



Genesee-Finger Lakes Regional Walkability Improvement Program

Walkability Action Plans

Albion • Avon • Batavia • Bergen • Canandaigua • Geneseo • Geneva
Medina • Penfield • Merchants-Culver

January 2016



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En Español

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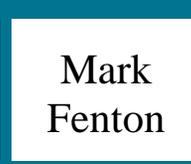
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Genesee-Finger Lakes Regional Walkability Improvement Program

Executive Summary

January 2016





Executive Summary

Introduction

Walking is the most basic, common and accessible mode of transportation. There has been growing attention to the benefits of “active transportation” (walking, biking and using transit). Increasingly, it is recognized that walkable communities are important not only for the health of our citizens, but also for the health of our communities. A growing percentage of people want livable communities where they can shop, socialize, recreate and even commute to work by foot and bicycle. The 2012 National Survey of Pedestrian and Bicyclist Attitudes and Behaviors Highlights Report indicates that 11 percent of all trips, and 25 percent of social and recreational trips are by foot. There is ample opportunity to increase the rate of active transportation: national data suggest that half of all trips are under 3 miles in length, and 25 percent are less than a mile, a distance that is easily walked or biked.

Creating a walkable community, however, involves much more than installing sidewalks. Many factors can encourage or discourage pedestrian activity. Physical elements that must be considered include the presence and connectivity of sidewalks, the quality of the pavement, the steepness of grades, and aesthetics. Social factors, such as perceptions of safety and security, comfort, convenience and the presence of other people, have an influence. Safety issues include traffic speeds, safe crossing areas, the number of curb cuts and separation from traffic. Other important details include tree canopy and other landscaping, wayfinding and signage, the location of parking lots, the mix of uses and the proximity of destinations, and the presence of pedestrian infrastructure, such as pedestrian crossing signals and crosswalks. Policies, education, enforcement and encouragement also have a strong influence on the amount of pedestrian activity.

The most important factor is community context. Each community has its own character and its own configuration of destinations. For this study, the Project Team evaluated the character of ten municipalities in the Finger Lakes region. These cities, villages and neighborhoods have a built environment that was developed in an era when walking was the primary mode of transportation, and they have strong potential for enhanced walkability. The existing building stock and combination of multiple land uses in close proximity to each other – which makes walking a viable travel option – is a competitive advantage to these areas. Increasing the walkability of these places will help the vibrancy of their downtown “main streets,” improve access to other activity centers, and benefit local residents. Currently, the physical infrastructure in support of walking and biking in many communities has been degraded by modern accommodations to the automobile. Retrofitting these areas requires context-sensitive interventions to promote better walkability. The municipalities in this series of audits ranges from small villages to an urban neighborhood to a major residential suburb, and the specific solutions vary depending on the nature of the community and local circumstances. However, there are also common themes and approaches that apply in different situations. One common theme is that there are demonstrable benefits to improving access for all residents.

The Walkability Audit can be a powerful tool for visioning change and redesigning these ten communities. Leveraging improvements to the built environment can make these communities more vibrant and appealing, while local policies and programs can help alter behaviors. Often these changes build confidence in a community and spur private investment. In all cases, local action is key to improving the walkability and quality of life for the citizens of these communities.

Walkability Audits: Setting

The Genesee-Finger Lakes Regional Walkability Improvement Program was initiated by the Genesee Transportation Council (GTC) as part of its on-going bicycle and pedestrian planning. GTC has invested significant resources in the planning for developing travel alternatives through the Circulation, Accessibility, and Parking (CAP) Program; public transportation service enhancements; municipal active transportation plans; and multi-use trail feasibility studies. The Regional Walkability Improvement Program is intended to support and enhance - not replace- these other initiatives.

The purpose of the project has been to develop action plans to improve pedestrian safety, accessibility, convenience and comfort in ten communities throughout the nine-county Genesee-Finger Lakes region. The communities are distributed throughout the region and represent a mix of municipalities, ranging in size from just over 1,000 residents to a densely populated urban neighborhood in the City of Rochester. The following table summarizes the characteristics of the ten communities that were audited.

GTC Walkability Study: Participating Communities			
Municipality	County	2010 Population	Density (Population/Sq.Mile)
Village of Albion	Orleans	6,056	2,074.0
Village of Avon	Livingston	3,394	1,096.2
City of Batavia	Genesee	15,447	2,976.3
Village of Bergen	Genesee	1,176	1,589.2
City of Canandaigua	Ontario	10,471	2,295.4
Village of Geneseo	Livingston	8,045	2,828.8
City of Geneva	Ontario	13,261	3,149.9
Village of Medina	Orleans	6,065	1,838.4
Town of Penfield	Monroe	36,242	974.0
City of Rochester *	Monroe	210,512*	5,884.8*
(Merchants- Culver)		42,571* (zip code)	5,870.2*

* Data shown are for City of Rochester. Neighborhood level data are not available. The 14609 zip code was used as a proxy for the neighborhood.

Methodology

A Walkability Audit was conducted in each of the ten target communities. Four of the audits were held in the Fall of 2014, while the remaining six were completed in the Spring of 2015. The Project Team hosted an introductory webinar for each group of audits (one in the Fall and one in the Spring). This webinar provided an overview of the audit process, an explanation of the logistics of the audits, and recommendations for how to hold a successful walk audit. The webinar also explained how to plan a local route for the audit, and ideas for who to invite. Beyond the webinar, the Project Team also worked directly with a local contact person to schedule audits, locate a meeting location, and invite local stakeholders to participate. For each community, two routes were developed: a ‘windshield’ tour route to provide an overview of the entire community, and a focused walking route for the audit itself. The mix of stakeholders attending the audits varied for each community, but generally included community leaders, local officials, representatives from relevant agencies and organizations, as well as members of the general public. The intent was to get a wide range of perspectives on the problems and opportunities faced by pedestrians in the local community. Representation variously included representatives from planning boards, zoning boards, schools, the business community, neighborhood associations, County employees (Health, Planning and Tourism Departments), local advocacy groups (running/walking/biking) and residents. Local municipal employees were also important stakeholders, including staff from Departments of Public Works, Parks, Planning, Clerks Offices, and/or engineering. In many communities, there was representation from the local elected governing board (Town Board, City or Village Council). In a few communities, the local press also participated in the audits. The audit routes were approximately 1 to 2 miles in length, and designed to cover a range of land uses, destinations, issues and concerns relevant to the community.

The audit process is described in the individual action plans. Generally, the audits consisted of a windshield tour, an introductory presentation, the walk audit, and a hands-on session with maps where participants identified opportunities and potential action items. The introductory presentation educated participants on what contributes to a walkable environment and the benefits of a more walkable community. The walk audits were highly interactive, with frequent stops to discuss conditions along the way. The workshop portions were designed to get participants to identify specific projects, programs and policies that could help make their communities more walkable. Focusing on these “three p’s” (projects, programs and policies) enables a more comprehensive approach to fostering walkability. Projects include elements of the built environment, such as crosswalks, streetscape improvements, and trails. Programs involve encouragement and education that build awareness, change behavior or strengthen abilities. Examples of programs include a walking school bus, a running club with a facebook page, or downtown events, such as a farmer’s market, to create a destination for walking or biking. Policies are the rules and standards that over time change the local environment. For example, communities should evaluate their comprehensive plan and their zoning ordinance to make sure both encourage pedestrian-friendly design. Adopting a local complete streets policy will ensure that the needs of bicyclists and pedestrians will be considered for each new transportation improvement. The most effective strategies involve all three: encouraging safe routes to school may require sidewalk improvements, but it works best when the district also considers school busing policies and implements education and encouragement programs to make students and their parents comfortable with walking or biking to school.

Why Walkability is Important

Walkable communities have many benefits. The health benefits of walking are well-documented by public health and medical professionals. Walking for transportation results in lower obesity rates and a reduction in related diseases, such as diabetes and heart disease. Environmental benefits include better air quality and reduced congestion on the roadways. Walkable areas also increase equity. They are more accessible to all ages, including youth and seniors who may not be able to drive, or lower income residents who may not be able to afford a vehicle. Walking creates community, and areas with high walk scores (a measure of mixed, walkable, land use) tend to have lower crime rates. As a result, urban planners, engineers, and public health professionals are increasingly working together to create pedestrian- and bicycle-friendly environments that promote these activities for both leisure and transportation purposes.

National statistics show that in 1969, 90% of students living within one mile of their school walked. By 1999, that figure had dropped to 31%. The distance is not the barrier; design, policies and attitudes are. School officials offer – or require – busing despite the distance to school. Parents are afraid to let their children walk, particularly when they must cross busy streets, or there are no sidewalks. Yet the greater threat to children is poor health associated with a lack of activity. There are an estimated 365,000 premature deaths each year due to physical inactivity and poor nutrition. Communities where biking and walking is easy and accessible have much lower obesity rates.

In addition to the health benefits, walkable communities see a range of other benefits:

- Fewer deaths from motor vehicle-vs-pedestrian crashes, as lower speeds are implemented
- Reduced congestion on the roadways, as people choose alternative means of transportation
- Lowered air pollution and greenhouse gases from car exhaust
- Reduced energy consumption
- Reduced need for parking
- Lowered health care costs
- More options and opportunities for persons with limited choices, particularly the young and the elderly who don't or can't drive, and those individuals and families without access to a private automobile
- Increased quality of life

There are also strong economic reasons to invest in walkable communities. Studies have shown that people who walk or bike to a commercial area spend more money per month than those who travel by automobile. Walkable areas sustain higher rents, revenues and resale values. Business districts that are pedestrian-friendly are more likely to be vital and economically sustainable. Younger generations increasingly are choosing to locate in walkable communities, where they do not always need to drive. Attracting young adults increases the vitality and economic development potential of an area. Residents in walkable areas often have more disposable income, due to lower overall transportation costs, as walking or biking becomes a viable option over taking the car. Home values tend to be higher in walkable areas: a CEOs for Cities report estimated a more pedestrian-friendly area can see an increase in home values from \$4,000 to \$34,000 per home. Walkable areas also tend to attract investment. As a case study, the Village of Hamburg, New York saw a doubling of property values following the reconstruction of Main Street to better accommodate biking and walking. Vehicle crashes fell by 66 percent, and injuries declined by 60 percent. The Village experienced approximately \$7 million in private investment in its downtown, and there is little to no vacancy in the business district. Creating places that are appealing to pedestrians also creates places that attract business activity and private investment.

What Makes a Walkable Community

Four features are integral to creating a walkable community:

1. A mix of destinations: People are more likely to walk or bike when there are nearby destinations that attract people to them. The most walkable locations have a mix of housing, shopping, restaurants, parks and institutions such as schools, libraries and post offices in close proximity. Zoning codes that segregate uses tend to discourage walking or biking. Traditional development styles, with housing above retail in downtown or neighborhood business districts, and schools and parks located near the community core, encourages walkability. The web site www.walkscore.com uses a community's land use mix as the principal determinant of its "walkability" in recognition of its key importance to making walking a feasible, enjoyable travel mode.
2. Site design: If the first thing people see is a large parking lot, they are more likely to choose to drive to a destination. Site design should promote buildings up to the street, with easily accessible, inviting front entrances. Features, such as clear pedestrian pathways through the site, landscaping and human-scale lighting also promote pedestrian activity. Details, such as public art, seating, awnings, visible bike parking, and other amenities further make a site more appealing. Beyond individual site design, community-wide design is important. Walkable communities tend to have shorter blocks and a tight grid of connections, rather than isolated cul-de-sacs. New development should integrate connections to adjoining development to promote connectivity and walkability.
3. Safety and access: People will not walk if they do not feel safe. High speed traffic, dangerous crossings and overly wide roadways inhibit pedestrian and bicyclist usage. Features such as highly visible crosswalks, curb extensions to shorten crossing distances, median islands for pedestrian refuge and traffic calming can improve safety for all users. In fact, research has shown that slowing speeds reduces overall accident rates and severity, promoting safety for drivers as well as pedestrians and bicyclists. Education about appropriate behaviors (crossing, yielding, etc.) also supports safety, as do programs, such as walking school buses (organized walk-to-school groups, with adult supervision). Facilities should be designed to support safety while also taking into consideration the needs of individuals of all ages, incomes and abilities. This will help to maximize their usefulness to the community and their cost effectiveness as an investment of scarce resources.
4. A connected network for pedestrians, bicyclists and transit users: In most communities, the pedestrian and bicyclist networks are incomplete. In newer developments, there may be no sidewalks. In older areas, the sidewalks may have deteriorated or heaved, making access difficult and creating potentially unsafe conditions. Most communities have some gaps or disconnects in the network. Bike lanes are even more likely to be inconsistently implemented than sidewalks. Often, there are no designated bike lanes, even on streets where sufficient right-of-way is available. In other cases, bike lanes may be inadequate, poorly marked or characterized by poor conditions (e.g. cracking pavement, gravel, poorly oriented storm drains). At a minimum, communities should strive to provide safe pedestrian and bicycle facilities to key destinations, such as parks and schools. Providing safe and convenient access to transit is also a key strategy, and expands the choices available beyond the privately-owned automobile. The mutually supportive connection between quality walkability and transit usage is increasingly recognized. Transit advocates now focus on the "first and last mile," recognizing that walking or biking is a crucial part of the journey to and from public transit.

How to Evaluate Your Community

The participating municipalities benefited from facilitated walk audits led by experts in the field. However, it was emphasized that one audit is not sufficient to create a walkable community. Participants were encouraged to continue to monitor and evaluate the walkability of their communities. In each case, there was great potential to encourage more active transportation. The following checklist provides guidance on what to look for when assessing your community's walkability.

- Sidewalks
 - Is there a continuous network, or are there gaps?
 - Are sidewalks wide enough? (5' minimum; 6' preferred; wider in heavily traveled areas, such as near schools or in downtown business districts)
 - Are they in good condition? (no cracks, heaving, etc.)
 - Are there "goat trails" (dirt paths) that show where paths or sidewalks are needed?
 - Is the sidewalk clear of obstacles, such as overgrown shrubbery or drainage grates?
 - Is there a sufficient buffer between the sidewalk and the traffic, taking into consideration traffic speeds? (a wider buffer needed along higher speed / higher volume roadways) Note: parking lanes, bike lanes or street furnishings can also serve as a buffer.
 - Are the sidewalks maintained, and kept clear of snow in the winter?
- Crosswalks
 - Are crosswalks clearly marked and visible?
 - Are there crosswalks at locations where people want to cross (access to key destinations)?
 - Is it comfortable to cross or is the width of the street intimidating?
 - Do crosswalks have appropriate signaling, with sufficient timing to cross? Are there count-down timers to indicate time available for crossing?
 - What is the condition of the curb ramps? Are they oriented properly?
 - Curb extensions or 'bulb-outs' both shorten the distance pedestrians must cross through the traffic lanes, and increase visibility of pedestrians to drivers, due to the increased height.
 - Crossing islands or medians can facilitate crossing wide roadways, by providing a pedestrian refuge. As a best practice, the crosswalk cut through the island should angled so that pedestrians, by design, are required to face towards on-coming traffic before crossing the road.
- Environmental
 - Is the walk pleasant: are there shade trees, awnings, landscaping, lighting, etc.?
 - Is the walk safe, with appropriate lighting, traffic speeds, community policing?
 - Is the walk interesting: does the route has a mix of land uses, activities, or is it monotonous?
 - Is the walk purposeful, providing access to important destinations, such as parks, schools, shops, libraries, etc.?
- Bicycle Network
 - Are bike lanes, marked shoulders or 'sharrows' provided as appropriate to the roadway?
 - Are the bike lanes wide enough for traffic conditions (minimum 5 feet)?
 - Are the bike lanes clearly marked?
 - Are the bike lanes in good condition and free from obstructions such as improperly oriented storm drains? (Drains should be oriented so that the 'slots' in the grate are perpendicular to the bicyclist's tires.)

- Are there bike facilities, such as bike parking or lockers, at important destinations?
- Multi-use paths can be a good solution, accommodating both bicyclists and pedestrians in a separated pathway. Such paths need to be wide enough to accommodate both modes: a minimum of 8 feet is needed, and 10 to 14 feet is preferred.
- Transit Network
 - Are the bus stops located appropriately (i.e. providing convenient access to destinations, such as downtowns, parks, etc.)?
 - Are there safe crossings nearby?
 - Are bus stops linked to the sidewalk network, or do passengers disembark on the side of the road or onto an unpaved surface such as a tree lawn?
 - At high usage bus stops, are there benches, a covered bus stop or other supporting infrastructure?
 - Are bus stops accessible in winter months, or are they obstructed by snow piles and ice? (This can be determined visually in season, but should also be verified through a review of the community's snow removal policies).
- ADA / Universal Design
 - Are sidewalks wide enough to accommodate two wheelchairs passing each other (minimum 5 feet width)?
 - Where feasible, are grade changes relatively consistent and not too steep?
 - Are cross slopes at intersection ramps and driveway crossings designed such that they will maximize stability for wheelchair users? (Excessive cross- or side slopes tend to direct wheelchair users off their intended path, 'downhill' into the street in many cases.)
 - Are surfaces smooth and free from obstacles?
 - When decorative paving is used, is a clear 'through-lane' provided through the center of the paved walkway?
 - Are there detectible warnings to alert pedestrians with visual impairments to intersections?
 - Are there flat 'landing areas' as transitions between crosswalk ramps and the sidewalk?
 - Do curb ramps provide access directly to crosswalks or direct the user into the street?
- Traffic Calming
 - Are traffic lane widths appropriate to the context? Narrower lanes reduce speeds naturally; conversely, motorists are more likely to speed when lanes are wide.
 - Are curb radii (turning distances at corners) appropriate? Tighter curb radii slow traffic. Excessively wide curb radii can function as unofficial right turn lanes and encourage drivers to travel through the intersection without stopping.
 - Adding visible pedestrian and bicycle infrastructure tends to slow traffic.
 - Street trees, streetscaping, public art, gateway treatments and buildings facing the street create a sense of 'arrival', 'enclosure, and 'place'. Drivers naturally reduce their speed in these environments.
 - Roundabouts, mini-traffic circles and chicanes are other options for slowing traffic.
 - Traffic calming features greatly reduce the risk of fatalities.

A Toolbox of Options

There is a wide range of options communities have in improving their walkability. Community specific solutions are provided in the individual action plans. A list of resources that provide additional guidance on various strategies is included at the end of this report, following the Action Plans. Some generic options for creating a more walkable community are listed here:

- Consider creating cross-lot or between-lot connections and trail linkages, particularly between residential concentrations and attractive destinations, such as parks. Over the long-term, work toward obtaining easements or direct ownership of the connecting property.
- Evaluate your community's Comprehensive Plan, zoning, subdivision and other regulations to determine if they support or hinder walkability. For example, required parking ratios often result in overly large, underutilized parking lots. Large setback requirements and single-use zoning districts that do not accommodate mixed development patterns also hinder walkability.
- As a more proactive step, consider updating the community's zoning and subdivision regulations to require connectivity and walkable design where it is appropriate.
- Establish a social media (e.g., Facebook, Twitter, Instagram, etc.) page to communicate walkability initiatives, events and programs, and encourage coordination with a range of advocates.
- Consider experimental, temporary solutions to test an idea. For example, curb extensions can be created with paint and removable bollards. Mini-circles can be tested out with hay bales.
- Consider pursuing official status as a Walk Friendly, Bike Friendly, and Age Friendly community to build momentum and support for proposed improvements – and bragging rights.
- Take creative approaches, such as a sponsor a bike rack programs.
- Involve the entire community, including youth and seniors, and welcome and celebrate volunteer initiatives.
- Programming, such as community events, walking clubs and farmer's markets, can encourage more walking.

Don't forget to make it fun and enjoyable – and recognize the benefits outside of walkability: entertainment, enhanced business activity, and a stronger community.

Moving Forward

There are a number of responses a community can take to make their area more walkable and bikable. These range from very low cost, such as paint for new striping, to extensive interventions, such as the complete reconfiguration of a roadway. It is recommended that an incremental approach be taken. A community should focus on easy to implement, low cost options first, while always keeping the preferred long-term changes in mind. For example, high visibility crosswalks can be installed at a relatively low cost (mostly paint) while the community investigates the need for and secures funding to implement more elaborately designed option, such as curb bump-outs or speed tables.

Step One: Determine local priorities.

The concepts in each community's Action Plan provide a starting point for projects each community can implement to improve local walkability. Communities are encouraged to learn from each other and share these ideas. Other sources of ideas include the local Comprehensive Plan, community surveys and input from partners, such as the GTC, the County or the local school district. Ultimately, it is a local decision on what strategies to prioritize and implement first.

Step Two: Establish an Organizational Structure

It is important to have some institutional basis. There should be a working group tasked with concentrating on the issue of active transportation in order to maintain momentum. The core team should be a small, focused group, made of people who have a natural tie to the issue, ideally as part of their job responsibilities. As an example, the local Parks Director, the head of Public Works, the Mayor and a representative from the County Health Department could form the core group. These people could leverage their professional and personal networks to bring in the wider group of advocates, for example to encourage letters of support for a grant application. In addition to the core group, each community should develop a wider support group that can advocate for action. The participants at the walk audits are excellent candidates for this support group. Partners could include representatives from local elected officials, planning and zoning, public works, schools, public health, historic preservation, chamber of commerce or other business groups, neighborhood organizations, church groups, conservation groups, etc. The objective is bringing in a range of capacities, interests, perspectives and skill sets in support of the issue.

Step Three: Create an Ambitious, Feasible Wish List

Pick a manageable list of actions to accomplish. Include programs and policies in addition to projects. In each case, include some easy to accomplish items, along with some more ambitious, long-term goals. This can be considered the community's list of alternatives from the 'tool box' of options available. Based on the cost and difficulty of implementation and the community's desires and resources, categorize each of the action items into a near-term, mid-term or long-term time frame for implementation.

Step Four: Develop a Work Plan

Consider creative ways to accomplish the projects. Some actions, such as adopting a new policy, can be accomplished at little to no cost, depending on the staff and resources available to the community. Others, such as curb bulb-outs and new sidewalks, may require outside funding, inclusion in the work programs of other agencies, or long term inclusion in the community's capital improvement budget. Potential funding sources include local, school or county capital budgets; state and federal transportation funding; state, federal, and private grants; and volunteer (in-kind) support.

Step Five: Work with Partners

Develop strong partnerships with organizations interested in the same goals. GTC is a key partner. County, state, and federal agencies can also be important partners. Partners can provide technical assistance, support and encouragement. They also can also facilitate new funding options and strengthen the competitiveness of grant applications.

Step Six: Celebrate Successes

Celebrating successes is important for maintaining momentum and keeping participants engaged. It is also a great way to communicate about what you are trying to accomplish and building broader support for your efforts.

Step Seven: Continually Re-evaluate

As successes occur, it is important to re-evaluate what you have accomplished and what remains to be done. Changing circumstances, such as new development, may necessitate identifying new priorities and action steps. Periodically revisiting Step One and taking a fresh look helps sustain existing projects, programs and policies, and can help identify new areas for improvement. There are always new opportunities and new enhancements that can improve the walkability of your community.



Village of Albion Walkability Action Plan

Introduction

The Albion Walkability Action Plan presents the findings and recommendations from the walkability audit conducted for the Village of Albion for the. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Albion.

Albion is the second-largest Village in Orleans County, with a 2010 population just over 6,000 residents and an approximate size of three square miles. Key walking and bicycling destinations include: Albion Central Schools, the Erie Canalway Trail, NYS Bike Route 5, and Bullard Park. Primary roadways include: Highway 31, Main Street and State Street.

A working group consisting of representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in Albion. The working group members gathered on April 13th, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Albion. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the village. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walking audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the audit. A larger working group met again that afternoon to conduct the walking audit portion, which built upon previous observations.

The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees broke into smaller work groups, and were given maps of the community to begin



formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the village.

Map Number	Location	Issue	Alternatives Discussed
1)	Village-wide	Downtown is disconnected from outer village, neighborhoods not well-connected	<ul style="list-style-type: none"> a) Install sidewalks on the north side of canal to improve neighborhood connectivity and downtown access – high concentration of low income residents who depend on walking. b) Implement wayfinding signage throughout the Village and along the Erie Canal Heritage Trail to direct users downtown. c) Create and adopt a community Bicycle and Pedestrian Master Plan. d) Work with NYS Canal Corporation to extend the canal hours past 6:00 pm for Albion (currently closes when lift bridge operator shift ends). e) Fix sidewalk gaps and improve pedestrian access, specifically at Walmart and urgent care facility. f) Use streetscaping treatments to improve the neighborhood feel of downtown (pedestrian scale lighting, wayfinding, etc.). g) Make bicycle and pedestrian wayfinding maps available online. h) Establish a bicycle and pedestrian advisory board to advocate for active transportation and recommend improvements to the Village Board. i) Develop a cost sharing sidewalk improvement program and prioritize installation and maintenance at key destinations.

Map Number	Location	Issue	Alternatives Discussed
2)	Village-wide	Pedestrian facilities are in poor condition, runners feel unsafe and mobility-impaired residents are often forced onto the street	<p>Engage NYSDOT to:</p> <ul style="list-style-type: none"> j) Install sidewalks on the north side of canal to improve neighborhood connectivity and downtown access - high concentration of low income residents who depend on walking. k) Implement pedestrian crossing signage at appropriate locations. l) Create and adopt a community Bicycle and Pedestrian Master Plan. m) Develop a cost sharing sidewalk improvement program and prioritize installation and maintenance at key destinations. n) Consider added/increasing enforcement of snow removal, parking limits, slowing for pedestrians at crosswalks, and crosswalk stings. o) Make bicycle and pedestrian wayfinding maps available online. p) Adopt a local Complete Streets policy. q) Update zoning code and land use plan to support walking and bicycling. r) Establish a bicycle and pedestrian advisory committee to advocate for active transportation and recommend improvements to the Village Board. s) Fix sidewalk gaps and improve pedestrian access, specifically at Walmart and urgent care facility.
3)	Village-wide	Lack of bikeways forces cyclists onto sidewalks	<ul style="list-style-type: none"> a) Use the village website to encourage walking and bicycling throughout the Village. b) Make bicycle and pedestrian wayfinding maps available online. c) Create and adopt a community Bicycle and Pedestrian Master Plan. d) Adopt a local Complete Streets policy. e) Update zoning code and land use plan to support walking and bicycling. f) Establish a bicycle and pedestrian advisory committee to advocate for active transportation and recommend improvements to the Village Board. g) Improve bicycle facilities throughout the Village, particularly bike lanes on Route 98 and 31.

Map Number	Location	Issue	Alternatives Discussed
8)	NYS Bike Route 5	Wayfinding and safety signage needed	<ul style="list-style-type: none"> a) Implement wayfinding signage throughout the Village and along the Erie Canal Heritage Trail to direct users downtown. b) Implement pedestrian crossing signage at appropriate locations. c) Include bikeway signage on Route 31 (State Bike Route 5). d) Make bicycle and pedestrian wayfinding maps available online.
9)	Main Street and Route 31	Multi-modal improvements	<ul style="list-style-type: none"> a) Improve bicycle facilities throughout the Village, particularly bike lanes on Route 98 and 31. b) Create and adopt a community Bicycle and Pedestrian Master Plan. c) Collaborate with NYSDOT on Complete Street improvements for state routes. d) High speeds on Main Street (Route 98), traffic calming needed. e) Update zoning code and land use plan to support walking and bicycling. f) Establish a bicycle and pedestrian advisory committee to advocate for active transportation and recommend improvements to the Village Board. g) Adopt a local Complete Streets policy.
10)	Village-wide	High speeds, traffic calming needed	<ul style="list-style-type: none"> a) Collaborate with NYSDOT on Complete Street improvements for state routes. b) High speeds on Main Street (Route 98), traffic calming needed. c) Adopt a local Complete Streets policy. d) Establish a bicycle and pedestrian advisory committee to advocate for active transportation and recommended improvements to the Village Board.
11)	Village-wide	Poor pedestrian facilities at parks and schools	<ul style="list-style-type: none"> a) Implement pedestrian crossing signage at appropriate locations. b) Establish a bicycle and pedestrian advisory committee to advocate for active transportation and recommend improvements to the Village Board. c) Create and adopt a community Bicycle and Pedestrian Master Plan. d) Prioritize sidewalk installation and maintenance at key destinations.

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for village-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the village and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



Infrastructure Programs

Wayfinding Program

Landmarks, natural features, civic destinations, neighborhood business districts and other visual cues help residents and visitors navigate through Albion. Wayfinding signs help people traveling along the pedestrian and bicycle networks and direct them to community destinations. The benefits of a complete wayfinding system include:

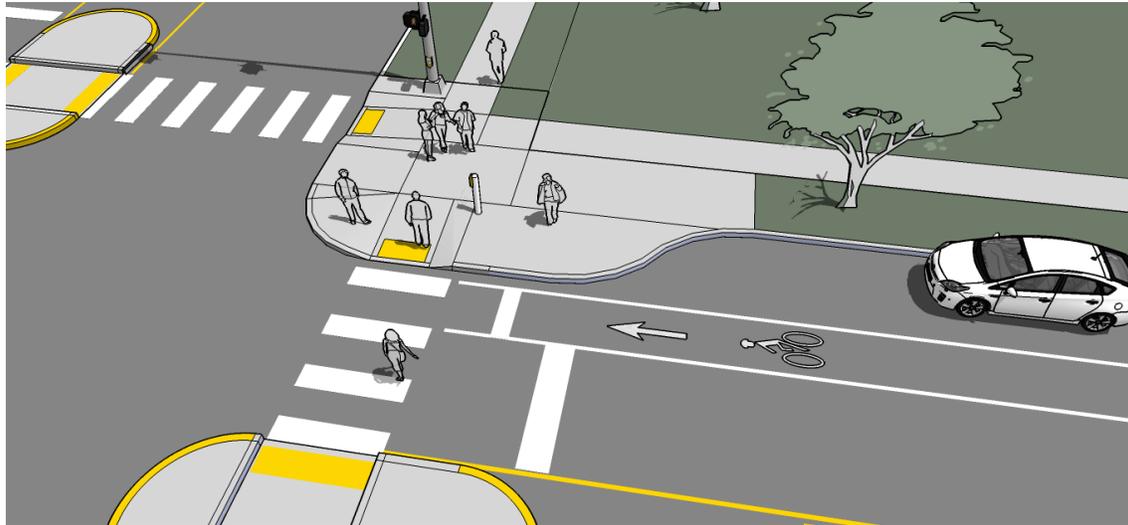
- It encourages residents and visitors to try new walking and bicycling routes
- It reduces misperceptions about walking and bicycling travel time to key destinations
- It reassures bicyclists and pedestrians that they are on the correct route
- It improves visibility of existing routes for all residents and visitors
- It improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists



Sample Bicycle and Pedestrian Wayfinding

Traffic Calming (Village-wide)

Audit participants expressed a desire for traffic calming measures throughout the Village. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The Village should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts when warranted and integrated with emergency response vehicle access.



Example of Curb Extensions

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older residents, children, and individuals with disabilities). These policies are all similar in spirit, but vary considerably when considering implementation. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).

The Principle:

- Simply put, Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets often means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated with all users in mind, resulting in improved safety for all modes.
- Transportation agencies must ensure that all road projects result in a complete street appropriate to local context and needs.

Sample policies and best practices: <http://www.completestreets.org/>

Route 98 (Main Street) Corridor Study

Route 98, or Main Street, may have more traffic lane capacity than Albion requires. A corridor study is recommended to study existing conditions and determine the best use for the roadway given the Village's evolving multi-modal needs. The study will assess parking utilization, design speed, traffic volume, and access management issues and recommend treatments such as road diets, traffic calming, green infrastructure, and bicycle and pedestrian. Connecting the neighborhoods north of the canal, capitalizing on the Erie Canal Heritage Trail, and pedestrian safety should all be considerations during the study.

Citywide Sidewalk Improvement Program

Walk audit participants repeatedly cited improvements in the sidewalk network as a priority. The sidewalk improvement program should prioritize improvements and maintenance at key locations and establish a cost-sharing initiative for home owners. Closing sidewalk gaps and improving pedestrian access throughout the village will encourage walking, improve pedestrian safety, and greatly improve access for low-car neighborhoods and the mobility impaired. Installation of curb ramps for ADA compliance should be included at intersections and crossings. A study should be conducted on existing sidewalk conditions to allow for prioritization of projects.



A key part of the sidewalk improvement program should be improving sidewalk connections to schools and parks. Albion has numerous parks for public use, including the County Fairground and Bullard Park. Some sidewalk improvements suggested to improve neighborhood access to parks include the following:

- Sidewalks along Washington Street to King Street
- Sidewalks along both sides of King Street connecting to the County Fairground
- Sidewalks on the east side of Clarendon Street to Route 31 to connect to Bullard Park
- Sidewalks from Butts Road to Bullard Park
- Sidewalks along the west side of Butts Road to Route 31
- A multi-use path southward from the south end of Goodrich Street and a crossing at the railroad intersection, to Bullard Park (there is an existing “goat-trail” along this route. Formalizing it should increase use and provide an opportunity to implement safety precautions at the railroad crossing).

Development and Design Guidelines

Design guidelines included in village code provide clear direction to developers and promote the provision of appropriate bicycle and pedestrian consideration during new development. Guidelines can specify different standards for the village center, including wider sidewalk minimums, planting strips or other buffer areas to protect pedestrians, building setbacks, and placement of parking at the back of buildings. Sidewalks and bicycle facilities should be constructed as a part of all new and updated facilities. The code can also specify minimum bicycle parking requirements as well as establishing bicycle parking as a community benefit for a developer seeking an exemption.

Education and Encouragement Programs

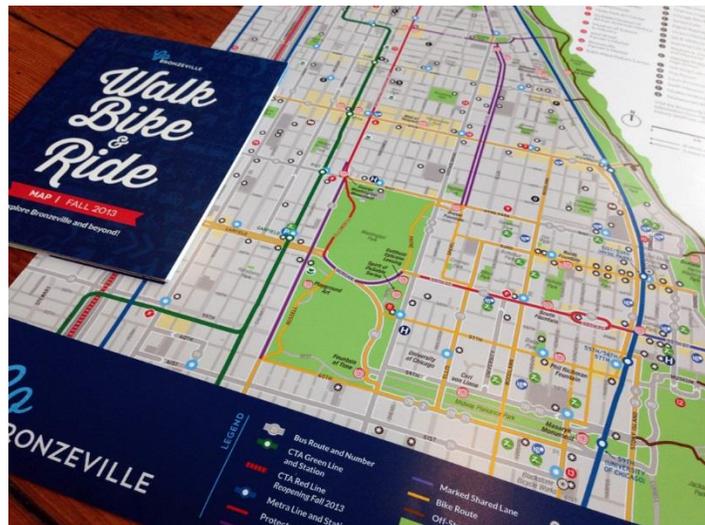
Develop and Adopt a Bicycle and Pedestrian Master Plan

In an effort to continue improving the walking and bicycling facilities and programs in Albion, a Bicycle and Pedestrian Master Plan should be developed for the community. The plan would establish a vision and guiding goals to direct infrastructure improvements, education and encouragement programs, and funding strategies. Public input should be a significant factor to establish priority improvements and community needs. An advisory board should be established as a part of this plan to guide implementation and encourage walking and bicycling in Albion.

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

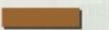
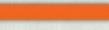
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, village newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.

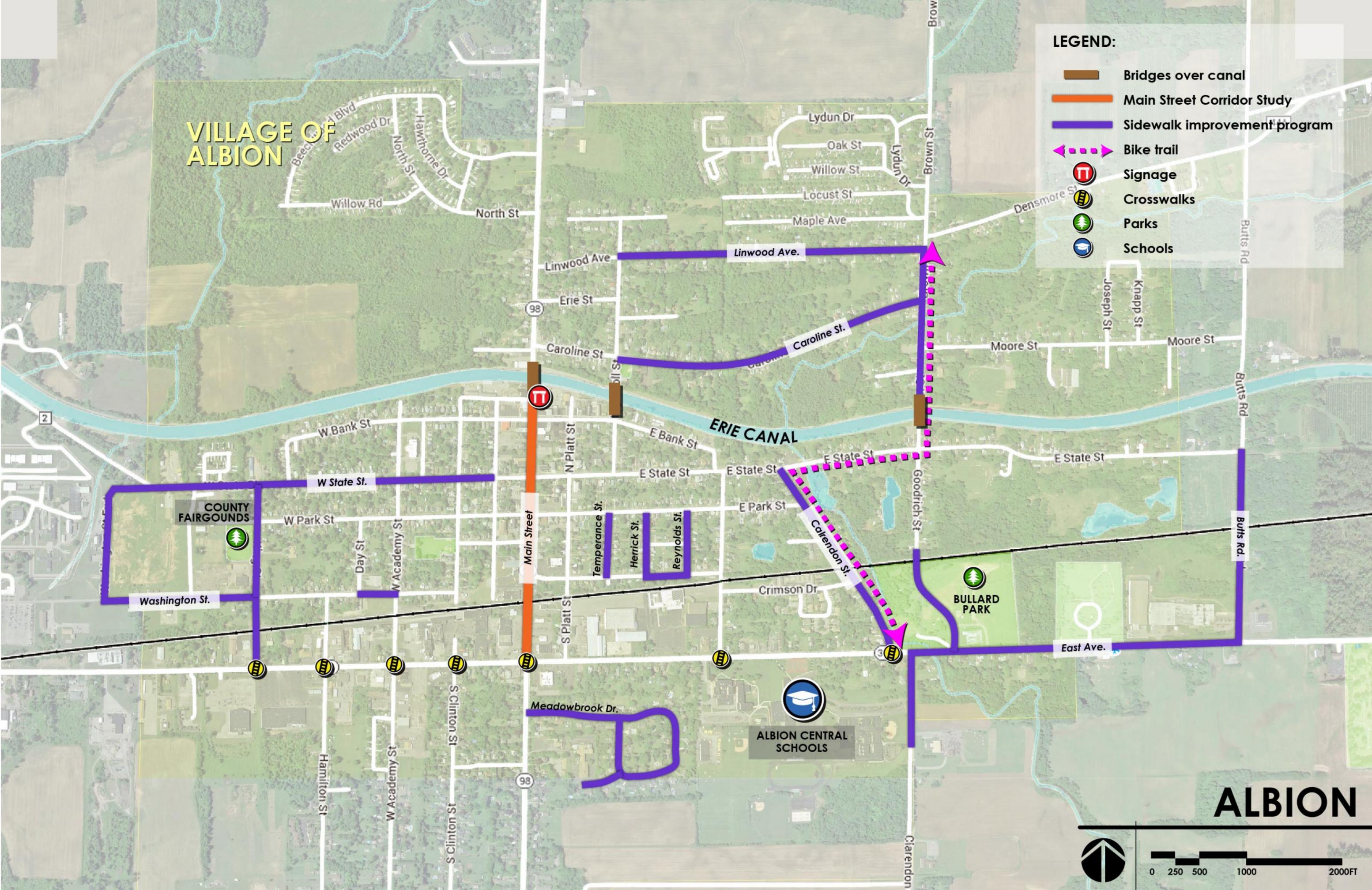


Example pedestrian and bicyclist wayfinding map

VILLAGE OF ALBION

LEGEND:

-  Bridges over canal
-  Main Street Corridor Study
-  Sidewalk improvement program
-  Bike trail
-  Signage
-  Crosswalks
-  Parks
-  Schools



ALBION

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Village of Avon Walkability Action Plan

Introduction

This Action Plan presents the findings and recommendations from the Walkability Audit conducted for the Village of Avon for the. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Avon.



. The Working Group conducts the walking audit in Avon

Avon is a village in Livingston County, with a 2010 population just over 3,400 residents and approximately 3 square miles. Key walking and bicycling destinations include: town center circling Zion Episcopal Church, Sports Park, the village business district, the Avon Post Office, the Town and Village Halls, St. Agnes Roman Catholic Church and Parochial School, and Avon Primary, Middle and High Schools. The village itself functions as the center of town activities.

A working group was convened with representatives from Genesee Transportation Council staff, local officials and interested residents. The working group members gathered on November 14, 2014 to observe existing conditions and identify issues and opportunities in Avon.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Avon. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the town and village. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

Each walk audit was conducted in two stages. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walk audit.

The working group met the following day to conduct the walk audit. The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees broke into smaller work groups, and were given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.



The Working Group reports their recommendations back to the group

Existing Conditions and Alternatives Considered

Participants at the Walkability Audit identified a variety of issues and opportunities throughout the village.

#	Location	Issue	Alternatives Discussed
1)	Village-wide	Safety of students accessing the school	<ul style="list-style-type: none"> a) Establish a Safe Routes to School program with a walking school bus and/or corner captains to ease parent's safety concerns, particularly at Route 5 and Route 20 and informal routes along trails from the south b) Partner with the school wellness program to engage health and physical education departments around educating students and parents about the need for students to be more active, as well as the environmental and economic benefits. Students can conduct research on the benefits and disseminate those to their parents c) Collect usage data, including traffic volumes, truck volumes, speed and timing d) Observe, document, and photograph the crosswalks at school arrival/dismissal times to determine conflicts, potentially as a middle or high school math, science, sociology project
2)	Village-wide	Speeding vehicles	<ul style="list-style-type: none"> a) Develop an education campaign targeting truck drivers, reaching out to Gray Metal, Starlight, Barilla, and Kraft, to assist with a comprehensive driver outreach and education program teaching proper routes and appropriate speeds through town b) Create an awareness program for all drivers warning them of enhanced enforcement in the village, particularly near schools c) Work with police to increase enforcement with higher speeding fines in school zones and higher fines for multiple infractions
3)	Village-wide	Residents are unaware of the benefits of walking and bicycling	<ul style="list-style-type: none"> a) Create an education and promotion program around Complete Streets to explain the benefits, including higher housing values, boost to the local economy, improved connectivity and options, and improved health
4)	Village-wide	Existing facilities are underutilized and people may not know about routes	<ul style="list-style-type: none"> a) Develop a wayfinding program for pedestrian routes to destinations (parks, shopping) as well as indicating parking behind buildings in the downtown
5)	Village-wide	Speeding vehicles	<ul style="list-style-type: none"> a) Add curb extensions across the parking lane to visually narrow the street, potentially with inexpensive and removable initial treatments
6)	Town-wide	Lack of connectivity in sidewalk network	<ul style="list-style-type: none"> a) Create a construction program for missing sidewalk links based on an inventory and identified priorities that connect to key destinations

#	Location	Issue	Alternatives Discussed
7)	Village-wide	Need clear goals and requirements for development supportive of active transportation.	<ul style="list-style-type: none"> a) Adopt Complete Streets policy or resolution by Village Boards, Planning Board, and School Board, possibly using Wayne County's language b) Update zoning ordinance to include Comprehensive Plan recommendations and ensure their application in new developments, specifically: <ul style="list-style-type: none"> • Sidewalks required on both sides of streets in subdivisions, retail and commercial development • Buildings with a build-to line at 20-30 feet, rather than a set-back line for commercial development • Parking behind buildings or on-street along parking boulevards • Reduce parking requirements (maximums rather than minimums) and add a bicycle parking requirement c) Develop a policy to reconfigure Tops and Avon Town plaza designs, reducing parking requirements, and moving parking behind buildings and encouraging new infill development at street frontage d) Encourage two-story development with offices or apartments above
8)	Village-wide	Education and encouragement	<ul style="list-style-type: none"> e) Publicize snow removal policy and make expectations clear to property owners
9)	Town-wide	Safety of students accessing the school	<ul style="list-style-type: none"> a) Establish a Safe Routes to School program with a walking school bus and/or corner captains to ease parent's safety concerns, particularly at Route 5 and Route 20 and informal routes along trails from the south b) Partner with the school wellness program to engage health and physical education departments around educating students and parents about the need for students to be more active, as well as the environmental and economic benefits. Students can conduct research on the benefits and disseminate those to their parents c) Collect usage data, including traffic volumes, truck volumes, speed and timing d) Observe, document, and photograph the crosswalks at school arrival/dismissal times to determine conflicts, potentially as a middle or high school math, science, sociology project
10)	Spring Street and Wadsworth Avenue (Route 39)	Challenging pedestrian crossing	<ul style="list-style-type: none"> a) Mark a crosswalk
11)	Rochester Street (Route 26) and North Avenue (Route 40)	Challenging pedestrian crossing	<ul style="list-style-type: none"> a) Mark a crosswalk

#	Location	Issue	Alternatives Discussed
12)	Trail connections	Lack of connectivity in trail network	<ul style="list-style-type: none"> a) Complete Erie-Attica Trail link to and around Barilla facility, with links south to Driving Park area potentially with sidewalks south along South Avenue b) Complete/formalize pathways to the Tops/shopping area from the north via D'Angelo Parkway and High Street c) Develop a trail from Case Park to the shopping area
13)	Intersection of Route 5 and Route 20	Lack of signs indicating the village Speeding vehicles	<ul style="list-style-type: none"> f) Install a gateway treatment with traffic calming such as a roundabout or median island, street trees, and/or painted or textured treatment at Pole Bridge g) Provide traffic calming, including roundabout at Pole Bridge with mountable, textured apron so cars will deflect around it h) Construct gateway mini-roundabout at Genesee Street, Lake Road, Linden Street, and Littleville Road Offset intersection to slow traffic and consider art installation (e.g. have annual contest and installation administered by school art department)
14)	School areas	Safety of students accessing the school	<ul style="list-style-type: none"> a) Improve crossings of E Main Street at Hal-Bar Road, Lacy Street, and North Avenue/Temple Street, potentially with median islands, left-turn prohibitions, and/or temporary treatments b) Complete/formalize pathways from the south, especially from Anderson Meadows, by soccer fields from Lake Road, from developments along Lake Road, and along Pole Bridge
15)	School areas	Encourage students to walk or bicycle to school or to the bus	<ul style="list-style-type: none"> a) Shorten school bus routes times with fewer stops and centralized pick-up points, which students can walk to b) Adjust school policy that currently allows elementary school students to walk to school or a bus stop only along line of sight c) Create a system such as a walking school bus where groups of students can walk to schools or collected area bus stops
16)	North Avenue	Challenging pedestrian crossing	<ul style="list-style-type: none"> a) Sign right turn only on southbound leg and have eastbound vehicles reverse direction around the circle to reduce conflicts with pedestrians

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the Walk Audit. The Preliminary Recommendations are the projects considered the top priority for village-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the town and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.

Infrastructure Programs

Wayfinding Program

Landmarks, natural features, civic destinations, neighborhood business districts and other visual cues help residents and visitors navigate through Avon. Wayfinding signs help people traveling along the pedestrian and bicycle networks and direct them to community destinations. The benefits of a complete wayfinding system include:

- Enhances users ability to navigate the pedestrian and bikeway network and find key attractors
- Provides key information such as destinations, direction, and distance
- Supports and promotes the Town's identity
- Raises community awareness of the bikeway and walkway networks



Pedestrian Directional

Sample pedestrian wayfinding sign.

A coordinated, well-designed signage system improves the coherency of the bikeway and walkway systems and can provide a greater sense of user security and comfort, as users receive confirmation that they are on the correct route and are aware of how far they have to travel to reach their destination.

Traffic Calming (Town-wide)

Audit participants expressed a desire for traffic calming measures throughout the Town. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The Town should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts when warranted and integrated with emergency response vehicle access.

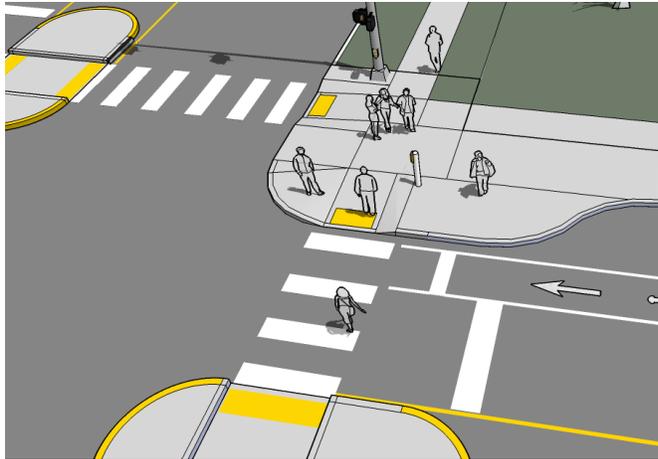


Figure 4. Example of curb extensions and refuge islands

. The working group uses a midblock crosswalk

Improve Main Street Crossings

Crossing Main Street was identified as a major barrier. Improved crosswalks at key intersections will significantly improve the pedestrian environment. Figure 6 displays three crossing improvements proposed by Walk Audit participants.



Potential Crossing Improvements on Main Street

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older people, children, and people with disabilities). There are many ways to implement Complete Streets policies. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).

The Principle:

- Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated to enable safe access for all users.
- Transportation agencies must ensure that all road projects result in a complete street appropriate to local context and needs.

Sample policies and real-life examples: <http://www.completestreets.org/>

Update Zoning Code

The zoning code can be updated to ensure that future land uses and site designs make walking convenient, safe, and enjoyable. Walk Audit participants specifically mentioned the following recommendations for the zoning code:

- Sidewalks required on both sides of subdivisions, retail and commercial development
- Buildings with a build-to line at 20-30 feet, rather than a set-back line for commercial and retail development
- Parking behind buildings or on-street along parking boulevards
- Reduce parking requirements (maximums rather than minimums) and add a bicycle parking requirement
- Encourage two-story development with offices or apartments above

Snow Removal Program

Snow and ice represent seasonal challenges to bicycling. When snowplows remove snow and ice from roadways, it is usually deposited on roadway edges. This creates a very difficult bicycling environment by narrowing the curb lane or blocking the bike lane.

While trails are plowed in the winter, they are low priority and it may take several days before they are cleared. Ice on the roadway presents a more serious challenge to cyclists than motorists. Proper drainage for snowmelt, and more aggressive treatment of roadway surfaces in freezing temperatures may help increase the cycling season for some hardy riders. Timely removal of traction sands and winter debris will also improve cycling conditions and storm-water quality.



Many cyclists will ride in snowy climates.

Education and Encouragement Programs

Safe Routes to School

Safe Routes to School programs encourage and educate students and their parents about walking and biking to school. They use a "5 Es" approach using Engineering, Education, Enforcement, Encouragement, and Evaluation strategies to improve safety and encourage children to walk and bike to school. The programs are usually run by a coalition of local government, school and school district officials and teachers, parents and students, and neighbors.

Interested schools can start by convening 'walking school busses' or groups of families walking together to school. These can be as formal or informal as desired; more formal programs have the advantage that parents can take turns walking the group to school and save other parents the trip.

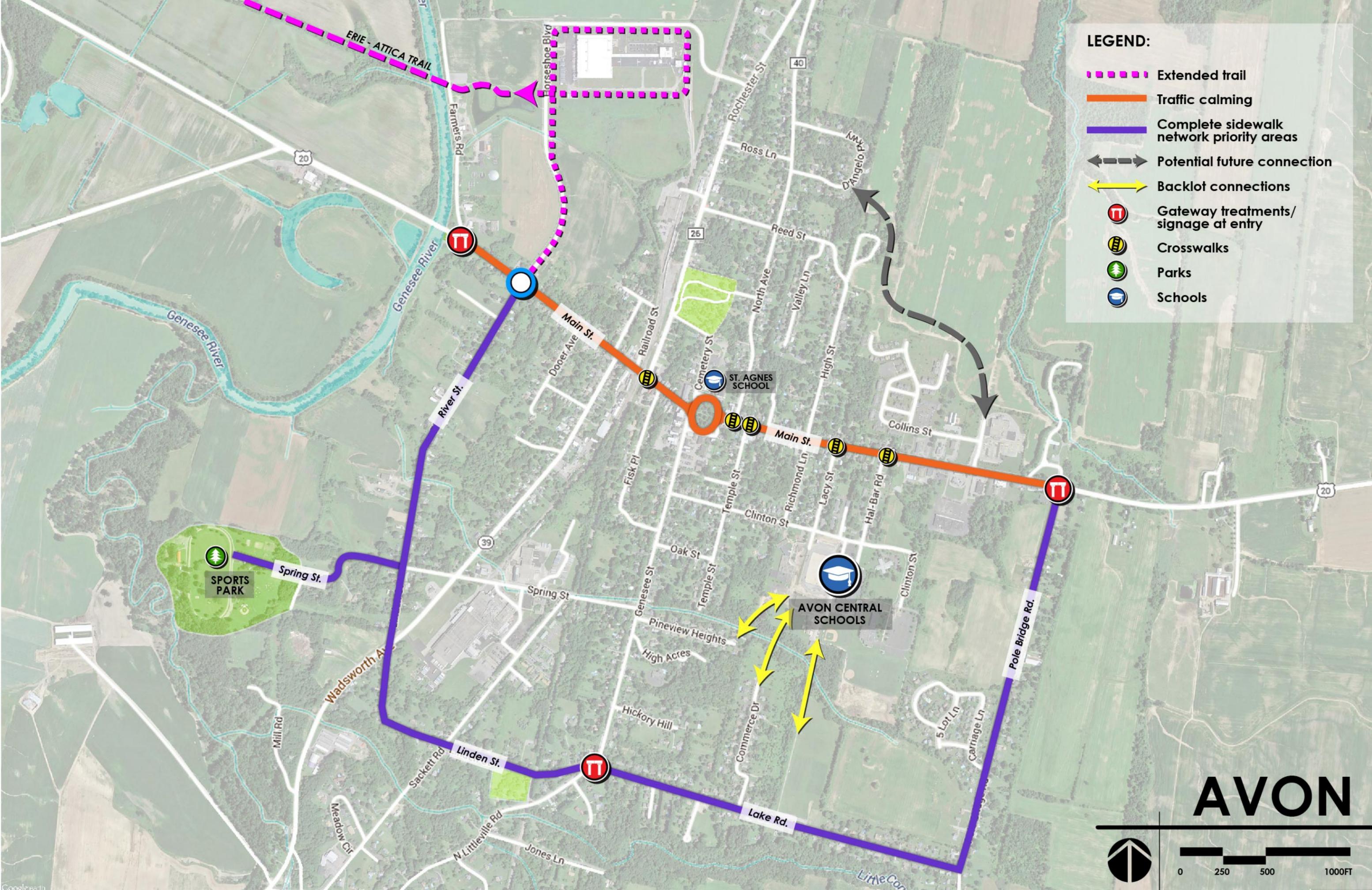
School staff and the PTA should also work with the Town and police to hold a walk audit, in which the school community and town (or county) traffic engineers observe drop-off or pick-up behaviors and develops a list of needed improvements. The audit and recommendations can be used to support grant funding requests for larger-scale projects.

Police Enforcement

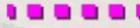
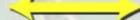
Walk Audit participants expressed a desire to reduce speeds throughout the Village. Speeding vehicles endanger bicyclists and pedestrians, and discourage bicycling and walking. Enforcement campaigns can include crosswalk stings, speeding, distracted driving, and distracted walking/bicycling. The Town or interested community members should partner with local law enforcement committed to a zero-tolerance approach, which is recommended in order to send a strong message with lasting impression, for the greatest number of violators.



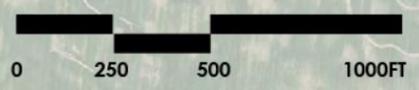
Speed feedback signs are a commonly used enforcement tool



LEGEND:

-  Extended trail
-  Traffic calming
-  Complete sidewalk network priority areas
-  Potential future connection
-  Backlot connections
-  Gateway treatments/signage at entry
-  Crosswalks
-  Parks
-  Schools

AVON





City of Batavia Walkability Action Plan

Introduction

The Batavia Walkability Action Plan presents the findings and recommendations from the walkability audit conducted for the City of Batavia for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Batavia.

Batavia is a City surrounded by the Town of Batavia in Genesee County, with a 2010 population of 15,465 residents and an approximate size of 5 square miles. Key walking and bicycling destinations include: Richmond Memorial Library, Williams Park, Centennial Park, Kibbe Park, Farrell Park, Elmwood Cemetery, Austin Park, Dwyer Stadium, Batavia High School, New York State School for the Blind, Batavia Middle School, United Memorial Medical Center, and John Kennedy Elementary School. Primary roadways include: South Main Street, East Main Street, West Main Street, Pearl Street Road, North Street, Ellicott Street, Oak Street, Clinton Street, and Richmond Avenue.

A working group with representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in Batavia. The working group members gathered on April 22nd, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Batavia. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the city. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the audit. A larger working group met again that afternoon to conduct the walking audit portion, which built upon previous observations. There were over 40 total attendees.

The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements



and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees broke into smaller work groups, and were given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the City.

Map Number	Location	Issue	Alternatives Discussed
1)	City-wide	Community development	<ul style="list-style-type: none"> a) Re-coordinate a quarterly Day of Caring partnership with the high school to clean the City and provide services to elderly and disabled residents. b) Each City Council member should host a walkability audit and trash collection day in their ward. c) Provide additional community space downtown, possibly by closing Jackson Square to through traffic. d) Initiate a tree planting program. e) Adopt a form-based zoning code. f) Develop a consistent and enforceable snow clearing policy (similar to mowing). g) Adopt a Complete Streets policy.
2)	City-wide	Pedestrian safety	<ul style="list-style-type: none"> a) Provide motorist safety education for residents and at schools. b) Conduct a Safe Routes to School evaluation of primary walking and bicycling routes to school. Identify key corridors and gaps. c) Convene a meeting for the Bank Street Crossing Challenge. d) Make Main Street more pedestrian-friendly (possible mid-block crossing and ADA compliant curb ramp improvements). e) Adopt a Complete Streets policy. f) Each City Council member should host a walkability audit in their ward

Map Number	Location	Issue	Alternatives Discussed
3)	Downtown	Downtown improvements	<ul style="list-style-type: none"> a) Provide additional community space downtown, possibly by closing Jackson Square to through traffic. b) Program additional activities in Jackson Square. c) Make Main Street more pedestrian-friendly (possible mid-block crossing and ADA compliant curb ramp improvements). d) Extend the Ellicott trail into downtown, developing spur connections to key destinations (schools, parks, shopping, and senior housing). e) Initiate priority development sites to encourage mixed-use development. f) Adopt a form-based zoning code. g) Conduct a parking audit downtown to determine usage rate and potential to sell parking space.
4)	City-wide	Bicycle access	<ul style="list-style-type: none"> a) Extend the Ellicott Trail into downtown, developing spur connections to key destinations (schools, parks, shopping, and senior housing). b) Coordinate with Go-Art and local schools to coordinate bike rack projects wherein businesses pay for materials. c) Adopt a Complete Streets policy
5)	City-wide	Infrastructure improvements	<ul style="list-style-type: none"> a) Make Main Street more pedestrian-friendly (possible mid-block crossing and ADA compliant curb ramp improvements). b) Mitigate through traffic on State Street/Jefferson Avenue by closing off the exit onto Jefferson Avenue by the Credit Union. c) Work with DoH and NYSDOT to discuss potential road diet on Route 5

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for city-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the city and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



Infrastructure Programs

Sign Walking and Bicycling Routes

Batavia benefits from several existing pedestrian and bicycle facilities, but the lack of markings or signage results in residents not being aware of the routes. Signing routes and indicating distance and travel time to key destinations has multiple benefits:

- It encourages residents and visitors to try new walking and bicycling routes
- It reduces misperceptions about walking and bicycling travel time to key destinations
- It reassures bicyclists and pedestrians that they are on the correct route
- It improves visibility of existing routes for all residents and visitors
- It improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists



Pedestrian Directional

Example Bicycle and Pedestrian Wayfinding

Pedestrian Improvements

Walking audit participants were vocal about improving the pedestrian accessibility and safety of several corridors. Specifically, Bank Street would benefit from re-painting/applying new thermoplastic to faded crosswalks downtown and implementing a high-visibility crosswalk and pedestrian crossing signage where Bank Street meets Denio Street. Because of its location relative to Dwyer Stadium, crossing improvements would improve the access and safety of players and visitors walking to the stadium.

Main Street is a primary thoroughfare in Batavia, and as such, the road has considerable traffic volume, multiple travel lanes, and on-street parking. To make Main Street more pedestrian-friendly, improvements such as high-visibility crossings, audible pedestrian countdown timers, pedestrian refuge islands and curb extensions should continue to be implemented where appropriate. The section of Main Street between Liberty and Ellicott Streets presently has landscaped medians, but did not provide pedestrian refuge islands where the medians extend to the intersection. Pedestrian refuge islands should be retrofitted at these locations and a similar landscaped median should be implemented along the rest of Main Street to improve streetscaping and safety.

Due to the importance of Main Street, a corridor study should be conducted to assess the potential for a road diet and the potential for traffic calming, pedestrian improvements, and the addition of bicycle facilities to better accommodate all modes.

Trail Connections

Batavia is currently in the process of developing the Ellicott Trail, which runs through the southern portion of the city. Walking audit participants expressed excitement over the trail and the potential to expand the trail connections to key destinations in the city and out to the existing regional trail network. Presently, the Batavia Loop Trail has been planned to connect to the Ellicott Trail and loop around the northern extent of the city. Regional trail connections such as the NYC Peanut Line Trail, National Grid Right of Way Trail, and the Erie-Attica Rail Trail have also been planned to connect the city with the regional trail system and neighboring communities. Efforts to establish funding and conduct feasibility studies for these trails should remain a top priority.

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind. These policies are all similar in spirit, but vary considerably when considering implementation. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).

The Principle:

- Simply put, Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets often means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated with all users in mind, resulting in improved safety for all modes.
- **Transportation agencies must ensure that all road projects result in a complete street appropriate to local context and needs.**

Sample policies and best practices: <http://www.completestreets.org/>

Downtown Parking Audit

According to audit participants, Batavia has a substantial amount of parking spaces downtown that may be underutilized. A parking audit would assess peak usage, high parking times, and overall utilization. If parking is being underutilized, parking spaces can be consolidated or repurposed into curb extensions, parklets, multi-use paths, bicycle parking or bike lanes.

Education and Encouragement Programs

Batavia Branding

In an effort to promote Batavia's identity, some community branding is recommended. Potential branding opportunities include a wayfinding sign package or coordinating with local art organizations, such as Go-Art, to develop custom bike racks. Both examples should incorporate a local brand or icon - such as a canal lock in reference to the community's Dutch heritage, the Holland Land Company, and the Erie Canal - to establish an identity.

Community Events

One of the main overarching themes discussed during the walking audit was the strong sense of community in Batavia. Community events are a great way to provide local entertainment, develop community ownership, and also further the City's brand. A walking tour is a common event that encourages a healthy lifestyle by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

- Organized walks to Jackson Square
- Regular walks The Richmond Library and Centennial Park
- A table at the Downtown Public Market providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell giveaways

The city can also develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

Safe Routes to School

Safe Routes to School programs encourage and educate students and their parents about walking and biking to school. They use a "5 Es" approach using Engineering, Education, Enforcement, Encouragement, and Evaluation strategies to improve safety and encourage children to walk and bike to school. The programs are usually run by a coalition of local government, school and school district officials and teachers, parents and students, and neighbors.

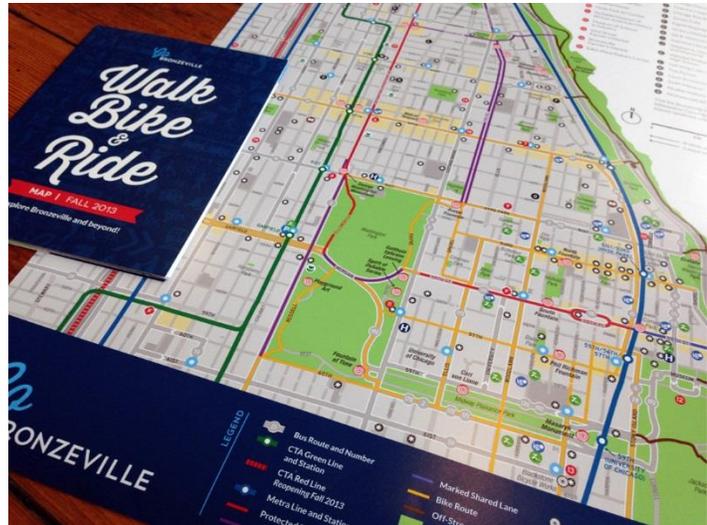
Interested schools can start by convening 'walking school busses' or groups of families walking together to school. These can be as formal or informal as desired; more formal programs have the advantage that parents can take turns walking the group to school to save other parents the trip.

School staff and the PTA should also work with the City and police to hold additional walk audits, in which the school community and city (or county) traffic engineers observe drop-off or pick-up behaviors and develop a list of needed improvements. The audit and recommendations can be used to support grant funding requests for larger-scale projects.

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

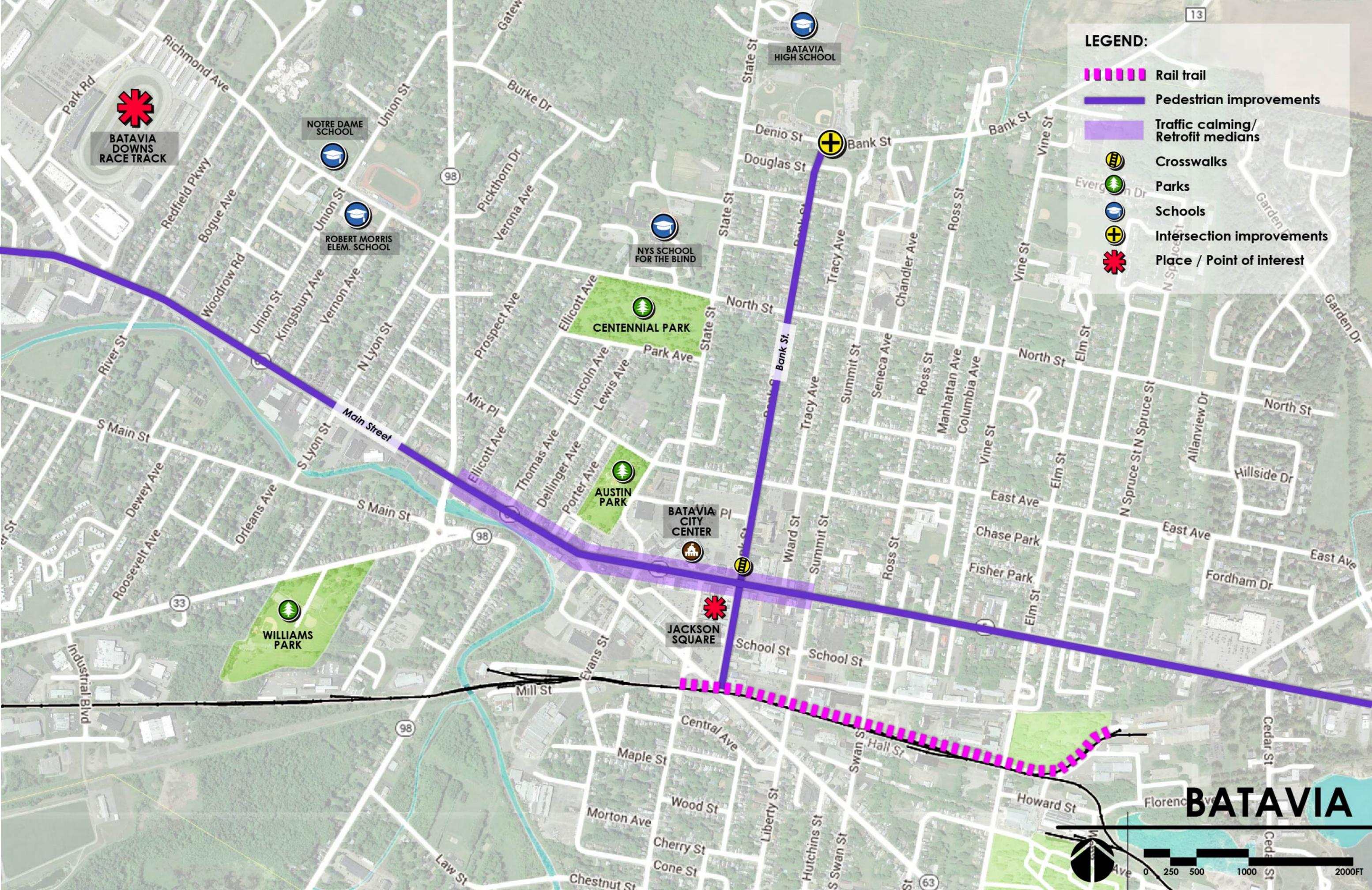
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, city newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



Example bicycle and pedestrian wayfinding map

LEGEND:

-  Rail trail
-  Pedestrian improvements
-  Traffic calming/ Retrofit medians
-  Crosswalks
-  Parks
-  Schools
-  Intersection improvements
-  Place / Point of interest



BATAVIA





Town of Bergen Walkability Action Plan

Introduction

This Action Plan presents the findings and recommendations from the Walkability Audit conducted for the Village of Bergen for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Bergen.

Bergen is the second-smallest town in Genesee County, with a 2010 population just over 3,000 residents and approximately 0.6 square miles. Key walking and bicycling destinations include Hickory Park, the Post Office, the Library, and the Bonduelle at the west side of town. Byron-Bergen Central Schools and Byron-Bergen Elementary School are located about three miles west of Lake Avenue via Townline Road. Main Streets include Townline Road (Route 13), South Lake Road (Route 19), Clinton Street Road (Route 33), and Interstate 490 to the east of town.

A working group was convened with representatives from Genesee Transportation Council staff, local officials and interested residents. The working group members gathered on November 13, 2014 to observe existing conditions and identify issues and opportunities in Bergen.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Bergen. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the town. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walk audit was conducted in two stages. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walk audit. The working group met the following day to conduct the walk audit. The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed



The working group walks around the Village of Bergen

opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, the working group was given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the Walkability Audit identified a variety of issues and opportunities throughout the village.

Map Number	Location	Issue	Alternatives Discussed
1)	Village-wide	Lack of bicycle or pedestrian activity	<ul style="list-style-type: none"> a) Create a Facebook Group to link walkers/runners/bicyclists b) Hold Community Walks events to increase social engagement c) Encourage regular run/walk groups through a Facebook page listing regular walks, events, and topics around walkability d) Develop a public relations campaign and educational program e) Implement a community public art program to include lighting, signal boxes, and street painting
2)	Village-wide	Existing facilities are underutilized and people may not know about routes	<ul style="list-style-type: none"> a) Sign and mark a walking loop around town using existing infrastructure; include distance and time to key destinations b) Sign routes to show distances and walking/biking times to key destination c) Install signage directing people to trail locations
3)	Village-wide	Need clear goals and requirements for development supportive of active transportation.	<ul style="list-style-type: none"> a) Update Comprehensive Plan with Complete Streets policy b) Develop design guidelines and formalize them in the code so developers are fully aware of requirements on any project c) Pursue a park and ride, and bus rapid transit into Rochester, which would make Bergen a western commuter link for Rochester area employees d) Provide an easement on/near old public works building for trail link from Hartland neighborhood to downtown, across Route 19 to park, etc.
4)	Village Center	Speeding vehicles Lack of pedestrian space	<ul style="list-style-type: none"> a) Install a parklet in front of Gregory's to provide on-street seating and slow traffic
5)	Townline Road	Speeding vehicles No bicycle or pedestrian access to school	<ul style="list-style-type: none"> a) Install traffic calming treatments near schools b) Work with police department to enforce posted speed limit, pavement markings, and signs c) Construct a side path or separated sidewalk

Map Number	Location	Issue	Alternatives Discussed
6)	West Shore Trail	Not connected to the village	a) Develop a path from the fire station to the existing trail b) Post wayfinding signs on the trail to bring bicyclists into the village
7)	Richmond Avenue to Canterbury Lane	No access	a) Build a formal trail link
8)	Route 33	Sidewalk network is discontinuous Vehicle speeds and hill result in pedestrian-unfriendly environment	a) Construct sidewalk (not curb-tight) or side path on west side of Route 33 connecting Ward Park to Munger Street b) Extend sidewalk south to Route 33 cluster of retail activities
9)	Railroad corridor	Opportunity for rail-with-trail development	a) Study feasibility of rail-with-trail along rail corridor, linking Robbins Brook Park, school complex, and community center
10)	Old Department of Public Works Building	Opportunity for parking	a) Formalize parking to access downtown, Hartland Park, and the walking network b) Consider building rehabilitation and reuse as winter warming hut and summer cafe. Summer and winter cafe could be operated by high school students and could be a potential fund raising effort.
11)	Route 33 and Route 19	No marked pedestrian or bicycle crossings Long crossing distances Speeding vehicles	a) Study roundabout design to act as a gateway to Bergen, minimize vehicle delay, and provide small green spaces while improving safety for bicyclists and pedestrians
12)	Buffalo Road at Rochester Street	No pedestrian crossings	a) Mark a crosswalk at Rose Garden Bowl & Volley Ball and Viking Valhalla
13)	Hickory Park	No pedestrian crossings	a) Mark a crosswalk at S Lake Avenue b) Mark a crosswalk at Parkview Drive
14)	New development south of the village	No connection from residential area to businesses/light industrial	a) Connect trail through potential residential wedge between Parkview and Buffalo Road, to the light industrial park near Route 490 b) Encourage new businesses to keep a bicycle fleet available for employees to bike downtown for errands, lunch, etc.
15)	Hartland Neighborhood	Poor sidewalks, connectivity, and signage	c) Retrofit sidewalks, connecting to the trail through Hartland Park d) Provide an easement on/near old public works build for trail link from Hartland neighborhood to downtown, across Route 19 to park, etc. e) Install signage in Hartland Park
16)	North end of town	Lack of signs indicating the village	a) Install a gateway treatment such as a public art installation, archway, or other high-visibility treatment

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the Walk Audit. The Preliminary Recommendations are the projects considered the top priority for village-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the town and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



The working group cross the street between parks

Infrastructure Programs

Sign Walking and Bicycling Routes

Bergen benefits from several existing pedestrian and bicycle facilities, but the lack of markings or signage results in residents not being aware of the routes. Signing routes and indicating distance and travel time to key destinations has multiple benefits:

- It encourages residents and visitors to try new walking and bicycling routes
- It reduces misperceptions about walking and bicycling travel time to key destinations
- It reassures bicyclists and pedestrians that they are on the correct route
- It improves visibility of existing routes for all residents and visitors



Sample bicycle wayfinding signage



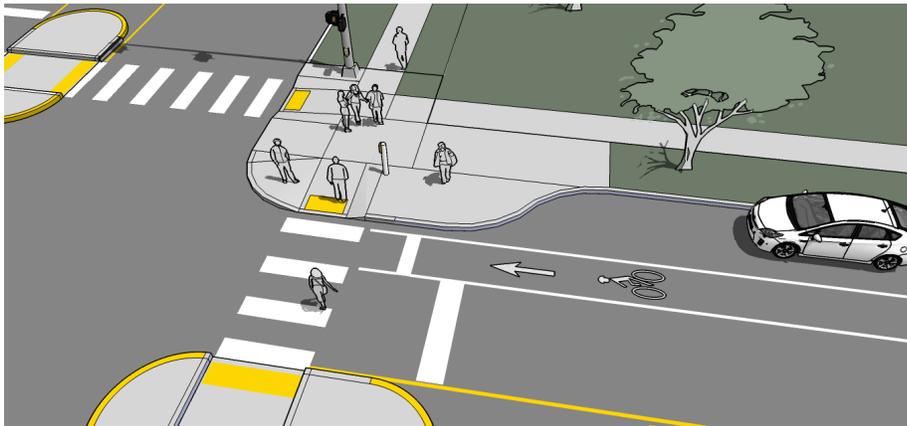
Pedestrian Directional

Sample pedestrian wayfinding sign.

Install Traffic Calming Near Schools

Audit participants noted several issues with speeding around the schools. While few students are likely to walk or bicycle the three miles from town to the schools, there are several possibilities for park-and-walk locations for families to walk part of the way. Improved safety will encourage more walking and bicycling around and between the schools, as well as protecting one of the most vulnerable user groups.

Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The Town should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect the street from high speeds, and pedestrian/vehicle conflicts when warranted.



Example Curb Extension

Construct Walkway on Route 33

A sidewalk or side path along the west side of Route 33 will connect existing sidewalks from Ward Park to Munger Street, providing a continuous pedestrian connection. Additionally, this connection will create economic benefits by linking village shops to employers.

Place a Parklet in Front of Greg'ry's

A parklet increases sidewalk width for amenities, improves the business environment, and provides intriguing and special experiences for pedestrians and passing observers. Often, these activities may be allowed under existing café permits or with minor changes to such regulations. Properly designed temporary structures, often can last for years and are low-cost alternatives to permanent curb extensions. Because they are temporary, communities can also remove or relocate unsuccessful uses with little consequence.



Sample parklet to create outdoor café space

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older people, children, and people with disabilities). There are many ways to implement Complete Streets policies. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).

The Principle:

- Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated to enable safe access for all users.
- Transportation agencies must ensure that all road projects result in a complete street appropriate to local context and needs.

Sample policies and real-life examples: <http://www.completestreets.org/>

Development and Design Guidelines

Design guidelines included in town code provide clear direction to developers and promote the provision of appropriate bicycle and pedestrian consideration during new development. Guidelines can specify different standards for the village center, including wider sidewalk minimums, planting strips or other buffer areas to protect pedestrians, building setbacks, and placement of parking at the back of buildings. Sidewalks and bicycle facilities should be constructed as a part of all new and updated facilities. The code can also specify minimum bicycle parking requirements as well as establishing bicycle parking as a community benefit for a developer seeking an exemption.



A sidewalk maintenance program can be part of townwide design guidelines or complete streets policy

Education and Encouragement Programs

Community Events

The town can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

Walking Tours

Hosting regular walking tours can encourage healthy lifestyles by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

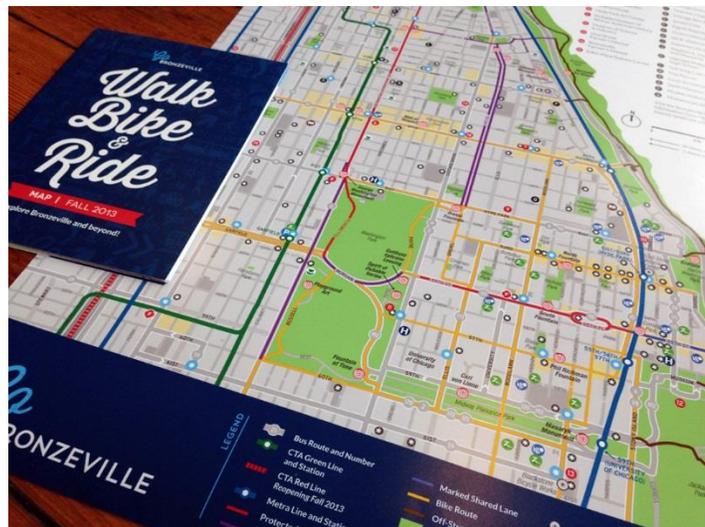
- Organized walks to the Farm Market
- Regular walks to and from the Community Center
- A table at the Park Festival providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell give-aways

The town can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

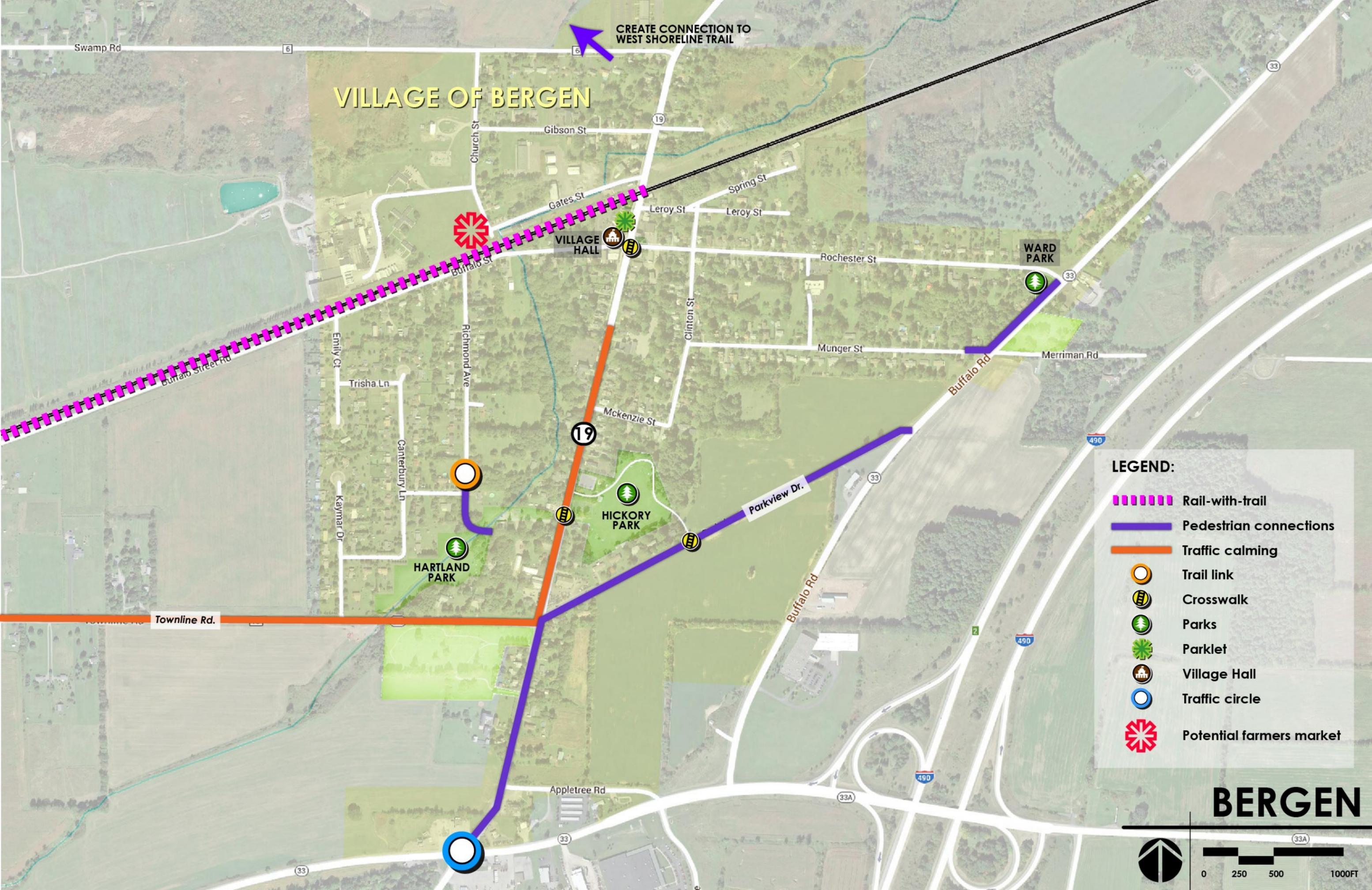
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, town newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



Example of a walking and biking map.

VILLAGE OF BERGEN

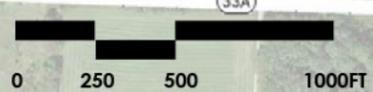
CREATE CONNECTION TO WEST SHORELINE TRAIL



LEGEND:

- Rail-with-trail
- Pedestrian connections
- Traffic calming
- Trail link
- Crosswalk
- Parks
- Parklet
- Village Hall
- Traffic circle
- Potential farmers market

BERGEN





City of Canandaigua Walkability Action Plan

Introduction

This Action Plan presents the findings and recommendations from the Walkability Audit conducted for the City of Canandaigua for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Canandaigua.



Shops along Route 332 in Canandaigua

Canandaigua is a city in Ontario County, with a 2010 population just over 10,500 residents and approximately 4.8 square miles. Key walking and bicycling destinations include: Canandaigua Lake and the State Marine Park, The Shopping corridor near the intersection of East Lake Road and Eastern Boulevard, Finger Lakes Community College, Sonnenberg Park and Gardens, Jefferson Memorial Park, Frank Baker Park, and Canandaigua Primary, Elementary, and Middle Schools.

A working group was convened with representatives from Genesee Transportation Council staff, local officials and interested residents. The working group members gathered on November 24, 2014 to observe existing conditions and identify issues and opportunities in Canandaigua.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Canandaigua. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the City. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

Each walk audit was conducted in two stages as a one day event. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walk audit. The working group met the following day to conduct the walk audit. The meeting began with a presentation and discussion of benefits related to improved

walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, the working group broke into groups. Each group was given maps of the community to begin formulating ideas for improvement. Each participant was encouraged to think about projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.



Walk audit participants stop to discuss observations

Existing Conditions and Alternatives Considered

Participants at the Walkability Audit identified a variety of issues and opportunities throughout the village.

Map Number	Location	Issue	Alternatives Discussed
1)	City-wide	Snow Covered Sidewalks	a) Create a snow removal program for areas not in the business district
2)	City-wide	Lack of trails	a) Create a north/south trail for bicyclists and pedestrians
3)	City-wide	Lack of bicycle or pedestrian activity	a) Hold walking tours to encourage higher rates of walking
4)	City-wide	Implementation of complete streets policy	a) Establish a complete streets advisory board to ensure the complete streets policy is being implemented as intended
5)	City-wide	Bicycle/Pedestrian friendly zoning	a) Update zoning code to require car parking in the back and the provision of bike parking
6)	City-wide	Snow Covered Sidewalks	a) Create a snow removal program for areas not in the business district
7)	City-wide	Lack of trails	a) Create a north/south trail for bicyclists and pedestrians

Map Number	Location	Issue	Alternatives Discussed
8)	City-wide	Promote Bicycle use	<ul style="list-style-type: none"> a) Provide incentives at businesses for people who bike (e.g. BicycleBenefits.org) b) Create bicycle route maps for residents and tourists c) Apply for bike friendly community designation
9)	City-wide	Lack of walking/biking trails	<ul style="list-style-type: none"> a) Build a north/south multi-use trail through the city
10)	Lakefront	Limited bike/ped access	<ul style="list-style-type: none"> a) Build pedestrian tunnel underneath US 20/Hwy b) Better crossings across highway
11)	Parish St (part of the bicycle loop around the lake)	Poor bike/ped facilities	<ul style="list-style-type: none"> a) Install shared lane markings b) Build sidewalk on both sides of the street (one side currently missing)
12)	Phoenix St		<ul style="list-style-type: none"> a) Turn it into pedestrian only
13)	Canandaigua Academy (High School)	Incomplete sidewalk network surrounding school	<ul style="list-style-type: none"> a) Construct sidewalks on North St and East St
14)	Intersection of Route 5/20 and Main St.	Dangerous/busy intersection	<ul style="list-style-type: none"> a) Install a roundabout
15)	Main Street/Hwy 322	Challenging pedestrian crossings and high speeds Lack of signs indicating the village	<ul style="list-style-type: none"> a) Mark a crosswalk(s) b) Police speed enforcement c) Gateway at the north entrance to the city
16)	School areas	Encourage students to walk or bicycle to school or to the bus	<ul style="list-style-type: none"> a) Create a walk to school club b) Educate students on safe walking/biking c) Create a walk to school PSA

Preliminary Recommendations

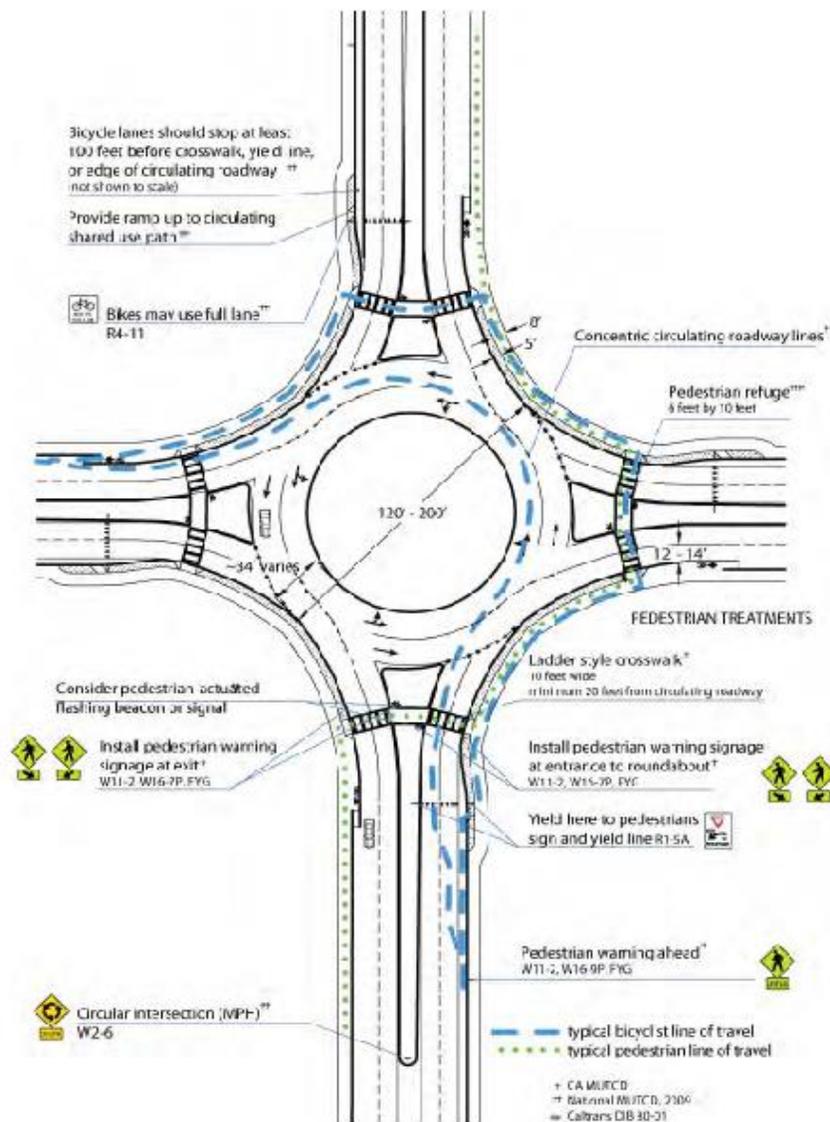
Many beneficial and achievable alternatives were discussed at the Walk Audit. The Preliminary Recommendations are the projects considered the top priority for city-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the city and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.

Infrastructure Programs

Feasibility Study on Installing a Roundabout at Route 5/20 and Main Street

Multiple walk audit participants expressed a desire for a roundabout at the intersection of Route 5/20 and Main Street. Roundabouts increase the safety of an intersection by reducing speeds, removing the potential for head-on collisions, and eliminating left turns. However, research indicates that while single-lane roundabouts may benefit bicyclists and pedestrians by slowing traffic, multi-lane roundabouts may present greater challenges and significantly increase safety problems for these users. There are specific treatments that can be applied to multilane roundabout to improve pedestrian and bicyclist safety (Figure 3). However, a feasibility study should be conducted to determine the effectiveness of a roundabout at this location.

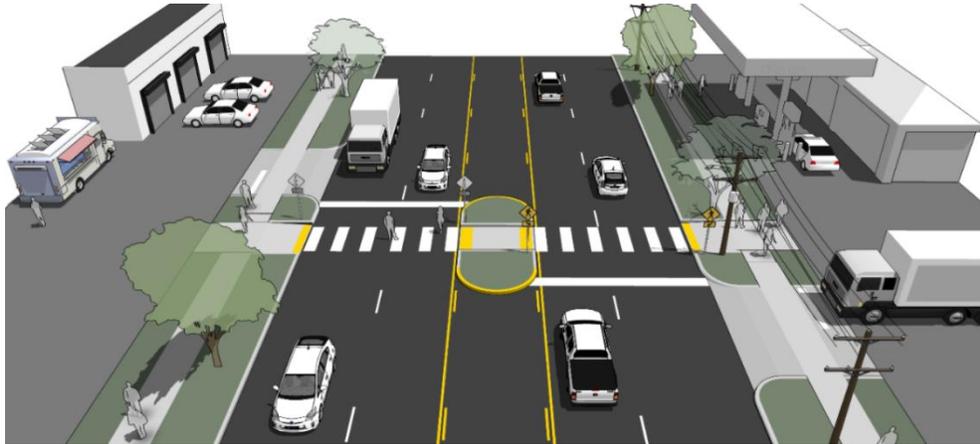
Treatments for Rural Multilane Roundabouts



Source: California Department of Transportation's Complete Intersection: A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians

Improve Crossings and Reduce Speeds on Main Street

A theme throughout the Audit was pedestrian improvements on Main Street. High speeds and difficult crossings make Main Street an uncomfortable pedestrian environment. Rectangular rapid-flash beacons (RRFB's) can be used to create comfortable crossings. Figure 5 displays a typical RRFB crossing, which light use LED lighting to ensure that motorists are aware a pedestrian is present.



Example of Improved Crossings on a Five Lane Arterial

Police enforcement can be used to reduce speeding vehicles. Speeding vehicles endanger bicyclists and pedestrians, and discourage bicycling and walking. Enforcement campaigns can include crosswalk stings, speeding, distracted driving, and distracted walking/bicycling. The City or interested community members should partner with local law enforcement committed to a zero-tolerance approach, which is recommended in order to send a strong message with lasting impression, for the greatest number of violators.



Bicycling along and walking across this five lane section can be difficult

Provide Better Access to Lakefront Parks

An undercrossing of Hwy 20 can be used to provide better access to the lakefront. Bicycle/pedestrian undercrossings provide critical non-motorized system links by joining areas separated by barriers such as railroads and highway corridors. In most cases, these structures are built in response to user demand for safe crossings where they previously did not exist. There are no minimum roadway characteristics for considering grade separation. Depending on the type of facility or the desired user group grade separation may be considered in many types of projects.



Bicycle and Pedestrian Underpass on the Boise River Greenbelt

Adopt Supportive Policies

Hold Open Street Events on Phoenix Street

Phoenix Street presents a great location to hold Open Streets Events. Open Streets Events encourage walking and biking by providing a car-free street event. These programs have many names: Summer Streets, Sunday Parkways, Ciclovias, Sunday Streets. Summer Streets are periodic street closures (usually on Sundays) that create a temporary park that is open to the public for walking, bicycling, dancing, hula hooping, roller skating, etc. They have been very successful internationally and are rapidly becoming popular in the United States. Open streets events promote health by creating a safe and attractive space for physical activity and social contact, and are cost-effective compared to the cost of building new parks for the same purpose. These events can be weekly or one-time events, and are generally very popular and well-attended.



A rendering of an Open Street Event on Phoenix St

Snow Removal Program

Snow and ice represent seasonal challenges to bicycling. When snowplows remove snow and ice from roadways, it is usually deposited on roadway edges. This creates a very difficult bicycling environment by narrowing the curb lane or blocking the bike lane.

While trails are plowed in the winter, they are low priority and it may take several days before they are cleared. Ice on the roadway presents a more serious challenge to cyclists than motorists. Proper drainage for snowmelt, and more aggressive treatment of roadway surfaces in freezing temperatures may help increase the cycling season for some hardy riders. Timely removal of traction sands and winter debris will also improve cycling conditions and storm-water quality.



Many cyclists ride year-round in snowy climates.

Education and Encouragement Programs

Safe Routes to School

Safe Routes to School programs encourage and educate students and their parents about walking and biking to school. They use a "5 Es" approach using Engineering, Education, Enforcement, Encouragement, and Evaluation strategies to improve safety and encourage children to walk and bike to school. The programs are usually run by a coalition of city government, school and school district officials and teachers, parents and students, and neighbors.

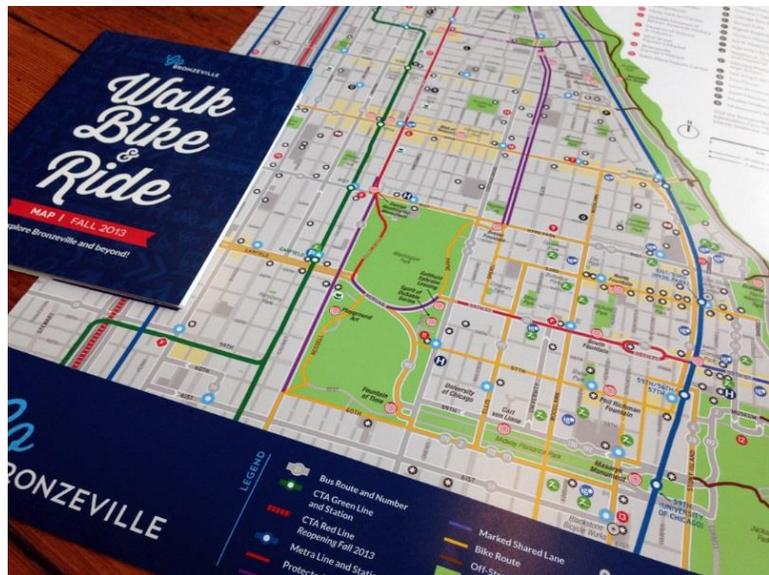
Interested schools can start by convening 'walking school busses' or groups of families walking together to school. These can be as formal or informal as desired; more formal programs have the advantage that parents can take turns walking the group to school and save other parents the trip.

School staff and the PTA should also work with the City and police to hold a walk audit, in which the school community and City traffic engineers observe drop-off or pick-up behaviors and develops a list of needed improvements. The audit and recommendations can be used to support grant funding requests for larger-scale projects.

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

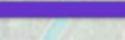
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, city newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



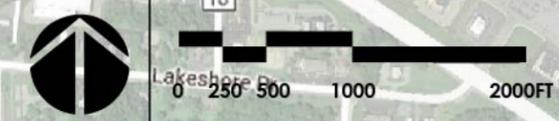
Example of a walking and biking map.



LEGEND:

-  Potential future trail connection
-  Traffic calming
-  Bike/ped facilities improvement
-  Open street events
-  Roundabout
-  Crosswalks
-  Parks
-  Schools
-  City Hall
-  Intersection improvements
-  Safe Routes to School

CANANDAIGUA





Village of Geneseo Walkability Action Plan

Introduction

The Geneseo Walkability Action Plan presents the findings and recommendations from the walkability audit conducted for the Town of Geneseo for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Geneseo.

Geneseo is a village in Livingston County, with a 2010 population just over 8,000 residents. Key walking and bicycling destinations include SUNY Geneseo, Highland Park, John W. Chanler Island Preserve, Geneseo Middle School, and Geneseo High School. Main Streets include Lakeville Road, South Street, Mary Jemison Drive, Main Street, and Avon Road.

A working group consisting of representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in Geneseo. The working group members gathered on April 23rd, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Geneseo. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the town. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walking audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walking audit. A larger working group met again that afternoon to conduct the walking audit portion, which built upon previous observations.

The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees formulated ideas for improvement using maps of the community. This included projects, policies, and programs. Possible next steps were discussed and the facilitator concluded the Walk Audit.



Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the town.

Map Number	Location	Issue	Alternatives Discussed
1)	Town-wide	Pedestrian safety	<ul style="list-style-type: none"> a) Implement a pedestrian skills and awareness campaign for students (especially for crossing Mary Jemison Drive). b) Investigate crash, injury, and fatality data for local intersections. Collect and share data. c) Implement traffic calming at Route 20A and Mary Jemison. d) Main Street and 20A improvements – tighten curb radii, pedestrian refuge island on Main Street and 20A westbound (east side of intersection) for a pedestrian crossing. e) Construct roundabouts at Temple Hill, Main Street, and Mt. Morris (mini circle). f) Main Street Redesign - Begin with cheap curb extensions (paint, curbing, bollards) that include bicycle parking. Test a more delineated mini-roundabout (paint and signs first, then mountable curbing material) around the fountain. Explore reverse diagonal parking with 9' stalls and have a community "try-out" event. Once reverse diagonal parking is tested, stripe a bicycle lane in front of the parking. g) Upgrade crosswalks to "ladder style striping" for improved visibility.

Map Number	Location	Issue	Alternatives Discussed
2)	Town-wide	Bicycle access and safety	<ul style="list-style-type: none"> a) Investigate crash, injury, and fatality data for local intersections. Collect and share data. b) Establish bike facility education program – clarify meaning of sharrows, engage students in outreach and education. c) Implement traffic calming at Route 20A and Main Street. d) Construct Roundabouts at Temple Hill, Main Street, and Mt. Morris (mini circle). e) Main Street Redesign - Begin with cheap curb extensions (paint, curbing, bollards) that include bicycle parking. Test a more delineated mini-roundabout (paint and signs first, then mountable curbing material) around the fountain. Install reverse diagonal parking with 9’ stalls and have a community “try-out” event. Once reverse diagonal parking installed, stripe a bicycle lane in front of the parking. f) Implement bike lanes on Oak Street by eliminating on street parking.
3)	Town-wide	Multi-modal improvements	<ul style="list-style-type: none"> a) Launch transportation demand management with SUNY and county employees. b) Develop an active transportation plan for the community. Identify key gaps, future goals, and specify connectors at missing cul-de-sacs. Require linked roadways between subdivisions. c) Update development requirements to include bike and pedestrian connection improvements and require sidewalk across frontage. d) Update crosswalks to “ladder style striping” for improved visibility. e) Implement traffic calming at Route 20A and Mary Jemison. f) Construct roundabouts at Temple Hill, Main Street, and Mt. Morris (mini circle). g) Main Street Redesign - Begin with cheap curb extensions (paint, curbing, bollards) that include bicycle parking. Test a more delineated mini-roundabout (paint and signs first, then mountable curbing material) around the fountain. Install reverse diagonal parking with 9’ stalls and have a community “try-out” event. Once reverse diagonal parking installed, stripe a bicycle lane in front of the parking.

Map Number	Location	Issue	Alternatives Discussed
4)	Town-wide	Zoning code updates for the east end of town	<ul style="list-style-type: none"> a) Encourage site design with parking located in the back. b) Implement form-based code encouraging mixed-use developments. c) Updated parking requirements to reduce minimum amounts. d) Update development requirements to include bike and pedestrian connection improvements and require sidewalk frontage. e) Require low-impact development features (rain gardens, etc.).

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for town-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the town and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



Infrastructure Programs

Sign Walking and Bicycling Routes

Geneseo benefits from several existing pedestrian and bicycle facilities, but the lack of markings or signage results in residents not being aware of the routes. Signing routes and indicating distance and travel time to key destinations has multiple benefits:

- It encourages residents and visitors to try new walking and bicycling routes
- It reduces misperceptions about walking and bicycling travel time to key destinations
- It reassures bicyclists and pedestrians that they are on the correct route
- It improves visibility of existing routes for all residents and visitors
- It improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists

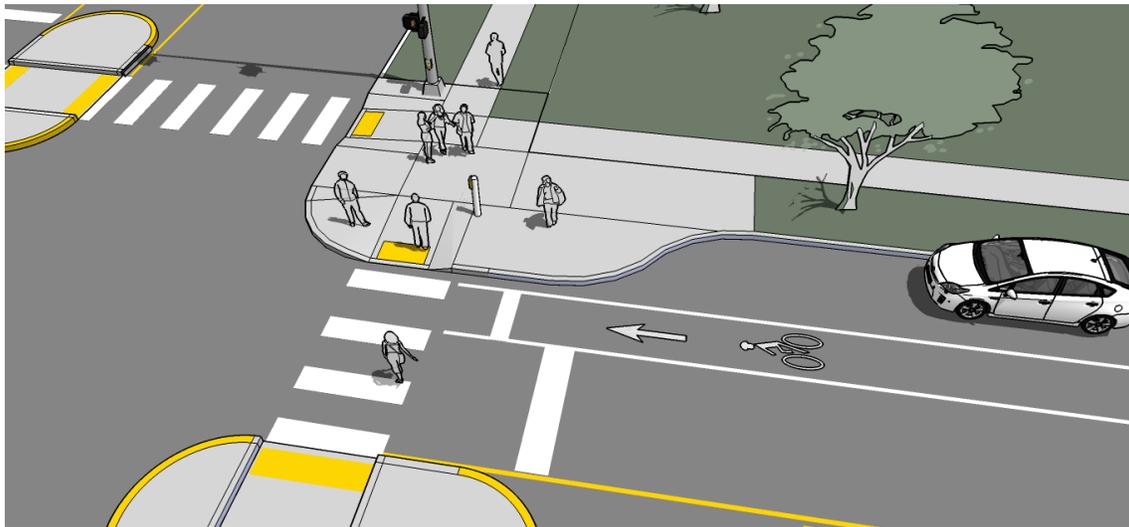


Figure 1:
Sample Bicycle
and Pedestrian
Wayfinding



Traffic Calming (Town-wide)

Walking audit participants expressed a desire for traffic calming measures throughout the Town. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. Geneseo should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts as appropriate.



Example Curb Extension

Main Street and Route 20A Traffic Calming

At the intersection of Main Street and Route 20A, tightening the turn radii without shortening the curb extensions (this is possible because the extensions are ellipses rather than circles) will force traffic to slow as it turns. Additionally, a center island for pedestrian crossing east of the intersection may help slow traffic while easing crossings.



Proposed re-design of intersection at Main Street and Route 20A

Roundabouts

Walk Audit participants expressed the desire for roundabouts as the ultimate goal. They cited the need for roundabouts on Main Street at the intersection with Center Street, the intersection of Mt. Morris Road and Route 20A, and the intersection of Temple Hill Street and South Street. Because roundabouts slow traffic and place the responsibility on motorists and pedestrians (rather than stop lights), they tend to be safer while improving traffic flow.



Proposed roundabout at Main and Center Streets



Proposed Roundabout at intersection of Mt. Morris Road and Route 20A

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older residents, children, and individuals with disabilities). These policies are all similar in spirit, but vary considerably when considering implementation. Once a policy is in place, training is recommended for professionals like planners and engineers whose work will be affected by the policy.

The Principle:

- Simply put, Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets often means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated with all users in mind, resulting in improved safety for all modes.
- Transportation agencies must ensure that all future Complete Street road projects and treatments are appropriate to local context and needs.

Sample policies and best practices: <http://www.completestreets.org/>

Update Zoning Code and Development Standards

The zoning code can be updated to ensure that future land uses and site designs make walking convenient, safe, and enjoyable. Walk Audit participants specifically mentioned the following recommendations regarding updated to future developments.

- Update development requirements to include bike and pedestrian connection improvements.
- Encourage developers to construct parking behind buildings rather than in front.
- Reduce parking requirements (e.g., cite maximums rather than minimums)
- Encourage mixed-use development with offices or apartments above.
- Require low-impact development practices.



Education and Encouragement Programs

Develop and Adopt an Active transportation Plan

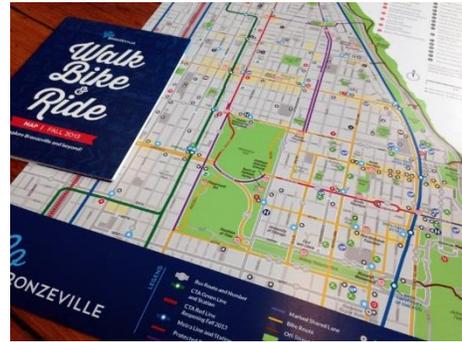
In an effort to continue improving the walking and bicycling facilities and programs in Geneseo, an Active Transportation Plan should be developed for the community. The plan would establish a vision and guiding goals to direct infrastructure improvements, education and encouragement programs, and funding strategies. Public input should be a significant factor to establish priority improvements and community needs.

Pedestrian and Bicycle Skills Campaign

Programs such as a bicycle rodeo or street crossing trainings are useful education programs to teach children how to properly and safely ride a bicycle or walk in neighborhood. The education programs teach skills such as safe riding, what the various signs and facilities types are, how to properly cross a street, and how to be safe when walking on the sidewalk. Adult-oriented classes, like group training sessions facilitated by a League of American Bicyclists instructor, can also be scheduled to improve bicycle and walking knowledge.

Bicycle and Pedestrian Maps

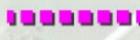
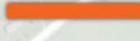
Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

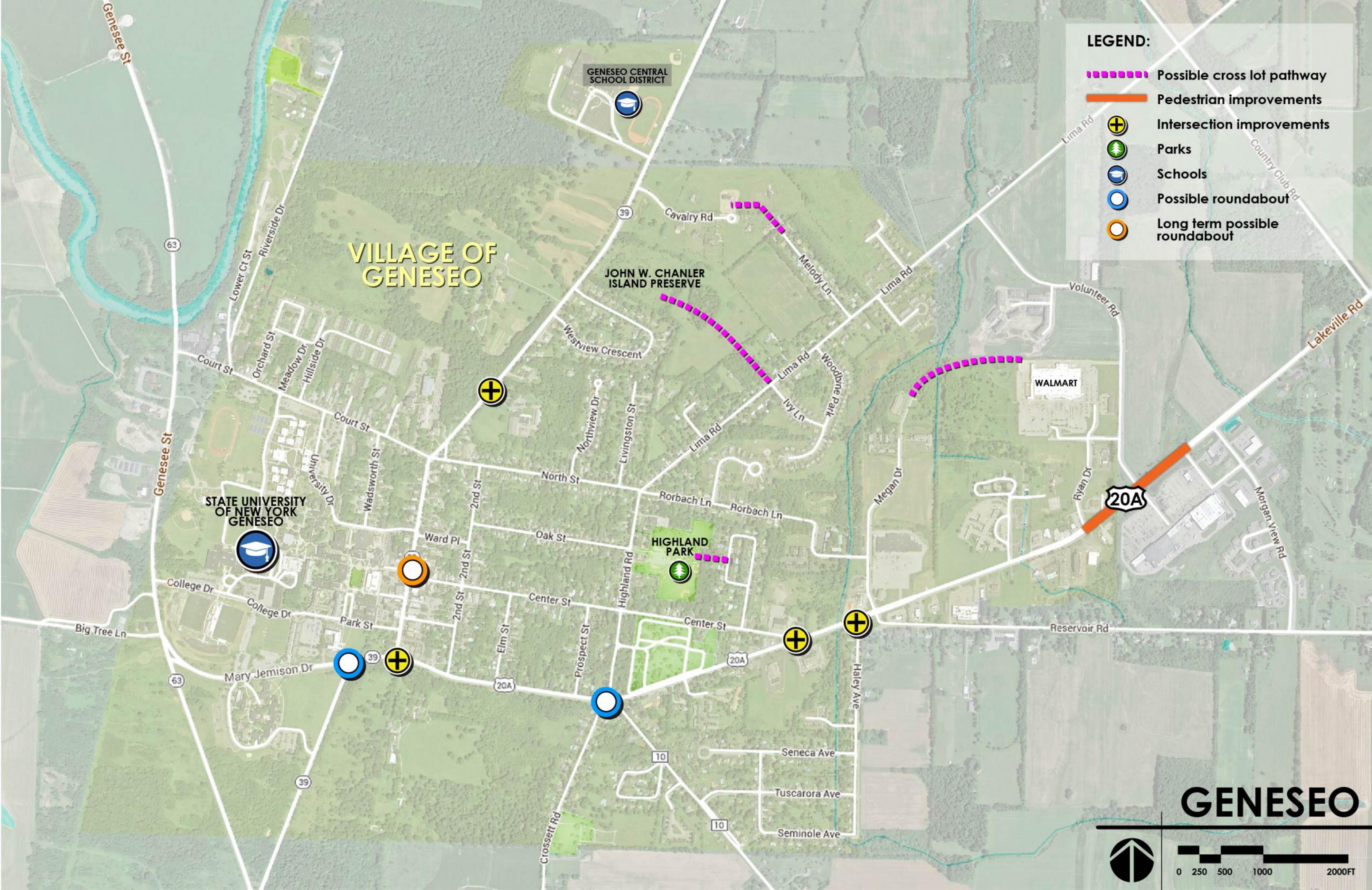


Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, town newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.

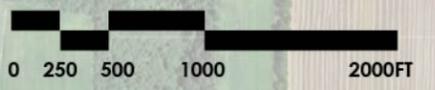
VILLAGE OF GENESEO

LEGEND:

-  Possible cross lot pathway
-  Pedestrian improvements
-  Intersection improvements
-  Parks
-  Schools
-  Possible roundabout
-  Long term possible roundabout



GENESEO





City of Geneva Walkability Action Plan

Introduction

This Action Plan presents the findings and recommendations from the Walkability Audit conducted for the City of Geneva for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Geneva.

Geneva is a city in Ontario and Seneca counties, with a 2010 population just over 13,000 residents and approximately 4.3 square miles. Key walking and bicycling destinations include: Seneca Lake and the Lakefront Park, Hobart & William Smith Colleges, McDonough and Ridgewood Parks, Gulvin Park, and Geneva Middle School, High School, and North Street School, and the downtown shopping area.

A working group was convened with representatives from Genesee Transportation Council staff, local officials and interested residents. The working group members gathered on December 11, 2014 to observe existing conditions and identify issues and opportunities in Geneva.



Walk audit participants discuss community opportunities

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Geneva. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the town. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walk audit was conducted in two stages as a one day event. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walk audit. The working group met the following day to conduct the walk audit. The meeting began with a presentation and discussion of benefits related to improved

walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, overall safety, and gaps within the network. Upon return from the walking tour, the working group broke into sub-groups and was given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.



Members of the working group discuss recommendations

Existing Conditions and Alternatives Considered

Participants at the Walkability Audit identified a variety of issues and opportunities throughout the village.

Map Number	Location	Issue	Alternatives Discussed
1)	Route 14	Difficult Crossing	<ul style="list-style-type: none"> a) Install a series of rectangular rapid flashing beacons b) Install curb extensions
2)	Intersection of Main, Castle, and Milton	Busy/dangerous 5-way intersection	<ul style="list-style-type: none"> c) Install a roundabout
3)	Hwy 5 & 20	High Speeds Cuts off access to Lakefront park	<ul style="list-style-type: none"> a) Road diet b) Reduce speed limits c) Pedestrian bridge
4)	Lakefront (near Hobart and William Colleges)	No pedestrian/bicycle access or connections to destinations. There is an existing trail but it is unpaved and not well advertised.	<ul style="list-style-type: none"> a) Build a paved trail along the rail ROW (rails with trails) to connect destinations along the lake
5)	School areas	Encourage students to walk or bicycle to school or to the bus	<ul style="list-style-type: none"> a) Create an organized walking school bus program where groups of students can walk to schools or collected area bus stops b) Engage students and parents in identifying routes and projects for improvements c) Provide education on safe walking behavior d) Add sidewalks on both sides of roads adjacent to schools

Map Number	Location	Issue	Alternatives Discussed
6)	State Bike Route 14	No bicycle facilities	e) Install bike lanes f) Slow vehicle speeds g) Reroute on to Milton St to Pulteney St to Jay St and back onto Hwy 14 south of the city h) Work with town to address gaps
7)	Intersection of Castle and Geneva	Difficult Crossing	i) Add pedestrian signal j) Install refuge island
8)	Brook Street Park	No ADA access	k) Install ramp at crosswalk on Brook St to allow for ADA Access l) Install sidewalks on east side
9)	Pedestrian Tunnel under rte 5 & 20	Limited, isolated access from west tunnel. Not used to potential	a) Extend complete street to south end of Exchange Street b) Provide safe new rail crossing at south end of Exchange Street/Lake Front Drive
10)	East of S. Main Steet at 5 & 20 Bridge	Sidewalk ends abruptly	a) Install complete sidewalks
9)	City-wide	Sidewalk network is incomplete and often ADA deficient	a) Sidewalk infill projects and ADA improvements
10)	City-wide	Traffic Calming	m) Install curb extensions at locations throughout the city (see map for recommended sites)
11)	City-wide	Snow Covered Sidewalks	a) Create a snow volunteer program to assist with snow removal
12)	City-wide	Lack of bicycle and pedestrian information	a) Create a map with biking and walking routes

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the Walk Audit. The Preliminary Recommendations are the projects considered the top priority for village-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the city and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.

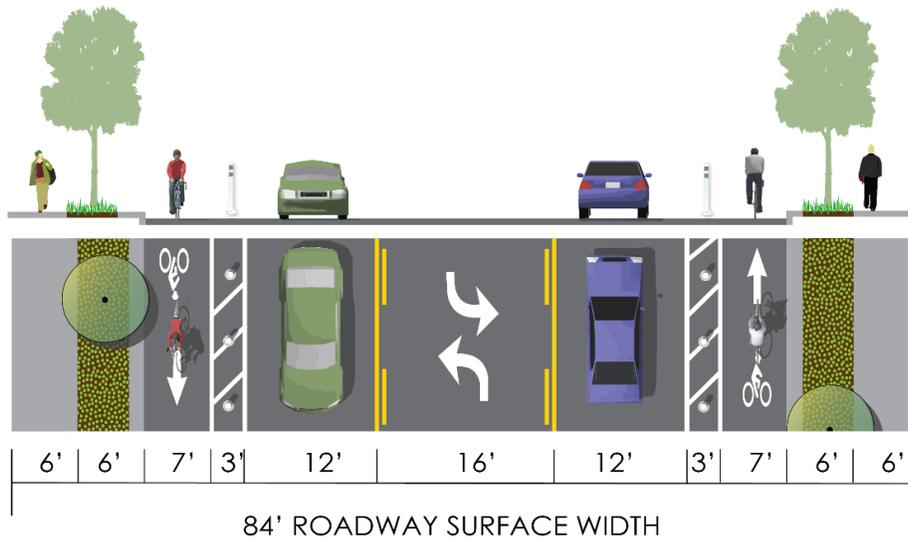
Infrastructure Programs

Road Diet Feasibility Study for Hwy 5 & 20

A road diet is reconfiguration of the roadway involving a reduction of the number of lanes. Road diets provide a number of benefits when implemented properly:

- Improved safety (19-47 percent reduction in overall crashes)¹
- More consistent traffic flow (speed differential reductions)
- Bicycle and pedestrian benefits

For Highway 5 & 20 a road diet would reduce the number of lanes from five to three lanes. There are multiple ways that the roadway space could be reallocated and Figure 3 demonstrates one potential option. A feasibility study would be required to evaluate the effectiveness and configuration of the road diet for Highway 5 & 20.



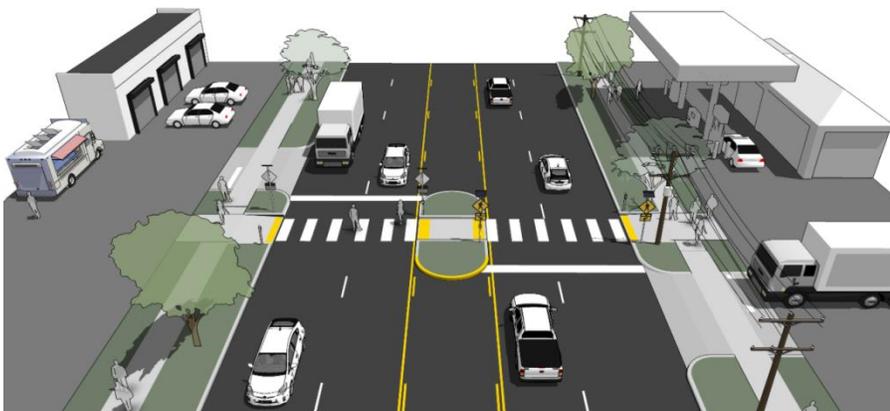
Potential cross section of Hwy 5 & 20 after a road diet

Install Traffic Calming and Improve Crossings on Route 14

Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The City should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect the street from high speeds, and pedestrian/vehicle conflicts when warranted.

Walk audit participants mentioned that crossings are currently difficult on Route 14. A series of rectangular rapid-flash beacons (RRFB's) could be installed along Route 14 to create comfortable crossings. Figure 4 displays a typical

RRFB crossing, which light uses LED lighting to ensure that motorists are aware a pedestrian is present.



A crosswalk with a RRFB installed

¹ Federal Highway Administration. *Road Diet Informational Guide*. November 2014.

Install a Roundabout at the Intersection of Main, Castle, and Milton

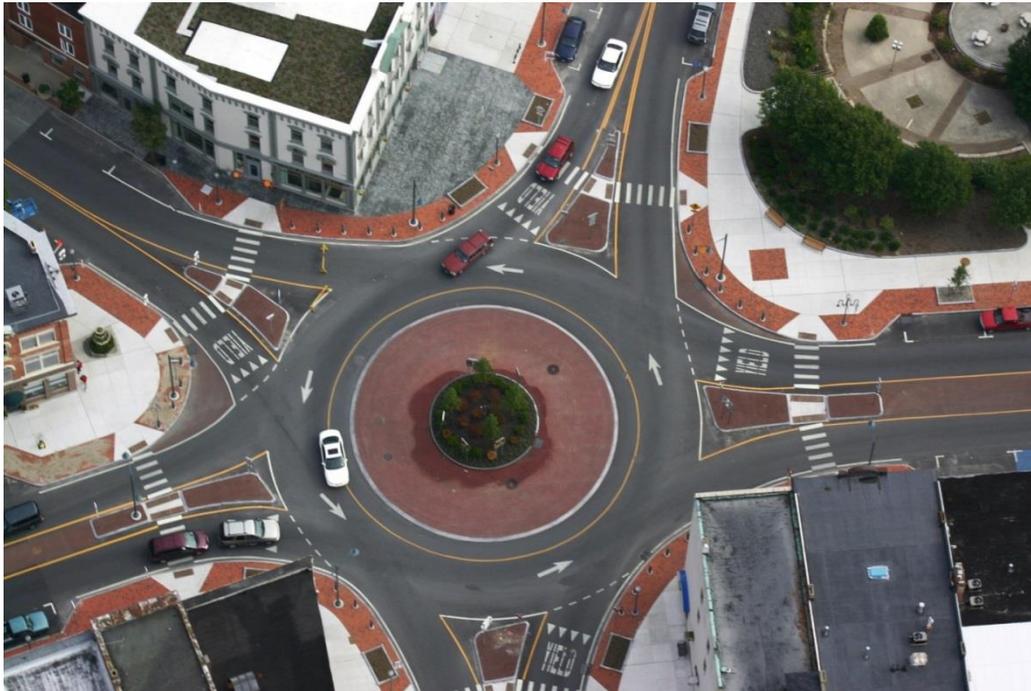
Roundabouts are a circular intersection designed with yield control for all entering traffic, channelized approaches and geometry to induce desirable speeds. They are used as an alternative to intersection signalization.

It is important to indicate to motorists, bicyclists and pedestrians the right-of-way rules and correct way for them to circulate, using appropriately designed signage, pavement markings, and geometric design elements.

Typical guidelines:

- 25 mph maximum circulating design speed.
- Design approaches/exits to the lowest speeds possible.
- Encourage bicyclists navigating the roundabout like motor vehicles to “take the lane.” This term is often used to describe bicyclists riding closer to the center of the travel lane, discouraging motor vehicles from passing.
- Maximize yielding rate of motorists to pedestrians and bicyclists at crosswalks.
- Provide separated facilities for bicyclists who prefer not to navigate the roundabout on the roadway.

Figure 5 displays a single lane, five-way roundabout. The design could be implemented to accommodate the five-way intersection of Main, Castle and Milton.



A Single Lane, Five-way Roundabout

Adopt Supportive Policies

Work with NYSDOT to Reroute State Bike Route 14

NYS Bike Route 14 is already routed on a parallel street to NYS Route 14 through the northern portion of Geneva. Consider working with NYSDOT to continue NYS Bike Route 14 on parallel streets south of Milton Street, such as Pulteney Street. Pulteney Street is a lower volume, local road that will be more comfortable for the average cyclist.

Citywide Sidewalk Improvement Program

Walk audit participants repeatedly cited improvements in the sidewalk network as a priority. Make sidewalk improvements to infill and repair stretches of the walkway network, giving priority to hazardous sidewalks and missing curb ramps, and whenever possible protecting street trees by avoiding root damage. A study should be conducted on existing sidewalk conditions to allow for prioritization of projects. Since the sidewalks are considered the responsibility of the property owners in the City, a formalized inspection program that ensures regular inspection of sidewalks could be a viable option.

Snow Removal Program

Snow and ice represent seasonal challenges to bicycling. When snowplows remove snow and ice from roadways, it is usually deposited on roadway edges. This creates a very difficult bicycling environment by narrowing the curb lane or blocking the bike lane.

While trails are plowed in the winter, they are low priority and it may take several days before they are cleared.

Ice on the roadway presents a more serious challenge to cyclists than motorists. Proper drainage for snowmelt, and more aggressive treatment of roadway surfaces in freezing temperatures may help increase the cycling season for some hardy riders. Timely removal of traction sands and winter debris will also improve cycling conditions and stormwater quality.



Many cyclists ride year-round in snowy climates.

Education and Encouragement Programs

Walking Tours

Hosting regular walking tours can encourage healthy lifestyles by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

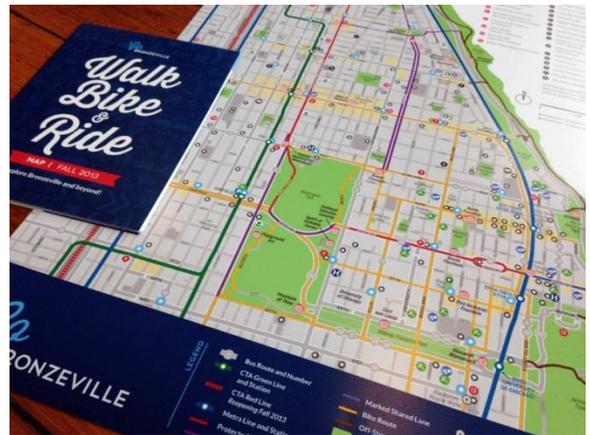
- Organized walks to the Farmers' Market
- Regular walks to local parks or in the Seneca Lake State Park
- A table at the Farmers' Market providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell give-aways
- Walking tour that emphasizes and highlights the architectural features of the city, such as the red brick historic district.

The City can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage visitors to bike and walk in the neighborhood by providing route and facility information and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, city newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



Example of a walking and biking map.



Village of Medina Walkability Action Plan

Introduction

The Medina Walkability Action Plan presents the findings and recommendations from the Walkability Audit conducted for the Village of Medina for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Medina.

Medina is the largest village in Orleans County, with a 2010 population just over 6,000 residents and an approximate size of 3.3 square miles. It lies partially in the town of Shelby and partially in the town of Ridgeway. Key walking and bicycling destinations include John E. Butts Memorial Park, the Erie Canal Heritage Trail, Glenwood Lake, State Street Park, Gulf Street Park, and Medina High School. The primary roadways in Medina include Center Street and Main Street – particularly the intersection of these two streets.

A working group consisting of representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in Medina. The working group members gathered on April 28th, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Medina. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the village. In addition, many identified alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walk audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the walk audit. A larger working group met again that afternoon to conduct the walking audit portion, which built upon previous observations.

The meeting began with a presentation and discussion of benefits related to improved



walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees broke into smaller work groups, and were given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the village.

Map Number	Location	Issue	Alternatives Discussed
1)	Village-wide	Lack of funding for sidewalk repairs	<ul style="list-style-type: none"> a) Create a sidewalk plan that inventories and prioritizes repairs (e.g. near schools). b) Adopt a local Complete Street policy (stronger than NYSDOT policy). c) Create incentives or other means to encourage and assist homeowners with making sidewalk repairs. Retain the Medina stone where feasible.
2)	Village-wide	Poor sidewalk conditions force pedestrians into streets	<ul style="list-style-type: none"> a) Create a sidewalk plan that inventories and prioritizes repairs (e.g. near schools). b) Adopt a local Complete Street policy (stronger than NYSDOT policy). c) Develop a Complete Streets Committee to work on policy and prioritize actions. d) Implement sidewalks or multi-use paths to the developments (west of village) and senior housing (east of village) on Maple Ridge. e) Provide incentives to encourage and assist homeowners with sidewalk repairs, retaining the Medina stone sidewalks where feasible. f) Fill in sidewalk gaps, especially near schools (e.g. west side of Gwinn Street near the Middle School and connecting to apartments near Maple Ridge). g) Establish a volunteer program to help clear sidewalks in the winter.

Map Number	Location	Issue	Alternatives Discussed
3)	Village-wide	Sidewalk maintenance is the homeowner's responsibility, but it is not enforced. Village program to assist in sidewalk repair by removing the old material is not well known.	<ul style="list-style-type: none"> a) Create sidewalk plan that inventories and prioritizes repairs (e.g. near schools). b) Provide incentives to encourage and assist homeowners with sidewalk repairs, retaining the Medina stone sidewalks where feasible. c) Establish a volunteer program to help clear sidewalks in the winter. d) Educate community on incentive program
4)	Downtown	High renovation costs prohibit multi-story downtown redevelopment	<ul style="list-style-type: none"> a) Encourage and incentivize infill downtown b) Change building and zoning codes to support development
5)	NYS Bike Route 5	NYS Bike Route 5 is in poor bicycling condition (narrow, not signed, improper drainage gates)	<ul style="list-style-type: none"> a) Adopt a local Complete Street policy (stronger than NYSDOT policy) b) Develop a Complete Streets Committee to work on policy and prioritize actions c) Encourage NYSDOT to improve/ mark existing NYS Bike Route 5 d) Develop a bicycle plan to identify key Village routes and necessary improvements e) Construct bicycle facilities on Route 63 from Route 31 (State Bike Route 5) to connect downtown
6)	Village-wide	Crosswalks are substandard or non-existent, particularly on Gwinn Street (school access) and Main Street (neighborhood and park access)	<ul style="list-style-type: none"> a) Adopt a local Complete Street policy (stronger than NYSDOT policy). b) Develop a Complete Streets Committee to work on policy and prioritize actions. c) Improve crosswalks at key locations (Maple Ridge/South Main, near schools, across South Main Street – particularly, installing a midblock crossing near John E. Butts Memorial Park). d) Install traffic calming on Main Street, especially south of downtown (i.e. chicanes, mid-block crossings). e) West, Park, Gwinn, and Horn Roads will be re-paved in May - opportunity to add bicycle facilities, and crosswalks. f) Implement traffic calming treatments on Gwinn Street to help enforce 15 MPH school zone limit. g) Add traffic calming on Gwinn Street to help enforce 15 MPH school zone limit.

Map Number	Location	Issue	Alternatives Discussed
7)	Village-wide	Zoning code does not have sidewalk requirements for new developments	<ul style="list-style-type: none"> a) Adopt a local Complete Street policy (stronger than NYSDOT policy). b) Develop a Complete Streets Committee to work on policy and prioritize actions. c) Update zoning code with sidewalk standards for new developments.
8)	Downtown	Downtown as a destination. Lack of signage to encourage bicyclists or boaters on the Erie Canal to visit downtown.	<ul style="list-style-type: none"> a) Create bicycle connections between the Canalway Trail and downtown (wayfinding signage, clear bike routes). b) Develop a bicycle plan to identify key Village routes and necessary improvements. c) Clearly mark pedestrian path/route through parking lot at Town Hall. d) Construct bicycle facilities on Route 63 from Route 31 (State Bike Route 5) to connect downtown. e) Implement back-in angled parking in the business district to improve bicycle and pedestrian safety. f) Establish better signage from Route 31 to downtown.
9)	Village-wide	Poor road conditions	<ul style="list-style-type: none"> a) Adopt a local Complete Street policy (stronger than NYSDOT policy). b) Develop a Complete Streets Committee to work on policy and prioritize actions. c) Develop a bicycle plan to identify key Village routes and necessary improvements. d) West, Park, Gwinn, and Horn Roads will be re-paved in May - opportunity to add bicycle facilities, and crosswalks. e) Work closely with NYDOT to coordinate Complete Street improvements with their maintenance schedule.
10)	Village-wide	OTS bus service heavily utilized	<ul style="list-style-type: none"> a) Adopt a local Complete Street policy (stronger than NYSDOT policy). b) Develop a Complete Streets Committee to work on policy and prioritize actions. c) Encourage transit oriented development and design of facilities.

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for village-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the village and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



Infrastructure Programs

Wayfinding Program

Landmarks, natural features, civic destinations, neighborhood business districts and other visual cues help residents and visitors navigate through Medina. Wayfinding signs help people traveling along the pedestrian and bicycle networks and direct them to community destinations. The benefits of a complete wayfinding system include:

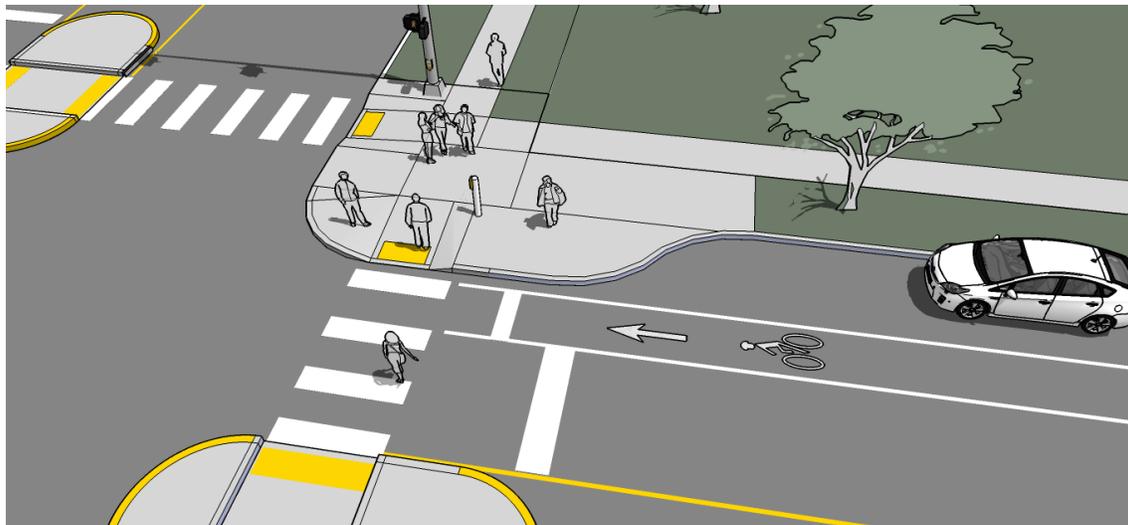
- Enhances users ability to navigate the pedestrian and bikeway network and find key attractors
- Provides key information such as destinations, direction, and distance
- Supports and promotes the Village's identity
- Raises community awareness of the bikeway and walkway networks
- Improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists

A coordinated, well-designed signage system improves the coherency of the bikeway and walkway systems and can provide a greater sense of user security and comfort, as users receive confirmation that they are on the correct route and are aware of how far they have to travel to reach their destination.

Traffic Calming (Village-wide)

Walking audit participants expressed a desire for traffic calming measures throughout the Village of Medina, particularly near schools, on Main Street, and on Gwinn Street. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The Village should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes, to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts as appropriate.

Example Bicycle and Pedestrian Wayfinding



Example Curb Extension and Bike Lane

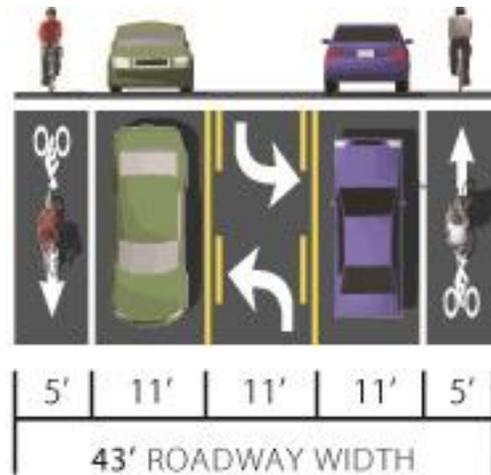
Main Street

There is a desire to slow traffic on Main Street, especially south of downtown. Implementing traffic calming devices such as curb extensions downtown (particularly at Center Street) and southward would improve crossing safety, slow traffic, and improve the streetscape. Chicanes can also be used to slow traffic where there are fewer crosswalks south of the railroad tracks to Oak Orchard Street. Chicanes in this area could be employed at minimal cost using tabular markers rather than a full build out of curbs. There is also space to implement a bike facility, which has been shown to slow traffic and improve the safety of a corridor in addition to providing a dedicated space for bicyclists.

Additionally, the crossing on Main Street at Oak Orchard could benefit from curb extensions, squared crossings, crosswalks, and additional pedestrian crossing signage.

Multi-use Paths

To encourage a connection between “the two Medinas” – downtown and the Maple Ridge area – sidewalks or multi-use paths are suggested on Maple Ridge to developments west of the village (e.g. Lakewood Village, the Charles Street area) and to senior housing east of the village (e.g. Orchard Manor). This could be accomplished by widening existing sidewalks or using excessive roadway space. Further study is required to determine the preferred alternative.



Center Street bike lanes

Bicycle Facilities

The Erie Canal Heritage Trail and State Bike Route 5 are the two main bicycle facilities that run through Medina. The Erie Canal Heritage Trail runs along the northern bank of the canal and State Route 5 follows Center Street through the village.

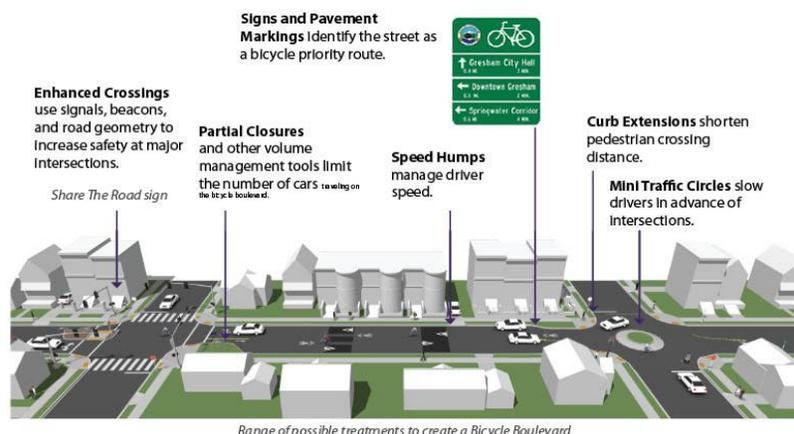


Main Street bike lanes

The addition of a five foot bike lane on both sides of Center Street would encourage greater use and provide safety improvement

for bicyclists as they ride through the village. Center Street has ample roadway space and the bike lane would only require restriping and the removal of parking for two blocks. There are less than 40 spots in those blocks, most of which are under-utilized and adjacent to parking lots. Considering the abundance of diagonal parking on Main Street, this would appear to have little adverse impact. As an alternative, the bike lane could transition to shared lane markings with additional traffic calming.

On Main Street, there is diagonal parking from the railroad tracks north almost to Glenwood Avenue with a five foot space between the parking and the roadway. By painting an additional line parallel to the fog line at the end of the parking space, this section can be repurposed into a bike lane. For further safety improvements, parking here can be converted to back in parking to improve visibility. Where Main



Street narrows to accommodate curb extensions or street trees, shared lane markings can be added to accommodate bicycles.

In addition to the suggestions for Center and Main Streets, a bicycle boulevard could connect the Erie Canal Heritage Trail with the Medina Railroad Museum, the Lee-Whedon Memorial Library, Oak Orchard Elementary School, Medina High School, and the Clifford H. Wise Middle School. Bicycle boulevards are low-volume, low-speed streets modified to enhance bicyclist comfort by using treatments such as signage, pavement markings, traffic calming, and intersection modifications. These treatments allow through movements of bicyclists while discouraging similar through-trips by non-local motorized traffic. As a guideline, bicycle boulevards should include a variety of traffic calming treatments to maximize the safety and comfort of the roadway. These traffic calming enhancements can include, but are not limited to, speed humps, curb extensions, mini traffic circles, and stop signs. A designated Bicycle Boulevard could extend south along West Avenue from its intersection with Main Street to Oak Orchard Street where it would split west to the schools, and east to re-connect with Main Street (Highway 31).

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older residents, children, and individuals with disabilities). These policies are all similar in spirit, but vary considerably when considering implementation. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).



The Principle:

- Simply put, Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets often means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated with all users in mind, resulting in improved safety for all modes.
- Transportation agencies must ensure that all future Complete Street road projects and treatments are appropriate for local context and needs.

Sample policies and best practices: <http://www.completestreets.org/>

Citywide Sidewalk Improvement Program

Walking audit participants repeatedly cited improvements in the sidewalk network as a priority. Sidewalk improvement entails consistently filling gaps, repairing long stretches, giving priority to hazardous sidewalks and missing curb ramps, and protecting street trees by avoiding root damage. A study should be conducted on existing sidewalk conditions to allow for prioritization of projects.



Infill

Recent developments in downtown have been concentrated mostly on the street-facing level; however, audit participants want to encourage mixed-use properties and developing residential spaces on the upper floors. Encouraging infill and denser, mixed-use development will establish a healthier downtown with the influx of residents and workers overlapping and creating a more active downtown throughout the day. It is suggested that the Village create incentives to redevelop these upper floor spaces – perhaps tax incentives for developers and/or residents. In addition to tax incentives, simplifying the permitting process can increase interest in redevelopment.

Development and Design Guidelines

Design guidelines included in construction and zoning documents provide clear requirements regarding the construction of more bicycle- and pedestrian-friendly developments. Guidelines can specify different standards for the village center, including wider sidewalk minimums, planting strips or other buffer areas to protect pedestrians, a requirement for sidewalks for all new developments, or the placement of parking at the back of buildings. This tool should be used to ensure that sidewalks and bicycle facilities are constructed as part of all new and updated facilities. The code can also specify minimum bicycle parking requirements as well as establishing bicycle parking as a community benefit for a developer seeking an exemption.

Education and Encouragement Programs

Walking Tours

Hosting regular walking tours can encourage healthy lifestyles by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

- Organized walks to the Railroad Museum
- Regular walks along the Canal Heritage Trail
- A table at the Parade of Lights or Ale in Autumn providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell giveaways

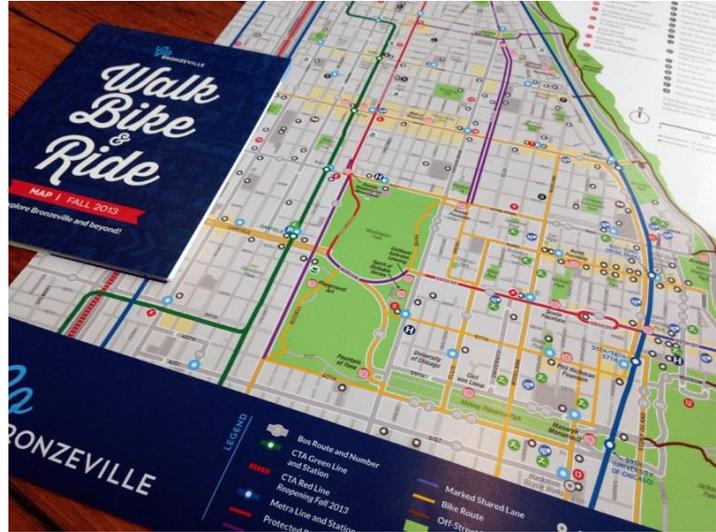
The village can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.



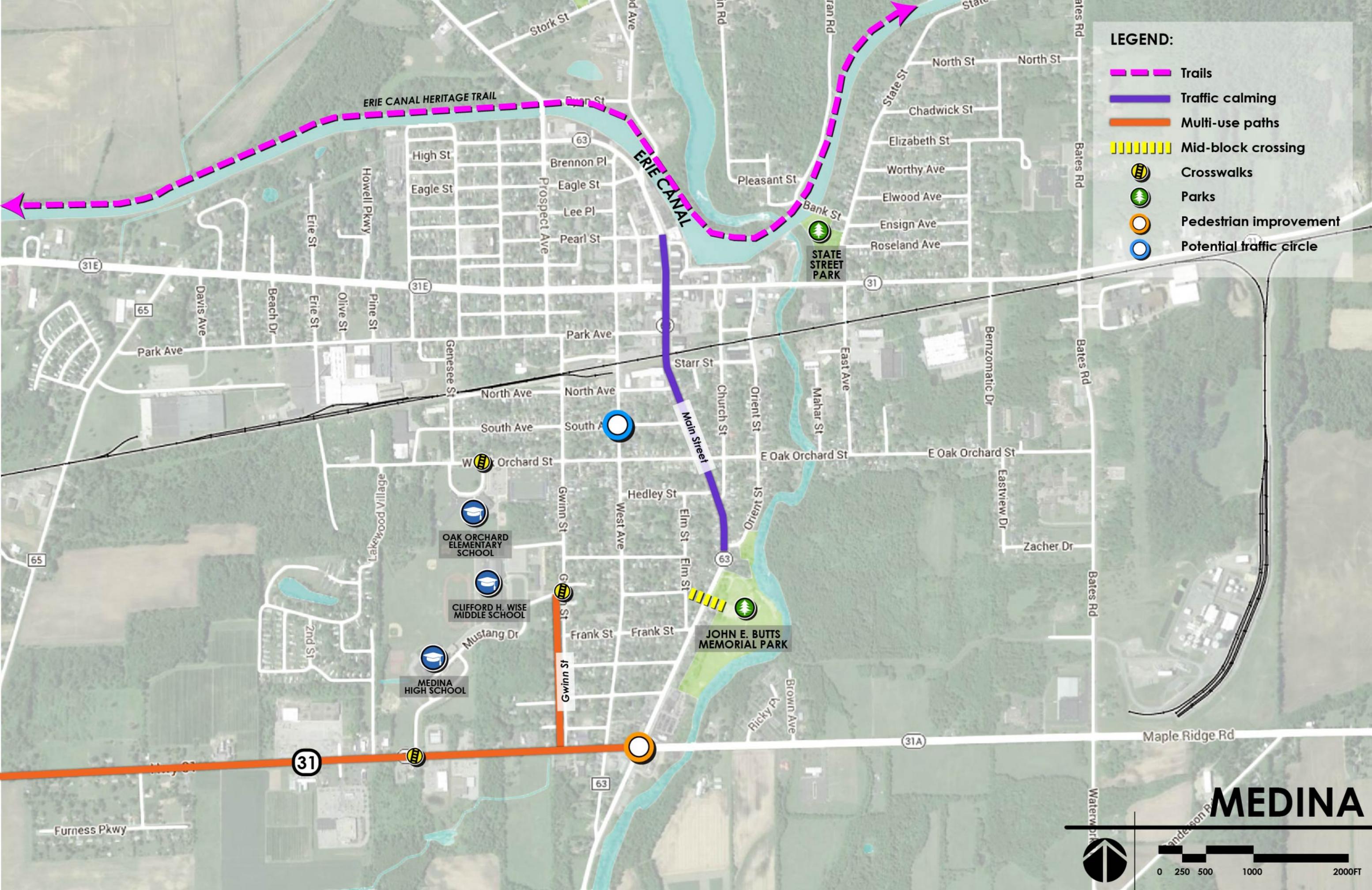
Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

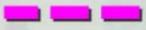
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, town newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



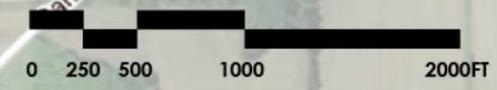
Example bicycle and pedestrian wayfinding map



LEGEND:

-  Trails
-  Traffic calming
-  Multi-use paths
-  Mid-block crossing
-  Crosswalks
-  Parks
-  Pedestrian improvement
-  Potential traffic circle

MEDINA





Town of Penfield Walkability Action

Introduction

The Penfield Walkability Action Plan presents the findings and recommendations from the walkability audit conducted for the Town of Penfield for the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in Penfield.

Penfield is the eighth-largest town in Monroe County, with a 2010 population just over 36,000 residents and an approximate size of 38 square miles. Key walking and bicycling destinations include: Abraham Lincoln Park, Lucien Morin Park, Greenwood Park, Rothfuss Park, Hipp Brook Preserve, Veteran's Memorial Park, Harris Whalen Park, Ellison Park, Linear Park, Penfield High School, and the Plank Road Elementary schools. Primary roadways include Plank Road (Route 11), Five Mile Line Road (Route 18) Atlantic Avenue (Route 286), Fairport Nine Mile Point Road (Route 250), Penfield Road (Route 441), and Empire Boulevard (Route 404).

A working group consisting of representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in Penfield. The working group members gathered on April 14th, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in Penfield. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the town. In addition, many alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walking audit facilitator and several members of the community. This tour allowed for a wider tour of the community and some initial observations prior to the audit. A larger working group met again that afternoon to conduct the walking audit portion, which built upon previous observations.



The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a

walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees were given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the town.

Map Number	Location	Issue	Alternatives Discussed
1)	Town-wide	Major routes are State Routes and the Town has minimal influence over NYSDOT design	a) Build community support to encourage NYSDOT to adhere to its Complete Streets policy
2)	Town-wide	Excellent, but underutilized, sidewalk coverage	a) Create alternative routes for pedestrians by implementing a greenway along Town drainage ways b) Accommodate and encourage pedestrians and bicyclists by strategically widening sidewalks into multi-use paths, especially along major corridors where on-road bicycling feels unsafe (e.g. Route 441)
3)	Town-wide	Pedestrians use personal vehicles during bad weather/winter and often lag in returning to walking when the weather improves	a) Consider creating a formal advocacy group to encourage walking and bicycling (e.g. GObike Buffalo)
4)	Town-wide	No bus shelters and limited transit option	a) Work with RTS to expand transit options, possibly an eastern suburban circulator (Webster, Penfield, East View/Victor) b) Adopt a local Complete Streets policy (stronger than NYSDOT policy)

Map Number	Location	Issue	Alternatives Discussed
5)	Town-wide	Limited bike lanes and illegal to ride a bike on sidewalks (enforced by police)	<ul style="list-style-type: none"> a) Adopt a local Complete Streets policy (stronger than NYSDOT policy) b) Consider creating a formal advocacy group/formal advisory board to encourage walking and bicycling (e.g. GObike Buffalo) c) Consider formalizing “back-lot” connections - link subdivisions to plazas and parks d) Accommodate and encourage pedestrians and bicyclists by strategically widening sidewalks into multi-use paths, especially along major corridors where on-road bicycling feels unsafe (e.g. Route 441) e) Establish a series of interconnected neighborhoods that provide access to parks, the YMCA, and other recreation opportunities
6)	Town-wide	Many residents have long commutes that require using a personal vehicle	<ul style="list-style-type: none"> a) Work with RTS to expand transit options, possibly an eastern suburban circulator (Webster, Penfield, East View/Victor)
7)	Town-wide	Large lot residential development is common (1/2+ acre lots)	<ul style="list-style-type: none"> a) Encourage denser, mixed use zoning (e.g. by the YMCA)
8)	Town-wide	Average homebuyer age is 33, focus is on families with children	<ul style="list-style-type: none"> a) Implement Safe Routes to School Programs b) Adopt a local Complete Street policy (stronger than NYSDOT policy) c) Establish a series of interconnected neighborhoods that provide access to parks, the YMCA, and other recreation opportunities
9)	Town-wide	Town slow to implement 2008 bike master plan	<ul style="list-style-type: none"> a) Consider creating a formal advocacy group/formal advisory board to encourage walking and bicycling (e.g. GObike Buffalo) b) Adopt a local Complete Streets policy (stronger than NYSDOT policy)
10)	Town-wide	NYSDOT has a Complete Streets policy, but often forgoes bicycle and pedestrian accommodations due to cost (ex: NYSDOT resurfaced Route 441, but did not widen shoulders, sidewalks, etc. as originally planned)	<ul style="list-style-type: none"> a) Adopt a local Complete Streets policy (stronger than State policy) b) Consider creating a formal advocacy group/formal advisory board to encourage walking and bicycling (e.g. GObike Buffalo)

Map Number	Location	Issue	Alternatives Discussed
11)	Empire Boulevard	Preferred boulevard roadway, but due to traffic counts, NYSDOT implemented a center-turn lane design on Empire Boulevard	<ul style="list-style-type: none"> a) Review NYSDOT maintenance schedule and identify opportunities for restriping b) Build community support to encourage NYSDOT to adhere to State Complete Street policy c) Consider creating a formal advocacy group/formal advisory board to encourage walking and bicycling (e.g. GObike Buffalo)
12)	Town-wide	Due to roadway safety concerns, many families don't allow children to walk or bike to parks	<ul style="list-style-type: none"> a) Consider creating a formal advocacy group/formal advisory board to encourage walking and bicycling (e.g. GObike Buffalo) b) Adopt a local Complete Streets policy (stronger than State policy) c) Establish a series of interconnected neighborhoods that provide access to parks, the YMCA, and other recreation opportunities d) Accommodate and encourage pedestrians and bicyclists by strategically widening sidewalks into multi-use paths, especially along major corridors where on-road bicycling feels unsafe (e.g. Route 441) e) Create alternative routes for pedestrians by implanting a greenway along Town drainage ways f) Implement Safe Routes to School Program
13)	Town-wide	High speeds on major roadways make pedestrians and bicyclists feel unsafe/uncomfortable	<ul style="list-style-type: none"> a) Adopt a local Complete Streets policy (stronger than State policy) b) Accommodate and encourage pedestrians and bicyclists by strategically widening sidewalks into multi-use paths, especially along major corridors where on-road bicycling feels unsafe (e.g. Route 441) c) Create alternative routes for pedestrians by implanting a greenway along Town drainage ways
14)	Town-wide	Aging population and limited transit options in town	<ul style="list-style-type: none"> a) Work with RTS to expand transit options, possibly an eastern suburban circulator (Webster, Penfield, East View/Victor) b) Establish a series of interconnected neighborhoods that provide access to parks, the YMCA, and other recreation opportunities c) Develop Transportation Demand Management and Ride Share programs

Map Number	Location	Issue	Alternatives Discussed
15)	YMCA and Town Hall	Link YMCA and Town Hall through development	a) Encourage denser, mixed use zoning between YMCA and Town Hall to establish a "second town center" b) Mitigate drive-thru and "big box" developments

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for town-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the town and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.

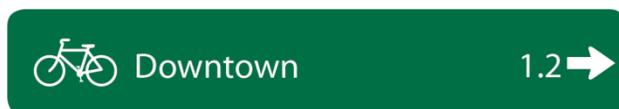


Infrastructure Programs

Sign Walking and Bicycling Routes

Penfield benefits from several existing pedestrian and bicycle facilities, but the lack of markings or signage results in residents not being aware of the routes. Signing routes and indicating distance and travel time to key destinations has multiple benefits:

- Encourages residents and visitors to try new walking and bicycling routes
- Reduces misperceptions about walking and bicycling travel time to key destinations
- Reassures bicyclists and pedestrians that they are on the correct route
- Improves visibility of existing routes for all residents and visitors
- Improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists

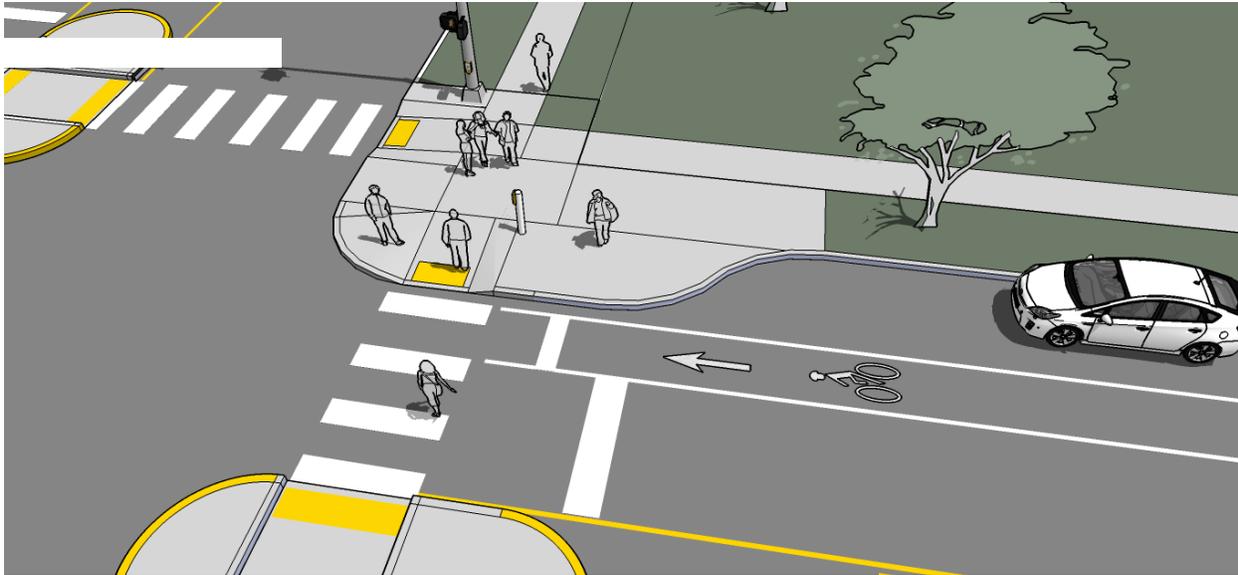


Pedestrian Directional

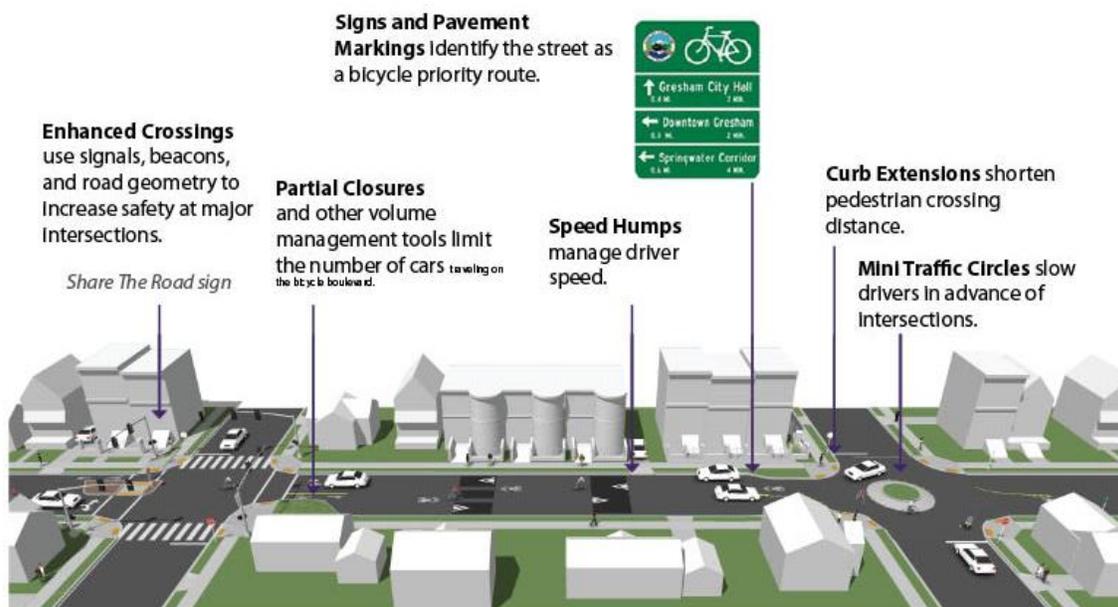
Sample Bicycle and Pedestrian Wayfinding

Traffic Calming (Town-wide)

Walking audit participants were vocal about high-speed streets and expressed a desire for traffic calming measures throughout the Town of Penfield. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users, while not sacrificing vehicle level of service. Penfield should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes, to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts as appropriate.



Example Curb Extension and Bike Lane



Complete Street/Bicycle Boulevard treatments

Route 250 and Route 441 Intersection

The Route 250 and Route 441 intersection is the site of multiple lanes of traffic and was commonly discussed during the walking audit. The long crosswalks require crossing times well over 30 seconds, resulting in a high level of pedestrian exposure and a hesitance to use this route due to perceived safety concerns. Intersection improvements such as tighter curb radii, pedestrian refuge islands, and other traffic calming would help make this intersection more pedestrian-friendly.

Two alternatives have been designed for this intersection:

For both alternatives, the curb radii are reduced, the crosswalks are pulled back from the intersection, and median refuge islands have been added to Route 441. These improvements decrease the crossing distance by approximately 34 feet on the east side of Route 441 and 44 feet on the west side, resulting in a reduced crossing time of 10 and 12 seconds. Crossing distance for the north and south sides of Route 250 has been reduced by over 40 feet resulting in a reduced crossing time of 12 seconds.



Route 250/Route 441 Intersection Alternative 1



Route 250/Route 441 Intersection Alternative 2

In addition to the above improvements, Alternative 1 implements a similar median found on Route 441 to Route 250. The addition of a median on Route 250 established a dedicated left turn lane and provides the opportunity to install a pedestrian refuge island.

Alternative 2 reduces the width of all five lanes on Route 250 to ten feet. The road diet, or lane narrowing, creates enough room to add a bicycle lane on both sides of Route 250.

Additionally, it may be appropriate to either strategically widen sidewalks, creating multi-use paths to accommodate pedestrians and bicyclists, or to create more robust, protected bike facilities on major routes like Routes 250 and 441.

Informal Connections

Some infrastructure improvements may not require much research or study. There are existing “back lot” connections from subdivisions to plazas and parks and formalizing these informal connections is a simple solution to meet public demand. An apparent example can be seen in the Highland Drive, Cobblestone Crossing area where a paved bicycle and pedestrian path connects this subdivision with Cobbles Elementary School. This reduces the distance that a resident of Cobblestone Crossing would have to take from their home to the school by over 60%, or approximately 1,200 feet, and helps them avoid travelling on busy streets or crossing parking lots. If this shortcut hadn’t existed, necessity would have created it.

Adopt Supportive Policies

Develop and Adopt a Complete Streets Policy

Local governments adopt Complete Streets policies in order to direct transportation planners and engineers to consistently design roadways with all users in mind (e.g., motorists, transit riders, pedestrians, bicyclists, older residents, children, and individuals with disabilities). These policies are all similar in spirit, but vary considerably when considering implementation. Once a policy is in place, training is recommended for professionals whose work will be affected by the policy (e.g., planners and engineers).

The Principle:

- Simply put, Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a Complete Street.
- Creating Complete Streets often means changing the policies and practices of transportation agencies.
- A Complete Streets policy ensures that the entire right-of-way is routinely designed and operated with all users in mind, resulting in improved safety for all modes.
- Transportation agencies must ensure that all future Complete Street road projects and treatments are appropriate to local context and needs.

Sample policies and best practices: <http://www.completestreets.org/>

Update Zoning Code

The zoning code can be updated to ensure that future land uses and site designs make walking convenient, safe, and enjoyable. Walking audit participants specifically mentioned the following recommendations for the zoning code:

- Require sidewalks on both sides of commercial and residential developments
- Commercial and retail buildings should have a build-to line of 20-30 feet, rather than a set-back line
- Offering parking behind buildings or on-street along parking boulevards
- Reduce parking requirements (maximum amount rather than minimum amount) and add a bicycle parking requirement
- Encourage two-story development with offices or apartments above



Townwide Sidewalk Improvement Program

Walking audit participants repeatedly cited improvements in the sidewalk network as a priority. Sidewalk improvement needs consist of filling gaps, repairing long stretches, giving priority to hazardous sidewalks and missing curb ramps, and protecting street trees by avoiding root damage. A study should be conducted on existing sidewalk conditions to allow for prioritization of projects.

Transit Options

Because Penfield is a suburb of Rochester, most of the transit options are between the City and the town. Walking audit participants would like to improve the transit options by adding a circulator bus that would travel through the east side communities of Webster, Penfield, East View, and Victor. It is suggested that the Town work with the Regional Transit Service to achieve this goal. Improved transit would encourage greater multimodal trips and walking to and from stop locations.

Development and Design Guidelines

Design guidelines included in town code provide clear direction to developers and promote the provision of appropriate bicycle and pedestrian consideration during new development. Guidelines can specify different standards for the town center, including wider sidewalk minimums, planting strips or other buffer areas to protect pedestrians, building setbacks, and placement of parking at the back of buildings. Sidewalks and bicycle facilities should be constructed as a part of all new and updated facilities. The code can also specify minimum bicycle parking requirements and establish bicycle parking as a community benefit for a developer seeking an exemption.

Education and Encouragement Programs

Walking Tours

Hosting regular walking tours can encourage healthy lifestyles by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

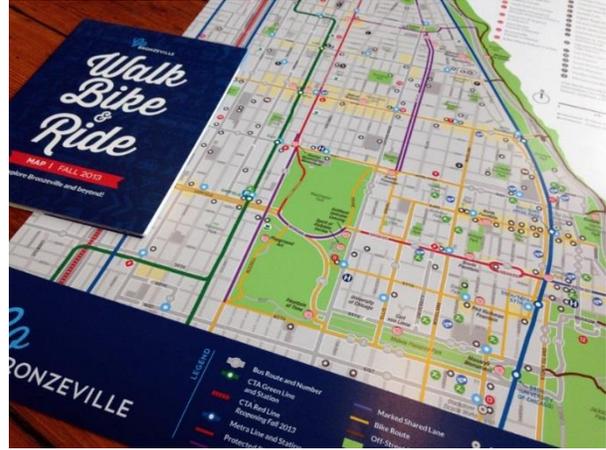
- Organized walks in Lucien Morin Park
- Regular walks around the Wild Iris Path in the Hipp Brook Preserve
- A table at Harris Hill on the 4th of July providing information about walking, bicycling, and transit routes in the neighborhood. The table can also distribute items for bicycling such as helmets, lights, or bells

The town can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

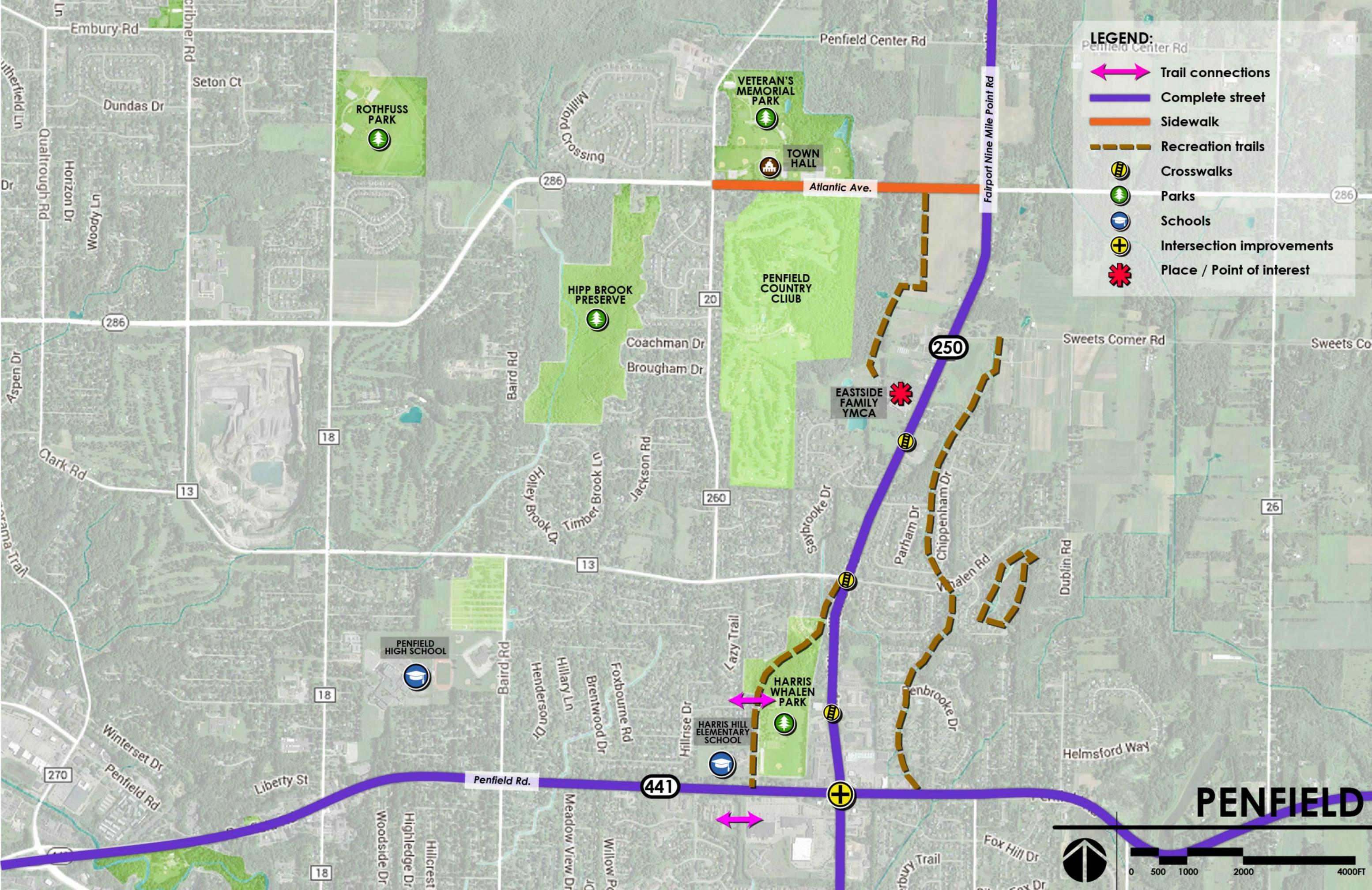
Bicycle and Pedestrian Maps

Bicycling and walking maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, town newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



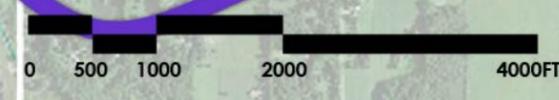
Example bicycle and pedestrian wayfinding map



LEGEND:

- Trail connections
- Complete street
- Sidewalk
- Recreation trails
- Crosswalks
- Parks
- Schools
- Intersection improvements
- Place / Point of interest

PENFIELD





Merchants-Culver Neighborhood Walkability Action

Introduction

The Merchants-Culver Neighborhood Walkability Action Plan presents the findings and recommendations from the Walkability Audit conducted for the city of Rochester under the Genesee-Finger Lakes Regional Walkability Improvement Program. The goal of this Action Plan is to identify potential physical improvements, education/encouragement programs, and policies to support walking and bicycling in the neighborhood. The audit also extended into the adjacent neighborhood in the town of Irondequoit.

Rochester is the county seat of Monroe County, with a 2010 population just over 210,000 residents. The Merchants-Culver neighborhood in the City is centered on the triangle formed between Culver Road and Merchants Road. The area is generally bounded on the north by Culver Parkway, on the south by East Main Street, and on the east by the Town of Irondequoit, and the walk audit extended into the adjacent neighborhood in Irondequoit. The Merchants-Culver neighborhood is considered part of the Southeast Quadrant of the City of Rochester, and has an estimated population of approximately 42,500 persons. Key walking and biking destinations within the neighborhood include the business districts along East Main Street, Culver Road and Merchants Road; East High School; School 52; Farmington Park and the Glen Haven Rail Trail.

A working group consisting of representatives from Genesee Transportation Council staff, local officials and interested residents was convened to identify the opportunities and challenges of walking in the Merchants-Culver Neighborhood. The working group members gathered on April 24th, 2015 to observe existing conditions and discuss potential improvements.

This Action Plan is intended as a framework to guide next steps for improving walkability and bikeability in the neighborhood. It reflects recommendations made in a short period of time and should not be mistaken for a comprehensive plan for radically altering the number of people walking and biking in the community. In addition, many alternatives require additional study to evaluate the feasibility of the approach. The preliminary recommendations are focused on projects that could be implemented in the next three to five years.

Walkability Audit Process

The walking audit was conducted in two stages. The first meeting included a windshield tour with the walk audit facilitator and a transportation specialist working for the City of Rochester. This tour allowed for a wider tour of the community and some initial observations prior to the walking audit. A larger working group met again that afternoon



to conduct the walking audit portion, which built upon previous observations.

The meeting began with a presentation and discussion of benefits related to improved walkability within a community and a description of possible improvements and examples from other cities. The working group then conducted a walking tour of the community. The group discussed opportunities and issues along the tour, such as parklets, sidewalk improvements, and gaps within the network. Upon return from the walking tour, attendees broke into smaller work groups, and were given maps of the community to begin formulating ideas for improvement. This included projects, policies, and programs. After these mini groups had a chance to develop these ideas, each reported back to the larger working group. Possible next steps were discussed and the facilitator concluded the Walk Audit.

Existing Conditions and Alternatives Considered

Participants at the walkability audit identified a variety of issues and opportunities throughout the community. Some alternatives may be relevant for more than one issue and appear more than once in the following table.

Map Number	Location	Issue	Alternatives Discussed
1)	City-wide	Pedestrian network	<ul style="list-style-type: none"> a) Create an urban trail network identifying walking destinations focused on points of interest. Sites can be historic, photo-worthy, great business or foot establishments, all types. b) Create an app for the "Walk Rochester" effort, allowing people to find and collect these types of trails and destinations. c) Educate and provide research to realty businesses on the value connected to walkability. d) Require a Multi-Modal Transportation Analysis for all new development projects. Always estimate potential best-case pedestrian, bicycle, and transit trips, and provide mitigation in each category. e) Institute a five-minute safety delay for motor vehicles at schools, ensuring pedestrians, bicyclists, and bus riders can depart safely before allowing the cars to move. Combine this with walking school bus programs.

Map Number	Location	Issue	Alternatives Discussed
2)	City-wide	Bicycle network	<ul style="list-style-type: none"> a) Continue the bicycle parking program at local business clusters (City has a stock of bike racks and an on-line request program). b) Create valet bicycle parking corral at the Public Market on Saturdays to increase incentive to bike there and reduce auto traffic burden. The bike corral can be run by local school sports teams or churches (any entity that would benefit from the donations). c) Require a Multi-Modal Transportation Analysis for all new development projects. Always estimate potential best-case pedestrian, bicycle, and transit trips, and provide mitigation in each category. d) Institute 5 minute safety delay for motor vehicles at schools, ensuring pedestrians, bicyclists, and bus riders can depart safely before allowing the cars to move. Combine this with walking school bus programs.

Map Number	Location	Issue	Alternatives Discussed
3)	City-wide	Community development and improvement	<ul style="list-style-type: none"> a) Program the Glen Haven trail. Work with merchants all along the corridor to create events, music, destinations (such as benches, picnic tables, umbrellas), water fountains; any incentive to use. b) Create valet bicycle parking corral at the Public Market on Saturdays to increase incentive to bike there and help reduce auto traffic burden. Have the corral run by local school sports teams or churches – any entity that would benefit from the donations. c) Educate and provide research to realty businesses on the value connected to walkability. d) Create an app for the “Walk Rochester” effort, allowing people to find and collect these types of trails and destinations. e) Require that sidewalk improvements be constructed with concrete rather than asphalt. f) Street tree replacements need to be appropriate for their setting (root depth, width of tree lawn, etc.). g) Launch an Active Transportation site improvement grant program that supports a healthy redesign of set-back retail developments (e.g. create sidewalk extensions into the parking area, create a painted walkway to the front door, add high quality bicycle parking (covered when possible) and transit stop facilities (pad, bench, shelter). Create a demonstration project at Rite Aid at the Merchants/Culver/Bay Intersection, provide a ribbon cutting event with local residents, Rite Aid, city, and then roll out city-wide.

Map Number	Location	Issue	Alternatives Discussed
4)	City-wide	Infrastructure improvements	<ul style="list-style-type: none"> a) Improve Culver during repaving - Add high visibility crosswalk painting, especially from St Marks to the Merchant/Culver/Bay intersection. Short-term should include curb extensions wherever possible to shorten crossing distances, traffic calming, and potentially include yield to pedestrian in crosswalk signs. b) Redesign Merchants Road - Remove the parking, add center median island at intersections on the side with no left turn movement (can be textured surface or raised islands with plantings). Include pedestrian refuge with offset crossing so pedestrian faces traffic. Include painting of center line and fog line; could even paint crossing islands, and include "yield to pedestrian in crosswalk signs." c) Include improved quality of lighting, making the case for improved real estate values. Use LED to decrease energy cost and recoup capital investment over time from energy savings. Irondequoit uses lighting districts. Note that RG&E is interested in updating older infrastructure. d) Culver-Merchants-Culver Parkway 5-way intersection - Repaint crosswalks with high visibility and include curb extensions wherever possible. Also no right turn allowed from Culver to Merchants (and make clear with existing signage). Make pedestrian connection from sidewalk to the Rite Aid pharmacy and always include pedestrian phase with a leading pedestrian interval. e) Façade improvements at Culver-Merchants retail cluster (ideally through existing grant program). f) Require that sidewalk improvements be constructed with concrete rather than asphalt. g) Connect Farmington Park to School 52 with high quality pedestrian link across north side of electrical substation property. h) Complete the Glen Haven Rail Trail, connecting to Family Collar retail cluster at Culver-Garson intersection. Provide adequate traffic calming at road crossings to assure safety, ranging from painted crosswalks and signage to raised crosswalks i) Garson bike boulevard improvement – mini roundabout at the Garson-Culver intersection and create a right-in/right-out only intersection for the Family Dollar plaza.

Map Number	Location	Issue	Alternatives Discussed
5)	City-wide	Economic development	<ul style="list-style-type: none"> a) When permitting retail, require building up at the sidewalk and installing pedestrian improvements. b) For all development, require Multi-Modal Transportation Analysis. Always estimate potential best-case pedestrian, bicycle, and transit trips, and provide mitigation in each category. c) Launch an Active Transportation site improvement grant program that supports health redesign of the set-back retail (e.g. create sidewalk extension into the parking area, create a painted walkway to the front door, add high quality bicycle parking (covered when possible) and transit stop facilities (pad, bench, shelter). Create a demonstration project at Rite Aid at the Merchants/Culver/Bay intersection, provide a ribbon cutting event with local residents, Rite Aid, city, and then roll out city-wide. d) Launch a coffee shop, green grocery, or similar business through a local-area activated cooperation or non-profit at the Culver five-way cluster. e) Program the Glen Haven trail. Work with merchants all along the corridor to create events, music, destinations (such as benches, picnic tables, umbrellas), water fountains; any incentive to use.

Preliminary Recommendations

Many beneficial and achievable alternatives were discussed at the walking audit. The Preliminary Recommendations are the projects considered the top priority for city-wide walkability and safety, which can be manageably pursued in the next three to five years. This section advises the city and GTC on potential projects, programs, and policies that will improve the walking and bicycling environments in the community.



Infrastructure Programs

Wayfinding (City-Wide)

Landmarks, natural features, civic destinations, neighborhood business districts and other visual cues help residents and visitors navigate through Rochester and adjoining communities. Wayfinding signs help people traveling along the pedestrian and bicycle networks and direct them to community destinations. The benefits of a complete wayfinding system include:

- Encourages residents and visitors to try new walking and bicycling routes
- Reduces misperceptions about walking and bicycling travel time to key destinations
- Reassures bicyclists and pedestrians that they are on the correct route
- Improves visibility of existing routes for all residents and visitors
- Improves roadway safety by alerting motorists of the potential for pedestrians or bicyclists

As a dense urban environment, Rochester has the opportunity to develop an urban trail network identifying walking destinations and points of interest. These points could be historic sites, photo-worthy sites, great business destinations, or all of the above. While the network might best begin in the densest downtown section, over time other neighborhoods could connect to the network and draw pedestrians to parts of the route.

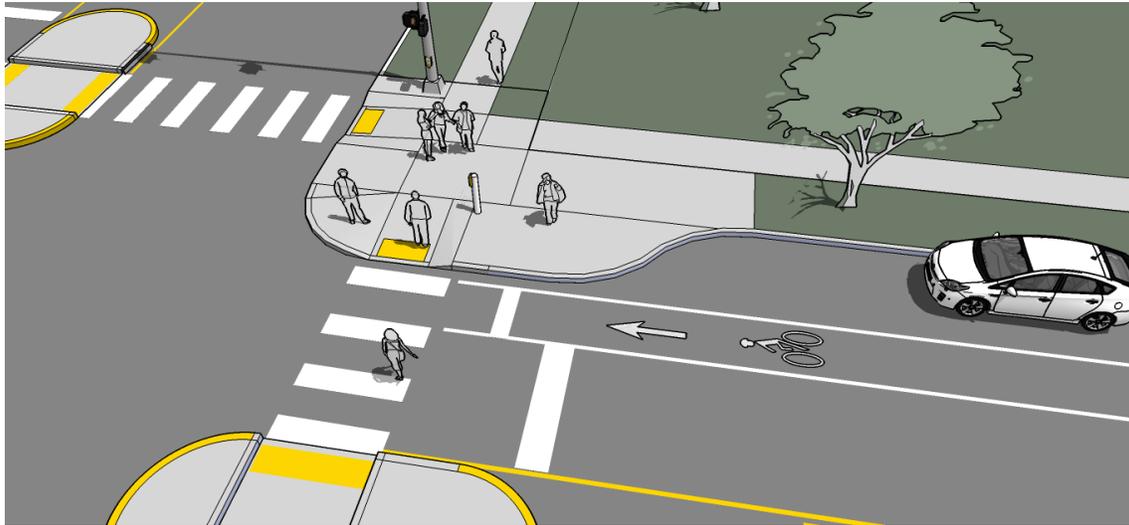


Pedestrian Directional

Example Bicycle and Pedestrian Wayfinding

Traffic Calming (City-wide)

Walking audit participants expressed a desire for traffic calming measures throughout the City. Traffic calming treatments can be used to reduce vehicle speeds so that motorists and bicyclists generally travel at the same speed, creating a safer and more comfortable environment for all users and neighbors. The City should use sanctioned engineering approaches, such as medians, streetscapes, curb extensions, traffic circles, traffic controls and bike lanes to protect neighborhood streets from cut-through traffic, high volumes, high speeds, and pedestrian/vehicle conflicts where appropriate.



Example Curb Extension

Culver Road and Merchants Road Intersection

The Culver Road and Merchants Road intersection is the heart of a small commercial district within a largely residential neighborhood where five streets meet. The streets do not align perfectly and it can be an awkward space to navigate, regardless of your mode of transit. A pedestrian phase timer with a leading pedestrian interval is recommended at each crossing. This allows pedestrians a 3-7 second head start when crossing, making them more visible and potentially reducing the number of vehicle-pedestrian collisions. Repainted crosswalks (with high visibility paint) will also draw more attention from motorists, and the addition of curb extensions at crossings will shorten the crossing distance and function as traffic calming. Finally, adding “yield to pedestrians in crosswalk” signage at new marked crosswalks in the area may help to alert motorists.

Merchants Road has the appearance of a typical quiet suburban street, yet walking audit participants noted that the road has relatively high vehicle speed and volumes, and, as a result, is less appealing to pedestrians and bicyclists. In addition, the streets off of Merchants Road do not align with each other resulting in a number of three-way intersections. To address speeding traffic, high visibility crosswalks, curb extensions or median islands, edgelines (foglines), and “yield to pedestrian in crosswalk” signage is recommended.

Although parking can be a traffic calming feature, the current alternate parking restrictions on Merchants create hazardous situations due to the traffic conditions and the relatively narrow width (26') of the street. The City should consider establishing permanent parking on one-side or, preferably, eliminate on-street parking entirely.

Road Diet for Empire Boulevard

Empire Boulevard from I-590 to Culver is a good candidate for a road diet due to its excess roadway space and average daily traffic counts of 15,000. Reducing the number of travel lanes from four to three – one travel lane in each direction and a center turn lane – would provide enough room for either five foot bicycle lanes or a two-way separated cycle track. In addition to adding a bicycle facility, a road diet may also lower vehicle speeds, reduce crash rates, and create a more comfortable corridor for pedestrians.



Four lane road converted to three lanes after a road diet.

Adopt Supportive Policies

Update Zoning Code and Developer Guidelines

The zoning code can be updated to ensure that future land uses and site designs make walking convenient, safe, and enjoyable. The following recommendations are a few changes highlighted during the walking audits:

- Sidewalks required on both sides of subdivisions, retail and commercial development
- Buildings with a build-to line at 20-30 feet, rather than a set-back line for commercial and retail development
- Parking behind buildings or on-street along parking boulevards
- Reduce parking requirements (maximums rather than minimums) and add a bicycle parking requirement
- Encourage multi-story development with offices or apartments above
- Sidewalk repairs need to be concrete, not asphalt

Development and Design Guidelines

Design guidelines included in city code provide clear direction to developers and promote the consideration of bicycles and pedestrians in the development process. Guidelines can specify different standards for the neighborhood centers, such as Merchants-Culver, including wider sidewalk minimums, planting strips or other buffer areas to protect pedestrians, building setbacks, and placement of parking at the back of buildings. Sidewalks and bicycle facilities should be constructed as a part of all new and updated facilities. The code can also specify minimum bicycle parking requirements as well as establishing bicycle parking as a community benefit for a developer seeking an exemption.

Active Transportation Site Improvement Grant Program

The City could offer grants or low-interest loans for existing businesses to retrofit their site design to be more pedestrian-, bike-, and transit-friendly. The program could change set-back retail by creating sidewalk extensions into parking lots and painting a walkway to the establishment's front door, or add high quality covered bicycle parking and transit facilities to be more welcoming with the addition of a pad, bench, and shelter. Walking audit participants suggested the use of the Rite-Aid at the five corner intersection of Culver and Merchants Roads as a demonstration Active Transportation project. Because one potential benefit of this program is reuse of on-street parking, another less involved demonstration project might be a temporary installation in existing parking spaces. Parklets, small vegetated parks that improve the aesthetic quality of a neighborhood while occupying little space, would be a simple option for such a demonstration.



Example Parklet

Multi-Modal Transportation Analysis

In an effort to improve the opportunities for non-automobile transit, a new multi-modal transportation analysis (MMTA) requirement for all new development in Rochester is recommended. These would require developers to always estimate the potential best-case pedestrian, bicycle, and transit trips, and provide mitigation in each category. In combination with a Traffic Impact Study requirement for all new developments, MMTAs could reduce Rochester residents' dependence on automobiles and provide alternatives for accessing the city's many neighborhoods.

Education and Encouragement Programs

Walking Tours

Hosting regular walking tours can encourage healthy lifestyles by promoting walking as a viable option for transportation and recreation. This campaign could include some of the following events/outreach:

- Organized walks to the Public Market
- Regular walks along Park Avenue or East Avenue
- A table at the Lilac Festival providing information about walking, bicycling, and transit routes in the neighborhood, as well as resources for bicycling such as helmet, light, or bell giveaways
- Encourage partnerships with Rochester Walks! Which has a route that travels through the Merchants Culver Neighborhood

The city can develop a Facebook page and/or advertise community walks via a newsletter or e-news. Holding regular walking events can encourage residents to experience more existing trail and park facilities, and discover new routes to destinations.

Walking School Bus

School 52, in the Merchants-Culver Neighborhood, serves students in kindergarten through sixth grade in a 1925 gothic revival-style building. Parents and guardians often cite distrust of strangers and the dangers of traffic as reasons why they do not allow their students to walk to school. A walking school bus program mitigates these fears by forming a “bus” of children walking together to school with one or two adults (usually parents or guardians of the children). Similar to a school bus, the walking school bus has a predefined route and picks up additional children at predetermined locations on the way to school.

Walking school buses can be informal arrangements between neighbors with children attending the same school or official school-wide endeavours with trained volunteers and structured meeting points with a pick-up timetable. In this setting, there is opportunity for older siblings to walk their brothers or sisters to local elementary schools, or lead larger walking school buses, either before or after school.

More information about walking school buses is available at the end of this document. Additionally, a walking school bus “how to” guide is available from the National Center for Safe Routes to School (http://www.saferoutesinfo.org/guide/walking_school_bus/index.cfm). While School 52 specifically was cited as needing a walking school bus, this program could be applicable to many schools throughout Rochester.

Bicycle Parking

Rochester has a stock of bike racks and an on-line request program. If these were better utilized by local businesses, or if businesses took the issue of bicycle parking as an opportunity to create community awareness and branding with identifiable custom bike racks that represented a unique neighborhood quality or historic feature, then bike parking could transition from problem to benefit. For example, the cluster of businesses in the Merchant-Culver Neighborhood could design a unique bike rack which could be installed throughout the commercial district to identify the community’s brand and encourage bicycling.

Valet bicycle parking is also another option to encourage bicycle trips. A natural location for this would be the Public Market where the corral could be operated by a local church organization, school sports team, or any group that looks to earn donations as a way to benefit their cause. Successful corral operations will require researching the best locations, finding funding to buy, lease, or borrow the space, identifying a group to operate the corral, organizing the volunteer group, and building facilities to handle the anticipated number of customers. Examples of successful Bicycle valet services that provide bicycle parking at public events include:

- San Francisco Bicycle Coalition (San Francisco, CA)
- Collar City preRAMBLE Complete Streets Festival (Troy, NY)
- Massbike Bicycle Valet Services (Cambridge, MA)



Artistic bicycle parking

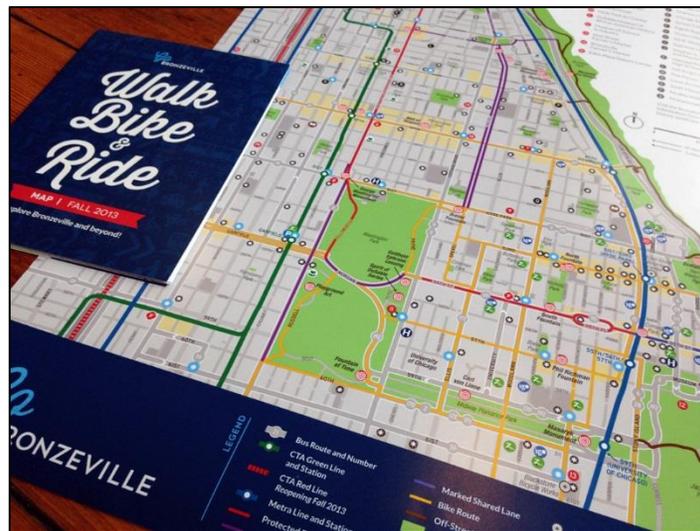


Bike Valet Services (Troy, NY)

Bicycle and Pedestrian Maps

Bicycling and Walking Maps encourage residents and visitors to bike and walk in the neighborhood by providing route and facility information, and highlighting walking and bicycling destinations in a convenient and attractive format. A map should be developed that focuses on existing amenities, services, shopping districts, parks and community gardens. Bicycle facilities can be added to the map as they are developed. This information could be made into a brochure, which could be printed on paper or made available online as an interactive map to promote cycling and walking.

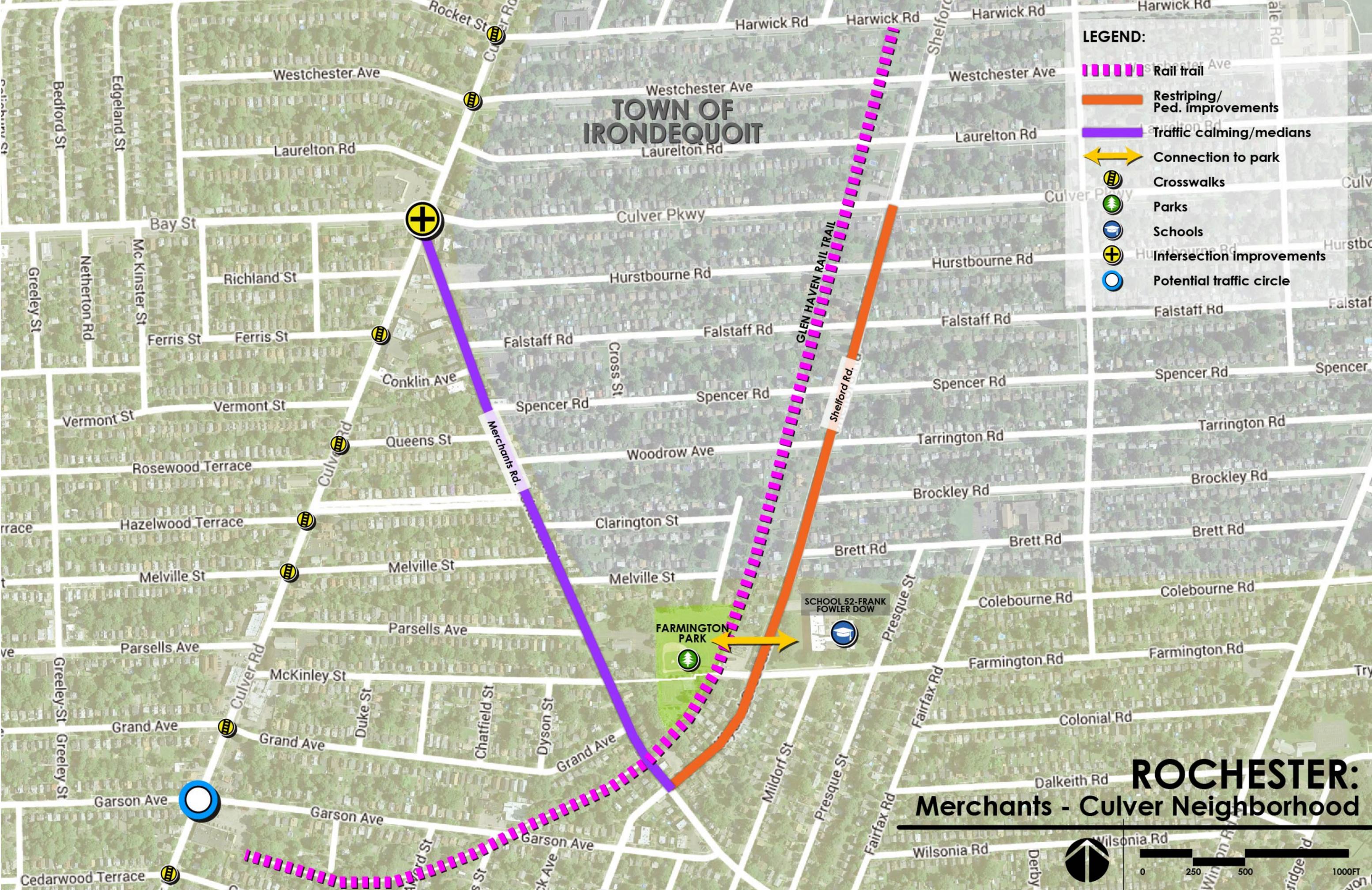
Once the map is produced, it should be made available online and distributed to residents by mail, at local bike shops, and/or at community events such as those recommended here. The bike map can also be promoted through flyers in utility bills, city newsletters, and other community media outlets. The map should be updated every few years to incorporate new bikeways or other changes.



Example bicycle and pedestrian wayfinding map

TOWN OF IRONDEQUOIT

- LEGEND:**
- Rail trail
 - Restriping/ Ped. improvements
 - Traffic calming/medians
 - Connection to park
 - Crosswalks
 - Parks
 - Schools
 - Intersection improvements
 - Potential traffic circle



ROCHESTER: Merchants - Culver Neighborhood



Walkability Recommendation Funding Opportunities

Federal Funding

There are a large number of federal funding sources available for the walkability improvements recommended in this plan. The most recent and comprehensive list is available at the following web address, and should be consulted for further information: http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.cfm.

New York State Funding

Several specific NYS funding sources are detailed below; however, the best source of state funding is the consolidated funding application (CFA). The CFA's are typically due in August of each year and the application applies for a variety of state programs and funding.

NYSDOS - Local Waterfront Revitalization Program (LWRP)

The Department of State works with communities in the Hudson Valley Region through the Local Waterfront Revitalization Program to promote community revitalization and resource protection through community-based plans and projects. The Department of State provides funding through the Environmental Protection Fund for projects that enhance public access to waterways and state lands, promote sustainable economic development, protect and improve water quality, and revitalize hamlets and downtowns. Eligible activities include planning, feasibility, design and construction of trails, blueways and streetscape enhancements.

Consolidated Local Street and Highway Improvement Program (CHIPS)

A New York State-funded program administered through the NYSDOT to assist localities in financing the construction, reconstruction or improvement of local highways, bridges, highway-railroad crossings and other local facilities. Eligible CHIPS bicycle and pedestrian projects include: bike lanes and wide curb lanes, shoulder improvements, roundabouts, new signs, new or upgraded traffic signals and traffic calming installations (www.dot.ny.gov/programs/chips).

NYS Department of Health- Preventative Health and Health Services (PHHS) Block Grant

The Preventive Health and Health Services (PHHS) Block Grant provides funding for health problems in the state of New York that range from tuberculosis to adult physical activity. PHHS Block Grant dollars fund a total of 19 different New York State health programs, including the Healthy Heart Program. PHHS Block Grant funds are used to promote and evaluate increases in the number of adults participating in regular sustained physical activity. From 1995-2004, nearly 1.2 million New York State residents received help from local HHP contractors to increase their physical activity levels (www.health.ny.gov/funding/grants/block_grant.htm).

Private Foundations

Private foundations are an increasingly important source of funds for bicycle and pedestrian planning and implementation. More info: <http://www.foundationcenter.org/>

Resources

The following list of resources provides guidance on where to find information on specific topics related to walkability, complete streets, smart growth, and related topics. It is not an exhaustive bibliography.

General Information on Transportation Planning, Smart Growth.

EPA Putting Smart Growth to Work in Rural Communities, 2011

<http://www2.epa.gov/smart-growth/putting-smart-growth-work-rural-communities>

Complete Streets Work in Rural Communities. Smart Growth America, National Complete Streets Coalition.

<http://www.smartgrowthamerica.org/documents/cs/factsheets/cs-rural.pdf>

Best Practices to Enhance the Transportation-Land Use Connection in the Rural United States. National Cooperative Highway Research Program. TRB. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_582a.pdf

Close to Home: A Handbook for Transportation-Efficient Growth in Small Communities and Rural Areas, National Cooperative Highway Research Program, TRB.

<http://www.trb.org/Main/Blurbs/172109.aspx>

US DOT Health and Transportation tool. 2015

www.fhwa.dot.gov/planning/health_in_transportation/resources/health_tool/

EPA Smart Growth and Economic Success series:

- Benefits for Real Estate Developers, Investors, Business, and Local Governments, 2012

<http://www2.epa.gov/smart-growth/smart-growth-and-economic-success-benefits-real-estate-developers-investors-business>

- The Business Case, 2013

<http://www2.epa.gov/smart-growth/smart-growth-and-economic-success-benefits-real-estate-developers-investors-business>

- Investing in In-fill Development, 2015

<http://www2.epa.gov/smart-growth/smart-growth-and-economic-success-investing-infill-development>

- Strategies for Local Governments, 2014

<http://www2.epa.gov/smart-growth/smart-growth-and-economic-success-strategies-local-governments>

Complete Streets/ Safe Routes to School

Complete Streets, www.completestreets.org; *National coalition working for streets that work for pedestrians, bicyclists, and transit users of all ages, incomes, and abilities.*

National Center for Safe Routes to School: www.saferoutesinfo.org.

National Safe Routes to School Partnership, www.saferoutespartnership.org.

Pedestrian/ Bicycle Policy and Support

AmericaWalks, Boston, MA; www.americawalks.org. *National pedestrian advocacy organization. Resources Page: <http://americawalks.org/learning-center/technical-resources/>*

Pedestrian and Bicycle Information Center, www.pedbikeinfo.org; *Comprehensive technical support & info including walkability and bike-ability checklists, design, & cost guides.*

Alliance for Biking and Walking, www.peoplepoweredmovement.org; *Coalition of state and local bicycle and pedestrian advocacy organizations, providing support and resources.*

Bikes Belong Coalition, www.bikesbelong.org; *Coalition of bicycle industry retailers & suppliers supporting bike-friendly communities & policies, including a community grant program.*

League of American Bicyclists, www.bikeleague.org. *National advocacy group advancing the Bike Friendly Community, Business, & Campus programs.*

National Center for Bicycling and Walking, www.bikewalk.org; *Organizes the biennial Pro Walk/Pro Bike conference, and sends out a info-laden monthly email newsletter.*

Trails

Rails-to-Trails Conservancy, Washington, DC; www.railtrails.org. *Great help for trail and greenway advocates, including research supporting trails' benefits.*

Rivers and Trails Conservation Assistance, a program of the National Park Service; www.ncrc.nps.gov/rtca. *Provides technical planning, design, organizational support.*

Active Living

Active Living by Design, www.activelivingbydesign.org. *Extensive technical assistance & practical guidance on building healthy eating, active living settings.*

Active Living Research, at UC San Diego, www.activelivingresearch.org. *Definitive compilation of the research on active living designs, policies, and impacts.*

Design Guidance

NACTO Urban Street Design Guide

<http://nacto.org/usdg/>

NACTO Urban Bikeway Design Guide

<http://nacto.org/cities-for-cycling/design-guide/>

A Resident's Guide for Creating Safer Communities for Walking and Bicycling, 2015

http://safety.fhwa.dot.gov/ped_bike/ped_cmunity/ped_walkguide/residents_guide2014_final.pdf

A Resident's Guide for Creating Safe and Walkable Communities, 2008

http://www.pedbikeinfo.org/collateral/PSAP%20Training/gettraining_references_ResidentsGuidetoSafeWalkableCommunities.pdf

The Best Complete Streets Policies of 2014. Smart Growth American and the National Complete Streets Coalition, February 2015.

<http://www.smartgrowthamerica.org/documents/best-complete-streets-policies-of-2014.pdf>

A Practitioner's Guide for Advancing Health Equity; Community Strategies for Preventing Chronic Disease.

<http://www.cdc.gov/NCCDPHP/dch/pdf/health-equity-guide/Practitioners-Guide-full-version.pdf>

EveryBody Walk practice briefs; concise implementation ideas to advance your efforts:

- Getting Started
- Getting the Community on Board
- Additional Resources

<http://americawalks.org/every-body-walk-getting-started-practice-briefs/>

Introductory webinar by Mark Fenton for the EveryBody Walk "Getting Started" briefs:

<http://americawalks.org/america-walks-lessons-from-the-experts-webinar/>

Montana DOT's impressive rural transportation web resource:

<http://www.mdt.mt.gov/research/toolkit/default.shtml>

The Western Transportation Institute: <http://www.westerntransportationinstitute.org/default.aspx>

(Note: WTI, funded by USDOT, is the country's largest University Transportation Center)

Benefits of Walkable/Bike-able Communities:

On Common Ground: National Association of Realtors bi-annual smart growth publication

<http://www.realtor.org/topics/smart-growth/publications/on-common-ground>

Builder magazine. *Walkability: Why we care and you should too!* March 2014. National Association of Homebuilders.

<http://www.builderonline.com/magazine/2014/march/>

Protected Bike Lanes Mean Business, the Green Lane Project

<http://www.bikewalkalliance.org/resources/reports/protected-bike-lanes-mean-business>

The Economic Benefits of Sustainable Street Design New York City

<http://www.nyc.gov/html/dot/downloads/pdf/dot-economic-benefits-of-sustainable-streets.pdf>

Local Government Commission, Sacramento, CA, www.lgc.org; *Technical guidance and practical planning and transportation guides, especially useful for local elected & appointed officials.*

Additional Resources:

Surface Transportation Policy Partnership, www.transact.org. *Publishes annual reports loaded with pedestrian activity and safety data.*

Centers for Disease Control and Prevention. www.cdc.gov/nccdphp/dnpao. *A site with tons of current data on health and physical activity, and promotional resources*

Victoria Transportation Policy Institute, Victoria, British Columbia; www.vtppi.org. *Outstanding white papers, research evidence, and resources to support active transportation.*

Walkable and Livable Communities Institute, www.walklive.org; *The education and technical assistance group launched by Dan Burden, premier walkable community expert.*

Walkscore.com. *Get a score from 0-100 on the walkability of any address in North America!*

Mark Fenton's website: www.markfenton.com

