This document was prepared for the New York State Department of State with funds provided under Title 11 of the Environmental Protection Fund.

**Steering Committee**

James Bosley, Clinton County, SRTG Project Manager  
Robert Fuller, SUNY Plattsburgh  
Paula Calkins-Lacombe, Clinton County  
Jesse Feiler, City of Plattsburgh  
Robert Fuller, Dr., Town of Plattsburgh  
Joanne (Knowlton) Dahlen, Clinton County  
Ellen Lamora, Town of Saranac  
David Premore, Town of Schuyler Falls  
Sara Rowden, Clinton County  
Rodney Brown, Clinton County  
Kevin Farrington, City of Plattsburgh  
Joe Gerardi, Town of Saranac  
Howard Newton, Town of Schuyler Falls  
Philip Von Bargen, Town of Plattsburgh

**Consultant Team**

*Alta Planning + Design*  
Jeff Olson, Principal in Charge  
Sam Piper, Project Manager  
Lindsay Zefting, Project Engineer
# CONTENTS

1. EXECUTIVE SUMMARY..............................................................1-1
   - Introduction..................................................................................1-1
   - Recommended Alignment.............................................................1-3
   - Public Input Summary..................................................................1-7
   - Estimating Greenway Benefits......................................................1-8
   - Action Plan & Next Steps..............................................................1-12
   - Master Map Key............................................................................1-13

2. EXISTING CONDITIONS...........................................................2-1
   - Summary of Previous Plans & Initiatives......................................2-1
   - Community Connections & Support............................................2-7
   - Existing Conditions Maps............................................................2-13

3. ALTERNATIVE ALIGNMENTS................................................3-1
   - Introduction..................................................................................3-1
   - Opportunities & Challenges Maps..............................................3-4
   - Alternative Alignment Analysis................................................3-15
   - Alternative Alignment Maps........................................................3-18
   - Permitting Requirements.............................................................3-26

4. RECOMMENDED ALIGNMENT..............................................4-1
   - Introduction..................................................................................4-1
   - Trail Cross-Sections....................................................................4-2
   - Recommended Alignment............................................................4-7
   - Priority Project Concepts..............................................................4-17
   - Traffic Calming.............................................................................4-26
   - Greenway Wayfinding................................................................4-27
   - Health, Economic and Environmental Benefits..........................4-28
   - Construction Requirements.........................................................4-29
   - Funding Sources..........................................................................4-30
   - Operations and Maintenance.......................................................4-33

Appendix A: Priority Concept Project Cost Estimates......................A-1
Appendix B: Trail Maintenance Best Practices................................B-1
Appendix C: Benefits Model Summary.............................................C-1
Appendix D: Clinton County Fair Comments..................................D-1
THE SARANAC RIVER TRAIL GREENWAY WILL BENEFIT EVERYONE

Photos were captured at the Clinton County Fair. People were asked to pose in front of the camera and hold up an icon to show how they would use the SRTG.
PROVIDING A GREENWAY FOR PEOPLE OF ALL AGES & ABILITIES
This is wonderful. This is a great idea.

I think this is an awesome idea!! If it’s done environmentally friendly what are you waiting for?!!

We love trails, this is really cool!

Great!

My kids would love this!

I’d love a place to go walking.

The trail will pay for itself many times over.

I work with the elderly and the disabled and there is just nowhere to go, we would love to have somewhere to go...

It’s so beautiful here it would be wonderful for that to exist here.

I would love to see access to some good fishing spots.

We need more of this.

A trail to High Falls would be awesome. I swam there as a girl and I took my grandkids there - it’s beautiful.

A safe place for my daughter to ride her bike would be really awesome There just aren’t many places on our side of Plattsburgh.

It’s so beautiful here it would be wonderful for [the trail] to exist here.

Text represents a sampling of comments collected at the Clinton County Fair in support of the SRTG.
Executive Summary

Saranac River Trail Greenway (SRTG) is a 26-mile corridor in Clinton County, New York that connects communities along the river from the shores of Lake Champlain into the Adirondack Park. This plan provides the recommended alignment for a “braided” necklace of trail types that will allow people who enjoy walking, hiking, bicycling, paddling, fishing and other trail uses along the greenway. The proposed route is not a single, paved pathway along its entire length, but instead provides a combination of shared-used paths, low-volume roadways, natural surface trails, wetland boardwalks and other connections appropriate to the local context of each community.

The SRTG plan is proposed in sections going from east to west, beginning with the existing Saranac River Trail in the City of Plattsburgh and connecting the communities of Schuyler Falls, the Town of Plattsburgh, Morrsionville, Cadyville, Woods Mills, Saranac, Moffitville and Redford. Each section of the plan is identified with a theme (Section 1: Downtown Connector, Section 2: Hydro Power Alley, Section 3: Adirondack Gateway and Section 4: High Falls Connector). Important destinations along the way include “Main Street” villages, High Falls Dam, Clinton County Fairgrounds and the natural beauty of the Saranac River landscape. The project will help improve local economies, support public health, and connect people with nature.

The planning process for the SRTG included a review of existing conditions, opportunities and challenges using both digital tools and field work. Public outreach included an active steering committee, public meetings, an on-line survey, a public radio program and tabling at the County Fair. Multiple route options were considered for each section, and an evaluation matrix was utilized to identify the proposed trail concept. The proposed trail is identified in sections that can be implemented in phases as opportunities for funding and integration into other infrastructure projects become available over time.

The key to making the SRTG move forward is for this plan to become the vision for a coordinated effort by public, private and non-profit partners. Clinton County has provided the structure for an ongoing collaboration with the municipalities, the existing sections of trail in the City of Plattsburgh have proven that the project is possible, and community support has been evident throughout the planning process. With continued leadership, this plan will be the catalyst for creating the Saranac River Trail Greenway.
PREFERRED ALTERNATIVE: FORMALIZED PATH (PAVED OR STONE-DUST)

LONG TERM CONNECTIONS

PREFERRED ALIGNMENT

0.0 mi

Peace Point Park

5.0 mi

7.5 mi

10.0 mi

12.5 mi

15.0 mi

17.5 mi

20.0 mi

22.5 mi

25.0 mi

27.0 mi
RECOMMENDED ALIGNMENT

Several potential alignment options were developed for the Saranac River Trail Greenway corridor. To determine the feasibility and desirability of each option, they were evaluated using a set of criteria developed by the planning team in coordination with the Project Advisory Committee and the public. After modifying the alignment to reflect stakeholder input, a preferred alignment for the development of a 27 mile greenway extending from the City of Plattsburgh to Saranac was established. The preferred alignment is comprised of a braided network on-and-off road segments that together form a connected greenway that will link residents and visitors to the many destinations in Adirondack Coast Region and along the Saranac River.

The development of the trail will occur in phases, with the first phase of the SRTG beginning at the end of the existing Saranac River Trail. This plan presents the concept for the alignment as it extends from west from this point, 24 miles into the Town of Saranac. By and large, the trail maintains a close connection with the Saranac River and is routed to connect with places that people live, learn, work and play at throughout the corridor. Due to topographical challenges and the lack of linear rights-of-way paralleling the river, the surface type of the trail varies along its length to complement the terrain and setting of particular segments.

This report presents the recommended alignment for the Saranac River Trail Greenway, dividing the corridor into four sections. Each map identifies several points of interest that will be connected, as well as proposed trailheads and parklet locations that would be integrated into the trail, creating start and end points. The preferred alignment is shown on the maps as a gold color, reflecting the standard that greenway seeks to attain. Additionally, corollary on-road segments are identified, as well as long-term alignment options that may not be feasible today for a variety of reasons, but which represent appealing alignments if identified barriers can be overcome. It is important to include these routes as desired future options, which should be incorporated into the SRTG as funds and momentum allows.
The Saranac River Trail Greenway will connect neighborhoods from the City and Town of Plattsburgh to Schuyler Falls and Saranac, providing residents and visitors a window into the Adirondack Coast and all it has to offer. Designed for active transportation and outdoor recreation, this path will extend a total of 26 miles, linking residents and visitors to nature, world class fishing, jobs, schools, shopping, restaurants, parks, and other attractions. With over 1.5 miles already built, the trail system is already bolstering the quality of life in the region.1

1 Complete analysis of impacts provided in Appendix A
**Who lives Near the Greenway**

While the construction of the Saranac River Trail Greenway will benefit all residents and visitors to the Adirondack Coast region, those living within one-half mile of the trail (about a 10 minute walk) and three miles of the trail (about a 15 minute bike) will have the most convenient access to the Greenway. These neighbors will gain the most from its construction. To calculate what this means, we have estimated impacts of the trail system for residents living within a 10 minute walk and 15 minute bike of the trail. All estimated values are rounded and should be considered order of magnitude estimates rather than exact amounts.
The SRTG in Context

The Saranac River Trail Greenway will build upon the completed section of the Saranac River Trail that runs from Plattsburgh High School to the bridge at Durkee St in Downtown Plattsburgh. Plans and designs are moving forward to connect the trail to Peace Point Park on the shore of Lake Champlain. The SRTG will be a westward extension of these portions of the Saranac River Trail, ultimately connecting Peace Point Park to Pup Hill Rd in the Town of Saranac and covering a cumulative distance of 27 miles. The map at right depicts how the SRTG will be integrated into Downtown Plattsburgh, and how this trail system will connect with other non-motorized facilities and routes heading north and south along the shore of Lake Champlain. It is envisioned that the SRTG will become an integrated greenway that seamlessly connects with these other facilities, and together, they will provide residents and visitors with world class amenities that allow them to travel and recreate in the region without a vehicle.

It is most likely that sections of the SRTG will be built in phases, and phases may or may not occur in sequence from east to west. The phases which are implemented largely depend on which sections are funded, and the four municipalities that the trail passes through should coordinate efforts to ensure that the different phases of the trail are developed in a logical manner.
Public Input Summary

The expansion of the Saranac River Greenway trail will affect many stakeholders and property owners, and will require coordination among several public agencies. Due to the scope of the project, a robust public outreach strategy was employed to gather feedback, gain support, and ensure that the final recommendation for the SRTG reflected the public’s vision.

Many channels of communication were used to share information throughout the duration of the project. A custom Facebook page was set up for the project, and a brochure summarizing it was distributed at events throughout the summer. Additionally, project partners promoted events and meetings using their social media channels, and draft reports were uploaded to the Friends of the Saranac River Trail website for public comment and review.

Public & Stakeholder Outreach

Several public outreach sessions were held over the course of the project, and each provided meaningful input that was incorporated into the final plan. These meetings and outreach sessions included:

- Three Planning Advisory Committee Meetings
- Alternative Alignments public listening session and open house
- A booth at the Clinton County Fair for a week
- SUNY Plattsburgh University Stakeholder meeting and listening session
- Superintendent of Plattsburgh City Schools meeting and listening session
- Final presentation of the plan recommendations on PBS

Clinton County Fair

The Clinton County Fair was a particularly successful public outreach method for the project. Since the SRTG covered such a large area, traditional public meetings were expected to reach a relatively small number of people that would be affected by and use the greenway. In order to engage a greater cross-section of those who would likely benefit from the trail, a booth was rented for the entire length of the Fair.

At the booth, maps of the alternative trail alignments for the SRTG were laid out on large tables so that the public could view and comment upon them. Over 100 brochures were handed out to people who stopped at the booth, and people’s general comments were recorded. Of the 41 comments collected, 38 were positive, three were neutral and none were negative or opposed to the idea of the SRTG. All of the comments are included in Appendix D of this report.

The people that stopped by the table also had the opportunity to have their picture taken in the “What type of trail user are you” photo booth. For those that weren’t too shy to have their picture taken, they could stand in the booth and hold up icons representing the types of things they would like to use the greenway to do. This was a great way for people to show that they were supportive SRTG’s vision. In total, over 75 pictures were taken, and the cross-section of people that smiled in front of the camera was impressive. From infants and toddlers, to young parents, whole families, empty nesters and grandmas and grandpas, the entire range of people who live and recreate in Clinton County were represented. A sample of the pictures that capture this diversity are displayed in the introduction to this report.
Estimating Greenway Benefits

In order to calculate health, environmental, and transportation impacts, this analysis utilizes five-year socio-demographic and travel behavior estimates generated by the US Census Bureau. Currently, less than 1 percent of Clinton County residents bicycle to work and 4 percent walk to work. With better access to trails that connect destinations and jobs, the number of people bicycling and walking in Clinton County will rise to be more in-line with peer cities throughout the United States.

How Clinton County Compares

How will a fully-developed trail network change the way Clinton County residents travel? To better understand this shift, we looked at travel behavior in cities similar to Clinton County and its largest City, Plattsburgh, but with more advanced bicycle and pedestrian networks. These cities, known as peer cities, were selected based on similarities in the design of their street networks, geographic locations, terrain, street networks and the make-up of their populations.

All of the peer cities have achieved Bronze Level League of American Bicyclist’s Bicycle Friendly Community ® award designation. The designation of a city as a Bicycle Friendly Community ® or as a Walk Friendly Community ® represents a significant investment in improving the bicycle and walking environment. Because of this, residents on average are more likely to bicycle or walk in the seven peer cities compared to Clinton County. Currently, only 0.23 percent of the Clinton County population bicycles to work compared to an average of 1.72 percent in the seven peer cities. In addition, 4.4 percent of people in Clinton County walk to work compared to an average of over 6 percent in the peer cities.

Calculating Impacts

A series of over 50 factors from various studies and peer-reviewed journal articles were utilized to convert the estimated number of new bicycle and walking trips that will result from the construction of the Saranac River Trail Greenway into dollar figures. These individual factors are explained in more detail in the Appendix.

The primary purpose of the analysis is to create a clearer, fuller picture of how the Saranac River Trail Greenway will improve the quality of life of Clinton County-area residents. The estimated impacts reflect the benefits that may be experienced with the full build-out of the 26 mile trail, and key impacts are shown on pages 1-9 to 1-11. A more detailed explanation of the results of the benefits model is included in Appendix C.
When the SRTG IS COMPLETE
THE CLINTON COUNTY REGION WILL GAIN

Transportation Benefits

Much of the land that parallels the Saranac River is private or protected, and there is no linear route that people can currently use to access jobs and recreate along it. This means that the approximately 43,000 residents living within one mile of the SRTG do not have access to a connected trail system. The trail system will not only provide new access to trails and recreation for Clinton County’s population, but it will also provide access to schools, jobs, retail, and other services.

In addition to improved access, the Greenway will also save money on transportation costs. While money doesn’t always change hands, real savings can be estimated from the reduced costs associated with congestion, collisions, road maintenance, and gas. Construction of the trail system will save households over $.6 million annually in vehicle operation costs and over $.7 million for the regional transportation costs, for a total of over $1.3 million in total transportation cost savings for the region.

HOUSEHOLD VEHICLE OPERATION COSTS

$616,000
IN REDUCED HOUSEHOLD VEHICLE OPERATION COSTS PER YEAR

COMMUNITY-WIDE VEHICLE OPERATION COSTS

$1,394,000
IN REDUCED COMMUNITY-WIDE VEHICLE OPERATION COSTS PER YEAR

VEHICLE MILES TRAVELED

1,081,000
FEWER MILES TRAVELLED BY AUTOMOBILES EVERY YEAR

TRAIL ACCESS

43,000
WITHIN A 15 MINUTE BIKE OF THE GREENWAY WITH NEW ACCESS TO TRAILS
Health and Environmental Benefits

Building a well-designed, connected trail system across Clinton County will encourage a shift from energy-intensive modes of transportation such as cars and trucks to active modes of transportation such as bicycling and walking. While many of the active living-related benefits of a trail network can be difficult to quantify – such as improved mental health, educational growth, connection to nature, and sense of place – a growing body of literature links parks and trails to increased physical activity, decreased healthcare costs, and improved air quality.

The completed Saranac River Trail Greenway will dramatically shape the ability of residents in the region to get out and live more active, healthier lifestyles. Mid-level estimates show that the region could realize an increase of over 1.3 million bicycling and walking trips, remove over 1.6 million pounds of pollutants from the atmosphere, and spur over 187,000 new hours of physical activity.

In addition, studies show that increased physical activity helps seniors stay mentally fit, reduces the risk of coronary heart disease, and even decreases the amount of insulin needed by people with Type I diabetes.

---


Economic Benefits

Creating a major recreational resource like the Saranac River Trail Greenway would attract tourists riding on two wheels, wearing hiking boots, running shoes, and paddling gear, and casting fishing poles, ultimately serving as a needed economic boost to the region.

Tourism represents the use of outside purchasing power to support local businesses, and the ability of Saranac River Trail Greenway to attract tourism spending is an important factor in analyzing the overall impact of the trail system.

While it is difficult to accurately forecast the exact change in tourism spending resulting from the implementation of the Greenway, an examination of current tourism activity and tourism spending near similar, completed trail projects provides a useful proxy for evaluating tourism benefits of the SRTG. Once built, the trail system could generate nearly $1.4 million in tourism spending per year. And when estimating the impact the SRTG will have on adjacent property values, based upon increases in property values seen in other communities where greenways have been implemented, the total estimated increase in property value will top $16.3 million.

Action Plan and Next Steps

This plan includes a vision for a connected greenway system that will help make Clinton County a premier recreation destination. Implementing this plan will depend upon on-going collaborations between public, private and non-profit partners. Each of the plan recommendations have significant potential, and in addition, key agencies can support non-motorized travel through policy actions. For example, the Local, County, and State Highway Departments can improve roadway shoulders, and this will help pedestrians, bicyclists and others safely access key destinations. To advance the SRTG towards completion, the following implementation steps are recommended:

**Concept Plan Adoption:** The Clinton County Legislature can adopt a resolution in support of the plan. This will allow for public support of the plan recommendations and help continue the momentum created by the development of the plan.

**SRTG Advisory Council:** The current mission of the non-profit Saranac River Trail Greenway Inc. includes planning, development and expansion of the Saranac River Trail Greenway with private citizen board members elected by Clinton County and affected municipalities. This group and its mission can be expanded through its Professional Advisory Committee to include Ex-Officio, non-voting members including County and municipality elected officials, state agencies and staff to support and coordinate projects, initiatives and maintenance associated with the Greenway. The non-profit Friends of Saranac River Trail is a grass-roots organization open to members of the public. It develops and promotes the tourist, recreational, commercial, historical, and natural opportunities of the Saranac River Trail by providing public information; coordinating volunteer opportunities; developing and purchasing trail amenities such as signs, benches, and the universally accessible Max Moore Memorial Treehouse. These groups are expected to work together closely to promote the vision of the Saranac River Trail and Greenway for the benefit of residents of and visitors to Clinton County and New York.

**New Trails Partners:** Traditionally, trails have been built by volunteer trail organizations and public land managers. Clinton County has opportunities to engage new partners including the regional arts community, scouting programs, community service organizations and others to expand the SRTG.

**Complete Streets Policy:** Clinton County can adopt a policy that includes appropriate infrastructure for bicycling, walking and trails into ongoing roadway projects. This policy will support the NY State Complete Streets legislation that passed in 2011. In Ulster County, NY a similar policy was tailored to meet the conditions of rural roads in the Catskill Mountain region.

**Funding Options:** There are a wide range of public, private, and nonprofit resources available for trails in Clinton County. For most federally-funded transportation projects, 20% of the cost is required in local matching funds. A local trails fund can be established through a combination of grants, private donations, development impact fees, the sale of bonds, and municipal budget processes. An important grant source is the annual NY State Consolidated Funding Application (CFA). Additional funding options are described in detail in Chapter 4.

**“Adopt a Trail” Program:** In order to ensure long term support, each trail project can be ‘adopted’ by local community partners. The adoption process can include working to secure funding and resources for each section, and eventually to serve as a community building effort for long term trail maintenance and operations.

**Branding / Marketing:** It is important to use a consistent “brand” for the SRTG, including a logo, website, and promotional materials. The identity of the trails can serve as a defining feature in the county. Where possible, the wayfinding signage and graphics can be provided on existing trails, as new sections are built, and to identify future alignments.
**Celebrations:** Where possible, every step forward on a project should be celebrated publicly. National Trails Day, Walk/Bike to School Day, the Battle of Plattsburgh Festival, The Clinton County Fair, and other events are opportunities to keep the SRTG initiative visible.

**Events:** The distance and location of the SRTG makes it a prime corridor to host races. At roughly 27 miles, a marathon could be run along its length, and a triathlon could be organized that included sections of the greenway, surrounding roads for the bike leg, and the river for the swim leg. Kayaking and fishing competitions could also be held along the river. These events are great opportunities to promote the SRTG and raise money for its expansion.

This report presents a highly graphic visualization of the proposed Saranac River Trail Greenway. Several maps were developed to describe the existing conditions of the corridor, opportunities and challenges presented by these conditions, potential alignments for the SRTG, and finally, the recommended alignment. Each of these maps includes many icons and other items to convey information about the corridor. In some instances, legends were abbreviated due to space constraints. The legend below is the Master Map Key, and should be referred to when reviewing maps that have an abbreviated legend.

### MASTER MAP KEY

<table>
<thead>
<tr>
<th>POINTS OF INTEREST</th>
<th>LAND USE AND RIGHTS-OF-WAY</th>
<th>PROPOSED AMMENITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FISHING</td>
<td>WINTER RECREATION</td>
<td>PROPOSED TRAIL HEAD</td>
</tr>
<tr>
<td>CANOEING</td>
<td>DAM</td>
<td>PROPOSED POCKET PARK</td>
</tr>
<tr>
<td>KAYAKING/WHITEWATER</td>
<td>MOTOR VEHICLE BRIDGE</td>
<td>KEY SRTG CONNECTION</td>
</tr>
<tr>
<td>PADDLE CRAFT PUT-IN</td>
<td>PEDESTRIAN BRIDGE</td>
<td></td>
</tr>
<tr>
<td>PORTAGE</td>
<td>CLOSED BRIDGE</td>
<td></td>
</tr>
<tr>
<td>PARK</td>
<td>UNIVERSITY</td>
<td></td>
</tr>
<tr>
<td>PARK</td>
<td>SCHOOL</td>
<td></td>
</tr>
<tr>
<td>MOUNTAIN BIKING</td>
<td>BEACH</td>
<td></td>
</tr>
<tr>
<td>RUNNING</td>
<td>SENIOR HOUSING</td>
<td></td>
</tr>
<tr>
<td>HIKING</td>
<td>TOWN HALL</td>
<td></td>
</tr>
<tr>
<td>CAMPING</td>
<td>AIRPORT</td>
<td></td>
</tr>
<tr>
<td>TRAIL HEAD</td>
<td>POCKET PARK OPPORTUNITY</td>
<td></td>
</tr>
<tr>
<td>DISC GOLF</td>
<td>HISTORICAL MARKER</td>
<td></td>
</tr>
<tr>
<td>FOOD AND WATER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LODGING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WETLANDS</td>
<td>TOWN, CITY, STATE &amp; FEDERAL LAND</td>
<td></td>
</tr>
<tr>
<td>NYSEG OWNED LAND</td>
<td>INSTITUTIONAL / EDUCATIONAL LANDS</td>
<td></td>
</tr>
<tr>
<td>CLINTON COUNTY INDUSTRIAL DEVELOPMENT AGENCY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DELAWARE &amp; HUDSON RAILWAY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NYS DEC FISHING EASEMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHARED USE PATH</td>
<td>ABANDONED RAIL LINE</td>
<td></td>
</tr>
<tr>
<td>SNOWMOBILE TRAIL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>POWER LINES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 2: EXISTING CONDITIONS

The Saranac River Trail Greenway Feasibility Study formalizes a vision for a world-class greenway system that will enhance quality of life, connect communities to public land, and spur economic development opportunities for communities along the 27-mile corridor.
Existing Conditions

Introduction

The Saranac River Trail Greenway (SRTG) concept is the culmination of over two decades of community initiatives aimed at enhancing the region’s natural resources and providing citizens with recreation and active transportation opportunities. The commitment of the communities along the Saranac River and the construction of the Saranac River Trail emphasize the wide-ranging support for the completion of a Greenway system along the Saranac River. This chapter summarizes past plans and highlights key initiatives that have been instrumental in progressing forward the SRTG vision. It also identifies the existing trails, access-ways and destinations that the Greenway would connect. The implementation of the SRTG will hinge on the integration of existing trails and rights-of-way along the Saranac River. This chapter includes maps of the corridor that illustrate these existing access-ways, along with the many destinations the SRTG will link.

Summary of Previous Plans & Initiatives

Assessing the feasibility for a Greenway system between The City of Plattsburgh and The Town of Saranac begins with a review of existing trail proposals, concept studies, and city and town master plans. This review seeks to establish existing support for and recommendations related to non-motorized facilities along the Saranac River corridor.

The following trail concepts and master plans are summarized:

- Saranac River Trail Feasibility Study
- Town of Plattsburgh Comprehensive Land Use Plan
- Town of Plattsburgh Recreational Master Plan
- Saranac River Trail Valley Corridor Study
Saranac River Trail Feasibility Study (2006)

The Saranac River Trail Feasibility Study prepared by Alta Planning + Design in 2006 helped lay the foundation for the implementation of a two-mile long, 10-foot wide, asphalt, paved, shared-use trail to be built along the Saranac River, between the Imperial Dam west of Plattsburgh High School and the Lake Champlain Waterfront. The study also included the feasibility of a northern extension of the trail to connect to Cumberland Head via the Karen Fleury Bike Path, as well as a western extension in the Town of Plattsburgh terminating at the I-87 bridge. The study identified connections between local schools, the SUNY Plattsburgh Campus, downtown Plattsburgh, residential neighborhoods, and the redeveloped lakefront area. The trail concept included the heritage and history of Plattsburgh and recommended the integration of iconic and significant historic events into the design to tell the story of Plattsburgh. A trail user analysis identifying the wide diversity of users and the common shared interests among them was developed in an effort to understand and assess the needs of trail users both from the local community members and eco-tourist visitors.

Alta identified several 'next steps' aimed at generating long-term support for a successful River Trail, including forward-thinking planning activities, such as seeking opportunities to preserve the right-of-way during future infrastructural upgrades, identifying state and federal grant funding opportunities, and recognizing the value of the neighborhood clean-ups and trail segment adoptions that are spear-headed by local organizations and agencies. Research on the expected benefits of the trail, utilizing the “BikeCost” model, included a decrease of more than 427,000 vehicle miles traveled (VMT) per year due to the increase of commuter cycling and a decrease of over 81,000 VMT per year as a result of an increase in pedestrian commuting. Additionally, the estimated annual benefits for recreation are over $244,000, while the annual health care cost savings are over $11,000.
A detailed list of opportunities and constraints, alternative trail alignment routes, parcel location and ownership information, and priority project cost estimates with emphasis on maintenance routines following construction establish this study as a benchmark guide to the future successful implementation of Phase II of the Saranac River Trail Greenway.

Local Waterfront Revitalization Program

The New York State Department of State Division of Coastal Resources Local Waterfront Revitalization Program (LWRP) is defined as, “a comprehensive program that refines legislatively established waterfront policies by incorporating local circumstances and objectives.” LWRP projects are locally driven, voluntary efforts that bring together diverse stakeholders to assess current opportunities and constraints and lead to consensus on the desired future of community waterfront resources. LWRP projects seek to meet the following goals:

- Preserve the environmental integrity of water resources, while capitalizing upon the economic opportunities presented by these assets
- Promote use of ports and harbor areas, which serve a critical function within the state’s transportation/industrial network
- Conserve and protect fish and wildlife resources
- Encourage and facilitate public access to waterfront resources for recreational uses
- Determine appropriate land-use regulations to mitigate damage to natural resources and property caused by flooding and erosion
- Restore and revitalize natural and man-made resources
- Conserve and protect agricultural areas
- Ensure coordinated efforts in regard to waterfront resources among federal, state and local agencies

LWRP projects have been implemented along the study corridor, and have been shown to be an effective way to engage stakeholders and preserve and improve waterfront resources. Located at the intersection of Rt. 3 and Bowen Rd. in Saranac, the Pickett’s Corners Park is an example of a successful waterfront recreation development funded through the LWRP program. Pickett’s Corners park includes a parking lot, boat ramp for small craft put-in, and a swimming pool for town residents.

City of Plattsburgh Local Waterfront Revitalization Program Report (2010)

The City of Plattsburgh developed an LWRP report in order to coordinate efforts for the revitalization of its waterfront resources among federal, state and local agencies, with the primary goal being to maximize these resources through thoughtful planning.
among multiple stakeholders. Key objectives of this report are outlined below:

- Increase public awareness of, and accessibility to, the Lake Champlain and Saranac River waterfronts;
- Capitalize on the economic development/downtown revitalization potential of waterfront redevelopment;
- Address ways to accommodate increasing public demand for recreational resources;
- Craft a reasonable plan for protecting and enhancing the city's waterfront, cultural, and natural resources.

In addition to LWRP funds, the City has made successful use of numerous federal and state funding programs for community planning, housing rehabilitation and commercial revitalization, such as U.S. Department of Housing and Urban Renewal’s Community Development Block Grant (CDBG) programs and New York State programs such as Economic Development Zone designation, RESTORE, AHC and Rental Rehab programs. Significant improvements that have been made include:

- Riverwalk Park: including a picnic area and pedestrian bridge on the south bank of the Saranac River
- Handicapped-accessible fishing dock at McDonough Monument
- Landscape improvements and walkway paving at Champlain Monument
- City Beach
- Heritage Park received a new boardwalk, biking trail, and picnic pavilion
- Walking trails linking the city’s historic and natural resources

The pursuit of these projects, “are all part of the city’s larger vision of creating a system of walking trails and publicly-accessible areas along Lake Champlain and the Saranac River, which will be addressed in the development of this LWRP” (pg. 2).

**Town of Plattsburgh Comprehensive Land Use Plan (2009)**

When the Plattsburgh Air Force Base closed in 1995, Clinton County moved its airport operations to the former base, opening up a 600 acre parcel along the Saranac River in the heart of Plattsburgh, where the former airport operated. The proposed rezoning of this parcel would accommodate a mix of affordable housing, commercial uses, and conserved lands, accommodate the expansion of existing businesses, and promote professional offices and ‘green’ or tech related industries. The redevelopment of this parcel would include the preservation of lands adjacent to the Saranac River for pedestrian access.

The Plan also recommends the development of a Local Waterfront Revitalization Program (LWRP) which would establish comprehensive land and water use policies for the Town of Plattsburgh’s waterfront resources. This LWRP would lay the framework for the planning of critical waterfront areas and lead to the implementation of improvement projects that would improve the town’s appearance, enhance and capitalize on natural resources, and provide an environment that will stimulate economic development. “LWRP’s help to identify and attract desirable development, execute waterfront and water quality related projects, secure financial assistance in the form of grants, and ensure federal and state consistency with the Town’s waterfront vision and policies” (Town of Plattsburgh Comprehensive Land Use Plan, pg. 101). The Town’s plan
will complement the already established City of Plattsburgh LWRP. Additional information about leveraging LWRP projects regionally are provided in the Local Waterfront Revitalization Program section.

The plan identifies the Lake Champlain and Saranac River waterfronts as two of the most important local resources, providing scenic beauty and unparalleled opportunities for recreation. Recommendations include efforts to improve and maintain public and visual access to these resources in addition to preserving and enhancing the respective ecosystems along both waterfronts.

The plan also discusses how the Town of Plattsburgh park system has been expanded and linked by a network of pedestrian/bicycle trails that also connect the Town to the City of Plattsburgh. The trail system is supplemented by an on-going transportation initiative that includes bus service, ride sharing, and community bicycles. Specific recommendations made in the Land Use Plan regarding Town parks include expanding the park system, with an emphasis on more trails and increased waterfront access, in addition to designating and signing a bicycle trail network that would connect to its future off-road trail network. A recommended Recreation Master Plan would include a robust public outreach effort, land acquisitions and programmatic additions, and the planning and development of a town-wide trail system that connects key nodes “such as Town Hall and parks, and it should incorporate the Saranac River” (pg. 98). The recognition of the economic, educational, social, and ecological benefits of green infrastructure in the plan provides documented support for the expansion of the Saranac River Greenway Trail.

Town of Plattsburgh Recreational Master Plan (2010)

This plan emphasizes shifting recreational needs and trends based on lifestyle and demographic shifts occurring now and projected into the future. The report states clearly that “current recreational trends are moving towards walking and biking… Recommendations include adding hiking and biking trails, nature trails and water access both to the Saranac River and Lake Champlain” (Pg. ii). Goals include creating an array of recreational opportunities which will attract a diverse citizenry with a variety of interests. This will in turn contribute to the economic health and vitality of the Town and its community members.

The Recreational Master Plan notes a general shortage of water access, trails and bikeways, it states specifically that the Town’s parks could be better connected to surrounding neighborhoods via sidewalks and bicycle trails. The recognition of these missing links within the recreational landscape provides the impetus to improve bikeways, trails, and water access for all users. Separate tables within the report list ‘Biking’ under ‘Current Unmet Need’ and ‘Bike trails for both transportation and local and regional recreation’ under ‘Future Unmet Need.’ The report further recommends the addition of bike racks to each park to encourage users to cycle from home to the park. The projected 10 year demographic shift will require an increase in the number of Greenway trails for seniors in addition to people of all ages.

The Recreation plan recognizes the need for an integrated bike trail system that connects parks and locations in Town in addition to existing trail systems at the Town’s borders. A specific recommendation is the extension of the existing trail along
the Saranac River from its border with the City to Morrisonville. The plan acknowledges the various landowner entities and stakeholders that would be a part of the trail planning process in addition to the need to think creatively about leveraging one project to help pay for another when securing funding.

**Trail Concepts**

The vision for the SRTG has been progressed for more than a decade. The construction of the Saranac River Trail in 2011 marked the implementation of the first link of the larger Greenway system. Since, focus has been placed on expanding the system westward towards the Adirondack Park. This section summarizes the plans that have identified opportunities for routing the SRTG.

**Saranac River Trail Valley Corridor Study – Preliminary Trail Concept Report (2011)**

In 2010, a task force convened to discuss the future of the Saranac River Trail beyond the City of Plattsburgh. The group consisted of many diverse stakeholders including representatives from the Clinton County Health Department, SUNY Plattsburgh, the City of Plattsburgh, the Town of Plattsburgh, the Town of Saranac, Eastern Adirondack Healthcare Network, The Development Corporation of Clinton County, and the Saranac River Trail Advisory Committee. The decision they made was to hire the Technical Assistance Center (TAC) at SUNY Plattsburgh to draft a preliminary concept plan including the following tasks:

- Organize and convene the SRT task force
- Measure bicyclist and pedestrian usage of the SRT and within Clinton county
- Community outreach
- Obtain input from municipalities
- Identify and define trail projects
- Create a list of prioritized trail projects
- Create concept map

Community input was requested via a newspaper article. Eight comments were received by the TAC project director via telephone or email. Thirty-six attendees participated in two public meetings. Project research and document review revealed many references in favor of expanding, linking, and completing the Saranac River Trail. Additionally, the study forecasted that the passage of the Complete Streets policy in the New York State legislature -- which requires “consideration of people of all ages walking, riding bicycles, driving cars, and taking public transportation in any transportation project that uses federal and state funds, including the construction, reconstruction, restriping, and rehabilitation of roadways” -- would have major implications on biking and walking facilities within the state.

This report did not investigate property rights and estimates for potential path segments are conceptual only. The report identifies proposed alignments, priority projects, opportunities, constraints, and maps of proposed trail alignments and potential areas of interest and future project areas. Priority projects were prioritized utilizing three factors:

1. Ease of implementation
2. Community input regarding priorities
3. Provision of connectivity to existing trail

**Additional Trail Concepts**

Additional trail concepts have been developed by various stakeholders, but have not been formalized or published. These ‘back of a napkin’ ideas have been captured through multiple rounds of communication with the Project Advisory Committee, and will be taken into consideration when developing alternative alignments for the SRTG.
Community Connections and Support

The SRTG is intended to connect many existing trails, including hiking, biking, fishing, and winter recreation trails, as well as countless destinations located along the Saranac River from the City of Plattsburgh to the Town of Saranac. This section identifies these trails and access-ways, and also the many supporters of the Greenway expansion, including both public, private and non-profit parties partners, that have collaboratively sought the completion of the Saranac River Trail Greenway.

Trails + Access Ways

The implementation of the SRTG will hinge on the integration of existing trails and rights-of-way along the Saranac River. This section identifies trails and access-ways along the river that could serve as Greenway alignment opportunities and connections.

Rugar Woods

Rugar Woods features wildlife viewing points and 10 miles of recreational trails that community members and SUNY Plattsburgh students often bike, hike, run, and walk. Additionally, students conducting research use Rugar Woods as a field site. Rugar Woods was the site of the 2005 State University of New York Athletic Conference Cross Country Championships. The SUNY map of Ruger Woods highlights the Saranac River Trail extension from Ruger Woods to downtown Plattsburgh. Rugar Woods contains approximately 1.6 miles of frontage along the Saranac River.

Rugar Woods is an actively managed forest preserve along the north/west bank of the Saranac River. Managed and owned by SUNY Plattsburgh, the preserve offers hiking, biking, running, orienteering and winter recreation opportunities. With approximately 1.6 miles of frontage along the Saranac River, it is popular among SUNY Plattsburgh and Plattsburgh City School students and faculty, who study, live and work nearby.
New York State Electric & Gas Hydroelectric Dams

New York State Electric and Gas (NYSEG) owns and operates hydro-electric dams along the Saranac River. The banks of the Saranac River near the dams are accessible to the public for walking and hiking, and represent an important destination point along the SRTG. Trailheads are provided at these access locations, complete with small parking areas and visitor information. Maps at the sites detail portage take out and put in locations, portage routes, public access points, location of floating barriers, and parking areas. The SRTG may be able to shorten and/or facilitate the length of some of the longer portage routes. The image at right shows one example of a trailhead provided by NYSEG.

**High Falls Dam:** High Falls Dam has a portage take-out that follows the NYSEG Access Road on the south side of the Saranac River. There are two additional white-water portage put-in points on the north side of the Saranac River, accessible via the NYSEG Access Road off of Route 3. Public access parking is available where the Access Road terminates at the white-water put-in point. High Falls Dam is a likely destination location for trail users as it provides beautiful scenery.

**Cadyville Dam:** Cadyville Dam has a portage structure on the North side of the Saranac river just before the floating barrier. Paddlers portaging from this area will walk down Park Row and cross an abandoned railroad en route to the access point between Mill C and Kents Falls dams.

**Mill C Dam:** Mill C Dam is located just West of the Goddeau Rd. bridge and has no portage structures. Parking to access Mill C Dam is located on Kents Falls Road. Access to the dam is beyond the gated NYSEG Access Road.

**Kent Falls Dam:** Kent Falls Dam is one of the newer dams on the Saranac, completed in 1991. Portagers entering the Saranac on the north side of the River just before Kents Falls Dam must quickly cross the River to exit at the next portage. Public access parking is on the North side of the Saranac River at the closed Kents Falls Road bridge. There is a popular white-water portage put-in point just after the Kents Falls dam. The final portage put-in point is at the end of the .5 mile penstock at the Kents Falls Powerhouse.

**Imperial Dam:** The Imperial Dam was originally built in 1819 to supply process water and electricity to the Imperial wallpaper mill. Rebuilt in 1903, it was renamed Imperial Dam and continues to breed controversy today. Environmental advocates argue that the dam no longer serves its intended purposes of flood water retention or electricity generation. Additionally, the dam prevents salmon from reaching 15 kilometers of pristine spawning habitat. Money set aside for a fish ladder has yet to be spent due to structural deficiencies revealed during an inspection. There’s been documented interest in removal of the dam and efforts need to be coordinated with the development of the SRTG. More detail will be provided as to the specifics of the dam’s future in the opportunities and challenges section of this report.
Northern Forest Canoe Trail

The 740 mile Northern Forest Canoe Trail (NFCT) includes a significant segment along the Saranac River. Section 3 of the trail begins at Saranac Lake and follows the Saranac River through the Town of Saranac and Plattsburgh to Lake Champlain. Paddlers often stay at Baker’s Acres Campground in Saranac. Paddlers would benefit from greater access to shops, restaurants and lodging along the river, and also be provided with the opportunity to walk/bike from the river to these destinations, through the implementation of the SRTG.

New York State Department of Environmental Conservation (NYSDEC) - Public Fishing Rights

The NYSDEC has secured permanent easements from willing landowners to allow anglers the right to fish and walk along the banks of streams and rivers in designated areas. According to maps provided by NYSDEC, there are nine segments of NYSDEC easements along the Saranac River between Cadyville and the City of Plattsburgh. It is important to note that this easement is strictly for the purpose of fishing, and that courtesy and respect towards the land and its owner will ensure continuation of this right and privilege. See existing conditions maps 3 and 4 for specific locations.
The development of the Saranac River Trail Greenway has broad-based support from public, private and non-profit agencies. The health, economic and environmental benefits that would result from the Greenway’s completion has led these agencies to seek its implementation. The SRTG will only come to fruition through partnerships across jurisdictions and coordination among multiple stakeholder groups. The community supporters listed in this section then are instrumental in progressing the vision of the SRTG. The geographic distribution of these stakeholders is displayed in the map below, and their affiliation with the SRTG is identified on the subsequent page.
### PUBLIC & PRIVATE AGENCIES

<table>
<thead>
<tr>
<th>Organization</th>
<th>Affiliation With SRTG</th>
</tr>
</thead>
<tbody>
<tr>
<td>County of Clinton</td>
<td>Administering the grant for the SRTG Feasibility Study and supports the development of the Greenway.</td>
</tr>
<tr>
<td>City of Plattsburgh</td>
<td>Developed LWRP encouraging community recreational use of Saranac River waterfront.</td>
</tr>
<tr>
<td>Town of Plattsburgh</td>
<td>Recreation Master Plan supports westward expansion of SRTG.</td>
</tr>
<tr>
<td>Town of Schuyler Falls</td>
<td>Proposed trail alignment travels through Schuyler Falls and the Town supports the development of the Greenway.</td>
</tr>
<tr>
<td>Town of Saranac</td>
<td>Proposed trail alignment ends in the Town of Saranac and the Town supports the development of the Greenway.</td>
</tr>
<tr>
<td>SUNY Plattsburgh</td>
<td>Existing trail segment heavily used by both students and employees of SUNY Plattsburgh. Supports extension of Greenway and recognizes its marketing potential.</td>
</tr>
<tr>
<td>Plattsburgh City Schools</td>
<td>Greenway would pass near the high school, and it would provide students, faculty and staff with an active recreation and transportation corridor.</td>
</tr>
<tr>
<td>Town of Plattsburgh Complete Streets Committee</td>
<td>The extension of the SRTG is consistent with the mission of the Complete Streets Committee, which seeks to make travel by all modes of transportation safe and viable.</td>
</tr>
<tr>
<td>NYS Department of Environmental Conservation</td>
<td>The NYSDEC owns easements along the Saranac River that provides anglers the right to fish along private property, and the extension of the SRTG is in line with NYSDEC's waterfront preservation and restoration efforts.</td>
</tr>
<tr>
<td>NYS Department of State</td>
<td>THE NYSDOS funded the SRTG westward expansion feasibility study.</td>
</tr>
<tr>
<td>Clinton County Action for Health Committee</td>
<td>Committee focused on identifying and implementing ways to reduce chronic disease in the community through enhanced nutrition and physical activity initiatives.</td>
</tr>
<tr>
<td>Saranac Central Schools</td>
<td>Potential trail alignment offers healthy options for students and employees traveling to and from schools.</td>
</tr>
<tr>
<td>Rugar Woods Committee</td>
<td>SUNY Plattsburgh-sponsored committee that helps plan future use of Rugar Woods.</td>
</tr>
<tr>
<td>North Country Chamber of Commerce</td>
<td>Representatives from the Chamber of Commerce acknowledge the benefits that the SRTG would bring to local businesses.</td>
</tr>
</tbody>
</table>

### COMMUNITY GROUPS

<table>
<thead>
<tr>
<th>Organization</th>
<th>Affiliation With SRTG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision 2 Action</td>
<td>Engaged body of citizens in Clinton County that provides direction to leaders in planning for the future of the community. The projected local economic and health benefits of the SRTG are consistent with V2A’s mission.</td>
</tr>
<tr>
<td>Friends of the Saranac River Trail</td>
<td>Nonprofit focused on completion and maintenance of the SRTG within the City of Plattsburgh.</td>
</tr>
<tr>
<td>Saranac River Trail Greenway Committee</td>
<td>Nonprofit focused on completion of the westward expansion of the SRTG to the Town of Saranac.</td>
</tr>
<tr>
<td>Adirondack Cycling Team</td>
<td>Organization that helps to foster the growth of bicycle touring within the Adirondack coast area, to promote the health and fitness of members in a safe, social, and fun way.</td>
</tr>
<tr>
<td>Plattsburgh Acquiring Safe Streets</td>
<td>Group of citizens who successfully advocated for a road diet resulting in the addition of bicycle lanes on North Margaret Street (State Route 9) in the City of Plattsburgh.</td>
</tr>
</tbody>
</table>
The Adirondack Coast is rich with recreational opportunities during all seasons of the year. The proximity of hiking, cycling, canoeing, whitewater kayaking, and winter recreation activities to the city, town centers and surrounding neighborhoods encourages the frequent pursuit of outdoor adventures. There are many important, beautiful, and historic destinations along the Saranac River corridor between the City of Plattsburgh and Towns of Plattsburgh, Schuyler Falls, and Saranac. Connections between neighborhoods, schools, scenic places of leisure, and employment/economic centers are critical for the success of the Saranac River Trail Greenway. These key destinations are highlighted on the following four maps (the coverage of each section map is shown on the overview map to the left). The maps also identify existing accessways to the Saranac River, including fishing access, NYSEG properties, electric power line rights-of-way, and natural surface trails. These existing roadways, routes and accessways provide alignment opportunities for the SRTG. Following each of the four destination maps, maps with photographs of important sections along the corridor are also provided that help tell a story about the existing conditions along the Saranac River. The maps extend from east to west, beginning at the terminus of the existing Saranac River Trail.
The eastern most section of the proposed Saranac River Trail Greenway begins at the terminus of the existing Saranac River Trail in the City of Plattsburgh, and travels west through the Town of Plattsburgh to Morrisonville. This section of trail includes many destinations which would be connected via the greenway. These include Rugar Woods, which offers many recreation opportunities and serves as an outdoor classroom for SUNY Plattsburgh and Plattsburgh High School students, and the Bombardier plant and Plattsburgh International Airport, whose employees would benefit from the greenway extension. Additionally, several dams are located along this stretch of the proposed greenway route, which offer fishing access and walking trails that could serve as alignment options. The County Fairgrounds is another destination that would be connected in this section of the greenway, as well as Morrisonville. The proposed park along the river at the end of Lapierre Lane would be enhanced by the SRTG as well. Overall - this section of the greenway, which includes higher population densities than sections of the trail further west, will serve as the gateway for thousands of residents, employees, students and visitors to the Saranac River Greenway Trail.
The second section of the proposed Saranac River Trail Greenway continues through Morrisonville and Cadyville in Plattsburgh and through Woods Mills in Schuyler Falls. This section of trail includes many destinations which would be connected via the greenway. These include Morrisonville Elementary School, Kents Falls Dam, Mill C Dam, Cadyville Dam, Cadyville Park, Cadyville Town Beach, and Gougeville Spring. The connection between places of learning and employment and recreation opportunities, including activities such as cross country skiing, disc golf, mountain biking, hiking, running, fishing, and swimming at Cadyville Town Beach offer numerous benefits for a variety of trail users along this portion of the corridor. Overall – this section of the greenway connects the hamlets of Cadyville and Morrisonville through picturesque woods, and would provide a recreational jump-off point for residents of the hamlets and The Town of Plattsburgh.
The third section of the proposed Saranac River Trail Greenway continues from Cadyville in Plattsburgh through a scenic stretch of the Saranac River in the Town of Saranac. This section of trail includes recreational destinations which would be connected via the greenway. These include Pickett’s Corner Park, the Saranac Middle School and High School, a campground and driving range, places for anglers to fish, and the beginning of the Flat Water Challenge. Overall – this section of the greenway has a more rural character than the sections to the East and connects the hamlet of Pickett’s Corner with recreational opportunities for residents and visitors.
The final section of the proposed Saranac River Trail Greenway continues from Pickett’s Corner through the hamlet of Moffitsville, The Town of Saranac, and ends just before the Hamlet of Redford. This section of trail includes many destinations which would be connected via the greenway. These include Saranac Town Hall and High Falls Dam. High Falls dam offers fishing access, parking, and walking trails that could serve as an attractive destination. Additionally, white water kayaking and small paddle craft put-in locations on both sides of the Saranac River offer numerous water-based recreational opportunities. Overall - this section of the greenway is the most rural in character, and will serve as the final destination for long distance bicyclists from Plattsburgh and walkers from Morrisonville.

Data Source: NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County
CHAPTER 3: ALIGNMENT ALTERNATIVES

The north side or the south side of the river? Which destinations and neighborhoods should it connect to? What type of trail surface should it have? By evaluating different alignment options for the SRTG, a recommended alignment can be determined that fulfills the goals and objectives of the greenway.
Alignment Alternatives

Introduction

The Saranac River Trail Greenway will travel approximately 26 miles, connecting the City of Plattsburgh to the Town of Saranac. The SRTG is envisioned to be a 4-season “braided” necklace of trail types within the corridor, ranging from paved shared use paths in more urbanized areas, to the rural sections with on-road bike routes, natural surface trails and a water trail. This chapter is divided into three sections, which together, describe alignment options and potential permitting requirements necessary for the development of a braided necklace greenway between these municipalities.

Section 1: Opportunities and Challenges Analysis

The opportunities and challenges analysis builds upon information described in the existing conditions chapter, and generates a complete picture of the barriers to trail development in the study corridor and options to overcome these barriers. Overall, a variety of opportunities and challenges were identified, including public lands, rights-of-way, existing easements, and topography. This analysis was instrumental to the development of alignment options for the SRTG.

Section 2: Trail Typologies and Alternative Alignments

The opportunities and challenges review provided the framework for the identification of alternative alignment options for the SRTG. Opportunities were leveraged and solutions to challenges were found to develop several options for creating a connected greenway between the City of Plattsburgh and the Town of Saranac. Each alignment was then evaluated according to several criteria to determine the desirability of the various options. The SRTG will consist of several different trail typologies along its 26 mile course. The different types of trails that could be incorporated into the greenway are also described in this section.

Section 3: Regulatory Requirements

The SRTG will cross through multiple jurisdictions and could bypass sensitive environmental habitats. The construction of the greenway will therefore need to meet different regulatory requirements. These potential requirements and necessary permits are described in this section.
Opportunities

There are many opportunities to make connections to destinations and for trail alignments along the Saranac River Trail Greenway corridor. These opportunities were analyzed and grouped according to common themes. Descriptions of these major themes are provided below, and maps on subsequent pages display detailed information about the opportunities available for each section of the SRTG.

Existing Trails
Existing walking, hiking, snowmobiling, and ATV trails have been identified as attractive options for trail alignments. These trails exist on both public and private lands.

Fishing Easements
The New York State Dept of Environmental Conservation has secured easements along private property to provide fishing access to the public. These easements are located along segments of the river that may be conducive for trail development.

Utility & Rail Rights-Of-Way
Rights-of-way (ROW) along power lines, NYSEG Access Roads, and abandoned railroad corridors provide potential alignment opportunities along the Saranac River.

Existing Road/Bridge Infrastructure
Low-volume country roads that are amenable to non-motorized transportation, existing vehicular bridges that cross the Saranac River, and closed bridges that could be converted into bike and pedestrian crossings have been identified as significant opportunities for trail connections.

Private Parcel Opportunity
There are many private parcels along the banks of the Saranac River that are undeveloped. The ability to successfully construct a trail across private parcels will be determined through negotiations with property owners, but these parcels serve as opportunities.

Public Parcel Opportunity
There are trail alignment opportunities along the riverbanks through publicly owned, and largely undeveloped, parcels of land.

Point of Interest
Destinations along the river, including both man-made and natural points of interest, will serve as trip beginning and endpoints for many users. Destinations include dam overviews, restaurants, schools and offices, and campgrounds / lodging.
Challenges

Challenges also exist, both natural and man-made, to the development of the Saranac River Trail Greenway. These challenges were analyzed and grouped according to common themes. Descriptions of these major themes are provided below, and maps on subsequent pages display detailed information about the challenges to developing the SRTG.

<table>
<thead>
<tr>
<th>Infrastructural Barrier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major barriers that limit access to the river include Interstate 87, and the dam penstock infrastructure for the generation of hydro-electric power.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Terrain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Many banks along stretches of the Saranac River are very steep, which limit the ability to construct trails in these areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property Owners</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are several opportunities to route the SRTG through private properties, but routing the trail along these alignments will require negotiations with property owners to secure easements. Alignments that avoid private property could be implemented more quickly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>River Crossings</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are existing bridges that cross the Saranac River, but which are closed and would need to be rehabilitated in order to be incorporated into the SRTG. Additionally, there are instances where a river crossing is desirable, but no such crossing exists.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wetlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetlands are present along several sections of the Saranac River. Portions of the SRTG could be routed through wetlands, but these alignments would be more expensive to construct, as they would require boardwalks and permits. Routing the greenway through wetlands does present an excellent educational opportunity.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Existing Road Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Several roads parallel the Saranac River, but are less appealing alignment options due to high posted speed limits, minimal shoulders and sidewalks, and few connections to the River.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Developed Riverbanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed parcels along the banks of the Saranac River are a barrier to alignment options.</td>
</tr>
</tbody>
</table>
**OPPORTUNITIES AND CHALLENGES MAP: 1 OF 4**

**LEGEND**

- **OCCUPANY**
  - Defined Alignment
  - Potential Alignment
  - Spot Location
  - Steep Slope

- **CHALLENGE**

- **NEUTRAL**

---

- **OPPORTUNITIES AND CHALLENGES**

- **NEUTRAL**

- **CHALLENGE**

- **OCCUPANY**

---

**MAP DATA SOURCE**

- NYS Department of Environmental Conservation
- Google Images
- Bing Images
- GoAdirondack.com
- SUNY Plattsburgh
- NorthernForestCanoeTrail.org
- Clinton County
Significant opportunities exist in this section of the proposed greenway, which extends west from the existing Saranac River Trail to Morrisonville. Specific opportunities include: the SUNY-owned Ruger Woods, fishing easements on town-owned land between Ruger Woods and I-87, existing trails within The Development Corp. Industrial Park, the former Clinton County Airport, Brown Road, land along the Clinton County Fairgrounds and adjacent parcels, and Pinebrook Road. Combined, these parcels and rights-of-way provide attractive alignment opportunities. On the south side of the river, an unused rail corridor beginning near the corner of Arizona Avenue and Crete Boulevard, crosses I-87 via an abandoned bridge, and ends near the corner of Kelly Road and Military Turnpike. This provides a significant opportunity for crossing the I-87 corridor.

Challenges along this section include steep slopes and wetlands, particularly west of I-87 and on the south side of the river. Additional challenges include crossing the I-87 corridor, heavily developed residential properties that abut the river in Morrisonville, multiple private property owners along potentially attractive alignment routes, and alignment options that provide limited visual connection to the Saranac River.
**Opportunities and Challenges**

**Map:** 2 of 4

**Data Source:** NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County

**Legend:**
- **Opportunity**
  - Defined Alignment
  - Potential Alignment
- **Challenge**
  - Spot Location
  - Steep Slope
- **Neutral**

---

- **Defined Alignment**
- **Potential Alignment**
- **Spot Location**
- **Steep Slope**

---

- **Private property abuts river**
- **Utility right-of-way opportunity**
- **NYSEG owns undeveloped linear parcel along riverfront**
- **Private property abuts river**
- **Utility right-of-way opportunity**

---

- **Arkville Dam**
- ** Existing walking trail through woods**
- **Penstock is barrier to boat portaging**
- **Existing walking trail along utility right-of-way**
- **Utility right-of-way opportunity**

---

- **Park Row is a residential street that provides connectivity to Saranac Elementary School**
- **May be opportunity for shared use path in right-of-way in some locations. Shoulders are provided, but no sidewalks and 55 MPH high speeds create uncomfortable conditions.**
- **Park Link**
- **Existing walking path along utility right-of-way**
- **Existing snowmobile trail**

---

- **Kent Falls Rd is a low volume dead end street**
- **NYSEG Access Rd**
- **Existing shoulders on Rand Hill Rd: potential on-road alignment, but road is steep**
- **This section of Rt 22B has wide shoulders conducive for trail use**
- **Closed railroad bridge provides river crossing opportunity**

---

- **Closed bridge could be repurposed into bike / pedestrian bridge**
- **Sidewalk and shoulders provided along this stretch of Rabideau St.**
- **Make connection to beach**
- **Utilize existing bridge to cross river**
- **Utility right-of-way opportunity**

---

- **Utility Line right-of-way**
- **Utilize existing bridge to cross river**
- **Penstock is barrier to river access**
- **Closed railroad bridge provides river crossing opportunity**
- **Use existing shoulders on Rand Hill Rd: potential on-road alignment, but road is steep**

---

- **Take advantage of NYSEG owns undeveloped linear parcel along riverfront**
- **Park Row is a residential street that provides connectivity to Saranac Elementary School**
- **NYSEG Access Rd**
- **Existing shoulders on Rand Hill Rd: potential on-road alignment, but road is steep**
- **This section of Rt 22B has wide shoulders conducive for trail use**

---

- **Existing walking path along utility right-of-way**
- **Utility right-of-way opportunity**
- **Closed bridge could be repurposed into bike / pedestrian bridge**
- **Sidewalk and shoulders provided along this stretch of Rabideau St.**
- **Make connection to beach**

---

- **Existing walking trail along utility right-of-way**
- **Existing snowmobile trail**
- **Utility right-of-way opportunity**
- **Closed bridge could be repurposed into bike / pedestrian bridge**
- **Sidewalk and shoulders provided along this stretch of Rabideau St.**

---

- **Park Row is a residential street that provides connectivity to Saranac Elementary School**
- **NYSEG Access Rd**
- **Existing shoulders on Rand Hill Rd: potential on-road alignment, but road is steep**
- **This section of Rt 22B has wide shoulders conducive for trail use**
- **Closed railroad bridge provides river crossing opportunity**

---

- **Existing walking trail along utility right-of-way**
- **Utility right-of-way opportunity**
- **Closed bridge could be repurposed into bike / pedestrian bridge**
- **Sidewalk and shoulders provided along this stretch of Rabideau St.**
- **Make connection to beach**

---

- **Existing walking path along utility right-of-way**
- **Utility right-of-way opportunity**
- **Closed bridge could be repurposed into bike / pedestrian bridge**
- **Sidewalk and shoulders provided along this stretch of Rabideau St.**
- **Make connection to beach**
Major opportunities for attractive trail alignments exist in this section of the SRTG, which travels from Morrisonville and Cadyville. In particular, there are several low-volume country roads that parallel the river, including Route 22B, Rabideau Street, and Kent Falls Rd. Kent Falls Rd is particularly appealing because it is a dead end road, and existing traffic volumes are very low. Linear corridors also exist in this section and provide alignment opportunities. These include: existing utility-line rights-of-way and NYSEG access roads, snowmobile trails, and abandoned railroad/utility lines. Several operational bridges exist that provide multiple river crossing opportunities, and there are closed bridges that could be repurposed into bike/pedestrian crossings, including a bridge closed to motor vehicle traffic at Kent Falls Rd and an abandoned rail bridge crossing the river near the Cadyville Dam Pump Station. Connections to a town park on Lapierre Lane, Cadyville Park, Cadyville town beach, and multiple schools will provide appealing options for both start and end-point destinations for trail users.

Challenges along this section of the corridor include very steep slopes along both banks of the Saranac River, numerous dams that have large penstock infrastructure that pose barriers to river access, wetlands, and developed private parcels that abut the river. Route 3, which is posted 55 MPH, parallels the river, but high speeds, minimal shoulders, and lack of sidewalks minimize the appeal of Route as a potential on-road alignment.
Picketts Corners Rd is a low volume road with relatively high speeds and few to no shoulders.

Wetlands pose challenge to trail development.

Developed properties along river bank.

There are several destination located at Pickett’s Corner, and making a strong connection to this location is important.

Riverbank along this stretch of river is not developed. Also - parcels are large, so routing trail along this route would affect a relatively small number of property owners.

Bucks Corners Rd is a low-volume country road. Pavement condition is poor compared to Rte. 3.

Properties on this side of river are generally more developed along the riverbank compared to the south side.

Bucks Corners Rd is a low-volume country road. No shoulders are provided. Visual connection to river is minimal.

Hardscrabble Rd is a low volume road with relatively high speeds and few to no shoulders. Visual connection to river is minimal.

Rte. 3 is an alignment option with existing shoulders, posted 55 MPH so vehicle speeds are high.

Restaurant provides pit-stop opportunity for trail users.

Existing shared use path along school property.

There are several destination located at Pickett’s Corner, and making a strong connection to this location is important.

Local businesses provide pit-stop opportunity for trail users.

Restaurant provides pit-stop opportunity for trail users.

Gateway opportunity crossing into ADK park property.

Utilities right-of-way alignment option.

Utility line right-of-way.

Utility line right-of-way.

Laurel Ln: low-volume partially gravel residential street.

There are several destination located at Pickett’s Corner, and making a strong connection to this location is important.

Alternative to Rte. 3 / opportunity to re/fill water.

Challenges:
- Wetlands challenge to trail development.
- Developed properties along river bank.
- Riverbank along this stretch of river is not developed. Also - parcels are large, so routing trail along this route would affect a relatively small number of property owners.

Opportunities:
- There are several destination located at Pickett’s Corner, and making a strong connection to this location is important.
- Existing shared use path along school property.
- Local businesses provide pit-stop opportunity for trail users.
- Restaurant provides pit-stop opportunity for trail users.

Legends:
- Defined Alignment
- Potential Alignment
- Spot Location
- Steep Slope
- Opportunity
- Challenge
- Neutral

Data Source: NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County
Opportunities for trail alignments between Cadyville and Pickett's corner include short utility right-of-way segments and low-volume country roads such as Blanchard Rd, Gougeville Spring Rd., and Laurel Ln. Significant opportunities include the fact that, within this section, the SRTG crosses into Adirondack Park lands, as well as the presence of several largely undeveloped parcels along the south bank of the river. Additionally, Pickett’s corner park, the Saranac Central School campus and Bakers Acres campground offer a variety of trip start and end points. The absence of steep slopes along this stretch of river is an opportunity for off-road trail alignments.

The challenges that exist in this section of the SRTG include developed properties that abut the northern river bank, significant wetlands on the north and south side of the river, and few segments of attractive on-road alignments. On the north side of the river, although Bucks Corners Road is low volume, it has poor pavement conditions and no shoulder. Pickett’s Corners Road has high speeds and few to no shoulders. Route 3, which is posted 55 MPH, parallels the river, but it’s high speeds, minimal shoulder, and lack of sidewalks, make it less appealing for a potential on-road alignment. Hardscrabble Rd and Duquette Rd are both low-volume country roads on the south side of the river, but have narrow-to-no shoulders, and have limited visual connection to the River. In sum, the roads on the north and south sides of the river are generally less attractive alignment options.
Diner and gas station offer pit-stop services for trail users.

Ending trail at Cane Rd bridge provides continuous loop option.

Rte. 3 is an alignment option with intermittent shoulders; posted 55 MPH and vehicle speeds are high.

Wilson Rd: Low-volume road.

NYSEG access road provides connection to river.

Opportunity to create white water kayaking course in this section of the river and complimentary observation areas.

Existing NYSEG access roads provide routes to High Falls Dam.

High Falls Dam is a scenic destination offering parking and trail access.

NYSEG access road provides connection to river.

Opportunity to create white water kayaking course in this section of the river and complimentary observation areas.

High Falls Dam is a scenic destination offering parking and trail access.

Low-volume rural road, but does not have shoulders or sidewalks. Visual connection to river is minimal.

Riverbank here is not developed. Also - parcels are large, so routing trail along this route would affect a relatively small number of property owners.
Key opportunities along the final segment of the greenway, which connects Moffitsville to Redford, include Pickett’s corner park, NYSEG access roads between Soper Road and High Falls Dam, and largely undeveloped parcels that flank the south side of the River. High Falls Dam is a scenic destination and will serve as the primary point of interest for many trail users. An opportunity for an appealing off-road alignment exists on the south bank of the river along large and undeveloped private parcels between High Falls Dam and the Cane Rd bridge. Additionally, there are long stretches of on-road alignments opportunities following low-volume country roads, including Bowen Rd, a portion of Hardscrabble Rd, Soper Rd, and Pup Hill Rd.

Challenges to the development of the SRTG along this section of the river include poor visual connection to the river along portions of otherwise attractive on-road segments. Other challenges include wetlands, steep slopes, and properties developed adjacent to the riverbank. Potential trail alignments along NYSEG Access Roads are particularly steep. Overall, negotiations with property owners along this section of the SRTG will be critical. Large portions of the most appealing alignment options travel through private property and NYSEG owned lands, and therefore, negotiations with these property owners would be necessary to determine if they would be amenable to having a trail routed through their property.
To make a connected greenway system from the City of Plattsburgh to the Town of Saranac, the SRTG is envisioned to be a 4-season “braided” network of trail types within the corridor, ranging from paved shared use paths in more populated areas, to the rural sections with on-road bike routes, natural surface trails. Some sections may include multiple trail types oriented towards different users and desired experiences. Sample trail types are pictured below, and cross-sections and details of each type are provided in Chapter 4.
Alternative Alignments Analysis

Introduction

The opportunities and challenges analysis provided detailed information about the conditions along the Saranac River Trail Greenway Corridor. This information was used to develop alternative alignments for the SRTG, which are presented in this section. The alignment options were developed after careful analysis of roads, NYSEG and NYS DEC properties, railroad and utility line rights-of-way, and public and private parcels. Every effort was taken to develop options that maintained a parallel route to the course of the Saranac River. The following list describes the considerations that were used to develop the alternative alignments for the Saranac River Trail Greenway.

Potential Trail within River Corridor: The trail may be routed adjacent to the Saranac River where there is available space and floodplain/wetland constraints are minimized.

Potential Trail within Utility Line, NYSEG Access Roads, or Rail Corridor: With cooperation from the utility companies and property owners, a trail can potentially take advantage of existing utility lines, NYSEG Access ways, or unused rail corridors.

Potential Trail in Road Rights-of-Way (ROW): There are multiple opportunities along the corridor to take advantage of paved and unpaved road rights-of-ways that have low-volumes of motorized vehicle traffic.

Potential Trail through Undeveloped Land: In some areas, the trail may be routed through an undeveloped area where there is no existing corridor for it to follow.

Potential Trail through Public Land: In many instances, the opportunity for trail alignment passes through publicly owned parcels, including Town/City, County and State lands. Additionally, the NYS DEC has obtained public fishing easements along the river, and the potential exists to expand the use of these existing easements to include walking and biking.

Potential Connection within Public Roadway: In some areas there is potential for a trail to be routed within the existing right-of-way of a public road. This can mean the trail takes advantage of an existing wide shoulder and/or sidewalk. In other cases it requires that additional improvements be made to make space for trail users within the rights-of-way.

Potential Spur Trail/Street Improvement: Spur trails can connect off the main spine of the trail system, which travels east-west, to a destination to the north or south.

Potential Water Trail: There may be opportunities to add paddle craft launches and new water trails to navigable portions of the Saranac River.
Alternatives

On-road alignment, including paved and unpaved roads
Walking, hiking, and bicycling trails

Formalized path (paved or stone dust)

<table>
<thead>
<tr>
<th>Connection to Saranac River</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintains consistent visual connection to river</td>
<td>Intermittent visual connection to river</td>
<td>Minimal visual connection to river</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Links to Activity Generators</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links to several activity generators in area</td>
<td>Links to some activity generators in area</td>
<td>Links to few activity generators in area</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Private Parcels Affected</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affects few to no private parcels</td>
<td>Affects some private parcels</td>
<td>Affects many private parcels</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Permitting Requirements</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>May not require any permits</td>
<td>Some permits may be required</td>
<td>Would require permits</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Topography</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoids topographically challenging terrain</td>
<td>Involves some topographically challenging terrain</td>
<td>Large portions are routed through topographically challenging terrain</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Experience</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long sections separated from motor vehicles, making it comfortable for wide range of ages/abilities</td>
<td>Some sections shared with motor vehicles, making it comfortable for more confident users</td>
<td>Not separated from motor vehicles and would be comfortable for only very confident users</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Construction Cost</th>
<th>+</th>
<th>0</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of constructing option is comparatively low</td>
<td>Cost of constructing option is medium</td>
<td>Cost of constructing option is high</td>
<td></td>
</tr>
</tbody>
</table>
Alignment options were developed for each of the four sections of the SRTG corridor. To determine the feasibility and desirability of each option, they were evaluated using the set of criteria described below. A matrix is provided for the four sections that evaluates the options using this criteria, along with a corresponding map. The scoring methodology used in the matrix is described on the map to the left. For each section, the most and least appealing aspect of each option is also identified.

**Connection to Saranac River:** Connecting the SRTG to the Saranac River is important for recreational and aesthetic reasons. Alignment opportunities that provide frequent access to view or cross the River are prioritized over other options with minimal visual/physical connection to the Saranac River.

**Links to Activity Generators:** The SRTG will link parks, schools, businesses, and residential areas to common recreational and scenic destinations. The proximity of these links is important for the convenience of trail users, and options that maximize connections to activity generators are preferred.

**Private Parcels Affected:** The number of private parcels crossed by a potential alignment increase the need for easements or property acquisitions. Options that minimize impacts on private property owners are preferred.

**Permitting Requirements:** Many of the trail alignments travel through forested terrain where the presence of sensitive habitats are located, such as wetlands. Options that avoid environmentally sensitive habitats and that would require fewer permits are preferred.

**Topography:** The terrain surrounding the Saranac River Trail Greenway corridor is rugged, and very steep in many locations. Options that avoid steep terrain are preferred.

**User Experience:** The alternative alignments include various trail typologies. Options that are separated from motor vehicle traffic and are routed closer to the scenic beauty of the Saranac River provide a better user experience and are preferred.

**Construction Cost:** Cost is an important consideration when developing alternative alignments. Those options that minimize cost are preferred over more expensive options.
3-16 TRAIL ALIGNMENT ALTERNATIVES

Utilize public lands to I-87

Existing trail through DCI Land

Option would stay within public right-of-way along river; option would pass through wetlands and travel upon steep slopes

Utilize ridge along airport property

Trail through Fairgrounds and one private parcel

Option would stay atop ridge, but pass through private property

Utilize abandoned railroad right-of-way, passing through 7 private parcels between Military Tpke & Mason St

The abandoned railroad ROW along this portion of the alignment is intact, but the linear parcel is privately owned

The railroad right-of-way along this portion of the alignment is owned by D & H Railway

Existing access road through private property

Utilizes existing gravel roads

NYS DEC fishing access trail

Existing snowmobile trail

Data Source: NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County
Evaluation Criteria Matrix

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>OPT A</th>
<th>OPT B</th>
<th>OPT C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to Saranac River</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Links to Activity Generators</td>
<td>+</td>
<td>o</td>
<td>-</td>
</tr>
<tr>
<td>Priv. Parcels Affected</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Permitting Requirements</td>
<td>o</td>
<td>-</td>
<td>o</td>
</tr>
<tr>
<td>Topography</td>
<td>o</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>User Experience</td>
<td>+</td>
<td>+</td>
<td>o</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>o</td>
<td>-</td>
<td>o</td>
</tr>
</tbody>
</table>

OPTION A
Most Appealing Aspect: Option would connect to major activity generators on the north side of the river, including SUNY Plattsburgh and Plattsburgh HS, the SRT, and Morisonville
Least Appealing Aspect: There are instances along this alignment where no trail currently exists, and negotiations with private property owners would need to be undertaken

OPTION B
Most Appealing Aspect: Option would maintain an appealing river-side route by utilizing trails and infrastructure along the river, including NYSEG lands and NYS DEC fishing easements
Least Appealing Aspect: Much of the land along this alignment is designated as wetlands, which would require permits and limit the type of trail that could be constructed

OPTION C
Most Appealing Aspect: Option would utilize existing railroad/utility line ROW and snowmobile trails, minimizing construction expense
Least Appealing Aspect: The railroad parcel is no longer intact, which would require negotiations with 7 private property owners to secure easements. Also, the alignment, while following the course of the Saranac River, has minimal visual connection to it
**Evaluation Criteria Matrix**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>OPT A</th>
<th>OPT B</th>
<th>OPT C</th>
<th>OPT D</th>
<th>OPT E</th>
<th>OPT F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saranac River Connection</td>
<td>+</td>
<td>-</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Links to Activity Generators</td>
<td>+</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Priv. Parcels Affected</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Permitting Requirements</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Topography</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>User Experience</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>0</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>+</td>
<td>0</td>
</tr>
</tbody>
</table>

**OPTION A**

*Most Appealing Aspect:* Option would utilize existing infrastructure and rights-of-way along the river, making a strong connection to it and minimizing permitting/construction costs

*Least Appealing Aspect:* Two now closed bridges would need to be rehabilitated for this alignment. This poses an increased construction cost, but also an appealing opportunity.

**OPTION B**

*Most Appealing Aspect:* Option would be routed on-road, which would minimize construction cost for the alignment

*Least Appealing Aspect:* This option is routed upon Rand Hill Rd, which is very steep, and Rte 3, which has high vehicle speeds and is not comfortable to walk/bike along

**OPTION C**

*Most Appealing Aspect:* Option would utilize existing utility line right-of-way and snowmobile trail, which would minimize construction cost

*Least Appealing Aspect:* The Utility line right-of-way is extremely steep in some locations, which would limit the number of users who could use this segment of trail

**OPTION D**

*Most Appealing Aspect:* Option would primarily travel upon abandoned railroad right-of-way/utility line

*Least Appealing Aspect:* Alignment would be routed upon Sand Rd, which is not comfortable to bike/walk upon. Alignment would have little visual connection to Saranac River

**OPTION E**

*Most Appealing Aspect:* Option would leverage an existing snowmobile trail to provide an alignment alternative to Route 3, and make direct connections to Cadyville Park and Beach

*Least Appealing Aspect:* Option would have minimal visual connection to river for much of the alignment.

**OPTION F**

*Most Appealing Aspect:* Option provides an alternative to Route 3, and leverages an existing trail through one private parcel and NYSEG lands, making a strong connection to Mill C Dam

*Least Appealing Aspect:* Alignment would travel upon hilly terrain that would limit the types of users who could use this section of the trail
Alignment would affect 10 private property owners.
**Evaluation Criteria Matrix**

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>OPT A</th>
<th>OPT B</th>
<th>OPT C</th>
<th>OPT D</th>
<th>OPT E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to Saranac River</td>
<td>+</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Links to Activity Generators</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Priv. Parcels Affected</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Permitting Requirements</td>
<td>-</td>
<td>+</td>
<td>+</td>
<td>0</td>
<td>+</td>
</tr>
<tr>
<td>Topography</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>User Experience</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>-</td>
<td>+</td>
<td>0</td>
<td>0</td>
<td>+</td>
</tr>
</tbody>
</table>

**OPTION A**

**Most Appealing Aspect:** Option would be routed close to the Saranac River, providing a unique and enjoyable trail user experience

**Least Appealing Aspect:** Alignment travels through undeveloped private parcels that would require negotiations to obtain easements

**OPTION B**

**Most Appealing Aspect:** Option would be routed on-road, which would minimize construction cost for the alignment

**Least Appealing Aspect:** Much of this option would be routed upon Route 3, which has high vehicle speeds and is not comfortable to walk/bike along

**OPTION C**

**Most Appealing Aspect:** Option would be routed on-road, which would minimize construction cost for the alignment

**Least Appealing Aspect:** Alignment would be routed upon Hardscrabble and Duquette Roads, which have high vehicle speeds and minimal shoulders

**OPTION D**

**Most Appealing Aspect:** Option would utilize existing utility line right-of-way that has moderate slopes

**Least Appealing Aspect:** Although the option parallels the Saranac River, it has little visual connection to it.

**OPTION E**

**Most Appealing Aspect:** Option would use Bucks Corner Rd, a low-volume country road that provided an alternative route to Option B and Option D

**Least Appealing Aspect:** Bucks Corner Rd had poor pavement quality, is a rather circuitous route, and has very minimal visual connection to the river.
Alignment would affect 10 private property owners.
Evaluation Criteria Matrix

<table>
<thead>
<tr>
<th>CRITERIA</th>
<th>OPT 1</th>
<th>OPT 2</th>
<th>OPT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection to Saranac River</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Links to Activity Generators</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>Priv. Parcels Affected</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Permitting Requirements</td>
<td>o</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Topography</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>User Experience</td>
<td>+</td>
<td>o</td>
<td>-</td>
</tr>
<tr>
<td>Construction Cost</td>
<td>o</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

OPTION A

Most Appealing Aspect: Option would use several different trail typologies to maintain close connection with the river, including public roads and NYSEG accessways

Least Appealing Aspect: Alignment is routed through several private parcels, which would require negotiations to secure easements

OPTION B

Most Appealing Aspect: Option would be routed primarily upon Rte 3, and would also utilize secondary roads adjacent to the river, minimizing construction/permitting hurdles

Least Appealing Aspect: Much of this option would be routed upon Route 3, which has high vehicle speeds and is not comfortable to walk/bike along

OPTION C

Most Appealing Aspect: Option would be routed upon Pup Hill Rd minimizing construction/permitting hurdles

Least Appealing Aspect: Pup Hill Rd has high vehicle speeds and minimal shoulders, making it uncomfortable for the majority of people to walk/bike upon
CHAPTER 4: RECOMMENDED ALIGNMENT

The recommended alignment for the Saranac River Trail Greenway represents the public’s vision for a connected trail system from Lake Champlain to the Adirondack Park. It is imagined as a braided network of trail types that together will provide a world-class recreation and transportation amenity for residents and visitors alike.
Recommended Alignment

Introduction

The development of the recommended alignment for the Saranac River Greenway Trail was a collaborative effort that involved many stakeholders from the public, private and non-profit sectors. Together, the planning team worked with these stakeholders and the public to articulate and illustrate a vision for the development of a roughly 27 mile greenway that would connect Downtown Plattsburgh to Saranac, maintaining a close connection to the Saranac River as it extended westward from Peace Point Park. This trail is anticipated to have many health, economic and environmental benefits, and will be used to increase the number of Clinton County residents using active modes of transportation and recreation.

This chapter of the plan presents the vision for the path that the SRTG will take, and how its different sections will look. The proposed SRTG will not be a single trail type along the entire route. Rather, the trail will adapt to the landscape as it moves west from Plattsburgh, creating a ‘braid’ of trail types for the wide range of trail uses and conditions along the Greenway. Designed in this manner, the trail will become an appealing amenity for families looking to ride and walk sections; will become a tourist draw from people living outside the region; will provide avid anglers with many opportunities to access the excellent fishing holes; and will provide long-distance bicyclists with varied terrain and routes. Like a braided fishing line, the SRTG will create a strong connection between residents and visitors of Clinton County to the many destinations along the Saranac River. When completed, the trail will provide unparalleled access to nature and elevate the status of walking, biking and other non-motorized uses in the Adirondack Coast region.

Trail Types

The SRTG will be comprised of a braid of trail types. The following section illustrate the trail types that are recommended for the various segments of the SRTG. The detailed maps of the trail on pages 3-10 to 3-17 identify what type of trail is recommended for the different segments of the trail. These recommendations are conceptual in nature, and as each section of the trail is implemented, engineering judgement should be exercised when referencing this plan.
**TRAIL TYPE 1: SHARED USE PATH**

Shared Use Paths are an ideal treatment for a wide variety of trail users. Typically constructed of asphalt, concrete, or firmly packed crushed aggregate, these hard surfaces trails are a durable option, and as long as grades of 5 percent or less are maintained, they are accessible to those with disabilities. Cross slopes of 2% or less should be maintained. The trail tread of shared-use paths should be at least 10 ft wide in order to allow two-way traffic. Additionally, a 2 ft soft shoulder should be provided on either side of the trail tread to allow for passing. A minimum of 8 ft vertical clearance from overhead objects should be maintained, and a maintenance schedule should be employed to keep clearances. Where railings are necessary due to steep slopes adjacent to the trail, 42 inch railings should be installed. This trail typology is recommended in areas of the SRTG that are expected to be most heavily trafficked, and will be placed along gradually sloping areas of the corridor, such as railroad beds or utility rights-of-way, or other flat stretches of land.

**TRAIL TYPE 2: SHARED USE PATH - STONE DUST**

Crushed stone trails are made out of a composite of crushed stones and a binder. The stones are typically made of granite that are less than 3/8 inch in diameter, and the binder most often used is stone dust, which is a by-product of the crushing process. Slightly excavating the trail’s foundation and using a vibratory compactor ensures that the trail will remain firm and stable and not sink into the soil beneath. Stone-dust trails are not appropriate in areas prone to flooding or where soils have poor drainage, as they can erode in wet environments. Additionally, a 2 ft soft shoulder should be provided on either side of the trail tread to allow for passing. This trail typology fits in well with natural settings and is the preferred option for sections of the trail that traverse wooded environments with topographical challenges, areas that will generally see less use because they are located near relatively few activity generators. There is also a cost savings to installing a stone dust trail instead of a paved trail, while still accommodating the same types of users (bicycles roll well on this hard surface; stone dust is ADA compliant) and permitting two-way traffic.
TRAIL TYPE 3: SIDEPATH

Sidepaths are typically asphalt or other hard-surface dedicated paths for pedestrians and bicyclists that are separated from roadways by a vegetated buffer or vertical barrier, such as a curb. Sidepaths are recommended along portions of the SRTG adjacent to roadways where high speeds, low shoulder widths, or other hazards make bicycling and walking on-road uncomfortable. Sidepaths should be 10 ft wide to accommodate two-way traffic, with 2 ft soft shoulders on both sides. Thoughtful design and striping on side paths is important to inform trail users when crossing driveways, railroad tracks, or other streets. In locations where a 5’ separation between the roadway and the trail cannot be maintained, additional barriers, such as a split rail fence, should be considered. In these constrained areas, a 3’ soft shoulder can be placed on the side of the trail opposed to the travel lane. In unconstrained situations, a 2’ soft shoulder should be maintained on both sides of the trail.

TRAIL TYPE 4: NATURAL SURFACE TRAIL

Walking/Hiking trails are natural surface trails that meander through wooded environments, and provide a low-impact option for accessing ecologically sensitive habitats. Surface materials range from bare earth to mulch and grass. Due to the natural settings and minimal improvements made to walking/hiking trails, this type of trail needs to be maintained seasonally and cleared of brush, fallen trees, and other obstacles that could impede a trail user. A seasonal work plan should be established to maintain this type of trail. Maintaining wider lateral and vertical clearances can help to reduce the frequency of maintenance. Due to the rugged nature of natural trails, this typology is not ADA accessible. This type of trail is ideal for traversing topographically challenging terrain with minimal human impact, and are recommended along sections of the SRTG that are hard to reach and that are environmentally sensitive. To minimize erosion, walking trails should follow contours as much as possible to allow water to flow over the trail, instead of along it.
TRAIL TYPE 5: DOWNTOWN CONNECTOR TYPICAL

This trail typology is recommended for Main St, travelling through Morrisonville. This section of the trail will connect directly to many destinations along the street, but thoughtful design is required to create a seamless and enjoyable trail user experience. The recommended treatment for this section of the trail proposes that a 5 ft sidewalk to be maintained on one or both sides of the street to accommodate pedestrians. Where road width is available, bike lanes of at least 5 ft should be maintained, and in the long term, narrow sections of the street should be widened to maintain consistent bike lane width. Branded wayfinding signage should be installed along the streets length, as well as custom SRTG bike lane markings. NYS DOT and FHWA must provide approval for any variance from the standard bike lane marking.

TRAIL TYPE 6: KENT FALLS CONNECTOR

Kent Falls Rd provides an excellent opportunity for routing a key segment of the SRTG. The existing bridge at the end of the road is currently closed, resulting in very low traffic volumes along on both sides of the street. It is recommended that Kent Falls Rd be signed as local traffic only street to further reduce volumes, and that the street center line be removed so that advisory bike lanes can be installed along the street’s length. Advisory bike lanes are appropriate on streets with low traffic volumes that are too narrow to install standard bike lanes and travel lanes separately. Advisory bike lanes are marked with a dashed line to the left, directing cars to travel outside the lane if possible. These markings give bicyclists a space to ride, but are also available to motorists if space is needed to drive past an on-coming vehicle. It is also recommended that 5’ shoulders be mowed on either side of the street to provide a space for pedestrians to walk. Sand deposits have been known to accumulate on the side of Kent Falls Rd. Efforts should be prioritized to remove this sand seasonally, as it poses a hazard to bicyclists. Study should be conducted before installation of treatment to confirm that volumes and speeds are consistent with guidance and standards of local governing agencies for advisory lane treatments. A speed study could also be done to potentially reduce speed limit.
ON-ROAD TRAIL TYPES

TRAIL TYPE 7: UTILITY ACCESS ROAD

Some sections of the SRTG are routed upon utility access roads, primarily dirt and gravel roads maintained by NYSEG or other utilities for use by their vehicles. Some of these roads are currently open to the public, while others are gated. The portions of utility roads that are incorporated into the SRTG will receive enhancements that ensure a positive trail users experience. With cooperation from roadway owners, roads will be signed with non-motorized access only signage, as well as with SRTG branded wayfinding signage. Roads should be surfaced with an aggregate that is strong enough to support heavy vehicles but also fine enough to provide a smooth surface that is amenable to bicycling. Also, the roads will be incorporated into a seasonal maintenance program that would include regrading, pothole filling and washout repairs, as well as improved drainage and storm water management. Particular emphasis will be placed upon improving wet sections of road and repairs will be scheduled to coincide with the end of the Spring wet season. The Friends of the Saranac River Trail and Greenway will assume many of the responsibilities for the seasonal maintenance program, working in close coordination with NYSEG.

TRAIL TYPE 8: NEIGHBORHOOD TRAFFIC CALMING

The SRTG will be routed upon several low-volume residential streets, which are envisioned to become shared streets, known as Neighborhood Greenways. For these streets, treatments are recommended to reduce volumes and minimize travel speeds, two key goals of a shared street environment. Shared roadways are most comfortable when the difference between bicycle and motorist speeds is small, and speed humps are recommended to minimize speed differentials along these streets. If speed humps pose a winter maintenance issue, temporary humps can be installed seasonally. Additionally, sidewalks should be constructed on one or both sides of the street to provide a space for pedestrians to walk. SRTG branded wayfinding signage will help to guide users along these streets and connect them to other portions of the Greenway. Shared lane markings (sharrows) are also recommended. Sharrows alert motorists to the presence of bicyclists along the roadway, and help to define the position in the lane that bicyclists should assume. Additional traffic calming features can be implemented where appropriate, which are elaborated upon on page 3-7.
PROPOSED PHASING PLAN
1. Rugar Woods
2. I-87 to Runway
3. Main St to Kent Falls Rd
4. Adirondack Gateway
5. Wetlands Connector
6. High Falls Connector
Several potential alignment options were developed for the Saranac River Trail Greenway corridor. To determine the feasibility and desirability of each option, they were evaluated using a set of criteria developed by the planning team in coordination with the Project Advisory Committee and the public. After modifying the alignment to reflect stakeholder input, a preferred alignment for the development of a 27 mile greenway extending from the City of Plattsburgh to Saranac was established. The preferred alignment is comprised of a braided network on-and-off road segments that together form a connected greenway that will link residents and visitors to the many destinations in Adirondack Coast Region and along the Saranac River.

The development of the trail will occur in phases, with the first phase of the SRTG beginning at the end of the existing Saranac River Trail. This plan presents the concept for the alignment as it extends from west from this point, 24 miles into the Town of Saranac. By and large, the trail maintains a close connection with the Saranac River and is routed to connect with places that people live, learn, work and play at throughout the corridor. Due to topographical challenges and the lack of linear rights-of-way paralleling the river, the surface type of the trail varies along its length to complement the terrain and setting of particular segments.

This report presents the recommended alignment for the Saranac River Trail Greenway, dividing the corridor into four sections. Each map identifies several points of interest that will be connected, as well as proposed trailheads and parklet locations that would be integrated into the trail, creating start and end points. The preferred alignment is shown on the maps as a gold color, reflecting the standard that greenway seeks to attain. Additionally, corollary on-road segments are identified, as well as long-term alignment options that may not be feasible today for a variety of reasons, but which represent appealing alignments if identified barriers can be overcome. It is important to include these routes as desired future options, which should be incorporated into the SRTG as funds and momentum allows.
PREFERRED ALTERNATIVE: NATURAL SURFACE TRAIL

LONG TERM CONNECTIONS

PREFERRED ALTERNATIVE: FORMALIZED PATH (PAVED OR STONE-DUST)

LEGEND

*legend is abbreviated, see report front matter for complete legend

DOWNTOWN CONNECTOR
The recommended alignment for the Downtown Connector section of the SRTG begins at the end of the Saranac River Trail. It continues across the high school and Rugar Woods property, and then travels underneath I-87. From the Northway, the trail is routed on-road, and then crosses through the Development Corporation and Former Clinton County Airport parcel, ultimately connecting with Main St in Morrisonville. Since this section links directly to areas with relatively high population densities and will likely see heavy trail use, major segments of this section are recommended to be shared use paths. The on-road sections are intended to be thoughtfully designed Complete Streets, which accommodate all road users, providing an enjoyable trail user experience and connecting trail users directly to local businesses in Morrisonville.

SARANAC RIVER TRAIL GREENWAY FEASIBILITY STUDY | 4-9
Utility Line right-of-way through two private parcels; Alignment would require collaboration with property owners.

Natural surface trail along NYSEG and two private parcels; Alignment would require collaboration with property owners.

Utility Line right-of-way to be rehabilitated, potentially converted into a covered bridge.

Long term route would form off-road connection, but requires rehabilitation of closed railroad bridge and collaboration with private ownership.

On-road route connects Cadyville Park to Cadyville Town Beach.

Connect through woods.

Data Source: NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County.
Hydro Power Alley extends from Main St in Morrisonville to Hank Wilson Rd, connecting trail users to many of the hydroelectric dams within this stretch of the Saranac River. A major portion will be routed upon Kent Falls Rd, and include rehabilitation of the closed Kent Falls Rd bridge to accommodate a bike and pedestrian crossing. The trail will then connect users to the Mill C Dam, cross the river at Goddeau Rd, and utilize various rights-of-way on the south side of the river, ultimately linking to Hank Wilson Rd. A variety of trail types are recommended for this section, including several stretches of on-road alignments and off-road segments routed upon utility access ways. When completing this section of the trail, particular emphasis should be placed on making a connection to the historic importance of hydroelectric power in the region’s history using interpretive signage and artwork placed at key locations.
Data Source: NYS Department of Environmental Conservation, Google Images, Bing Images, GoAdirondack.com, SUNY Plattsburgh, NorthernForestCanoeTrail.org, Clinton County

**PREFERRED ALIGNMENT**

- PREFERRED ALTERNATIVE: FORMALIZED PATH (PAVED OR STONE-DUST)
- PREFERRED ALTERNATIVE: NATURAL SURFACE TRAIL
- PREFERRED ALTERNATIVE: ON-ROAD SEGMENT
- PREFERRED CONNECTION (SIGNAGE & STRIPING)
- LONG TERM CONNECTIONS

**LEGEND**

- DAM
- MOTOR VEHICLE BRIDGE
- PEDESTRIAN BRIDGE
- CLOSED BRIDGE
- LOCAL FOOD/WATER STOP
- LODGING
- HISTORICAL MARKER
- ABANDONED RAIL LINE
- TOWN, CITY, STATE & FEDERAL LAND
- INSTITUTIONAL OR PUBLIC CLIN
- HISTORICAL MARKER
- PROPOSED TRAIL HEAD
- PROPOSED POCKET PARK
- KEY SRTG CONNECTION

Alignment for natural surface trail section requires cooperation with 10 private property owners.

Location provides beautiful vista of High Peaks.

On-road connection for bicyclists and other trail users.

**LONG TERM CONNECTIONS**

- On-road connections

**ADIRONDACK GATEWAY**

**TOWN OF SARANAC**

**PREFERRED ALTERNATIVE: FORMALIZED PATH (PAVED OR STONE-DUST)**

**PREFERRED ALTERNATIVE: NATURAL SURFACE TRAIL**

**PREFERRED ALTERNATIVE: ON-ROAD SEGMENT**

**PREFERRED CONNECTION (SIGNAGE & STRIPING)**

**LONG TERM CONNECTIONS**

**Utility Line ROW**

**Alignment for natural surface trail section requires cooperation with 10 private property owners**

Location provides beautiful vista of High Peaks.

On-road connection for bicyclists and other trail users.

**LONG TERM CONNECTIONS**

- On-road connections
Extending west from Hank Wilson Rd, the SRTG crosses into the Adirondack Park. This is an excellent gateway opportunity, and a trail-side structure should be erected here to emphasize this important entrance. Crossing into the parkland, a walking & biking natural surface/boardwalk trail is proposed that would extend on the south side of the river, ultimately connecting with Bowen Rd. This would provide a rugged but beautiful alignment meandering along the bank of the river. This portion of the trail would require cooperation from 10 property owners. Additionally, an on-road alignment is proposed along Duquette and Hardscrabble Rd, which both offer inspiring views of the High Peaks. A lookout platform is recommended along Duquette Rd to further enhance this view and serve as a draw for people to use this alignment.
Alignment for natural surface trail section requires cooperation with 9 private property owners.

Camping sites could be added at High Falls Dam.

On-road connection for bicyclists and other trail users.
Waterfall Way connects trail users to the dramatic High Falls Dam and Gorge, which has the potential to become a major tourist attraction drawing people from all over the region, and who would use the SRTG to get there. This section includes various trail types to connect users to the closed bridge at the end of Soper Rd. From here, the recommended alignment crosses the river northbound, and continues along the side of Rte 3, linking to a NYSEG access road and ultimately to High Falls Dam. Here, a lookout, picnic area, and walking trails along the gorge are recommended. For all of these features, safety is the number one priority, and features should be carefully designed to prevent accidents in this beautiful but steep area. In the long term, an additional alignment is recommended on the south side of the river that would connect to the other side of High Falls Dam, providing another perspective and allowing trail users to complete the SRTG without interacting with Rte 3. Although safety is more of a concern on this side of the dam (due to the dam intake), careful design can result in a safe trail user experience. Additionally, an on-road alignment is proposed along Pup Hill Rd to provide a alternative route for long-distance bicyclists.
PREFERRED ALIGNMENT

PREFERRED ALTERNATIVE: FORMALIZED PATH (PAVED OR STONE-DUST)
PREFERRED ALTERNATIVE: NATURAL SURFACE TRAIL
PREFERRED ALTERNATIVE: ON-ROAD SEGMENT
PREFERRED CONNECTION (SIGNAGE & STRIPING)

LONG TERM CONNECTIONS

MAP 1

Peace Point Park
5.0 mi

7.5 mi

10.0 mi

12.5 mi

15.0 mi

17.5 mi

20.0 mi

22.5 mi

25.0 mi

27.0 mi

MAP 2

SARANAC

SCHUYLER FALLS

MAP 3

MAP 4
This plan details a recommended alignment for the SRTG. As the sections of the trail are implemented, additional planning and design phases will be required to determine the precise alignment that the trail will take through the general areas identified here. This section of the report showcases eight concepts for different sections of the trail, and together they help to illustrate what the SRTG might look like and how various features could be designed.

The priority concept projects were selected to fulfill the following objectives: to provide a broad range of visuals to represent the many braids of trails that will comprise the SRTG, to be evenly dispersed across the four municipal jurisdictions that the trail passes through, and also to provide conceptual solutions to overcome barriers to the trail’s overall implementation. Various graphics are included in this section to illustrate the priority concepts. The map on the left identifies where along the SRTG each of the eight projects are located. The graphic below highlights the content included for each Priority Concept Cut Sheet:

Detailed cost estimates for each project are included in Appendix A.
I-87 Underpass Proposal

The I-87 priority concept illustrates an option for crossing under the Northway. This is a key connection, and using the existing path under the interstate combined with improvements is the most cost effective option. There is an existing path under the northway that is approximately 7’ wide, which is considered a constrained width for a shared use path. It is recommended that the existing gravel/dirt surface be replaced with a crushed stone surface, providing a better trail surface to accommodate the higher number and wider range of trail users expected in this area. Additionally, a 42” (min.) fence is recommended on the south/river facing side of the path. The stone dust trail will then continue on both approaches to the under-crossing.

Cost Estimate

<table>
<thead>
<tr>
<th>Cost Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stone Dust Trail</td>
<td>$9,110</td>
</tr>
<tr>
<td>2. Retaining Wall</td>
<td>$27,600</td>
</tr>
<tr>
<td>3. Split Rail Fence</td>
<td>$4,500</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$41,210</strong></td>
</tr>
<tr>
<td>4. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$55,634</strong></td>
</tr>
</tbody>
</table>
Airport Runway Segment

The recommended alignment passes through the former Clinton County Airport. This parcel and its aviation history provides a unique opportunity to create a distinct trail user experience. The airport runways, although overgrown with weeds, are largely intact and could potentially be incorporated into the Greenway. After skirting the perimeter of the airport property, the alignment bends to the right, and then is envisioned to travel north along the northwest/southeast runway, ultimately connecting with Fair Grounds Rd. The photo rendering below showcases an option for how the trail could look utilizing this runway. A boulevard of trees would provide shading for trail users, and sculptures of F-4 Phantom could be incorporated into the Greenway, making a strong reference to Plattsburgh’s aviation history and as a way to pay homage to the fact that this plane flew over the skies of Plattsburgh for many years.

Cost Estimate

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Runway rehab for trail section</td>
<td>$14,290</td>
</tr>
<tr>
<td>2. Green Median</td>
<td>$56,500</td>
</tr>
<tr>
<td>3. Trail Sculptures</td>
<td>$4,000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td>$57,025</td>
</tr>
<tr>
<td>4. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$76,983</td>
</tr>
</tbody>
</table>
Goddeau Rd. Bridge Connection

On-road sections of the Greenway need to be thoughtfully designed to maintain a cohesive and enjoyable trail user experience, and the Goddeau Rd Bridge Connection is no exception. The illustration below presents one alternative option for the enhancement of this crossing. In this option, it is recommended that the travel lanes over the bridge be reduced to 10’, and the shoulder widened to 4’. Although the shoulders will still be relatively narrow, this design will provide a better experience for bicyclists and pedestrians crossing the bridge. In addition, a jug handle two-stage crossing area is proposed on the east side of Goddeau Rd, along with a crosswalk and Rectangular Rapid Flash Beacons. This facility will provide bicyclists and pedestrians a place to queue and cross the street perpendicular to traffic. Additionally, a larger parking area is recommended, along with kiosks that would provide trail information. In the long term, the closed railroad bridge to the west of the Goddeau Rd crossing could be rehabilitated to provide a separated bike & ped only facility to cross the river, or alternatively, a cantilevered extension could be added to the Goddeau Rd bridge to create space for an adjacent side path.

Cost Estimate

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Runway rehab for trail section</td>
<td>$14,290</td>
</tr>
<tr>
<td>2. Green Median</td>
<td>$56,500</td>
</tr>
<tr>
<td>3. Trail Sculptures</td>
<td>$4,000</td>
</tr>
<tr>
<td>Sub Total</td>
<td>$45,586</td>
</tr>
<tr>
<td>4. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>$61,541</td>
</tr>
</tbody>
</table>

RECTANGULAR RAPID FLASH BEACONS

RRFBs are designed to alert motorists to the presence of a pedestrian entering the crosswalk. They have been shown to dramatically improve motorist yield behavior.

For any approach on which RFFBs are used, two W11-2, W11-15, or S1-1 crossing warning signs (each with RFFB, W11-15, and W16-7p plaque) shall be installed at the crosswalk, one on the right-hand side of the roadway and one on the left hand side of the roadway.

RFFBs are typically actuated by a pedestrian push button. They flash for a pre-determined length and allow time for the users to cross the street before going dark. This warning device does not create the legal requirement to stop. RFFBs are solar powered, easy to install, and significantly less expensive than installing a signal or hybrid beacon.
West of Hardscrabble

A trailhead is recommended where the SRTG is proposed to extend west from Hardscrabble onto a utility line right-of-way. At this juncture, a parking area complete with kiosks and trail information is recommended. This priority concept also illustrates how two complementary routes can be designed parallel to one another. On the northern route, a stone dust trail is recommended along the existing utility line right-of-way. This will provide an accessible trail option for a variety of trail users, including those on narrow wheeled bicycles. In addition, a walking/mountain biking/hiking trail is proposed to meander close the river bank. Along this route, boat launches, fishing docks and gazebos/lookouts can be incorporated to provide attractions along the river that people can connect to.

Cost Estimate

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trail Facility</td>
<td>$183,424</td>
</tr>
<tr>
<td>2. Parking Lot</td>
<td>$26,775</td>
</tr>
<tr>
<td>3. Water Facilities</td>
<td>$42,500</td>
</tr>
<tr>
<td>4. Trail Amenities</td>
<td>$18,000</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$18,000</strong></td>
</tr>
<tr>
<td>5. Additional Costs</td>
<td>$270,699</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$365,444</strong></td>
</tr>
</tbody>
</table>

35%
Boardwalk Section

As the SRTG crosses into the Adirondack Park, a long section of trail is recommended to be routed through 10 parcels, designed as a walking/mountain biking trail. This alignment would provide unparalleled access to the banks of the Saranac River and requires cooperation with the owners of the parcels that the proposed alignment passes through. This section of the trail crosses over several areas designated as wetlands in addition to creeks, and for these segments boardwalks can be employed to connect people to these sensitive and valuable habitats, providing an excellent educational opportunity. Boardwalks are raised trails that provide the ability to cross wetlands. Boardwalks are designed to minimize impact upon the natural environment, and key details of boardwalk design are illustrated below.

**Cost Estimate**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trail Boardwalk</td>
<td>$515,000</td>
</tr>
<tr>
<td>2. Natural Surface Trail</td>
<td>$136,675</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$651,675</strong></td>
</tr>
<tr>
<td>3. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$879,761</strong></td>
</tr>
</tbody>
</table>

**WIDTH**

Boardwalk width should be a minimum of 10 feet when no rail is used. A 12 foot width is preferred in areas with higher average anticipated use and whenever rails are used.

**HEIGHT**

When the height of the boardwalk exceeds 3 feet, railings are required. For shared-use boardwalks, railings need to be built 54” above the surface of the boardwalk.

**STRUCTURAL INTEGRITY**

If access by vehicles is desired, boardwalks should be designed to structurally support the weight of a light-duty maintenance truck used by local agencies.

**MATERIALS AND MAINTENANCE:** Decking should be either non-toxic treated wood or recycled products. Long-term maintenance can be minimized through good design and the use of quality materials.
Duquette Rd Lookout

The SRTG is envisioned to become a braid of trail types that offer different user experiences. Some sections of the greenway are proposed to be signed on-road routes, primarily intended for use by long-distance bicyclists. These segments are routed upon low-volume rural roads that provide inspiring vistas of the High Peaks. One particularly impressive viewing point is located where the recommended alignment passes north/south on Duquette Rd across Porky Ryan Rd. At this intersection, a lookout is proposed that provides trail users with an elevated perspective of the beautiful view. Additionally, benches, bicycle racks, and a map kiosk could be incorporated into the design to further enhance the lookout area, providing trail users with a space to rest and information about the SRTG. By providing a prominent lookout structure, this area becomes a destination in-and-of itself, serving as a draw for people to visit the site. Wayfinding signage and shared lane pavement markings along the road will help to guide on-road trail users along this stretch of the greenway. The lookout is proposed on private property, and cooperation from the landowner would be necessary to move the concept forward.

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tower</td>
<td>$30,000</td>
</tr>
<tr>
<td>2. Gravel Clearing</td>
<td>$7,500</td>
</tr>
<tr>
<td>3. Trail Amenities</td>
<td>$1,800</td>
</tr>
<tr>
<td>4. Shared Lane Markings</td>
<td>$22,800</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$62,100</strong></td>
</tr>
<tr>
<td>5. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$83,835</strong></td>
</tr>
</tbody>
</table>
High Falls Dam is one of the most intriguing features of the entire SRTG corridor. The dramatic falls crashing into the gorge below offer a truly unique experience, and will become a major attractor for the trail’s western end and entice people to use the greenway to access it. Some amenities already exist here, including a gravel parking lot and paths that the public can use to walk to the top of the dam. The proposed concept for this important trailhead would include many more features that would convert the northern bank of the river into a park-like setting, complete with picnic areas, kiosks and bike parking. Interpretive signage should be incorporated into the design to inform people about the history of the dam and hydroelectric power generally. Additionally, a natural surface trail could be routed north along the river, providing a path to view and access the gorge beneath the dam. This trail would need to be very thoughtfully designed to maintain the safety of trail users, complete with fencing and signage intended to prevent accidents and alert people to proceed with caution in this rugged area.

<table>
<thead>
<tr>
<th>Cost Estimate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Parking Lot Improvement</td>
<td>$2,812</td>
</tr>
<tr>
<td>2. Picnic Areas</td>
<td>$16,875</td>
</tr>
<tr>
<td>3. Natural Surface Trail</td>
<td>$3,300</td>
</tr>
<tr>
<td>4. Trail Amenities</td>
<td>$16,875</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$26,987</strong></td>
</tr>
<tr>
<td>3. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$36,433</strong></td>
</tr>
</tbody>
</table>
West-End Trailhead

Many users will begin their excursion along the SRTG in Plattsburgh, but the western end of the trail also represents the beginning of the trail for people starting on the greenway near Redford. A trailhead is recommended off of Pup Hill Rd to mark this area as the beginning of the trail in the easterly direction. Proposed on the north side of Pup Hill Rd, and just east of the Cane Rd bridge, the trailhead will serve as a gateway to the SRTG, inviting people coming from the High Peaks to access the trail. Many amenities will be provided here, including parking, kiosks with information about the trail, a walking trail that leads directly to the river where people can put-in boats and fish, as well as benches and bicycle racks. The trailhead should be designed to blend into the natural setting, and situated to avoid wetlands that are present on the parcel that it is proposed to occupy. This parcel is owned by NYSEG, and their cooperation would be necessary to move this concept forward.

Cost Estimate

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Natural Surface Trail</td>
<td>$3,410</td>
</tr>
<tr>
<td>2. Water Facilities</td>
<td>$27,500</td>
</tr>
<tr>
<td>3. Parking Lot</td>
<td>$79,750</td>
</tr>
<tr>
<td>4. Trail Amenities</td>
<td>$4,600</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>$115,260</strong></td>
</tr>
<tr>
<td>5. Additional Costs</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$155,601</strong></td>
</tr>
</tbody>
</table>
Traffic Calming for Neighborhood Greenways

**TOOLBOX**

Neighborhood Greenways have been used all over the country with a primary objective of calming traffic.

**Horizontal Deflection**

Horizontal traffic calming devices cause drivers to slow down by constricting the roadway space or by requiring careful maneuvering.

- **Chicane**
  - Chicanes deflect vehicles and reduce mid-block speeds

- **Choker**
  - Chokers create pinch-points that reduce speeds mid-block

- **Traffic Circle**
  - Traffic Circles reduce speeds through intersections

- **Curb Extension**
  - Curb extensions increase turn radii and reduce turning speed

**Strategies for Reducing Volume**

Maintaining motor vehicle volumes below 3,000 AADT (annual average daily traffic), where 1,000 - 1,500 AADT is preferred, significantly improves bicyclists’ comfort. To manage volume, physical or operational measures can be taken on routes that have been identified as a bicycle boulevard. These volume management elements also provide an opportunity for landscaping, stormwater management, and other pedestrian and bicycle supportive amenities.

- **Traffic Restriction Signage**
  - The most straightforward traffic volume reduction strategy is signage restricting motor vehicle through movement

- **Choker Entrances**
  - Choker entrances are used to reduce motor vehicle volumes by restricting/constraining vehicle passage while allowing full bicycle passage to a boulevard

- **Stop Sign Placement**
  - At minor intersections, stop signs on bicycle boulevards should be placed on side street approaches in a way that favors through traffic on the bicycle boulevard

- **Median Traffic Diverters**
  - Median diverters restrict through motor vehicle movements while providing a refuge for bicyclists to cross in two stages
Greenway Wayfinding

In most situations two wayfinding signs are recommended in each direction at an intersection. These comprise a decision sign before the turn and a confirmation sign after the turn. In some situations it may also be useful to add turn fingerboards to provide clarity at complex intersections, or waymarkers to highlight routes.

The image to the right displays the typical configuration of wayfinding signs at a decision point with two intersecting bikeways. Each direction has a decision sign on the approach and a confirmation sign on the exit. In normal situations the default approach is to use two signs for each arm of an intersection. If one of the intersecting roads is not a designated bike route, signs would not be necessary along that street, and only confirmation signage would be necessary on the opposing street.

PAVEMENT MARKINGS

Pavement markings increase visibility of neighborhood bikeways and reinforce that cyclists are on a bicycle facility. The pavement markings also help direct riders through jogs in the route. Pavement markings vary widely by jurisdiction. Some communities develop unique, custom markings to reinforce the branding of the bikeway network. However, custom marking development does require FHWA experimentation approval or acceptance of increased municipal liability.

SHARED LANE MARKINGS

SLMs used on neighborhood bikeways should be applied using the same basic principles as any other street. The center of the marking should be a minimum of 4' from the pavement edge, or parking lane (if present). However, placing SLM in the center of the travel lane increases the life of the markings because there is less tire wear from motorists.
Health, Economic and Environmental Benefits

The chart below summarizes the health, environmental, transportation and economic benefits that could be realized through the implementation of the SRTG. These conservative estimates are presented as a range from low to mid to high. A more detailed explanation of these benefits is included in Appendix C.

<table>
<thead>
<tr>
<th></th>
<th>LOW ESTIMATE</th>
<th>MID ESTIMATE</th>
<th>HIGH ESTIMATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Trips</td>
<td>907,000</td>
<td>1,178,000</td>
<td>1,569,000</td>
</tr>
<tr>
<td>Annual Miles</td>
<td>1,269,000</td>
<td>1,648,000</td>
<td>2,195,000</td>
</tr>
<tr>
<td>Annual Hours of Physical Activity</td>
<td>127,000</td>
<td>165,000</td>
<td>220,000</td>
</tr>
<tr>
<td>Recommended Physical Activity Min. Met</td>
<td>977</td>
<td>1,269</td>
<td>1,692</td>
</tr>
<tr>
<td>Regional Physical Activity Need Met</td>
<td>2.27%</td>
<td>2.95%</td>
<td>3.93%</td>
</tr>
<tr>
<td>Healthcare Cost Savings</td>
<td>$41,000</td>
<td>$53,000</td>
<td>$71,000</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reduced Traffic Congestion Costs</td>
<td>$55,000</td>
<td>$72,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>Reduced Vehicle Crash Costs</td>
<td>$394,000</td>
<td>$512,000</td>
<td>$682,000</td>
</tr>
<tr>
<td>Reduced Road Maintenance Costs</td>
<td>$118,000</td>
<td>$153,000</td>
<td>$204,000</td>
</tr>
<tr>
<td>Household Vehicle Operation Cost Savings</td>
<td>$449,000</td>
<td>$583,000</td>
<td>$776,000</td>
</tr>
<tr>
<td>Environmental</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO2 Emissions Reduced (lbs)</td>
<td>1,192,000</td>
<td>1,549,000</td>
<td>2,062,000</td>
</tr>
<tr>
<td>Other Vehicle Emission Reduced (lbs)</td>
<td>26,000</td>
<td>33,000</td>
<td>44,000</td>
</tr>
<tr>
<td>Transportation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual VMT Reduced</td>
<td>788,000</td>
<td>1,023,000</td>
<td>1,362,000</td>
</tr>
<tr>
<td>Reduced Traffic Congestion Costs</td>
<td>$55,000</td>
<td>$72,000</td>
<td>$95,000</td>
</tr>
<tr>
<td>Reduced Vehicle Crash Costs</td>
<td>$394,000</td>
<td>$512,000</td>
<td>$682,000</td>
</tr>
<tr>
<td>Reduced Road Maintenance Costs</td>
<td>$118,000</td>
<td>$153,000</td>
<td>$204,000</td>
</tr>
<tr>
<td>Household Vehicle Operation Cost Savings</td>
<td>$449,000</td>
<td>$583,000</td>
<td>$776,000</td>
</tr>
<tr>
<td>Economic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Increase in Tourism Spending</td>
<td>$1,462,200</td>
<td>$1,462,200</td>
<td>$1,462,200</td>
</tr>
</tbody>
</table>

Note: Estimates reflect conceptual benefits that would be generated at given increases in walking use as if they existed in study area today. Values are rounded for readability. Values are not discounted and do not reflect future demographic growth, cost changes or other multiplier changes. Full explanation of results see Appendix A.
Permitting Requirements

This section outlines the permits that may need to be obtained to construct certain segments of the SRTG. Knowledge of the permitting requirements will be useful when choosing the best trail routing option. The need for one or many permits does not exclude the possibility of a trail, but it is better to anticipate the time and work involved in obtaining the permits in advance so the trail can be completed on schedule. The following is a summary of potential regulatory agencies and possible required permits for the completion of the Saranac River Trail Greenway.

NYS Adirondack Park Agency (APA)
Permit required for activities in or affecting wetlands and shoreline development, disturbance or vegetative cutting along lakes & rivers.

NYS Department of Environmental Conservation (DEC)
The Saranac River is a Class C waterway and does not fall subject to additional permits that would be required if it were a navigable waterway.

- Erosion and sediment control plan is required for trail construction. A storm water pollution prevention plan (SWPPP) is not required unless more than an acre is being disturbed in a non-linear fashion.
- *Wild, Scenic and Recreational Rivers Permit Program:* Trails are allowed with a permit in wild, scenic, recreational, and community areas.
- Protection of Waters Permit - Required for the installation of culverts or bridges, bank stabilization, fill or dredging.
- *Freshwater Wetland Permit:* Required if any class of wetlands is to be impacted by the proposed trail. NYSDEC maps all wetlands and files these with local counties. The APA maintains wetland mapping within the Park.

NYS Department of Transportation (DOT)
*Right-of-Way Work Permit:* Needed for work within State Highway ROWs including signage, sidepaths, and crossings.

Towns along the Saranac River may also have additional building or land use permits or approvals that may be required.

State Historic Preservation Office (SHPO)
Local historical societies, State Historic Preservation Office (SHPO) and the National Register of Historic Places will need to be contacted to find out if the proposed trail will have any impact on historical properties in the area. Once the trail locations are further identified, additional information can be provided on potential historic property impacts.

New York State Energy and Gas Corporation
All work proposed on NYSEG property or easements will require review and approval by NYSEG. Additional fencing or barriers will be required in areas adjacent to intakes for the dams located along the Saranac River.

United States Army Corps of Engineers (USACE)
Impacts to wetlands that do not fall under state, but federal jurisdiction, will require a permit from USACE. A wetland specialist will delineate on-site wetlands and prepare jurisdictional determination correspondence to both NYSDEC and USACE.

State Environmental Quality Review (SEQR)
A lead agency will need to be determined for the environmental quality review of each project as it is undertaken. This is typically the local municipality or the county, but can be a state agency. That lead agency will determine if the proposed action is Type II, unlisted, or Type I. Unlisted or Type I actions will require an environmental assessment form. The lead agency will request either a short or long environmental assessment form to be completed. At the conclusion of the review process, a positive or negative determination will be made by the lead agency.
Funding Sources

The following section outlines sources of funding for bicycle, pedestrian, and safe routes to school projects in New York State. Federal, state, local, and private sources of funding are identified. The following descriptions are intended to provide an overview of available options and do not represent a comprehensive list. Funding sources can be used for a variety of activities, including: planning, design, implementation, encouragement, and maintenance. Additionally, efforts within the City of Plattsburgh and Towns of Schuyler Falls, Saranac and Plattsburgh should be coordinated to take advantage of funding provided for other roadway projects, such as repaving and water/sewer main replacement to install bicycle and pedestrian accommodations. It should be noted that this section reflects the funding available at the time of writing. The funding amounts, fund cycles, and even the programs themselves are susceptible to change without notice.

Federal transportation funding is typically directed through state agencies to local governments either in the form of grants or direct appropriations, independent from state budgets. Federal funding typically requires a local match of 20%, although there are sometimes exceptions, such as the recent American Recovery and Reinvestment Act stimulus funds, which did not require a match.

The following is a list of possible Federal funding sources that could be used to support construction of many pedestrian and bicycle improvements. Most of these are competitive and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. However, it should be noted that the FHWA encourages the construction of pedestrian and bicycle facilities as an incidental element of larger ongoing projects. Examples include providing paved shoulders on new and reconstructed roads, or building sidewalks, on-street bikeways, trails and marked crosswalks as part of new highways.

Moving Ahead For Progress In The Twenty-First Century (MAP-21)

The largest source of federal funding for bicycle and pedestrian infrastructure is the US DOT’s Federal-Aid Highway Program, which Congress has reauthorized roughly every six years since the passage of the Federal-Aid Road Act of 1916. The latest act, Moving Ahead for Progress in the Twenty-First Century (MAP-21) was enacted in July 2012 as Public Law 112-141. The Act replaces the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU), which was valid from August 2005 - June 2012.

MAP-21 authorizes funding for federal surface transportation programs including highways and transit for the 27 month period between July 2012 and September 2014. It is not possible to guarantee the continued availability of any listed MAP-21 programs, or to predict their future funding levels or policy guidance. Nevertheless, many of these programs have been included in some form since the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991, and thus will be likely to continue to provide funds for active transportation projects and programs into the foreseeable future.

In New York State, federal monies are administered through the New York State Department of Transportation (NYSDOT) and metropolitan planning organizations (MPOs). Since there is no designated MPO for Clinton County, federal transportation dollars for the county are programmed directly by NYSDOT. Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing intermodal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system. There are a number of programs identified within MAP-21 that are applicable to bicycle, pedestrian, and safe routes to school projects. These programs are discussed below. More information: http://www.fhwa.dot.gov/map21/summaryinfo.cfm.
Transportation Alternatives

Transportation Alternatives Program (TAP) is a new funding source under MAP-21 that consolidates three formerly separate programs under SAFETEA-LU: Transportation Enhancements Program (TEP), Safe Routes to School (SR2S), and the Recreational Trails Program (RTP). These funds may be used for a variety of pedestrian, bicycle, and streetscape projects including sidewalks, bikeways, multi-use paths, and rail-trails. TAP funds may also be used for selected education and encouragement programming such as Safe Routes to School, despite the fact that TAP does not provide a guaranteed set-aside for this activity as SAFETEA-LU did. Unless the Governor of a given state chooses to opt out of Recreational Trails Program funds, dedicated funds for recreational trails continue to be provided as a subset of TAP. MAP-21 provides $85 million nationally for the RTP. Complete eligibilities for TAP include:

1. Transportation Alternatives as defined by Section 1103 (a)(29). This category includes the construction, planning, and design of a range of bicycle and pedestrian infrastructure including “on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety-related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990.” Infrastructure projects and systems that provide “Safe Routes for Non-Drivers” is a new eligible activity. For the complete list of eligible activities, visit: http://www.fhwa.dot.gov/environment/transportation_enhancements/legislation/map21.cfm

2. Recreational Trails. TAP funds may be used to develop and maintain recreational trails and trail related facilities for both non-motorized and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, equestrian use, and other non-motorized and motorized uses. These funds are available for both paved and unpaved trails, but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads. Recreational Trails Program (RTP) funds may be used for:
   - Maintenance and restoration of existing trails
   - Purchase and lease of trail construction and maintenance equipment
   - Construction of new trails, including unpaved trails
   - Acquisition or easements of property for trails
   - State administrative costs related to this program (limited to seven percent of a state’s funds)
   - Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a state’s funds)

3. Safe Routes to School: The purpose of the Safe Routes to Schools eligibility is to promote safe, healthy alternatives to riding the bus or being driven to school. Education and enforcement projects must be within two miles of primary or middle schools (K-8). Eligible projects may include:
   - Education Efforts: These programs are designed to teach children safe bicycling and walking skills while educating them about the health benefits, and environmental impacts. Projects and programs may include creation, distribution and implementation of educational materials; safety based field trips; interactive bicycle/pedestrian safety video games; and promotional events and activities (e.g., assemblies, bicycle rodeos, walking school buses).
   - Enforcement Efforts: These programs aim to ensure that traffic laws near schools are obeyed. Law enforcement activities apply to cyclists, pedestrians and motor vehicles alike. Projects may include development of a crossing guard program, enforcement equipment, photo enforcement, and pedestrian sting operations.
4. Planning, designing, or constructing roadways within the right-of-way of former Interstate routes or divided highways.

Average annual funds available through TAP over the life of MAP-21 equal $814 million nationally, which is based on a 2% set-aside of total MAP-21 authorizations. Projected apportionments for New York State total $25.8 million for FY 2013 and $32.7 million for FY 2014. Note that state DOT’s may elect to transfer up to 50% of TAP funds to other highway programs, so the amount listed above represents the maximum potential funding. To date, however, New York State has supported full funding of the TAP program. Remaining TAP funds (those monies not re-directed to other highway programs) are disbursed through a separate competitive grant program administered by NYSDOT. Local governments, school districts, tribal governments, and public lands agencies are permitted to compete for these funds.

Surface Transportation Program

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of bicycle and pedestrian improvements are eligible, including on-street bicycle facilities, off-street trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities. Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act (ADA) is also an eligible activity. Unlike most highway projects, STP funded bicycle and pedestrian facilities may be located on local and collector roads which are not part of the Federal-aid Highway System. 50% of each state’s STP funds are sub allocated geographically by population; the remaining 50% may be spent in any area of the state.

MAP-21 doubles the amount of funding available through the Highway Safety Improvement Program (HSIP) relative to SAFETEA-LU. HSIP provides $2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. MAP-21 preserves the Railway-Highway Crossings Program within HSIP but discontinues the High-Risk Rural roads set-aside unless safety statistics demonstrate that fatalities are increasing on these roads.

Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for non-motorized users in school zones are eligible for these funds. NYSDOT estimates that they will receive an average of $92.8 million annually for this program through the lifetime of MAP-21.

The programming of these funds is coordinated by NYSDOT. The Transportation Improvement Program is typically updated every 2 years.

Community Development Block Grants

The Community Development Block Grants (CDBG) program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal CDBG grantees may “use Community Development Block Grants funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.” Safe Routes to School projects that enhance accessibility are the best fit for this funding source. More information: www.hud.gov/cdbg

Additional Federal Funding

The landscape of federal funding opportunities for bicycle and pedestrian programs and projects is always changing. A number of Federal agencies, including the Bureau of Land Management, the Department of Health and Human Services, the Department of Energy, and the Environmental Protection Agency have offered grant programs amenable to bicycle and pedestrian planning and implementation, and may do so again in the future. For up-to-date information about grant programs through all federal agencies: http://www.grants.gov/
New York State Funding

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

Consolidated Local Street And Highway Improvement Program (CHIPS)

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

CHIPS funds are administered by local municipalities after they are apportioned to them by the New York State Legislature through the annual NYS budget process. These funds are then used to address necessary road improvements which are prioritized by the local highway department or department of public works in consultation with elected officials through a capital improvement program or other local budgetary structure. Many municipalities rely heavily on these funds for routine annual maintenance of local streets and such work is typically planned several years in advance. Local citizens should therefore contact their elected officials to begin a discussion as to how these funds may be used to address possible pedestrian and bicycle improvements in the future.

NYS Department Of Health- Preventative Health And Health Services (PHHS) Block Grant

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

Private Foundations

Private foundations are an increasingly important source of funds safe routes to school planning and implementation. More info: http://www.foundationcenter.org/

Operations & Maintenance

Maintaining the various sections of the SRTG will guarantee an enjoyable trail user experience. As new sections of the trail are constructed, a maintenance schedule should be established. The following chart describes the annual cost/mile for the eight trail types that will comprise the SRTG. A full summary of the maintenance tasks per trail type is included in Appendix B.

<table>
<thead>
<tr>
<th>OPERATIONS &amp; MAINTENANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trail Types</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>8</td>
</tr>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>B-1</td>
</tr>
<tr>
<td>B-2</td>
</tr>
</tbody>
</table>

*Costs were estimated at a ‘per mile per year’ basis, with the exception of wayfinding which was estimated for individual sign and marking replacement.
The operations of the Saranac River Trail Greenway should be integrated and operated as seamlessly as possible, offering citizens and visitors a first class system. Coordination and cost-effective management and function are essential. To help achieve a sustainable operations program, the following actions are suggested:

- The agencies should work together with a written ‘Owners Manual’ with a specific listing of all functions, frequency of tasks, and quality standards. This should be translated into an annual budget that anticipates build-out in five-year increments.
- The program must be cost-effective with sustainable funding sources identified.
- The elected bodies should designate an individual or committee to serve as liaison/advocate for the alternative transportation system.
- The program should have a discrete and adequate funding allocation for the off-street pathway system based on the program manual and annual budget.
- A lead person with trails development and management skills should be designated who will have management authority over the SRTG. A ‘contract’ should be established with the appropriate departments and/or outside private contractors as appropriate to carry out the various operations, management, and programming functions.
- The lead person should also work cooperatively with other department heads, non-profit and private sector partners, and agency staff to assure a coordinated effort amongst all of the alternative modes including: shared-use paths, sidewalks, on-street bicycling, and transit services.

With the full build-out of the Saranac River Trail Greenway, annual operations and programming could include the following responsibilities and tasks:

1. Special Events Planning
2. Volunteer Coordination
3. Environmental Education / Stewardship
4. Outreach Programming
5. Program Development
6. Safe Routes to Schools Coordination
7. Health and Fitness Coordination
8. Trail Patrol Coordination
9. Trail Patrol Staff/Volunteers
10. System Engineering/Planning

Guiding Principles for an Effective Operations Program

The following guiding principles will help assure the preservation of a first class system:

- Good maintenance begins with sound planning and design.
- Foremost, protect life, property, and the environment.
- Promote and maintain a quality transportation and recreation experience.
- Develop a management plan that is reviewed and updated annually with tasks, operational policies, standards, and routine and remedial maintenance goals.
- Maintain quality control and conduct regular inspections.
- Include field crews, police, and fire/rescue personnel in both the design review and on-going management process.
- Maintain an effective, responsive public feedback system and promote public participation.
- Be a good neighbor to adjacent properties.
The quality and condition of a shared-use path is essential to the long-term success of the project. System Maintenance refers to the care, upkeep and smooth functioning of shared-use paths. If the facility is well maintained and cared for, it will assure both the safety and enjoyment of the residents and visitors who use it. A proper maintenance program will reduce long-term costs by extending the life of the components, and it will also win the continued support of the residents, homeowners, and businesses.

Typical annual maintenance includes:

- Sweeping of the path after the spring snow pack melts
- Shoulder mowing and sweeping operations
- Periodic maintenance and repairs -including seal coating of path surfaces (approximately every 4-5 years on a rotating basis) striping, signage, benches, bike racks, and installation of safety fencing, safety signage, and devices, etc.
- Snow plowing and/or grooming for cross-country skiing
- Bridge maintenance
- Trash removal
- Tree and vegetation trimming
- Crack sealing and repair

### Facilities Maintenance

The SRTG maintenance program should maintain the following elements:

- Off-Street Shared-Use Pathways
- Natural Surface / Single Track Trails (part of a future integrated system)
- Trail-Related Corridors (landscaped and open space areas associated with trails and greenways, including streams and conservation areas)
- On-Street Bicycle Routes (bike lanes, bike routes, and streets used for biking)
- Trailheads
- Sidewalks
- Wayfinding Signage, Fixtures and Furnishings (on-street and off-street)
- Regulatory and Safety Signage
- Tunnels, Pedestrian Bridges, Underpasses, and At-Grade Street Crossings
- Trail-Related Parks and Features
- Access Parking and Maintenance Roads
- Rest Areas