



Wakefield Bicycle and Pedestrian Master Plan



February 2024
DRAFT

Acknowledgments

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This Plan was developed by the Metropolitan Area Planning Council (MAPC). David Loutzenheiser, Senior Transportation Planner, and Jessica Boulanger (formerly of MAPC). Funding was provided by MAPC and the Town of Wakefield.

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Chapter 1: Introduction

A. Plan Overview

The Wakefield Bicycle and Pedestrian Plan (the Plan) provides policy and infrastructure recommendations for improving biking, walking, and rolling in the Town of Wakefield. The term rolling has been used throughout this report to include users of wheeled mobility devices. The Plan should be used as a guideline to advance the Plan's goals.

The goals of this Plan are to:

- Encourage a culture where residents and visitors choose to walk, bicycle, and roll to schools, retail, places of employment, and other points of interest. Users should be able to access the mentioned locations safely and conveniently.
- Establish a bicycle and pedestrian network plan connecting local destinations and surrounding communities through safe, comfortable, and convenient routes.
- Advance the Town's Complete Streets Policy to identify targeted areas for major infrastructure improvements.
- Institutionalize pedestrian, bicycle, and rolling accommodations locally as part of all roadway projects.
- Reinforce the value of walking, rolling, and biking through initiatives and the installation of supportive infrastructure.

This study examined pedestrian and bicycle use throughout the Town of Wakefield. MAPC, in collaboration with Town staff, assessed existing conditions, demographics, key destinations in Wakefield, and gathered community input. The recommendations in this report include a broad set of design "best practices" and related policies, as well as specific bicycle and pedestrian improvements such as exclusive bicycle lanes, widened pedestrian footpaths, enhanced pavement markings, and curb extensions.

B. About MAPC

The Metropolitan Area Planning Council (MAPC) is the regional planning agency for the 101 cities and towns in Greater Boston, with a mission to promote smart growth and regional collaboration.

MetroCommon 2050 is Greater Boston's regional land use and policy plan developed by MAPC and adopted in 2022. Among its many recommendations is to create safe, accessible, and well-connected networks of biking and walking infrastructure. For more information on our long-range plan, visit metrocommon.mapc.org.

C. About Wakefield

1. Demographics

Wakefield, Massachusetts, is a town in Middlesex County. As of July 1, 2022, the US Census estimated the population in Wakefield to be 27,069. The race and origin of the population in Wakefield is 91.9% White, 1.2% Black, 2.7% Hispanic or Latino, 3.8% Asian, and 2.7% of one or more races. The average travel time to work is estimated to be 33 minutes. The average household income is \$110,372, with 5.1% of residents considered to be living in poverty.

Wakefield is often recognized for Lake Quannapowitt, with many pedestrians and cyclists attracted to the location. The lake was named after James Quannapowitt, a member of the Indigenous Pawtucket tribe. Lake Quannapowitt is 3.6 miles in circumference and serves as a local hub for year-round Town events, such as farmer's markets, parades, races, and sporting events.

2. Recreational Activities and Lake Experience

Lake Quannapowitt is the center of recreation and leisure activity in the Town. The open space is used for movie nights, community gatherings, races, baseball games, and more throughout the year. The path around the lake is used for exercise by a diverse set of users. Residents and non-residents travel to the lake to walk, run, roll, skate, bicycle, walk dogs and park to enjoy scenic views of Lake Quannapowitt. Some of the regular activities at the lake include a weekend farmer's market on the West side of Lake Quannapowitt and a food truck on the north side. Baseball games are well-attended throughout the spring and summer months.

3. Transportation

Wakefield is 10 miles north of Boston at Interstate 93 and I-95/128. The Town is within the MBTA bus service network, providing further access to the Orange Line. Within Wakefield, there are two commuter rail stations: Greenwood and Wakefield. Both stations are on the Haverhill Line and provide direct access to Boston's North Station.

D. Previous Town Planning Processes

The following planning processes within Wakefield set the stage for the Bicycle and Pedestrian Master Plan. They all highlight the need and desire for safer streets, improved bicycle and pedestrian infrastructure, and a community where residents prioritize walking and pedaling.

1. Complete Streets Policy

In 2017, the Town of Wakefield adopted a Complete Streets Prioritization Plan. Using an evaluation matrix, projects were selected and assigned a score to determine priority levels. The

vision and purpose statement of the 2017 policy reads, “The Town of Wakefield aims to improve the health of its residents and recognizes that Complete Streets can increase everyday physical activity by enabling additional healthy opportunities, such as walking and bicycling, by its residents and visitors.” The purpose of the Town of Wakefield’s Complete Streets Policy is to accommodate roadway users of all ages and abilities by creating a transportation network that meets the needs of individuals utilizing a variety of transportation modes. This policy will be applied in all decision-making for related infrastructure planning and construction.

2. Wakefield Vision 2030

Vision 2030 was a high-level, aspirational community visioning-for-planning initiative. Visioning is a collective process where the community can “imagine the future” and envision how we can transform different areas of Town with new and forward-looking ideas. Led by MAPC, the initiative covered a broad range of topics, from public infrastructure and historic preservation to environmental resiliency and educational opportunities.

The Vision 2030 Statement:

We envision a Wakefield that:

- Protects and enhances its beautiful natural landscape, neighborhood character, and signature open space assets, including Lake Quannapowitt, Crystal Lake, and Breakheart Reservation.
- Welcomes and supports residents in different life stages and is inviting to people of all backgrounds.
- Enhances its neighborhoods with housing options for all and safe walking and biking amenities.
- Improves its business districts with more services, leisure retail, job opportunities, and pedestrian amenities.
- Expands its social, civic, and cultural landscape with more creative placemaking amenities and more festive events.
- Invest in legacy civic projects that enhance our beautiful landscape and foster community gatherings for present-day residents and future generations.
- Reduces car dependency by leveraging its commuter rail access and other creative transportation innovations to support shops and residents.

3. Wakefield Master Plan 2033

When this report was being developed, the Town of Wakefield was undergoing a Master Plan process. The Master Plan is a strategic framework that guides the Town’s future physical and economic development based on the community’s vision and goals. It provides a roadmap of strategies and recommendations for the next ten years.

The Metropolitan Area Planning Council (MAPC), which led the Vision 2030 initiative, has been engaged to lead the project.

4. Safe Routes to Schools

Beginning in 2008, Wakefield has participated in the Massachusetts Department of Transportation's Safe Routes to School Program. The Safe Routes to School (SRTS) Program is a free, federally funded program that works to increase safe biking and walking among public school students by using a collaborative, community-focused approach that bridges the gap between health and transportation. SRTS has a public health foundation that utilizes the Six E's to support our student commuters — Education, Encouragement, Engagement, Evaluation, Engineering, and Equity.

- **Education:** SRTS offers students the tools to be smart, safe pedestrians and bicyclists through a combination of Massachusetts Department of Elementary & Secondary Education approved pedestrian and bike safety curriculum and Professional Development, school assemblies, workshops, videos, and printed materials. They also have resources available for parents/guardians, educators, and community stakeholders, including webinars, lesson plans, videos, and other materials. Some Wakefield elementary schools and community events have benefited through pedestrian safety instruction, bike assemblies, bike rodeos, and attending numerous workshops and webinars.
- **Encouragement:** SRTS celebrates active transportation for our student commuters. Wakefield has been a regular participant in the program's flagship walking-biking events, lawn sign contests, and Crossing Guard Appreciation events.
- **Engagement:** SRTS works with many stakeholders, including the Wakefield Safe Streets Working Group (SSWG) with its SRTS Taskforce, Youth Commission, municipal departments, school administration, Mass in Motion (Dept of Health), and local law enforcement officials to promote safe walking and biking within the local community.
- **Evaluation:** Using various qualitative and quantitative evaluation tools, SRTS gathers data to better understand existing environmental conditions and current behaviors regarding walking and biking. These strategies help track trends over time and can aid in allocating resources to improve walking and biking conditions near schools. Wakefield has participated in numerous Family Travel Surveys and Student Route Mapping.
- **Engineering:** Changes to the built environment through engineering improvements are a critical component of Safe Routes to School. Best practice opportunities include SRTS infrastructure funding, Arrival Dismissal Observation of school properties and school zones, as well as examining the student's journey from home to school with Walk

Audits.

- **Equity:** Embracing a sustainable approach, Equity is the umbrella under which all other SRTS E's function by providing the needed resources to best benefit the programmatic needs of all students in all schools. Wakefield has employed SRTS multi-language materials, policy, and planning.

5. Current Walking and Biking Conditions

Wakefield has the condition to see more demand for biking and walking — a dense population, active commercial corridors, two commuter rail stations, and numerous schools and parks spread across Town. While most streets have sidewalks, there are currently no bike lanes in Town. A number of locations have recently experienced bicycle and pedestrian crashes, particularly along Main Street and North Avenue, highlighting the need for safer infrastructure.

The following maps provide existing conditions for demographics, transportation, and vulnerable populations within the Town of Wakefield.

Figure 1: Population Density

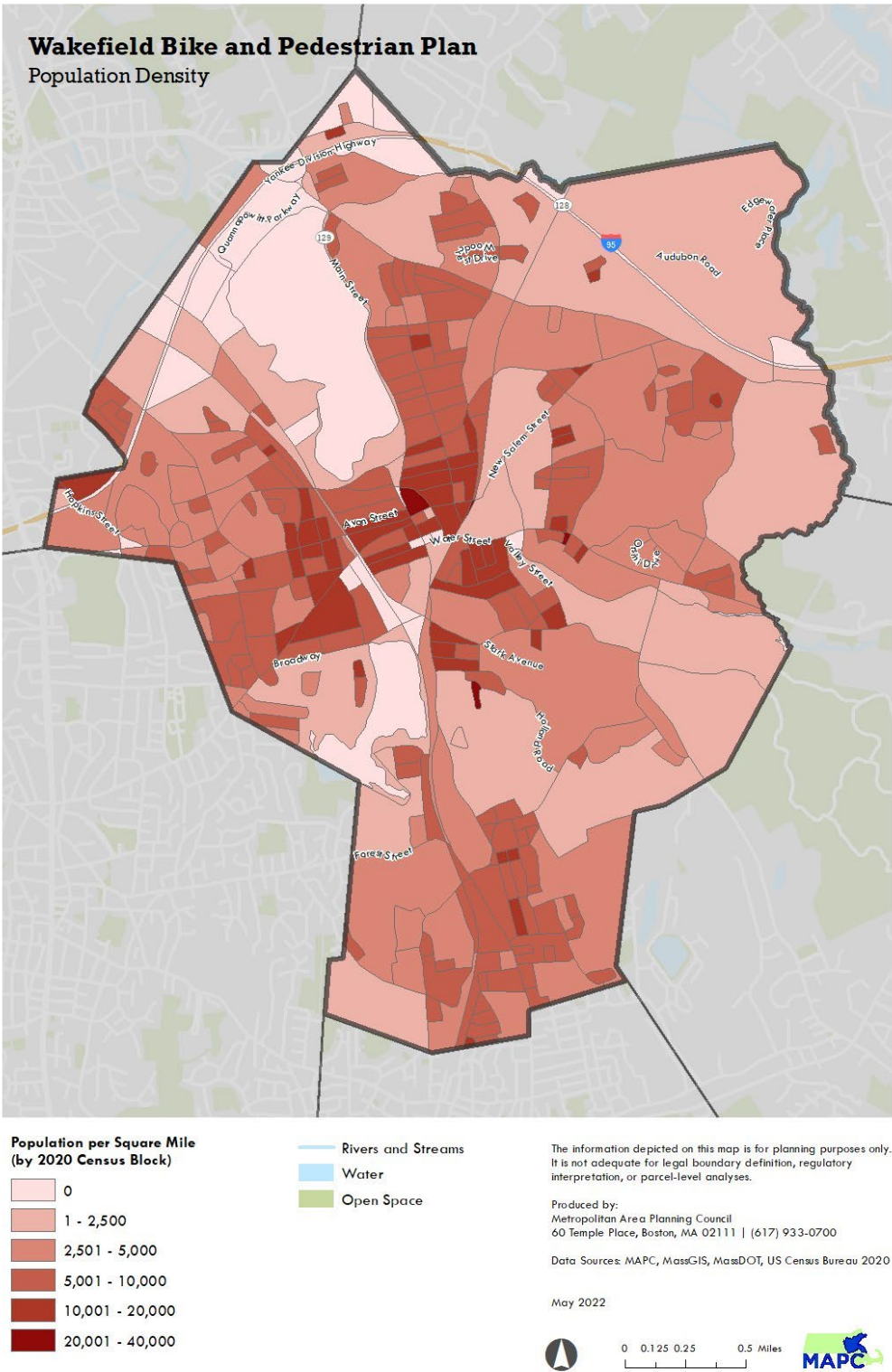


Figure 2: Road Classification

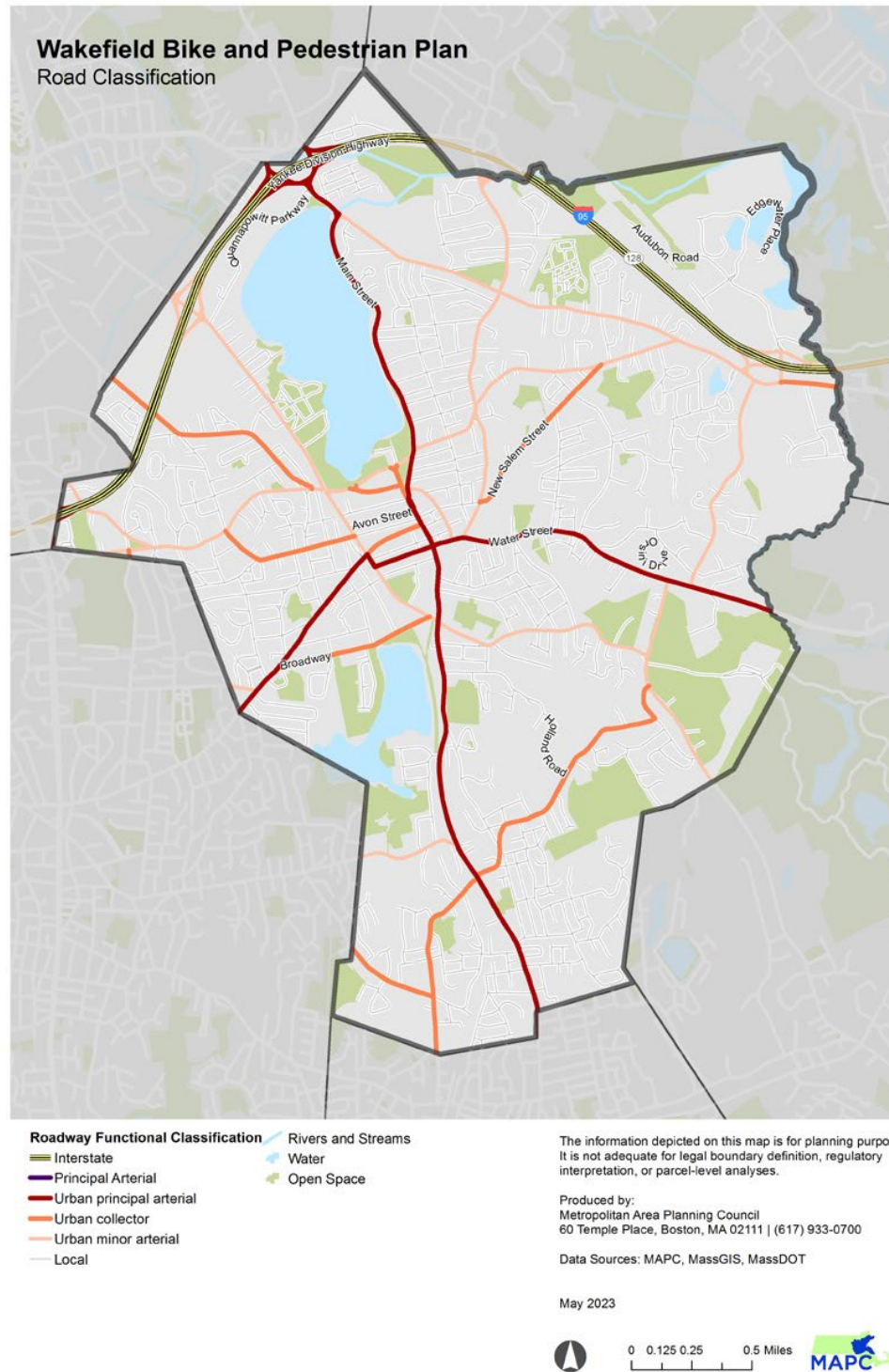


Figure 3: Crashes involving pedestrians or bicyclists

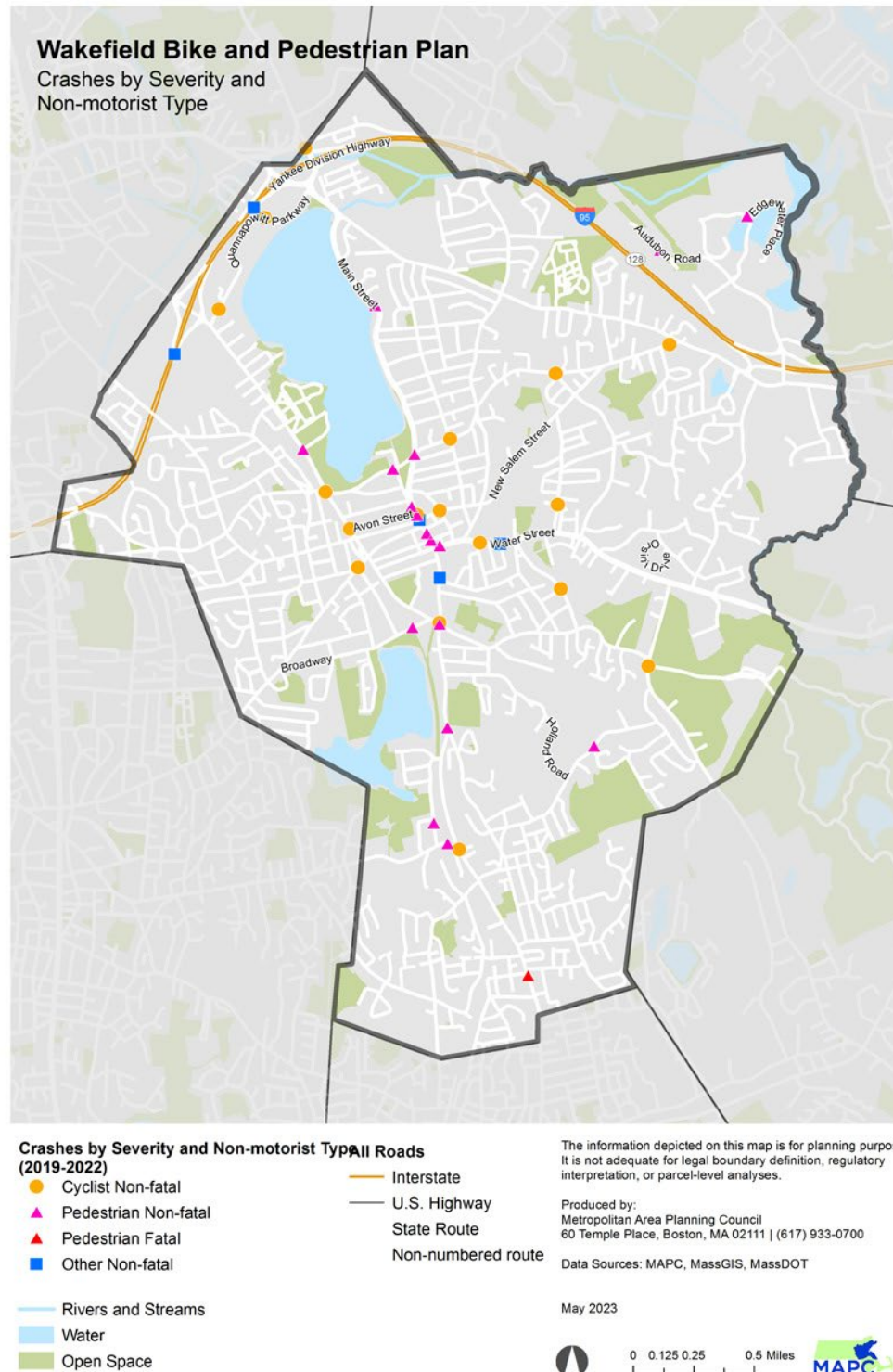


Figure 4: Sidewalk Inventory

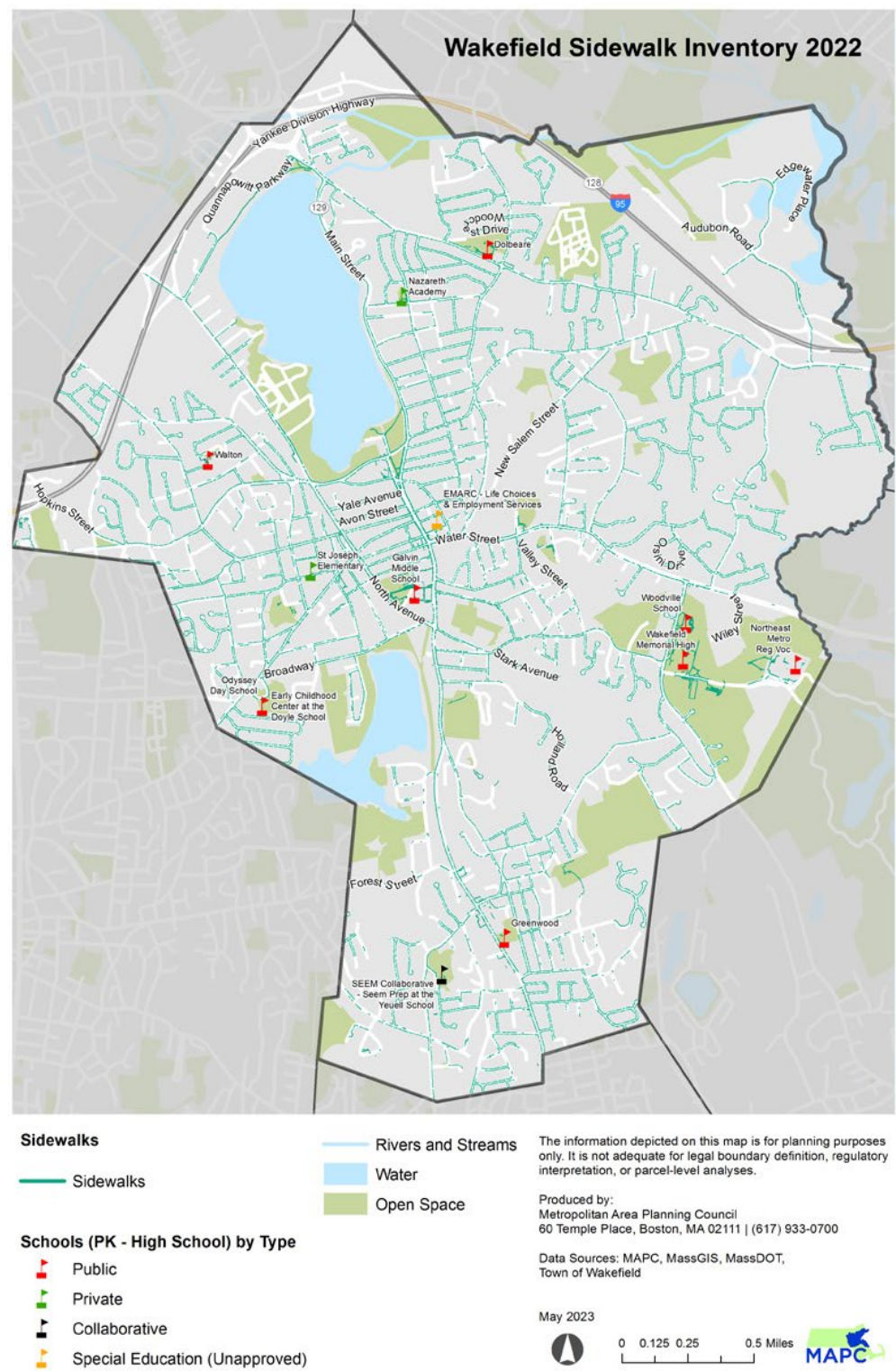
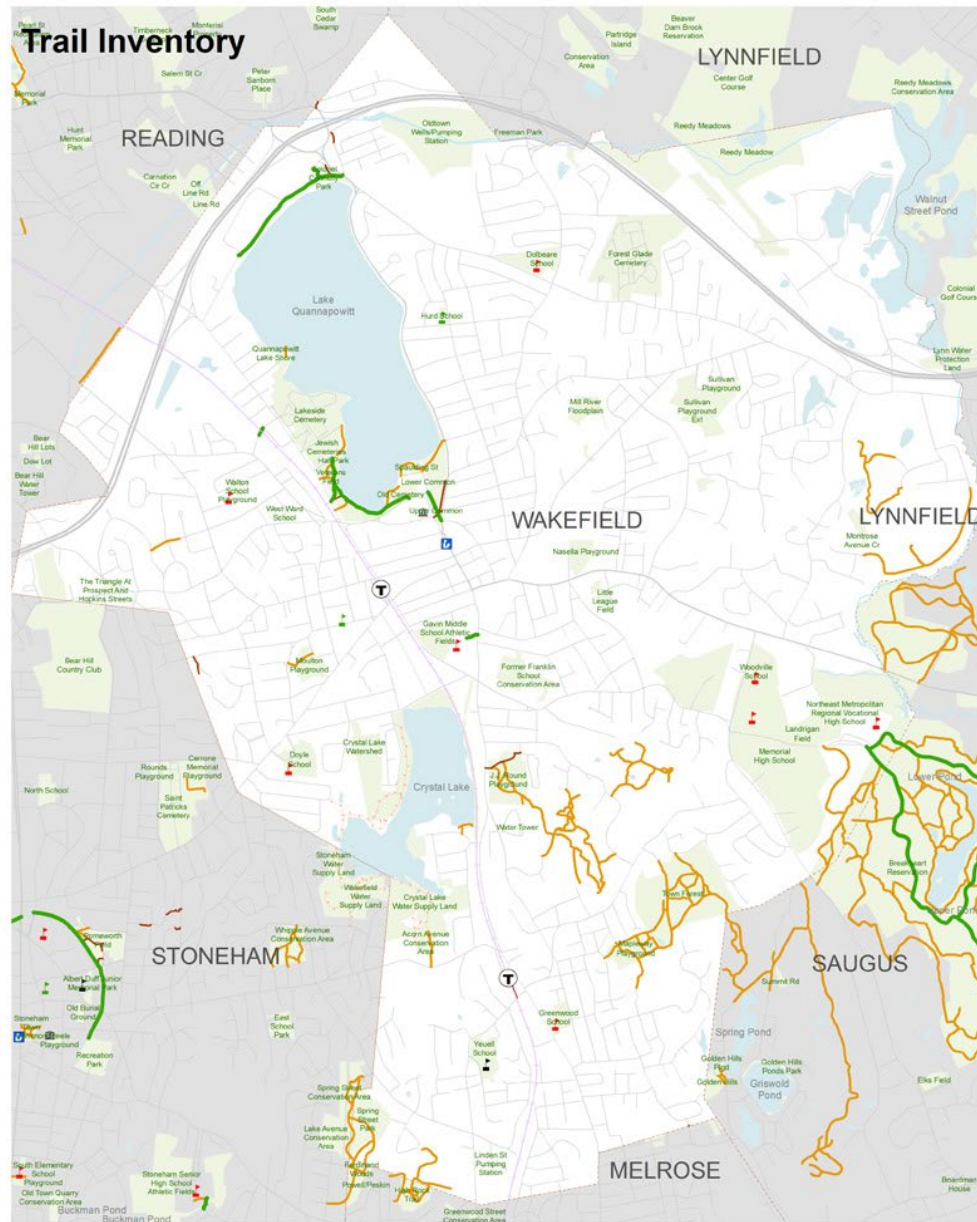


Figure 5: Trail Inventory



Legend

Shared Use Paths existing

Shared Use Path

Walking Trails existing

Paved Footpath

Natural Surface Footpath

Footpath - Closed to the public

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

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Data Sources: MAPC, MassGIS, MassDOT

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Chapter 2: Community Engagement

This study included several community engagement techniques, including site visits, a survey, and stakeholder meetings. MAPC staff held public and internal meetings with Town staff and residents, along with multiple walking tours led by local advocates and municipal staff. For all meetings, MAPC invited and welcomed community organizations throughout the planning process, including public meetings to solicit feedback.

A. Site Visits

MAPC conducted two formal site visits with Town staff and SSWG to evaluate the existing conditions. The walking tours took place on June 28, 2021, and March 25, 2022. During these site visits, residents and town staff highlighted areas of concern. The site visits served as an opportunity to observe travel behavior, ask questions of key stakeholders, and evaluate current conditions.

B. Survey

In the fall of 2021, the project team distributed a bicycle and pedestrian survey to people who live or work in Wakefield. The survey was distributed through the Safe Streets Working Group (SSWG), newspaper posts, public postings, press releases, and the Town of Wakefield website. The press release appeared in a November 17, 2021, Patch article.

The objectives of the survey were to:

1. Establish locations of interest
2. Aggregate areas of concern
3. Classify barriers for pedestrian and bicyclist behavior
4. Identify user groups

1. Who took the Survey?

The survey recorded a total of 360 complete responses. 85% of people indicated that they reside in Wakefield, while 7% of survey respondents travel to the Town for work and shopping. 5% indicated they travel through Wakefield to get to another destination, while 3% of survey respondents travel to Wakefield for some other reason.

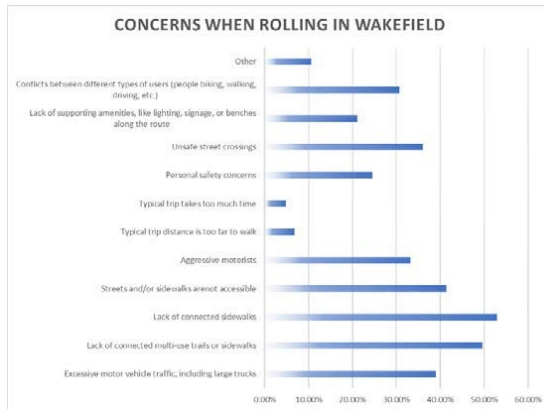
2. Concerns for Walking, Biking, and Rolling

MAPC asked respondents to identify their concerns or barriers to walking, biking, and rolling in the Town.

- Walking- For walking facilities, a lack of connected sidewalks, multi-use trails, and crosswalk and sidewalk maintenance were the greatest concerns or barriers facing pedestrians. Excessive motor vehicle traffic and aggressive motorists were also cited as a concern among survey respondents.
- Biking- For biking, respondents cited poor or missing bike lanes as the greatest barrier in Wakefield. According to the survey, a lack of multiuse trails and aggressive motorists were the second greatest concerns facing bicyclists in Wakefield.
- Sidewalk- Respondents revealed sidewalk connectivity was the biggest barrier or concern when rolling in Wakefield. The lack of multi-use trails and inaccessible streets and sidewalks were also selected as the most significant barriers.

Figure 6: Survey, What places do you currently walk, bike or roll to?





3. Top Locations of Concern

The most frequent locations that people access by walking, biking, or rolling are the downtown area, parks, grocery stores, shopping areas, and schools.

The following locations were the most frequently identified by survey respondents as needing improvement:

- Crossing Main Street was identified as a challenge, with many intersections along the corridor identified by survey respondents. The North Avenue intersection was consistently mentioned as the most difficult to cross.
- The North Avenue corridor was frequently mentioned as difficult to cross, particularly the Albion Street intersection and the Prospect Street/Church Street intersection.
- Walking conditions around Lake Quannapowitt, particularly the need for wider sidewalks to accommodate heavy foot traffic.
- Greenwood Street and the Myrtle Avenue and Spring Street intersections were identified as unsafe to cross or cycle through.
- Oak Street was mentioned several times for its poor sidewalk condition.
- Lowell Street was highlighted for lack of safe bike accommodation given that it connects to a school and the lake.
- Audubon Road is heavily used by bicyclists to commute to work. Local businesses and property owners have installed bike racks in the area to promote bike usage.

For full survey results, see Appendix A, B.

C. Workshops or Public Meetings

MAPC conducted three public meetings in coordination with the Town of Wakefield. The first public meeting took place on December 13, 2021. During this meeting, the project team presented some initial findings and survey results and facilitated breakout groups. During the

breakout sessions, residents and other meeting attendees proposed improvements and made suggestions for the plan.

The second public meeting was held on July 14, 2022. A draft plan was shared for feedback. Following the presentation, attendees were separated into virtual breakout rooms for further discussion. The meeting was an opportunity to speak directly with stakeholders and obtain real-time feedback on the public process.

The third public meeting, held on June 8, 2023, summarized modifications to the draft of the plan and provided new updates.

On July 10, 2023, November 13, 2023, and February 26, 2024, a draft plan was presented to the Town Council incorporating comments and feedback from the public and the Town Council.

D. Additional Engagement

In addition to the survey, community engagement was conducted through conversations with residents, boards and committees, frequent observation, and stakeholder meetings. The project team joined the Wakefield Traffic Advisory Committee meeting, Safe Streets Working Group meetings, and consulted with the MassDOT Safe Routes to Schools Outreach Coordinator assigned to the Town of Wakefield.

The project team presented to the Town of Wakefield's Traffic Advisory Committee at their June 24, 2022, December 1, 2023, February 2, 2024, and February 16, 2024, meetings to provide a project overview, existing conditions, community engagement strategy, key recommendations, and the project action plan. The committee members offered initial feedback for MAPC and Town staff to explore and incorporate into the final plan.

Chapter 3: Policy Recommendations

A key goal of this plan is to establish a process and a culture of designing for and including the needs of pedestrians and bicyclists in all infrastructure projects in Wakefield. This includes projects moving through the phases of design and the selection of new projects for funding. While this plan will not identify every necessary infrastructure change, it does highlight significant projects or corridors to prioritize. This section will focus on design "best practices" and policy-based solutions that can be adopted within the Town of Wakefield.

Roads designed to accommodate all modes of travel, including bicyclists and pedestrians, should be "low stress" and designed and built to encourage use through safety, comfort, and connectivity. Low stress bicycle and pedestrian facilities, are for the most part, separated from vehicle traffic. Low traffic streets can be made low stress without separate facilities.

Encouraging bicycle and pedestrian travel is best accommodated with a complete or continuous network. Missing segments of paths, safe street crossings, sidewalks, or other infrastructure can deter use and create greater safety concerns. We can create Complete Street cross-sections that will address a wide range of elements, including sidewalks, bicycle lanes, crosswalks, curb extensions, modified vehicle travel lanes and streetscape/ landscape treatments. To create Complete Streets, which will enable safe use and mobility for all users, including drivers, pedestrians, bicyclists, or public transportation riders of all ages and abilities, thoughtful planning and repurposing of the right-of-way is needed.

A. Bicycle Accommodations

This section will find general cross section recommendations to create a Complete Street concentrating on bicycle and pedestrian infrastructure improvements. The section is broken into five "Tiers" of bicycle protection, with the lower numbered tier providing a higher level of security. When looking to implement new bicycle infrastructure, the highest level of protection that the street's unique characteristics can accommodate should be used.

1. Tier 1 — Shared Use Paths

Shared use paths are infrastructure designed to be shared with non-motorized users, including walkers, strollers, wheelchair users, dogs, and more. Shared use paths are often referred to as mixed-use paths and bike paths. Shared use paths are typically two-directional, with lanes separated by a thin dashed yellow line. Besides providing a bi-directional travel flow, the dashed yellow line allows faster users (bikes and pedestrians) to use the adjacent lane to pass slower users.

Shared use paths can be located in abandoned rail beds, open space land, or roadway rights-of-way. When installed in roadways, they are separated from vehicular travel ways with a

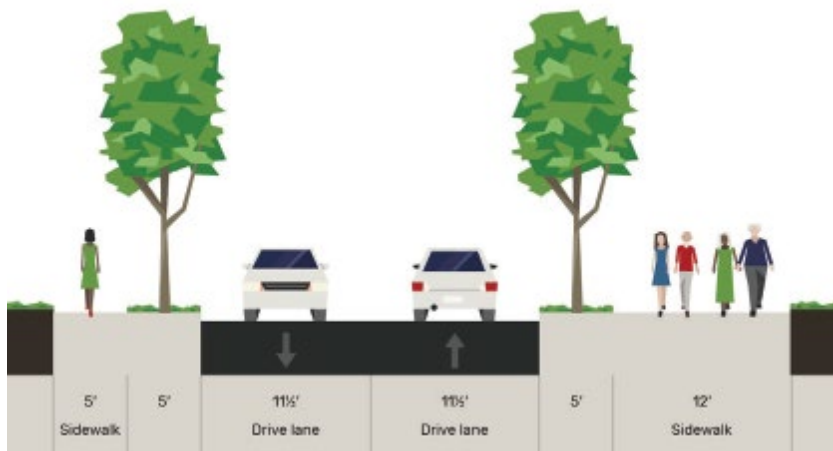
separation of curbing, vegetation, or on-street parking. Typically, shared use paths have a width of 10-12 feet, but that width can be reduced to 8' in very limited circumstances.

In *Figures 7 & 8*, below, you will find an example photo and a cross-section.

Figure 7: Shared use path-adjacent to roadway



Figure 8: Example cross section of shared use path adjacent to the roadway



2. Tier 2 — Protected Bicycle Lanes

Protected bicycle lanes are for exclusive use by bicyclists and are separated from motor vehicle traffic. The preferred width for a protected bike lane is 6-7 feet wide to allow bicyclists to pass each other and allow for plowing and sweeping. Sometimes, a roadway can be restriped to use the available shoulder area.

Vehicle and bicyclist separation options include flex posts, concrete barriers/ partial curbs, painted gore strips, vertical curbing vegetated strips, and parked vehicles. Wider cross-sections may consist of both planted buffers and protected bicycle lanes.

Wakefield has a network of collector and arterial roads that provide opportunities to be restriped or reconstructed for safe motor vehicle, bicyclist, and pedestrian use. In many cases, a general-purpose travel lane of 11 feet wide is sufficient for motor vehicle use and meets MassDOT design guidelines.

In *Figures 9 -14*, below you will find example photos and cross sections.

Figure 9: Example of a protected bike lane with curb separation



Figure 10: Example of a cross section with protected bike lanes with a curb separation



Figure 11: Example of protected bike lanes with parking separation



Figure 12: Example cross section of protected bike lanes with parking separation

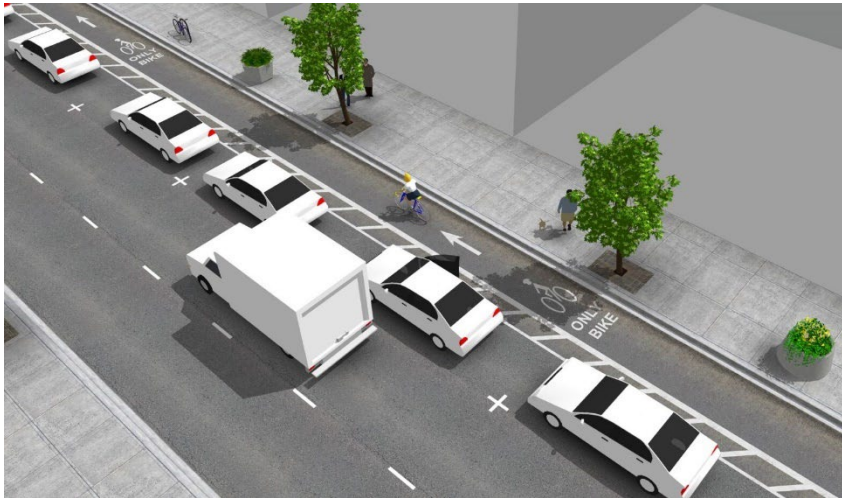


Figure 13: Example of protected bike lanes with gore strip and flex post



Figure 14: Example cross section of protected bike lanes with gore strips and flex posts



3. Tier 3 — Conventional Bicycle Lanes

Conventional bike lanes are separated from vehicular traffic by a white line pavement marking. They can be installed next to a curb and next to on-street parking.

A conventional bike lane is typically 5 feet-wide. However, 4 feet-wide lines may be accommodated next to a curb or in other constrained conditions. Conventional bike lanes should be deployed only on streets that cannot accommodate a shared-use path-protected bike lane configuration.

Figure 15: Example of a one-way bike lane



Figure 16: Example cross section of conventional bike lanes



4. Tier 4- One-Way Bicycle Lane

One-way bike lanes are reserved for space-constrained roadways where bike lanes cannot be accommodated in both directions. One-way bike lanes are separated from vehicular traffic by a single solid white line; they are typically 5 feet wide, can be reduced to 4 feet wide, and may be accommodated next to a curb and constrained conditions. Normally, a one-way bike lane is deployed on roads with a 40-foot right-of-way with a curb-to-curb roadway width of 24 feet.

It is essential when a one-way bike lane is implemented that an adjacent street be identified to receive the same treatment to accommodate bicycle traffic in the opposite direction.

Figure 17: Example of a one-way bike lane



Figure 18: Example cross section of a one-way bike lane



5. Tier 5- Shared Streets

Shared Streets, sometimes called bike boulevards, are roadways where bicyclists and perhaps pedestrians, if no sidewalk exists, share the traveled way with motor vehicles. This can be a helpful treatment when the correct roadway characteristics and volumes are present on a street. Generally, low-volume residential streets with less than 5,000 daily trips and without centerlines are the best candidates to deploy shared streets/bike boulevards. Traffic-calming elements should be considered on streets that receive excess cut-through traffic. This includes

signage identifying the road as a shared street/bike boulevard to inform all roadway users; pavement can be marked with sharrows (share the lane markers) and painted pedestrian areas. The NACTO Urban Street Design Guide provides good examples of treatments for various street contexts.

It should be noted that MassDOT recognizes signed shared streets/bike boulevards on low-volume streets as bike accommodations for state funding opportunities. However, MassDOT does **not** recognize painted sharrows as a bike accommodation on arterial and collector roadways, which impacts state funding opportunities.

Figure 19: Example of shared street



Figure 20: Example cross section of a shared street



6. Bicycle Parking

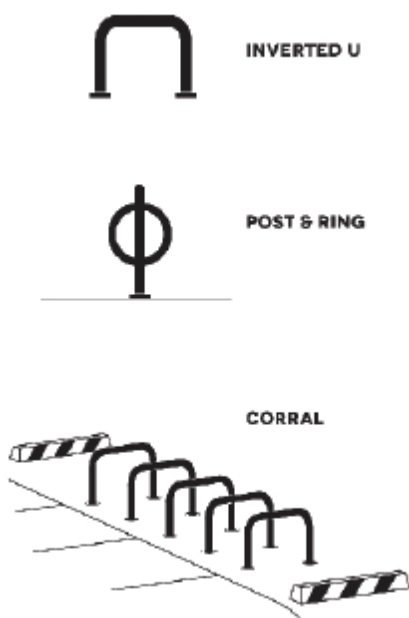
Bicycle parking is a critical element to accommodating and encouraging biking as transportation and a viable way to replace driving trips. Bicycle parking should be secure and in convenient locations where people will use them.

All bicycle parking installed should meet general standards for bicycle parking design. The APBP Essentials of Bicycle Parking guideline is recommended for use in selecting racks, general design guidance, and placement.

In general, racks should be designed to support a bicycle at two points of contact, allow for a variety of bicycle sizes, and be able to use a strong U-Lock to attach to the rack. The figure below demonstrates good bicycle parking, including adequately spaced racks and a shelter.

Inverted U or Post and Ring design bike parking can be installed along streets, parallel sidewalks, or in a row parallel to each other (spaced as noted on p. 12 of the Essentials for Bicycle Parking). Preferably, in-ground-mounted bicycle racks should be utilized over surface-mounted racks for enhanced security and tamper-resistant qualities. All short-term bicycle parking should be included in business districts, libraries, Town Hall, and other civic buildings.

Figure 21: Most popular acceptable bike parking designs (Source APBP)



Bicycle parking is generally categorized into short and long-term parking. Short-term parking is for short trips such as to patronize businesses or parks. Long-term parking is categorized by trips to work, transit facilities, or parking at residential buildings. Short-term parking is easily visible and accessible. Long-term parking should be sheltered from the elements and in a secure area such as a locked room or card-accessed facility.

The following are general recommendations for bicycle parking. Note that each inverted U rack holds two bicycles if installed correctly. If racks are consistently close to full, then plan on increasing parking to meet demand.

- Encourage short- and long-term bicycle parking in all new multi-family, business, and retail developments.
- Install bicycle parking (or ensure adequate supply) at all key destinations in the Town, including but not limited to:
 - Schools (based on Safe Routes to Schools Assessment), particularly the Wakefield Memorial High School and Galvin Middle School. Install racks to initially serve the current school demand with the ability to expand to serve 10% of the school population.
 - Downtown and Greenwood commercial districts (recommend two racks per block, each side of the street)
 - Library — 8 racks (replace existing non-standard ribbon rack)
 - Grocery stores (Shaw's and Farmland) and larger retail establishments — 6+ racks per big box business
 - Lake Quannapowitt, north and south ends of the lake (6 racks south end, four racks north end)
 - Greenwood and Wakefield Commuter Rail stations in collaboration with the MBTA or appropriate owner. (10 racks at each station)
 - Americal Civic Center (Main St)
 - Parks — Recommend two racks per park. Lower priority than locations noted above
- Install sheltered bike parking at heavily used locations

Figure 22: Bicycle parking example



B. Pedestrian and Rolling Accommodations

When greater numbers of people walk, communities can experience social, economic, health, and environmental benefits. (Citation of a study) Establishing local guidelines and standards for pedestrian and accessible mobility allows for enhancements to be dovetailed into planned infrastructure improvement projects or incorporated into development offsite scope of work.

Core principles to consider when creating a strong pedestrian network include:

- Connectivity – Provide connections between key destinations including transit stations, bus stops, civic buildings, downtown business districts, parks, open space, etc.
- Safe Roadway Crossings – Provide crosswalks at appropriate intervals, including MUTCD approved signage.
- Accessibility – Remove mobility barriers in the network utilizing the standards within the Public Rights of Way Accessibility Guidelines (PROWAG).

1. Sidewalks

The sidewalk network in Wakefield is largely “complete” as most streets have sidewalks. The Department of Public Works utilizes a Town-wide inventory and condition assessment to prioritize sidewalk repairs and replacement projects and to address incomplete accessibility and safety enhancements. The sidewalk inventory is shown in Figure 4.

A few locations in Town have network gaps or limited connectivity. In general, priority should be given to completing the sidewalk network on both sides of all arterial streets. Suggested sidewalk project areas are highlighted within the plan recommendations section.

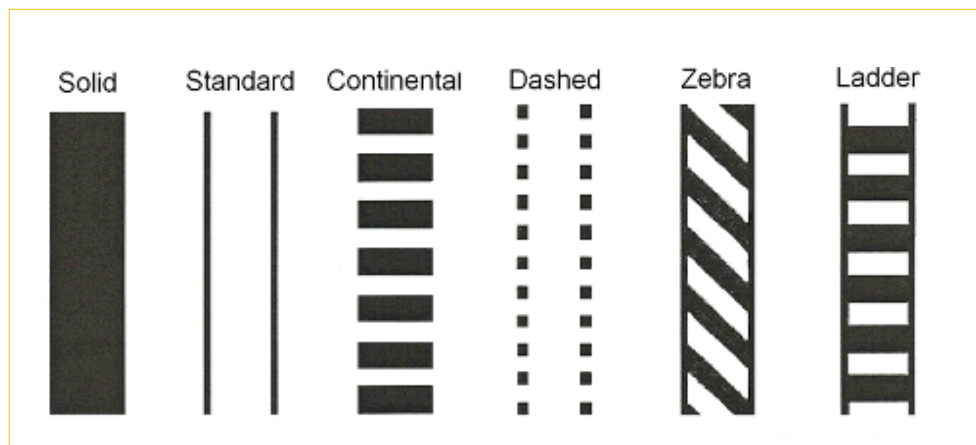
All sidewalk projects should ensure that sidewalks have sufficient width to allow pairs and groups to walk past each other comfortably. Downtown areas and areas with higher pedestrian volumes will need wide sidewalks and clear paths to accommodate peak periods. Sidewalks must also have minimum continuous widths meeting ADA Pedestrian Access Routes (PARs) as well as maximum slope requirements in the PROWAG.

2. Crosswalks

Crosswalks are an important component of a pedestrian network. It is generally recommended that crosswalks be spaced no closer than 200’-300’ from each other. The final determination of crosswalk locations should be based on several factors, including but not limited to demand (present and future), pedestrian compliance, roadway speed, safety, and crash history.

It is recommended that ladder-style crosswalks be used for optimum visibility throughout Town. High-visibility crosswalks such as the ladder style have been shown to improve yielding behavior.

Figure 23: Crosswalk designs showing the recommended latter pattern



All crosswalks require the installation of ADA-compliant curb ramps where the roadway meets the sidewalk. Careful planning is needed to ensure that the grading of ramps meets the requirements within the PROWAG. All crosswalks will need appropriate signage consistent with requirements in the Manual for Uniform Traffic Contractor Devices (MUTCD). Like sidewalks, the Department of Public Works utilizes a Town-wide inventory and condition assessment to confirm compliance with requirements and prioritize curb ramp repairs, replacement and new installation projects.

Mid-block crossings, in general, are not preferred, but when necessary, due to conditions, may need to include the installation of traffic calming measures such as chicanes, bump outs, raised crosswalks, etc. Additionally, safety enhancements, including rapid reflecting beacons, pedestrian phases at traffic signals, and improved sight distance at crosswalks, may also need to be incorporated at several crosswalks.

When crosswalks are located at a signalized intersection, pedestrian signals with vibrotactile buttons and auditory crossing signals are required. Signal equipment must be properly placed as required by the PROWAG and MUTCD. Additionally, all legs of an intersection should be striped when pedestrian facilities are located at all approaches to facilitate full mobility through the intersection.

It should be noted that budgeting for crosswalk projects is a necessity due to the significant costs associated with all of the above-referenced requirements and recommendations. Further, the project may require significant time to implement. Currently, new crosswalk requests are vetted by the Traffic Advisory Committee and budgeted and constructed through the Department of Public Works.

Chapter 4: Project Recommendations

Ultimately, this Plan's goals and policy recommendations lead to specific project recommendations. This section provides specific project recommendations in Wakefield to provide regional bicycle network connections, to accommodate bicycle use on arterial and collector streets, and intersection projects to improve connectivity.

Before implementing any of the recommendations below, a full engineering analysis is required to balance each street's unique characteristics, rights of way widths, grading limitations, utility needs, parking needs, and other competing interests. Some projects may warrant traffic and parking studies to ensure the improvements will not have adverse impacts and remain within the public interest. Projects must be vetted through the Traffic Advisory Committee (TAC) and approved by the Town Council.

A. Connected Networks

LandLine is MAPC's vision to connect our greenways and trails into a seamless network. The Plan has been developed in coordination with the Landline Coalition, a group of transportation planners, engineers, municipal officials, and local trail and greenway advocates.

In May 2018, MAPC unveiled the Landline Trail and Greenway Plan, connecting 1,400 miles of trails and greenways throughout the Boston Region. In 2021, MAPC released the first Trail and Greenways Rankings report. These rankings compared Metro Boston municipalities based on their trail, bicycle way, and greenway inventories.

In 2022, MassDOT released the Wayfinding Design Guide. The Guide provides prescriptive signage standards for marking and wayfinding Greenways. It's MAPC's goal to sign the entire LandLine Network eventually; this parallels our complete state highway signage. Installing signage to direct users is critical for access, encouraging the use of amenities and discovery through walking, biking, and wheelchairs. Accurate and visible wayfinding can also be used to avoid multi-modal conflict points by clearly communicating the use of space and dedicating space for specific modes.

Three Greenway Corridors within Wakefield have been proposed as part of the LandLine. These are the Mystic Highlands (which include branches and individual projects within Malden, Melrose, Wakefield, Reading, and Stoneham), the Breakheart Greenway, and the Wakefield/Lynnfield Rail Trail.

B. Greenway Corridors

The three proposed Greenway Corridors connect downtown, the lake, all schools (within ¼ miles), and adjacent communities. Recommendations follow, describing

the path of each Greenway Corridor.

1. Mystic Highlands Greenway

MAPC is working with Wakefield and neighboring cities to connect the Mystic Highlands Greenway. The goal of the Mystic Highlands Greenway is to develop a safe and inviting corridor for walking and biking. The corridor has been structured to connect several town centers, parks, transit, and established regional trail corridors. The municipalities included in this new development are Malden, Melrose, Wakefield, Stoneham, and Reading. MAPC and state Senator Jason Lewis are leading a coalition to scope plan and implement this shared-use path. The new Greenway will connect the Malden River paths, Tri-Community Greenway, Lynn Fells Parkway, Wakefield/Lynnfield Rail Trail, and Lake Quannapowitt.

Within Wakefield, the Mystic Highland Greenway is divided into three segments that intersect in the Downtown Wakefield area: the Melrose Branch, Wakefield Branch, and Stoneham Branch.

(a.) Melrose Branch

From North Avenue south, the Greenway follows Main Street to Forest Street, then to Atwood Street. At the end of Atwood Street, a shared use path is proposed along the MBTA ROW to Greenwood St. From Greenwood Street, the Greenway follows low-traffic streets, creating Shared Streets on; Foundry Street, Cooper Street, Grove Street, Hanson Street, Renwick Road, Morgan Avenue, Overlook Road, and Nowell Road into Melrose.

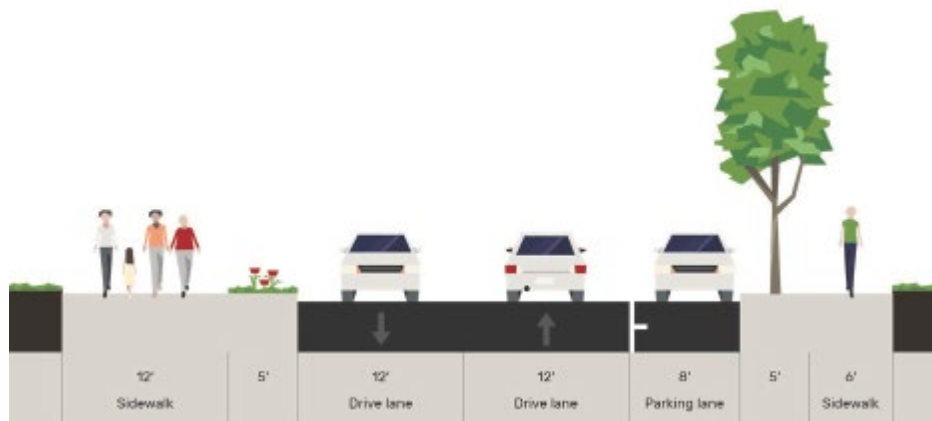
Consider short-term flex post and paint installation before a complete build. Sections with limited ROW shall consider widening the sidewalk on one side to a shared-use path width.

Between North Ave and Forest Street, construct a protected bike lane or shared use path along Main Street. Evaluate a mix of one-way protected bike lanes or two-way protected bike lanes on one side and widening the sidewalk to create a share use path on one side. Parking would be retained on one side of these roadways in most areas. Install wayfinding signs per MassDOT guidelines on the shared streets and consider traffic calming on selected streets as needed.

Figure 24: Melrose Branch future location on Main Street



Figure 25: Recommended cross section for Main Street, Wakefield (Melrose Branch)



(b.) Wakefield Branch

Within the Town of Wakefield Mystic Highland Greenway branch, there are two project recommendations: Downtown Wakefield (between North Ave and Main Street), and the Lake Quannapowitt Loop. These two projects connect the Greenway to other communities but are also standalone projects which could create Complete Streets within the community.

i. Downtown Wakefield

Stretching from Church Street to North Avenue, the Envision downtown revitalization project has been developed as a holistic multi-model project incorporating new bicycle accommodations and sidewalk and crosswalk improvements consistent with recommendations in this plan. The project also includes parking reconfigurations, streetscape improvements, place-making, safety enhancements, and traffic signal upgrades. The project

has gone through significant outreach and refinement over the past three years. The project is phased into two sections. Both sections are currently programmed for state funding on the Transportation Improvement Program (TIP). The downtown proper between Church Street and Water Street is included in the fiscal year 2028 TIP, while the section from Water Street to North Ave is incorporated into the Wakefield Rail to Trail project and programmed on the Fiscal Year 2026 TIP.

i. Lake Quannapowitt Loop

Lake Quannapowitt is a popular walking, running, and recreational and scenic destination for Wakefield residents and visitors. This Plan acknowledges that recommendations for the Lake Loop must accommodate a variety of users. The overall goal of the Lake Loop is to construct a 12-foot-wide paved path around the lake. This will allow two-way travel with room to pass each other.

Currently, most sections around the lake are extremely narrow. The most limited areas are about five feet wide, with guardrails on both sides.

The narrow path width forces users to move into the street to avoid conflicts with children or walkers. Recreational or leisure walkers are forced to step aside, to allow bicyclists the ability to pass them at a faster speed.

There are three objectives related to the improvements around Lake Quannapowitt.

- Create a consistent, clockwise shared-use path width of 12 feet paved.
- Install bicycle parking, benches, improved crosswalks, and other features to improve access to the lake by foot, bike, and roll.
- Install wayfinding around Lake Quannapowitt, indicating directions to transit, appropriate routes for bicyclists, and highlighting key destinations.

The Lake Quannapowitt Loop project recommendations are divided into the following sections (clockwise from Main St): North Avenue, North Avenue-Reading, Quannapowitt Parkway, Lowell Street, Main Street (Lakeside), and Church Street.

(1) North Avenue

North Ave runs along the west side of the lake, separated by a cemetery, houses, or business uses.

In 2021, the Town of Wakefield was awarded \$2,000,000 under the MassWorks program to fund water system upgrades and multi-modal improvements along North Avenue. These improvements will support ongoing housing development that advances the goals and aims of the Town's 2015-2020 Housing Production Plan. The Town received a Housing Choice grant to update its Housing Production Plan in 2024.

The Town has completed the final design for the project, and construction began in the Fall of 2023 and will be completed in the Spring of 2024. Missing sidewalks were added on the west side of the work area. The remaining work includes narrowing travel lanes to 11 feet to allow for a northbound bike lane and a shared-use path constructing pedestrian crossings at Winn Street and Willard Road.

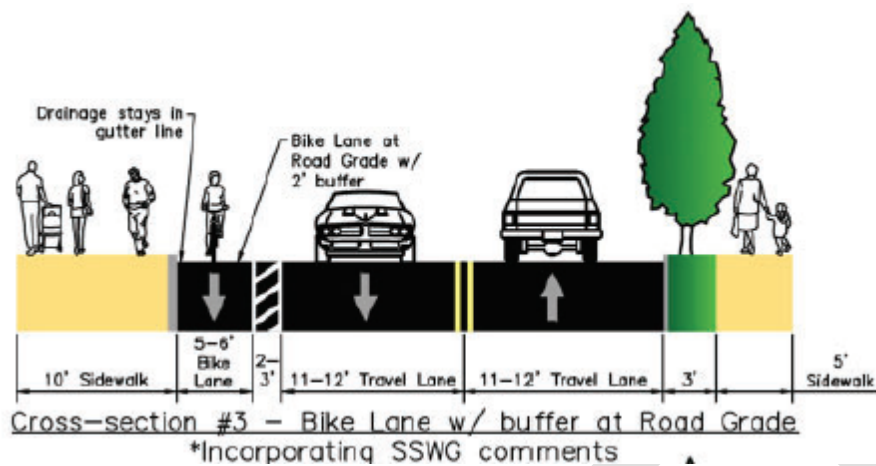
Figure 26: North Ave in 2022



Figure 27: Proposed North Ave Plan



Figure 28: Proposed North Ave cross section



(2) North Avenue to Reading

The Town of Reading has begun planning the reconstruction of Walkers Brook Drive, which would connect with the Greenway and the Lake Quannapowitt Loop. Currently, the underpass of I-95 has a cross section of four lanes and a narrow 5-foot sidewalk on the west side, which limits connectivity and impacts the ability to install new bike facilities.

Wakefield and Reading have initiated contact with MassDOT to evaluate and create a shared use path along North Avenue into the Town of Reading under I-95.

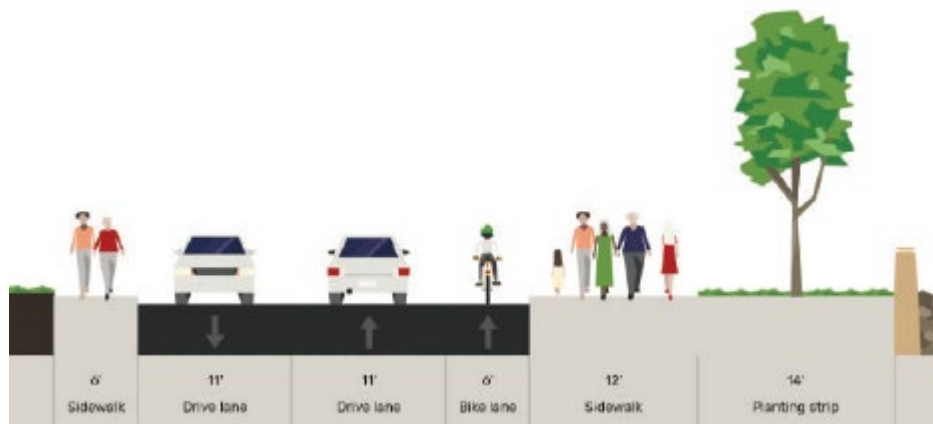
(3) Quannapowitt Parkway

A mixed-use multifamily project on Quannapowitt Parkway has provided funds to reconstruct the roadway. The proposed road will install a new 10-12' wide shared-use path to replace the sidewalk. The project is currently in the design and permitting phases and will be constructed in conjunction with the development.

Figure 29: Developer image of reconstructed shared use path



Figure 30: Quannapowitt Parkway cross section



(4) Lowell Street

A short section of Lowell St on the northeast corner of the Lake has a narrow sidewalk and a relatively wide roadway cross section of about 45 feet for three lanes of traffic.

The crossing distance and demarcation between the Cumberland Farms parking lot and the entrance to Main Street could be improved using a new design. The separation between the driveway and the road would increase visibility, facilitating safer crossings. Reducing to 33–35 feet will gain at least 10 feet for widening the path and landscaping.

- Reduce the pavement width to 33–35 feet to accommodate three 11-foot travel lanes
- Move the curb outward to widen the path to 12 feet and landscaped buffer between the path and roadway
- Realign the crosswalks along with a narrowing of the intersection of Lowell St and Main St (north segment).

(5) Main Street (Lakeside)

This section of Main Street lakeside has a ROW of 60 feet with a pavement width between 32–38 feet. Additionally, the Town owns land that abuts the ROW on the lakeside.

Currently, sidewalks are 5 feet wide and do not accommodate heavy pedestrian usage. Users are walking in the street in the parking area to pass one another. As noted previously, a continuous 12-foot-wide path is recommended around the lake to safely accommodate recreational use in both directions without walking or running into the roadway.

Parking is allowed in some sections of the roadway segment, but not all. Parking use for the area is typically concentrated on the north and south ends near the Lower Common and Gertrude Spaulding Park. Parking use can expand significantly during nicer weather and lakeside events. The preservation of the parking in this section of Main Street is required to support the Town's frequent event programming and recreational use at the lake.

The following pedestrian and bicycling accommodations are recommended to be installed to the maximum extent practicable:

- Narrow the roadway and curbing to two 12-foot lanes to accommodate a widened shared-use path and protected bicycle lane in the southbound direction.
- Use on-street parking as a buffer for the bike lane from vehicular traffic.
- Add missing sidewalks along the east side of Main Street.

Figure 31: Main Street (Lake Quannapowitt) current cross section





(6) Church Street

The section of Church Street from Main Street to Floral Way is included within the Downtown Envision project and is currently proposed to include a 10-12-foot shared use path on the north side of the roadway adjacent to the Lower Common. Closer to the North Avenue intersection the right of way narrows. Installation of a one-way bike should be installed to complete the Quannapowitt Loop.

(c.) Stoneham Branch

This Greenway section will follow a series of lower-traffic residential streets between downtown Wakefield and the rail trail. Given Stoneham's elevated height, the corridor aims to minimize steep hills where possible. Bicyclists will share the relatively low-traffic roads in this section with vehicles and pedestrians on the sidewalks.

Beginning at Main Street, this section of the Greenway is proposed to head west via Chestnut Street, Emerson Street, Gould Street, Converse Street, Jordan Avenue, Fox Road, and Mountain Avenue to the Stoneham line.

Install wayfinding signs per MassDOT guidelines and consider traffic calming on selected streets as needed.

Figure 33: Mass Trails Wayfinding Design Guide signage sample



2. Breakheart Reservation Greenway

The proposed Breakheart Greenway provides direct access between downtown Wakefield and DCR's Breakheart Reservation. Importantly, this greenway also directly connects to Wakefield Memorial High School, Northeast Metropolitan Regional Vocational High School, and Woodville School. The three sections of this greenway include Water Street, Farm Street, and Hemlock Rd. Recommended treatments for the greenway include conventional bike lanes on Water St., shared-use paths and protected bike lanes on Farm Street, and a shared-use path on Hemlock Rd. The Wakefield Memorial High School project incorporates a shared-use path along Farm Street.

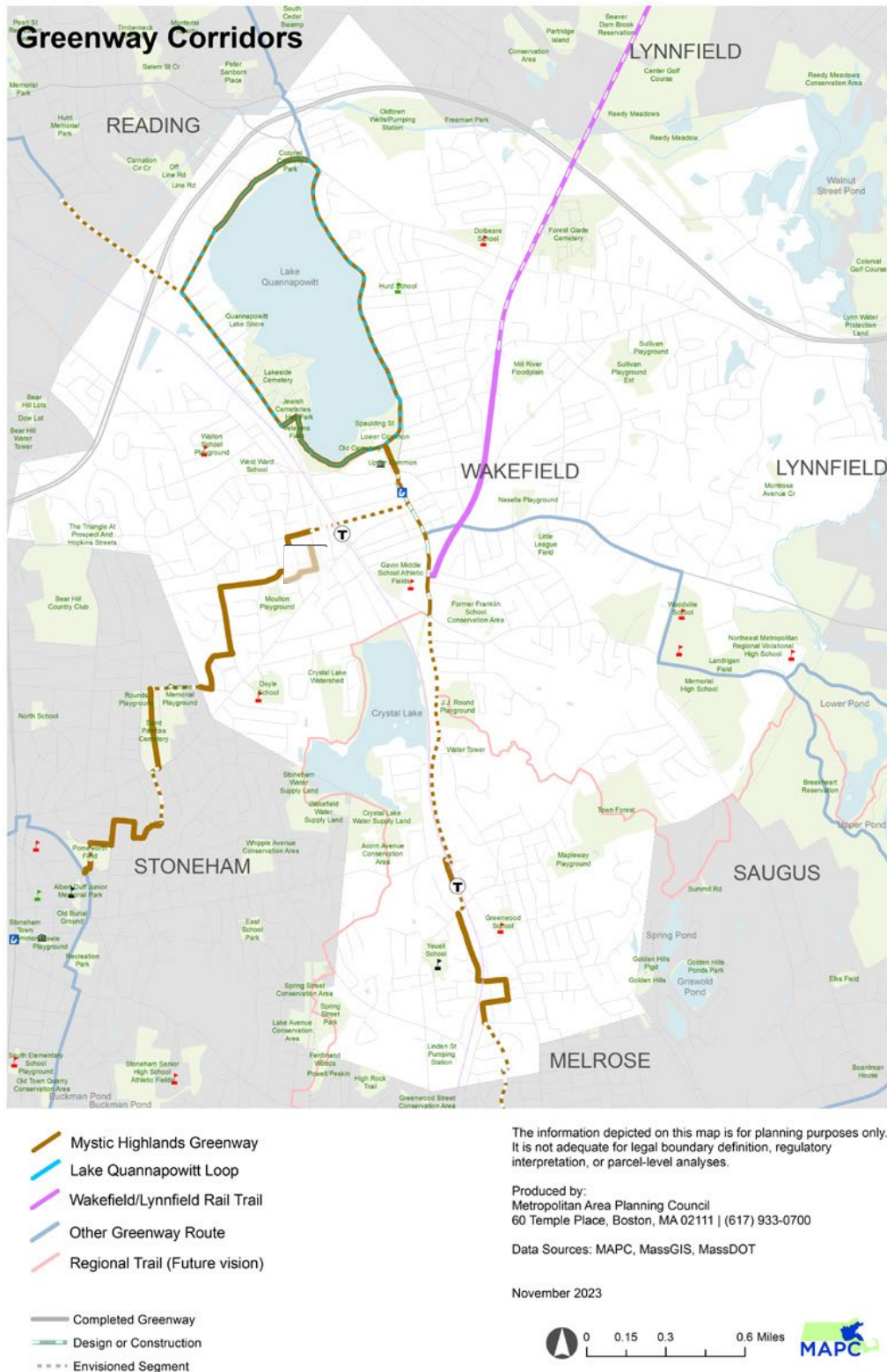
3. Wakefield Lynnfield Rail Trail

The rail trail is a connection to the Border to Boston Trail that will eventually connect into New Hampshire and Maine. Over 50% of the trail is complete. Within Wakefield, a portion is complete but has yet to be opened to the public. The town is working with the MBTA to finalize a lease agreement to open the constructed trail. The completed section of the trail is anticipated to be open in 2024.

The remaining Wakefield sections within the abandoned rail bed, from Salem Street to Fosters Lane, on Water Street from the trail crossing to Main Street, and a portion in Main Street from Water Street to North Avenue, are currently under design. The Water Street portion of the trail proposes a new shared-use path on the north side of the road. The project's Main Street portion proposes installing a new shared-use path on the western side of the roadway and expanded sidewalks on the eastern side of the road.

As noted, the project is funded within the state's Transportation Improvement Program in fiscal year 2026.

Figure 34: Greenway Corridors



C. Arterial and Collector Streets

Roadway widths and cross-sections throughout Wakefield do not vary significantly. Arterial streets are largely two-lane roads with minimal shoulders and sidewalks on both sides separated by a 2 to 3-foot grass buffer. Curb-to-curb widths are largely 30 feet, allowing for the potential for bicycle lanes within the existing width. Recommendations in this section are for areas that are not identified within the previous Section B – Greenway Corridors. Limited research on right of ways and pavement width was conducted. It should be noted that MAPC conducted limited right-of-way and travelway width research.

All roads identified for shared use paths or protected bike lanes in Wakefield are included within **Section B – Greenway Corridors** above.

1. Bicycle Accommodations

The following roadways have been selected to install bicycle accommodations based on available right of way and pavement widths:

- *Albion Street (North Avenue to Stoneham town line)*: Restripe the existing roadway to support conventional bike lanes.
- *Audubon Road*: Restripe the existing roadway to support conventional bike lanes.
- *Lowell St (Main Street to Salem Street)* - Restripe existing roadway to support conventional bike lanes.
- *Prospect Street (North Avenue to Stoneham line)* - Restripe existing roadway to support conventional bike lanes.
- *Vernon Street (Salem Street to Lowell Street)* - Restripe existing roadway to support conventional bike lanes.
- *Water Street (Rosemary Avenue to the Saugus town line)* Restripe existing pavement to support conventional bike lanes.
- *Albion St between Main St and North Avenue)* – Add a new protected one-way bike lane on the northern side of the roadway with gore strip buffers.

2. Sidewalk Projects

Sidewalk project planning should prioritize the elimination of network gaps, the sidewalk network should be expanded to areas without current sidewalk infrastructure, and sidewalks should be provided on both sides of the street when appropriate. Refer to **Chapter 2, Figure 4** of this report for a visual representation of the Town of Wakefield's sidewalk inventory. The following projects are recommended to enhance the Wakefield sidewalk network:

- Elm Street (Prospect Street to Parker Road) – Install new sidewalk expansion. *This sidewalk segment is currently designed and is funded using ARPA funds. Construction is scheduled for 2024*
- Parker Road— (Elm Street to Reading Town Line) - Install new sidewalk expansion. This sidewalk segment is currently designed and is funded using ARPA funds. Construction is scheduled for 2024
- Parker Street (Prospect Street to Elm Street) - Construct in-fill sidewalks to support pedestrian traffic to the Walton School.
- Nahant Street (Mt. Pleasant Ave to Partridge Lane)— Install new sidewalk expansion to connect neighborhoods and promote walkability to the Wakefield Memorial High School and Woodville Elementary School. This sidewalk segment is currently designed, planned for a 2024 construction, and funded using ARPA funds.
- Forest Street (Main Street to Stoneham line) - Install new sidewalk expansion. It should be noted; the sidewalk will require significant retaining walls and ledge cuts and may be cost-prohibitive.
- New Salem Street - Install new sidewalk expansion.
- Foundry Street- Continue new sidewalk expansion using developer contributions in the transit development area.
- Prospect Street (North Ave to Stoneham line) - Construct in-fill sidewalks and sidewalk expansion to connect neighborhoods and Bear Hill Country Club.
- Vernon Street (Salem and Lowell Street) – Install in-fill sidewalks
- Water Street (Rosemary Ave to the Saugus town line) - Install new sidewalk expansion
- Hopkins Street - Install new sidewalk expansion to connect Hopkins Street residents and the 40B development at the Reading town line. The project has been advanced to preliminary design and has been awarded a MassWorks grant.

D. Intersection Projects

Several intersection improvement projects have been identified through the Plan process, including the survey. The following priority intersection projects are recommended to be implemented.

Oak Street, Greenwood Street, Green Street

This intersection of multiple roadways confuses drivers and pedestrians due to excess pavement widths and lack of clear travel lane designations. As a result, pedestrians crossing the street are less clear of vehicle movements. Crosswalks are wider than necessary due to pavement widths.

The project will reconfigure the intersection. Key goals are to significantly improve pedestrian crossings, clarify traffic movements, and remove excess asphalt. Due to the lack of width from all approaching roadways, no bike lanes will be provided through the project. Sharrows may be considered as part of the project. A new public space will evolve out of the reclaimed roadway space.

The Town has developed concept design alternatives, and a public process developed a preferred alternative. The Town applied for a Shared Streets and Spaces grant in the fall of 2023 to fund the project. If successful, the construction will be completed in 2024.

Figure 35: Existing Conditions at Oak Street, Greenwood Street, Green Street



Figure 36: Preferred Concept Design at Oak Street, Greenwood Street, Green Street



North Ave @ Prospect Street/Church Street

At the time of this report, there was some dedicated sidewalk space on North Ave near the Mark A. Delory Municipal Gas & Light Building. Sidewalk connectivity is recommended near high-traffic areas, especially locations near transit. Gaps in sidewalks force pedestrians to cross streets seeking refuge or greater comfort. The weekly Wakefield Farmers Market and local events are held along the North Ave corridor adjacent to Lake Quannapowitt. This location draws large crowds and is a high-travel route through the Town.

The at-grade railroad crossing at the intersection includes a slip lane with a separate gate for traffic crossing turning to Prospect Street. Vehicles using the slip lane are yield-controlled and often are required to stop on the tracks. It is recommended that a study be conducted at this intersection to determine alternative configurations.

Main Street @ Hanson Street

There are no crosswalks at this intersection. A non-compliant crosswalk across Main Street is located at the church ½ block to the north. A pedestrian fatality occurred here in early 2022. This intersection has a post office and café with indoor and outdoor dining. This creates a strong desire line for pedestrians to cross Main Street. There is also a bus stop near the corner of Main Street and at the church, which likely increases pedestrian foot traffic. It is recommended that the Town evaluate this intersection area (including Grafton St) to identify a location for a crosswalk and evaluate potential signalization and traffic calming. The crosswalk adjacent to the church should be removed as part of this project.

Farm Street @ Hemlock Road

This priority project is adjacent to Wakefield Memorial High School. The project will reconfigure the intersection into a roundabout with separated bicycle and pedestrian facilities. In addition, bicycle lanes are recommended for installation the length of Farm Street and Hemlock Street. Farm Street has space for protected bicycle lanes, which would benefit school access.

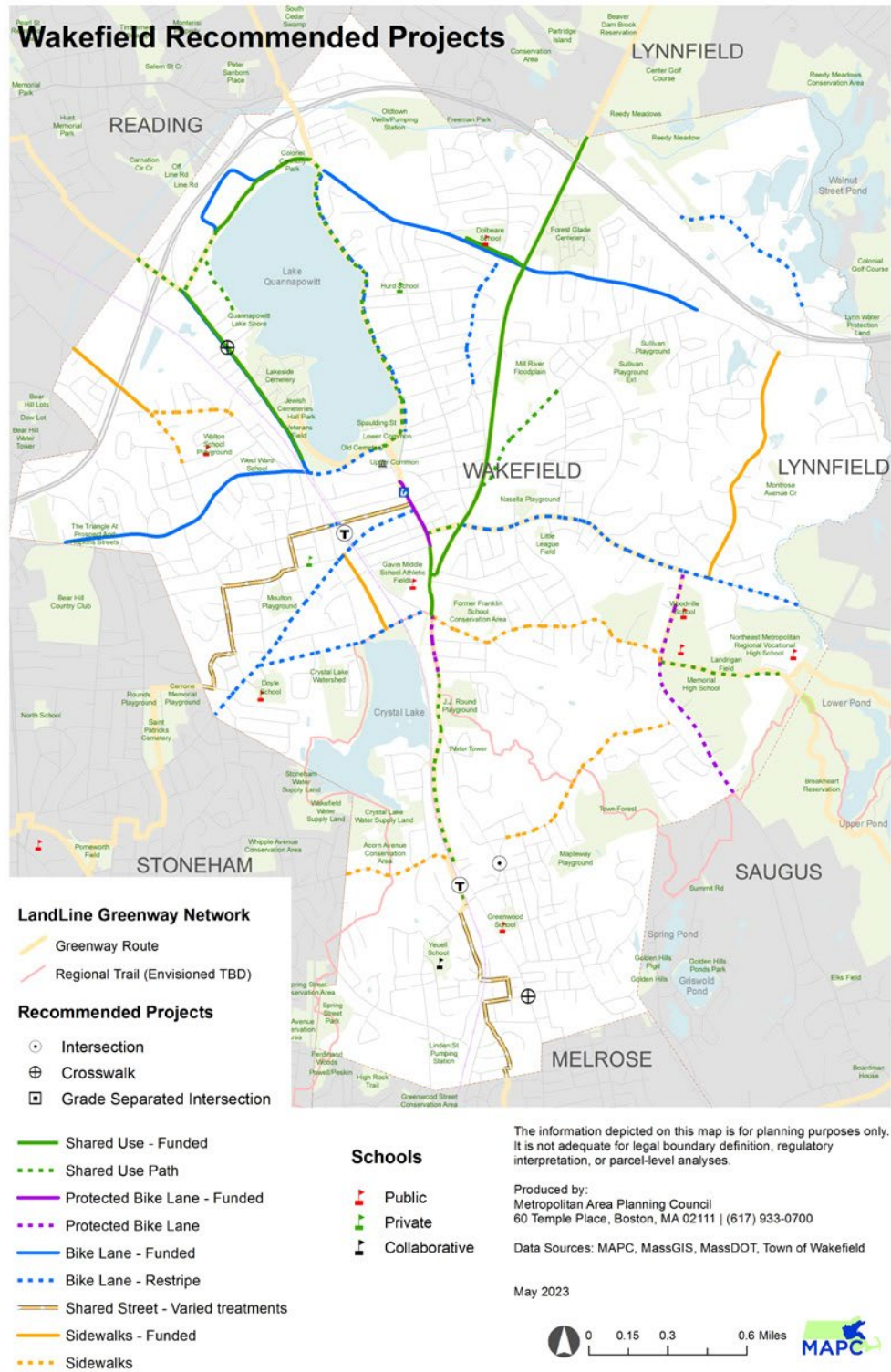
Albion Street @ Gould Street

The Town obtained a \$35,000 developer contribution for the intersection realignment, as shown in the Envision Project concept sketches. The project is still in the planning phase and is anticipated to be advanced over the next two years when Foundry Street is paved.

Crescent Street @ Otis Street

The ZBA recently approved a multifamily 40B project at this intersection. Developer contribution funds will create a new crosswalk with curb extensions and traffic mitigation.

Figure 37: Recommended Projects Map



E. Project Recommendation Spreadsheet

The attached Project Spreadsheet lists in tabular and summary form each project, priority, and cost. It also notes whether the project is part of the regional Landline Network. A more detailed text description follows along with suggested cross sections for several of the projects.

For projects recommending bicycle accommodations, MAPC is proposing the highest safety “tier” believed to be viable based on the limited research conducted.

1. Project Priority

Projects are assigned a priority grade of high, medium, or low based on the following criteria. However, this should not preclude implementing lower-priority projects sooner if a given roadway has water or sewer work that would involve infrastructure repair.

- High-priority projects connect directly to major destinations (schools, library, Town Hall, Downtown and Greenwood commercial districts, or on the LandLine Greenway Network.
- Medium-priority projects may connect to one key destination or in close proximity.
- Low-priority projects may provide indirect or lesser connections to key destinations, or of much higher cost. Topographic or right-of-way constraints may also reduce the priority.
- Signage at school zones should be uniform across the Town. The signage and pavement markings should provide traffic-calming benefits in these areas.

2. Cost

Projects are assigned a relative cost rating roughly high, medium, or low.

A recommended project can have a low- or high-cost, particularly where protected bike lanes are involved. Low-cost versions allow for trial efforts with flex posts or other devices, whereas higher-cost projects involve more in-depth construction.

- High-cost projects likely involve significant roadway reconstruction, such as moving the curb line, drainage or a new shared use path.
- Medium-cost projects include lesser curb extensions or sidewalk reconstruction.
- Low-cost projects are those limited to repaving and/or restriping and perhaps with traffic calming or flex posts.

Figure 38: Recommended Projects Spreadsheet



Street	From/To	LandLine?	ROW width	Pave width	Priority	Key Connections	Cost	Project Description	Design or Construction
Albion St	Main St to North Ave	no		18'	medium	downtown, MBTA station	low	Bike lane - stripe on left side of one way road	
Albion St	North Ave to Stoneham Line	no	50'	32'	medium	downtown, school	low	Bike lanes - restripe roadway	
Albion St at Gould St	Intersection						?		
Audubon Rd	IS3 Ramp to Edgewater Rd	no		36'	low		low	Bike lanes - restripe roadway	
Broadway St	Main St to Albion St	no	50'	30'	low	schools (2)	high	Bike lanes and add missing sidewalks	
Church St	Cemetery Path to Spaulding Playground	Lake Q			high	lake	medium	Shared use path - widen existing sidewalk	No
Church St	Main St to North Ave	no	50-65'	30-32'	medium	lake downtown, MBTA station	low	Bike lanes - restripe roadway	
Elm St	Pine Hill Cr to Parker Rd	no			funded	na	na	Sidewalks - add new sidewalks where missing	ARPA funded
Farm St	Saugus line to Water St	no	50-60'	38-40'	high	schools (3), Breakheart Res	low/high	Protected bike lanes - flex posts short term, move curbs long term	
Farm St @ Nahant/Hemlock	Intersection	Breakheart			high	schools (3), Breakheart Res	high	Intersection - reconfigure, evaluate roundabout option	
Forest St	Main St to Stoneham Line	no			medium	Greenwood, MBTA station	medium	Sidewalks - add new sidewalks where missing	
Foundry St	Albion St to Broadway	no				downtown, school		Sidewalks - add new sidewalks	Funded by development
Green St and Oak St	Intersection	no			high	na	medium	Crosswalks and sidewalks - narrow and reconfigure roadway	In design
Greenway Trail (new)	Alwood Ave to Greenwood St	MHG Melrose			high	MBTA station	high	Shared use path on MBTA property	
Greenwood Ave	Oak St to Maple Way	no	50'		medium	playground, school	medium	Sidewalks - reconstruct and add missing	
Hanson St and Main St	Intersection	no			high	na	medium	Crosswalk and curb extension - add new crossing of Main St	
Hemlock Rd	Farm St to Breakheart Reservation	Breakheart			high	High school, regional park	medium	Shared use path, adjacent to the roadway - DCR road	
Lakeside Trail (new)	Quannapowitt Parkway to Linda Ave	Lake Q			medium	lake	medium	Shared use path, through redevelopment and town property	
Lowell St	Main St to Main St	Lake Q	60'	48'	high	lake	medium	Shared use path - widen existing path and narrow roadway	
Lowell St	Main St to Salem St	no	40-50'	29-32'	funded	school, lake	high	Bike lanes and reconstruct walkway	ARPA funded
Lowell St	Rail trail to the Dolbeare School	no	45-50'	30'	medium	school, rail trail	medium	Shared use path - north side of street, widening walkway	
Main St 1	Forest St to Charles St	MHG Melrose	58-60'	42-45'	high	park, MBTA station	high	Shared use path - widen existing path, narrow roadway, add missing SW	
Main St 2	Charles St to North Ave	MHG Melrose	60'	45'	high	school, downtown	low	Protected bike lanes - one way each side or two way one side	
Main St 3	North Ave to Water St	MHG			very high	school, downtown, civic center	high	Shared use path on the west side (Envision Wakefield)	STIP 2026
Main St 4	Water St to Crescent St	MHG			very high	library, town hall, downtown	high	Protected bike lanes (Envision Wakefield)	TIP 2028
Main St 5	Salem St to Lowell St	Lake Q	60'	32-38'	high	lake	high	Shared use path - widen existing path and narrow roadway	
Montrose St	Water St to Salem St	no			funded	na	na	Sidewalks - reconstruct and add missing	ARPA funded
Mystic Highlands Greenway	Stoneham line to Main St	MHG Stoneham	varies	varies	high	regional, connects between Towns	low	Shared Street - wayfinding & sharrows, contraflow bike lane @ MBTA trucks	
Mystic Highlands Greenway	Melrose line to Greenwood St	MHG Melrose	varies	varies	high	regional, connects between Towns	low	Shared Street - wayfinding signs & sharrows	
Nahant St	Main St to Farm St	Breakheart			high	schools (3), regional park, downtown	medium	Sidewalks - add new sidewalks where missing	
New Salem St	Vernon St to Preston St	no	50'	32'	medium	Sullivan Playground/BMX course	medium	shared use path on one side (south side likely)	
North Ave	Church St to Quannapowitt Parkway	Lake Q	50-80'	32-36'	high	lake, downtown	high	Narrow roadway, add bike lanes and widen SW to shared use	Construction in 2023
North Ave	Quannapowitt Pkwy to Reading Line	MHG Reading	48'		high	Reading	medium	Work with MassDOT to create a shared use path under I-95	In design
North Ave at Prospect/Church St	Intersection				high		medium	?	TIP 2028
North Ave at Wolcott	Intersection	Lake Q			high	na	medium	Install new signalized crossing and crosswalks	
Oak St	Green St to Farm St	no			low	na	medium	Sidewalks - reconstruct and add missing	
Parker Rd	Elm St to Reading line	no			funded	school	na	Sidewalks - reconstruct and add missing	ARPA funded
Parker Rd	Davidson Rd to Elm St	no			medium	school	medium	Sidewalks - reconstruct to ADA standards	
Prospect St	Stoneham line to North Ave	no	50-70'	30-40'	funded	school	na	Bike lanes - restripe roadway	ARPA funded
Quannapowitt Parkway	Lowell St to Quannapowitt Parkway	Lake Q			funded	lake	na	Shared use path - widen path to shared use standards	funded by development
Quannapowitt Parkway	North Ave to 200	Lake Q	60'	32'	high	lake	medium	Shared use path - narrow parkway width	
Vernon St	Salem St to Lowell St	no	50'	32'	medium	school	low	Bike lanes	
Wakefield Rail Trail	Water St to Lynnfield Line	Border to Boston			funded	downtown, regional trail	na	Shared use path - continue construction of the rail trail	STIP 2026
Water St	Saugus line to Vernon St	Breakheart	50'	38'	high	schools, downtown	low	Bike lanes	
Water St	Vernon St to Main St	no	50'			rail trail, downtown	medium	Shared use path on the north side	
Winn St	Elm St to North Ave	no			medium	school, lake	medium	Sidewalks - reconstruct and add missing	

Chapter 5: Resources

This chapter contains electronic resources that are available for guidance on pedestrian and bicycle accommodations. In this document MAPC has provided recommendations for improving the bicycle and pedestrian network. In addition to this plan, the project team recommends engaging users in the public process to advance future design and implementation locally.

The resources listed include both design tools and funding opportunities.

A. Design and Implementation Guides

There are several resources available for implementing bicycle and pedestrian enhancements.

The National Association of City Transportation Officials design guide is a helpful resource for innovative concepts, the guide provides good visual representations and case studies.

The MassDOT Municipal Resource Guide for Walkability features strong examples of walkability accommodations for diverse user groups. The MassDOT Separated Bicycle Lane Planning Design & Guide features strategies for managing curb activity within a municipality.

B. Potential Funding Sources

At the time of this report, Wakefield is pursuing several funding opportunities. There are sources available at the state and federal levels. Projects may be funded by a variety of programs. Some funding sources are consistent from year to year, and others are available infrequently. Wakefield should be aware of these programs and apply for funding to implement the projects when possible. These fundings include Safe Routes to Schools, MassDOT Shared Streets, WalkBoston Complete Streets, and Mass Trails funding. These funding sources will improve existing conditions and strengthen the existing connections. The MassDOT Community Transit Grant Program is an annual grant program targeted to meet the needs of seniors and individuals living with disabilities. This program provides municipalities with resources to identify unmet transit needs and prioritize transportation access for vulnerable populations.

Engaging with the Council on Aging and Commissions on Disabilities, is suggested. The Boston Metropolitan Planning Organization Community Connections Funding Program can be used to support bicycle lanes, transit signal priorities, and other supportive infrastructure. Federally the Bipartisan Infrastructure Law there will be funding available. The second round of American Rescue Plan dollars may be used to continue progress on bicycle and pedestrian projects.

C. Conclusion

It should be noted that there has been substantial progress on bicycle and pedestrian goals within the Town of Wakefield. The purpose of this plan is to continue the evaluation and informed professional decision-making to improve bicycle and pedestrian accommodations. Planning projects should be approached from the lens of population growth and further sustainability. This analysis and recommendations will serve as a resource for the continued work toward a safer community for walking and biking in the Town of Wakefield.

D. References

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*All images in this report were captured by MAPC Staff unless stated otherwise

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