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# BARBERTON ACTIVE TRANSPORTATION PLAN

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FINAL  
February 2023

## ACKNOWLEDGEMENTS

### City of Barberton

**William Judge**, *Mayor*

**Trevor Hunt**, *Director of Planning & Community Development*

**Michael J. Teodecki, P.E.**, *Director of Public Service, Engineer*

**Pete Wearstler**, *Assistant Planning Director*

**Tayler Thompson**, *Barberton City Council*

### Barberton School District

**Jeffrey Ramnytz**, *Superintendent*

**Jason Ondrus**, *Assistant Superintendent for Business Operations and Personnel*

### Akron Metropolitan Area Transportation Study

**Darryl Kleinhenz**

**Matt Stewart**

### Toole Design Group LLC

**Sally Sharrow**, *Project Planner II*

**Carli Goode**, *Planner*

**Horizon Starwood**, *Planner*

### Summit County Public Health

**Kristi Kato**, *Social Determinants of Health Manager*

**Shelby Mills**, *Disease Prevention Specialist*

### Steering Committee

**Haylee DeSonne**, *Summit County Board of Developmental Disabilities*

**Carrie Herman**, *Barberton Community Foundation*

**Ted Herncane**, *Barberton Community Foundation*

**Ann Hutchinson**, *Barberton Library*

**Don Kaser**, *R&D Bike Shop*

**Ruth Kaser**, *R&D Bike Shop*

**Darryl Kleinhenz**, *AMATS*

**Kris Lackey**, *Salvation Army*

**Marissa Little**, *Habitat for Humanity of Summit County's Neighborhood Network program*

**Nicholas Miller**, *Akron METRO*

**Nick Moskos**, *Summit Metro Parks*

**Jim Sawin**, *Lake Anna YMCA*

**Dorothy Somerville**, *Barberton Area Community Ministries*

**David Stephens**, *Rotary Club*



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# EXECUTIVE SUMMARY





## EXECUTIVE SUMMARY

### WHAT IS ACTIVE TRANSPORTATION AND WHY IS IT IMPORTANT?

“Active Transportation” is an umbrella term for all the ways people can get around without using a motorized vehicle – walking or bicycling, using mobility assistance devices (such as wheelchairs and scooters), skating or skateboarding, and more. In short, active transportation is human-powered travel. Active transportation represents fundamental transportation modes for many Ohioans to access transit, work, school, retail stores or any number of destinations in urban, suburban, and rural settings. Active transportation can provide many community benefits beyond personal mobility, such as improved public health, economic development, greater quality of life, and enhanced environmental quality.

Active transportation planning involves community engagement specific to the needs of people who walk and bicycle and outlines the vision, goals, and strategies needed to support safe, convenient, and accessible active transportation options. It is important and beneficial to meet the needs of people walking and bicycling by planning for and directing investments in infrastructure and programs that support active transportation options.

For Barberton, the plan seeks to create a city-wide vision that ties into previous local and regional plans and projects. This active transportation plan aims to provide projects, strategies, and recommendations for people of all ages and abilities to access healthy, sustainable, and practical ways to commute, run errands, and make other trips.

## Benefits of Active Transportation

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### Physical Health

Increased opportunity for recreation and destination-oriented trips using active modes of travel are key to increasing daily physical activity and reducing the risk for developing preventable, chronic diseases.

### Mental Health

Physical activity reduces depression, can improve the quality of sleep, and has been shown to improve cognitive function for older adults.<sup>1</sup> Active transportation can also improve social conditions in communities, which contributes to positive mental well-being among residents.

### Economic Development

There is broad consensus across the country, and in Ohio, that investing in active transportation produces a positive return on investment for host communities. This is especially true when it comes to trails, which serve as major regional attractions for recreational riders.

### Quality of Life

Comfortable and accessible options for bicycling and walking provide a host of quality-of-life benefits. They increase the number of travel options for everyone and can lead to greater independence for older residents, young people, and others who cannot or choose not to drive. Providing a high-quality active transportation network is especially important for the mobility of community members who do not have full access to a vehicle.

### Environmental Quality

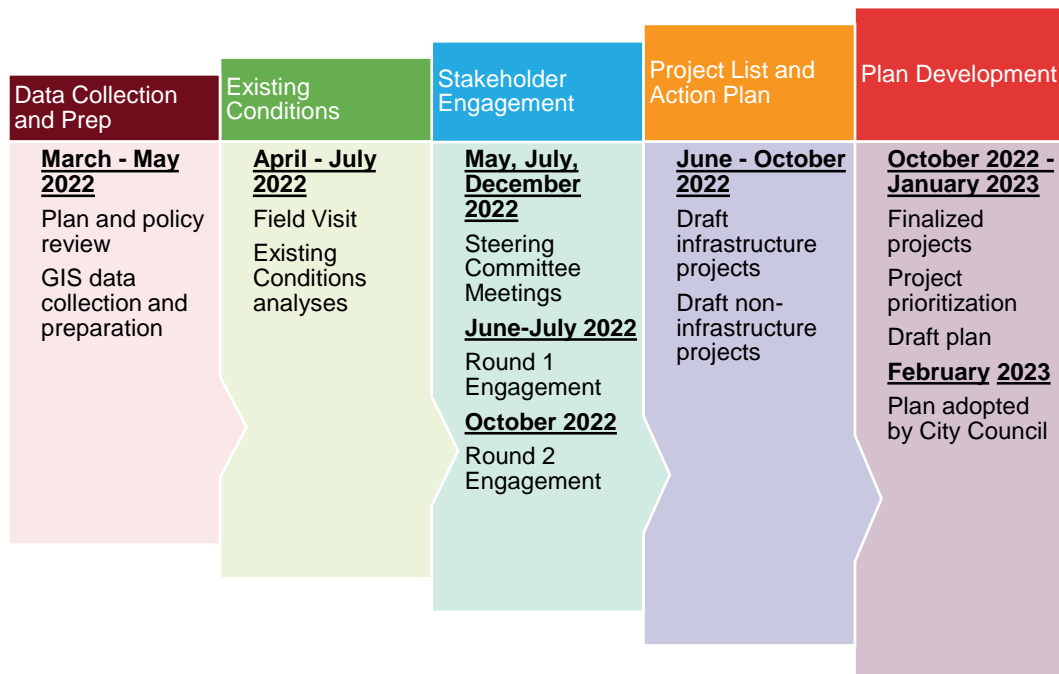
Shifting to bicycling and walking trips and concentrating development in dense walkable and bikeable communities can reduce transportation-based emissions and sprawling land use that impacts the natural environment.<sup>2</sup>

1. U.S. Department of Health and Human Services. 2008 PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS. Washington, DC: U.S. Dept of Health and Human Services; 2008. <http://health.gov/paguidelines/pdf/paguide.pdf>

2. Federal Highway Administration, National Bicycling and Walking Study, "Case Study No. 15 The Environmental Benefits of Bicycling and Walking," 1993 [http://safety.fhwa.dot.gov/ped\\_bike/docs/case15.pdf](http://safety.fhwa.dot.gov/ped_bike/docs/case15.pdf)

## PROJECT TIMELINE

The Active Transportation Plan (ATP) was funded by the Ohio Department of Health Creating Healthy Communities Program and was created under the direction of Toole Design Group, LLC, the City of Barberton, and Summit County Public Health, who sought to ensure that it represented the variety of interests and stakeholders in Barberton. The process to develop the ATP began with the collection of documents and data assets. Then an assessment of existing conditions was conducted along with a review of other relevant plans and studies. Public input and a technical analysis provided a foundation for proposed projects and prioritization of those recommendations. The final chapter includes guidance for implementation (see Figure 1 for a project timeline). This document summarizes the findings of the planning process.



**Figure 1. Project Timeline**

## VISION AND GOALS

### COMMUNITY VISION AND GOALS

The vision and goals are crucial in creating a safe and accessible active transportation network that can be used by people walking, bicycling, taking transit, and driving and meet the needs of the community. The City of Barberton established a community transportation vision in 2020 through the adoption of a Complete Streets Policy, which states:

**The city will develop a complete and connected integrated multimodal transportation network that balances the needs of different modes of travel and contributes directly to the health, safety, economic vitality, and quality of life of all users, especially the most vulnerable. All modes of transportation including bicycling, walking, public transit, and motorized transportation will be included in transportation project identification, scoping procedures, and design approvals. Persons of all ages, circumstances, and abilities will have access to sustainable transportation options for needs and desires including employment, commerce, grocery stores, medical facilities, education, recreation, culture, and home. Destinations will be reached safely, conveniently, reliably, affordably, and efficiently.**

Project goals were discussed by the project team at the outset of the project. Major goals for the project were:

- Provide safe options for students to walk and bike to school
- Improve connectivity to and visibility of the Towpath Trail which runs through the city
- Address areas with a history of crashes to improve safety
- Increase accessibility to destinations

## ENGAGEMENT EFFORTS

The project team collected community input in two phases and through several strategies, including pop-up events at community destinations, map input stations, paper surveys, and online surveys. Community members also completed walk audits of 20 locations around the city. Early engagement identified key barriers to walking and bicycling, which defined areas of focus for the planning process. These focus areas included downtown, neighborhoods surrounding the schools, Wooster Road, Robinson Road, 5<sup>th</sup> Street, and Van Buren Avenue. See the Community Engagement section for a summary of all engagement efforts.

## EXISTING CONDITIONS

The project team completed a series of analyses to understand the current transportation system and where improvements could be made for people walking and bicycling. The city has a major asset in the Towpath Trail, but access between the trail and the city are limited. The trail and the railroad also create a major barrier between the east and west sides of town. Sidewalks are missing in some key areas around schools and community destinations. Several major roadways, such as Norton Ave, Wooster Rd, and Hudson Run present high risk for crashes involving people walking or bicycling. Much of the city presents high potential for people walking and bicycling. See the Existing Conditions section for a summary of all analyses.

## PROPOSED PROJECTS AND PROGRAMS

The existing conditions analysis, public input and steering committee meeting led to the final proposed active transportation network. There are a total of **68 infrastructure recommendations** which include adding:

- » **10.6** miles of sidewalks,
- » **0.5** miles of bicycle boulevards,
- » **5.7** miles of separated bike lanes,
- » **13.5** miles of shared use paths; and
- » improvements to **16** intersections and trailheads.

The plan also proposes establishing or continuing a total of **18 supportive programs** such as educational campaigns, encouragement programs, policies, and school-related programs. See the Proposed Projects and Programs section for details on the proposed bicycle and pedestrian projects and supportive programs.

A prioritization process that included data analysis and input from the community identified high priority projects, as well as “quick-win” projects that could be accomplished in the near term. Top projects included completing sidewalk gaps around the schools, improved connections between east and west Barberton along Robinson Avenue, and crossing improvements around Lake Anna. See the Priority Projects section for full details.

# VISION AND GOALS





## VISION AND GOALS

### COMMUNITY VISION STATEMENT

The vision and goals are crucial in creating a safe and accessible active transportation network that can be used by people walking, bicycling, taking transit, and driving and meet the needs of the community. The City of Barberton established a community transportation vision in 2020 through the adoption of a Complete Streets Policy, which states:

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### COMMUNITY GOALS

- Provide safe options for students to walk and bike to school
- Improve connectivity to and visibility of the Towpath Trail which runs through the city
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- Increase accessibility to destinations

# COMMUNITY ENGAGEMENT



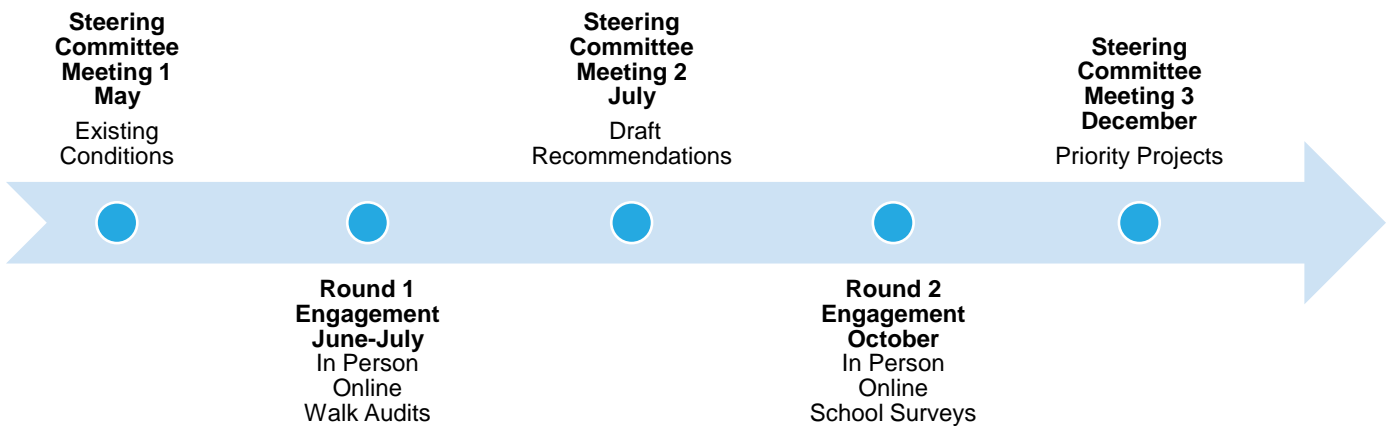


# COMMUNITY ENGAGEMENT

Community engagement plays an essential part in the plan development process. Involving the public builds trust in the plan and improves the overall quality of the findings. The project team used several strategies to collect public input including steering committee meetings, surveys, public workshops, and pop-ups events.

## ENGAGEMENT TIMELINE

It was important to meet members of the Barberton community “where they were at” by setting up engagement opportunities in everyday locations around the city. Community members participated via the Steering Committee and through two rounds of public engagement.



# ENGAGEMENT STRATEGIES

## STEERING COMMITTEE MEETINGS

The Steering Committee was comprised of City of Barberton staff, Akron Metropolitan Area Transportation Study (AMATS) staff, Summit County Public Health staff, and a wide variety of community partners who are listed in the Acknowledgments section at the beginning of this document. The Steering Committee met in May 2022, September 2022, and December 2022 to discuss and provide input on the progress of the plan development.

## STEERING COMMITTEE MEETINGS

- » **Meeting 1** was held in May 2022 and kicked off the planning process. The first meeting introduced active transportation and why Barberton would benefit from an Active Transportation Plan. The meeting wrapped up with a mapping exercise to identify opportunities and challenges within the city.
- » **Meeting 2** was held in September 2022 and provided a summary of data analysis and the first round of public engagement. The meeting also allowed for feedback on the draft proposed recommendations and established plans for the second round of public engagement.
- » **Meeting 3** was held in December 2022 and consisted of reviewing project and program prioritization. The meeting allowed for feedback on the prioritization process and discussion of supportive programs.



Figure 2. Steering Committee meeting

## ROUND 1 ENGAGEMENT

### Activities:

The first round of engagement asked people to provide their opinions about walking and bicycling, and to identify destinations and barriers to walking and bicycling. Information was collected through a survey and the opportunity to place points and lines on a map of the city to indicate where people would like to walk, bike, roll or ride the bus to; routes they like to take; and routes or locations that present a barrier.

### Tools:

An interactive webmap with a survey was provided on the project website to collect public input during the first round of engagement. A corresponding printed survey and large map were used to gather information at in-person events.

## Events/Locations

### *Pop-up events:*

Pop-up events have a broader reach than conventional public meetings. By leveraging existing events or popular destinations, the project team reached a wide cross-section of Barberton community members, especially those who might not want to or be able to participate in online or traditional forms of engagement.

The project team held six pop-up events in June and July at the Barberton Farmers Market, Hilltop House, Lake Anna summer concert, Skoops Ice Cream shop, and Tuscora Park. Akron METRO offered free bus rides to attend the events. The public were encouraged to provide feedback on areas where they wish they could walk, bike, or take transit to, and to draw network recommendations directly on a map.

### *Self-serve engagement stations:*

Pop-up events do not allow for the entire public to provide feedback and online options may present technical difficulties for some, because of this, materials were available at several “stations”. These “stations” allowed members of the public to stop and add their comments to the map on their own schedule. Paper surveys and the paper version of the map exercise were left at R&D Bike Shop, Lake Anna YMCA, and the Barberton Public Library throughout June and July.

### *Project website:*

Project materials and activities were also available on the project website throughout June and July.

## WALK AUDITS

During the first phase, Habitat for Humanity of Summit County’s Neighborhood Network program also recruited community volunteers to conduct walk audits in 20 locations around the city. The volunteers were compensated for their time with a gift card to a local business. Volunteers were given a route and a quantitative score sheet for each street. A typical route consisted of three to five streets; volunteers walked each of the streets and recorded their observations about the sidewalks, streets, and overall experience. Information gathered from the walk audits were considered when developing the infrastructure project list and overall network. The score sheet is show in Figure 4 below.



**Figure 3: Barbertain City Staff engaging with the public at a pop-up event**



## ENGAGEMENT RESULTS

Major takeaways from the various community engagement efforts are summarized below.

### Active Transportation Survey

Survey questions aimed to gauge the level of interest in using active transportation, what challenges people faced when doing so, and what would encourage people to shift their typical mode of travel to an active transportation method.

A total of 62 people responded to the survey. A majority of survey respondents (74%) stated that they drive a personal vehicle to travel around Barberton, 47% of respondents walk or roll, and 27% of respondents bike around Barberton.

Mode Shift
<b>Top reasons that would encourage people to walk more in Barberton</b>
<ul style="list-style-type: none"><li>» More sidewalks or trails (56%)</li><li>» Better maintenance of sidewalks, etc. (42%)</li><li>» More separation between cars, etc. (37%)</li></ul>
<b>Top reasons that would encourage people to bike more in Barberton</b>
<ul style="list-style-type: none"><li>» More bike lanes (50%)</li><li>» More separation between cars, etc. (40%)</li><li>» Better maintenance of bike lanes (37%)</li></ul>
<b>Top reasons that would encourage people to take the bus more in Barberton</b>
<ul style="list-style-type: none"><li>» Nothing would encourage me (55%)</li><li>» More sidewalks (11%)</li><li>» More bus shelters (11%)</li><li>» Additional bus routes (11%)</li></ul>

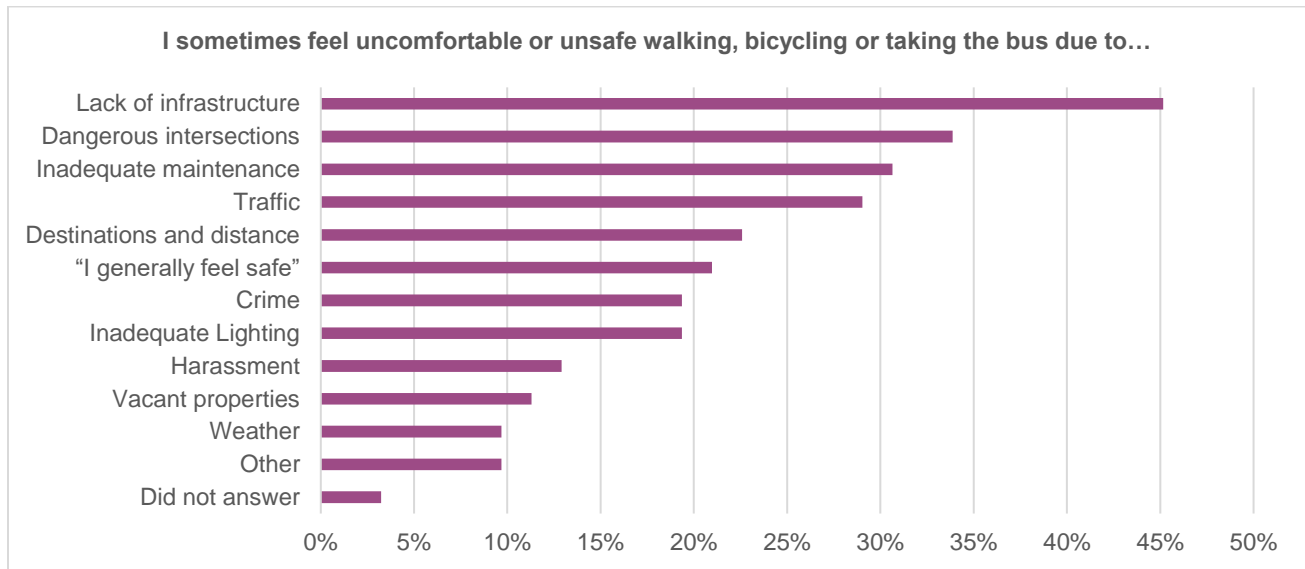
Additional write-in themes for encouraging people to bike more included:

- » Trikes & adaptive bikes
- » Improve enforcement around vehicles such as distracted driving and speed enforcement
- » Increase bike amenities, specifically bike racks and information
- » More bicycling community events that bring the community together

It was important to understand why people chose not to bike, walk, or take the bus. The survey listed numerous options for why respondents might be uncomfortable or unsafe when walking, bicycling, or taking the bus. Top reasons people feel uncomfortable walking/bicycling/taking the bus are due to:

- » Lack of infrastructure (45%)
- » Dangerous intersections (34%)
- » Inadequate maintenance (31%)

Write-in reasons included distracted drivers, perception, and limited access to adaptive bikes and adult trikes.



**Figure 5: Reasons for feeling unsafe when walking, bicycling, or taking the bus**

High school students surveyed about their interest in walking and bicycling expressed interest in walking to school, downtown Barberton, restaurants, Lake Anna, and other destinations.

**Table 1: High School Students and Active Transportation**

Where in Barberton do you currently or want to use active transportation to go to?	Total # of Students
School	56
Downtown Barberton	31
Food / Restaurants	31
Lake Anna	26
Kave	16
Movie Theater	15
Friend / Families House	15
Park(s)	15
YMCA	14
Library	14
Grocery Store	10
Convenience Store	6
Work	5
Ohio & Erie Towpath Trail	1
Bank	1

Participants also provided map-based comments on locations around the city where they would like to see better conditions for walking and bicycling. Results from mapping activities are included in the Existing Conditions section.

# EXISTING CONDITIONS





## EXISTING CONDITIONS

This chapter examines several elements of Barberton’s transportation system. It presents a demographic profile of Barberton, and a plan and policy review summarizing existing active transportation and related efforts to date, framing the current planning process as a logical next step in the evolution of active transportation in Barberton. This chapter also summarizes existing programs that support active transportation. It also includes a set of analyses that examines the active transportation system from various perspectives (e.g., equity, safety, connectivity).

## DEMOGRAPHIC PROFILE

The City of Barberton is 9.26 square miles and home to over 25,000 people<sup>1</sup>. The city consists of an array of homes, churches, schools, and commercial businesses. In the heart of Barberton, sits Lake Anna, a 1-acre natural spring lake<sup>2</sup> that is a major attraction for residents and visitors.

Barberton’s population is growing increasingly diverse, while also growing older. Barberton’s population is majority white, with 84.1% identifying as white alone/non-Hispanic white in 2020. However, Barberton's population has become more diverse since 2010, with a growing proportion identifying as Black, Asian, Two or more races, and Hispanic. Nationally, people of color have been shown to be more likely to utilize active transportation than non-Hispanic whites and are at most risk of being injured or killed when walking or bicycling. 5.3% of workers currently walk, bike, or use transit or other means to get to work, and 3.3% work from home. Around 13% of households (or 1,400) do not have access to a vehicle. 18% of the

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<sup>1</sup> [2022 US Census, Barberton, Ohio Profile](#)

<sup>2</sup> [2010 Census U.S. Gazetteer Files for Places – Ohio](#)

population lives below the poverty line and may not have funds available to own, operate and maintain a motor vehicle. 18.9% of residents identify as having a disability.

**Table 2. Barberton Demographics**

Category	2010 Census		2020 Census	
	#	%	#	%
<b>Total Population</b>	<b>26,550</b>		<b>25,191</b>	
<b>Race and Hispanic Origin</b>				
Hispanic or Latinx	359	1.4%	474	1.9%
<b>Not Hispanic or Latinx</b>				
White/Caucasian alone	23,916	90.1%	21,028	83.5%
Black/African American alone	1,542	5.8%	1,999	7.9%
American Indian and Alaska Native alone	84	0.3%	58	0.2%
Asian alone	77	0.3%	127	0.5%
Native Hawaiian and Other Pacific Islander alone	10	0.0%	14	0.1%
Other Race alone	22	0.1%	77	0.3%
Two or more races	540	2.0%	1,414	5.6%

Category	2010 ACS 5-Year		2020 ACS 5-Year	
	#	%	#	%
<b>Total Population</b>	<b>26,842</b>		<b>26,030</b>	
<b>DP05 - ACS DEMOGRAPHIC AND HOUSING ESTIMATES - AGE</b>				
Under 19	7,044	26.24%	6,187	24.56%
20 - 24	1,381	5.14%	1,019	4.05%
25 - 34	3,309	12.33%	3,963	15.73%
35 - 44	3,311	12.34%	2,485	9.86%
45 - 54	4,132	15.39%	2,635	10.46%
55 - 65	3,195	11.90%	4,524	17.96%
Over 65	4,470	16.65%	5,217	20.71%
<b>Educational Attainment</b>				
<b>Total population 25 years or older</b>	<b>18,417</b>		<b>18,824</b>	
9th to 12th grade, no diploma	2,468	13.40%	2,340	12.43%
High school or equivalent degree	8,288	45.00%	8,418	44.72%
Some college, no degree	3,205	17.40%	3,151	16.74%
Associate's degree	1,602	8.70%	1,398	7.43%
Bachelor's Degree	1,676	9.10%	2,232	11.86%
Graduate or professional degree	645	3.50%	737	3.92%
<b>Household income in the past 12 months</b>				
<b>Total households</b>	<b>11,376</b>		<b>11,221</b>	
Less than \$15,000	2,525	22.20%	1,773	15.80%
\$15,000 - \$34,999	3,094	27.20%	3,108	27.70%

Category	2010 ACS 5-Year		2020 ACS 5-Year	
	#	%	#	%
\$35,000 - 74,999	4,266	37.50%	3,826	34.10%
\$75,000 - \$149,999	1,285	11.30%	2,132	19.00%
\$150,000 or more	205	1.80%	370	3.30%
<b>Household size by vehicles available</b>				
0 vehicles	1,390	12.22%	1,430	12.74%
1 vehicle	4,699	41.31%	4,436	39.53%
2 vehicles	3,858	33.91%	3,756	33.47%
3 or more vehicles	1,429	12.56%	1,599	14.25%
<b>Means of transportation to work</b>				
Total workers 16 and over	<b>11,593</b>		<b>10,972</b>	
Drove alone	10,086	87.0%	9,198	83.8%
Carpooled	767	6.6%	819	7.5%
Public transportation (excluding taxicab)	84	0.7%	168	1.5%
Walked	387	3.3%	212	1.9%
Bicycle	0	0.0%	0	0.0%
Other means	128	1.1%	209	1.9%
Worked at home	141	1.2%	366	3.3%

Category	2012 ACS 5-Year		2020 ACS 5-Year	
	#	%	#	%
<b>Disability (S1810)</b>				
Total civilian noninstitutionalized population	<b>26,305</b>		<b>25,683</b>	
With a disability	4,270	16.23%	4,851	18.89%
With a hearing difficulty	1,024	3.9%	1,348	5.25%
With a vision difficulty	718	2.7%	649	2.53%
With a cognitive difficulty	1,509	5.7%	1,872	7.29%
With an ambulatory difficulty	2,625	10.0%	2,888	11.24%
With a self-care difficulty	946	3.6%	1,027	4.00%
With an independent living difficulty	1,751	6.7%	1,601	6.23%
<b>Poverty Status in the Past 12 Months (S1701)</b>				
Population for whom poverty status is determined	<b>26,043</b>		<b>25,677</b>	
Below Poverty Level	5,133	19.71%	4,514	17.58%
All individuals below:	N/A	N/A	N/A	N/A
50 percent of poverty	2,549	9.79%	1,853	7.22%
125 percent of poverty	6,880	26.42%	6,441	25.08%
150 percent of poverty	8,362	32.11%	7,846	30.56%
185 percent of poverty	10,446	40.11%	10,614	41.34%
200 percent of poverty	11,402	43.78%	11,416	44.46%

## EXISTING PLANS, POLICIES, AND SUPPORTIVE PROGRAMS

Interest in improving walkability and accessibility in Barberton has been identified in City plans and guidelines at least since 1994. Several plans pose ideas for bicycling loops and connections to the Towpath Trail. The city’s Complete Streets resolution expresses its commitment to a multi-modal transportation network that accommodates users of all ages, abilities, and transportation modes. This plan builds on prior plans and initiatives developed by entities within Barberton. It looks to these plans for existing conditions data, issue identification, and to incorporate or update previous recommendations. Details of existing plans, policies and supportive programs are outlined in Table 3, Table 4, and Table 5.

**Table 3. Existing Plans and Policies**

<b>Plan/ Policy</b>	<b>Lead Agency</b>	<b>Year Completed</b>	<b>Key Takeaways (what proposed projects/policies will impact the active transportation plan?)</b>
<b><i>Barberton Design Guidelines</i></b>	City of Barberton	1994	The Barberton Design Guidelines focus on design guidance for preservation and rehabilitation as well as design guidance for downtown Barberton. The document provides minimal guidance for accessibility and sidewalks. Regarding accessibility, the guidelines recommend ramps and lifts should be located along the side of a building, while handrails should be modern and simple. As for sidewalks, the guidelines state that sidewalks and pavers should be maintained, and new development should be located near streetscapes that are comfortable--which includes access to sidewalks.
<b><i>Barberton Master Plan</i></b>	City of Barberton	2006	The main goals within the Barberton Master Plan relating to active transportation include developing a system of parks, open spaces, and trails with a vast network of connectivity for all users; improving connections along numerous streets and areas for vehicle, bike, and pedestrian users; and creating pedestrian-oriented spaces throughout neighborhoods with high amounts of connectivity. Numerous streets and areas are proposed for bike paths, shared use paths, trails, and sidewalks in the plan.
<b><i>Connecting Communities Barberton’s North-South Bicycle Infrastructure Master Plan</i></b>	City of Barberton/ AMATS	2013	Barberton’s North-South Bicycle Infrastructure Master Plan is a result of pursuing the Connecting Communities Planning Grant program in 2013, to receive funding from the Akron Metropolitan Area Transportation Study (AMATS). The goal of the plan was to formulate ideas to strengthen the north-south connections within Barberton by increasing bicycle and pedestrian infrastructure and safety. The plan proposed the Magic Mile, which would connect Lake Anna to the Towpath by constructing a one-mile bicycle loop within Downtown Barberton. While some portions of this plan, including a connection from the Towpath up to the Robinson Ave bridge and related signage, were completed with funding from Medical Mutual, the full connection to Lake Anna has not yet been completed.

<b>Barberton Complete Streets Policy</b>	City of Barberton	2021	Barberton recently completed a Complete Streets Policy which includes the ten components recommended by the National Complete Streets Coalition. The policy’s vision and intent are to ensure that the city integrates and completes a multi-modal transportation network that users of all ages, abilities, and transportation modes can utilize. In the diverse users section, the city identified six principles including: safety, street conditions, equity, diversity, and inclusivity, network, project coordination, and environment. The city has identified implementation steps, and stated where the city will provide oversight to ensure that the policy is incorporated in all projects.
<b>City of Barberton Zoning and Development Code Updates</b>	City of Barberton	In Progress	The city is currently undergoing a process to update its zoning and development codes, to be completed in 2023. The code is being reviewed with Complete Streets principles in consideration.
<b>Lake Anna Park Design Study</b>	City of Barberton	In Progress	The city is competing a plan for Lake Anna Park, which will include potential investments in the park, as well as connections to the park from the surrounding area (especially W. Tuscarawas Avenue and 2nd Street) and from the Towpath Trail. The plan will be completed in 2023, and its recommendations were coordinated with the recommendations in this plan.

**Table 4. Related Studies, Plans, and Policy Efforts**

<b>Plan/ Policy</b>	<b>Lead Agency</b>	<b>Year Completed</b>	<b>Key Takeaways (what proposed projects/policies will impact the active transportation plan?)</b>
<b>League of American Bicyclists Bicycle Friendly Community Report Card</b>	League of American Bicyclists	2018	<p>The League of American Bicyclists provided a Bicycle Report Card for the City of Barberton in the Spring of 2018. The report card provides a comparison to the average bronze rating and Barberton’s current rating. A key category where Barberton is meeting the bronze rating is in the Bicycle Education in Schools category, where Barberton achieved a “Very Well” score, while the average Bronze City scored “Average.”</p> <p>Overall, Barberton has plenty of room for improvement, as the League of American Bicyclists outlines. The League of American Bicyclists provided numerous steps for Barberton to reach the bronze rating, a few key recommendations include:</p> <ul style="list-style-type: none"> <li>• Adopt a Complete Streets policy, which Barberton recently did.</li> <li>• Incorporate NACTO design elements into a design guide, other policies, or adopt NACTO’s design guide.</li> </ul> <p>Implement and adopt practices and policies that create safer systems for bicyclists. This could include providing education for drivers, providing bicycle parking, etc.</p>

<b>Plan/ Policy</b>	<b>Lead Agency</b>	<b>Year Completed</b>	<b>Key Takeaways (what proposed projects/policies will impact the active transportation plan?)</b>
<b><i>AMATS Area Coordinated Public Transit – Human Services Transportation Plan (May 2018)</i></b>	AMATS	2018	AMATS Area Coordinated Public Transit – Human Services Transportation Plan was released in May 2018. The plan provided goals for meeting future transportation need for residents within the metropolitan area. The plan proposed seven recommendations to improve the transit service and address gaps, including but not limited to increasing funding, the number of vehicles, and stops, increasing ADA vehicles, altering routes to decrease service gaps, increasing hours to ensure transit is available for longer periods of time, increasing training, and more.
<b><i>AMATS 2020 Transit Plan (DRAFT)</i></b>	AMATS	2020	The AMATS 2020 Transit (September 2020 Draft) Plan provides guidance, goals, and strategies for public transit in the region, which include METRO RTA in Summit County and the Portage Area Regional Transportation Authority (PARTA) in Portage County. Regarding Barberton, transit coverage for the city is 57.5%, with 15,080 Barberton residents living within ¼ mile of transit. Barberton is among the few cities with the highest levels of access to transit. Routes #8 and #14 run through Barberton. When comparing transit coverage to other communities Barberton has some of the highest transit coverage for vulnerable populations including older adults, people of color, and people with disabilities.
<b><i>Walk.Bike.Ohio</i></b>	Ohio Department of Transportation	2020	The Ohio Department of Transportation (ODOT) produced the Walk.Bike.Ohio (WBO) bike and pedestrian policy plan in 2020. WBO is a beneficial resource as it provides a vast amount of information for municipalities who are attempting to expand or improve their active transportation inventory and network. WBO provides an overview for why active transportation is beneficial, strategic goal areas for the state of Ohio, and a plan framework for areas that are producing active transportation plans. Additionally, ODOT has provided numerous analyses while developing WBO for the state. The Demand Analysis Summary 2020 provides an overall analysis for the types of active transportation that are in demand around the state.
<b><i>METRO 2020 Strategic Plan</i></b>	METRO	2020	METRO’S 2020 Strategic Plan provides guidance and an overview for the operation and goals for Metro, the public transit system in Summit County, for 2020. The gaps and opportunities analysis in the plan found that Barberton is one of the few cities that have a high concentration of vulnerable populations, including the elderly population, population with disabilities, and no car households. While the minority population in Barberton isn’t as high as other areas within Summit County, there are pockets within the city where minority populations are concentrated. The

<i>Plan/ Policy</i>	<i>Lead Agency</i>	<i>Year Completed</i>	<i>Key Takeaways (what proposed projects/policies will impact the active transportation plan?)</i>
			highest ridership areas within Barberton were seen in areas surrounding Summa Health and suburban areas for recreation purposes. Input from people in Barberton showed that service after 11pm would be beneficial as well as the addition of a route to Cleveland on Saturdays.
<b><i>AMATS Transportation Outlook 2045 (DRAFT)</i></b>	AMATS	2021	AMATS Transportation Outlook 2045 (Draft) Plan provides a comprehensive plan of the region’s transportation system for the next 20 years, pulling in analyses and information from previous plans, such as AMATS Area Coordinated Public Transit – Human Services Transportation Plan (May 2018) and AMATS 2020 Transit Plan. The plan provides recommendations for bicycle and pedestrian facilities and policies. For Barberton, the long-term bicycle recommendations included the 3 Creeks - Silver Creek Trail shared-use path from Magic Mile to Lake Dorothy, the Magic Mile shared-use path from Lake Anna to Robinson Avenue, and the 3 Creeks shared-use path at Pigeon Creek / Wolf Creek / Wadsworth Trail, from Hopocan Ave to I-77.
<b><i>Community Health Needs Assessment</i></b>	Summa Health	2022	Summa Health completed their most recent community health needs assessment since 2019. The report is meant to be a resource to assist in community health outcomes. The report included map graphics including the Social Vulnerability Index (indicators include socioeconomic status, household characteristics, racial and ethnic minority status, and housing type and transportation) and an Estimated Population Living in a Food Desert in Summit County. In the Social Vulnerability Index, Barberton ranked as a mix of high and medium, indicating that more social vulnerability exists. The northeast and southwestern portions of Barberton ranked as low-medium. The Estimated Population Living in a Food Desert showed the majority of the center southern portion of Barberton as living in a food desert. A specific health achievement for Barberton includes the Summa Barberton Campus added a “First Step” addiction recovery pathway.

**Table 5. Existing Supportive Programs**

<i>Program Name</i>	<i>Responsible Entity</i>	<i>Target Audience</i>	<i>Ongoing?</i>
<b><i>Safety Town</i></b> The Barberton Police Department works with Barberton Schools to host annual Safety Town events at the schools. They feature videos and lessons on walking, bicycling, and traffic safety, along with an interactive Safety Town course for students to explore.	Police Department, Barberton Schools	School-aged children	Ongoing

<b>Program Name</b>	<b>Responsible Entity</b>	<b>Target Audience</b>	<b>Ongoing?</b>
<p><b><i>Bike Rodeo</i></b>                      Hosted by the Police Department, bike rodeos teach basic bike handling, safety, and other riding tips for riders of all ages and abilities.</p>	City of Barberton Police Department	Bike riders of all ages and abilities	Paused
<p><b><i>Bicycle helmet distribution</i></b>                      The Planning Department has applied annually for free helmets from the American Association of Pediatrician’s “Put a Lid On It” program, which are then distributed at various events.</p>	Planning Department	School-aged children	Ongoing
<p><b><i>National Walk/Bike to School Day</i></b>                      As part of a national Bike to School Day in May, Barberton Schools have worked with the Safe Kids Coalition to host group bicycle rides to school.</p>	Akron Children’s Hospital Safe Kids Coalition, Barberton Schools	School-aged children	Paused
<p><b><i>Summit Bike Share</i></b>                      Summit Bike Share is Summit County’s free bicycle share system, with 40 bikes available at nine stations across Summit County, including at the Barberton Library and Lake Anna YMCA. Operated by the Ohio &amp; Erie Canalway Coalition, Summit Bike Share provides an accessible, eco-friendly, and healthy method of transportation for residents and visitors of Summit County.</p>	Ohio & Erie Canalway Coalition	Residents 18+	Ongoing
<p><b><i>Bike-N-Brainstorm</i></b>                      Bike-N-Brainstorm is a concept developed by AMATS where the public is taken on a bike ride in order to spur discussion regarding the bike ride overall, the route, and how bike and pedestrian infrastructure could improve in their community. Rides have been hosted in Barberton in the past, and AMATS is available to host future events for the city.</p>	AMATS	Adults interested in active transportation topics	Ongoing
<p><b><i>Bike to the Ballpark</i></b>                      An annual group ride from Ignite Brewing in downtown Barberton to the Akron RubberDucks ballpark along the Towpath Trail, the event also features bike decorating, food, and games.</p>	Ignite Brewing Company, Ohio & Erie Canalway Coalition, Akron RubberDucks	Families interested in bicycling for recreation or transportation	Ongoing
<p><b><i>Huntington Towpath Century Ride</i></b>                      In the Ohio &amp; Erie Canalway Coalition’s largest fundraiser of the year, more than 100 bicyclists raise money for the continued development of the Ohio &amp; Erie Canal Towpath Trail, connector trails, and public spaces. In one or two days, bicyclists travel 101 miles along the Towpath Trail, gathering donations and pledges as they train before the ride.</p>	Ohio to Erie Canalway Coalition	Adults throughout Summit County and beyond	Ongoing
<p><b><i>Bike 2 Barberton Day</i></b>                      Presented by the Barberton Community Foundation, this family-oriented event featured a bike rodeo, one- or ten-mile “Bidingmyer Bike Ride” on the Towpath Trail, and music at Lake Anna. The event encouraged more families to try bicycling together, and was held for several years, most recently in 2016</p>	Barberton Community Foundation	Families in Barberton	Past

<i>Program Name</i>	<i>Responsible Entity</i>	<i>Target Audience</i>	<i>Ongoing?</i>
<p><b><i>Barberton Better Block</i></b>                      In 2017, Barberton worked with the Better Block Foundation to hold an open street event in the Second Street business district. The event featured temporary installations with seating, plazas, play areas, and bicycle and pedestrian infrastructure; public art; food; performances; fitness classes; and more.</p>	Barberton Community Foundation, Planning Department, South Summit Chamber of Commerce, Downtown Barberton Merchant's Association	All residents	One time



## EXISTING TRANSPORTATION NETWORK

Toole Design staff used GIS data, desk review, and field visits to analyze the existing active transportation facilities in the city.

### BICYCLE FACILITIES

There are approximately 5.5 miles of existing bicycle and shared use facilities in the city. The city currently has a cumulative 1.1 miles of standard bike lanes, which can be found on Norton Ave (Wooster Rd N to Newell St) and 2nd St SW (Wooster Rd W to Hudson Run Rd). Norton Ave will be designated as part of State Bike Route 60, a signed bicycle route connecting to Wadsworth and Rittman.



Figure 6. Standard bike lanes on Norton Avenue

Around 4.5 miles of the Congressman Ralph Regula Towpath Trail runs north/south through the center of Barberton. Part of a longer 87-mile trail running from Zoarville to Cleveland, it is also designated as US Bicycle Route 21/State Bike Route 1 and is part of the Ohio to Erie Trail connecting Cleveland, Columbus, and Cincinnati, which brings long-distance cyclists through on a regular basis. The trail connects Barberton directly to Akron. The shared use path has a crushed limestone surface. With three existing entry points within the city, access to the trail has been identified in the past as a gap. Entrances and exits to the trail tend to be distanced far apart, making it more difficult for users to enter and exit the trail as they please. Additionally, the crushed limestone surface along parts of the trail can be challenging for bicyclists with narrow tires because it is a looser surface than conventional asphalt or concrete trail surfaces. Trailheads within Barberton, which are maintained by Metro Parks, which include:

- » **Robinson Avenue/Magic Mile Trailhead** contains wayfinding signage, a fix-it station, message board, and a ramp up to the Robinson Ave Bridge from the trail.
- » **Barberton Trailhead** (Fairview Avenue)
- » **Wolf Creek Trailhead** (Snyder Avenue)
- » There is another connection along S Van Buren, just south of Eastern Road. This southern section of the trail passes behind the affordable housing areas along S Van Buren. With many homes near this trailhead, it should be useful to the neighborhood. However, sidewalks end along S Van Buren near Shakers Auto Salvage, making it difficult to access this connection.

### PEDESTRIAN FACILITIES

According to a 2017 inventory, there are 125 miles of roadway and 113 miles of sidewalk in Barberton. This means there are 137 miles of potential sidewalk gaps were every street to have sidewalks on both sides. Major roads, commercial areas and important pedestrian routes should have sidewalks on both sides; however some residential areas may not have a great need for sidewalks on both sides. Sidewalks are present in most commercial areas and in central residential areas but are not present in residential areas in

the southwest, south central, and northeast areas of the city. Notable sidewalk gaps on major arterial and connector roads, where vehicle speeds and volumes are likely to be higher, include along the western part of Wooster Rd W; Hudson Run Rd/Snyder Ave; much of E State St; and parts of Norton Ave.

Most of the sidewalks observed have buffers, except in some commercial areas such as Wooster Rd North and 2nd St NW. There are few marked crosswalks, however, where they are located, they are well marked and signed and often located in important areas. Additionally, there are a few signalized crossings around downtown that are missing pedestrian signal heads.

## TRANSIT

Two METRO bus lines provide service in Barberton. The #14 line connects to Downtown Akron and the Romig Road transit center, serving 5<sup>th</sup> St, Van Buren Ave, Downtown/Lake Anna, and the western part of Wooster Rd. The #8 line connects to Norton and Akron along Norton Ave, through Downtown, and along Wooster Rd N. METRO will be reworking its system in 2023. In Barberton, the changes will not significantly alter the service available, and include:

- » Slightly rerouting the route taken through Downtown Barberton by one block.
- » Line 14 route will now be served by Route 3.
- » Line 8 splits in Barberton, with 8A following the route on Norton Ave and 8B continuing down Wooster Road.
- » Bus frequencies will remain the same

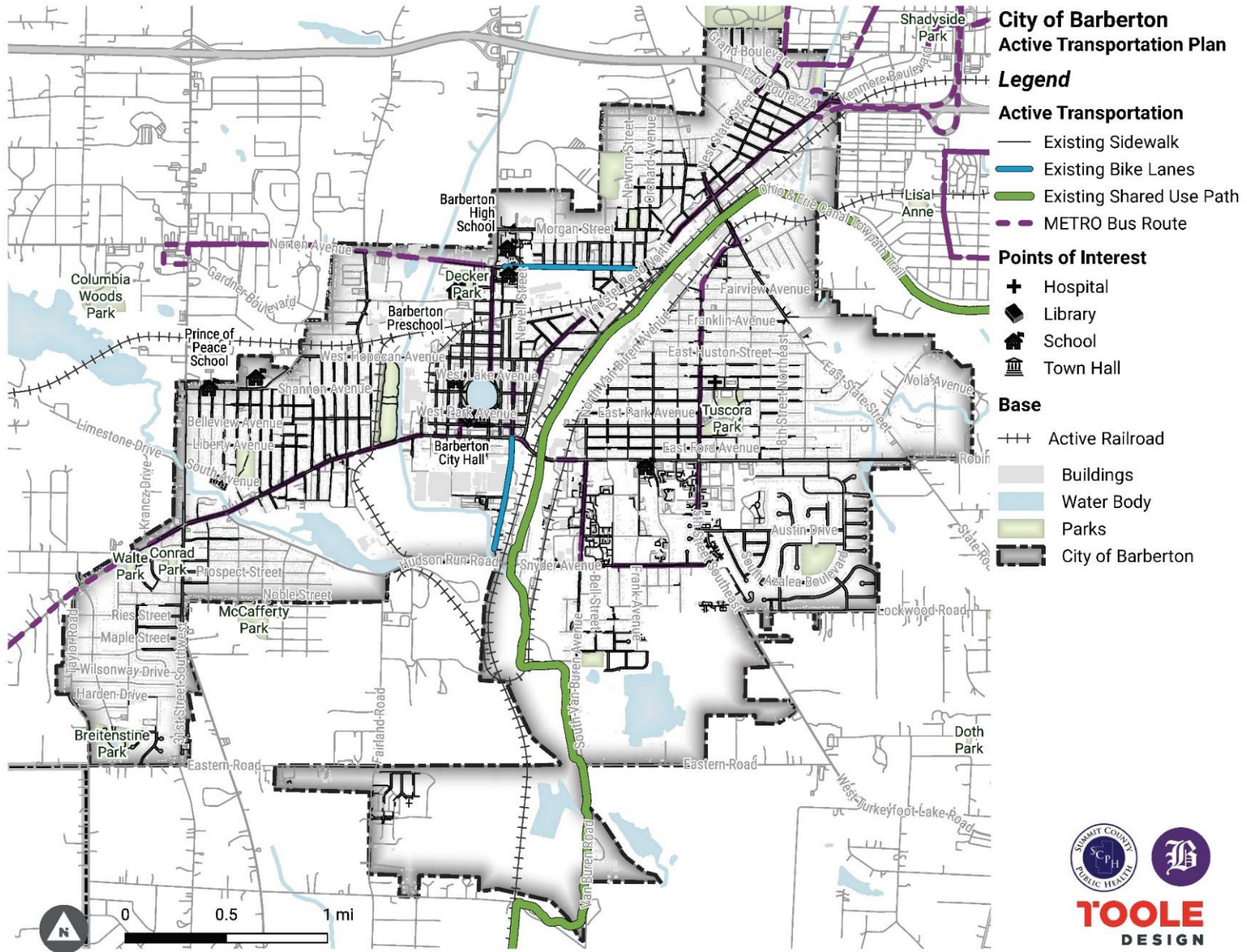


**Figure 7. Bus waiting area at 2nd St NW**

All METRO buses include bicycle racks that can carry two bicycles. Sheltered bus stops, landscaping, and public art are present at the downtown Barberton boarding area on 2<sup>nd</sup> St NW and Tuscarawas Ave. There are 128 total bus stops in the city; the highest numbers of bus boardings within Barberton occur at:

- » 2nd St and Tuscarawas Ave
- » Summa Health
- » The BWXT Facility
- » Robinson Ave and Van Buren Ave
- » Wooster Rd N and W Lake Ave (shopping center)
- » All around Lake Anna (SW and NE corners)
- » The JR Wheel Manufacturing Facility

Figure 8. Existing Network Map



## SCHOOL TRAVEL

Barberton Local School District has four schools throughout the city of Barberton: a primary, intermediate, middle, and high school. Schools were recently reorganized to consolidate grade levels by building. All schools are in different neighborhoods throughout the city, aside from the middle and high school which are across the street from one another. Bussing is offered to all students living further than a mile from their school. Student travel tallies were conducted in October 2022 to judge current rates of students walking and bicycling to school. Across all schools, around 9 percent of students reported walking to or from school, and 0.6% reported biking. The rates of walking and biking were highest at the middle and high schools. A survey was also completed by 337 parents and caregivers of school-age children. Full school travel data are included in the Appendix.

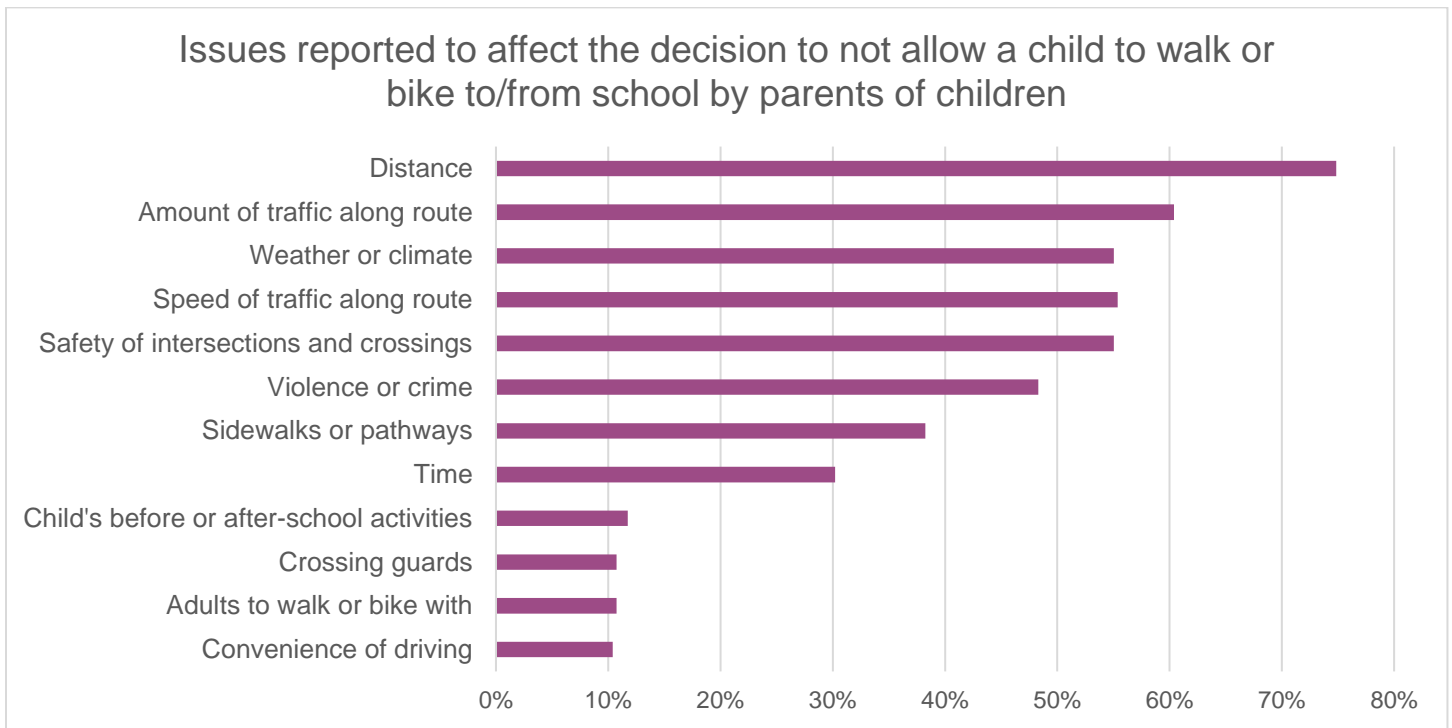
Table 6: Current Student Travel, Fall 2022

<i>Barberton Primary School</i>															
	Total	Walk		Bike		School bus		Family Vehicle		Carpool		Public Transit		Other	
Number of students (morning trips)	671	31	4.6%	0	0.0%	333	49.6%	262	39.0%	3	0.4%	1	0.1%	41	6.1%
Number of students (afternoon trips)	445	24	5.4%	0	0.0%	229	51.5%	151	33.9%	5	1.1%	2	0.4%	34	7.6%
<i>Barberton Intermediate School</i>															
	Total	Walk		Bike		School bus		Family Vehicle		Carpool		Public Transit		Other	
Number of students (morning trips)	754	46	6.1%	0	0.0%	402	53.3%	278	36.9%	11	1.5%	7	0.9%	10	1.3%
Number of students (afternoon trips)	644	53	8.2%	0	0.0%	360	55.9%	197	30.6%	15	2.3%	8	1.2%	11	1.7%
<i>Barberton Middle School</i>															
	Total	Walk		Bike		School bus		Family Vehicle		Carpool		Public Transit		Other	
Number of students (morning trips)	1095	77	7.0%	12	1.1%	521	47.6%	459	41.9%	18	1.6%	5	0.5%	3	0.3%
Number of students (afternoon trips)	792	93	11.7%	11	1.4%	377	47.6%	288	36.4%	14	1.8%	2	0.3%	7	0.9%
<i>Barberton High School</i>															
	Total	Walk		Bike		School bus		Family Vehicle		Carpool		Public Transit		Other	
Number of students (morning trips)	573	39	6.8%	6	1.0%	177	30.9%	294	51.3%	31	5.4%	6	1.0%	20	3.5%
Number of students (afternoon trips)	335	33	9.9%	3	0.9%	102	30.4%	160	47.8%	21	6.3%	5	1.5%	11	3.3%

**Table 7: Total Current Student Travel, Fall 2022**

<i>Barberton City Schools</i>															
	Total	Walk		Bike		School bus		Family Vehicle		Carpool		Public Transit		Other	
<b>Total Number of students (morning trips)</b>	<b>3093</b>	193	6.2 %	18	0.6 %	143	46.3 %	129	41.8 %	63	2.0 %	19	0.6 %	74	2.4 %
<b>Total Number of students (afternoon trips)</b>	<b>2216</b>	203	9.2 %	14	0.6 %	106	48.2 %	796	35.9 %	55	2.5 %	17	0.8 %	63	2.8 %

The 2022 Barberton Parent/Caregiver Survey found that there are several reasons why parents won't allow their children to walk or bike to school. These reasons include the lack of proper sidewalk infrastructure, lack of walking and bicycling routes for children, and danger and fear of their children being harassed by strangers or to witness violence or crime. Parents also stated that there are minimal walking and bicycling route options for children to travel to and from school. Schools are located near roadways with heavy traffic volumes and perceived higher speeds.



**Figure 9: Issues reported to affect the decision to allow a child to walk or bike to/from school**

## ANALYSES

After mapping the existing transportation system, the project team performed several analyses to better understand the equity of the network, its connectivity, use of walking and bicycling facilities, safety, and infrastructure conditions. The following section provides a summary of each existing conditions analysis.

### EQUITY

#### Incorporating Equity in Active Transportation Planning

Active transportation options contribute to a more equitable transportation system by reducing barriers for people who do not use a motor vehicle. Many people do not drive because of ability, income, age, or a combination of these factors. The cost of owning and maintaining a vehicle can be a major burden, especially on low-income families. People without a vehicle need to access employment, school, grocery shopping, and a variety of other activities to fully participate in society. Transit, walking, and bicycling play a vital role in the overall transportation system by offering increased mobility, independence, and access to opportunity for people without vehicles.

National statistics point towards the need for equity in active transportation planning and design. Across the country and in Ohio, a disproportionate share of walking and bicycling fatalities occurs among communities of color, older adults, and low-income populations.<sup>1</sup> Connected and accessible active transportation infrastructure for these groups results in better access to daily physical activity and improved quality of life.

1. Ohio Department of Transportation. (2020), *Walk.Bike.Ohio Safety Analysis Reports*. <https://www.transportation.ohio.gov/wps/portal/gov/odot/programs/walkbikeohio/existing-future-conditions-analysis/safety-analysis-reports>

#### Equity Analysis

As part of its statewide bicycle and pedestrian plan, Walk Bike Ohio, the Ohio Department of Transportation (ODOT) performed an Active Transportation need analysis for the entire state. It created a composite need score for every census tract in the state, with scores assigned based on the presence of non-white groups, youth, older adults, poverty, low educational attainment, limited English proficiency, and low motor vehicle access. Higher scores correspond to a higher presence of underserved groups and indicate a greater need to increase equitable outcomes.

#### Demand Analysis

The ODOT [Demand Analysis 2020](#) (Figure 10) provides an overall analysis for the demand for active transportation around the state. Darker areas on the map represent a higher demand for walking and cycling opportunities. Demand indicators include employment density, population density, walk/bike

commute mode share, park density, presence of college/universities, retail employment density, and number of people below 200% of the poverty line.

The area with the highest demand for walking and cycling opportunities is Downtown Barberton and the areas surrounding it. Four schools are within this area of high demand. Much of the rest of Barberton has a medium-high need for walking and cycling opportunities. The lowest demand is found around the edges of the city (north of Morgan St, east of State Road and south of Eastern Road), which are sparsely populated.

*Need Analysis*

The ODOT [Need Analysis 2020](#) (Figure 11) identifies where active transportation is needed based on concentrations of vulnerable populations. Darker areas on the map represent a higher need for access to walking and cycling opportunities. There are a total of seven need indicators: minority groups, youth, older adults, poverty, no high school diploma, limited English proficiency, and no access to a motor vehicle.

Areas with the highest need for walking and bicycling opportunities are the neighborhood east of the Ohio & Erie Canal Towpath Trail to 5th Street SE. Downtown, the northern point of the city, and the neighborhood around 31st and Wooster Rd W. All of these areas have a medium-high need for walking and cycling opportunities. The remaining areas range from medium need (such as the areas immediately surrounding downtown) to low need (such as the eastern and westernmost parts of the city).

Outcomes of these analyses were used to inform the Priority Projects section of the plan.



Figure 10. Demand Analysis - Barberton

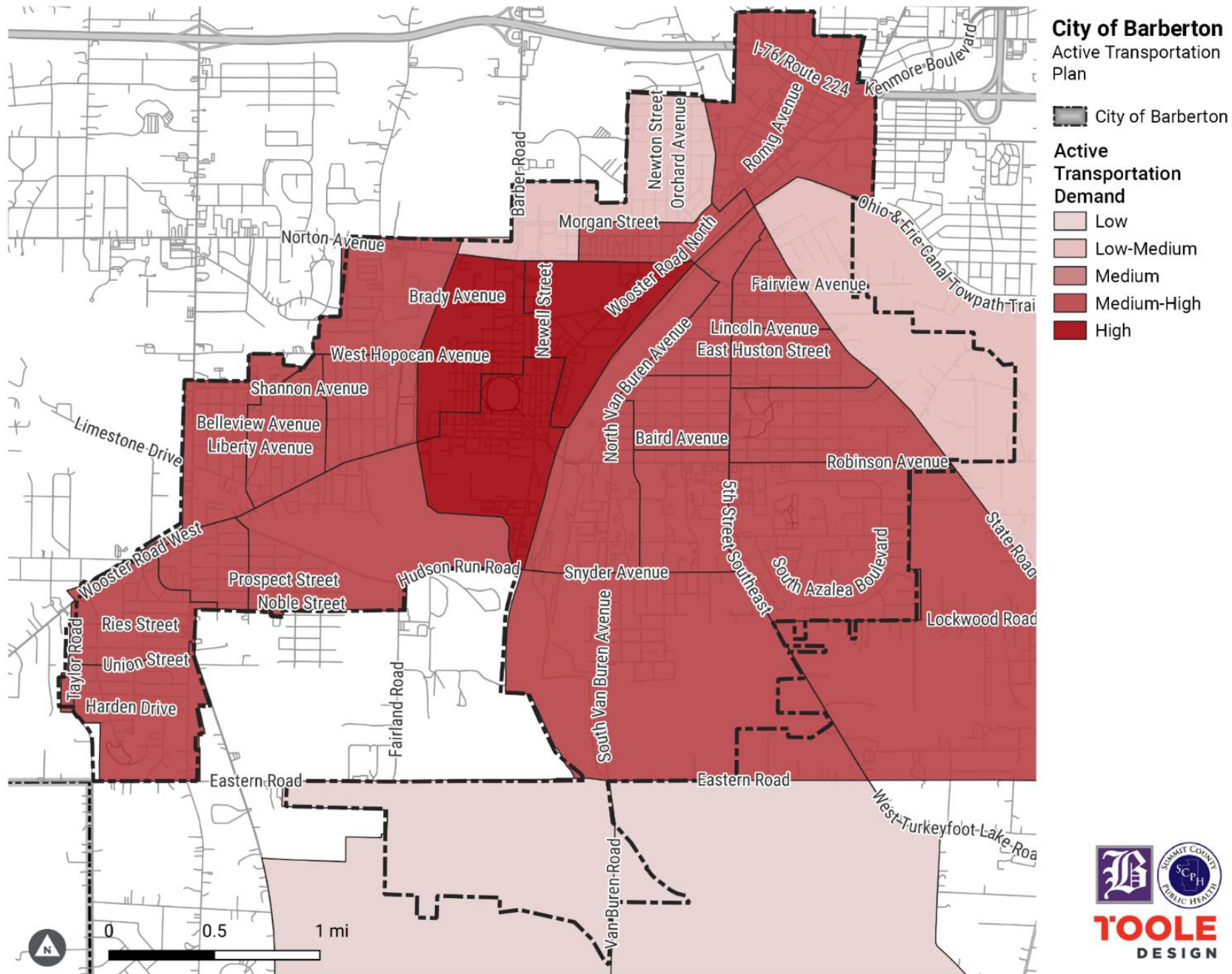
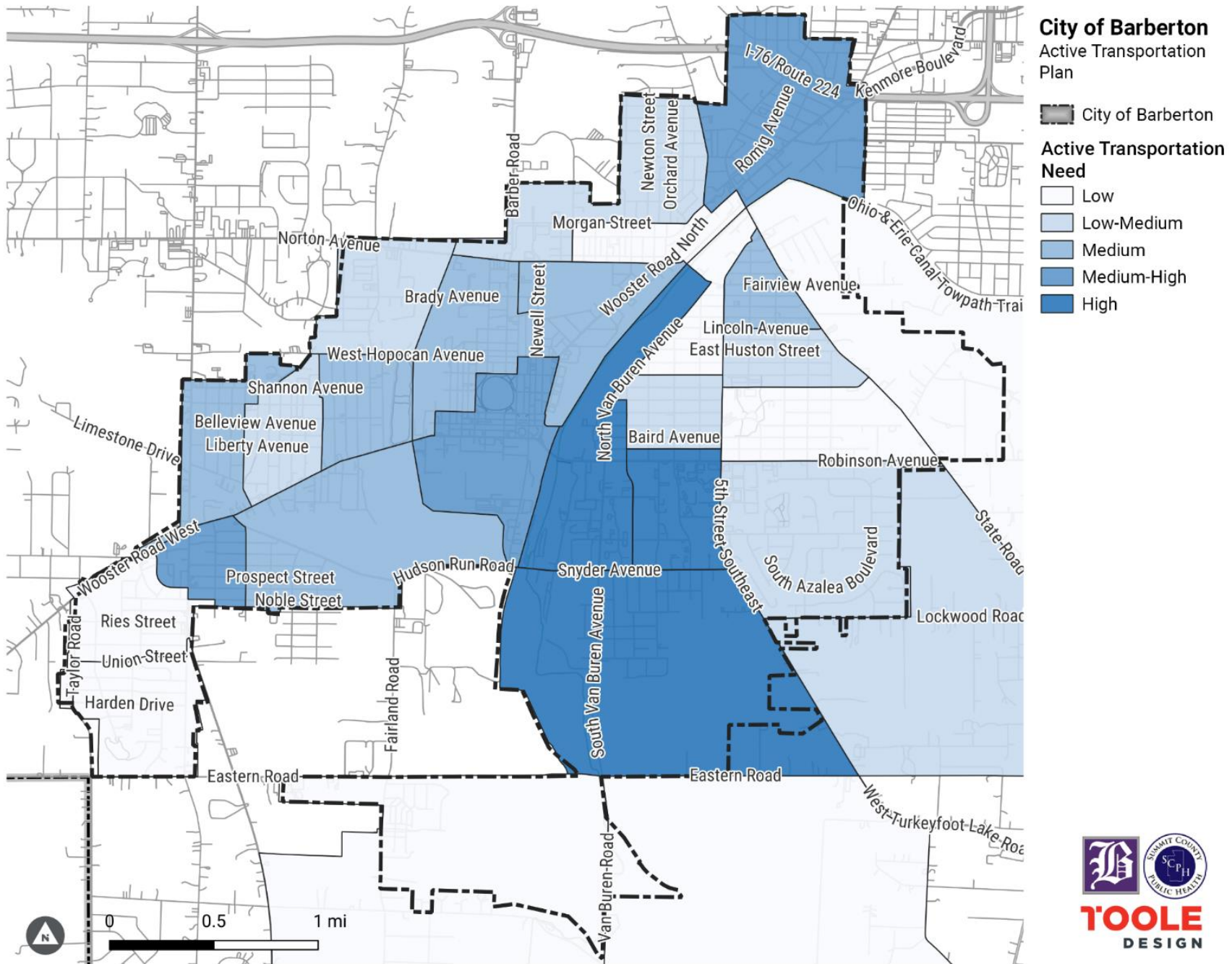


Figure 11: Need Analysis - Barberton



## NETWORK CONNECTIVITY

### Completeness of active transportation system

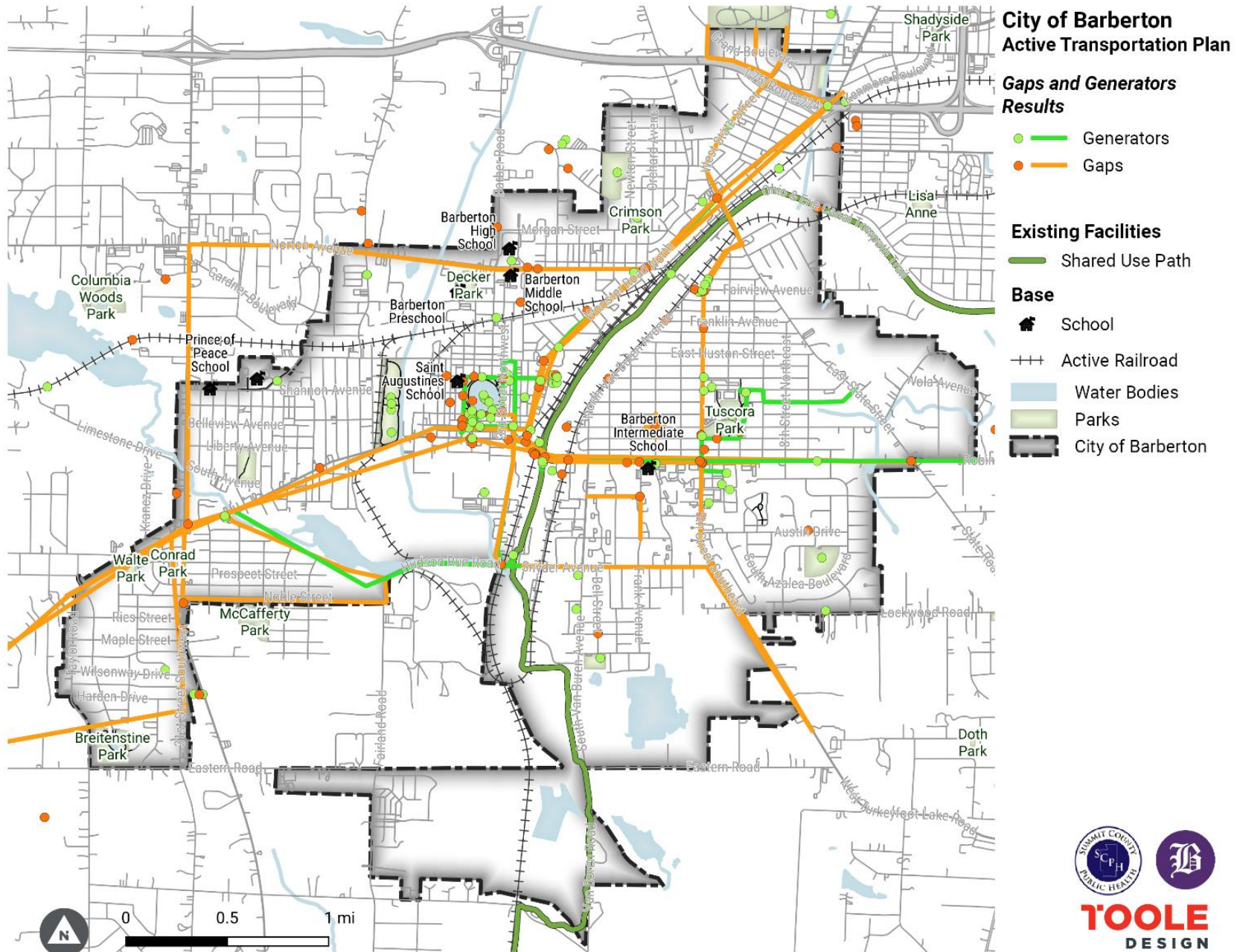
Active transportation facilities that connect people to jobs, schools, parks, and other destinations form a complete network. Filling in missing connections expands access and mobility for people walking and bicycling and providing multiple route options accommodates people of all ages and abilities. Evaluating network connectivity provides an understanding of where gaps in the network exist and whether low comfort or high comfort walking and bicycling facilities exist.

### Gaps and generators mapping

A gaps and generators analysis examines physical breaks in an active transportation network, such as sidewalk gaps or missing connections between bicycle facilities as well as bicycling and walking trip generators. The first Steering Committee meeting and the first round of engagement were used to identify key destinations that residents wished to be able to reach by walking, bicycling, or transit, and key gaps in the network that made it more difficult to do so. A total of 215 mapped comments were collected. Mapped results are shown in Figure 12.

- » Key activity generators identified included:
  - Barberton City Schools
  - Lake Anna
  - Lake Anna YMCA
  - Magic City Plaza
  - Giant Eagle Supermarket
  - Ohio & Erie Towpath Trail
- » Major gaps highlighted by the public included:
  - Access to Ohio & Erie Canal Towpath trailheads along Snyder Ave
  - Missing sidewalks in multiple neighborhoods
  - Availability of bike lanes on major roads
  - Safe crossings to access parks, library, shopping destinations

Figure 12: Gaps and Generators Results



## SAFETY

### Evaluating crash trends and patterns

Evaluating crash trends and patterns identifies where crashes are currently occurring and provides a better understanding of what factors may be contributing to crashes. Understanding these crashes can lead to projects that have the greatest likelihood of improving safety for pedestrians and bicyclists. These analyses are especially important because Ohio is not trending in the right direction for bicyclist and pedestrian safety.

### CAPE Tool

The Crash Analysis and Planning Evaluation (CAPE) Tool is provided by the Ohio Department of Transportation (ODOT) and provides a crash trend analysis of the local area. The crash data used for this tool was provided by ODOT and covers a ten-year period, from 2011 to 2020. Key findings include:

- » Serious injuries have decreased over the past five years, going from between 25 to 39 serious injury crashes between 2011-2015, to between five to 14 serious injury crashes between 2016-2020.
- » Fatalities and serious injuries occurred at the highest rate for crashes involving pedestrians and crashes where a vehicle overturned.
- » Regarding non-motorized vehicles (pedestrians/skaters and bicyclists) there has been one fatal crash (pedestrian/skater) and 11 serious injury crashes over the past ten years, and a total of 60 reported crashes.
- » There is no apparent trend regarding pedestrians/skaters and bicyclist crashes. the highest number of pedestrian/skater and bicyclist crashes occurred in 2019, while the lowest number of pedestrian/skater and bicyclist crashes occurred in 2014.
- » Twice as many crashes occur at intersections than at non-intersections. More non-motorized crashes occurred on minor and principal arterial roads than on other types of roads.
- » In late 2022 a pedestrian was also hit and killed on Robinson Avenue east of the bridge.

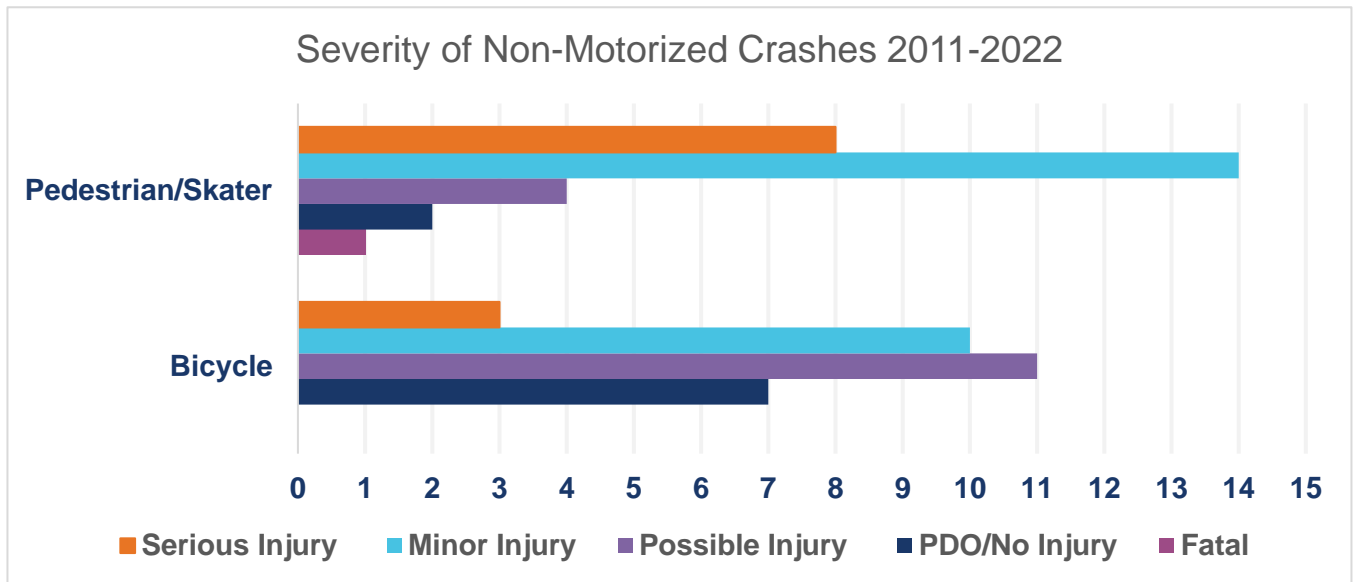


Figure 13. Severity of Non-Motorized Crashes

### AMATS Crash Trends Study

AMATS performed a regional systemic study of high-crash roadway sections and high crash intersections. 160 high crash roadway sections and 202 high crash intersections were identified within the AMATS region. High crash sections were those with three or more crashes per mile and at least 30% fatal or injury related crashes over a three-year period. High crash intersections were those with a minimum of nine crashes where at least 30% of the crashes resulted in fatalities or injuries over a three-year period. Nine of the 160 high crash sections that were identified for the region were within Barberton, including three of the top 25 locations. Six of the 202 high crash intersections were within Barberton, including one of the top 50 locations.

High crash sections within Barberton include:

- » #4 of 160 – Wooster Road W from Johnson Road to 31<sup>st</sup> Street
- » #17 of 160 - 5th Street NE (SR 619) from Robinson Avenue to State Street
- » #23 of 160 - W Hopocan Avenue from Wooster Road N to 8th Street NW
- » #41 of 160 - Wooster Rd W from 31st St to 14th St NW
- » #59 of 160 - Norton Avenue/Fairview Avenue from Wooster Road N to 5th Street NE (SR 619) (at least one fatality was reported)
- » #63 of 160 - Waterloo Road from Wooster Road N to Barberton Corp Line
- » #95 of 160 - Wooster Road N from Norton Avenue to State Street
- » #112 of 160 - W State Street from Wooster Road N to Barberton Corp Line
- » #152 of 160 - Hillsdale Avenue/W Hopocan Avenue from Shannon Avenue to 8th Street NW

High crash intersections within Barberton include:

- » #44 of 202 - Wooster Road N and Wooster Road W/Robinson Avenue
- » #57 of 202 - W Hopocan Avenue and 15th Street NW
- » #85 of 202 - Wooster Road W and 31st Street

- » #110 of 202 - Wooster Road W and 6th Street NW
- » #141 of 202 - Wooster Road N and Oakwood Street
- » #172 of 202 - Wooster Road N and Burt Street

### **Safer Streets Priority Finder**

The Safer Streets Priority Finder is an open-access tool that uses crash data and roadway characteristics to identify roadways with the greatest history of crash risk, as well as likely crash risks in the future.

#### *Crash Data*

Crash data were collected from the Ohio Department of Transportation (ODOT) GIS Crash Analysis Tool (GCAT). Data was collected for a 5 year-period, from 2017-2021. Crashes are categorized into three groupings: fatal and serious injury suspected, injury, and injury possible.

#### *Sliding Windows Analysis*

A sliding windows analysis helps us understand crashes throughout a transportation network and identify roadway segments with the highest crash density, weighted by crash severity. The analysis is done by determining the number and severity of crashes in a half-mile “window” on a roadway and shifting that window along the roadway 1/10 mile at a time. Crashes are weighted by severity by multiplying the number of fatal and incapacitating injury (sometimes called Killed or Seriously Injured crashes or KSI) crashes by 3 and non-incapacitating injury crashes by 1 (non-injury crashes are not reflected). Each roadway segment is scored, and a map is generated to visualize roadway segments with the highest density of crashes for pedestrians, bicyclists, and motorists. Roadway segments with thicker and darker lines represent portions of the roadway network that have a higher concentration of overall crashes and KSI crashes.

#### **Sliding Windows Analysis - Bicycle**

The sliding windows analysis was performed to understand which roadway segments contained the highest density of crashes for bicyclists. Street segments with a high concentration of bicycle crashes were a mix of rural streets, four lane commercial roads, and neighborhood roads. Specific street segments included Wooster Rd (31<sup>st</sup> Street NW to 15<sup>th</sup> Street NW), Norton Avenue (15<sup>th</sup> Street NW to Decker Park), 15<sup>th</sup> Street NW (West Hopocan Avenue to Norton Avenue), Hudson Run Road (intersection of Hudson Run Road/Wooster Road to 21<sup>st</sup> Street SW), 23<sup>rd</sup> Street NW. Most crashes happened at intersections.

#### **Sliding Windows Analysis - Pedestrian**

The sliding windows analysis for pedestrians was performed to understand the concentrations of pedestrian crash locations. High and medium-high concentrations of pedestrian crashes were seen in areas with heavier amounts of pedestrian activity, including W Paige Avenue and Wooster Road North near downtown (W Tuscarawas Avenue to Norman Street), Wooster Road West (37<sup>th</sup> Street SW to 15<sup>th</sup> Street NW), and 31<sup>st</sup> Street NW (Bellevue Avenue to Haynes Avenue/31<sup>st</sup> Street NW). Additionally, street segments near Summa Health show medium concentrations of pedestrian crashes. Most crashes happened at intersections.

#### **Sliding Windows Analysis - Motor Vehicle**

The sliding windows analysis was performed to understand which roadway segments contained the highest density of crashes for motorists. The highest concentrations of crashes are seen along higher trafficked roadways including Wooster Road, Robinson Avenue, the eastern portion of Norton Avenue,

State Street north of Coventry Road, and the downtown core. Most crashes were located within or near intersections.

See the Appendix for Sliding Windows Analysis maps.

#### *Safer Streets Model*

The Safer Streets Model estimates crash risk throughout the system. This framework incorporates external information about how many crashes might be expected alongside the observed crash history. The model estimates pedestrian and bicycle crash risk rates per mile for each road segment and crash severity type (e.g., serious injury). These values are then converted to crash cost estimates based on the costs assigned to each crash severity type.

#### **Safer Streets Model - Bicycle**

The safer streets model estimates bicycle crash risk rates per mile for each road segment and crash severity type to understand future roadway safety (Figure 14).

Roadways that show as high future crash risk include:

- » The entirety of Norton Avenue, which is near multiple schools, is either medium-high risk or high risk for bicyclists in the future.
- » Rural two-lane roads, such as parts of Hudson Run Road and all of S Cleveland Massillon Road within city limits show as medium-high or high risk for bicyclists in the future.
- » Wooster Road, starting at Hudson Run Road and ending at 14th Street NW, show as medium-high risk for bicyclists in the future. This portion of road is a high traffic, four lane road, with commercial, residential, and industrial zoning.
- » Numerous neighborhood roads that are near medium-high and high-risk roads also show as medium-high risk for bicyclists in the future, such as 15th Street NW, 28th Street SW, 25th Street SW, 23rd Street SW, and 21st Street SW.

#### **Safer Streets Model - Pedestrian**

The safer streets model estimates pedestrian crash risk rates per mile for each road segment and crash severity type to understand future roadway safety (Figure 15).

Major corridors that have heavy amounts of traffic show up as high or medium-high risk for pedestrians including:

- » The entirety of Wooster Road, within city limits, is either high or medium-high risk for pedestrians in the future.
- » The majority of Hudson Run Road/Snyder Avenue (Fairland Rd to where Snyder Avenue dead ends at 5th Street SE), 5th Street SE north of Snyder Avenue and State Street (north of 5th Street SE) show up as a high or medium-high risk for pedestrians in the future.
- » Additionally, street segments near Barberton High School, Barberton Middle, Barberton Elementary School West, and Summa Health are medium-high risk for pedestrians in the future.

Results of the Safer Streets Model were used to inform the prioritization model in the Priority Projects section.

Figure 14: Safer Streets Model - Bike

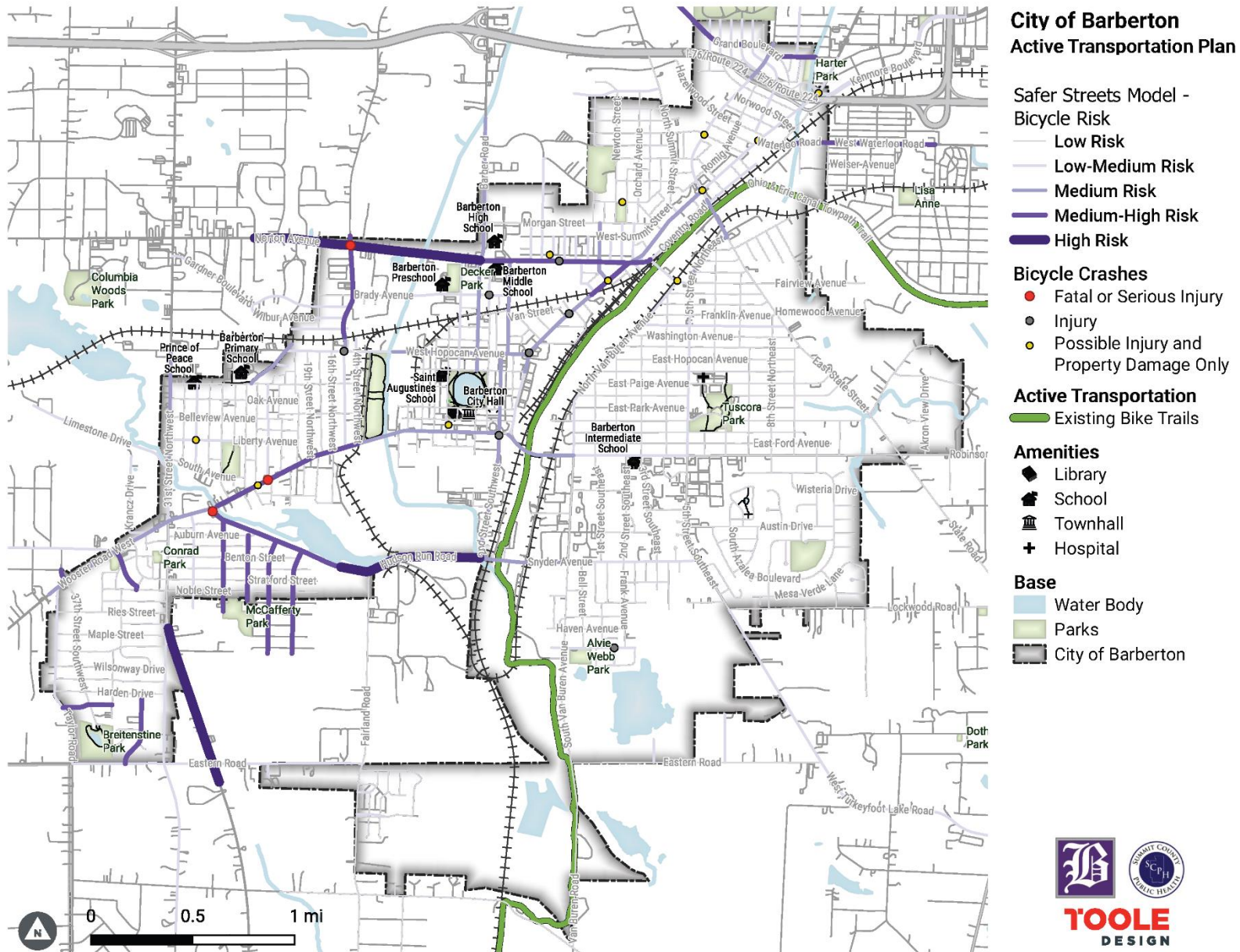
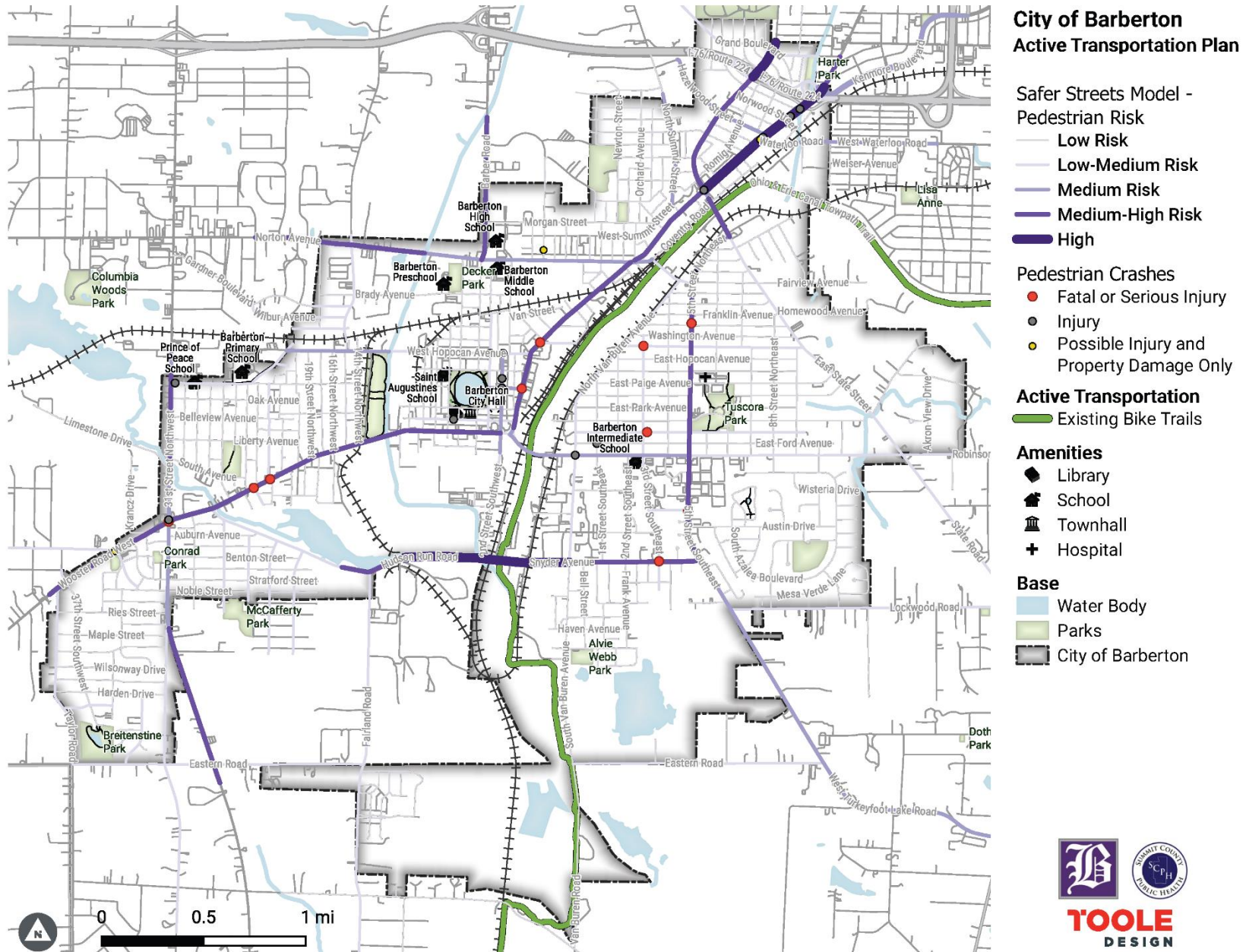


Figure 15: Safer Streets Model - Pedestrian



# PROPOSED PROJECTS AND PROGRAMS



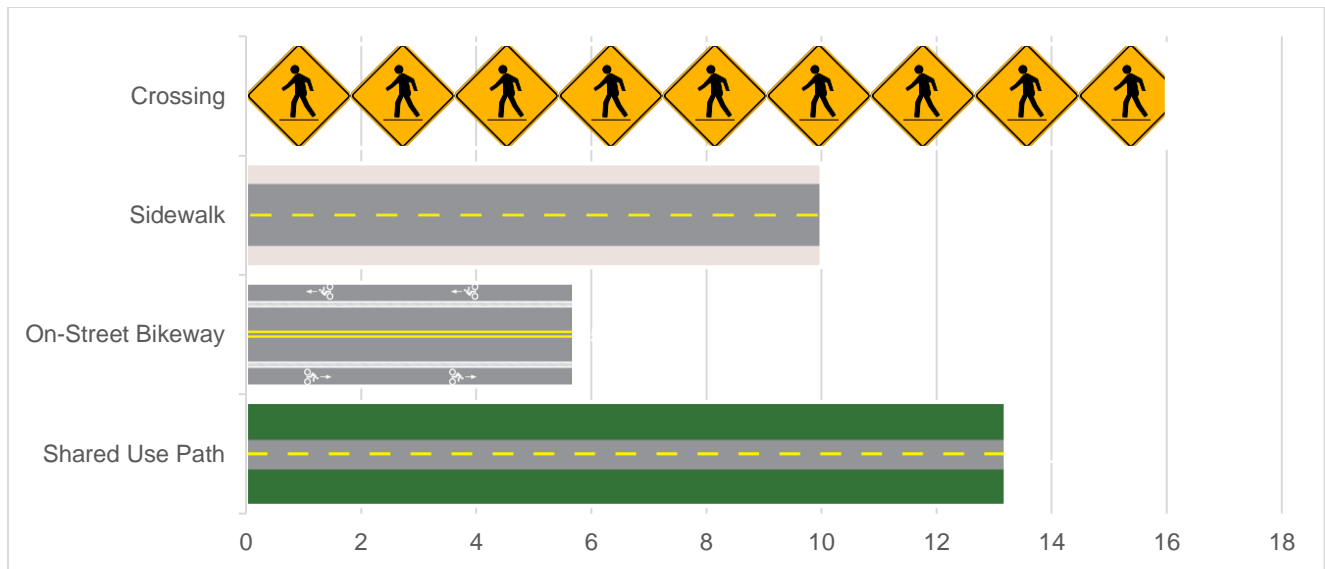


## PROPOSED PROJECTS AND PROGRAMS

This plan makes recommendations that will promote and support active transportation through a combination of infrastructure projects, policies, and programs. Infrastructure recommendations refer to physical, built projects that will change how roadways are configured to provide space for all users. Policy and program recommendations aim to re-prioritize walking and bicycling and to change the culture around active transportation and help increase its use through engagement, education, encouragement, and evaluation.

## ACTIVE TRANSPORTATION NETWORK RATIONALE

A primary goal of this plan is to increase the safety and convenience of walking and bicycling and to that end, recommendations include a variety of route options and facility types to accommodate the majority of community members. The recommendations outlined add over **10 miles of sidewalks, 5.7 miles of on-street bikeways, 13.2 miles of shared use paths** to the transportation system, and **16 intersection or crossing improvements**.



**Figure 16. Proposed Projects by Miles/Number of Projects**

### Bicycle Facilities

Local infrastructure and routes will help bicyclists of varying abilities access their daily destinations such as schools, grocery stores, parks, and work. There are several important factors to consider during bicycle facility selection, such as design users and roadway conditions. The majority of bicycle facilities recommended in this plan are shared use paths, which provide maximum separation from motor vehicles and also serve pedestrians. The plan also recommends on-road facilities in some locations where space was more constrained, where vehicle volumes are lower, therefore less separation is necessary, or to continue on-road facilities already present.

### Pedestrian Facilities

Pedestrian infrastructure is primarily provided in the form of sidewalks and shared use paths. The presence of sidewalks along a roadway corresponds to a 65 to 89 percent reduction in walking along road pedestrian crashes.<sup>3</sup> Pedestrians are also among the most vulnerable road users and 72 percent of pedestrian fatalities occur at non-intersection locations.<sup>4</sup> Additional spot treatments implemented along roadways or trails at crossings would improve the bicycling and walking experience, encourage more walking, and decrease the number of crashes that occur. Crossing improvements could include high-visibility crosswalks, signage, curb extensions, pedestrian refuge islands, rectangular rapid-flashing beacons (RRFB), or pedestrian hybrid beacons (PHB).



<sup>3</sup> FHWA (2017). Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, Table 11. Referenced in <https://safety.fhwa.dot.gov/provencountermeasures/walkways/>

<sup>4</sup> FHWA (2018). Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, Page 1.

[https://safety.fhwa.dot.gov/ped\\_bike/step/docs/STEP\\_Guide\\_for\\_Improving\\_Ped\\_Safety\\_at\\_Unsig\\_Loc\\_3-2018\\_07\\_17-508compliant.pdf](https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf)

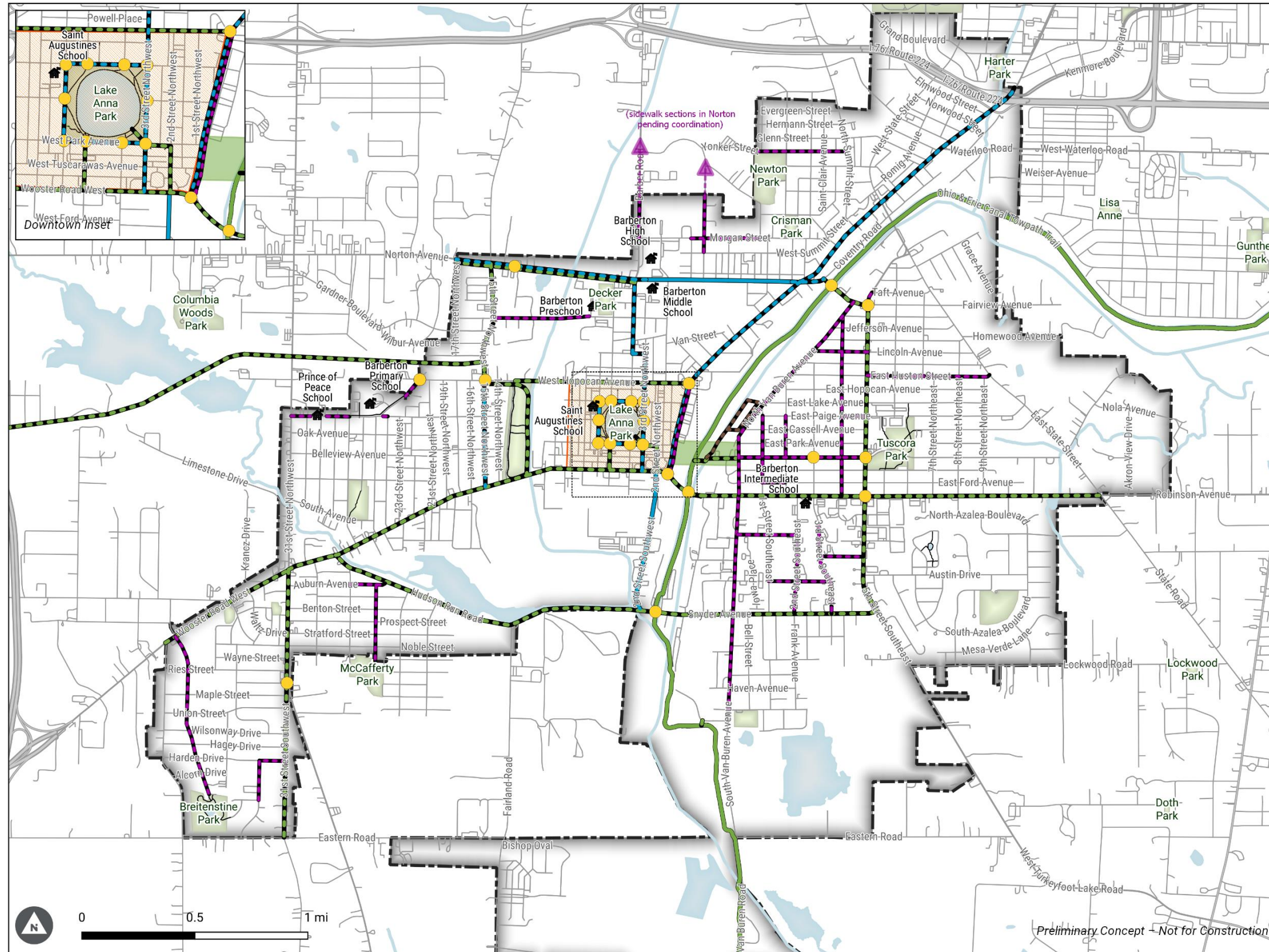
## INFRASTRUCTURE PROJECT RECOMMENDATIONS

The final proposed network is based on the existing conditions analysis, Steering Committee meetings, and public input. The network includes critical connections to downtown, Lake Anna, the Towpath trailheads, and schools. The network also identifies multiple intersections that should be improved to make walking and bicycling safer along major roads, such as Lake Anna intersections, Robinson Avenue, Wooster Road, and 5th Street. See Figure 17, Figure 18, and Figure 19 for maps and Table 8, Table 9 and Table 10, and The following general infrastructure recommendations are not associated with numbered projects on the map, but would be implemented programmatically or city-wide as appropriate.

Table 11 for a complete lists of all proposed projects with descriptions.



Figure 17. Network Map



**City of Barberton  
Active Transportation Plan  
Draft Recommendations**

**All Recommendations**

- Proposed On-Road Bicycle Facility
- Proposed Shared Use Path
- Proposed Bridge
- Proposed Traffic Calming
- Proposed Sidewalk
- Proposed Unpaved Trail
- Proposed Spot Improvement

**Existing Facilities**

- Bike Lane
- Shared Use Path

**Base**

- School
- Active Railroad
- Water Bodies
- Parks
- City of Barberton

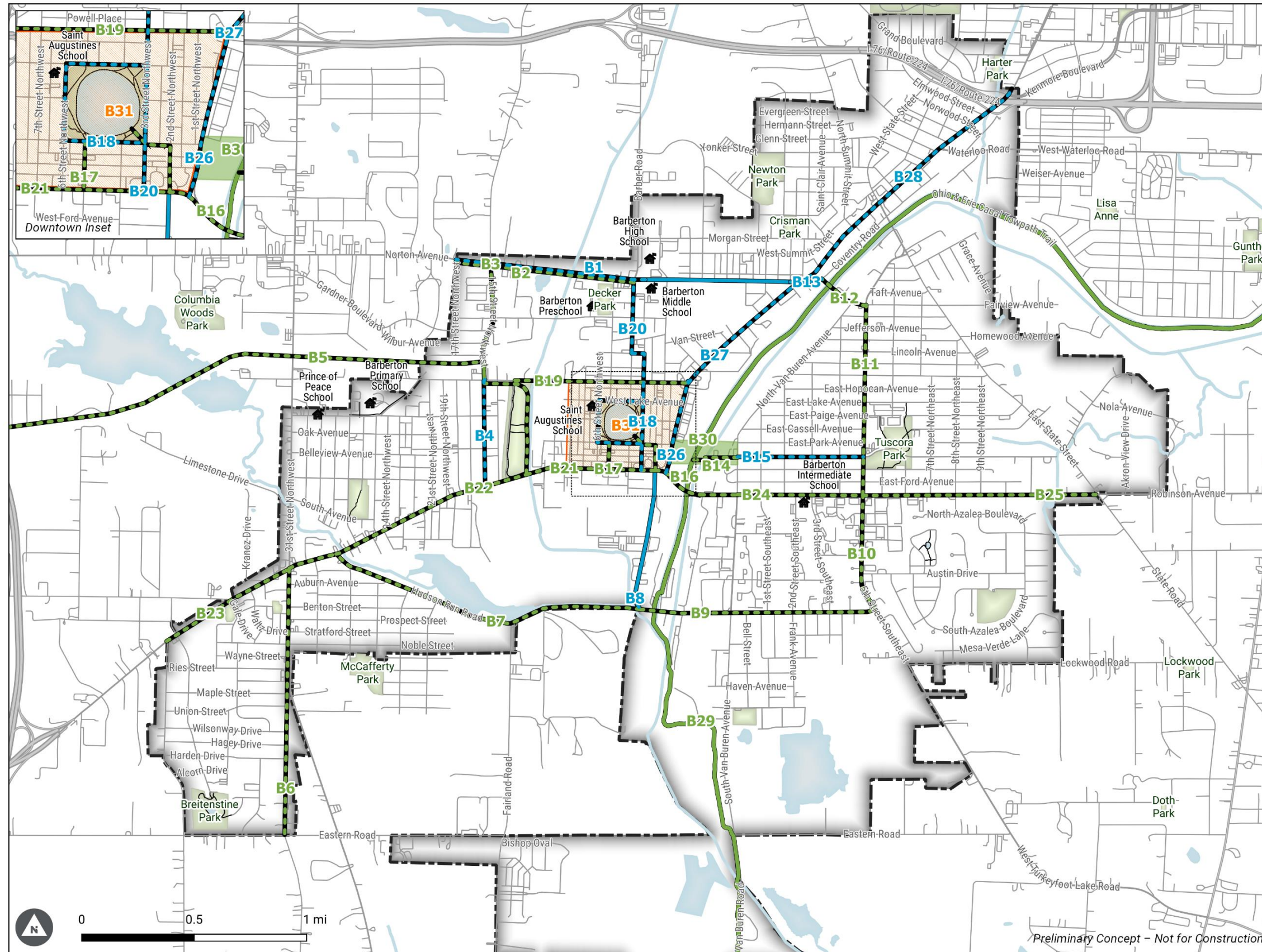
Labeled recommendations are found in the following pages

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Figure 18. Bicycle and Shared Use Recommendations Map



**City of Barberton  
Active Transportation Plan  
Draft Recommendations**

**Bicycle and Shared Use Recommendations**

- Proposed On-Road Bicycle Facility
- Proposed Shared Use Path
- Proposed Bridge
- Proposed Traffic Calming

**Existing Facilities**

- Bike Lane
- Shared Use Path

**Base**

- School
- Active Railroad
- Water Bodies
- Parks
- City of Barberton

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**TOOLE**  
DESIGN

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**Table 8. Bicycle and Shared Use Path Project Recommendations**

<i>Project ID</i>	<i>Location</i>	<i>Extents</i>	<i>Facility Type</i>	<i>Description</i>	<i>Length (mi)</i>
<i>B1</i>	Norton Ave	West city limits to existing bike lane 306 ft E of 4th Street NW	On-Road (Bike Lane)	Continue existing bike lane to city limits for continuous facility along Norton Ave.	0.8
<i>B2</i>	Norton Ave	West city limits to Barber Ave	Shared Use Path	Provide a shared use path on one side of Norton Ave, providing access to Howmet and bus stops and towards high school.	0.8
<i>B3</i>	15th Street NW Part 1	Norton Ave to W Hopocan Ave	Shared Use Path	Provide a shared use path on one side of 15th St NW.	0.5
<i>B4</i>	15th Street NW Part 2	W Hopocan Ave to W Wooster Rd	On-Road (Bicycle Boulevard)	Provide an on-road bikeway, such as a bicycle boulevard, on 15th St, incorporating traffic calming measures and signage.	0.5
<i>B5</i>	Planned Silver Creek Metro Parks Trail	Towpath Trail to west city limits	Shared Use Path	Provide a shared use path from Towpath Trail towards Norton through Downtown, Foundation Fields and along railroad right of way. (Project is currently under development by Summit Metro Parks).	1.0
<i>B6</i>	31st St SW	Wooster Rd W to Eastern Road	Shared Use Path	Provide a shared use path along west side of 31st St SW for neighborhood and park access.	1.2
<i>B7</i>	Hudson Run Rd	Wooster Rd W to 2nd Street SW	Shared Use Path	Provide a shared use path on one side of Hudson Run Rd for access from west side of town to Wolf Creek Trailhead.	1.4
<i>B8</i>	2nd Street SW	End of existing bike lane on 2nd St SW to Hudson Run Road	On-Road (Bike Lane)	Fill gap in existing bike lanes on 2nd St SW to connect to Wolf Creek trailhead.	0.1
<i>B9</i>	Snyder Ave	2nd St SW to 5th St SE	Shared Use Path	Provide a shared use path on one side of Snyder Ave for access from south side of town to Wolf Creek trailhead and bus stops.	1.0
<i>B10</i>	5th St SE	Robinson Ave to Snyder Ave	Shared Use Path	Provide a shared use path on one side of 5th St SE for access to groceries, school, and Wolf Creek trailhead.	0.5
<i>B11</i>	5th St NW	Fairview Ave to Robinson Ave	Shared Use Path	Provide a shared use path on one side of 5th St NW for access to parks, groceries, jobs, and medical services.	0.8

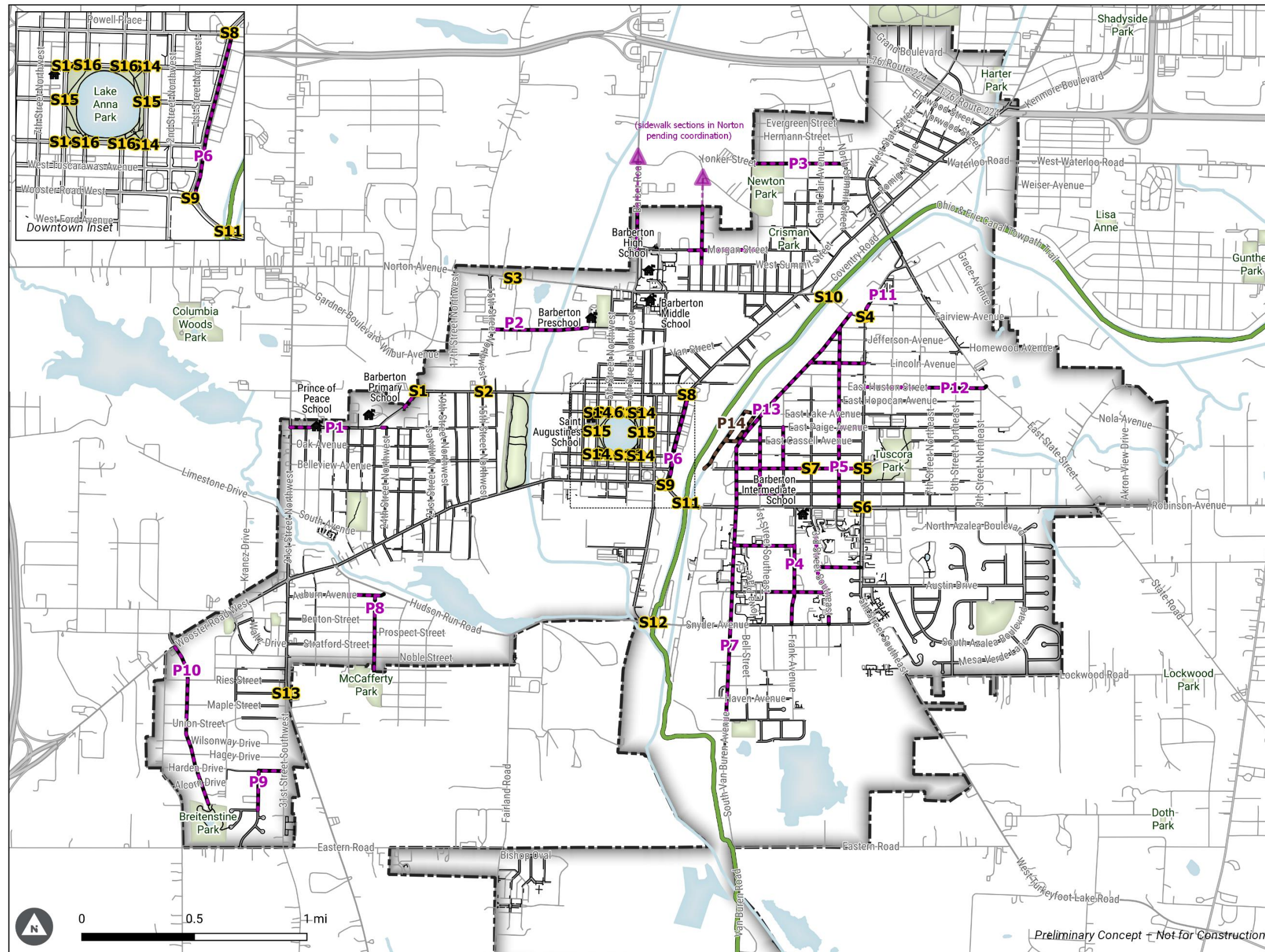
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<b>Project ID</b>	<b>Location</b>	<b>Extents</b>	<b>Facility Type</b>	<b>Description</b>	<b>Length (mi)</b>
<i>B12</i>	Fairview Ave	Norton Ave/Coventry Rd to 5th Street NE	Shared Use Path	Provide a shared use path on one side of Fairview Ave for improved access to Barberton Trailhead.	0.2
<i>B13</i>	Norton Ave	Parkview Ave to the intersection of Norton Ave/Coventry Rd	On-Road (Bike Lane)	Extend existing bike lane on Norton Ave to access Barberton Trailhead.	0.1
<i>B14</i>	E Tuscarawas Ave Wetland/Towpath Link	N Van Buren Ave to Towpath Trail	Shared Use Path	Build a new bridge and shared use path linking N Van Buren Ave and proposed Wetland Loop path to the Towpath Trail.	0.2
<i>B15</i>	E Tuscarawas Ave	N Van Buren Ave to 5th St NW	On-Road (Bike Lane)	Add bike lanes or bicycle boulevard treatment to E Tuscarawas Ave to connect proposed Towpath bridge connection through neighborhood.	0.6
<i>B16</i>	Magic Mile (Robinson Ave and 2nd St)	Towpath Trail entrance to Lake Anna (2nd St)	Shared Use Path	Implement recommendations of Connecting Communities Magic Mile plan to better connect Towpath Trail entrance to Lake Anna with a shared use path.	0.5
<i>B17</i>	Magic Mile (5th St)	Lake Anna to Wooster Rd (5th St)	Shared Use Path	Implement recommendations of Connecting Communities Magic Mile plan to better connect Towpath Trail entrance to Lake Anna with a shared use path.	0.1
<i>B18</i>	Lake Anna	W Lake Ave, 3rd St NW, W Park Ave, 6th St NW	On-Road (Bike Lane)	Provide facilities for cyclists separated from pedestrians around Lake Anna. Consider using slip lanes for bike facility.	0.8
<i>B19</i>	W Hopocan Ave	15th St NW to Wooster Rd N	Shared Use Path	Provide a shared use path or other separated facility for an east/west connection through downtown to proposed Silver Creek trail and Foundation Fields.	0.8
<i>B20</i>	3rd St NW Creedmore Ave, 4th St NW	Wooster Rd W to Norton Ave	On-Road (Bike Lane)	Provide an on-road bicycle facility using 3rd and 4th Streets for a north/south connection through central Barberton.	0.9
<i>B21</i>	Wooster Rd W Part 1	2nd St SW/Robinson Ave to proposed Silver Creek Trail	Shared Use Path	Provide shared use path on one side of Wooster Rd W. (Project currently underway).	0.6
<i>B22</i>	Wooster Rd W Part 2	Portion of the Silver Creek Trail to Hudson Run Rd	Shared Use Path	Provide shared use path on one side of Wooster Rd W. (Project currently underway).	0.9
<i>B23</i>	Wooster Rd W Part 3	Hudson Run Rd to western city limits to	Shared Use Path	Provide shared use path on one side of Wooster Rd W. (Project currently underway).	0.9

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<i>Project ID</i>	<i>Location</i>	<i>Extents</i>	<i>Facility Type</i>	<i>Description</i>	<i>Length (mi)</i>
<i>B24</i>	Robinson Ave Part 1	Towpath Trail entrance to 5th Street	Shared Use Path	Add shared use path on one side of Robinson Ave for a major east/west connection and filling gaps in sidewalk network.	0.7
<i>B25</i>	Robinson Ave Part 2	5th Street to eastern city limits	Shared Use Path	Add shared use path on one side of Robinson Ave for a major east/west connection and filling gaps in sidewalk network.	1.0
<i>B26</i>	Wooster Rd N Part 1	Wooster Rd W to W Hopocan Ave	On-Road (Bike Lane)	Reduce lanes to provide an on-road bike facility with as much separation as possible.	0.4
<i>B27</i>	Wooster Rd N Part 2	W Hopocan Ave to Norton Ave	On-Road (Bike Lane)	Reduce lanes to provide an on-road bike facility with as much separation as possible.	0.7
<i>B28</i>	Wooster Rd N Part 3	Norton Ave to northern city limits	On-Road (Bike Lane)	Reduce lanes to provide an on-road bike facility with as much separation as possible.	1.3
<i>B29</i>	Russell Ave	Russell Ave to Towpath Trail	Shared Use Path	Provide a new neighborhood access point from end of Russell Ave to Towpath Trail.	0.02
<i>B30</i>	Tuscarawas Bridge	Tuscarawas Ave at railroad/Towpath Trail	Bridge	Explore feasibility of a potential pedestrian/bicycle bridge crossing the railroad and towpath around Tuscarawas Ave to improve connectivity between the two sides of the city. This is a longer-term project with further study needed for feasibility.	0.3
<i>B31</i>	Lake Anna neighborhood traffic calming	Hopocan Ave to Wooster Rd W, 8th St NW to Wooster Rd N	Traffic Calming	Apply a neighborhood-wide traffic calming strategy to slow traffic on residential streets around Lake Anna; this may include curb extensions, raised crossings or other vertical or horizontal traffic calming elements.	N/A

Figure 19. Pedestrian and Spot Improvement Recommendations



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Pedestrian and Spot  
Recommendations

- Proposed Sidewalk
- Proposed Unpaved Trail
- Proposed Spot Improvement

Existing Facilities

- Shared Use Path
- Sidewalk

Base

- School
- Active Railroad
- Water Bodies
- Parks
- City of Barberton

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**Table 9. Pedestrian Project Recommendations**

<i>Project ID</i>	<i>Location</i>	<i>Extents</i>	<i>Facility Type</i>	<i>Description</i>	<i>Length (mi)</i>
<i>P1</i>	Barberton Primary School Sidewalks	Shannon Ave from 31st St to 30th St NW and 29th St NW to 27th St NW; Shannon Ave from Hillsdale Ave to 24th St NW; Hillsdale Ave from Shannon Ave to W Hopocan Ave	Sidewalk	Fill sidewalk gaps on north side of Shannon Ave and west side of Hillsdale Ave at Primary School.	0.3
<i>P2</i>	Barberton Preschool Sidewalks	Brady Ave from 15th St NW to Barberton Preschool	Sidewalk	Fill sidewalk gaps leading from neighborhood to Barberton Preschool.	0.4
<i>P3</i>	Barberton Middle/High School Sidewalks	Barber Rd from Morgan St to northern city limits; Morgan St from Miami Ave to Lloyd Street; Wesleyan Ave from W Summit St to northern city limits; Yonker St from Madison Ave to N Summit St	Sidewalk	Fill sidewalk gaps leading from neighborhood to school and towards athletic complex (sections in Norton pending coordination).	1.2
<i>P4</i>	Barberton Intermediate School Sidewalks	Quincy Ave from S Van Buren Ave to 2nd St SE; 2nd St SE from Quincy Ave to Snyder Ave; 3rd St SE from school to Snyder Ave; Lambertson Ave from 1st St SE to 3rd St SE; Portsmouth Ave from 5th St SE to 3rd St SE	Sidewalk	Fill sidewalk gaps leading from neighborhood to Barberton Intermediate School.	1.3
<i>P5</i>	Neighborhood sidewalks north of Robinson Ave/East of 5th Ave NW	E Ford Ave, 1st St NE, 2nd St NE, E Tuscarawas Ave, 4th St NE, E Paige Ave, and Lincoln Ave (throughout neighborhood between N Van Buren and 5th Street)	Sidewalk	Fill gaps and repairs to neighborhood sidewalk network in area west of hospital.	2.3
<i>P6</i>	Wooster Rd N	Robinson Ave to W Hopocan Ave	Streetscape and	Enhance streetscape, widen buffer between sidewalk & road; explore possibility of a shared use path on the east side.	0.4

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<i>Project ID</i>	<i>Location</i>	<i>Extents</i>	<i>Facility Type</i>	<i>Description</i>	<i>Length (mi)</i>
			pedestrian experience		
<i>P7</i>	S Van Buren Ave	Robinson Ave to Russell Ave	Sidewalk	Reconstruct sidewalk on one of S Van Buren Ave (project is currently underway with roadway reconstruction).	1.0
<i>P8</i>	Auburn Ave; 25th St SW	31st Street to Hudson Run Rd; Auburn Ave to McCaffery Park	Sidewalk	Fill gaps and repairs to neighborhood sidewalk network.	0.5
<i>P9</i>	33rd Street SW; Harden Dr	Harden Dr to Glenbreigh Cir; 33rd St SW to 31st St	Sidewalk	Fill gaps in sidewalk network.	0.3
<i>P10</i>	37th St SW	Wooster Rd W to Breitenstine Park	Sidewalk	Fill gaps in sidewalk network leading from neighborhood to Breitenstine Park and Wooster Rd W.	0.7
<i>P11</i>	5th St NE	Fairview Ave to Taft Ave	Sidewalk	Fill gaps in sidewalk network.	0.1
<i>P12</i>	East Huston St	5th St to State St	Sidewalk	Fill gaps in sidewalk network.	0.5
<i>P13</i>	N Van Buren Avenue	Robinson Ave to Fairview Ave	Sidewalk	Fill gaps in sidewalk network.	1.0
<i>P14</i>	Wetland Loop Trail	North of E Tuscarawas Ave and west of N Van Buren Ave	Unpaved Trail	Build a recreational loop trail with trailhead at the cul-du-sac of E Tuscarawas Ave.	0.6

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**Table 10: Spot Improvement Recommendations**

<i>Project ID</i>	<i>Location</i>	<i>Facility Type</i>	<i>Description</i>
S1	W Hopocan Ave & Hillsdale Ave	Unsignalized Intersection Crossing	Low visibility intersection, sidewalk currently ends. Add marked crossing slightly removed from curve in conjunction with sidewalk improvements.
S2	W Hopocan Ave & 15th Street NW	Signalized Intersection Crossing	High crash intersection. Add pedestrian signal heads. Consider intersection geometry changes.
S3	Norton Ave at Howmet Aerospace	Mid-block Crossing	Add marked crossing of Norton Ave at bus stop outside Howmet Aerospace.
S4	Fairview Ave & 5th St NE	Unsignalized Intersection Crossing	Increase visibility for crossing to bus stops and restaurants; crossing located on a hill.
S5	E Tuscarawas Ave & 5th St NE	Unsignalized Intersection Crossing	Look at improvements for safer pedestrian crossing directly to park.
S6	Robinson Ave & 5th Street	Signalized Intersection Crossing	Look at improvements for safer pedestrian crossing to grocery and other destinations.
S7	3rd St NE & E Tuscarawas Ave	Unsignalized Intersection Crossing	Increase visibility and slow vehicles at crossing within neighborhood.
S8	W Hopocan Ave & Wooster Rd N	Signalized Intersection Crossing	3-way intersection with limited visibility and crossing options, high crash location. Consider intersection and crossing improvements.
S9	Wooster Rd & Robinson Ave	Signalized Intersection Crossing	High crash intersection with slip lane and limited crossing options. Consider intersection and crossing improvements.
S10	Fairview Ave & Norton Avenue	Trailhead Facilities	Add improved crossing and wayfinding signage to better connect trail to bicycle facilities.
S11	Robinson Ave east of Wooster Rd W	Trailhead Facilities	Add improved crossing and wayfinding signage to better connect trail to bicycle facilities.
S12	Wolf Creek Trailhead - Hudson Run Rd & Water St SW	Trailhead Facilities	Add improved crossing and wayfinding signage to better connect trail to bicycle facilities.
S13	Haynes Ave & 31st St	Unsignalized Intersection Crossing	Unmarked crossing to destinations at complicated intersection. Add high visibility crossing, consider intersection geometry changes.
S14	<b>Lake Anna</b> - W Lake Ave & 6th St NW - W Lake Ave & 3rd St NW - W Park Ave & 6th St NW	Unsignalized Intersection Crossing	Add marked, raised crossings/intersections. Consider removal of slip lane.

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<i>Project ID</i>	<i>Location</i>	<i>Facility Type</i>	<i>Description</i>
	- W Park Ave & 3rd St NW		
<i>S15</i>	<b>Lake Anna</b> - W Lake Ave & 6th St NW - W Lake Ave & 3rd St NW - W Park Ave & 6th St NW - W Park Ave & 3rd St NW	Signalized Intersection Crossing	Add marked, raised crossings/intersections and pedestrian signal heads. Consider removal of slip lane.
<i>S16</i>	<b>Lake Anna</b> - W Lake Ave & 4th St NW - W Lake Ave & 5th St NW - W Park Ave & 4th St NW - W Park Ave & 5th St NW	Mid-block Crossing	Add marked, raised crossings/intersections and signage.

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The following general infrastructure recommendations are not associated with numbered projects on the map, but would be implemented programmatically or city-wide as appropriate.

**Table 11. General Infrastructure Recommendations**

<i>Project ID</i>	<i>Location</i>	<i>Recommendation</i>	<i>Description</i>
<i>11</i>	Railroad Crossings	Enhance Crossings	Upgrade railroad crossings throughout the city to ensure they are ADA compliant.
<i>12</i>	Downtown/Mixed Use Areas	Bicycle Parking	Install additional bicycle parking throughout downtown and in areas that are zoned commercial or mixed use. Include minimum bicycle parking requirements at new developments.
<i>13</i>	Lake Anna	Streetscape and Park Improvements	Implement the recommendations of the Lake Anna Park Illustrative Plan, including streetscape and other transportation-related improvements.
<i>14</i>	Citywide	Accessible Curb Ramps	Continue reconstructing curb ramps to be ADA compliant.
<i>15</i>	Citywide	Bus Stops	Continue installing additional amenities at bus stops; this could include shelters, benches, etc. and should prioritize highest ridership stops.
<i>16</i>	Citywide	Traffic Calming Program	Create a policy and approach for addressing neighborhood speeding concerns through traffic calming; this may include curb extensions, raised crossings or other vertical or horizontal traffic calming elements.
<i>17</i>	Citywide	Wayfinding Program	Building upon existing Magic Mile signage to direct Towpath Trail and other trail users towards key destinations.

## FACILITY SELECTION AND DESIGN

The projects recommended above include initial facility selections and recommendations based on initial data; however, each project should go through additional study to identify the most appropriate and most feasible option for each location, with additional community engagement performed for each project. This section describes the concepts of “design user” and “facility selection” to guide such processes and outlines potential facility types.

### Design Users

Understanding which types of bicyclists feel comfortable using a given facility is key to building a safe, convenient, and well-used network.

#### Design User Profiles

##### Highly Confident Bicyclist (~4-7%)

- » Smallest group.
- » Prefer direct routes and will operate in mixed traffic, even on roadways with higher motor vehicle operating speeds and volumes.
- » Many also enjoy separated bikeways.
- » May avoid bikeways perceived to be less safe, too crowded with slower moving users, or requiring deviation from their preferred route.

##### Somewhat Confident Bicyclist (~5-9%)

- » Comfortable on most types of facilities.
- » Lower tolerance for traffic stress, prefer striped or separated bike lanes on major streets and low-volume residential streets.
- » Willing to tolerate higher levels of traffic stress for short distances.

##### Interested but Concerned Bicyclist (~51-56%)

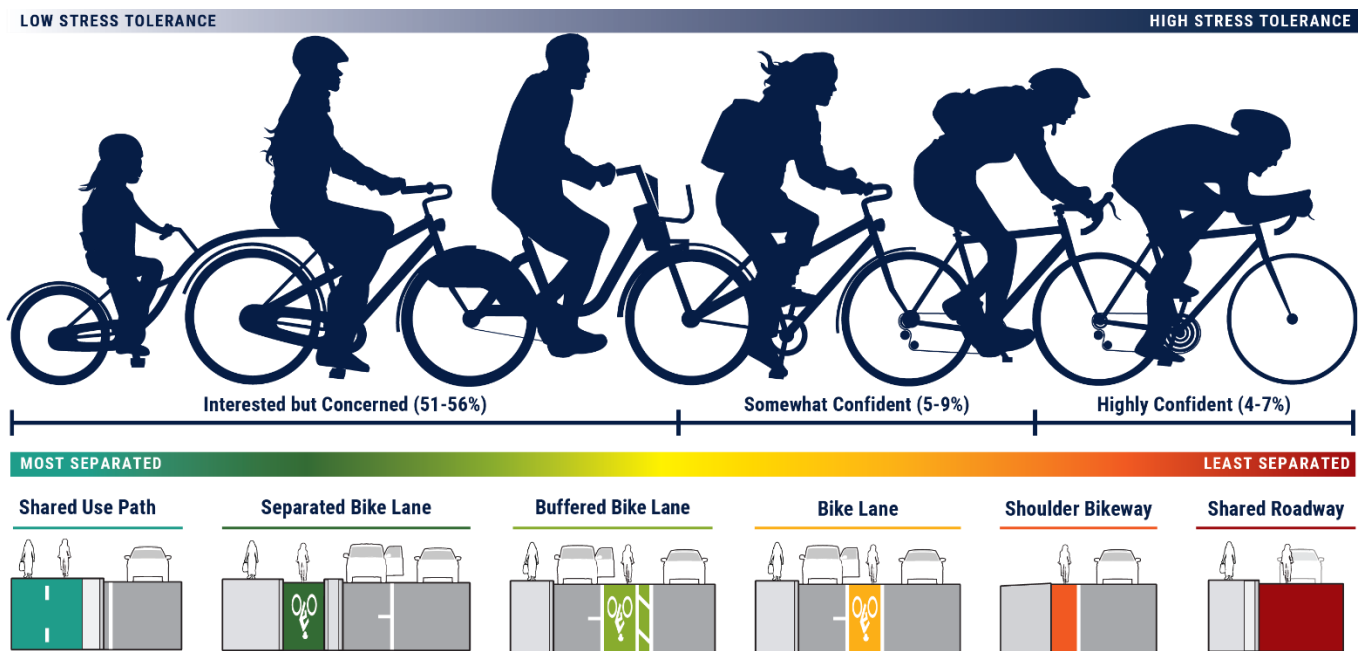
- » Largest group.
- » Lowest tolerance for traffic stress.
- » Avoid bicycling except with access to networks of separated bikeways or very low-volume streets with safe roadway crossings.
- » Tend to bicycle for recreation but not transportation.
- » Generally, the recommended design user profile to maximize potential for bicycling.

(The remaining 28% are generally not interested in bicycling at all.)

Bicyclists are most commonly classified according to their comfort level, bicycling skill and experience, age, and trip purpose. These characteristics can be used to develop generalized profiles of various bicycle users and trips, also known as “design users,” which inform bicycle facility design. Comfort, skill, and age may affect bicyclist behavior and preference for different types of bicycle facilities. Selecting a design user

profile is often the first step in assessing a street’s compatibility for bicycling. The design user profile should be used to select a preferred type of bikeway treatment for different contexts, urban, suburban, rural town or rural roadways (see Figure 21, Figure 22, and Figure 22). People who bicycle are influenced by their relative comfort operating with or near motor vehicle traffic. To accommodate the majority of the population, the “Interested but Concerned” rider should be the primary user type that facilities are designed for. In some contexts, such as rural roadways where less people may be expected to be traveling by bike, the Somewhat Confident or Highly Confident rider is the most relevant design user.

Figure 20: Types of Bicyclists (Source: Toole Design)

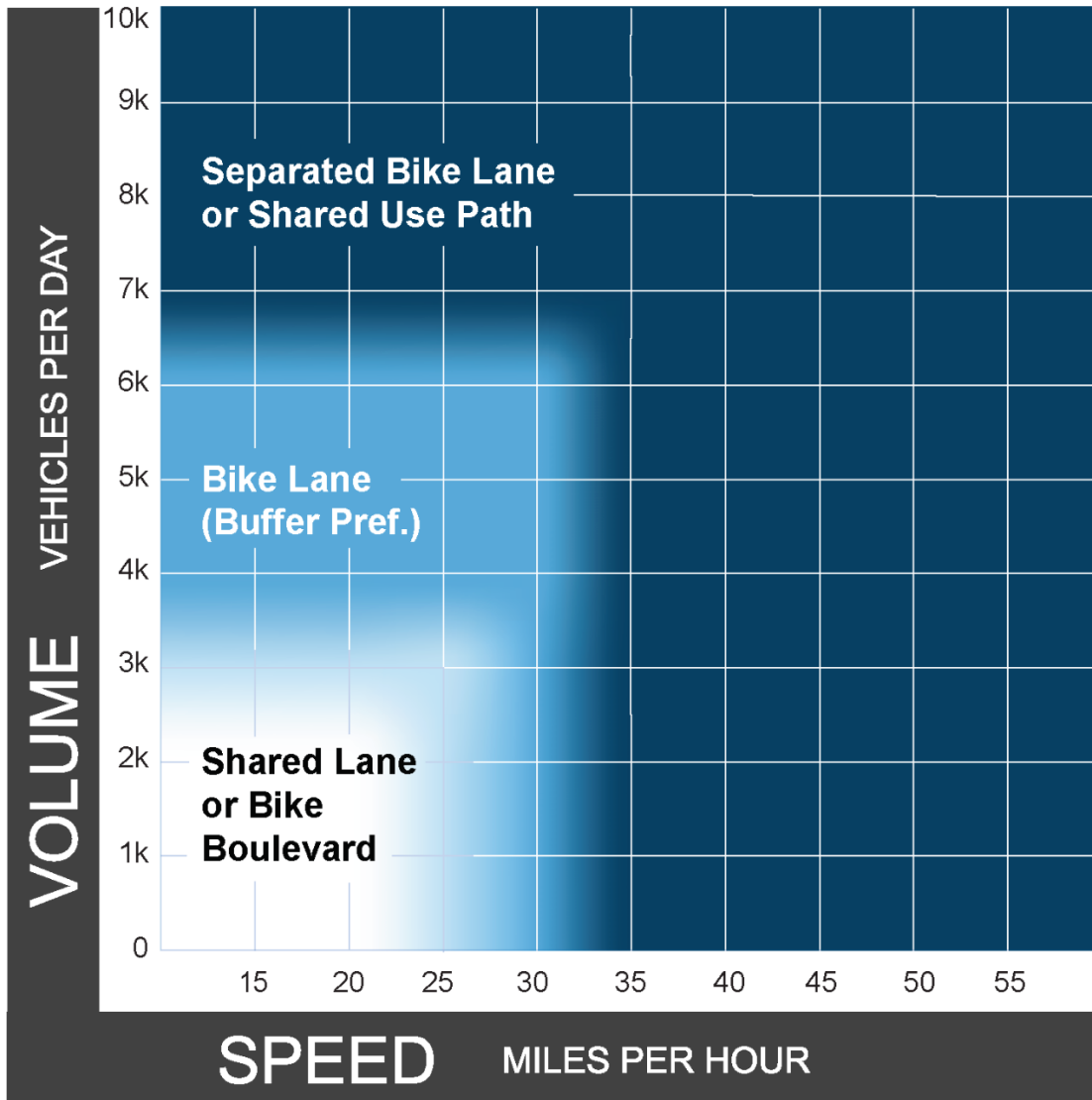


### Facility Selection Methodology

Bicycle networks should be continuous, connect seamlessly across jurisdictional boundaries, and provide access to destinations. Anywhere a person would want to drive to for utilitarian purposes, such as commuting or running errands, is a potential destination for bicycling. As such, planning connected low-stress bicycle networks is not achieved by simply avoiding motor vehicle traffic. Rather, planners should identify solutions for lowering stress along higher traffic corridors so that bicycling can be a viable transportation option for the majority of the population.

Before projects can be implemented the type of on-street bicycle facility will need to be defined. The [Federal Highway Administration \(FHWA\)’s Bikeway Selection Guide](#)’s facility selection matrices (Figure 22 and Figure 22) can be used to help determine the best facility for the roadway based on context, speed, and volume as well as the relevant design user type. See the full guide for further detail on facility selection.

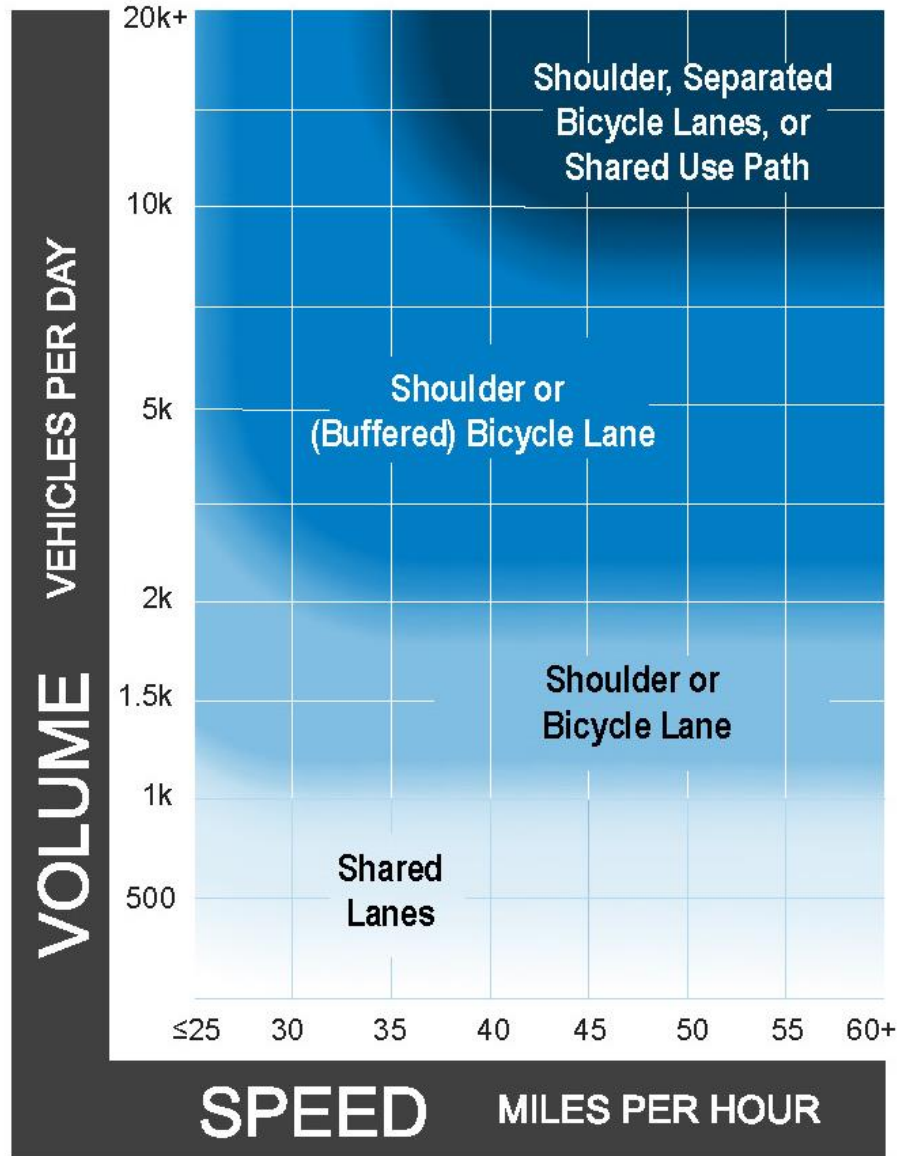
**Figure 21: FHWA Bikeway Facility Matrix: Preferred Bikeway Type for Urban, Urban Core, Suburban and Rural Town Contexts (Design User: Interested but Concerned)**



**Notes**

- 1 Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.
- 2 Advisory bike lanes may be an option where traffic volume is <3K ADT.
- 3 See page 32 for a discussion of alternatives if the preferred bikeway type is not feasible.

Figure 22: Preferred Bikeway for Highly Confident Bicyclists in Rural Contexts (Modified FHWA Bikeway Facility Matrix)







**Notes**

- 1 *Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.*
- 2 *If the percentage of heavy vehicles is greater than 10%, consider providing a wider shoulder or a separated pathway.*

## Facility Toolkit

On-street bicycle infrastructure recommendations and potential facility types were presented within the Barberton Active Transportation Plan. Further detail is provided below on varying bicycle facility types that would accommodate people of varying ability and in different riding environments. Research shows that the provision of low-stress, connected bicycle networks improves bicyclist safety and encourages bicycling for a broader range of user types.<sup>5</sup> Pedestrian infrastructure is primarily provided in the form of sidewalks, shared use paths, and crossings. Detailed design guidance can be found in the [Ohio Department of Transportation Multimodal Design Guide](#).

**Table 12. On-Street Bikeway Facility Toolkit**

	Bicycle Boulevard	Paved Shoulder	Bike Lane and Buffered Bike Lane	Separated Bike Lane
				
<i>Description</i>	Where traffic volumes and speeds are low, many bicyclists can comfortably share lanes with motor vehicles. Shared lane markings and signs are added to inform people driving that bicyclists may operate in the lane and where to expect bicyclists. Wayfinding signage and traffic calming can help increase user comfort and prioritize bicycle travel.	Providing additional pavement width outside of the travel lanes can reduce crashes, aid maintenance, and provide space for bicyclists. Benefits include reducing pavement edge deterioration, accommodating oversize and maintenance vehicles, and providing emergency refuge for public safety vehicles and disabled vehicles. Paved shoulder recommendations should be accompanied by signage.	One-way facilities within the roadway demarcated with painted lane lines. Standard bike lanes provide some improvements to bicyclist safety, and can be enhanced with painted buffers, bike lane extensions through intersections, green colored pavement, and regulatory signs.	One- or two-way facilities within the roadway and physically separated from adjacent travel lanes with vertical elements such as a curb, flex posts or on-street parking. Such facilities reduce the risk of injury and can increase bicycle ridership due to perceived and actual safety and comfort.
<i>Intended Users</i>	Bicyclists and Motorists	Bicyclists	Bicyclists	Bicyclists
<i>Context</i>	Urban and Urban Periphery	Rural and Urban Periphery	Urban	Urban

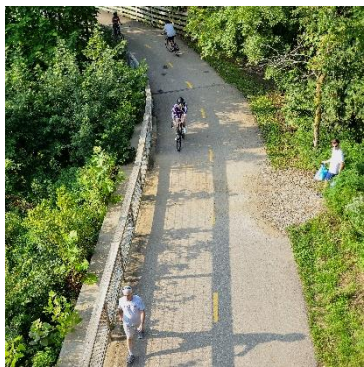
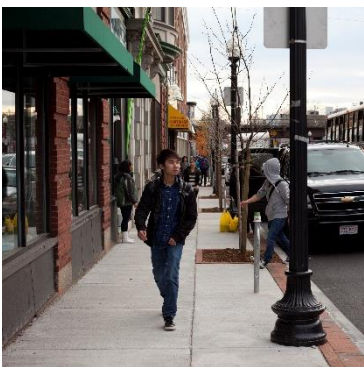


<sup>5</sup> AASHTO (2021). Guide to Bicycle Facilities, 4<sup>th</sup> Edition, 2.2. Why Planning for Bicycling is Important.

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	Bicycle Boulevard	Paved Shoulder	Bike Lane and Buffered Bike Lane	Separated Bike Lane
<i>Posted Speed Limit</i>	20 mph or lower (preferred) 25 mph or lower (acceptable)	Any speed (typically 45 mph or higher)	30 mph or lower	Any speed (typically 30 mph or higher)
<i>Motor Vehicle Traffic Volume</i>	≤2,000 ADT (preferred) ≤3,000 ADT (acceptable)	≤ 6,500 ADT (preferred) Any volume (acceptable)	≤6,000 ADT (preferred)	Any volume (typically 6,000 ADT or greater)
<i>Other Considerations</i>	May be used in conjunction with wide outside lanes. Explore opportunities to provide parallel facilities for less confident bicyclists. Where motor vehicles are allowed to park along shared lanes, place markings to reduce potential conflicts with opening car doors. On low speed (<25 mph) low traffic (<3,000 ADT) streets, traffic calming, and diversion can be used to slow traffic or create a bicycle boulevard.	Shoulder width to accommodate bicyclists depends on traffic volume and speed in adjacent motor vehicle lane. See Figure 22 for guidance on selecting appropriate width. Placement of the rumble strip is critical to providing usable space for bicyclists.	Intersection designs should promote visibility of bicyclists and raise awareness of potential conflicts. Painted buffers can increase actual and perceived safety and are preferred when feasible. Bike lanes located next to parked cars should have a painted buffer next to the parking lane to prevent “dooring” crashes.	Intersection designs should promote visibility of bicyclists and raise awareness of potential conflicts. Separation may be provided through temporary measures such as planters or removable bollards as an interim and low-cost design.

\*For more information on facility selection and design see the [FHWA Bikeway Selection Guide](#), AASHTO Guide for Development of Bicycle Facilities, and [ODOT Multimodal Design Guide](#)

Table 13. Shared Use and Pedestrian Facility Toolkit\*



	Shared Use Path	Sidewalk	Unpaved Trail	Streetscape
				
<i>Description</i>	Typically designed as two-way facilities physically separated from motor vehicle traffic and used by bicyclists, pedestrians, and other non-motorized users, shared use paths provide a low-stress and comfortable travel environment for users of all confidence levels. They are used for recreational opportunities in addition to transportation and be located along roadways or completely separated from the road network, sometimes along rivers or old railroad corridors.	Sidewalks are intended for exclusive use by pedestrians. They are adjacent to but separated from the roadway by a curb and/or buffer, such as a tree lawn. As roadway speeds and volumes increase, more separation is needed to maintain a safe and comfortable walking environment for pedestrians. Common in urban areas, they may also be necessary in rural areas with pedestrian generators, such as schools and businesses. May notably increase levels of walking in areas with high traffic speeds/volumes.	Unpaved trails offer recreational opportunities for people to walk and experience nature, though are generally not used for transportation.	Streetscape elements can make a corridor more pleasant and attractive for walking and bicycling. Elements can be incorporated along sidewalks and paths to enhance the experience and increase comfort even along busy roadways.
<i>Intended Users</i>	Bicyclists and Pedestrians	Pedestrians	Pedestrians	Pedestrians
<i>Context</i>	Urban and Rural	Urban	Urban and Rural	Urban
<i>Posted Speed Limit</i>	Urban: Any speed (typically 30 mph+) Rural: Any speed (typically 55 mph+)	N/A	N/A	Any

**FINAL - FEBRUARY 2023**

	Shared Use Path	Sidewalk	Unpaved Trail	Streetscape
<i>Motor Vehicle Traffic Volume</i>	Urban: Any volume (typically 6,000 ADT+) Rural: Any volume (typically 6,500 ADT+).	Dependent on land use context	N/A	N/A
<i>Other Considerations</i>	Shared use paths should be at least 11 feet wide (wider where higher bicycle and pedestrian traffic is expected, e.g., urban areas). Special consideration must be given to the design of roadway crossings to increase visibility, clearly indicate right-of-way, and reduce crashes. Alternative accommodations should be sought when there are many intersections and commercial driveway crossings per mile.	N/A	N/A	Elements may include: <ul style="list-style-type: none"> <li>» Landscaping and planted buffers</li> <li>» Trees and shade</li> <li>» Pedestrian-scaled lighting</li> <li>» Seating</li> <li>» Trash receptacles</li> <li>» Public art</li> <li>» Etc.</li> </ul>

\*For more information on facility selection and design see the [FHWA Bikeway Selection Guide](#), AASHTO Guide for Development of Bicycle Facilities, and [ODOT Multimodal Design Guide](#).

Table 14: Spot Improvement Toolkit\*

	Crossing Treatment	Trailhead Facilities
		
<b>Description</b>	A variety of solutions can be employed to make intersections and mid-block crossings safer and more convenient for people walking. These treatments range from painted facilities, such as high-visibility crosswalks, to lights and signals, such as rectangular rapid flashing beacons (RRFB). Painted crosswalks delineate the safest pathway for pedestrians, and RRFBs enhance user safety and convenience at crossing points when full signalization is not warranted.	Trailheads are locations where trails are accessed and serve as an important destination and transition point between the trail and the rest of the transportation system. Facilities in these locations may help people better locate or navigate interconnected facilities, park vehicles, or gather. Special attention to these locations can also help trail travelers recognize when they are going through a community and encourage them to stop and visit.
<b>Intended Users</b>	Bicyclists and Pedestrians	Bicyclists and Pedestrians
<b>Context</b>	Urban and Rural	Urban and Rural
<b>Posted Speed Limit</b>	Any Speed (appropriate treatment will vary)	N/A
<b>Motor Vehicle Traffic Volume</b>	Any Volume (appropriate treatment will vary)	N/A
<b>Other Considerations</b>	<p><u>Treatments</u> may include:</p> <ul style="list-style-type: none"> <li>» High visibility markings</li> <li>» Advance yield lines and signage</li> <li>» Curb extensions</li> <li>» Median islands Raised crosswalk</li> <li>» Rectangular Rapid Flashing Beacons</li> <li>» Textured intersection pavement</li> <li>» Etc.</li> </ul>	<p>Facilities may include:</p> <ul style="list-style-type: none"> <li>» Restrooms</li> <li>» Water fountains</li> <li>» Gateway art</li> <li>» Interpretive signage</li> <li>» Wayfinding signage and maps</li> <li>» Parking (for cars and bicycles)</li> <li>» Seating and shaded area</li> <li>» Bicycle fix-it stations</li> <li>» Etc.</li> </ul>

\*For more information on facility selection and design see the [FHWA Bikeway Selection Guide](#), AASHTO Guide for Development of Bicycle Facilities, and [ODOT Multimodal Design Guide](#).

## SUPPORTIVE PROGRAMS AND POLICIES

Establishing safe and convenient active transportation infrastructure is critical to improving walking and bicycling conditions. But without programs and policies in place to support active transportation, infrastructure projects can only go so far. A variety of non-infrastructure tools can increase pedestrians' and bicyclists' safety by establishing a culture of walking and bicycling and creating a friendly regulatory and political environment for active transportation.

Programs and policies can typically be implemented relatively quickly and inexpensively. Programs can be easily scaled to a wide audience, such as elementary school students, transit riders, or business owners or they can target specific groups for programming, like speeding motorists in school zones. Individual programs can increase walking and bicycling in specific circumstances and locations but should be coordinated with policy development to ensure lasting change. See Table 15 for a list of proposed programs and policies. These proposed programs and policies aim to accomplish the following goals:

- » **Foster culture change:** shift the mindset of community members so that walking and bicycling is normal and expected.
- » **Maintain momentum:** help maintain momentum and excitement around active transportation while infrastructure projects are in development.
- » **Build support:** encourage new people to try active transportation and help community partners recognize the value of increased active transportation options.
- » **Support efficient operations and maintenance:** help institutionalize best practices in active transportation operations and maintenance.

The status of programs and policies should be assessed and updated each time the plan is updated. Status is defined as:

- » **New:** A program or policy that is proposed in this Plan.
- » **Ongoing:** An existing program or policy that will be continued.
- » **On-hold:** A program or policy that has been stalled or deferred.
- » **Completed:** When regularly updating the plan, update the program or policy status to complete when applicable to help track progress.

**Table 15. Program and Policy recommendations**

<b>Program/Policy</b>	<b>Responsible Party(ies)</b>	<b>Description</b>	<b>Status</b>
<b>Education</b>			
<i>Trainings &amp; Curricula</i>	Barberton City Schools, YMCA, Summit County Public Health, Barberton Library	Train staff on safe walking and bicycling practices and road rules to allow teachers to educate students on walking and bicycling to school in the classroom. Training for students and youth could be a part of classroom courses, physical education courses or through the continuation of the Safety Town program.	New and Ongoing
<i>Walking and Bicycling Information</i>	Barberton Library, YMCA, Barberton City Schools, R&D Bike Shop	Ensure information for walking and bicycling are easily provided on the city’s website as well as in key locations such as the library, YMCA, and at trailheads. Information could consist of bicycle parking, routes and route planning, amenities, safety tips, and more. Akron Metro also offers Travel Training for riding the bus; work together to distribute this information and connect people with the service.	New
<i>Barberton Safe Routes Campaign</i>	City of Barberton, Summit County Public Health	Continue to develop a city campaign using social media and other means to promote the benefits of walking and bicycling.	Ongoing
<b>Encouragement &amp; Community Support</b>			
<i>Demonstration Project</i>	City of Barberton, Summit County Public Health, Barberton Community Development Corporation, Habitat for Humanity of Summit County’s Neighborhood Network program	Familiarize residents with bicycle or pedestrian infrastructure through a demonstration project. This will provide greater understanding of how the public will react to changes and interactions. Additionally, demonstration projects can allow the public to give feedback and provide support if they are in favor of the project.	New
<i>Towpath Events</i>	City of Barberton, Summit County Public Health, Metro Parks, Ohio & Erie Canalway Coalition, Ignite Brewing, Regional bicycling groups	Host events along the Towpath Trail within Barberton. Events on the Towpath will encourage residents and others from around the area to experience and enjoy the Towpath. Events could consist of organized rides and activities hosted by Metro Parks, farmer’s markets at trailheads, and more.	New
<i>Bike Month</i>	Barberton Library, YMCA, Barberton City Schools, R&D Bike Shop	Organizing events throughout Bike Month to promote bicycling throughout Barberton would improve physical health, boost the economy, and promote bicycle infrastructure. Bike Month events could include group rides, safety trainings, challenges with bicycle gear giveaways, and more.	On hold

<b>Program/Policy</b>	<b>Responsible Party(ies)</b>	<b>Description</b>	<b>Status</b>
<i>How We Roll Rides</i>	YMCA, R&D Bike Shop, Barberton Library, Employers, Salvation Army	These instructor-led bicycle tours teach bike traffic laws and offer practical riding tips while on fun, intimate bicycle tours of a neighborhood. These riding tours have increased participants' confidence levels with understanding bicycle-related traffic laws and riding on the roads. These can be delivered as stand-alone bicycle tours or as a full-scale transportation behavior change campaign allowing residents to practice safe and legal bicycling skills with a certified instructor. Rides and campaigns are tailored to the unique needs of each group.	New
<i>Organized Walks</i>	Barberton Library, Barberton Historical Society, Lake Anna YMCA, Summa Health	Host organized and themed walking tours to encourage walking in different parts of the city. Walks could highlight city history, focus on health (like past "Walk with a Doc" programs), and/or be aimed at specific age or other groups.	On hold
<i>Bicycle Clubs</i>	Barberton Library, YMCA, Barberton City Schools, R&D Bike Shop	Create an after school and/or weekend bicycle club for students and youth. This program would encourage residents of all ages to bicycle which in turn improves health outcomes. Additionally, clubs could include educational opportunities on bicycle safety, laws, and maintenance.	New
<i>Promotion of Walk/Bike to Work/School Days</i>	City of Barberton, Summit County Public Health, Barberton City Schools	Promoting Walk and Bike to School Day and Bike to Work Day encourages more residents of all ages to try a new method of travel to a location they attend almost daily. Events such as Walk and Bike to School Day and Bike to Work Day provides a greater understanding of what is working well, as well as flaws in the network.	New
<i>Walking School Bus/Bike Train</i>	Barberton City Schools, YMCA	Walking School Buses and Bike Trains create opportunities for parents to walk and bike with groups of children who live together in a neighborhood. These activities help eliminate many parental fears of walking and bicycling by ensuring a supervised commute, creating strong community cooperation, and achieving "safety in numbers." Children get to practice safe pedestrian and bike skills, have fun, increase socialization time with friends and arrive at school alert and ready to learn. Schools hold these activities periodically, weekly, or daily depending on the level of enthusiasm and support.	New
<i>Adaptive Bikes</i>	Barberton Library, Lake Anna YMCA (Summit Bike Share)	Expand the offerings of the Summit Bike Share stations in Barberton to include adaptive bicycles such as adult trikes, recumbent bikes, etc. to increase access for people of all abilities.	Ongoing

<b>Program/Policy</b>	<b>Responsible Party(ies)</b>	<b>Description</b>	<b>Status</b>
<i>Bicycle Repair Tools</i>	Barberton Library, Lake Anna YMCA (Summit Bike Share)	Provide bicycle repair tools and offer classes to community members interested in learning how to repair and maintain their own bicycles. Barberton Library already offers bicycle locks for checkout.	Ongoing
<b>Policy</b>			
<i>Road Diet Threshold Guidance</i>	City of Barberton Police Department, City of Barberton	Areas with vulnerable populations, high bicycle and pedestrian activity, and high crash rates should be reviewed and studied to understand whether speeds should be reduced and/or a road is eligible for a road diet. Reductions of speeds and road diets create safer roadways for all users and provide additional space for alternate modes of travel, (e.g., space for bike lanes or wider sidewalks).	New
<i>Development Guidance</i>	City of Barberton	Specific development and design guidance that encourages walkable development patterns (density, wide setbacks that allow space for active transportation facilities, parking in rear, short block length, etc.), the provision of bicycle parking, and more should be adopted to guide future development that is supportive of active transportation.	Ongoing
<b>Data, Planning, and Evaluation</b>			
<i>Pedestrian and Bicycle Counts</i>	City of Barberton, Summit Metro Parks	Collect pedestrian and bicycle counts to track ridership, usage, etc. Key infrastructure where counts should be collected include the Towpath Trail and in the future the Magic Mile. Collection of pedestrians and bicycle counts would allow city staff and officials to understand which facilities are most popular.	New
<i>Adopt the Plan and Perform Regular Updates</i>	City of Barberton	Adopt the Active Transportation Plan by City Council Resolution. Revise and update the Active Transportation Plan on a regular basis (every ~5 years). To ensure that the plan remains relevant to the community and eligible for funding, it is crucial to update the Plan and incorporate any new, revised, or completed projects and reflect any changes to the community.	Ongoing
<i>Complete Streets/Active Transportation Committee</i>	City of Barberton	Formalize a diverse committee made of residents and partner organizations to regularly meet and advise the city on Complete Streets and Active Transportation and oversee implementation of the Active Transportation Plan.	New

# PRIORITY PROJECTS





## PRIORITY PROJECTS

The infrastructure recommendations in the previous chapter are conceptual routes, meant to show the potential of a comprehensive active transportation system in Barberton. The recommendations are planning level in scope and are not necessarily constrained by existing challenges. Funding, land use, property rights, terrain, and other project specific factors may make certain recommendations less practicable than others. Project prioritization uses data to determine which projects are both feasible, given real-world constraints, and align with stakeholders’ priorities.

## PRIORITIZATION METHODOLOGY

Projects were ranked using the analyses described previously in this plan and some additional criteria. The Steering Committee reviewed the recommendations and made some adjustments to determine the final ranking.

**Table 16. Weighted Categories for Quantitative Prioritization**

<i>Category</i>	<i>Weight</i>	<i>Variable</i>
<b><i>Connections</i></b>	12.5%	Level of risk from Safer Streets Priority Finder analysis OR Included on AMATs high crash location
<b><i>Destinations</i></b>	25%	Overlap with upcoming AMATS or ODOT planned projects
<b><i>Needs</i></b>	25%	Number of connections to existing and proposed projects
<b><i>Synergy</i></b>	12.5%	ODOT Need Analysis ODOT Demand Analysis
<b><i>Safety</i></b>	25%	Project within 1/2 mile of a school OR Project within 1/2 mile of a park OR Project located on a transit line

## PRIORITIZED INFRASTRUCTURE PROJECT LIST

Implementing this plan will take time and significant effort. Table 17 and Figure 23 identifies high-, medium-, and low-priority projects, as well as several “quick win” projects that are already underway or could be implemented quickly. Implementation will require working with a larger number of partners, as well as building public support for priority projects. Whenever possible, recommendations in this plan should be incorporated into other roadway projects per the Complete Streets Policy; even recommendations given a lower priority should be considered when other roadway projects are taking place. Every year Barberton should re-evaluate the priority list to track which projects have been implemented and to adjust as needed. Potential funding sources that could be pursued by the City are also named.

**Table 17. Prioritized Infrastructure Project List**

	Project ID	Location/Extents	Potential Facility Type	Potential Funding Source(s)*
<b>Quick Wins</b>	B13	Norton Ave	Bike Lane	TASA, HSIP
	B20	3rd St NW Creedmore Ave, 4th St NW	Bike Lane	OEC
	B21	Wooster Rd W Part 1	Shared Use Path	Already Funded
	B22	Wooster Rd W Part 2	Shared Use Path	Already Funded
	B23	Wooster Rd W Part 3	Shared Use Path	Already Funded
	P7	S Van Buren Ave	Sidewalk	Already Funded
	S14	<b>Lake Anna</b> - W Lake Ave & 6th St NW - W Lake Ave & 3rd St NW - W Park Ave & 6th St NW - W Park Ave & 3rd St NW	Unsignalized Intersection Crossing	TASA
	S15	<b>Lake Anna</b> - W Lake Ave & 6th St NW - W Lake Ave & 3rd St NW - W Park Ave & 6th St NW - W Park Ave & 3rd St NW	Signalized Intersection Crossing	TASA
	S16	<b>Lake Anna</b> - W Lake Ave & 4th St NW - W Lake Ave & 5th St NW - W Park Ave & 4th St NW - W Park Ave & 5th St NW	Mid-block Crossing	TASA
<b>High Priority</b>	B6	31st St SW	Shared Use Path	RTP
	B7	Hudson Run Rd	Shared Use Path	TASA, RTP, OEC
	B11	5th St NW	Shared Use Path	HSIP, TASA
	B16	Magic Mile (Robinson Ave and 2nd St)	Shared Use Path	RTP, OEC, TASA
	B19	W Hopocan Ave	Shared Use Path	TASA, HSIP
	B24	Robinson Ave Part 1	Shared Use Path	TASA, HSIP, OEC
	B26	Wooster Rd N Part 1	Bike Lane	HSIP, STBG

	Project ID	Location/Extents	Potential Facility Type	Potential Funding Source(s)*
	B27	Wooster Rd N Part 2	Bike Lane	HSIP, STBG
	B28	Wooster Rd N Part 3	Bike Lane	HSIP, STBG
	P1	Barberton Primary School Sidewalks	Sidewalk	SRTS, TASA, HSIP
	P2	Barberton Preschool Sidewalks	Sidewalk	SRTS, TASA, HSIP
	P3	Barberton Middle/High School Sidewalks	Sidewalk	SRTS, TASA, HSIP
	P4	Barberton Intermediate School Sidewalks	Sidewalk	SRTS, TASA, HSIP
	S1	W Hopocan Ave & Hillsdale Ave	Unsignalized Intersection Crossing	TASA, HSIP
	S4	Fairview Ave & 5th St NE	Unsignalized Intersection Crossing	TASA, HSIP
	S5	E Tuscarawas Ave & 5th St NE	Unsignalized Intersection Crossing	TASA, HSIP
	S6	Robinson Ave & 5th Street	Signalized Intersection Crossing	TASA, HSIP, STBG
	S8	W Hopocan Ave & Wooster Rd N	Signalized Intersection Crossing	TASA, HSIP
	S9	Wooster Rd & Robinson Ave	Signalized Intersection Crossing	TASA, HSIP, STBG
	<b>Medium Priority</b>	B1	Norton Ave	Bike Lane
B2		Norton Ave	Shared Use Path	HSIP, TASA
B3		15th Street NW Part 1	Shared Use Path	TASA
B5		Planned Silver Creek Metro Parks Trail	Shared Use Path	TASA, RTP, COTF, RAISE
B9		Snyder Ave	Shared Use Path	TASA, RTP
B10		5th St SE	Shared Use Path	TASA, HSIP
B12		Fairview Ave	Shared Use Path	TASA, RTP, OEC
B17		Magic Mile (5th St)	Shared Use Path	RTP, OEC, TASA
P5		Neighborhood sidewalks north of Robinson Ave/East of 5th Ave NW	Sidewalk	SRTS
P6		Wooster Rd N	Streetscape and pedestrian experience	TASA, HSIP, STBG
P11		5th St NE	Sidewalk	HSIP
P12		East Huston St	Sidewalk	TASA
S2		W Hopocan Ave & 15th Street NW	Signalized Intersection Crossing	HSIP, STBG
S10		Fairview Ave & Norton Avenue	Trailhead Facilities	OEC, RTP

Project ID	Location/Extents	Potential Facility Type	Potential Funding Source(s)*
S12	Wolf Creek Trailhead - Hudson Run Rd & Water St SW	Trailhead Facilities	OEC, RTP
<b>Low Priority</b>	The remaining projects were categorized as low priority.		

**\*Funding Acronyms** (See full details of funding sources in Table 20)

Potential funding sources that may be applicable to priority projects are listed in the chart. Other sources may be applicable, and funding eligibility and requirements may change over time.

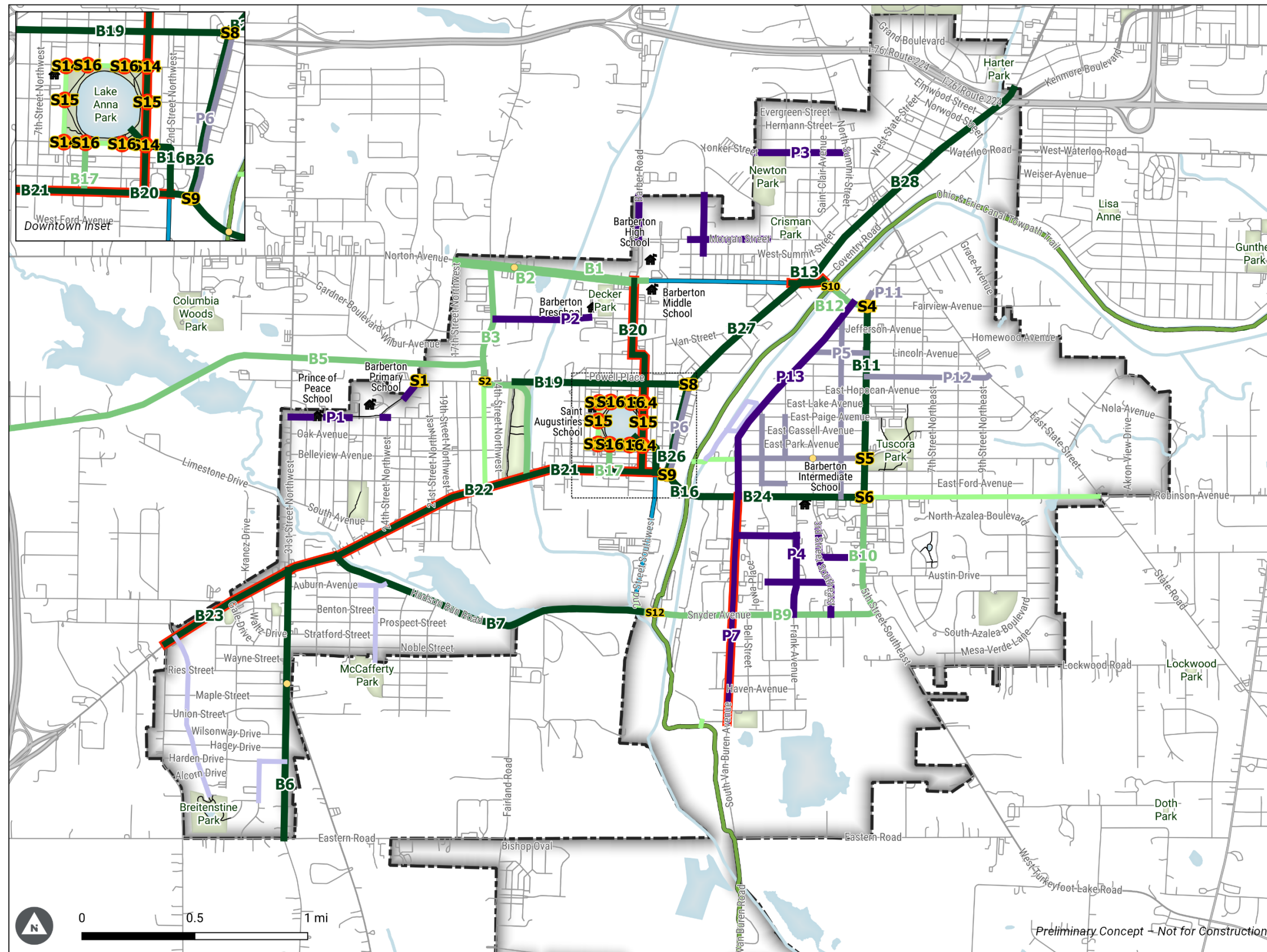
**Table 18. Project Funding Source Acronym Definitions**

TASA	Transportation Alternatives Set-Aside
SRTS	Safe Routes to School
HSIP	Highway Safety Improvement Program
STBG	Surface Transportation Block Grant
RTP	Recreational Trails Program
COTF	Clean Ohio Trails Fund
COGS	Clean Ohio Green Space Conservation Program
RAISE	RAISE Discretionary Grants
OEC	Ohio & Erie Canalway Strategic Initiatives

In addition to the numbered projects above, the City could pursue the following general infrastructure recommendations in the short term:

- » I2 (Bicycle Parking Program)
- » I3 (Streetscape and park improvements around Lake Anna)
- » I5 (Bus stop improvements)

Figure 23: Project Prioritization



**City of Barberton  
Active Transportation Plan  
Recommendations**

**Project Prioritization**

**Bike & Shared Use  
Project Priorities**

- █ Quick Win
- █ High
- █ Medium
- █ Low

**Pedestrian Project  
Priorities**

- █ Quick Win
- █ High
- █ Medium
- █ Low

**Spot Improvement  
Priorities**

- Quick Win
- High
- Medium
- Low

**Existing Facilities**

- █ Bike Lane
- █ Shared Use Path

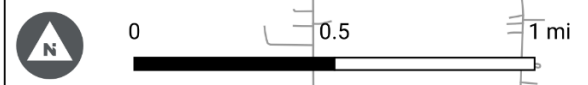
**Base**

- School
- Active Railroad
- Water Bodies
- Parks
- City of Barberton

December 2022



Preliminary Concept - Not for Construction



# IMPLEMENTATION





# IMPLEMENTATION

## ROLES AND RESPONSIBILITIES

Collaboration is the first step towards successful implementation of the Barberton ATP. Stakeholders involved in the planning process will be collectively responsible for the design, funding, construction, maintenance, monitoring, and/or evaluation of the network. See Table 19. Implementation Responsibilities

**Table 19. Implementation Responsibilities**

Agency	Responsibility
City of Barberton - Public Works Department	Design, construction, maintenance, and evaluation of city-owned bicycling and walking facilities
City of Barberton - Planning Department	Monitoring and Evaluation Plan updates Supportive program implementation
City of Barberton - Communication Department	Supportive program implementation
City of Barberton - Parks and Recreation Department	Design, construction, maintenance, and evaluation of city-owned parks facilities Supportive program implementation
City of Barberton - Planning Commission/City Council	Monitoring and Evaluation
Barberton City Schools	Supportive program implementation
Akron Metro	Public transit planning, operations, and evaluation Supportive program implementation
AMATS	Supportive program implementation Monitoring and Evaluation Regional funding distribution
Barberton Public Library	Supportive program implementation

Agency	Responsibility
<i>Barberton Community Foundation</i>	Supportive program implementation
<i>Habitat for Humanity of Summit County's Neighborhood Network program</i>	Supportive program implementation
<i>Kiwanis Club/Rotary Club</i>	Supportive program implementation
<i>Lake Anna YMCA</i>	Supportive program implementation
<i>R&amp;D Bike Shop</i>	Supportive program implementation
<i>Summit Metro Parks</i>	Design, construction, maintenance, and evaluation of Metro Parks trails Supportive program implementation
<i>Summit County Board of Developmental Disabilities</i>	Supportive program implementation

## FUNDING STRATEGIES

Active transportation projects comprise a fraction of overall transportation network construction and maintenance. While pedestrian and bicycle infrastructure generally does not serve as many users as highways, bridges, and other critical infrastructure, it can have a substantial positive effect on local economies. Additionally, providing opportunities for active living promotes public health and may reduce the burden on taxpayer funded healthcare systems over time. In this light, active transportation infrastructure is a critical component of a complete transportation network and results in a positive return on investment for communities that fund such projects.

Several state and federal funding sources can be used to supplement local funding sources to build out the active transportation network and fund related programming efforts. Table 20 lists the primary funding sources for active transportation projects in Ohio and relevant to Barberton; click on the name of each funding source to access web pages with further information. As part of the statewide Walk.Bike.Ohio Plan, ODOT published a [Funding Overview Report](#) that provides more details on types of funding available, schedules, and eligibility requirements. For information on funding for public transit, visit the [ODOT Office of Transit's website](#). Private funding and City capital budget funding are also important sources for matching funds.

**Table 20. Primary Active Transportation Funds for Barberton**

Funding Source	Distributed by	Eligible Project Examples	Eligible Project Sponsor
<a href="#"><u>Transportation Alternatives Set-Aside</u></a>	AMATS	Bicycle & pedestrian facilities Safe routes for non-drivers Conversion & use of abandoned railroad facilities Overlooks & viewing areas	Local governments
<a href="#"><u>Safe Routes to School</u></a>	ODOT	Infrastructure Non-Infrastructure School Travel Plan assistance	Local governments (infrastructure) Local governments, school, or health district, or non-profit (non-infrastructure)

<b>Funding Source</b>	<b>Distributed by</b>	<b>Eligible Project Examples</b>	<b>Eligible Project Sponsor</b>
<a href="#"><u>Highway Safety Improvement Program</u></a>	ODOT (Coordinate with local ODOT District)	Signalization Turn lanes Pavement markings Traffic signals Pedestrian signals/crosswalks Bike lanes Road diets	Local governments
<a href="#"><u>Recreational Trails Program</u></a>	Ohio Department of Natural Resources (ODNR)	New recreational trail construction Trail maintenance/restoration Trailside and trailhead facilities Purchase/lease of construction & maintenance equipment Acquisition of easements Educational programs	Local governments State and federal agencies Park districts Conservancy districts Soil and water conservation districts Non-profits
<a href="#"><u>Clean Ohio Trails Fund</u></a>	ODNR	New trail construction Land acquisition for a trail Trail planning/engineering and design (must include construction)	Local governments Park districts Conservancy districts Soil and water conservation districts Non-profits
<a href="#"><u>Clean Ohio Green Space Conservation Program</u></a>	Ohio Public Works Commission (OPWC)	Open space acquisition including: <ul style="list-style-type: none"> <li>• Easements</li> <li>• Bike racks</li> <li>• Kiosks/Signs</li> <li>• Hiking/Bicycling trails</li> <li>• Pedestrian bridges</li> <li>• Boardwalks</li> </ul>	Local governments Park districts Conservancy districts Soil and water conservation districts Non-profits
<a href="#"><u>RAISE Discretionary Grants</u></a>	U.S. Department of Transportation	Major projects for: <ul style="list-style-type: none"> <li>• Public transportation</li> <li>• Intermodal facilities</li> <li>• Surface transportation projects</li> </ul>	Municipalities Tribal governments Counties
<a href="#"><u>Ohio &amp; Erie Canalway Strategic Initiatives</u></a>	Ohio & Erie Canalway National Heritage Area	This program allows the Ohio & Erie Canalway to contribute to projects like the Ohio & Erie Canal Towpath Trail, Cuyahoga Valley Scenic Railroad, America’s Byway, and visitor facilities. Additional projects funded enrich local cities, towns, and villages through community development efforts that feature historic preservation or natural conservation.	State of Ohio political subdivisions Non-profit organizations Other persons or projects that fall within the boundaries of the Ohio & Erie Canalway National Heritage Area

## MAINTENANCE STRATEGIES

The long-term performance of bicycle and pedestrian networks depends on both the construction of new facilities and an investment in continued maintenance. Maintaining bicycle and pedestrian facilities is critical to ensuring those facilities are accessible, safe, and functional.

### FREQUENCY

The first step to approaching maintenance is to understand how often maintenance should be performed. Many activities, such as signage updates or replacements, are performed as needed, while other tasks such as snow removal are seasonal (see Table 21Table 21). Creating a winter maintenance approach is important to encourage year-round travel by walking and bicycling. One key component of this approach should be identifying priority routes for snow removal. More information on winter maintenance such as types of equipment needed for different facility types and how to consider snow removal in the design of facilities can be found in [Toole Design's Winter Maintenance Resource Guide](#).

**Table 21: Maintenance Activity Frequency**

Frequency	Facility Type	Maintenance Activity
As Needed	Shared Use Paths	Tree/brush clearing and mowing
		Replace/repair trail support amenities (parking lots, benches, restrooms, etc.)
		Map/signage updates
		Trash removal/litter clean-up
		Repair flood damage: silt clean-up, culvert clean-out, etc.
	Patching/minor regrading	
	Shared Use Paths/ Separated Bike Lanes / Paved Shoulders/ Bike lanes	Sweeping
Bicycle Boulevards	Sign replacement	
Sidewalks	Concrete panel replacement	
Seasonal	All	Snow and Ice control
	Shared Use Paths	Planting/pruning/beautification
		Culvert/drainage cleaning and repair
	Installation/removal of seasonal signage	
Yearly	Shared Use Paths/ Sidewalks	Evaluate support services to determine need for repair/replacement
		Perform walk audits to assess ADA compliance of facilities
	Separated Bike Lanes / Paved Shoulders/ Bike lanes	Surface evaluation to determine need for patching/regrading/re-stripping of bicycle facilities
5-year	Shared Use Paths	Repaint or repair trash receptacles, benches, signs, and other trail amenities, if necessary
		Sealcoat asphalt shared use paths
10-year	Shared Use Paths	Resurface/regrade/re-stripe shared use paths
20-year	Shared Use Paths/ Sidewalks	Assess and replace/reconstruct shared use paths/sidewalks

## PLAN FOR MAINTENANCE

Creating a strong maintenance program begins in the design phase. The agency that will eventually own the completed project should collaborate with partners to determine the infrastructure placement, final design, and life cycle maintenance cost. Maintenance staff should help identify typical maintenance issues, such as areas with poor drainage or frequent public complaints. They may have suggestions for design elements that can mitigate these issues or facilitate maintenance activities and can provide estimates for ongoing maintenance costs for existing and proposed facilities.

## COORDINATION & RESPONSIBILITY BETWEEN AGENCIES

Many jurisdictions struggle with confusion around which entity – city, village, township, county, or state – is responsible for the maintenance of trails and other active transportation facilities. Frequently there is no documentation showing who is responsible for maintenance of existing facilities, which can prolong unsafe conditions for trail users. Coordination between the government agencies is key for effective maintenance programs. Intergovernmental agreements (IGAs) are used to codify the roles and responsibilities of each agency regarding ongoing maintenance. For example, a local government may agree to conduct plowing, mowing, and other maintenance activities on trails in its jurisdiction that were built by another agency. Clarifying who is responsible for maintenance costs and operations ensures that maintenance problems are resolved in a timely manner.

## MAINTENANCE ACTIVITIES

Different facility types require different types of strategies to be maintained. Table 22 breaks down maintenance activities and strategies for each by facility type.

**Table 22: Maintenance Strategy Recommendations**

Facility Type	Maintenance Activity	Strategy
<i>Shared Use Paths/ Separated Bike Lanes</i>	Pavement Preservation	Develop and implement a comprehensive pavement management system for the shared use path network.
	Snow and Ice Control	Design shared-use paths to accommodate existing maintenance vehicles.
	Drainage Cleaning/Repairs	Clear debris from all drainage devices to keep drainage features functioning as intended and minimize trail erosion and environmental damage.
		Check and repair any damage to trails due to drainage issues.
	Sweeping	Implement a routine sweeping schedule to clear shared-use paths of debris.
		Provide trail etiquette guidance and trash receptacles to reduce the need for sweeping.
	Vegetation Management	Implement a routine vegetation management schedule to ensure user safety.
		Trim or remove diseased and hazardous trees along trails.
		Preserve and protect vegetation that is colorful and varied, screens adjacent land uses, provides wildlife habitats, and contains prairie, wetland, and woodland remnants.
	ADA Requirements	Conduct walk and bike audits to assess accessibility of new, proposed, and existing shared-use paths.
		Ensure that ADA compliance is incorporated into the design process for new facilities.

Facility Type	Maintenance Activity	Strategy
<i>Paved Shoulders/ Bike Lanes</i>	Pavement Markings	Explore approaches to routinely inspect pavement markings for bicycle infrastructure and replace as needed.
		Consider preformed thermoplastic or polymer tape on priority bikeways (identified in this Plan) adjacent to high-volume motor vehicle routes (preformed thermoplastic or polymer tape are more durable than paint and requires less maintenance).
	Snow and Ice Control	Clear all signed or marked shoulder bicycle facilities after snowfall on all state-owned facilities that do not have a maintenance agreement with a local governmental unit in place.
	Sweeping	Implement a routine sweeping schedule to clear high-volume routes of debris.
<i>Bicycle Boulevards</i>	Sign Replacement	Repair or replace damaged or missing signs as soon as possible.
<i>Sidewalks</i>	Pavement Preservation and Repair	Conduct routine inspections of high-volume sidewalks and apply temporary measures to maintain functionality (patching, grinding, mudjacking).
		Consider using public agency staff or hiring contractors for sidewalk repairs, rather than placing responsibility on property owner (property owner can still be financially responsible).
	Snow and Ice Control	Educate the public about sidewalk snow clearance.
		Require sidewalk snow clearance to a width of five feet on all sidewalks.
		Establish required timeframes for snow removal.
	Implement snow and ice clearing assistance programs for select populations.	

## ON-GOING MONITORING AND EVALUATION

Measuring the performance of active transportation networks is essential to ongoing success. Bicycle and pedestrian counts, crash records, and other data contribute to a business case for continued improvement of and investment in multimodal infrastructure. As recommendations are implemented, Barberton must be able to measure whether these investments are paying active transportation dividends (i.e., more people walking and bicycling). An affirmative answer reinforces this Plan’s legitimacy and provides evidence that future investments will also yield positive results. The performance measures in Table 23, and also encompassed in the city’s Complete Streets Policy, will chart progress towards making walking and bicycling safe, connected, and comfortable. Barberton should establish baseline targets and revisit these metrics as new plans and priorities occur. Data on these measures should be documented and published for public review annually. A robust performance measures program includes establishing baseline measurements, performance targets, data collection frequency, and data collection and analysis responsibility.

Table 23: Performance Measures

<i>Performance Measure</i>	<i>Goal</i>	<i>Timeline</i> (how often is data collected/updated)	<i>Responsibility</i> (who will collect the data)
<i>Safety</i>	Average vehicle speed	Annually	» AMATS » City of Barberton
	Average vehicle traffic volume	Annually	
	Number of crashes by severity	Annually	
	Number of crashes involving a bicyclist	Annually	
	Number of crashes involving a pedestrian	Annually	
<i>Infrastructure Conditions</i>	Number of Roads with pavement conditions less than “fair” (PCR 65 or below)	Annually	» AMATS » City of Barberton
	Number of sidewalks in conditions less than “fair”	Annually	
	Number of new or improved facilities installed to promote active transportation	Annually	
	Number of parks serviced by sidewalks	Annually	
	Miles of bike lanes	Annually	
	Number of sidewalk and crosswalk gaps	Annually	
	Number of pedestrian countdown signals	Annually	
	Number of bikeway connections to off-road trails	Annually	
	Liner Feet/miles of sidewalks and bike lanes	Annually	
<i>Economic Vitality</i>	Residential Property Values	Annually	» City of Barberton
	Number of Vacant Parcels	Annually	
<i>Health</i>	On-Road Mobile Source Emissions	Annually	» AMATS » City of Barberton » Akron METRO RTA » Summit County Public Health
	Chronic Disease Rates	Annually	
	METRO Ridership	Annually	
	Transit Travel Times	Annually	
	Number of transit stop connectivity sidewalk gaps	Annually	
<i>School</i>	Number of students that walk/bike to school	Annually	» Summit County Public Health » Barberton City Schools
	Number of Safe Routes to School countermeasures by school year	Annually	
<i>Policy</i>	Number of exceptions granted	Annually	» City of Barberton Planning Commission

# APPENDIX A - BARBERTON LOCAL SCHOOLS DATA

## OUR SCHOOLS

Our Schools			
School District	School Name	School Address	Grades served
Barberton Local School District	Barberton Primary School	1151 Shannon Avenue Barberton, OH 44203	K - 2
	Barberton Intermediate School	292 Robinson Avenue Barberton, OH 44203	3 - 5
	Barberton Middle School	477 4th St. NW Barberton, OH 44203	6 - 8
	Barberton High School	555 Barber Road Barberton, OH 44203	9 - 12

Our School's Students 2021-2022												
School	Total Enrollment	Attendance Rate	Black, non-Hispanic	American Indian or Alaska Native	Asian or Pacific Islander	Hispanic	Multi-Racial	White, non-Hispanic	Economically Disadvantaged <sup>6</sup>	English Learner	Students with Disabilities	Migrant
Barberton City School District	3,519	89.2%	15.7%	0.3%	0.5%	3.7%	8.8%	71.0%	73.0%	1.0%	18.7%	NC
Barberton Primary School	762	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	74.4%	Not available*	Not available*	Not available*
Barberton Intermediate School	795	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	72.77%	Not available*	Not available*	Not available*
Barberton Middle School	799	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	72.2%	Not available*	Not available*	Not available*
Barberton High School	1221	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	Not available*	59.4%	Not available*	Not available*	Not available*

(\*Full demographic data are given for the district as a whole. Full data per school, with the exception of enrollment and economic disadvantage, were not available due to the reorganization of school buildings this school year which rendered 2021-2022 data inapplicable).

<sup>6</sup> Barberton City School District (Students receiving free or reduced lunch)

## CURRENT STUDENT TRAVEL

Students within walking and biking distance of school Barberton Primary School		
Distance From School	Number of Students	% of Student Body
Within 1/4 mile of school	15	2
Within 1/2 mile of school	83	12
Within 1 mile of school	146	22
Within 2 miles of school	343	51

Total enrollment of students: 670

Students within walking and biking distance of school Barberton Intermediate School		
Distance From School	Number of Students	% of Student Body
Within 1/4 mile of school	16	2
Within 1/2 mile of school	90	13
Within 1 mile of school	299	43
Within 2 miles of school	571	81

Total enrollment of students: 702

Students within walking and biking distance of school Barberton Middle School		
Distance From School	Number of Students	% of Student Body
Within 1/4 mile of school	9	1
Within 1/2 mile of school	52	7
Within 1 mile of school	206	29
Within 2 miles of school	561	80

Total enrollment of students: 845

Students within walking and biking distance of school Barberton High School		
Distance From School	Number of Students	% of Student Body
Within 1/4 mile of school	7	1
Within 1/2 mile of school	74	7
Within 1 mile of school	301	27
Within 2 miles of school	828	75

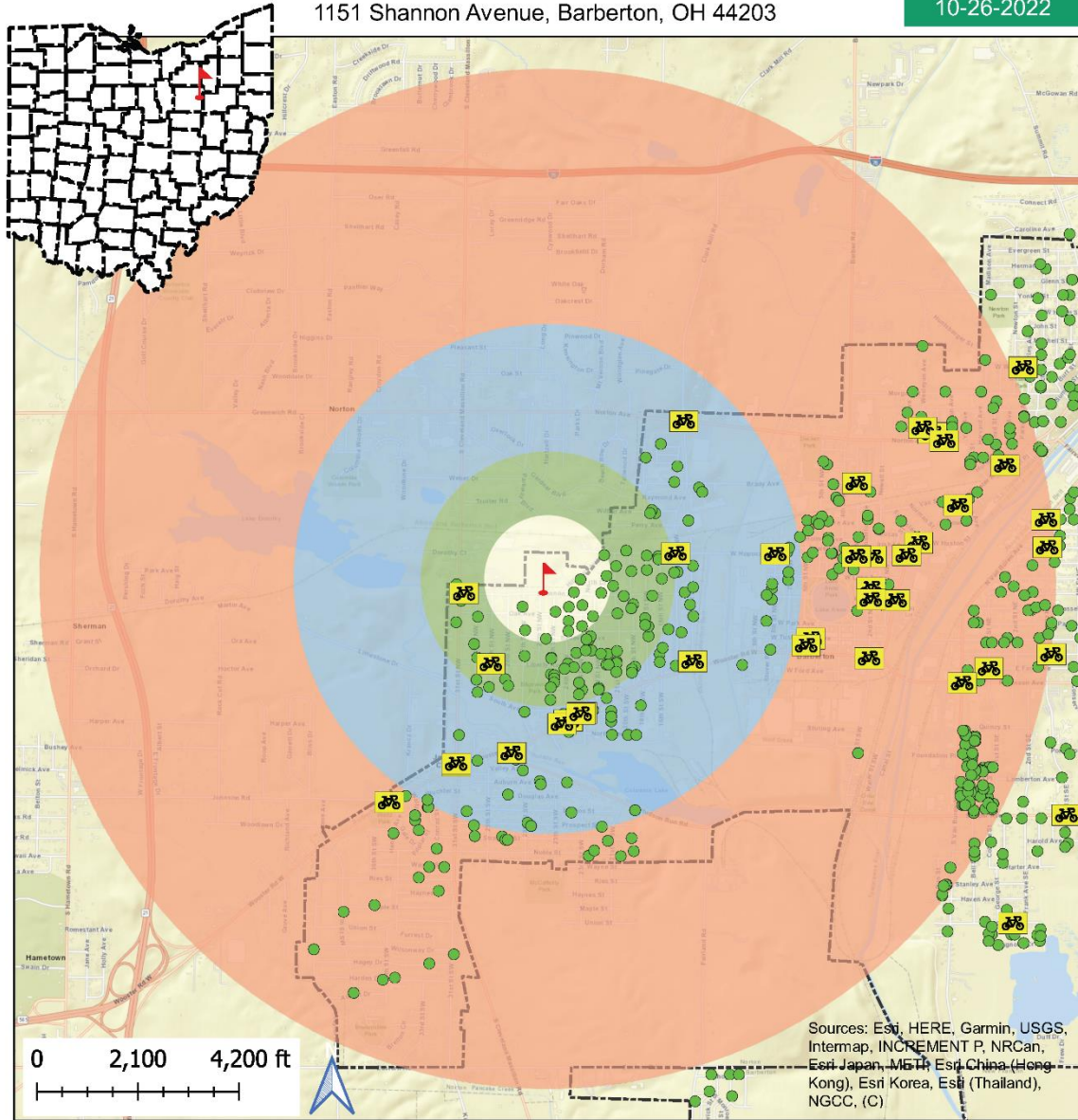
Total enrollment of students: 1102



## Barberton Primary School - Barberton Local Schools - Summit County

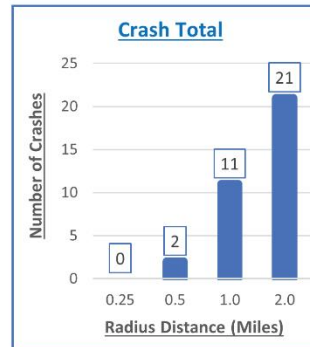
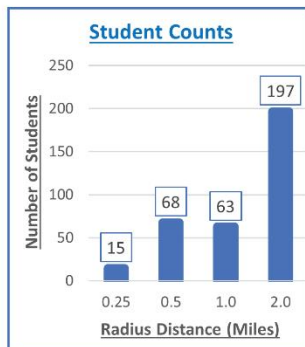
1151 Shannon Avenue, Barberton, OH 44203

10-26-2022



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (C)

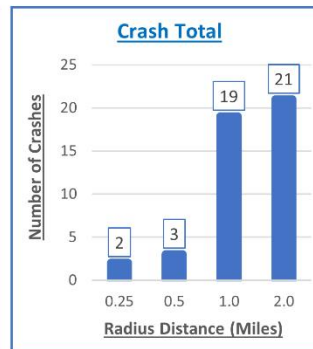
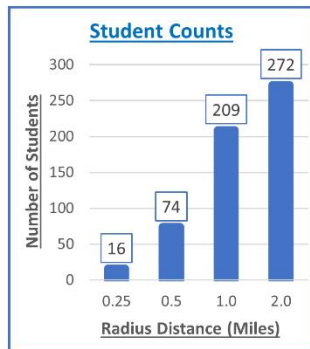
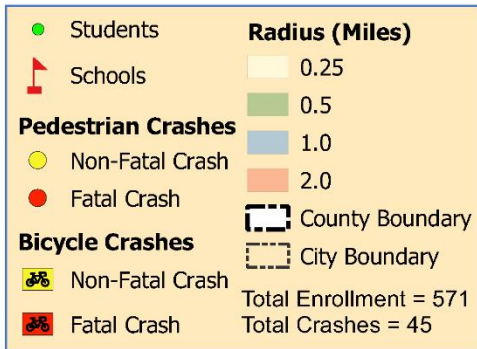
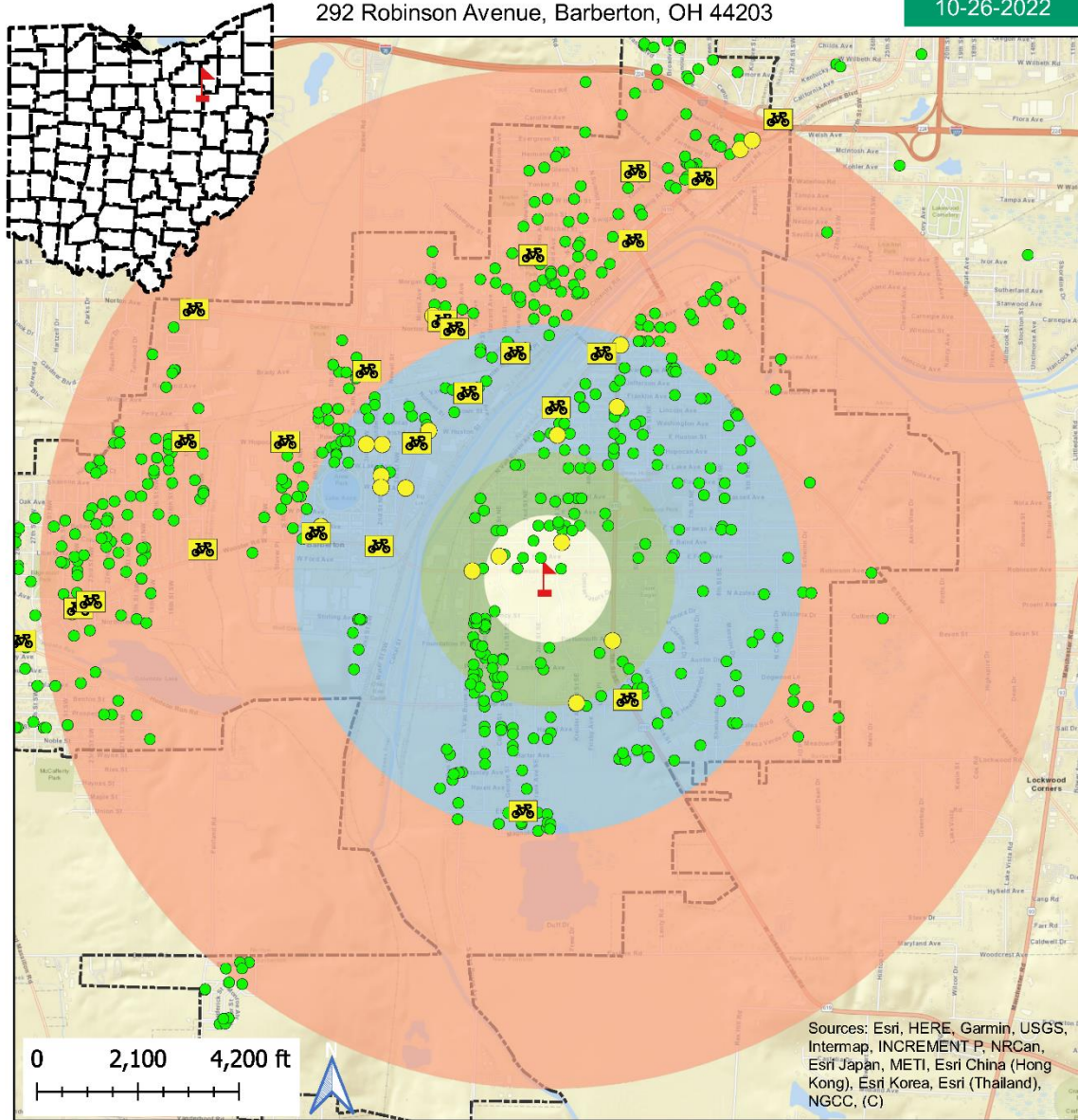
<span style="color: green;">●</span> Students	<b>Radius (Miles)</b>
<span style="color: red;">🚩</span> Schools	0.25
<b>Pedestrian Crashes</b>	0.5
<span style="color: yellow;">●</span> Non-Fatal Crash	1.0
<span style="color: red;">●</span> Fatal Crash	2.0
<b>Bicycle Crashes</b>	<span style="border: 1px dashed black; padding: 2px;"> </span> County Boundary
<span style="border: 1px dashed black; padding: 2px;"> </span> Non-Fatal Crash	<span style="border: 1px dashed black; padding: 2px;"> </span> City Boundary
<span style="border: 1px dashed black; padding: 2px;"> </span> Fatal Crash	Total Enrollment = 34
	Total Crashes = 34



## Barberton Intermediate School - Barberton Local Schools - Summit County

292 Robinson Avenue, Barberton, OH 44203

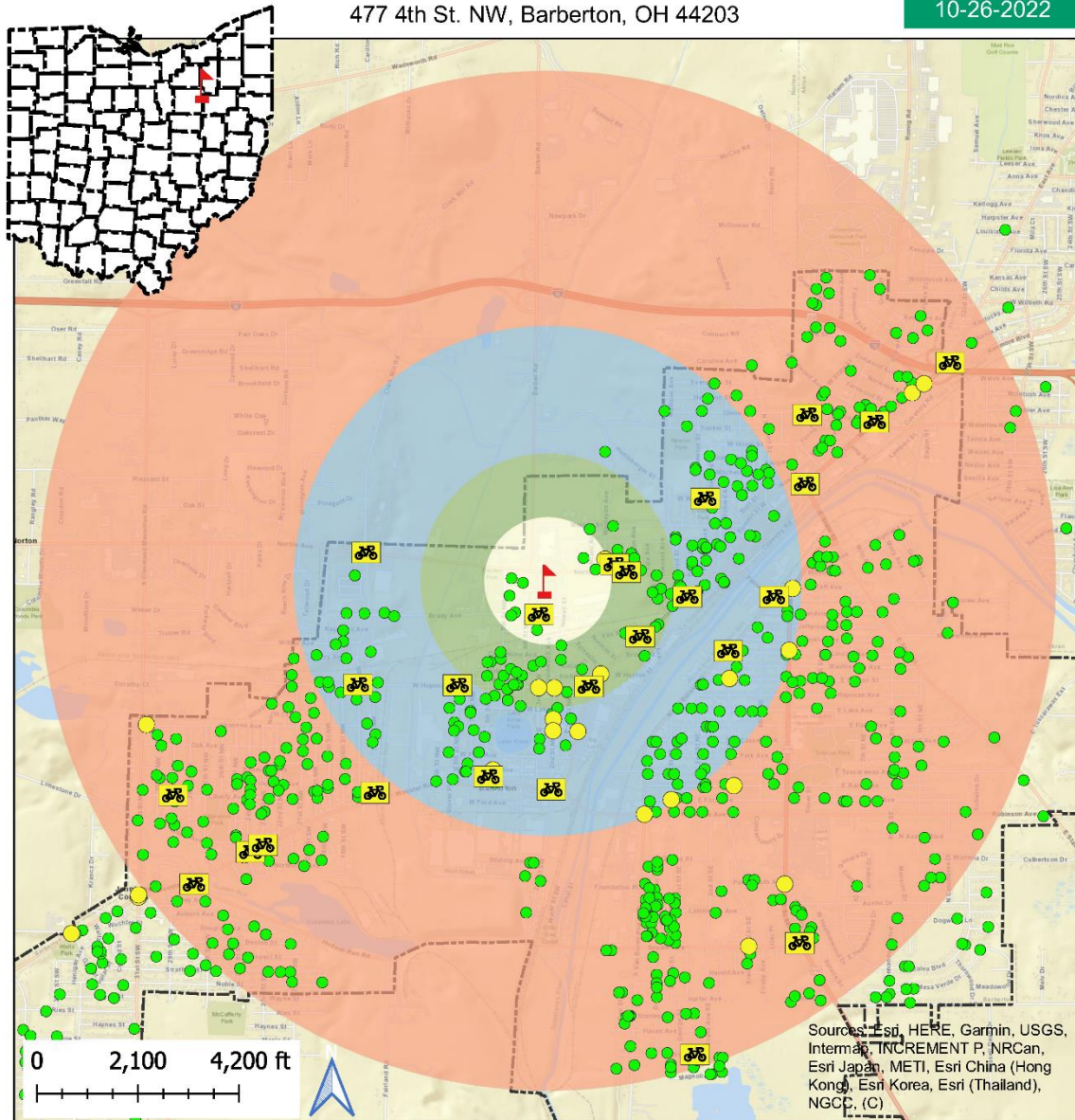
10-26-2022



## Barberton Middle School - Barberton Local Schools - Summit County

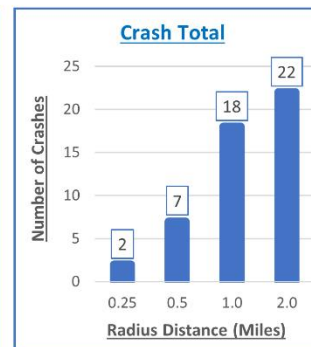
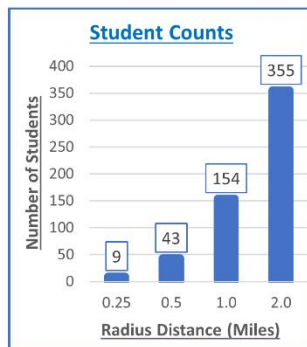
477 4th St. NW, Barberton, OH 44203

10-26-2022



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (C)

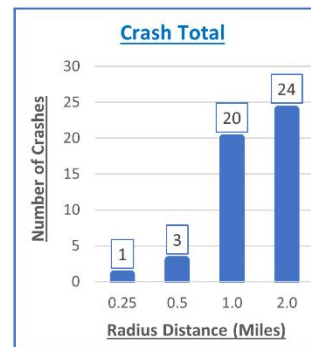
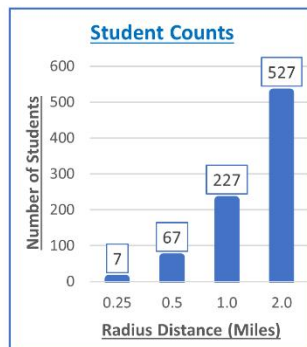
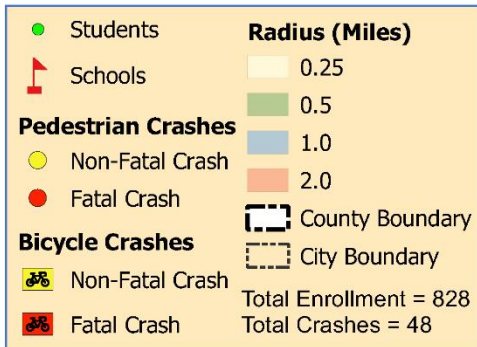
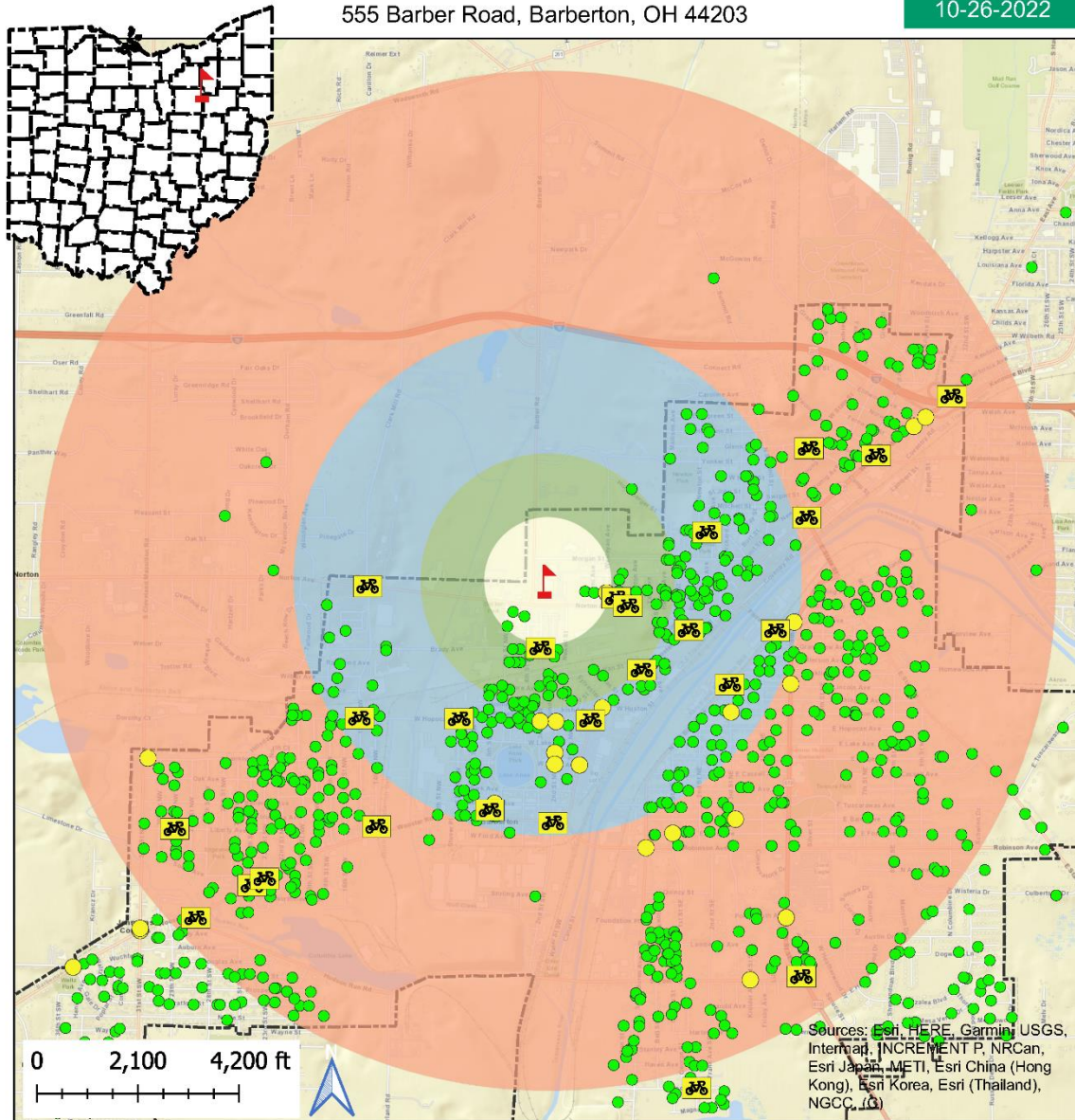
<span style="color: green;">●</span> Students	<b>Radius (Miles)</b>
Schools	<span style="background-color: #ffffcc;">■</span> 0.25
<b>Pedestrian Crashes</b>	<span style="background-color: #90ee90;">■</span> 0.5
<span style="color: yellow;">●</span> Non-Fatal Crash	<span style="background-color: #add8e6;">■</span> 1.0
<span style="color: red;">●</span> Fatal Crash	<span style="background-color: #ff9966;">■</span> 2.0
<b>Bicycle Crashes</b>	County Boundary
Non-Fatal Crash	City Boundary
Fatal Crash	Total Enrollment = 561
	Total Crashes = 49



## Barberton High School - Barberton Local Schools - Summit County

555 Barber Road, Barberton, OH 44203

10-26-2022



**FINAL - FEBRUARY 2023**

In-classroom student travel tallies were collected on 3 days during the week of October 3, 2022.

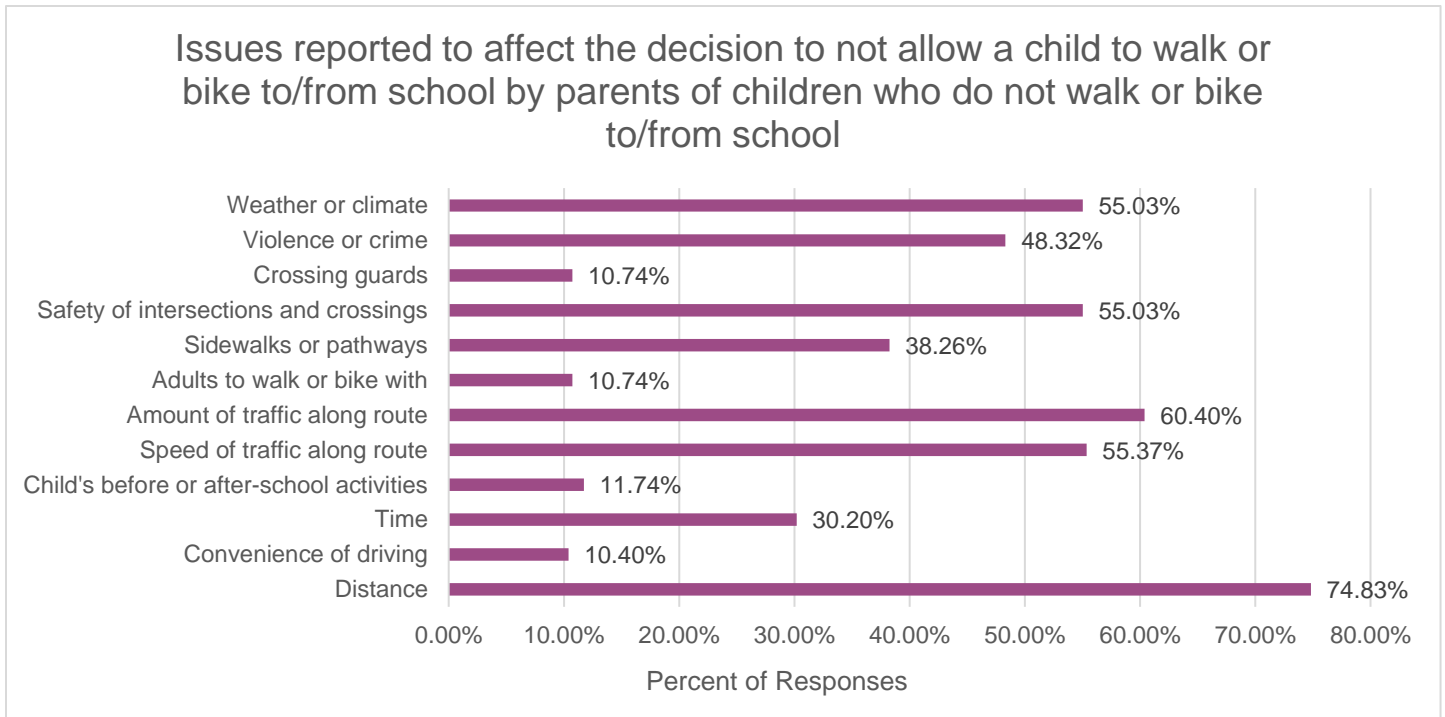
Student Travel Tallies Barberton Primary School							
	Walk	Bike	School bus	Family Vehicle	Carpool	Public Transit	Other
Number of students (morning trips)	31	0	333	262	3	1	41
	5%	0%	50%	39%	0%	0%	6%
Number of students (afternoon trips)	24	0	229	151	5	2	34
	4%	0%	34%	22%	1%	0%	5%

Student Travel Tallies Barberton Intermediate School							
	Walk	Bike	School bus	Family Vehicle	Carpool	Public Transit	Other
Number of students (morning trips)	46	0	402	278	11	7	10
	6%	0%	53%	37%	1%	1%	1%
Number of students (afternoon trips)	53	0	360	197	15	8	11
	7%	0%	48%	26%	2%	1%	1%

Student Travel Tallies Barberton Middle School							
	Walk	Bike	School bus	Family Vehicle	Carpool	Public Transit	Other
Number of students (morning trips)	77	12	521	459	18	5	3
	7%	1%	48%	42%	2%	0%	0%
Number of students (afternoon trips)	93	11	377	288	14	2	7
	8%	1%	34%	26%	1%	0%	1%

Student Travel Tallies Barberton High School							
	Walk	Bike	School bus	Family Vehicle	Carpool	Public Transit	Other
Number of students (morning trips)	39	6	177	294	31	6	20
	7%	1%	31%	51%	5%	1%	3%
Number of students (afternoon trips)	33	3	102	160	21	5	11
	6%	1%	18%	28%	4%	1%	2%

**Parent Attitudes towards walking and biking.** Using the Parent Survey Summary Data Report generated by ODOT Safe Routes to School program, indicate the top 5 reasons impacting the decisions of parents who currently DO NOT allow their children to walk or bicycle to school:



Reasons for not allowing children to walk or bicycle to school:
Distance
Amount of traffic along route
Safety of intersections and crossings
Weather or climate
Violence or crime

**Safety Issues and Concerns.** Summarize traffic safety issues and concerns that are gathered anecdotally from the team, parents and the community at large.

The 2022 Barberton Parent Survey found that there are several reasons why parents won't allow their children to walk or bike to school. These reasons include the lack of proper sidewalk infrastructure, lack of walking and biking routes for children, and danger and fear of their children being harassed by strangers or to witness violence or crime. Parents also stated that there are minimal walking and biking route options for children to travel to and from school. Schools are located near roadways with heavy traffic volumes. Motor vehicles that travel along these roadways tend to speed and this poses a threat to a child's safety, especially if a child were worth to bike or walk alone.



**Relevant traffic crashes.** Summarize the findings from the crash data reports recorded within 2 miles of the school sites for the previous 5 years for which data is available.

<b>Bicyclist and Pedestrian Crashes within 2 miles of schools (2017-2021)</b>				
<b>School</b>	<b>Pedestrian Crashes</b>	<b>Pedestrian Fatalities</b>	<b>Bicyclist Crashes</b>	<b>Bicyclist Fatalities</b>
Barberton Primary School	17	0	17	0
Barberton Intermediate School	23	0	22	0
Barberton Middle School	24	0	25	0
Barberton High School	24	0	24	0
<b>Total crashes (citywide)</b>	<b>27</b>	<b>0</b>	<b>25</b>	<b>0</b>



