

Geneseo

ACTIVE TRANSPORTATION PLAN



Prepared for Livingston County and
Genesee Transportation Council



Prepared by Barton & Loguidice and
Landis Evans + Partners



FEBRUARY 2020

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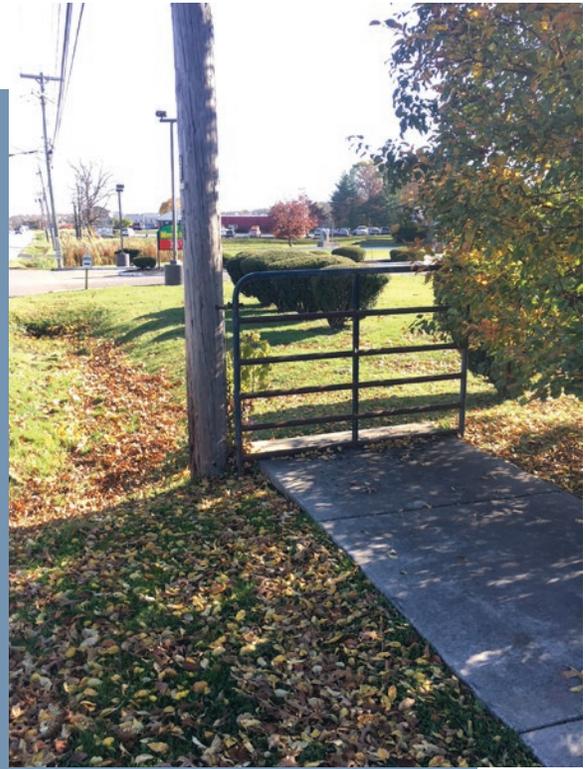
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1 | EXECUTIVE SUMMARY

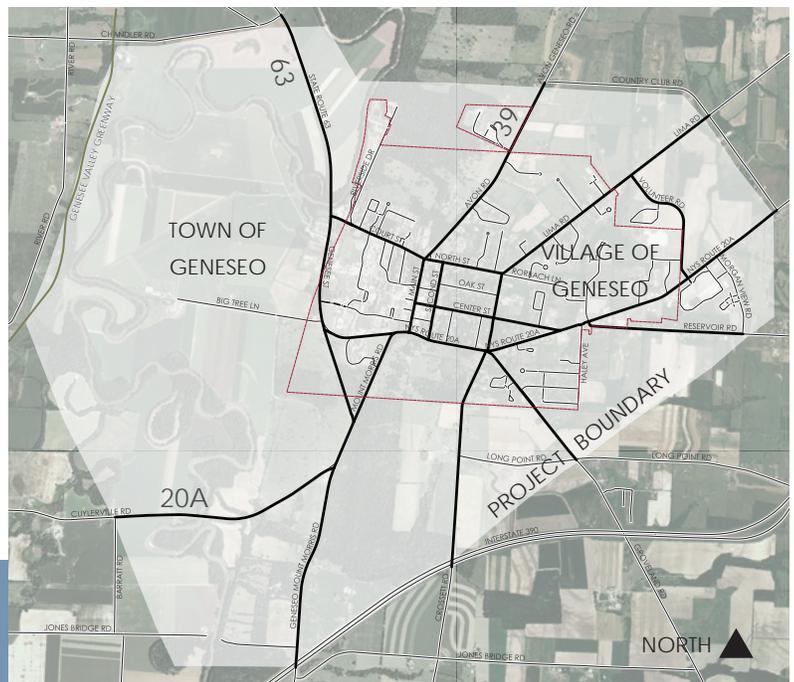


PROJECT PURPOSE

Initiated by Livingston County, the Genesee Transportation Council, and the Town and Village of Geneseo, the Genesee Active Transportation Plan proposes enhancements to the pedestrian, bicycling, and public transportation networks throughout the Town and Village of Geneseo. Supplementing previous active transportation planning efforts within the region, this Plan recommends specific facility, programmatic, and policy improvements, creating an implementable 'blueprint' for making Geneseo a more walkable and bikeable community.

PROJECT AREA

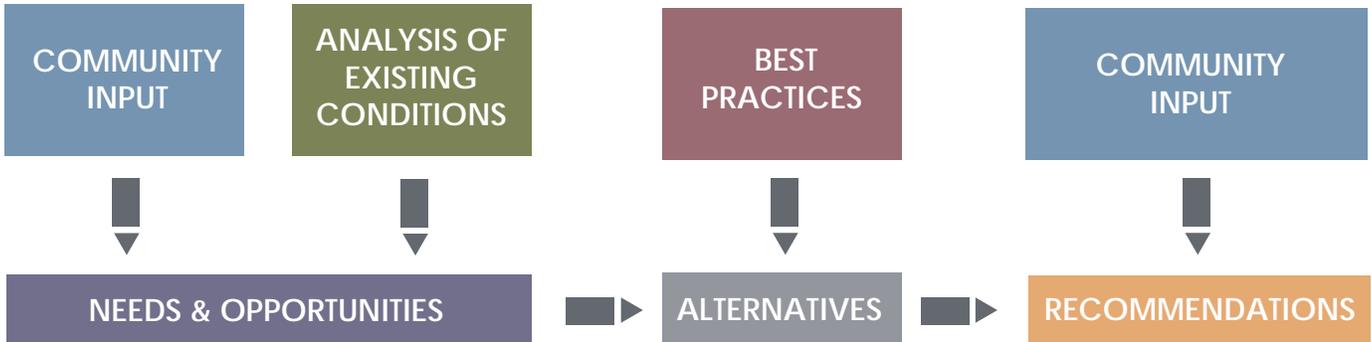
This Plan studies approximately nineteen miles of roadway within the Town and Village of Geneseo, including all State- and County-owned roads. The Plan also examines connections to several off-road trails, including the Genesee Valley Greenway, which currently runs along the Genesee River to the west of the Village of Geneseo.



The Project Area encompasses New York State Routes 39, 63, and 20A

PROJECT APPROACH

This project approaches active transportation planning through a comprehensive lens, recognizing the importance of creating physical, social, and regulatory frameworks to generate a more connected, equitable, and accessible community. The recommendations within this plan have accordingly been developed through an extensive process that has included multi-faceted community engagement, a detailed inventory of existing conditions, and an application of national and local best practices. In general, the recommendations seek to balance short-term, highly feasible projects with larger, longer-term projects that will require more extensive coordination to implement.



BENEFITS OF ACTIVE TRANSPORTATION

Active Transportation refers to all forms of non-motorized transit, which most commonly include walking, jogging, and bicycling. Promoting active transportation has wide-ranging benefits for a community and its residents.



HEALTH *Increasing physical activity through walking or biking has significant benefits for both physical and mental health.*



ENVIRONMENTAL *Promoting active transportation leads to a reduction in vehicular travel, lessening the amount of pollutants that are emitted.*



SOCIAL *Providing active transportation infrastructure promotes social equity by reducing the need to own a vehicle, and also creates opportunities for socialization.*



ECONOMIC *Walkability and Bikeability have a significant impact on a community's 'livability,' increasing property values and connectivity to businesses.*

INVENTORY & ANALYSIS: KEY TAKEAWAYS

- » Throughout the project area, vehicles typically drive 4-7 Miles Per Hour above the posted speed limits.
- » There have been twenty active transportation-related crashes within the project area over the past ten years, primarily within the central core of the Village of Geneseo.
- » There are currently no on-road bicycle facilities within the project area, and based on the nationally-recognized Bicycle Level of Service model, only half of the project roadways feel safe and comfortable for the majority of bicyclists.
- » Based on the Pedestrian Level of Service model, nearly all of the streets within the central core of the Village are comfortable for pedestrians, while nearly all of the other roadways feel uncomfortable and unsafe for pedestrian use.
- » The hill on the west side of the Village of Geneseo has 5-7% slopes throughout, which can pose challenges for pedestrians and bicyclists.
- » Based on community input and time-lapse camera deployment, the intersection of Crossett Road, NYS Route 20A, Groveland Road, and Temple Hill Street represents the greatest active transportation safety concern within the project area.

COMMUNITY INPUT

Throughout the project, community input was gathered through a variety of methods:

- » Two Public Meetings
- » Five Project Committee Meetings
- » Four Stakeholder Meetings
- » Online Community Survey



NEEDS & OPPORTUNITIES

Based on community input and the analysis of existing conditions, the following needs and opportunities categories were identified for the project area:

- » *Priority Intersections*
- » *New & Enhanced Crosswalks*
- » *On-Road Bicycle Facilities*
- » *New Sidewalks*
- » *Connections to the Genesee Valley Greenway*
- » *Additional Trails*
- » *Policies & Regulations*



RECOMMENDATIONS

INTERSECTIONS

- » Design and implement roundabout at the Crossett Road / Groveland Road / NYS Route 20A / Temple Hill Street intersection.
- » Remove free-flow right turn lane, and implement new sidewalk and crossings at Center Street / NYS Route 20A intersection.
- » Install new crosswalks, curb ramps, sidewalks, and on-road bicycle facilities at NYS Route 20A intersections with Megan Drive / Reservoir Road and Volunteer Road / Genesee Valley Plaza.
- » Tighten curb radii and reduce pedestrian crossing distance at North Street / Court Street / Avon Road / Main Street and North Street / Lima Road / Rorbach Lane / Highland Road intersections
- » Add crosswalks and sidewalks, and tighten turn radii at Main Street / NYS Route 20A intersection.



CROSSINGS

- » Implement new crossings at Avon Road near the Geneseo Central School District, and NYS Route 20A at the intersection with Country Lane.
- » Enhance existing mid-block or minor intersection crosswalks along North Street, Court Street, and Avon Road through potential curb extensions, additional signage, and reflective posts.
- » If roundabout is not installed at Crossett Road / Groveland Road / NYS Route 20A / Temple Hill Street intersection, continue evaluating feasibility of installation of Rapid Rectangular Flashing Beacon at existing crosswalk at Prospect Street and NYS Route 20A.



BEAR FOUNTAIN ALTERNATIVES

- » *Continue evaluating seven alternatives for preferred intersection treatment around Bear Fountain Statue at Center Street and Main Street. Initial community feedback indicated a strong preference for keeping the fountain in its current location, and feedback was mixed regarding implementing a raised speed table, curb extensions, gathering space, or pedestrian refuge island.*



- » Where feasible, implement new and/or enhanced crossings along Main Street through curb extensions, vertical elements, and additional signage.

BICYCLE FACILITIES

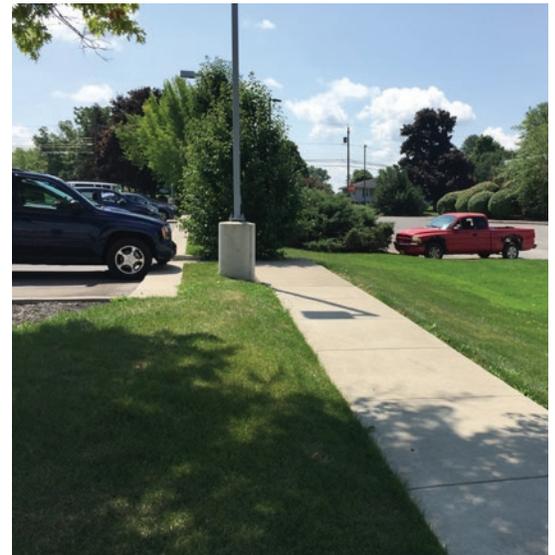
- » Explore widening of roadway shoulders for additional bicycling space on Lima Road, Reservoir Road, and sections of Mt. Morris Road and Genesee Street.
- » Mark bike lanes along sections of North Street and Main Street; continue coordination with NYSDOT regarding potential bike lane treatments along sections of Avon Road and NYS Route 20A with sidewalk.
- » Consider implementing buffered shoulder treatment on sections of Cuylerville Road.
- » Install Shared Use Markings on key low-speed roadways within the Village of Geneseo, including Center Street, Second Street, and Highland Road.
- » Consider designating Rorbach Lane as a Bicycle Boulevard, and installing a new gate that prohibits vehicles yet allows bicycles to pass through on the pavement.
- » Implement bicycle parking at key destinations throughout Town and Village of Geneseo.

SIDEWALKS

- » Construct new sidewalks along NYS Route 20A, beginning with the north side of the street.
- » Explore design alternatives for constructing new sidewalks along Lima Road and Volunteer Road.

CONNECTION TO GENESEE VALLEY GREENWAY

- » Continue coordination with all stakeholders to create multi-use connection to Greenway via Big Tree Lane.
- » Consider adding sidewalks along Mary Jemison Drive and repaving Big Tree Lane.
- » Construct multi-use pathway between Geneseo Airport and Genesee River below existing electrical lines.
- » Pursue permitting, funding, and design feasibility studies for construction of multi-use bridge over Genesee River to connect new pathway to Genesee Valley Greenway.



ADDITIONAL TRAILS

- » Construct new multi-use pathway along west side of Avon Road between Westview Crescent and the Geneseo Central School District.
- » Continue coordinating with private property owners and developing plans for off-road connecting pathways between the Walmart plaza, Lima Road, and Volunteer Road.
- » Continue examining feasibility of new pathways near Jaycox Creek, and along the railway bed to the west of the Village of Geneseo.
- » Coordinate with recommendations from Livingston County Wayfinding Study, implementing bicycle and pedestrian wayfinding signage near key destinations.

POLICIES & REGULATIONS

Land Use Policies and Design Standards can help create an environment that is more conducive to active transportation through promoting connectivity, denser development, and streetscapes that feel more inviting to pedestrians. Regulatory tools recommended in this plan include:

- » Lane use regulations that encourage sidewalk construction between buildings and roadways, and promote development that is closer to the street.
- » Commercial district regulations that promote mixed-use activity centers and pedestrian-scaled development.
- » Potential adoption of a Unified Development Ordinance between the Town and Village of Geneseo to promote consistent application of standards, simplify development review process, and provide for better communication.

GENESEO SCHOOL ZONE IMPROVEMENTS

- » *A suite of recommendations around the Geneseo Central School District on Avon Road will enhance multimodal safety and encourage children to walk and bicycle to school more often. Recommended improvements include a formalized off-road path, new crossings and signage, a potential school speed limit below 40MPH, and green infrastructure to manage stormwater runoff.*



PROGRAMS

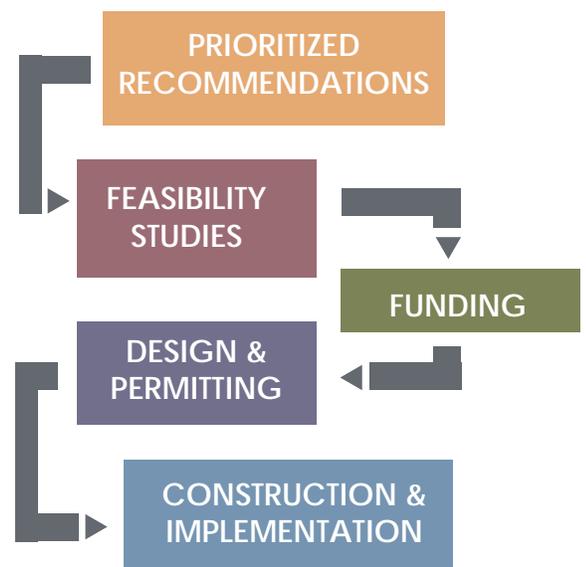
- » Continue developing maintenance procedures that ensure sidewalks and shoulders are cleared of debris, ponding, and snow.
- » Create additional educational opportunities about active transportation for all roadway users, particularly for children, through partnerships with the Geneseo Central School District, the Cornell Cooperative Extension, local driving schools, SUNY Geneseo, and RTS.
- » Adopt and partner with national and local active transportation-related programs, including National Bike Month, Bicycle- and Walk-Friendly Community Designation, and the Bike Light Campaign.
- » Continue enforcement of active transportation-related infractions, including vehicular speeding or bicycling without a light.
- » Renew efforts to pursue Bike Share program in partnership with SUNY Geneseo.

PUBLIC TRANSIT

- » Continue coordinating with RTS to implement seating or shelters at key bus stop locations throughout the project area.

IMPLEMENTATION & NEXT STEPS

As a high-level planning document, the Geneseo Active Transportation Plan provides a guide for enhancing active transportation within the Town and Village, but does not identify all of the specifics needed to implement each individual project. However, the Plan does provide a detailed ‘matrix’ for prioritizing the implementation of each recommendation, factoring in community preferences, expected use, cost of construction, level of improvement to safety, and other environmental considerations. While all recommendations will directly improve the experience of walking and bicycling in Geneseo, those receiving the ‘Priority’ ranking are expected to have the most significant impacts. The Plan also provides an overview of a wide variety of Federal, State, regional, and private funding sources geared towards active transportation projects.



SELECT PRIORITY PROJECTS:

- » Roundabout at Crossett Road / Groveland Road / NYS Route 20A / Temple Hill Street.
- » School zone improvements, including off-road pathway, crossings, and pursuit of school zone speed limit.
- » Bike lane along North Street
- » New sidewalks along NYS Route 20A and Volunteer Road
- » Connection to the Genesee Valley Greenway via Big Tree Lane

2 | INTRODUCTION



2.1 GENESEO COMMUNITY

Located in the Genesee Finger Lakes Region of New York State, Geneseo is the governmental and retail center of Livingston County. The community is comprised of the primarily rural, 45.2 square mile Town of Geneseo, and the historic 2.8 square mile Village of Geneseo, which lies within the western section of the Town. As illustrated by Figure 1: Project Area, this project's study area includes the entirety of the Village, a majority of the key roadways within the Town, and selected areas within the neighboring towns of Groveland, Leicester, and York. Overall, Geneseo's development has been significantly shaped by its location in the fertile Genesee River Valley, proximity to the City of Rochester, and rich history. The 5,000-student State University of New York at Geneseo, located one block west of the village center, also contributes greatly to the economic, social, and cultural makeup of the community.

2.2 PURPOSE OF STUDY

Defined as a 'way of traveling that requires physical activity,' active transportation provides significant personal health, environmental, and economic benefits to communities and their citizens. A growing active community within Geneseo has sparked efforts to enhance the facilities for pedestrians, joggers, cyclists, and other active transportation participants. This plan, developed by the Town and Village of Geneseo in conjunction with local stakeholders, Livingston County, and transportation officials, builds upon previous studies to make Geneseo a safer, more accessible, and connected community. Specifically, this plan examines segments of 17 roadway corridors within Geneseo, with the intention of improving connections between neighborhoods, activity centers, and other destinations, enhancing the safety and attractiveness of all active transportation facilities, and protecting the community's environmental and historical resources. The specific project area has been determined by the Project Steering Committee.

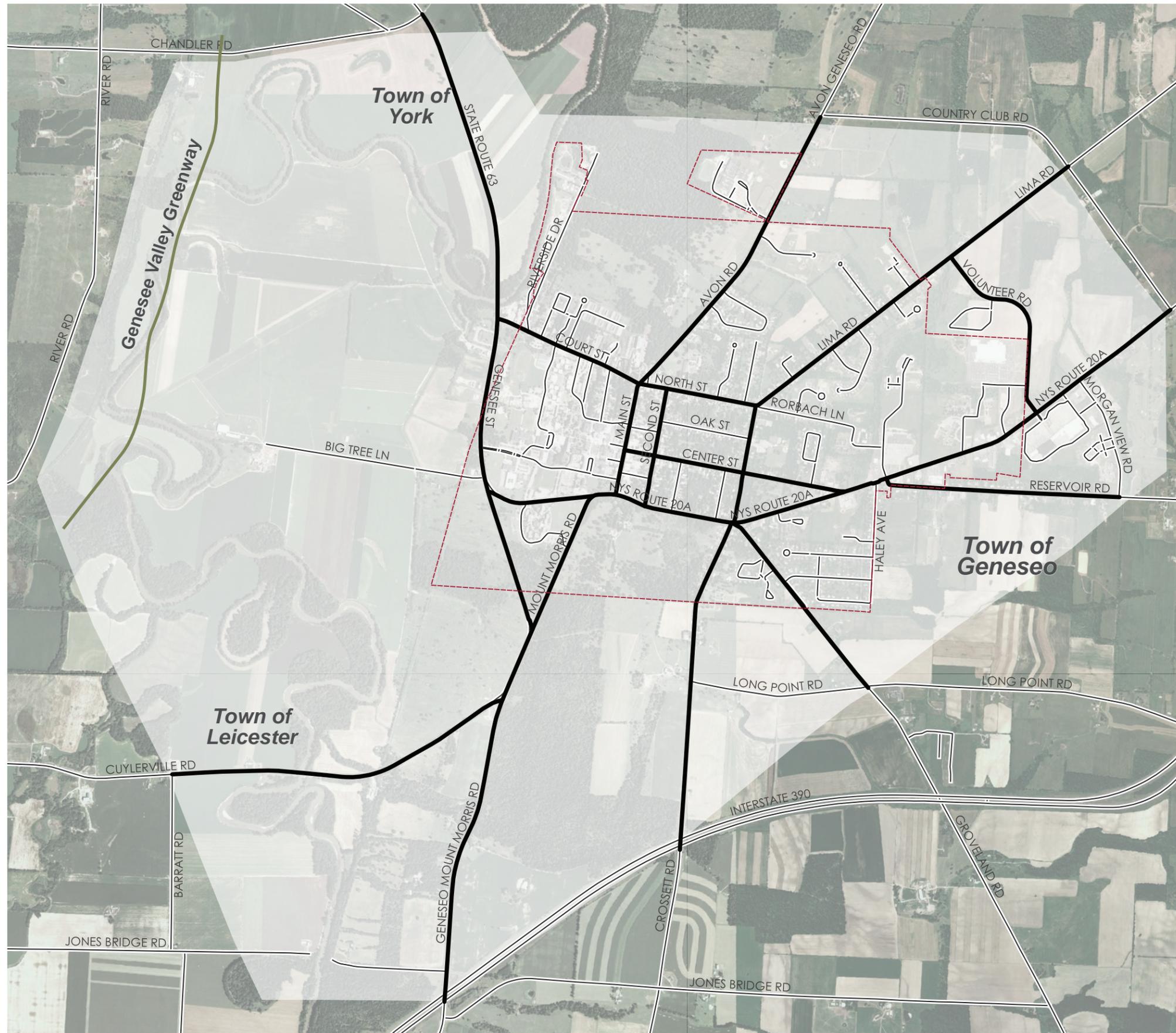


FIGURE
1 PROJECT
AREA

-  Study Network
-  Project Area
-  Municipal Boundary
-  Streams & Rivers



2.3 PREVIOUS PLANS & STUDIES

The following plans and studies have been completed within the past decade, and provide key information that informs and guides the development of this project. In addition to this section, these plans and studies are referenced throughout this document.

LIVINGSTON COUNTY TRANSPORTATION CONNECTIVITY PLAN

Compiled through a comprehensive public input process in **2012 and 2013**, the data and recommendations contained in this plan identified key issues related to active transportation in Geneseo. Specifically, the appendix to this document, known as the *Geneseo Pilot Plan*, identified gaps in active transportation infrastructure, community preferences for active transportation facilities, and opportunities for reinforcing multi-modal transportation in policies and codes. Additionally, this plan analyzed potential connections from the Village to the Genesee Valley Greenway, a major multi-use trail that connects Western New York communities from Rochester to Cuba. Key findings from the *Geneseo Pilot Plan* are referenced, further developed, and prioritized throughout this document.

ROUTE 39/NORTH STREET/COURT STREET STUDY

Focused on the key intersections and corridors within the Village of Geneseo, this **2009** plan recommended a series of treatments aimed at enhancing pedestrian and bicyclist safety and accessibility. Specific recommendations included improvements to crossing treatments, additions to the sidewalk network, traffic pattern modifications, and general streetscape improvements.

TOWN OF GENESEO MASTER PLAN

Developed in **2008**, this plan outlined several goals related to active transportation, including the creation of a 'comprehensive pedestrian and bicycle network,' particularly in the more densely-developed areas of the Town. Specific projects and areas examined in this plan included NYS Route 20A, the Volunteer Road and Lakeville Road Intersection, and future developments along Volunteer Road.

VILLAGE OF GENESEO COMPREHENSIVE PLAN

Identifying Geneseo as a community that is striving to provide an active and close-knit atmosphere, this **2007** plan identified that developing sidewalks and other pedestrian infrastructure is a key ongoing priority. Specifically, this project proposed active transportation improvements along NYS Route 20A, focusing primarily on intersection crossings and closing sidewalk gaps.

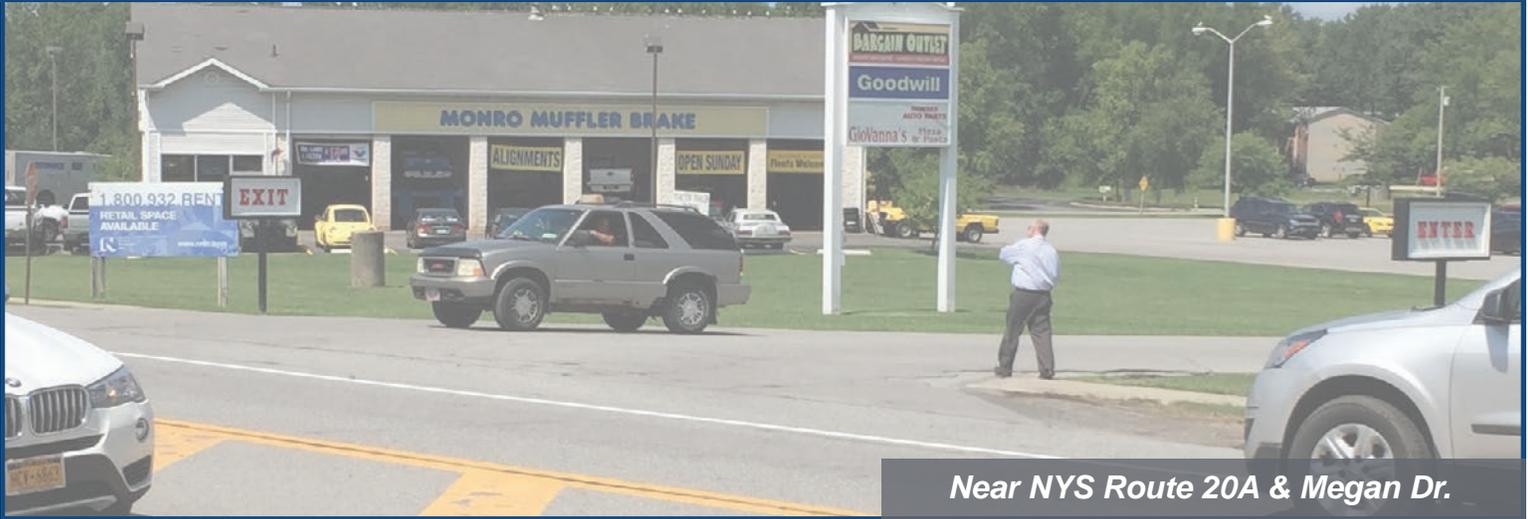
NYS ROUTE 20A ACCESS MANAGEMENT PLAN

Developed in **2007**, this plan builds upon the 2002 Access Management Plan and considers how active transportation systems integrate into the continued growth and development along NYS Route 20A. In addition to general recommendations for improving pedestrian and bicycle access on the corridor, this plan discusses several specific recommendations that are expanded upon in this plan. These potential improvements include sidewalks that bridge existing gaps, public transportation expansion along the corridor, crossing improvements at the Megan Drive / Reservoir Road intersections, and roundabout implementation at the Center Street intersection and the Groveland Road / Crossett Street / Temple Hill Street intersection.

LIVINGSTON COUNTY WAYFINDING PLAN

Currently underway, this wayfinding plan will provide recommendations to improve navigation throughout all nine of the villages in Livingston County, including the Village of Geneseo. The wayfinding and signage improvements outlined in this Active Transportation Plan will integrate with and complement the system to be developed in the Wayfinding Plan.

3 | ACTIVE TRANSPORTATION BENEFITS



Near NYS Route 20A & Megan Dr.

Encouraging active transportation greatly benefits the environmental, economic, physical, and social health of a community. This section summarizes and quantifies many of these benefits, and cites several key studies related to each benefit.

3.1 PHYSICAL & MENTAL HEALTH BENEFITS

Many studies show that access to safe trails, parks, sidewalks, and bicycle networks during both daily commutes and leisure activities can improve quality of life for all types of residents.

Rails to Trails Conservancy studies have shown that access to trails and green spaces both increases the amount of physical activity of residents and the longevity of elderly community members. Currently, 10% of Geneseo residents are over the age of 65.

The Bicycling & Walking in the United States: 2018 Benchmarking Report, published by the League of American Bicyclists, emphasizes the importance of well-designed transportation systems that provide attractive, safe places to bicycle and walk to encourage physical activity.

According to the American Community Survey, the average commute to work for Village of Geneseo residents is 16 minutes, and the average commute for Town residents is 21 minutes. In comparison to the national mean travel times of 27 minutes, these times are relatively low, suggesting that

HEALTH-RELATED FACTS



94% of workers in Geneseo do not work from home (ACS).



36% of Geneseo workers walk to work (ACS).



2% of workers in Geneseo use public transit to get to work (AreaVibes).



1/10 of Geneseo residents are 65 years of age or older

strategic inter-modal transportation improvements (combining pedestrian, bicyclist, and public transit) could encourage some commuters to choose modes of active transportation over vehicular travel.

3.2 ENVIRONMENTAL BENEFITS

By walking or biking instead of driving an automobile, citizens can have a direct impact on the reduction of pollutants. The corresponding reduction in vehicle traffic results in less emissions of greenhouse gases and other pollutants that contribute to climate change, smog, and acid rain. Additionally, this reduction in the total number of vehicles on the road minimizes traffic congestion.

A Global High Shift Cycling Scenario study estimates that if 14% of trips in urban areas were made via bicycle, nearly 11% of transportation-related carbon emissions could be reduced globally by 2050.

Rails to Trails Conservancy studies have shown that almost 850 million gallons of fuel can be saved nationally per year by active transportation alternatives to vehicles.

3.3 SOCIAL BENEFITS

Bicycling, walking, and public transportation provide opportunities for enhancing social equity, increasing community engagement, and improving safety for all residents. In particular, active transportation provides individuals, especially those who can not afford a car, with mobility and freedom to access the community in a less expensive way.

Livability Initiative, a federal policy initiative, supports active transportation to “provide more transportation options to improve access to housing, jobs, businesses, services and social activities,” which will “increase public participation and enhance coordination of transportation and housing and healthy communities.”

Active Transportation, published by the US Department of Transportation, supports projects that “enhance mixed-use neighborhoods where different destinations are within walking distance of one another.” For example, improved public transportation service can “foster new development near a stop or station that already has a variety of housing, jobs, shops, and services.”

ENVIRONMENTAL



Of all trips in the U.S. 50% are under 3 miles, and 28% are 1 mile or less. With safe active transportation facilities, many of these trips can be completed by walking or biking. It is likely that an even higher majority of trips within Geneseo are less than 3 miles.



A four-mile round trip by bicycle keeps about 15 pounds of pollutants out of the air we breathe.

SOCIAL



Transportation equity provides mobility for the 1/3 of the people in the US who do not have cars, increasing access to jobs, health care, and education (APTA).



Bicycling opportunities are significantly associated with community’s livability - attracting businesses, workers, and tourism.

3.4 ECONOMIC BENEFITS

Studies have shown the number of people walking and bicycling is a key indicator of a community's livability - a factor that has a profound impact on attracting new residents, businesses, workers, and tourists, who all contribute towards the local economy. Enhancing multimodal facilities also provides a means of affordable transportation to jobs and businesses, further stimulating the economy.

University of Delaware Institute for Public Administration found that "economically, a town or city can benefit from having a more walkable environment. The presence of sidewalks and other walking facilities is shown to increase property values and promote tourism. Sidewalks and connected, well-maintained pedestrian networks allow citizens the ability to safely and conveniently patronize local shops, businesses, and restaurants."

Political Economy Research Institute states that improvement projects for greenways, sidewalks, and bikeways created 17 jobs per \$1 million spent. Almost 45% of the total population of the Town of Geneseo is in the workforce over the age of 16 years (ACS).

APTA studies have shown every dollar invested in public transportation can generate \$4 in local economic returns. By encouraging active transportation, local economies keep shoppers centrally located, developing a direct relationship with local businesses and services, resulting in increased community reinvestment.

AreaVibes uses a unique algorithm to objectively evaluate the quality of life in a community based on various factors using Census data, National statistics, and National Report information. <https://www.areavibes.com/>

The American Public Transportation Association is a nonprofit international organization advocating for funding, research, expertise, workforce development, and education for all modes of public transportation. <http://apta.com/>

CYCED is a cycling blog based in the United Kingdom for everyday runners, cyclists, and other physically active members of the community. <http://Cyced.co.uk/>

ECONOMIC



On average, switching from driving to cycling saves \$1.42/mile (APTA).



Geneseo workers spend around 16 to 21 minutes per day commuting to work, a significantly low number compared to the national average of 52.2 minutes. These shorter trips are more suitable to modes of active transportation.



If the average commute at a 30mph driving speed was about 8 miles, a person could save \$11.36 one way, or \$113.60 total for an average 5 day week by bicycling to work.

4 | COMMUNITY INPUT



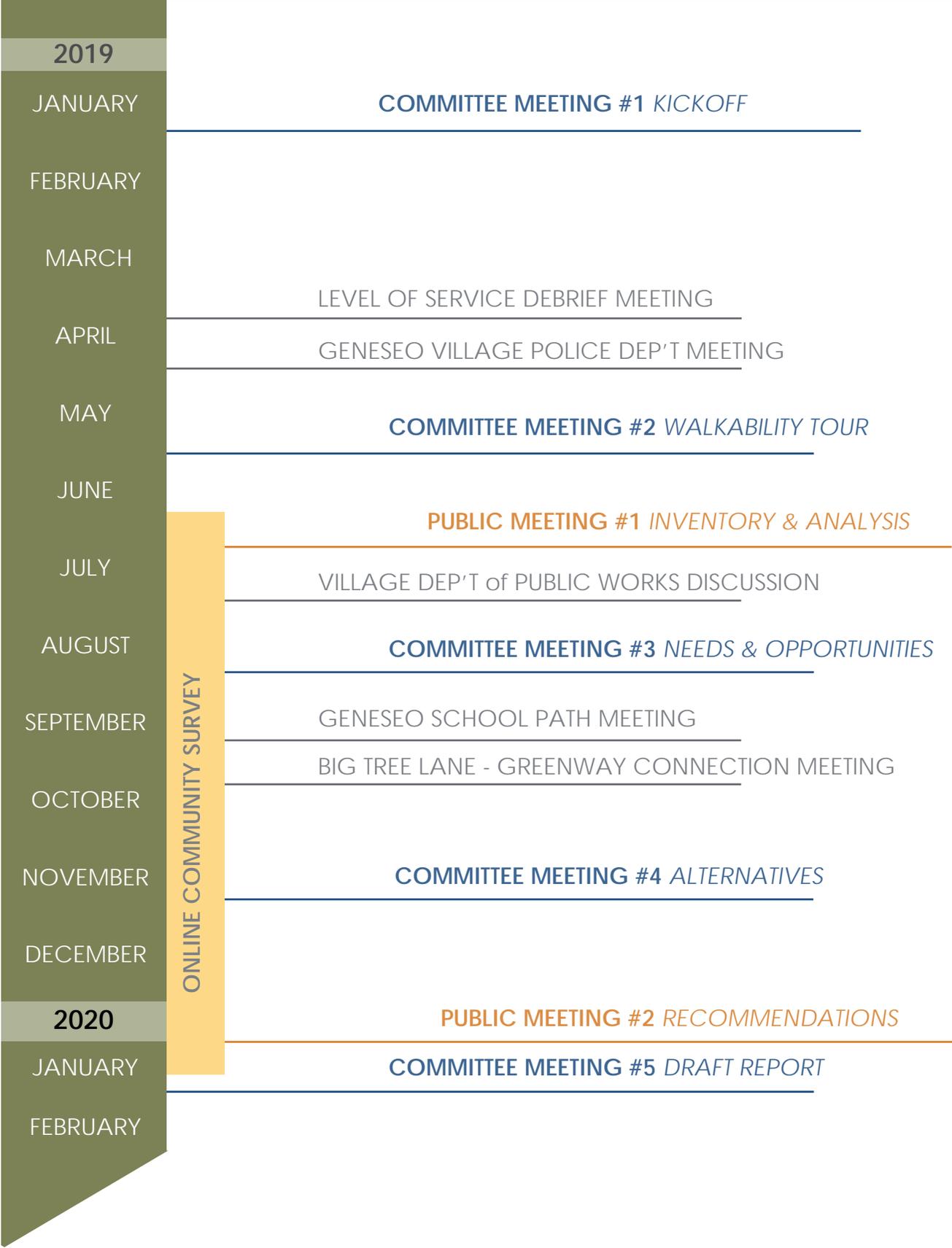
Public Meeting #1 at the Village Park

This chapter summarizes the community input that has guided the development of this Active Transportation Plan. The graphic on the next page outlines the opportunities for public and stakeholder engagement, which have included five Project Steering Committee meetings, two Public Open Houses, numerous stakeholder meetings and a community survey.

4.1 PROJECT STEERING COMMITTEE

Planning for public participation has been guided by the New York State community planning principles, which envision planning as a continuous, comprehensive, engaging, and coordinated effort. For this project, Steering Committee participants have included key representatives from state, regional, and local organizations; please refer to the following page for a full list of participants, and **Appendix C** for a summary of all Project Steering Committee meetings.

OVERVIEW OF COMMUNITY INPUT



ONLINE COMMUNITY SURVEY

PROJECT STEERING COMMITTEE MEMBERS

Beardsley, Lisa	Livingston County Health Department
Clyke, Curt	Association for the Preservation of Geneseo (APOG)
Croteau, DeAnna	Livingston County Cornell Cooperative Extension
Crowe, Megan	Livingston County Planning
DeZarn, Dan	SUNY Geneseo
Duff, Margaret	Mayor, Village of Geneseo
Flowers, Cindy	Superintendent, Geneseo Central School District
Freeman, Bo	Cornell Cooperative Extension
Gajewski, Ben	Genesee Valley Conservancy
Grove, Mark	Livingston County Department of Health
Johnson, Jaime	Livingston County Cornell Cooperative Extension
Johnson, Pattie	Traffic Safety Board
Leon, Lora	New York State Department of Transportation (NYSDOT)
Oliver, Yvonne	Public Health Educator of the Livingston County Department of Health
Rutigliano, Mary	Village of Geneseo Deputy Mayor
Sanders, Katelyn	Cornell Cooperative Extension
Wadsworth, Louise	Livingston County Downtown Partnership
Wadsworth, Will	Town of Geneseo Supervisor
Williams, Robert	Genesee Transportation Council
Woods, David	Village of Geneseo & Town of Geneseo Planning Board

4.2 PUBLIC MEETING #1

Public Meeting #1 was held in July 2019 in a ‘pop-up’ format at the Geneseo Summer Rotary Festival. Project staff displayed interactive boards with information on existing active transportation-related facilities and use patterns in Geneseo, and asked community members for input on desired active transportation-related improvements. For more information about this meeting, please refer to **Appendix A: Public Meeting #1**.

4.3 PUBLIC MEETING #2

Public Meeting #2 was held in January 2020 at the Geneseo School District cafeteria. Approximately seventy community members attended the meeting, which was held in an informal manner with interactive preference boards set up throughout the room. Attendees provided feedback on draft recommendations through placing stickers on boards, writing on comment cards, and conversations with project staff. For more information about this meeting, please refer to **Appendix B: Public Meeting #2**.

4.4 ADDITIONAL OUTREACH

Further outreach was made to stakeholder groups in the Village and Town, including SUNY Geneseo and its cross-country team, the National Warplane Museum, the Geneseo Police Department, the Village of Geneseo Department of Public Works, Genesee Valley Greenway State Park staff, Geneseo Central Schools staff, members of the Genesee Valley Conservancy, and private property owners. For additional information on these meetings, please refer to **Appendix C: Stakeholder Meetings Summary**. A project webpage on the Livingston County website has also been routinely updated throughout the project to provide additional information to the community.

4.5 COMMUNITY SURVEY

To gather additional information for this plan, a 29-question community active transportation preference survey was available from June 26th, 2019 through January 9th, 2020. Throughout this period of time, a link to the survey was posted on the Livingston County website and was also sent out to community members via digital communication. The text and visuals below provide a summary of key takeaways from the survey; for a detailed summary, please refer to **Appendix D: Community Survey Summary**.

DEMOGRAPHICS OF RESPONDENTS

Total Number: **285**

Residency:

Village of Geneseo: **48%**
 Town of Geneseo: **17%**
 Livingston County: **18%**
 Elsewhere: **17%**

Age:

19-29: **31%**
 30-49: **25%**
 50-64: **19%**
 65-80: **24%**
 80+: **1%**

Gender:

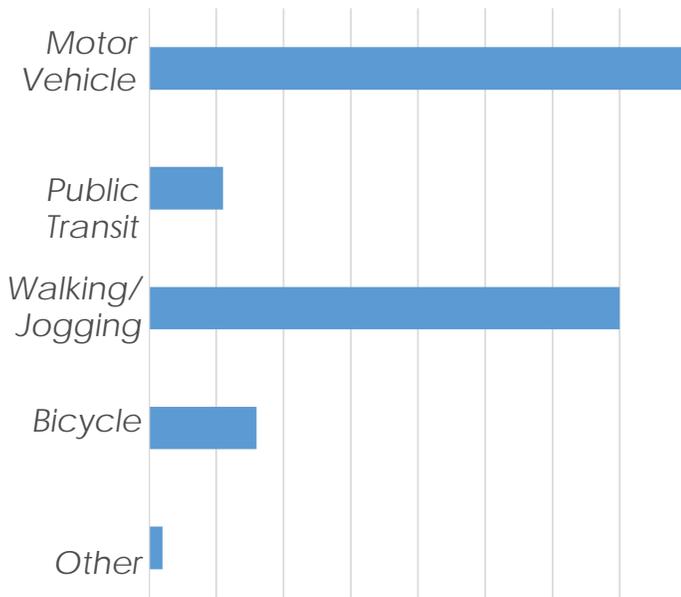
Male: **35%**
 Female: **63%**
 Prefer Not To Answer: **1%**

Average per Household:

Bicycles: **1.6**
 Vehicles: **2.1**
 Adults: **2.0**
 Children: **.5**
 Seniors: **.6**

CURRENT USE TRENDS

Typical Modes of Transit (Can be Multiple)



Most Popular Community Destinations

- Wegmans
- Walmart
- Downtown
- SUNY Geneseo
- Parks

Accessed By Walking:

- SUNY Geneseo
- Downtown
- Parks

Accessed by Bicycle

- Parks
- SUNY Geneseo
- Downtown
- Genesee Valley Greenway

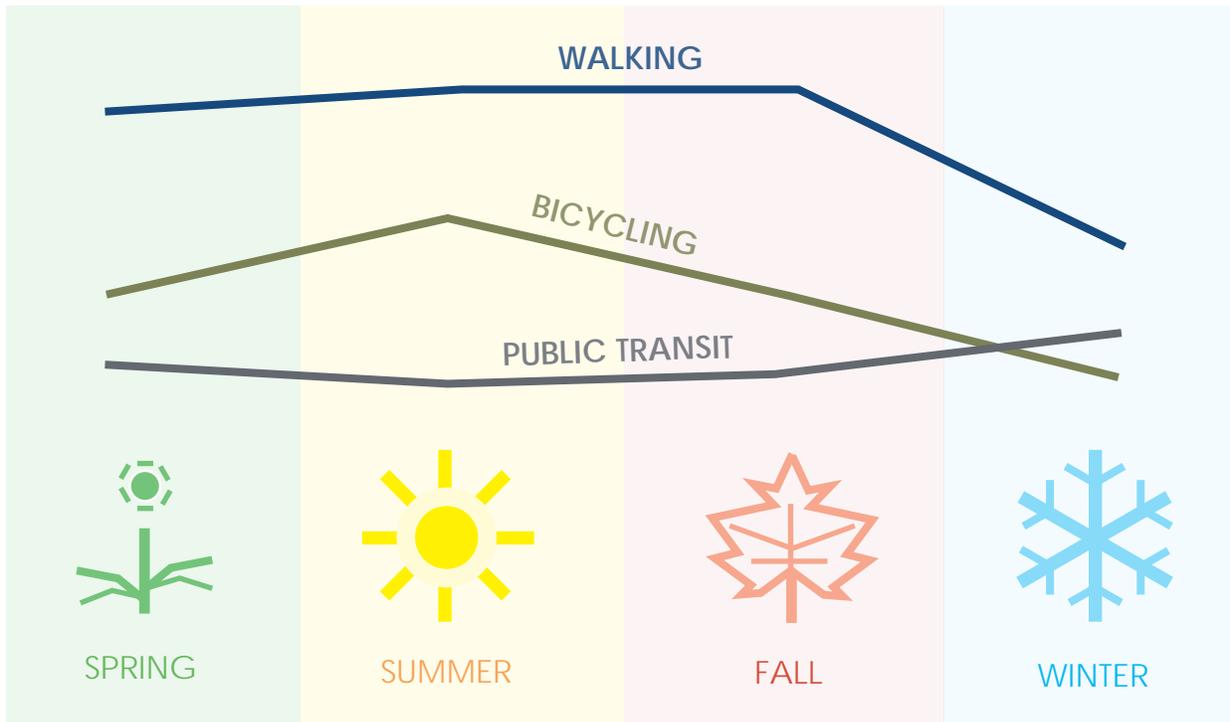
Accessed by Public Transit

- Walmart
- Wegmans

Accessed By Driving:

- Wegmans
- Walmart
- Downtown

REPORTED AMOUNTS OF ACTIVE TRANSPORTATION BY SEASON



	REASONS FOR USING PUBLIC TRANSIT	BARRIERS TO USING PUBLIC TRANSIT	FACTORS THAT WOULD INCREASE USE OF PUBLIC TRANSIT
<p>MORE ↑</p> <p>↑ SIGNIFICANT</p>	<ul style="list-style-type: none"> • Going to/from Work • Going to/from College • Going to/from Shopping 	<ul style="list-style-type: none"> • Lack of Awareness • Lack of Frequency • Lack of Reliability • Lack of Convenience 	<ul style="list-style-type: none"> • Knowledge of Routes • Improved Wayfinding • Availability of All-Weather Protected Stops
<p>↓</p> <p>LESS</p>	<ul style="list-style-type: none"> • Accessing Parks & Trails • Going to/from Events 	<ul style="list-style-type: none"> • Lack of All-Weather Accommodations • Lack of Bus Stop Seating • Lack of Winter Maintenance • Lack of ADA Accessibility • Lack of Lighting 	<ul style="list-style-type: none"> • Improved Sidewalks • Fully Enclosed Transit Stops • Improved ADA Accessibility • Availability of Bike Racks

<p>MORE ↑</p> <p>↑</p> <p>SIGNIFICANT</p> <p>↓</p> <p>LESS</p>	<p>REASONS FOR BICYCLING</p> <ul style="list-style-type: none"> • Exercise • Going to/from College • Leisure 	<p>BARRIERS TO BICYCLING</p> <ul style="list-style-type: none"> • Winter Weather • Winter Maintenance • Safety • Lack of Shoulders 	<p>FACTORS THAT WOULD INCREASE AMOUNT OF BICYCLING</p> <ul style="list-style-type: none"> • Shared Use Paths • On-Street Bike Lanes • Shared Use Roadway
	<ul style="list-style-type: none"> • Going to/from Work • Going Shopping 	<ul style="list-style-type: none"> • Lack of Trail Connections • Lack of lighting • Lack of bike parking • Personal security 	<ul style="list-style-type: none"> • Bike Boulevards • Signed Routes
	<ul style="list-style-type: none"> • Attending a Social Event • Going to Geneseo Central School 	<ul style="list-style-type: none"> • Travel flexibility • Lack of travel time • Lack of access to bike • Lack of bike share 	<ul style="list-style-type: none"> • Cycle Track • Bike Share • Bike Parking

<p>MORE ↑</p> <p>↑</p> <p>SIGNIFICANT</p> <p>↓</p> <p>LESS</p>	<p>REASONS FOR WALKING</p> <ul style="list-style-type: none"> • Exercise • Going to/from College • Leisure 	<p>BARRIERS TO WALKING</p> <ul style="list-style-type: none"> • Winter Weather • Winter Maintenance • Lack of sidewalk connectivity • Travel Time 	<p>FACTORS THAT WOULD INCREASE AMOUNT OF WALKING</p> <ul style="list-style-type: none"> • Sidewalks • Shared Use Paths
	<ul style="list-style-type: none"> • Going to/from Work • Attending a Social Event 	<ul style="list-style-type: none"> • Safety Concerns • Lack of Trail Connections • Lack of Pedestrian Lighting 	<ul style="list-style-type: none"> • Shared Use Trails • Pedestrian Signals • Shared Use Roadways
	<ul style="list-style-type: none"> • Accessing Parks & Trails • Going Shopping 	<ul style="list-style-type: none"> • Travel flexibility • Personal Security • ADA Accessibility 	



Images from Public Meeting #1



5 | INVENTORY & ANALYSIS



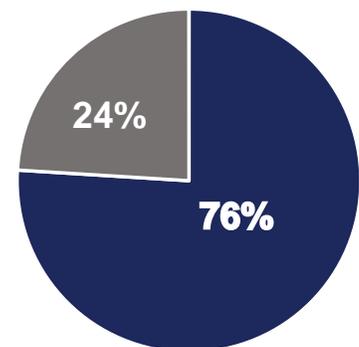
5.1 COMMUNITY CHARACTER

The project study area was determined by the Project Steering Committee, and is centered around the Village of Geneseo, extending to portions of the Town of Geneseo, the Town of Groveland to the south, and the Towns of Leicester and York to the west. All of these municipalities are located in Livingston County, New York.

Roughly 16% of Livingston County residents live in Geneseo, and the Village is recognized as the County seat. In 2017, the American Community Survey (ACS) estimated the total population of Geneseo to be 10,691 residents, a slight increase from population stated in the 2010 Census. Of those residents, 76% live in the Village, and 35% of Village residents are students at SUNY Geneseo (2017 ACS; 2010 Census). In general, the Village is comprised of higher-density, walkable neighborhoods, with a prominent downtown Main Street corridor, while the Town contains lower-density residential housing and agricultural land.

Data collected from the 2017 ACS also highlights the importance of creating safe, accessible routes for active transportation users. For instance, of the 3,161 total households in the Town and Village of Geneseo, 16% do not have access to a vehicle, and 33% only possess one vehicle. Furthermore, an estimated 24% of Geneseo

2018 Census Population Data
RESIDENT CONCENTRATION
IN GENESEO



■ Village of Geneseo
■ Town of Geneseo

residents currently walk to work. The 12% of families in Geneseo whose incomes are below the Federal Poverty Line are also more likely to rely on active and/or public transportation to access both work and retail.

SUNY Geneseo influences population fluctuations throughout the year, and contributes to the community's notably low median age of 21.8 years old. The college covers a total of 220 acres, about 1% of the total area coverage of the Town of Geneseo, but hosts about 53% of the total population of the Town of Geneseo. A large number of students walk or bike to classes, including those who live off-campus on nearby roads, including Center Street, Main Street, Court Street, and North Street. The college's cross-country and track and field athletes also frequently run along many of the roads and off-road paths within this project study network, including Avon Road, NYS Route 63, NYS Route 20A, and the Genesee Valley Greenway.

5.2 DESTINATIONS, PARKS, HISTORIC, & NATURAL SITES

Geneseo is a popular destination within Livingston County for its businesses, historic sites, and natural and scenic resources, many of which are detailed in **Figure 2: Destinations**. Local businesses are centered around the downtown-Main Street area, while commercial retail along NYS Route 20A includes national and regional retailers such as Walmart and Wegmans. Ongoing plans for mixed-use development on the northeast corner of the Volunteer Road / NYS Route 20A intersection are expected to further increase pedestrian, bicycle, and vehicular demand along this corridor by creating a new destination.

Geneseo's rich heritage is highlighted at several historical sites, including the Wadsworth Homestead, a wedding and events venue that has an entrance located south of the NYS Route 20A / Main Street intersection, and the National Warplane Museum, which is located just west of the village on Big Tree Lane. There are an abundance of trails, parks, and natural areas in and around Geneseo, with several near the Genesee River; in particular, the Genesee Valley Greenway, a multi-use path along the old Genesee Valley Railway line that provides access from Cuba, NY, to Rochester, NY, runs along the western edge of the River. The following destinations are located within the project area:

SERVICE & SHOPPING CENTERS

- Mixed Use on NYS Route 20A
- University of Rochester Medical
- Walmart Plaza
- Genesee Valley Shopping Center Plaza
- Byrne Dairy

EDUCATIONAL DESTINATIONS

- Wadsworth Library
- Geneseo Central School District
- SUNY Geneseo
- Geneseo Christian School

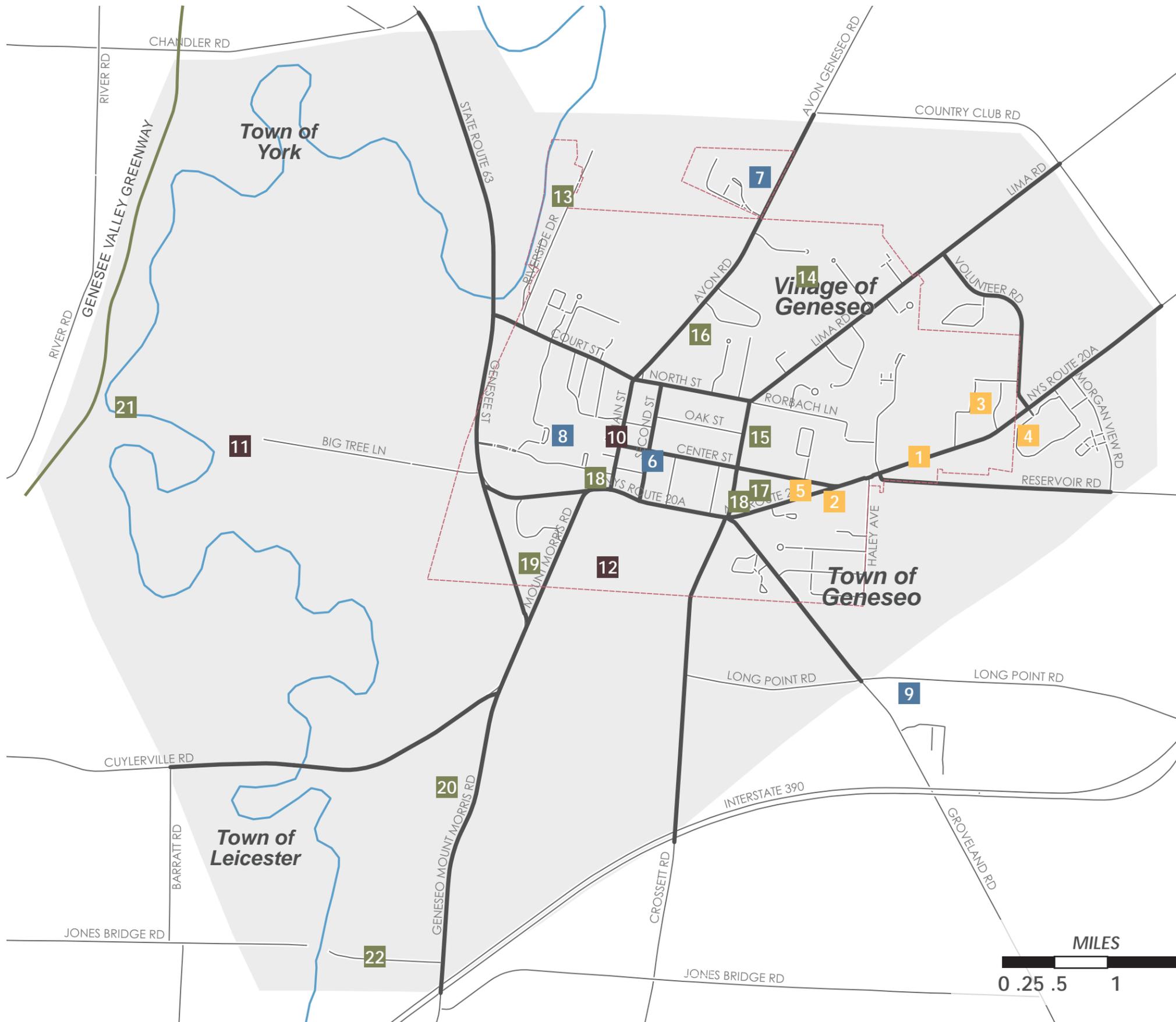
HISTORIC SITES

- Main Street Historic District/Downtown
- National Warplane Museum
- Wadsworth Homestead

PARKS & NATURAL SITES

- Genesee River Park
- Genesee Valley Conservancy Island Preserve
- Highland Park
- Kelsey Field
- Temple Hill Cemetery
- Village Park
- Roemer Arboretum
- Fall Brook Gorge
- Genesee River
- Indian Fort Nature Preserve

FIGURE 2
COMMUNITY DESTINATIONS



SERVICE & RETAIL

- 1 Retail on US-Route 20A
- 2 Medical Center
- 3 Walmart Plaza
- 4 Genesee Valley Shopping
- 5 Byrne Dairy

EDUCATIONAL

- 6 Wadsworth Library
- 7 Geneseo CSD
- 8 SUNY Geneseo
- 9 Genesee Christian School

HISTORIC SITES

- 10 Main Street Historic District
- 11 National Warplane Museum
- 12 Wadsworth Homestead

PARKS & NATURE

- 13 Genesee River Park
- 14 GVC Island Preserve
- 15 Highland Park
- 16 Kelsey Field
- 17 Temple Hill Cemetery
- 18 Village Parks
- 19 Roemer Arboretum
- 20 Fall Brook Gorge
- 21 Genesee River
- 22 Indian Fort Preserve

5.3 TRANSPORTATION NETWORK

ROADWAY CLASSIFICATION

As illustrated by **Figure 3: Roadway Classification**, the majority of the studied roadways are Minor Arterials or Major Collectors. Route 63, which includes portions of Mount Morris Road and Genesee Street, is the only Principal Arterial; the southern portion of Crossett Road is the only Minor Collector; Volunteer Road is the only local roadway studied in this project. The types of facilities and recommended cross-sections along a roadway are typically determined by roadway classification.

ROADWAY JURISDICTION

The Village of Geneseo functions as a crossroads accessed by Village, Town, County, and New York State Department of Transportation (NYSDOT) roadways. As illustrated by **Figure 4: Roadway Jurisdictions**, State highways include Route 63, NYS Route 20A, and Mary Jemison Drive. The only County highway within the project area is Groveland Road, outside the Village. The jurisdiction of each roadway informs the types of recommendations applicable to it.

PUBLIC TRANSPORTATION

Public transportation provides access to key destinations and promotes additional pedestrian and bicycle activity, as most users must bike or walk to bus stops. Regional Transit Service (RTS) Livingston provides public transit in the project area for both residents, who must pay a regular fare, and SUNY Geneseo students, who have access to specified routes through their tuition. Please refer to **Figure 5: Public Transportation** for additional information about specific RTS Livingston routes and stops.

RELEVANT CONSTRUCTION PROJECTS

At the north-west edge of this project boundary, NYSDOT is replacing the existing State Route 63 bridge across the Genesee River and installing a roundabout at the adjacent intersection with Court Street. The project is underway in 2019, and the new roadway alignment is expected to reduce vehicular speeds and the severity of crashes at the intersection. The bridge, which will be north of the roundabout, will not provide delineated space for bicycling or walking, though it will leave room for a shared use pathway that could be built below the bridge post-construction.

ROAD STRIPING & MAINTENANCE

Crosswalk, edge, and center line striping can contribute to active transportation safety by providing delineated space for pedestrians and cyclists. According to the Village of Geneseo Department of Public Works, all center line striping and crosswalk markings in the Village are repainted on an annual basis. However, the Village does not currently paint edge striping along any roadways. Edge striping, center line striping, and crosswalk markings in the Town of Geneseo are also repainted on a regularly scheduled basis. The Town of Geneseo Highway Department and the Village of Geneseo Department of Public Works maintain local roadways.

TRAFFIC CONDITIONS

Within the project study network, NYS Route 20A has the most vehicular traffic, with an average of over 17,000 vehicles per day. Other project roadways that have over 4,000 vehicles per day include Main Street, North Street, Court Street, and NYS Route 63, which sees a significant amount of heavy truck traffic. The remainder of project roadways have lower traffic volumes, with less than 4,000 vehicles per day. Please refer to **Figure 6: Vehicular Traffic & Speeds** for more information on traffic volumes.

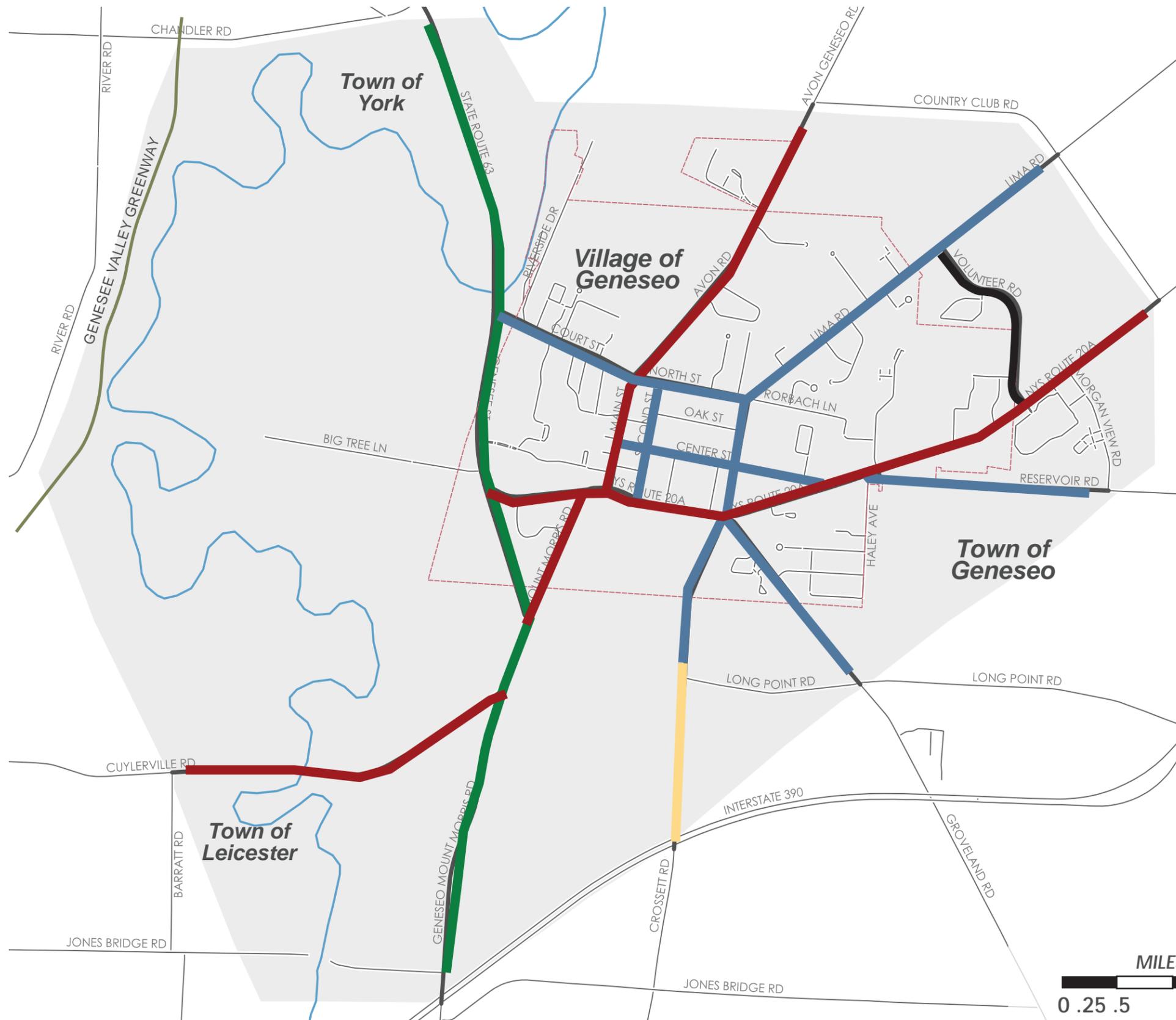


FIGURE 3 ROADWAY CLASSIFICATION

- █ Principal Arterial
- █ Minor Arterial
- █ Major Collector
- █ Minor Collector
- █ Local Roadway

*only roadways within the study network are classified on this map

Principal Arterial	Routes designated as interstate highways
Minor Arterial	Routes that provide interstate and intercounty service between cities and larger towns
Major Collector	Routes that provide connections between key destinations within a county
Minor Collector	Routes that collect traffic from local roads and provide linkages to more trafficked roadways
Local Roads	Routes that provide access to adjacent land over short distances

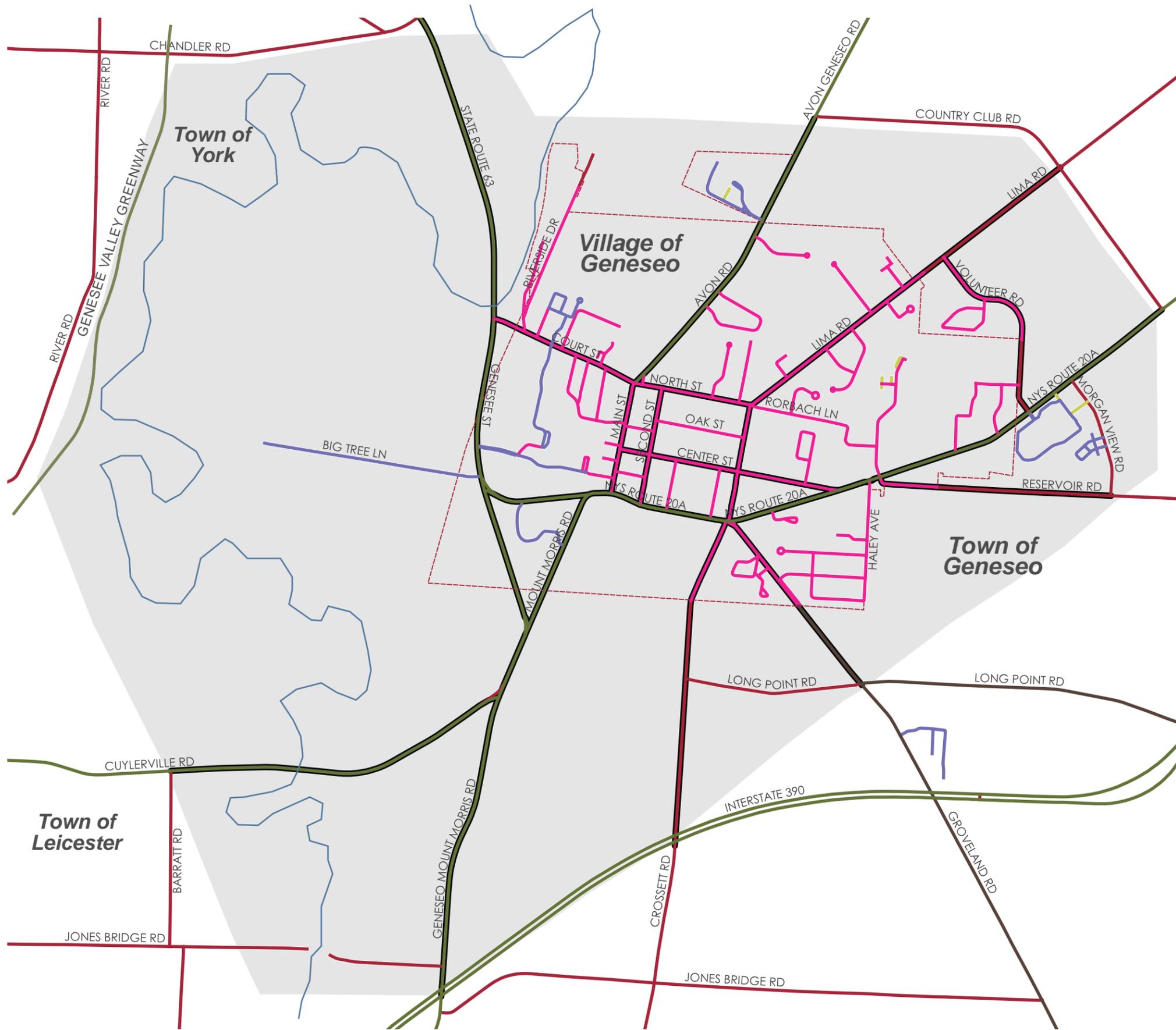


FIGURE 4 ROADWAY JURISDICTIONS

- Study Network
 - Project Area
 - - - Municipal Boundary
- Street Jurisdictions
- State
 - County
 - Town
 - Other
 - Village
 - Private



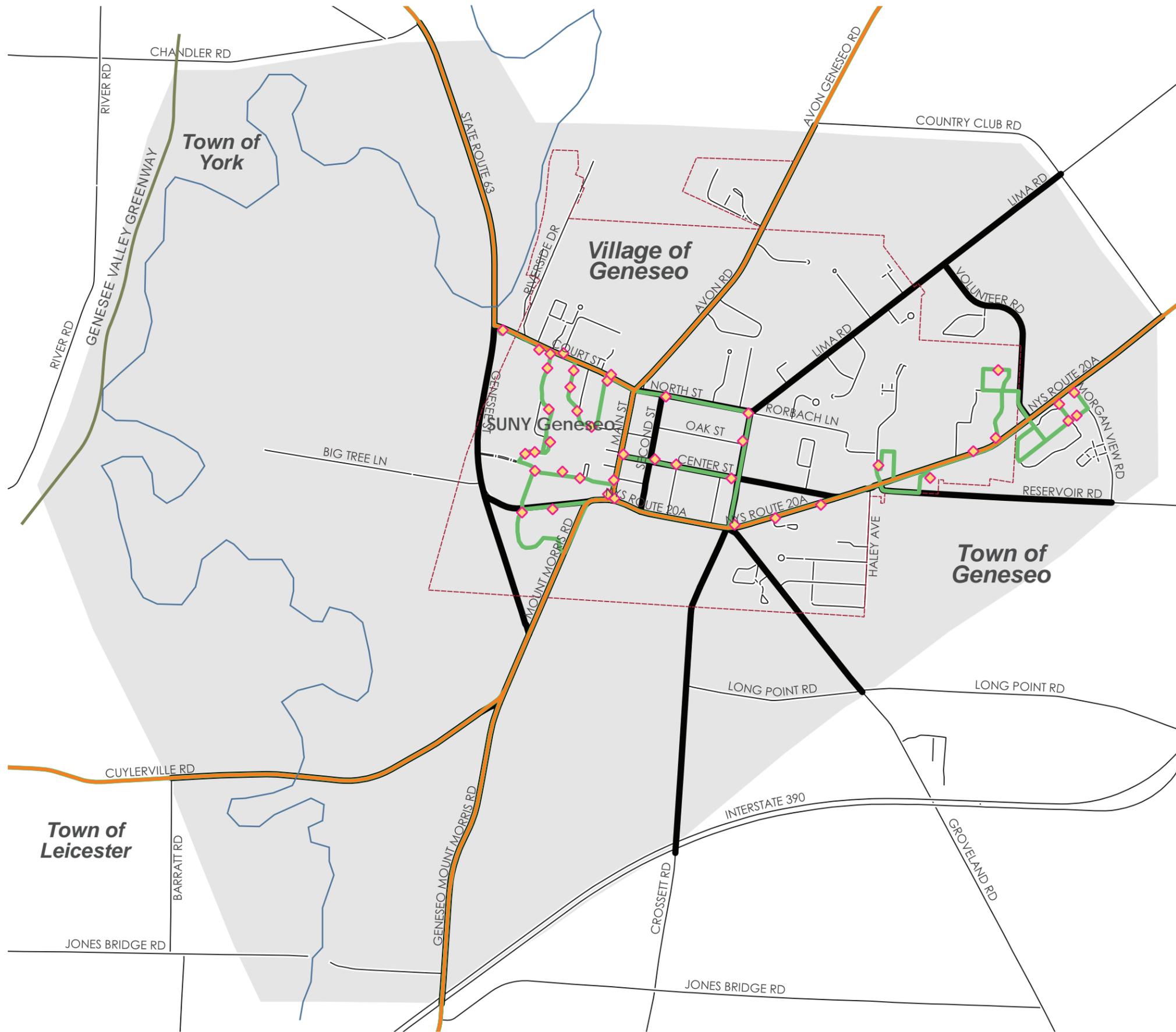


FIGURE 5 PUBLIC TRANSIT

- Study Network
- ◆ RTS Bus Stops
- SUNY Geneseo RTS Route
- Regional RTS Routes



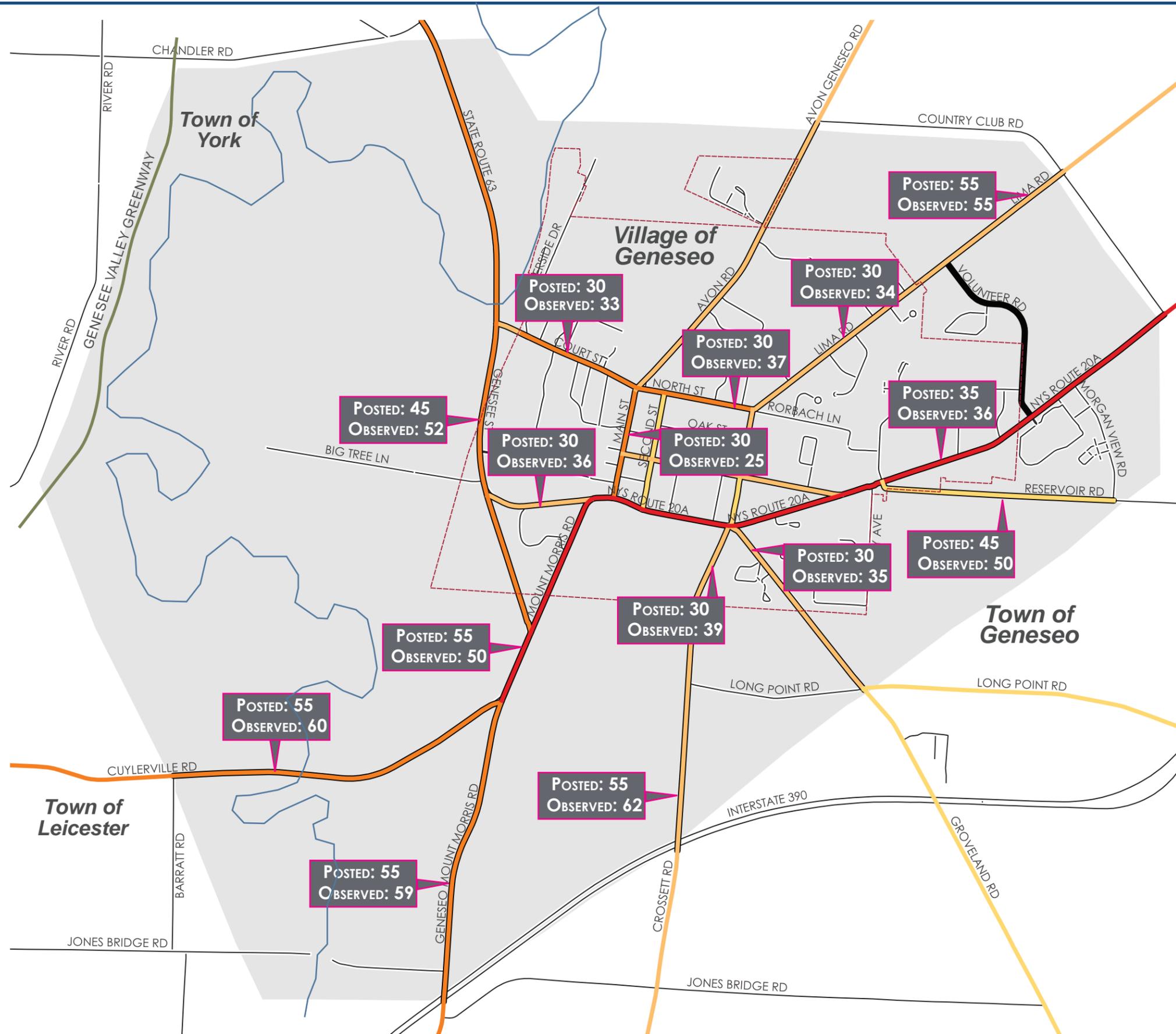


FIGURE 6 **VEHICULAR TRAFFIC & SPEEDS**

— Study Network

Daily Traffic Counts

- 1-1,500
- 1,501-4000
- 4,001-10,000
- 10,001-25,000
- 25,001-75,000

Speed Data

POSTED SPEED
OBSERVED SPEED

*Data sourced from NYSDOT Roadway Speed Count Average Weekday reports from 2014-2016. "OBSERVED SPEEDS" listed are the 85th percentile speeds, in miles per hour, that were measured by NYSDOT at each location. 85th percentile refers to the speed at which 85% of vehicles are traveling at or below.



5.4 SAFETY EVALUATION

POSTED AND ACTUAL SPEEDS

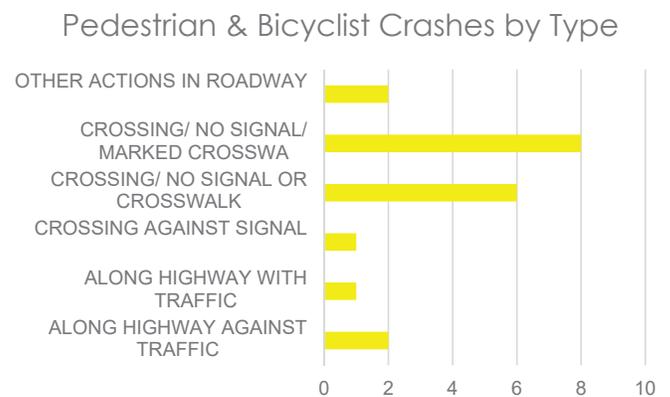
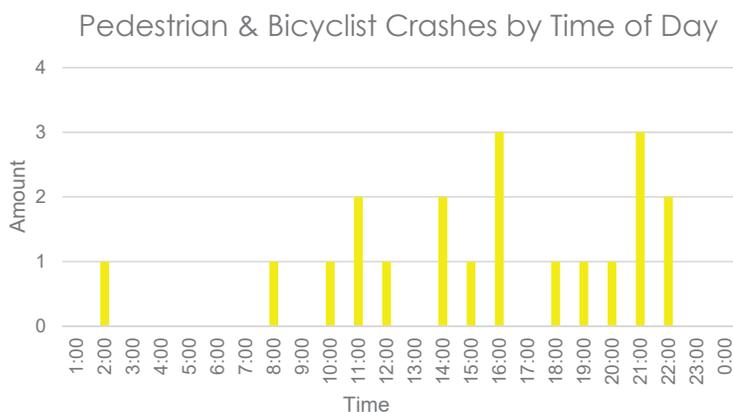
High vehicular speeds affect the perception of comfort and create safety concerns for active transportation modes, as pedestrians and bicyclists have reduced time to respond to vehicles and are more susceptible to serious accidents. The posted speed within the Village of Geneseo is 30 mph, while posted speeds in the Town range from 35 to 55 mph. The *Geneseo Pilot Plan* identified concerns with both lower selected speed limits and vehicles traveling far in excess of the posted speed limits.

This perception is largely supported by speed data from the NYS Department of Transportation (NYSDOT) gathered between 2009 and 2017. NYSDOT uses '85th Percentile' speeds - the speed at which 85% of drivers are at or below - to determine appropriateness of speed limits; these speeds are detailed on **Figure 6: Vehicular Traffic & Speeds**. Throughout the project area, many speeds are at or above 5 MPH over the speed limit, with sections of Crossett Road, Route 63, and North Street experiencing particularly high relative speeds. Within the project area, Main Street is the only corridor with a lower driven speed than posted speed, potentially due to pedestrian crossings and high amounts of parking.

CRASH ANALYSIS

A safety evaluation was conducted in the study area using ten years of collision history from the Genesee Transportation Council from the Accident Location Information System Data (ALIS). This data was supplemented by inventory and analysis from the *Geneseo Pilot Plan*. As illustrated by **Figure 7: Crash Analysis**, there have been a total of twelve reported pedestrian incidents and 8 bicyclist incidents in the project area during the past ten-year period.

Pedestrian-related crashes have been clustered along NYS Route 20A, Court Street, Main Street, and at the Groveland/Crossett/Temple Hill/NYS Route 20A intersection, while bicycle-related crashes have occurred throughout the Village. As illustrated below, a majority of active transportation-related crashes have occurred in the early afternoon and evening, and most frequently during the months of February and April.



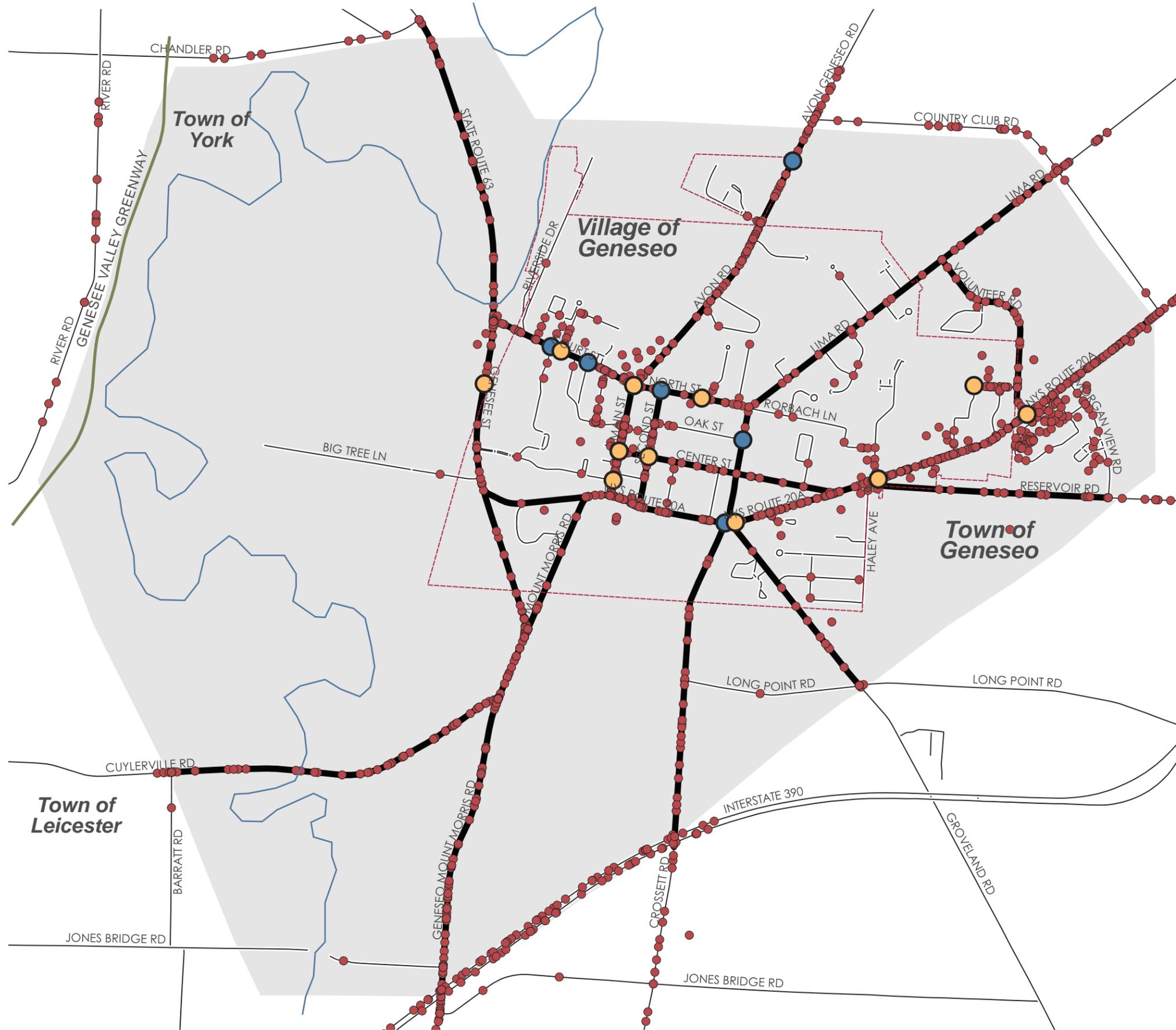


FIGURE 7 **CRASH ANALYSIS**

- Study Network
- All Crashes (2009-2018)
- Collisions with Pedestrians
- Collisions with Bicyclists

	454 CRASHES W/ DEER OR ANIMAL		93 CRASHES W/ CULVERT OR EARTH
	1284 CRASHES W/ VEHICLE		8 CRASHES W/ BICYCLIST
	30 CRASHES W/ TREE OR OTHER		12 CRASHES W/ PEDESTRIAN



5.5 PEDESTRIAN & BICYCLE NETWORKS

The frequent presence of sidewalks throughout the Village provide protected accommodations for pedestrian travel. However, sidewalk, crosswalk, and shoulder gaps within the project area, especially on the southern side of NYS Route 20A, create unsafe areas where pedestrians are forced to walk without sufficient protection from vehicular traffic. Please refer to **Figure 8: Existing Sidewalks** for additional information about pedestrian infrastructure.

There are currently no designated on-road bicycle facilities within the project study network, though community outreach and data collection indicated that cyclists often utilize many of the project roadways, including Avon Road, Lima Road, and Main Street. Additional information about on-road bicycle and pedestrian facilities are discussed in the following section, 5.6: *Data Collection & Analysis*.

OFF-ROAD TRAILS

There are 4.9 miles of established off-road trails within the project area, as discussed in the *Geneseo Pilot Plan*. Each of these trails is detailed below. This section also discusses future plans that seek to connect to the Genesee Valley Greenway. See **Figure 9: Existing Trails** for trail locations.

Spencer J. Roemer Arboretum Trail

Connecting NYS Route 39 and NYS Route 63, the Spencer J. Roemer Arboretum Trail is located on the south end of the SUNY Geneseo campus near Parking Lot J. The outer loop of the trail is 0.59 miles, and the inner loop is 0.44 miles, for a total length of 0.8 miles. The trail is cleared through a forest, weaving through two ravines, with nine benches for seating and one pavilion area for rest, and is primarily a dirt pathway.

Genesee Valley Conservancy Trails

With entrances at Avon Road and Lima Road, the John W. Chanler Island Preserve Trail (1.3 miles) is in the Village of Geneseo. Located with an entrance at 3432 Jones Bridge Road, Indian Fort Nature Preserve Research Preserve Trail (2.0 miles) is located in the Town of Geneseo. . These trails are owned and maintained by the Conservancy. Both trails are cleared for hikers, but bicyclists are prohibited.

Municipal Trail

The Highland Park Trail is a 0.8 mile loop around the park in the Village of Geneseo. The gravel pathway can be accessed at 23 Highland Road, and also includes a fitness trail and equipment.

Genesee Valley Greenway

Located on the western edge of this project area, the Genesee Valley Greenway is a multi-use pathway that extends from Cuba, NY, to Rochester, NY. However, due to the Greenway's location to the west of the Genesee River, Geneseo residents must drive, bike, or walk along high-volume state roadways to access the Greenway. To improve accessibility to the Greenway, the *Geneseo Pilot Plan* identified five potential connections, including via Big Tree Lane, Route 63 Bridge, Village of Geneseo River Access Park, and Jones Road/Indian Fort Nature Preserve. These connections are analyzed in the ***Needs & Opportunities*** chapter of this document.

Geneseo Central School District Informal Path

There is currently an informal grass path along the western side of Avon Road on private property that connects to the Geneseo Central School district. For this project, pedestrian use of this path was analyzed using Eco-Counter data; please refer **Figure 12: Eco-Counter Data** for additional detail.

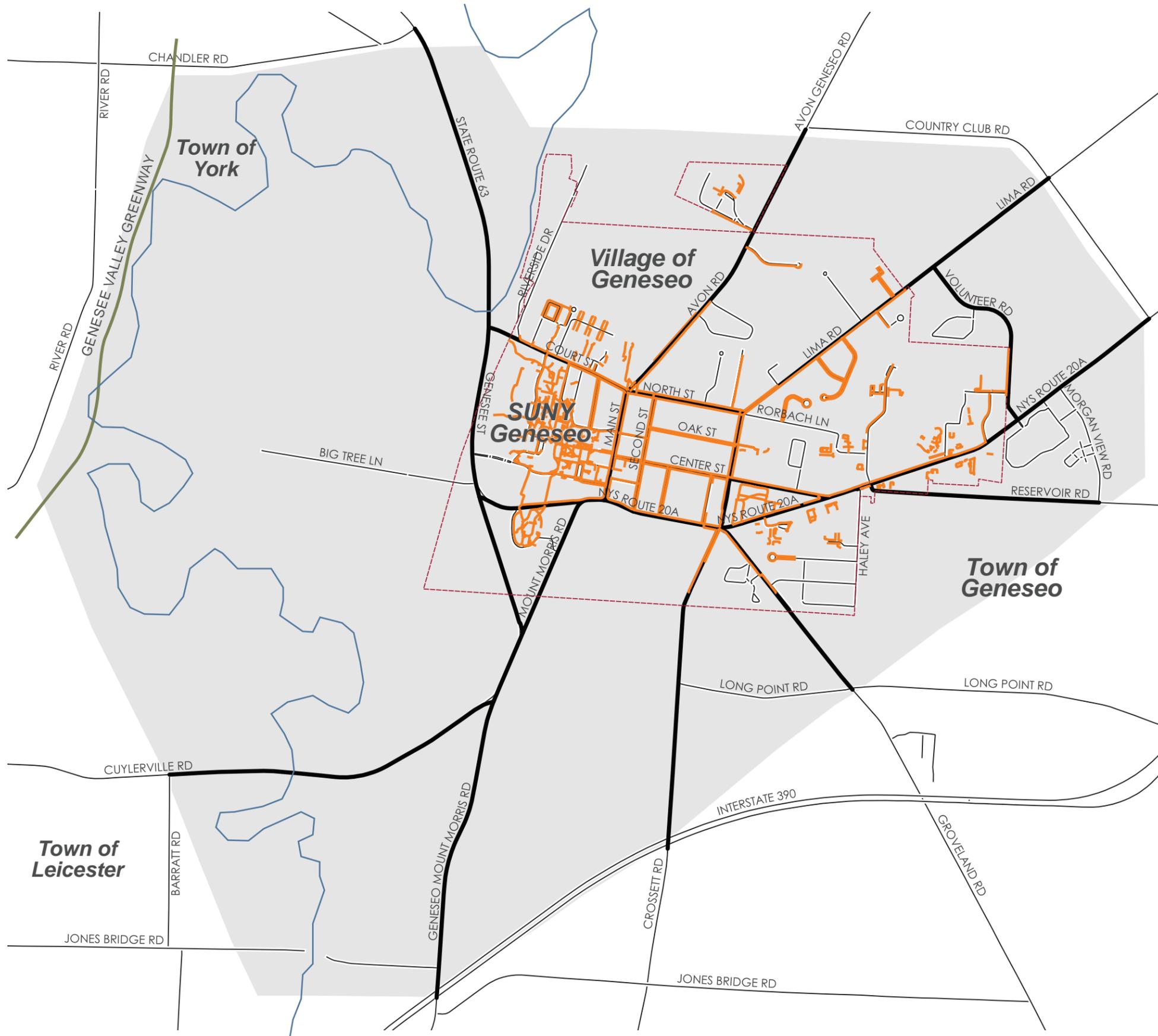


FIGURE 8 EXISTING SIDEWALKS

- Study Network
- - - Municipal Boundary
- Sidewalks:



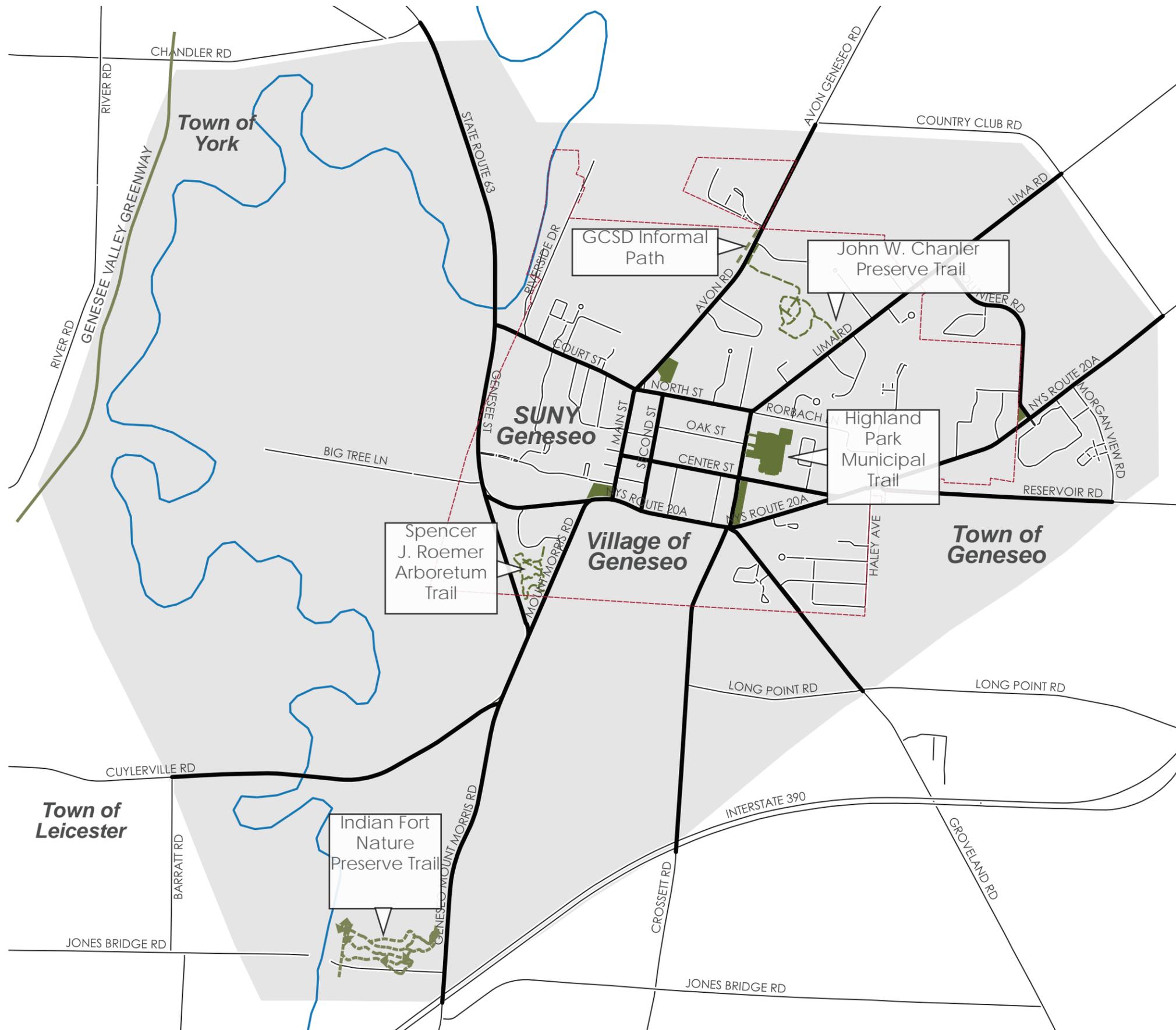


FIGURE 9 **EXISTING TRAILS**

- Study Network
- Project Area
- Parks
- Streams & Rivers
- Existing Trails

EXISTING TRAILS	
0.8mi	Spencer J. Roemer Arboretum Trail (SUNY Geneseo)
2.0mi	Indian Fort Preserve Trail (Genesee Valley Conservancy)
1.3mi	John W. Chanler Preserve Trail (Genesee Valley Conservancy)
0.8mi	Highland Park Trail (Village of Geneseo)



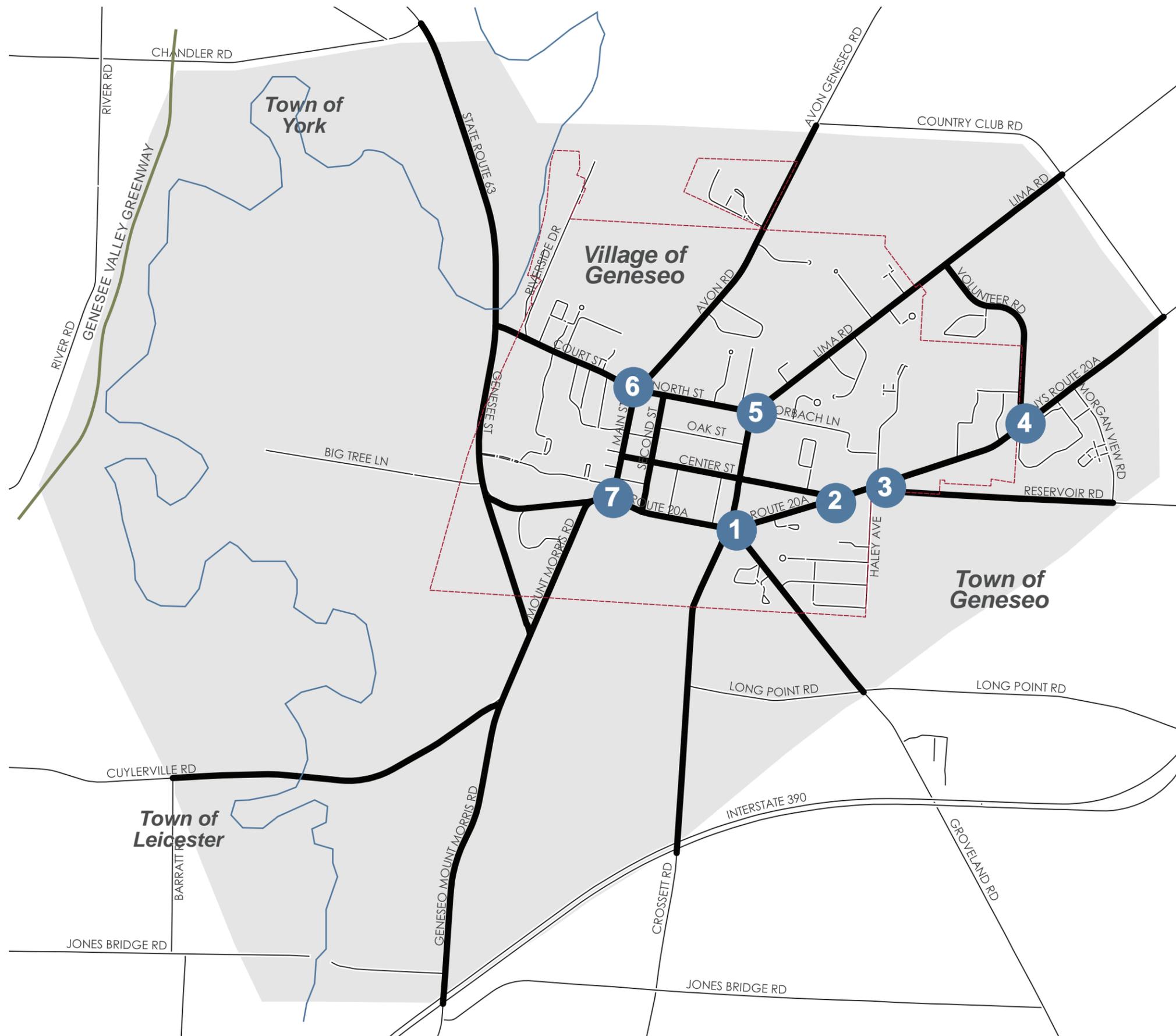


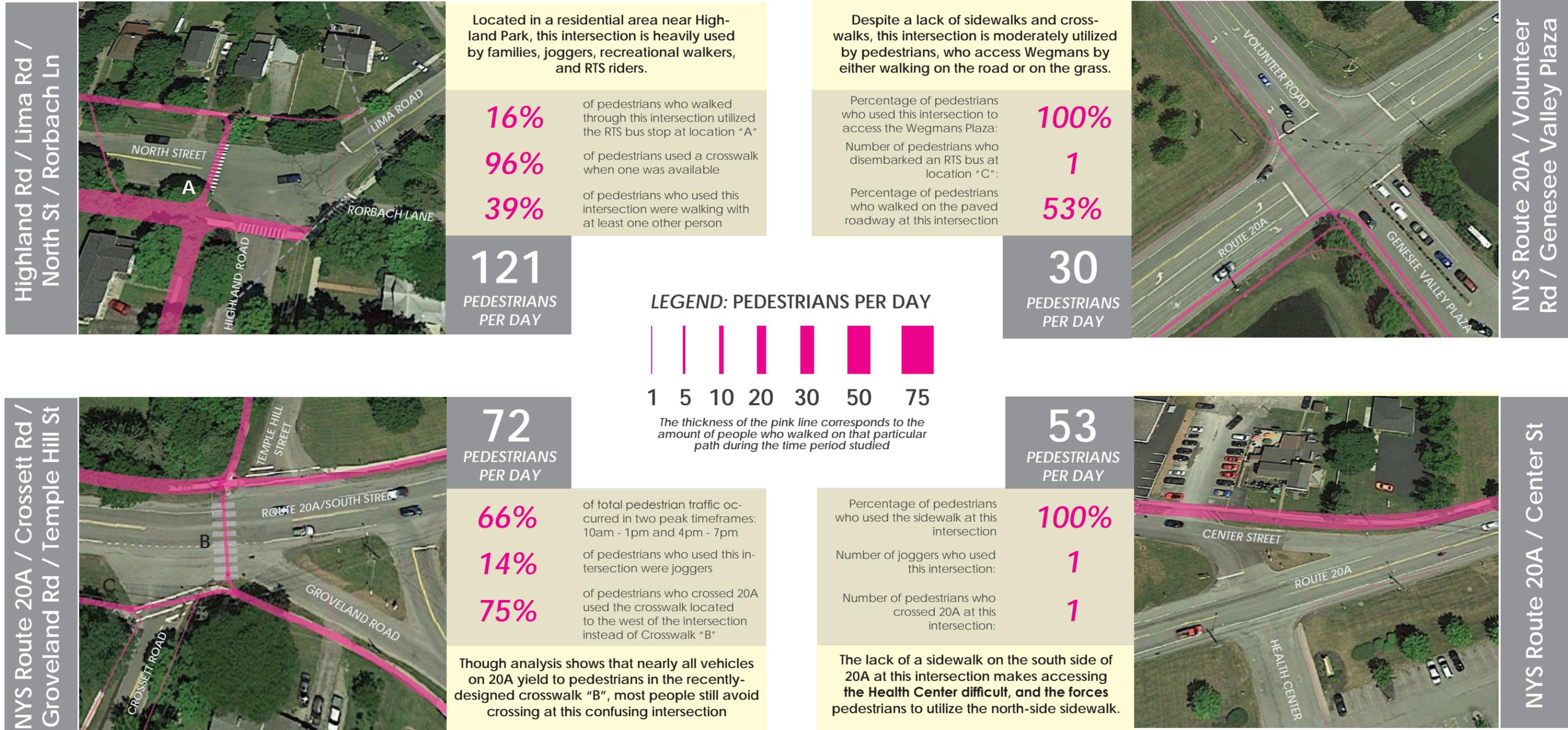
FIGURE 10 **PRIORITY INTERSECTIONS**

- 1 Groveland / Crossett / Temple Hill/ NYS Route 20A
- 2 Center/ NYS Route 20A
- 3 Megan/Reservoir/NYS Route 20A
- 4 Volunteer / NYS Route 20A
- 5 North/Highland/ Rorbach/Lima
- 6 North/Main/Court/ Avon
- 7 Main / NYS Route 20A



Time lapse cameras were set up at four intersections on Monday, April 29th, 2019, a mostly sunny day. A total of 276 pedestrians, 20 Regional Transit Service bus riders, 6 cyclists, and 2 roller skaters utilized these intersections during the study period.

FIGURE 11 TIME LAPSE CAMERA DATA



*all pedestrians walking down path "C" crossed over NYS Route 20A at the crosswalk 280' west of this intersection, at Prospect Street. A secondary camera deployment illustrated that pedestrians typically had to wait for gaps in traffic to cross at this location.

METHOD OF DATA COLLECTION: ECO-COUNTER

The 'Eco-Counter' is a pedestrian counting tool that uses heat-sensing mechanisms to detect the amounts and times of pedestrians that pass by a particular location. From December 1, 2018 through April 11, 2019, an Eco-Counter was deployed along the Geneseo Central School informal pathway, approximately 500' southwest of the Avon Road / Cavalry Road intersection. Throughout that timeframe, 824 pedestrians used the path, an average of 6.2 pedestrians per day. The following graphs detail usage trends by seasonal, weekly, and daily use.



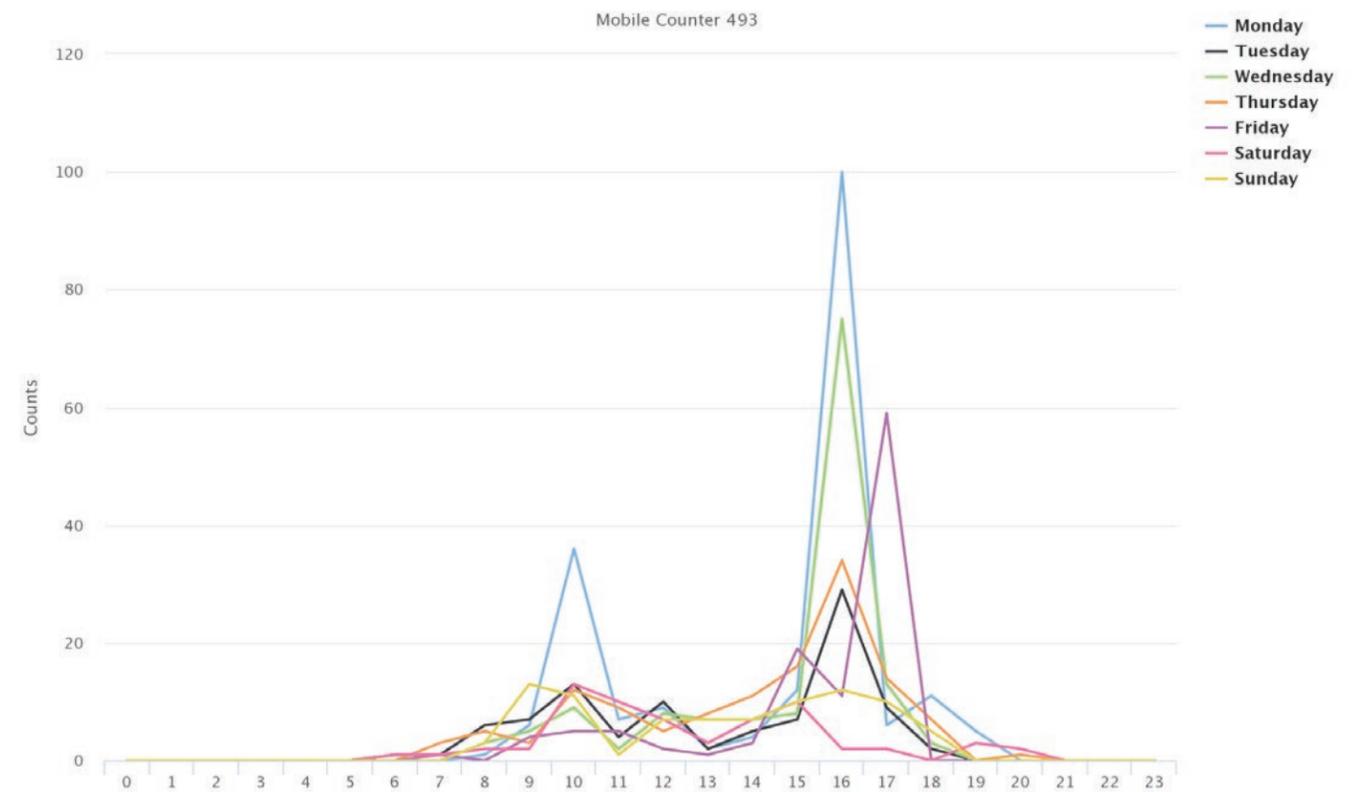
FIGURE 12 ECO-COUNTER DATA



Seasonal Use: The path was used significantly more during the early spring season. However, peak use days did not directly correlate with peak temperatures; for instance, 88 people used the path on March 25, a day with a high temperature of 43 degrees, while only 11 people used the path on March 30, a day with a high temperature of 71 degrees. This suggests that peak use of the path depends more on the occurrence of organized activities than on daily weather.



Weekly Use: The path was used primarily on weekdays, with Saturdays and Sundays seeing the least amount of activity. This data suggests that the path may be used primarily by students walking to school or participating in after-school activities during the week.



Daily Use: The path was used primarily during the afternoon, particularly between 3:00PM and 5:30PM. There was also a slight peak in mid-morning, between 9:00AM and 11:00AM. This data suggests that the path may be used for recreational exercise in the morning and for after-school activities and/or walking home from school in the afternoons.

LEVEL OF SERVICE

The Bicycle Level of Service (BLOS) Model and Pedestrian Level of Service (PLOS) Model measures actual bicycling and walking conditions of each roadway studied, providing an evaluation of the users' perceived safety and comfort with respect to motor vehicle traffic and roadway conditions in addition to the baseline facilities.

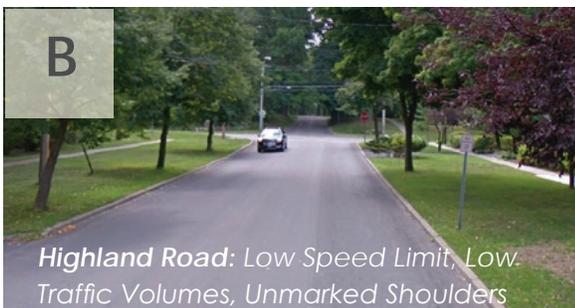
This nationally adopted and widely used methodology quantifies the quality, or level of service, for bicyclists and pedestrians that currently exists within the roadway environment on each side of each analyzed road segment in the project area. Factors used for evaluation are detailed below. The resulting score can be used to identify more than adequate, adequate, and inadequate facilities. This analysis can help call attention to active transportation network shortcomings, and prioritize areas for proposed facility improvements.

For this project, bicycle and pedestrian levels of service analyses were performed along approximately 19 miles of roadway, which were broken up into 84 segments based on the character of a roadway and its surrounding land uses. The ratings shown on **Figure 13: Bicycle Level of Service** and **Figure 14: Pedestrian Level of Service** include individual grades for each direction of roadway for each of these segments. Because of the general topography of Geneseo, this plan has also developed a method of rating the grade of a roadway and applying that grade to modify the Bicycle or Pedestrian Level of Service result to reflect the challenges presented by roadway grades to non-motorized travel.

Overall, the analysis results indicate relatively safe and comfortable bicycling and walking conditions for many of the study area segments, with distance weighted averages reflecting Bicycle and Pedestrian Level of Service grades of "B" and "C", respectively, but also with some particular local challenges. The higher grades are likely tied to the fact that the study area has generally low traffic volumes (almost 50% of the network is on roadways with fewer than 5,000 vehicles per day), lower vehicular speeds (particularly in the Village), and a large amount of paved shoulders and sidewalks. However, these assets are balanced out by heavy volumes of truck traffic along several state routes, high speed traffic along more rural roads, and several significant sidewalk gaps throughout the project area. Please refer to **Appendix C** for a breakdown of the level of service ratings and methodologies.

BLOS Model Factors			PLOS Model Factors		
+		-	+		-
Yes	Presence of Bike Lane	No	Yes	Presence of Sidewalk	No
Large	Width of Shoulder	Small	Large	Shoulder Width	Small
Low	Traffic Volume & Speed	High	Low	Traffic Volume & Speed	High
Less	Amount of Travel Lanes	More	Less	Amount of Travel Lanes	More
Low	Percentage of Trucks	High	Low	Percentage of Trucks	High
Small	Outside Travel Lane Width	Large	Yes	Presence of Buffer	No
None	On-Street Vehicle Parking	Yes	Yes	On-Street Parking	No
Good	Pavement Condition	Poor	Yes	Street Tree Presence	No
Flat	Topography	Hilly	Flat	Topography	Hilly

BICYCLE LEVELS OF SERVICE



PEDESTRIAN LEVELS OF SERVICE



**Please note that characteristics described on these images do not represent all factors that contribute to the Levels of Service. Please refer to the appendix for more detailed information.*

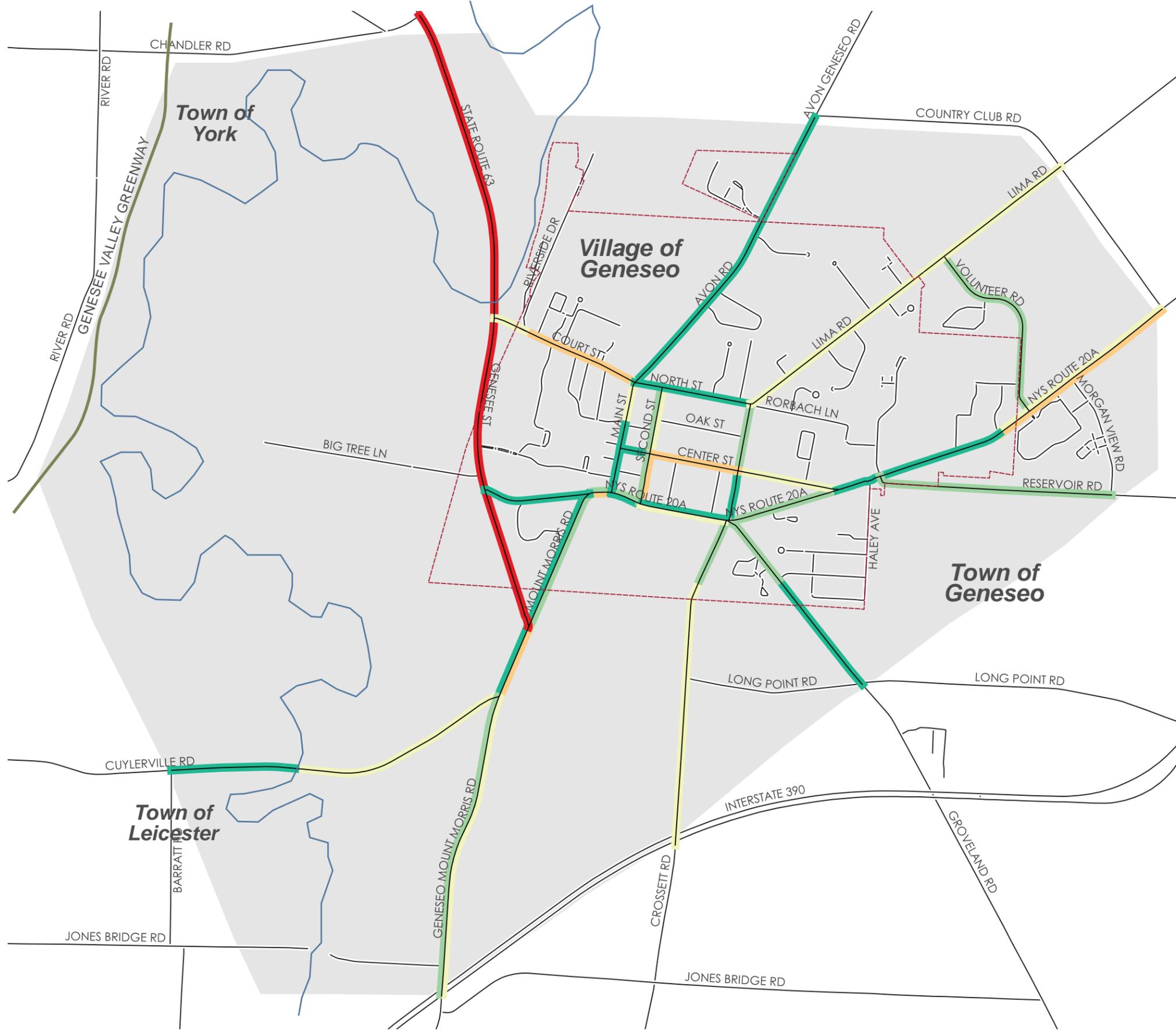
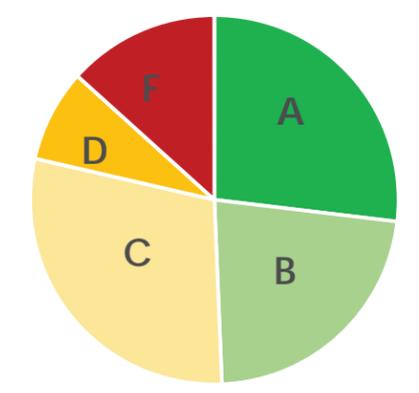


FIGURE 13 BICYCLE LEVEL OF SERVICE



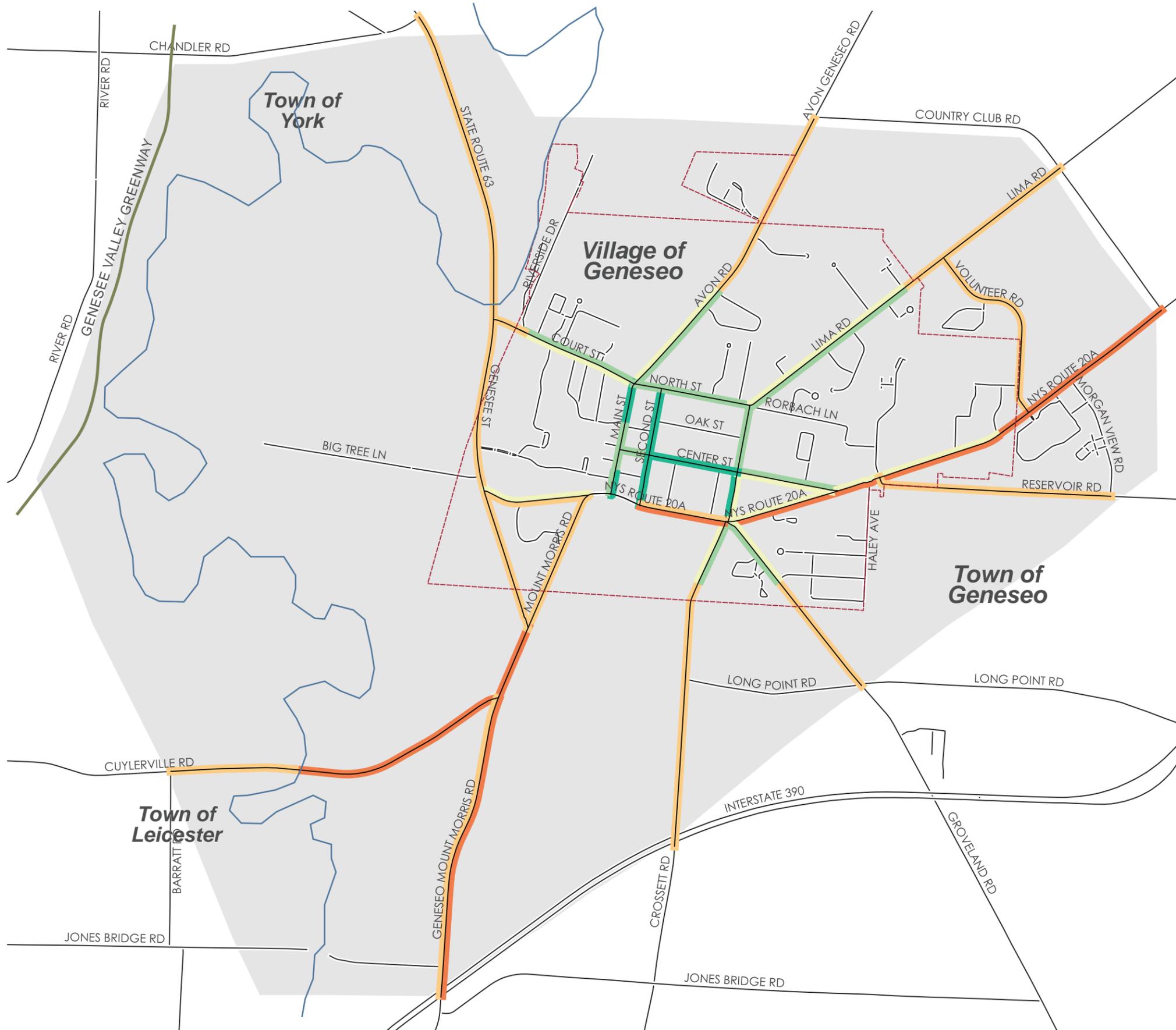
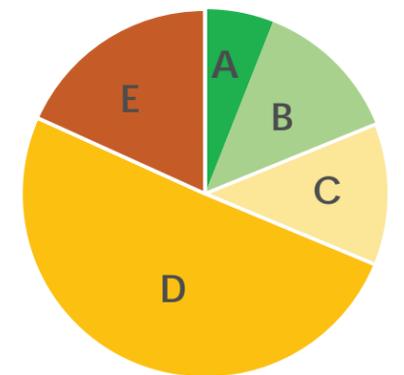


FIGURE 14 PEDESTRIAN LEVEL OF SERVICE

Pedestrian LOS

- █ A
- █ B
- █ C
- █ D
- █ E
- █ F



5.7 STORMWATER MANAGEMENT

As identified in precedent plans, and confirmed with additional inventory and analysis, stormwater and waterbodies within the project area do impact some of the roadways and trails within the project area.

There are currently several freshwater/forested wetland and pond wetland areas regulated by the National Wetlands Inventory in the project area, as shown in Figure 15: Environmental Features. While there are no NYS Department of Conservation (DEC) or federally regulated wetlands located near or in the project study roadway network, roadside drainage systems and crossing tributaries do pose potential constraints for pedestrian and bicyclist infrastructure in Geneseo.

Roadside swales and ditches capture stormwater runoff from roadways, and can potentially conflict with desirable sidewalk locations. In Geneseo, swales line the eastern side of NYS Route 20A, both sides of NYS Route 63, and the south side of Mary Jemison Drive. In general, local drainage patterns flow northwest to southeast throughout the project area.

Sections of the Genesee River and Jaycox Creek flow through the project study area. These streams are classified as class “C,” meaning they are not protected under New York State Conservation Law, but they may hinder walking and bicycling conditions during flood events.

According to the Federal Emergency Management Agency (FEMA) maps, there are 100-year flood zones along Jaycox Creek that cross NYS Route 20A near Megan Drive. There are also both 100-year and 500-year flood zones that run along the west side of Riverside Drive. Beyond this point and westward, the town land is in a 100-year flood zone to the Genesee River. This includes nearly the entirety of Big Tree Lane. These flood zones must be considered when evaluating connectivity alternatives to the Genesee Valley Greenway Trail, and trails should be designed accordingly.

5.8 SLOPE & TOPOGRAPHY

Slope significantly impact the ability, visibility, and willingness for active transportation participants to safely navigate Geneseo. Many of the roadways in the project area are between 1%-5%, meaning they are ADA accessible for all pedestrians, and not hard for most bicyclists. While these moderate slopes occur in the eastern and northern portion of the project area, slopes become steep west and south of Main Street. See **Figure 16: Slopes & Topography** for a map of slopes. The list below identified specific areas of concern:

- Inconsistency in grade change on Court Street with 5%-7% slopes.
- North entrance to the college campus 5%-7% slopes.
- Consistent, significant grade change on Mary Jemison Drive.
- Minimal visibility due to hillcrest on Court Street approaching Main Street.
- Minimal visibility due to hillcrest westward of Temple Hill Street to Main Street.
- Eastern portion of Big Tree Lane from Route 63 to Greenway.

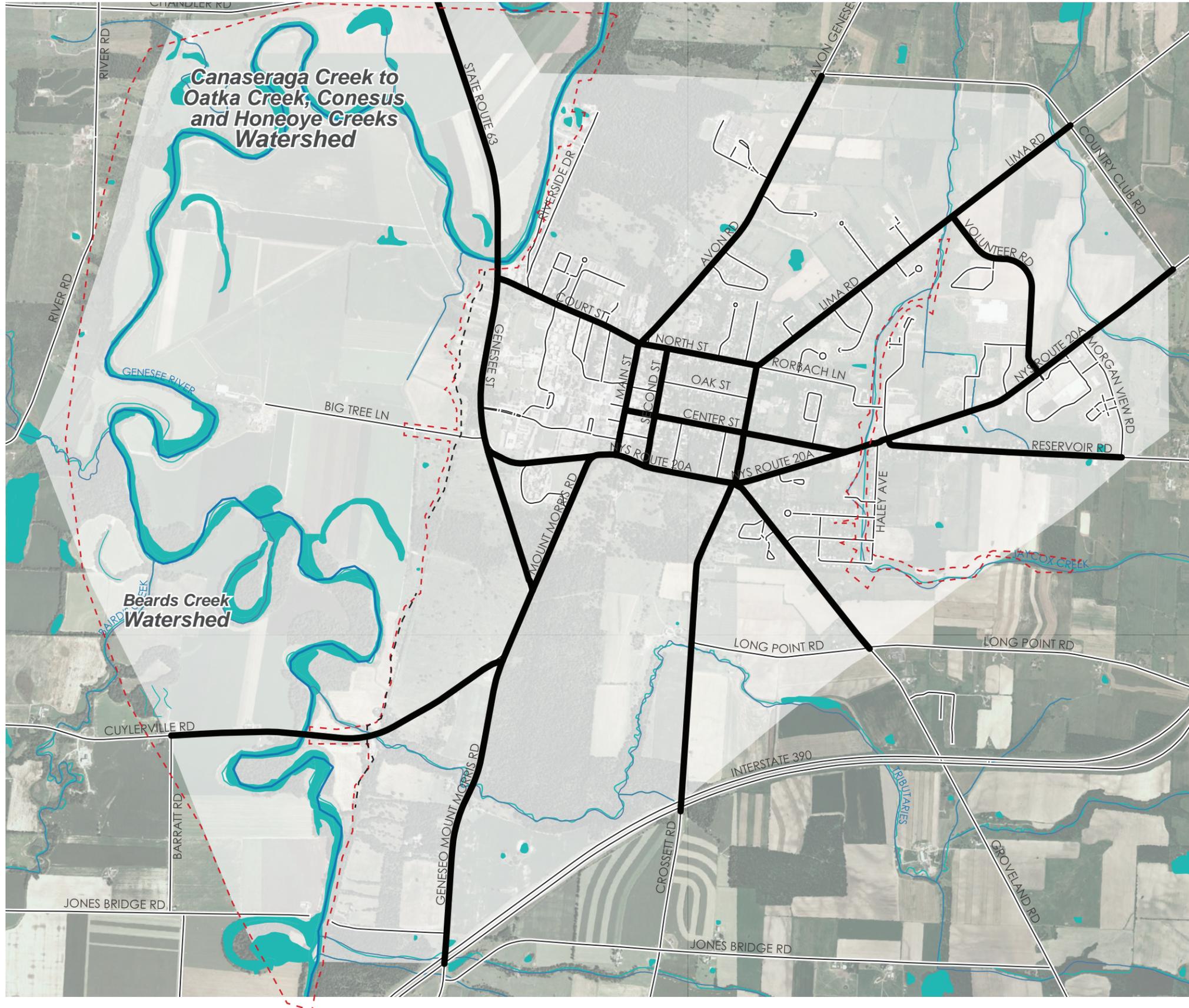


FIGURE 15 ENVIRONMENTAL FEATURES

-  Study Network
 -  Project Area
 -  Streams & Rivers
 -  Wetlands
 -  100 Year Floodplain
 -  500 Year Floodplain
- *where 500 Year Floodplain not shown, assume line to be same as 100 Year Floodplain*



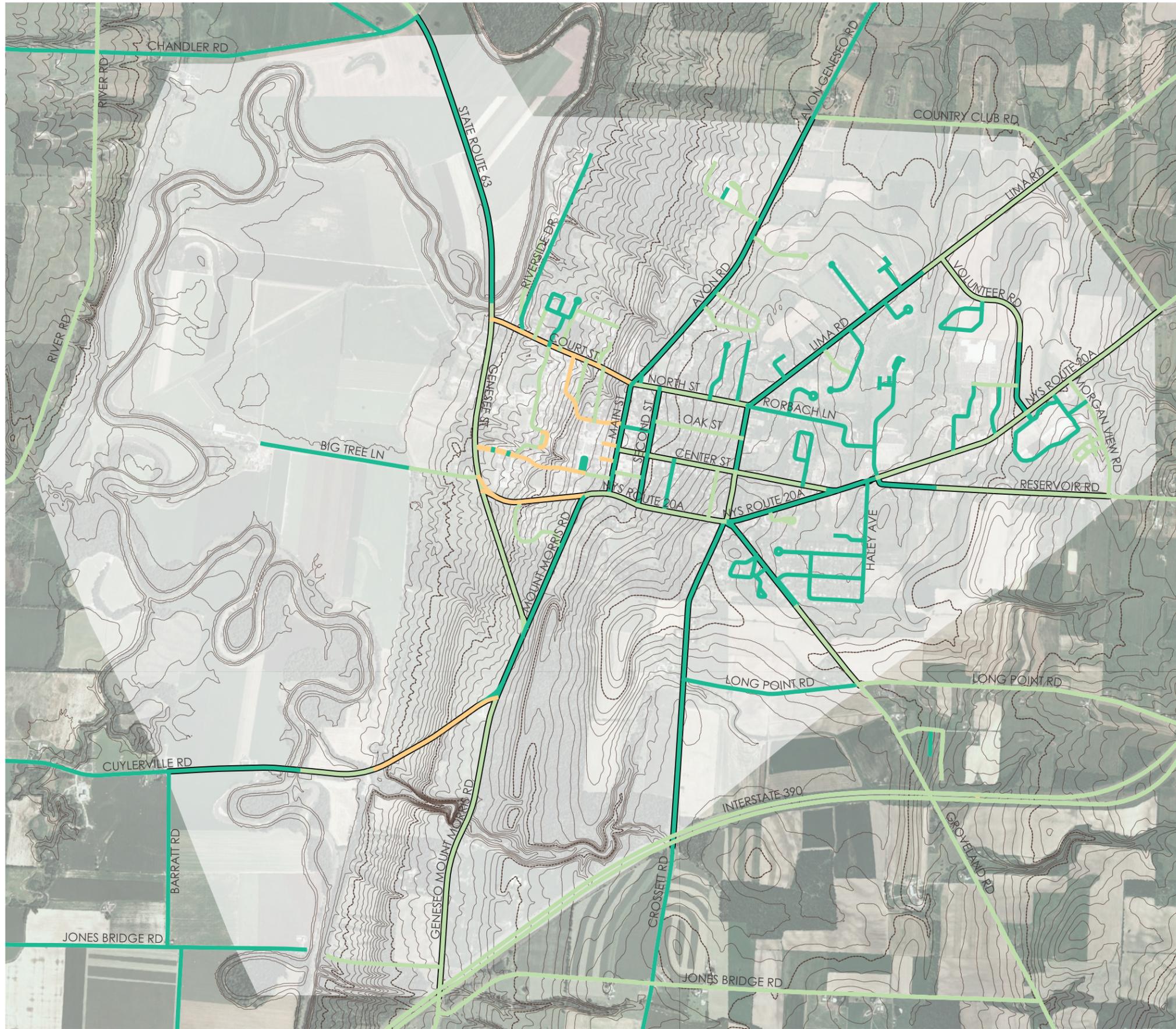


FIGURE 16 ROAD SLOPE & TOPOGRAPHY

- Contours - 10ft
- Road Slope
 - 0%-2%
 - 2%-5%
 - 5%-7%
- Study Network
- Project Area



5.9 LAND USE & DEVELOPMENT REGULATIONS

The Town and Village each have established a series of local land use regulations and policies that shape the character and design of public and private investment in the community. This summary is intended to highlight the provisions that are relevant to this active transportation planning effort and is not intended to be an exhaustive description of all regulatory provisions. Within each municipality there are six code sections that impact land use development patterns, streetscape design, and provision of pedestrian accommodations. These sections are listed below.

TOWN CODE

- Zoning (Chapter 106)
- Site Plan (Chapter 106, Article 52)
- Subdivision (Chapter 93)
- Design Standards (Chapter 93, Article II)
- Streets & Sidewalks (Chapter 90)
- Vehicles & Traffic (Chapter 100)

VILLAGE CODE

- Zoning (Chapter 130)
- Site Plan (Chapter 130, Article XIV)
- Subdivision (Chapter 130, Article XIII)
- Design Standards (Chapter A135)
- Streets & Sidewalks (Chapter 105)
- Vehicles & Traffic (Chapter 123)

The following overview of each of these code sections serves as a foundation for the subsequent assessment of regulatory needs and opportunities (Section 6) and recommendations (Section 8) provided in this Plan.

ZONING CODE

Arguably the most impactful land use and development tool within the Town and Village is their respective zoning codes. Established as local law, the requirements of these chapters in municipal code dictate the physical character, use, and pattern of investment over time. The current zoning districts are shown on the Town and Village Zoning Maps. Most notable are the districts located along the transportation corridors studied as part of this Plan.

Not shown on the Village's zoning map is the Access Management Overlay District (§130-42). The requirements and procedures of this district are intended to achieve the following objectives:

- Provide and manage access to properties while preserving the operational efficiency of the roadway system.
- Improve the safety of motorists and non-motorists.
- Reduce traffic congestion and delay associated with poor access, location, and design.
- Coordinate access management with NYSDOT and Livingston County.

The Access Management Overlay District is applied to the MU-2 District, CI-1 District, R-3 District (east of NYS Route 39, north of NYS Route 20A), C-1 District (west of NYS Route 63), R-1 District (west of NYS Route 63 and south of NYS Route 20A, west of Crossett Road).

Residential Districts

Uses permitted include single- and two-family dwellings, with the addition of agricultural uses in the Town, and multi-family dwellings in the R-3 District and by special permit in the LDR District.

DISTRICT	MIN LOT AREA	MIN LOT WIDTH	MIN FRONT YARD	MAX BLDG HEIGHT
TOWN				
AZ / RR	1 Acre	125 ft	70 ft	35 ft
HR	3 Acres	500 ft	150 ft	35 ft
LDR	30,000 sf	150 ft	70 ft	35 ft
VILLAGE				
R-1	10,000 sf	75 ft	20 ft	35 ft
R-2	7,500 sf	50 ft	20 ft	40 ft
R-3	6,000 sf	60 ft	10 ft	35 ft

Commercial Districts

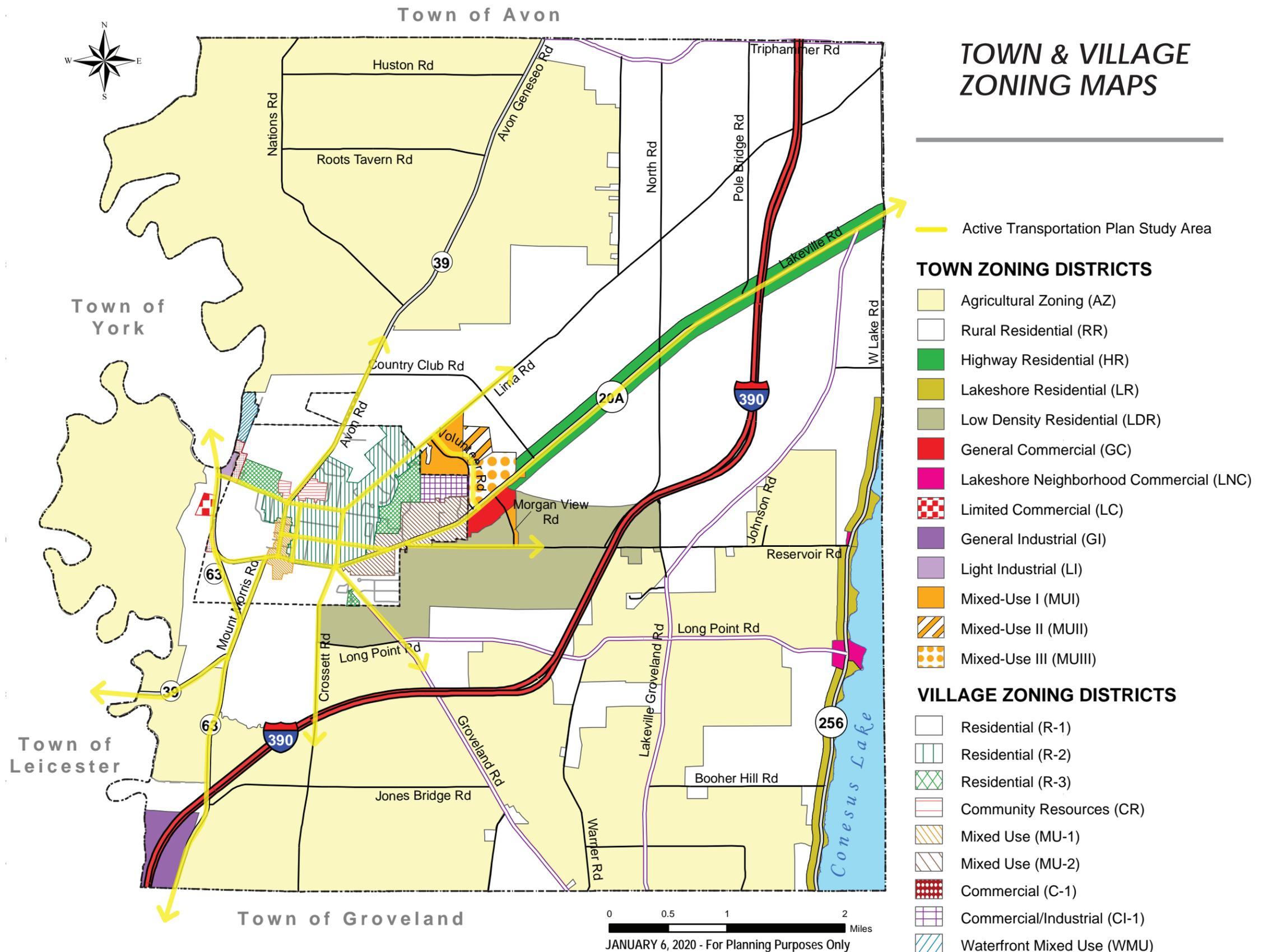
No residential uses are permitted within the Town or Village commercial districts. The C-1 District does permit a mixed-use structure, but does not define the mix of uses permitted. These districts are the most auto-oriented, allowing gas stations, auto repair, and large-scale, regional retail uses.

DISTRICT	MIN LOT AREA	MIN LOT WIDTH	MIN FRONT YARD	MAX BLDG HEIGHT
TOWN				
GC	30,000 sf	100 ft	40 ft	45 ft
LC	30,000 sf	100 ft	30 ft	40 ft
VILLAGE				
C-1	40,000 sf	100 ft	35 ft	35 ft
CI-1	20,000 sf	80 ft	20 ft	45 ft

Mixed Use Districts

Residential and commercial uses are permitted in these districts at varying densities and development styles. Overall, the intent is to foster vibrant activity centers.

DISTRICT	MIN LOT AREA	MIN LOT WIDTH	MIN FRONT YARD	MAX BLDG HEIGHT
TOWN				
MUI, II, III	0.5 Acres	100 ft	50 / 70 ft	35 ft
VILLAGE				
MU-1	3,000 - 20,000 sf	50 - 100 ft	0 - 5 ft	40 - 45 ft
MU-2	8,000 - 30,000 sf	50 - 150 ft	10 ft / 35 ft (20A)	45 - 50 ft



SITE PLAN REVIEW

Another key component of the Town and Village zoning codes is the required site plan review process. The purpose of site plan review is to ensure local development applications are consistent with the vision, policies, and goals of each municipality. Within the Village of Geneseo, site plan review is required for all development projects except one- and two-family residential dwellings and related accessory uses in the R-1 and R-2 Districts. The review and approval or disapproval of applications is the purview of the Village Planning Board.

Similarly, within the Town of Geneseo, site plan review is required for all development projects except one- and two-family dwellings, permitted residential accessory structures, alterations to one- and two-family dwellings, and agricultural land uses (except for roadside farm stands). The Town Planning Board is also the final decision authority for review and approval or disapproval.

SUBDIVISION

Both the Town and Village have provided their respective Planning Boards with review and final decision authority for subdivision applications in accordance with NYS Municipal Law. Unlike site plan review, the subdivision review process typically applies to applications proposing the development of new or altered lots, streets, utility infrastructure, or other designated rights-of-way. Each municipality's subdivision regulations provide design and development standards to ensure that newly created lots, streets, sidewalks, or utility infrastructure is built to the community's expectations. Some Town and Village requirements related to pedestrian infrastructure and streetscape design are listed below.

- Sidewalks and walkways provided in all development
- Interior pedestrian walks (5+ foot width) and crosswalks (10+ foot width) for blocks over 1,000 feet
- Street intersections designed at right angles as nearly as possible
- Intersections designed with extreme care for pedestrian and vehicular safety
- Street trees planted in residential developments

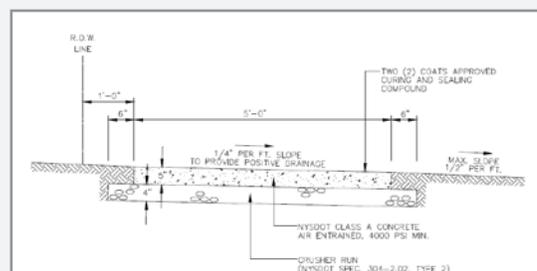
STREETS & SIDEWALKS / VEHICLES & TRAFFIC

These sections generally apply to the maintenance and function of streets and sidewalks, as well as the movement of traffic. The Streets and Sidewalks Chapter of the Town addresses the clearing of snow and infrastructure maintenance, while the Vehicles and Traffic Chapter is more for police enforcement.

DESIGN & CONSTRUCTION STANDARDS

In addition to subdivision design standards, many communities employ more technical construction standards. The Village of Geneseo does have such standards in the form of Land Development Regulations and Public Works Requirements (Chapter A135). This Chapter includes technical drawings of infrastructure specifications (example below).

For new construction, the Village requires a minimum sidewalk width of 5 feet, with sidewalks on both sides of the street, where feasible. The Planning Board is authorized to adjust some standards to fit the context or constraints of various development sites.



EXISTING VILLAGE CODE SUMMARY

CHAPTER	SECTION	DESCRIPTION
130	Zoning & Subdivision of Land	
	41	Planned Residential Development District The intent of this district is to encourage creative approaches which allow flexibility in settings that require a somewhat unified plan for residential development. This section promotes density and discusses the need for sidewalks, but does not explicitly require any bicycle facilities.
135A	Land Development Regulations & Public Works Requirements	
III	Development Requirements	A-15 Street Layout Subsections B and F mandate that streets in new developments and minor streets be laid out to discourage through traffic. Connections are required, but may be severed for specific planning reasons.
		A-18 Blocks A.4: "Requirements for safe and convenient vehicular and pedestrian circulation" are specified among the conditions to be regarded in the drafting of blocks within a development.
IV	Site Improvements	A-28 Site Improvements "Sidewalks shall be installed on both sides of the street and installed 1-foot inside the road right-of-way."
		A-34 Street Lighting While street lighting is required along new streets, sidewalk lighting is specified as a requirement the Planning Board may specify in certain developments.
VII	Design Criteria	A-56 General Road Design Criteria B. Horizontal Alignment: Clear sight at intersections is specified as a requirement of a roadway design, without explicit specification of visibility of bicycles F. Road Widths: The standard road widths provided collector streets of 26 and 24 feet are not wide enough to include bike lanes in association with 10-foot or wider lanes.
		A-59 Sidewalks The specification for sidewalks establishes a minimum width of 5 feet
IX	Installation of Improvements	A-85 Concrete Gutters and Sidewalks The specification for cross slope establishes a standard cross slope of ¼ inch per foot, or 1:48. This is steeper than the 1:50/2% maximum cross slope that is established in adopted ADA guidance.
	Appendices	S, T, U Typical Road Cross Sections Cross section illustrations for Collector Local and Private Roads show sidewalks but do not include any dimensions or other sidewalk-specific criteria.
		X Sidewalk Detail In addition to thickness and material specifications, detail specifies 5-foot sidewalk width and 1:48 cross slope.
105	Streets & Sidewalks	
	5	Riding on Sidewalks "No person shall ride any bicycle, motorcycle, skateboard, or motor vehicle upon any sidewalk in the village."
	6	Accumulations & Encumbrances "All accumulations of snow, ice, or other substance, encumbrance, or obstruction shall be removed from sidewalks by the owner, occupant, tenant, or other person having the charge or control of the premises, before 12:00 noon following the deposit thereof"
	11.1	Sidewalk Permits "Sidewalk permits shall be required in the MU-1 Zoning District for items including, but not limited to, merchandise for sale and/or use of tables, chairs, or grills. Applicants shall maintain a minimum of a thirty-six-inch-wide handicap accessible path between the street and merchandise, tables and chairs and grill(s) at all times. Access to the business must also be kept free and clear of any merchandise, tables and chairs or grill(s) at all times."
123	Vehicles & Traffic	
	51	Speed Limits All speed limits on Village roads within this project network are 30 mph, with the exceptions of: Avon Road: "From the Village line 0.5 mile south in both directions to the 30 mph zone," the speed limit is 40 mph NYS Route 20A: "From the Village line .4 mile west in both directions to the 30mph zone at Reservoir Rd," the speed limit is 35 mph Route 63: "From the Village line to the Village line in both directions," the speed limit is 45 mph.
	52	School Speed Limits While the code states that "No personal shall drive a vehicle in excess of the speeds indicated below, in the areas below, during school days between 7:00am and 6:00pm," no areas are currently designated.

EXISTING TOWN CODE SUMMARY

CHAPTER	SECTION	DESCRIPTION
93	Subdivision of Land	
	6	Definitions
		“Street: A strip of land, including the entire right-of-way, intended for use as a means of vehicular and pedestrian circulation.”
	8	General Standards Applicable to All Types of Development
		“Pedestrian interior walks may be required... in blocks over 1,000 feet or to provide pedestrian walkway continuity within a given subdivision. Such crosswalks shall have a width of not less than 10 feet and a paved walk of not less than five feet.”
	13	Street Pavement, Curbs, and Sidewalks
		The Town of Geneseo provides minimum requirements for sidewalks in Arterial, Collector, Minor, and Marginal Access Streets above 4 feet wide in a table for comprehensive use.
106	Zoning	
	23.3	Mixed Use Districts: Objectives
		Development of an internal roadway system that provides for the safe and efficient travel of pedestrians and cyclists as well as motorists. Said roadway system should include sidewalk connections, crosswalks, transit stops, and bicycle accommodations where appropriate.
	41.3	Off-Street Parking & Loading Regulations: General Requirements
		Pedestrian Walkways. All parking lots that contain more than 20 spaces, including access lanes and driveways, must include clearly identified pedestrian route from the parking area to the main building entrance and to the public sidewalk along the street if present.
	41.7	Off Street Parking & Loading Regulations: Minimum Parking Space Requirements
		This section specifies parking requirements in each zoning district. Bicycle parking is required in all mixed-use districts at 10% of the motorized vehicle parking requirements but not less than two bicycle spaces and not more than 10 bicycle spaces for any use.
	44.3	Design Standards & Guidelines: Objectives
		Create lively, pedestrian -friendly, and attractive buildings, sites, open spaces, and streetscapes where residents and visitors will enjoy walking, biking, and driving.
	44.4	Design Standards & Guidelines: Site Planning Standards
		This section describes walkway and bicycle access concepts. Walkways must be constructed along the entire frontage length, meet minimum width of 5 feet with curbing, and connect to the building front. Bicycle circulation must include separate facilities, parking facilities, and access.

6 | NEEDS & OPPORTUNITIES



Existing conditions, community input, and the Project Steering Committee identified needs and opportunities for active transportation infrastructure throughout the project area. This list of needs is compiled under the following categories: on-road facilities, off-road facilities, and programs & policies.

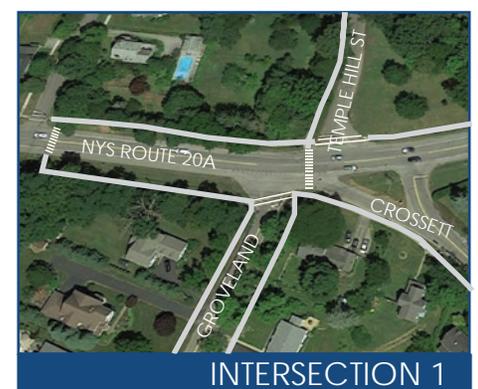
6.1 INTERSECTIONS

The identified needs for each of the seven priority intersections are summarized below. **Figure 17: Crosswalks & Intersection Opportunities** locates each of these intersections.

1 | NYS ROUTE 20A, CROSSETT STREET, GROVELAND ROAD & TEMPLE HILL ROAD

This has been identified as the most concerning intersection in previous studies and for this project due to its configuration. Based on recommendations from previous studies, one crosswalk was recently installed at this intersection, and one mid-block crosswalk was installed just west of the intersection.

- Community input and data analysis, however, have illustrated a need for further enhanced pedestrian facilities and a potential intersection reconfiguration. For instance, camera data analysis showed that instead of crossing at this intersection, 75% of pedestrians walked down to the mid-block crossing to move across NYS Route 20A. This pattern is likely due to the significant crossing distance and the amount of potential vehicular conflict points at this intersection. The presence of municipally-owned property to the northwest of this intersection also presents an opportunity for installation of a roundabout or other traffic calming measure.



2 | NYS ROUTE 20A & CENTER STREET

Center Street and NYS Route 20A provide access between the downtown and retail on NYS Route 20A. The radius at which Center Street spurs from NYS Route 20A and the slip lane causes vehicles to speed into the turn. Pedestrians crossings have to be set-back from the intersection for safety and on-road users experience difficulty to turning out of the Medical Center and Center Street.

- There is a need to improve ADA accessible infrastructure to the existing crosswalk across Center Street.
- There is a need to improve pedestrian connections to the Medical Center. Without a crosswalk or sidewalk along the south side of NYS Route 20A, visitors accessing the Medical Center must walk along the grass or move across traffic without any protection.
- Previous studies, community input, and the analysis of existing conditions have identified the need to explore traffic calming measures related to the 'slip lane' onto Center Street.



3 | RESERVOIR ROAD, MEGAN DRIVE, & NYS ROUTE 20A

This intersection is a safety concern due to the lack of crosswalks and shoulder space along NYS Route 20A. Additionally, there have been over fifteen vehicular crashes at or near this intersection since 2009, in addition to one collision involving a pedestrian.

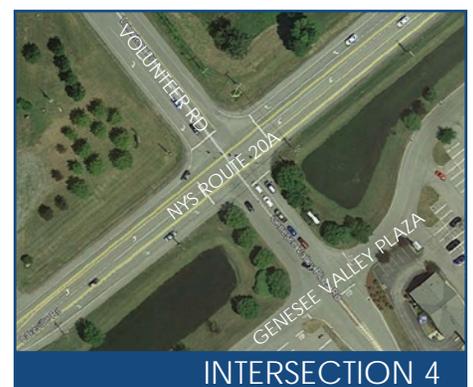
- Though there is currently one crosswalk at this intersection, there is a need for crosswalks at all approaches.
- There is a need for continued bicycle facilities and shoulders at this intersection.



4 | NYS ROUTE 20A & VOLUNTEER ROAD

This intersection is the major gateway that transitions from the Town to the Village, providing access to Genesee Valley Shopping Center Plaza, retail along NYS Route 20A, and future development along Volunteer Road.

- Based on community input and camera data analysis, there is a need for improved pedestrian infrastructure at this intersection. For instance, camera data showed that 30 pedestrians used this intersection in one day, and they were forced to either walk in the grass or in the shoulder. The 13 pedestrians that crossed the intersection were also forced to do so without the assistance of any crosswalk or signage. Furthermore, the proposed development to the northeast of this intersection is expected to increase pedestrian traffic.



5 | NORTH ROAD, HIGHLAND ROAD, RORBACH LANE & LIMA ROAD

Camera data analysis identified that this intersection is passed through by a variety of user groups, including families, recreational walkers and joggers, and people waiting at the RTS Bus Stop. The *Geneseo Pilot Plan* identified safety is a concern at this location.

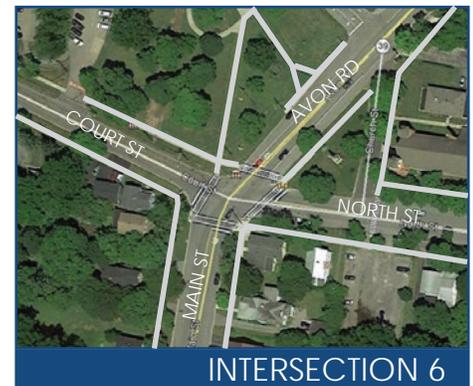
- A crossing is needed at the northeast corner of this intersection to facilitate access to sidewalks along the north and east sides of Lima Road. This would help create a seamless network between the Highland Park trail and the Conservancy Trails.
- Camera data analysis identified that facilities are needed to accommodate people waiting for the RTS buses. For instance, 50% of the 19 people who were waiting for the bus on the date of camera analysis waited over 5 minutes, and had nowhere to sit or find protection from the weather.
- There is an opportunity to configure this intersection to better accommodate bicyclists entering from Rorbach Lane, which community members identified as a key bicycle corridor.



6 | NORTH STREET, MAIN STREET, & AVON ROAD

This intersection serves as a major pedestrian crossroads, as SUNY Geneseo is located to the southwest, the County governmental complex is located to the north, and residences are located to the south and west of this intersection. Additionally, the Geneseo Central School District is located 0.8 miles north of this intersection along Avon Road. A recent NYS DOT project installed a 4-way stop at this location.

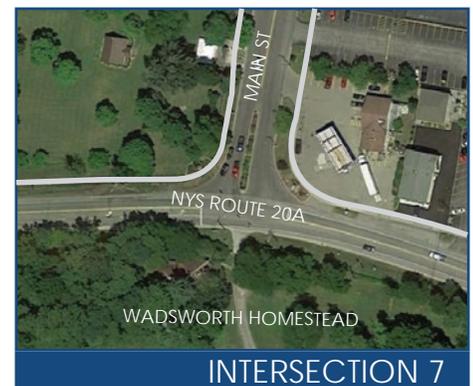
- There is a need to reconstruct ramps and replace detectable warning mats for ADA compliance.
- There is an opportunity to better define usage of road edges, including striping for parking, since vehicles often form two lanes.



7 | MAIN STREET & NYS ROUTE 20A

This intersection serves as one of the gateways into the downtown area for those entering Geneseo from the south. The entrance to the Wadsworth Homestead is also located south of this intersection.

- This intersection's proximity to downtown, the convenience store, the Village Park, and the Wadsworth Homestead leads to a notable amount of pedestrian usage, and there has been one vehicular crash at this intersection in the past ten years. There is a need for pedestrian facilities to enhance accessibility and safety while crossing this intersection in all directions.
- There is an opportunity to prohibit parking directly adjacent to the intersection to improve sight distances.



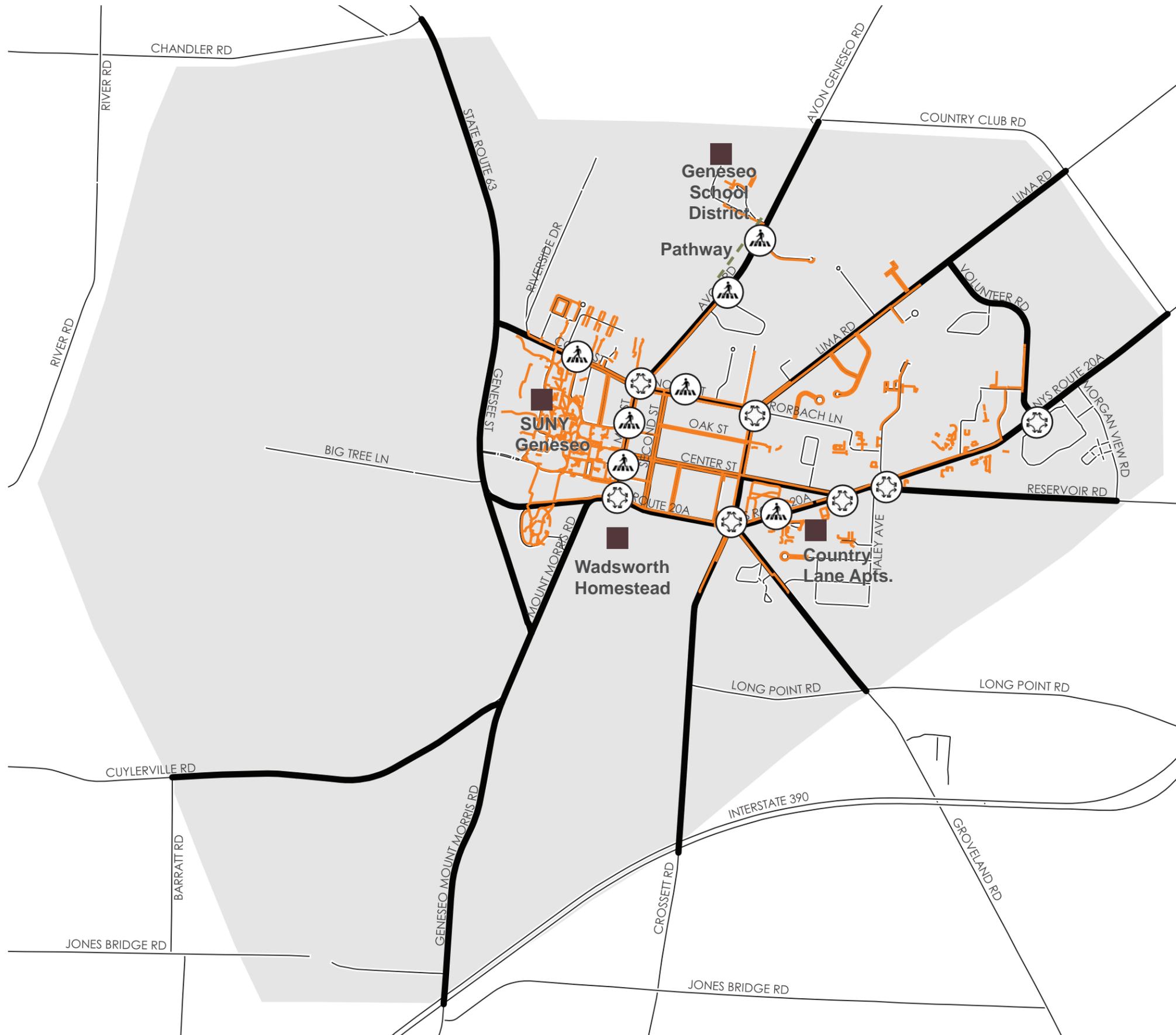


FIGURE 17 INTERSECTION & CROSSING OPPORTUNITIES

— Study Network
 — Sidewalks



INTERSECTION OPPORTUNITIES

- Groveland Road/Crossett Road/ NYS Route 20A/ Temple Hill Street
- Center Street / NYS Route 20A
- Reservoir Road/NYS Route 20A
- Volunteer Road/Genesee Valley Plaza/NYS Route 20A
- Avon Road / Highland Road / North St / Lima Road
- North St / Main St / Avon Road / Court St
- NYS Route 20A / Main St



MID-BLOCK CROSSING OPPORTUNITIES



6.2 CROSSWALKS

The following crossings are located either at additional intersections or in the middle of blocks. ‘Mid-block’ crossings provide opportunities for pedestrians to safely move across corridors without having to walk to an intersection. Because of their location in areas where motorists do not expect to stop, it is imperative that all mid-block crossings are clearly signed. Inventory and analysis of existing conditions identified the following needs and opportunities for implementing new mid-block crossings and enhancing existing mid-block crossings in Geneseo.

ENHANCED CROSSING OPPORTUNITIES	
Main Street (Throughout)	<i>There are opportunities to implement curb extensions and enhanced signage at crosswalks throughout Main Street. As detailed in the following chapter, curb extensions, or ‘bumpouts’ shorten pedestrian crossing distances and enable pedestrians and motorists to more easily see each other.</i>
North Street (Throughout)	<i>There are opportunities to improve the existing crossings at Second Street & Northview Drive through additional signage and curb extensions.</i>
NYS Route 20A (Prospect St)	<i>As illustrated by the time lapse data collection, this crosswalk is frequently used by pedestrians to cross over NYS Route 20A. There is an opportunity to enhance this existing crosswalk through additional signage and the potential installation of a Rapid Rectangular Flashing Beacon.</i>
Court Street (Throughout)	<i>There are opportunities to enhance the existing crossings at Wadsworth Street and University Drive through signage and lighting, and repaint the previously marked crossing at Meadow Drive</i>
Avon Road (Westview Crescent)	<i>This crosswalk is primarily used by students and residents accessing the informal path to the Geneseo Central Schools. There are opportunities to improve this crosswalk through back-to-back signage, reflective posts, and a potential RRFB.</i>



NEW CROSSWALK OPPORTUNITIES

NYS Route 20A
(at Country Lane
Apartments)

There is an opportunity to provide facilities for pedestrians who often cross between the apartments on the south side of NYS Route 20A and the existing sidewalk on the north side of the corridor.

Avon Road (Cavalry
Road and/or School
District Driveway)

There is an opportunity to encourage more students to walk to school by providing a safe crossing over Avon Road. This would provide facilities not only for students living on Cavalry Road, but also students who live along Lima Road and can walk to school via the Island Preserve trail.

Main Street
(Throughout)

There is an opportunity to increase the frequency of mid-block crossings along Main Street, due to high levels of pedestrian activity. As detailed in the following chapter, recommended distances between crosswalks in areas with heavy pedestrian activity may be as close as 200'. However, as shown in the image on the previous page, there are two locations along the commercial stretch of Main Street (adjacent to Chesnut Street, and across from the Big Tree Inn), where crosswalks are currently over 350' apart. Additionally, Chesnut Street is the only intersecting roadway along this stretch of Main Street that does not have a crosswalk directly adjacent to it.

ADDITIONAL CONSIDERATION: 'BEAR' FOUNTAIN STATUE

Located at the intersection of Center Street and Main Street, the Bear statue is an historic, aesthetic, and cultural landmark in Geneseo. The fountain also serves as a traffic calming feature; however, it has been occasionally hit by vehicular traffic since its installation. There are several opportunities to reconfigure the intersection, to protect the statue while maintaining traffic flow and enhancing pedestrian visibility and mobility.



'BEAR' FOUNTAIN & STATUE

6.3 SIDEWALK GAP ANALYSIS

Sidewalk gaps are key areas where sidewalks do not exist, and cause safety and accessibility concerns, as pedestrians are often forced to walk in the roadway or on grass. The Village Code sets the standard for sidewalks along both sides of the road with the intent of establishing a continuous sidewalk network.

Nearly all streets in the Village of Geneseo have sidewalks. However, there are a few key locations where gaps exist in the system that inhibit the community from being entirely walkable. Previous studies, including the *Route 20A Access Management Plan*, indicate that sidewalk gaps are an issue in transition from the Village to the Town. Other areas which lack consistent sidewalks include

across driveways to plazas and retail along NYS Route 20A. While some of these gaps are due to constraints along the roadway, there is value to a solution that closes the gaps between local destinations, businesses, and recreational opportunities.

Figure 18: Sidewalk Opportunities and the following table illustrate the gaps noted in the inventory and analysis stage, including those created by driveways that break the continuous sidewalk network. The proposed sidewalk that is highlighted in blue in this figure refers to the sidewalk that will be installed as part of the new development on the northeast corner of the NYS Route 20A / Volunteer Road intersection.

Because these sidewalk gaps exist along State Routes, Town Roads, and Village Roads, coordination is necessary between the Town and the Village to establish these routes as interdependent systems providing mutual benefits to residents in each municipality.

SIDEWALK GAP LOCATIONS

ROADWAY	Segment	Side of Gap	Jurisdiction
TEMPLE HILL ST.	<i>NYS Route 20A to Center St.</i>	East	Village of Geneseo
CENTER ST.	<i>NYS Route 20A to Temple Hill St.</i>	South	Village of Geneseo
NYS ROUTE 20A	<i>Groveland Rd. to Center St.</i>	South	NYSDOT, Village of Geneseo
NYS ROUTE 20A	<i>Center St. to Reservoir Rd.</i>	South	NYSDOT, Village of Geneseo
NYS ROUTE 20A	<i>Reservoir Rd. to Ryan Dr.</i>	South	NYSDOT, Village of Geneseo, Town of Geneseo
NYS ROUTE 20A	<i>Ryan Dr. to Volunteer Rd.</i>	South	NYSDOT, Village of Geneseo, Town of Geneseo
NYS ROUTE 20A	<i>Ryan Dr. to Volunteer Rd.</i>	North	NYSDOT, Village of Geneseo, Town of Geneseo
VOLUNTEER RD.	<i>NYS Route 20A to Veteran Dr.</i>	West	Town of Geneseo
VOLUNTEER RD.	<i>Veteran Dr. (N) to Lima Rd.</i>	West	Town of Geneseo
LIMA RD.	<i>Westhampton Dr. to Volunteer Rd.</i>	South	Town of Geneseo
LIMA RD.	<i>Island Preserve to Kimberly Dr.</i>	North	Village of Geneseo
NYS ROUTE 20A	<i>Main St. to Crossett Rd.</i>	South	NYSDOT, Village of Geneseo
AVON RD.	<i>Westview Cr. to School Drive</i>	West	NYSDOT, Village of Geneseo, Private Property
MARY JEMISON DR.	<i>SUNY Driveway to Genesee St.</i>	North	Village of Geneseo
RESERVOIR RD.	<i>Morgan View to NYS Route 20A</i>	Both	Town & Village of Geneseo



FIGURE 18 **SIDEWALK OPPORTUNITIES**

- Study Network
- Existing Sidewalk
- Sidewalk Gap
- Proposed Sidewalk



6.4 BICYCLE FACILITIES OPPORTUNITIES

Observation of existing conditions and input from community members has indicated a diversity of types of bicyclists in Geneseo. Some cyclists ride recreational ‘loops’ along rural roadways, some access SUNY Geneseo and downtown shops along Main Street, and others ride to retail along NYS Route 20A. However, there are currently no designated bicycle accommodations along roadways within the project boundary, forcing cyclists to utilize shoulders (when available) and/or vehicular travel lanes to move throughout the community.

The following table details selected features of each roadway segment within the project boundary that are relevant to bicycle travel, including whether or not edge striping, on-street parking, curbing, or sidewalks are present along each segment. The column on the right in the table, entitled “width of pavement outside of travel lane,” details the amount of feet of paved surface that is available outside of the vehicular travel lane for bicyclists to utilize. On roadways with edge striping, this area is referred to as the ‘shoulder;’ however, on Village roadways without edge striping, this area has been determined by subtracting the typical travel lane width from the total width of pavement. **Figure 19: On-Road Bicycle Facility Opportunities** further illustrates this data.

BICYCLE FACILITY OPPORTUNITIES			Edge Striping	On-Street Parking	Curbing	Sidewalk (along at least one side of roadway)	Width of Pavement outside of Travel Lane (ft)
ROADWAY	Segment	Travel Direction(s)					
Avon Rd.	North St. to Westview Cr.	Both	✓			✓	4
Avon Rd.	Westview Cr. to GCSD Driveway	Both	✓				5
Avon Rd.	GCSD Driveway to Country Club Rd.	Both	✓				5
Center St.	Main St. to Second St.	Both		✓	✓	✓	6
Center St.	Second St. to Highland Rd.	Both			✓	✓	0
Center St.	Highland Rd. to NYS Route 20A	Both			✓	✓	0
Court St.	Genesee St. to Riverside Dr.	Both					0
Court St.	Riverside Dr. to Main St.	Both			✓	✓	0
Crossett Rd.	Project Boundary to Cemetery	Both	✓			✓	0
Crossett Rd.	Cemetery to NYS Route 20A	Both					0
Cuylerville Rd.	Project Boundary to Bridge	Both	✓				8
Cuylerville Rd.	Bridge to Mt. Morris Rd.	Both	✓				6
Genesee St.	Mt Morris Rd. to Mary Jemison Dr.	Both	✓				6
Genesee St.	Mary Jemison Dr. to Court St.	Both	✓				6
Genesee St.	Court St. to Chandler Rd.	Both	✓				6
Groveland Rd.	Long Point Rd. to Tuscarora Rd.	Both	✓				5
Groveland Rd.	Tuscarora Rd. to NYS Route 20A	Both				✓	0

ROADWAY	Segment	Travel Direction(s)	Edge Striping	On-Street Parking	Curbing	Sidewalk	Width of Pavement Outside of Travel Lane (ft)
Highland Rd.	Center St. to North St.	Both			✓	✓	0
NYS Rt 20A	Reservoir Rd. to Ryan Dr.	Both	✓			✓	8
NYS Rt 20A	Ryan Dr. to Country Club Rd.	EB	✓				2
NYS Rt 20A	Country Club Rd. to Ryan Dr.	WB	✓				3
Lima Rd.	North St. to Westhampton Dr.	Both				✓	0
Lima Rd.	Westhampton Dr. to Country Club Rd.	Both	✓				2
Main St.	NYS Route 20A to Chesnut St.	Both		✓	✓	✓	8
Main St.	Chesnut St. to Center St.	Both		✓	✓	✓	8
Main St.	Center St. to Ward St.	Both		✓	✓	✓	8
Main St.	Ward St. to Court St.	Both		✓	✓	✓	0
Mary Jemison	Genesee St. to Mt Morris Rd.	Both	✓			✓	5
Mt Morris Rd.	Project Boundary to Cuylerville Rd.	NB	✓				5
Mt Morris Rd.	Cuylerville Rd. to Project Boundary	SB	✓				5
Mt Morris Rd.	Cuylerville Rd. to Genesee St.	NB	✓				5
Mt Morris Rd.	Genesee St. to Cuylerville Rd.	SB	✓				5
Mt Morris Rd.	Genesee St. to NYS Route 20A	NB	✓				4
Mt Morris Rd.	NYS Route 20A to Genesee St.	SB	✓				6
North St.	NYS Route 20A to Second St.	Both		✓		✓	8
North St.	Second St. to Lima Rd.	Both		✓		✓	8
Reservoir Rd.	NYS Route 20A to Morgan View Rd.	Both	✓				2
Second St.	NYS Route 20A to Center St.	NB			✓	✓	0
Second St.	Center St. to NYS Route 20A	SB		✓	✓	✓	0
Second St.	Center St. to North St.	NB			✓	✓	0
Second St.	North St. to Center St.	SB		✓	✓	✓	0
NYS Rt 20A	Mt. Morris Rd. to Main St.	EB	✓				0
NYS Rt 20A	Main St. to Mt. Morris Rd.	WB	✓			✓	6
NYS Rt 20A	Main St. to Second St.	EB	✓				8
NYS Rt 20A	Second St. to Main St.	WB	✓			✓	6
NYS Rt 20A	Second St. to Crossett Rd.	EB	✓				8
NYS Rt 20A	Crossett Rd. to Second St.	WB	✓			✓	6
NYS Rt 20A	Crossett Rd. to Center St.	Both	✓			✓	6
NYS Rt 20A	Center St. to Reservoir Rd.	Both	✓			✓	8
Temple Hill	NYS Route 20A to Center St.	Both				✓	0
Volunteer Rd.	NYS Route 20A to Lima Rd.	Both	✓				5

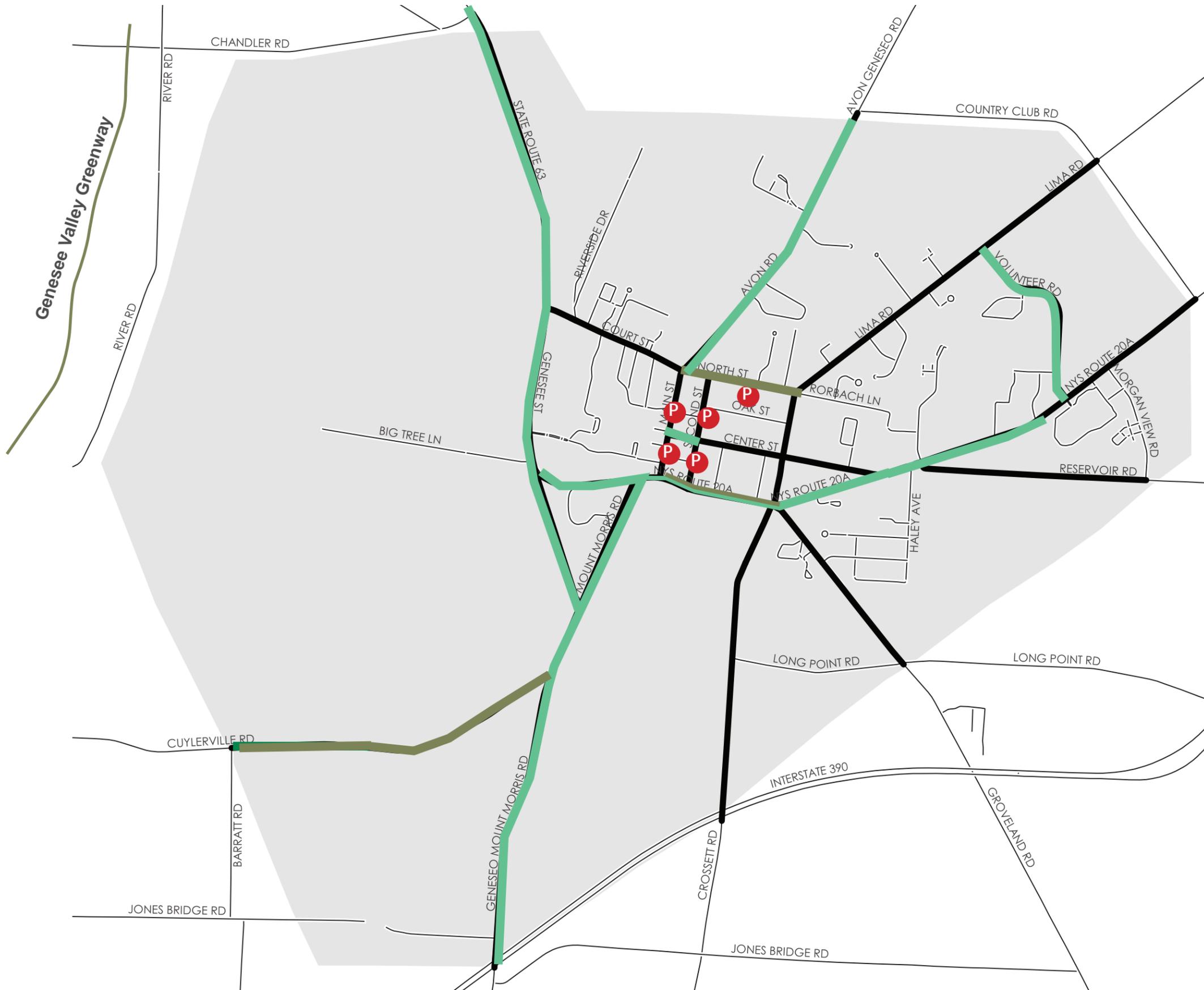


FIGURE 19 ON-ROAD BICYCLE FACILITY OPPORTUNITIES

SPACE FOR BICYCLING OUTSIDE TRAVEL LANE*

- Less than 4' Wide
- 4' - 8' Wide
- Over 8' Wide
- P Typical On-Street Parking Areas

*Calculated by measuring entire width of roadway and subtracting typical width of travel lanes for each roadway type. For instance, a 34' road with one 12' travel lane in each direction would have a 5' space outside of the travel lanes on each side ($12 \times 2 = 24$; $5 \times 2 = 10$; $24 + 10 = 34$).

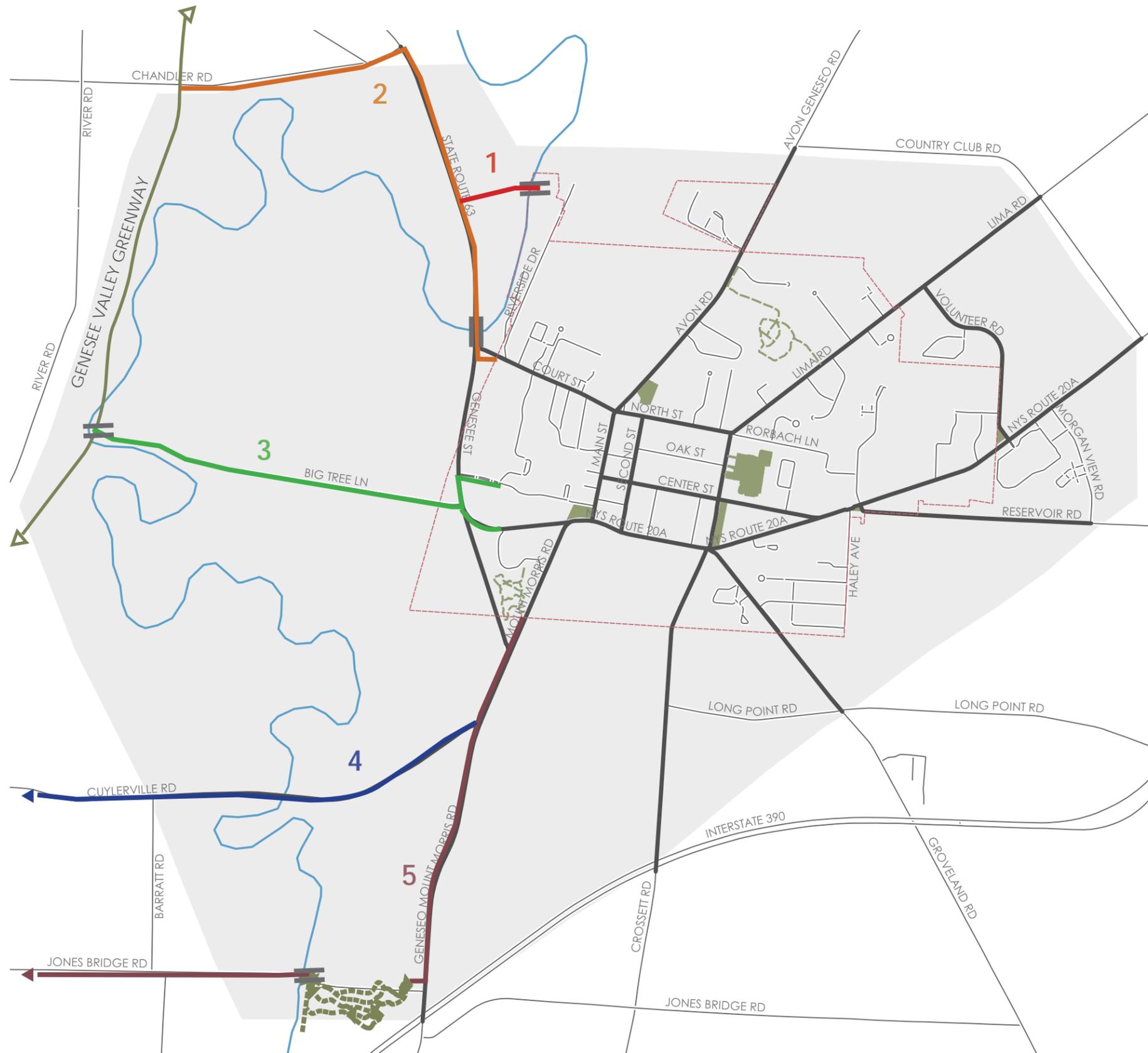


6.5 CONNECTION TO GENESEE VALLEY GREENWAY

There is a need for a safe connection between the Village and Town of Geneseo and the Genesee Valley Greenway. Prior to this project, the *Geneseo Pilot Plan* presented the following five opportunities for Geneseo-Greenway connections, each of which have been evaluated as part of this study. **Figure 20:Greenway Connections** illustrates the specific routes for each potential connection.

GREENWAY CONNECTION OPPORTUNITIES	
<p>Village of Geneseo River Access Park</p> <p>1</p>	<p><i>Connecting from this Park to the Greenway would make use of a low-volume street, open space, and the existing Right-of-Way. However, the park is located along Riverside Drive, which is narrow and along a hillside. Potential trail access would require significant grading off-road. A connection across the river would require not only a bridge over the river, but approval of private farm fields to cross over to the Trail. This connection would also be relatively far from the Village and require an additional 1.86 miles to the Greenway once across the Genesee River.</i></p>
<p>NYS Rt. 63/Genesee St Highway Bridge</p> <p>2</p>	<p><i>This connection involves funding for the addition of an underpass, already designed by NYSDOT, to the recently constructed Route 63 Bridge. However, barriers include project funding and speeds north of the bridge. Coordination would be needed with adjacent property owners for off-road alternate routes.</i></p>
<p>Big Tree Lane</p> <p>3</p>	<p><i>This option is the shortest distance between the Village and the Greenway. It would involve construction of a bridge over the Genesee River, and off-road trails on utility property. This connection is the only option that utilizes a low volume, somewhat off-road experience to access the Greenway. However, it should be noted that the logistics of executing agreements with private owners, permitting processes, and designing a safe crossing of Route 63 present significant challenges. There is also an opportunity to implement a park-and-ride lot at this option, allowing residents to drive near the Greenway before their bike rides.</i></p>
<p>Cuylerville Road Highway Bridge</p> <p>4</p>	<p><i>This connection is also farther from the Village, at 1.75 miles to the Genesee River, and another 1.5 miles to access the Greenway. Most of the route would be adjacent to high volume, high speed roadways, with challenging slopes. However, there are wide shoulders that may allow for a separated facility within the Right-of-Way.</i></p>
<p>Indian Fort Nature Preserve</p> <p>5</p>	<p><i>This option requires significant travel from the Village, including 2.5 miles to the Genesee River, and another 1.7 miles to access the Greenway. Challenging climbs, high speeds, and truck traffic pose another concern for utilizing this connection, which would also require construction of a new pedestrian bridge. However, this connection would promote access to open space, utilize the existing Right-of-Way, and portions could be located on low-volume roadways.</i></p>

FIGURE 20 GREENWAY CONNECTIONS



-  Study Network
-  Parks
-  Existing Trails

- 1** Village of Geneseo River Access Park
- 2** Route 63/ Genesee St Highway Bridge
- 3** Big Tree Lane
- 4** Cuylerville Road Highway Bridge
- 5** Indian Fort Nature Preserve



6.6 ADDITIONAL TRAILS & CONNECTIONS

There are opportunities to build upon the existing network of off-road facilities by providing additional connections to recreational, retail, and community amenities. The analysis performed for Geneseo trails involved an inventory of existing infrastructure and site visits. Reference **Figure 21: Trail Opportunities**, and the following table for the following specific off-road trail areas and needs. Please note that some of the following opportunities are located partially on private property, and any implementation would require additional coordination with property owners.

ADDITIONAL TRAIL & CONNECTION OPPORTUNITIES	
Walmart - Lima Road - Volunteer Road Connections	<i>There are opportunities to formalize existing paths through private properties that could provide convenient off-road access for bicyclists and pedestrians to Walmart and nearby stores on Megan Drive. If completed, this trail system could connect the neighborhoods south of Lima Road, Volunteer Road, and NYS Route 20A. Coordination with property owners would be essential to the completion of this network.</i>
Rorbach Lane - Jacqueline Way Bicycle Boulevard	<i>Rorbach Lane and Jacqueline Way are low-traffic, low-speed connecting roadways that are separated by a gate. This gate currently blocks vehicular traffic, and forces pedestrians and bicycles to walk onto the grass in order to pass by. There is an opportunity to make this roadway into a primary active transportation corridor and connection between the Village of Geneseo and NYS Route 20A through enhanced facilities, markings, and an improved gate.</i>
Geneseo School District Path	<i>As shown by the EcoCounter data, the existing informal pathway by the Geneseo School District is utilized daily. There is an opportunity to develop this path into an accessible, multi-use trail that further incentivizes children to walk to school. Please refer to the following pages for a summary of all active transportation needs and opportunities within the school zone.</i>
Rails to Trails	<i>There is an opportunity to convert abandoned railbeds into multi-use trails. However, many of these sections are quite overgrown, and extensive coordination with private landowners would be necessary to develop this project.</i>
Genesee Valley Conservancy Loop Path	<i>In 2017, The Genesee Valley Conservancy outlined a plan to create a 'closed loop' trail throughout the Village of Geneseo, utilizing the existing Island Preserve, School Path, and Roemer Arboretum trails in addition to several sidewalks and low-traffic roadways. However, implementation of the remaining sections of this trail loop would require additional property owner coordination.</i>
Jaycox Creek Paths	<i>There are two branches of Jaycox Creek on the eastern side of the project area. There is an opportunity to create an informal walking path along the creekbeds through coordination between the Town, Village, and Property Owners.</i>

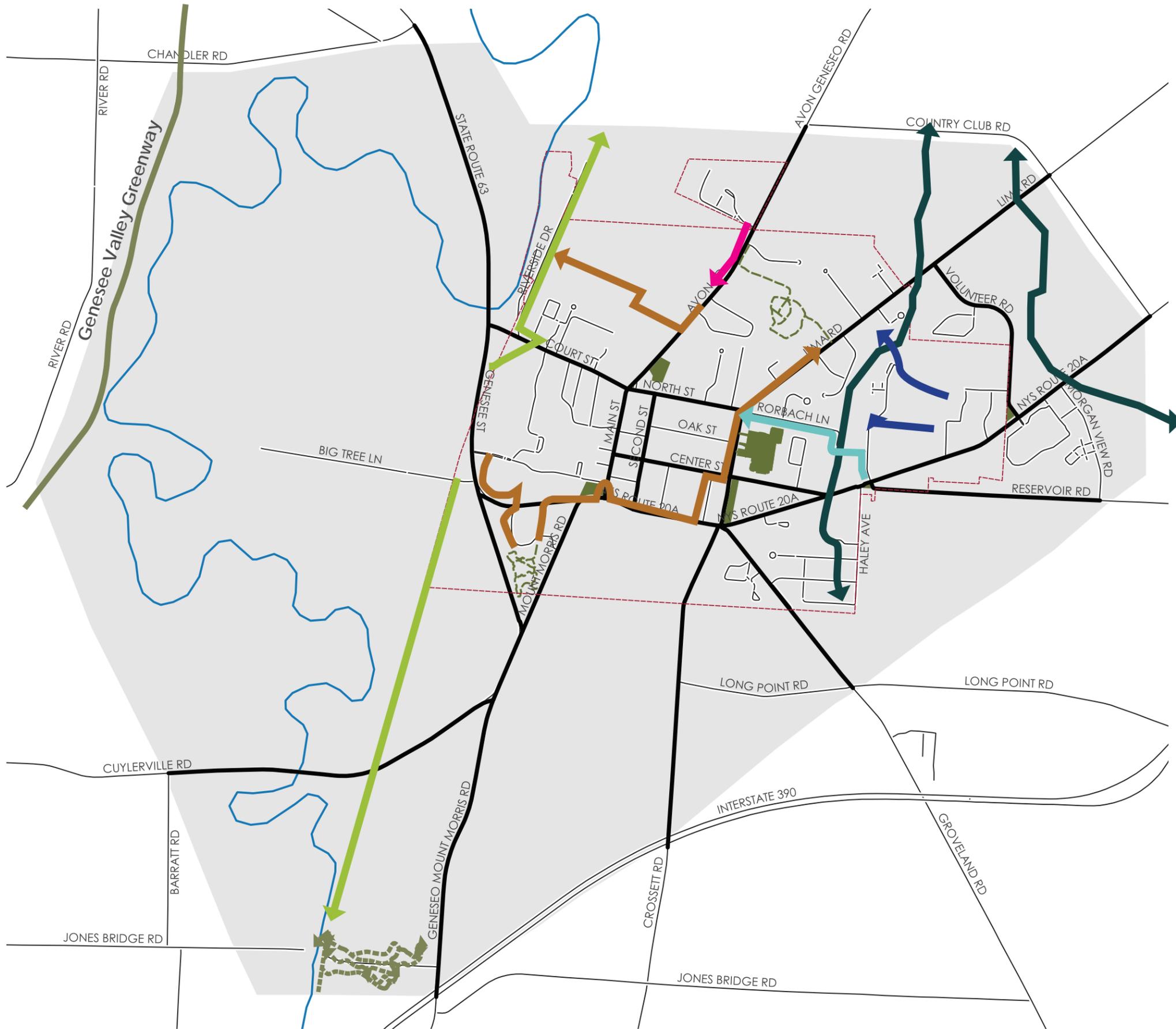


FIGURE 21 **TRAIL OPPORTUNITIES**

-  Study Network
-  Parks
-  Existing Trails

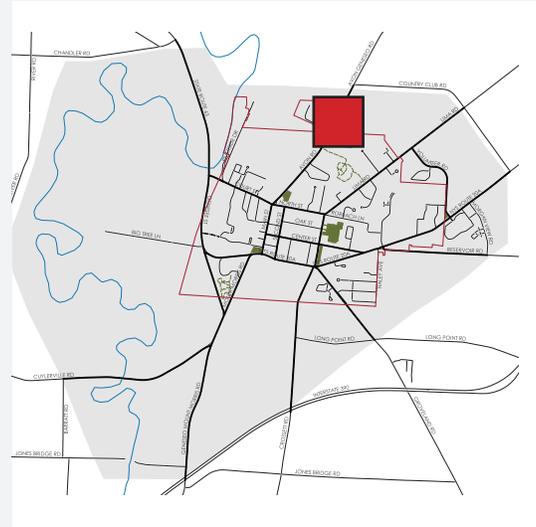
POTENTIAL TRAILS + CONNECTIONS

-  Walmart Connections
-  Rorbach Lane Bicycle Boulevard
-  Geneseo School District Path
-  Rails-to-Trails
-  Genesee Valley Conservancy 'Loop Path'
-  Jaycox Creek Paths



SPOTLIGHT: GENESEO CENTRAL SCHOOL AREA

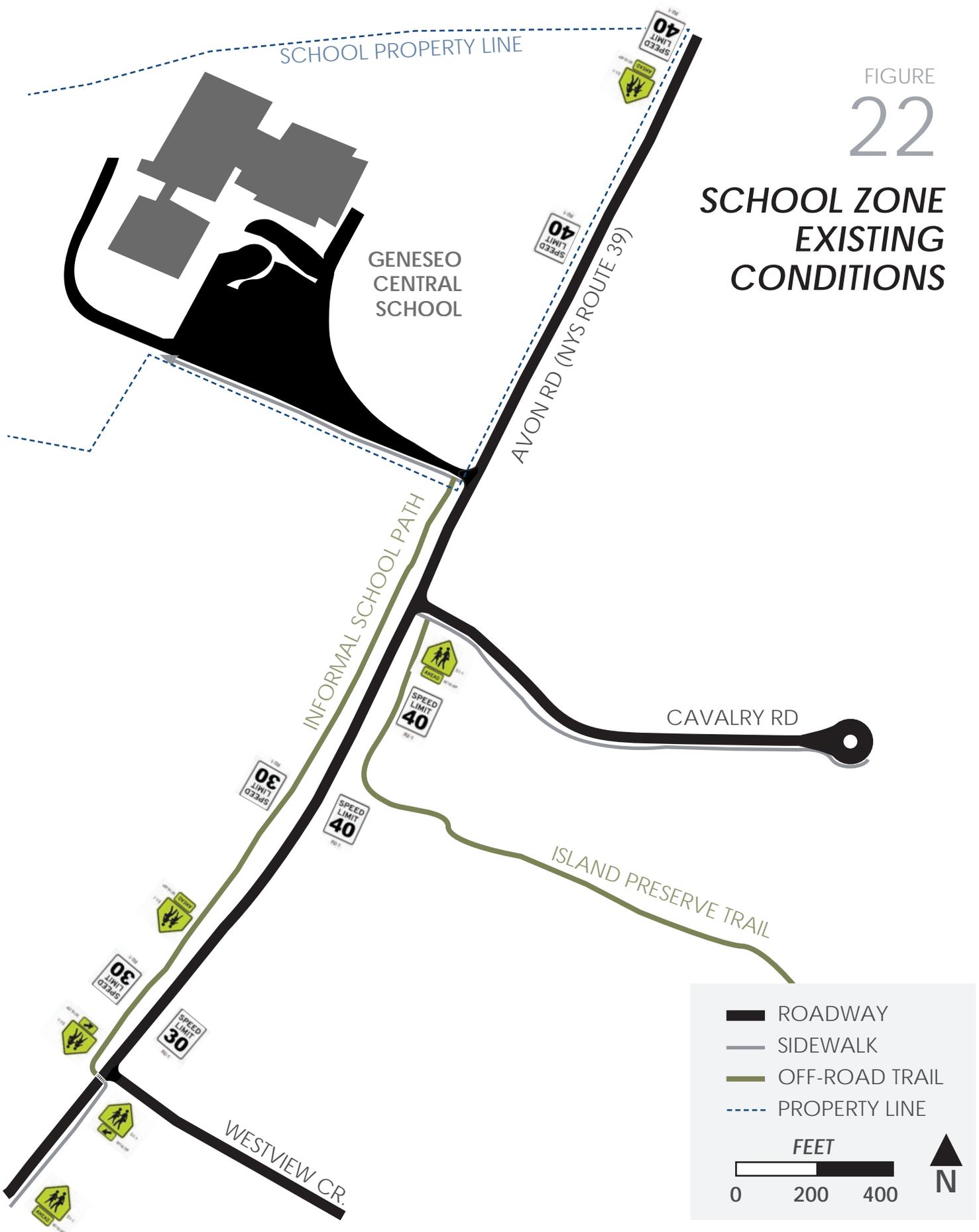
The area around the Geneseo Central School presents an opportunity to bring together multiple types of active transportation-related enhancements. The table below references the various specific needs and opportunities mentioned throughout this chapter that are relevant to the school area. Please refer to **Figure 22: School Zone** for an overview of existing signage, trails, sidewalks, and crossings in this area.



NEED/ OPPORTUNITY TYPE	SPECIFIC NEED/ OPPORTUNITY	DETAILS AND/OR CONDITIONS
Crossing	Opportunity for enhanced crossing over Avon Rd at Westview Crescent	Would better serve students and residents who utilize the school pathway along the west side of Avon Road
Crossing	Opportunity for new crosswalk across Avon Rd adjacent to School Driveway	Would serve Cavalry Rd residents and those who use Island Preserve trail; would require sidewalk installation along west side of Avon Rd
Bicycle Facility	Opportunity for Bike Lane along Avon Rd	Would require formalized off-road path for pedestrian and jogger use; otherwise would be mixed-use shoulder
Sidewalk	Opportunity for sidewalk along east side of Avon Rd from Cavalry Rd to School Driveway	Would connect Cavalry Rd sidewalk and Island Preserve trail to new crosswalk at School Driveway
Off-Road Trail	Opportunity to formalize existing informal path along west side of Avon Rd between Westview Crescent and School Driveway	Would provide accessible path for multiple user groups; property owner coordination must continue
Policy	Need to enhance perceptions of safety through potential school speed limit reduction	Potential school speed limit reduction could be implemented with new crosswalk and presence of a crossing guard

FIGURE
22

SCHOOL ZONE EXISTING CONDITIONS



6.7 REGULATORY NEEDS & OPPORTUNITIES

OVERVIEW

With regard to active transportation, there are opportunities to further strengthen the regulatory tools of the Town and Village (summarized in Section 5.9). Ensuring that these regulatory tools are consistent with the overall vision of the community is essential to realizing the goals of this Plan. While the general framework of Town and Village land use regulations are well considered, there are several opportunities for improvement. In general, the needs and opportunities for Geneseo include:

- Providing consistent reference to and codification of multi-modal transportation goals;
- Enhancing building and site design standards to ensure future investment reflects a desirable character and development pattern for all modes of travel and connects non-motorists between neighborhoods and activity centers;
- Creating a cohesive set of active transportation facility design requirements community-wide;
- Establishing more clear and prescriptive standards for the construction and maintenance of pedestrian infrastructure;
- Incorporating more requirements for bicycle connectivity and accommodations, and providing guidance for the creation of bicycle-friendly routes between the Village and Town;
- Providing for the construction of safe, secure, all-weather bus stop infrastructure; and
- Ensuring local regulations accommodate residents and travelers of all ages and abilities, including ADA compliance.

VILLAGE REGULATIONS

A more detailed summary of regulatory needs and opportunities within the Village Code and Land Development Regulations is provided in the tables on the following page. Overall, improvements that should be considered for the Village's regulatory framework include the:

- Enhancement of site plan review criteria with respect to considerations for bicycle, pedestrian, and transit access.
- Expansion of active transportation facility design requirements, such as managing curb cuts, to areas outside the Access Management Overlay District.
- Clarification of the language used to describe crosswalks.
- Enhancement of language related to lighting and pedestrian safety within new developments.
- Addition of language to encourage adherence to ADA guidelines for accessibility.
- Addition of language to promote the design of separated bicycle facilities.

VILLAGE CODE NEEDS & OPPORTUNITIES

CHAPTER	SECTION	DESCRIPTION
130 Zoning & Subdivision of Land		
	41	Planned Residential Development District Consider additional construction of bicyclist infrastructure, whether that be racks, shared-use roadways, or lanes, especially to access open space areas. Encourage architectural design of these facilities to build upon the character of the development and the community.
	42	Access Management Overlay District These standards should be applied Village-wide and also implemented by the Town in areas where consistency in streetscape design is desired, such as Route 20A.
	97	Blocks The Village could go further to enhance walkability in the community. While sidewalks must be present for blocks over 1,000 feet in length according to code, a walkable block measures much smaller scale, about 250 to 300 feet in length. Blocks over 1,000 feet should be prohibited and regulations adapted to suit walkability.
135A Land Development Regulations & Public Works Requirements		
III	Development Requirements	A-15 Street Layout Non-motorized connections are not differentiated within this section and lack considerations for connectivity. This can make non-motorized trips longer and ultimately suppress the utility of these modes.
		A-18 Blocks Need more specific parameters on what constitutes "safe and convenient vehicular and pedestrian circulation." E.g. requiring the designation of pedestrian walkways and cross walks. Amend requirements to include maximum block lengths for walkability.
IV	Site Improvements	A-28 Site Improvements It is good that this section requires sidewalks on both sides of the street; however, the one-foot inside the road right-of-way requirement may be limiting in certain developments. Additionally, this section makes no mention of accessibility requirements. In general, all the sidewalk requirements should be grouped together in one section, rather than scattered throughout (see section A-59).
		A-34 Street Lighting These requirements should be reviewed to ensure they meet the illumination requirements of AASHTO Roadway Lighting Design Guide. Also, AASHTO states that when sidewalks are present along a roadway, the sidewalks need to be lit to at least the same level as the roadway. No specific matrix or formula is provided; the zoning code (Article VI, Chapter 130) does specify use of pedestrian scale lighting but only within the Mixed-Use Districts.
		A-37 Parking Areas No mention of bicycle parking is made, although it is specified within parking requirements of certain districts defined within the zoning code. No mention is made of accessibility concerns where driveways cross sidewalks or other designated pedestrian routes. It should be required that pedestrian facilities exist across driveways for continuity in marked pedestrian circulation.
VII	Design Criteria	A-56 General Road Design Criteria Clear sight at intersections is specified as a requirement of a roadway design, without explicit specification of visibility of bicycles The standard road widths provided collector streets of 26 and 24 feet are not wide enough to include bike lanes in association with 10-foot or wider lanes. Mixing with traffic is likely not comfortable for most bicyclists on collector class streets.
		A-59 Sidewalks The specification for sidewalks establishes a minimum width of 5 feet, but makes no mention of other accessibility criteria, such as cross slope or surface condition.
IX	Installation of Improvements	A-85 Concrete Gutters and Sidewalks The specification for cross slope establishes a standard cross slope of ¼ inch per foot, or 1:48. This is steeper than the 1:50/2% maximum cross slope that is established in adopted ADA guidance.
	Appendices	S, T, U Typical Road Cross Sections Adding dimensions and other details could help establish and clarify criteria.
		X Sidewalk Detail Adding dimensions and other details could help establish and clarify criteria.
105 Streets & Sidewalks		
	11.1	Sidewalk Permits Regulations do not clarify ADA compliance for sidewalks, but does set a minimum width. Results of this action are shown along Main Street and the Village Park where there are stairs leading from the crosswalk along Park Street into the Park, making it inaccessible from this access point.
	5	Riding on Sidewalks While it is important to discourage riding on the sidewalk due to difficulty associated with coordination between pedestrians and bicyclists, it is also an important stepping stone for young children learning how to ride to have a safe, off-road facility.
123 Vehicles & Traffic		
	51	Speed Limits In §123-52 there is language stating school day operating hours take place from 7am to 6pm, but there are no areas on which this code is applied. This code creates an distinguish the school zone being a standard 25 mph during operating hours 7am-6pm, but remain 40 mph during other times of the day in this area.

TOWN REGULATIONS

There is a significant amount of language and visuals in the zoning code demonstrating the importance of multi-modal transportation, especially in mixed use districts. This is established in the intent statements of the districts, as well as reiterated throughout the document. Opportunities for improving the Town's regulatory framework include the:

- Addition of language about bicycles to the Access Management portion of the code that currently defines streets only as “means of use” for pedestrians and vehicles.
- Enhancement of minimum requirements for pedestrian walkways in parking areas.
- Enhancing design standards within the zoning code for pedestrian, bicycle, and vehicular circulation.
- Adding ADA-compliant requirements to pedestrian walkways

The table on the following page provides a summary of specific needs and opportunities by chapter and section of the Town Code.

TOWN CODE NEEDS & OPPORTUNITIES

CHAPTER	SECTION	DESCRIPTION
93	Subdivision of Land	
	6	Definitions
		“Street: A strip of land, including the entire right-of-way, intended for use as a means of vehicular and pedestrian circulation.”
	8	General Standards Applicable to All Types of Development
		“Pedestrian interior walks may be required... in blocks over 1,000 feet or to provide pedestrian walkway continuity within a given subdivision. Such crosswalks shall have a width of not less than 10 feet and a paved walk of not less than five feet.”
	13	Street Pavement, Curbs, and Sidewalks
		The Town of Geneseo provides minimum requirements for sidewalks in Arterial, Collector, Minor, and Marginal Access Streets above 4’ wide in a table for comprehensive use.
106	Zoning	
	23.3	Mixed Use Districts: Objectives
		Development of an internal roadway system that provides for the safe and efficient travel of pedestrians and cyclists as well as motorists. Said roadway system should include sidewalk connections, crosswalks, transit stops, and bicycle accommodations where appropriate.
	41.3	Off-Street Parking & Loading Regulations: General Requirements
		Pedestrian Walkways. All parking lots that contain more than twenty (20) spaces, including access lanes and driveways, must include clearly identified pedestrian route from the parking area to the main building entrance and to the public sidewalk along the street if present.
	41.7	Off Street Parking & Loading Regulations: Minimum Parking Space Requirements
		This section specifies parking requirements in each zoning district through relative metrics. Bicycle parking is required in all mixed-use districts at 10% of the motorized vehicle parking requirements but not less than two (2) bicycle spaces and not more than ten (10) bicycle spaces for any use.
	44.3	Design Standards & Guidelines: Objectives
		Create lively, pedestrian-friendly, and attractive buildings, sites, open spaces, and streetscapes where residents and visitors will enjoy walking, biking, and driving.
	44.4	Design Standards & Guidelines: Site Planning Standards
		This section describes walkway and bicycle access concepts. Walkways must be constructed along the entire frontage length, meet minimum width of 5’ with curbing, and connect to the building front. Bicycle circulation must include separate facilities, parking facilities, and access.
	44.7	Design Standards & Guidelines: Listing of Figures
		The Architectural Standards define pedestrian circulation in as a form based code.