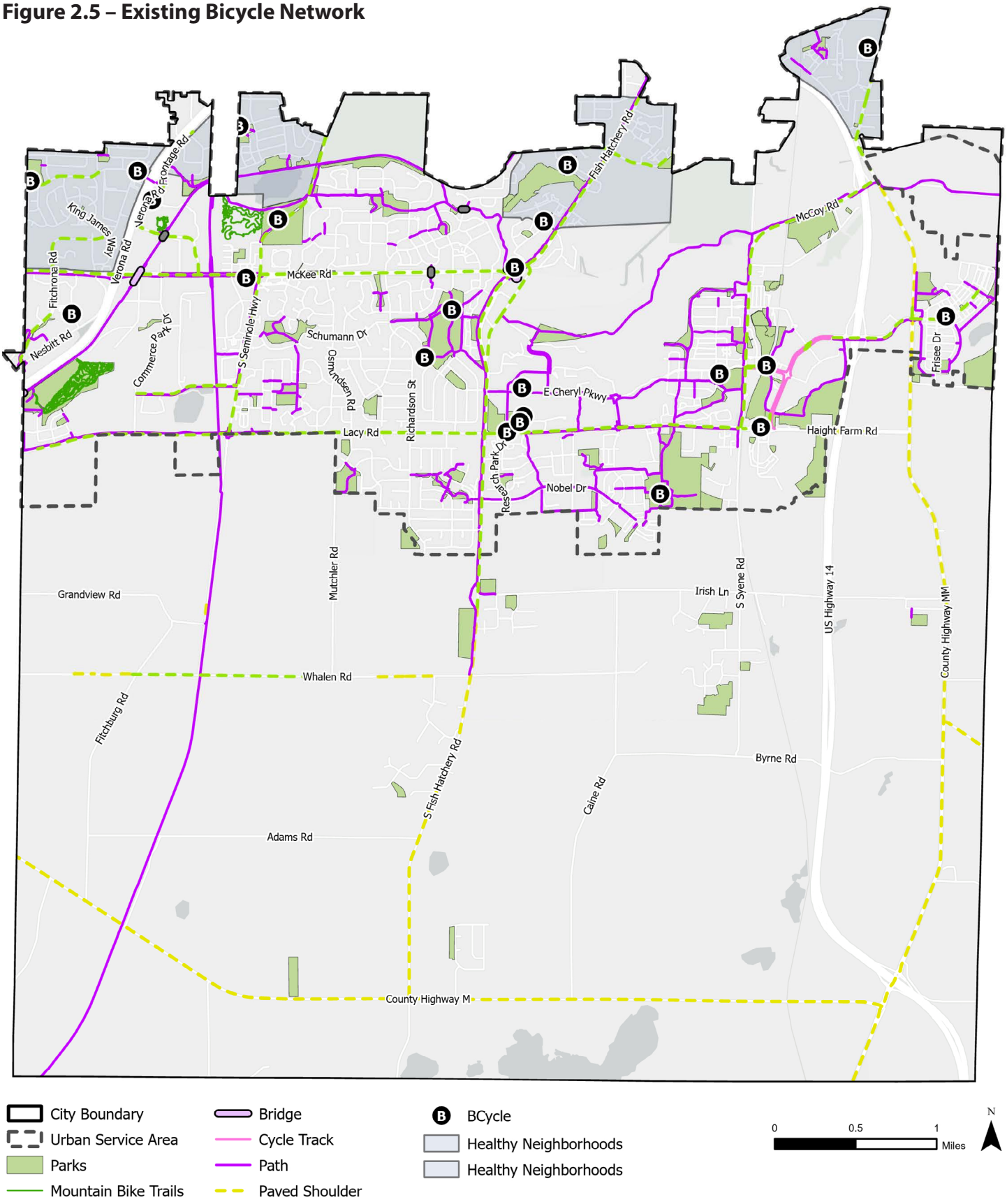
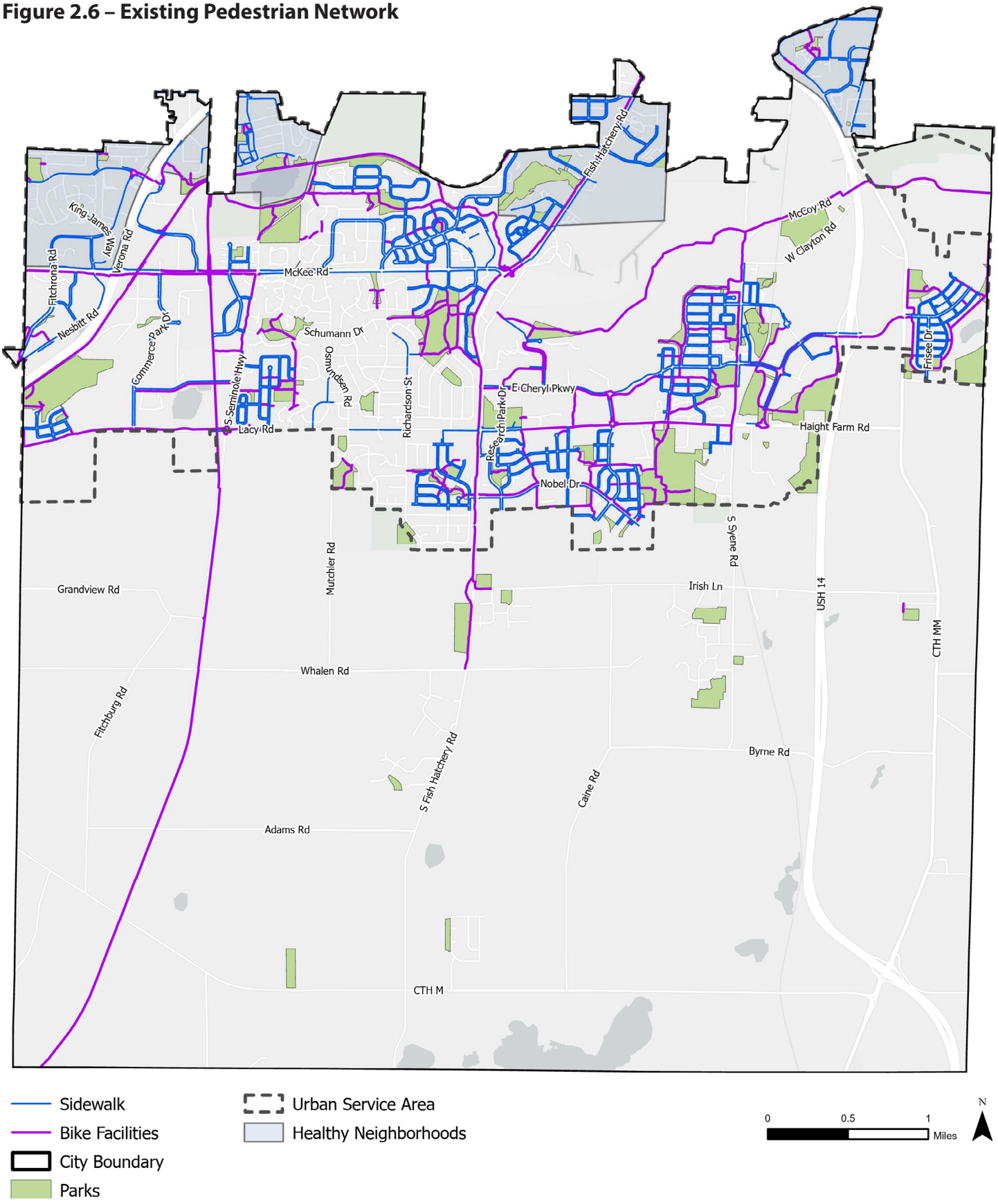


Figure 2.6 – Existing Pedestrian Network



Active Community and Partnerships

Fitchburg is home to a very active community of recreational and commuter bicyclists, as well as dedicated trail users. Many groups around the Madison area frequently organize group rides, work to raise awareness for bicycling and pedestrian-related issues, and share information. Advocacy groups like Bike Fitchburg, and citizen bodies like the BPC, provide arenas to discuss bicycle and pedestrian-related matters and make progress towards goals identified in this plan. And the City supported Bike Fitchburg's 2018 "Wisconsin Active Together Community" application (Resolution R-167-18), calling for ongoing cooperative efforts to improve Fitchburg's biking and pedestrian networks.

With an already active community, there is additional opportunity to capitalize on current momentum for more bike and pedestrian events and improvement projects. New partnerships can strengthen advocacy, equity, and information networks for bike and pedestrian activities. Future outreach may include working with schools to provide safe routes for children through the Safe Routes to School (SRTS) program or volunteer programs like bike buses, and bringing bike and pedestrian programming activities to schools, parks, and area community centers.

Business Community Support

Fitchburg has 31 "bicycle-friendly businesses" that provide employees with bicycle parking, commuter benefits, changing rooms, and access to bike equipment and safety information. Many businesses belong to the national Bicycle Benefits program which passes along discounts to customers arriving to the business by bicycle. These business owners actively support the movement towards Active Living and recreation through bicycling and walking.

There is an opportunity to grow the network of bicycle related businesses and bike friendly businesses that promote and advocate bicycling for employees and customers. Partnerships with the Fitchburg Chamber and other bike and pedestrian groups can attract more bike-related businesses and craft the regional identity through community events and marketing materials.

Existing Parks and Natural Areas

Fitchburg has a large network of community, neighborhood, and area parks, all of which are designed to accommodate the existing population and their needs. Walking, hiking, jogging, and bicycling are among the most popular activities for park users in Fitchburg, which emphasizes the importance of parks and open spaces when considering bicycle and pedestrian network improvements.

Ample natural and conservation areas owned both by the City and other entities, such as the Capital Springs State Recreation Area, Dawley Conservancy, and the UW South Arboretum are connected to the existing trail network and provide opportunities for people to enjoy plants, water, wildlife and the outdoors while bicycling and walking.

Fitchburg's "Night Riders" group meeting at Hatchery Hill

Weaknesses & Threats

Distances to Important Destinations

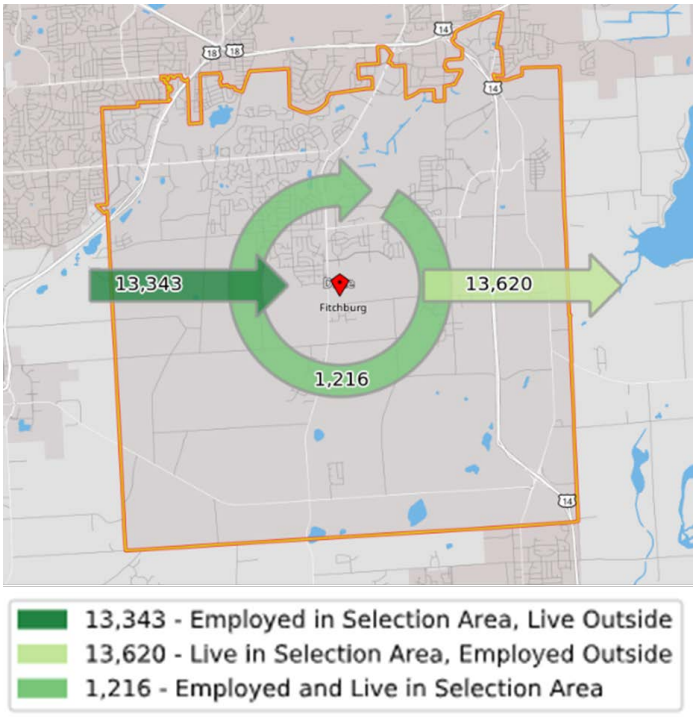
Separated land uses are prevalent in Fitchburg. Many Fitchburg residents report living too far away from important destinations to be able to walk or bicycle for transportation, and many residents travel outside of Fitchburg for both work and school. Only 1,216 residents both live and work in Fitchburg according to US Census *On the Map* estimates from 2022. Additionally, due to these separate development patterns, Fitchburg has a shortage of amenities that require denser population centers to be feasible. This creates a difficult challenge to connect these often-scattered amenities to the bike and pedestrian network and provide the facilities needed for this network including bike repair stations and resting areas.

Continued population growth in the Greater Madison area means Fitchburg will continue to see an influx of people and development in the coming years. Suburban sprawl, separation of land uses, and low-density growth could be a threat as it is not conducive to improving bicycle and pedestrian network connectivity. Fortunately, significant portions of Fitchburg's population do live within walking and bicycling distance of commercial, educational, and recreational destinations, as well as within walking distance of public transportation. Equitable investments, such as targeting improvements in the Healthy Neighborhood Initiative areas, are needed to strengthen these connection opportunities.

Limited Route Options

While the trail network in Fitchburg creates an unforgettable experience for recreational cyclists and trail users, some of Fitchburg's community amenities are not well-connected to a bicycle or pedestrian network. Fitchburg's motor-vehicle roadway network provides connections between neighborhoods and connector roads. Short

Jobs Inflow and Outflow *(U.S. Census On the Map)*



segments of shared use paths connect various neighborhoods to the trail systems, parks, and some specific destinations. Although trails and paths are abundant, there are gaps in the system for providing routes for transportation and recreational uses within neighborhoods. Significant gaps in the network are on the arterial roadways of Lacy and Verona Roads. Verona Road specifically, is not a viable connecting route to close these gaps and will require other accommodations to be made on the western edge of Fitchburg. Historically, neighborhoods such as Jamestown and Southdale have lacked investment in stronger pedestrian and bicycle infrastructure.

Generally, a well-gridded street network enables people walking or bicycling to choose lower-stress routes with relative ease by shifting to streets that parallel busy arterials. In Fitchburg, alternative options for well-connected routes are available in some areas, even though the roadway network is

more suburban. A threat to the connectivity within these suburban neighborhood networks is an adopted resolution strictly limiting the ability to add sidewalks to existing neighborhoods, which creates a "two-tiered" system between old and new neighborhoods.

Difficult Intersections

Fitchburg's arterial roads often provide the most direct routes from Point A to Point B and connect the city's most important destinations. Most commercial destinations are located along McKee Road, Lacy Road, Fish Hatchery Road, and Verona Road. These important connections typically have long blocks with limited crossing opportunities for people walking and bicycling. When crossings do exist, they are often long (crossing several vehicle travel lanes and channelized right-turn lanes or "slip lanes") and inconvenient (complicated signal timing with multiple turning phases with long wait times for people walking or bicycling). At a few crossings, the sidewalk network is broken, forcing pedestrians to share the road with motor vehicles, or proceed on paths that may not be accessible or safe.

Grade-separated crossings have significantly improved the safety of several intersections crossing the state trails in Fitchburg (for example the crossing of the Capital City State Trail over Fish Hatchery Road, and the crossings of the Badger State Trail and the Military Ridge Path over McKee Road). While some of the following examples are partially or fully outside of Fitchburg, there are also important grade-separated crossings under Verona Road and over the Beltline. Two bridges over the Beltline connect the Southdale and Allied/Dunn's Marsh neighborhoods to Madison, both of which are priority neighborhoods in the Healthy Neighborhoods Initiative. Bridges over the Beltline at the Cannonball Path and the Southwest Path connect Fitchburg's trail and path network to Madison.

An integrated public transit system requires that people can cross roads safely to reach bus stops. Fitchburg's public bus routes are primarily located on major roads with high traffic volumes, which can pose safety issues for pedestrians and bicyclists. Local crash data (**Figure 2.7**) shows that most crashes between a motor vehicle and a pedestrian have occurred at these intersections.

Lack of Communication for Education and Encouragement Activities

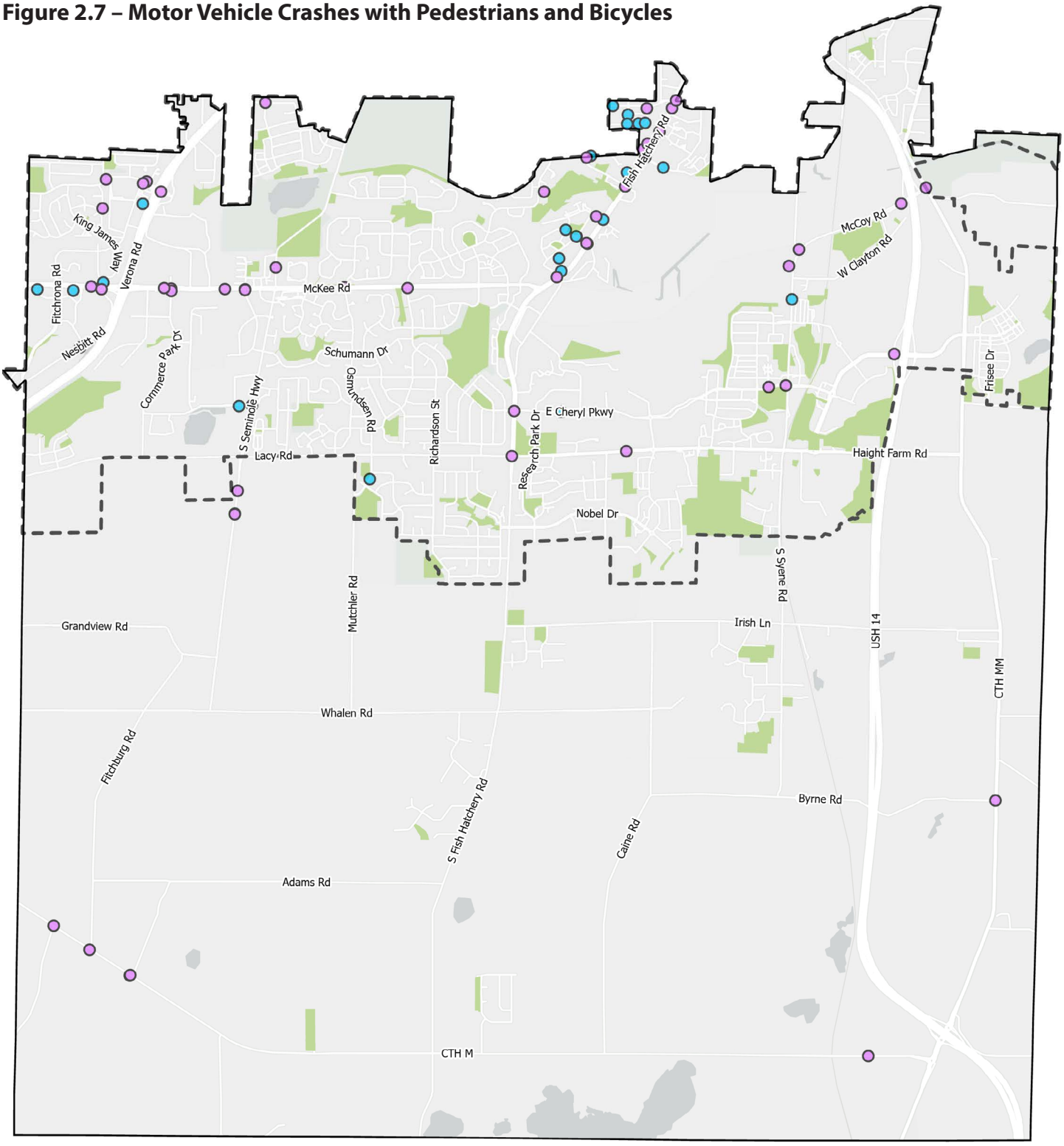
Weaknesses in education and encouragement can result in community members not feeling confident or informed enough to use existing bicycle and pedestrian facilities as much as they might like to. Educational and Encouragement programming for all ages is needed to promote bicycle and pedestrian safety and access. Partnerships with the BPC, Bike Fitchburg, the Wisconsin Bike Fed, 1k Friends of Wisconsin, school districts, and other stakeholders can disseminate safety information, community events, and training. Lack of communication is a threat to more people biking and walking in the City of Fitchburg.

Uncertain Political Environment

The general State and Federal political environment can cause considerable uncertainty in the political and financial support of bike and pedestrian projects. At this time, unpredictable funding opportunities and criteria at the federal level may inhibit action on recommendations within this plan.

Additionally, opposition to further investment in network improvements can lead to continued gaps in infrastructure and connectivity issues that reduce the number of people who will utilize the system and threaten progress on equity goals. There is a clear need to build a coalition of support for these projects, representative of all community members, and to prioritize improvements that benefit the overall community.

Figure 2.7 – Motor Vehicle Crashes with Pedestrians and Bicycles

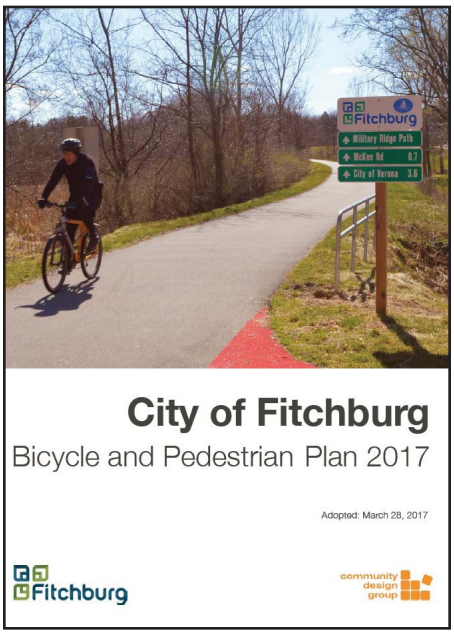


2.3 – Existing and Concurrent Plans and Policies

The following existing and concurrent plans were reviewed and referenced for the development of the Fitchburg Bicycle and Pedestrian Plan - 2025 Update.

Local Plans and Policies

City of Fitchburg 2017 Bicycle and Pedestrian Plan



The 2017 Bicycle and Pedestrian Plan was initiated as an update to the 2008 plan. The 2017 plan significantly updated and expanded on the analysis of current conditions of the Fitchburg bicycle and pedestrian network and the recommendations for improvements. There was also a robust public engagement process for this plan, including online surveys, an online input mapping tool, meetings with the Bicycle and Pedestrian Advisory Committee, pop-up events and community open house meetings, stakeholder interviews, and walking and biking audits. The bicycle network recommendations focus on addressing gaps, enhancing connectivity, and providing accommodations for all ages, including priority corridors, neighborhood connections, routes near schools, and points of interest. Pedestrian network recommendations include new sidewalks and connections to public transportation and community destinations to make walking safer. The plan offers guidance for policy development, including wayfinding, bicycle parking, education, encouragement, and enforcement programs. It identifies priority locations for corridor and intersection improvements and recommends performance measures to track progress during implementation.

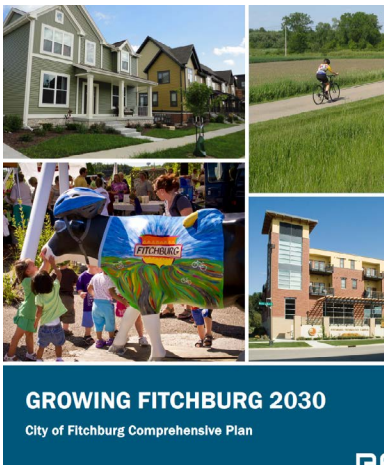
This 2025 Plan update preserves materials from the 2017 update that still apply to City goals, while revising information and recommending new objectives and goals identified by the City, BPC, and other stakeholders.

Resolution R-185-16 and Resolution R-69-17

On January 24, 2017, the Fitchburg Common Council adopted Resolution R-185-16 restricting installation of sidewalks and shared use paths in select existing City neighborhoods and residential areas, unless specific criteria are met. The Council passed Resolution R-69-17 on March 28, 2017, amending a portion of R-185-16. Please see *Appendix D and E* of this Plan for R-185-16 and R-69-17 in their entirety.

Growing Fitchburg 2030: City of Fitchburg Comprehensive Plan (2020)

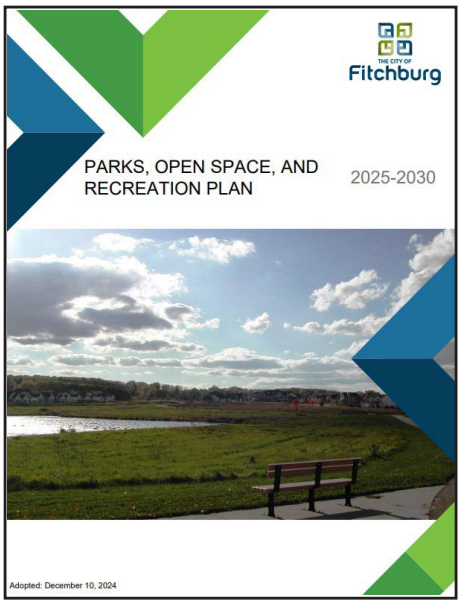
The City of Fitchburg updated its Comprehensive Plan in 2020. Within this plan, the Transportation chapter identifies the key themes of prioritizing multi-modal options like walking and biking, enhancement of the connectivity of streets, trails, and paths, ensuring safety for all users, identifying partnerships to meet transportation goals and leverage funding, and addressing bike and pedestrian facility needs, wayfinding, lighting, and streetscaping projects.



Applicable policies to the bicycle and pedestrian network include:

- Policy 1.2.2: Enhance the recreational use of rural roads by providing and maintaining suitable biking conditions.
- Policy 2.1.2: Develop a data driven program, including crash data, which identifies intersections with the highest potential for safety improvements.
- Policy 2.2.2: Plan a pattern of streets, sidewalks, bicycle facilities, and public transit facilities in new neighborhoods that maximizes the connectivity of land uses within the neighborhood and to areas outside the neighborhood.
- Policy 3.1.1: Establish and follow a "Complete Streets" policy that is equally sensitive to the needs of motorists, pedestrians, bicyclists, and transit users.
- Policy 3.2.1: Identify major generators and destinations for potential bicycle and pedestrian trips, such as public buildings, parks, commercial districts, places of employment, transit stops, and other attractions, and plan for pedestrian and bike connections among them.
- Policy 3.2.3: Provide a striped paved shoulder with a minimum width of four feet (preferably five feet) on both sides when a road is reconstructed, on most two lane streets and highways having a rural cross-section.
- Policy 3.2.5: Design new bridges and street underpasses to include pedestrian and bicycle facilities for both directions of travel.
- Policy 3.2.7: Maintain sidewalks, shared-use paths, bike lanes, transit boarding pads, and areas connecting to and within transit shelters for year-round use, including appropriate snow removal, designate commuter routes for bicycle and pedestrian facilities, and place a higher priority for snow removal on those routes over recreational routes.
- Policy 3.3.2: Develop and implement programs that encourage walking and bicycling and educate the public about the many benefits of walking and bicycling, including health, financial and environmental benefits. (e.g. Participate in the Car Free Challenge and Bike to Work Week)
- Policy 3.3.3: Sidewalks shall be added to both sides of the street in all new developments and considered on streets without sidewalks in the urban service area, except cul-de-sacs, when major reconstruction (curb and gutter and/or base course) occurs, all in accordance with the City's Bicycle and Pedestrian Plan.
- Policy 3.3.4: Educate transportation network users on the rules of the road and their rights, as well as the benefits of a multi-modal transportation system

City of Fitchburg Comprehensive Parks, Open Space and Recreation Plan: 2025-2030



The City of Fitchburg Comprehensive Parks, Open Space and Recreation Plan: 2025-2030 (POSRP) provides a vision and action items to achieve that vision for the City of Fitchburg parks, open space and recreation system. The plan includes the Fitchburg Conceptual Park and Open Space Proposal Map which identifies a system of linked parks and open space that protect Fitchburg's natural areas. The main feature of the Proposal was the creation of a greenbelt buffer, known as Moraine Edge Park and Preserve North that would connect neighborhood areas, preserve natural area, and create connection to community amenities and recreation opportunities through a multi-use path.

Major action items from this plan include:

- Assist in development and implementation of a comprehensive City trail/path plan and network, premised on connecting residential areas with park system properties and other "social" places such as restaurants, coffee shops, and community facilities.
- Include adequate Association of Pedestrian and Bicycle Professionals (APBP)-recommended bike parking in parks and open space properties; consider providing public bicycle repair stands and air pumps in area and community parks.
- Develop wayfinding signage for City parks along the City's multi-use path system.
- Assess the connectivity of low stress bicycle and pedestrian networks between system properties and residential areas, including assessments of barriers (e.g. crossing a busy street).
- Strengthen partnerships with existing City and other governmental/non-profit entities.
- Identify projects that are eligible for Federal, State, and County funding on an annual basis and apply for said grants, as staff capacity allows.
- Review future development proposals and City budget cycles as they relate to the Conceptual Park and Open Space Proposal, Moraine Edge Park (CIP), and the Heritage Circle Route.

Additionally, the plan identifies proposed Signature Theme Parks that focus on specific uses and amenities. Dawley Conservancy, Quarry Ridge Recreation Area, and the N. Fish Hatchery Road Hub fall under the biking theme with amenities such as an enhanced bike hub, bike "waystop" and bike trails. Other system parks will include bike parking, repair stations, and trailheads to connect with local trails.

City of Fitchburg Sustainability Plan (2025)

The City of Fitchburg Sustainability Plan is a roadmap for the City to address 32 sustainability goals and achieve a cumulative reduction of 358,000 metric tons of GHG by 2030. The plan is organized around eight citywide sectors, each including overarching strategies for 2030 goals and detailed actions for implementation.

The Land Use and Transportation Sector Chapter outlines strategies and actions related to the bike and pedestrian network, including:

- TL 1: Decrease total community wide Vehicle Miles Traveled (VMT) by 5% by 2030.
  - Establish a Complete Streets policy to guide the planning, designing, building, operating, maintaining, and funding of streets.
  - Partner with the school districts in Fitchburg to develop a Safe Routes to Schools Implementation Plan (SRTS).
  - Install universal design accessibility features at crossing locations to ensure the crossing is accessible for everyone (e.g., raised crossings, pedestrian traffic signals, audible signals). Install audible signals at all signalized intersections when signals are replaced or added in the future.
  - Prioritize building sidewalks, crosswalks, and other walking infrastructure in high need areas and those identified in the city's Bicycle and Pedestrian plan.
  - Promote incentives for employers to provide transit passes, bicycle racks, bicycle sharing stations, carpool parking, shuttle services, and pedestrian facilities. Implementation should be prioritized for improved equity.

Heritage Circle Route

The Heritage Circle Route is a conceptual 19-mile route, identified as a "major linear recreation path linkage that would provide a circular recreation path around the City of Fitchburg." The Route would give users an opportunity to pass through the varied cultural and natural terrain of Fitchburg. The proposed Route consists of four segments. The north segment would utilize the Capital City Trail, the west segment the Badger State Trail, and the east segment within, or adjacent to, the former Chicago and Northwestern Railroad line. The south segment may require land acquisition, as it parallels County Highway M, until meeting the west segment. The Route concept recognizes the challenges that will need to be addressed, "given the desire and need to maintain rail presence" through the corridor and the adjacent land uses, including the Oakhill Correctional Institute.

Healthy Neighborhoods Initiative (2019)

The City of Fitchburg's Healthy Neighborhoods Initiative (HNI) is designed to formulate and implement a strategic, collaborative, and holistic approach to address specific issues in four City neighborhoods in conjunction with community/neighborhood partners and residents. The Strategic Plan framework for HNI implementation consists of Pillar Principles, Indicators, and Action Items to achieve goals in six Pillar categories: Education, Life Skills, Care, Mobility, Healthy Lifestyles, and Healthy Landscapes.

The plan identifies the following with relevance to this Bicycle and Pedestrian Plan:

- Mobility - Work to build and maintain neighborhoods in which adequate means to travel to areas of everyday importance is available to residents
  - Indicator: Cumulative transit, car-sharing, and ride service options
- Healthy Lifestyles - Work to build and maintain safe neighborhoods that have a diverse, healthy resident demographic and opportunities for adequate social interaction
  - Indicator: Physical health – obesity rates for children and adults
  - Indicator: Social interaction – Number of annual community or neighborhood-building events
- Healthy Landscapes – Work to build walkable neighborhoods that have diverse land uses, high-quality and diverse housing stock, and adequate gathering places.
  - Indicator: Food access - Distance from any Priority Neighborhood residence to a food distribution outlet to include supermarket, hypermarket, or food pantry, via roads, trails, or paths
  - Indicator: Gathering/"Third" places - Number of neighborhood hubs

The HNI Priority Neighborhoods received special consideration in the 2025 Updates to this Plan's network and facilities recommendations (*Chapter Three)* and program/operations recommendations (*Chapter Four*).

Healthy Neighborhoods Initiative (HNI) Priority Neighborhoods

Neighborhood Plans and Policies

The following land use plans and policies have been approved by the City of Fitchburg, are specific to new or existing neighborhoods, or address rural development throughout the City. New developments in Fitchburg are required to provide pedestrian and bicycle facilities. These plans and policies have been considered for the development of bicycle and pedestrian recommendations for this Plan Update.

Nine Springs Neighborhood Plan *(1998)*

- Plan includes required sidewalks and recreational paths throughout the linear park areas
- Provides for a recreational path constructed to connect McGaw Park with the Capital City Trail
- Recommends a major pedestrian promenade to link transit and commercial areas, as well as a boardwalk through wetland areas and connecting to the fish hatchery. The recommended promenade is planned to be located within a 75-ft linear park throughout the residential areas

Southdale Neighborhood Plan *(2009)*

- Recommendations include closing a gap in the on-street bicycle lane route along the perimeter of the neighborhood (Ski Lane and CTH MM) to connect to the Capital City Trail
- Recommends installing sidewalks on both sides of new streets (per City requirements)
- Recommends new sidewalks to close network gaps along Ski Lane, Clausen Street, Country Rose Court, and CTH MM

McGaw Park Neighborhood Plan *(2009, Amended 2014)*

- Plan includes extending sidewalks along Lacy Road, to access the neighborhood's east boundary.
- Plan recommends sidewalks on both sides of all roadways within the McGaw Park Neighborhood, or the development of a multi-use path
- Plan recommends bicycle lanes on both sides of the street for a number of new proposed roads (Nobel Drive Extended and Research Drive), as well as extending bicycle lanes along Lacy Road

Northeast Neighborhood Plan *(2010, amended 2017)*

- Recommends pedestrian and bicycle facilities for connection to the Capital City Bike Trail and through neighborhood areas.
- Recommends a separated shared use path along USH 14.
- Ensures that the neighborhood provides for a street network of complete streets meeting the needs of pedestrians, bicyclists, motorists, and transit users.

Arrowhead Redevelopment Plan *(2012, amended 2014)*

- Proposed transportation network includes several grade-separated bicycle/ped crossings, one of which has been constructed (McKee Road and Cannonball Path)
- The proposed transportation network also includes 'Complete Streets' throughout, with bicycle lines, sidewalks, and street trees

North Stoner Prairie Neighborhood Plan *(2012, amended 2019)*

- Land Use recommendations include several proposed trails, such as an east-west trail through the middle of the development, connecting to the Badger State Trail, Seminole Highway, Stoner Prairie Elementary School and Savannah Oaks Middle School, and to the Quarry Ridge Recreation Area.

Rural Cluster Zoning Ordinance *(2012)*

- Document outlines the design standards for Rural Cluster Zoning throughout the rural areas of Fitchburg, and is not specific to a neighborhood
- 22-611.104 (6) "Compatibility with recreational trails, bicycle trails - specifically the Fitchburg Heritage Circle Route and wildlife corridors noted in the Fitchburg Park and Open Space Plan."

Anton Drive Planning Study *(2017)*

- Identified placemaking strategies to support safe and pedestrian-friendly walkways like lighting, artistic work, and social spaces.
- Recommends biking facilities, upgraded curbs ramps, sidewalks, and multi-modal connections to neighborhoods and community destination along Anton Drive and surrounding areas.
- Recommends restricting parking on the east side of Anton Drive, and sign and stripe bike lanes on both sides of the street.
- Recommends marked bike lanes on both sides of Williamsburg Way (between S. Whitney Way and Verona Road).
- Recommends establishing an east pedestrian connection from Jamestown Neighborhood to Fitchrona Road, including sidewalks on King James Way.

South Stoner Prairie Neighborhood Plan *(ongoing)*

- Concepts include on-street bike lane facilities and shared-use paths on Lacy Road and Fitchrona Road.

Greenfield Neighborhood Plan *(ongoing)*

- Concepts include on-street bike lane facilities and shared-use paths.
- Neighborhood provides bicycle/pedestrian network around existing residential development which is not subject to sidewalk installation per Resolution R-185-16 and Resolution R-69-17.

Recently Completed Capital Improvement Projects

Fish Hatchery Road / CTH D *(2020-2021)*

- Road reconstruction from Brendan Avenue to just north of Greenway Cross.
- Project added a multi-use path along the entire west side of this stretch.
- Intersection of McKee Road and Fish Hatchery Road was updated to include better bike/ped signaling, and later timing improvements created walk sign anticipating the green signal.
- Slip lane added for east-bound traffic turning south on Fish Hatchery Road (opposed by biking groups due to safety concerns).

West Lacy Road *(2023) – Identified in the 2017 Plan*

- Road reconstruction and widening from Seminole Highway to Fitchrona Road, to accommodate and anticipate continuing development along the stretch.
- Project added bike lanes in both directions, reduced vehicle speed limit from 45mph to 35mph, and added a multi-use path along the entire north side of this stretch.
- The intersection of Seminole Highway/Lacy Road was redesigned as a roundabout (previously a 4-way stop).
- Badger State Trail, which crosses Lacy Road just west of this roundabout, enhanced crossing with a large median island design to accommodate bicycles and position cyclists to provide better vision of crossing traffic, and added RRFBs (Rectangular Rapid Flashing Beacons).

South Syene Road Reconstruction *(2023-2025)*

- Road reconstruction from Aurora Avenue to McCoy Road, with a redesign of the Syene/McCoy intersection.
- Project added bike lanes along the entire length, as well as new signals at two intersections seeing increased traffic with development in this portion of Fitchburg.
- Syene/McCoy intersection, previously a one-way stop where Syene approaches from the north, modified to a T-intersection with a signal.
- The Capital City State Trail, which had crossed Syene Road just to the north of its intersection with McCoy Road, was re-routed to a signalized crossing at the intersection.

McCoy Road / CTH MM *(2022-2023)*

- Intersection reconstruction to add a signal, reroute bicycle traffic.
- Capital City State Trail previously crossed CTH MM ~100 feet south of the intersection, now crosses at the signal.
- Slip lane added for east-bound traffic turning south onto CTH MM (opposed by biking groups due to safety concerns).

Bike/Ped Bridge *(2020)*

- New bridge carrying the Badger State Trail over McKee Road, replacing a set of RRFBs.

New RRFBs *(2021 and 2023)*

- RRFBs added on Seminole Hwy, for the crossings of both the Capital City State Trail and Cannonball Path.

BCycle Network Expansion *(2023-2025)*

- With support from a WisDOT Transportation Alternatives Program grant, Fitchburg expanded the BCycle bike-sharing network from Madison, adding 22 stations since the start of 2023.
- Bike-share network provides short-term e-bike rentals for a fee, connecting Fitchburg to the BCycle network that began in Madison and includes Monona and McFarland.
- Special focus to place stations in communities designated as priority areas by the "Healthy Neighborhoods Initiative," with lower median income, historically lower levels of services, and generally less access to cars. To support this effort, $2,500 was invested in purchasing passes to be distributed by the Boys and Girls Clubs of Dane County (the site of a BCycle station) in 2024. This funding was not carried over to successive years.

Additional Projects

- As of December 2025, Fitchburg has 31 Bicycle-Friendly Businesses and 12 businesses participating in the Bicycle Benefits program, all added since the 2017 Plan update including the City of Fitchburg main civic campus.
- Fitchburg repealed its mandatory bicycle registration ordinance, removing a potential perceived barrier to cycling.
- Fitchburg renewed its Bicycle-Friendly community status in 2023, maintaining its silver designation for another 4-year cycle.
- Fitchburg Chamber began a "Bike the 'Burg" challenge in 2021, conducted every Summer since, encouraging residents to increase their bike riding (target of 150 miles from May to September) and offering incentives and prize drawings for participants.
- The City established a permanent Bicycle & Pedestrian Commission (BPC) that meets eight times per year.

Upcoming Capital Improvement Projects

Fitchrona Road Reconstruction (2025)

- Beginning this year, which will add an off-street multi-use path along the east side of the street that connects from Lacy Rd to the traffic circle at Nesbitt Road.

Whalen Road (2025)

- Completing the paved shoulders that were initially added as disjointed sections over a decade ago.

Additional Projects

- A bike/ped underpass will be constructed (programmed 2026-2027) beneath County Road MM, north of the Terravessa development.
- 2028-2029 CIP project for a path along County Highway MM to connect Southdale to the Capital City State Trail
- The City's 2025-2030 POSRP identifies a "conceptual park and open space proposal and moraine edge park," which will be a series of parks and open spaces with a corridor connecting them (see p. 63-65 of the POSRP). The Greenfield Neighborhood Plan proposes a Moraine Edge Corridor for the area within the Greenfield study area, north of Irish Lane that would include a multi-use path connecting parks and natural areas.

3. Network Recommendations

photo credit: BikeFitchburg

This chapter contains the following sections:

3.1 – Facility and Network Overview

The City of Fitchburg has many assets for walking and bicycling in place today; however, gaps in the network make it difficult to walk or bicycle comfortably in neighborhoods and access important destinations including schools, local parks, commercial areas, and transit. The infrastructure recommendations outlined in this chapter address gaps and barriers in the existing network and provide guidance for developing a more complete, equitable, and inviting network for walking and bicycling in Fitchburg.

Recommendations are based on engagement with the public, City Boards/Staff, the BPC, and Bike Fitchburg, as well as detailed network analysis, site visits, and current best practices. Further facility design and engineering must be completed prior to implementation of any recommendations.

Considerations which guided 2025 updates to the 2017 Facility & Network Recommendations:

- Addition of the Healthy Neighborhoods Initiative
- Input provided in the 2025 Working Session with the BPC on progress since 2017 and new/unresolved issues to address
- New neighborhoods and the addition of the former Town of Madison crash data, especially since 2017 and in recently reconstructed areas
- Emphasis on pedestrian connections to community destinations and safe routes to schools
- Success of the BCycle program and opportunities to expand this and other bicycle/pedestrian facilities

Plan Goals Summary

Expand Options

- Make walking and bicycling an option for more residents, workers, and visitors
- Use a multi-faceted approach to provide safe, comfortable, and inviting places to walk/bicycle
- Establish recommendations that are implementable in the plan's lifetime (~10 years)

Strengthen Connections

- Develop connections to regional trail networks, adjacent communities, new developments, and underserved neighborhoods
- Improve walking/bicycling connections to transit and community destinations

Improve Networks and Intersections

- Improve the existing bicycle/pedestrian network, prioritizing primary and critical intersections

Engage Stakeholders

- Strengthen, enhance, and promote education and encouragement activities
- Tailor outreach and engagement to be inclusive of historically underrepresented groups in planning and decision-making processes

Ensure Equity

- Prioritize equitable access to walking and bicycling infrastructure in Fitchburg's Healthy Neighborhoods

Pedestrian and Bicycle Facility Types in Fitchburg

A variety of facility types can be used to improve accessibility, mobility, and connectivity options for people walking and bicycling in Fitchburg. *For more information about facilities and crossing treatments as well as selection and application guidance, see Appendix A.*

Shared-Use Paths (SUPs)

A shared-use path provides a shared space for people walking and bicycling that is separate from motor vehicle traffic.

Since 2018, Fitchburg and Madison have agreed that a facility for biking, walking, and other non-motorized uses shall be named 'Path' if it does not require a State Trail Pass for bicycling and 'Trail' if it does. Both are shared-use paths (other authorities including the WI Department of Natural Resources and Dane County Parks do not observe this distinction).

Shared-use paths are most effective in the following instances:

- Locations with minimal, well-controlled intersections with motorized traffic
- Areas where there will not likely be conflicts between bicyclists and pedestrians,
- Opportunities to connect network routes and loops where there is not an existing roadway

Shared-use paths are preferred along roadway corridors in Fitchburg with limited roadway crossings and driveways. The city's shared-use paths also serve recreational uses within parks and through natural or scenic areas.

Facility Guidelines

- Shared-use paths should be a minimum width of ten feet; eight-foot widths are acceptable for short distances in constrained spaces.
- Asphalt is recommended to differentiate from sidewalks, provide a smoother surface for wheeled users, and reduce initial installation costs.
- Striping shared-use paths clarifies travel direction and distinguishes lanes for people walking or bicycling in high use areas.

Sidewalks

Sidewalks are paved concrete or asphalt walkways designed for pedestrian use. A well-connected sidewalk network is the foundation of pedestrian accessibility. High quality sidewalks include level and unbroken surfaces, ADA compliant curb ramps, lighting, and trees and plantings. Vegetated terraces improve safety and comfort by separating the sidewalk from drive lanes and double as snow storage in winter. Street furniture like benches, waste receptacles, and public art enhances user comfort and interest.

Protected Bicycle Lanes or Cycletracks

A protected bicycle lane (also known as a separated bicycle lane or cycletrack) is an exclusive space for bicycles separated from motor vehicle traffic by a physical barrier (such as a curb, parked cars, or bollards). Protected lanes are separate from the sidewalk and can significantly increase bicycle ridership for people of all ages and experience levels due to increased rider comfort. Protected bicycle lanes and sidewalks are preferred over shared-use paths in areas where a lot of pedestrian activity is expected (e.g. neighborhood mixed use districts or pedestrian oriented commercial areas).

Removable bollards (also known as "candlesticks") can be used seasonally as a method for protecting bicycle lanes during the spring, summer, and fall. Removing the bollards during the winter months can alleviate conflicts with snowplow methods.

Special consideration is needed at intersections and driveways that intersect two-way protected bike lanes and shared-use paths. Crash patterns show that contraflow bicycle movements are a main factor in crashes due to motorists failing to yield or look for approaching bicyclists.

Buffered Bicycle Lanes

Buffered bicycle lanes are conventional bicycle lanes that include an additional painted buffer space for increased separation between people bicycling and people driving.

Facility Guidelines

- Buffers should be a minimum of two (2) feet in width (see Appendix A for details).
- Wider buffers with cross-hatching are recommended in appropriate contexts to further separate people bicycling from motor vehicle traffic, and to increase user comfort.
- If on-street parking is present and space allows, an additional painted buffer may be provided between the bicycle lane and on-street parking to reduce the risk of dooring incidents.

Typical Bicycle Lanes
(not protected or buffered)

Bicycle lanes designate a portion of the roadway for preferential use by people bicycling. Lanes are defined by paint/pavement markings and may also include signage.

Facility Guidelines

- A typical and recommended bicycle lane is six (6) feet in width, which includes a two (2)- foot-wide gutter pan (overall width will vary to ensure rider safety and comfort, see Appendix A for design guidance and criteria).
- Bicycle lanes may be located adjacent to curbs or on-street parking; where bicycle lanes are adjacent to on-street parking, bicycle lanes should be placed outside of the door zone to prevent the risk of dooring incidents.
- Shared bicycle/parking lanes are discouraged.

Paved Shoulders

Paved shoulders are areas adjacent to drive lanes on rural roads without curb and gutter that have been paved beyond white line demarcating the travel lane. This provides space for emergency parking, EMS access, and protects the edge of the roadway from premature deterioration. Additionally, shoulders have the benefit of providing space along the road that can be used by bicyclists and pedestrians where no other facilities exist.

Paved shoulders, in combination with reflective signage and wayfinding, can help drivers be aware of the potential presence of bicyclists along the roadway. Paved shoulders are not a recommended pedestrian facility.

Per the AASHTO Guide for the Development of Bicycle Facilities, 'rumble strips are not recommended on shoulders used by bicyclists unless there is a minimum clear path of 4 ft (1.2m) from the rumble strip to the outside edge of a paved shoulder, or 5 ft (1.5m) to the adjacent curb, guardrail, or other obstacle.' Also, 'periodic gaps in rumble strips should be provided to allow bicyclists to move across the rumble strip pattern as needed.'"

Neighborhood Slow Streets & Traffic Calming

Neighborhood Slow Streets are residential streets designed to prioritize bicycle and pedestrian travel while making motor vehicle traffic calmer. They can include several types of traffic-calming elements: bump-outs, traffic circles, speed tables, and/or pavement markings.

Neighborhood Slow Streets make walking, bicycling and driving easier and safer by reducing motor vehicle speeds and improving crossing movements; they benefit all residents and roadway users by improving overall traffic safety along the corridor. Route signage, pavement markings, and stop sign orientation can help highlight the street as a bikeway or walkway.

Shared-Lane Markings (Sharrows) & Advisory Lanes

Shared-lane markings (often called sharrows) are pavement markings used to communicate bicyclists' right to use the full roadway space for their travel. Sharrows help bicycle riders position themselves safely in travel lanes that cannot accommodate a bicycle lane or other facility. These are most appropriate on slow streets to aid in road positioning or to assist with wayfinding.

Advisory bike lanes can be used on narrow streets to indicate a designated space for bicyclists and motorists; unlike dedicated bicycle lanes, motor vehicle use is not prohibited within the advisory bike lane and is expected on occasion. According to the Federal Highway Administration (FWHA), advisory bike lanes are a relatively new treatment in North America. Dutch research has found advisory lanes to be effective at reducing motor vehicle operating speeds; however, consideration should be given to the bikeway type's general intuitiveness and the potential need for education around its proper use.

Network Facilities

The network recommendations for both bicycle and pedestrians in this Plan provide a framework for the City's priority locations for future facility improvements. Each route type indicated as a recommendation represents a variety of facilities to be implemented, all of which will need to be carefully considered within the specific site and scope of the project. All recommendations will require engineering and design services, along with a community/public approval process before any facilities can be constructed.

Table 3.1 shows the route types that are recommended in the following pages in this Plan, along with each facility type that is strongly recommended (understood to provide the most appropriate level of safety and comfort for users), recommended (understood to provide an appropriate level of safety and comfort for users), and considered (facilities that may be appropriate, depending on the specific circumstances of the site constraints and public approval).

Amenity Areas

The network recommendations map provided in the following sections additionally highlight locations in need (as identified by the public and BPC members) of bicycle and pedestrian-oriented amenities. Amenities can include a range of facilities dependent on available space and needs, including bike parking and charging stations, bike repair stations, water fountains, wayfinding signage, and areas of respite with shade and seating. These amenities, which can be located in the right-of-way or within developments, will improve accessibility and equity for users around community destinations and pedestrian activity areas.

Table 3.1 - Network Recommendations Matrix

			BICYCLE FACILITIES							
			PEDESTRIAN FACILITIES		MOST PROTECTED				LEAST PROTECTED	
PEDESTRIAN NETWORK	BICYCLE NETWORK	ROUTE TYPE	Sidewalks	Shared-Use Paths	Protected Bicycle Lanes / Cycletracks	Buffered Bicycle Lanes	Typical Bicycle Lanes	Paved Shoulders	Neighborhood Slow Streets / Traffic Calming	Shared-Lane Markings / Advisory Lanes
	✓	Primary Bike Routes	S	S	S	S	R	R*	C	
	✓	Neighborhood Bike Routes	R	C			C		S	R
✓	✓	"Safe & Comfortable" Routes	S	S	S					
✓	✓	Scenic Recreational Trails		S						

S = Strongly Recommended R = Recommended C = Considered

*Recommended only in rural areas of Fitchburg

Amenity Areas

3.2 - Bicycle Route Network Recommendations

The Bicycle Route Network (**Figure 3.1**) designates three types of bicycle routes for the City of Fitchburg. These routes overlap existing network segments, with an overall goal of filling network gaps and creating a visible, inviting, consistent, and connected experience for bicycling in Fitchburg. Within each route type, a variety of facilities are recommended while maintaining consistency and responding to existing infrastructure and site constraints. Priorities can easily be identified for future investments and improvements with these designations.

To better understand the different route types, **Figures 3.2** and **3.3** show the route types independently. **Table 3.2** identifies additional treatments to encourage a welcoming bicycle route network in the city.

Bicycle Route Types

Safe & Comfortable Routes

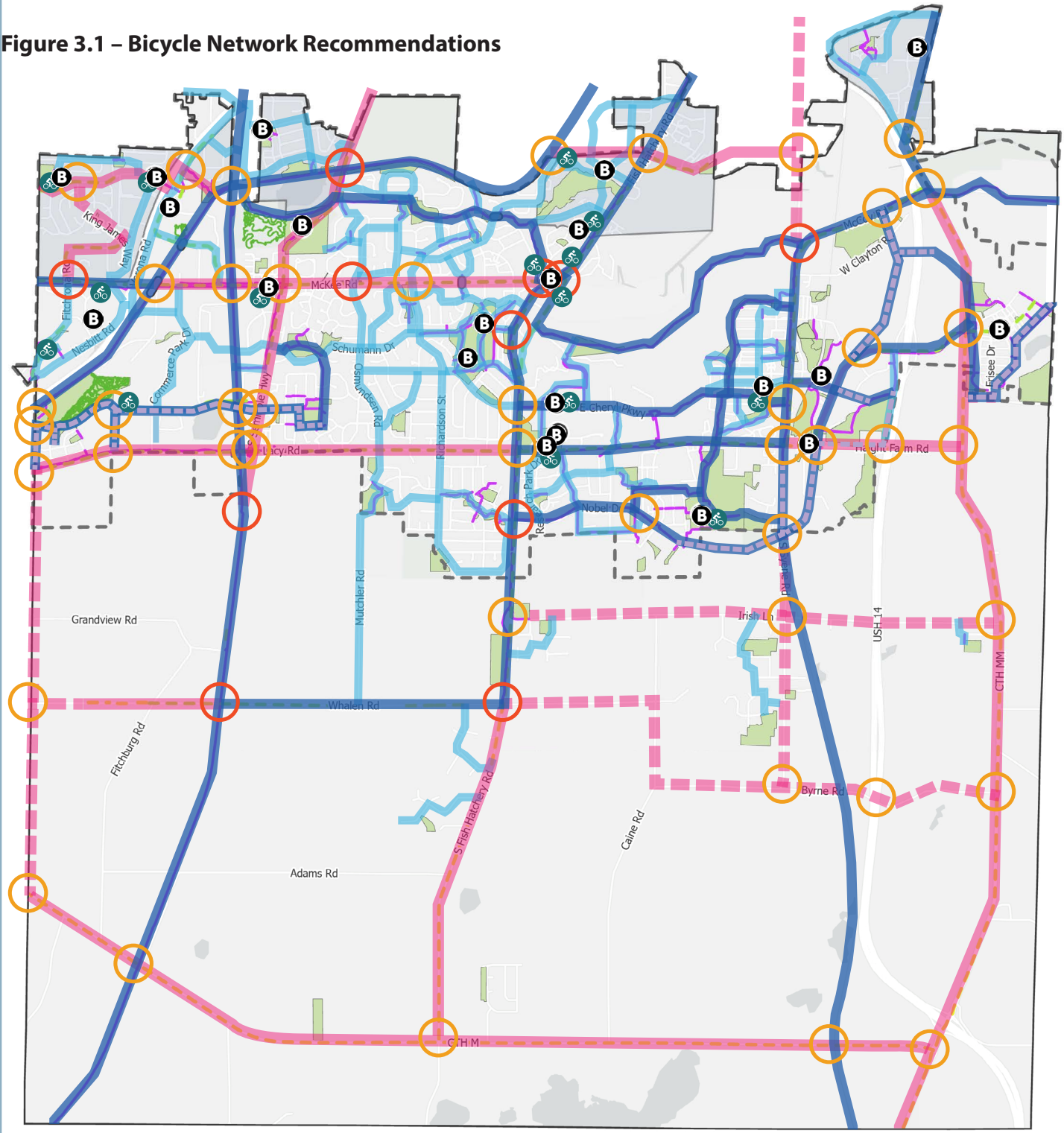
"Safe & Comfortable" Routes are designated as high priorities for ensuring the safety of non-commuting users. These routes are selected due to a variety of factors including access to parks, schools, and other community destinations, recreational demands, or to meet the needs of underserved populations and/or inexperienced riders. These routes will be developed with the highest level of separation from motor vehicle traffic, either as shared use paths or a combination of cycletracks and sidewalks.

The Safe & Comfortable Bicycle Network should include (but are not limited to) a combination of the following facility types:

- Shared-use paths (min. 10' wide)
- One-way protected cycle tracks (min. 6' wide, bike lanes could be considered), pedestrians prohibited
- Two-way protected cycle tracks (min. 10' wide), pedestrians prohibited
- Bicycle boulevards (25 mph speed limit or less), where bikes may use full lane
- Marked crosswalks (min. 10' wide) across streets with speed limits higher than 25 mph
- RRFBs (min. 10' wide) across streets with speed limits 30-35 mph
- Signalized crosswalks on streets with speed limits 40 mph and above
- Grade-separated crossings

See **Figure 3.2** for Safe & Comfortable Routes, as shown within the Bicycle Route Network.

Figure 3.1 – Bicycle Network Recommendations



City Boundary
Urban Service Area
Parks
Mountain Bike Trails
Bike Lanes
BCycle
Healthy Neighborhoods
Bridge
Cycle Track
Path
Paved Shoulder
Tunnel
Primary Bicycle Routes
(Gaps in Primary Network)
Safe + Comfortable Routes
(2017 Proposed Shared-Use Paths)
Neighborhood Bicycle Routes
2017 Primary Intersections
Critical Intersections
Bicycle Amenity Areas

Bicycle Network Recommendations Map

0 0.5 1 Miles

N

Primary Bicycle Routes

Primary Bicycle Routes are the most useful and important in the city, providing connectivity and access to important destinations and to other route types. These routes are already used heavily for commuting, recreation, and transportation by bicycle (or would be with the appropriate improvements). Primary Routes could also be referred to as "Safe & Fast" paths through the city.

Many of the Primary Routes were identified by the community as places they would like to ride safely and comfortably; not surprisingly, these are also routes where the community has raised the most concerns regarding bicycle safety and the comfort of drivers who share the road with bicyclists.

These routes aim to provide a consistent network of off-street facilities (shared-use paths and protected bike lanes) or enhanced on-street facilities (buffered bicycle lanes). Conventional bicycle lanes will only be used when it is not possible to accommodate protected or separated facilities. Primary Bicycle Routes overlap existing on- and off-street facilities, integrating with the existing shared use trail and path network. These routes are City priorities for improvements, maintenance, and safety.

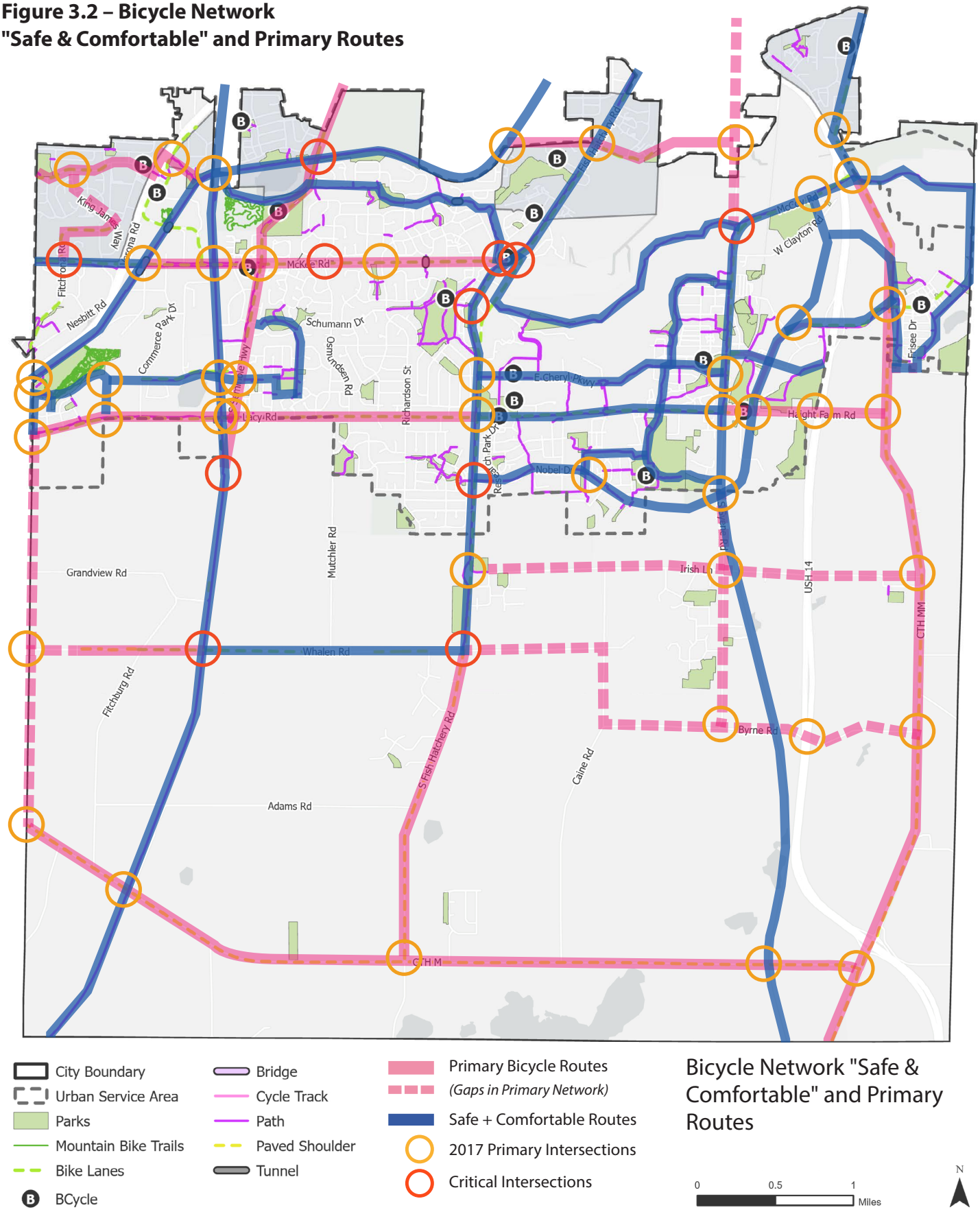
The Primary Bicycle Network can include (but are not limited to) a combination of the following facility types:

- Quiet neighborhood streets (25 mph speed limit or less)
- One-way protected bike lanes and cycle tracks (min. 6' wide), pedestrians prohibited
- Two-way protected cycle tracks (min. 10' wide), pedestrians prohibited
- Striped bike lanes (min. 5' wide)
- Buffered bike lanes (min. 5' wide)
- Paved shoulders (min. 3' wide) in rural areas, parking separate or prohibited, disabled vehicles permitted

Where possible, upgrading bike lanes and paved shoulders to enhanced on-street facilities (buffered lanes or protected lanes/cycletracks) or shared-use paths is a long-term vision for these routes.

See **Figure 3.2** for Primary Bicycle Routes, as shown within the Bicycle Route Network.

Figure 3.2 – Bicycle Network
"Safe & Comfortable" and Primary Routes



Neighborhood Bicycle Routes

Neighborhood Bicycle Routes will expand connections within neighborhoods and to the Primary Bicycle Routes. These routes will provide closed loops for shorter rides in neighborhoods with lower motor-vehicle traffic volumes (daily traffic count of 3,000 vehicles or fewer) and connect to primary routes and/or community destinations like parks and schools. The emphasis along these routes is to increase awareness for the presence of bicyclists, establish a consistent network of on-street facilities (Neighborhood Slow Streets, bicycle lanes, sharrows), and connect to existing off-street facilities (shared use paths and trails) throughout neighborhoods.

See **Figure 3.3** for Neighborhood Bicycle Routes, as shown within the Bicycle Route Network.

Additional Network Map Features

In addition to the proposed routes described above, the Bicycle Network Recommendations Map provides:

Scenic Recreational Trails

Scenic Recreational Trails represent a conceptual long-term vision for connecting the rural areas of Fitchburg through a network of scenic, off-road trails. These routes could potentially coincide with the long-term vision of the Comprehensive Parks, Open Space and Recreation Plan, and could potentially replace or complement portions of the Primary Bicycle Routes in the future.

Primary & Critical Intersections

Primary Intersections have been identified as the highest priority for bicycle and pedestrian crossing improvements, as they are located at the intersections of Primary Bicycle Routes. Primary Intersections connect people to important community amenities and destinations.

Critical Intersections have been identified by the public and BPC members as hazardous for pedestrians or are frequent locations for bicycle/pedestrian crashes; further study of these areas for potential improvements will promote equity and safety for pedestrians in the city. These locations, especially when in alignment with Priority Intersections, should be the highest priority for assessment and investment (most efficient when symbiotic with upcoming projects and planned infrastructure improvements).

A variety of treatments are recommended for these intersections depending on context and site-specific needs. Treatments can include stop bars, high visibility cross walks, leading pedestrian interval signal improvements, prohibited or restricted right turn on red, protected-only left turns, bike boxes, bicycle signals, protected intersections, bicycle detectors, crosswalk signals and pedestrian countdowns, and attention to curb ramps and sidewalk connectivity. See the Infrastructure Toolkit (*Appendix A*) for further information on facility types and selection criteria. Primary and Critical Intersections are also included as part of the Pedestrian Network recommendations map.

Figure 3.3 – Bicycle Network Neighborhood Routes

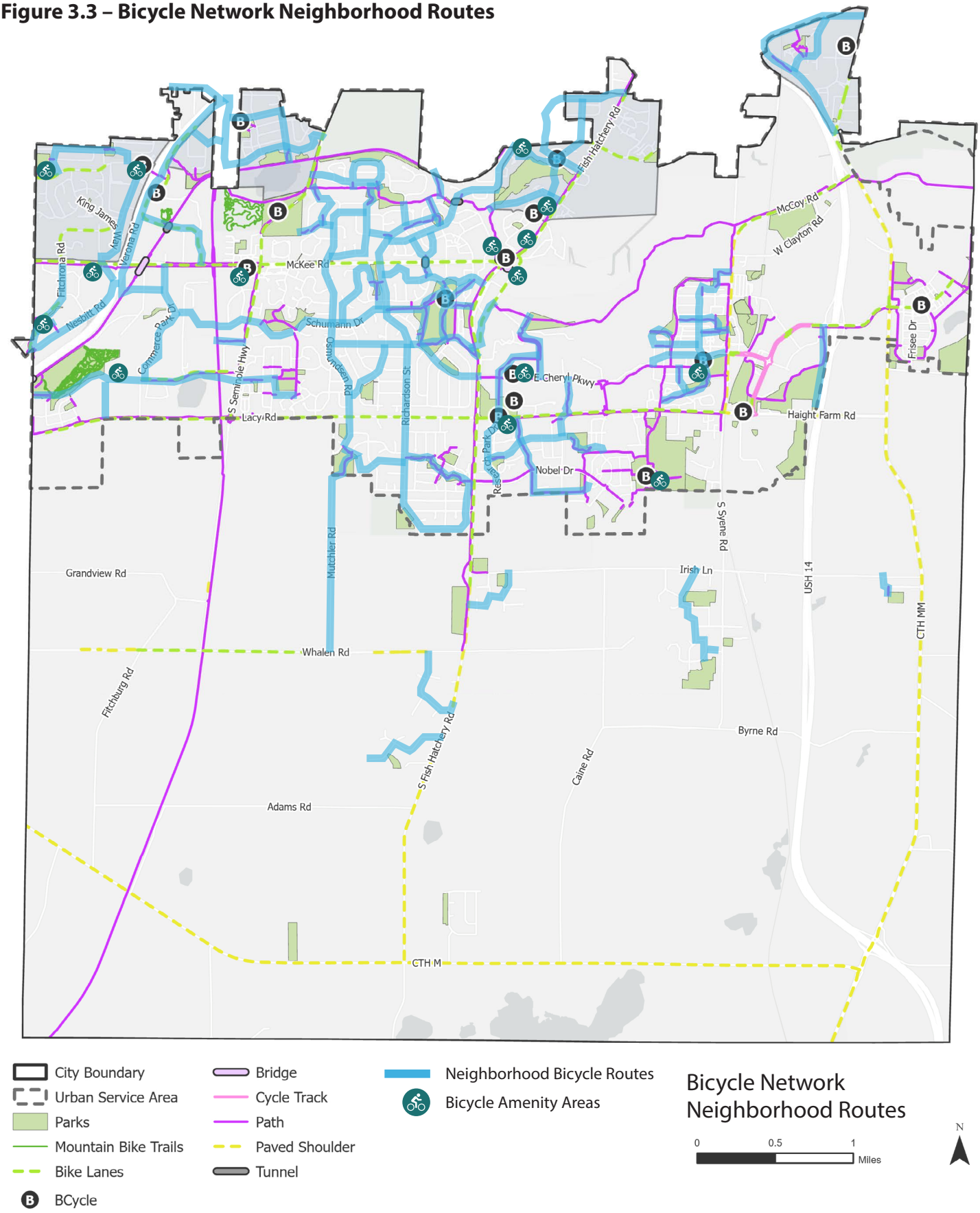


Table 3.2 - Recommendations for Bicycling

BICYCLING "THEME"	RECOMMENDATIONS
BICYCLE NETWORK DESIGN	Draw on latest best practices for full selection of bikeways facilities, including but not limited to: - 2024 AASHTO Guide for the Development of Bicycle Facilities - 2025 NACTO Urban Bikeway Design Guide - 2015 FHWA Separated Bicycle Lane Planning and Design Guide - 2019 FWHA Bikeway Selection Guide - 2016 Dane County Bicycle Wayfinding Manual
BICYCLE PARKING/END-OF-TRIP FACILITIES	Encourage businesses to become Bike-Friendly Businesses or participate in Bicycle Benefits.
	Develop incentive programs to encourage installment of bicycle parking at existing destinations including commercial and employment centers, recreational areas, schools, and other community destinations where people may arrive by bicycle. More information about bicycle parking is provided in *Chapter 4* and in *Appendix A*.
BICYCLE TREATMENT AT INTERSECTIONS AND TRAIL CROSSINGS *(MORE INFORMATION ABOUT INTERSECTION TREATMENTS INCLUDED IN APPENDIX A)*	Mark bicycle lanes across right-turn lanes and through intersections by marking them with green paint where appropriate.
	Install chevrons and dashed lines across intersections where appropriate.
	Install signage at conflict points where appropriate to alert drivers of the presence of bicyclists.
	Install road daylighting infrastructure or visibility markings at trail crossings and intersections.
	Establish guidelines for installing medians or raised crosswalks at trail crossings and intersections.
	Install bicycle signal detection including loop detectors or camera detection along bikeways when signals are installed or majorly updated.
LIGHTING OF TRAILS AND ON-ROAD	Establish policies for providing lighting along on- and off-road facilities, and in tunnels and other areas along trails as needed.
BICYCLING ON SIDEWALKS	Develop a city-wide policy establishing an appropriate speed at which a bicyclist may be allowed to ride on a sidewalk, and areas in which bicyclists are not allowed on sidewalks (i.e., in areas with higher pedestrian activity, in front of businesses with closer setbacks from the sidewalk, etc.)
ELECTRIC-ASSIST BICYCLES	Continue efforts to develop a city-wide policy to address shared facilities with users of electric assist bicycles (e-bikes) and micromobility devices.

3.3 – Pedestrian Route Network Recommendations

The emphasis of the Pedestrian Network (**Figure 3.4**), comprised of various existing and potential pedestrian treatments, is to encourage safe and convenient options for walking in the City, including within neighborhoods and to community destinations. **Table 3.3** identifies additional treatments to encourage in the city.

The following identifies major features of the Pedestrian Route Network:

Safe & Comfortable Routes

Safe & Comfortable Routes are designated as high priorities for ensuring the safety of non-commuting cyclists and pedestrians. These routes will connect pedestrians to parks, schools, and other community destinations, address recreational demands, and meet the needs of underserved populations. These routes will accommodate pedestrians with the highest level of separation from motor vehicle traffic, either with shared use paths or sidewalks.

The Safe & Comfortable Walking Network can include (but is not limited to) a combination of the following facility types:

- Shared-use paths with shade trees
- Sidewalks (min. 5' wide), shade trees recommended*
- Marked crosswalks (min. 6' wide) across streets with speed limits higher than 25 mph*
- RRFBs (min. 6' wide) across streets with speed limits 30-35 mph*
- Signalized crosswalks across streets with speed limits 40 mph and above*

**Notes pedestrian facilities to be used in conjunction with separated bicycle facilities (cycletracks, bike lanes, etc.) on Safe & Comfortable Routes*

Proposed Shared-Use Paths

These areas have been identified as vital pedestrian connections, many of which connect to future neighborhoods and have been identified in City-adopted neighborhood plans. The location of these areas is generalized and may be subject to change based on specific future development patterns, including development of additional shared-use paths not identified on **Figure 3.4**. Shared-use paths are maintained by the City.

It is a recommendation of this Plan to implement the proposed shared-use paths, and appropriate related treatments, in accordance with future development.

Sidewalks

The Pedestrian Network Recommendations Map identifies existing sidewalk infrastructure within the City of Fitchburg. Sidewalk installation is required in all new developments.

Within existing developments in the city, sidewalk installation is strongly recommended in areas that will improve pedestrian safety, especially in and around primary and critical intersections, and along Primary Bicycle Routes (where practical for space constraints, anticipated pedestrian use, and cost allowance).

At the time of writing this Plan, per Resolution R-185-16, residential properties in existing neighborhoods, as identified in **Appendix C**, are not subject to sidewalk or shared-use path installation, unless all of the following criteria (1. and 2.) are met:

1. The sidewalk or shared use -path has been requested by the neighborhood residents and/ or property owners, or has been quantitatively documented as the only recourse to eliminate a hazardous condition;
2. The installation of said sidewalks is agreed to by a minimum of 75% of affected property owners;

Sidewalk installation along Neighborhood Bicycle routes in conjunction with redevelopment or planned infrastructure updates is encouraged.

Additional Network Map Features

In addition to the proposed routes described above, the Pedestrian Network Recommendations Map provides:

Community Destinations

These areas have been identified as those where people are most likely to walk to, including schools, community and area parks, employment, commerce, leisure/recreation activity centers, and civic amenities such as libraries, community/ neighborhood centers, and government administration buildings.

Pedestrian Activity Areas

These areas are within 1/4 mile of community destinations. In general, people are most likely to walk to a destination if the time it takes to reach the destination is around 5-10 minutes (a 5-minute walk corresponds roughly to a 1/4 mile).

Primary & Critical Intersections

Primary Intersections will be priority locations for bicycle and pedestrian crossing improvements, as they connect people to community destinations and are located at the intersections of Primary Bicycle Routes. Critical Intersections were identified by the BPC as hazardous crossings for bicyclists and pedestrians, due to environmental issues (drainage), poor visibility, or a history of bicycle/ pedestrian crashes. Further assessment should be completed at Critical Intersections to determine causality and potential solutions to promote equity and safety for pedestrians. Instances where Primary Intersections are also identified as Critical Intersections should be the highest priority for pedestrian crossing improvements.

A variety of treatments may be considered for Primary and Critical Intersections (depending on specific context), including stop bars, high visibility cross walks, leading pedestrian interval signal improvements, prohibited or restricted right turn on red, protected-only left turns, curb extensions, median islands, raised intersections, parking restrictions near the intersection, mid-block crosswalks, Rectangular Rapid Flashing Beacons (RRFBs), high-intensity activated crosswalk beacon (HAWKs) and special attention to curb ramps.

See the Infrastructure Toolkit *(Appendix A)* for further information on facility types.

Figure 3.4 – Pedestrian Network Recommendations Map

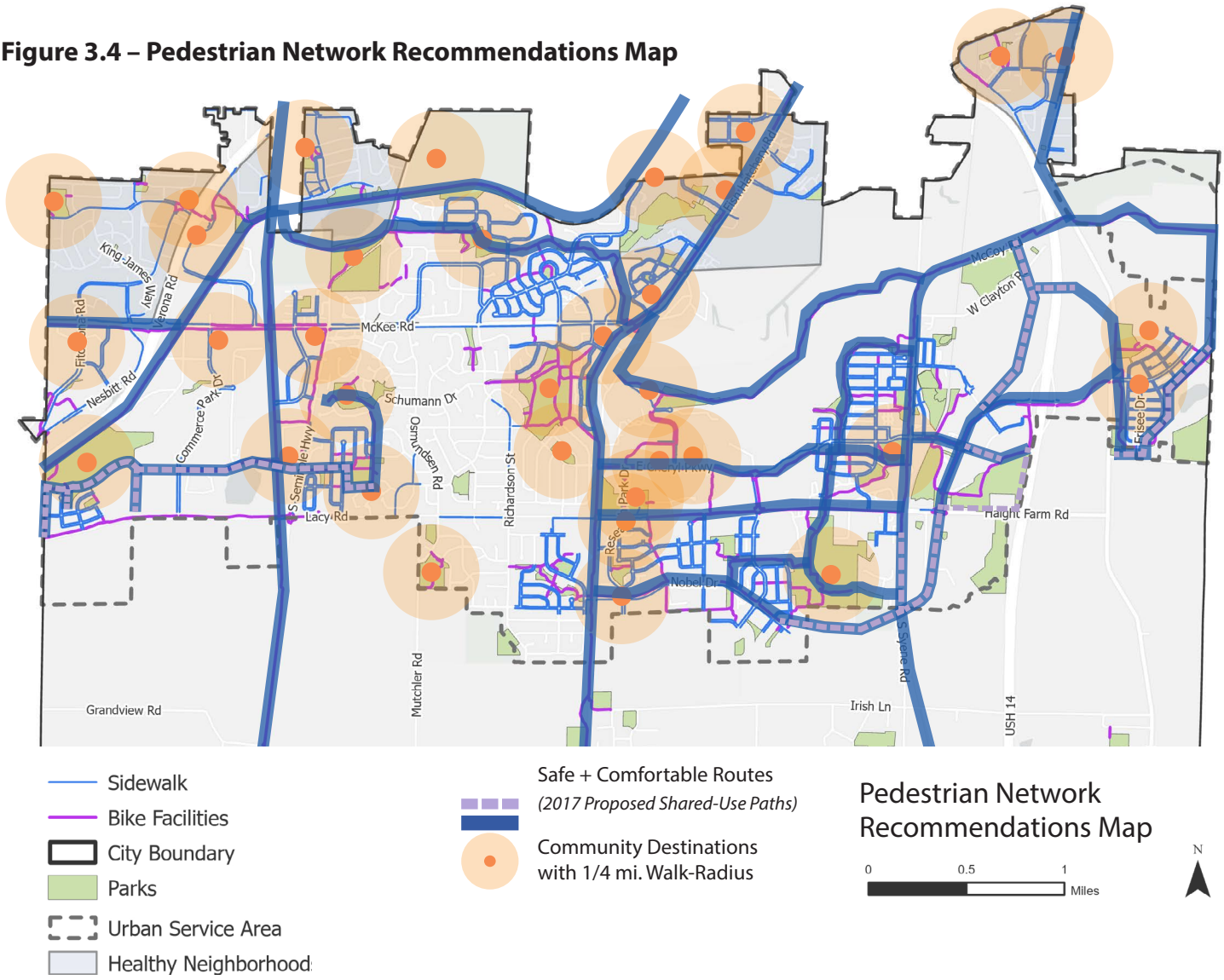


Table 3.3 - Recommendations for Walkability

WALKABILITY "THEME"	RECOMMENDATIONS
URBAN DESIGN AMENITIES	Encourage street trees, vegetative buffers, and street furnishings to control stormwater and provide shade/rest areas
	Plan for and accommodate facilities that enhance the pedestrian environment including pedestrian-scaled lighting, public art, wayfinding, plantings, etc. especially in areas identified as Pedestrian Activity Areas
	Provide sufficient facilities in and around commercial activities that invite walking and add activity and interest to the area.

WALKABILITY "THEME"	RECOMMENDATIONS
STREET CROSSINGS	Review the U.S. Access Board Public Right-of-Way Accessibility Guidelines (PROWAG) to ensure compliance with federal standards regarding sidewalks and streets, crosswalks, curb ramps, pedestrian signals, on-street parking, and other components of public right-of-way.
	Reduce unsafe crossing behavior by providing safe, marked opportunities for people walking to cross the street at least every quarter-mile, especially along minor arterials, in neighborhoods, and adjacent to commercial or retail development, schools, parks, and along transit routes.
	Install ADA-compliant curb ramps at all marked and unmarked crosswalks.
	Increase installation of curb extensions where possible, including neighborhoods and where on-street parking is permitted.
	Design intersections with the minimum allowable turning radii to slow traffic speeds, to allow perpendicular curb ramps to be positioned parallel to crosswalks and perpendicular to curb, and to shorten overall crossing distance.
	Consider eliminating channelized turn lanes (slip lanes) from intersection design, prioritizing designs that enhance pedestrian and bicyclist safety rather than making vehicle convenience the primary concern.
	Avoid multiple turning lanes when possible.
	Implement advanced stop bars to deter motorists from encroaching into crosswalks when stopped.
PEDESTRIAN CROSSING SIGNALS	Continue updating pedestrian crossing signals to countdowns until all units have been converted.
	Continue to regularly test user-activated technologies for traffic control including Rapid Rectangular Flashing Beacons (RRFB), Pedestrian Hybrid Beacon (PHB or HAWK), and others.
	Utilize leading pedestrian intervals at signalized intersections (with expected pedestrian activity/near pedestrian activity centers/at major intersections).
	Ensure that clearance intervals are properly timed to allow all users to cross, including those with mobility or visual impairments and any age; use the 8-80 principle when timing clearance intervals.

4. Program & Operations Recommendations

photo credit: Bike Fitchburg

This chapter contains the following sections:

4.1 – Education and Encouragement Program Recommendations

Increasing walking and bicycling in Fitchburg will require both physical improvements and the implementation of programming strategies in education, encouragement, policy changes, and facility maintenance. Education and encouragement programs promote increased walking and bicycling by educating roadway users on safe interactions, incentivizing walking and bicycling trips, and spreading awareness and support for non-motorized transportation options.

Considerations which guided 2025 Updates to the 2017 Program and Operations Recommendations included:

- Addition of the Healthy Neighborhoods Initiative
- Input provided in the 2025 Working Session with the BPC on progress since 2017 and new/unresolved issues to address
- New neighborhoods
- Feedback from the Bicycle Friendly Cities (BFC) Spring 2023 Report Card

Network Maps

Printing and distributing bikeways maps is a high-benefit, low-cost way to promote walking and bicycling by helping people identify route choices. Network maps can also be used to promote the city's local businesses and festivals.

Map inserts can provide information covering rules of the road, bicycle safety and maintenance, and connecting with mass transit. Currently, Fitchburg has a high-quality bicycle route brochure, with information on the route network, traffic laws and safe riding practices, information on state trail passes, and contact information for bicycle advocacy organizations. This brochure is provided by the Fitchburg Chamber Visitor + Business Bureau. Regular updates will help to maintain up-to-date information. Integrating information related to pedestrian facilities and messaging related to public transportation may also be helpful.

Another current map resource is a brochure titled "I Love to Bicycle! Family Fun Map." This brochure is aimed at families and outlines shorter-distance loops for riding. It has been translated into Spanish to help reach a wider audience and was produced through a partnership with the Healthy Kids Collaborative, Pacific

Strategies for Education and Encouragement Programming

- **Educate the public about walking and bicycling** as sustainable modes of transportation that save money, promote healthy living, and reduce emissions and traffic congestion.
- **Develop activities and events** to overcome barriers to walking and bicycling.
- Support programs to **encourage employers to support walking and bicycling** as viable transportation options.
- Provide tools for residents and visitors to **easily report issues** or concerns.
- **Partner with community organizations and local businesses** to promote and participate in education programs.
- Work with partners to **expand driver education** and coursework about the rights and responsibilities of all road users.

Bike information center set up at a local business by Bike Fitchburg

Cycle and Wisconsin Bicycle Fed. Products like this map are great examples of how community organizations can come together to produce an easy-to-use tool that encourages bicycling for people of all ages.

Fitchburg's 2023 Bicycle-Friendly Community report card from the League of American Bicyclists highlighted a significant need for increased youth education . In the last two years, the City has utilized partnerships with Bike Fitchburg and the Police Department to host more frequent bike rodeos (events to increase biking safety and comfort for younger riders) to help address this need. The City and Chamber should also explore opportunities to provide and regularly update curated maps for underserved groups, which could include family-friendly rides such as those provided in the brochure above, "safe and comfortable" off-street routes for new riders, routes to popular destinations, or pedestrian routes with amenity/rest locations and difficulty ratings.

Another low-cost and potentially helpful tool is integrating web-based trip planner services (like Google Maps) into the city's website or events pages. Walking and bicycling route and parking information can also be prioritized when providing directions to city events to encourage more people to arrive on foot or by bicycle.

Wayfinding

Wayfinding tools, including signs, pavement markings, maps, and online trip planning tools make it easier for people to navigate existing facilities on foot or by bicycle by directing users to nearby walking routes, paths and trails, and important destinations. Ensuring information is easy to find and understand helps bring a wide range of people to the benefits of walking or bicycling for more of their trips.

A wayfinding system, including signs and pavement markings, helps people navigate the existing network. Update signage as needed to reflect new destinations and newly implemented facilities. Include wayfinding signs as a component of all projects, especially those along recommended pedestrian and bicycle routes, or those surrounding community destinations.

Wayfinding and signage should be coordinated with the Dane County Bicycle Wayfinding Manual (2016), Dane County Wayfinding Plans for Cannonball Path and Capital City Trail (2016), and any other applicable local guides and standards. There are also opportunities to increase education and access through multi-lingual signage (English and Spanish) on major trail routes.

Additional guidance for wayfinding including sign types and application can be found in *Appendix A*.

Trail signage at Quarry Ridge mountain bike trails

BCycle Expansion and Education

Madison's public bikeshare system, BCycle, allows residents and visitors to easily rent a bicycle from any of the 90 stations located throughout the Madison Metro area. The system is designed to encourage short trips by bicycle and allow people to easily access a bicycle without the cost or effort of owning and maintaining it. In 2019, Madison BCycle transitioned its fleet to electric bikes. As of August 2025, the BCycle network includes 22 Fitchburg locations.

Access to bike ownership, maintenance, and storage may be potential barriers for some Fitchburg residents, especially for those living in multi-family housing where storage is limited. Providing access to a bicycle share system can also help people to more easily access this mode of transportation. The City should continue to build this partnership with the City of Madison, local sponsors, and grant funders to expansion BCycle station locations to Fitchburg. The City could also explore opportunities to defray costs for interested riders with limited financial means (previously supported by the Boys and Girls Club of Dane County through 2024).

Priority locations are places where people are already bicycling or walking, where there is good access to bicycle facilities (such as the regional shared-use paths and trails), and places where people can easily connect with public transportation and to popular community destinations.

Community Walking and Bicycling Events

Special events offer an opportunity to bring attention to practical, fun, and healthy aspects of walking and riding a bicycle as tools for transportation, recreation, and health. Because these events are community-wide and of limited duration, people are more open to participating without feeling compelled to make a long-term change in their travel or recreation habits - but sometimes an introduction is all that is needed to open the door for new travel behaviors over the long term.

There are a number of organizations throughout Fitchburg and the surrounding area that organize group bicycle rides and raise awareness for the benefits and enjoyment of bicycling in Fitchburg.

Specific Event Recommendations:

- Open Streets events that close a road or two to auto traffic and make it a bicycle and pedestrian-only street
- Parks and recreation programs that work with non-profit or bicycling advocacy groups to sponsor bicycling events and activities, especially on trails and regional bicycling routes
- Participating in walk/bicycle weeks. These types of events, such as Walk/Bicycle to Work Week, often include special publicity, route guidance, group activities, and pit stops for participants, providing a fun invitation for people to try walking or bicycling in their community.

Strategic Kid-Friendly Walking and Bicycling Events

Several events identified by the City and BPC aim to engage children and families in walking and bicycling, emphasizing engagement in priority areas for Healthy Neighborhoods and neighborhood/school areas with higher concentrations of children living nearby. These programs, which vary in scope and service area, will be implemented through partnerships between local agencies, non-profit organizations, and school districts.

Neighborhood Outreach

- Focus on walking and bicycling opportunities for kids living in key outreach neighborhoods (see sidebar). Activities for kids to include:
  - Open School or Open House events, such as bicycle riding or fix-it education
  - Bicycle/Ped events in the neighborhood and around the school
- Create a walking school bus and/or bicycle bus program (see sidebar)
  - Create a bicycle park
  - Create a neighborhood bicycle share
  - Taking advantage of the Madison Metropolitan School District's bicycle fleet in physical education classes
- Create a program for Parent-Community Liaisons by enlisting two parents living in the school neighborhood to facilitate information sharing
- Partner with existing network including local schools, Fitchburg Parks, Madison and Fitchburg Police Department, and the Boys and Girls Club
- Walking audits with elected officials

Bicycle Giveaway and Fleets

- Support and promote programs such as Bikes for Kids Wisconsin (www.bikesforkidswi.org) and other initiatives that provide free or discounted bicycles for kids in the Fitchburg Area

School Outreach

- Partner with local schools, along with community bicycle advocates and other interested partners, such as Healthy Kids Collaborative. Schools of interest include:
  - Leopold Elementary
  - Lori Mann Carey Elementary
  - Forest Edge Elementary
  - Stoner Prairie Elementary
  - Savannah Oaks Middle School
  - Badger Rock Middle School
  - Eagle School
- Evaluation of the engagement activities will happen through data gathering with Participatory Photo Mapping (PPM) and surveys

Key Neighborhoods for Outreach

These Neighborhoods were selected as priority areas for youth outreach based on goals for the Healthy Neighborhoods Initiative (HNI), areas near schools, and neighborhoods with a high concentration of student populations. Neighborhoods for Outreach include:

- Leopold (Leopold Elementary)
- Belmar / Dunn's Marsh / Renaissance on the Park (HNI)
- Jamestown / Verona Road West (HNI)
- Southdale (HNI)
- North Fish Hatchery Road (HNI)
- North Stoner Prairie (Stoner Prairie Elementary & Savannah Oaks Middle School)
- Terravessa (Forest Edge Elementary)

County-Wide Outreach: Dane County Safe Routes to School (SRTS)

- Partner with schools listed above, along with planners and police officers from Healthy Neighborhood communities , Healthy Kids Collaborative, and the SRTS Coordinator
- Create walking school buses and/or bicycle buses with support from parent/community organizations and volunteers
- Assess current walking and bicycling routes through surveys and student-led Participatory Photo Mapping (PPM).
- Re-design walking and bicycling routes around schools
- Utilize parent and student survey materials, such as bicycling and walking tallies, to guide activities and evaluate the performance of these programs
- Explore opportunities for SRTS funding through Federal Transportation Alternatives Program (TAP) grants

Bike Buses

A bike bus is a coordinated group ride where children bike to school together along a set route under adult supervision. It can go to one or multiple schools, have one or multiple starting points, and can have a few or a lot of children and families. These rides help reduce traffic, build community, and give kids a healthy, active start to their day.

Source: PeopleforBikes.org; photo by Bike PGH

Regional Outreach: Healthy Kids Collaborative's Active Living Action Team

- Partner with stakeholders and advocates from the Healthy Kids Collaborative from Middleton, Fitchburg, Madison, Sun Prairie, Cross Plains, Monona, UW-Madison and Dane County to increase bicycling and walking opportunities through municipal and county policies
- Strategize Complete Streets and Safe Routes to Schools in Healthy Neighborhoods and around schools of interest,
- The Healthy Kids Collaborative's Active Living Action Team can promote activities such as:
  - Walking School Bus and/or Bicycle Bus
  - Evaluating the impacts of programs through parent, student, and teacher surveys

Rider Incentives, Bicycle-Friendly Businesses, & Bicycle Benefits

Increased use of walking and bicycling can improve community health and support local economic development as well. Several types of incentive programs are in use in communities throughout the United States, which encourage customers and employees to bicycle or walk.

Some of the most popular programs include:

- Business associations provide discounts to shoppers who arrive by bicycle
- Employers offer parking cash-out benefits, which give employees who don't drive the cash equivalent of the parking subsidies provided to drivers
- Guaranteed Ride Home programs (provided locally by the Greater Madison Metropolitan Planning Organization), which help remove some of the concerns about bicycle commuting
- Organized employee bicycle rides, or commuter challenges like the National Bicycle Challenge
- Providing bicycle share subscriptions for employees
- Providing showers, locker rooms, changing areas and repair areas for employees

As noted in *Chapter Two*, the City of Fitchburg has been named a Bicycle Friendly Community by the League of American Bicyclists, with Silver Status. As of April 2025, Fitchburg has 25 Bicycle-Friendly Businesses (3 platinum, 2 gold, 5 silver, and 12 bronze designations).

Bicycle Friendly Businesses are awarded for efforts to encourage a more welcoming atmosphere for employees who bicycle to work and customers/ community members who also engage in cycling. A business can apply to become a Bicycle Friendly Business at https://bikeleague.org/business. If awarded, businesses are recognized through national press releases, the League of American Bicyclists social media and listed on an interactive awards map.

A recommendation for this Plan is to encourage more businesses to be recognized as Bicycle-Friendly Businesses and to promote more businesses becoming members of the Bicycle Benefits program. Bicycle Benefits is a discount incentive program for participating customers who travel to the establishment via bicycle; as of April 2025, Fitchburg has 11 businesses that are Bicycle Benefits Members.

Bicycle Benefits infographic

Bicycle Friendly Communities Program

Currently, the City of Fitchburg is designated as a Bicycle Friendly Community by the League of American Cyclists, with a Silver Status awarded in Fall 2019 and Spring 2023. On the BFC Spring 2023 Report Card, the City received positive feedback for Network Maintenance, Adult Bicycle Education, and Ridership Encouragement through Bicycle Culture and Promotion. Some of the programs and assets that supported this designation were activities related to Bicycle Month and Bicycle to Work events, Healthy Neighborhood Initiatives, as well as having an active bicycle advocacy group.

A recommendation within this Plan is to strive for Gold Status as a Bicycle Friendly Community. The recommendations listed in the following section were identified as key actions for Fitchburg to prioritize in its efforts to maintain Silver and push towards Gold status.

Some of the first Bicycle-Friendly Businesses in Fitchburg, recognized in 2022

Recommendations from 2023 Report Card

- Increase the amount of staff time spent on improving conditions for people who bike and walk, either by creating a new dedicated position or expanding the responsibilities of current staff. Ensure that this position is well supported with training and professional development opportunities to stay up-to-speed on the latest best practices and safety guidelines for bicycle planning, outreach, and infrastructure.
- Adopt specific measurable goals to better benchmark and track the success of the plan. Establish a dedicated annual budget for implementation of the plan, in addition to funding for ongoing bicycle programming and infrastructure development/maintenance.
- Adopt a community-wide Complete Streets policy and create implementation guidance. By adopting a Complete Streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right-of-way to enable safe access for all users, regardless of age, ability, or mode of transportation. The City should consider lane and/or road diets when repaving or doing major maintenance on roadways. [Note: Recommendations to adopt a Complete Streets policy are also expressed in Fitchburg's 2030 Comprehensive Plan and the 2025 Sustainability Plan]
- Lower speed limits -- and designed speeds -- on residential streets to 20 mph or less. Introduce road diets and traffic calming measures to ensure compliance. Develop a system of bicycle boulevards, utilizing these quiet neighborhood streets, that creates an attractive, convenient, and comfortable cycling environment welcoming to cyclists of all ages and skill levels.
- If an automated traffic enforcement program is implemented in Fitchburg in the future, take precautions to ensure the system is implemented with socioeconomic and racial equity at the forefront, and offer educational diversion programs in lieu of fee-based citations. Note: As of the writing of this Plan, Wisconsin state law prohibits law enforcement use of any radar device combined with photographic identification of a vehicle to determine compliance with motor vehicle speed limits.

- Continue to increase the amount of high-quality bicycle parking available throughout the community, and to upgrade the quality of existing bike parking to meet APBP standards, as well as to accommodate adaptive cycles, cargo bikes, and other non-standard bicycles. (See www.apbp.org/bicycle-parking-solutions). Launch a funded campaign to install bike parking at transit stops.
- Improve bicycle safety education for students of all ages by incorporating more on-bicycle education opportunities and by expanding the program to all K-12 schools. Provide a fleet of bicycles in schools for on-bike education to ensure that all students can participate regardless of the availability of a bicycle in their household. Consider creating a curriculum around biking and math/science for STEM programs in middle schools.
- Increase the number of local League Cycling Instructors (LCIs) in your community, either by hosting an LCI seminar or sponsoring a City staffer or local bike advocate to attend an existing seminar elsewhere. Visit bikeleague.org/ridesmart for more information. [As of 2025, the City currently has four instructors]
- Collect more socioeconomic and demographic data as it relates to current transportation habits and patterns and establish equity-related indicators to inform future prioritization and budgeting processes for your community.
- Adopt a goal for a target level of bicycle use (percent of trips made by bike) to be achieved within a specific timeframe and ensure data collection necessary to monitor progress toward your adopted goal.

Additional Feedback from the 2019 Report Card

- Continue to expand and improve the bike network and follow bicycle facility selection criteria that increase separation and protection of bicyclists based on levels of motor vehicle speed and volume. On roads where automobile speeds regularly exceed 35 mph, provide protected bicycle infrastructure such as protected bike lanes or parallel 10ft wide shared-use paths, rather than relying on wide shoulders or unprotected bike lanes.
- Expand bicycle safety education to be a universally routine part of education for students of all ages and ensure that schools and the surrounding neighborhoods are particularly safe and convenient for biking and walking.
- Continue efforts to improve data-driven road safety operations and Vision Zero activities. Work with neighboring jurisdictions to develop a coordinated and comprehensive Vision Zero policy and program.
- Adopt a target level of bicycle use (percent of trips) to be achieved within a specific timeframe and ensure data collection necessary to monitor progress. Demonstrating a higher level of ridership in Fitchburg than what the ACS data shows (0.76%) will be critical to moving the community up to the Gold BFC level.

More information about this encouragement program can be found at www.bikeleague.org.

4.2 – Enforcement and Network Safety Recommendations

The following are recommendations specifically related to enforcement and safety for bicycling and walking in Fitchburg.

Bicycle Definition

While vehicles pose the most significant risk to the safety of bicycles and pedestrians, it is important to note that bicycles are considered vehicles under Wisconsin State Statute 346.02. This means that bicycles are subject to the same rules of the road as motor vehicles, which include obeying all traffic signs and signals, as well as adhering to right-of-way laws.

E-Bikes

The increasing prevalence of e-bikes has led to the establishment of regulation for e-bike and definitions of e-bike classification. E-bikes were legalized when the 2019 Wisconsin Act 34 was signed into law. This law:

- Created three categories of electric bicycles based on the type of motor and assistance it provides to the rider;
- Specifies that riders under the age of 16 cannot ride a Class C electric bicycle that allows the motor to assist riders up to 28 miles per hour;
- Requires manufacturers to permanently affix a label that provides the classification of the bicycle's motor; and
- Ensures that electric bicycles are regulated and treated in the same manner as human-powered bicycles, except that local municipalities or the Department of Natural Resources may prohibit the use of electric bicycles on a bike path under its jurisdiction.

Under Wisconsin law, e-bikes are defined into three classifications.

1. **Class 1 E-bike:** Provides electrical assistance only while the rider is pedaling, assist up to 20 mph.
2. **Class 2 E-bike:** Provides electrical assistance regardless if the rider is pedaling or not, assist up to 20mph
3. **Class 3 E-bike:** Provides assistance only while the rider is pedaling, assist up to 28 mph. Must have a speedometer. May not be operated by anyone under the age of 16.

Safety Enforcement Methods

A variety of law enforcement methods can help change unsafe behaviors, making it easier for people of all ages and abilities to walk and bicycle in Fitchburg. Regardless of method, enforcement requires consistency and follow-up in order to maintain effectiveness; studying behaviors before and after implementation can help to identify which methods are best at achieving the desired outcomes. Studies may be as simple as measuring speeds or observing the behavior of people driving, walking, and bicycling.

Speed Trailers & Active Speed Monitors

Portable speed trailers display drivers' real-time speeds compared to posted speed limits. Devices help reduce driver speeds and increase awareness of local speed limits. Speed trailers are most effective when they flash "slow down," or flash lights that mimic photo speed cameras or police cars when drivers surpass the speed limit. Some trailers have the ability to collect traffic data, including vehicle counts and speed information, which can be used to identify times when additional enforcement may be needed. In some cases, back-up enforcement by police officers may be needed to stop and/or ticket individuals who are speeding.

Active speed monitors are permanent or portable devices to keep drivers aware of speeds and remind them of the need to slow down. Speed monitors are typically displayed below speed limit signs and visually display drivers' speed in real time as they pass. Whether the monitors are permanent or portable, these displays are a valuable tool for monitoring problem areas and influencing driver behavior in a targeted manner.

Progressive Enforcement

Progressive enforcement is a method addressing safety concerns through a three-stage process: educating, warning, and ticketing. Progressive enforcement can apply to drivers, pedestrians, or bicyclists who exhibit unsafe behaviors. Enforcement does not need to be followed in a progressive manner, depending on the situation or severity of the violation; however, traditionally, it is recommended.

Educate

First, community awareness of the problem must be established. Raising awareness of the issue will change some behaviors and will create public support for follow-up enforcement efforts. This can come in the form of police presence in a particular area.

Warn

Second, warn the public about actions to be taken and why by distributing flyers, posting signs, and sharing information using social and traditional media. Issuing warnings allows police to contact many more non-compliant motorists compared to writing citations. High frequency of stops also ensures that many other people witness warning stops, prompting them to obey the rules. Give people time to change their behaviors before ticketing starts.

Ticket

Finally, after the "warning" time expires, clearly announce when and where ticketing operations will occur. If offenders continue to violate the law, officers begin writing tickets. Ticketing gives the program credibility by establishing police follow-through.

Speed Enforcement in School Zones

Strict enforcement of speed limits in school zones is one enforcement tool that can improve safety for students and families walking and bicycling to community destinations. Consistent enforcement in established school zones and near community destinations are useful approaches.

4.3 – Policy Recommendations

Considering and implementing a range of policy changes can create a lasting framework for facilitating walking and bicycling improvements in Fitchburg. The following are recommendations specifically related to policy in Fitchburg.

Adopt NACTO Urban Street Design Guide into Development Review Process

The Urban Street Design Guide, published by the National Association of City Transportation Officials (NACTO) in 2013, provides best-practice guidance for engineers, planners, and designers working in cities all over the world. The Urban Street Design Guide considers all modes of transportation, with an emphasis on pedestrian and bicyclist safety. *More information can be found at* http://nacto.org/publication/urban-street-design-guide/.

The guide can be most useful in the development review process for specific commercial or more urbanized areas in the City. This can be used as a supplemental resource to the Infrastructure Toolkit located in *Appendix A*.

Orienting Development to Trails and Bike/Ped Investments

Fitchburg has made an important investment to provide pedestrian and bicycle connectivity in the city. An important opportunity to support the city's ongoing orientation towards a built environment that encourages active transportation is to develop and adopt policies that encourage appropriate economic and commercial development along the City's path and trail corridors. These investments, oriented toward leveraging bike and pedestrian traffic, can help grow walking and biking overall while also shaping the city's new growth

Pedestrian-Oriented Policies

The following highlights policy recommendations intending to expand and promote pedestrian access, connectivity, and safety.

Sidewalks in New & Existing Developments

The City should continue to require the installation of sidewalks in new developments and redevelopments per existing ordinance/policy (redevelopment constitutes "infill" development, or a change in intensity of use, to create a new building area. Redevelopment does not include resurfacing or rebuilding a street). The City should discuss removing obstacles to adding sidewalks in existing developments, including ordinance changes with Council approval.

RRFBs at the Seminole Hwy crossing of the Capital City Trail

Complete Streets, Vision Zero, and Traffic Calming

It is a recommendation of this Plan, Fitchburg's 2030 Comprehensive Plan, and the 2025 Sustainability Plan that the City should adopt a Complete Streets policy and implementation guide as an effort to promote safety for non-driving users of the roads. Complete street design would include reducing speed limits, introducing lane reductions, and inclusion of traffic-calming measures such as speed bumps and raised crossings at intersections.

The City is also coordinating with neighboring jurisdictions in continuing a comprehensive, coordinated Vision Zero effort; the nonprofit organization ChangeLab Solutions describes Vision Zero as "a strategy to achieve the policy goal of eliminating all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all."

A Vision Zero resolution would ideally commit Fitchburg and its partners to these actions:

- Actively working to eliminate traffic deaths and serious injuries (within a specified time period)
- Collecting, analyzing, and using data to understand trends and potential disproportionate effects of traffic deaths on specific populations
- Creating a Vision Zero task force and advisory group to develop and implement an action plan that is guided by community input (could be coordinated with or assumed by the BPC)
- Prioritizing the safety of pedestrians, bicyclists, transit riders, scooter riders, and people with disabilities over the ease of use of personal automobiles
- Prioritizing strategies that benefit the safety of communities in historically underinvested areas and ensuring that no strategy results in racial profiling or otherwise exacerbating racial inequities

Traffic Calming Measures reduce traffic speeds and/or cut-through traffic with the goal of increasing safety for motorists, bicyclists, and pedestrians.

- **Striping Drive Lane Edge:** Painted solid line to reduce the perceived lane width and separate it from parking or biking space.
- **Tree-lined Streets:** Streets with landscaped center medians and/or perimeter trees can affect driver perceptions of lane width, inducing lower speeds.
- **Speed Display Sign:** Street sign with radar that displays actual speed and prompts motorists to slow down (via blinking or flashing lights).

Speed Display

- **Bump-out (bulb-out, neck-downs):** Curb extensions into the road section (outside travel lanes) that narrows the road and length of pedestrian crossings.
- **Raised Crossing / Intersection:** Speed table across the entire crossing / intersection that reduces vehicle speed and creates level crossings for pedestrians.
- **Raised Median / Crossing Refuge**: Placement of a raised island in the middle of the roadway to narrow the vehicle travel lanes.


Bump-out

- **Chicanes and Traffic Circles:** Features that shift the path of traffic horizontally within the right-of-way. Chicanes do this mid-block and traffic circles do this within intersections.


Raised Median / Crossing Refuge, Plus Speed Table


Chicane

4.4 – Bicycle Parking Recommendations

Visible, secure bicycle parking is essential for making bicycling a viable option for transportation purposes. Most people will simply not bike to locations where parking isn't available. Others will improvise by locking bicycles to anything that seems secure. Attempts to lock to 'anything that doesn't move' can result in damage to fixtures including light posts and railings and can also cause hazards to people walking.

Expanding Bicycle Parking Options

Compared to other infrastructure-related improvements, bicycle parking is a relatively quick and inexpensive way to make bicycling easier. Table A.4 in Appendix A provides suggested guidance for the number of bicycle parking stalls to be installed per establishment type.

There are several steps the city could take to better accommodate bicycle riders' parking needs:

- Establish a policy for requiring bicycle parking as part of existing development throughout the City of Fitchburg.
- Create a "Request-a-Rack" program and/or bicycle rack cost-share program to add bicycle parking on public land or in rights-of way around commercial areas.

photo credit: Bike Fitchburg

Short-Term Bicycle Parking

Short-term parking accommodates visitors, customers, employees, and others who arrive at a destination with the intention of leaving within a few hours. Standard Inverted-U racks, securely anchored and placed near primary entries are recommended. Short-term parking is recommended for Fitchburg's neighborhood parks, schools, transit stations, employment centers, and commercial areas.

Long-Term Bicycle Parking

Long-term parking accommodates employees, students, residents, commuters, and multi-modal travelers. Long-term parking should be secure, weather-protected, and in a visible and convenient location. Long-term parking may be provided using inverted-U racks in a secure and supervised area, or by bicycle lockers, bicycle stations, or bicycle rooms. Long-term parking should be provided at schools, major transit hubs, large multifamily developments, and office areas.

Bicycle Parking Criteria

APBP Parking

The Association of Pedestrian and Bicycle Professionals (APBP) is a community of practitioners in transportation, engineering, urban design/planning, and more, working to create more walkable, bikeable places. The APBP's Essentials of Bike Parking is a brief guide to providing quality, usable bike parking for the community.

Performance criteria for APBP compliance includes the following baseline for bike parking racks:

- Support the bike upright without putting stress on wheels
- Accommodate a variety of bicycles and attachments
- Allow locking of frame and at least one wheel with a U-lock
- Provide security and longevity features that are appropriate for the intended location (materials, coatings, hardware, etc.)
- Use is recognizable and intuitive for first-time users

Placement and Function

Parking areas should be visible and prominent, located near a building's main entry, and located clearly and conveniently along a bicycle riders' natural path to access a site. More information about bicycle parking is available in *Appendix A*.

photo credit: Bike Fitchburg

4.5 – Facility Maintenance Recommendations

The City should ensure that bicycle and pedestrian facilities continue to serve the needs of residents and visitors well into the future. Walking and bicycling facilities should receive adequate maintenance to remain safe and convenient and to protect the investments made by the City of Fitchburg and its partners.

General Considerations

People walking, especially people who use mobility aids, depend on a level, slip-resistant surface for travel. Walking surfaces that are free from unexpected bumps, holes or cracks, ice, or other slippery materials are paramount for people's safety and comfort. Pedestrians also depend on motorists' ability to anticipate and respond to their presence when crossing streets.

Surfaces that are adequate for vehicles can be treacherous for pedestrians or cyclists: gravel can deflect a bicycle wheel; a crack in the pavement or a poorly-placed utility grate can trap a wheel or trip walkers; wet leaves, ice, and gravel in walkways and bikeways can result in a fall, limit mobility for people requiring aids, and reduce system use.

Maintenance of travel ways (sidewalks, shared-use paths, and on-street bicycle facilities), signs, signals, and pavement markings is important in providing a reliable network for people walking and bicycling.

Maintenance Budgets

Preventive maintenance reduces hazards and decreases future repair costs. Maintenance costs and responsibility for maintenance should be assigned when projects are planned and budgets developed. As with roadways, typical annual maintenance costs range from 3 to 5 percent of infrastructure replacement costs - for example, a $100,000 facility should include a $5,000 annual maintenance budget. Life-cycle cost analysis is recommended to determine the net value of using longer-lasting, higher-quality materials during construction if they reduce yearly maintenance expenditures.

Management Plans

A management plan is a tool to identify maintenance needs and responsible parties. A management plan that includes the maintenance component for a proposed facility should be established before construction. Additionally, a management plan should include a means for users of the system to report maintenance and related issues and to promptly address them.

A facility's management plan answers basic operational and staffing questions such as frequency of maintenance tasks and who is responsible for the following issues:

- Filling potholes
- Removing fallen trees or branches
- Responding to vandalism and trespassing
- Removing litter
- Replacing stolen or damaged signs
- Watering and weeding landscaping
- Acting as the main contact
- Covering expenses

User-Initiated Maintenance Requests

Users of Fitchburg's pedestrian and bicycle network will likely be the first to notice hazards, maintenance issues, and opportunities to improve the system. Since 2017, the City has created an online form for members of the public to submit questions, concerns, and requests. Continuation of this system will support staff's ability to prioritize investments, avert deterioration of the city's infrastructure investments, provide effective management, and reinforce resident-ownership of Fitchburg's non-motorized network assets.

Markings

Signs and pavement markings are important features of walkways, bikeways and roadways, and help ensure continued safe and convenient use of these facilities. To be useful, bikeways signs, striping, and legends must be kept in a readable condition.

Some recommendations to address these infrastructure elements include:

- Regular inspection of bikeways signs and legends, including an inventory of signs to account for missing or damaged signs;
- Prompt replacement of defective or obsolete signs;
- Regular inspection of striping, and prompt reapplication as needed. Bicycle lanes may require annual re-striping if located on higher-volume streets; and
- Consider durable cold plastic for skip-striping bicycle lanes across right turn lanes.

Street Sweeping

Loose gravel, sand, leaves, and other debris on the surface of bicycle lanes, paved shoulders, and paved sections of shared use paths is being removed by City maintenance staff at least once a year, typically in the spring. Debris will tend to accumulate on bicycle lanes because automobile traffic will sweep these materials from the automobile driving lanes to the sides of the roadway. This is especially true for bicycle lanes that are located directly adjacent to a curb, where debris frequently collects.

Snow and Ice Removal

Snow removal is a critical component of pedestrian and bicycle safety. The presence of snow or ice on sidewalks, curb ramps, or bikeways will deter pedestrian and cyclist use of those facilities to a much higher degree than cold temperature alone.

Seniors and other vulnerable adults will avoid walking in locations where ice or snow accumulation creates slippery conditions that may cause a fall. Curb ramps that are blocked by ice or snow effectively sever access to pedestrian facilities for wheelchair users and seniors. Additionally, inadequately maintained facilities may force people walking or bicycling to take a route that is unsafe or inconvenient.

When the surface of a road is covered by snow, the pavement markings that guide and warn people walking, bicycling, or driving may be difficult to see. Clear snow from the entire roadway surface so pavement markings are identifiable, and people walking and bicycling can comfortably travel as far to the right as practicable.

Prioritizing Snow Clearing Operations

A useful approach for maximizing the efficiency of maintenance investments is to identify locations where accumulation of snow or ice would significantly impede pedestrian and bicycling access and safety so that these locations are prioritized for clearing immediately after a storm event.

Surface Repairs and Resurfacing

People walking and bicycling are more sensitive and more vulnerable to problems in the roadway surface than people driving. A smooth surface, free of potholes and other major surface irregularities, should be provided and maintained. Care should be taken to eliminate other physical problems. Requests for surface improvements could be made through the user-initiated maintenance request program described above.

Loose asphalt materials from patching operations often end up on the shoulder, where the larger particles adhere to the existing surfacing, creating a very rough surface for bicycling. Fresh loose materials should be swept off the road before they have a chance to adhere to the pavement.

Utility cuts can leave a rough surface for people bicycling if not backfilled with care. Cuts should be backfilled and compacted so that the cut will be flush with the existing surface when completed. Extra care should be used when cuts are made parallel to bicycle traffic to avoid a ridge or groove in the bicycle wheel track. Consideration should be given to adding these specifications to utility permit requirements.

Street resurfacing projects provide ideal opportunities to greatly improve conditions for people walking and bicycling by narrowing automobile travel lanes, widening shoulders, or adding bicycle lanes, for example. However, if not done correctly (by leaving a ridge or a joint in a shoulder or bicycle lane for example), conditions may worsen.

Items to consider on resurfacing projects that will help improve conditions for people walking and bicycling include:

- Gravel driveways and alleys should be paved back 5–10 feet from the curb or right-of-way to prevent gravel from spilling onto shoulders or bikeways.
- Loose gravel used during the installation process for chip seals creates hazardous bicycle riding conditions, especially in shoulder areas. Provide warning signs for bicycle riders as well as bicycle route detours during installation.
- Avoid leaving a ridge in the area where people ride bicycles, which occurs where an overlay extends only part-way into a shoulder or bicycle lane. If possible, the overlay should be extended over the entire surface of the roadway to avoid leaving an abrupt edge.

Stormwater Management

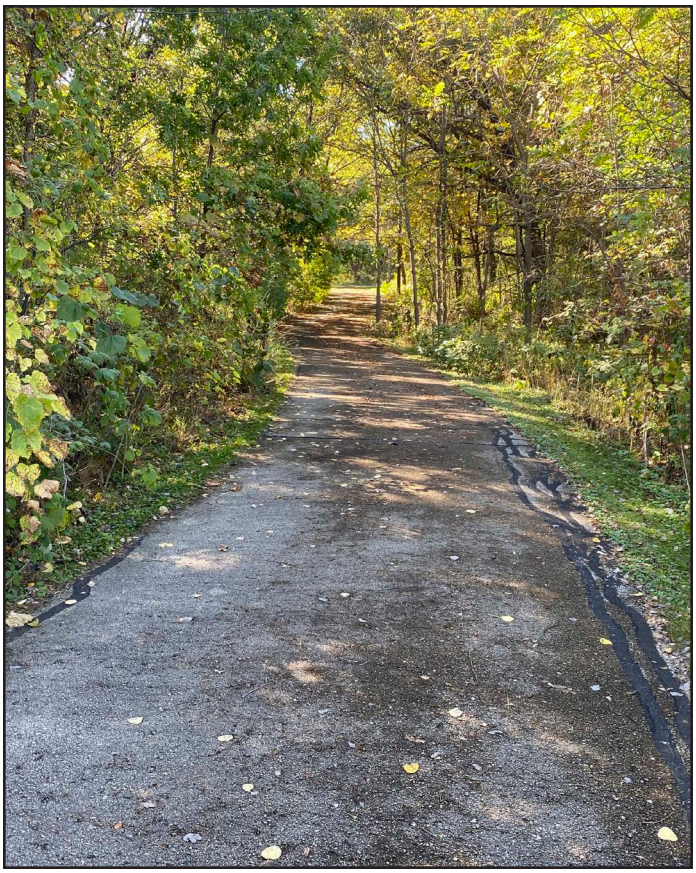
Drainage facilities may change grades and deteriorate over time. Ensuring that bicycle-safe drainage grates are located at the proper height greatly improves cyclist safety; it may sometimes be necessary to adjust or replace catch basins to ensure continued safe operations and improve drainage. The small asphalt dams that are sometimes constructed on roadway shoulders to divert stormwater into catch basins are a hazard to people bicycling, and their use should be avoided.

Event-related drainage issues (e.g. backed-up grates) and long-term drainage hazards (unsafe grates) can be reported through the user-initiated maintenance request program and should be proactively addressed whenever street improvements are made.

Vegetation

Vegetation encroaching into and under a sidewalk, shared-use path, or trail crossing creates a nuisance and a hazard for people walking or bicycling, especially for those with sight or mobility impairments. Vegetation maintenance ensures smooth and clear pedestrian and bicycle travel areas and reduces visual barriers that could otherwise hinder user safety. City maintenance staff are generally responsible for vegetation management. Management needs should be considered during design and construction for long-term maintenance.

Vegetation management issues identified by users (e.g. tree roots causing heaving of sidewalk surfaces, encroachment and maintenance issues) can be reported to City of Fitchburg staff via a Request Tracker tool on the City's website that has been updated to include a form for "Bikeway and Pedestrian Concerns."



4.6 – Evaluation and Performance Measure Recommendations

Performance measures are instruments that help assess the extent to which progress is being made in implementing a plan. They are a set of goals, trends or targets that are meant to be met at a certain point of time in the future. The following are evaluation and performance measure recommendations for the City of Fitchburg Bicycle and Pedestrian Plan - 2025 Update.

Conduct Regular Walk and Bicycle Audits

As part of the process of creating the 2017 Plan, City planning and engineering staff conducted several walk and bicycle audits, in coordination with the ad-hoc Bicycle and Pedestrian Advisory Committee (now established as the BPC). Groups led by city staff walked and bicycled routes together, observing the quality and comfort of the route and identifying areas of discomfort or safety concerns. It is recommended to continue to organize walk and bicycle audits on a regular basis, both to audit and measure improvements within the city for walking and bicycling, but also to build awareness and provide an opportunity for city staff to interact directly with residents on issues of walking and bicycling.

Review Plan Implementation Progress Annually

This Plan is intended to serve the City of Fitchburg for a 7-10-year period, when either a new plan or a plan update will be developed and adopted. In the interim, City Staff and the BPC should review this Plan semi-annually to track progress towards Plan goals and ensure timely implementation of Plan recommendations.

Benchmarks and Targets

It is a priority recommendation of this Plan that the BPC, City Staff, and other related committees develop standard benchmarks and targets to ensure that this Plan's goals and actions are successfully implemented. These benchmarks could align with indicators from other Fitchburg Plans as appropriate.

Existing benchmarks for Fitchburg include:

- Number of Bicycle-Friendly & Bicycle Benefits Businesses
- Number and severity of bicycle and pedestrian crashes
- Average Active Living Index (for Fitchburg's Urban Service Area)

New benchmarks for the City to set goals and track progress toward could include:

- Level of bicycle use as percentage of total trips in Fitchburg
- Number of League Cycling Instructors (LCIs) in Fitchburg
- Facility Use Data

The BPC should maintain this list of benchmarks and update for the semi-annual plan review along with a list of potential capital improvements projects to infill network gaps as identified in *Chapter Three* of this Plan.

Gather and Evaluate Crash Data

Pedestrian and bicycle crashes should be tracked as best as possible. Fewer crashes per year may indicate an improved environment, especially if more people are walking and bicycling for their daily trips. The City retrieves local pedestrian and bicycle crash data from the TOPS lab at the University of Wisconsin in Madison. This 2025 Plan update reviewed bicycle and pedestrian crash data from 2017-2024 to facilitate conversation and inform Plan recommendations. The Plan recommends updating the City's GIS file yearly to keep up-to-date on increases and decreases in pedestrian- and bicycle-vehicle crashes.

Recommended Performance Measures

It is recommended to keep an annual record of the following data:

- Number and location (intersections, on- or off-street locations) of pedestrian- and bicycle-vehicle crashes
- Severity of pedestrian- and bicycle-vehicle crashes
- Demographic information of people involved in pedestrian- and bicycle crashes
- Safety audits at Primary Intersections and other intersections of concern
- Nature of crashes (single vehicle crashes, motor vehicle-ped/bike-ped/motor vehicle-bike/bike-bike, Single user incidents may indicate a facility-based hazard, while multi-user may indicate needed improvements to conflict points.

Optional Measures

- Conduct an intercept or general community survey to get an overall sense of pedestrian, bicyclist, and driver sense of safety and comfort
- Conduct observation of pedestrian and bicycle use, as well as automobile compliance and awareness in targeted areas

Facility Use Data

Fitchburg can work with partner organizations and local Bicycle-Friendly businesses to establish a bicycle and pedestrian counting program. An increase in observed walkers or cyclists would indicate an improved environment, especially if collisions involving people walking or bicycling decrease over the same period. An online survey can also be completed to assist with this evaluation.

Recommended Performance Measures

It is recommended to keep an annual record of the following data:

- Percent of residents who walk or bicycle to work
- Percent of students who walk or bicycle to school
- Annual pedestrian and bicycle counts at important community destinations

Network Facility Inventory

A system's physical facilities and network provide the foundation for increasing travel by foot or bicycle. Measuring progress in the implementation and development of facilities will help measure success in plan implementation and provide additional context for understanding potential gains in user safety and facility use that may occur as new facilities are added.

Recommended Performance Measures

It is recommended to keep an annual record of the following data:

- Miles of new/existing sidewalks and trails
- Miles of new/existing on-street bicycle facilities
- Number of new/existing bicycle parking spaces
- Miles of gaps in pedestrian network
- Miles of gaps in bicycle network

Bicycle and Pedestrian Commission

The BPC was created to oversee the adoption of this Plan Update in place of the 2017 BPAC. As part of an on-going effort in the City of Fitchburg, the Commission should continue to convene and work with City staff to address bicycle and pedestrian-related issues.

Active Living Index

The Active Living Index is an assessment tool designed to evaluate how conducive a place is to active living, assigning a combined Active Living Score with three mobility components included (walking, bicycling, and transit infrastructure.) Last updated in 2015, much of the Urban Service Area of Fitchburg showed scores between 10-30 (out of 100), with a few areas along Fish Hatchery Road showing scores closer to 50 (out of 100).

The Active Living Index is not expected to be updated again, as a one-time partner project between multiple area entities, but this historical snapshot provides a benchmark against which to measure Fitchburg's progress in creating further accessibility for bicycling, walking, and transit.

The Active Living Index can be found at https://www.arcgis.com/apps/webappviewer/index.html?id=6a19a38e00be441080923f1f2f862b22.

5. Implementation

This chapter contains the following sections:

5.1 – General Approaches to Implementation

When adopted, the Fitchburg Bicycle and Pedestrian Plan - 2025 update will be the guiding document for decisions regarding bicycle / pedestrian facilities and planning for the City of Fitchburg.

A productive approach for implementing infrastructure and programming recommendations during that time period should include:

- Development of initial concepts for pedestrian and bicycle network improvements based on recommendations from this plan, guidance from City of Fitchburg staff and community, and a review and analysis of existing conditions.
- A "test-run" of new projects by installing temporary pilot/pop-up versions of proposed changes. Pilot projects provide opportunities to measure impacts and gather comments from community members before investing in permanent infrastructure improvements.
- Further refining of conceptual recommendations through additional engineering and land use analysis, as well as coordination with the local community.
- Funding support for implementation of this plan's recommendations from multiple sources. The City should work closely with Dane County and the Wisconsin DNR regarding implementation of facilities along county roadways and state trails, as well as with the neighboring communities of the City of Madison, the Village of Oregon, the City of Verona, the Town of Verona, and the Town of Dunn for roadways at City of Fitchburg borders.

Table 5.1 provides a list of state and federal grant opportunities for various trail and infrastructure improvement projects. The City may consider these sources of funding to complete upcoming projects (identified in *Chapter Two*), filling network gaps (identified in *Chapter Three*), or fulfilling recommendations as set forth in this chapter.

Table 5.1 - Funding & Grant Opportunities

NAME	DESCRIPTION	SOURCE	AVAILABLE FUNDS	FUNDING SCHEDULE	APPLICABLE ACTIVITIES
WISDOT					
Transportation Alternatives Program (TAP)	Funding for transportation projects through the Bi-Partisan Infrastructure Law (BIL) and state budget	WisDOT *(Bipartisan Infrastructure Law through 2026)*	$18 million total funds available. Amount varies by project. Covers up to 80% of eligible project costs.	Bi-annual funding schedule with next project solicitation anticipated in October 2025. Awarded in early 2026.	Pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements and historic preservation.
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Provides funds to State WisDOT for transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards.	USDOT/ FHWA	$15-20 million awarded annually. Awards range from $100,000-$2 million. Covers up to 80% of eligible project costs.	Application cycle opens June 2025. Applications due September 8, 2025.	Projects that reduce traffic congestion and improve air quality, including bike and pedestrian facilities.
Transportation Economic Assistance (TEA)	Provides matching state grants to governing bodies for projects that help attract employers to Wisconsin or encourage in-state business and industry expansion	WisDOT	$3.4 million per year, will fund 50% of eligible project costs OR $5,000 per job created/ retained (whichever is less)	Applications are ongoing on a first come, first serve basis. Projects must begin within 3 years of grant award.	Road, rail, harbor, and airport projects (environmental testing, traffic control and safety, road and railroad construction, etc.).
Carbon Reduction Program (CRP)	Provides funding for projects that reduce transportation emissions	WisDOT	$2.3 million available annually for municipalities > 50,000 people. Covers up to 80% of eligible project costs.	Application cycle is not anticipated in 2025. *Subject to state budget approval.*	Design and construction of bike/ pedestrian on-street and off-street facilities, bike and ped programs, micromobility like bike and scooter sharing, other traffic and congestion reduction projects.

NAME	DESCRIPTION	SOURCE	AVAILABLE FUNDS	FUNDING SCHEDULE	APPLICABLE ACTIVITIES
WI DNR					
Knowles-Nelson Stewardship Grant	Single application to wide group of grants funding recreational development and conservation land purchases for local governments and nonprofits	WI DNR	$33 million total funds available in 2023. Covers up to 50% of eligible project costs. Requires a CORP developed within previous five years.	Applications due March 1 annually. *Subject to state reauthorization after 2026.*	Land acquisition, trail and path construction, nature-based recreation projects.
Recreational Trail Program (RTP)	Reimbursement for development, rehabilitation, and maintenance of recreational trails and trail-related facilities	WI DNR	$1.5 million total funds awarded in 2023. $100,000 or $250,000 every third-year limit per grant. Covers up to 80% of eligible project costs.	Applications due March 1 annually. *Subject to state reauthorization after 2026.*	Existing trail maintenance, Development of trailhead facilities and linkages, new trail construction, acquisition of easements for trail corridors).
WISCONSIN ECONOMIC DEVELOPMENT CORPORATION (WEDC)					
Vibrant Spaces Grant	Single application to wide group of grants funding recreational development and conservation land purchases for local governments and nonprofits.	WEDC	Up to 50 awards awarded each cycle. Awards range from $25,000-$50,000.	Applications due in December annually	- Public space enhancements (activating alleys, park spaces, vacant parcels/underutilized parking lots) with public art, landscaping, benches, bike racks, etc. - Public signage (wayfinding, interpretive signage, kiosks, etc.) - Public infrastructure (site prep, restrooms, water features, electrical, lighting)

NAME	DESCRIPTION	SOURCE	AVAILABLE FUNDS	FUNDING SCHEDULE	APPLICABLE ACTIVITIES
FEDERAL/OTHER					
Safe Streets and Roads for All	Supports the development of a Safety Action Plan and additional funding opportunities for Implementation of projects listed in the Action Plan	FHWA	Over $1 billion overall in 2024,	Applications due June 26, 2025; additional opportunities anticipated through 2026.	- Development of Safety Action Plan - Implementation of projects and strategies in the Action Plan to address a roadway safety problem (infrastructure, behavioral, or operational)
Active Transportation Infrastructure Investment Program (ATIIP)	Created by the Bipartisan Infrastructure Law (BIL) to construct projects to provide safe and connected active transportation facilities.	USDOT/ FHWA	$100,000 - $15,000,000	Annual application cycle (March - June). *Potentially suspended by USDOT.*	Planning, design, and construction of connected active transportation networks
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	Provides funds to States for transportation projects designed to reduce traffic congestion and improve air quality, particularly in areas of the country that do not attain national air quality standards.	USDOT/ FHWA	Varies by project	Applications due September 30 annually	Projects that reduce traffic congestion and improve air quality, including bike and pedestrian facilities.
Rails to Trail Conservancy (RTC)	Support for organizations and local agencies to develop and connect equitable trail networks (must serve multiple user types: bicycling, walking/ hiking, riding, etc.)	RTC	$200,000 overall, grants will range $5,000 - $25,000	2024 applications were due June 9, grants will be awarded Fall 2024. Projects must begin by September 2025	Project must support one or more of the Trail Nation Playbook strategies: vision, coalition building, acquisition, mapping and analytics, matching funds, community engagement.

5.2 – Implementation of Network Recommendations

Pedestrian and bicycle improvements are often implemented as part of larger streetscape and roadway improvements. For this reason, it is difficult to provide precise phasing recommendations for network implementation. Regardless, identifying priority areas and projects can be helpful in moving implementation forward fairly and effectively.

Consider when selecting, designing, and implementing infrastructure recommendations:

- Coordinate pedestrian and bicycle improvements with scheduled road construction and repairs to avoid potential conflicts and take advantage of opportunities for simultaneous improvements.
- Street resurfacing, re-striping, and streetscape projects provide opportunities to stripe on-street bicycle facilities or improve off-street sidewalk and trail connections at minimal costs.
- Treatments that require special consideration and careful design include raised crosswalks, channelized turn lane (slip lane) improvements, neighborhood slow streets with traffic calming elements, bicycle-specific traffic signals, and refuge islands.
- Pursue additional funding to support the design, implementation, and maintenance of pedestrian and bicycle improvements on a regular, ongoing basis.
- Include pedestrian and bicycle improvements as part of development and redevelopment projects, or through spot improvements.

Table 5.2 outlines the recommendations, timeline for implementation, and the champion or responsible agency for implementing the network recommendations described in *Chapter Three*.

Recommendations Table Features

Implementation Time Frame

- Priority Actions: Highest priority, anticipated completion 2025-2026
- Short-Term Actions: Complete after Priority Actions, anticipated 2025-2028
- Medium-Term Actions: Anticipated completion 2028-2030
- Long-Term Actions: Lowest priority or will require additional resources not yet attained by the city, anticipated completion will be beyond 2030 or the life span of this 2025 Plan update

Champion / Responsible Parties

- City Staff – Staff from City of Fitchburg Planning & Zoning, Public Works, and Parks, Recreation, & Forestry Departments
- Chamber – Fitchburg Chamber Visitor & Business Bureau
- BF - Bike Fitchburg
- BPC – Fitchburg Bicycle & Pedestrian Commission
- TTC- Fitchburg Transportation & Transit Commission

Table 5.2 - Network Recommendations

FROM CHAPTER 3.2 - BICYCLE ROUTE NETWORK			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Bicycle Network Implementation	Work towards completing the network of primary and neighborhood bicycle routes (see pages 47-51) with facility selection criteria that increases separation and protection of bicyclists based on motor vehicle speed and volume.	Short-term (2025-2028)	City Staff, BPC & related committees, Bike Fitchburg
Bicycle Treatment at Intersections and Trail Crossings	Conduct city-wide survey of Primary & Critical Intersections to determine necessary improvements to intersections and crossings per Table 3.2 (see page 48)	Short-term (2025-2028)	City Staff, BPC & related committees
Lighting of Trails and On-Road Facilities	Establish guidelines for providing lighting along on- and off-road facilities, and in tunnels and other areas along trails as needed	Long-term (2030+)	City Staff, BPC & related committees

FROM CHAPTER 3.3 - PEDESTRIAN ROUTE NETWORK			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Pedestrian Network Implementation	Work towards completing the network and policy recommendations (see pages 52 – 56)	Priority (2025-2026)	City Staff, related committees
Urban Design Amenities	Improve urban design amenities for pedestrians, especially within Pedestrian Activity Areas, per Table 3.3 (see page 54)	Long-term (2030+)	City Staff, related committees
Street Crossings	Improve street crossings for pedestrians per Table 3.3 (see page 54), especially in Pedestrian Activity Areas, at Primary & Critical Intersections, and with opportunities to tie into planned construction projects	Medium-term (2028-2030)	City Staff, related committees
Pedestrian Crossing Signals	Improve pedestrian crossing signals per Table 3.3 (see page 54)	Medium-term (2028-2030)	City Staff, related committees

5.3 – Implementation of Program Recommendations

The city's role in implementation of programming initiatives will vary depending on resources and capacity. The city may take the lead, provide support, or partner with other organizations, neighborhood groups or local businesses to initiate and implement a diverse array of programs. For some programs, the City of Fitchburg may have little or no direct involvement, other than a statement of support or implication of support through this plan.

Program implementation should occur in coordination with infrastructure implementation and evolve as needed in the long term to educate all roadway users on how to safely operate in shared spaces including travel-ways and intersections, promote use of new facilities through encouragement programming, and support network safety through enforcement and facility maintenance.

When working to implement programs, the City of Fitchburg can:

- Provide support to schools for further Safe Routes to School planning and programming implementation at the school-, district- and citywide levels;
- Leverage partnerships with governmental and non-governmental agencies, community organizations, and local businesses to support education and encouragement programming; and
- Work closely with the City of Fitchburg Police Department to enforce traffic safety laws, lead safety workshops including community education classes or bicycle rodeos, and to provide a positive example for safe driving and bicycling behavior.

Table 5.3 outlines the recommendations, timeline for implementation, and the champion or responsible agency for implementing the program described in *Chapter Four.*

Local Organizations

Implementation of this Plan's recommendations may be supported with outreach to these community organizations for potential partnerships and programming coordination:

- Active Youth Wisconsin
- Boys & Girls Club of Dane County
- Healthy Neighborhoods Advisory Committee
- Bike Fitchburg
- Fitchburg Lions Club
- Fitchburg Verona Horizons Rotary Club
- Fitchburg Senior Center
- Fitchburg Public Library & Friends of the Fitchburg Library
- Reach Dane
- Destination Madison
- Outdoor Afro – Madison Chapter
- Black Girls Do Bike – Madison Chapter
- Madison Bikes

Table 5.3 - Program Recommendations

FROM CHAPTER 4.1 - EDUCATION AND ENCOURAGEMENT PROGRAM RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Citywide Network Maps	Update and distribute Citywide Network Maps regularly, ensure maps are available in multiple languages, and explore opportunities to create curated maps for underserved groups (such as "safe and comfortable routes" for new riders or family-friendly rides)	Yearly	City Staff, Bike Fitchburg, Chamber
Community Walking and Biking Events	Encourage regular community events (to include Open Street Events Bike/Walk Weeks, Bike to Work initiatives, rides with Mayor and other City leaders, and Bike the Burg)	Yearly	Bike Fitchburg, Chamber, local businesses
Strategic Kid-Friendly Walking and Biking Events	Provide a wide range of encouragement programs at Regional, County, City, and Neighborhood scales, promoting youth walking and biking (Bike4Kidz, Bike Rodeos, Bike to School, etc.)	Short-term (2025-2028)	Local schools (Leopold Elementary, Forest Edge Elementary, Stoner Prairie Elementary, Savannah Oaks Middle Schools), City Staff, related committees, Fitchburg Police Department, Boys and Girls Club, Healthy Kids Collaborative, Dane County Safe Routes to School, neighborhood groups
Safe Routes to School	Explore opportunities to partner with local schools on funding (TAP grants) and outreach for Safe Routes to School plans	Short-term (2025-2028)	
Youth Education	Work to incorporate on-bicycle education opportunities in K-12 schools (providing a fleet of bicycles and safety training programs in schools, and/or incorporating biking into STEM programs)	Short-term (2025-2028)	
Rider Incentives and Bicycle Friendly Businesses	By 2030, increase the number of Bicycle Friendly Businesses to 35 (the City has 25 in 2025) and 25 Bicycle Benefits Businesses (11 as of 2025)	Short-term (2025-2028)	Local businesses, Bike Fitchburg

Adult Education & Outreach	Ensure that there are bicycle education opportunities for both frequent and occasional riders (especially for women, seniors, families, and other key demographic groups) that promote Fitchburg's network and destinations and outline the rules of the road	Short-term (2025-2028)	Neighborhood groups, City Staff, related committees, Bike Fitchburg, Chamber, health advocates, local businesses
Bicycle Friendly Communities	Increase the number of League Cycling Instructors (LCIs) in Fitchburg	Short-term (2025-2028)	BPC, Bike Fitchburg
Bicycle Friendly Communities	Apply on a four-year cycle and strive for Gold-level Status as a Bicycle Friendly Community	2027, 2031, etc.	City of Fitchburg staff, Bike Fitchburg
BCycle Expansion & Education	Continue to partner with BCycle to identify future locations for bicycle share stations to fill gaps in Fitchburg's existing (and future) network	Ongoing	BPC, City of Madison, BCycle, local businesses, and bicycle advocates

FROM CHAPTER 4.2 - ENFORCEMENT AND NETWORK SAFETY RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Speed Trailers and Active Speed Monitors	Consider temporary (speed trailers) and permanent (active speed monitors) for installation at critical locations for bicycle and pedestrian use (ie—Badger State Trail crossing at McKee Road)	Long-term (2030+)	City Staff, related committees, City Police Department
Progressive Tracking	Pilot progressive ticketing procedures at critical locations for bicycle and pedestrian use	Long-term (2030+)	City Police Department
Speed Enforcement in School Zones	Strict enforcement of speed limits in school zones within the City of Fitchburg	Short-term (2025-2028)	City Police Department, Dane County Safe Routes to School, Verona Area Public Schools

Equity in Traffic Law	Continue to adopt fair and equitable traffic laws that will not be used to discriminate against cyclists, restrict their right to travel, or reduce their relative safety; consider racial and socioeconomic equity in the implementation of traffic enforcement systems	Short-term (2025-2028)	City of Fitchburg Police Department, City Staff, related committees, neighborhood groups

FROM CHAPTER 4.3 - POLICY RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Bicycling on Sidewalks	Develop a city-wide policy establishing guidelines for when and where a bicyclist may be allowed to ride on a sidewalk, with consideration for pedestrian needs as well as cyclist needs.	Short-term (2025-2028)	City Staff, related committees, City Police Department
Sidewalks in New Developments	Continue to require installation of sidewalks in new developments and redevelopments per existing city ordinance/policy *(Redevelopment constitutes "infill" development, or a change in intensity of use, to create a new building area. Redevelopment does not include resurfacing or rebuilding a street.).*	As needed	City Staff, related committees
Economic & Commercial Development Encouragement	Encourage appropriate economic and commercial development opportunities – taking advantage of bike and pedestrian traffic – along the City's path and trail corridors	Long-term (2030+)	City Staff, related committees, Mayor and City Council, Chamber
Downtown Thoroughfare Street Design	Adopt Downtown Thoroughfare Street Design Per NACTO Urban Street Design Guide for specific commercial corridors	Long-term (2030+)	City Staff, related committees, Mayor and City Council, Transportation and Transit Committee
Sidewalk Restriction Ordinances	Review ordinances restricting sidewalk additions in existing neighborhoods for potential changes	Short-term (2025-2028)	City Staff, related committees, Mayor and City Council

Complete Streets	Adopt Complete Streets policy and implementation guide to identify opportunities to lower speed limits (20 mph in residential areas) and introduce road-diets and traffic calming measures	Long-term (2030+)	City Staff, related committees, Mayor and City Council, Transportation and Transit Committee
Vision Zero	Continue to develop a coordinated and comprehensive Vision Zero policy and program	Long-term (2030+)	City Staff, related committees, Mayor and City Council, Transportation and Transit Committee
Traffic Calming	Explore development of Neighborhood Slow Streets and install traffic calming measures, such as speed bumps, traffic circles, and raised intersections in accordance with the City's Neighborhood Traffic Management Process.	Long-term (2030+)	City Staff, related committees
Slip Lanes	Consider eliminating slip lanes (channelized right-turn lanes) from intersection design for future road improvements, particularly for intersections identified as 'critical' or 'primary' intersections.	Short-term (2025-2028)	City staff, related committees

FROM CHAPTER 4.4 - BICYCLE PARKING RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Bicycle Parking Policies	Establish policy requiring bicycle parking for existing development, continue to require bicycle parking for selected new development uses	Short-term (2025-2028)	City Staff, related committees, City of Fitchburg Mayor and City Council, Transportation and Transit Committee

Bicycle Rack Encouragement	Add bicycle racks (APBP-compliant parking) to all new community destinations and public spaces, especially within parks, neighborhoods, and community centers	Long-term (2030+)	City Staff, related committees, BF, Mayor and City Council, Transportation and Transit Committee, local businesses and bicycle advocates

FROM CHAPTER 4.5 - FACILITY MAINTENANCE RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Maintenance Budgets	Include on-going maintenance within capital improvement project budgets	Short-term (2025-2028)	City Staff, related committees
Management Plans	Require facility management plans for new developments	Long-term (2030+)	City Staff, related committees
Street Sweeping	Continue additions of bicycle lanes and on-street facility types that will be compatible with street sweeping/cleaning procedures in Fitchburg	Ongoing	City Staff, related committees
Markings	Conduct regular inspections of wayfinding signs, striping, and facilities for bicycles and pedestrians	Yearly	City Staff, related committees
Snow and Ice Removal	Prioritize and evaluate snow clearing operations for pedestrians and bicyclists	Yearly	City Staff, related committees

Surface Repair and Resurfacing	Enforce quality control for surface repairs and resurfacing projects	Yearly	City Staff, related committees
Stormwater Management	Replace bicycle-safe drainage grates as necessary throughout the City of Fitchburg	Long-term (2030+)	City Staff, related committees

FROM CHAPTER 4.6 - EVALUATION AND PERFORMANCE MEASURE RECOMMENDATIONS			
ACTION / PROGRAM	**RECOMMENDATION**	**TIME FRAME**	**RESPONSIBLE AGENCY**
Review Plan Implementation Progress Annually	Review the Plan semi-annually and pursue a complete Plan Update in 2032-2035	Semi-Annually	City Staff, BPC
Benchmarks	Establish a list of benchmark indicators to determine success of Plan implementation and programming	Priority (2025-2026)	City Staff, BPC
Dedicated Staff / Coordinator	Consider increasing staff/committee hours, with a new position or expanded responsibilities for an existing position, dedicated to Plan monitoring and implementation	Long-term (2030+)	City Staff, BPC
Facility Use Data	Conduct yearly mode-share surveys	Yearly	City Staff, related committees
Walking and Bicycle Audits	Conduct regular walk and bicycle audits throughout the City of Fitchburg	Yearly	City Staff, related committees
Network Facility Inventory	Create and maintain data quantifying bicycle and pedestrian facilities	Yearly	City Staff, related committees

Appendix A - Infrastructure Toolkit

This chapter contains guidance on the following:

Introduction

This toolkit was revised in 2025 from the *Fitchburg Bicycle and Pedestrian Plan - 2017 Update* and includes a description of best practices for the development of bicycling infrastructure. The tools and approaches included are based on a survey of national applications and case studies, and provide guidance for improvements to street cross sections, intersections, and signals. This toolkit should not be the only resource to determine appropriate measures or infrastructure. Rather, it is part of an overall planning and engineering toolbox that includes the requirements and guidelines of state and local best-practices.

The following is a list of resources for bicycle and pedestrian infrastructure design and planning:

- Wisconsin Traffic Engineering, Operations and Safety Manual
- Wisconsin Manual on Uniform Traffic Control Devices (WMUTCD)
- Wisconsin Bicycle Facility Design Handbook
- Wisconsin Bicycle Planning Guidance
- Wisconsin Guide to Pedestrian Best Practices
- NACTO (National Association of City Transportation Officials)
- AASHTO (American Association of State Highway and Transportation Officials)

Facility Design and Selection Tables

Tables A.1-3 and Figures A.1-2 may be referenced when investigating new routes and crossing improvements in Fitchburg related to bicycle facilities. The following Bikeways Design Selection Tables were developed using a combination of reference with best-practice standards presented by MnDOT, WisDOT, NACTO, and AASHTO, as well as direct guidance from the City of Fitchburg Public Works Department. Widths specified below are *minimum* recommended widths. Buffered bicycle lanes and protected bicycle lanes are recommended along primary routes whenever space permits. In addition, four lane roads with fewer than 25,000 ADT are ideal candidates for road diets: four-to-three lane conversion with potential bicycle lanes added.

Table A.1 - Bikeways Design Selection for Rural (Shoulder/Ditch) Cross Section - Adapted from multiple sources* for Fitchburg, WI**

Motor Vehicle ADT (2 Lane)		<500	500-1,000	1,000-2,000	2,000-5,000	5,000-10,000	>10,000
Motor Vehicle ADT (4 Lane)		N/A	N/A	2,000-4,000	4,000-10,000	10,000-20,000	>20,000
Motor Vehicle Speed	25 MPH	4' PS or SLM	4' PS or SLM	4' PS	4' PS	5' PS or SUP	5' PS or SUP
	30 MPH	4' PS or SLM	4' PS	4' PS	4' PS	5' PS or SUP	5' PS or SUP
	35-40 MPH	5' PS or SLM	5' PS	5' PS	5' PS min.; 6' PS preferred	6' PS or SUP	6' PS or SUP
	45 MPH and greater	5' PS	5' PS	5' PS	5' PS min.; 6' PS preferred	6' PS or SUP	SUP

PS= Paved Shoulder; SUP= Shared Use Path; SLM = Shared Lane Marking

Table A.2 - Bikeways Design Selection for Urban (Curb/Gutter) Cross Section - Adapted from multiple sources* for Fitchburg, WI**

Motor Vehicle ADT (2 Lane)		<500	500-1,000	1,000-2,000	2,000-5,000	5,000-10,000	>10,000
Motor Vehicle ADT (4 Lane)		N/A	N/A	2,000-4,000	4,000-10,000	10,000-20,000	>20,000
Motor Vehicle Speed	25 MPH	NSS or SLM	SLM	SLM	NSS or 5' BL	5' BL	SUP
	30 MPH	NSS or SLM	NSS	NSS	5' BL	5' BL	6' BL or 5' BL + 2' BuL
	35-40 MPH	5' BL	5' BL	5' BL	5' BL	5' BL + 2' BuL or PBL	6' BL + 2' BuL and SUP or PBL
	45 MPH and greater	5' BL	5' BL	5' BL	5' BL + 2' BuL	5' BL + 2' BuL or PBL	SUP or PBL

NSS=Neighborhood Slow Street***; BL=Bicycle Lane**; BuL=Buffer Lane*****; PS= Paved Shoulder; SUP= Shared Use Path; SLM = Shared Lane Marking; PBL=Protected Bicycle Lane*****

*Adapted from MnDOT Bikeways Facility Design Manual, Wisconsin Bicycle Facility Design Handbook, AASHTO, and NACTO guides, as well as through direct guidance from the City of Fitchburg Public Works Department.

** Bicycle lane widths do not include the width of adjacent gutter pan.

***Preferred ADT for neighborhood slow streets is below 3,000. Neighborhood slow streets are not recommended for 4 lane roadways.

****While bicycle lanes with minimum widths are presented here as recommendations, consideration should be made about whether an on-street facility with greater protection/separation from vehicles (such as buffered or protected bicycle lanes) is warranted based on local road conditions, destinations, and expected and desired bicycle ridership. Where possible, the highest level of separation between bicyclists and motor vehicles is preferred; the dimensions and facilities shown in this table are suggested minimum widths and facilities.

*****Where possible, protected bicycle lanes should be integrated with a buffer. See page A-8 for a description of protected bicycle lanes

Table A.3 - Criteria for Crossing Treatments at Uncontrolled Locations*

Roadway Configuration	# of lanes crossed to reach a refuge (1)	# of multiple threat lanes per crossing (2)	Roadway ADT and Posted Speed															
			1,500 – 9,000 vpd				9,000 – 12,000 vpd				12,000 – 15,000 vpd				>15,000 vpd			
			≤ 30 mph	35 mph	40 mph	≥ 45 mph	≤ 30 mph	35 mph	40 mph	≥ 45 mph	≤ 30 mph	35 mph	40 mph	≥ 45 mph	≤ 30 mph	35 mph	40 mph	≥ 45 mph
2 Lanes (two way street, no median)	2	0	A	B	C	E	A	B	C	E	B	B	C	E	B	C	C	E
2 Lanes w/ Raised Median	1 or 2	0 to 1	A	B	C	E	A	C	D	E	B	C	D	E	C	D	D	E
3 Lanes w/ Striped Median	3	0 to 1	C	C	D	E	C	C	D	E	C	C	D	E	C	D	D	E
4 Lanes (two way street, no median)	4	2	A	D	D	E	B	D	D	E	B	D	D	E	D	D	D	E
4 Lanes w/ Raised Median (5 Lanes w/ turn lanes)	2 to 3	2	A	B	D	E	B	C	D	E	B	C	D	E	C	C	D	E
6 Lanes (two way street with or without median)	3 to 6	4	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F	F

NOTES: Painted medians shall not be considered a refuge for a crossing pedestrian. Similarly, a four-foot wide raised median next to a left turn lane can only be considered a refuge for pedestrians if the left turning volume is less than twenty vehicles per hour (meaning that in most cases the left turn lane is not occupied while the pedestrian is crossing). A multiple threat lane is defined as a through lane where it is possible for a pedestrian to step out in front of a stopped vehicle in the adjacent travel lane (either through or turn lane).

Treatment Descriptions

A Install marked crosswalk
Specific Guidance: Install marked crosswalk with standard (W11–2) advance pedestrian warning signs; use S1–1 signs for School Crossing locations.

B Install marked crosswalk with enhanced road-side and in-roadway (bollard mounted) signs
Specific Guidance: Install marked crosswalk "State Law - Yield to Pedestrian" signs mounted on in-roadway bollards; use standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations.

C Install marked crosswalk with enhanced signs and geometric improvements to increase pedestrian visibility and reduce exposure
Specific Guidance: For 2 or 3-lane roadways, install marked crosswalk with “State Law – Yield to Pedestrian” signs mounted on in-roadway bollards or median mounted signs or overhead (R1–9) signs; use standard (W11–2) advance pedestrian warning signs; use S1–1 signs for School Crossing locations. Add neckdowns or median refuge islands to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists.

D Install marked crosswalk with enhanced signs, user activated RRFBs, and geometric improvements to increase pedestrian visibility and reduce exposure.
Specific Guidance: Install raised median refuge island (unless it is a one-way street or one already exists) to shorten the pedestrian crossing distance and increase pedestrian visibility to motorists. [If a median refuge cannot be constructed on a two-way street, go to Scenario F]. Install marked crosswalk with "State Law - Yield to Pedestrian" signs WITH pedestrian activated RRFBs mounted on the side of the roadway and on median mounted signs; use standard (W11-2) advance pedestrian warning signs; use S1-1 signs for School Crossing locations. Consider adding neckdowns at the crossing if on-street parking exists on the roadway and storm drain considerations will allow. [Note: Implement when pedestrian volume is a minimum of 20 pedestrians in a single hour (young, elderly, and disabled peds count as 2x's the volume thresholds.) If pedestrian volume falls above the RRFB limit line in 5.2.2.b and 5.2.2.c, consider pedestrian hybrid beacon, pedestrian traffic signal, or grade-separated crossing.]

E Do not install marked crosswalk at uncontrolled crossing. Determine if the speed limit can be effectively reduced to 40 mph AND a raised refuge median can be installed. If so, utilize Scenario D criteria above. If this is not possible, or if pedestrian volume falls above the RRFB limit line on 5.2.2.b and 5.2.2.c, consider pedestrian hybrid beacon, pedestrian traffic signal, or grade-separated crossing.
Specific Guidance: Consider pedestrian hybrid beacon, pedestrian traffic signal or grade-separated crossing; application of these treatments will consider corridor signal progression, existing grades, physical constraints, and other engineering factors.

F Do not install marked crosswalk at uncontrolled crossing with 3 or more THROUGH lanes per direction or where the speed limit is 45 mph and/or there is not a median refuge on a 5-lane crossing. Consider pedestrian hybrid beacon, pedestrian traffic signal, or grade-separated crossing.
Specific Guidance: Consider pedestrian hybrid beacon, pedestrian traffic signal or grade-separated crossing; application of these treatments will consider corridor signal progression, existing grades, physical constraints, and other engineering factors.

*Adapted from the 2011 City of Boulder, CO Pedestrian Crossing Treatment Installation Guidelines (updated in 2025)

Figure A.I - Guidelines for the Installation of Pedestrian Hybrid Beacons (PHB), Pedestrian Signals, or Rectangular Rapid Flash Beacon (RRFB) Signs on Low-Speed Roadways*

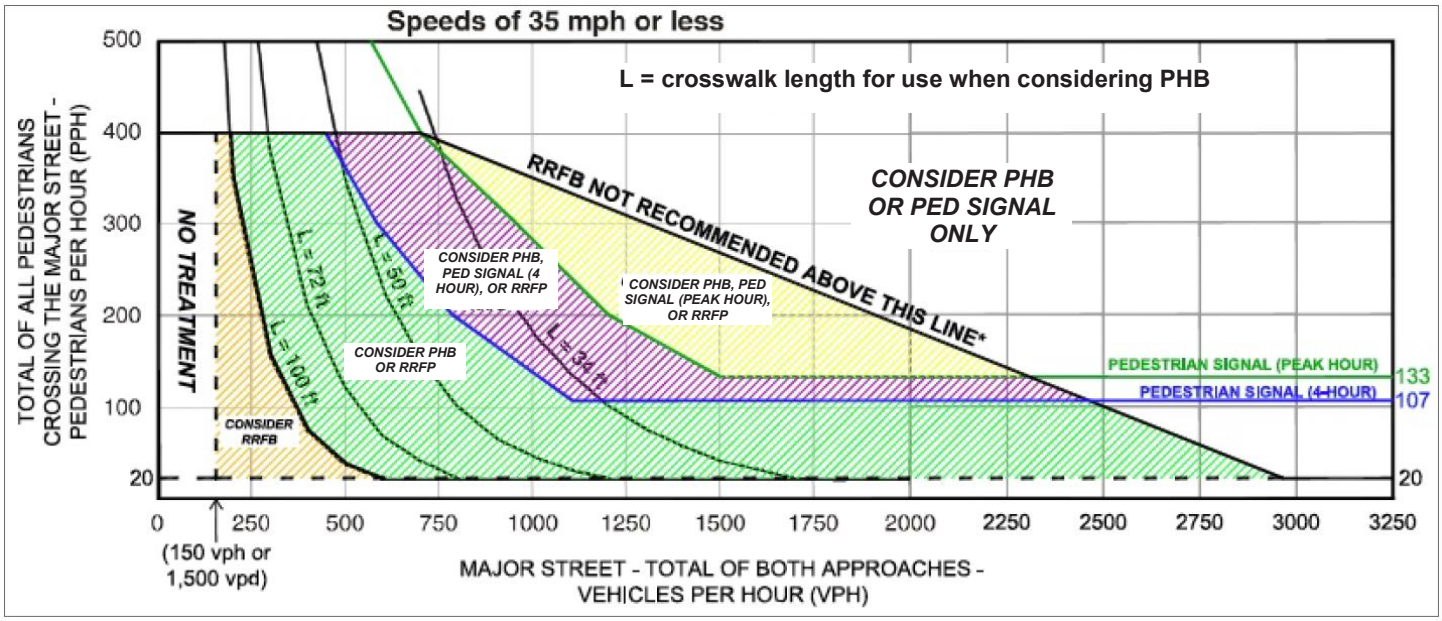
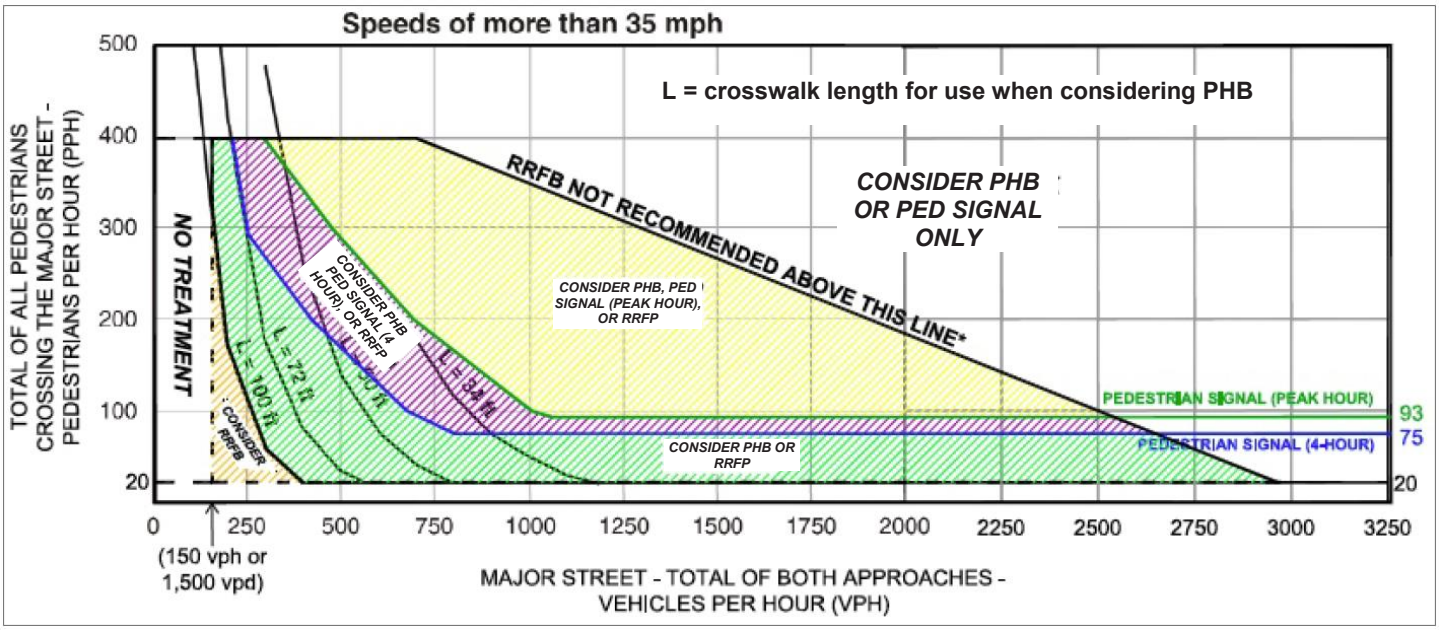


Figure A.2 - Guidelines for the Installation of Pedestrian Hybrid Beacons (PHB), Pedestrian Signals, or Rectangular Rapid Flash Beacon (RRFB) Signs on High-Speed Roadways*



*Adapted from the 2011 City of Boulder, CO *Pedestrian Crossing Treatment Installation Guidelines*

Figure A.3 - Levels of Separation for Bicycle Facilities

Off-Street Bicycle Facilities (Shared-Use Facilities Shared with Pedestrians)

Shared-use path (no lane markings)

Shared-use trail (separated lanes)

On-Street Bicycle Facilities Not Shared with Motor Vehicles

Paved shoulder

Bicycle lane

Buffered bicycle lane

Protected bicycle lane

On-Street Bicycle Facilities Shared with Motor Vehicles

Sharrow (shared-lane arrow)

Neighborhood Slow Street

Increasing Separation from Motor Vehicles

Increasing Separation from Motor Vehicles

Note on application of facilities

In general, bicycle routes where higher motor vehicle traffic speeds and volumes are present should offer riders greater separation from motor vehicles. This will result in facilities that offer greater perception of safety and comfort to current and potential bicycle riders and will invite use by larger number of riders and through a greater range of ages and abilities.

Pedestrian and Bicycle Facilities

Bicycle Lanes

Description

Bicycle lanes designate a portion of the roadway for preferential use by bicyclists. Lanes are defined by striping, pavement markings and signage. Bicycle lanes create separation between bicycling and driving and increase comfort and visibility of people bicycling. On some roads, space availability may be a constraint; however, implementing a "road diet" (for example, by converting a four-lane roadway to three-lanes), or decreasing the width of travel lanes (down to 11 ft or 10 ft in urban settings) can often free up additional roadway space and provide a solution to this issue.

A conventional bicycle lane in Milwaukee, WI with striping and pavement marking

Application of Facility

- Bicycle lanes should be considered for streets that exceed 3,000 or higher motor vehicle average daily traffic (ADT); and
- Bicycle lanes should be paired with shared-use path on roads with speeds of 45 mph or greater and the following ADTs:
  - 2-Lane Road with ADT greater than 10,000; and
  - 4-Lane Road with ADT greater than 20,000.

Design guidance

- Provide door zone clearance when bicycle lanes are located adjacent to parked vehicles.
- Apply bicycle symbol markings frequently to indicate that the space is a bicycle lane.
- Place pavement markings out of the path of turning vehicles to minimize wear.
- Minimum total width of 5' (including gutter). Example:
  - 4' bicycle lane + 1' gutter
- Preferred total width of 6' (including gutter). Examples:
  - 4' bicycle lane + 2' gutter
  - 5' bicycle lane + 1' gutter

Buffered Bicycle Lane

Description

Buffered bicycle lanes provide cyclists with extra space between bicycles and traffic, increasing comfort for bicycle riders. Buffers can provide cyclists with room to pass slower riders without having to merge into motor vehicle traffic. Buffered bicycle lanes also separate people from motor vehicle traffic as they exit and enter parked cars.

A buffered bicycle lane. This example has a buffer on the left for separation from moving vehicles and a buffer on the right for separation from parked cars (Park Avenue, Minneapolis).

Application of Facility

- All locations where a bicycle lane is considered;
- On streets with higher travel speeds and/or higher travel volumes;
- On streets that provide additional lane width; and
- Buffered bicycle lanes may provide a safer and more comfortable designated bicycling space for parents with schoolchildren than conventional bicycle lanes and should be considered for routes serving school locations.

A painted buffer provides extra distance between the bicycle lane and motor vehicle travel lanes on Portland Avenue in Minneapolis.

Design guidance

- Apply pavement markings frequently to identify that the space is designated for people bicycling.
- Color may be used at the beginning of each block to clearly indicate to motorists that the space is a buffered bicycle lane.
- Buffer is typically marked with 2 solid white lines with optional diagonal hatching of 3'.

Protected Bicycle Lane

Description

A protected bicycle lane (also known as a separated bicycle lane or cycletrack) is an exclusive space for bicycles separated from motor vehicle traffic by a painted buffer and a physical barrier (such as a curb, parked cars, or bollards). Protected bicycle lanes are separated and distinct from the sidewalk. Protected bicycle lanes significantly increase bicycle ridership for people of all ages and experience levels because the distinct separation from motorized vehicles greatly increases rider comfort.

Protected bicycle lanes also increase safety by reducing the likelihood of dooring crashes and potential conflicts from passing motor vehicles. They require more space and infrastructure than conventional bicycle lanes, and require special design attention at intersections. Separated bicycle lanes are the preferred on-street bicycle accommodation where the right-of-way space allows for its installation.

Removable bollards (also known as "candlesticks") can be used seasonally as a method for protecting bicycle lanes during the spring, summer, and fall. Removing the bollards during the winter months can alleviate conflicts with snow plow methods.

A painted buffer and bollards physically separate bicyclists using the two-way protected bicycle lane from motor vehicle traffic.

A protected bicycle lane in Missoula, Montana is physically separated from motor vehicle traffic by a curb and parallel parking. Image courtesy of bicycleleague.org.

Application of Facility

- Along roadways with few cross streets, longer blocks, and limited driveways;
- Major roadways with medium to high motor vehicle traffic speeds and volumes; and
- Streets with parking lanes.

Design guidance

- Design with consideration for intersections and driveways.
- Colored pavement may be used to define the lane.
- One-way protected bicycle lane width: 6' min. (not including buffer space).
- Two-way protected bicycle lane or cycletrack: 10' min. (not including buffer space).

Neighborhood Slow Street

Description

A neighborhood slow street (also sometimes known as a bicycle boulevard, neighborhood greenway, or shared street) is a lower volume, lower speed residential street designed to prioritize bicycle travel while encouraging motor vehicles to use other routes and maintaining relatively low motor vehicle speeds.

Application of Facility

- Residential streets where traffic calming is desired;
- Residential streets a block or two away from a major thoroughfare with high traffic volumes;
- Target speed for motor vehicle traffic on a bicycle boulevard should be no higher than 20 to 25 mph; and
- Motor Vehicle traffic volumes on a bicycle boulevard should be no higher than 3,000 ADT.

A traffic circle helps to calm traffic along a Neighborhood Slow Street.

The Riverlake Greenway Bicycle Boulevard in Minneapolis, MN includes traffic diverters to reduce motor vehicle cut-through traffic.

Design guidance

- Traffic calming devices (traffic circles, speed tables) will reduce motor vehicle speeds and create a safer environment for people walking and bicycling.
- Roadway markings should be used to designate the roadway as a bikeways and remind motorists to be mindful of people walking and bicycling.
- Wayfinding markers should be used to direct people bicycling to neighborhood slow streets from major thoroughfares and to alert motorists to the presence of bicycle riders.
- Signals, roundabouts, and/or median refuges should be used at major intersections when necessary to calm and/or redirect through traffic.

Shared-Use Path/ Trail

Description

Off-road shared-use paths (SUPs), also known as shared-use trails, provide separated space away from the street for non-motorized transportation users. These paths often link parks and other recreation destinations, and some serve broader regional connection purposes. Shared-use paths may run parallel to roadways, or away from streets in parks, along railways, and in wetland areas. Shared-use paths are generally very comfortable for users of all ages and abilities.

A shared-use path (SUP) in Eden Prairie, MN is separated from traffic with a wide vegetative buffer, and accommodates several types of users.

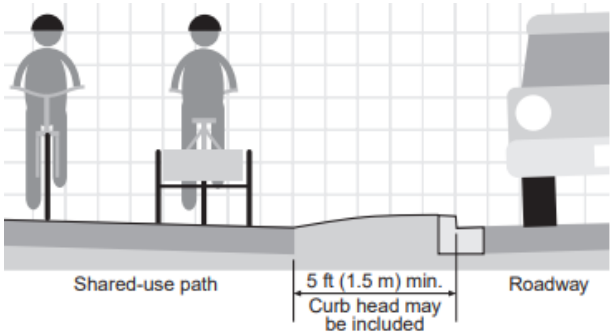
Application of Facility

- Along corridors where there is a sufficient width of continuous right-of-way and limited or controlled access
- Along roads with speeds of 45 mph or greater with the following traffic volumes:
  - 2-Lane Road with ADT greater than 10,000
  - 4-Lane Road with ADT greater than 20,000

A shared-use path in Saint Paul, Minnesota offers separate lanes for people walking and bicycling.

Design guidance

- Minimum width should be 10'.
- Dual paths recommended along high speed/ volume roadways, or roadways with limited crossing opportunities to minimize unsafe crossing behavior.
- Minimum separation of 5 ft between the edge of the paved roadway shoulder and the path, preferably outside of the roadway clear zone.
- Maintain adequate shoulders and clearance between the path and obstacles.



Guidance for share-use path in the Wisconsin Bicycle Facility Design Handbook

Shared-Lane Markings

Description

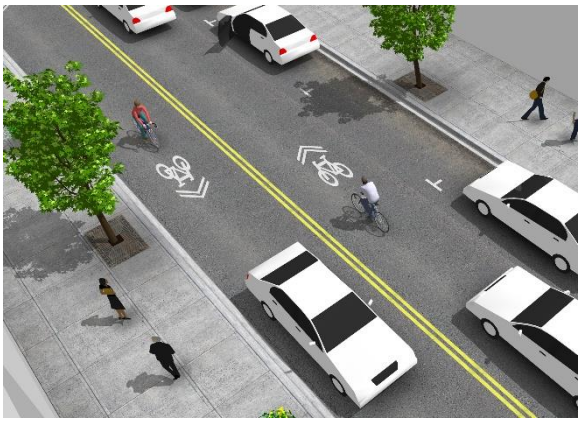
Shared-lane markings (often called sharrows) are pavement markings used to communicate bicyclists' right to use the full roadway space for their travel. Sharrows help bicycle riders position themselves safely in travel lanes that cannot accommodate a bicycle lane or other facility. Sharrows may also be used to mark Neighborhood Slow Streets.

Priority shared-lane markings include additional paint or striping to bring further attention to the facility and highlight a bicyclist's placement and presence in the roadway.

Priority shared-lane markings include additional striping to further establish the route as a bikeways. Image courtesy of Boston.com

Application of Facility

- Streets with fewer than 3,000 motor vehicles per day, and where right-of-way width does not allow a bicycle lane or protected bicycle facility;
- If right-of-way width allows room for a bicycle lane on only one side of the street, a sharrow may be used in downhill direction, with a bicycle lane in the "climbing" direction;
- Can be used to clarify bicyclist movement and positioning in challenging environments such as intersections and at a combined turn/bicycle lane; and
- May be used as a treatment for streets identified as Neighborhood Slow Streets.



Guidance for Shared Lane Markings from NACTO

Design guidance

- Typical bicycle-and-chevron symbol dimensions are 9'3" by 3'3".
- High frequency of markings indicate shared lane environment.
- Markings should be placed in the center of travel lanes and out of turning vehicles' paths to minimize wear from automobiles.
- Should not be used as a substitute for bicycle lanes where space allows.

Painted Bicycle Facilities

Description

Bicycle lanes are made more visible by painted pavement. This treatment distinguishes the lane from the rest of the roadway, making bicycle riders more visible. It is recommended that high-friction surfacing be used over standard paint because it is more slip-resistant and it doesn't have to be reapplied as often (standard paint has to be reapplied every year or two).

Green painted lanes through an intersection on the University of Minnesota campus in Minneapolis, MN.

Application of Facility

- Within conventional, buffered, and protected bicycle lanes;
- Corridors with heavy auto and bicycle traffic;
- Through busy and/or complex intersections and at conflict points, such as driveways;
- Use thermoplastic treatment with anti-slip characteristics - has a 7-8 year life expectancy; and
- Areas where illegal motor vehicle parking in the bicycle lane is common.

Green painted lanes approaching an intersection in Minneapolis, MN. At this location, motor vehicles travel across the bicycle lane to turn right.

Color recommendation

- PMS 375

PMS 375

Design guidance

- Provide signage to accompany pavement markings.
- Use green high-friction surfacing rather than paint.
- Consistency in coloring bicycle facilities is important. Green is standard in U.S. applications.
- Color can be provided in conflict areas alone, or throughout the facility.
- White border lines should be provided along the edges of the colored lane to maintain consistency with other bicycle facilities.

As stated in the MUTCD, Green-colored pavement shall not be:

- Incorporated into electric-vehicle parking stations or parking stalls
- Incorporated into crosswalks
- Used as a background for shared-lane markings
- Used instead of the required markings for bicycle facilities

Intersection Treatments

Bicycle Box

Description

A bicycle box is a designated area for bicycle riders at the head of an intersection. Pavement markings guide motorists to stop a greater distance ahead of an intersection, allowing bicycle riders to move forward and stop in the bicycle box, increasing visibility and decreasing the risk of "right hook" crashes. This treatment also gives bicycle riders priority at a green light by allowing them to be the first to begin movement when a traffic signal turns from red to green. Ideally, bicycle boxes are paired with bicycle specific traffic signals.

An example of a bicycle box implemented in the City of Wauwatosa, WI

Bicycle boxes enhance the visibility of bicyclists and allow them to get out in front of motor vehicles at intersections. Image courtesy of streetwise.kittelson.com.

Application of Facility

- Signalized intersections with high volumes of bicycles and/or motor vehicles, especially those with frequent bicyclist left-turns and/or motorist right-turns.

Design guidance

- Box may be ineffective without application of surface color.
- The box may be disregarded by motorists if it is not commonly filled by bicyclists.
- Box depth: 10' to 16'.
- Ingress bicycle lane should be used to define bicycle space and allow people bicycling to bypass stopped motor vehicles.
- High-visibility pavement markings and green-colored pavement surfacing should be used.
- "WAIT HERE" marking should be used to guide motorists to stop before the box.

Bicycle Detection Systems

Description

Bicycle detection systems allow people bicycling to make movements through intersections in a timely way without requiring the detection of a motorized vehicle or push button. Detection systems include in-pavement loop detectors and mounted camera detectors.

Loop detectors detect the presence of bicycles on the roadway. Detectors should be installed to cover areas of the road where people bicycling are likely to ride, including the right edge of travel lanes and the center of bicycle lanes. Pavement markings may be used to direct riders to the proper spot where their presence will be detected.

Cameras can be used to detect roadway users, including people bicycling. Once detected, a signal change is initiated to allow users to travel through the intersection.

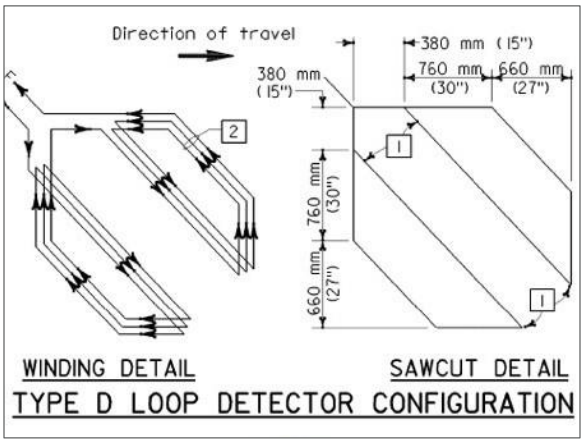
Various technologies are available, some of which are in use in surrounding communities, including loops, buttons and camera technology

Application of Facility

- Implement appropriate detection whenever traffic signals are added or significantly upgraded;
- At intersections with traffic control;
- At intersections that require vehicle detection to initiate a signal change; and
- Crossings with traffic signals for bicycles.

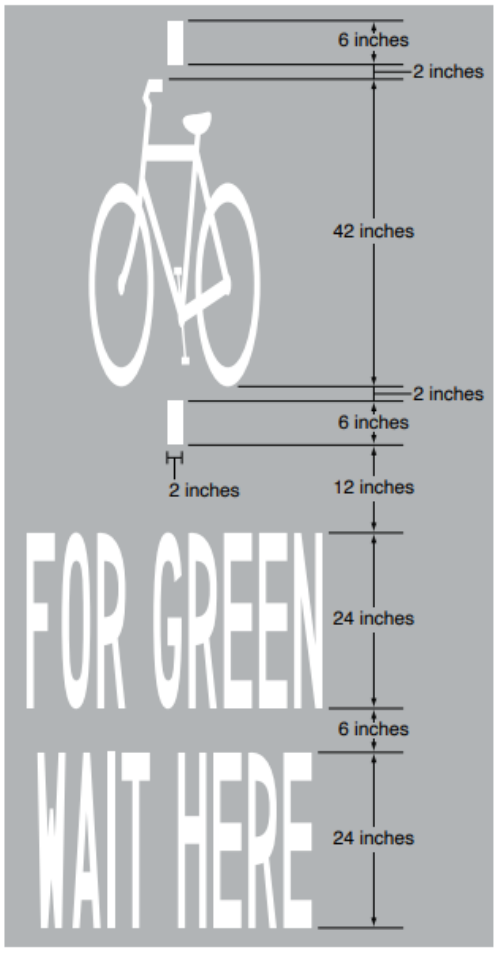
Design guidance

- The most effective loop detection design is a Type D Loop, also known as a diagonal quadrupole pattern. This loop is sensitive over its entire width with a quick drop off in sensitivity outside its perimeter to avoid detection of vehicles in adjoining lanes.
- Sensitivity setting for the loop amplifier should be tested and adjusted to ensure that the detector can be activated by using only a bicycle wheel.



Diagonal quadrupole pattern. Image courtesy of California DOT.

Figure 9E-16. Bicycle Detector Pavement Marking



Note: The word pavement markings are optional.

Pavement marking recommended to encourage proper positioning of bicycles at loop detectors (Source: FHWA).

Bicycle Traffic Signals

Description

Traffic signals for bicycles are traffic control devices used to provide guidance specific to people bicycling at intersections. Bicycle signals are coordinated with motor vehicle signals to provide a protected crossing for bicycle riders at intersections, reducing stress and delays, and increasing safety and comfort. They also discourage illegal and unsafe crossing maneuvers.

Traffic signals for bicycles include:

- Bicycle Signal Heads and supplemental "Bicycle Signal" sign, clearly visible to oncoming bicycle riders (and motorists, if applicable);
- Signal detection and actuation; and
- Intersection crossing markings.

A bicycle traffic signal in Minneapolis, MN helps people bicycling to safely cross a busy street.

Application of Facility

- Intersections where high volumes of bicycle riders have to travel across roadways with high motor vehicle traffic volumes and/or speeds.

Push buttons for bicycle signals should be located at the edge of the curb facing the roadway so they can be easily accessed and activated by people bicycling.

Design guidance

- Identify which signal treatment is appropriate by analyzing the factors involved: speed limit, average daily traffic, anticipated bicycle crossing traffic.
- Determine a clearance interval appropriate for the specific intersection.
- The bicycle clearance interval should be sufficient to accommodate at least 85% of bicyclists at their normal travel speed, including reaction time and acceleration from a stop.

High-Visibility Crosswalks

Description

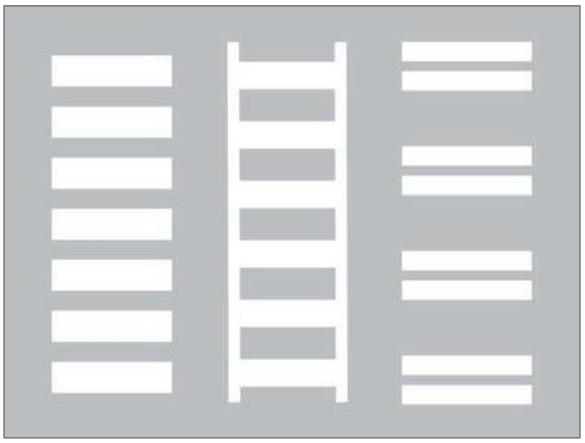
Marked crosswalks help to create a continuous route network for people walking and bicycling by alerting motorists to their potential presence at crossings and intersections.

Application of Facility

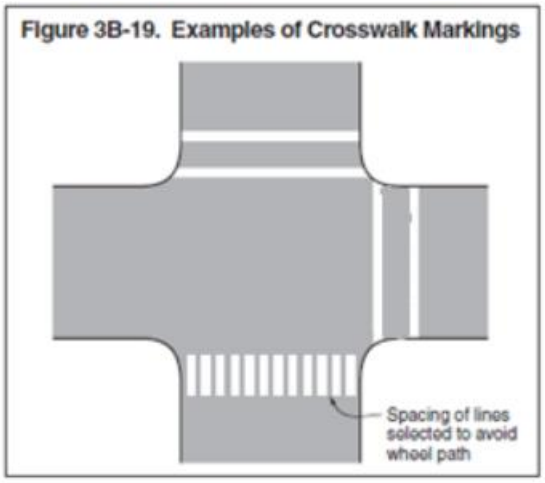
- Should be used at fully-controlled intersections where sidewalks exist (all-way stop signs, traffic lights, or user-activated crossing beacons);
- Should be used where bicycle trails or shared-use paths cross a roadway; and
- Should not be used at uncontrolled crossings as a stand-alone device when speeds exceed 40 mph, to discourage unsafe crossings.

Design guidance

- Advanced stop bars should be considered when multiple motor vehicle travel lanes per direction are present in order to minimize risk of "hidden threat" crashes.
- Crossings marked with pavers are discouraged as they can be difficult for those with mobility impairments.
- High-visibility marked crossings are preferred because they are easier for motorists to see.
- Minimum markings consist of solid white lines between 6-24" in width (MUTCD).



Different types of high-visibility crosswalk markings.



Wisconsin Standards prefer Two 6" Transverse Lines or 24" Ladder Pattern

Median Refuge Island

Description

Median crossing islands make crossings safer and easier by dividing them into two stages so that pedestrians and bicyclists only have to worry about crossing one direction of traffic at a time. Median crossing islands make high-volume roads safer and easier to cross, especially for slower walkers such as children and the elderly who might otherwise get stranded in the middle of the roadway. Space can sometimes be a constraint as crossing islands require the provision of a median in the center of the road.

Median crossing island on Bainbridge Island in Washington State. Image courtesy of FHWA.

Application of Facility

- Two-way, multi-lane roads;
- Roads with high traffic speeds and/or volumes; and
- Near schools, transit hubs, trails, shopping centers and employment centers.

A median refuge at the intersection of Franklin Avenue Wand Bryant Avenue S (a Neighborhood Slow Street) in Minneapolis makes it easier for people walking and bicycling to cross Franklin Avenue W.

Design guidance

- In addition to signage, trees and low ground cover increase visibility to alert drivers of the presence of the median island.
- Minimum width of 6'.
- Adequate lighting should be provided.
- Refuge area in the median should be angled so that users face traffic before crossing, while still allowing bicycle riders (when present) to navigate without dismounting.

Pedestrian Hybrid Beacon (PHB)

Description

A Pedestrian Hybrid Beacon (formerly known as HAWK or High-Intensity Activated crossWalK beacon) is a pedestrian-activated red-indication signal designed for locations where a standard traffic light does not meet traffic engineering warrants. The PHB gives pedestrians and bicyclists a chance to comfortably cross busy roads at intersections or mid-block locations protected by an enforceable, red-indication signal for motorists.

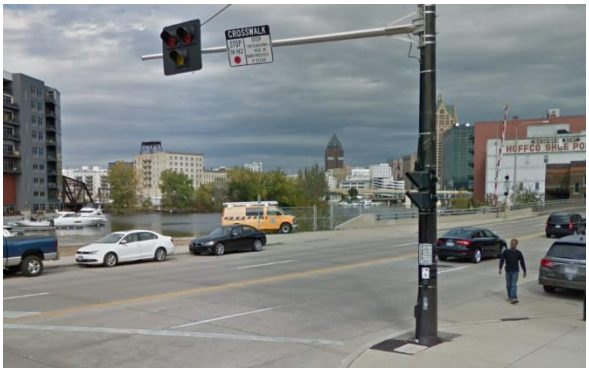
The PHB remains dark until activated by a pedestrian or bicyclist pressing the crossing button. Once activated, the signal responds immediately with a flashing yellow pattern that changes to a solid red light providing unequivocal "Stop" guidance to motorists. PHB signals have been shown to elicit very high rates of motorist compliance. Cost for installation of a PHB typically ranges from $75,000 to $100,000.

Application of Facility

- At crosswalks where no traffic signal is present;
- At mid-block or intersection locations; and
- The MUTCD (Chapter 4J) has guidance for applying a PHB based on motor vehicle speeds and volumes, crossing length, and pedestrian volumes. Bicyclists are not specifically considered, however bicycle crossing volumes may be added to pedestrian crossing volumes for evaluation purposes.

Design guidance

- Should include installation of a high-visibility crosswalk and advanced stop bar ahead of crosswalk.
- When used to facilitate bicycle movements, a bicycle signal head should be installed in addition to pedestrian signal heads. The bicycle signal head should display a flashing red to bicyclists when the hybrid is dark, allowing bicyclists to treat the intersection as a "stop" when the beacon is not activated.
- The MUTCD provides guidance on establishing the length of signal phasing.



A PHB in Milwaukee, Wisconsin makes it easier for pedestrians and bicyclists to cross a busy street.

Pedestrian Hybrid Beacon Operation

	DRIVERS		PEDESTRIANS	
	Will See ...	Will Do ...	Will See ...	Will Do ...
1		Proceed with caution.		Push the button to activate the system.
2	FLASHING	Proceed with caution. A pedestrian has activated the system.		Wait.
3		Stop if safe to do so.		Continue to wait.
4		STOP. A pedestrian is in the crosswalk.		Start crossing when all vehicles are stopped.
5	FLASHING	STOP. Proceed with caution if the crosswalk is clear.	09	Continue crossing; the signal will count down.
6		Proceed if the cross-walk is clear.		Push the button to activate the system.

Operation of a PHB from perspective of drivers and pedestrians. (Source: WisDOT)

Rectangular Rapid Flashing Beacon (RRFB)

Description

The Rectangular Rapid Flash Beacon (RRFB) is a high-intensity flashing sign assembly that is placed ahead of a crosswalk. The RRFB is user-activated, and uses an irregular "stutter" flash pattern with very bright amber lights (similar to those on emergency vehicles) to alert drivers to yield to pedestrians who wish to cross.

The RRFB offers a higher level of driver compliance than other flashing yellow beacons, but lower than the PHB signal. Installation cost ranges from $8,000 to $13,000 for two assemblies (for installation on each side of the street).

Application of Facility

- At crosswalks where no traffic signal is present;
- Suitable for two-lane roads (one assembly on each side of the street) and four-lane roads (one assembly on each side of the street and in the median or center island);
- Implemented when a minimum of 20 pedestrians in a single hour (young, elderly, and disabled peds count as 2x's the volume thresholds);
- Not compatible with three-lane approaches if roadside-mounted signs are used (due to potential line of sight issues / obstruction of signs); and
- FHWA permits the overhead placement of RRFBs, when it is not possible to achieve clear visibility of roadside signs; for placement, FHWA directs: "Only a minimum of one such sign per approach is required and it should be located over the approximate center of the lanes of the approach or where optimum visibility can be achieved."

An RRFB at a mid-block crossing alerts drivers when a pedestrian or bicyclist is crossing. Image courtesy of Michael Frederic.

Design guidance

- Employ RRFBs at crossing problem areas, school routes, or high volume routes.
- A beacon should be placed between the pedestrian crossing sign and the attached arrow plaque.
- For overhead signs, no arrow plaque is required.
- A maximum of 4 lanes to be crossed, unless there is a raised median, in which case it can be six lanes.
- RRFPs need adequate stopping sight distance, to be reviewed by qualified engineer.

Design Concepts for Protected Trail Crossings

Description

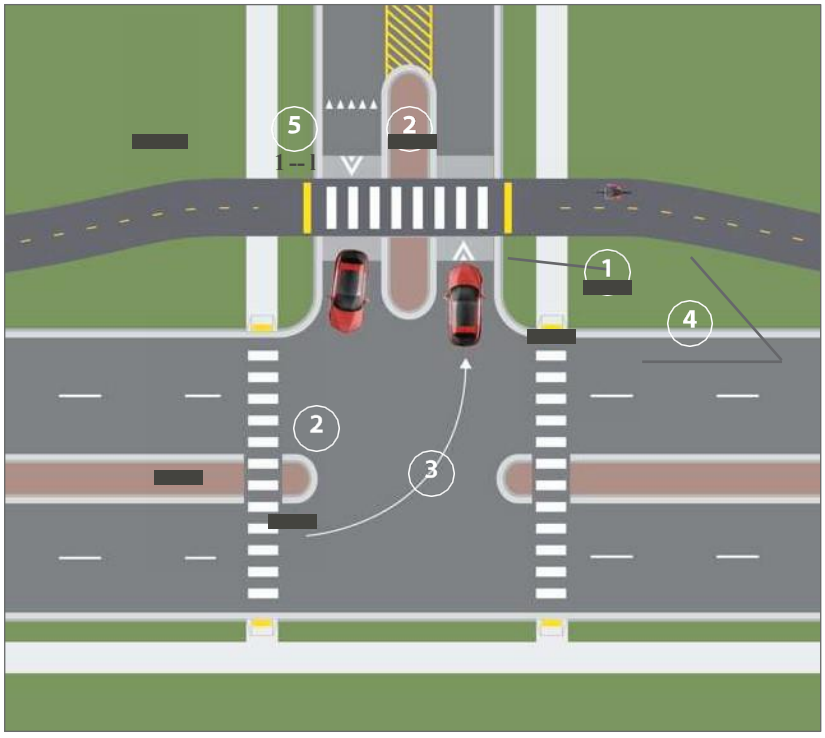
Common problems at trail crossings include:

- People walking and bicycling are blocked by motor vehicles which have inched forward and are preparing to turn onto the main road;
- Elevation changes at curb ramps and through the intersection affect walking and bicycling conditions; and
- High motor vehicle speeds as they turn from the main road and travel across the path crossings.

The concepts shown here address these issues by identifying measures that can, when used in combination, mitigate challenges for users. At a T-intersection, this concept sets trail crossings about 20 feet back from the parallel street (to provide space for motorists to queue up outside of the crossing when waiting for a gap in traffic), and provides a continuous path at a constant elevation for people walking and bicycling.

Additional components and configuration elements (including turning radius, medians, signs and markings) reduce the probability of drivers blocking the path of pedestrians and bicyclists, and provide traffic-calming benefits near the trail crossing.

Figure A.4 - Protected Trail Crossing Concept



Protected trail crossings are set back from parallel streets to provide room for motorists to queue up outside of the crossing

Additional design elements include:

1. *Speed table for the crossing*
2. *Medians and median extensions*
3. *Reduced turning radius*
4. *Clear sight triangle between motorists and trail users*
5. *6-foot waiting zone*

Design Considerations

Crossing is pulled back 20 feet from parallel street

- Allows room for one vehicle to queue up, without blocking pedestrian or bicycle travel, to wait for a gap in traffic; and
- Allows sufficient distance for motor vehicles turning from the parallel roadway to see pedestrians or bicyclists using the crossing and to react and stop if needed.

Crossing is raised

- Addresses the issues of elevation changes affecting wheelchair users, pedestrians and bicycle riders at crossings;
- Calms traffic by functioning as a speed table, giving motorists more time to notice approaching pedestrians or bicyclists; and
- Discourages motorists from stopping on the crossing, maintaining a clear travel-way for trail users.

Medians and islands are provided, and include mountable curbs

- Channelize and calm motor vehicle traffic while allowing access for freight trucks and emergency vehicles.

Crossing is visible and legible

- Crossing location is visible and understood by all users of the road and path (appropriate pavement markings and signs are used); and
- Maintains clear and unobstructed sight lines at corners.

Turning radius is reduced

- Tightens corner radii and includes installation of median extensions to slow motor vehicles turning into and out of the intersection to/ from all directions; and
- Accommodates freight vehicles and emergency vehicles with mountable curbs.

Additional Design Considerations

Additional design considerations for improved safety and functioning of crossings include:

- Speed table slope should be 1:10 except on emergency or freight routes when it can be lowered to 1:25;
- 6 feet waiting zone for path users between perpendicular path and curb; and
- Maintain a clear sight triangle between motorists and trail users at crossing approach.

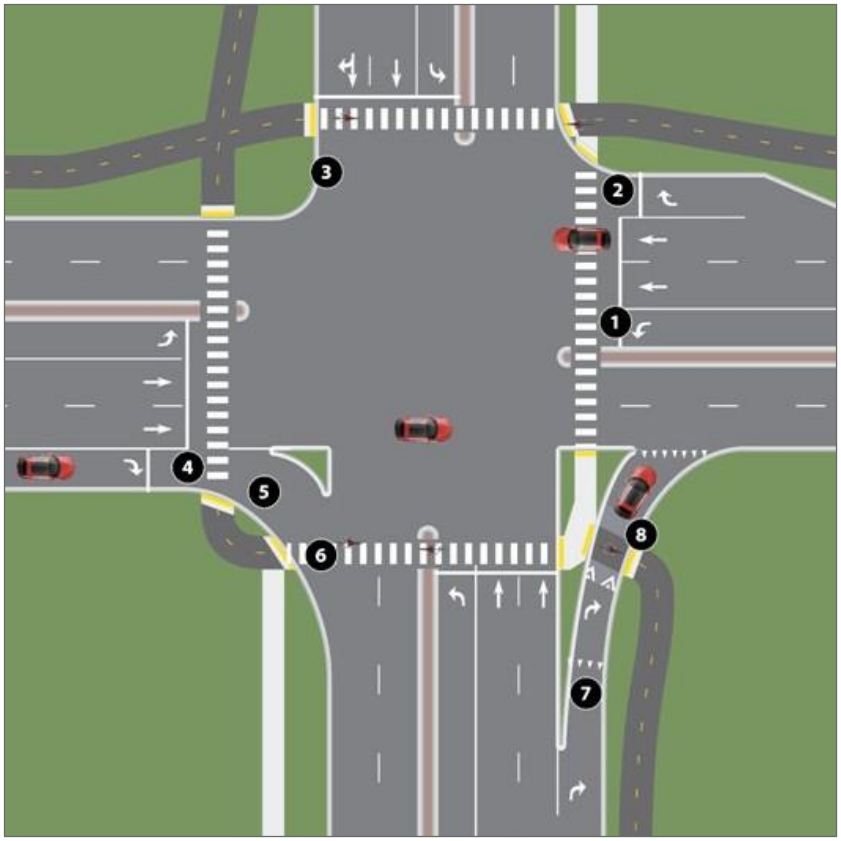
Design Concepts for Arterial Intersections

Description

Arterial intersections carry large volumes of motor vehicle traffic. Conventional geometric design for arterials, which focused on optimizing traffic flow for motor vehicles and did not fully consider the needs of other users, has negative implications for the safety, comfort and experience of people walking or bicycling through an intersection.

At locations where high numbers of people are expected to walk or bicycle, the roadway designer should strive to eliminate conflicts completely if possible, or to modify roadway designs to reduce motor vehicle speeds and make them more compatible speeds of people walking and bicycling (10-15 mph) at locations where conflicts cannot be avoided.

Figure A.5 - Components of Arterial Intersection Design



Design components:

1. *Protected-Only Left Turn Signal Phase*
2. *Conventional Turn Lanes*
3. *Shared Right/Through Lane and Slow Speed Geometry*
4. *Protected Right Turn Signals*
5. *No Turn on Red*
6. *Leading Pedestrian Interval (LP/)*
7. *Pedestrian-Friendly Channelizing Islands*
8. *Other Channelized Turn Lane Enhancements*

Design Considerations

Refer to Figure A.5 for illustration of each of the numbered characteristics below.

1) Protected-Only Left Turn Signal Phase

Exclusive left turn lanes should use protected-only signal phasing at intersections with trail crossings. This type of operation is recognized to provide the safest left-turn operation. Permitted-only or protected/ permitted left turn phasing should not be allowed at crossings of high-priority bicycle and pedestrian routes.

2) Conventional Turn Lanes

Channelized turn lanes generally offer larger radius, higher speed turns than conventional turn lanes, which may pose a pedestrian and bicyclist safety issue (FHWA 2013). Conventional right turn lanes with smaller curb radii will reduce vehicular turning speeds, minimize pedestrian crossing distances, and reduce the potential severity of vehicle-pedestrian collisions. In situations where a right-turn lane is necessary, preference should be given to a narrow conventional turn lane with a small corner radii over a channelized turn lane.

3) Shared Right/Through Lane and Slow Speed Geometry

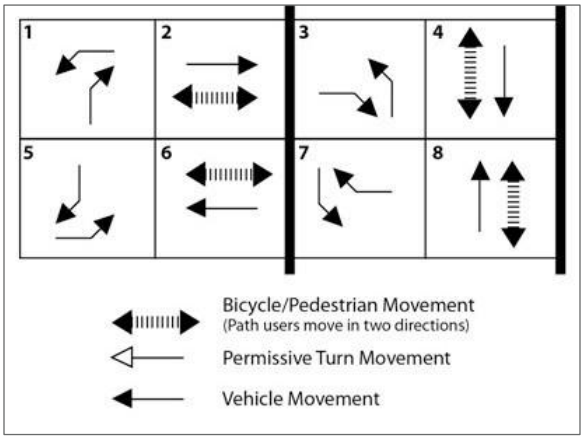
In areas with lower right turn volumes and lower speeds, a right turn only lane may not be warranted. By using a shared right/through lane in place of an exclusive right turn only lane, pedestrian crossing distance is decreased and turning speeds are reduced. The pedestrian signal commonly runs concurrently with the adjacent right/through lane. Because this creates a potential conflict between right turning vehicles and crossing path users, it is essential to use geometric design to create a slow speed turning movement. To design for slow speed turning movements, use a very small corner radius and narrow receiving lanes. Like intersections at T-intersections and minor streets, the crossing should be setback around 20 ft from the intersection.

A note on arterial intersection design recommendations

Please note that signalization, lane configuration and user volumes all have an effect on vehicle throughput, delay and safety. All intersections are unique, and there is no single typical design that can serve all needs. Each intersection requires review by a registered Professional Engineer to identify sight lines, potential impacts on traffic progression, timing with adjacent signals, capacity and safety for all users.

Notes and references

- FHWA Signalized Intersections: An Informational Guide, 2013
- TRB NCHRP 780: Design Guidance for Intersection Auxiliary Lanes, 2014
- TRB NCHRP 674: Crossing Solutions at Roundabouts and Channelized Turn Lanes for Pedestrians with Vision Disabilities, 2010



Simple Ring/Barrier Diagram for Protected but Concurrent Phasing.

4) Protected Right Turn Signals

At signalized intersections, right turn lanes are commonly served the circular green signal of the adjacent through lane. Assuming pedestrian signal phase occurs at this time, right turning vehicles are expected to yield for crossing pedestrians and bicyclists in the crosswalk.

Reconfiguring the signals to offer a protected right-turn phase may allow a fully protected pedestrian signal phase, allowing efficient and safe mobility for path users. Protected right-turn signalization may be established concurrently with the left-turn signal phase of the cross street, while the pedestrian signal phase is provided concurrently with the adjacent through movement. This type of "protected but concurrent" phasing provides the benefits of protected signalization without adding additional delay to the intersection that comes with exclusive phase operation (please see diagram on previous page).

5) No Turn on Red

The Minnesota Manual on Uniform Traffic Control Devices (WI-MUTCD 2B.54) states that a No Turn on Red (NTOR) sign should be considered when an engineering study finds "an unacceptable number of pedestrian conflicts with right-turn-on-red maneuvers, especially involving children, older pedestrians, or persons with disabilities."

Given the likelihood and desire to support high volumes of bicycle and pedestrians along priority paths, an engineering study should be performed to evaluate the potential benefits of NTOR prohibitions at path crossings.

When right-turn-on-red is prohibited, there may be more right-turn-on-green conflicts between motor vehicles and pedestrians when both the right turning motorists have a green light and the pedestrian has the walk signal on the adjacent crosswalk. The use of leading pedestrian intervals can reduce this effect, and the use of protected signal phasing can eliminate it. Alternatives to NTOR prohibitions include "Yield to Pedestrian in Crosswalk," "Turning Vehicles Yield to Pedestrians," and "No Turn on Red When Pedestrians are Present."

6) Leading Pedestrian Interval (LPI)

At intersections with high pedestrian volumes and high conflicting turning vehicle volumes, a brief leading pedestrian interval, during which an advance WALKING PERSON (symbolizing WALK) indication is displayed for the crosswalk while red indications continue to be displayed to parallel through and/or turning traffic, may be used to reduce conflicts between pedestrians and turning vehicles. All path crossings at signalized intersections should be evaluated for leading pedestrian interval use where there is a desire to support high volumes of bicycle and pedestrian travel.

7) Pedestrian-Friendly Channelizing Islands

Whenever possible, channelized turn lanes should be avoided in pedestrian- and bicycle-oriented areas. If their use cannot be avoided, efforts should be made to mitigate their negative effects on these users.

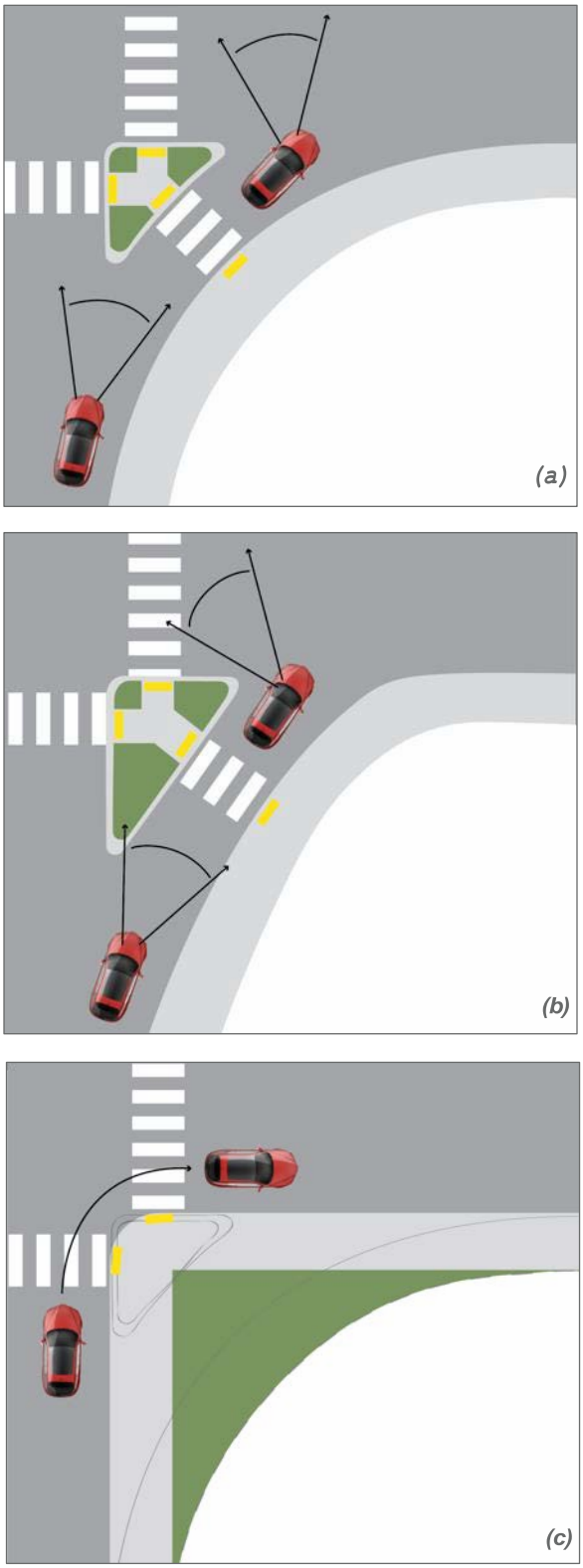
If channelized turn lanes and yield or free-flow operation is necessary, pedestrian-friendly geometry should be used to promote slow driver speed through the channelized turn lane and promote yielding of motor vehicles to people crossing the street.

Channelizing island geometry should promote clear visibility of people in the crosswalk, and provide space for safe yielding to people walking, bicycling, or driving (TRB 2014). The alignment of the turn lane should be a nearly right-angle entry to the cross street, giving the channelizing island a shape like an acute right triangle. There should be adequate length of the turn lane to store yielding motor vehicles both before and after the crosswalk area.

8) Other Channelized Turn Lane Enhancements

Channelized turn lanes can be particularly challenging to navigate for pedestrians with vision impairments (TRB 2010). Recommended strategies to assist these users include the use of raised crossings through the channelized turn lane to slow driver turning speeds and/or use of Rectangular Rapid Flash Beacons (RRFB) to improve yielding rates. These improvements also greatly benefit sighted users and should be considered where possible.

Each intersection/ crossing has its own unique challenges. Concepts should be considered and implemented on a case by case basis.



(a) Vehicle speed is prioritized; (b) Pedestrian safety is improved as well as driver sight lines; (c) Removing channelized turns maximizes pedestrian space and minimizes turning speeds.

Wayfinding & Signage

Description

A bicycle wayfinding system is a comprehensive network of signing and pavement markings indicating destinations along preferred bicycle routes. Wayfinding signage encourages cycling by familiarizing riders with the bicycle network and by making it easier for cyclists to reach preferred destinations.

Confirmation Signs

Confirmation signs reassure bicycle riders that they are on a designated bikeways, and make motorists aware that they are driving on a route where they can expect to encounter bicyclists. They can include destinations, and possibly distance or time. They don't typically include directional arrows.

Confirmation signs are placed every quarter to every half mile on off-street facilities, and every 2 to 3 blocks along on-street facilities, unless another types of sign is used (for example a turn or decision sign). Confirmation signs should be placed soon after turns to confirm destinations still ahead. Pavement markings also act as confirmation to bicyclists that they are on a designated route.

Turn Signs

Turn signs indicate where a bikeways turns onto a new street, or when a bicyclists should turn to reach a particular destination. Pavement markings can also be used for this purpose. Turn signs typically include destinations and arrows.

Turn signs are placed on the near-side of an intersection where a bicycle route turns. Pavement markings can also be used to indicate the need to turn.

Wayfinding signs should include clear destination, direction and distance information (in both time and miles). Image courtesy of bicyclemichiana.org.

Confirmation signage reassures bicyclists that they are on a designated route, and helps to make motorists aware of the route.

Turn signs indicate to bicyclists when they need to turn to reach a particular destination or stay on a designated route.

Decision Signs

Decision signs inform bicyclists of the designated bicycle routes that provide access to key destinations. Decision signs include destinations and directional arrows. Distances and travel time should also be included.

Three main components are needed for useful decision signs. They can be thought of as the 3 "Ds":

Destination

The destination is the main element, and communicates where things are that a bicycle rider may not have already known.

Direction

The direction component guides riders to their destination. The direction is indicated simply by using an arrow on the sign that directs users to proceed forward or to prepare to turn. Directional signage also gives motorists warning to expect cyclists on the road, and to anticipate cyclists' turning or crossing movements.

Distance

The distance and time component informs riders how long their trips will be, adding a measure of certainty and convenience when planning trips. Distance should be communicated in miles and time, calculated at a bicycling speed of 10 miles per hour.

Decision signs should be placed on the near-side of intersection in advance of a junction with another bicycle route, or along a route to indicate a nearby destination.

Decision signs are located at the intersection of one or more bikeways, and inform bicyclists of the designated routes that provide access to important destinations.

Pavement markings reinforce routes and direction signage. Image courtesy of share.america.gov.

Types of Destinations

Destinations that may be signed as part of a network wayfinding system include:

- On-street bikeways
- Commercial areas
- Schools
- Civic/community destinations
- Transit centers
- Local or regional parks and trails
- Hospitals

Before developing a wayfinding system, it is useful to classify a list of destinations for inclusion based on the relative importance to users in the area. A destination's place in the hierarchy may be used to determine the physical appearance of signs, as well as how far destinations are signed from their location.

In Fitchburg, primary destinations may be signed throughout the city (or even outside city limits), while secondary or tertiary destinations may be signed within a mile or two of the destination.

Pavement Markings

Pavement markings installed along dedicated routes help to reinforce routes and directional signage, and help bicyclists position themselves in the roadway. In many areas, pavement markings are more visible than signs to bicycle users, and can be especially helpful in areas where signage would be difficult to see including areas with parking or vegetation. They can also help to assist bicyclists in positioning themselves in difficult turning situations.

Pavement markings can also serve as confirmation and directional wayfinding. The use of stencils within bicycle lanes and along bicycle boulevards reinforces the designation of the route as a bicycle corridor. The chevron symbol for shared-lane markings can also be applied at an angle to indicate to bicyclists when they need to turn to stay on a designated route.

Pavement markings can also be used to indicate to bicyclists when and where they should turn. Green turn boxes help bicyclists position themselves during two-stage turns.

Design Guidance

- Provide information on destination, direction and distance (in miles and in minutes, calculated at speed of 10 mph).
- Decision signage should be placed in advance of all decision points.
- A consistent font, such as ClearviewHwy, is recommended for maintaining consistency with other road signs.
- The frequency of wayfinding signs is important. Confirmation signs should be placed every 1/4 to 1/2 mile along off-street bicycle routes and every 2 to 3 blocks along on-street routes.

Route signage along the Monona Lake Loop in Madison, WI.

Bicycle Parking Guide

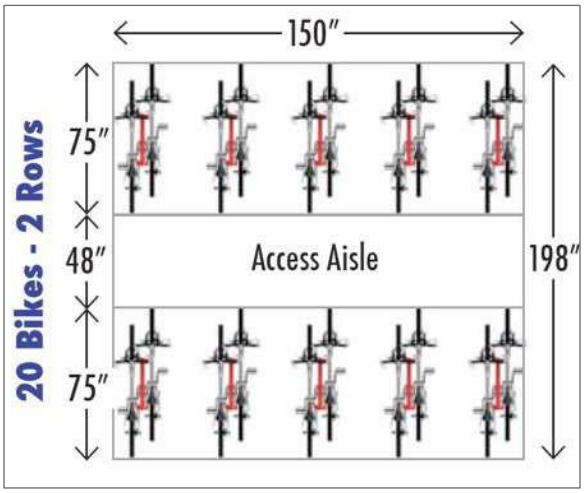
Bicycle parking is an end of trip facility that makes it more convenient and inviting for people to arrive by bicycle to a destination.

Provision of adequate bicycle parking cannot be overlooked: if bicycle parking spots are inadequate or if finding them is enough of an inconvenience, cyclists will next time choose a different mode for arriving or may choose another destination altogether, even if the provided bicycle routes are perfectly safe and convenient.

Two of the preferred types of bicycle rack: the "Inverted U" (left) and the "Post and Loop" (right).

Application of Facility

- Choose a style that allows secure locking of the bicycle (frame and front wheel) to the rack without need of lifting the bicycle. The "Inverted U" and "Post and Loop" style bicycle racks are preferred.
- Locate bicycle parking with consideration for the rack's proximity to the building entrance it serves, its placement along the natural path used by cyclists to approach the building, and its visibility from both the interior and exterior of the building.
- Provide an adequate number of racks to meet the needs of people visiting the area.



Arrangement of a bicycle parking area with parking for 20 bicycles and a central aisle for circulation. Image courtesy of Dero Bicycle Racks.

Additional Details

Generally, there are three components to bicycle parking:

1) The type or design of the bicycle rack itself, which supports the bicycle;
2) The location of the rack area, including its relationship to the building entrance it serves and the cyclists' approach to that entrance; and
3) The design of the rack area (the "bicycle parking lot"), which may include several individual bicycle racks.

The Bicycle Rack

The rack should support the bicycle upright by its frame in two places, enabling the frame and one or both wheels to be secured while preventing the bicycle from tipping over. Additionally, it should not require a cyclist to lift their bicycle to be able to lock it securely - a useful rack design should allow a cyclist to roll-in or back-in their bicycle to lock it.

The Rack Area

The rack area is the "bicycle parking lot" defined by the racks and the space needed to access the racks. To be functional and useful, certain minimum clearances and access rules should be observed:

- Individual racks should be located no closer than 30 inches to each other in order to allow sufficient space for easy entry and removal of bicycles on either side.
- No rack element should be closer than 24 inches to a wall or other obstruction in order to allow full usability and easy access to perimeter racks.
- Large rack areas, or rack areas with high turnover, should provide more than one entrance to ease circulation of cyclists and pedestrians.
- Rack areas should preferably offer protection from rain and snow in order to ease loading and unloading of bicycles and to keep bicycle saddles dry.
- When multiple rows of bicycle racks are provided, the circulation space provided from the wheel of a bicycle on one row to the closest wheel of a bicycle on the next row should be a minimum of 48 inches.

Location of the Rack Area

One of the most important considerations in providing useful and functional bicycle parking is the location of the rack area in relation to the building it serves. Some guidelines for locating the rack area include:

- The recommended location for a bicycle parking area is immediately adjacent to the entrance it serves, preferably within 50 feet. It should be located as close as possible without blocking the entrance or hindering pedestrian movement to or from the building.
- The rack area should be clearly visible from the entrance it serves and from the building's approach line.
- Bicycle rack areas should be as close or closer than the nearest car parking space.
- Buildings with multiple active entrances should include bicycle rack areas at each entrance.
- Racks that are hard to find, are far from principal entrances, or perceived to be unsafe will not be used by cyclists.

Minimum Parking Guidelines

The following table provides guidance regarding the number of bicycle parking spaces that should be provided in areas of Fitchburg that do not need to comply with Smart Code, which has separate requirements.

Table A.4 - Non-Smart Code Bicycle Parking Guidelines

Type of use	Short term parking	Long term parking
Commercial	Office: 1 space for each 15,000 ft^2; minimum 2 spaces	1 space for each 10,000 ft^2; minimum 2 spaces
	Retail: 1 space for each 8,000 ft^2; minimum 2 spaces	
Multifamily residential	0.05 spaces for each bedroom; minimum 2 spaces	0.5 spaces for each bedroom
Institutional/ public uses (libraries, hospitals, parks, religious uses, etc.)	1 per 8,000 ft^2; minimum 6 spaces	1 space per 25 employees; minimum 2 spaces
Institutional Assembly (Auditoriums, Religious Gathering Spaces)	Spaces to equal 2% of assembly seating capacity; minimum 2 spaces	1 space per 20 employees; minimum 2 spaces
Parks and Recreational Space	1 space per 10 automobile stalls; minimum 4 spaces	None required; consider minimum 2 spaces at facility offices or public building entrance
Manufacturing, industrial	None required; consider minimum 2 spaces at public building entrance	1 space for each 25,000 ft^2; minimum 2 spaces

Mayor Arata-Fratta
Introduced by

PLANNING
Prepared by

Bicycle & Pedestrian Commission,
Community Equity Committee, Transportation
& Transit Commission
Referred to

November 25, 2025
Date

RESOLUTION R-174-25

APPROVAL OF THE CITY OF FITCHBURG BICYCLE & PEDESTRIAN PLAN 2025 UPDATE

WHEREAS, the City of Fitchburg has long recognized the value of a comprehensive, diverse, and integrated transportation system, consisting of automobile, bicycle, and pedestrian elements, and adopted the 2017 City of Fitchburg Bicycle and Pedestrian Plan with amendments on March 28, 2017 (hereafter "2017 Plan") to continue to provide for safe, efficient, and cost-effective options for biking and walking in the City; and

WHEREAS, the City of Fitchburg Common Council approved Resolution R-184-24 authorizing a contract with MSA Professional Services at a cost of $25,000 to update the 2017 Plan, and the Fitchburg Bicycle and Pedestrian Commission (hereafter "BPC") and staff working group guided the process of updating the 2017 Plan; and

WHEREAS, major components of the 2025 Plan Update process included working meetings, review of the 2017 Plan, mapping, data collection, and implementation recommendations; and

WHEREAS, the 2025 Plan Update reflects the aforementioned process, and includes sound transportation planning principles and current trends, so as to continue to provide for safe, efficient, and cost-effective options for biking and walking in the City; and

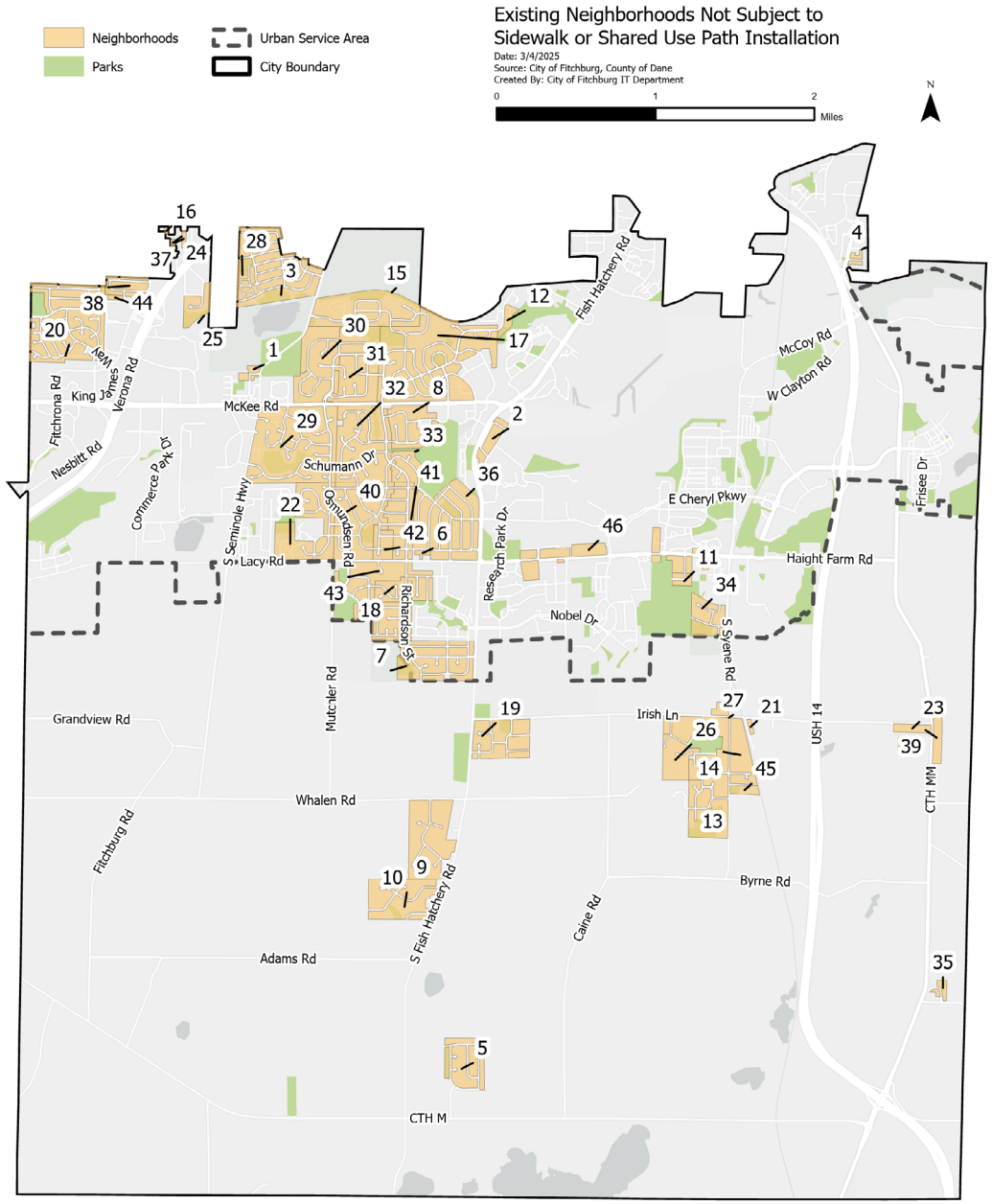
NOW BE IT HEREBY RESOLVED, by the Fitchburg Common Council that it approves the 2025 City of Fitchburg Bicycle and Pedestrian Plan Update.

Adopted this 27th day of January, 2026.

Julia Arata-Fratta, Mayor

Tracy Oldenburg, City Clerk

Map Number	Neighborhood
1	Assessor's Plat #1
2	Assessor's Plat #2
3	Belmar
4	Braeger Court
5	Briarwood
6	Brunsell
7	Byrnewood
8	Chapel Valley
9	Country Heights
10	Country Vineyard
11	Dommers View
12	Fitchburg Springs
13	Gold Addition to Fitchburg
14	Greenfield
15	Harlan Hills
16	Hatfield
17	Highlands of Seminole
18	Highwood Hills
19	Hillside Heights
20	Jamestown
21	Knipfer Addition
22	Lacy Heights
23	Morning Sun Plat
24	Moschkau
25	Nakoma Heights
26	Oakhaven Hills
27	Oakhaven Park
28	Renaissance on the Park
29	Seminole Forest
30	Seminole Hills Estates
31	Seminole Hills Estates - Bosshard Addition
32	Seminole Ridge
33	Sterling Meadows
34	Tarpleywick Hills
35	Timber Lake Knolls
36	Tower Hill Park
37	Westchester Woods
38	Western Hills
39	White Plat
40	Wildwood
41	Wildwood Richardson Addition
42	Wildwood Ridge
43	Wildwood South
44	Williamsburry
45	Zwaska Estates
46	Lacy Road Residential Properties



Alders Carol Poole, Jason Gonzalez, Dan Carpenter, Julia Arata-Fratta
Introduced by

Alder Carol Poole
Prepared by

Board of Public Works, Finance, TTC & PSHS Committees
Referred to

November 15, 2016
Date

RESOLUTION R-185-16

A RESOLUTION UPDATING AND EXTENDING RESOLUTION R-75-10, REGARDING THE CONSTRUCTION OF NEW SIDEWALKS AND SHARED USE PATHS IN EXISTING NEIGHBORHOODS

WHEREAS, Resolution R-75-10 was passed and adopted on August 24th, 2010 to suspend controversial sidewalk construction in existing neighborhoods until the 2008 Bicycle and Pedestrian Plan was reviewed, revised and re-adopted; and

WHEREAS, this review and re-adoption will be completed in 2017 causing R-75-10 to sunset, creating a renewed interest and concern among residents; and

WHEREAS, alternatives to sidewalks are identified in the Bicycle and Pedestrian Plan that can enhance the walkability of existing neighborhoods and address pedestrian safety issues; and

WHEREAS, residents in our existing neighborhoods that do not have sidewalks, have testified and demonstrated time and again that due to the cost of installation, continual maintenance, increased liability and detrimental impact on landscaping, grading, driveways and streetscapes they do not want sidewalks installed in their existing neighborhoods; and

WHEREAS, the installation of share multiuse paths that are separated from motor vehicle traffic create an even greater impact; and

WHEREAS, residents of Fitchburg have requested a resolution to this issue that they can trust, that is codified and is not just a plan,

NOW THEREFORE BE IT HEREBY RESOLVED that the existing neighborhoods are identified as shown on the attached map. And also include any existing development where sidewalks were not required when the development was platted, or subsequently when homes were built, and

NOW THEREFORE BE IT HEREBY RESOLVED that new sidewalks and shared multiuse paths will not be constructed in existing neighborhoods, on residential properties unless all of the following criteria are met:

1. The Sidewalk or shared multi-use path has been requested by the neighborhood residents and/or property owners, or has been quantitatively documented as the only recourse to eliminate a hazardous condition; and

2. The installation of said sidewalks is agreed to by a minimum of 75% affected property owners.

Adopted this 24th day of January, 2017.

Patti Anderson

Patti Anderson, City Clerk

Stephen L. Arnold, Mayor

Mayor Arnold
Introduced by

Public Works
Prepared by

Council - direct referral
Referred to

March 28, 2017
Date

RESOLUTION R-69-17

RESOLUTION TO AMEND THE PREVIOUSLY ADOPTED R-185-16 AND ADOPT THE 2017 CITY OF FITCHBURG BICYCLE AND PEDESTRIAN PLAN

WHEREAS, Council adopted Resolution R-185-16 which sets policy related to existing neighborhoods and the construction of new sidewalk or shared used paths within those existing neighborhoods; and

WHEREAS, Council adopted Resolution R-16-17 to approve the 2017 Bicycle and Pedestrian Plan, with an amendment to incorporate the language from Resolution R-185-16 into the Bike and Pedestrian Plan (Plan) to maintain consistency between the resolution and the Plan; and

WHEREAS, the first Now Therefore statement of Resolution R-185-16 includes a clause which is not consistent with Figure 3.5 of the Plan; and

WHEREAS, the Plan has been updated to include language from Resolution R-185-16, with one modification which removes the inconsistency between the R-185-16 language and Figure 3.5 of the Plan; and

WHEREAS, the language in Resolution R-185-16 should be amended to maintain this consistency;

NOW BE IT HEREBY RESOLVED, by the Fitchburg Common Council that it amends the first Now Therefore Be It Hereby Resolved clause of Resolution R-185-16 to the following:

> "**NOW THEREFORE BE IT HEREBY RESOLVED** that the existing neighborhoods are identified as shown on the attached map (Figure 3.5 of the 2017 Bicycle and Pedestrian Plan)."

BE IT FURTHER RESOLVED, by the Fitchburg Common Council that it approves the 2017 City of Fitchburg Bicycle and Pedestrian Plan, as amended to incorporate the language from Resolution R-185-16.

Adopted this 28th day of March, 2017.

Patti Anderson, City Clerk

Stephen L. Arnold, Mayor