

# City of Twinsburg

## First Mile / Last Mile Community Connections Plan

August 23, 2018





**"Your city should be your greatest ally  
in health and well-being."**

**- New York City Department  
of Design and Construction**

# Table of Contents

This report is organized into four primary sections to address the planning process undertaken to reach design recommendations, priorities and implementation strategies. The City of Twinsburg commissioned this study to identify the gaps in the city's existing trail system and develop strategic recommendations for the missing links. The project team worked closely with city representatives and sought community feedback through a public survey process. Residents expressed strong support for this approach and provided helpful suggestions.

## DISCOVER

INTRODUCTION / PROJECT OVERVIEW	4
CONNECTING COMMUNITIES PROGRAM	6
WALK & BRAINSTORM	10
TRAIL SYSTEM VISUAL OVERVIEW	12
EXISTING TRAILS NETWORK	16
ROADWAY ANALYSIS	18
COMMUNITY PRIORITIES	20

## CHALLENGE

TRAIL TYPES	24
MISSING PIECES	28
TRAIL INNOVATIONS	30

## TRANSFORM

PATH / TRAIL CONCEPTS	36
FITNESS LOOPS	62

## IMPLEMENT

BUDGET ANALYSIS BY TRAIL	66
PRIORITY PROJECT IMPLEMENTATION	68
BUILDING THE TWIN TRAILS BRAND	72
APPENDIX	76

In Memory  
of  
Fisherman  
DAVID R. WATSON



INTRODUCTION

The Twinsburg First and Last Mile Planning Study examines the City's extensive trail network with an underlying goal to better link the system and provide safer, more intuitive community connections.

The planning process, outlined in this report, was facilitated by the Akron Metropolitan Area Transportation Study (AMATS), City of Twinsburg leadership, City Architecture and WSP.

The City of Twinsburg recognizes the importance of an interconnected community and looked to the AMATS (Akron Metropolitan Area Transportation Study) Connecting Communities program for assistance in addressing gaps in the city's trail network, and developing sustainable transportation choices for all residents. To accomplish this goal, the City of Twinsburg undertook a First Mile / Last Mile connectivity study.

Through its application the city identified the need to address the following objectives:

- Improve connections to accomplish greater trail utilization rates
- Enhance and develop Twinsburg's identity as a bicycle friendly community
- Overcome auto-dependent suburban land patterns to develop a network that supports non-motorized transportation
- Create safer alternative transportation options along high-volume arterial roadways
- Close gaps within the existing trail network to provide stronger connections to community facilities

DISCOVER - UNDERSTANDING TWINSBURG'S INFRASTRUCTURE

Twinsburg

is a well-situated suburban community know for its high quality of life within a picturesque, semi-rural environment. Twinsburg's neighborhoods, parks and community facilities are true assets, attracting residents and visitors. Its location adjacent to major highways and the Ohio Turnpike provides convenient access to nearby Akron and Cleveland. Twinsburg is most well-known for its annual Twins Day Festival, a twin-themed event that draws thousands of visitors from across the nation each August.

The city has invested in the development of high-quality parks and trails, but these represent hidden gems, with access points located along quiet residential streets. A stronger physical presence is needed for these recreational and public health assets as well as greater connectivity. They provide an opportunity to brand the community as one focused on fitness and balanced lifestyles with infrastructure that helps to communicate this message.



The Connecting Communities Planning Grant program is designed to provide communities with funding to develop transportation plans that will lead to the identification of projects eligible for Akron Metropolitan Area Transportation Study (AMATS) funds.

The purpose of these plans is to focus on the concept of livability as it relates to a community's transportation systems. Plans developed through this program should enhance neighborhoods by improving transportation connections and promoting alternative modes of transportation like biking, walking and transit. Grant funding is used to hire a consultant to study a general area of a community. The funds are not used for preliminary engineering, but instead to develop plans containing analysis and recommendations. Recommended projects are then eligible for implementation funding.

To begin to change the transportation patterns that have created auto-dependent communities and create places that are more vibrant and livable, the planning agency has developed the Connecting

Communities program. This helps communities work together and rethink their approach to transportation and economic development.

In AMATS' words:

*"We can, however, begin to give serious thought to a new way of doing things; of creating a built environment where walking, biking, and using public transportation again become a viable option for the majority of our residents; where roads are designed to accommodate a variety of modes of transportation; and where public buildings and residential spaces retain their utility, but regain a sense of dignity and an appealing design aesthetic."*

And this is what Connecting Communities is all about: encouraging incremental, small-scale, and practical modifications to the way that our transportation system and our built environment interact with one another. It is our hope that by following the recommendations contained in this document, communities throughout our region will become better, more interconnected places to live.

#### Recommendations

The recommendations in this guide are intended to be used by AMATS and other agencies as a framework for increasing transportation alternatives and supporting land use patterns through targeted investments. The eight recommendations of Connecting Communities are:

- 1. Improve pedestrian planning and facilities through targeted investments.**
- 2. Improve bicycle planning and facilities through targeted investments.**
- 3. Enhance public transportation systems to meet the needs of current users and be attractive to new users.**
- 4. Incorporate complete streets principles into land use and transportation decisions.**
- 5. Implement land use policies that improve community cohesion and reduce urban sprawl.**
- 6. Integrate environmental planning into land use and transportation planning.**
- 7. Improve inter-agency coordination on regional planning.**
- 8. Create a planning grant program to implement Connecting Communities.**

## CONNECTING COMMUNITIES

While many communities in Northeast Ohio have developed trails, our roadway infrastructure is primarily geared toward vehicular movement with little thought given to complete streets that provide safe and equitable transportation options within a shared right-of-way. Thankfully, that is changing, with opportunities provided for planning and implementation through programs like the AMATS Connecting Communities Program. With smart investments in our infrastructure, we can begin to create an interconnected region.

This will lead to:

- Increased community health
- Safer transportation options
- Improved access and opportunity
- New investment opportunities
- Positive impacts on community character
- Positive impacts on the environment

When we create neighborhoods and districts that decrease dependence on automobiles, we create healthier, more supportive, and more sustainable communities for all.

In the development of a more complete and interconnected trail system, the team explored many options. Roads, neighborhood streets, utility rights-of-way and the rail right-of-way were considered. Right-of-way widths, traffic volumes, driveways and potential obstructions were studied to find the most buildable, economical and fundable paths. Priority designations were identified and the team generated a range of options for each route for review and consideration. This information, as well as the final recommendations are included on the following pages.

This was a focused study, aimed at improving connections within core areas of the community. It does not reach into all of the surrounding neighborhoods, but consideration was given to providing connectivity to areas outside of the primary study area.

Further analysis of these connections is strongly recommended, once the First Mile / Last Mile connections are in place, as these will be valuable in expanding the system to provide all residents with safe connections and increased mobility. This will do much to communicate the values of the City of Twinsburg and provide increased opportunities for greater community health.



Priority study area along Ravenna Road Corridor

# DISCOVER

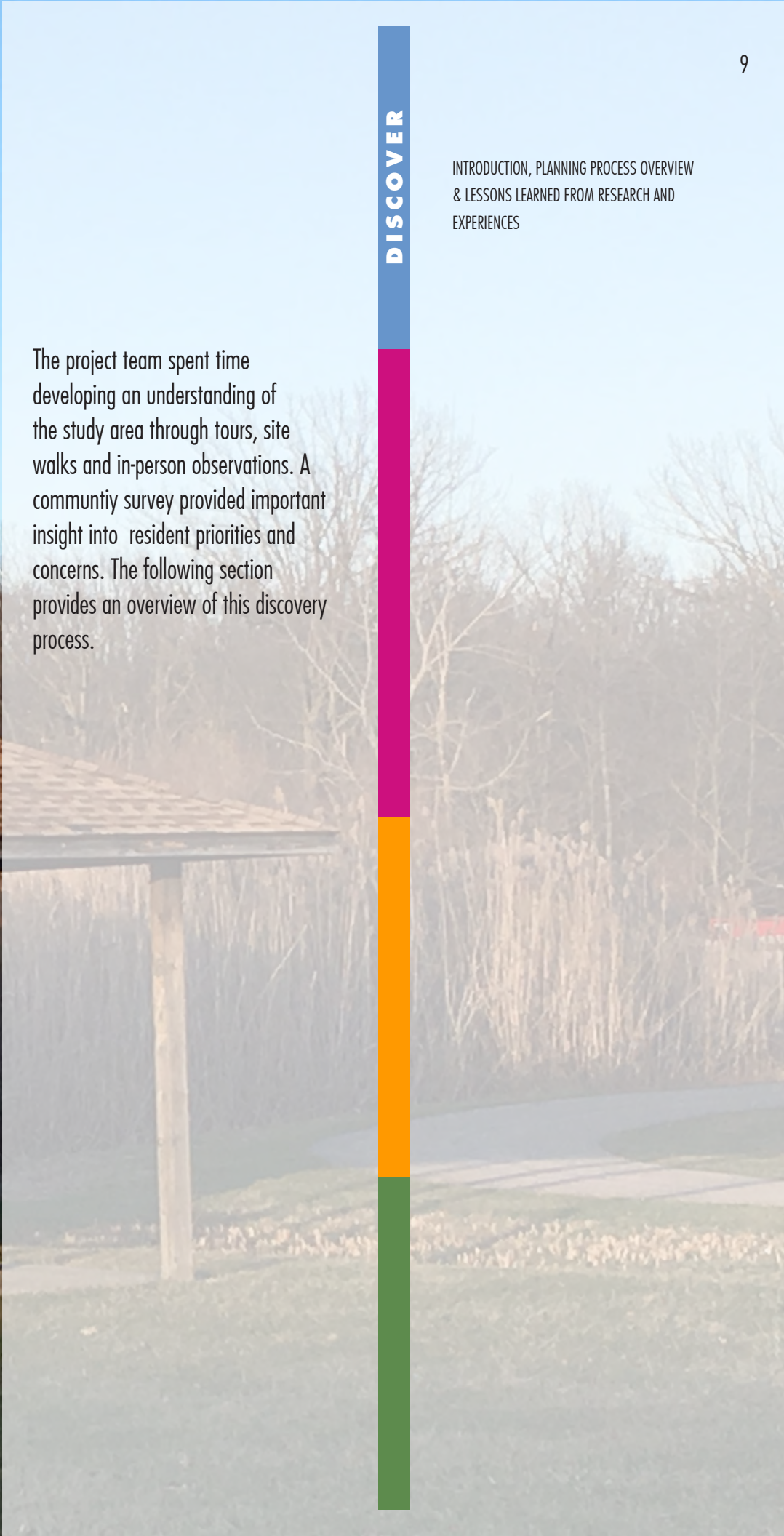




**DISCOVER**

INTRODUCTION, PLANNING PROCESS OVERVIEW  
& LESSONS LEARNED FROM RESEARCH AND  
EXPERIENCES

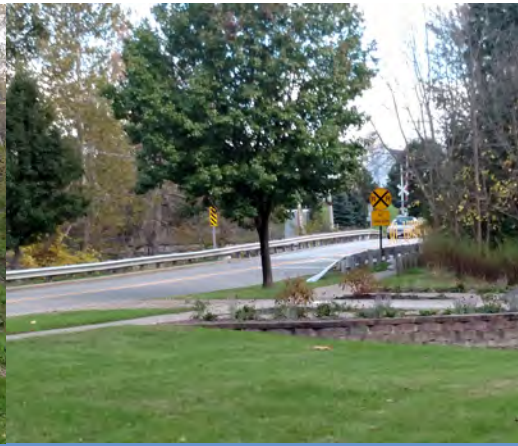
The project team spent time developing an understanding of the study area through tours, site walks and in-person observations. A communitiy survey provided important insight into resident priorities and concerns. The following section provides an overview of this discovery process.







The Center Valley Park Trail is a 1.35-mile paved asphalt pathway which has held up well over the years with virtually no maintenance, is easy to bike or walk on, and is both people and pet friendly.



Landscaping near the north trailhead to the Center Valley Park Trail pulls the trail entrance to the road and acts as a visual cue to show passersby that it is there.



Most of the trails provide numerous benches along the way to allow one to stop and rest or just enjoy the park's peace and serenity.



The majority of the Evan's Way / Hunter's Ridge Connector consists of crushed aggregate as it winds through woods and traverses some fairly steep terrain.

### WALK & BRAINSTORM TOUR

To kick off the planning process, the project team completed a comprehensive trail walk and tour on many of the trails within the community. This enabled observation of different trail materials, signage and amenities to understand the anticipated details and standards. It also provided an opportunity to experience the character of the various trails and to identify gaps in the system. This detail-oriented overview provided the ability to approach the project with an eye toward building a comprehensive trail network.

The team organized actions and assessments into four categories:

- Neighborhood Connections
- Corridor
- Twinsburg Town Square
- Trail Network



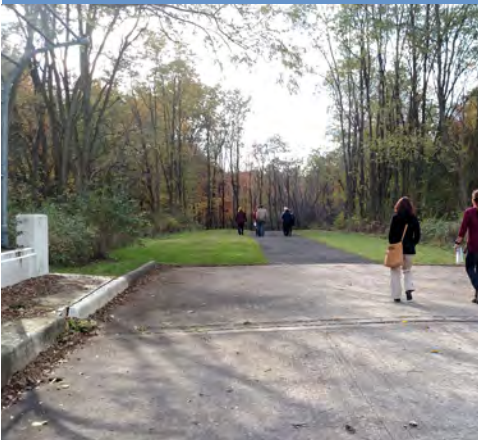
The Center Valley Trail incorporates bridges in a range of locations and styles to provide access across Tinker's Creek.



This trail continues over the bridge lovingly dubbed as the "Bridge to Nowhere" as it is open only to pedestrian traffic. It links Laurel Dr. to Chamberlin Rd. over I-480.



The eastern portion of the Evan's Way / Hunter's Ridge Connector is concrete as it enters the wooded area.



The Laurel Bike and Hike Trail pedestrian bridge lets off onto a (rubberized surface\*) trail that connects into a residential neighborhood on the Macedonia-Twinsburg border.



One of many charming wooden bridges which allow Old Hickory Trail to meander across the creeks of Center Valley Park.



Scenic view from the Evan's Way / Hunter's Ridge Connector Trail between The Reserve at Kensington (image on opposite page) to Hunter's Ridge to the west.

## NEIGHBORHOOD CONNECTIONS

Neighborhood access points for existing trails vary widely in terms of signage, ease of access and wayfinding. Existing trails interact with adjacent neighborhoods in a range of ways. The planning team observed different uses on each trail and connection. Overall, neighborhood connections must be emphasized and enhanced. In instances where trail connections are located within a neighborhood, sharrows or bike lanes should be utilized for visible connections along lower-volume streets.



Trail connection points along Glenwood Road link northern neighborhoods.



Miktarian Trail provides a critical east-west connection and links several neighborhoods.



An existing trailhead at the community gardens combines uses.



East Idlewood trail connection.



A cut-through has been created to connect with civic spaces and recreational uses.



Thoughtful details along trail add memorable connection points.



Trail requirements for new developments supports a more comprehensive system.



The Laurel Trail and bridge link several west Twinsburg neighborhoods, but a stronger connection to Ravenna Road would be helpful.



High School drive can serve as useful connection between Chamberlin Park and Ravenna Corridor.

**CORRIDOR**

The Ravenna Road Corridor is auto-dominated, with higher volumes of traffic traveling at speeds that exceed the limit. This situation has proven to be dangerous for pedestrians, and dramatically impacts bikeability. As a result, community feedback identified a need for off-road bicycle paths along this corridor rather than on-street bicycle facilities.



Pedestrian crosswalk at Richner Court.



Wide lanes promote higher speeds along corridor.



A significant amount of school traffic occurs along Ravenna, supporting the need for traffic-calming measures to be implemented.



Regular pedestrian activity in plaza area requires safer crossing details.



Non-signalized pedestrian crossing areas along Ravenna Road feel unsafe.



Stone walls in some locations limit sidewalk expansion opportunities.



Traffic speeds increase just north of the Town Square.



Pedestrian crossing improvements are needed at the E. Idlewild/Gettysburg intersection.



Intersection at school entry drives - safer crossing details are needed.

**TWINSBURG TOWN SQUARE**

The configuration of traffic patterns around the Town Square has changed over the last few decades, reflecting a priority of moving traffic through the area over the support of the square as a walkable destination. Smooth corners with expanded radii have created an environment that supports increased speeds, and have reduced the predictability of vehicular movement. It is evident that vehicular movements are prioritized over pedestrian comfort.



The Twinsburg Town Square provides a picturesque anchor for the community.



The Town Square provides an important access point to many community assets.



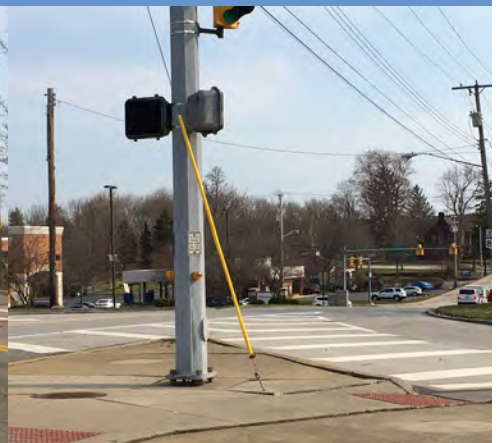
Wide expanses of pavement around the Town Square limit pedestrian access and comfort.



Unusual intersection configurations lead to confusion.



The sides of the Town Square feel disconnected from one another, instead of acting as a cohesive "place."



Some pedestrian-supportive details exist, but more are needed.



A parking zone in front of commercial uses creates unusual patterns of vehicular movement.



Current roadway configurations in front of the Town Square create long crossing distances.



Existing businesses need supportive spaces and amenities.

**TRAIL NETWORK**

Twinsburg’s trail network incorporates paved and unpaved options in a system that spans over nine miles, and weaves through much of the City’s limits.



Initial branding has been done on some trails, but a system-wide approach is needed.



Existing trailhead stations with maps & information.



Bridges throughout the system traverse scenic Tinker’s Creek.



Railings and other thoughtful details help make trails more accessible to all.



Special views add interest to the trails.



Trailside seating areas add places to pause.



Raised boardwalks are utilized in low-lying areas.



Neighborhood connections vary in quality and details.



The pedestrian bridge over Interstate 480 connects the west side of the city.

Connect to northern Twinsburg neighborhoods



# 2 RAVENNA ROAD CORRIDOR

# 4 NORTHERN COMMERCIAL NEIGHBORHOOD NODE



Connection to western Twinsburg neighborhoods



I-480

# 1 CIVIC CAMPUS

ROUTE 82

Connect to commercial district and employment centers





**MISSING LINKS**

Twinsburg is ahead of many communities in recognizing the importance of a recreational trail system and implementing portions throughout the community over the last several years. The City has also required new developments to include trail components.

The City's Engineering Department has experimented with a range of trail surfaces and types, identifying a preference for a recycled content porous paving system as the 'gold standard.'

This map demonstrates the study's starting point; identifying the overall focus areas, priority connections and destination areas. It provides an overview to guide the more detailed physical analysis and design considerations.

As noted, the planning team's recommendations focus on strategic links. These links will address the gaps in the existing network, increase the system's presence throughout Twinsburg, and better serve the community as a whole.

**STUDY AREA ANALYSIS - FOCUS AREAS AND CONNECTIONS**



**3 EAST SIDE NEIGHBORHOOD CONNECTION**

Connect to eastern Twinsburg neighborhoods and park amenities

**5 TOWN SQUARE**

Connect to major redevelopment sites

DARROW ROAD

&

**TRANSPORTATION NETWORK**

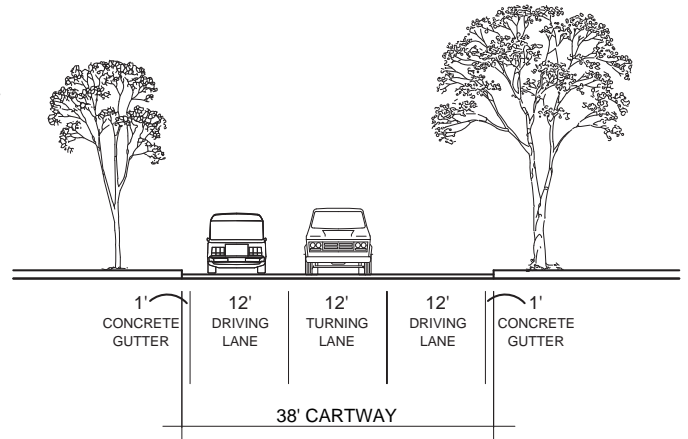
The transportation network in and through Twinsburg is predominantly auto-dominant and although this plan strives to better integrate bicycle and pedestrian infrastructure into the fabric of the community, it must be done in a way that integrates well within the existing roadway network. This requires an understanding of the current network and how it serves the community.

The commercial heart of Twinsburg is centered around the area where East Aurora Road (State Route 82), Darrow Road (State Route 91) and Ravenna Road (County Route 12) converge. This area is also served by the two I-480 interchanges which form the southern border of the commercial area. Speed limits on Aurora, Darrow and Ravenna Roads are all posted at 25-35 MPH, but field observations reflected vehicles that appeared to be traveling at higher speeds. Ravenna Road is a three-lane road with one travel lane in each direction and a center turn lane. Darrow Road is a two-lane road north of Ravenna Road and becomes a four-lane road with turn lanes south of East Aurora Road. Although these roads have sidewalks on at least one side, they are narrow and they do not feel walkable. There are no bicycle facilities and with the traffic speeds and volumes, these roads are only bikable for experienced road cyclists; the average person would not feel safe. The Town Square is formed at the convergence of Aurora, Darrow and Ravenna Roads. The park located in the center of the square is surrounded by wide roads with some on-street parking, turn lanes and a right turn bypass lane, forming a barrier that inhibits access to the park. The intersection of Darrow Road and Ravenna Road is quite large and not pedestrian or bicycle friendly.

The civic heart of Twinsburg is located along Ravenna Road, a little more than one-half mile northwest of the square. Twinsburg High School and Middle School campuses are located on the south side of Ravenna Road, along with the community center and library. Twinsburg City Hall, Police and Fire Departments, Dodge Intermediate School, and Center Valley Park are located on the north side. Ravenna Road forms a spine that links many neighborhoods with Twinsburg’s civic and commercial centers. Given the nature of the corridor and its destinations, bicycle and pedestrian enhancements along the Ravenna Road corridor would be of significant benefit to the community.

Liberty Road runs north-south along Twinsburg’s eastern border with multiple access points to Liberty Park, a significant community destination for recreation. Post Road provides a direct east-west connection between Center Valley Park (at Darrow Road) and Liberty Park.

Glenwood Road is a two lane, east-west roadway that links Ravenna Road and Darrow Road along the northern part of Twinsburg. To the south Officer Joshua T. Miktarian Memorial Highway connects Darrow Road with Ravenna Road, also linking to Center Valley Park, the school campuses and the community center. The remaining streets within



**RAVENNA ROAD: EXISTING CONDITIONS**

**CONNECTING COMMUNITIES**  
2016 Planning Grant



**Right Of Way**



**TRAFFIC SPEEDS & SAFETY**

the community are predominantly residential roads. In addition, I-480 forms an almost unbroken physical barrier within Twinsburg, with most of the community resources and desired destinations located on the northeast side of the highway.

Speed limits along the primary roads within the study area are summarized below and include recommendations that align with the overarching objective of supporting a transportation network that safely and comfortably accommodates all modes.

*The speed limit on Darrow Road is posted as 35 MPH near Post Road and drops to 25 MPH south of the Miktarian Parkway intersection.*

*The speed limits on Gettysburg Drive and East Idlewood Drive are posted as 25 MPH.*

*The speed limit on Miktarian Parkway is posted at 35 MPH.*

*Recommendation:* Given the configuration of Miktarian Parkway, the adjacent land uses (residential, park and school), and the 25 MPH speed limits on the connecting Ravenna Road and Darrow Road, reducing the speed limit on Miktarian Parkway to 25 MPH is recommended.

*The speed limit on Post Road between Darrow Road and Liberty Road is posted as 25 MPH.*

*The speed limit on Ravenna Road is posted as 25 MPH to the east of Miktarian Parkway, for both directions of travel. The speed limit becomes 35 MPH to the northwest, but the specific point of transition is not clearly marked. Northwest bound Ravenna Road is posted as 35 MPH near Rolling Hills Drive; southeast bound Ravenna Road is posted as 35 MPH between Whitewood Parkway and the Middle School*

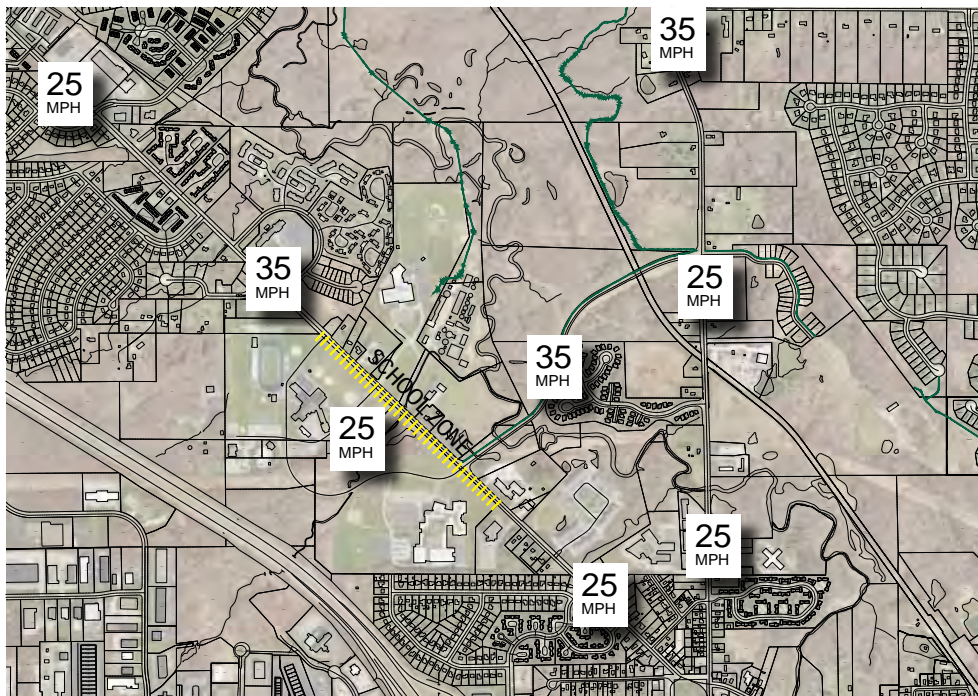
*service road. There are multiple school zones posted in between the 25 MPH and 35 MPH speed limit signs, however, the termination of the school zones are not posted.*

*Recommendation:* Given the nature of the land uses along Ravenna Road, which includes multiple schools and community destinations, the 25 MPH speed limit on Ravenna Road should extend from the Town Square to Rolling Hills Drive. The transition from 35 MPH to 25 MPH for southeast bound traffic should be clearly marked with an advance warning sign (Speed Limit 25 MPH Ahead (W3-5)) and a 25 MPH speed limit sign (R2-1).

*Recommendation:* The speed limit and school zone signing on Ravenna Road should be updated to clearly identify the speed limit transition zone and the start and end points of the school zone. It would be reasonable to establish one continuous school zone between the library entrance/Twinsburg Fire Department to the service road on the north border of the Chamberlin school campus area. The school zone should be reinforced with interim signing between the beginning and end of the school zone.

*The speed limit on the campus drive to Twinsburg High School, RB Chamberlin Middle School, Chamberlin High School, Twinsburg Fitness Center and Twinsburg Community Center is not posted.*

*Recommendation:* The speed limit for the campus drive should be posted for the southbound lane after the campus entry points along Ravenna Road, with a limit of 20 MPH (preferred) or 25 MPH to encourage appropriate travel speeds through this pedestrian-centric area.



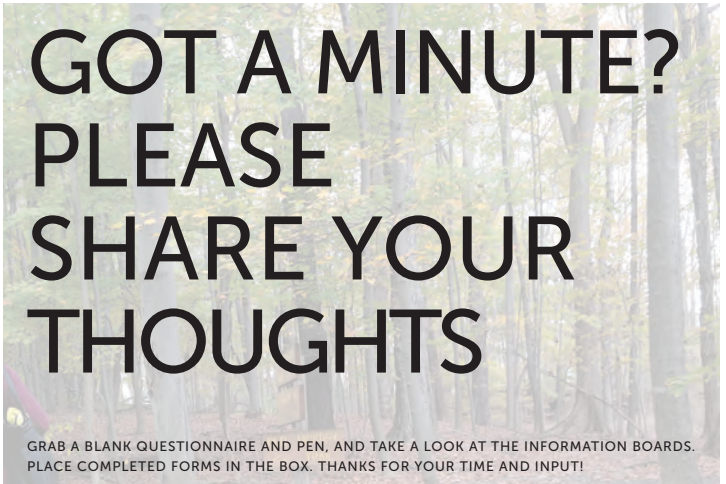
**COMMUNITY SURVEY**

The City of Twinsburg conducted a month-long community survey on the trail system with displays placed at the community fitness center and the public library. Information on the community survey was advertised through a range of outlets. Nearly 100 people participated in the survey, with responses that were informative and well thought-out.

Participants were asked to weigh in on key points within the community for which better connections were needed, the types of amenities that would make new and existing paths more usable, and a potential name with which to market the system. Finally, there was an opportunity to provide additional feedback for consideration. A significant amount of ideas were provided, and the design team has attempted to incorporate many of these ideas into this design process. The numbers from both locations have been totaled and the results have been organized from highest to lowest priority.

The information gathered helped to guide the areas of study for this process, and the basic approach to character and amenities. Beyond the conclusion of this project, the valuable information provided by Twinsburg residents will help to guide future community infrastructure investment decisions.

We are extremely appreciative of all who made an effort to participate in this process.



**Important destinations**

Liberty Park	52
Town Square	40
Recreation Center	37
Library	35
Glen Chamberlin Park	22
Senior/Community Center	16
Shopping Center	15
Elementary Schools	12
High School	12
Middle School	8
KSU	5
Major Employers	2
Municipal campus	1

Other suggestions:

Old Hickory Trail, Solon, Center Valley Trail, Bedford, Summit Metroparks, paved trails

**Conclusions:**

Connections between Liberty Park to the east and the civic core/other trails are important to bringing Twinsburg’s favorite recreational amenities together and improving access.



**COMMUNITY CONNECTIONS - PRIORITY LOCATIONS**

**1**  
QUESTION

What destinations are most important to connect via bike, public transportation & walking paths?

- The library
- Elementary schools
- Middle school
- High school
- Senior / Community Center
- Glen Chamberlin Park
- Liberty Park
- Recreation Center
- Town square
- Shopping areas
- Major employers
- KSU campus
- Municipal campus
- Other

Please select your top three priority locations on the questionnaire.

If we are missing a critical connection point, please feel free to write it on the "other" line.



TRAIL MIX - AMENITIES

# 2

QUESTION

What amenities and details are most important to you to support greater use of the trail system?

- On-road bike lanes
- Off-road bike lanes / shared sidewalks
- Improved crossing at intersections
- More crossing areas / intersections
- Slower speeds and traffic calming on main roads
- Lighting at trails
- More bike racks / fixit stations / site furniture
- Wayfinding maps & directional signage
- More bus stops & transit waiting areas
- Parking near trailheads
- Mile markers to identify travel distance
- Other

Please select your top three priority amenities on the questionnaire.

If we are missing a detail that you feel is important, please feel free to write it on the "other" line.

## COMMUNITY FEEDBACK

### Key amenities

Off-road bike lanes/shared sidewalks	50
Lighting	32
Parking near trailheads	31
Mile markers	30
Wayfinding	29
Bike racks, fixit stations, site furniture	23
Improved crossings at intersections	16
Slower speeds / traffic calming	12
Bus stops / transit	5

Other suggestions:

More trail maintenance behind Dodge School , designated no dog walking days

### Conclusions:

Off-road bike lanes and trails are preferred, with lighting, parking and mile markers/wayfinding also desired to increase usability of the trail system for fitness and supplemental transportation.



AN IDENTIFIABLE TRAIL SYSTEM

# 3

QUESTION

The City of Twinsburg is proud of its community amenities that support healthy lifestyles, and this project is aimed at filling in the existing gaps to create a more complete system.

We want to market this special community feature as a way to attract residents, businesses and visitors.

A critical part of this effort involves branding the City's trail system through signage and wayfinding, but we need a name.

What should we call this unique community feature?

Twin Trails? The Twinpath?

Please share your creative ideas on the questionnaire.

### System name considerations

Twinsburg Trails	6
Twin Trails	5
Twin Tiger Trail System	
Twin Path	
Twin Connections	
Twinsburg Riders Route	
Tiger Path	
Tiger Trail	
People's Pathways	
Burg Path	
Trails of Twinsburg	
Double Take Trails	
TTT (Twinsburg Trail of Thunder)	
Burg Connect	
Greenway	
TTT (Twinsburg Twin Trails)	

- Tour Twinsburg
- T-Trail
- Green for You
- Traverse Trails
- Twinsburg Community Trail
- Golden Flash Bike Path
- Tiger Traveler
- Liberty Trail
- Hikers Heart
- Paradise Journey
- Family Trails
- Keep Twinsburg Green
- Twinsburg Trailways
- The Burgomaster Trail
- Mr. Snarls Way
- Who Cares just build it

### Conclusions:

It is important to address the city's twin heritage while communicating the off-road nature of the system.

# CHALLENGE



Once an understanding of project context, existing conditions and community priorities was complete, the project team explored numerous layouts and configurations. These included potential routes for missing links to achieve key connections, considerations of path types and potential details.

**CHALLENGE**

TRAIL NETWORK IDEAS, MISSING LINK LOCATIONS, FOCUS AREAS CULMINATING INTO A CONNECTED, BALANCED & INTUITIVE SYSTEM WHICH ADDS VALUE TO THE TWINSBURG COMMUNITY



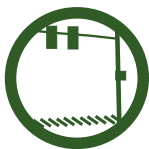


## INTERSECTION

- Banner style crosswalks
- Signal timing
- Pedestrian and bicycle crossing signage
- Audible signal
- Pedestrian / bicycle network signage
- Pedestrian-activated signals
- Street trees to narrow field of vision from 100' - 600' outside of intersection
- Count down pedestrian crossing heads

### PRIORITY LOCATIONS

- Ravenna Road & E. Idlewood / Gettysburg
- Ravenna Road & Miktarian Memorial Parkway
- Ravenna Road at Town Square
- Darrow Road & Post Road



### BUDGET

\$175,000 - \$200,000/ intersection



## SIDEWALK TRAIL

- Provide expanded accommodations for off-road bike lanes along existing sidewalks where the construction of a new multi-purpose path is not feasible.
- Additional width: 4-5' (minimum)
- Path materials: asphalt (\$) or recycled paving (\$\$)
- Provide directional signage to community destinations at intersections and decision points
- Provide markings that support a safe mixture of uses
- Provide distance markers

### PRIORITY LOCATIONS

- Ravenna Road Corridor
- Post Road Corridor



### BUDGET

\$68 / lineal foot - asphalt  
\$142 / lineal foot - recycled paving



## MULTI-PURPOSE PATH

- All new sidewalks along desired bike and walking routes should be constructed to this standard.
- Path width: 8' (minimum)
- Path materials: asphalt (\$) or recycled paving (\$\$)
- Provide directional signage to community destinations at intersections and decision points
- Provide distance markers

### PRIORITY LOCATIONS

- Center Valley / Miktarian Connector
- Center Valley Trail Extension
- Ravenna / Glenn Chamberlin Connector
- Ravenna / Whiteoak Drive Connector



### BUDGET

\$136/ lineal foot - asphalt  
\$285/ lineal foot - recycled paving





## BOARDWALK

- Raised path to provide access through wetlands and flood-prone areas, and promote greater use
- Path width: 8' (minimum)
- Path materials: wood, composites
- Increased height required within flood plain areas

### PRIORITY LOCATIONS

- Center Valley / Miktarian Connector
- Center Valley Trail Extension
- Ravenna / Glenn Chamberlin Connector



### BUDGET

\$750 / lineal foot



## BRIDGE / RAMP

- The presence of Tinker's Creek lends tremendous value to the park system, but creates challenges to path development.
- Bike and pedestrian scale bridge - can be pre-manufactured for cost savings
- Width: 8-10' to accommodate two lanes of bike or pedestrian traffic
- Bridge materials: utilize materials that are complementary to the natural surroundings
- Increased height required within flood plain areas

### PRIORITY LOCATIONS

- Center Valley / Miktarian Connector



### BUDGET

\$1,200/ lineal foot

## TRAIL TYPES

Missing pieces and connections throughout Twinsburg's trail system can be addressed through five primary trail types:

### Intersection

A standard set of intersection upgrades to improve visibility, crossing safety and multi-modal facilities

### Sidewalk Trail

A design solution for adding 4'-5' of trail width to an existing sidewalk to accommodate off-road bike facilities.

### Multi-Purpose Path

A traditional bike and walking path, to be utilized in a variety of settings.

### Boardwalk

A raised wood or composite pathway to accommodate trails in low-lying and flood prone areas.

### Bridge / Ramp

Structures to support improved connections and crossings pre-engineered when possible.

**EXAMPLE IMAGES - INTERSECTIONS**

Thoughtful details help to focus motorist attention at intersections and increase safety. Enhanced transit waiting environments at main intersections/stops will improve the usability of public transportation and convey a more balanced street system.



High-visibility crosswalk markings



Transit waiting environments



Signal upgrades



Pedestrian crossing signage



Clear markings for bike and pedestrian crossing



Paved multi-use path



Side-by-side path



Pavement markings for speed reduction



Pavement lights at crosswalks

**EXAMPLE IMAGES - PATHS & TRAIL HEADS**

Amenities, wayfinding and unique details help to brand the trail system and improve the experience for users. Consideration should be given to elements that convey a unique and memorable character through art history and heritage.



Solar trail lighting



Natural aesthetic for built elements



Bike amenities



Wayfinding signage



Trailheads and gathering points



Directional and distance signage



Covered bike parking



Public art in unexpected places



Smart trail maps and signage

**3** RAVENNA / EAST IDELWOOD / GETTYSBURG INTERSECTION UPGRADES

1/2 MILE RADIUS

**2** CENTER VALLEY / MIKTARIAN CONNECTOR

**8**

**1** CENTER VALLEY TRAIL EXTENSION

**6** RAVENNA / GLEN CHAMBERLIN CONNECTOR

**8**

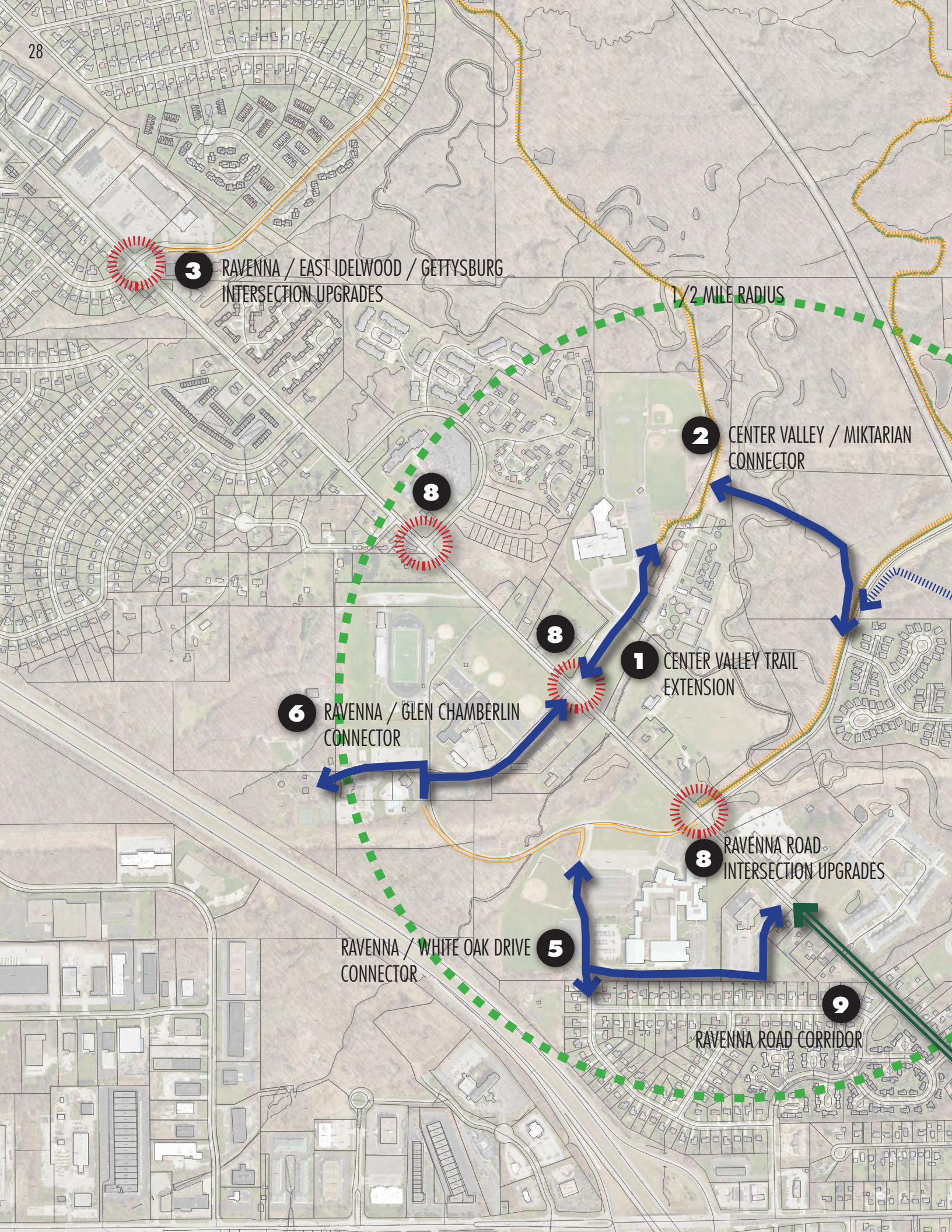
**8** RAVENNA ROAD INTERSECTION UPGRADES

RAVENNA / WHITE OAK DRIVE CONNECTOR

**5**

RAVENNA ROAD CORRIDOR

**9**





**CONNECTIONS**

Missing pieces within the City's existing trail system limit widespread use. The project team analyzed the gaps to identify opportunities for connections. This addresses the goal of creating a more complete experience.







This map identifies key pieces of the system, including trail portions, intersections and trailheads, and these items have been prioritized in terms of potential impact and need.

This does not preclude projects from shifting, if funding becomes available or if public priorities change.

All pieces have been studied to identify benefits, challenges, physical constraints, layout and budget, and they are detailed on the following pages.

**FIRST MILE/LAST MILE: CREATING THE LINKS THAT FILL GAPS IN THE NETWORK**

**DRAWING KEY**

-  EXISTING TRAIL
-  PROPOSED CONNECTOR
-  PROPOSED FUTURE TRAIL
-  PROPOSED CORRIDOR TRAIL
-  1/2 MILE RADIUS
-  KEY INTERSECTION



## PARK & PEDAL LOTS

Park & Pedal lots are being used by municipalities around the country to decrease traffic congestion. Commuters are encouraged to ride the last few miles by bike, with incentives including free parking lots for those who participate, easy access to bike share facilities for those who do not wish to bring their own bike, and employer perks to encourage this healthy alternative.

*While current traffic counts in Twinsburg may not necessarily require this type of reduction at area employment centers, a modified version of this approach could be utilized by local employers to encourage healthy habits.*

### POTENTIAL LOCATIONS

- Richner Court Trailhead

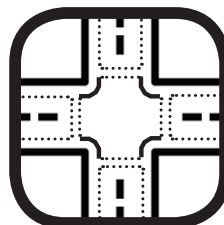


## DUTCH JUNCTION

Intersection safety can be a challenge for cyclists and motorists. Turning movements can cause particular problems, as they bring cyclists into the path of cars if one or the other is turning. An intersection design used in the Netherlands for years is finally making its way into forward-thinking American cities. The Dutch Junction places an island at each of the four corners of an intersection. These protect cyclists who are turning right, and adjust the path of cyclists going straight through an intersection to be more visible to motorists who are turning.<sup>4</sup>

### POTENTIAL LOCATIONS

- Ravenna / East Idlewood / Gettysburg intersection
- Ravenna / Miktarian Memorial Parkway



## BIOLUMINESCENT PATH

European cities have been experimenting with trail paving materials that incorporate phosphors. This allows the path to harness energy from the sun during the day and release that energy as glowing light during the night. The material has the ability to glow for more than ten hours. The goal with this application is to help provide light in more remote trail locations, increasing safety and decreasing accidents between bicycles and pedestrians out for an evening workout.<sup>5</sup>

### POTENTIAL LOCATIONS

- Center Valley / Miktarian Connector
- Center Valley Trail Extension
- Ravenna / Glenn Chamberlin Connector
- Ravenna / Whiteoak Drive Connector





## SUPER SIDEWALKS

Duluth, Minnesota builds “Super Sidewalks” near schools and community facilities to accommodate and organize a range of users in a safer setting. These paths are wider than typical sidewalks, and are delineated to support a mixture of bicycles, strollers, pedestrians, etc. at busy times of the day. These clearly communicate the intent of encouraging bicycle traffic on sidewalk trails, supporting increased use by those who are uncomfortable riding on the road.<sup>6</sup>

### POTENTIAL LOCATIONS

- Ravenna Road Corridor, especially near the civic and educational campus areas



## BIKE SUPPLY VENDING MACHINES

A bike vending machine can help to support the cycling community with necessities during times when nearby bike shops are closed. These can be designed for indoor or outdoor locations and should be located in a place that is highly visible and used by cyclists. Customizable items can include inner tubes, rim tape, tires, patch kits, lights, energy bars, beverages, etc. The machines can be managed and stocked by a bike shop or other local business, or they can be managed by the vending machine company.<sup>7</sup>

### POTENTIAL LOCATIONS

- Richner Court Trailhead (best option)
- Post Road Trailhead
- Town Square



## TRAIL INNOVATIONS

The City of Twinsburg could set itself apart from other communities by utilizing innovative approaches to providing bike infrastructure. Through this process the team has explored and considered some details that could be utilized to take new and existing trails to another level of usability.

Infographics located on trail layout sheets throughout the report demonstrate specific locations where these concepts may be considered.

TRAIL INNOVATIONS - CONSIDERING DETAILS TO SET THE SYSTEM APART

# TRANSFORM





Once a general methodology to project components was determined, the project team developed conceptual approaches to paths, intersections, and trailheads.

It is one thing to observe, analyze, and create a plan. However, it is another to actually develop and implement the vision. To truly improve connectivity, expand multi-modal access for both functional and recreational uses and increase quality of life for the people of Twinsburg, the following proposals have been devised with these very intentions as their basis - to identify paths that are buildable and fundable.

Aimed toward filling in the priority connections identified, these ideas have the potential to transform not only the way people move throughout Twinsburg, but the way the city is known, recognized, and respected as a more connected, sustainable, and healthy community.

The following pages detail the priority trail pieces by location, character, construction type, amenities, benefits, challenges and potential trail innovations, and intersperse these plans with the community objectives that guided their development.

**TRANSFORM**

CREATING REALIZABLE VISIONS FOR FOCUS  
AREAS & CRITICAL CONNECTIONS THAT CAN BE  
PRIORITIZED FOR IMPLEMENTATION

DRAWING KEY

-  INTERSECTION
-  SIDEWALK TRAIL
-  MULTI-PURPOSE TRAIL
-  BOARDWALK
-  BRIDGE / RAMP
-  WAYFINDING SIGNAGE
-  PATH LIGHT
-  BIKE RACK
-  BENCH

CONNECTION POINT AT CENTER VALLEY TRAIL

DODGE INTERMEDIATE SCHOOL

REGRADE HERE TO ADDRESS DRAINAGE ISSUES

WASTEWATER TREATMENT PLANT

0.23 MILES

SIGNAGE AT CROSSING POINT

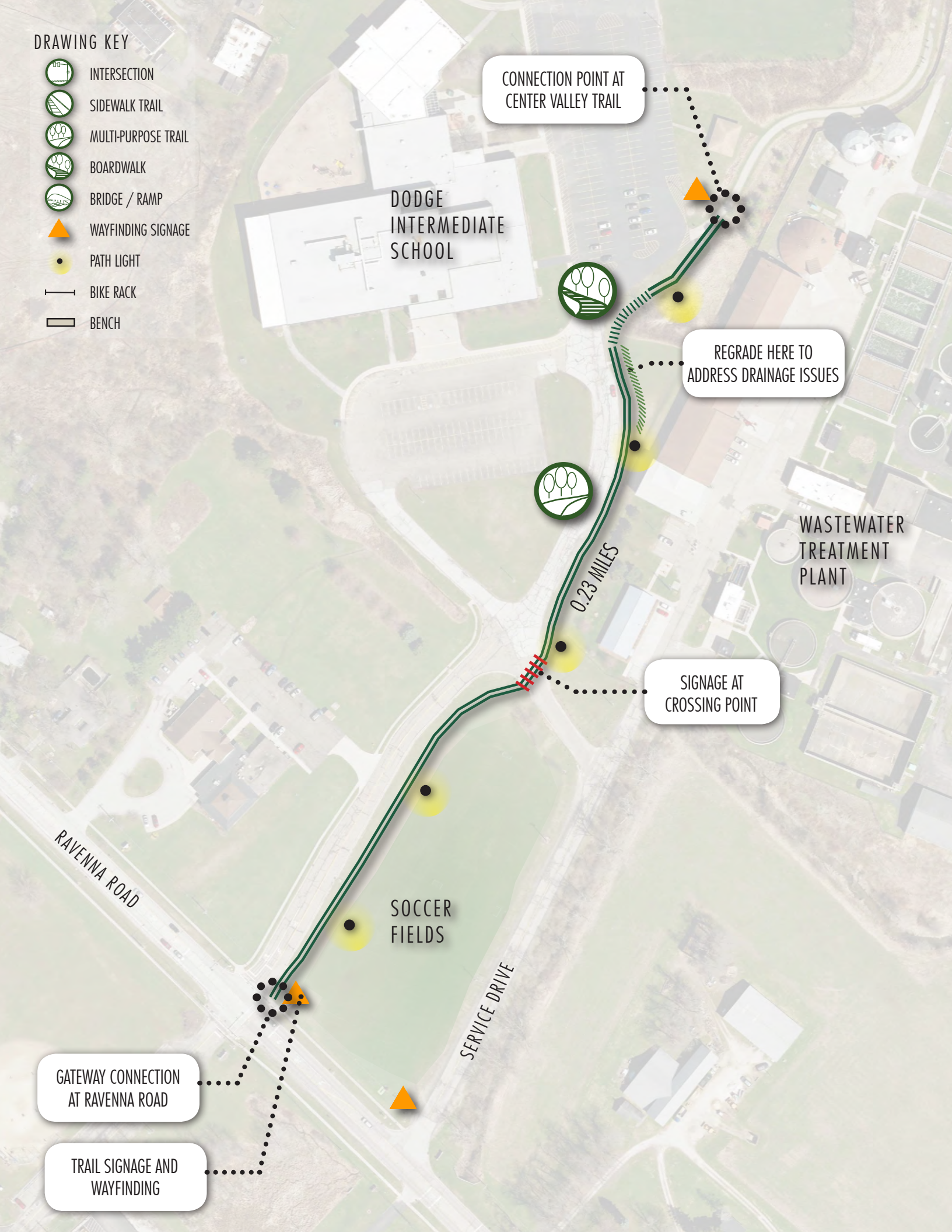
SOCCER FIELDS

RAVENNA ROAD

SERVICE DRIVE

GATEWAY CONNECTION AT RAVENNA ROAD

TRAIL SIGNAGE AND WAYFINDING



### LINK #1: CENTER VALLEY TRAIL EXTENSION

#### DETAILS

**LENGTH:**

0.23 miles

Walking time: 4.5 minutes

Biking time: 1 minute

**TYPE:**

10' wide sidewalk/multi-purpose path

**CONNECTIONS:**

Ravenna Road Corridor

Dodge Intermediate Schol

Athletic fields

Center Valley Trail

**BENEFITS:**

Provides a safe, off-road path that connects the Center Valley Trail to the Ravenna Road corridor

Makes the trail system more visible

**CHALLENGES:**

Potential conflict point at intersection of driveways

Pinch point near entry to parking lot

**INNOVATIONS:**



CAMPUS PATH - RAVENNA ROAD TO CENTER VALLEY TRAILHEAD







# OBJECTIVE: IMPROVE CONNECTIONS TO ACCOMPLISH GREATER TRAIL UTILIZATION RATES

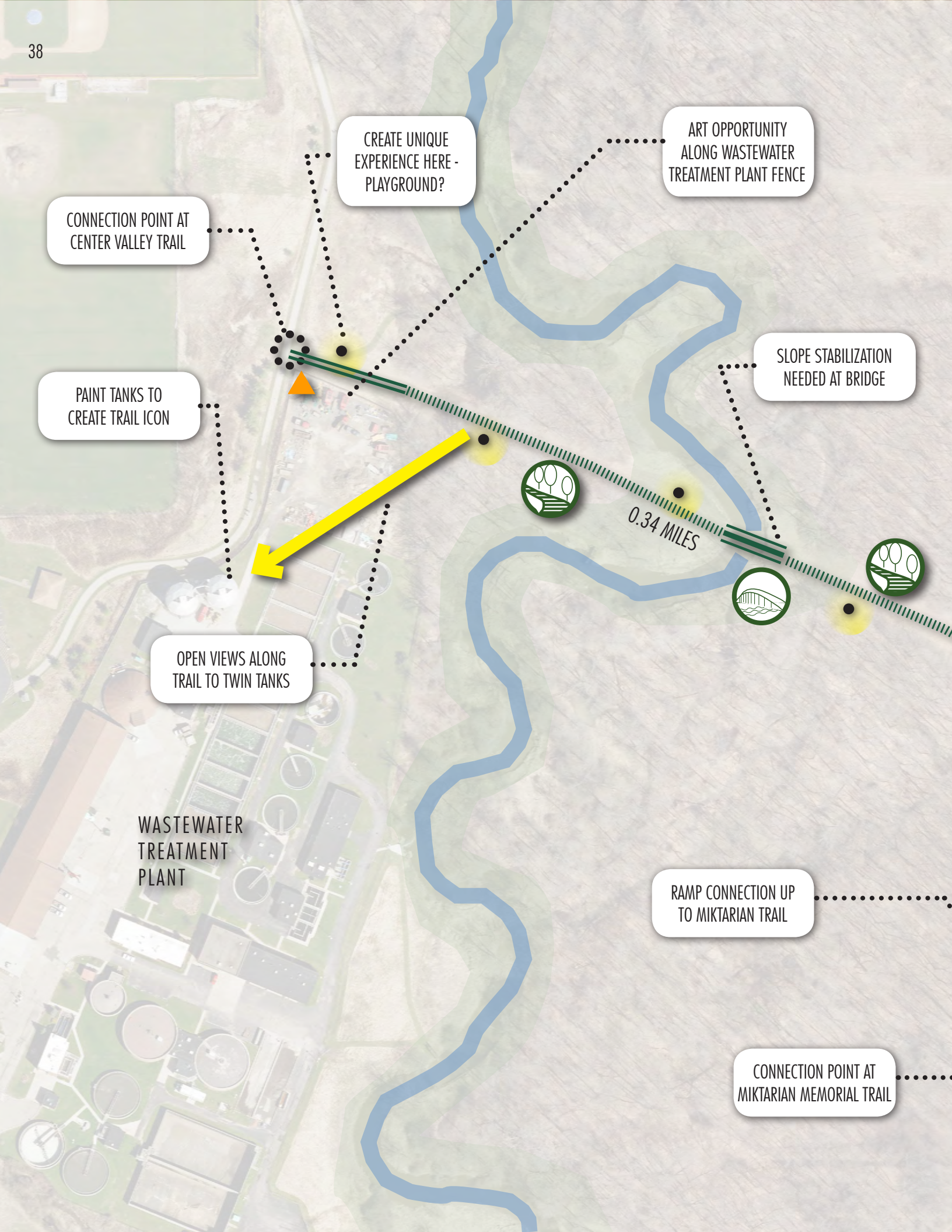
## COMMUNITY COMMENTS

*"It would be great if Twinsburg's trails could connect to other surrounding trail systems."*

*"As a runner it is very boring to run on the same trails every day."*

*"Connection points from neighborhoods to these trails. Work with developers to build in connection trails."*

*"Incorporate longer trails for endurance athletes and more trails that you can go on to get around traffic."*



CONNECTION POINT AT CENTER VALLEY TRAIL

CREATE UNIQUE EXPERIENCE HERE - PLAYGROUND?

ART OPPORTUNITY ALONG WASTEWATER TREATMENT PLANT FENCE

PAINT TANKS TO CREATE TRAIL ICON

SLOPE STABILIZATION NEEDED AT BRIDGE

OPEN VIEWS ALONG TRAIL TO TWIN TANKS

0.34 MILES

WASTEWATER TREATMENT PLANT

RAMP CONNECTION UP TO MIKTARIAN TRAIL

CONNECTION POINT AT MIKTARIAN MEMORIAL TRAIL

# LINK #2: CENTER VALLEY/MIKTARIAN CONNECTOR

## DETAILS

### LENGTH:

0.34 miles

Walking time: 7 minutes

Biking time: 1 minute

### TYPE:

10' wide multipurpose trail

### CONNECTIONS:

Center Valley Trail

Miktarian Memorial Trail

Dodge School

### BENEFITS:

Provides a direct connection to the Center Valley Trail

Relatively straightforward path that builds from existing walking paths / clearings

Links Bel Mawr and Arbor Glen neighborhoods to the trail system

### CHALLENGES:

Potential gas line easement in this area - may need to shift path to run adjacent to easment

Requires a bridge to cross Tinkers Creek

### INNOVATIONS:



### DRAWING KEY



INTERSECTION



SIDEWALK TRAIL



MULTI-PURPOSE TRAIL



BOARDWALK



BRIDGE / RAMP



WAYFINDING SIGNAGE



PATH LIGHT



BIKE RACK



BENCH



TRAIL EXTENSION - CENTER VALLEY TRAIL TO MIKTARIAN PARKWAY





A photograph of a park area. In the foreground, there is a paved path that curves to the left. To the right of the path, there is a dense stand of tall, dry reeds. In the background, there is a building with a brown roof and a parking lot with several cars. The sky is overcast and grey. The text "OBJECTIVE: ENHANCE / DEVELOP TWINSBURG'S IDENTITY AS A BICYCLE FRIENDLY COMMUNITY" is overlaid in white, bold, sans-serif font on the upper left portion of the image.

# OBJECTIVE: ENHANCE / DEVELOP TWINSBURG'S IDENTITY AS A BICYCLE FRIENDLY COMMUNITY

## COMMUNITY COMMENTS

"Need to establish bike and pedestrian "welcome" routes and work to promote them to the automotive segments."

"It would be nice to make this a more walkable/rideable/runable community."

"Make trails more visible, safer (light) and advertise. Majority of public is not aware of our vast park system."



BIKE LANES ALONG EAST IDLEWOOD TO CONNECT TO CENTER VALLEY TRAILHEAD

EXTRA WIDE LADDER STYLE CROSSWALKS PROVIDE VISUAL REMINDER OF PEDESTRIAN MOVEMENT

OVERHEAD PEDESTRIAN CROSSING SIGNALS

TRAIL MARKER SIGNAGE TO IDENTIFY CENTER VALLEY TRAILHEAD ON EAST IDLEWOOD

GETTYSBURG DRIVE

EAST IDLEWOOD DRIVE

RAVENNA ROAD

OVERHEAD PEDESTRIAN CROSSING SIGNALS

BIKE LANES ALONG GETTYSBURG TO CONNECT TO LAUREL BIKE AND HIKE TRAIL

SHOULDER STRIPING ALONG RAVENNA NARROWS TRAVEL LANES FOR TRAFFIC CALMING, WHILE PROVIDING SPACE FOR ON-ROAD CYCLISTS

DRAWING KEY

-  INTERSECTION
-  SIDEWALK TRAIL
-  MULTI-PURPOSE TRAIL
-  BOARDWALK
-  BRIDGE / RAMP
-  WAYFINDING SIGNAGE
-  PATH LIGHT
-  BIKE RACK
-  BENCH

STREET TREES NEAR INTERSECTION CALM TRAFFIC AND DIRECT DRIVER FOCUS ON INTERSECTION BY NARROWING FIELD OF VISION



INTERSECTION - RAVENNA ROAD, GETTYSBURG DRIVE AND EAST IDLEWOOD DRIVE

LINK #3: RAVENNA/EAST IDLEWOOD/GETTYSBURG INTERSECTION UPGRADES

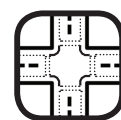
**DETAILS**

**CONSIDERATIONS:**

- Improved crossing details:
  - highly visible crosswalks
  - crossing lights / signals
  - signage for pedestrian and school crossing zone
  - signal timing upgrades
  
- Identity elements:
  - wayfinding signage for trail system
  - streetscape components (landscaping, pedestrian scale lighting, banners, etc.)


This intersection represents a typical approach that can be utilized for intersections throughout the city.

**INNOVATIONS:**



Burridge Ln

BURRIDGE  
LANE

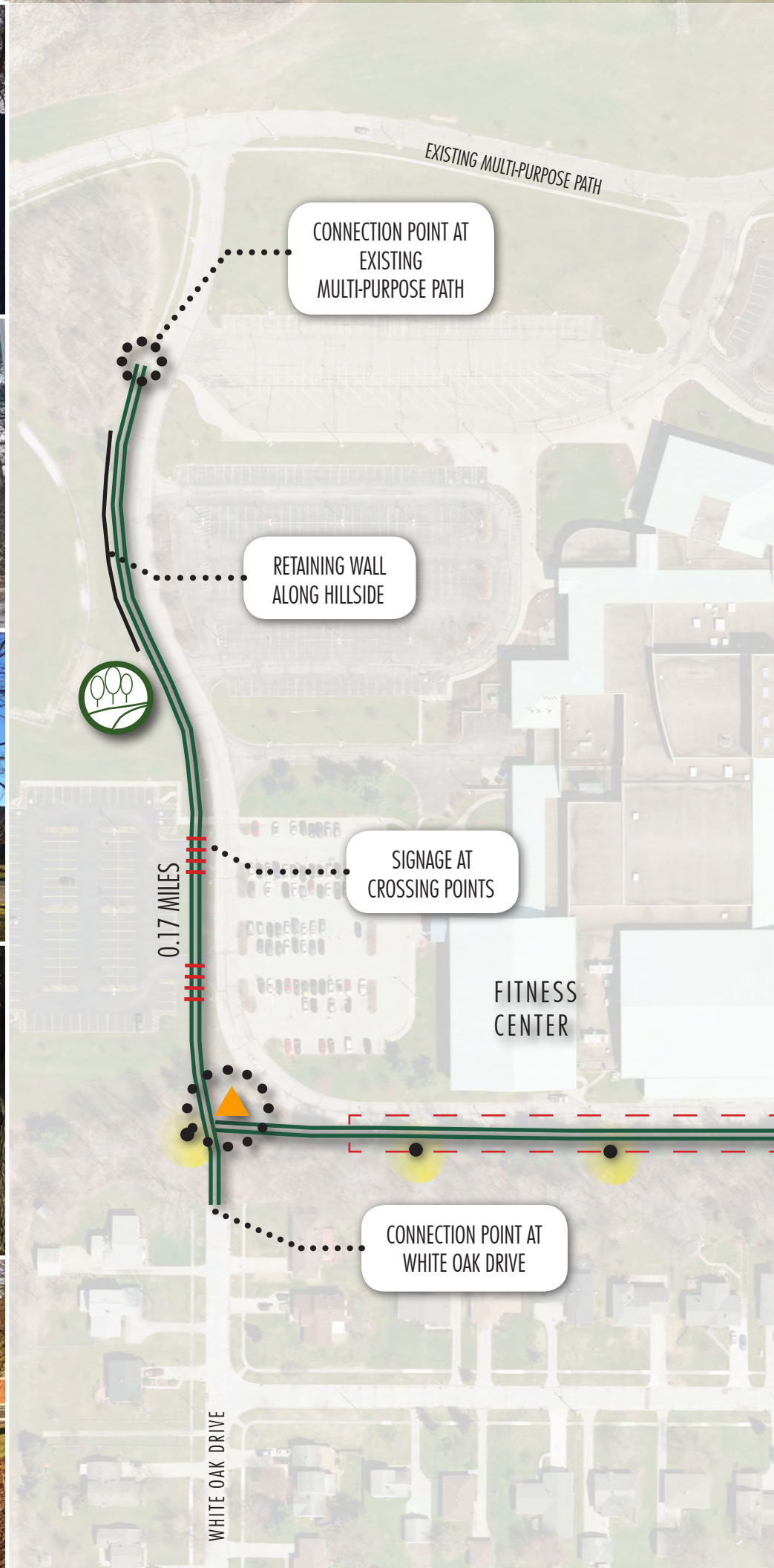


# OBJECTIVE: OVERCOME AUTO-DEPENDENT SUBURBAN LAND PATTERNS TO DEVELOP A NETWORK THAT SUPPORTS NON-MOTORIZED TRANSPORTATION

## COMMUNITY COMMENTS

*"Would love to see Pinewood Gardens area connected to downtown via safe path."*

*"I have been a resident for 10 years. It always concerned me to see pedestrians walking on SR 82 to get to town from the township. It seems extremely unsafe for these pedestrians with little protection from the street traffic. Improving safety for these residents, many of whom are teenagers or families with small children, should be a top priority."*



### LINK #5: RAVENNA/WHITE OAK DRIVE CONNECTOR

#### DETAILS

#### LENGTH:

Section A: 0.34 miles

Walking time: 7 minutes

Biking time: 1 minute

Section B: 0.17 miles

Walking time: 3.5 minutes

Biking time: <1 minute

#### TYPE:

10' wide sidewalk/multi-purpose path

#### CONNECTIONS:

Ravenna Road Corridor

Public Library

Fitness Center

White Oak Drive / Birchwood Hills Neighborhood

Existing multi-purpose path

#### BENEFITS:

Off-road connection to community destinations

Direct neighborhood connection

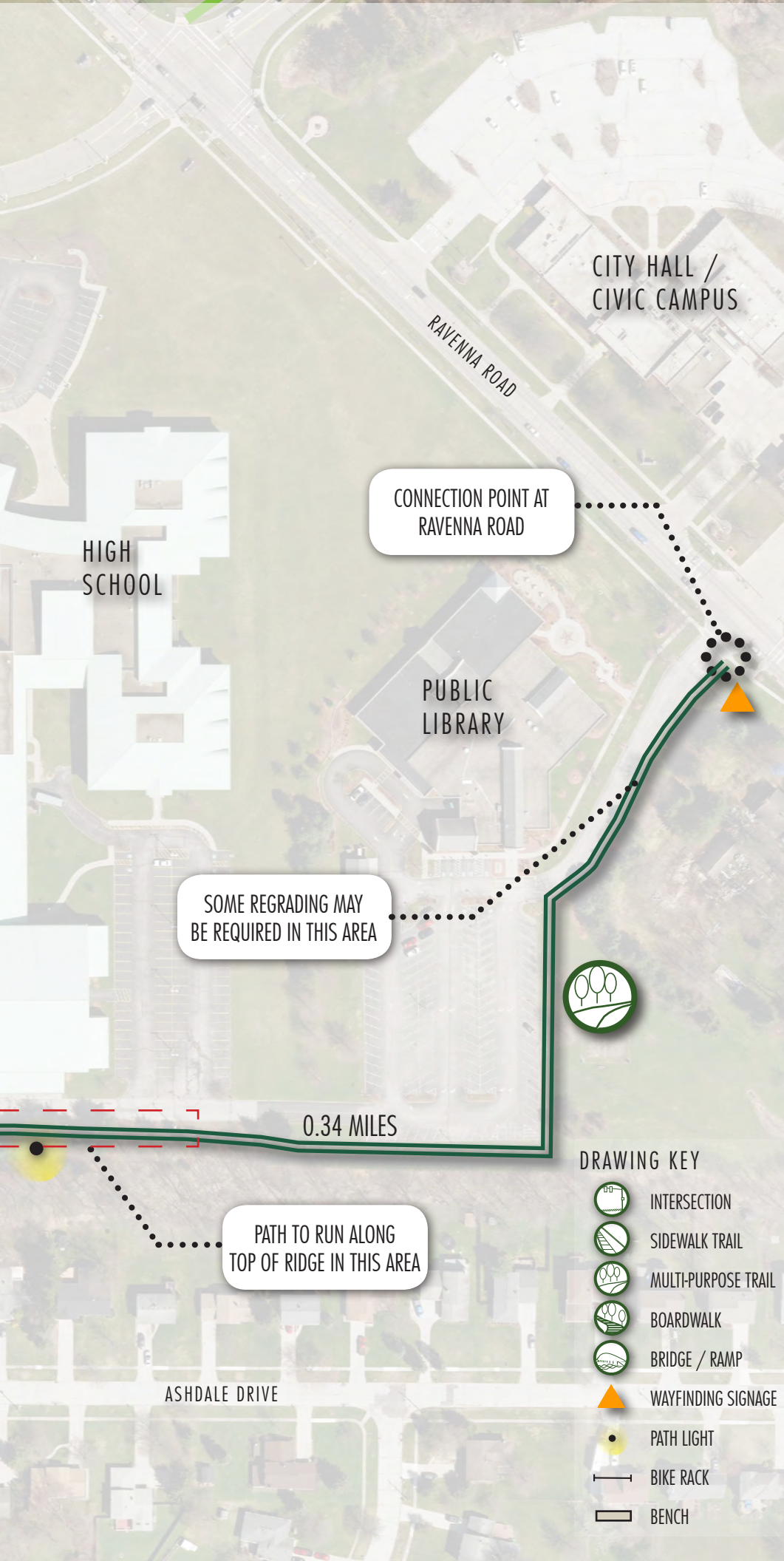
Visible trail connection point

Path occurs on civic property - no private acquisition needed

#### CHALLENGES:

Preferable location for path is on south side of library drive, but grading in this area is problematic

#### INNOVATIONS:



CAMPUS PATH - RAVENNA & WHITEOAK DRIVE CONNECTOR

CITY HALL / CIVIC CAMPUS

RAVENNA ROAD

CONNECTION POINT AT RAVENNA ROAD

HIGH SCHOOL

PUBLIC LIBRARY

SOME REGRADING MAY BE REQUIRED IN THIS AREA

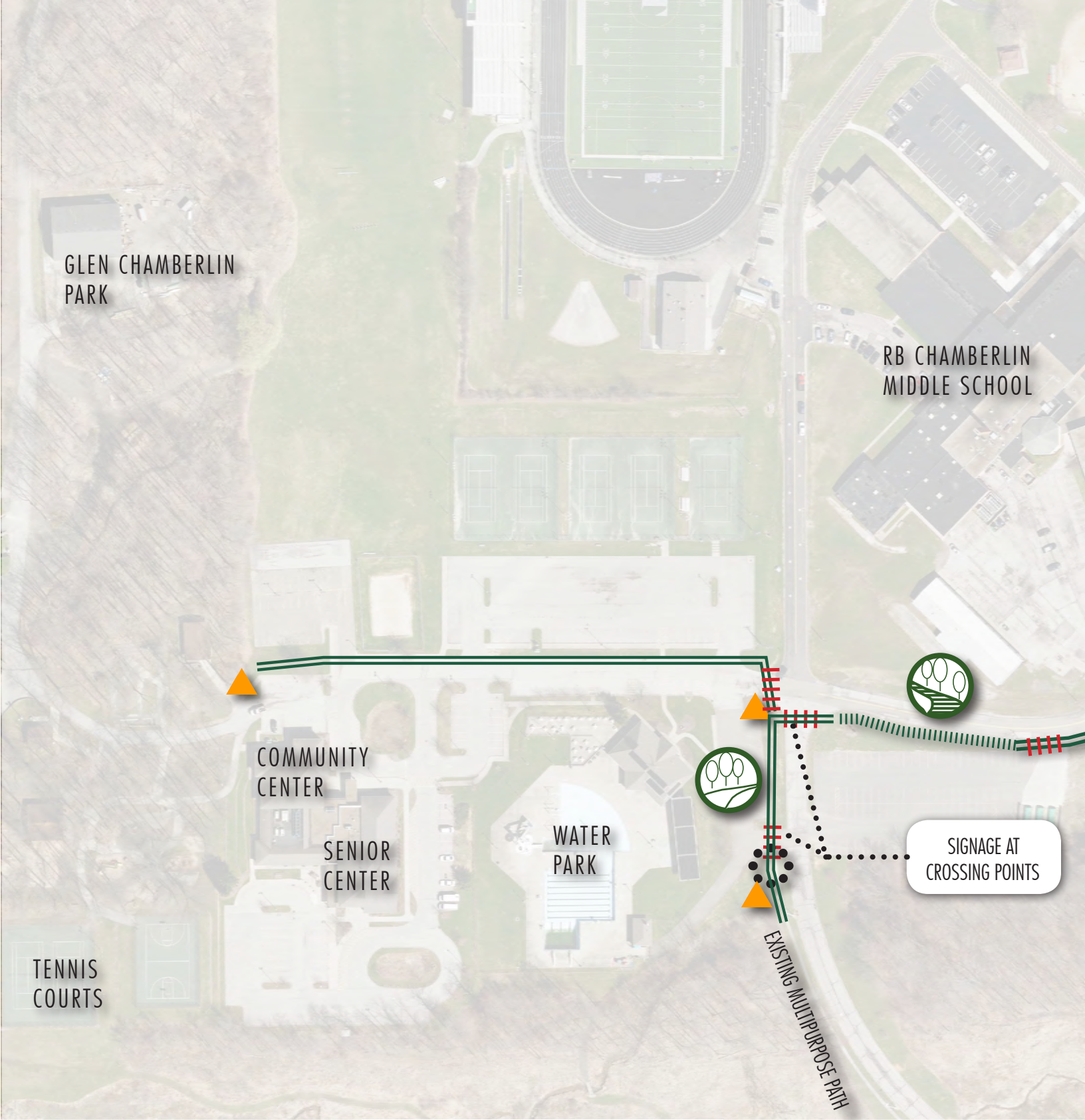
0.34 MILES

PATH TO RUN ALONG TOP OF RIDGE IN THIS AREA

ASHDALE DRIVE

#### DRAWING KEY

- INTERSECTION
- SIDEWALK TRAIL
- MULTI-PURPOSE TRAIL
- BOARDWALK
- BRIDGE / RAMP
- WAYFINDING SIGNAGE
- PATH LIGHT
- BIKE RACK
- BENCH





LINK #6: RAVENNA/GLEN CHAMBERLIN CONNECTOR

**DETAILS**

**LENGTH:**

0.36 miles

Walking time: 6.5 minutes

Biking Time: 1.3 minutes

**TYPE:**

10' wide sidewalk/multi-purpose path

**CONNECTIONS:**

- Ravenna Road Corridor
- Twinsburg Community Center
- Twinsburg Senior Center
- Twinsburg Water Park
- Glenn Chamberlin Park

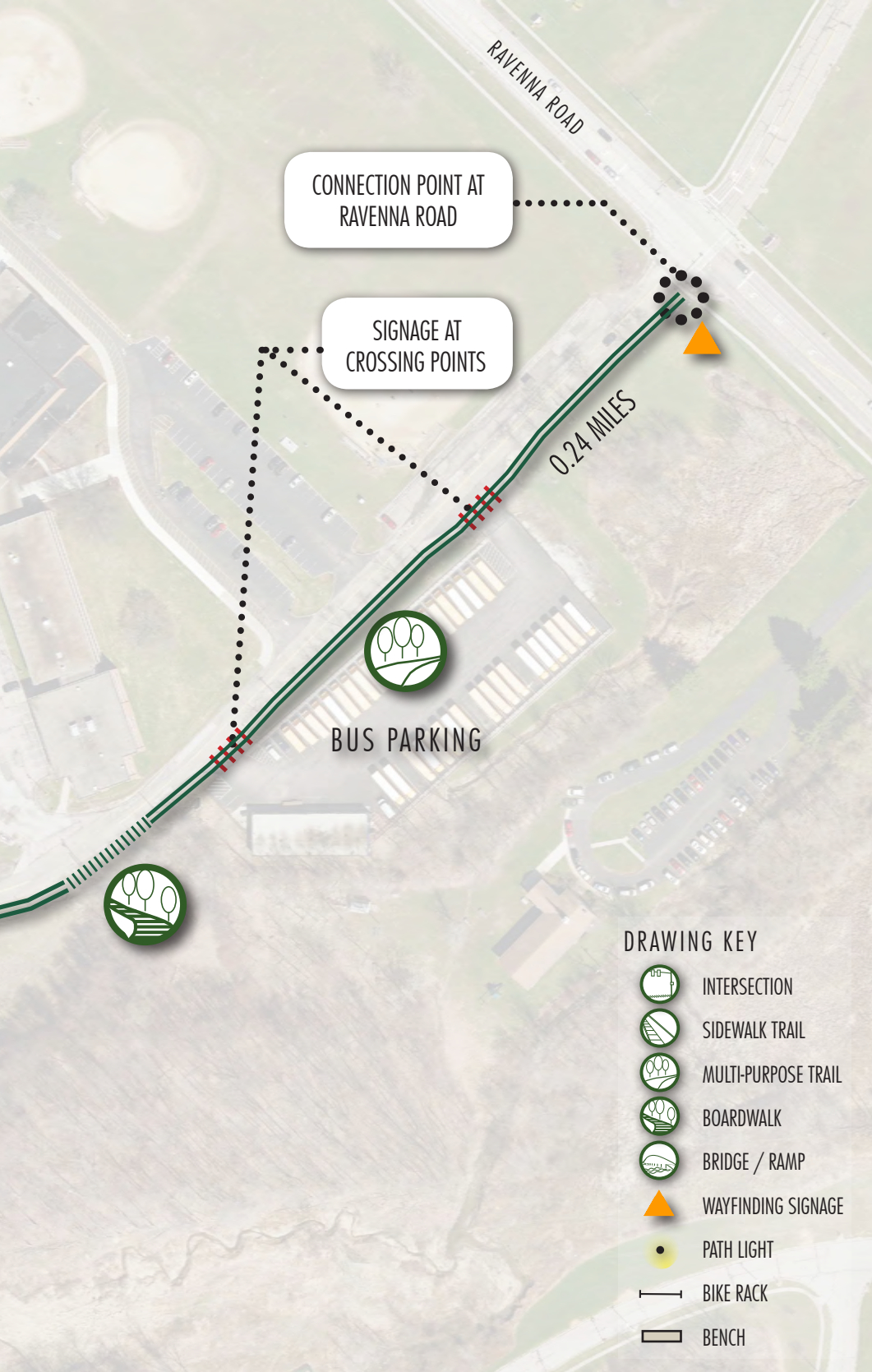
**BENEFITS:**

- Links popular community destinations with Ravenna Road corridor.
- Connects to existing path system to create an off-road loop

**CHALLENGES:**

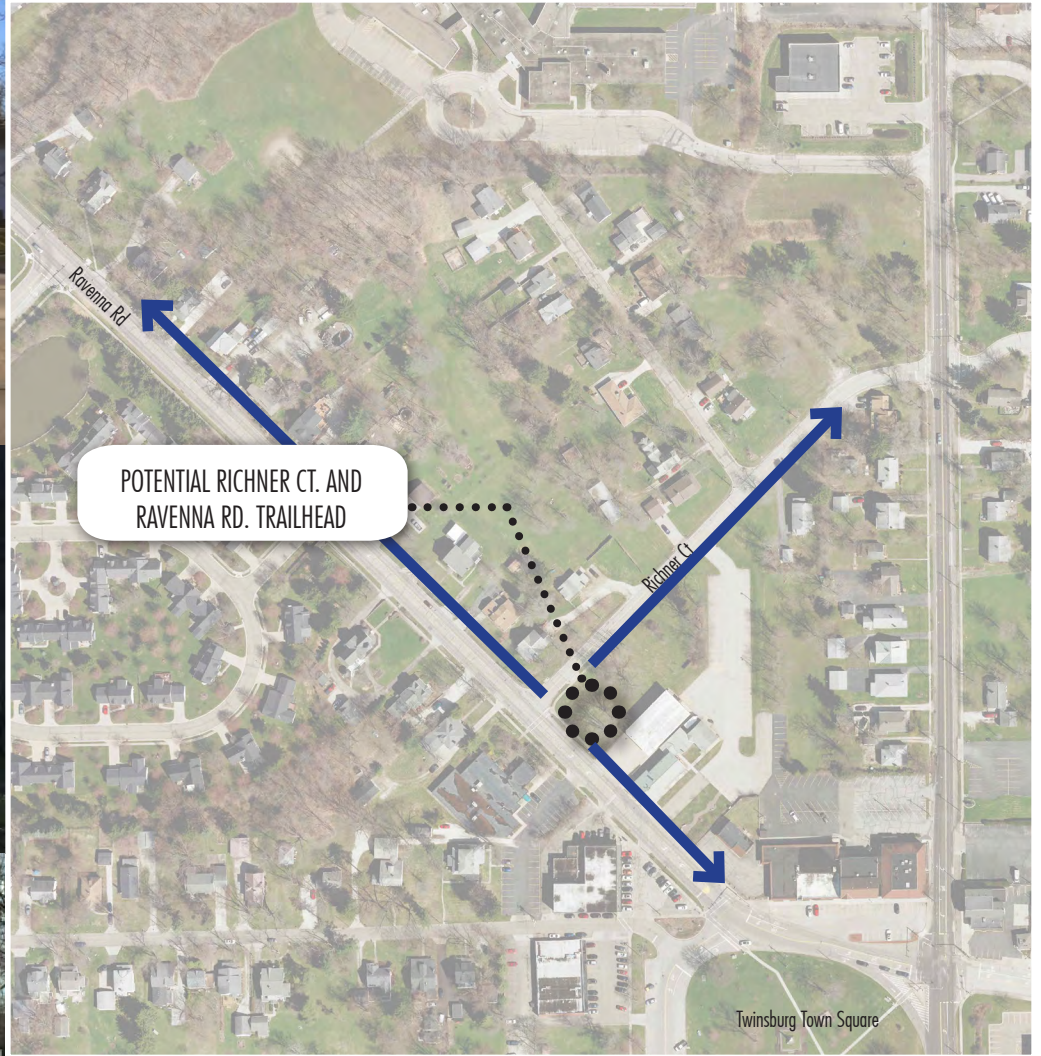
- Potential conflicts at bus driveways - extra wide aprons
- Will require a boardwalk or raised component over drainage areas west of the bus parking lot
- May need to reconfigure or restripe parking lot east of water park to fit trail adjacent to ditch

**INNOVATIONS:**

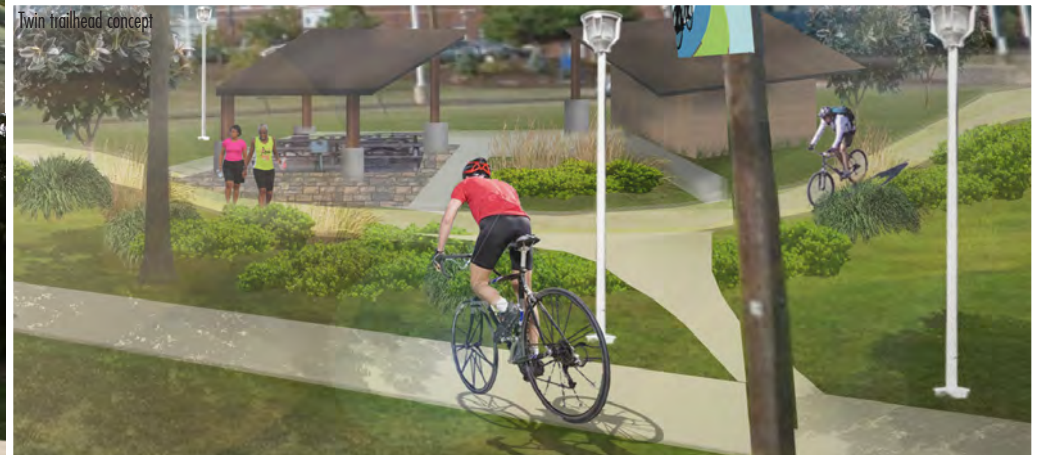


RAVENNA / GLEN CHAMBERLIN CONNECTOR

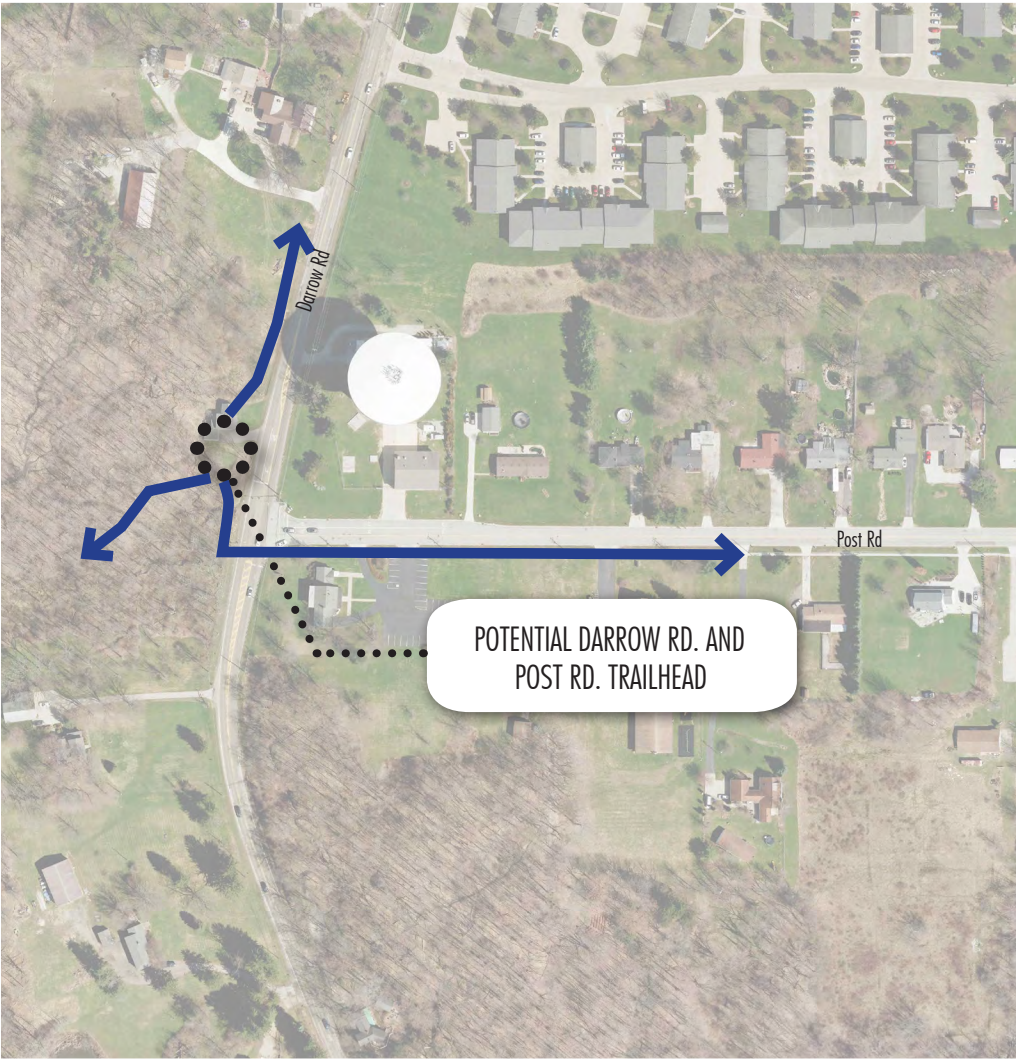




Existing conditions of the potential trailhead locations are shown to the left along with a current aerial map of the potential trailhead at Richner Court and Ravenna Road. Below are renderings for possible trailhead designs.



DETAILS



This aerial map indicates the second potential trailhead at Darrow Road and Post Road, and trailhead example images are shown below for existing precedents.



Trailheads create a visible location for residents and visitors to connect with the larger trail system. At a minimum, these should provide parking, short term bike storage, trail maps and signage. Supplemental details include restroom facilities, a water source and seating areas. These should occur at key junctions in the trail system, where people can access multiple trails and destinations. Locations along Ravenna Road and at key path junctions can help to communicate the importance of multi-modal facilities. Conceptual renderings of trailhead facilities demonstrate the idea of “twin pavilions” to provide these amenities.

As a part of this study, four potential trailhead locations have been considered. Two occur on city-owned property, creating a stronger opportunity for implementation. Two additional locations were considered on school property along Ravenna Road, but it was determined that this use was not a high priority for School Board leadership.

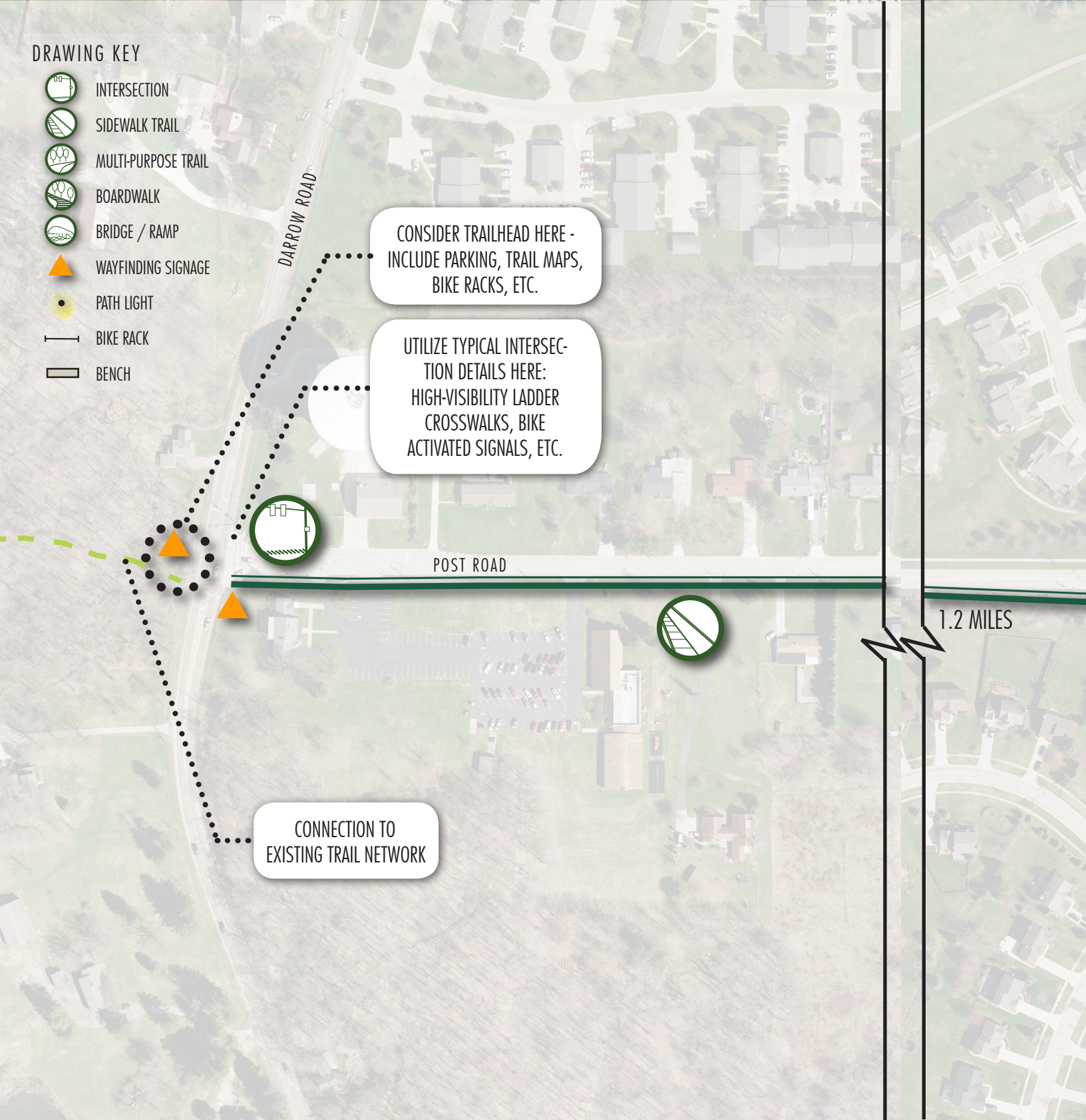
We’ve highlighted two priorities for potential future trailhead locations, one near the intersection of Richner Court and Ravenna Road, and the other near the intersection of Darrow Road and Post Road. The Richner/Ravenna trailhead is in close proximity to the Twinsburg Town Square as well as other connection points to lead elsewhere through the city. Furthermore, the Darrow/Post trailhead is also situated in a key location, allowing for easy access to other community trails, neighborhoods, and main roads.

*Note: Baldwin Park and the Community Gardens are additional trailhead locations indicated in the 2014 Twinsburg Comprehensive Plan. These previously identified sites remain as potential trailhead locations, providing trail access at both SR 82 and SR 91.*

TWIN TRAILHEADS CONCEPTS

DRAWING KEY

-  INTERSECTION
-  SIDEWALK TRAIL
-  MULTI-PURPOSE TRAIL
-  BOARDWALK
-  BRIDGE / RAMP
-  WAYFINDING SIGNAGE
-  PATH LIGHT
-  BIKE RACK
-  BENCH



LINK #7: POST ROAD CORRIDOR  
LINK #11: DARROW/POST  
INTERSECTION UPGRADES

**DETAILS**

**LENGTH:**

1.2 miles

Walking time: 24 minutes

Biking time: 5 minutes

**TYPE:**

8' wide sidewalk trail

**CONNECTIONS:**

- Center Valley Trail
- Liberty Park
- Darrow Road
- Eastern neighborhoods
- Solon trail system

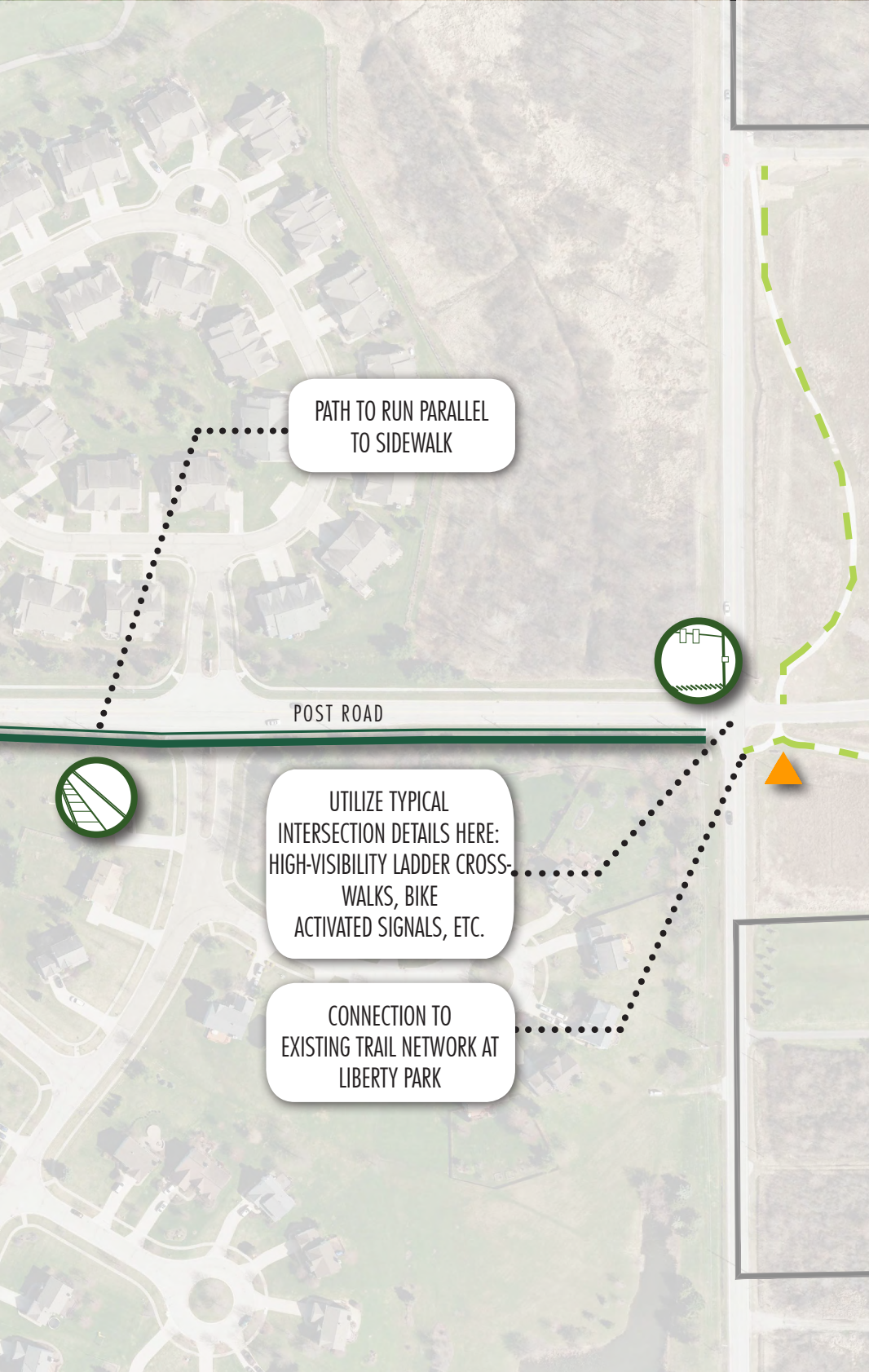
**BENEFITS:**

- Provides off-road connection to amenities and trail system at Liberty Park
- Greatly expands path system

**CHALLENGES:**

- Requires intersection and trailhead improvements at Route 91 and Post Road
- Large setbacks support sidewalk trail widening, but adjustment of some poles and mailbox locations will be required

**INNOVATIONS:**

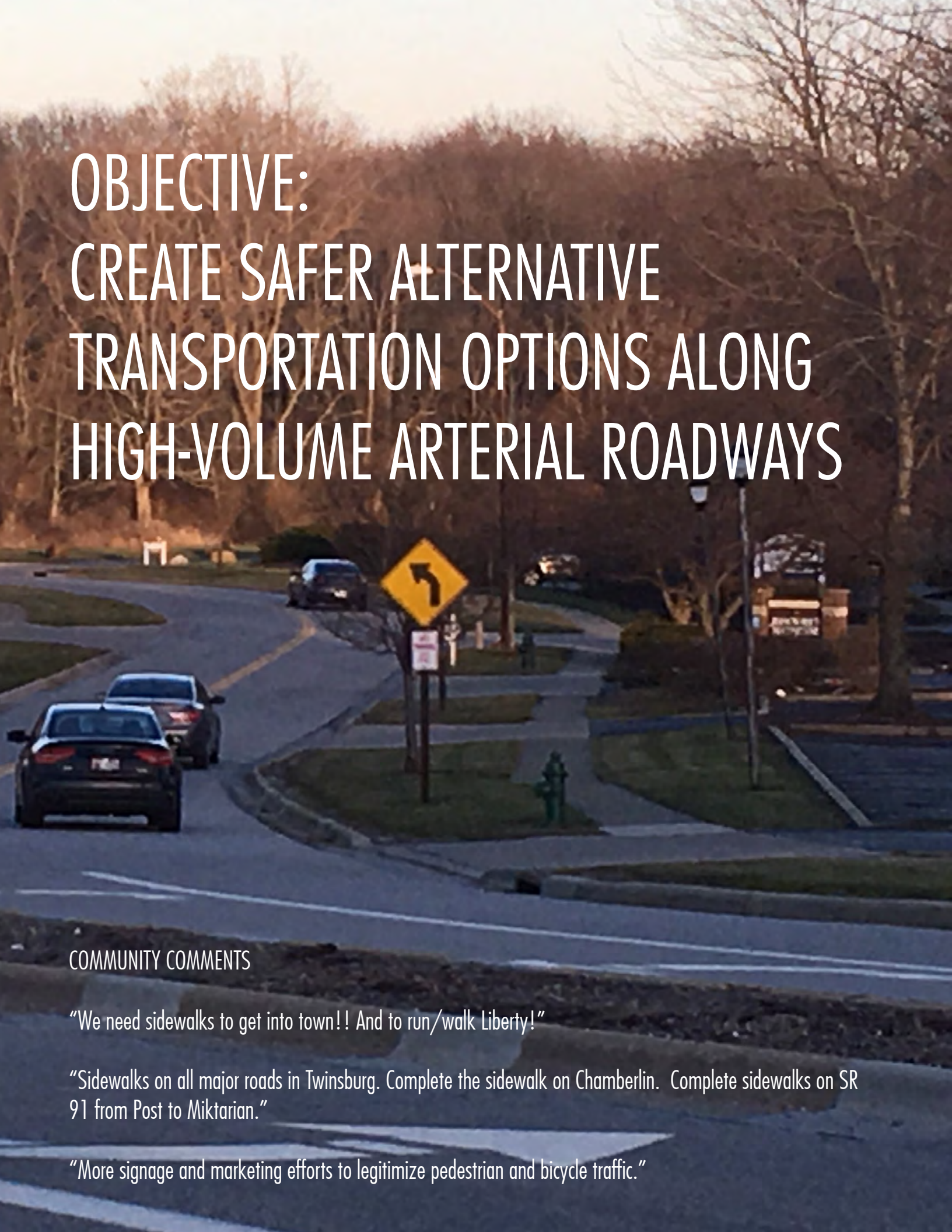


POST ROAD CORRIDOR - CONNECTING TRAIL SYSTEMS





*Signature*  
**GLENWOOD**  
AREA



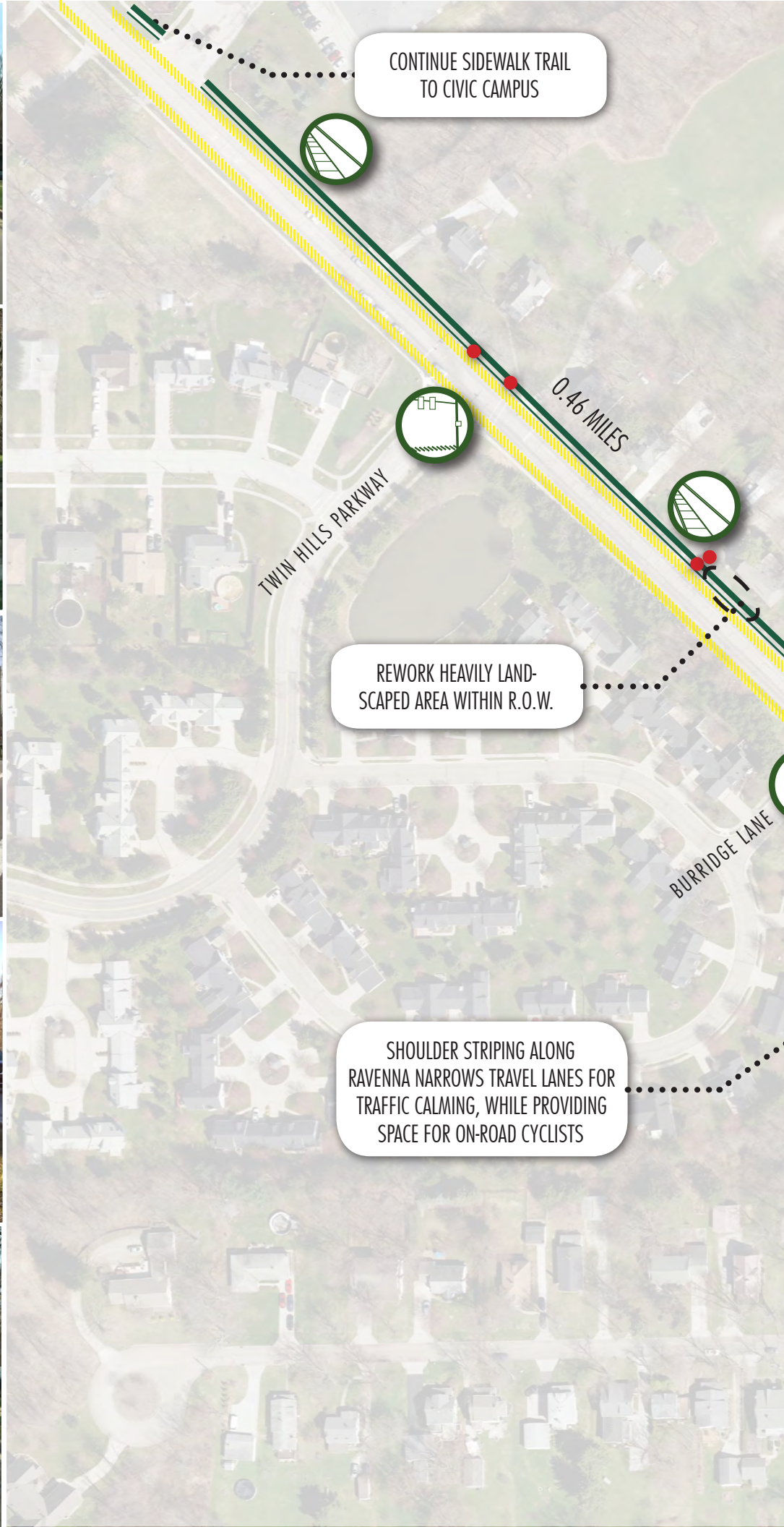
# OBJECTIVE: CREATE SAFER ALTERNATIVE TRANSPORTATION OPTIONS ALONG HIGH-VOLUME ARTERIAL ROADWAYS

## COMMUNITY COMMENTS

*"We need sidewalks to get into town!! And to run/walk Liberty!"*

*"Sidewalks on all major roads in Twinsburg. Complete the sidewalk on Chamberlin. Complete sidewalks on SR 91 from Post to Miktarian."*

*"More signage and marketing efforts to legitimize pedestrian and bicycle traffic."*





WILCOX PRIMARY SCHOOL

DRAWING KEY

-  INTERSECTION
-  SIDEWALK TRAIL
-  MULTI-PURPOSE TRAIL
-  BOARDWALK
-  BRIDGE / RAMP
-  WAYFINDING SIGNAGE
-  PATH LIGHT
-  BIKE RACK
-  PATH OBSTRUCTION

SHARROWS ON LOWER VOLUME STREET TO CONNECT TO DARROW ROAD

TOWN SQUARE TRAILHEAD AREA - WAYFINDING SIGNAGE, PARKING AND BIKE FACILITIES

TRAIL SIGNAGE AND WAYFINDING AT TOWN SQUARE

RAVENNA ROAD RIGHT-OF-WAY IMPROVEMENTS

LINK #9: RAVENNA ROAD CORRIDOR POTENTIAL TRAILHEAD

DETAILS

CONSIDERATIONS:

This is a critical link to the greater trail system, providing access between civic destinations and commercial / employment destinations. The development of this corridor provides a visible reminder of a community emphasis on health and greater access.

Traffic calming is needed to increase comfort and safety along this corridor for pedestrians. A lower speed limit through this section is recommended.

Visibly narrowed roadway from Town Square to Civic Campus area - 11' driving lanes, 10' turning lane, 3' striped 'gutter' along curb

New 8' wide multipurpose sidewalk trail - a large section of this route does not currently have sidewalks.

PHYSICAL OBSTRUCTIONS

- Utility / power poles: 2
- Street trees/landscaping: 3
- Fire hydrant: 2
- Signal box: 1
- Traffic signal poles: 2

These items must be addressed to allow the development of the off-road path.

INNOVATIONS:



BEGIN STRIPING TO NARROW DRIVING AND TURNING LANES HERE

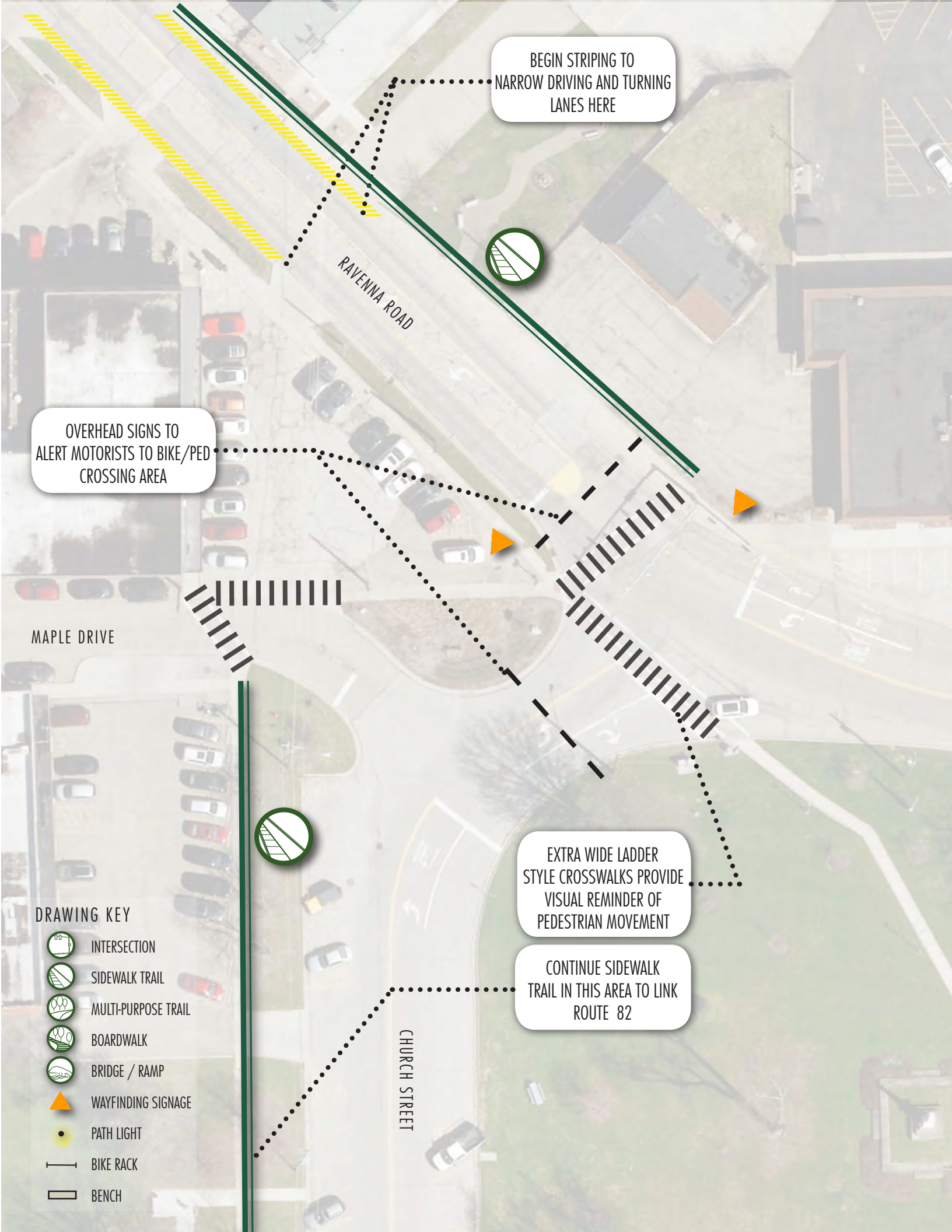
OVERHEAD SIGNS TO ALERT MOTORISTS TO BIKE/PED CROSSING AREA

EXTRA WIDE LADDER STYLE CROSSWALKS PROVIDE VISUAL REMINDER OF PEDESTRIAN MOVEMENT

CONTINUE SIDEWALK TRAIL IN THIS AREA TO LINK ROUTE 82

DRAWING KEY

-  INTERSECTION
-  SIDEWALK TRAIL
-  MULTI-PURPOSE TRAIL
-  BOARDWALK
-  BRIDGE / RAMP
-  WAYFINDING SIGNAGE
-  PATH LIGHT
-  BIKE RACK
-  BENCH



# LINK #10: TOWN SQUARE NW INTERSECTION UPGRADES

## DETAILS

### CONSIDERATIONS:

Improved crossing details:

- highly visible crosswalk
- crossing lights / signals
- signage for pedestrian crossing zone

Identity elements:

- wayfinding signage for trail system
- bike parking and amenities area

TOWN SQUARE NORTHWEST - CONNECTION TO TRAIL SYSTEM



### INNOVATIONS:





NO  
MOTOR  
VEHICLE

CITY ORD #5505 D  
REQUIRES ALL DOGS  
TO BE LEASHED



ORD. 505-15 REQUIRE  
THAT ALL DOG WASTE  
BE CLEANED AND  
REMOVED FROM PUBLIC  
& PRIVATE AREAS

LEASH, CURB AND  
CLEAN UP AFTER  
YOUR DOG!  
FAILURE TO DO SO  
IS A MISDEMEANOR

A paved path winds through a park-like area. The path is dark asphalt and curves to the left. On the right side of the path, there are several tall, dark green evergreen trees. In the background, there are bare deciduous trees and a clear blue sky. The overall scene is bright and sunny.

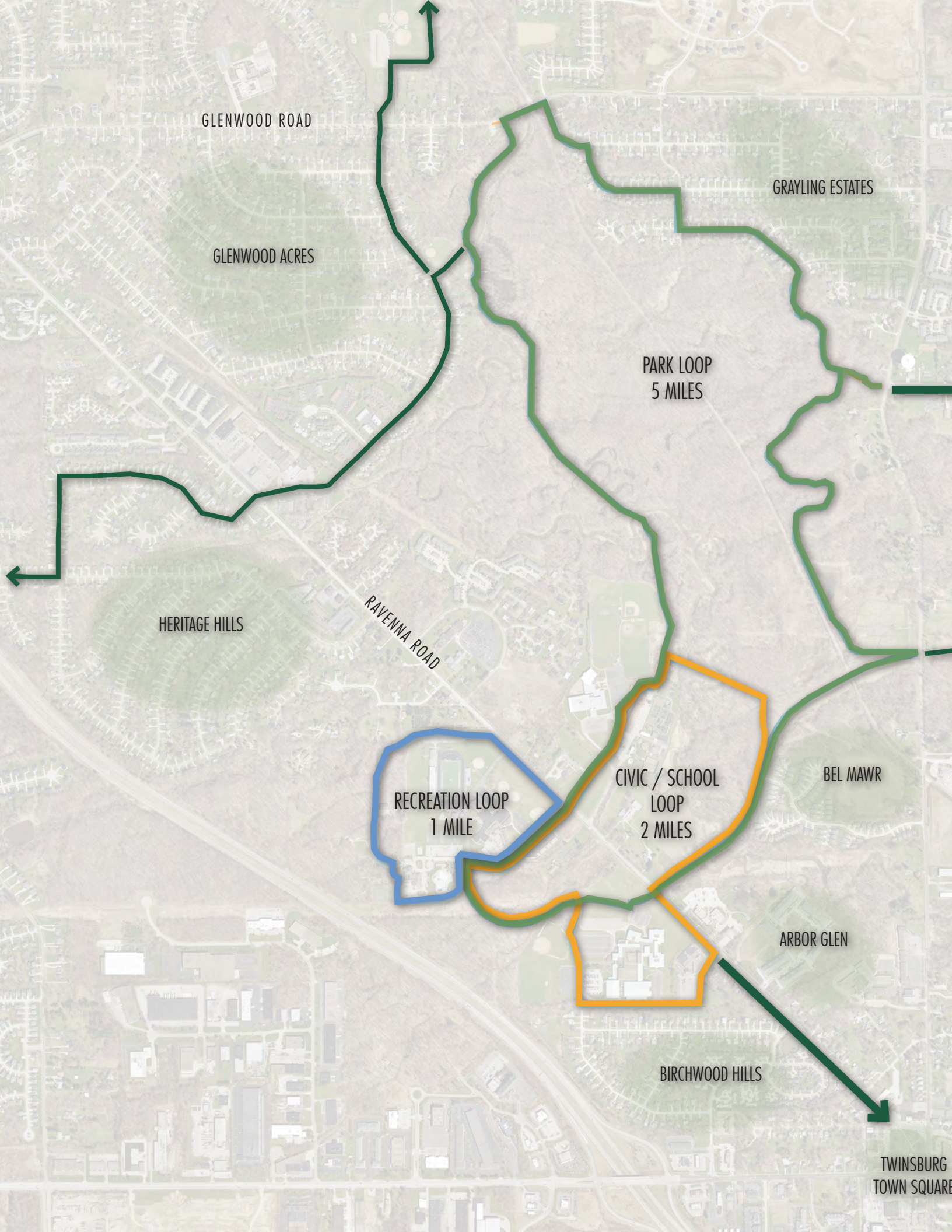
# OBJECTIVE: MEET DEMAND FOR RECREATIONAL TRAILS AND FOR FUNCTIONAL, PURPOSEFUL ALTERNATIVE TRANSPORTATION FACILITIES

## COMMUNITY COMMENTS

"I really like the idea of connecting all of the parks around the city via multipurpose trails and also connecting to trail systems in other communities."

"Love, love, love that this is a priority."

"I like how the community linked Laurel Road with Chamberlin. It helps me get around better in the community. Do more of this."



GLENWOOD ROAD

GLENWOOD ACRES

GRAYLING ESTATES

PARK LOOP  
5 MILES

HERITAGE HILLS

RAVENNA ROAD

RECREATION LOOP  
1 MILE

CIVIC / SCHOOL  
LOOP  
2 MILES

BEL MAWR

ARBOR GLEN

BIRCHWOOD HILLS

TWINSBURG  
TOWN SQUARE



**OVERALL NETWORK**

Many in the community have expressed an interest in a more connected trail system as it relates to fitness activities. Additional routes for walking, running, and biking are desired.

New links identified in this planning study allow the creation of different length loops within the overall system. To maximize use, neighborhood connections and proximities were considered.

Finally, the incorporation of fitness-supportive amenities such as mile markers, trail wayfinding signage, and lighting should be considered as part of any new trail construction project.

CONNECTED COMMUNITY - NEIGHBORHOOD LINKS, RECREATION PATHS AND FITNESS LOOPS

# IMPLEMENT





The analysis, community engagement and visioning mean nothing if they do not lead to project implementation. The trail components detailed in the previous section were developed in a manner that would encourage funding and, ultimately, construction.

This is intended to be an action document, and the following section provides preliminary cost estimates for trail sections, an overview of primary funding sources and detailed breakdowns for the top three priority projects. Additionally, the project team has developed a comprehensive listing of infrastructure funding sources that can be considered for project elements.

This planning document represents the beginning of the next wave of connectivity and accessibility within the City of Twinsburg.

**IMPLEMENT**

ALIGNING SPECIFIC VISION COMPONENTS & POTENTIAL FUNDING SOURCES TO ENSURE NEXT STEPS & CONSTRUCTION OPPORTUNITIES ARE ACTIONABLE

**3** RAVENNA / EAST IDELWOOD / GETTYSBURG INTERSECTION UPGRADES

\$218,700

**2** CENTER VALLEY / MIKTARIAN CONNECTOR

\$1,421,100 (asphalt)  
\$1,506,900 (recycled)

**8** \$218,700

\$319,400 (asphalt)  
\$497,000 (recycled)

**1** CENTER VALLEY TRAIL EXTENSION

\$218,700

\$452,600 (asphalt)  
\$688,600 (recycled)

**6** RAVENNA / GLEN CHAMBERLIN CONNECTOR

**8** RAVENNA ROAD INTERSECTION UPGRADES

\$218,700

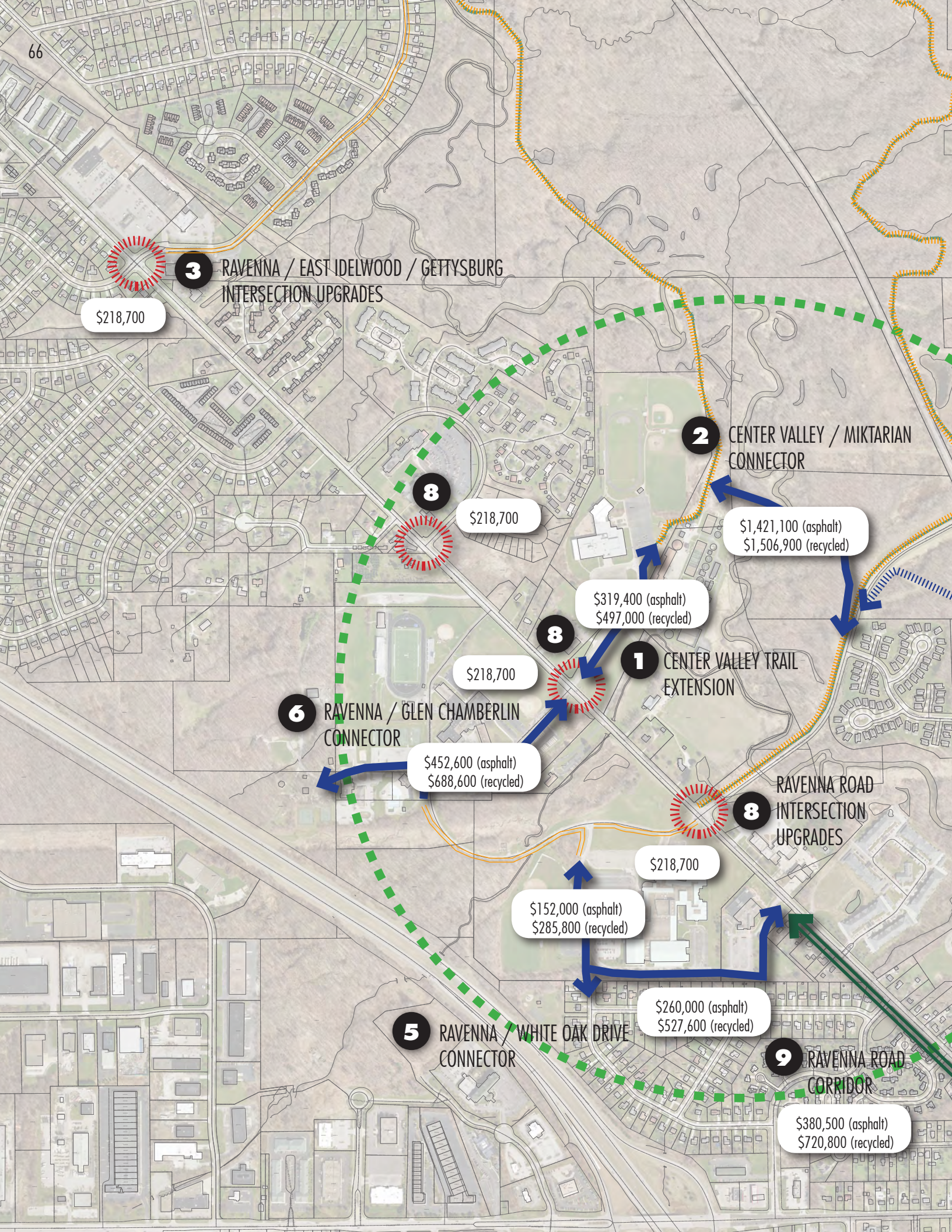
\$152,000 (asphalt)  
\$285,800 (recycled)

**5** RAVENNA / WHITE OAK DRIVE CONNECTOR

\$260,000 (asphalt)  
\$527,600 (recycled)

**9** RAVENNA ROAD CORRIDOR

\$380,500 (asphalt)  
\$720,800 (recycled)








### IMPLEMENTATION

As funding for trail implementation can come from a range of sources, it is important to start with an understanding of anticipated budgets for the range of first and last mile connections identified in this study.

These budgets are for planning purposes only, and represent trail construction estimates. They do not include utility work associated with construction, but they do include budgets for amenities, signage and trail elements.

FIRST MILE/LAST MILE: ANTICIPATED COSTS

#### DRAWING KEY

-  EXISTING TRAIL
-  PROPOSED TRAIL
-  PROPOSED CORRIDOR TRAIL
-  1/2 MILE RADIUS
-  KEY INTERSECTION

## PRIORITY PROJECT IMPLEMENTATION STRATEGIES: FUNDING SOURCE OVERVIEW

In an effort to assist the City of Twinsburg to direct the momentum of these projects toward implementation, we have provided more detailed cost analysis of the top three priority projects. The project components were then reviewed by the AMATS team to identify potential funding sources.

*AMATS receives over \$9 million dollars a year to invest in the region's transportation infrastructure. All funding is provided through the federal government by the federal gas tax which is paid when consumers purchase gasoline.*

*AMATS uses implementation funds to help communities pay for road maintenance, safety improvements, congestion relief and bike and pedestrian infrastructure.<sup>8</sup>*

The primary program identified for project funding is the Transportation Alternatives Set Aside program (TASA). This program provides Federal funding for pedestrian and bicycle facilities, and is allocated to Metropolitan Planning Organizations.

Projects seeking TASA funding must relate to surface transportation and must address a transportation need, use or benefit.

TASA projects have a Federal funding cap of \$700,000 for preliminary engineering, right-of-way and construction, with a 20% local match, meaning that fundable project costs must not exceed \$875,000. Projects that connect to an existing facility at both ends will score the highest, as noted by AMATS representatives.

Additional funding recommendations have been provided for components that are ineligible for TASA funding, and a more comprehensive identification of local, state and Federal funding opportunities has been developed as an additional project resource. This list of resources is included in the appendix.



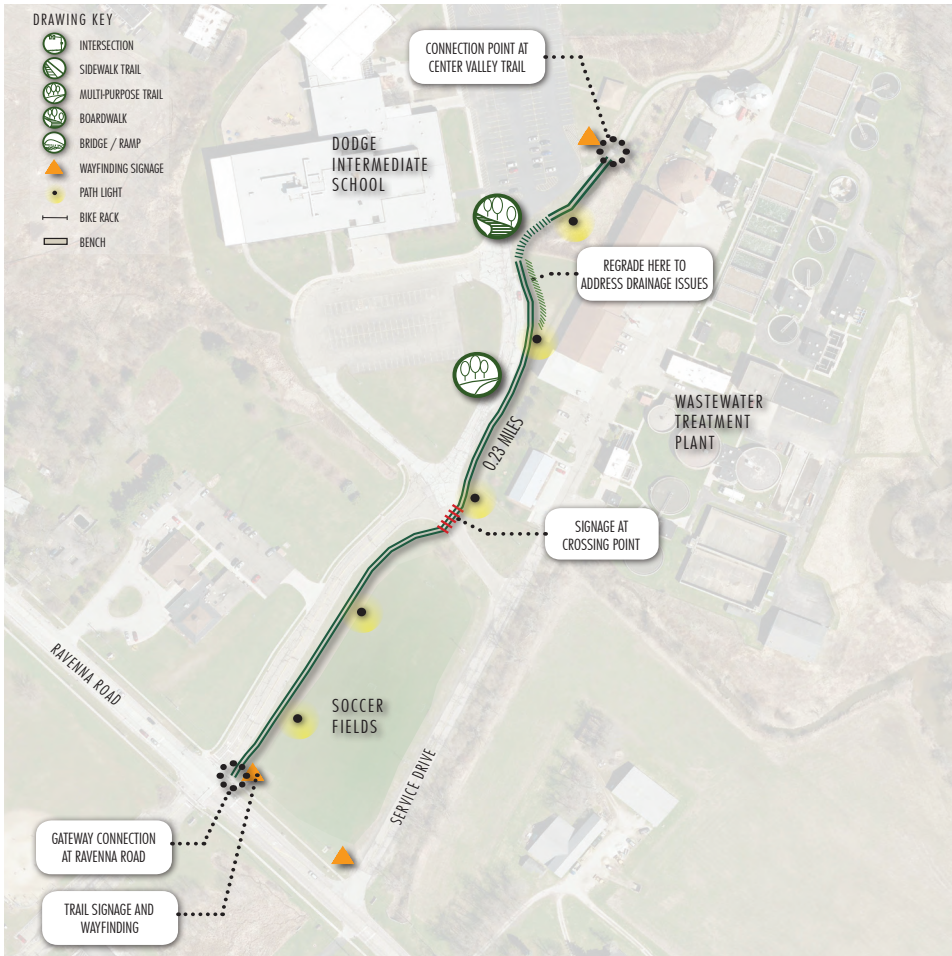
**IMPLEMENTATION**

## PRIORITY PROJECT IMPLEMENTATION STRATEGIES: CENTER VALLEY TRAIL EXTENSION

As described in the previous section of this report, the Center Valley Trail Extension is a .23 mile multipurpose trail that provides a formal connection between the current Center Valley Trail and Ravenna Road, improving linkages to the City of Twinsburg’s civic and recreational campus area.

This trail is primarily paved with a small section of boardwalk in a low-lying area adjacent to the Wastewater Treatment Plant. The flat terrain along this path allows the construction of this section to be relatively straightforward. Estimated budgets include supplemental lighting, signage and amenities.

All components except for site furniture would potentially qualify for TASA funding.



### Center Valley Trail Extension

Projected Cost: \$319,400 (asphalt)  
\$497,000 (recycled content trail surface)

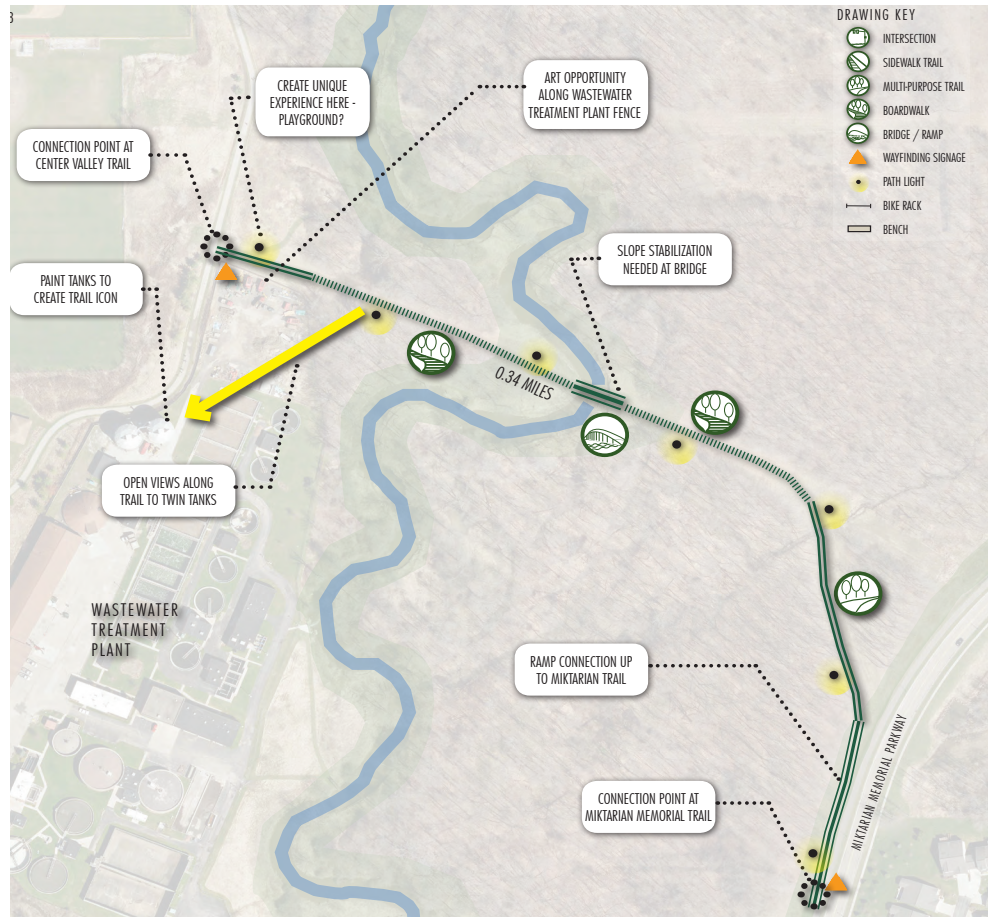
Project Element	Quantity	Unit	Unit Price	Total	Potential Funding Source
Paved trail (asphalt)*	12,000	sf	\$13.60	\$163,200.00	TASA
Boardwalk trail	1056	sf	\$75	\$79,200.00	TASA
Trail lighting	7	ea	\$5,000	\$35,000.00	TASA
Earth work / grading	1	lump sum	\$15,000	\$15,000.00	TASA
Trail signage and wayfinding	1	lump sum	\$12,000	\$12,000.00	TASA
Benches and site amenities	1	lump sum	\$15,000	\$15,000.00	ODNR Recreational Trails Program
<i>*Optional upgrade</i>					
Paved trail (recycled content)	12,000	sf	\$28.40	\$340,800.00	TASA

# PRIORITY PROJECT IMPLEMENTATION STRATEGIES: CENTER VALLEY / MIKTARIAN CONNECTOR

As described in the previous section of this report, the Center Valley / Miktarian Connector is a .34 mile multipurpose trail that connects the current Center Valley Trail and the Miktarian Memorial Parkway Trail, a critical link in the overall system.

This trail is more complex in nature, incorporating a significant amount of boardwalk and a bridge to cross through a low-lying floodplain area, and Tinker’s Creek. Additionally the eastern end of the trail needs to rise approximately 10’ to meet the Miktarian Parkway section. This is accomplished through the use of a ramp along the hillside. In addition to the trail construction components, the estimate includes a budget for public art along the Wastewater Treatment Plant fence and the twin tanks.

Trail components except for the site amenities and art would be eligible for TASA funding. It should also be noted that this trail section would most likely score well because it connects two existing trails.



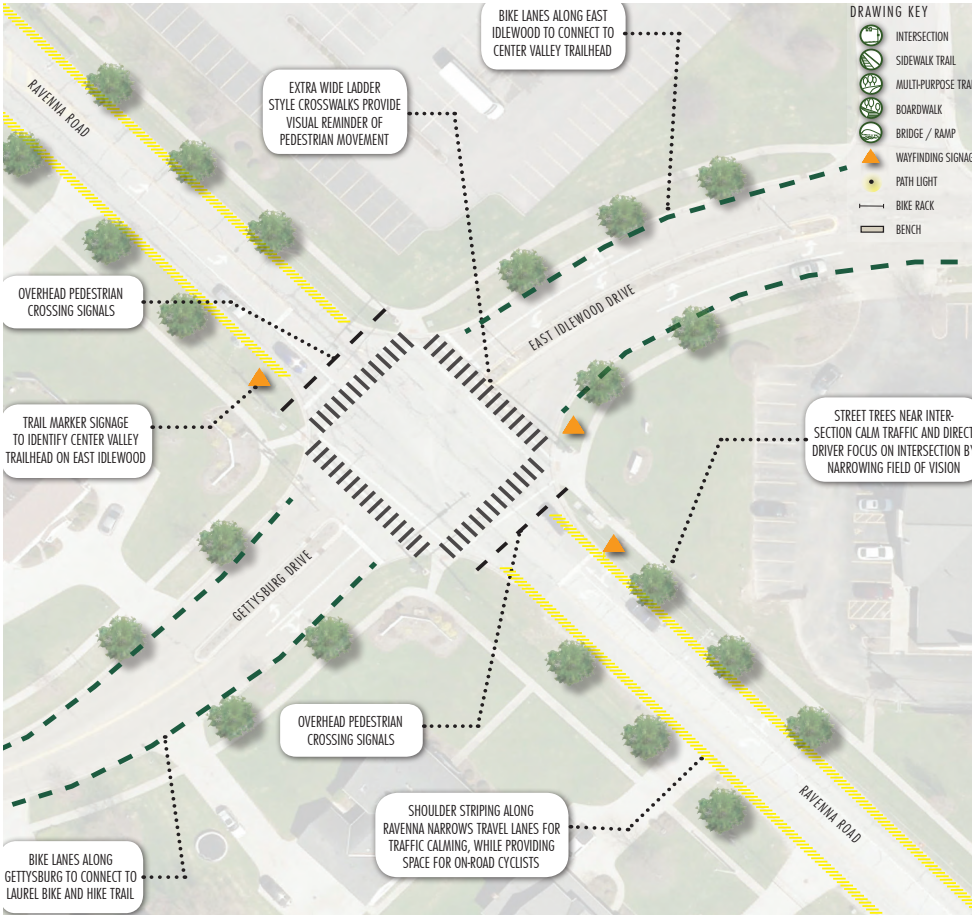
## Center Valley / Miktarian Connector

Projected Cost: \$1,421,080 (asphalt)  
\$1,506,920 (recycled content trail surface)

Project Element	Quantity	Unit	Unit + Installation Price	Total	Potential Funding Source
Paved trail (asphalt)*	5,800	sf	\$13.60	\$78,880.00	TASA
Boardwalk trail	8,976	sf	\$75	\$673,200.00	TASA
Bridge at Tinker’s Creek	930	sf	\$120	\$111,600.00	TASA
Ramp at Miktarian Parkway	3,170	sf	\$120	\$380,400.00	TASA
Trail lighting	10	ea	\$5,000	\$50,000.00	TASA
Earth work / grading / floodplain	1	lump sum	\$75,000	\$75,000.00	needs defined, probably covered
Trail signage and wayfinding	1	lump sum	\$12,000	\$12,000.00	TASA
Benches and site amenities	1	lump sum	\$15,000	\$15,000.00	ODNR Recreational Trails Program
Public Art (fence & twin tanks)	1	lump sum	\$25,000	\$25,000.00	The Knight Foundation, local institutions (sponsorship)
<i>*Optional upgrade</i>					
Paved trail (recycled content)	5,800	sf	\$28.40	\$164,720.00	TASA

**IMPLEMENTATION**

## PRIORITY PROJECT IMPLEMENTATION STRATEGIES: RAVENNA / E. IDLEWOOD / GETTYSBURG INTERSECTION



As described in the previous section of this report, the Ravenna Road / East Idlewood / Gettysburg intersection is a priority from a pedestrian safety standpoint.

The proposed solution includes updated signal features (including signal timing, countdown and audible upgrades), clear crossing areas with pedestrian and bike activated options and overhead signals, pavement markings for improved bike facilities, signage and wayfinding elements.

These components may qualify for CMAQ funding (which focuses on improvements to the flow of traffic), but STP and some TASA funding may be better considerations.

### Ravenna / East Idlewood / Gettysburg Intersection Upgrades

Projected Cost: \$218,700

Project Element	Quantity	Unit	Unit Price	Total	Potential Funding Source
Updated signalization	8	ea	\$7,000	\$56,000.00	CMAQ or STP
Overhead pedestrian crossing signals	4	ea	\$6,000	\$24,000.00	CMAQ or STP
Pavement striping - shoulder area	2,000	lf	\$7	\$14,000.00	CMAQ or STP
Pavement striping - bike lanes/sharrows	800	lf	\$6	\$4,800.00	CMAQ or STP
Pavement striping - crosswalks	260	lf	\$15	\$3,900.00	CMAQ or STP
Landscaping - street trees or alternative plantings near intersection	1	lump sum	\$10,000	\$10,000.00	Clean Ohio Fund
Amenities at transit waiting area	1	lump sum	\$8,000	\$8,000.00	ODOT Safety Program
Pedestrian scale lighting at intersection	16	ea	\$5,000	\$80,000.00	TASA
Trail signage and wayfinding	1	lump sum	\$18,000	\$18,000.00	TASA

## PROJECT IMPLEMENTATION STRATEGIES: BUILDING THE TWIN TRAILS BRAND

Signage and marketing will be critical in communicating the existence of Twinsburg's trail system to build ridership by residents and attract visitors.

While it can be challenging enough to locate and secure money to construct the physical trails and associated support infrastructure, an investment in wayfinding, clear signage and the development of a recognizable brand for the system is just as critical. These details add recognition within a larger system, a sense of safety and security and connections to the Twinsburg Community.

A consistent brand should be a part of everything:

- overall trail maps
- trail and roadway signage
- mile markers
- printed maps and materials
- public art
- trail amenities and educational components

Branding and marketing efforts should also consider opportunities for local sponsorship. The City of Twinsburg is fortunate to include large medical facilities, industry and a branch of Kent State University that may see value in investing in multimodal transportation that supports healthier lifestyles.

The Twin Trails brand:

The public input portion of this project included initial conversations about potential names for the trail system. Twinsburg's

rich history and current renown as a result of its Twins Day Festival provides a logical and unique branding opportunity.

The community expressed a strong preference for a trail branding approach that included a reference to twins. The 'Twin Trails' idea received the most votes in the initial public questionnaire, and should be studied further.

This idea could be incorporated throughout the city's trail system in a number of ways:

- Paired trail amenities such as seating, signage kiosks, etc.
- Custom bike racks, trash receptacles, that incorporate the Twin Trails logo.
- A specialization in tandem bike rentals
- Twin-themed public art that is incorporated at trailheads, special destinations and key points along the trails.
- Paired pavilions at trailhead locations to incorporate support functions (restrooms, covered seating, etc.)
- Catch phrases such as "Twin Trails, twice as nice," or traffic safety reminders such as "Save a life, look twice," could be considered.

The City of Twinsburg is fortunate to have such a strong and identifiable heritage as a starting point for trail branding opportunities. Further development of these ideas with a signage and branding professional will be an important part of this initiative's success.

Case Study:

"Portland, one of the most progressive U.S. bicycle cities in terms of signing and connections, has invested heavily in its trails and networks over the past 10 years. Jeff Olson, partner with Alta Planning (Portland, Ore.) says the city's infrastructure, valued at \$60 million, is equivalent to building one mile of urban freeway."

"Ten years ago, Mayer/Reed (Portland) designed a trail and wayfinding system for a neglected 1.5-mile stretch of riverfront, the Vera Katz Eastbank Esplanade, on the industrial east bank of Portland's Willamette River. "The client was smart in recognizing that 'if we build the trail, that doesn't mean they will come,' and they were very supportive of how the design features could enhance the project's success," says Principal Michael Reed. The designers used landscaping, art, design, and interpretive panels—including 20-ft.-tall steel pylons—to heighten the trail's visibility. Although the community was initially concerned it would be money misspent, the trail is now used heavily by the downtown working population and bike tours and bike rental companies have been launched as a result."

- Excerpted from *Bicycle Trail Signage and Environmental Graphics*, by Jenny Reising, *segdDESIGN* no. 32, 2011

Measureable returns on trail investments:

"A study from Minnesota suggests that property values increase because of trails: 70% of real estate agents surveyed use trails as selling points for homes, and over 80% thought that they would make a home easier to sell. The Indianapolis Cultural Trail has seen property values within a block of this eight-mile urban trail increase by 148% since it opened in 2008."<sup>9</sup>

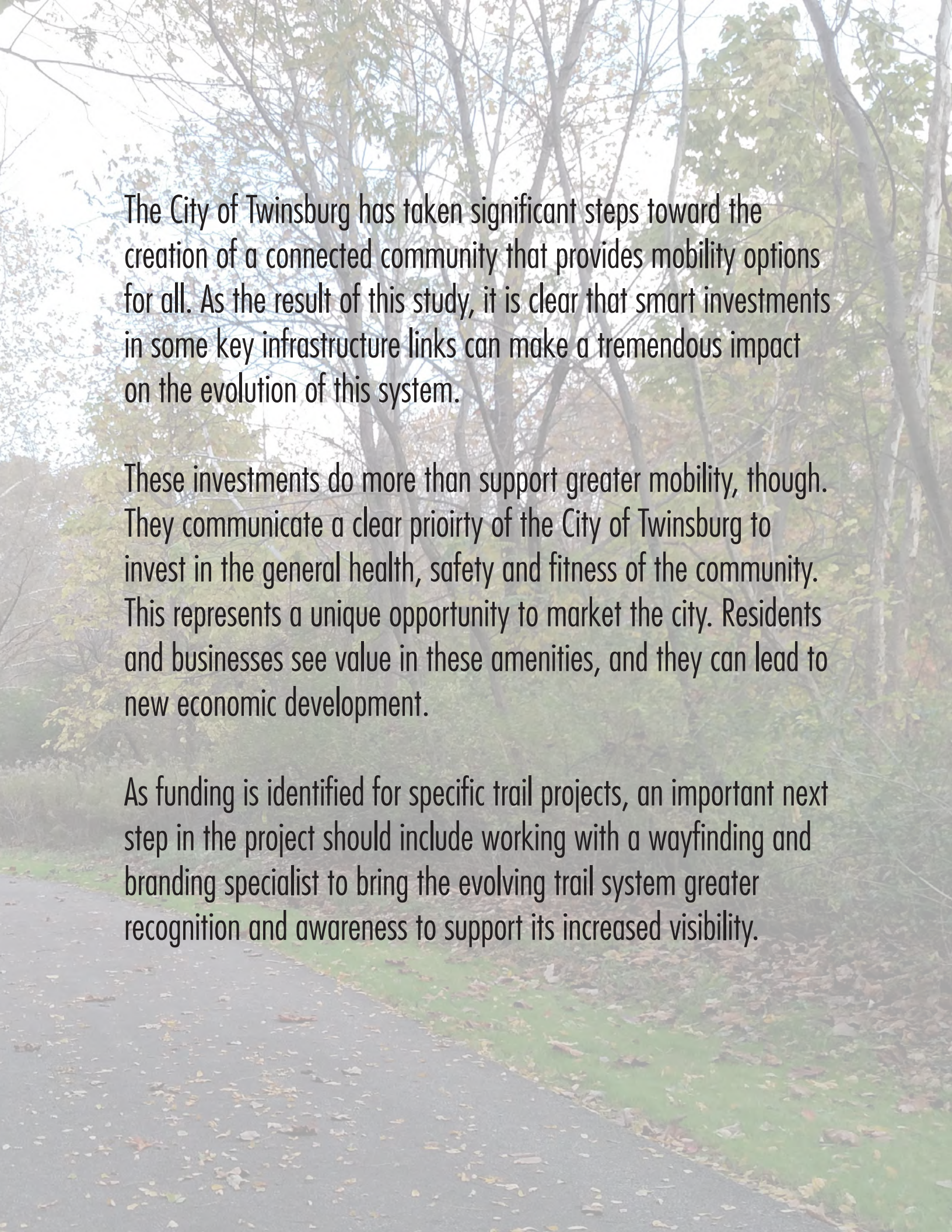


**IMPLEMENTATION**

# 2WIN TRAILS





A paved path leads through a wooded area with trees showing autumn foliage. The path is dark grey and has some fallen leaves scattered on it. The trees are mostly bare or have sparse green and yellow leaves. The background is a soft, out-of-focus green and yellow.

The City of Twinsburg has taken significant steps toward the creation of a connected community that provides mobility options for all. As the result of this study, it is clear that smart investments in some key infrastructure links can make a tremendous impact on the evolution of this system.

These investments do more than support greater mobility, though. They communicate a clear priority of the City of Twinsburg to invest in the general health, safety and fitness of the community. This represents a unique opportunity to market the city. Residents and businesses see value in these amenities, and they can lead to new economic development.

As funding is identified for specific trail projects, an important next step in the project should include working with a wayfinding and branding specialist to bring the evolving trail system greater recognition and awareness to support its increased visibility.



**APPENDIX**



APPENDIX

# FUNDING OPPORTUNITIES DATABASE

To support implementation of the trails, intersections, and amenities detailed in this plan, the project team has pulled together a comprehensive analysis of potential funding sources. This list is organized by type of funder, eligible applicants, categories of elements and also local match where available.

## Potential Funding Sources

Description & Link	Eligible Applicants	Categories	Match
<b>FEDERAL PROGRAMS</b>			
<b>Advanced Transportation and Congestion Management Technologies Deployment Initiative</b>			
<p>This program provides funding to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment. These model deployments are expected to provide benefits in the form of: reduced traffic-related fatalities and injuries, reduced traffic congestion and improved travel time reliability, reduced transportation-related emissions, optimized multimodal system performance, improved access to transportation alternatives, including for underserved populations, public access to real time integrated traffic, transit, and multimodal transportation information to make informed travel decisions, cost savings to transportation agencies, businesses, and the traveling public; or other benefits to transportation users and the general public.</p> <p><a href="https://www.grants.gov/custom/viewOppDetails.jsp?oppId=282433">https://www.grants.gov/custom/viewOppDetails.jsp?oppId=282433</a></p>	Counties, Metroparks, Municipalities, Port Authorities, Sewer Districts, Transit Agencies	Communications Equipment, Computer Hardware/Software, Intelligent Transportation Systems, Mobility Management, Safety, Transit, Transit Capital	50%
<b>Rural Transportation Assistance Program (5311 b3)</b>			
<p>Federal and State funds are used to assist with operating and capital expenses in the provision of general public transportation services in rural and small urban areas. Section 5311 funds can be used for up to 50% of the net project cost of operating expenses and up to 80% of the cost of capital projects. State General Revenue funds, through the Ohio Public Transportation Grant Program, are also available to provide up to 30% of eligible operating costs and up to 10% of the costs of capital projects.</p> <p><a href="https://www.dot.state.oh.us/Divisions/Planning/Transit/Pages/Rural.aspx">https://www.dot.state.oh.us/Divisions/Planning/Transit/Pages/Rural.aspx</a></p>	Counties, Municipalities, Non Profits, Transit Agencies	Communications Equipment, Computer Hardware/Software, Intelligent Transportation Systems, Mobility Management, Transit, Transit Capital, Transit Center Facility, Transit Operating, Vehicles	20%-50%
<b>BUILD (formerly TIGER)</b>			
<p>The Better Utilizing Investments to Leverage Development (BUILD) Transportation Grant Program (formerly TIGER or Transportation Investment Generating Economic Recovery) provides funding for innovative, multi-modal and multi-jurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation.</p> <p><a href="https://www.transit.dot.gov/funding/grants/better-utilizing-investments-leverage-development-build-transportation-grants-program">https://www.transit.dot.gov/funding/grants/better-utilizing-investments-leverage-development-build-transportation-grants-program</a></p>	Counties, Municipalities, Port Authorities, Transit Agencies	Bike/Pedestrian, Bikeways, Bridge, Pedestrian, Road, Road/Bridge, Transit, Transit Capital, Transit Center Facilities	20%

**PROJECT FUNDING**

Description & Link	Eligible Applicants	Categories	Match
<b>AMATS Resurfacing Program</b>			
Resurfacing projects on non-state routes using AMATS STP funds	Communities within the AMATS region.	Principal and minor arterials, urban collectors and major rural collectors that are not on a state route.	20%
<b>Transportation Alternatives (TA Set-Aside)</b>			
<p>The Fixing America's Surface Transportation (FAST) Act replaced the former Transportation Alternatives Program (TAP) with a set-aside of funds under the Surface Transportation Block Grant Program (STBG). For administrative purposes, the Federal Highway Administration (FHWA) will refer to these funds as the TA Set-Aside. The TA Set-Aside authorizes funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity; recreational trail projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former divided highways.</p> <p><a href="https://www.fhwa.dot.gov/environment/transportation_alternatives/">https://www.fhwa.dot.gov/environment/transportation_alternatives/</a></p>	Local Governments, Regional Transportation Authorities, Transit Agencies, Natural Resource or Public Land Agencies, School Districts, Local Education Agencies or Schools, Tribal Governments, Nonprofit entities responsible for the administration of local transportation safety programs, other Local or Regional Governmental entity with responsibility for or oversight of transportation or recreational trails.	All projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.	0-20%
<b>Community Facilities Direct Loan and Grant Program in Ohio</b>			
<p>This program provides affordable funding to develop essential community facilities in rural areas. An essential community facility is defined as a facility that provides an essential service to the local community for the orderly development of the community in a primarily rural area, and does not include private, commercial or business undertakings.</p> <p><a href="https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program/oh">https://www.rd.usda.gov/programs-services/community-facilities-direct-loan-grant-program/oh</a></p>	Public bodies, Community-based non-profit corporations, Federally recognized Tribes	Health care facilities, Public facilities, Public safety services, Educational services, Local food systems, Utility services, Community support services	Not Provided
<b>Connecting Communities Planning Grants</b>			
<p>The purpose of Connecting Communities is to guide integrating land use and transportation to promote a region that balances environmental, social and economic concerns by improving coordination between land use and transportation. The intent of this initiative is to create more vibrant livable communities through coordinating resources, partners and stakeholders to integrate transportation and land use planning and decisions in the greater Akron area. It looks at how transportation funding, project selection and planning can better complement land use planning that encourages investment and revitalization of established neighborhoods and regional collaboration. Planning grants further the following Connecting Communities principles: 1) Increase alternative transportation options to connect people and places, 2) Promote Complete Street principles to create vibrant and safe places for all users, and 3) Leverage transportation projects to develop places which support alternative transportation and complete streets through land use and design</p> <p><a href="http://amatsplanning.org/planning/initiatives/connecting-communities/">http://amatsplanning.org/planning/initiatives/connecting-communities/</a></p>	Local AMATS communities, regional transit authorities and county park districts.	Alternative transportation (pedestrian infrastructure, bicycle facilities, public transportation), complete streets, land use and design	0%

Description & Link	Eligible Applicants	Categories	Match
<b>FY 2016 – FY 2019 EDA Planning Program and Local Technical Assistance Program Funding Opportunity No. EDA-HDQ-TA-HDQ-2016-2001759</b>			
<p>Under the Planning program EDA assists eligible recipients in creating regional economic development plans designed to build capacity and guide the economic prosperity and resiliency of an area or region. As part of this program, EDA supports Partnership Planning investments to facilitate the development, implementation, revision, or replacement of Comprehensive Economic Development Strategies (CEDs), which articulate and prioritize the strategic economic goals of recipients' respective regions.</p> <p><a href="https://www.grants.gov/web/grants/view-opportunity.html?oppld=280447">https://www.grants.gov/web/grants/view-opportunity.html?oppld=280447</a></p>	<p>Non Profits, Institutions of higher education, County governments, City or township governments, State governments</p>	<p>Economic Development</p>	<p>Not Provided</p>
<b>FY 2017 Economic Development Assistance Programs - Application submission and program requirements for EDA's Public Works and Economic Adjustment Assistance programs. Funding Opportunity No. EDAP-2017</b>			
<p>The Economic Development Administration's (EDA's) mission is to lead the Federal economic development agenda by promoting innovation and competitiveness, preparing American regions for economic growth and success in the worldwide economy. EDA fulfills this mission through strategic investments and partnerships that create the regional economic ecosystems required to foster globally competitive regions throughout the United States. EDA supports development in economically distressed areas of the United States by fostering job creation and attracting private investment. Specifically, under the Economic Development Assistance programs (EDAP) Notice of Funding Availability (NOFA), EDA will make construction, non-construction, and revolving loan fund investments under the Public Works and Economic Adjustment Assistance (EAA) Programs. Through this NOFA, EDA will also designate a portion of its EAA funding to support communities and regions that have been negatively impacted by changes in the coal economy (Assistance to Coal Communities, or ACC 2017). Grants made under these programs will leverage regional assets to support the implementation of regional economic development strategies designed to create jobs, leverage private capital, encourage economic development, and strengthen America's ability to compete in the global marketplace. Through the EDAP NOFA, EDA solicits applications from rural and urban communities to develop initiatives that advance new ideas and creative approaches to address rapidly evolving economic conditions.</p> <p><a href="https://www.grants.gov/web/grants/view-opportunity.html?oppld=294771">https://www.grants.gov/web/grants/view-opportunity.html?oppld=294771</a></p>	<p>County governments, Non Profits, City or township governments Special district governments, State governments Public and State controlled institutions of higher education</p>	<p>Economic Development</p>	<p>Not Provided</p>
<b>Surface Transportation Program (includes CMAQ, TA funds)</b>			
<p>STP funds are the most versatile and may be used for any project that is recommended in or consistent with the AMATS Regional Transportation Plan. STP funds can be used on any federal-aid roadway classified above a local road or a rural minor collector and bridge projects on any public road</p>	<p>Counties, Municipalities</p>	<p>Highway projects and bridge improvements (construction, reconstruction, rehabilitation, resurfacing, restoration, and operational), transportation system management, public transit capital improvement projects, commuter rail, carpool projects, bus terminals and facilities, bikeways, pedestrian facilities and planning studies</p>	<p>20%</p>
<b>Community Development Block Grant State Administered CDBG and the Neighborhood Stabilization Program</b>			
<p>The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Federal funding through Housing and Urban Development (HUD) for public facilities: road resurfacing, crosswalks, street lights, traffic/pedestrian signals, barrier removal for handicap accessibility (e.g., sidewalks, curb ramps), and street furniture. The annual CDBG appropriation is allocated between states and local jurisdictions called "non-entitlement" and "entitlement" communities respectively. Entitlement communities are comprised of central cities of Metropolitan Statistical Areas (MSAs); metropolitan cities with populations of at least 50,000; and qualified urban counties with a population of 200,000 or more (excluding the populations of entitlement cities). States distribute CDBG funds to non-entitlement localities not qualified as entitlement communities. Check HUD's, County's, or City's website to see if funding is eligible in your location.</p> <p><a href="https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/commuitydevelopment/programs">https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/commuitydevelopment/programs</a></p>	<p>Counties, Municipalities</p>	<p>Bike/Pedestrian, Bikeways, Bridge, Pedestrian, Road, Road/Bridge, Safety</p>	<p>Varies</p>



Description & Link	Eligible Applicants	Categories	Match
<p>The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Federal funding through Housing and Urban Development (HUD) for public facilities: road resurfacing, crosswalks, street lights, traffic/pedestrian signals, barrier removal for handicap accessibility (e.g., sidewalks, curb ramps), and street furniture. The annual CDBG appropriation is allocated between states and local jurisdictions called “non-entitlement” and “entitlement” communities respectively. Entitlement communities are comprised of central cities of Metropolitan Statistical Areas (MSAs); metropolitan cities with populations of at least 50,000; and qualified urban counties with a population of 200,000 or more (excluding the populations of entitlement cities). States distribute CDBG funds to non-entitlement localities not qualified as entitlement communities. Check HUD’s, County’s, or City’s website to see if funding is eligible in your location.</p> <p><a href="https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/commuitydevelopment/programs">https://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/commuitydevelopment/programs</a></p>	Counties, Municipalities	Bike/Pedestrian, Bikeways, Bridge, Pedestrian, Road, Road/Bridge, Safety	Varies
<b>Congestion Mitigation and Air Quality Improvement Program</b>			
<p>Congestion Mitigation and Air Quality (CMAQ) funds can only be used for projects that help reduce traffic congestion and improve air quality. These funds may be used for traffic signal upgrade projects, bus replacements, bike facilities, intelligent transportation system improvements, transit center and Park-and-Ride construction.</p> <p><a href="https://www.fhwa.dot.gov/environment/air_quality/cmaq/policy_and_guidance/2013_guidance/">https://www.fhwa.dot.gov/environment/air_quality/cmaq/policy_and_guidance/2013_guidance/</a></p>	Counties, Metroparks, Municipalities, Port Authorities, Transit Agencies	Bike/Pedestrian, Bikeways, Communications Equipment, Computer Hardware/Software, Congestion, Intelligent Transportation Systems, Pedestrian, Road, Road/Bridge Safety, Traffic Signal Upgrade, Transit Capital, Transit Center Facility, Vehicles	0%-25%
<b>Mobility on Demand (MOD) Sandbox Program</b>			
<p>This program provides funding for new service options in combination with available technologies that allow for greater individual mobility.</p> <p><a href="https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program.html">https://www.transit.dot.gov/research-innovation/mobility-demand-mod-sandbox-program.html</a></p>	Non Profits, Transit Agencies	Communications Equipment, Computer Hardware/Software, Intelligent Transportation Systems, Mobility Management, Planning, Transit, Transit Capital	80%
<b>Capital Investment Grant (5309)</b>			
<p>FTA’s primary grant program for funding major transit capital investments along separate corridor lines, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. It requires steps over several years to be eligible.</p> <p><a href="https://www.transit.dot.gov/funding/grants/capital-investment-grants-5309">https://www.transit.dot.gov/funding/grants/capital-investment-grants-5309</a></p>	Counties, Municipalities, Port Authorities, Transit Agencies	Transit, Transit Capital, Transit Center Facility, Vehicles	40%
<b>Building Blocks for Sustainable Communities (USEPA)</b>			
<p>Many communities around the country are asking for tools to help them achieve their desired development goals, improve quality of life, and become more economically and environmentally sustainable. In response to this demand, EPA developed the Building Blocks for Sustainable Communities Program in 2011. Building Blocks for Sustainable Communities provides quick, targeted technical assistance to selected communities using a variety of tools that have demonstrated results and widespread application.</p> <p><a href="https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities">https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities</a></p>	Local, county, or tribal governments, or nonprofit organizations that have the support of the local government on whose behalf they are applying.	Sustainable Communities	Not Provided
<b>STATE PROGRAMS</b>			
<b>County Highway Safety Program (County Engineers Association of Ohio)</b>			
<p>The County Safety Program provides funds to counties, through the County Engineers, for safety related improvements, on county maintained roadways. The County Engineers Association of Ohio (CEAO) serves as program manager for project selection and administration.</p> <p><a href="http://www.ceao.org/aws/CEAO/pt/sp/home_page">http://www.ceao.org/aws/CEAO/pt/sp/home_page</a></p>	Counties	Congestion, Planning, Safety, Traffic Signal Upgrade	20%
<b>Clean Ohio Green Space Conservation Fund (Ohio Public Works Commission)</b>			
<p>This program is dedicated to environmental conservation including acquisition of green space and the protection and enhancement of river and stream corridors. Grant recipients agree to maintain the properties in perpetuity so that they can be enjoyed and cherished for generations to come.</p> <p><a href="http://www.pwc.state.oh.us/GSCdefault.html?m=">http://www.pwc.state.oh.us/GSCdefault.html?m=</a></p>	Counties, Metroparks, Municipalities, Non Profits, Port Authorities, Sewer Districts, Transit Agencies	Bike/Pedestrian, Bikeways, Environmental, Natural Habitat Preservation and Restoration, Pedestrian, Resilience Efforts, Storm Water Improvements	Varies

Description & Link	Eligible Applicants	Categories	Match
<b>Clean Ohio Fund (Ohio)</b>			
<p>The Clean Ohio Fund restores, protects, and connects Ohio's important natural and urban places by preserving green space and farmland, improving outdoor recreation, and cleaning up brownfields to encourage redevelopment and revitalize communities. This program includes Brownfield Revitalization, Farmland Preservation, Green Space Conservation and Recreational Trails. The program supports improved outdoor recreational opportunities by funding trails for outdoor pursuits including land acquisition for a trail, trail development, trailhead facilities, engineering and design.</p> <p><a href="https://development.ohio.gov/cleanohio/">https://development.ohio.gov/cleanohio/</a></p>	Counties, Metroparks, Municipalities, Non Profits, Port Authorities	Bike/Pedestrian, Bikeways, Environmental, Natural Habitat Preservation and Restoration, Pedestrian	25%
<b>Clean Ohio Trails and Recreational Trails (Ohio Department of Natural Resources)</b>			
<p>A standalone bicycle and/or pedestrian project can be funded with Clean Ohio Trails, and Recreational Trails Program funds.</p> <p><a href="http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf">http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf</a></p> <p><a href="http://ohiodnr.com/tabid/10762/default.aspx">http://ohiodnr.com/tabid/10762/default.aspx</a></p>	Municipalities	Bike/Pedestrian	Varies
<b>Community Development Block Public Infrastructure Grant Program (Ohio)</b>			
<p>Community Development Block Public Infrastructure Grant Funds are granted to local government applicants for both economic development loan and public infrastructure projects. Public off-site infrastructure funds are retained as a grant by the local government. In the case of a loan, the local government grantee loans the funds to the beneficiary business for fixed asset financing projects and the funds are repaid to the local government Revolving Loan Fund.</p> <p><a href="https://development.ohio.gov/cs/cs_edl.htm">https://development.ohio.gov/cs/cs_edl.htm</a></p>	Counties, Municipalities	Bike/Pedestrian, Bikeways, Bridge, Community Water System Improvements, Environmental, Pedestrian, Road, Road/Bridge, Sewer Construction, Storm Water Improvements, Wastewater Treatment Plant Improvements	Not Provided
<b>Economic Development Loan and Public Infrastructure Grant Program (Ohio)</b>			
<p>Eligible activities include provision of financial assistance, through eligible units of general local government, for public off-site infrastructure improvements and fixed asset financing for land, building, machinery and site preparation directly and primarily related to the creation, expansion or retention of a particular business that results in job creation and retention for persons of low- and moderate-income.</p> <p><a href="https://development.ohio.gov/cs/cs_edl.htm">https://development.ohio.gov/cs/cs_edl.htm</a></p>	Counties must apply on behalf of villages and townships; counties may also apply on behalf of cities within their jurisdiction.	Economic development loan and public infrastructure projects	Not Provided
<b>Jobs &amp; Commerce (Ohio Department of Transportation)</b>			
<p>Businesses, with a sponsoring local government, can request grant funding for infrastructure improvement and access projects that help create and/or retain jobs.</p> <p><a href="https://www.dot.state.oh.us/Divisions/JobsAndCommerce/Pages/default.aspx">https://www.dot.state.oh.us/Divisions/JobsAndCommerce/Pages/default.aspx</a></p>	Counties, Municipalities	Bike/Pedestrian, Pedestrian, Road, Road/Bridge	Not Provided
<b>Land and Water Conservation Fund (Ohio Department of Natural Resources)</b>			
<p>This program provides funding for acquisition, development, and rehabilitation of recreational areas.</p> <p><a href="http://realestate.ohiodnr.gov/outdoor-recreation-facility-grants">http://realestate.ohiodnr.gov/outdoor-recreation-facility-grants</a></p>	Counties, Metroparks, Municipalities, Port Authorities	Bike/Pedestrian, Bikeways, Environmental, Natural Habitat Preservation and Restoration, Pedestrian	50%
<b>Natureworks Grants (Ohio Department of Natural Resources)</b>			
<p>This program provides funding for acquisition, development, and rehabilitation of recreational areas.</p> <p><a href="http://realestate.ohiodnr.gov/outdoor-recreation-facility-grants">http://realestate.ohiodnr.gov/outdoor-recreation-facility-grants</a></p>	Counties, Municipalities	Bike/Pedestrian, Bikeways, Environmental, Natural Habitat Preservation and Restoration, Pedestrian, Resilience Efforts	25%
<b>ODOT Program Resource Guide (Bicycle and Pedestrian)</b>			
<p>Bicycle and Pedestrian facilities can be eligible for funding in a variety of transportation funding programs if they are appurtenances to the roadway project itself. A standalone bicycle and/or pedestrian project can be funded with Transportation Alternative, Clean Ohio Trails, and Recreational Trails Program funds. The projects must relate to transportation, i.e., getting somewhere, with logical termini at each end. ODOT administers and funds projects in the rural areas of Ohio with Transportation Alternatives funding, while the Metropolitan Planning Organizations selects Transportation Alternative projects in urban areas.</p> <p><a href="http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf">http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf</a></p>	Municipalities	Bike Safety Program, Bike/Pedestrian, Bikeways, Safety	0%-20%

Description & Link	Eligible Applicants	Categories	Match
<b>Ohio State Infrastructure Bank (SIB) (Ohio Department of Transportation)</b>			
The Ohio State Infrastructure Bank provides loans to fund highway, rail, transit, intermodal, and other transportation facilities and projects which produce revenue to amortize debt while contributing to the connectivity of Ohio's transportation system and further the goals such as corridor completion, economic development, competitiveness in a global economy, and quality of life. <a href="http://www.dot.state.oh.us/Divisions/Finance/Pages/StateInfrastructureBank.aspx">http://www.dot.state.oh.us/Divisions/Finance/Pages/StateInfrastructureBank.aspx</a>	Counties, Municipalities, Port Authorities, Transit Agencies	Bike/Pedestrian, Bikeways, Bridge, Congestion, Freight, Pedestrian, Road, Road/Bridge, Safety, Traffic Signal Upgrade, Transit, Transit Capital, Transit Center Facility, Vehicles	N/A
<b>Recreational Trails Program (Ohio Department of Natural Resources)</b>			
Includes development of urban trail linkages, trailhead & trailside facilities, acquisition of easements & property, development and construction of new trails. <a href="https://development.ohio.gov/cleanohio/RecreationalTrails/">https://development.ohio.gov/cleanohio/RecreationalTrails/</a>	Counties, Metroparks, Municipalities, Non Profits, Port Authorities	Bike Safety Program, Bike/Pedestrian, Bikeways, Pedestrian, Pedestrian Safety Program	20%
<b>Safe Routes to School Program (Ohio Department of Transportation)</b>			
The purpose of Safe Routes to School is to encourage and enable students in grades K-8 to walk or ride their bicycle to school. Projects can be either engineering (improved crossings, sidewalks, etc.) or non-engineering (education and encouragement programs). The responsibility of a safe route to school is ultimately shared by the user, government agencies, elected officials, schools, and safety advocates. <a href="http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/ActiveTransportation/Pages/SRTS.aspx">http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/ActiveTransportation/Pages/SRTS.aspx</a>	Municipalities, Non Profits, School Districts	Bike Safety Program, Bike/Pedestrian, Bikeways, Helmets, Pedestrian, Pedestrian Safety, Program Planning, Road, Road/Bridge, Safety	0%
<b>Safety Program (Ohio Department of Transportation)</b>			
ODOT's Highway Safety Program sets aside \$2M annually to support bicycle and pedestrian-related funding requests. This money will likely flow from the Active Transportation Plan and these funds will be in addition to the requests that ODOT receives for bike/pedestrian infrastructure included in road safety improvements. It also provides \$1 million dollars in funding to upgrade safety signage on Ohio's Township Roadways. Townships are invited to apply for the safety funding based on the following criteria: Ranked among the top townships with above average; system wide crash rates based on their previous five years crash history; and have not previously received a Township Sign Safety Grant under this program. <a href="http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/HSIP/Pages/default.aspx">http://www.dot.state.oh.us/Divisions/Planning/ProgramManagement/HighwaySafety/HSIP/Pages/default.aspx</a>	Municipalities	Bike Safety Program, Bike/Pedestrian, Bikeways, Safety	0%-20%
<b>Small Government Program (Ohio)</b>			
The program provides grants and loans to villages and townships with populations in the unincorporated areas of less than 5,000 in population. <a href="http://www.pwc.state.oh.us/OPWCOverview.html?m=">http://www.pwc.state.oh.us/OPWCOverview.html?m=</a>	Municipalities	Bike/Pedestrian, Bikeways, Bridge, Community Water System Improvements, Environmental, Pedestrian, Road, Road/Bridge, Sewer Construction, Wastewater Treatment Plant Improvements	N/A
<b>State Capital Improvement Program (Ohio Public Works Commission)</b>			
The State Capital Improvement Program (SCIP) assists local communities in financing local public infrastructure improvements. Eligible applicants are counties, cities, villages, townships, and water and sanitary districts. Eligible projects are for improvements to roads, bridges, culverts, water supply systems, wastewater systems, storm water collection systems, and solid waste disposal facilities. <a href="http://www.pwc.state.oh.us/OPWCOverview.html">http://www.pwc.state.oh.us/OPWCOverview.html</a>	Counties, Municipalities, Sewer Districts	Bridge, Community Water System Improvements, Road, Road/Bridge, Sewer Construction, Storm Water Improvements, Wastewater Treatment Plant Improvements	0%-50%
<b>State Infrastructure Bank Loan and Bond Programs (Ohio Department of Transportation)</b>			
The revolving loan program makes direct loans to any public entity. The program assists with all levels and modes of transportation projects within the state. <a href="http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf">http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf</a>	Any public entity, such as counties, cities, villages, townships, boards or commissions, regional transit and port authorities	Any transportation related project eligible under Federal Title 23, including highway and transit, as well as aviation, rail, and intermodal facilities.	N/A
<b>Urban Paving Program (Ohio Department of Transportation)</b>			
The ODOT Urban Paving Program provides funds to cities for surface treatment and resurfacing projects located on State and U.S. Routes within city corporation limits. Eligible projects are those that have a Pavement Condition Rating (PCR) of 55 or worse according to ODOT's Pavement Condition Rating System. <a href="http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf">http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/Documents/ProgramResourceGuide.pdf</a>	Counties, Municipalities	Bridge, Road, Road/Bridge	20%

Description & Link	Eligible Applicants	Categories	Match
<b>OTHER PROGRAMS</b>			
<b>Eaton Corporation Charitable Fund</b>			
<p>The Eaton Charitable Fund is dedicated to supporting programs that improve the quality of life in communities where the company operates. The Fund gives primary consideration to requests for programs located in an Eaton community, recommended by an Eaton manager and where our employees demonstrate leadership involvement. Programs selected for funding will have clearly defined objectives, measurable end results, and provide a positive return on investment.</p> <p><a href="http://www.eaton.com/ecm/groups/public/@pub/@eaton/@corp/documents/content/98065570.pdf">http://www.eaton.com/ecm/groups/public/@pub/@eaton/@corp/documents/content/98065570.pdf</a></p>	Communities within where the company operates.	Arts and culture, education, health, cancer, housing, disaster relief, human services, and community development. Special emphasis is directed toward organizations with which employees of Eaton are involved.	Not Provided
<b>GAR Foundation</b>			
<p>GAR grants are awarded to organizations and programs that help Akron, Ohio become smarter, stronger, and more vibrant.</p> <p><a href="http://garfoundation.org/">http://garfoundation.org/</a></p>	High-functioning organizations working at scale in the Akron Community, Programs areas Organizations or programs that benefit Akron, OH residents, and Organizations that have been recognized as tax-exempt under Section 501(c)(3)	Economic and Workforce Development	Not Provided
<b>The George Gund Foundation</b>			
<p>The George Gund Foundation's guidelines reflect a deep commitment to place, to the Greater Cleveland Community. Their philanthropic stewardship of this region reflects a long-standing interests in the arts, economic development and community revitalization, education, environment and human services because these areas embrace most of the major issues that any community must address. While much of their work within these program areas, there is increasing awareness that many issues and, therefore, many grant proposals do not fit neatly into one program category so they are becoming ever more interdisciplinary.</p> <p><a href="https://gundfoundation.org/">https://gundfoundation.org/</a></p>	Counties, Metroparks, Non Profits, Port Authorities, School Districts, Sewer Districts, Transit Agencies	Bike Safety Program, Bike/Pedestrian, Bikeways, Environmental, Helmets, Natural Habitat Preservation and Restoration, Nutrient Reduction, Pedestrian, Planning, Resilience Efforts, Storm Water Improvement	N/A
<b>Goodyear Community Support</b>			
<p>Goodyear's grant program is designed to utilize resources to build and support collaborative programs within our community investment focus areas. Our key focus areas reflect the global and local nature of our business and where Goodyear can make the greatest impact including: promoting safe mobility to make our communities stronger (safe); inspiring people to reach their potential in school and prepare for careers (smart); and, reducing waste and conserving energy for our planet (sustainable).</p> <p><a href="https://corporate.goodyear.com/en-US/responsibility/community/community-support.html">https://corporate.goodyear.com/en-US/responsibility/community/community-support.html</a></p>	Organizations that demonstrate competency and effectiveness	Promoting safe mobility to make our communities stronger (safe), and reducing waste and energy conservation (sustainable).	N/A
<b>PeopleForBikes Community Grant Program</b>			
<p>People For Bikes Community Grant Program supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride.</p> <p><a href="http://www.peopleforbikes.org/pages/grant-guidelines">http://www.peopleforbikes.org/pages/grant-guidelines</a></p>	Counties, Metroparks, Municipalities, Non Profits, Port Authorities, Sewer Districts, Transit Agencies	Bike/Pedestrian, Bikeways, Bridge, Road, Road/Bridge	at least 50%
<b>Rockefeller Foundation Grants</b>			
<p>The Rockefeller Foundation works to spread the benefits of globalization to more people in more places around the world. Funding inquiries must fit within these core areas: Health, Food, Power, Resilient Cities, Innovation and Co-Impact. Resilient Cities focuses on helping cities worldwide build better and build back to improve the lives and well-being of urban populations.</p> <p><a href="https://www.rockefellerfoundation.org/">https://www.rockefellerfoundation.org/</a></p>	Counties, Metroparks, Municipalities, Non Profits, Port Authorities, School Districts, Sewer Districts, Transit Agencies	Bike Safety Program, Bike/Pedestrian, Bikeways, Community Water System Improvements, Environmental, Helmets, Intelligent Transportation Systems, Mobility Management, Pedestrian, Pedestrian Safety Program, Planning, Resilience Efforts, Storm Water Improvement, Transit, Transit Center Facility	N/A

Description & Link	Eligible Applicants	Categories	Match
<b>REI Community Investment and Engagement</b>			
<p>REI is working to reduce the barriers to life outside. Their philanthropy and advocacy work helps push to imagine a world where green, outdoor natural space is within an easy walk from every American's home or work place. A lot of REI's work supports rural communities across the United States that serve as connection points to our iconic outdoor places. They are also committed to "rewilding" our big cities by developing green spaces and creating sustainable transportation alternatives because close to 80% of the American population lives in cities now.</p> <p>Each year, the REI co-op invests in local, regional, and national nonprofits throughout the country. At the very local level, the outdoor programs and outreach teams work with local store managers to identify partners that we invite to apply for grants. Applications are evaluated according to the applicant's ability to successfully maintain and enhance diverse, accessible, and popular areas where our members play outdoors. Their broader-scoped national and REI Foundation grants are also by invitation only. They support more expansive landscapes (like National Parks), innovative ways of connecting people to transformational outdoor experiences, and advocacy work that aligns with human-powered recreation.</p> <p><a href="https://www.rei.com/stewardship/creating-access">https://www.rei.com/stewardship/creating-access</a></p>	local, regional, and national nonprofits	Trails, Sustainable Transportation Alternatives	Not Provided
<b>State Farm Insurance Good Neighbor Citizenship® Company Grants</b>			
<p>Strong neighborhoods are the foundation of a strong society. State Farm is committed to maintaining the vibrancy of our communities by assisting nonprofits that support: affordable housing, first time homeowners, neighborhood revitalization, financial literacy, job training, and small business development. Through community outreach and community development grants and investments, State Farm gives back to the neighborhoods it serves and helps develop stronger neighborhoods by reinvesting in the community.</p> <p><a href="https://www.statefarm.com/about-us/community/education-programs/grants-scholarships/company-grants">https://www.statefarm.com/about-us/community/education-programs/grants-scholarships/company-grants</a></p>	Programs conducted by Municipal, county, state or federal government entities or Non Profits that align with State Farm's charitable focus.	Safety, Community Development, Education	Not Provided

**TWINSBURG FIRST MILE / LAST MILE CONNECTIONS PLAN  
PLANNING COMMISSION WORKING MEETING**

February 5, 2018

Location: Twinsburg City Hall

Time: 7:00 PM – 8:00 PM

Attendance:	Affiliation:	E-Mail Address:
Ted Yates, Mayor	City of Twinsburg (CT)	tyates@twinsburg.oh.us
Amy Mohr	City of Twinsburg (CT)	amohr@twinsburg.oh.us
Larry Finch	City of Twinsburg (CT)	lfinch@twinsburg.oh.us
Lynn Muter	City of Twinsburg (CT)	lmuter@twinsburg.oh.us
Marc Cohen, Chair	Planning Commission (PC)	
Kevin Sterling	Planning Commission (PC)	
Matt Bova	Planning Commission (PC)	
Pete Metropulos	Planning Commission (PC)	
Cynthia Bennardo, Sec.	Planning Commission (PC)	cbennardo@twinsburg.oh.us
Maureen Stauffer	Twinsburg City Council (CC)	
Chris Shaffer	Parks & Rec. Commission (PR)	Cespts2210@gmail.com
David Kleinman	Parks & Rec. Commission (PR)	davidskleinman@yahoo.com
Chuck Bonacci	Environmental Comm. (EC)	
Suzanne Hawthorne-Clay	Twinsburg Library (TL)	suzanneclay@gmail.com
Mark Durbin	Twinsburg Library (TL)	durbinm@firstenergycorp.com
Holly G. Toth	Twinsburg Library (TL)	HAT9562@aol.com
Don Spice	Twinsburg Library (TL)	
Sam Taylor	Twinsburg Library (TL)	Sam9795@roadrunner.com
Kathi Powers	Twinsburg City Schools (TCS)	kpowers@twinsburgcsd.org
Curtis Baker	AMATS	CBaker@akronohio.gov
Heather Davis Reidl	AMATS	HReidl@akronohio.gov
Nancy Lyon-Stadler	WSP	Nancy.Lyon-Stadler@wsp.com
Alex Pesta	City Architecture (CA)	Alex@cityarch.com
Michelle Bandy-Zalatoris	City Architecture (CA)	Michelle@cityarch.com

**Summary of Meeting**

This was an introductory meeting to provide a project overview to the Planning Commission and key stakeholder organizations, to receive feedback and answer questions.

**Discussion**

1. Larry Finch (CT) introduced the project team, and provided an overview of the project and the Connecting Communities grant.
2. Curtis Baker gave an introduction to the Akron Metropolitan Area Transportation Study (AMATS) organization and a more detailed review of the Connecting Communities grant program.

3. CA and WSP provided an introduction to the project team, schedule and approach. The team reviewed the information gathering process so far, and noted that this was an opportunity for the groups to weigh in on whether the team was considering the correct areas. The project will result in an overview of where connections to the existing path network are missing and will generate more detailed concepts for a few priority focus areas
4. Initial recommendations: CA reviewed a series of initial areas of focus – an east side neighborhood connector, the Ravenna / Idlewood / Gettysburg intersection, a connection to the Town Square, the Ravenna Road corridor and a civic campus ‘trailhead’ area. Examples were presented for a range of potential details and approaches.
5. Project deliverables: CA discussed a project in Barberton that had some similarities to this effort, and provided examples of the types of project deliverables that can be expected as a part of this planning effort.

**Questions and feedback:**

6. Lynn Muter (CT) noted that the City team has worked together with the consultant team to develop a pretty thorough understanding of where the possibilities and challenges are for the project and identifying a preferred direction in its development. There is a desire to connect with the families of Twinsburg to make sure that the project will address their needs and concerns. This may be best handled with an information table at the fitness center. CA noted that the team will work with the City to figure out a display for this community feedback opportunity.
7. Marc Cohen (PC) noted that it may be worth considering the creation of a better path connection from northern Twinsburg, providing connections to the Ethans Green and Meadow Woods areas. There is a desire for better connectivity with paths to separate traffic. In considering recommendations for the Town Square area - ideas need to work with and even guide future development/redevelopment of the area. Any suggestions need to work today and tomorrow.
8. Kevin Sterling (PC) suggested a connection to the Twin Hills area, to expand access for these residents and reduce the need to come out to Ravenna to access many of the civic campus uses. White Oak dead ends in this area, and creates a good connection point for a trail near the library property.
9. Pete Metropulos (PC) noted that it would be helpful to connect with Kent State and the Post Office to the south. Additionally, a connection to the town square should be considered through Baldwin Park near the bridge. This area could be opened up to provide better access. Consideration should be given to a trail hierarchy. What type will appear where? CA noted that there were physical constraints along Ravenna that would limit the type of trail, but the expectation is to have an off-road option to accommodate all ages/abilities. PC reaffirmed that the Ravenna / Idlewood / Gettysburg intersection is a heavily traveled intersection, and an important area for study. A discussion about the willingness of pedestrians to walk a half mile was discussed. It was noted that while this is typically the limit for an errand, etc., a quarter mile

walk is more likely the limit for most to consider walking. The experience along the way, distance reminders and intermediate destinations can also impact this distance.

10. Matt Bova (PC) inquired about the possibility of utilizing pedestrian bridges. CA noted that anything is possible, but that it is often not a cost effective infrastructure investment. It depends on the type and volume of pedestrian traffic within the area. Ultimately the goal is to calm traffic and raise awareness of non-motorized users.
11. Maureen Stauffer (CC) reiterated an interest in connecting the neighborhoods in the northern portion of Twinsburg. CA noted that additional areas will be considered, but that there will be different levels of detail developed for the project.
12. Mayor Yates stated that he has been working with the group on this plan as it is developing. This plan is crucial to upcoming downtown work. As a cyclist he has ridden every road in Twinsburg, and has been brainstorming with Amy Mohr (CT) on what can be done along Ravenna. There is a desire to balance investment with what will be most effective. He is anxious to see final recommendations, as this is important to family life and quality of life in the city. We need to find ways to get to destinations without having to drive a car to get there.
13. Chuck Bonacci (EC) identified a need to provide better connections to Park & Ride locations to the north and south sides of the city. There may also be an opportunity to connect to the Glenwillow trail system to create a regional asset. The team will review these locations and potential connection points.
14. David Kleinman (PR) suggested that a Ravenna Road trail could connect across the border to Cuyahoga County and the Richmond Road trail. As an alternative, there is a set of railroad tracks that run parallel to Ravenna Road that are barely used (1-2 trains per week). The railroad right-of-way may have enough space to run a trail alongside with the proper separation. This area connects to Pettibone and connects to Tinkers Creek, providing an opportunity to connect additional assets to the trail system. The team will look into this option.
15. Sam Taylor (TL) noted that the greatest need for connectivity is with the Township and Reminderville. It is impossible for people to get from the heights to the library, although it is close. Many do not have cars, and a more complete transit system would be helpful. The library is currently using a bookmobile to access these areas, but better connectivity would be beneficial.
16. Larry Finch (CT) cautioned that while there were some valid considerations were raised as part of the discussion, the City will need to be careful with the project scope. A limited fee and the need to develop portions in enough detail to qualify for implementation funding need to be taken into account. This means that focus areas will need to be prioritized in terms of how they are developed.
17. CA thanked the group and requested that everyone sign in on provided sheets to enable the consultant team to stay in touch throughout the process.



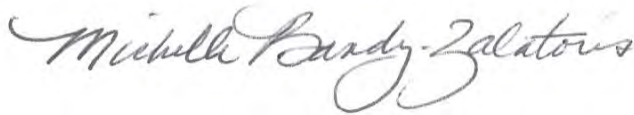
### Next Steps

1. CA will provide a quick review of the additional study areas that were suggested as a part of the meeting, and work with the City team to confirm the primary areas of focus.
2. CA will develop materials for a public information and input station at the Fitness Center. The City team will identify a date for this engagement and will communicate to the community.
3. CA will begin to generate design concept sketches and will provide a package for review and discussion once an initial set of concepts has been developed.

If any of the items herein are in conflict with your recollection of what was discussed or if any important elements have been omitted, it would be appreciated if you would contact us immediately. Otherwise we will assume the above items are correct. Please feel free to distribute to other parties, as you see fit.

Regards,

CITY ARCHITECTURE, INC



Michelle Bandy-Zalatoris, AICP, LEED AP  
Urban Designer / Planner

Copies to: All Attendees  
File

**Twinsburg First and Last Mile (#17072)**  
**Board of Education Presentation MEETING MINUTES**

June 13, 2018

Location: Twinsburg City Hall

Time: 7:30 PM – 9:00 PM

**Summary of Meeting**

The focus of this meeting was to present the Twinsburg First and Last Mile trail proposals to the Twinsburg Board of Education and Planning Commission for review and feedback. The presentation outlined the overall approach to project development, objectives of the study and details of each proposed new trail and trailhead to encourage questions, comments, and concerns from BOE and PC members and community attendees. The ultimate goal was to receive feedback and approval from the board in order to move forward with the proposal toward the finalized plans.

**Introductions**

1. AMATS introduction
  - a. Overview of the organization and what they do
    - i. Connecting people within the Akron metropolitan area through all forms of transportation
    - ii. Initiatives to improve these connections
    - iii. The Connecting Communities grant is helping to fund and launch the Twinsburg First and Last Mile project
2. City Architecture introduced the consultant team, and both City Architecture and WSP provided an overview of the project:
  - a. Holistic project goals
    - i. Increased alternative transportation options to connect people and places
    - ii. Complete streets that create vibrant and safe places for all users
    - iii. Accessible employment and education centers and increased economic development activity
    - iv. Solutions that support greater equity
  - b. Geographical areas of focus
    - i. East Side Neighborhood Connection
    - ii. Northern Commercial and Neighborhood Node
    - iii. Town Square
    - iv. Ravenna Road Corridor
    - v. Civic Campus
  - c. Community engagement
    - i. Brief overview of process that included engagement station at key community points, like the Rec Center
    - ii. Results overall very positive and supportive, shows a community desire for a more connected city
  - d. Missing links
    - i. Prime focus of the developing the trail proposals on how to connect key nodes and points of interest within the city as well as connecting to existing trails

## Trail Proposals

1. Trail types
  - a. Various kinds and materials for trails based on site conditions, route, and cost
    - i. Intersection with crosswalks
    - ii. Sidewalk trail
    - iii. Multi-purpose path
    - iv. Boardwalk
    - v. Bridge/ramp
2. Link #1: Center Valley Trail
  - a. .23 miles
  - b. 10' wide sidewalk/multi-purpose path
  - c. Provides a safe, off-road path that connects the Center Valley Trail to the Ravenna Rd corridor
  - d. Proposed new trailhead at Ravenna Rd access point with signage, pavilions, and head-in parking
  - e. Safer, more visible intersection and crosswalks
  - f. Challenge is a potential pinch point near the entry to the parking lot
3. Ravenna High School – Link #3: Potential Trailhead and Link #8: Ravenna Road
  - a. New trailhead at corner of School Drive and Ravenna Rd
  - b. 20-space parking lot and twin pavilions with picnic tables, restrooms, bike racks, and fixit stations
  - c. Safer, more visible intersection and crosswalks with overhead pedestrian crossing signals and traffic-calming elements near the intersection
4. Link #5: Ravenna/White Oak Drive Connector
  - a. Section A: .34 miles, Section B: .17 miles
  - b. 10' wide sidewalk/multi-purpose path
  - c. Off-road connection to community destinations such as the Fitness Center, Public Library, and White Oak Drive/Birchwood hills Neighborhood
  - d. New path lighting
  - e. Some regrading may be required
5. Link #6: Ravenna/Glen Chamberlin Connector
  - a. .36 miles
  - b. 10' wide sidewalk/multi-purpose path
  - c. Links popular community destinations with Ravenna Road corridor
  - d. Connects to existing path system to create an off-road loop
  - e. Potential conflict with bus parking/driveways
  - f. Will required a boardwalk/raised component
6. Link #2: Center Valley/Miktarian Connector
  - a. .24 miles
  - b. 10' wide multi-purpose trail
  - c. Provides a direct connection to the Center Valley Trail
  - d. Relatively straight path that builds from existing walking paths/clearings
  - e. Links Bel Mawr and Arbor Glen neighborhoods to the trail system

- f. Requires a bridge to cross Tinkers Creek
- 7. Link #7: post Road Corridor, Link #11: Darrow/Post Intersection Upgrades
  - a. 1.2 miles
  - b. 8' wide sidewalk trail
  - c. Provides off-road connection to amenities and trail system at Liberty Park
  - d. Greatly expands path system
  - e. Safer and more visible intersections
  - f. Required intersection and trailhead improvements at Route 91 and Post Road
- 8. Link #4: Ravenna/East Idlewood/Gettysburg Intersection Upgrades
  - a. Traffic calming elements near intersection
  - b. Shoulder striping along Ravenna Road narrows travel lanes for traffic calming and provides space for on-road cyclists
  - c. Bike lanes along Gettysburg to connect to Laurel Bike and Hike Trail
  - d. Bike lanes along East Idlewood to Connect to Center Valley trailhead
  - e. Safer, more visible intersection with overhead pedestrian crossing signals and extra wide ladder style crosswalks
  - f. Trail marker signage to identify Center Valley Trailhead on East Idlewood
- 9. Link #9: Ravenna Road Corridor and Potential Trailhead
  - a. Shoulder striping along Ravenna Road narrows travel lanes for traffic calming and provides space for on-road cyclists
  - b. Trail signage and wayfinding at Town Square along with new trailhead area with parking and bike facilities near Richner Court
  - c. Sidewalk trail on east side of Ravenna that connects from Town Square up to the civic campus (0.46 miles)
- 10. Link #10: Town Square NW Intersection Upgrades
  - a. Overhead pedestrian crossing signs
  - b. Extra wide ladder style crosswalks for increased safety and visibility
  - c. Continue sidewalk trail in this area to link Route 82
- 11. Overall network
  - a. Park Loop: 5 miles
  - b. Civic/School Loop: 2 miles
  - c. Recreation Loop: 1 mile
  - d. All interconnected and create one large trail system

## Feedback, Questions, and Concerns

- 1. School traffic flow
  - a. Related specifically to trailhead proposals near Dodge Intermediate School and Twinsburg High School, with the high school trailhead parking lot at the corner of School Drive and Ravenna Rd causing the most concern
    - i. Concerns were raised about how proposed trailhead parking lots along school road would affect traffic
    - ii. Emphasis stressed on how busy the road is during mornings and afternoons with parent drop offs and student drivers

1. Already heavy traffic and congestion as is, would adding public parking make this problem even worse and be detrimental to the school and the parents, students, and staff trying to enter/leave?
2. Ravenna/White Oak Drive connector library parking lot concern
  - a. Concern that the proposed trail location would prohibit any future parking lots expansion at the library
    - i. Already a congested and disorganized traffic flow and worry about how the trail system will interact with this
    - ii. Suggestion to reroute this trail segment to go around the other side of the library in order to keep the potential land unobstructed for a future parking lot expansion
3. Ravenna/Glen Chamberlin connector trail safety concern
  - a. Concern that the proposed trail would cross the school bus parking lot entrance drives
  - b. Heavy bus traffic curing morning and afternoon that could potentially impact pedestrians and bikers trying to use the trail and pose potential safety risks, especially with kids traveling along this trial to access the community water park
4. Overall positive feedback and there was support shown for the initiatives of the project and the overarching idea of connecting key points across the city with a unified trail system

### Next Steps

1. Establish further communication with the Board of Education to clarify feedback and determine best course of action to proceed.
2. Revise and finalize project proposals to create the finished study.
3. Proceed as necessary from the steps taken and proposals compiled to this point.

If any of the items herein are in conflict with your recollection of what was discussed or if any important elements have been omitted, it would be appreciated if you would contact us immediately. Otherwise we will assume the above items are correct.

CITY ARCHITECTURE, INC



Michelle Bandy-Zalatoris, AICP, LEED AP  
Senior Urban Designer / Planner

Copies to: All Attendees  
File