LIVINGSTON COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

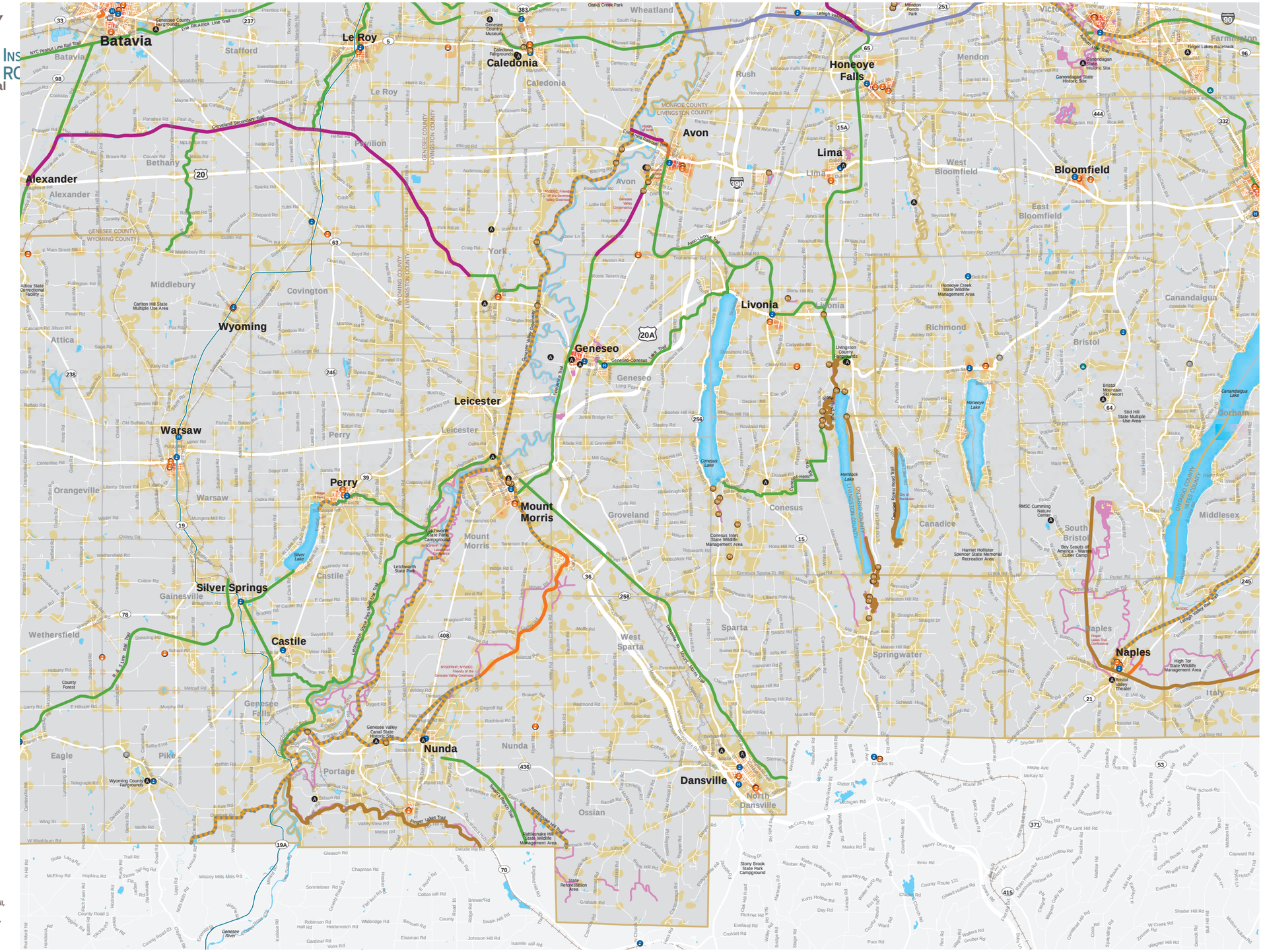
- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

Estimated Bicycle & Pedestrian Demand

- Higher
- Lower
- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 3 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.



ONTARIO COUNTY
Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

Estimated Bicycle & Pedestrian Demand

- Higher
- Lower

- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 3 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.

ORLEANS COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

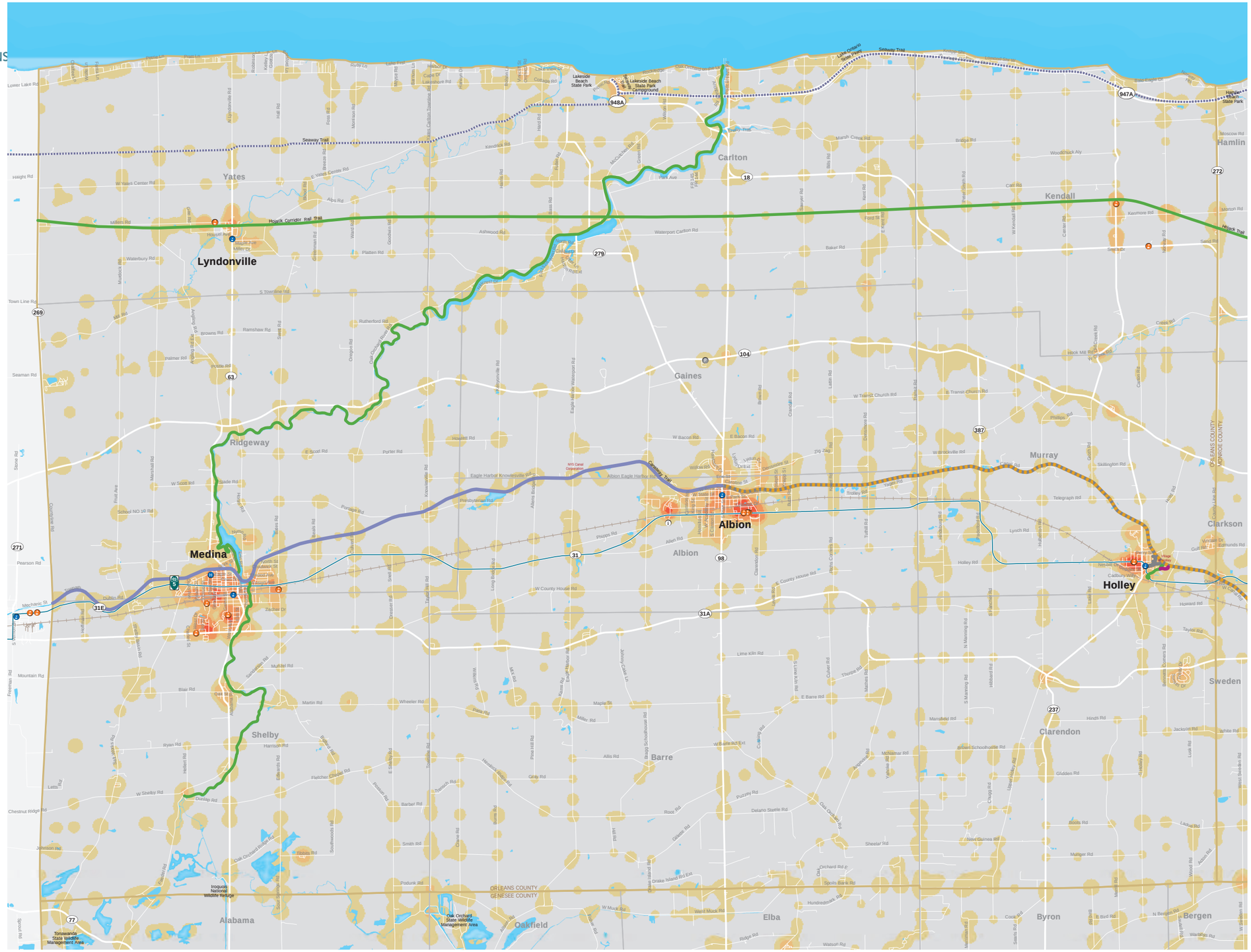
Estimated Bicycle & Pedestrian Demand

- Higher
- Lower

- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.



SENECA COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

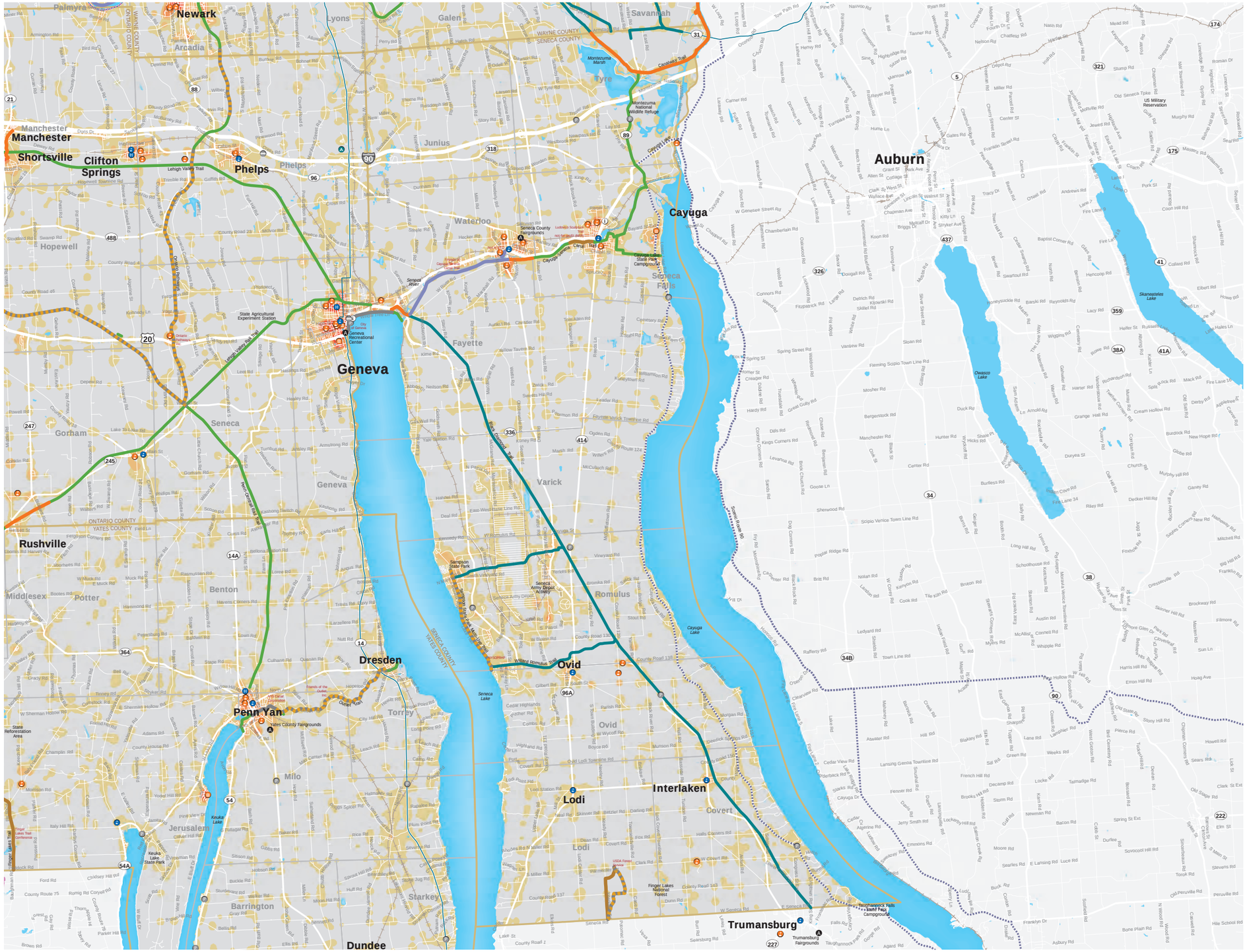
- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

Estimated Bicycle & Pedestrian Demand

- Higher
- Lower
- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 3 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.



WAYNE COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

INSE

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

Estimated Bicycle & Pedestrian Demand

- Higher
- Lower
- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.

WYOMING COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

Estimated Bicycle & Pedestrian Demand

- Higher
- Lower
- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.

YATES COUNTY Existing and Planned Trail Network

Genesee-Finger Lakes Regional Trails Initiative Update

INSE

Regional Trail Network by Surface Type
(Responsible agency shown in red)

- Paved Surface (Asphalt, concrete)
- Natural Surface (Grass, dirt)
- Unpaved Surface (Gravel, stone dust)
- On-Road
- Surface Type Varies
- Unknown Surface Type

Other Trails

- Other Local Trail
- Scenic Byway
- Lake Ontario Wine Trail
- State Bike Route

Planned and Proposed Regional Trail Network

- Under Development
- Planned/Prospective
- Potential/Proposed

Points of Interest

- Trail Works Trail
- Trailhead
- Proposed Trailhead
- Parking Area
- Bus Station
- Campground
- Attraction
- Tourist Info
- College
- School
- Hospital
- Library

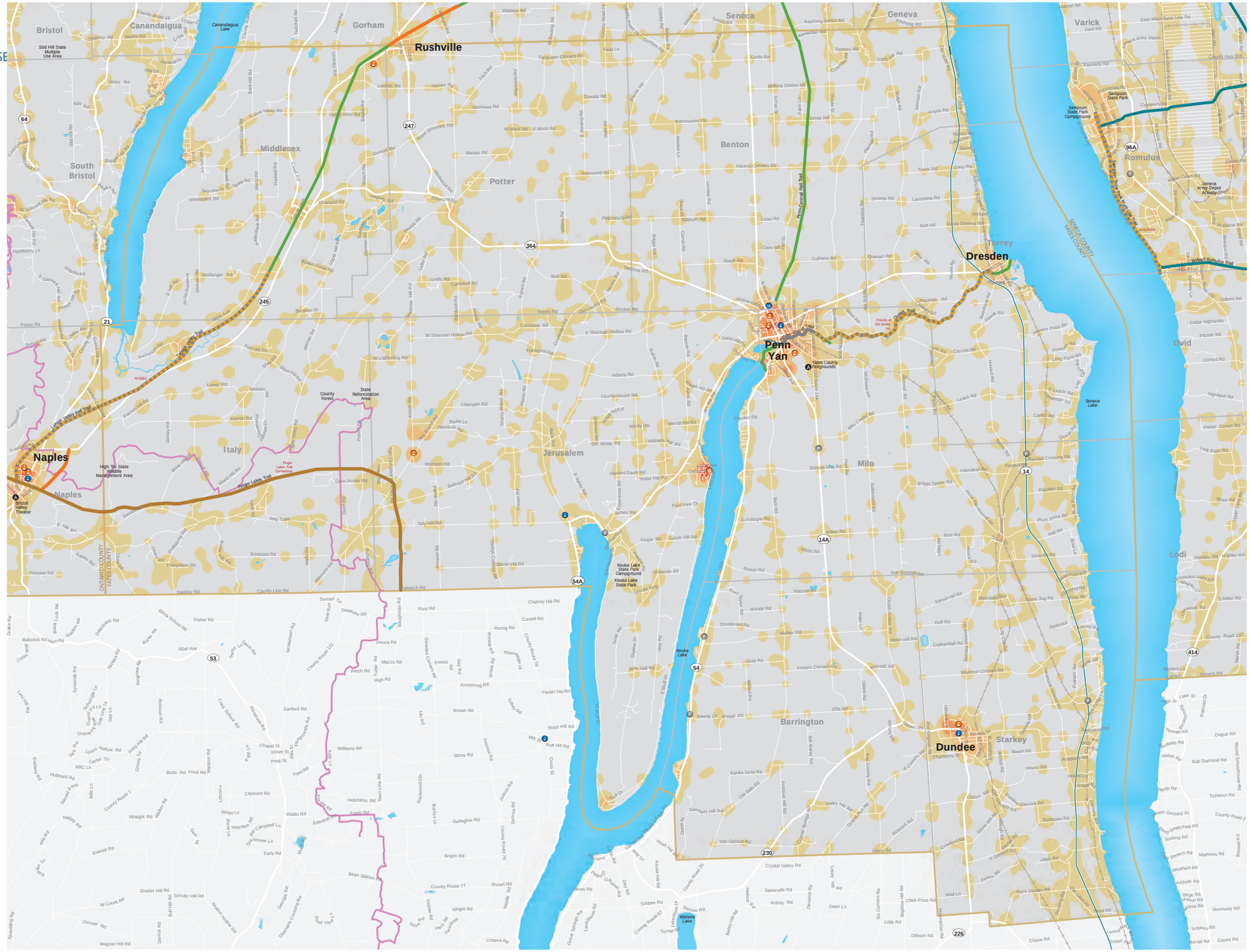
Estimated Bicycle & Pedestrian Demand

- Higher
- Lower

- County Boundary
- Town Boundary
- Study Area

N W E S 0 0.5 1 2 Miles

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, Genesee County, Ontario County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse.
Map created July, 2014.



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User Needs and Mode Share

Transportation Needs

Transportation in the study analysis includes employees who walk or ride their bicycle to work, children travelling to school, and residents running errands or making other utilitarian trips. The Rochester TMA has a great potential to increase the number of residents who use trails for transportation. The following attributes, which apply to some areas of the nine county study area, can help to facilitate an increase in the number of residents that can utilize trails for transpertation.

- The small size and compactness of many cities/ villages with dense residential neighborhoods nearby;
- A favorable climate for a large portion of the year;
- Flat, rolling terrain;
- A high percentage of work trips that are less than 5 miles.

According to the 2013 American Community Survey (ACS) 3-Year Estimates, a large portion of trips in the region are less than a 15 minute drive, or about a thirty minute bike ride. This suggests a large number of trips have the potential to be converted to bicycling and walking if the appropriate facilities are provided. The trail network should continue to close gaps and connect key destinations to capitalize on this regional potential.

When considering commuting needs, bicyclists and pedestrians share common preferences. These include, but are not limited to: minimal stops, safe roadway crossings, a direct and fast route, travelling in well-lit areas, and minimizing conflicts with vehicles.

Recreational Needs

Recreational trail users typically fall into the categories of pedestrians (walkers, runners), bicyclists, cross-country skiers, and horseback riders if allowed. For those seeking recreation uses, safety and aesthetics are generally more important considerations than directness of a route. Loop trails are often preferred and amenities such as protection from wind, artistic or informational elements, and moderate gradients help add to the attractiveness of the trail. The inclusion of trailheads, well-marked trail connections, and comfortable treads are basic elements to ensure a safe and comfortable experience for both commuter and recreational trail users. There are also competitive athletes who use trails for competitive events and training, including marathoners, cross country runners, triathletes and others - further emphasizing the need for continuity.

In the Genesee-Finger Lakes Region, the trail network is frequently used for recreational purposes and is an important element to the tourism industry. The natural amenities and many of the longer trails such as the Erie Canal Trail, the Genesee Valley Greenway, and the Lehigh Valley Trail attract bicycling, hiking,

and various recreation-oriented tourism to the region. The opportunity to travel throughout the region, experience many of the unique natural amenities, and connect with nature has proven to be a valued recreational asset that draws interest locally and nationally.

Mode Share as an Indicator of Demand

Common themes throughout the Regional Trails Initiative Plans have been to develop a regional trail system that will attract a broad variety of people, connect communities, link to important destination, and help overcome barriers to walking or bicycling. Phase 1 of the Plan established a framework for these benefits by analyzing regional and national statistics. According to the figures derived from the 2000 Census, Phase 1 found that approximately 1.6 percent of work trips were made by other means (aggregate number for transit and bicycles) in Monroe County and 2.2 percent of work trips were made on foot. These mode share numbers were lower than the national average of 0.4 percent and 3.9 percent, respectively. Due in part to this comparison and national interest in recreation, it was suggested that the region had a latent demand for connected trails and user facilities – otherwise classified as a "if you build it, they will come" opportunity.

Since the adoption of Phase 1 in 2002, the region has constructed (or is in the process of developing) more than 200 additional miles of trails to close network gaps and connect key destinations throughout the nine county region. Per the 2013 ACS 3-Year Estimates, 0.46 percent of work trips were made on a bicycle in Monroe County and 3.48 percent of work trips were made by foot. When considering the entire nine county study area, the region has a bicycle mode share of 0.61 percent and a walking mode share of 4.39 percent; both figures are higher than the national average for bicycling and walking mode share of 0.60 percent and 2.81 percent, respectively.

These numbers confirm that bicycling and walking to work has increased both nationally and locally, and provides credibility to the notion that the region has a latent demand for a regional trail network. Therefore, the analysis indicates there is a need to meet the growing demand for trails in the region, and furthermore, the area's demand for bicycling and walking as modes of transportation is higher than the national demand.

Mode Share 2013 2013 ACS, 3 year estimates

County	Bicycle	Walked	**Total**
Genesee	0.72%	3.99%	**4.71%**
Livingston	0.09%	6.61%	**6.70%**
Monroe	0.46%	3.48%	**3.95%**
Ontario	0.38%	3.95%	**4.33%**
Sececa	0.38%	2.83%	**3.21%**
Wayne	0.23%	2.28%	**2.51%**
Wyoming	0.22%	3.01%	**3.23%**
Yates	2.38%	8.98%	**11.36%**
Average	0.61%	4.39%	**5.00%**

Public Input Summary

Stakeholders in the Genesee-Finger Lakes nine county region were surveyed between September 26, and October 13, 2014. A 15-question survey was developed to gather information about trail use, benefits, and importance of amenities. The survey also sought user feedback about the community's top issues and priorities for enhancing the trail network.

A survey link was emailed to the stakeholder list developed by the steering committee. Approximately 40 mayors and town supervisors were invited to take the survey. The survey link was posted on the Facebook pages of local trail organizations and was available at three public open houses during the needs assessment phase of the planning process.

A total of 235 trail user surveys were received. The majority of respondents (63%) were men and 35 percent were women. A little more than 2 percent of respondents did not identify their gender. Forty-five percent of respondents were between 40-65 years of age; 23 percent were 30-40 years old; 16 percent were between 18-30 years; and 14 percent were over 65 years old. Again, a little more than 2 percent of respondents did not identify their age.

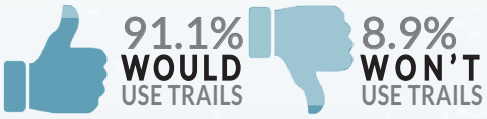
Respondents were most often from postal codes 14620 (City of Rochester and Town of Brighton), 14020 (Batavia, NY), 14607 (City of Rochester) and 14564 (Victor, NY).

The survey results from the public input process show:

When asked **how often do you use the trails** in the Genesee-Finger Lakes region respondents are generally regular trail users with most using trails a few times a week.

- 28.4% using trails a few times per week
- 27.2% using trails a few times per month
- 21.1% using trails a few times per year
- 14.7% rarely using trails
- 8.6% using trails daily

Nearly all respondents said they would use trails more often if they could easily walk or bike to one.



When asked **how trails are used** the majority of respondents use the trails for walking/hiking or bicycling.

- 77.1% of respondents use the trails for walking/hiking
- 71.9% bicycle on the existing trails
- 38.1% of respondents bicycle as transportation
- 29.9% of respondents jog/run
- 24.7% of respondents walk their dog on the existing trails

Respondents, when asked to **prioritize the purpose of building new trails**, ranked exercise/recreation, connectivity to important destinations, and family/friends as the most important.

1. Connecting people to trails and parks for exercise and recreation
2. Connecting people to places where they work
3. Connecting people to places where they shop or run errands
4. Connecting people to family and friends

When asked what are the **most important benefits and uses of a trail system** respondents rated recreation and exercise the highest with education and interpretation as the least important benefit.

1. Recreation/exercise
2. Transportation
3. Economic stimulation/tourism
4. Habitat and wildfire protection
5. Education and interpretation

The biggest **factors that discourage trail use** for respondents are lack of awareness and lack of connectivity.

1. Lack of awareness of the trail system
2. Lack of continuity or connectivity or the perception that the trail "doesn't go anywhere"

When asked to **prioritize actions steps** for the region the highest priority for respondents was to close gaps in the existing trail network.

1. Close gaps in the existing trail network
2. Add new trails to connect underserved towns and destinations
3. Bring existing trails up to new standards of safety amenities width and surface conditions
4. Initiate programs to increase awareness of the trails how to interact with other users and promote safety

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Respondents ranked directional signs and mile markers as the two **most important trail amenities** essential to their enjoyment of the trail.

1. Directional signs
2. Mile markers
3. Benches at points along trail
4. Drinking fountains
5. Bicycle repair stations

The Genesee Riverway Trail, the Rochester/ Brighton Canalway Trail, and the Pittsford Canalway Trail were checked as **most frequently used** by respondents.

• Genesee Riverway Trail (Roch.)	59.73%
• Canalway Trail (Roch./Brighton)	56.11%
• Canalway Trail (Pittsford)	56.11%
• Genesee Valley Greenway	52.94%
• Erie Canal Towpath (Pittsford)	47.06%
• Canalway Trail (Perinton)	38.91%
• Lehigh Valley Trail (Mendon)	38.91%
• Other	31.67%
• Canalway Trail (Gates/Greece)	31.67%
• Auburn Trail (Victor)	25.79%
• Canalway Trail (other areas)	25.79%
• Auburn Trail (Pittsford)	23.98%
• Crescent Trail (Perinton)	21.72%
• Canalway Trail (Macedon)	21.27%
• Route 390 Trail (Greece)	18.55%
• Route 104 Trail (Webster)	12.67%
• Hojack Trail (Webster)	11.31%
• RS&E Trolley Trail (Perinton)	10.86%

When asked **which local and regional destinations should be connected by trails** respondents frequently mentioned connecting the City of Rochester to the suburbs through trails. Connecting trails to get into and out of downtown Rochester was also frequently mentioned. Responses to this question are included in Appendix A.

The most frequent **suggestions for the Regional Trails Plan Update** were connectivity between trails, trail maintenance (especially in winter), trail safety, and whether trails should be paved or unpaved. A complete list of unedited responses is included as Appendix A.

Translating Needs into Recommendations

The needs assessment helps identify key origins and destinations that will lead to recommended trail alignments. Demand Analysis also indicates there is a latent demand of trail users in the area and therefore the current system is not fully meeting the needs of citizens and visitors. This is also supported by the survey; more trails, more connections, and gap closures are needed to serve the existing population. In addition to network recommendations, this needs assessment begins to highlight the priorities of the public. Closing gaps scores higher than new alignments, and providing wayfinding (signs) and mile markers are currently viewed as being more critical to enjoying the trail system than benches and other comfort features.

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Network Recommendations

Overview

The Regional Trails Initiative Update is comprised of a phased network of facilities that will expand the 500 plus mile trail system to more than 1,000 miles in an effort to connect communities, celebrate natural features, and enhance access to cultural destinations. The system will improve health for both people and the environment by providing recreation opportunities, active transportation corridors, and educational programming. As the gaps close, this trail network will be a world-class model for regional connectivity and a destination in and of itself.

This chapter highlights the methodology for developing the trail network, a description of the recommended map categories, the prioritization process, and cost estimates for development.

Methodology for Trail Planning

Project stakeholders, public participants, and planning consultants collaborated to develop the recommendations for the future trail system. The recommendations build upon the analysis of existing planning documents, public insight, and field visits. Public workshops and an online input map provided both in person discourse and specific trail alignment feedback. The diagram below summarizes the inputs involved in creating a regional network.

Trail Network Components

This plan unites the efforts of Phase 1 and Phase 2 to create a comprehensive nine county trails system. In some instances trails are recommended for surface upgrades; while other alignments may be removed from the regional network plan due to trail development and feasibility concerns. A data collection process was also undertaken to accurately record the existing and proposed local trails throughout each county. Key destinations

Trail network diagram illustrating the components that make up all the pieces of designing a trail.

were researched and documented to highlight places throughout the nine counties that can be connected with, and celebrated by, a regional trail system. Key components in the development of the trails system include:

1 Transportation Focus

While there are extensive recreation-based trails throughout the region, this plan focuses on those trails used for transportation - for both daily utilitarian use and tourism. Motorized trail types, including snowmobile trails, are not included in the recommendation; instead they are used in this plan as key destinations.

2 Complexity + Feasibility

The proposed trail network, in its third phase, is becoming more complex. Detailed studies of trail alignments have led to more specific alignments. These new, more refined alignments have been added to the network, and the previous conceptual lines have been removed. Alternately, some alignments have been removed completely due to fragmentation or feasibility studies indicating numerous barriers.

3 Regional Hubs

Another key addition in this phase is the placement of "trail hubs." These hubs will serve as gateways to the regional trail system. Each hub should provide a level of amenities commensurate with being a major trailhead. Major trailheads/hubs include restrooms, parking areas for vehicles and trailers, potential access to camping or lodging, maps and kiosks, and signposts for the trail and its features. Minor trailheads/hubs usually include a map or kiosk of the trail network, connections to adjacent sidewalks or bicycle facilities, and shared parking. Minor trailheads are sometimes referred to as "walk-up" trailheads.

4 On-Road Gap Closures

As the region embraces trails for transportation use, there is also a need to close gaps with on-road segments in key locations. In addition to typical trail types, alignments for on-road facilities are also depicted on the network maps. These gap closures emphasize the importance of aligning trail, bicycle, and pedestrian planning, design, and implementation efforts on a regional and local scale.

5 Design Guidance

Each trail type is suitable for the purpose of use (recreation / transportation / both), trail users, and environmental context. The following categories of documented existing conditions and network recommendations are present in this plan. Full descriptions and guidelines for development of planned and potential trails can be found in Appendix B: Design Guidelines.

Network Recommendation Categories

Due to the complexity of the trails system, the data gathered and maintained increasingly becomes more sophisticated. Several categories of existing and recommended trails are now recorded. Definitions are provided below:

1 Existing Trails

Paved

These existing trails have a surface type of either asphalt or concrete.

Natural Surface

Natural surface trails include those that are grass or soil. They may be through woods or mowed paths adjacent to agricultural fields.

Unpaved

This category of trails include gravel and stone dust surface types.

On-Road

These connection are within the road right-of-way and include a variety of bicycle facilities (bike lanes, shared lane markings, bicycle boulevards, and bike routes).

2 Other Trails

Existing Park Trail
Local recreational trails of varying surface type.

Proposed Park Trail
A park trail that is currently in an existing plan.

Other Local Trail
Local recreational trails that may not be within a park but create important connections or are recreational destinations.

Scenic Byway
Historic national or state recognized scenic byways.

Lake Ontario Wine Trail
A route connecting the eastern corner of Monroe County to the vast majority of Wayne County that aligns with vineyards, restaurants, and overnight accommodations.

Snowmobile Trails
recorded trails used for recreational snowmobiles during winter months.

State and Local Bike Routes
those routes designated by the state and local municipalities as bicycle routes.

Surface Type Varies
This category refers to those trails that have multiple surface types, they can include asphalt, stone dust, or other materials.

3 Phase 3 Recommended Network

Under Development
Trails that are either under construction, funded, or otherwise in the process of being designed and built (according to the research conducted through this study).

Upgrade Surface Type
A recommendation to enhance an existing trail to achieve connectivity, accessibility, or use as a transportation route by providing a surface suitable for biking and width suitable for multiple user types.

Planned
A trail alignment previously studied (by Phase I, Phase II, or any other GTC or local planning study) that this study supports as a recommendation.

Potential/Proposed
A new trail alignment created through this planning study. This may be a new connection or a realignment of an existing planned trail due to further field exploration.

Proposed On-Road
A new on-road connection created through this planning study to close a gap in the trail system.

Removed/Realigned
A trail alignment removed due to refining the alignment, research from previous planning studies that indicate it is no longer feasible, or field verification that the alignment is no longer feasible due to environmental constraints, fragmentation, or difficult land acquisition.

Prioritization Process and Project Sorting Criteria

Phase 1 and 2 employed similar criteria for sorting and prioritizing the development of new and improved trails. This criteria process was used again in Phase 3. During the second round of public input, citizens were invited to share their thoughts on which trails should be prioritized in the near-term (five years), mid-term (six to ten years), and long-term (beyond ten years). The steering committee considered the public feedback and used the below criteria to score each corridor.

1 Project Feasibility

Inclusion in a Local, County, Regional, or State Plan – Is the trail or trail improvement identified in a local, county, regional, and/or state plan?

Public Comments/Community Support – Is there a high-level of community support for the project? Was the project or improvement frequently identified in the Regional Trails Initiative Update public input methods?

History of Project-Specific Planning Effort – Has the respective community and/or agency progressed any specific planning efforts for a project (e.g. feasibility study, cost estimation, site and/or structural inspections, environmental and/or historic resource reviews)?

Right-of-Way Availability – What is the ownership status of the right-of-way or property for new trails or improvements to existing trails? Corridor availability is very important to the overall feasibility of a trail due to the cost and challenge of property acquisition.

Overall Project Readiness – Are there other factors that indicate a new trail or improvement to an existing trail is ready to proceed (e.g. funding resources in place, detailed planning and design completed)?

2 Connectivity

Gap Closure – Will the project close a gap in the local or regional trail system (e.g. new trail, new or improved linkage, bridge connection, etc.)?

Mobility/Access Improvements – Will the project improve access to activity centers, either directly adjacent to the trail or within a ½ mile? Examples of activity centers include parks and other recreation destinations, employment centers, schools of all levels, village/town centers, and business districts.

3 Benefit of a New Trail or Improvement to an Existing Trail

Persons Served – How many people will the proposed project serve?

Proximity to population centers

Likelihood that new trail or trail improvement will generate new trips

Economic Impact – Is the project likely to support local or regional economic initiatives?

Marketability of trail

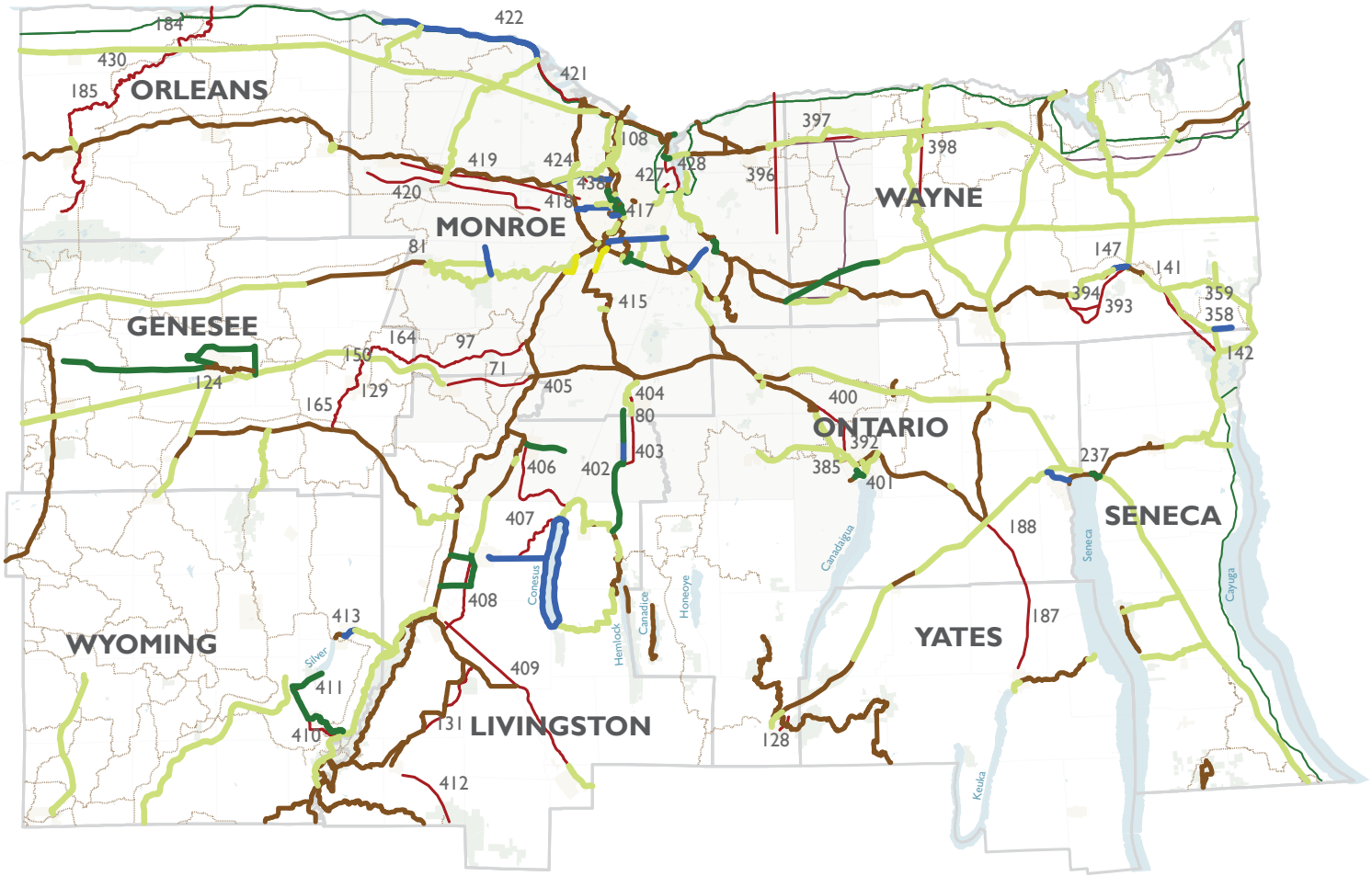
Support or potential support to nearby businesses/business opportunities

Transportation Option Provided – Will the proposed project provide a new and/or significant non-motorized transportation option to an area?

Accessibility Improved – Does the project ensure full accessibility per the standards and guidance of the Americans with Disabilities Act (ADA) and the US Department of Transportation? The US Architectural Board of Compliance considers properly installed unpaved trail surfaces to be accessible.

Safety and Security Improved – Will the project improve the safety of a trail and/or enhance personal and property security (e.g., trail/street intersection improvements, improved visibility, trail/trailhead lighting, improved access points)?

Phase 3 Recommendations Trails Marked For Removal ** From Proposed System



- Counties
- Municipalities
- Cities and Villages
- Major Parks
- Transportation Mgmt. Area (TMA)
- Snowmobile Trail
- Lake Ontario Wine Trail
- Scenic Byway
- Existing /Under Dev. Trail

Phase III Recommended Trails

- Upgrade Surface Type
- Planned (previously planned trail)
- Potential (new trail opportunity)
- On-Road Trail
- Removed, No Longer Feasible

Data obtained from the Genesee Transportation Council, Monroe County, Livingston County, Wayne County, the City of Rochester, NYDOT, and the NYSGIS Clearinghouse. Map created May, 2015.

0 2.5 5 10 Miles

N W E S

In some cases, the plan recommendation is to remove trails from the proposed system due to fragmentation or unrealistic land acquisition efforts. Alignments were also marked for removal when an alternate alignment provided a better, more feasible connection between two destinations.

**Please refer to large format map inserts for detailed alignments.

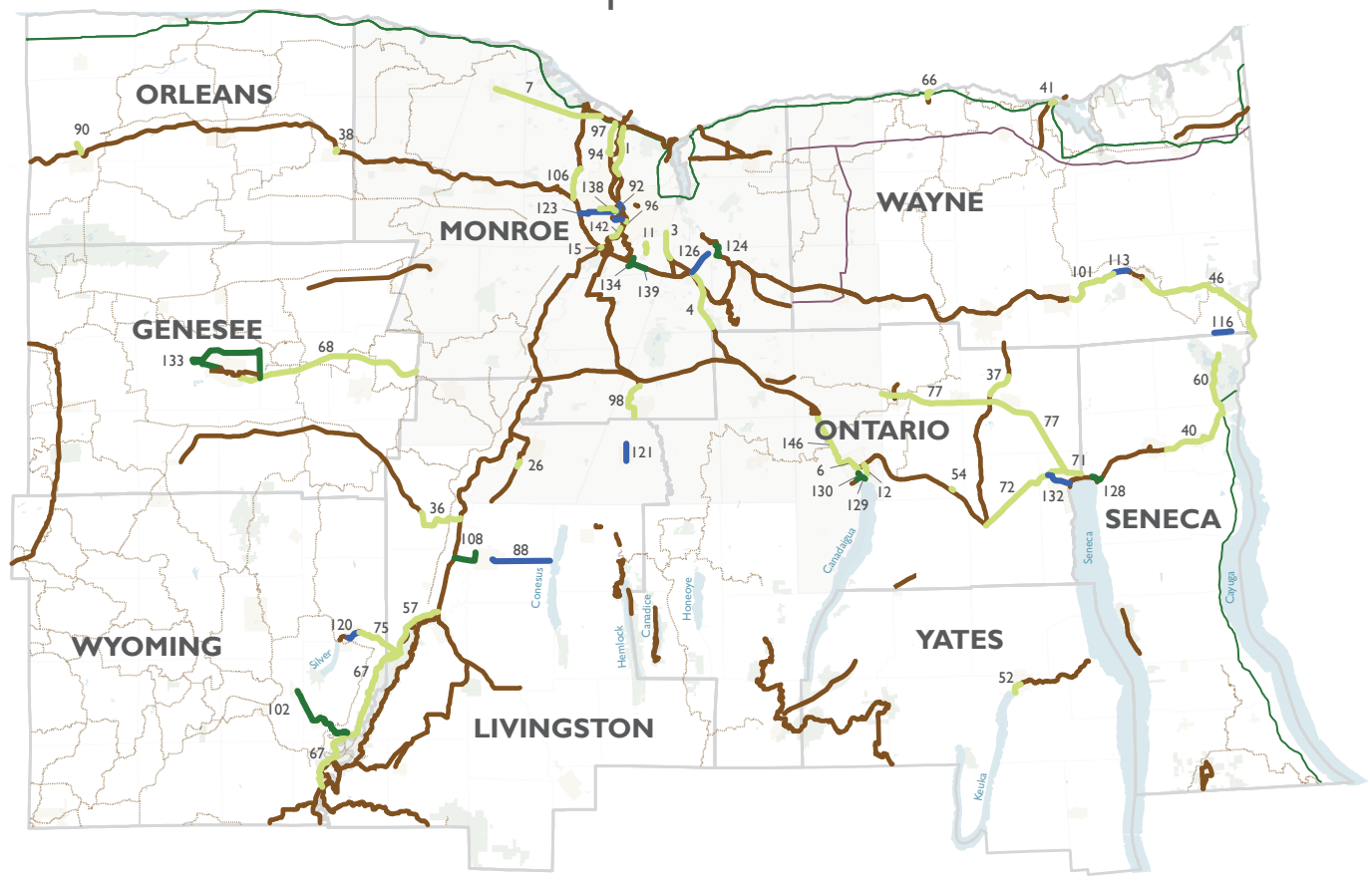
Phase 3 Recommendations: Trails Marked for Removal

Map ID	Trail Project Name	Existing Status	Proposed Removal Status	Approx. Mileage	Comments
71	Lehigh Valley Trail (Caledonia btwn River Road and	Potential	Removed - Not Feasible	6.2	Downgraded from "planned" based on feasibility study and 2014 feedback
80	Lehigh Valley Hemlock Line (within Village of Honeoye Falls)	Planned	Removed - Realigned	0.4	Included in related feasibility study.
81	NYC Westshore Line (Riga - Churchville)	Planned	Removed - Existing	1.9	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
97	Oatka Creek Stream Corridor Trail	Dropped - not feasible	Removed - Not Feasible	9.5	Updated from RTI fieldwork 2014
108	Genesee Riverway Trail Northern River Bridge	Planned	Removed - Not Feasible	0.2	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
415	Lehigh Valley Trail (Henrietta section)	Planned	Removed - Existing	0.7	Section near Golf Course - not completed
124	Batavia Creek Park Trail	Under Development	Removed - Realigned	0.4	Realigned in feasibility study and/or design development.
128	Naples Community Park Connector Trail	Under Development	Removed - Not Feasible	1.2	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
129	LeRoy Pedestrian Bridge	Under Development	Removed - Not Feasible	0.1	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
131	Genesee Valley Greenway (Tuscarora - Sonyea)	Under Development	Removed - Realigned	7.3	Realigned in feasibility study and/or design development.
141	Canalway Trail (Clyde to Tyre)	Potential	Removed - Realigned	3.8	Updated from RTI fieldwork 2014
142	Canalway Trail (Tyre to Montezuma Wildlife Refuge)	Under Development	Removed - Realigned	7.3	Realigned in feasibility study and/or design development.
147	Canalway Trail (Reid Road to Village of Clyde)	Potential	Removed - Realigned	1.9	Updated from RTI fieldwork 2014
150	Oatka Creek Trail	Dropped - not feasible	Removed - Not Feasible	3.9	Updated from RTI fieldwork 2014
164	Oatka Creek Trail - Buttermilk Falls to Mon Co	Dropped - not feasible	Removed - Not Feasible	4.4	Updated from RTI fieldwork 2014
165	Oatka Creek Trail - Village of LeRoy to Groveland	Dropped - not feasible	Removed - Not Feasible	3.4	Updated from RTI fieldwork 2014
184	Oak Orchard River Trail-Lake Ontario to Erie Canal	Dropped	Removed - Not Feasible	20.1	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
185	Oak Orchard River Trail-Erie Canal to Iroquois NWR	Dropped	Removed - Not Feasible	6.4	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
187	Penn-Centrail Rail Trail - Yates Co.	Dropped	Removed - Not Feasible	6.6	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
188	Penn-Centrail Rail Trail - Ontario Co.	Dropped	Removed - Not Feasible	5.1	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
237	Cayuga-Seneca Canal Trail (Geneva to Waterloo)	Under Development	Removed - Realigned	1	Realigned in feasibility study and/or design development.
238	Route 390 Trail Extension	Under Development	Removed - Realigned	0.1	Included in 2001-2006 TIP. Removed from TIP 2011 to "future years".
358	Canalway Trail - Town of Tyre to Town of Clyde	Potential	Removed - Realigned	1.6	Updated from RTI fieldwork 2014
359	Canalway Trail - C/S Rail Trail to Town of Tyre	Potential	Removed - Realigned	3.7	Updated from RTI fieldwork 2014
385	Downtown Rail with Trail	Potential	Removed - Not Feasible	1.3	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
392	Canandaigua-Farmington Trail Connection	Planned	Removed - Not Feasible	3.6	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
393	Canalway Trail (Arcadia to Clyde)	Planned	Removed - Realigned	9	Development stopped due to lack of funds
394	Potential Connection Canalway Trail	Potential	Removed - Realigned	2	Utility Line

Map ID	Trail Project Name	Existing Status	Proposed Removal Status	Approx. Mileage	Comments
396	Chiller Line Trail (Water Authority)	Planned	Removed - Not Feasible	10.1	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
397	Route 104 Trail Extension (Webster to Sodus - TMA)	Potential	Removed - Realigned	7.6	County Owned Active Railroad
398	Pultneyville to Marion Trail	Potential	Removed - Realigned	8.7	Realigned in feasibility study and/or design development.
400	Auburn Line Trail (Farmington section)	Planned	Removed - Realigned	2.2	Realigned in feasibility study and/or design development.
401	Canandaigua Trail (Finger Lakes RR Trail)	Under Development	Removed - Existing	0.9	Completed East of Leicester Street
404	Lehigh Valley Trail (Honeoye Falls - Mendon)	Planned	Removed - Realigned	2.9	Included in related feasibility study.
405	Lehigh Valley Trail (Caledonia btwn Gen Valley Gre	Planned	Removed - Existing	0.5	Verified in field for removal from planned recommendations.
406	Avon-Livonia Trail	Planned	Removed - Not Feasible	8.2	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
407	Geneseo-Conesus Lake Trail	Planned	Removed - Not Feasible	5	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
408	Erie-Attica Trail (Avon to Mount Morris)	Planned	Removed - Realigned	7.3	Realigned in feasibility study and/or design development.
409	Dansville to Mount Morris Trail	Planned	Removed - Realigned	16.5	Realigned in feasibility study and/or design development.
410	Silver Springs - Castile - Letchworth Trail	Planned	Removed - Realigned	5.6	Realigned in feasibility study and/or design development.
411	Silver Springs Trail	Planned	Removed - Realigned	2.5	Realigned in feasibility study and/or design development.
412	Swain's Branch Trail	Planned	Removed - Not Feasible	5.1	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
413	Silver Lake Outlet Trail Extension	Planned	Removed - Realigned	0.4	Realigned in feasibility study and/or design development.
417	Genesee Riverway Trail (gap completion)	Under Development	Removed - Realigned	1	Realigned in feasibility study and/or design development.
418	Westside Canalway Trail Section #2	Planned	Removed - Not Feasible	0.4	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
419	NYC Falls Road Branch Trail	Planned	Removed - Not Feasible	12.4	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
420	Route 531 Extension Trail	Planned	Removed - Not Feasible	13.5	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
421	Lake Ontario State Parkway Trail - Section 2	Planned	Removed - Not Feasible	3.6	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
422	Lake Ontario State Parkway Trail - Section 3	Planned	Removed - Realigned	13.3	Realigned in feasibility study and/or design development.
424	Northwest Erie Canal Corridor Trail	Planned	Removed - Realigned	2.7	Realigned in feasibility study and/or design development.
426	East Side Irondequoit Corridor	Potential	Removed - Not Feasible	0.1	Privately owned parcels obstruct trail
427	East Side RG&E Utility Corridor	Potential	Removed - Not Feasible	0.4	Owned by RG&E
428	Irondequoit Bay West Connector Trail	Planned	Removed - Not Feasible	3.4	Flagged for review due to feasibility study or existing plan review. Verified in field for removal.
430	Erie Canal - Glenwood Lake Connector Trail	Planned	Removed - Realigned	1.3	Removed/Realigned
369, 370 and 371	Genesee Riverway Trail (gap completion)	Under Development	Removed - Realigned	0.2	Realigned in feasibility study and/or design development.
402 and 403	Lehigh Valley Trail (Hemlock Branch Corridor - TMA	Planned	Removed - Realigned	2.4	Realigned in feasibility study and/or design development.

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Trail Project Recommendations
Near-Term Implementation Window**



Near-term recommendations are envisioned for construction and/or design development within five years (2016-2021).

**Please refer to large format map inserts for detailed alignments.

Orleans County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
38	Holley Bicycle Trail - Segment 1 Upgrade	Upgrade the East Avenue section of the existing Holley Bicycle Trail (Segment 1) to meet State trail design and construction standards	Orleans	Village of Holley	Stone dust	0.3	$82,500	Planned	Near
90	Erie Canal - Glenwood Lake Connector Trail	A feasibility study has been conducted for the development of a multi-use connecting trail from the existing Canalway Trail to Glenwood Lake. Continue to work towards implementation of the preferred alternative identified in the study.	Orleans	Village of Medina, Town of Ridgeway	Stone dust	0.8	$220,000	Planned	Near

Genesee County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
68	Erie RR-Attica Line Trail (Batavia to LeRoy)	Develop a multi-use trail on the former Erie Railroad - Attica Line from the Genesee/Livingston County border to the City of Batavia (currently part of the corridor is used as a snowmobile trail)	Genesee	Town/Vlg. of LeRoy, Town of Stafford, Town/City of Batavia	Stone dust	13.6	$2,848,623	Planned	Near
133	Batavia Loop Trail	Develop a multi-use loop trail around the north end of Batavia connecting to both ends of the Ellicott Trail.	Genesee	City of Batavia, Town of Batavia	Stone dust	9.6	$2,016,000	Potential	Near

Wyoming County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
67	Letchworth State Park Multi-Use Trail - Wyoming County Section	Develop the Wyoming Co. section of an 18-mile natural surface trail primarily paralleling the main park road from the north end to Whickey Bridge. This section is from the Wyoming/Livingston county line at Schenck Road to Route 436.	Wyoming	Town of Castile, Town of Genesee Falls	Stone dust	12.6	$2,646,000	Planned	Near
75	Silver Lake Outlet Trail - Perry to Letchworth	Develop a new multi-use trail through the Town of Perry, connecting the proposed on road segment through the Village of Perry, to connect the Village of Perry with Letchworth State Park	Wyoming	Town of Perry, Town of Castile, Town of Leicester, (Livingston County]	Stone dust	3.3	$693,000	Planned	Near
102	Silver Springs - Castile - Letchworth State Park Trail	Develop a multi-use trail along a section of active rail and then a seasonal road to connect the Village of Silver Springs, the Village of Castile, and Letchworth State Park	Wyoming	"Village of Silver Springs, Town/Village of Castile, Town of Gainesville"	Stone dust	5.8	$1,208,979	Potential	Near
120	Silver Lake Outlet Trail Connector	Develop an on-road connection from the existing Silver Lake Outlet trail to the Village of Perry downtown. Bikeway alignment shown on map	Wyoming	Village of Perry	On-Road	1.1	$110,852	Proposed On-Road	Near

Livingston County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
26	Railroad Bed Trail Extension	Develop a trail connection between existing Railroad Bed Trail to Village of Avon	Livingston	Village of Avon	Stone dust; on-road	0.7	$74,358.0	Planned	Near
36	Little Italy Trail	Develop a multi-use trail to connect the Groveland Secondary Trail with the Genesee Valley Greenway	Livingston	Town of York	Stone dust	4.1	$858,458	Planned	Near
57	"Letchworth State Park Multi-Use Trail - Livingston County Section"	Continue the development of the Livingston County section of an 18-mile natural surface trail primarily paralleling the main park road from the north end, connecting to the existing Highbanks Trail, and then to the proposed multi-use trail starting in Wyoming County section of the State Park.	Livingston	Town of Mount Morris	Stone dust	7.0	$1,470,000	Planned	Near
88	Geneseo - Conesus Lake Connection	Implement an on-road facility connecting the Village of Geneseo with the proposed on-road facility around Conesus Lake .	Livingston	Town of Geneseo, Village of Geneseo,	On-Road	4.3	$426,000	Proposed On-Road	Near
108	Genesee Valley Greenway - Geneseo Connector	Develop a multi-use trail connection from the Village of Geneseo to the Genesee Valley Greenway	Livingston	Village of Geneseo, Town of Geneseo	Stone dust	2.1	$577,363	Potential	Near
121	Lima Connector	On-road connection through the Village of Lima for the proposed Lehigh Valley 15A Trail	Livingston	Village of Lima	On-Road	1.7	$165,816.2	Proposed On-Road	Near

*Estimated project cost reflect 2015 construction costs for basic treatment only (i.e. pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Yates County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
52	Outlet Trail Extension - Brown Street to Keuka Lake Waterfront	Extend the existing Outlet Trail along an abandoned rail corridor on the southeast side of the Keuka Outlet from Brown Street to Fireman's Field and Red Jacket Park on the Keuka Lake waterfront	Yates	Village of Penn Yan	Stone dust	0.9	$247,135	Planned	Near

Seneca County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
40	Cayuga - Seneca Canal Trail -- Waterloo to Seneca Falls	Develop a multi-use trail along the NYSEG-owned abandoned rail corridor between the Village of Waterloo through the Village of Seneca Falls to the eastern border	Seneca	Town of Seneca Falls, Village of Seneca Falls	Stone dust	5.9	$1,243,195	Planned	Near
60	Cayuga - Seneca Canal Trail -- Seneca Falls to Erie Canal	Develop a multi-trail between the Village of Seneca Falls and the mainline Erie Canal along a portion of the abandoned rail corridor to State Route 89 and then along the western boundary of the Montezuma National Wildlife Refuge	Seneca	Town of Seneca Falls, Town of Tyre	Stone dust	4.7	$980,725	Planned	Near
128	Cayuga-Seneca Canal Trail (Geneva to Waterloo)	Extend the existing Cayuga-Seneca Canal Trail to connect to the Seneca Lake State Park Trail.	Seneca	City of Geneva, Town of Waterloo, Village of Waterloo	Stone dust	0.8	$207,727	Potential	Near

Wayne County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
41	Wallington to Sodus Point Trail - Section 1	Continue to develop the multi-use trail from the existing segment to the Malt House in the Village of Sodus point	Wayne	Village of Sodus	Stone dust	0.3	$88,323	Planned	Near
46	Erie Canal Trail - Clyde to Galen and Alternative A	The trail is currently being considered in two parts: The first segment, from the Village of Clyde to the Town of Galen, runs from Route 414 in Clyde to the Lock E-26 area (south side of canal) across the canal on an abandoned County-owned double-wide railroad bridge in Galen that needs design for decking replacement. This segment of the trail is planned and presently under consideration for funding. The second segment, Alternative A, runs from the first segment across Route 31 and then follows the town-owned former trolley corridor to the Seneca River and then south to Route 31 on federal and state land. This segment is undergoing planning.	Wayne	Village of Clyde, Town of Galen, Town of Savannah	Stone dust	9.5	$1,995,000	Planned	Near
66	Williamson Bicentennial Trail Extension	Extend the Bicentennial Trail (now under development) from the Town-owned land (sewer district) off Maken Road north to Forman Park east of Pultneyville	Wayne	Town of Williamson	Stone dust	0.7	$180,886	Planned	Near

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
101	Canalway Trail (Lyons to Galen) - NYS Canal Corp	Potential canalway trail alignment from the NYS Canal Corporation. The existing trail is County owned, grass surface. Has been proposed as part of the Canal Trail system. The County is in the process of upgrading this trail to stone dust. This is a near term project to complete the canal trail. To finish as stone dust in near term, there will need to be outside funding, I recommend keeping this in the plan as currently grass, but in need of upgrade to be part of the Canal Trail system.	Wayne	Town of Galen, Town of Lyons	Stone dust	4.5	$951,745	Planned	Near
113	Canalway Trail - Galen to Village of Clyde Bikeway	Potential on-road canalway trail alignment from the NYS Canal Corporation.	Wayne	Village of Clyde	On-road	3.3	$330,000	Proposed On-Road	Near
116	Route 89 Connection	Implement an on-road connection from proposed Canalway Trail (Alternative A) along Route 89 to State Bicycle Route 5	Wayne	Town of Savannah	On-road	1.4	$140,000	Proposed On-Road	Near

Ontario County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
6	Canandaigua Downtown Rail-with-Trail	"Feasibility study has been conducted to develop a trail in downtown Canandaigua between the Ontario Pathways Trail (near Smith Road) and Buffalo Street. The status of the trail is pending due to ROW concerns. "	Ontario	City of Canadaigua	Asphalt	0.9	$298,427	Planned	Near
12	Canandaigua Connector Trail (near Leicester Street	Construction of a new trail between the proposed Canandaigua Feeder Canal Trail and proposed Downtown Canandaigua Rail-with-Trail (near Leiceister Street)	Ontario	City of Canadaigua	Asphalt	0.8	$267,404	Planned	Near
37	Ontario Pathways-Phelps Segment 1	Develop a multi-use trail between two existing segments of the Ontario Pathways trail system, from Route 96 to Gifford Road (Phelps), including the rehabilitation of the existing bridge over the Canandaigua Outlet (approx. 300' span)	Ontario	Town of Phelps, Town of Arcadia	Stone dust	2.0	$550,177	Planned	Near
54	Ontario Pathways Aloquin Bridge Rehabilitation	Rehabilitate abutments/structural members of the former rail bridge over Routes 5 & 20 in the Hamlet of Aloquin, Town of Hopewell	Ontario	Town of Hopewell	Bridge	0.2	$300,000	Planned	Near
71	Lehigh Valley Trail - Seneca County Line to Geneva	Develop a multi-use trail along the former Lehigh Valley RR - Naples Line Corridor from the Castle Creek area in the City of Geneva to the City and Cornell Agricultural Station	Ontario	City of Geneva, Town of Geneva	Stone dust	2.5	$680,418	Planned	Near
72	Lehigh Valley Rail Trail - Geneva to Stanley	Develop a multi-use trail along the former Lehigh Valley RR - Naples Line corridor from the Cornell Agricultural Station property to the Hamlet of Stanley. (Would intersect with the existing Ontario Pathways Trail in the hamlet of Stanley)	Ontario	Town of Geneva, Town of Seneca	Stone dust	6.1	$1,275,751	Planned	Near
77	Lehigh Valley Trail - Manchester to Geneva	Develop a multi-use trail within the right-of-way of the active Finger Lakes Railway corridor from the Farmington/Manchester town line to the City of Geneva, providing adequate separation between the trail and active rail	Ontario	T/Vlg. Of Manchester, Town/ Vlg. of Phelps, Vlg. of Clifton Springs, Town/City of Geneva	Stone dust	16.0	$3,353,521	Planned	Near
129	Manchester Gateway Segment 1	Trail segment connecting the existing trail along Western Boulevard and connecting to the waterfront trail system	Ontario	City of Canadaigua	Asphalt	0.7	$240,129	Potential	Near

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
130	Manchester Gateway Segment 1	Trail segment connecting downtown to the waterfront trail system	Ontario	City of Canadaigua	Asphalt	0.3	$112,411	Potential	Near
132	Cattle Street Trail	Implement an on-road facility on Cattle Street connecting the Seneca Lake waterfront to the State Agriculture Experiment Station and proposed Lehigh Valley Rail Trail .	Seneca	City of Geneva	On-road	1.8	$679,100.00	Proposed On-Road	Near
146	Auburn Trail Connector - Brickyard Road	Extension of the Auburn Trail from Farmington to Canandaigua will provide connectivity between these communities and the Lehigh Valley Trail, Erie Canal Corridor Trail and Genesee Valley Greenway. Upon connection to the City of Canandaigua, future linkages to the Finger Lakes Trail and Ontario County Pathways are possible. Connection to the proposed Peanut Line Trail may also be possible.	Ontario	Town of Farmington, Town of Canandaigua, City of Canandaigua	Concrete; asphalt; stone dust	4.8	$1,320,000	Planned	Near

Monroe County Trail Project Recommendations: Near - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
4	Auburn Line Trail - Pittsford Section #2	Construction of a new trail section on the Auburn Line RR corridor from the Victor/Pittsford border to the Village of Pittsford to connect with existing Auburn Line Trail sections in Victor and the Village	Monroe	Village of Pittsford	Stone dust	4.4	$931,389	Planned	Near
7	Hojack Line Railroad Corridor Rails-to-Trails Conversion -- Greece to Hilton	Acquisition and conversion of the abandoned Hojack Line Railroad Corridor to a multi-trail in the Towns of Greece and Parma and the Village of Hilton	Monroe	Town of Parma, Town of Greece, Village of Hilton	Stone dust	8.0	$1,671,469	Planned	Near
98	Lehigh Valley Railroad Corridor Trail -- Honeoye Falls to Mendon Section	"A feasibility study has been conducted on the abandoned Lehigh Valley Railroad - Hemlock Line Corridor from Honeoye Falls to the Lehigh Valley Linear Trail in the Town of Mendon. Continue the planning process and work towards implementing the updated trail alignment. "	Monroe	Town of Mendon, Village of Honeoye Falls	Stone dust	3.2	$664,595	Planned	Near

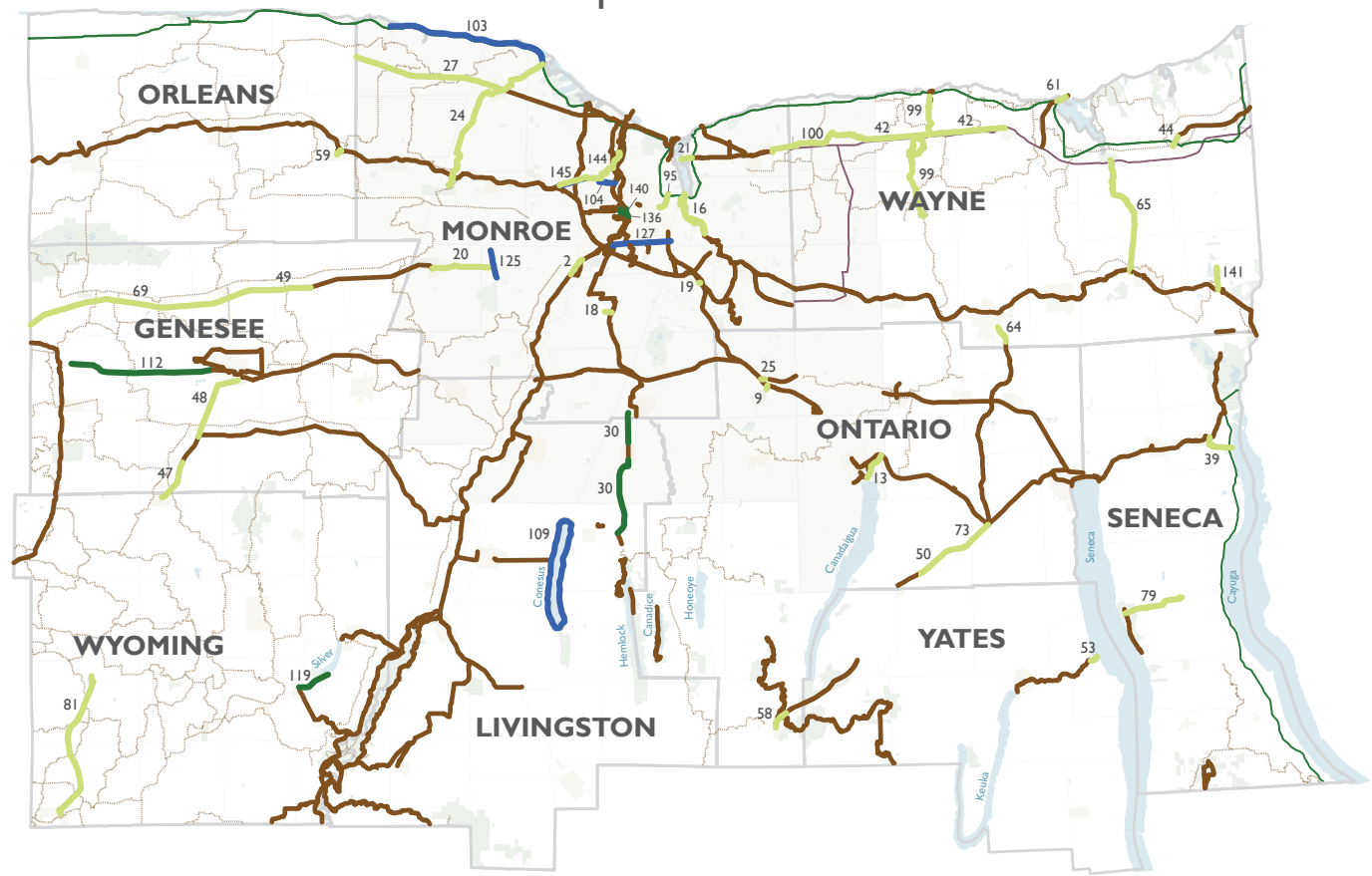
*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Monroe County Trail Project Recommendations: Near - Term Implementation (continued)

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
1	Irondequoit Seneca Trail	Develop the north/south multi-use path segment of the former Rochester Running Track railroad corridor per October 2013 feasibility study recommendation.	Monroe	Town of Irondequoit	Stone dust	3.7	$786,958	Planned	Near
3	Auburn Line Trail - Brighton Section Rail-to-Trail Conversion	Acquisition and conversion of the abandoned Auburn Line Railroad corridor from Clover Street to Highland Avenue in the Town of Brighton	Monroe	Village of Pittsford	Asphalt	1.9	$623,866	Planned	Near
11	Town of Brighton Brickyard Trail	Construction of a new trail between Elmwood Avenue and Westfall Road, per 2013 Bike?Walk Brightin Master Plan.	Monroe	Town of Brighton	Asphalt	0.8	$254,244	Planned	Near
15	Genesee Riverway Trail Bridge Conversion	Conversion of the abandoned Penn Central railroad bridge over the Erie Canal south of Genesee Valley Park to a fully accessible crossing for the Genesee Riverway Trail and Genesee valley Greenway Trail (accessible alternative to the existing Olmsted bridge crossing)	Monroe	New York State	Wood	0.1	$300,000	Planned	Near
92	St. Paul Street Connection	Implement an on-street facility on St. Paul Street to connect Genesee Riverway Trail sections.	Monroe	City of Rochester	On-road	0.3	$11,183	Proposed On-Road	Near
94	Genesee Riverway Trail Neighborhood Connectors	Neighborhood connections to access the Genesee Riverway Trail.	Monroe	City of Rochester	Asphalt	0.9	$285,831	Under Devel.	Near
96	Troup Street Connector	Develop an on-road facility connecting the Genesee Riverway Trail System with the Susan B Anthony Trail along Troup Street.	Monroe	City of Rochester	Stone dust	0.6	$55,001	Planned	Near
97	Russell Station Trail	Develop a multi-use trail segment along the west border of the City of Rochester that connects Lake Ontario Parkway Trail to the Genesee Riverway Trail.	Monroe	Town of Greece, City of Rochester	Stone dust	2.2	$724,028	Planned	Near
106	Route 390 Trail Extension	Connect State Route 104 to the Canalway Trail. TIP funding deferred to "future years" on 12/16/2011.	Monroe	Town of Greece	Stone dust	2.5	$4.1 Million (per TIP)	Planned	Near
123	Canalway Trail to Genesee Riverway Connection	Trail connection from Canal to Jay Street via either easement through Valeo property of along 490 ROW and on-road facilities along Jay Street to Brown's Square Park to Brown Street to Plymouth Avenue North.	Monroe	City of Rochester	On-Road	3.2	$318,283	Proposed On-Road	Near
124	Irondequoit Creek Trail to RS&E Trolley Trail	Trail connection from the Irondequoit Creek Trail along the Irondequoit Creek to Ontario Street, across the railroad tracks on S Lincoln Road, and then along E Chestnut Street to the RS&E Trolley Trail.	Monroe	Town of Perington, Village of East Rochester	Stone dust	1.4	$393,957.3	Potential	Near
126	Highway 153 On-Road Bike Lanes/ Sidepath	Implement a connection to the Auburn Line Trail along Washington Road via a combination of bike lanes and sidepaths.	Monroe	Town of Pittsford, Village of Pittsford, Village of East Rochester	On-road	1.8	$182,822.2	Proposed On-Road	Near
134	MCC / Clinton Connector and Canal Improvements	Connection from MCC parking lot under Route 390 to existing on S Clinton using existing maintenance road.	Monroe	Town of Brighton	Stone dust	9	$1,890,000	Potential	Near
138	JOSANA Trail	The proposed JOSANA Trail will establish an east/west connection between the City's Genesee Riverway Trail at High Falls to the Brown's Square and the JOSANA neighborhoods. A feasibility study is complete.	Monroe	City of Rochester	Stone dust	1.6	$160,000	Planned	Near
139	Buckingham Proposed Canal Improvements	Developer is improving trail on south side of canal connecting S Clinton to Winton Place.	Monroe	Town of Brighton	Stone dust	1.0	$275,000	Potential	Near
142	Vacuum Oil Brownfield Opportunity Area	Trail enhancements and neighborhood connectors as identified in the BOA mater plan as part of the larger plan of neighborhood development and revitalization.	Monroe	City of Rochester	Asphalt	0.5	$162,500	Planned	Near

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e. pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Trail Project Recommendations
Mid-Term Implementation Window**



Mid-term recommendations are envisioned for construction and/or design development within ten years (2021-2026). The map above illustrates all near term recommendations as having been built.

**Please refer to large format map inserts for detailed alignments.

Orleans County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
59	Holley Bicycle Trail - Segment 2	Develop an extension of the existing Holley Bicycle Trail (Segment 1) along the East Branch of Sandy Creek north to the Canal and south across State Rt. 31	Orleans	Village of Holley	Stone dust	0.7	$192,500	Planned	Mid

Genesee County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
47	Alexander to Attica Trail	Extend the Groveland Secondary Trail from its existing endpoint at the Village of Alexander south to the Village of Attica in Wyoming County, possibly to Tonawanda Creek Park in Town of Attica	Genesee	Village of Alexander, Town of Alexander, Village of Attica	Stone dust	3.1	$645,476	Planned	Mid
48	Erie RR-Attica Line Trail (Groveland Trail to Batavia)	Develop a multi-use trail along the former Erie Attica RR corridor (or similar alignment) to connect Alexander to Batavia, including the existing Groveland Secondary Trail Alexander	Genesee	Village of Alexander, Town of Alexander, Town of Batavia, City of Batavia	Stone dust	5.5	$1,149,229	Planned	Mid
49	"NY Central Westshore Branch Rail Trail - Existing West Shore Trail to Elba Segment"	Develop a multi-use trail from the existing West Shore Trail to Byron/ Elba town line	Genesee	Town of Byron	Stone dust	10.0	$2,098,730	Planned	Mid
69	NY Central Westshore Branch Rail Trail - Elba to Alabama Segment	Develop a multi-use trail from the Byron/Elba town line to Ackerson Road, Town of Alabama (near border with the Tonawanda Indian Reservation) (currently this corridor is used for snowmobiling)	Genesee	Town/Vlg. of Elba, Town/Vlg. of Oakfield, Town of Alabama	Stone dust	18.2	$3,828,460	Planned	Mid
112	NYC Peanut Line Rail Trail	Develop a multi-use trail from the City of Batavia to the Town of Pembroke	Genesee	City of Batavia, Town of Batavia, Town of Pembroke	Stone dust	9.7	$2,036,636	Potential	Mid

Wyoming County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
81	Arcade - Java Rail-with-Trail	Develop a multi-use trail along the active Arcade to Attica rail corridor from the Village of Arcade to the Beaver Meadow Audubon Center in Java	Wyoming	Town of Arcade, Town of Java	Stone dust	11.4	$2,389,769	Planned	Mid
119	Silver Springs Connector	Develop a multi-use trail connecting the Village of Silver Spring to Silver Lake and Silver Lake State Park	Wyoming	Village of Silver Springs, Town of Castile, Town of Gainesville	Stone dust	2.4	$658,180	Potential	Mid

Livingston County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
30	Lehigh Valley Trail - Lima Connection	Multi-use path running along Route 15A from W Main Street in Mendon to Lima, connecting to proposed on-road path through Lima, and then from Lima border along abandoned ROW to existing Lehigh Valley Trail	Livingston	Village of Honeoye Falls, Village of Lima, Town of Lima	Stone dust	10.0	$2,100,000	Planned	Mid
109	Conesus Lake Trail	Implement an on-road facility around the perimeter of Conesus Lake, connecting to the Lakeville - Livonia Trail and the Geneseo - Conesus Lake Trail.	Livingston	Town of Groveland, Town of Conesus, Town of Geneseo, Town of Livonia	On-Road	17.0	$1,700,083	Proposed On-Road	Mid

Yates County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
53	Outlet Trail Extension - Seneca Street to Seneca Lake Waterfront	Extend the existing Outlet Trail from Seneca Street to the Seneca Lake waterfront	Yates	Town of Torrey	Stone dust	0.6	$169,544	Planned	Mid

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Seneca County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
39	Arthur A. Baker Bicycle/ Pedestrian Trail	Develop a 1.5 mile trail connecting the Village of Seneca Falls with the Cayuga Lake State Park in the Town of Seneca Falls, including on-street route improvements with the Village, information kiosks, signage, and landscaping	Seneca	Town of Seneca Falls, Village of Seneca Fall	Stone dust, asphalt	2.3	$748,176	Planned	Mid
79	Sampson State Park - Army Depot Connector Trail	Connect Sampson State Park and the Sampson State Park Multi-Use Trail with the former Army Depot now being redeveloped with commercial, industrial, residential development and significant open space and the proposed Black Diamond Rail Trail - Fayette to Romulus segment	Seneca	Town of Romulus	Stone dust	4.4	$931,770	Planned	Mid

Wayne County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
42	Route 104 Corridor Trail - Ontario to Sodus	Develop a multi-use trail along the RG & E utility corridor/active RR corridor (operated by Ontario Midland) between the Ontario/ Williamson town line to the Town of Sodus (for nonmotorized trail users	Wayne	Town of Williamson, Town of Sodus	Stone dust	9.4	$1,978,834	Planned	Mid
44	Wolcott -Cato Corridor Trail	Continue to develop the trail segment through the Village of Wolcott to connect to the proposed Route 104 Trail	Wayne	Village of Wolcott	Stone dust	0.8	$211,686	Planned	Mid
61	Wallington to Sodus Point Trail - Section 2	Develop a trail route along existing local streets/sidewalks from the Malt House to the Sodus Point Beach in the Village of Sodus Point	Wayne	Village of Sodus Point	Asphalt	0.7	$234,906	Planned	Mid
64	Newark to Phelps Trail (Ontario Pathways)	Develop a multi-use trail along a former railroad corridor between the Village of Newark to the existing Ontario Pathways trail system in Ontario County (at Sweed Road in the Town of Arcadia)	Wayne	Village of Newark, Town of Arcadia	Stone dust	1.2	$340,502	Planned	Mid
65	Sodus Ditch Trail - Sodus Bay to Clyde	Develop a multi-use trail along the historic Sodus Ditch (creek) corridor from Sodus Bay (Shaker Heights area) to Lock E53 in the Town of Galen	Wayne	Town of Huron, Town of Rose, Town of Galen	Stone dust	9.3	$1,956,714	Planned	Mid
99	Pultneyville to Marion Trail	A feasibility study has been conducted for the trail from Pultneyville to the planned Newark to Marion Trail. Continue the planning process toward implementation.	Wayne	Town of Williamson, Town of Marion	Stone dust	13.7	$2,877,000	Planned	Mid
100	Route 104 Trail Extension - East Webster through western Wayne County	A feasibility study has been conducted for the Route 104 Trail Extension and a new preferred alternative has been suggested. Continue the planning process toward implementation.	Wayne	Town of Webster, Town of Ontario	Stone dust	8.8	$1,838,922	Planned	Mid
141	Hamlet to Montezuma Audubon Center Trail	Develop a multi-use trail connecting Hamlet or the Canal Trail to the Montezuma Audubon Center	Wayne	Town of Savannah	Stone dust	1.6	$336,000	Planned	Mid

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Ontario County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
9	Auburn Line Trail -- Ganondagan Connection	Construction of a new trail connection between the existing Auburn Line Trail in the Town of Victor and the Ganondagan State Historic Site	Ontario	Town of Victor	Stone dust	0.3	$78,503	Planned	Mid
13	Canandaigua Feeder Canal Trail	Construction of a multi-use trail along the Feeder Canal in the City of Canandaigua, connecting to lakefront trails and Kershaw Park	Ontario	City of Canadaigua	Asphalt	2.1	$672,902	Planned	Mid
25	Victor Trolley Trail	Construction of a paved trail on the former trolley corridor in the Village of Victor	Ontario	Village of Victor	Asphalt	0.3	$92,968	Planned	Mid
50	Lehigh Valley Rail Trail - Rushville to Gorham	Continue the development of the Lehigh Valley Rail Trail - Rushville to Gorham segment to connect to the proposed Lehigh Valley Rail trail - Stanley to Gortham segment.	Ontario	Village of Rushville, Town of Gorham	Stone dust	3.5	$742,052	Planned	Mid
58	Lehigh Valley Trail Upgrade - Ontario County Section	Upgrade the surface of this existing multi-use trail to stone dust to allow for a wider range of users (possibly equestrian; ADA accessibility) from Route 21 north of the Village of Naples to the Ontario/Yates county line	Ontario	Town of Naples	Stone dust	1.4	$384,916	Planned	Mid
73	Lehigh Valley Rail Trail - Stanley to Gorham	Develop a multi-use trail along the former Lehigh Valley RR - Naples Line corridor from the Hamlet of Stanley to Blodgett Rd. in the T. of Gorham. (Would intersect with the existing Ontario Pathways Trail in the hamlet of Stanley and the proposed Lehigh Valley Rail Trail	Ontario	Town of Seneca, Town of Geneva	Stone dust	2.8	$779,316	Planned	Mid

Monroe County Trail Project Recommendations: Mid - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
18	Middle Road Connector Trail	Construction of a new trail along a NYS Power Authority easement and Henrietta town properties to connect Middle Road to the Lehigh Valley Trail - Henrietta section	Monroe	Town of Henrietta	Stone dust	0.5	$140,435	Planned	Mid
19	Mitchell Road Canalway Trail Bridge	Construction of a new trail bridge over the Erie Canal near Mitchell Road (Pittsford) using the existing abandoned railroad bridge abutments	Monroe	Town of Pittsford	Concrete	0.1	$81,878	Planned	Mid
20	NYC Westshore Line (Churchville - Chili)	Conversion of the abandoned NYC Westshore Line railroad corridor in Riga and Churchville to a trail	Monroe	Town of Riga, Town of Chili, Village of Churchville	Stone dust	4.0	$829,792	Planned	Mid
24	Salmon Creek Stream Corridor Trail - Lake Ontario State Parkway to Northhampton Park	Development of a trail parallel to the Salmon Creek Stream Corridor connecting the Lake Ontario State Parkway (and proposed trail), the proposed Hojack Line Trail, the Canalway Trail, and Northhampton Park	Monroe	Town of Parma, Town of Ogden, Village of Hilton	Stone dust	13.6	$2,849,622	Planned	Mid
27	Hojack Line Railroad Corridor Rails-to-Trails Conversion - Hilton to Orleans County Line	Acquisition and conversion of the abandoned Hojack Line railroad corridor to new trail from the Village of Hilton to the Monroe/Orleans County line	Monroe	Village of Hilton, Town of Parma, Town of Hamlin	Stone dust	10.6	$2,219,180	Planned	Mid
103	Lake Ontario State Parkway Bikeway	Formalize a bikeway connection along the Lake Ontario State Parkway between Braddock's Bay and Hamlin Beach State Park. This can be accomplished by providing regular debris maintenance along the shoulders and installing signage where appropriate.	Monroe	Town of Hamlin, Town of Parma, Town of Greece	On-road	12.1	$1,205,672	Proposed On-Road	Mid
125	Highway 259 Bike Lanes	Implement bike lanes along Highway 259 from Buffalo Road to the proposed Black Creek Stream Corridor Trail. In addition to connecting to a regional trail recommendation, the proposed bike lanes will improve the safety of crossing I-490.	Monroe	Town of Chili	On-road	2.0	$202,176	Proposed On-Road	Mid

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Monroe County Trail Project Recommendations: Mid - Term Implementation (Continued)

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
2	Genesee Valley Greenway/ Scottsville Road connection	Develop a multi-use trail connecting the Genesee Valley Greenway from Scottsville Road to Ballantyne Road.	Monroe	Town of Chili	Stone dust	1.4	$381,977	Planned	Mid
16	"Irondequoit Creek Stream Corridor Trail – Panorama Plaza to Empire Blvd"	Development of a trail along the Irondequoit Creek Stream Corridor Trail from Panorama Plaza area to Route 404 (Empire Boulevard)	Monroe	Town of Penfield, Town of Brighton	Stone dust	5.4	$1,124,237	Planned	Mid
21	Route 104 Trail Extension -- Irondequoit Bay Overlook	Development of an extension of the existing Route 104 Trail west of Bay Road to the former rest area site overlooking Irondequoit Bay	Monroe	Town of Webster	Asphalt	0.8	$259,638	Planned	Mid
95	East Side Irondequoit Corridor	Develop a multi-use trail from Empire Boulevard to the City of Rochester	Monroe	City of Rochester, Town of Irondequoit	Stone dust	1.3	$416,718	Planned	Mid
104	Northwest Erie Canal Corridor Connection	Implement an on-road connection along Ridgeway Ave, Lily Street, Mcgee Avenue, and on Seneca Parkway connecting the Canalway Trail to the Genesee Riverway Trail.	Monroe	City of Rochester	On-road	4.4	$441,959	Proposed On-Road	Mid
127	Elmwood Avenue On-Road Cycle Track/Bike Lanes	This connection has two segments: A) Develop an on-road connection from the Genesee Riverway Trail to Mt. Hope Avenue along Elmwood Avenue using cycle track and bike lane facilities (construction anticipated late 2015-2016), and B) Develop an on-road connection from Mt. Hope Avenue to the proposed Auburn Line Trail (Brighton section) on Elmwood Avenue using cycle track and bike lane facilities.	Monroe	Town of Brighton, City of Rochecter	On-road	0.8/3.4	80,000/340,000	Proposed On-Road	Mid
136	Genesee Riverway Trail Center City Connection	Develop continuous riverside connections along both banks of the Genesee River between Court Street and High Falls to connect existing trail sections through downtown.	Monroe	City of Rochester	Concrete	1.2	$960,000	Potential	Mid
140	Plymouth Avenue Greenway Extension	Connect the existing Plymouth Greenway to High Falls and Point De Rennes Bridge via a sidepath/shared-use path along Plymouth Street and Platt Street. This alignment will likely require an easement or acquisition of Kodak/MCC parking.	Monroe	City of Rochester	Concrete	0.3	$240,000	Potential	Mid
144	Northwest Offroad Connection	Repair and upgrade existing St Bernards Seminary off-road trail loop. Extend trail northerly along top of river gorge through Holy Sepulchre and Riverside Cemeteries to connect to existing trail in Turning Point Park. Planned as part of GTC/ UPWP funded 2013 Urban Trail Linkages Study.	Monroe	City of Rochester	Asphalt	1.5	$487,500	Planned	Mid
145	Eastman Trail	Connect Genesee Riverway Trail with Canalway Trail via combination of off-road (City owned former canal prism parallel to Ridgeway Ave and easements through Eastman Business Park) and on-road facilities (Ridgeway, Aster, Dewey, Eastman and Merrill). Planned as part of GTC/ UPWP funded 2013 Urban Trail Linkages Study.	Monroe	City of Rochester, Town of Greece	Asphalt	2.7	$877,500	Planned	Mid

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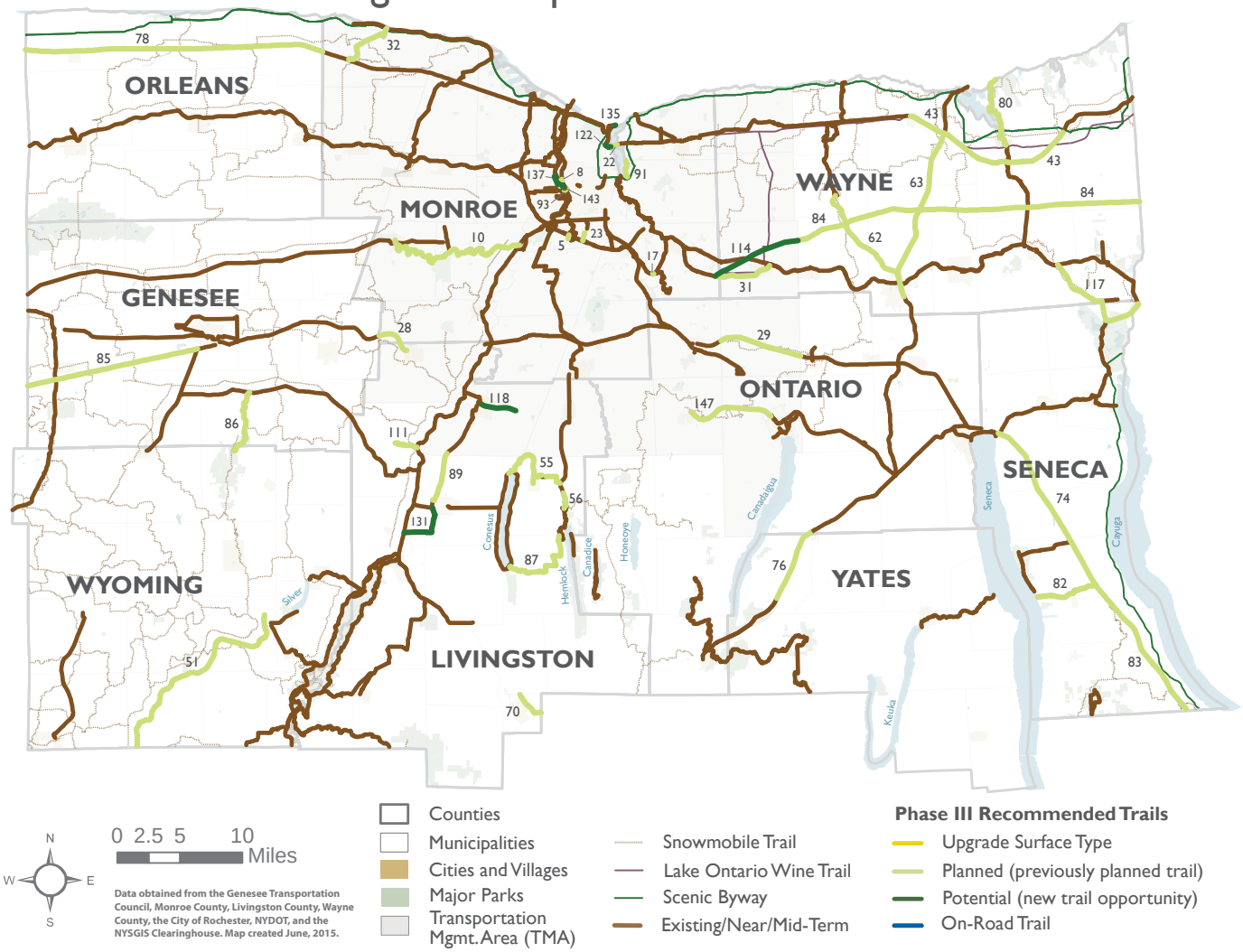
Trail Project Recommendations
Long-Term Implementation Window**



Long-term recommendations are envisioned for cunstruction and/or design development after ten years (post 2026). The map above illustrates all near-term and mid-term recommendations as having been built.

**Please refer to large format map inserts for detailed alignments.

Orleans County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
78	Hojack Corridor Rail Trail	Develop a multi-use trail on the former Hojack Railroad corridor from the eastern border of the Town of Kendall to the western border of the Town of Yates	Orleans	Town of Kendall, Town of Carlton, Town of Yates, Village of Lyndonville	Stone dust	23.8	$4,998,000	Planned	Long

Genesee County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
85	National Grid Right-of-Way Trail	Develop a year-round, multi-use trail on the former NYC Peanut Line railroad corridor from the City of Batavia to the Genesee/Erie County line in the Town of Darien	Genesee	Town of Batavia, Town of Pembroke, Town of Darien	Stone dust	13.9	$2,915,205	Planned	Long
86	Groveland-Carlton Hill Connector Trail	Develop a north-south trail to connect the Groveland Secondary Trail with Genesee County Park in southern Bethany and Carlton Hill State Multiple Use Area in northern Wyoming County (Middlebury)	Genesee	Town of Bethany, Town of Middlebury, (Wyoming (Co.)	Stone dust	6.0	$1,250,575	Planned	Lon g

Wyoming County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
51	R & S Line Rail Trail	Develop a multi-use trail on the former B & O railroad corridor between the Village of Silver Springs and the Wyoming/Allegany county line in the Town of Eagle	Wyoming	Vlg. of Silver Springs, Town of Gainesville, Vlg. of Gainesville, Town of Eagle	Stone dust	18.1	$3,794,989	Planned	Long

Livingston County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
28	Lehigh Valley Railroad Corridor Acquisition and Rails-to-Trails Conversion - Caledonia	Feasibility study has been completed for converting the abandoned Lehigh Valley railroad corridor to a trail. Continue to explore options to fully implement the trail and extend to Genesee County	Livingston	Village of Caledonia, Town of Caledonia	Stone dust	2.9	$797,500	Planned	Long
55	Lakeville - Livonia Trail	Feasibility study has been completed for a multi-use trail from Vitale Park on north shore of Conesus Lake north and east toward Lima, looping south along the Livonia-Avon-Lakeville rail corridor into the Village of Livonia. The trail then continues east to connect to the proposed Lehigh Valley Trail. Continue to explore opportunities to implement the trail.	Livingston	Village of Livonia, Town of Livonia	Stone dust	7.3	$1,533,000	Planned	Long
56	Lehigh Valley Trail - Hemlock Corridor	Develop a multi-use trail on the abandoned Lehigh Valley - Hemlock Branch Railroad corridor from the Village of Lima to Sharpe Avenue in the hamlet of Hemlock, connecting to the existing Kinney Creek Trail	Livingston	Town of Livonia	Stone dust	6.7	$1,407,000	Planned	Long
70	Dansville Rail-to-Trail Corridor	Develop a multi-use trail along eastern border of village.	Livingston	Town of North Dansville, Village of Dansville	Stone dust	2.4	$671,000	Planned	Long
87	Conesus - Hemlock Trail	Develop a trail between Hemlock Lake and Conesus Lake, connecting with the hamlet of Conesus utilizing some abandoned and seasonal roads including Marrowback, Bishop, Mission, Dugway, Middle, and Partridge Corners Roads; the Whispering Hills Golf Course property; and NYSDEC land west of Dacola Shores Road	Livingston	Town of Conesus	Stone dust	7.7	$1,623,993	Planned	Long
89	Railroad Bed Trail - Geneseo Extension	Develop a multi-use trail to connect the existing Railroad Bed Trail to the Village of Geneseo	Livingston	Town of Geneseo, Village of Geneseo	Stone dust	4.0	$840,000	Planned	Long
111	Genesee Valley Greenway York Connector	Build a trail connection from Route 36 in the Town of York to the Genesee Valley Greenway, per the Livingston County Transportation Connection Plan	Livingston	Town of York	Stone dust	1.7	$459,919	Planned	Long
118	East Avon-Lima Connector	Develop a multi-use trail connecting the Village of Avon to Route 15.	Livingston	Village of Avon, Village of Lima, Town of Avon, Town of Lima	Concrete	3.1	$2,480,000	Potential	Long
131	GVG Geneseo Connector	Trail from the Village of Geneseo boundary, south along Rt 36, west on Jones Bridge Road, connect to the GVG.	Livingston	Town of Geneseo, Village of Geneseo	Stone dust;on-road	4.3	$430,000.0	Planned	Long

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Yates County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
76	Lehigh Valley Rail Trail - Middlesex to Rushville	Develop a multi-use trail along the former Lehigh Valley Railroad - Naples Line corridor between the existing Lehigh Valley Rail Trail between Naples and Middlesex and the proposed Lehigh Valley Rail Trail - Rushville to Gorham	Yates	Town of Middlesex, Village of Rushville	Stone dust	6.1	$1,290,883	Planned	Long

Seneca County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
74	Black Diamond Rail Trail - Fayette to Romulus Segment	Develop a multi-use trail on the former Lehigh Valley Railroad - Ithaca Line corridor (aka the "Black Diamond" corridor) from the Town of Fayette to the vicinity of the southern boundary of the former Army Depot property (at/near the eastern terminus of the proposed Sampson State Park - Army Depot Connector Trail [Long Term Trail Project Recommendation #153]	Seneca	Town of Fayette, Town of Varick, Town of Romulus	Stone dust	10.7	$2,247,788	Planned	Long
82	Willard - Romulus Trail	Develop a multi-use trail between the southern end of the Sampson State Park Multi-Use Trail and the proposed Black Diamond Rail Trail (former Lehigh Valley Railroad corridor in Romulus)	Seneca	Town of Romulus	Stone dust	5.0	$1,057,037	Planned	Long
83	Black Diamond Rail Trail - Ovid to Covert Segment	Develop a multi-use trail on the former Lehigh Valley Railroad - Ithaca Line corridor (aka the "Black Diamond" corridor) from the vicinity of the southern boundary of the former Army Depot property through the Town of Covert to connect with trail development efforts in Tompkins County	Seneca	Town of Romulus, Town of Ovid, Town of Covert	Stone dust	16.3	$3,431,216	Planned	Long

Wayne County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
31	RS&E Trolley Trail - Wayne County Section	Re-establishment of the former trolley corridor and construction of a trail on it connecting the existing RS&E Trolley Trail in Perinton, Monroe County to the Canalway Trail in Macedon, Wayne County	Wayne	Town of Macedon	Stone dust	4.5	$951,359	Planned	Long
43	Route 104 Corridor Trail -Sodus to Wolcott	Develop a multi-use trail along the RG & E utility corridor/active RR corridor (operated by Ontario Midland) between the Town of Sodus and the Town of Wolcott = (for non-motorized trail users)	Wayne	Town of Sodus, Town of Huron, Town of Butler, Town of Wolcott	Stone dust	14.5	$3,051,475	Planned	Long
62	Newark-Marion Trail	Develop a multi-use trail on an abandoned rail corridor from the Village of Newark to the hamlet of Marion	Wayne	Village of Newark, Town of Arcadia, Town of Palmyra, Town of Marion	Stone dust	9.0	$1,887,252	Planned	Long
63	Wallington to Newark Rail-with-Trail	Develop a multi-use trail adjacent to the active rail line or on the corridor upon abandonment from the hamlet of Wallington to the Village of Newark	Wayne	Town of Sodus, Town of Arcadia, Village of Newark	Stone dust	14.0	$2,940,000	Planned	Long

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
80	Chimney Bluffs-Sodus Ditch Trail Connection	Develop a trail to connect Chimney Bluffs State Park, the Route 104 corridor trails, the Lakeshore Marshes State Wildlife Management Area, and the proposed Sodus Ditch Trail	Wayne	Town of Huron, Town of Rose	Stone dust	7.1	$1,496,461	Planned	Long
84	Wayne County Power Line Corridor	Develop a multi-use trail along the power line corridor from Palmyra through the Town of Butler	Wayne	Towns of Palmyra, Arcadia, Lyons, Rose, and Butler	Stone dust	27.8	$5,843,159	Planned	Long
114	Wayne County Power Corridor	Continue multi-use trail connection along the power corridor to the existing RS&E Trolley Trail	Wayne	Town of Macedon	Stone dust	7.3	$1,523,078	Potential	Long
117	Erie Canal Trail - Alternative B	This is the Alternative B segment of the Erie Canal Trail. This segment runs from the railroad bridge in the Town of Galen south along the utility corridor owned by Niagara Mohawk, east along Amitage Road and then south on Route 89 to the canal, and then follows the canal to Route 31.	Wayne	Town of Galen, Town of Savannah, Town of Tyre	Stone dust	9.7	$2,037,000	Planned	Long

Ontario County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
29	Lehigh Valley Railroad Corridor Rail-with Trail	Development of a Rail-with-Trail parallel to the active section of Lehigh Valley railroad corridor in the Towns of Victor and Farmington in Ontario County (extends into the Town of Manchester)	Ontario	Town of Farmington	Stone dust	6.6	$1,388,600	Planned	Long
147	Peanut Line Trail	The Peanut Line Trial follows the former Batavia Branch of the New York Central Railroad. An approximate 1.1 mile existing trail segment was donated by a private property owner to the Town of Canandaigua which is maintained for public use. Extension of Peanut Line Trail following the rail corridor to the City of Canandaigua could provide connectivity to a larger regional trail network, including the Auburn Trial and Lehigh Valley Trail as well as local trails and parks, including Richard Outhouse Park in the Town of Canandaigua. Extension of the Peanut Line to the west along the former rail corridor would provide connectivity to the Village of Bloomfield in the Town of Bloomfield in Ontario County.	Ontario	City of Canandaigua, Town of Canandaigua, Town of Bloomfield	Natural; grass	7.1	$142,000	Planned	Long

Monroe County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
10	Black Creek Stream Corridor Trail - Genesee Valley Greenway to Churchville Park	Development of a trail parallel to the Black Creek Stream Corridor connecting the Genesee Valley Greenway, Black Creek Park, and Churchville Park in the Towns of Chili and Riga	Monroe	Village of Churchville, Town of Chili, Town of Riga	Stone dust	15.8	$3,326,824	Planned	Long
17	Marsh Road Bushnell's Basin Canalway Trail Bridge	Development of a trail connection between the Canalway Trail and Marsh Road to Bushnell's Basin	Monroe	Town of Perinton	Concrete	0.1	$66,161	Planned	Long
32	Sandy Creek Stream Corridor Trail	Development of a trail parallel to the Sandy Creek Stream Corridor	Monroe	Town of Hamlin	Stone dust	4.8	$1,011,324	Planned	Long

*Estimated project cost reflect 2015 contruction costs for basic treatment only (i.e.,pathway) and are intended for general comparison only. Estimates do not include engineering design, property acquisition, bridges, grading, trail amenities such as way-finding signs, kiosks, furnishings, and lighting. In many cases, feasibility studies have been conducted for named trails and trail segments and these studies inlcude detailed planning-level cost estimates. Please refer to www.gtcmpo.org/Docs/PlansStudies.htm for approved feasibility studies.

Monroe County Trail Project Recommendations: Long - Term Implementation

Map ID	Trail Project Name	Trail Project Description	County	Jurisdiction(s)	Surface Type	Approx. Mileage	Estimated Project Cost*	Project Status	Phase 3 Prioritization
5	Canalway Trail Bridge Connection to MCC	Construction of a new bridge and trail connection between the Canalway Trail and Monroe Community College campus	Monroe	Village of Brighton	Concrete	0.3	$251,201	Planned	Long
8	Rochester Running Track Trail - Connection to Genesee Riverway Trail	Continue to convert the remainder of the abandoned Rochester Running Track corridor through the City of Rochester, including the existing bridge across the Genesee River and connecting to the existing Riverway Trail under the Smith Street Bridge.	Monroe	City of Rochester	Asphalt	0.7	$227,500	Planned	Long
22	Route 104/ Irondequoit Bay Bridge Bicycle/ Pedestrian Crossing	Development of a bicycle/pedestrian crossing of Irondequoit Bay between Webster and Irondequoit along the Route 104 Expressway (possibly cantilever a bicycle/pedestrian bridge off the existing structure)	Monroe	Town of Webster, Town of Irondequoit	Concrete	0.6	$441,550	Planned	Long
23	Route 590 Bicycle/ Pedestrian Bypass	Development of a connection under or over Route 590 and a trail connection to directly connect the Town of Brighton with the Canalway Trail	Monroe	Town of Brighton	Concrete	0.6	$501,805	Planned	Long
91	Irondequoit Bay Park East Trail	Develop a multi-use along the east side of Irondequoit Bay	Monroe	Town of Penfield	Stone dust	1.4	$459,863	Planned	Long
93	Genesse Riverway Trail System - Bike/ Ped Crossing (garden aerial)	Develope a connection across the Genesee River railroad bridge next to the Rochester Inner Loop Highway.	Monroe	City of Rochester	Wood	0.2	$300,000	Planned	Long
122	Route 104 to Titus Seabreeze Trail Connection	Extend the existing Route 590 Titus-Seabreeze Trail to the proposed Route 104 Bay Bridge Crossing	Monroe	Town of Irondequoit	Stone dust	0.5	$155,062	Potential	Long
135	Bay Outlet Crossing	Build a bike/ped bridge and extend 590 Trail.	Monroe	Town of Irondequoit	Concrete	1.0	$800,000	Potential	Long
137	Genesee Riverway Trail - West Side Lake Avenue Connection	Continue trail from planned extension of the Rochester Running Track at Ambrose Street along the sidepaths on Lake Avenue to connect to the Genesee Riverway Trail on west side of river.	Monroe	City of Rochester	Concrete	1.5	$1,200,000	Potential	Long
143	Brewery Line Trail	Extend trail north of the Pont-DeRennes bridge utilizing the recently acquired rail trestle, to connect to the trail along the Smith Street bridge.	Monroe	City of Rochester	Asphalt	0.3	$97,500	Potential	Long

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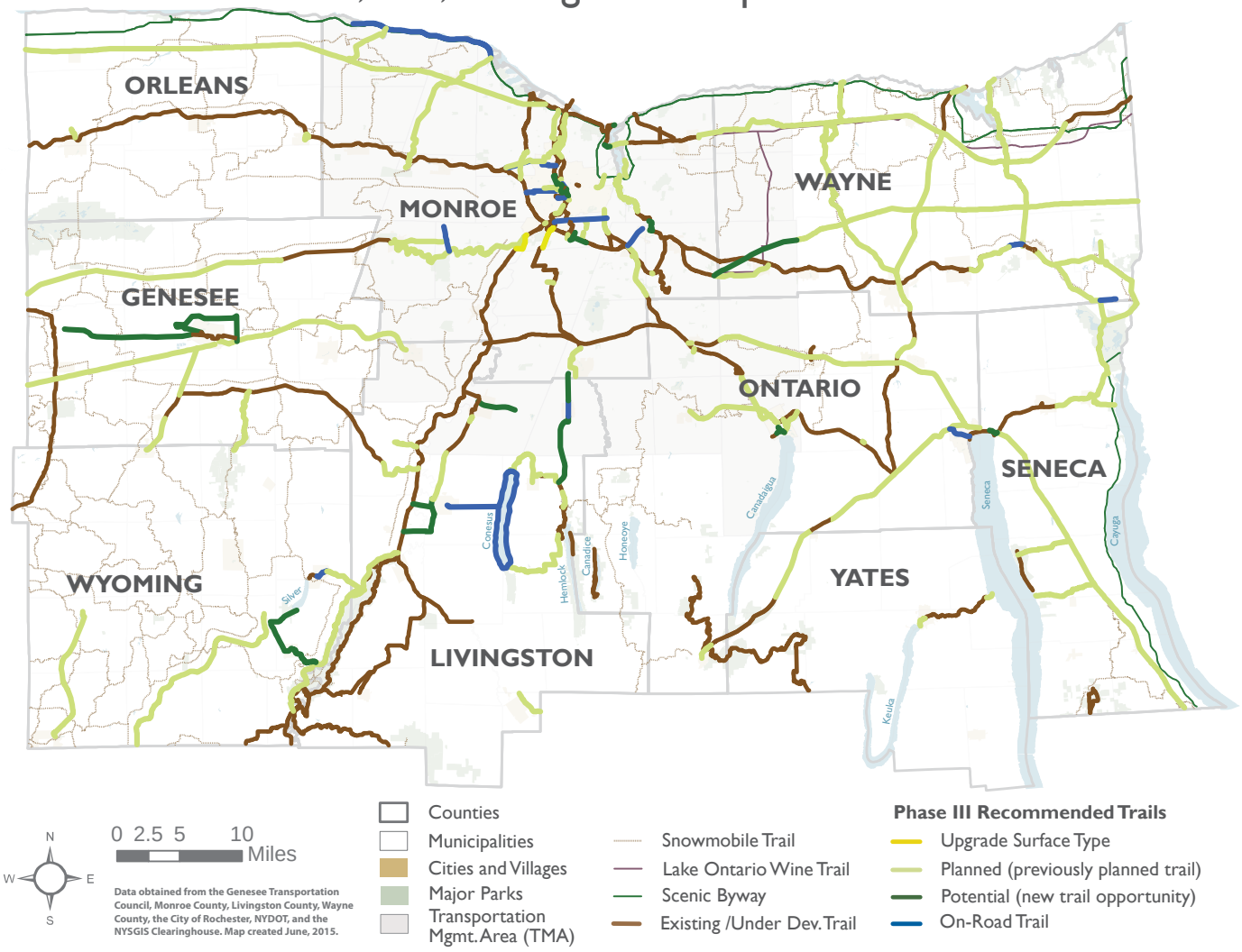
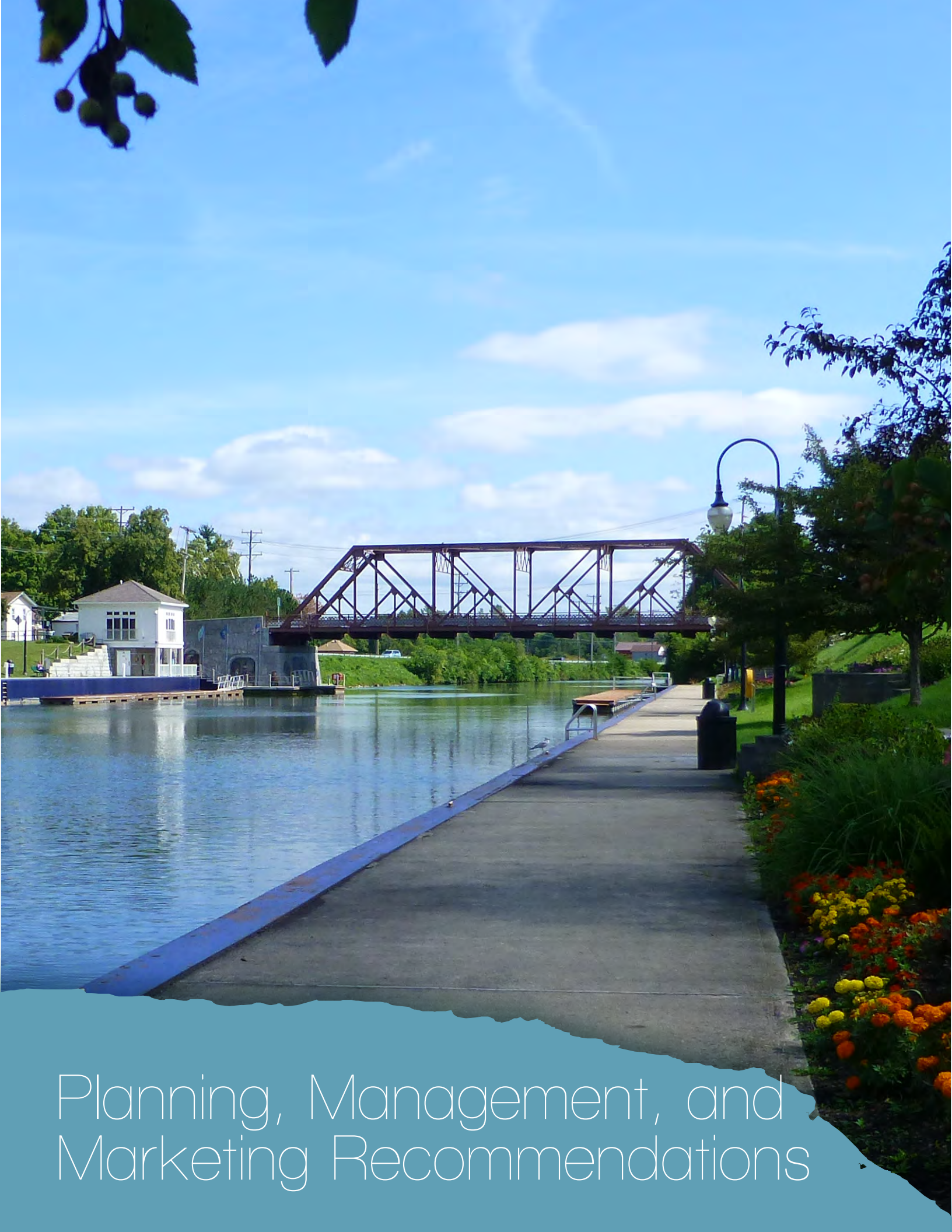
Trail Project Recommendations
Near, Mid, & Long-Term Implementation**



The map above illustrates a total build-out of the recommendations within this plan.

**Please refer to large format map inserts for detailed alignments.



Planning, Management, and Marketing Recommendations

Overview

In addition to trail alignment recommendations, this Plan offers recommendations that will enhance the brand of the regional trail system, provide opportunities to increase use, and elevate the consistency of quality experiences. Implementing the recommendations within this Plan will require leadership and dedication to trail development on the part of local government agencies. Most importantly, the local communities within the region need not accomplish the recommendations of this Plan by acting alone; success will be realized through collaboration with state and federal agencies, the private sector, and non-profit organizations.

Phase I and Phase II organized general recommendations into five areas that focus and support implementation efforts as well as region-wide standards of practice. These categories are:

- Planning and Implementation
- Trail Operations and Maintenance
- Accessibility and Connectivity
- Marketing and Programming
- Trail Amenities

This Plan captures the recommendations and follow-on activities from both previous planning efforts and provides additional ideas to transform the community's vision into the reality of a world-class trail system. The tables that follow illustrate previous recommendations and follow-on activities and identify if the recommendation or follow-on activity is supported by this Plan. New recommendations and follow-on activities are provided in narrative form.

Planning and Implementation Recommendations From Phase 1 and 2

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Expand the scope of the existing Active Transportation Working Group (ATWG) to guide the implementation of the Regional Trails Initiative. The formation of the ATWG in 2012 highlighted Monroe County's support for trails and active transportation as a key to region-wide success. The ATWG and supporting staff from participating agencies can help to implement the RTI by: • Maximizing coordination among agencies, communities, and trail groups. • Identifying and manage Priority Trail Advancement planning projects. • Assisting agencies, communities, and trail groups with trail planning efforts. • Identifying additional sources of funding and develop grant applications and other necessary information to compete for new funds. • Continuing identification and prioritization of new trail projects and opportunities as they emerge.	X	X	X Include representation from each county and representatives from local advocacy groups. This group will take the lead in implementing the recommendations of this plan and coordinate efforts across the region for additional planning and implementation.

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Fund the Priority Trail Advancement planning project (or similar planning activity) in the Unified Planning Work Program on an on-going basis to help advance the Regional Trails Initiative and to provide a stable, consistent source for advancing concept-level trail planning.	X	X	X
Support local communities' efforts to preserve and/or create corridors for trail development through local land use, planning, and zoning strategies.	X	X	X
Inventory key trail corridor preservation opportunities, identify achievable preservation and acquisition strategies, and facilitate actual corridor preservation and acquisition efforts.	X	X	X
Prioritize corridor preservation and/or acquisition in cases of imminent corridor loss over actual trail development where the corridor has been identified for trail development.	X	X	X
Encourage the use of the Trail Design, Maintenance, and Operations "Best Practices" Guidance developed as part of this Initiative for all trail projects and improvements in the region.	X	X	X
Ensure that trail projects, that are under development, progress in a timely fashion and with adequate funding to complete project as designed.	X	X	X
Expand existing mechanisms and opportunities or develop new ones for receipt and distribution of donations, bequests, corporate sponsorships, and civic and volunteer activities that benefit trail development, operations, maintenance, and promotion.	X	X	X
Update the Regional Trails Initiative on a 5- and 10-year schedule	X	X	X
Reinforce existing and establish new cooperative relationships with stakeholder agencies in the Non-TMA area.		X	X
Identify and provide local decision makers with trail corridor acquisition strategies.		X	X
Develop and/or identify for local use a template for assessing the potential economic impact of local trail projects.		X	X
Encourage community participation in the early stages of the trail planning process to help ensure accurate trail routing and design.		X	X
Host an annual meeting or similar opportunity for trail planning and development entities to facilitate information sharing.		X	X
Integrate trail planning and development as an important component of local and regional planning efforts.		X	X

Operations and Maintenance Recommendations From Phase 1 and 2

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Establish standards for trail maintenance appropriate for the type of trail and its users. [Addition of Phase II: Such maintenance activities may include trail sweeping, snowplowing and/or grooming, surface repair and/or grading, sign replacement, selective vegetation removal, and litter removal.]	X	X	X
Require all applicants for trail project funding provide a maintenance plan with their applications [Addition of Phase II: Necessary maintenance activities; Maintenance cost estimates; Agency and/or group(s) responsible for maintenance; and Sources of maintenance funding, labor, and equipment.]	X	X	X
Identify possible funding sources to assist local communities and agencies with on-going trail maintenance.	X	X	X
Facilitate the development of multi-community / multi-agency trail maintenance agreements that cross community boundaries to improve maintenance quality and consistency and achieve cost and labor savings.	X	X	X
Provide safe and convenient trail detours during reconstruction or major maintenance of existing trails.	X	X	X
Ensure that construction and maintenance of all transportation facilities (roadways, expressways, sidewalks, trails) and construction on properties adjacent to trails minimizes disruption to trails and related facilities, trail users, and adjacent landowners. [Addition of Phase II: Including: 1) Establishing "best practices" for construction zones that impact trails and/or trail users by ensuring safe and convenient through trail traffic and utilizing construction practices that do not damage the trail and related facilities or amenities and 2) Establishing "best practices" for maintenance activities that impact trails and/or trail users].	X	X	X

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Encourage the use of Adopt-A-Trail community maintenance programs on trails regionwide for basic trail maintenance (e.g. litter pick-up, beautification projects).	X	X	X
Identify potential mitigation measures, including design options and enforcement strategies to address security concerns, especially for trails where daily use may be limited.		X	X
Investigate opportunities to reduce conflicts between trails and adjacent land uses and activities through trail user education, signage, proper design, and enforcement measures.		X	X
Explore alternative sources of labor for trail development and maintenance.		X	X
Support and promote shared trail development and maintenance opportunities among trail user groups.		X	X

Accessibility and Connectivity Recommendations From Phase 1 and 2

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Identify locations and corrective measures to address existing trail accessibility problems that inhibit trail use by disabled and other mobility-challenged persons.	X	X	X
Prioritize the development of off-street and on-street linkages to/from trails and between trails to close gaps in the regional system.	X	X	X
Accommodate bicyclists, pedestrians, and other trail users on roadways and bridges in the region as appropriate.	X	X	X
Support the identification and development of new and/or improved trail connections to adjacent land uses.	X	X	X
Identify opportunities to improve and expand existing trailheads and parking areas, develop additional trailheads and parking areas, and enhance security at these locations.	X	X	X
Encourage low impact design standards for trails in or near environmentally sensitive areas.		X	X
Ensure trails have appropriate emergency and law enforcement access whenever possible.		X	X
Utilize roadways as needed, including scenic routes and state and local roadways, to enhance the connectivity of the trail network and to develop regional tourism connection with other attractions (e.g., wineries, heritage areas, natural environment, etc.).		X	X

Trail Marketing and Information Resources Recommendations From Phase 1 and 2

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Provide templates for local municipalities to use for trail interpretation, marketing and promotion.		X	X
Provide information periodically to local municipalities, related agencies, the media, and the public on progress made on the Regional Trails Initiative recommendations.		X	X

Amenities Recommendations From Phase 1 and 2

Recommendation	Included in Phase I	Included in Phase II	Supported by Phase III
Support the placement of functional trail amenities for trail users (e.g. bathroom facilities, drinking water, bicycle parking, benches, picnic tables, lighting, etc.).	X	X	X
Encourage the development of natural, scenic, and historic interpretative information and designation on trails to enhance trip experience and support community values.	X	X	X
Encourage landscaping, public art, and other beautification efforts along trails as desired by local communities.	X	X	X
Develop and disseminate trail amenity and signage guidance that addresses a variety of settings and budgets. [Addition of Phase II: Including: Sample designs for various settings; Materials suggestions; Informational content recommendations; Placement recommendations to enhance safety and visibility; and Vandalism prevention/protection suggestions.]	X	X	X
Establish clear implementation procedures and contacts for local groups desiring to install trail amenities and signs that meet the standard design requirements and/or guidance.	X	X	X

Follow-On Activities from Phase 1

Follow On Activities From Phase One	Supported by Phase III
Establishment of Regional Trails Initiative Implementation Task Force.	Yes
Completion of Phase 2 of the Regional Trails Initiative (for the non-TMA areas of Livingston, Ontario, and Wayne counties, and all of Genesee, Orleans, Seneca, Wyoming, and Yates counties).	Complete - update this plan in ten years
Identification of a project(s) for concept-level planning through the Priority Trails Advancement project (approved in the 2002-2003 GTC Unified Planning Work Program).	Continue to identify projects
Revision of the 1996 Regional Bicycle and Pedestrian Plan, including the identification of low cost on-street improvements through Corridor Feasibility Studies.	Continue to revise the Bicycle and Pedestrian Plan every ten years
Completion of Preliminary Engineering studies for proposed trails projects so that the cost, feasibility, impacts, and other aspects of the project are known prior to receiving funding.	Yes
Completion and adoption of local trails, bikeway, and/or pedestrian plans (as needed).	Yes
Encourage local agencies to complete trails plans for their communities either as stand alone products, or as part of master plans, transportation plans, or parks and recreation plans.	Yes
Encourage local communities to conduct feasibility studies on proposed trail projects in advance of design.	Yes
Consider adopting or amending local ordinances requiring new or improved trailheads and support facilities such as bicycle parking to be built as part of new development projects.	Yes
Signing and Stenciling	Use new Design Guidelines and refer to the Phase 3 Recommendations for narrative on a Wayfinding Plan
Pathway Rehabilitation	Yes, and refer to Phase 3 Recommendations for Maintenance Check List
Bicycle Parking	Yes
Bicycle and Pedestrian Maintenance and Development	Yes
Safe Routes To School	Yes
Enforcement, Education, and Support Programs	Yes, and refer to Phase 3 Recommendations for additional ideas

Phase 3 Recommendations and Follow-On Activities

The following recommendations and follow-on activities have been grouped together as some recommendations are not immediate-action follow-on activities, but are dependent upon the completion of a follow-on activity. Each main follow-on topic is marked with an (R) and (FO)for clarity.

Zoning and Ordinances (R)

Local Municipalities

Amend local zoning and subdivision ordinances and technical standards to ensure that, as developments are planned and reviewed, the greenway corridors identified in this plan are protected.

Utility Easements (R)

Revise sewer, stormwater and utility easement policies to allow for public access as a matter of right that does not require landowner approval for each parcel the easement overlaps.

Corporate Sponsorships (FO)

Develop a corporate sponsorship policy as a mechanism to collect donations for trail development and amenities. Provide opportunities for logo placement and/or areas where companies can add a personal or artistic element to the established regional trail amenity. To facilitate small donations, a web shopping cart could be set up as an easy way to accept small donations. A donor catalog can also be created for concentrated fundraising efforts.

Example pages from Razorback Greenway Donor Catalog. Dontations ranged from single trees and benches to entire trailheads.

Equity Analysis (FO)

Conduct an equity study of the region. Mapping will result in potential new projects including:

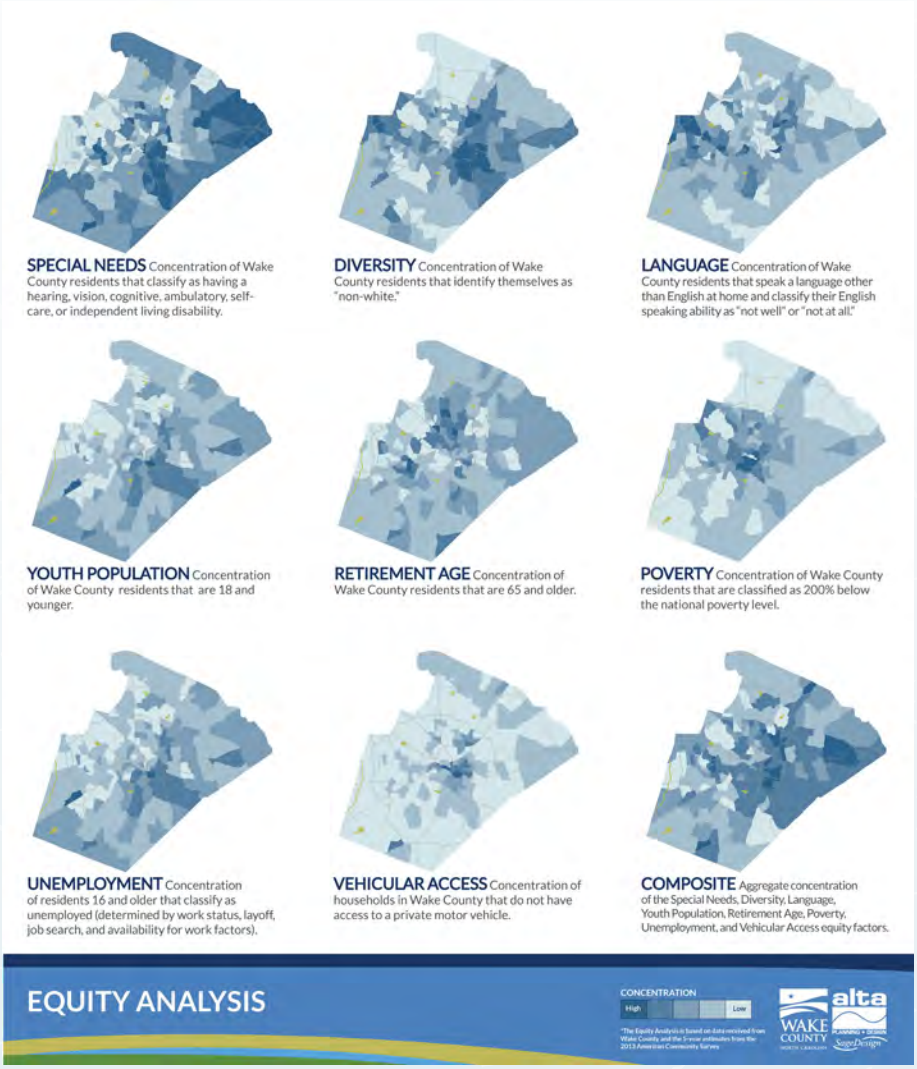
Age. Identification of the over 65 population. This leads to ADA studies, transportation services for the elderly, and critical complete streets study locations.

English As a Second Language. This mapping will lead to further study on where integration of multiple languages is critical to enhance transportation legibility for signage and commuter instruction.

Religion. Identification of the Mennonite population will identify critical areas for bicycle studies and critical areas for maintenance due to horse and buggy use;.

Access to A Vehicle. This will also pinpoint critical areas for bicycle plans.

Income. Indicators will also overlap to identify need for bicycle and transit planning.



An equity analysis will show where bicycle, pedestrian, and trail facilities are a high priority.

Heath and Economic Impact Study (FO)

Conduct a Health and Economic Impact Study for the Trail Region. By producing an attractive, easy to comprehend, marketable booklet, the GTC and participating communities will be able to provide substantive health and economic reasons for building the regional system and connecting residents and visitors with trails.

Branding Strategy (FO)

Since the regional trails system has grown into a local, regional, state, and national destination, creating a brand and brand strategy will strengthen the reputation of the system and foster economic development for the nine counties. The branding strategy should include the development of a brand personality, logo, color palette, tag line, and brand standards. This will fuel the development of the below follow-on activities.

Genesee-Finger Lakes Regional Trails Website (FO)

(dependent on completing the branding strategy)

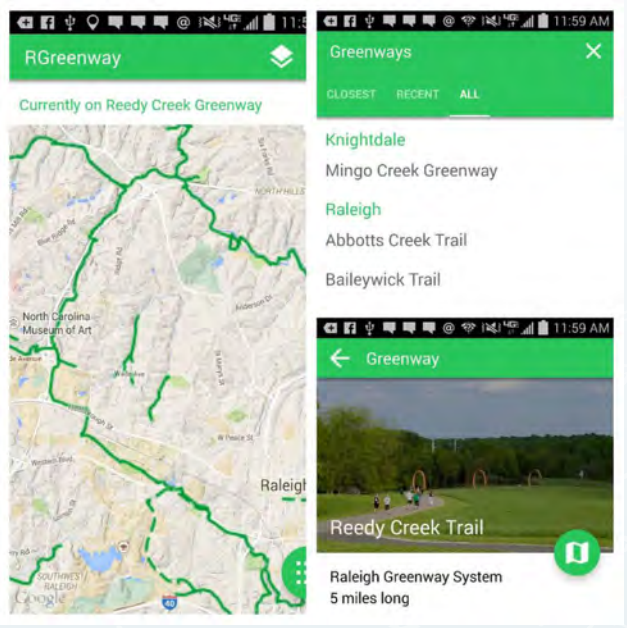
A website should be created after the brand is developed. This site will employ the logo and brand creative. Trip planning, key destinations, encouragement programs, and fundraising will be funneled through this site. Local communities can participate in regional programs such as a "My Last Mile" campaign. Several regional trail "tours" can be established with pre-established routes and key destinations to enhance bicycle tourism.

An example of a pre-established route would be similar to the Senecca Wine Trail. Wineries along the route would be indicated on a map as well as mileage between wineries, rest stops, and lodging.

Genesee-Finger Lakes Regional Trails App (FO)

(dependent on completing the branding strategy)

In addition to the website, an app should be developed. This app will include some of the content from the website, but will serve mostly as a navigation aid and encouragement tool. The app will open with a map, displaying the users' location. If they are not on a trail, the



The RGreenway App can be a model for the Genesee-Finger Lakes Regional Trail App.

app will alert the user of the distance they are situated to the closest trail as well as the mileage, estimated walk time, and estimated bike time. Features of the app include route planning, photo integration with Instagram and Facebook, weather, trip tracking, and motivational "pushes" to accompany physical activity goals.

Those who participate in encouragement programs and activity tracking through the app will also be providing data on user behavior. This behavior provides a sample of how people use the trail system and can lead to better maintenance practices, improvements in wayfinding, indications of desired amenities, and use data for grant funding and future studies.

Within the menu will also be access to the See-Click-Fix component (see below).

See-Click-Fix (FO)

(dependent on completing the branding strategy and trail app)

See-Click-Fix is a tool that is integrated with an app and phone number that allows trail users to report to local communities. These reports may be a fallen tree on the trail, a trail in need of repair, vandalism or damage to a trail amenity, and other "service ticket" items. The system is integrated with the selected municipal department (typically public works) to generate communication between users and those maintaining the trails. This serves as another pair of eyes on the trail for those departments without regularly scheduled maintenance checks.

Wayfinding Sign Package and Systemwide Placement Plan (FO)

(dependent on completing the branding strategy and should be implemented in conjunction with the trail app)

The Wayfinding Sign Package should build upon the brand, using the new logo and color palette, to provide the foundation for creative development. Each community should have the opportunity to place their logo on the signs to aid in community branding and orientation. A suite of signs should be developed including mile markers; loop maps; directional signs with local destinations; walk and bike mileage and timing; signs leading from communities to the trails; secondary trailhead kiosks; and major trailhead kiosks.

Prior to crafting a Placement Plan, a Steering Committee should be assembled to define route systems. The routes will start with the existing named trails. Logical zero mile beginning points will be established along main routes and branch out into communities. These mile markers aid in orientation, navigation, fitness goals, and the ability for first responders to find trail users in need.

The system will integrate with the app and prompt users to install the app where appropriate.

"My Last Mile" Campaign (FO)

(dependent on completing the branding strategy)

Each community within the nine county region will have the opportunity to participate in the My Last Mile Campaign. A public outreach process will be used by the local community to collect information about how the regional system can be connected into communities via on- and off-road alignments. Public Input Toolkits will be available from GTC to be customized by each community. Table banners, map templates, information cards, flyers, photo booth instructions, and giveaways will be created using the regional trails system brand with placement for community logos. This toolkit can be displayed at public libraries, local businesses, and used by planning departments at fairs and events. In addition to the outreach toolkit, the Regional Trails Website will collect and display photos from Instagram, Twitter, and Facebook tagged with #GFLMyLastMile (or other similar hashtag). This will allow trail enthusiasts to post pictures of opportunities to connect the regional trail system with their home, work, school, or places where they recreate.

"Pictures of You" - The Kodak Trail (FO)

A special route should be identified within the trail system to tell the story of Kodak and celebrate picturesque destinations throughout the nine counties. This trail will tie into the Regional Trails Website. A map on the website will indicate the route as well as each picturesque destination. At each destination, there will be a frame that trail users can interact with to take photographs. Each frame can be commissioned by a local artist to design a frame unique to each place. An Instagram hashtag will be established for users to post their photos which will be portrayed on the Regional Trails Website.

"Wine Along The Trail" and Pop-Up Beer Gardens (FO)

In conjunction with local wineries and breweries, special linear events help spread awareness of the trails and provide typical non-users with a reason to experience the Regional Trail System.

This event can be a traveling affair that rotates throughout the nine counties along trail loops or along the connecting routes between two municipalities. Advertisements for the event should be nationwide and will serve as an economic generator, filling hotels, restaurants, and local businesses with tourists. Local residents will also enjoy beverages, food, and wares from local establishments.

Wineries and breweries can use this as a platform for introducing new or seasonal offerings.

Photo Scavenger Hunt - Power and Freight (FO)

Photo Scavenger Hunts are a great method for regaining momentum for trail enthusiasm. Periodic photo scavenger hunts can be organized through the Regional Trails Website. Local

media, recreation oriented shops, restaurants, and local parks and recreation departments help advertise and build excitement for one-day photo scavenger events with large closing festivals and prizes, or a lengthier multi-week or month exploration of the trail system.

Organizers will create a list of items to find along the trail and participants, who pay an entry fee, will travel the trail system to photograph all the items in the scavenger list. Items may be a list, photos, or series of clues.

Partnering with local businesses or parks and recreation facilities will provide space for closing events and festivals.

Scavenger Hunts can be themed by geography, natural features, or history. For example, a celebration of Power and Freight could be a theme where participants learn about local sources of power (wind and water) as well as the history of some of the trails as former rail lines.

These events can be held during multiple seasons and feature the many modes used on the trails: running/hiking/strolling, biking, cross country skiing, and snowmobiling.

Design and Implementation of Branded Trail Amenities (FO)

(dependent on completing the branding strategy)

After establishing the brand and logo, custom items can be created to serve as trail amenities. Bike racks, benches, trash and recycling receptacles, kiosks, water fountains, bicycle repair stations, and other amenities can be designed and fabricated to reflect the brand of the Regional Trails System.

Identify Key Areas for Trail Oriented Development (FO)

The GTC should establish a Trail Oriented Development (TOD) program for communities along the trail. This would entail providing access to funding sources for each community to hire a consultant to conduct a visioning charrette. The charrette would include working with a group of stakeholders - including the GTC, municipal staff, and business owners - to establish a vision for how the Regional Trail System can contribute to the economic development and livability of the community. A four to five day charrette will be used to establish a vision, goals, spurs or new alignments, land use, commercial development, trailheads, open spaces, and urban revitalization opportunities. This program of initiating the process with a charrette will provide the community with a report that can be used to seek grant funding to implement the TOD.

To garner interest in the program, the GTC and/or consultant can host a series of workshops throughout the nine counties to help educate communities on what TOD is and the benefits associated with aligning retail, commercial, and residential uses along a trail.

Establish a Series of Regional Hubs (FO)

A series of regional hubs should be identified to become the "front door" of the regional system. These hubs should be located in communities with significant historic landmarks, significant support services for trail users, or at the junction of at least two regional trails. Each hub should reflect the unique nature of the context while providing a standard package of amenities. The amenities should include restrooms; large kiosks with a map of the entire system and regional destination and cultural information; bicycle repair stations; picnic area; public art; visitor

information; lighting; access to water; parking for vehicles and bicycles; and the ability and area to serve as a starting point for trail events (space to serve as a plaza with room for tents, food trucks, and vendors).

Develop a Maintenance Check List By Season (FO)

The GTC should lead an effort to assemble all of the county's public works or parks and recreation maintenance staff to discuss the contents of the O&M chapter of this Plan. Together, the communities should determine how to coordinate efforts to keep each trail alignment maintained and in good condition. Records should be created to track dates for maintenance activities, standards for tracking issues with the trails, and dates of resurfacing. Each community should produce a schedule with future dates for maintenance activities. These should all be tracked in a central location and the group should meet yearly to update charts, discuss maintenance tactics, and keep the trail system functioning like a world-class facility.

Trail Counts and App Tracking (FO)

(partially dependent on creating a trail app)

Trail counts serve multiple purposes for the GTC as well as each of the municipalities. Counts can help justify demand on the trails for improvements and build a case to build new connections and more direct routes. They can also help build a case and baseline for mode share and provide a gauge for healthy transportation use in the region. In addition, counts on trails near economic hubs provide data for new businesses wishing to determine the foot or bike traffic near their proposed new space.

Counts can be recorded by humans or with counting devices. The GTC should work with communities who wish to participate in the program to identify the purpose of conducting counts, where the counts should be recorded, and how the data will be used. Counts should be recorded yearly, at the least, to begin building a consistent data set. Standardizing the variables for counts is critical and documentation should be included in reports to note the weather, season, any significant events, time of day, and day of the week.

Trail counts may be conducted with volunteers or mechanical counters. Creative signage can help keep trail users moving while collecting important information, as shown here with a sign created by The Student Conservation Association.

After the Trail App is developed, route and mileage tracking may be included to provide users with information on their total distance, calories burned, communities visited, photos taken on the trail, etc. These variables can be collected by the app developer to provide a glimpse into the routes used and how people are behaving on the trail.

This information can be used to excite existing users and encourage new usership as well as provide data for future grants and trail studies.

Develop a Trails Report Card (R)

This report card can be released yearly or quarterly with a dual purpose to provide technical data and lifestyle components. Content may include updates on maintenance projects, implementation projects, events, health statistics generated by the Trail Counts and App Tracking, and feature stories about users. This may also coincide with other features of the website and social media tools. This may be a function of the "Friends Of" group or the Task Force.

Route Marking for Distance Events: Running, Cross Country Skiing, Pair with a Cause (R)

With the help of running and cross country skiing groups, the GTC can record ideal routes for races. These routes can be marketed to agencies and causes often looking for places to host large events. This will contribute to the national recognition of the region as a trail destination and will also contribute to the economic vitality of municipalities along the route that will experience income from hotel reservations, restaurants, shops, and use of other local businesses.

Friends of the Trail Membership (R)

A cooperation of local businesses can be assembled through a "Friends Of" or other entity. They will be provided with opportunities to advertise on the Trail Website, be identified in the Trail App as a destination, and be featured in trail events and advertising. In exchange, they will offer trail users a discount at their business. A "Friends of the Trail" Card can be purchased by trail users for a nominal fee each year to gain access to the trail discounts. These cards could also be purchased at area hotels, visitor centers, and convenience stores. Proceeds from the purchase of the card, as well as the fees collected from the businesses, would benefit the "Friends" and be used to host events and contribute to building and maintenance activities.

Design Guidelines Workshop (FO)

GTC should host a workshop for local municipal leaders and staff in the nine counties who are interested in reviewing and understanding how to implement the Design Guidelines within this plan. The workshop could also include discussions of how to fund branded amenities for each community and the best placement for larger amenities such as restrooms, repair stations, and other comfort facilities.

Guided Tours and Encouragement Walks/Rides (R)

Create a series of guided tours, walks, and rides. These can be used to build awareness of the unique landscapes and towns along the trail system as well as a tool to improve the health of communities. Sample ideas include:

- Conduct Guided Nature Walks and Rides to educate the community and visitors about the natural resources of the Genesee-Finger Lakes region and raise awareness of and familiarity with the developing bicycle and pedestrian network.
- Develop a Happy Trails to Healthy Foods Program to recognize the role that both physical activity and healthy eating play in public health and wellness.
- Host senior walk and ride programs to develop an active lifestyle program for senior citizens.
- Develop school-based trail activities in partnership with existing Safe Routes to School efforts.

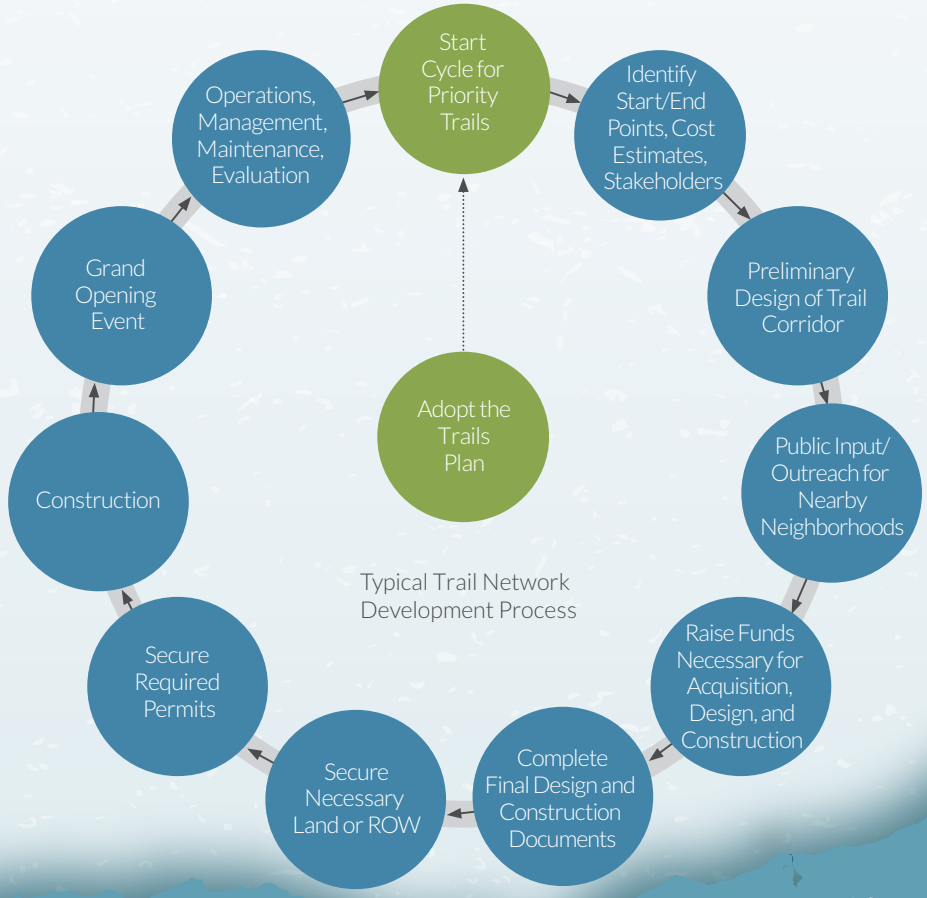
Administrative Structure and Implementation Roles

Overview

Implementation requires a series of action steps to construct, manage, and support the use of a regional trail network. Phase 1 outlined implementation strategies categorized by:

- Leadership (noting the formation of a regional task force)
- Corridor Preservation (noting the importance of preserving abandoned rail corridors, utility corridors, and waterways for potential trail development)
  - Corridor Inventory and Evaluation (a previous planning effort as well as an effort of Phase III)
  - Local Adoption of Trail Corridors (indicating the importance of these trail alignments being included in community planning documents)
  - Zoning (the ability of communities to modify regulations that foster the development of trails)
  - Licenses and Easements (the importance of understanding agreements for use of property as a trail and how critical it is to plan ahead and negotiate easements)
  - Corridor Purchase (acquisition strategies for identifying opportunities to purchase land to maintain the potential for a future trail project)
- Project Adoption (an integral component of educating and creating buy-in from local elected officials and the public)
- Preliminary Design (an outline of the sequence of events undertaken to study an alignment and provide a thorough analysis of existing conditions, needs, challenges, and more refined costs)
- Project Funding (focused on matching the project with available funding sources)
- Design (noting the importance of have a standard for regional trail design guidance as well as complying with ADA, NYSDOT, MUTCD, AASHTO, and other local "best practices")
- Maintenance and Operations
- Programming and Stewardship

Phase 2 of the Regional Trails Initiative included trail development steps from planning to design. The following diagram summarizes the process from adoption of this plan through to construction and into operations, management, maintenance, and evaluation.



Typical Trail Network Development Process

In addition to construction, it is critical to acknowledge the partnerships, funding, consistency, and programming that support the development of a well-connected system of trails that enable ease of use and navigation for citizens and visitors to the Genesee-Finger Lakes Region. These additional efforts, including policy and programming elements, enable the nine counties and each community to support and develop a trail system that links the region's healthy, thriving communities, builds on the unique assets of the Genesee-Finger Lakes Region, and is safe and accessible for all.

This chapter defines the administrative structure for managing the implementation of Phase 3 of the Genesee-Finger Lakes Regional Trails Initiative Plan. As the third phase of this planning study, in a region where trails are being successfully implemented, the GTC, nine counties, and strategic partners are already aware of how to build trails. Successful implementation of network recommendations require leadership and dedication to trail development on the part of a variety of agencies. Local governments within the region do not act alone.The success of expanding the trail network will be realized through collaboration with state and federal agencies, the private sector, and non-profit organizations. Regional cooperation is a critical component to improving the existing collection of trails into a regional network that offers quality transportation and recreation options. The key to this plan, will be to build on the relationships and roles already in place, that will make this a world renowned, well branded, trail system.

Administrative Structure

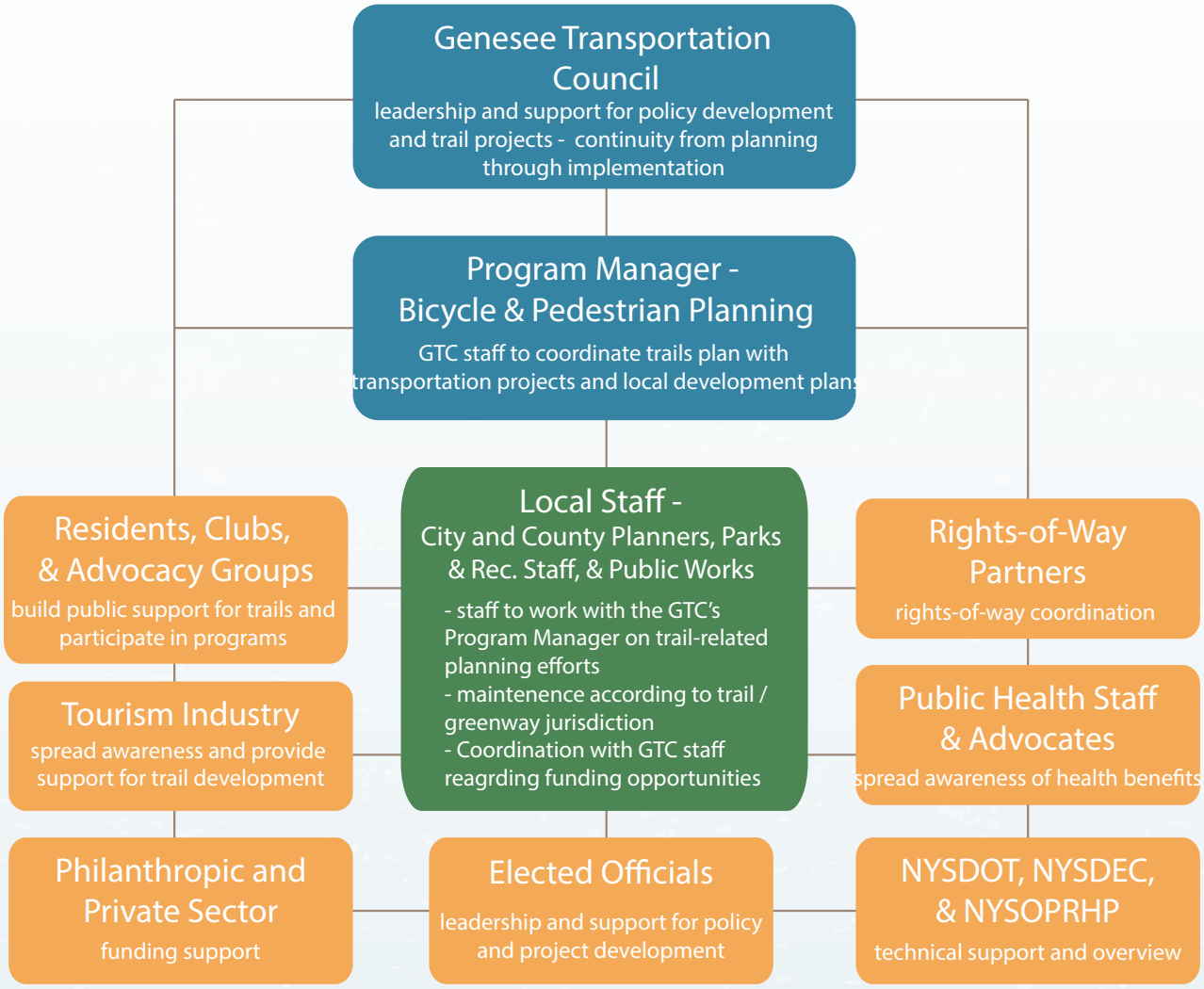
The following chart is a graphic depiction of how GTC, local staff, and other key stakeholders will work together to implement the network and other recommendations of this plan. Actual roles may vary depending on which agency leads the effort and the level of interest and involvement by specific stakeholders.

Role of the Genesee Transportation Council - MPO

As a key, leading agency in regional trail development, the GTCMPO fulfills multiple roles, including the following:

- Facilitate the implementation of this Plan by hosting semi-annual meetings (quarterly to start) and fostering ongoing communication. Encourage trails as a priority for public infrastructure investment among all stakeholders.
    - The Bicycle and Pedestrian Program Manager is responsible for coordinating implementation of this Plan and working with local agencies and municipalities to seek funding.
- Develop a coordinated operations and maintenance plan with various stakeholders. Operations and maintenance tasks need to be supported by adequate funding and staff levels.
- Execute the overarching branding, wayfinding, and web development components.
- Encourage local communities to participate in coordinated efforts across the region including marketing campaigns and programmatic elements associated with the regional network.

ORGANIZATIONAL FRAMEWORK FOR IMPLEMENTATION



Role of the Counties and Municipalities

Many of the communities in this region have already been active in trail planning and development. Communities that are more experienced in trail building should share strategies (such as effective development ordinances and procedures, contractor references, and budget estimates) with neighboring communities that have less experience. Additional tasks are as follows:

- County and municipal parks and recreation directors can formulate an annual plan of action for the trails program.
- County and municipal planners can ensure trail connectivity between jurisdiction borders.
- County and municipal parks and recreation staff and related citizen boards/ committees can participate in trail events that cross jurisdictional borders.

- County and municipal planners and engineers can share uniform standards in trail facilities, such as signage and wayfinding.
- Local planning staff can contribute to the awareness campaigns and marketing components by using base templates and materials supplied by GTC and contributing to planning, organization, and reporting.

Role of State Agencies (NYSDOT, NYSDEC, NYSOPRHP)

State agencies such as New York State Department of Transportation (NYSDOT), New York State Department of Environmental Conservation (NYSDEC), and New York State Department of Parks Recreation and Historic Preservation (NYSOPRHP) can continue to play a role in the implementation of this Plan, including participation in the following tasks:

- NYSDOT-Main Office should be prepared to provide guidance and technical support to regional NYSDOT offices implementing trail-related facilities, such as multi-use paths in roadway corridors, trail-roadway crossings, and improvements that increase safety for bicyclists and pedestrians crossing bridges on state roadways.
- NYSDOT should also continue to work with local and regional planners on coordination of upcoming and future roadway projects with trail recommendations.
- NYSDEC and NYSOPRHP should continue to be partners in providing guidance on recommendations such as trail interface with natural resource areas and proper alignments of trails through sensitive and regional significant environmental features.
- The New York State Canal Corporation should continue ongoing support of the Canalway Trail System.

Role of Residents, Clubs, and Advocacy Groups

Residents, clubs, and advocacy groups are instrumental in the success of implementing this Plan. Specific tasks include:

- Help to organize volunteers to assist with implementation and management.
- Advocate, promote, and encourage the development of trails throughout the region.
- Educate residents as to the benefits of trails and greenways.
- Assist the GTC and its counties and municipalities in raising funds and securing ROW for implementation.
- Develop local 'adopt a trail' and related stewardship programs.
- Participate in public events related to trail development.
- Volunteer in large events that promote the trail and local community economic development.
- Enjoy the trails!

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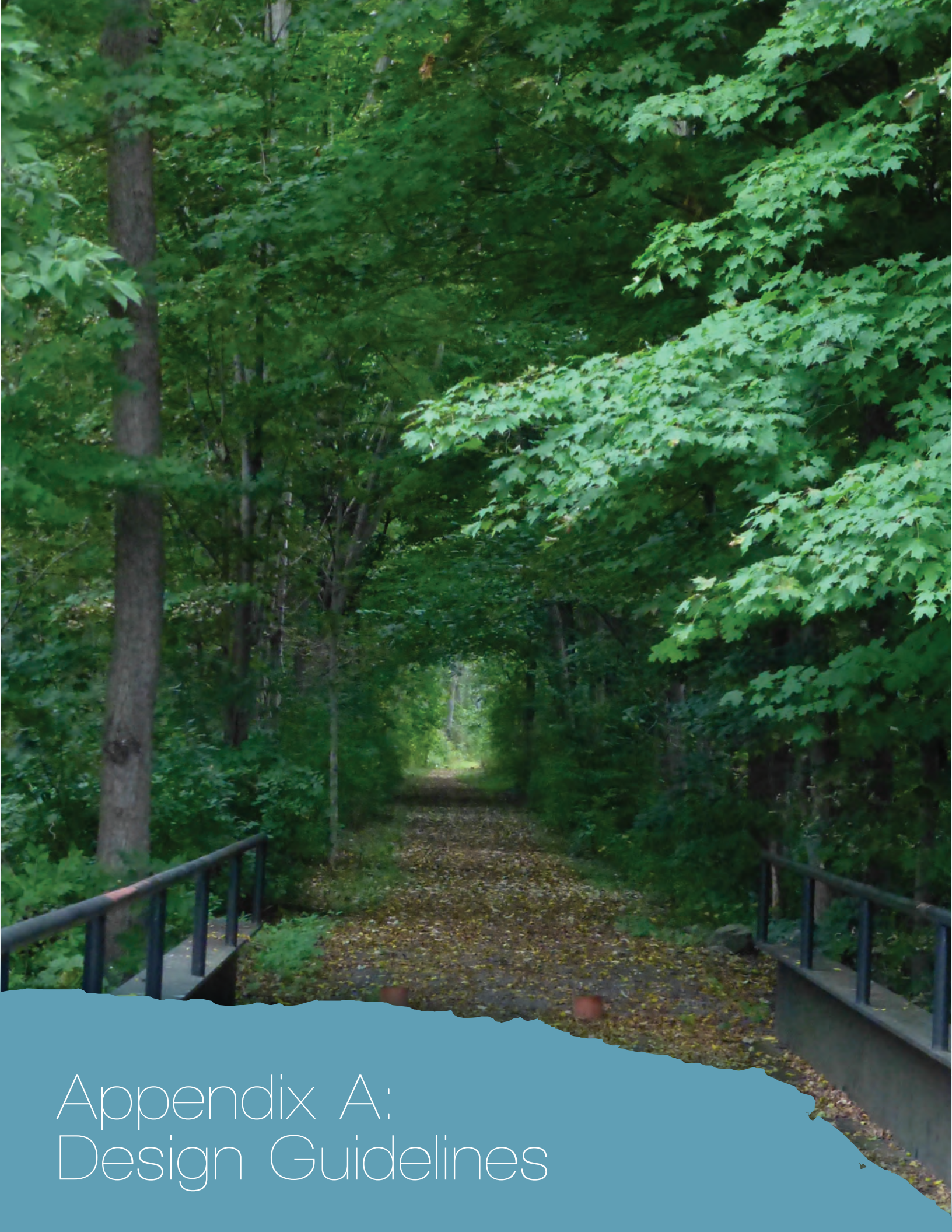


Appendix A: Design Guidelines

User Group Definitions and Design Needs

Overview

Trails attract a variety of users with different needs and expectations. Important design characteristics for different users are width, surface material, sight distances, clearances, and trail amenities. The following sections provide the framework for incorporating standards and guidelines for trail design and planning,

Users of the Genesee-Finger Lakes Regional Trails include:

- Pedestrians - joggers, hikers, walkers, baby strollers, pet walkers, nature watchers
- Bicyclists - commuting, recreational, touring; different types of bicycles
- In-line skaters and skateboarders
- Wheelchair users and users of other mobility devices
- Electric Personal Mobility Device (EPMD
- Winter recreation users

User Conflict

One of the safety issues in trail planning, design, and development is multi-user conflict. Typically these conflicts are caused by multiple user types traveling at different speeds. The combination of overuse of a trail and insufficient widths may result in user conflicts. Other factors that can lead to user conflicts are poorly designed and engineered trail alignments, inappropriate user behavior, or inadequate facility capacity. Potential conflicts that exist between greenway trail users are unique to the users themselves and indicated in Table 1.1.

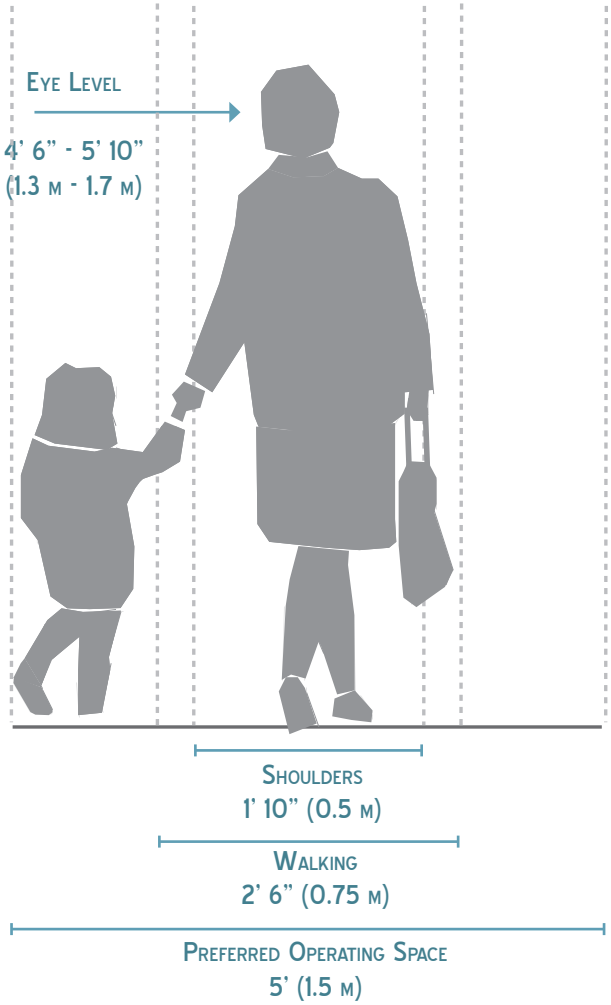
The most effective trail use management plan is a well-conceived safety program that provides the individual user with a Code of Conduct for the trail, sometimes called a Trail Ordinance. Several communities across the U.S. have adopted progressive trail ordinances for public use, including King County, Washington, and the East Bay Regional Park District in Alameda and Contra Costa counties, California.

Table 1.1 Potential Greenway Trail User Conflicts

USER TYPE	POTENTIAL CONFLICTS WITH OTHER USERS
PEDESTRIANS (includes any users on foot)	• Multiple pedestrians may walk more than two abreast making it difficult for other users to pass • Children may veer into oncoming users on bicycles • Pet owners may not exercise on-leash etiquette
BICYCLISTS	• Have tendency to startle other users • May not obey posted speed limits • May frighten wildlife • May not exercise appropriate audible etiquette when passing
SKATERS	• Have tendency to startle other users • May not exercise appropriate audible etiquette when passing
WHEELCHAIR USERS	• May not keep right making it difficult for other users to pass

Design Needs of Pedestrians

Pedestrians have a variety of characteristics and the Genesee-Finger Lakes Regional Trails System should accommodate a variety of needs, abilities, and possible impairments. Age is one major factor that affects pedestrians' physical characteristics, walking speed, and environmental perception. Children have low eye height and walk at slower speeds than adults. They also perceive the environment differently at various stages of their cognitive development. Older adults walk more slowly and may require assisted devices for walking stability, sight, and hearing. The table below summarizes common pedestrian characteristics for various age groups.



As a rule of thumb, the MUTCD recommends a normal walking speed of three and one half feet per second when calculating the pedestrian clearance interval at traffic signals. The walking speed can drop to three feet per second for areas with older populations and persons with mobility impairments. While the type and degree of mobility impairment varies greatly across the population, the trail system should accommodate these users to the greatest reasonable extent at greenway trail intersections, sharp turns, overpasses, and underpasses.

Pedestrian Characteristics by Age

AGE	CHARACTERISTICS
0-4	• Learning to walk • Requires constant adult supervision • Developing peripheral vision and depth perception
5-8	• Increasing independence, but still requires supervision • Poor depth perception
9-13	• Susceptible to "dart out" intersection dash • Poor judgment • Sense of invulnerability
14-18	• Improved awareness of traffic environment • Poor judgment
19-40	• Active, fully aware of traffic environment
41-65	• Slowing of reflexes
65+	• Difficulty crossing street • Vision loss • Difficulty hearing vehicles approaching from behind

Source: AASHTO Guide for the Planning, Design, and Operation of Pedestrian Facilities. 2004. Exhibit 2-1.

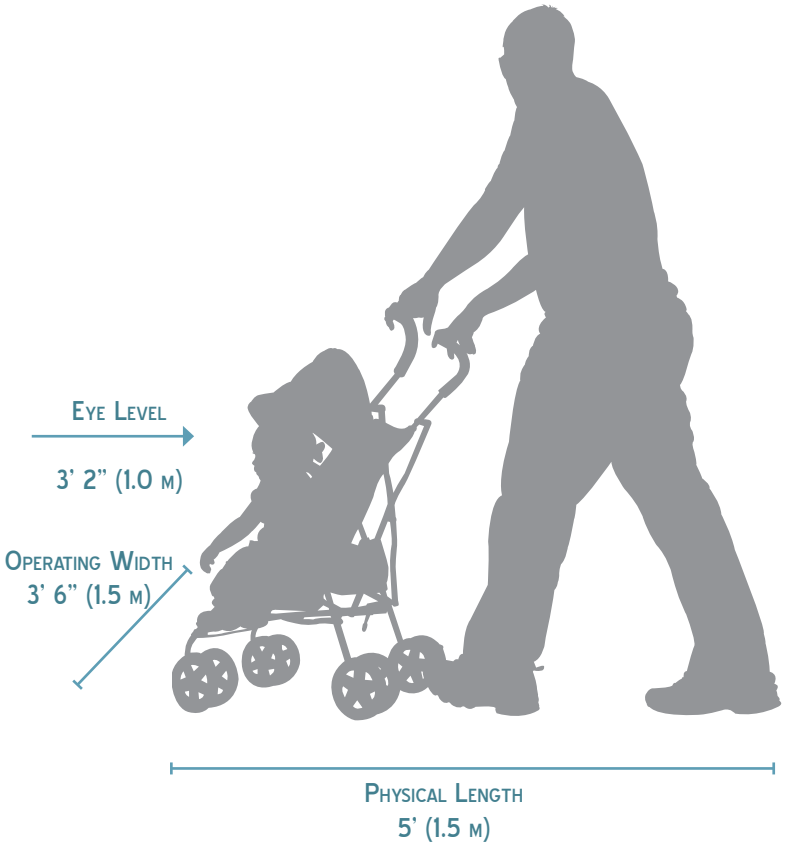
Design Needs of Strollers

Strollers are wheeled devices pushed by pedestrians to transport babies or small children. Stroller models vary greatly in their design and capacity. Some strollers are designed to accommodate a single child, others can carry three or more. Design needs of strollers depend on the wheel size, geometry and ability of the adult who is pushing the stroller.

Strollers commonly have small pivoting front wheels for easy maneuverability, but these wheels may limit their use on unpaved surfaces or rough pavement. Curb ramps are valuable to these users. Lateral overturning is one main safety concern for stroller users.

Typical Speed

USER	TYPICAL SPEED
Stroller	3.7 mph

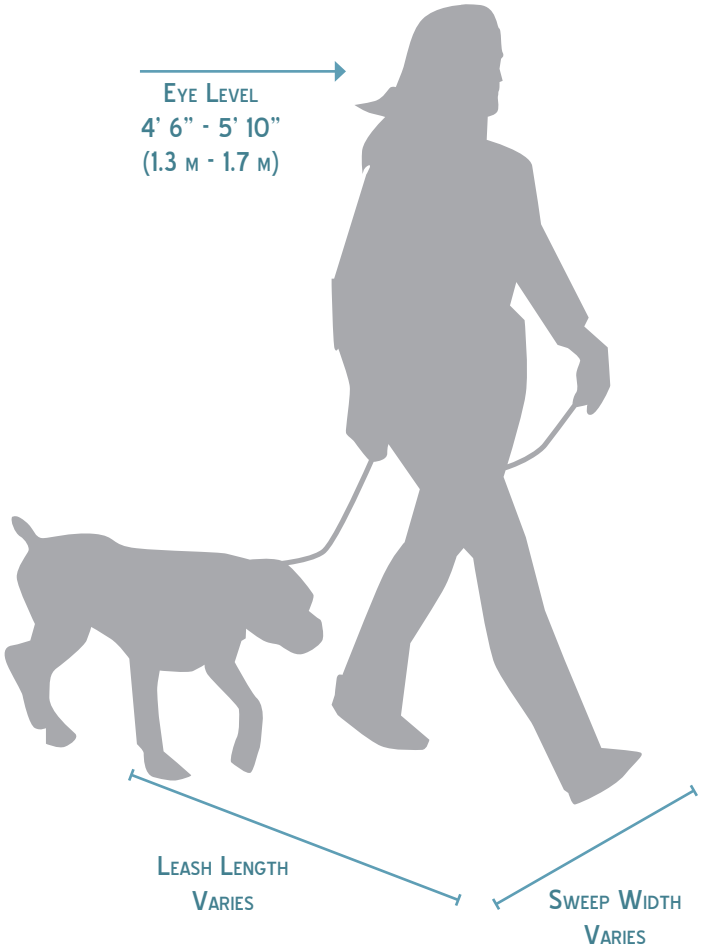


Source: FHWA. Characteristics of Emerging Road and Trail Users and Their Safety. (2004).

Design Needs of Dog Walkers

Dog walking is a common and anticipated use on trails. Dog sizes vary largely, as does leash length and walking style, leading to wide variation in possible design dimensions.

Trails designed to accommodate wheelchair users are likely to provide the necessary dimensions for the average dog walker. See following page, Design Needs of Wheelchair Users. Amenities such as dog waste stations at trailheads enhance conditions for dog walkers.



Design Needs of Mobility Assistance Device Users

As the American population ages, the number of people using mobility assistive devices (such as manual wheelchairs or powered wheelchairs) increases.

Manual wheelchairs are self-propelled devices. Users propel themselves using push rims attached to the rear wheels. Braking is done through resisting wheel movement with the hands or arm. Alternatively, a second individual can control the wheelchair using handles attached to the back of the chair.

Power wheelchairs use battery power to move the wheelchair. The size and weight of power wheelchairs limit their ability to negotiate obstacles without a ramp. Various control units are available that enable users to control the wheelchair movement, based on user ability (e.g., joystick control, breath controlled, etc).

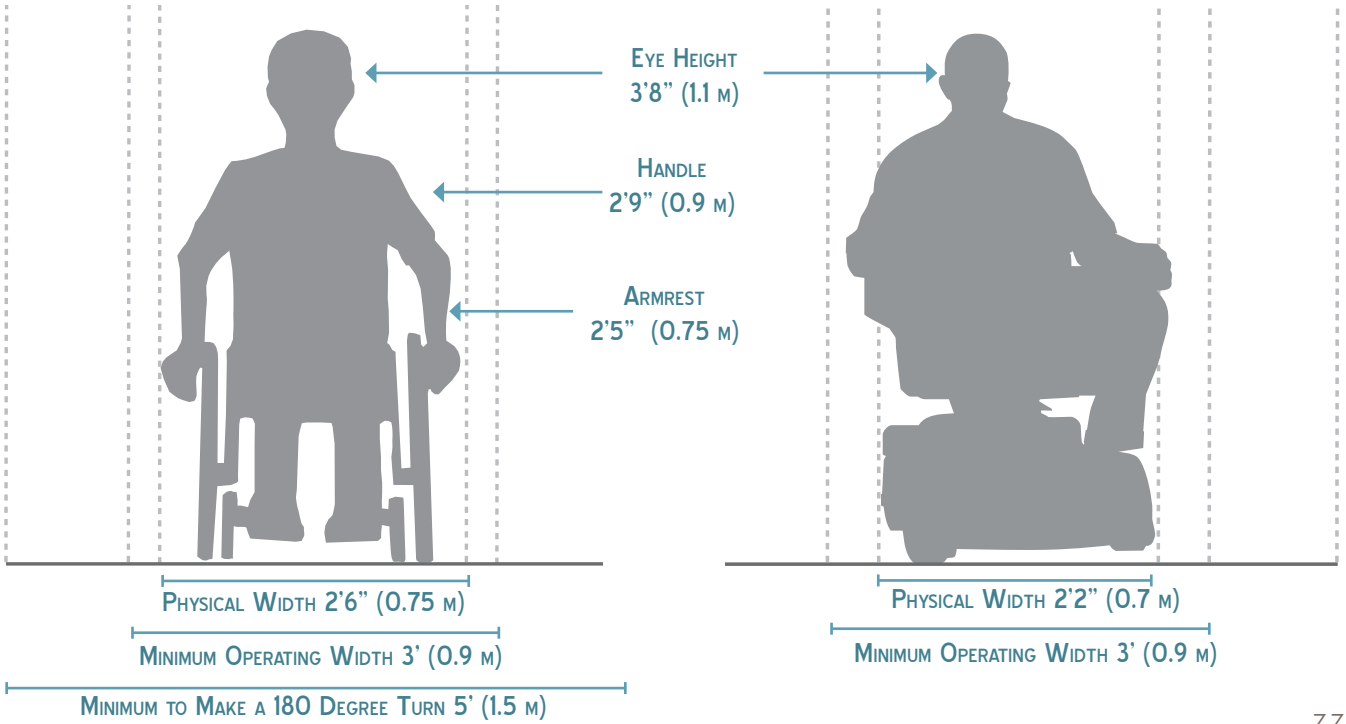
Maneuvering around a turn requires additional space for wheelchair devices. Providing adequate space for 180 degree turns at appropriate locations is an important element for accessible design. For more information see ADAAG Standards for Accessible Design.

Wheelchair User Typical Speed

USER	TYPICAL SPEED
Manual Wheelchair	3.6 mph
Power Wheelchair	6.8 mph

Wheelchair User Design Considerations

EFFECT ON MOBILITY	DESIGN SOLUTION
Difficulty propelling over uneven or soft surfaces.	Firm, stable surfaces and structures, including ramps or beveled edges.
Cross-slopes cause wheelchairs to veer downhill.	Cross-slopes of less than two percent.
Require wider path of travel.	Sufficient width and maneuvering space.



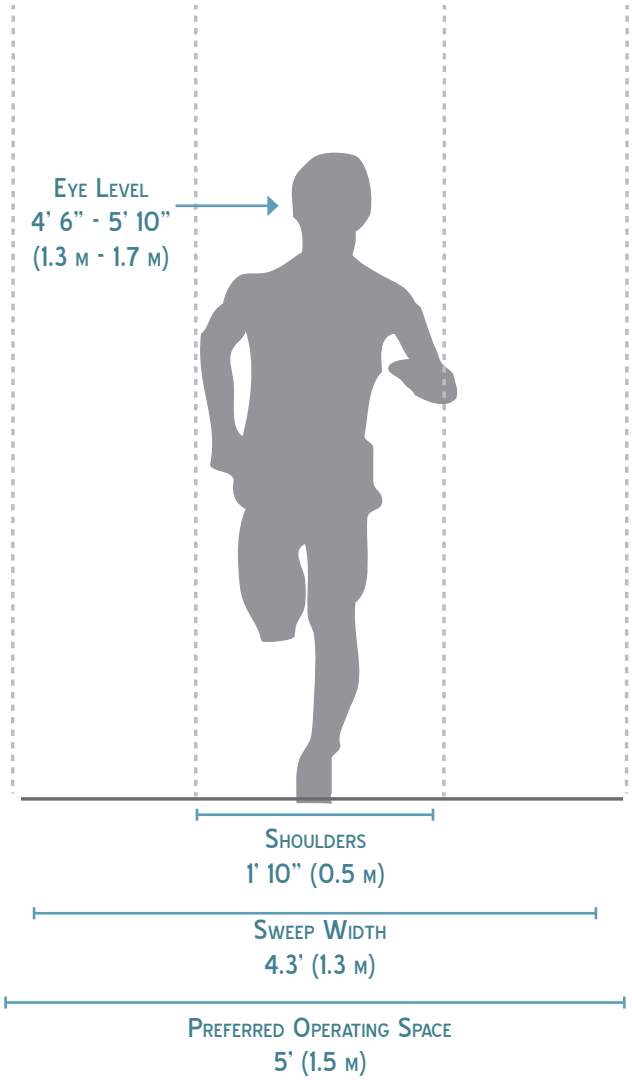
Source: FHWA. (2004). USDOJ. 2010 ADA Standards for Accessible Design. (2010).

Design Needs of Runners

Running is an important recreation and fitness activity commonly performed on trails. Many runners prefer softer surfaces (such as rubber, bare earth or crushed rock) to reduce impact. Among the hardened surfaces, asphalt is preferred over concrete because it is more forgiving on joints. Runners can change their speed and direction frequently.

Typical Speed

USER	TYPICAL SPEED
Runner	6.2 mph



Design Needs of Skaters

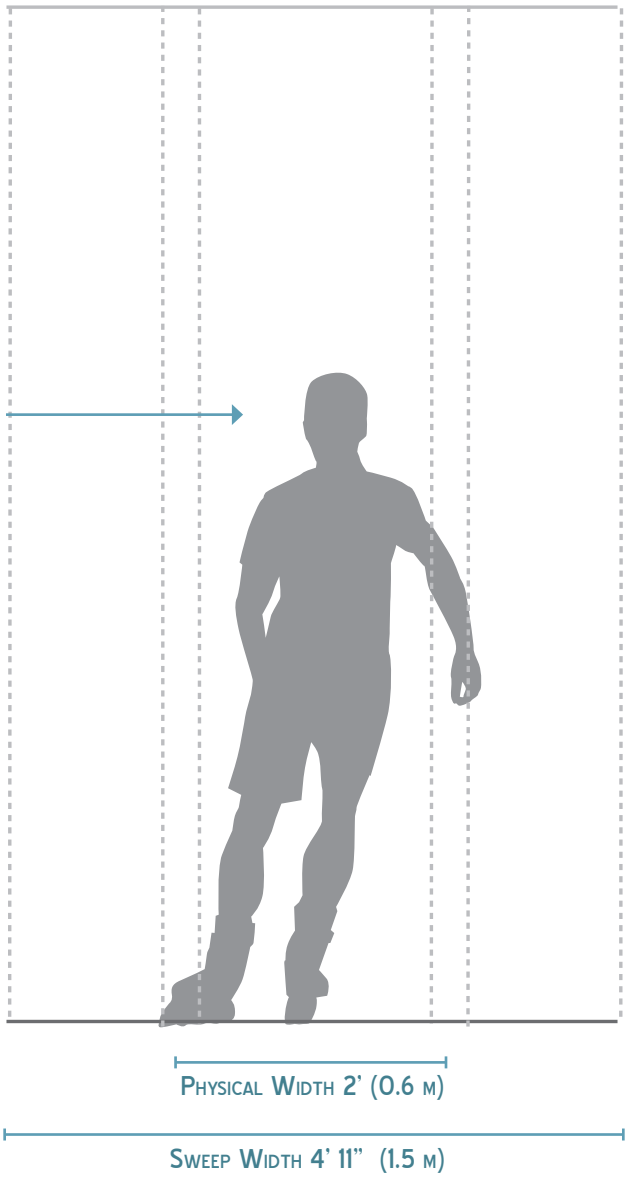
Inline skates are commonly used for recreational and transportation purposes. They typically have three to five wheels of 3 to 4 inches diameter, aligned in a straight line. Inline skate design allows for more efficient and high speed travel than quad wheel skates.

Operational characteristics vary by skill level of the operator. Novice skaters travel more slowly and have a narrower sweep width from advanced skaters. Novice users may also have trouble making sharp turns and stopping quickly, particularly on speed grades.

Inline skates are nearly impossible to use on unpaved surfaces and can be uncomfortable and difficult to operate on rough pavements such as asphalt with large aggregate.

Typical Speed

USER	TYPICAL SPEED
Inline Skates	9.9 mph



Source: FHWA. (2004).

Design Needs of Bicyclists

Similar to motor vehicles, bicyclists and their bicycles exist in a variety of sizes and configurations. These variations occur in the types of vehicle (such as a conventional bicycle, a recumbent bicycle or a tricycle), and behavioral characteristics (such as the comfort level of the bicyclist). The design of a greenway trail should consider expected bicycle types on the facility and utilize the appropriate dimensions.

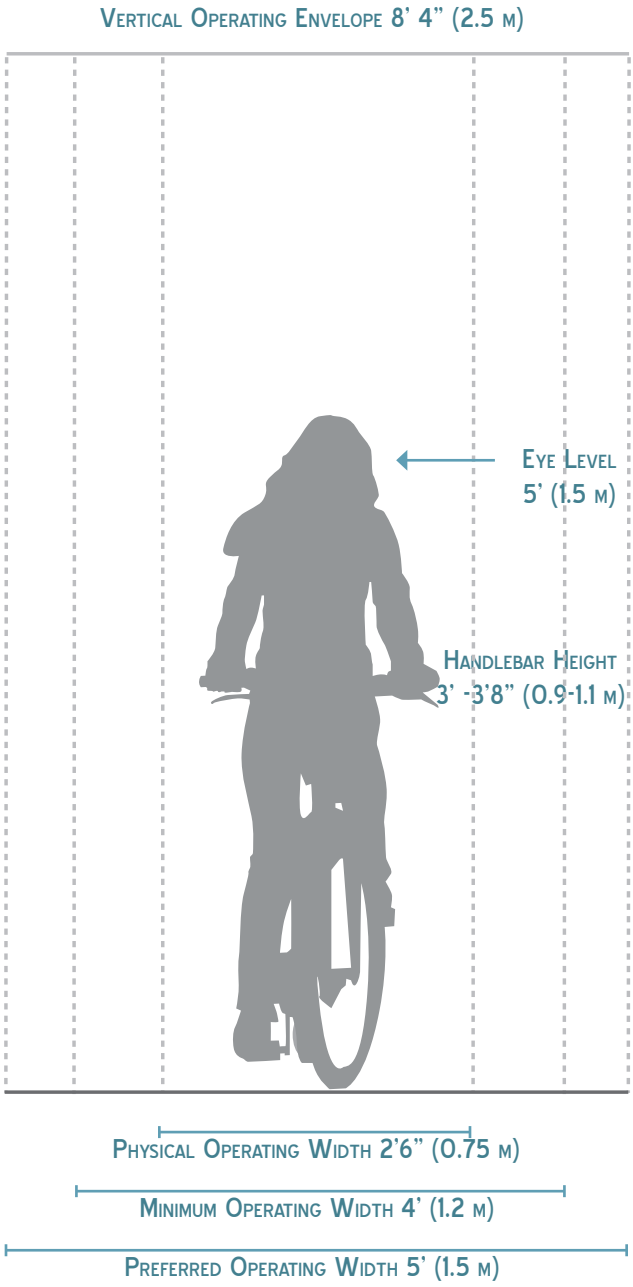
The figure below illustrates the operating space and physical dimensions of a typical adult bicyclist, which are the basis for typical facility design. Bicyclists require clear, open space with no visual obstructions to operate within a facility. This is why the minimum operating width is greater than the physical dimensions of the bicyclist. Bicyclists prefer five feet or more operating width, although four feet may be minimally acceptable.

Speed Expectations

BICYCLE TYPE	FEATURE	TYPICAL SPEED
Upright Adult Bicyclist	Paved level surfacing	8-15 mph
	Crossing Intersections	10 mph
	Downhill	20-30 mph
	Uphill	5 -12 mph
Recumbent Bicyclist	Paved level surfacing	11-18 mph

**Tandem bicycles and bicyclists with trailers have typical speeds equal to or less than upright adult bicyclists.*

Standard Bicycle Rider Dimensions



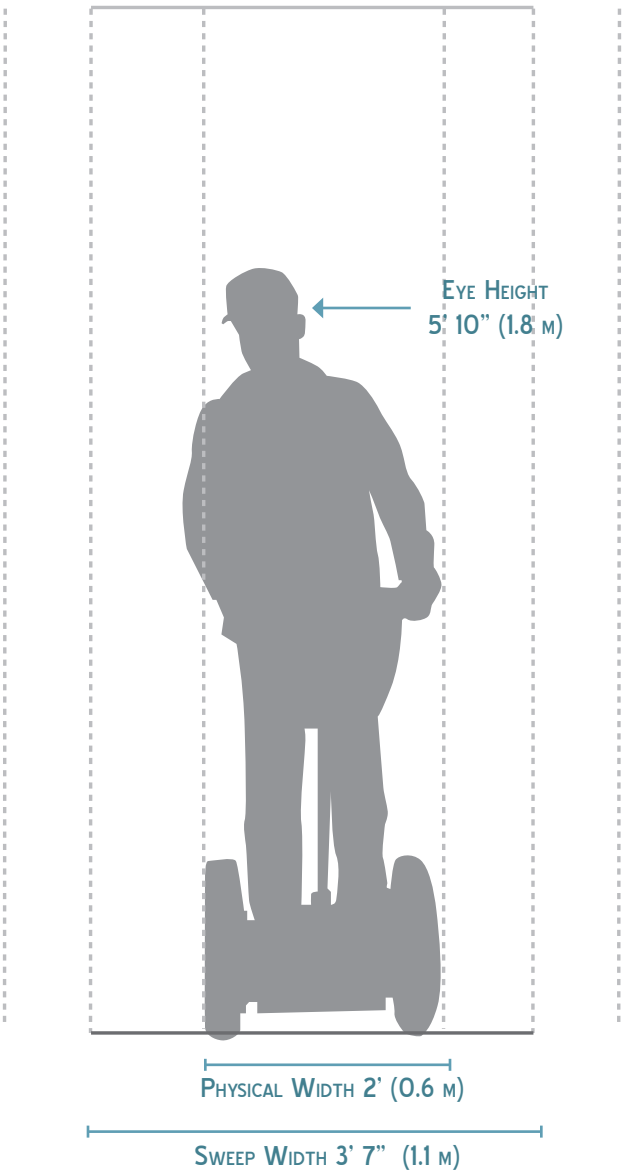
Design Needs of Electric Personal Mobility Devices (e.g. the Segway)

Electric personal mobility devices (EPMDs) such as the Segway, are appearing on paths and roadways around the country. A person operating an electric personal assistive mobility device on a trail shall yield the right-of-way to pedestrians and other human-powered devices.

The Segway is a self-balancing, electric-powered transportation device. Its footprint is not much larger than the human body and has two wheels side by side next to the user's feet. The Segway uses gyroscopes and tilt sensors to monitor the body's movements and balance the device on the single axle. When a person leans forward, the Segway moves forward; leaning backward causes it to move back. The Segway has no brakes; to stop the device, users simply straighten up from their leaning position. Turning is accomplished with a twisting motion on the handlebar. Because both wheels are on one axle, it can turn in place with no turning radius.

Typical Speed

USER	TYPICAL SPEED
Segway	10.5 mph



Genesee-Finger Lakes Regional Trails INITIATIVE

Design Considerations

Overview

A consistent physical character should be implemented for the Genesee-Finger Lakes trail system. The new trail design should address the following design issues:

- Design considerations for different applications and site conditions
- Design regulations
- Trail management features
- Amenities
- Signage and user regulation

Design Considerations for Environmental Stewardship

Trails are an important tool for linking recreation, conservation, and transportation. As such, they must be developed and maintained in ways that avoid negative impacts to the natural resources of the area. The following guidance is recommended for developing and maintaining trails.

Protect Sensitive Ecological Areas

Construction of trails can have unintended negative consequences on the environment. When prioritizing trails, balance costs, accessibility, aesthetics, and available land against environmental impacts. Prevent trail development from impacting the following areas when possible:

- Wetlands, lakes, rivers, and streams
- Rare and endangered species habitat
- Public water supplies
- Sensitive forest areas
- Steep slopes and soils that are identified as restricted for trail or road development
- Unique or important geologic features or formations

Provide Buffers to Protect Natural Systems

Maintaining buffers between trails and adjacent sensitive natural areas is essential to ensuring their long-term ecological quality, diversity, and habitat value. Irrespective of how well trails are designed and constructed, they have an impact on the environments they traverse. These impacts include habitat fragmentation, soil compaction, increased runoff and erosion, and introduction of nonnative plant species. For these reasons, the use of vegetative buffers is an essential part of trail planning and design. Recommended buffer widths, however, will vary in response to a number of conditions, including:

- Sensitivity of the ecological systems being impacted
- Extent of the natural open space or greenway corridor being traversed
- Type of trail being proposed and its potential for creating ecological impacts
- Grade and soil types
- Desired trail experience

Recommended buffer widths may range from 50-200 feet depending on conditions and associated regulatory requirements. When planning and designing greenway trails in natural and cultural resource areas, consult with the state's Natural Heritage Program, the State Historic Preservation Office, and local floodplain administrators to determine appropriate buffer widths.

Use Best Practices for Stormwater Management

The most critical component of trail design and management is to prevent standing water on the trail. On highly developed trails, the use of natural, dispersed infiltration systems such as vegetated swales and bioswales will bring ecological and hydrologic advantages over engineered stormwater control structures such as storm drains and catch basins.

Use Low Impact Design and Construction Methods

Trail development and maintenance across, along, and within ecologically sensitive areas is often desirable and justifiable. In the Genesee Finger Lakes System, the vast majority of trails occur along riparian areas. Low impact trail planning, design, and maintenance will lessen impacts to existing vegetation, wildlife, water resources, and soils, resulting in a durable trail system that will serve the public needs and provide a quality recreational experience.

Permitting

The construction of any trail will require permits for construction. Depending on the corridor location and structures, some trails will require coordination with various agencies at the state and federal level.

Potential permits which may be required for trail construction include:

- FEMA Conditional Letter of Map Revision (CLOMR)/FEMA Letter of Map Revision (LOMR)
- U.S. Army Corps of Engineers Section 401/404 Permit, Pre-Construction Notification (PCN) Permit

Prior to undertaking design or construction, determine current local requirements with Stormwater Management and Planning and Development departments.

Regional Trail Faciliites

General Design Practices for Paved Regional Trails

The intent of trail construction is to make open space available without damaging the qualities of the natural environment that are most valued and appreciated. Surfacing should be selected to support projected intensities of use and to enable multiple uses. Surfacing should also account for site topography, surface drainage, frequency of flooding, construction cost, and maintenance concerns.

Key features of trails include:

- Frequent access points from the local on-street transportation network.
- Directional signs to direct users within the greenway trail network.
- A limited number of at-grade crossings with streets or driveways.
- Providing easily accessible connections to destinations.
- Designing facilities that safely accommodate multiple user types.

Regional Trail Surfacing Types

American Disabilities Act Accessibility Guidelines compliant trails require paved surfaces, in most instances for access and ease of use. In limited cases, packed gravel fines can be used, where there is little to no topography. However, packed surfaces require much more maintenance effort and cost over time, and may not be desirable in the long term.

Asphalt tread surfaces have traditionally been used for trails. Asphalt trails offer substantial durability for the cost of installation and maintenance. Asphalt is popular with users for its smooth, continuous surface and has the benefit of lower cost, but requires more upkeep than concrete. As a flexible pavement, asphalt can also be considered for installing a paved trail on grades steeper than 3 percent. If constructed properly on suitable sub-grade, asphalt has a life span of about half that of concrete, or 10-15 years.

When properly constructed and maintained on a regular basis, concrete can last 25 years or more. The high cost of concrete is often the most limiting factor since it is one of the most expensive surfaces to install. It is recommended that concrete be used for its superior durability and lower maintenance requirements in areas prone to frequent flooding, and for intensive urban applications.

Permeable paving is twice the cost of asphalt to install and is only recommended in very special greenway trail applications under the following considerations:

- A maintenance schedule must be established for vacuuming debris after storm events (required to retain permeability)
- Only use permeable paving areas with proper drainage (not suitable in floodplain or areas with ponding or sedimentation)
- When determining surface type for trails, consider topography, landscape position, underlying soils, and trail classifications. All surfaces have advantages and disadvantages, and each must be analyzed to determine which surface is appropriate in any given location.

Width

- Eight feet is the absolute minimum width allowed for a shared use greenway trail and is only recommended for low volume trails. AASHTO requirements for trails receiving federal funding is 10' minimum.
- Ten feet is recommended in most situations and is adequate for moderate to heavy use.
- Twelve feet (and in very heavy trail use, 14 feet) is recommended for situations with high concentrations of multiple users. A separate track (5 feet minimum) can be provided for pedestrian use where right-of-way permits.

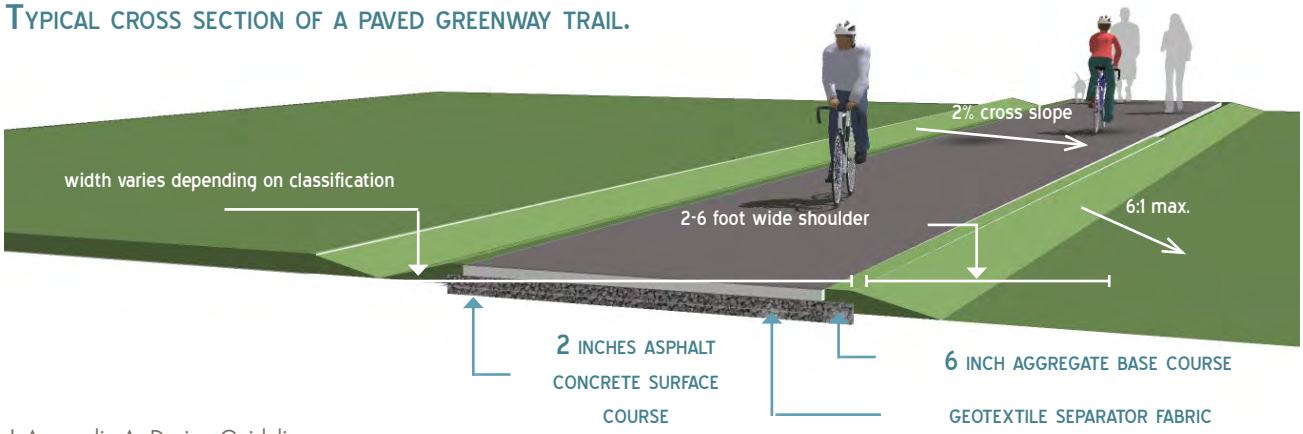
Lateral Clearance

- A 2 foot minimum shoulder on both sides of the trail should be provided for all trail classifications.
- Use 6 feet of shoulder in fill sections and 3 feet of shoulder in cut sections.
- If bollards are used at intersections and access points, they should be colored brightly and/or supplemented with reflective materials to be visible at night and spaced adequately.

Overhead Clearance

- Clearance to overhead obstructions should be 8 feet minimum, with 10 feet recommended.
- Convex mirrors should be provided at blind corners and at the approaches to underpasses with poor sight lines. Striping
- Striping should be used on trails with anticipated heavy use or with high concentrations of multiple users.

Typical cross section of a paved greenway trail.



Surface Grade

- Trails should be designed to comply with ADAAG standards.
- Provide a 2 percent cross slope from crown of trail in both directions to provide positive drainage off the trail as conditions allow.
- Provide a 48 inch safety rail for the following circumstances within 6 feet of the edge of pavement:
- Slope is greater than or equal to 3:1 and drop of 6 feet
- Slope is greater than or equal to 2:1 and drop of 4 feet
- Slope is greater than or equal to 1:1 and drop of 1 foot

Materials

- Asphalt is the most common surface for trails, offering substantial durability for the cost of installation and maintenance.
- It is recommended that concrete be used for its superior durability and lower maintenance requirements, specifically in areas prone to frequent flooding, since the hardness and jarring of this surface is not preferred by runners or cyclists. Saw cut concrete joints rather than troweled improve user experience.
- Stone dust, or crushed stone, trails provide a user-friendly surface for all types and ages of visitors including strollers, wheelchairs, and bicyclists.
- Proper trail foundation will increase the longevity of the trail. Two inches of surfacing material over six inches of base course gravel over geotextile fabric is recommended.

Tread Surface Options

SURFACE MATERIAL	FIRMNESS	STABILITY	SLIP RESISTANCE
Asphalt	Firm	Stable	Slip Resistant
Concrete, Broom Finish	Firm	Stable	Slip Resistant
Soil with Stabalizer	Firm	Stable	Slip Resistant
Compacted Aggregate, 3/4' minus, with Stabalizer	Firm	Stable	Not Slip Resistant
Compacted Aggregate, 3/4' minus, without Stabalizer	Firm	Stable	Slip Resistant
Wood Planks	Firm	Stable	Not Slip Resistant
Grass or Vegetation/Groundcover	Soft	Moderately Stable	Not Slip Resistant

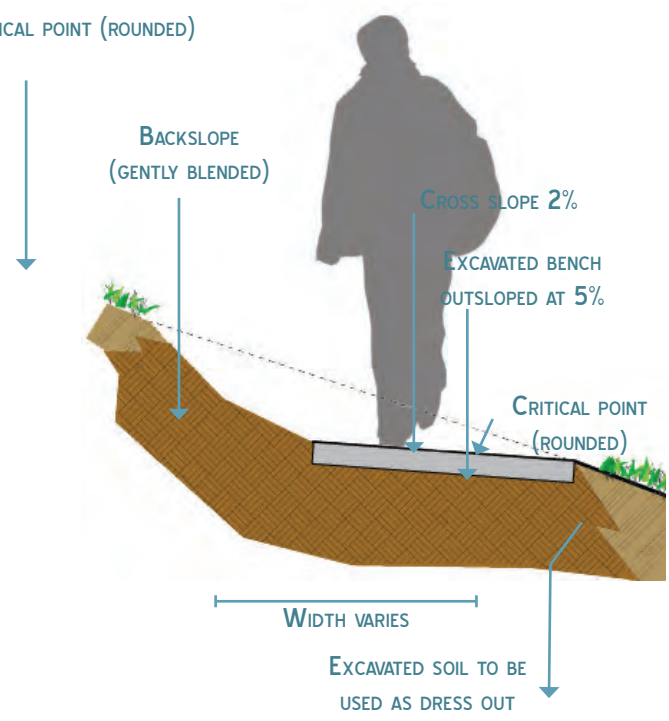
Source: Designing Sidewalks and Trails for Access: Part I of II, USDOT, Federal Highway Administration: 1999

General Design Practices for Natural Surface Trails

Sometimes referred to as nature trails or hiking trails, the natural surface trail is used along corridors that may be environmentally-sensitive but can support bare earth, wood chip, or boardwalk trails. Natural surface trails are a low-impact solution and found in areas with limited development or where a more primitive experience is desired.

Guidance

- Natural surface trails can vary in width from 18 inches to 10 feet; vertical clearance should be maintained at 8-10 feet above grade.
- Refer to the beginning of this chapter for guidance on planning, designing, and constructing trails in environmentally sensitive areas.
- Base preparation varies from machine-worked surfaces to those worn only by usage.
- Tread can be bare earth, rock, forest litter, or other native materials. Some greenway trails use crushed stone or screenings that contain about 4 percent fines by weight, and compact with use. Stone materials should not be used in flood-prone areas, environmentally sensitive areas, or areas with steep terrain.
- Provide positive drainage in all cases. Bench cut tread without extensive removal of existing vegetation. Build grade reversals and outsloped tread to encourage sheet flow across the trail.
- Localize stormwater features at small scales along the network to minimize erosion and keep the trail available for use year-round.
- Provide a longitudinal maximum slope of 5 percent and a cross slope of 2 percent.
- For additional guidance on natural surface trails design and construction: https://www.imba.com/resources/trail-building.



Typical cross section of a natural surface greenway trail.

Accessible Trail Design

The United States Access Board has approved American with Disabilities Act Accessibility Guidelines (ADAAG) for trails and outdoor recreational access routes. Constructing trails may have limitations that make meeting ADAAG and AASHTO guidelines difficult and sometimes prohibitive. Prohibitive impacts include harm to significant cultural or natural resources; a significant change in the intended purpose of the trail; requirements of construction methods that are against federal, state, or local regulations; or terrain characteristics that prevent compliance.

Guidance

- Surface: Hardened surface such as asphalt, concrete, timber, compacted gravel
- Clear tread width: 36 inches minimum
- Tread Obstacles: 2 inches high maximum (up to 3 inches high where running and cross slopes are 5 percent or less)
- Cross Slope: 5 percent maximum
- Longitudinal slope must meets one or more of the following:
- Five percent or less for any distance
- Up to 8.33 percent for 200 feet max with resting intervals no less than 5 feet long and equal to the width of the trail at both ends.
- Up to 10 percent for 30 feet max with resting intervals no less than 5 feet long and equal to the width of the trail at both ends.
- Up to 12.5 percent for 10 feet max with resting intervals no less than five feet long and equal to the width of the trail at both ends.
- NOTE: If resting intervals are not located within the trail tread, adjacent resting interval clear widths must be 3 feet minimum.
- No more than 30 percent of the total trail length may exceed a running slope of 8.33 percent.
- Passing Space: provided at least every 1,000 feet where trail width is less than 60 inches.
- Signs: shall be provided indicating the length of the accessible trail segment.
- Detectable pavement changes at curb ramp approaches should be placed at the top of ramps before entering roadways.
- Trailhead signage should provide accessibility information, such as trail gradient/profile, distances, tread conditions, location of drinking fountains, and rest stops.
- Provide one accessible parking space per every 25 vehicle spaces at trailheads.
- Trail amenities, drinking fountains, and pedestrian-actuated push buttons should be placed no higher than 4 feet off the ground.

Crime Prevention Through Environmental Design (CPTED) Principles for Greenway Trails

Personal safety, both real and perceived, heavily influences a trail user's decision to use a facility and a community's decision to embrace the trail system. Proper design must address both the perceived safety issues (i.e., feeling safe or fear of crime) and actual safety threats (i.e., infrastructure failure and criminal acts). CPTED is a proactive approach to deterring undesired behavior in neighborhoods and communities. When all spaces have a defined use and the use is clearly legible in the landscape, it is easier to identify undesired behavior.

Principle #1: Natural Surveillance

Principle #2: Natural Access Control

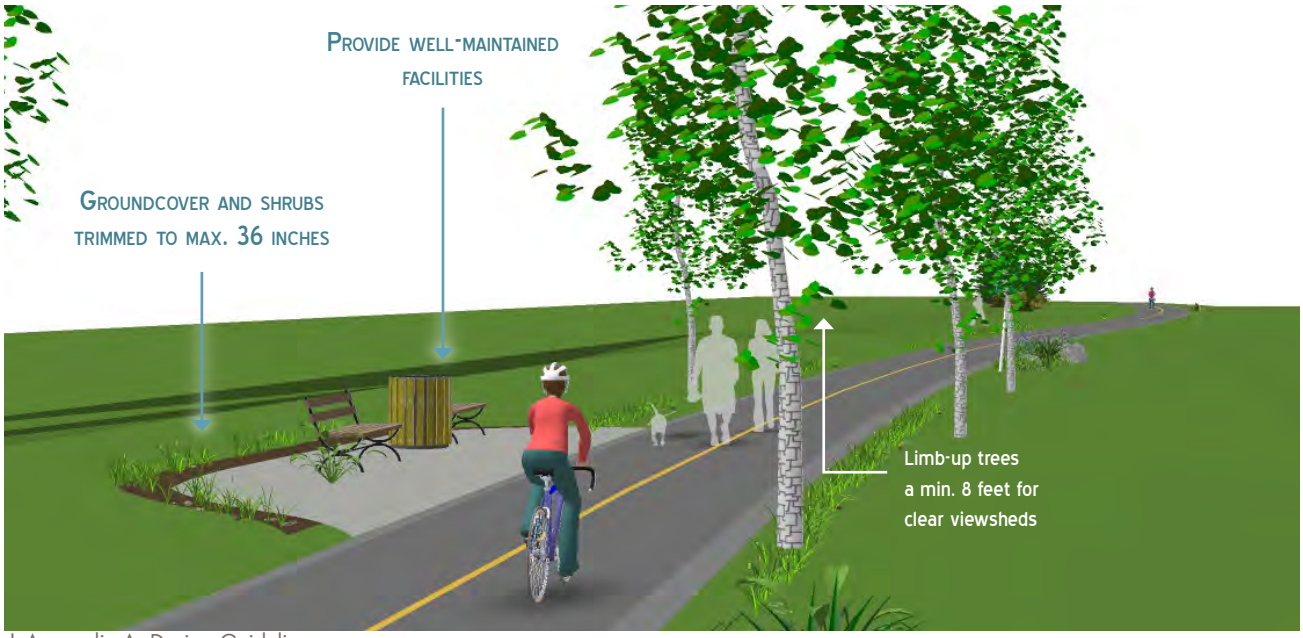
Principle #3: Territorial Reinforcement

Principle #4: Maintenance

The following elements include CPTED principles as they apply to the Genesee-Finger Lakes Regional Trails. Apply CPTED guidelines to trail facilities, management features, and amenities when appropriate.

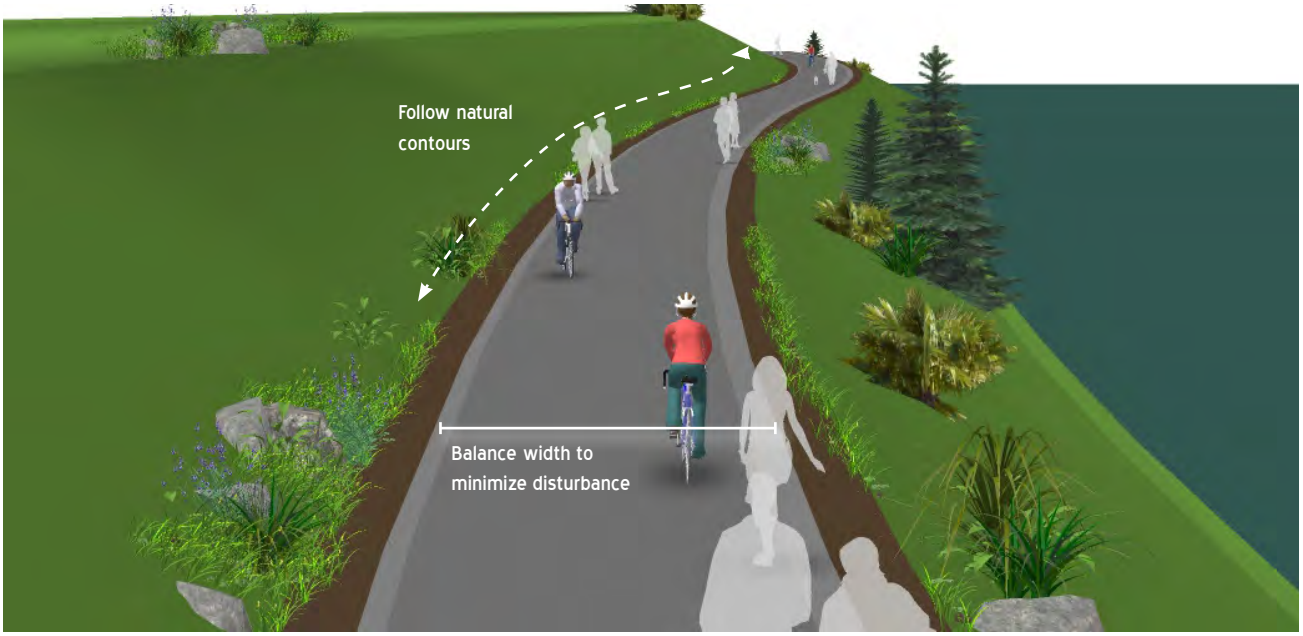
Guidance

- Where feasible, fencing installed along trails should not obstruct the view of trail users.
- Where the trail is fenced for long stretches, intermittent openings should be located to allow users to enter and exit the trail. Access points to the trail should be at locations with good visibility from the surrounding neighbors.
- Trail signage should include the contact number to report graffiti, suspicious behavior, and maintenance issues (e.g., "Immediately report any observed graffiti to 911").
- All groundcover and shrubs along trails should be trimmed to a maximum height of 36 inches above ground level.
- Trees should be limbed-up to provide a minimum of 8 feet of vertical clearance over the trail within the trail corridor.



- Tree canopies should not obstruct pathway illumination.
- Hostile native landscaping material (e.g. vegetation with thorns) can be used in strategic areas to discourage unauthorized use and eliminate entrapment areas.
- Add anti-graffiti application to retaining walls, where appropriate.
- Where lighting is installed on greenway trails the illumination should:
- Be adequate to identify a face up to 20 yards away.
- Have full cut-off fixtures to reduce light pollution.
- Provide uniform coverage, eliminating dark pockets.
- Provide good color rendition.
- Not be obstructed by tree canopies.
- The use of metal halide or light emitting diode (LED) lamps are recommended, as they provide excellent color rendition. Color rendition is especially important when describing identifying features such as hair, clothing, and vehicle color. Light quality is as important as the quantity. Poor lighting, whether too bright or not bright enough, can diminish safety.
- Lighting should respond to the conditions of the site and meet the minimum standards set forth by the Illuminating Engineering Society of North America (IESNA).

TYPICAL CROSS SECTION OF A PAVED GREENWAY TRAIL ALONG A RIPARIAN CORRIDOR.



Design Considerations for Riparian Greenway Trails

Riparian corridors are the primary trail development corridor across the existing Genesee-Finger Lakes Trails. Depending on the width of the floodplain area, riparian corridors often offer substantial recreational and open space preservation opportunities. These corridors include rivers and streams, drainage facilities, and wetlands (where environmentally feasible). All trails constructed within riparian corridors should be studied for stormwater impacts, wildlife habitat impacts, and floodplain development impacts.

Guidance

- Trails in riparian corridors should meet or exceed General Design Practices indicated previously due to their sensitive nature and generally poorly-drained and wet periods of the year.
- Confirm local and current buffer rules to determine acceptable uses and buffer widths.
- All trails within floodplain areas will require adequate environmental permits from local floodplain administrators. Confirm current requirements with stormwater staff when designing riparian trails.
- To minimize vegetation disturbance and breaching of the forest canopy, construct the tread only wide enough as indicated by the trail classification for the intended use.

Routing and Alignment

- Where possible, trails should follow the contours.
- Avoid constructing trails along fall lines, which are prone to erosion and generally cannot be maintained over time.
- Trails through wetlands should be avoided if possible. If wetlands must be crossed, choose the narrowest point.
- Construction of trails immediately adjacent to or abutting streambanks should be avoided to the greatest degree possible. Construct all trails at the maximum distance from streams as is practical.
- Include consideration of stream restoration potential where feasible. Stream restoration projects commonly involve considerable reshaping of the floodplain to reduce bank angles and heights to allow the stream to access its floodplain.

Access Points

- Any access point to the greenway trail should be well-defined with appropriate signage designating the corridor as a shared-use greenway trail and prohibiting motor vehicles.
- Design logical points of interest to avoid informal "social" trails that follow poorly executed routes and trample floodplain vegetation or sensitive areas.

Materials and Management

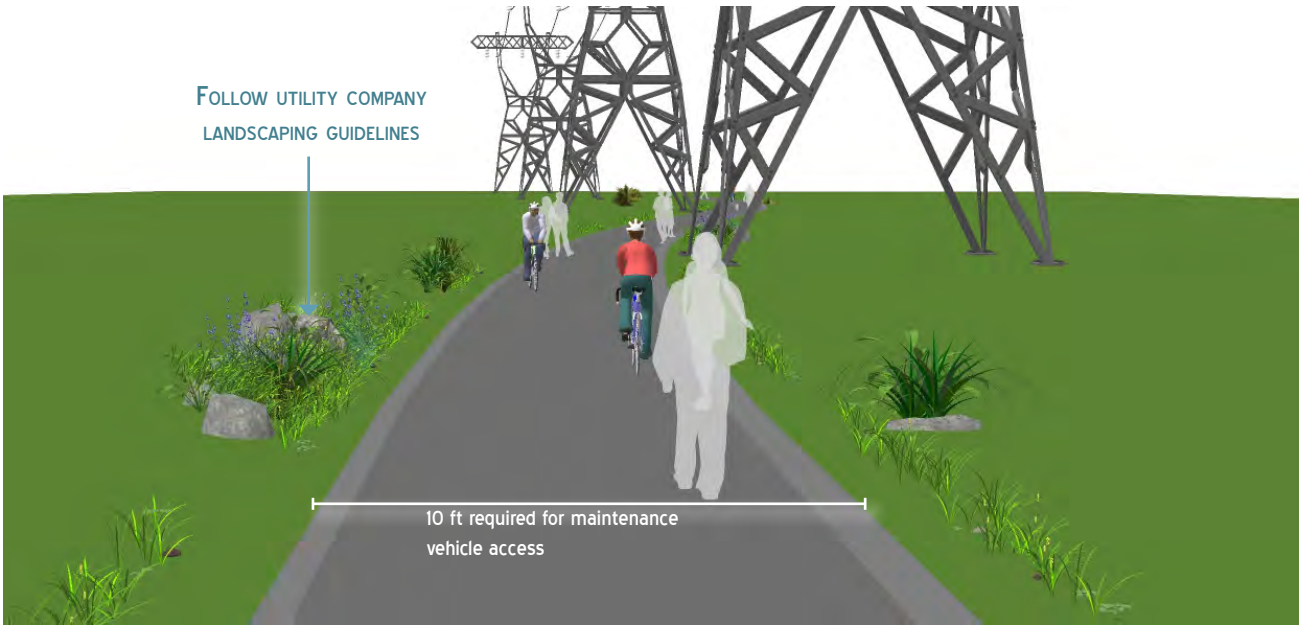
- Concrete is the recommended surface treatment for greenway trails prone to flooding due to its superior durability and lower maintenance requirements.
- Permeable paving is not recommended in floodplain areas or areas without proper drainage. Sheet flow and sediment transport clogs pores and requires vacuuming after all storm events.
- Where wetlands are present, use elevated tread materials (such as timber boardwalk) to preserve these fragile ecosystems. For more information on raised greenway trails, see the specific design guideline in this section.
- Do not use gravel or crushed stone fines in riparian areas prone to flooding. These materials have very low cohesiveness and erode easily. They can also contribute to sediment in streams.
- Use natural dispersed infiltration systems such as vegetated swales to manage stormwater.

Design Considerations for Greenway Trails in Utility Corridors

Existing man-made corridors may be able to simultaneously serve the needs of trail users. Underground utilities such as water, sewer, natural gas, or buried electric or optic lines can accommodate trails as well as above-ground utilities such as telephone, cable, or overhead electric. Utility companies benefit from this arrangement by having uninterrupted, easily accessible route to their utility service.

Guidance

- Utility companies require specific design guidelines, routing and alignment, and landscaping limitations.
- Ten feet width is required if motor vehicles will be accessing the trail for maintenance purposes.
- In sewer easements, the edge of trail should be at least 10 feet from manhole rims, where possible.
- All trails require acquisition of an easement from the current fee simple title owner of the land.
- Some utilities have trail width limitations within their rights-of-way. When designing trails in utility corridors, confirm current guidelines widths with each utility.
- In many cases, bollards are required at access points to deter motor vehicles. Bollards must be installed per the utility's specifications.
- For electrical utility corridors, a minimum separation of 25 feet is required between the trail and any associated electrical equipment (such as guy wires, power poles, and towers; based on Duke Energy ROW requirements for trails).
- Culverts and vegetation must be installed per the utility's specifications.
- Structures are typically restricted within utility easements. Structures include signage, lighting, and benches.
- Review each utility's policy and construction specifications for repair, maintenance, access, and corridor maintenance requirements.
- User expectations will be similar to other Genesee-Finger Lakes trails, however trails in utility corridors may be restricted to the conditions listed above and closed at certain times when utility repairs are necessary.



Trails in Abandoned Rail Corridors

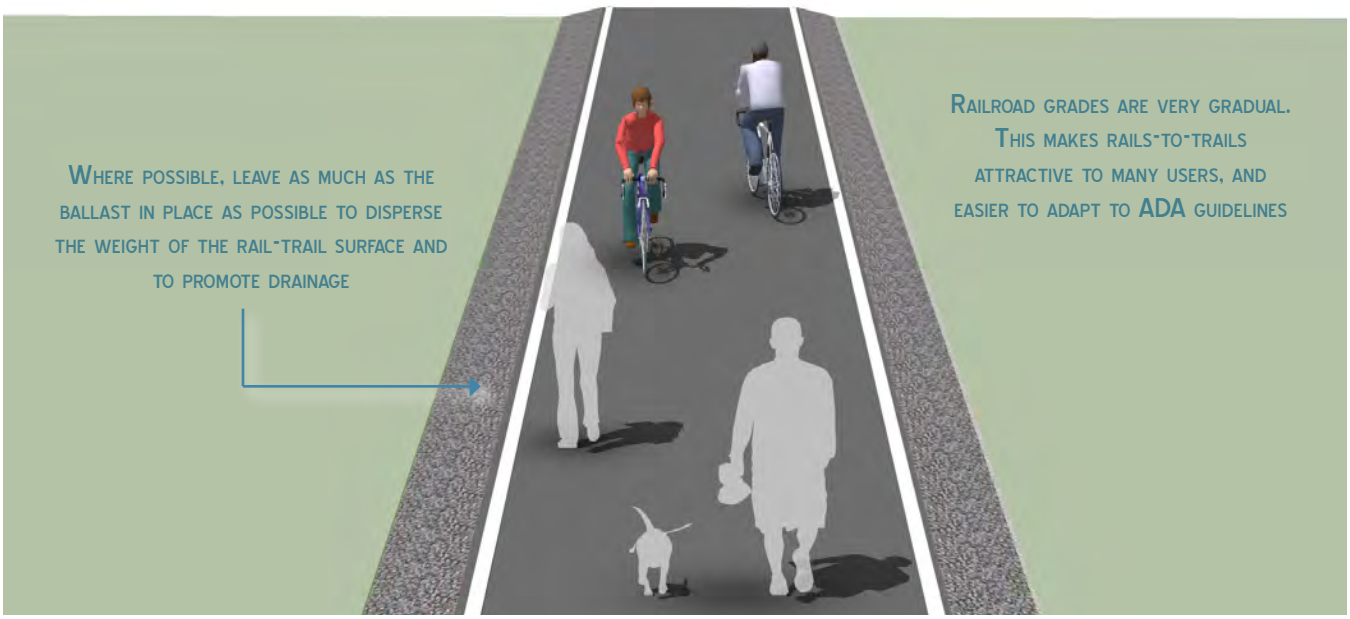
Commonly referred to as Rails-to-Trails or Rail-Trails, these projects convert vacated rail corridors into off-street paths. Rail corridors offer several advantages, including relatively direct routes between major destinations and generally flat terrain.

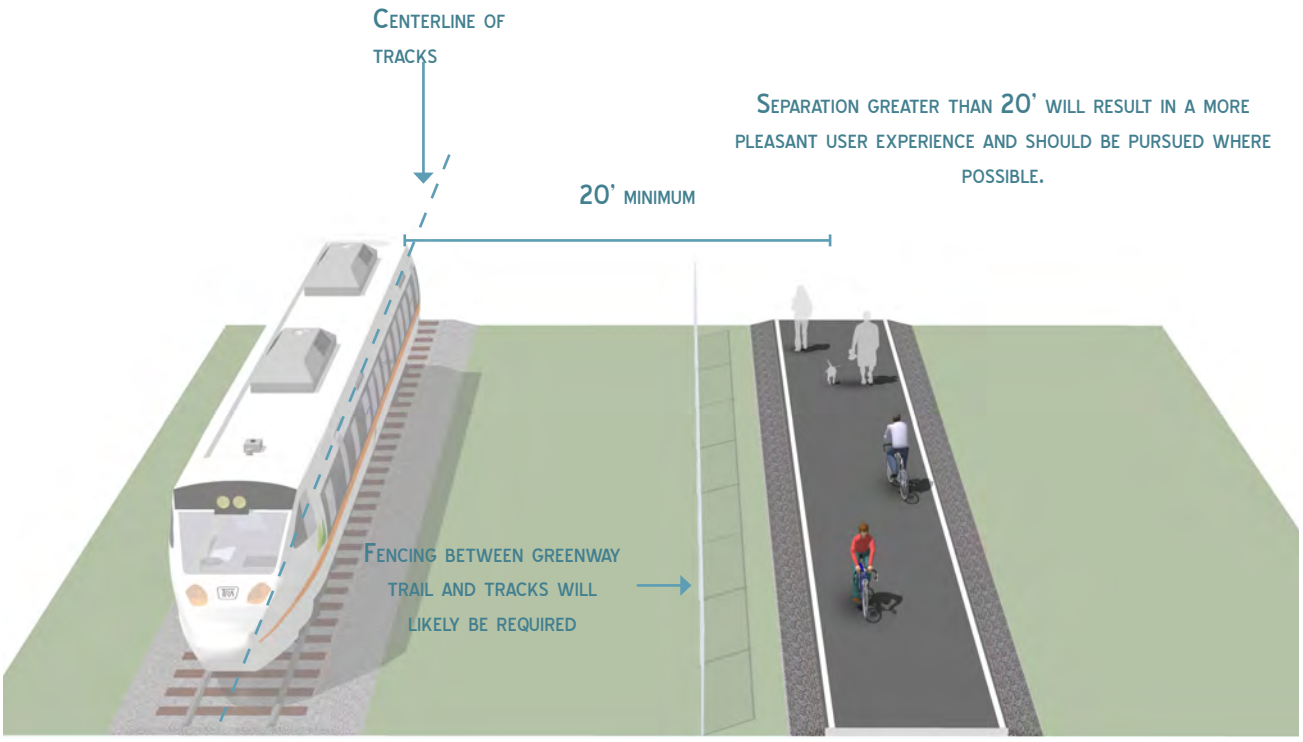
In some cases, rail owners may rail-bank their corridors as an alternative to a complete abandonment of the line, thus preserving the rail corridor for possible future use.

The railroad may form an agreement with any person, public or private, who would like to use the banked rail line as a trail or linear park until it is again needed for rail use. Municipalities should acquire abandoned rail rights-of-way whenever possible to preserve the opportunity for trail development.

Guidance

- Multi-use paths in abandoned rail corridors should meet or exceed general design practices. If additional width allows, wider paths, and landscaping are desirable.
- In full conversions of abandoned rail corridors, the sub-base, superstructure, drainage, bridges, and crossings are already established. Design becomes a matter of working with the existing infrastructure to meet the needs of a rail-trail.
- It is often impractical and costly to add material to existing railroad bed fill slopes. This results in trails that meet minimum path widths, but often lack preferred shoulder and lateral clearance widths.
- Rail-to-trails can involve many challenges including the acquisition of the right of way, cleanup and removal of toxic substances, and rehabilitation of tunnels, trestles and culverts. A structural engineer should evaluate existing railroad bridges for structural integrity to ensure they are capable of carrying the appropriate design loads.





Trails in Active Rail Corridors

Rails-with-Trails projects typically consist of trails adjacent to active railroads. It should be noted that some constraints could impact the feasibility of rail-with-trail projects. In some cases, horizontal space needs to be preserved for future planned freight, transit or commuter rail service. In other cases, limited right-of-way width, inadequate setbacks, concerns about safety/trespassing, and numerous mid-block crossings may affect a project's feasibility.

Guidance

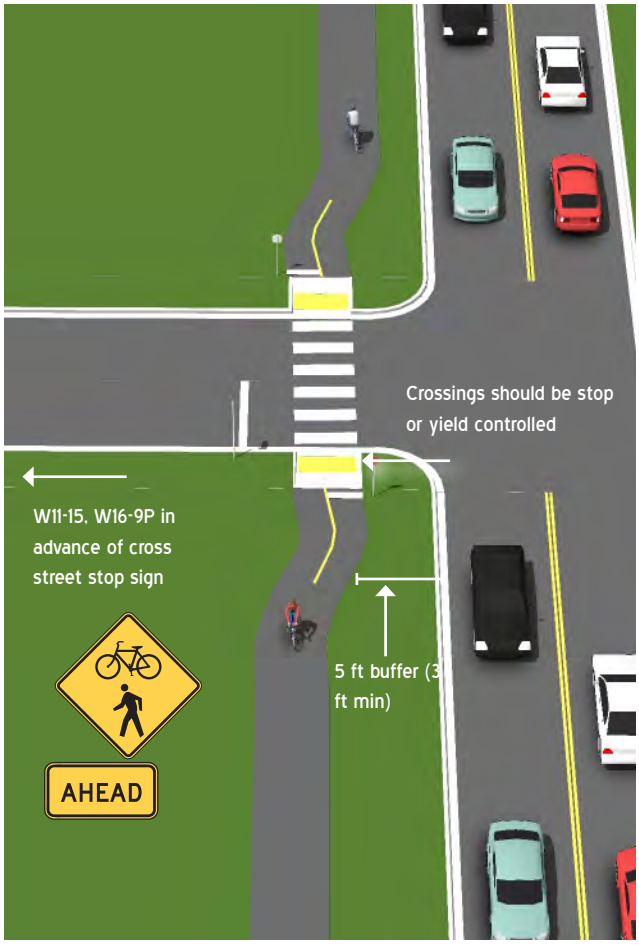
- Trails in railway corridors should meet or exceed General Design Practices indicated in the section above. If additional width allows, wider tread and landscaping are desirable.
- In most cases fencing will be required to separate use. If required, fencing should be a minimum of 5 feet in height with higher fencing than usual next to sensitive areas such as switching yards. Setbacks from the active rail line will vary depending on the speed and frequency of trains, and available right-of-way.

Design Considerations for Regional Trails in Roadway Corridors

Trails located within the roadway right-of-way (ROW) are sometimes referred to as 'sidepaths,' they provide more comfortable widths than sidewalks and can accommodate multiple users when designed adequately.

Guidance

- This configuration works best along roadways with limited driveway crossings and with services primarily located on one side of the roadway, or along a riverfront or other natural feature. Not recommended in areas with frequent driveways or cross streets.
- A minimum of 10 feet wide is necessary for bicyclists to pass other users safely on sidepaths.
- A 5 foot or greater vegetated buffer between the sidepath and the roadway should be provided.
- At driveway entrances and other roadway crossings, appropriate regulatory and wayfinding signage and crossing treatments should be provided.
- In some cases, trails will transition from sidepaths to sidewalks or designated bicycle lanes. In the event that sidepaths merge onto streets, provide appropriate signage and pavement markings to help safe merging.



Design Considerations for Winter Use Trails

Multi-use trails attract a variety of users and special design considerations should be considered for year-round recreation and transportation use. The most common winter trail users include cross-country skiing and snowmobiling, however pedestrians may use hard-packed snow covered trails and fat tire bicycles have become more popular.

Cross-Country Skiing Considerations

Cross-county skiers are recreational skiers who traverse the countryside rather than make downhill runs. Many multi-use trails that accommodate pedestrians, bicyclists and equestrians during warmer months are ideal for cross-country skiing during winter months. A minimum of 6 inches of snow on a trail offers excellent skiing without damaging the trail or ski equipment. If the trail sees other winter use, cross-country skiers will often ski off to the side to avoid having their tracks trampled.

Cross-country ski trails generally serve as a part of a looped trail system which provides varying conditions and difficulty levels. While recreational skiers do not depend on the technical difficulty of a trail, highly skilled skiers seek out well-groomed trails that offer a mixture of difficulty and length.

Trailheads and trail systems alike should offer amenities such as restrooms, warming areas, and drinking water to accommodate users.

Snowmobile Considerations

When allowed, snowmobiles can be used on multi-use trails with as little as 6 inches of snow without causing much damage to the trail surface.

Trails should be at least 8 to 10 feet wide to accommodate one-way traffic. For two-way traffic, trail width should be at least 12 to 14 feet. As motorized users travel at much greater speeds than other users, the trail should be free of obstacles and provide good sight lines with a minimum sight distance of 400 feet. Branches and other debris should be cleared across at least 2 feet on each side of the trail with a 10-foot vertical clearance; be sure to factor in anticipated snow levels. If the trail features bridges or tunnels, they must be at least 8 feet wide with a minimum carrying capacity of 5 tons. Intersections can be dangerous for these users, so it's best to double the trail width at intersections to improve maneuverability where possible.

PA DCNR Cross-Country Trail Guidelines, Level of Difficulty, and Other Considerations

TRAIL TYPE	EASIEST (INTERPRETIVE)	MORE DIFFICULT	MOST DIFFICULT
Clearing Height	10-12 feet	10 feet	8-10 feet
Clearing Width	18-24 in outside of treadway	12-24 in outside of treadway	12 in outside of treadway
Treadway Width	One-way: 2-4 feet Two-Way: 5-6 feet	1.5-4 feet	1-2 feet
Treadway Grade	Less than 8%	Less than 10%	Less than 15%
Treadway Cross Slope	0-4%	0-4%	4-8%
Turning Radius	50-100 feet	50-100 feet	5-100 feet
Sight Distance	50 feet on downhill, stream, and road crossings.	50 feet on downhill, stream, and road crossings.	50 feet on downhill, stream, and road crossings.

Source: Pennsylvania Trail Design & Development Principles, PA Dept. of Conservation and Natural Resources: 2013