Town of Moreau, New York

Big Boom Trail Concept Plan





PLANNING STUDIO SPRING 2015



Spring 2015 Studio Team

Kyle Simpson; Jeffrey Penzes; Mikaela Gerry; Ethan Gaddy; Sallam Al-Salami; Greg Talamini; Sandy Johnston; Desirae Mayo; Mohammed Al-Azawi; Matt Sousa

Faculty Advisor

Jeff Olson, R.A.

Acknowledgements

The Spring 2015 Studio Team would like to thank the following individuals and organizations for the help and assistance throughout the planning process: Robert Vittengl Jr; The Town of Moreau Town Board; Moreau Lake State Park; The Historical Society of Moreau and South Glens Falls; Reed Antis; and all residents who provided comments and feedback throughout the planning process. This project would not have been possible without the assistance of all parties involved.

Public Involvement Summary

The following details all public outreach undertaken throughout the planning process:

- Interactive project website launched February 2, 2015
- Online public survey (see Appendix A) March 4, 2015
- Project kick-off presentation at Moreau Town Board Meeting March 10, 2015
- Tabling at Moreau Lake State Park for public comment May 2, 2015
- Presentation of project findings and recommendations at Moreau Town Board Meeting May 12, 2015



Table of Contents

Executive Summary1
Purpose1
Structure1
Key Elements of the Big Boom Trail Concept Plan2
Methods and Process2
The Power of Cultural and Heritage tourism in Moreau4
The Heritage Behind the Big Boom Trail5
What would a heritage tourism-oriented Big Boom Trail look like?
Project Context
Project Area and Existing Conditions
Planning for Development
Informal Paths14
Project Process and Targets16
Project Process
Project Targets
Overview of Potential Routes
Route Assessment Matrix19
Route Assessment Summaries19
Concept Design Renderings
Wayfinding and Signage
Big Boom Trail Wayfinding Signage Examples32
Stakeholders and Potential Partners
Stakeholders



Potential Partner Organizations
Moving Forward
Next Steps
Integration with Existing Plans35
Appendix A: Survey
Appendix B: Big Boom Trail Concept Map
Appendix C: Moreau Lake State Park Expansion Press Release
Appendix D: References
Appendix E: Big Boom Trail Potential Opportunities/Challenges Map45
Appendix F: Town of Moreau Approved Pending & Speculative Developments
Appendix G: Town of Moreau Hudson River Trail Study47
Appendix H: Big Boom Trail Alternative Routes Map60
Appendix I: Route Assessment Analysis61
Appendix J: Grant Funding Sources73
Appendix K: Course Syllabus
Appendix L: Additional Geographic Information Systems Maps



Executive Summary

Purpose

For centuries, the Hudson River was the defining feature of life in what is today the Glens Falls region. Native Americans, colonial settlers, and immigrant industrial workers alike flocked to the water. For many years, the town of Moreau and the Village of South Glens Falls looked out over the river and saw a key piece of the region's industrial economy—the Big Boom. Organized by 19th-century logging barons, the Big Boom corralled logs that had been floated down the Hudson from the Adirondacks and organized them for processing in the region's mills. Today, the logging and papering economy has weakened, though it remains a large part of the region's identity and economic structure, and the Hudson has been largely neglected as part of the culture and identity of the Town of Moreau.

Today, Moreau has the opportunity to reconnect to the Hudson River—and to its history and heritage by building a multimodal trail network that grafts together new and existing infrastructure. The Big Boom Trail Concept Plan—named after one of the most important industrial features in the region presents a variety of options for trails within the corridor connecting Cooper's Cave in South Glens Falls, the Old Dike Road right-of-way bordering the Hudson in the Town of Moreau, and Moreau Lake State Park. Varying in length between 5 and 9 miles, the alternatives proposed here present different options for connecting important sites in the region and honoring the cultural heritage of the area.

This plan represents the final product of the Spring 2015 Planning Studio course at the University at Albany's Master's in Regional Planning Program. Over the course of the semester, a team of students sought to create a concept plan for a trail or trail system in the Town of Moreau, NY that would provide active recreation to the community, link the town to its history, and further the community's economic development efforts. The Concept Plan seeks not only to define the potential for building out a trail network within the Town of Moreau, but to link the town into existing regional trail and active recreation networks, while providing residents and elected officials in Moreau guidance on expanding and improving the existing multi-use trail system.

Structure

The Concept Plan is divided into four major sections. The **Introduction** provides details on the objectives of the plan, as well as background information on the Town of Moreau and its region. It also introduces the process by which the project came together, as well as laying out a set of goals for the plan. The **Regional Context** section covers the history of the Town of Moreau and its surroundings, as well as the importance of the several historic industries that have occupied the immediate trail study area. Linking the area's past to its future, as the proposed trail network is intended to do, the Regional **Context** section concludes with a profile of the Town of Moreau as it exists today. The **Potential Routes** section is the nitty-gritty heart of the plan, placing the proposed ideas into the context of pre-existing plans and providing an extensive comparative analysis of the various possible build alternatives. The **Moving Forward** section provides important information about how the town can move forward with whatever



steps it chooses to take, including identifying potential partners at all levels of government and a wide variety of possible funding sources.

Key Elements of the Big Boom Trail Concept Plan

The Town of Moreau has the potential to become one of the Capital Region's primary links in what could become one of the top multi-use trail networks in the country. The Hudson River has long been the unifying feature of the region; however, over the past half-century changes in transportation have disconnected residents from the surrounding natural features. Route 9 and Interstate 87 now serve as the primary transportation and commercial corridors for Moreau, creating opportunities and challenges for the development of a comprehensive trail network. The Big Boom Trail Concept Plan provides a guide to these challenges and opportunities.

Existing resources provide a solid foundation upon which to build. Approximately 2,740 feet of right-ofway extending southwest from Nolan Road on the Hudson is already established and can serve as a trailhead and key connector. There is great potential for linking this segment to the Betar Byway, the showpiece of the town's existing trail network. Connecting the Betar Byway and the South Glens Falls Bike Trail to a new trail extending westward will bring more of the community into easy range of active recreation and broaden the primary area of impact for the trail system.

The Concept Plan also provides options for improving pedestrian and bicycle access to two key public institutions, Tanglewood Elementary School and South Glens Falls Senior High School. Current conditions for pedestrian and bicycle access to the schools are suboptimal; linking them to a Town-wide (and indeed, region-wide) multimodal trail network can give kids a safe trip to school, reduce traffic congestion, and get kids and parents alike moving. As identified in the Potential Routes section, there is significant opportunity to maximize the utility of existing public assets by using school lands for trails.

The Concept Plan also identifies linkages to Moreau Lake State Park as a key element of the potential local and regional trail network. Moreau Lake State Park is a key regional asset for tourism, outdoor recreation, and active recreation, and the Big Boom Trail concept provides an opportunity to link the community of Moreau to this established resource. Using the historic Old Dike Road right-of-way along the Hudson River, a connection to Moreau Lake State Park would re-introduce citizens to the waterfront as well as to locally historic sites, reconnecting citizens of and visitors to the town to an area that was integral in the development and history of their community.

Methods and Process

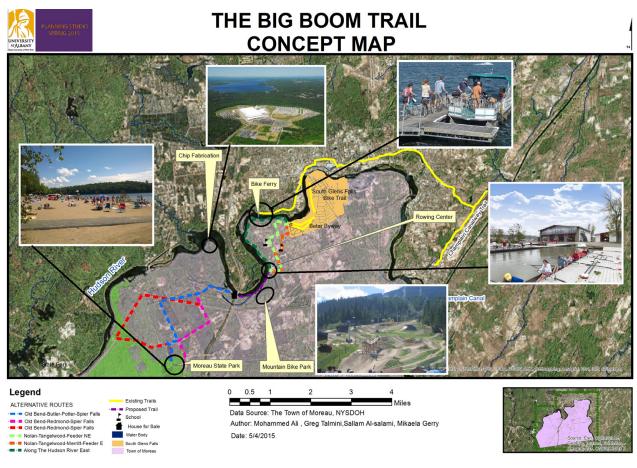
The Studio team used a wide variety of planning methods in the creation of this Concept Plan. Methods used included, but are not limited to,

- Document-based research into local history, field observation of existing trail use
- Dialogue with local stakeholders
- Review of past town, county and regional recreation plans
- Collection and mapping of data using Geographic Information Systems (GIS)



 Publicizing the trail concept, including public presentations before the Town of Moreau Board, at Moreau Lake State Park, and at the American Planning Association's Northeast Regional Conference (scheduled for June 2015)

This plan includes a list of six potential trail routes, all which have been evaluated and given a grade based on a comprehensive set of criteria that incorporate industry standards and best practices for community trail development. Recommendations are made for how the community of Moreau can take the concepts laid out in this plan and begin the process of educating the community and gathering the necessary feedback to put together a final master plan that will direct the future of multi-use trail development throughout the community for the foreseeable future.



See Appendix B for larger version of map



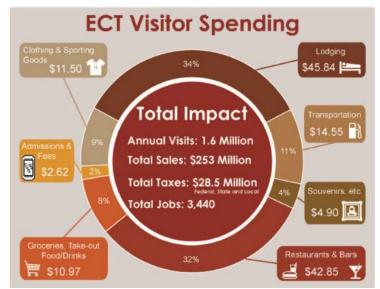
The Power of Cultural and Heritage Tourism in Moreau

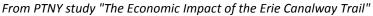
Cultural and heritage tourism is a well-recognized and growing subset within the field of economic development. A landmark 1995 White House white paper defined cultural and heritage tourism as "travel directed toward experiencing the arts, heritage, and special character of a place," and the practice of trying to attract this kind of tourism has spread since then. Cultural and heritage tourism, though, is not just a method for communities to attract tourist dollars and develop economic activity; it is a way to recognize, honor, and make prominent an area's history and cultural legacy. The Big Boom Trail project offers strong potential to help the Town of Moreau and the Village of South Glens Falls leverage their historic legacy and cultural inheritance into a future that both honors the past and assists the community as it transitions to a new future.

Cultural and heritage tourism is a potent economic force. As consultant Cheryl Hargrove wrote in 2002, "People who engage in historic and cultural activities spend more, do more, and stay longer than other types of U.S. travelers." (Hargrove 2002) This kind of tourism is particularly popular with retirees and families, two key tourism constituencies. Above all, heritage tourists seek authenticity—they are looking

for a real experience, one that connects them to the past while feeling natural rather than contrived or manufactured. Indeed, "That search for authenticity gives communities a chance to honor their history by presenting it as it happened, rather than transforming it to suit consumer preferences.

The benefits of this kind of tourism can be seen right here in New York State. Upstate is rich in historical resonances, from the Dutch heritage of Albany and the Hudson Valley to women's' history in Seneca Falls and the industrial legacy of Syracuse, Rochester, and Buffalo. But





perhaps the most powerful cultural legacy in the Upstate region is that of the Erie Canal. The canal of course powerfully shaped the fates of the communities along it, and it remains a powerful economic force even today, used as it is more for recreation and tourism than for commercial activity. A 2014 study by Parks & Trails NY estimated that the Erie Canalway Trail—a biking and hiking path that is now approximately ¾ complete—attracted approximately 1.6 million visitors to the corridor, generating \$253 million in sales, \$28.5 million in taxes, and 3,440 total jobs.

The Erie Canalway Trail mixes cultural and heritage tourism and outdoor recreation—a potent combination that attracts large numbers of visitors from all over the country (and indeed the world), many of whom tend to spend significant sums of money. And best of all, all that communities seeking to bring in this kind of activity need do is be themselves. Visitors looking for an authentic cultural



experience coupled with an outdoors recreation component seek little more than a community that is confident of its own heritage, safe routes of passage for pedestrians and bicyclists, and signage and explanations that connect what they see today to what happened in the past.

We believe that the model of mixing cultural and heritage tourism and outdoor recreation can be a powerful one for the town of Moreau. Moreau offers beautiful scenery along the Hudson River and significant historical resources. What, exactly, are those resources, and how can they be included in a plan that can honor the town's history while building a robust outdoors and heritage experience?

The Heritage Behind the Big Boom Trail

The Big Boom Trail offers a unique opportunity to tell the story of the several interconnected industries that have powerfully shaped the economic past, present, and future of the town of Moreau, the village of South Glens Falls, and the wider region. Reaching from Moreau Lake State Park to the Champlain Canal, the study area for the trail passes infrastructure—both remnant and operational—that will remind users of the then-and-now of the logging, papering, and hydropower industries.

The trail study is, of course, known as the Big Boom Trail, and it is with that piece of logging



Logs backed up behind the Big Boom, sometime in the late

19th century.

infrastructure that this history of the area's industry will begin. The logging and lumber industry has long held a key role in the economy of the Glens Falls region—including the town of Moreau and the village of South Glens Falls. From the very early 19th century, trees cut in the Adirondacks were "driven" floated and portaged—down the Hudson to the mills at Glens Falls.

In time, it became clear that the various mills operating in Glens Falls would need a way to corral the logs being sorted for processing. In 1849, the millers and loggers organized the Hudson River Boom Association and began operation of the "Big Boom" 3 ½ to 4 miles upriver from the major mills at Glens Falls, at a hairpin bend in the river. Long, solid logs

harvested from old-growth timber accumulated behind the boom, waiting to be transformed into furniture, wagons, and whatever else industry demanded.

By the late 19th century, the solid first-growth timber had been largely exhausted from the forests, and as the Adirondack logging industry shifted, so too did the purpose of the boom. The Glens Falls industry was moving towards paper-making, which could use smaller, lower-quality logs. Finch Pruyn, then as now one of the area's leading employers, led the charge into paper, converting to mainly paper



operations in 1904. Finch Pruyn, whose mill straddles the Hudson in South Glens Falls, continues to be a



A 1947 aerial picture, provided by historicaerials.com, shows logs backed up behind the boom in its last years.

major part of the US paper market to this day. In the papering era, the Boom was used to corral smaller, shorter logs, the standard being around four feet in length. While the wood was regarded as being of inferior quality during the papering era, the sheer volume of logs made the industry a valuable contributor to the regional economy.

Times, though, would change. As new, paved roads opened up the Adirondacks, and New York State's attitude toward the mountains changed, the practice of skidding logs down the Hudson—and therefore the boom declined in importance. The last Hudson River log drive occurred between 1947 and 1954, and the Big Boom went out of operation around the same time, but much of the

supporting infrastructure remained. And, of course, the paper industry simply shifted to other methods of delivery, and endures to this day.

One element of the Hudson River industry endured, though—the harnessing of the river's strength for hydroelectric power. Glens Falls mill owners had constructed an elaborate system of dams to tame the river, sort logs, and provide power to industry going far back, but major spring floods endured as late as the early 20th century. The landmark Spier Falls Dam, completed between 1900 and 1903 on the border between the towns of Moreau and Lake Luzerne, not only helped to calm the river, but generated enough electricity to power tens of thousands of homes in the Glens Falls metropolitan area and Saratoga County. Today, Spier Falls and several other dams in the area continue to provide hydroelectric power to the area, and the transmission lines that feed the national electric grid from their generators crisscross the local towns. Truly, hydropower deserves its place in the list of prominent regional industries alongside logging and papering.

Much of the infrastructure that supported (and continues to support) all three of these industries is visible from the route of the proposed Big Boom Trail. The trail would begin by reviving a segment of road along the southern bank of the Hudson once known as Old Dike Road, connecting what are now the ends of Nolan Road and Old Bend Road in the Town of Moreau. This historic segment of road was used for maintenance access to the Big Boom, as well as for overland haulage of logs to mills in Fort Edward along what is now Bluebird Road, and was abandoned around the time logging drives ceased



because of its tendency to flood (reduced, but not eliminated, by the introduction of dams on the Hudson!) and high maintenance costs.

Reviving Old Dike Road—and the rest of the proposed Big Boom Trail options represents a powerful connection to the history of Moreau and the broader region. Connecting residents and visitors alike to the industrial history of the area, a history that continues to shape the local economy even to this day, represents the best principles of heritage tourism. And combining the heritage component with a first-class outdoors recreation experience based on the beauty of the Hudson River and the potential to connect to numerous regional biking and



A representative historical sign along the Cynwyd Trail outside Philadelphia.

hiking facilities offers an even more potent combination. Visitors would be able to see first-hand the remains of the former logging operations at the Big Boom, and connections to the existing Betar Byway and South Glens Falls Bikeway would allow a journey from the future to the present, as visitors would exit the path in view of the ongoing operations at the Finch-Pruyn mill.

What would a heritage tourism-oriented Big Boom Trail look like?

It is common practice to introduce explanatory historical signage in corridors designated for heritage tourism. In the case of the Big Boom trail, this would likely include signage with historic images of the area, especially of the time when the Big Boom was itself in operation. In many cases, signage can be lined up exactly with contemporary views, so that visitors can transfer their vision directly from the historic to the existing view. This can be an incredibly powerful experience.

Signage can also tell the stories of the numerous workers who spent—and sometimes lost—their lives working on the Big Boom and in the logging industry more generally. This can expand into a larger heritage project, as trail planners could reach out to local families to request family histories and stories of ancestors who had worked in the industry. After all, the best and most authentic historical experience is that which involves storytelling from numerous backgrounds.

Perhaps the most exciting aspect of the larger Big Boom Trail corridor is the potential to connect Moreau Lake State Park, a 4,600 acre park that was just expanded by 750 acres (see Appendix C), to the Cooper's Cave area in South Glens Falls on the east, with further connections available to the Feeder Canal Trail, Warren County Bikeway and Champlain Canal Trail. These connections make it possible to present a trip along the trail as a voyage through history. Signage along the trail could cover, in a particular numbered order, the natural, cultural, and industrial heritage of the area, making for a coherent user experience covering the entire length of the trail. More information on signage can be found in the wayfinding section of the report (see Appendix D for chapter references).



Project Context

County	2000 Population	2010 Population	% Change
Saratoga	201,570	219,962	(+) 9.1%
Warren	63,364	65,677	(+) 3.7%

Source: U.S. Census Bureau 2000 and 2010

Town	Land Area (sq. mi.)	Water Area (sq. mi.)	Total Area (sq. mi.)	1980 Census Population	1990 Census Population	2000 Census Population	2010 Census Population
Moreau	42.163	1.447	43.61	11,188	13,022	13,826	14,728

Source: Capital District Regional Planning Commission

Located in Northern Saratoga County along the shores of the Hudson River, the Town of Moreau sits along one of the most significant historic travel routes in the country. Natives and early settlers, heading north up the Hudson from present day New York City would portage from Moreau to Lake George and continue up Lake Champlain to the St. Lawrence River.

Moreau's situation between the growing cities of Saratoga Springs and Glens Falls at the foothills of the Adirondacks still offers an incredible locational advantage. Easy access to Interstate 87 and Moreau's proximity to both natural and economic resources insure the towns continued development.

Intense public and private investments in high-technology research and manufacturing are growing due to New York States commitment to developing "Tech Valley"- the East Coast's answer to Silicon Valley. As communities in the region compete to attract businesses, residents, and investments while improving the level of services and quality of life of current residents they're exploring creative ways to leverage existing local assets. Communities up and down the Hudson have partnered with the state and not-for-profit organizations to develop historic and recreational facilities along their previously industrial Hudson River-fronts. Projects to develop multi-use trails, historical interpretation and recreation facilities along the Hudson achieve community goals and find ample financial support on the state and federal level. With improvements to existing trails, the Town of Moreau will be able to connect to an impressive regional trail network. Trails connecting Moreau's riverfront to Moreau Lake State Park to the west, Warren County Bikeway to the north, and the Champlain Canalway Trail to the east would allow users to enjoy miles of off-road trail access.



Project Area and Existing Conditions

The Hudson River has long been the unifying feature of the region. Before Route 9 and Interstate 87, the Hudson River served as the primary transportation and commercial corridor for Moreau. Over the past half-century, changes in technology and transportation have disconnected residents from the Hudson River. Industrial contamination and automobile dependency have led communities to neglect their waterways. But attitudes are shifting towards reconnecting with the rivers that shaped our past. The river remains as a constant reminder of our history and heritage.

Approximately 2,740 feet of the trail extending southwest from Nolan Road has already been graded and cleared, and leads through a private camping site before terminating. Most of the land along the Alta proposed trail alignment beyond that point is heavily wooded, uneven, and occasionally very narrow. At its narrowest, the trail base is about 10 feet wide and serves as a berm between the Hudson River and adjacent wetlands.

Parcel ownership and use is another consideration. The Town of Moreau, Excess Land LLC, and Erie Boulevard Hydropower control the bulk of the land along the trail corridor. Wetlands, forest land, and designated landfills make up the majority of the existing uses. Although three large parcels owned by the Town of Moreau are designated as landfills, only the parcel furthest east (and a small corner of the adjacent parcel) currently contains any actual fill. The trail alignment is protected from existing landfill by forest land, and state-regulated freshwater wetlands make up the bulk of the two western parcels that are nominally assigned for landfill. This wetland designation will likely prevent further encroachment of fill in the direction of the trail. The DEC Wetlands Overview map is a DEC-generated map of the area's wetlands has been provided for reference.

An opportunity for greater accessibility exists in relation to the Betar Byway. Currently an informal dirt path exists off of East Road, which is situated between an undeveloped parcel and an existing residence. This provides the prospect for an easement to formally connect East Road to the Betar Byway when the existing lot is developed.

Another opportunity for greater accessibility exits in relation to the connection point between the Betar Byway and the South Glens Falls Bike Trail. Currently these two trails have no distinctive connection rather only an informal linking by a roadway.

An opportunity also exists to provide bicycle and pedestrian connections to the two public schools, Tanglewood Elementary and South Glens Falls High School, along Nolan Road that currently lack any bicycle or pedestrian facilities. Beyond providing students to these schools a safe place to walk and bike, there is potential to use school land for alignment of a trail.

According to New York State Department of Transportation (NYSDOT) Average Annual Daily Traffic (AADT) data, Tanglewood Drive has a daily average of 886 vehicles; Feeder Dam Road between Tanglewood Drive and Saratoga Road (State Route 9) has a daily average of 3,287 vehicles; Nolan Road

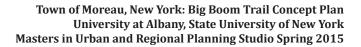


between Tanglewood Drive and Saratoga Road (State Route 9) has a daily average of 2,062 vehicles; and Saratoga Road (State Route 9) through the Town of Moreau has a daily average of 12,498 vehicles.

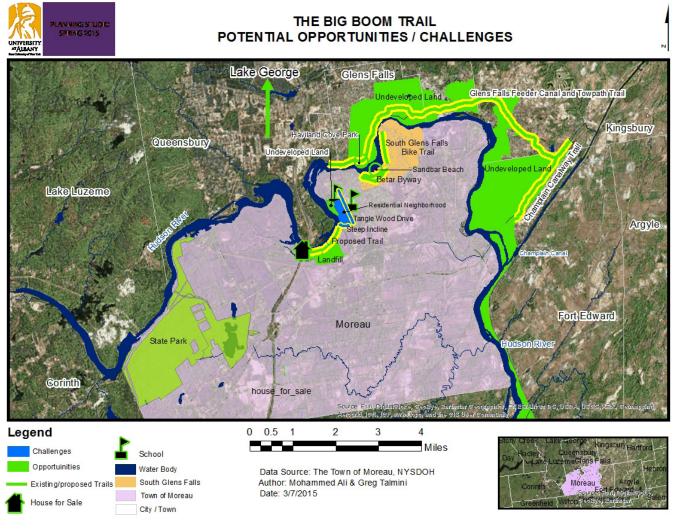
Additionally, another significant opportunity exists when connecting the Alta proposed trail alignment to Moreau State Park to the west; the connection of the county forest of approximately 140 acres located in the area of Redmond and Butler Road. Opportunity for trail implementation also exists along town roadways that have an average right-of-way of 45-50 feet of which an average of only 20-22 feet is currently in use.

The biggest opportunity that exists is centered on trail-oriented economic development. There are examples all across the country where the construction of a multi-use trail created substantial economic development including but not limited to the Razorback Regional Greenway, Great Allegheny Passage, Elroy-Sparta Trail, the Erie Canalway Trail, and the Burlington Bike Path. While the specific economic development spurred from each trail differs, development often includes new brew pubs, bike shops, café/coffee shops, bed and breakfasts, restaurants, and other supporting businesses. Trails are also often a significant selling point for new and existing homes sales.

Opportunity exists within the Town of Moreau for not only economic development, but also for other outdoor sport and recreation to be coupled with the trail. Great potential exists for a rowing center, with excellent water conditions in the Hudson River for rowing. Regattas in Saratoga Springs and Boston draw tens of thousands of visitors, a market that Moreau could easily tap into with the right facilities. Other recreational opportunities exist with the formation of mountain bike trails within town and county land, as well as a bicycle ferry across the Hudson River connecting the Big Boom Trail to existing trails to the north and east.







See Appendix E for larger version of map



Planning for Development

The Adirondack/Glens Falls Transportation Council's (AGFTC) 2014 report "Exit 17/US Route 9 Corridor Land Use and Transportation Study," explores the amount of possible new residential and commercial development along the Route 9 corridor.

Study of projected growth rates and current zoning regulations shows that highly concentrated residential development could occur within one mile of the potential routes of the Big Boom Trail (see Appendix F).

The AGFTC report provides "full build" and "reduced build" projections for the area. Full build scenario would result in 12 million square feet of commercial development and approximately 900 residential units. Reduced build scenario, a more realistic projection, would result in 500,000 square feet of commercial development and 250 residential units.

Statistical modeling shows that residents of single-family homes are willing to pay a premium for access to regional trail networks. For example, a typical (median priced) single family home in Mecklenburg County, North Carolina increases in value by \$3,200 if it is within 5,000 feet of the greenway (Campbell and Monroe, 2007). Commercial businesses values raise considerably as well.

By applying Campbell and Monroe's model to Moreau's build out potential there can be some general estimates of the impact of increased property values of new single family homes within a mile of the Big Boom Trail as defined in Appendix F.

(Median Home Value in Moreau + Regional Trail Access Premium)*(Full Build-out Potential)*(Property Tax Rate)*(25 Year) = **\$238,010.54**

(Median Home Value in Moreau + Regional Trail Access Premium)*(Reduced Build-out Potential)*(Property Tax Rate)*(25 Year) = **\$66,114.04**

These estimates are for the increased value of new single family residences and do not account for the increased property values of existing properties. Additionally, the estimates also do not account for the increased property values new commercial development along the Big Boom Trail. Actual increases in property tax revenues would be significantly larger.

While these numbers are general estimates, the Town of Moreau should approach developing the Big Boom Trail as a property tax generator capable of paying for itself without raising the Town level property tax rate. 50 year estimates of full potential build out would result in an additional \$476,021 of property tax revenue.

The Town of Moreau should also consider the positive effects of multi-use trails on job creation and business location. New York and the Adirondack Regional Chamber of Commerce launched their Adirondack Craft Beverage Trail and Map initiative in 2014.



Already 30,000 maps have been distributed in an effort to bolster small businesses and create a regional identity. Moreau sits square in the middle of the Adirondack Craft Beverage Trail Map, building the Big Boom Trail would ensure Moreau's position at the center of the growing craft beverage industry.

As the Town of Moreau continues its ongoing economic development efforts, integrating the Big Boom Trail and further analysis of its potential will be important for the community's future.





Informal Paths

Informal paths are unplanned, unofficial trails created by years of use that serve as indicators of the preferred routes of walkers. Observing and cataloguing the existence of such paths makes planning trail improvements easier. However, informal paths can prove difficult to incorporate into trail systems since they utilize property from a variety of owners. Sensitivity to current landowners is essential.

The approved developments along North Road/Feeder Dam Road and Pruyn Crest will eventually create between 112-137 single-family homes directly along the Big Boom Trail. These developments will benefit from connections to the Upper Betar Byway via East Road and safe routes to schools along Tanglewood Drive (see page 24 for rendering of the transition of East Road from informal path to multi-use trail).

Informal paths between Lamplight Acres, the Jennifer Drive apartment complex and Butler Road indicate that residents have already established a basic trail network. Formalizing and maintaining these trails will strengthen residents' connection with the Big Boom Trail.

In South Glens Falls, informal paths connect the Upper Betar Byway to the Kingpin's Alley parking lot and Hannaford Supermarket. The trail is currently unmaintained, making travel difficult if not impossible for those with impaired mobility. By plowing and clearing the trail residents will have a safe route to necessary retail and entertainment establishments without having to drive.



Informal path to the boat launch



Informal path on Jennifer Drive

The AGFTC's top demographic priority in their 2013 Long Range Plan is to, "continue to promote biking, walking, and transit use within the urbanized area and near employment centers." Based on their demographic research, providing alternative transportation modes for both the young and old is increasingly important. By, managing informal trails Moreau can make alternative modes of transportation safe and available to elderly residents uncomfortable driving a car.



Moreau needs to fully inventory existing informal trails. This could be accomplished with citizen input via smartphones and online survey platforms (see page 34 "Moving Forward"). Proactively securing easements in presently undeveloped land and maintaining current informal paths in areas of predicted growth will facilitate easy, and less expensive regional trail expansion in the future.



Project Process and Targets

Project Process

Over the course of four months, Studio participants have employed a variety of methods to create the Concept Plan. The plan authors have used typical planning methods and best practices that include the following:

- o Collecting and mapping data using Geographic Information Systems (GIS)
- o Researching local history through documents, interviews and desktop research
- o Conducting information sessions with the Town of Moreau
- O Photographing and documenting existing trail conditions
- o Launching an interactive website (bigboomtrail.wordpress.com) for public information and input
- o Identifying potential funding opportunities and partner organizations
- o Creating a list of potential trail routes
- o Enhancing photos for conceptual renderings of trail
- O Developing a framework for a comprehensive historical wayfinding and signage scheme
- 0 Field observation of existing trail use
- o Review of past town, county and regional recreation plans

Having applied all of these methods, a series of achievable targets for the trail development effort were identified. These targets will help guide Moreau policymakers in their decisions as to which aspects of the Concept Plan to adopt. They also provide a basic list of benefits of the trail project that can be passed on to stakeholders and citizens in the interests of education.

Project Targets

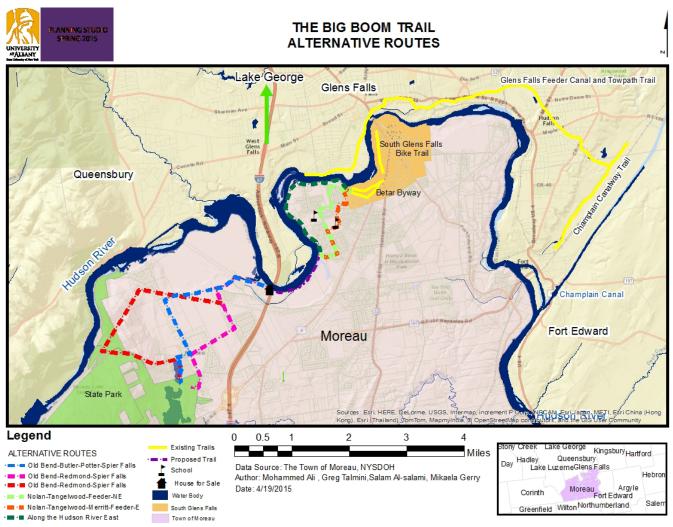
Throughout the development of the concept plan the following targets served as a guide to ensure that the plan adequately met what was identified as the primary needs of the community. These project targets can serves as both short and long term goals of a truly comprehensive multi-modal trail plan for the Town of Moreau and neighboring municipalities.

- Provide trail connections between the Betar Byway and Moreau Lake State park.
- O Provide bicycle and pedestrian accommodations to Tanglewood Elementary School and South Glens Falls High School.
- Increase access and recreational opportunity along the Hudson River for the residents and visitors of Moreau.
- Provide connections to and help expand the regional trail network.
- o Connect residents and visitors with the unique natural, cultural and historic assets of their town
- Provide guidelines for development of a consistent signage and way-finding theme for all trails in Moreau.



Overview of Potential Routes

Assuming the eventual integration of the towpath along the Big Boom as identified in the Town of Moreau Hudson River Trail Study (see Appendix G), there are two separate areas of study. These include connections between East Road and Nolan Road, along with a connection between Old Bend Road and Moreau Lake State Park. For each study area three different alternatives were explored, resulting in a total of six alternative routes. The factors selected to evaluate alternatives are extremely important and reflect the values and perspectives of the trail development program. Because these criteria reflect different objectives, they are not consistent with each other: an option that may rank high on one objective may have a low rating for another. For example, one alternative may offer a superior trail user experience, but might involve acquisition of private property over the objection of property owners. The result is that the trail project, while desirable from one perspective, would be challenging from another. In the case of trail development, the most feasible alternative often represents the best balance of different attributes. Ten evaluative criteria have been defined and the six alternative routes have been rated on a scale of zero to ten, zero representing a low-rating and ten representing a high rating, with a total feasibility score out of one hundred determined by the summation of the selected criteria.



See Appendix H for larger version of map



Connectivity: A high-rated option connects relatively directly and naturally to key destinations and existing trail networks, without unusual structures, difficult passages, or gaps. A low-rated alternative would not be direct or natural in its connection to key destinations and existing trail networks and additionally it may require unusual structure, contain difficult passages, or leave gaps in the network.

Directness: A high-rated option goes from endpoint to endpoint directly, with little or no misdirection. It is not necessary for the route to travel in an absolutely straight line, but users should feel they are progressing toward the destination. A low-rated option is indirect to the point of frustrating users, or takes them far out of the way to provide a safe passage.

Experience/Access to the Hudson: A high-rated option will offer users a positive experience, consistent with or above expectations, providing a scenic route free of stress and conflict and access to the Hudson River. A low-rated route is unpleasant, noisy, and unattractive, with conflicts and stresses that produce a neutral or negative experience.

Implementation Time Frame: A high-rated option is simple and economical enough to be fully realized within a realistic period of time, or developed as part of transportation projects that are certain enough that trail completion is highly likely. A low-rated option depends on very long-term or highly speculative projects or funding.

Opportunity for Funding: A high-rated option is eligible for funding from multiple sources, including other associated projects such as major street improvements, or fits within the structure of funding and resources that are relatively typical for the metropolitan area. A low-rated option depends on funding secured for the trail alone.

Safety and Security: A high-rated route is perceived as safe, provides visual contact without compromising the quality of the trail environment, has relatively good emergency access, and provides a facility free of traffic hazards. A low-rated route passes through environments that feel insecure, may be remote and inaccessible in emergency situations, or includes potential hazards.

Neighborhood Service: A high-rated route provides convenient access to existing or future residential areas and desirable support services. A low-rated route is separated from adjacent populated areas, and does not provide opportunities for future support services.

Ease of Acquisition: A high-rated option is relatively easy to acquire; part of another, non-trail project; makes extensive use of public land or easements; or is owned by property owners who support trail development or believe that a trail serves their self-interest. A low-rated alternative is difficult to assemble and requires involuntary acquisition, or is likely to generate considerable concern and possibly opposition.

Cost and Constructability: A high-rated option uses standard trail sections for most areas, with minimum need for special structures, difficult grading, or remediation of surface conditions. A low-rated alternative includes obstacles that require special structures or solutions that add considerable cost.



Diversity of Users: A high-rated route serves a wide variety of user groups and capabilities. A low-rated route has characteristics that limit the number of users and does not accommodate people of varying capabilities.

Route Assessment Matrix

	East Rd to Nolan Rd			Old Bend to Moreau Lake State Park		
Attribute	Dark Green	Light Green	Orange	Blue	Pink	Red
Connectivity	5	8	7	8	9	7
Directness	10	8	7	9	9	6
Experience/Access to Hudson	10	4	4	4	5	6
Implementation Time-frame	2	9	7	10	8	6
Opportunity for Funding	10	7	7	7	7	7
Safety/Security	7	6	6	8	9	5
Neighborhood Services	0	7	6	8	8	9
Ease of Acquisition	1	9	7	9	8	4
Cost & Constructability	1	5	6	9	10	4
Diversity of Users	8	6	6	6	6	7
Total Feasibility	54	69	63	78	79	61

Route Assessment Summaries

Dark Green Route	
Distance	
On Road	0 Miles
Off Road	2.6 Miles
Cost*	\$791,420
Number of Parcels involved	24
Residential	1.6 Miles
Public	0.10 Miles
Private	0.90 Miles
Traffic Flow*	Very Low
Route Description (From project area to Betar Bikeway)	This alternative would not follow any currently existing roads. It would begin at the end of Nolan Road, and move east along the Hudson River's bank, ultimately connecting with the Betar Bikeway.



Light Green Route	
Distance	
On Road	1.9 Miles
Off Road	0 Miles
Cost*	\$580,020
Number of Parcels involved	148
Residential	1.4 Miles
Combined Public/Private Ownership	0.5 Miles
Traffic Flow*	Medium, due to moderate traffic counts on Feeder Dam Road.
Route Description (From project area to Betar Bikeway)	East on Nolan Road, North West on Tanglewood Drive, East on Feeder Dam Road, North on Hudson Drive, East on North Road

Orange Route	
Distance	
On Road	2 Miles
Off Road	0 Miles
<u>Cost*</u>	\$612,020
Number of Parcels involved	101
Public	0 Miles
Private	2 Miles
Traffic Flow*	Low, Predominantly low speed residential roads. Where available, traffic counts suggest roads are moderately busy.
Route Description (From project area to Betar Bikeway)	East on Nolan Road, North West on Tanglewood Drive, West on Elmwood Drive, North on Merrit Road, East on Fuller Road, North on East Road



Blue Route	
Distance	
On Road	3.7 Miles
Off Road	0 Miles
Cost*	\$1,127,130
Number of Parcels involved	81
Forest	6 Parcels
Residential	72 Parcels
Municipal Park	1 Park
State Park	1 Park
Vacant Rural Land	1 Parcel
Traffic Flow*	Low, where counts are available.
Route Description (From project area to Moreau Lake State Park)	West on Old Bend Road, Continue West on Butler Road, South East on Potter Road, West on Spier Falls Road, South along Eastern Edge of Moreau Lake

Pink Route	
Distance	
On Road	3.4 Miles
Off Road	0 Miles
<u>Cost*</u>	\$1,034,220
Number of Parcels involved	60
Residential	55 Parcels
County Forest	5 Parcels
Combined Public/Private Ownership	3.25 Miles
Public	0.15 Miles
Traffic Flow*	Low, where counts available
Route Description (From project area to Moreau Lake State Park)	West on Old Bend Road, South East on Redmond Road, West on Easement, South East on Potter Road, South on Mountain Road



Red Route	
Distance	
On Road	1.27 Miles
Off Road	4.50 Miles
Cost*	\$1,761,860
Number of Parcels involved	61
Public	2.78 miles
Private	3.02 miles
Traffic Flow*	Medium, roads involved have low traffic counts where data is available. Average speeds are roughly 50mph. Multiple road crossings.
Route Description (From project area to Moreau Lake State Park)	West on Old Bend Road, South on Redmond Road, North West on Easement, Cross Butler Road, North West on Easement, Cross Potter Road, South West on Easement, Cross Spier Falls Road, East on Easement, Cross Spier Falls Road, East on Easement, Cross Spier Falls Road, South along Eastern Edge of Moreau Lake

*See Appendix I for further route assessment analysis.



Concept Design Renderings

Potter Road looking east. Connection to Moreau Lake State Park



Before



After



East Road looking east at improved connection to Betar Byway



Before



After



Old Dike Road looking east along the Hudson River



Before



After



Beach Road looking north at improved connection between the Betar Byway and South Glens Falls Bikeway



Before



After



Tanglewood Drive looking north along South Glens Falls High School



Before



After



Old Dike Road looking west along the Hudson River at the end of Nolan Road



Before



After



Under I-87 looking west, Hudson River to the immediate north

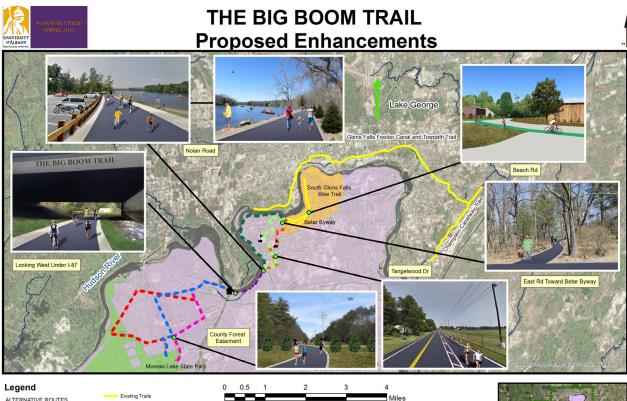


Before



After





ALTERNATIVE ROUTES ALLERNATIVE ROUTES Old Bend-Butter-Potter-Spier Falls Old Bend-Redmond-Spier Falls Old Bend-Redmond-Spier Falls Nolan-Tangelwood-Feeder NE Nolan-Tangelwood-Merritt-Feeder E Nolan-Tangelwood-Merritt-Feeder E

Proposed Trail School House for Sale Water Body South Glens Falls Town of Moreau

Data Source: The Town of Moreau, NYSDOH Author: Mohammed Ali , Greg Talmini,Sallam Al-salami, Mikaela Gerry Date: 5/4/2015





Wayfinding and Signage

Wayfinding is the process by which we navigate from place to place and an essential part of everyday life that makes it possible for us to move about in and engage with our communities. It is more than just signage and includes developing an identity, or brand, which is essential for a successful wayfinding and place making. Wayfinding combines marketing, consensus building, identity, planning, function, and design. It is a process of navigating through public and private spaces and maximizing that experience by explaining the environment ahead, recognizing that the user might employ several different modes of transportation (such as driving to the trailhead).

Wayfinding is a vital tool of economic development. Communities realize that there is a net benefit to a shared approach to attracting business and capturing resident and tourist dollars. A high-functioning wayfinding system makes the environment "legible" and enhances visitors' experience as it increases their comfort, builds their confidence, and encourages them to discover unique events, attractions and destinations on their own. The following sections detail some of the benefits of a quality wayfinding system.

Encourage Active Transport: A community that encourages walking for tourists and locals creates social and economic benefits. Many destinations, especially retail will benefit from passing traffic. Predictable, consistent wayfinding information is the key to building pedestrians confidence in reaching desired destinations. An increase in pedestrians can also lead to major benefits for the transport system, environment economy and public health.

Tourism and Economic Benefits: A community for walking is a tourist-friendly city and the local economy benefits directly. Retailers can gain benefits with having people walking past their shops as it increases passing trade and impulse buying.

Surveillance and Safety: More people walking and using the public domain can also increase perceptions of safety and increased surveillance with more "eyes on the street".



Big Boom Trail Wayfinding Signage Examples





Stakeholders and Potential Partners

Stakeholders

Town of Moreau: The town owns significant portions of the right-of-way that is being considered for the Hudson River Trail. The town would also likely lead funding requests, design, and construction. The town will also likely be the trail owner and be responsible for continued maintenance of the trail. Alternatively, a "friends of" group can be formed to perform routine maintenance.

NYS Office of Parks, Recreation, and Historic Preservation: Coordination with the local NYS Office of Parks should be continued. While they do not own property where the trail will be located, they do own and maintain significant property in the area. There may be interest to assume ownership and maintenance of this segment if so desired by the Town of Moreau.

NYS Department of Conservation: The study area is of particular interest to NYSDEC due its proximity to the Hudson and environmental sensitivity. Early conversations with NYSDEC have results in positive support for the project. Even though expanding the berm for the trail will encourage on existing waterways, this project will also offer an opportunity to provide bank stabilization. Continued engagement of NYSDEC is important in order to obtain support to necessary disturbance permits.

Potential Partner Organizations

- Adirondack/Glens Falls Transportation Council
- Adirondack Craft Beverage Trail and Map
- Feeder Canal Alliance
- National Water Trail
- Saratoga Plan: Preserving Nature and Land
- SUNY Adirondack
- South Glens Falls High School Vocational and Technical Program
- Southern Adirondack Audubon Society
- NYS Department of Transportation
- Brookfield Renewable Energy Partners
- Open Space Institute
- New York State Trails Council
- The Hudson River Greenway
- Parks and Trails New York
- Adirondack Mountain Club Glens Falls and Saratoga Chapter
- Bike Adirondacks
- NYS Scenic Byways Program



Moving Forward

Next Steps

The next steps of the Big Boom Trail Development would be to:

- (i) Generate greater public awareness of the project concept, scope, and concept plans.
- (ii) Acquire funding for the planning process and design phase (see Appendix J: Grant Funding Sources).
- (iii) Solicit public input on what they would like to see incorporated into a comprehensive trail network in their community.
- (iv) Solidify a final design plan for the comprehensive trail network after incorporating public input and institute an implementation schedule.
- (v) Acquire funding for the plan implementation schedule and construction phase (see Appendix J: Grant Funding Sources).

The following is a list of engagement strategies that can be utilized to gather public input, support, and awareness of the Big Boom Trail Concept Plan in the Town of Moreau and the Village of South Glens Falls.

Project Kick-Off Event: Holding a kickoff event gathers momentum and attention for the Big Boom Trail Concept Plan and help people become aware of the projects existence and direction. Additionally, this provides a jumping off point for future public events and information sessions related to the plan.

Host Public Hearing: A public hearing is a great tool to reach a large number of people at one time to educate them on the creation, scope, and direction of the Big Boom Trail concept plan. It also provides citizens an opportunity to learn about the project and ask questions. This type of event promotes openness and transparency and would also publicize the plan and possible drum up recognition and support.

Hold Public Workshops: Workshops allow people to discuss their ideas about the trail plan in an open atmosphere. These workshops are designed to exchange information such as to discuss a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis to obtain ideas and innovative thinking from the community. They should also entail a mapping session in which the public has the opportunity to provide feedback in a facilitated event on where they would like to see the trail go in their community, possible elements of the trail and what improvements to the concept plan that they would like to see implemented. By hosting a workshop in this manner, community members are be able to voice their opinions with visual aid and context, stimulating discussion. This type of session also builds a sense of community and ownership of the project as well as help citizens understand the concept plan in a different way.

Web Based Presence: A project website should be used as a primary point of contact with the community of Moreau. Posting surveys, plans, announcements, and information on the website



regarding the status of the concept plan is an excellent way of engaging members of the community and keeping them up to date on the status of the project.

Integration with Existing Plans

- Town of Moreau Comprehensive Land Use Plan (2008)
- Adirondack/Glens Falls Transportation Council Long Range Plan Update 2035 (P. 7, 8, 21) (2013)
- Exit 17/ Route 9 Corridor Land Use and Transportation Study Report (2014)
- Saratoga County Trails Initiative
- Hudson River Valley Greenway Trail
- Village of South Glens Falls Draft Comprehensive Plan (P. 11) (2008)
- Redevelopment and Connection Plan for Pruyn's Island Draft (P. 27) (2013)
- Include project in the New York State Trails Plan
- Include project in the New York State Open Space Plan



1/3

Appendix A: Survey

4/29/2015

We value community input. Please take our short survey to provide your opinion.

We value community input. Please take our short survey to provide your opinion.

*1. Are you a Resident of the Town of Moreau or the Village of South Glens Falls?

Yes No

2. What is your age?

under 12

12 - 17

18 - 24

25 - 34

- 35 44
- 45 54
- 55 64
- 65 74
- 75+

3. Are you aware of the following trails? (check all that apply)

Betar Byway South Glens Falls Bike Trail Glens Falls Feeder Canal and Towpath Trail Champlain Canalway Trail Warren County Bikeway

4. What is your primary use on these trails? (all trails from question 3, if applicable)

Recreation

Transportation

5. On average how many times do you use the following trails per month? (if applicable)

		1-5	6-10	11-15	16-20	21-25	26-31
	Betar Byway						
	South Glens Falls Bike Trail						
	Glens Falls Feeder Canal and Towpath Trail						
	Champlain Canalway Trail						
http:	s://www.surveymonkey.com/s/BGP9Pf	3D					



Appendix A: Survey (continued)

4/29/2015

We value community input. Please take our short survey to provide your opinion.

Warren County Bikeway

*6. What type of activities do/would you like to partake in? (check all that apply)

Nature walking
Fitness walking
Running/jogging
Biking
Cross-country skiing
Snowshoeing
Kayaking
Hiking
Bird watching
Fishing
Hunting
Sailing
Triathlon
Picnicking
Canoeing
Other (please specify)

*7. Do you think a trail connecting Moreau State Park to South Glens Falls would be an asset to the community?

Yes No

*8. If there was a trail what points of interest would you like to see it connect to? (check all that apply)

Glens Falls Feder Canal and Towpath Trail

Betar Byway

South Glens Falls Bike Trail

Champlain Canalway Trail

Warren County Bikeway

Ballard Elementary School

- Harrison Avenue Elementrary School
- Moreau Elementary School

```
https://www.surveymonkey.com/s/BGP9PBD
```



Appendix A: Survey (continued)

4/29/2015

We value community input. Please take our short survey to provide your opinion.

Tanglewood Elementrary School Oliver W. Winch Middle School

South Glens Falls High School

Saint Michael's School

Grocery Stores/Supermarkets

Moreau Recreational Park/Harry J. Betar Jr. Recreational Park

South Glens Falls Historical Park

Haviland Cove Park

County Forest

Lake George

Albany

Saratoga

Other (please specify)

9. Any additional comments are welcome.

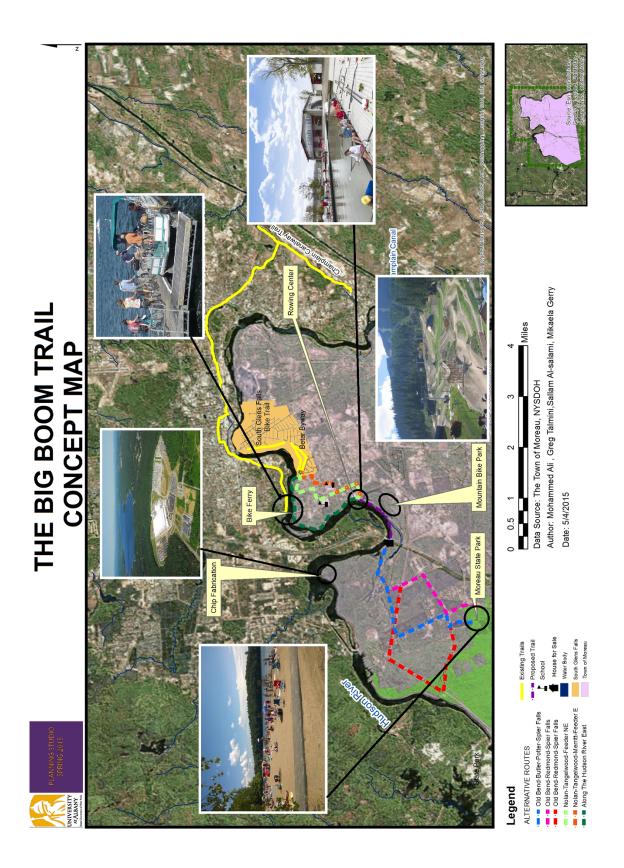


Done

Powered by <u>SurveyMonkey</u> Check out our <u>sample surveys</u> and create your own now!



Appendix B: Big Boom Trail Concept Map





Appendix C: Moreau Lake State Park Expansion Press Release

May 05, 2015

Randy Simons | Dan Keefe (518) 486-1868 | news@parks.ny.gov

Former Mount McGregor Correctional Facility Lands to Be Added to Moreau Lake State Park

750 acres of pristine forest will be opened to park visitors

The New York State Office of Parks, Recreation and Historic Preservation (State Parks) today announced that 750 acres of the former Mount McGregor State Correctional Facility property in Saratoga County will be transferred to Moreau Lake State Park. A map identifying the new parkland is attached.

"I'm thrilled that New York State will open these 750 acres of beautiful forested land to the public for outdoor recreation," said State Parks Commissioner Rose Harvey. "Moreau Lake State Park is visited by hundreds of thousands of outdoor enthusiasts each year for camping, swimming and exploring its popular trail network. Adding this land to the park will greatly expand the recreational opportunities in the region, preserve open space in fast-growing Saratoga County and ensure access to the Grant Cottage State Historic Site."

The new park lands, located in the towns of Corinth, Wilton and Moreau, include extensive forests and wetlands and the shores of Lake Bonita, a scenic undeveloped lake. The transfer extends the park's protection of a mountain ridge known as the Palmertown Range and includes a key segment of a planned long-distance Palmertown Ridge Trail that eventually will connect Saratoga Springs to Moreau Lake.

State Parks will undertake a public planning effort in the coming months to give the public an opportunity to comment on how best to provide recreational access to the new parkland, which will include creation of hiking trails and access to Lake Bonita. Public access to the property is currently limited with no parking areas or maintained trails.

The lands transferred to State Parks also include Grant Cottage State Historic Site, the site where President Ulysses S. Grant died in July 1885. General Grant spent the last five weeks of his life at the cottage, writing his memoirs while battling cancer. The Cottage became an historic site in 1890 and today the cottage remains essentially the same as during the Grant family's stay. Visitors can tour the downstairs of the cottage, viewing the original furnishings, decorations and personal items belonging to Grant, including the bed where he died, and floral arrangements that remain from Grant's August 4th funeral. The site opens for the season Memorial Day weekend.

The reuse of the full 1,025-acre former Mount McGregor Correctional Facility property is being coordinated by Empire State Development and the Office of General Services.

Empire State Development President, CEO & Commissioner Howard Zemsky said, "By working in collaboration with our partner agencies, the New York State Office of General Services and New York State Parks, we have been able to realize a unique approach for the reuse of the Mount McGregor facility that addresses both an opportunity for private investment and public uses. The transfer of hundreds of acres of land to Moreau Lake State Park will no doubt draw visitors and help boost the tourism economy in Saratoga County, while offering more open space for residents to enjoy outdoor recreational activities."

"Governor Cuomo has made it a priority to encourage visitors and residents to enjoy all our state has to offer, especially our rich history and glorious parks," Office of General Services Commissioner RoAnn Destito said. "Adding this acreage to Moreau Lake State Park and ensuring access to historic Grant Cottage will open up even more ways for families to see and enjoy New York."

"The transfer of 750 acres of land to Moreau Lake State Park is good news as it will enhance and expand access to hiking trails and other outdoor recreational activities. Most important, it will ensure the continued



Appendix C: Moreau Lake State Park Expansion Press Release (continued)

operation of Grant's Cottage, a historic site and popular local attraction, and that it is cared for and maintained under the close, careful supervision of the State Parks Department," said New York State Senator Kathy Marchione, Chair of the Senate's Local Government Committee.

"The addition of Mount McGregor to Moreau State Park will make an already beautiful asset even more appealing," said Senator Betty Little, who chairs the Senate Cultural Affairs, Tourism and Parks and Recreation Committee. "That's great news for area residents looking to enjoy the outdoors and for the region, which depends a great deal on a strong tourism economy."

"These lands will be a wonderful addition to our State park system, and will provide environmental, recreational and tourism-related benefits for the region," said Senator Hugh T. Farley. "I applaud the efforts of the Governor and his state agencies in working with local officials and organizations to ensure the preservation and public use of these wild lands, while also taking steps to find productive uses for the facility campus which will benefit the local economy."

"The publication of this Request for Proposal is a key step to ensuring an expeditious transition from correctional facility to new development that will benefit the residents of Saratoga County and our neighboring regions," said Assemblywoman Carrie Woerner. "I look forward to partnering with Empire State Development, as well as other state agencies, municipalities, and community stakeholders, to maximize the potential of the Mount McGregor site."

Assemblyman Daniel Stec said, "I am pleased to see this proposal moving forward. The environmental, historical and economic benefits this project offers to the community are very positive."

Wilton Town Supervisor Art Johnson said, "I'm pleased that ESD has released the RFP for the sale and redevelopment of Mount McGregor, and that undeveloped lands will be added to Moreau Lake State Park. This is a very desirable site that should bring lots of interest. There are many potential reuses for the property. I especially look forward to replacing the many jobs lost with the closure."

"Our board has been very supportive of creating more parkland and trails," said Moreau Town Supervisor Preston Jenkins, Jr. "We're very happy the land will be used for expanding Moreau Lake State Park. It's one of the best State Parks in the nation."

"I'm glad to be part of a partnership to develop new lands that can be accessed by the public, and that the public will have a say in how the park is used," said Town of Corinth Supervisor Richard Lucia. "We look forward to working with the community on this project."

"The designation of a portion of the former McGregor Prison lands as permanent parkland is an outstanding gift to the people of New York State," said Maria Trabka, Executive Director of Saratoga PLAN. "The Palmertown Range is a jewel in northern Saratoga County, a 62-square mile complex of wild woodlands and wetlands, providing environmental services like clean air and water and wildlife habitats, while offering ample opportunities for compatible public access and outdoor recreation close to local population centers."

"Congratulations to the Cuomo administration for their commitment to protecting the natural and historic resources located on the grounds of Mount McGregor. For more than 20 years OSI has worked with State Parks to build and expand Moreau Lake State Park," said Kim Elliman, president and CEO of the Open Space Institute. "Transformation of Mount McGregor into a protected recreational asset will not only greatly serve the residents of Saratoga County, but also advances our shared vision of connecting Moreau Lake and Saratoga Spa State Parks."

"Audubon New York Commends Governor Cuomo and Commissioner Harvey for expanding the Moreau Lake State Park and ensuring the protection of this critical forest habitat," said Erin Crotty, Executive Director of Audubon New York. "The Southern Adirondack Audubon Society has been a leading voice for protecting this Important Bird Area, and we applaud all the partners who worked to ensure these acres are permanently preserved."

The additional park acreage underscores Governor Cuomo's commitment to improving and expanding access to outdoor recreation. NY Parks 2020 is a multi-year commitment to leverage a broad range of private and



Appendix C: Moreau Lake State Park Expansion Press Release (continued)

public funding to invest approximately \$900 million in State Parks from 2011 to 2020. The 2015-16 State Budget includes \$110 million toward this initiative.

The additional park acreage underscores Governor Cuomo's commitment to improving and expanding access to outdoor recreation. NY Parks 2020 is a multi-year commitment to leverage a broad range of private and public funding to invest approximately \$900 million in State Parks from 2011 to 2020. The 2015-16 State Budget includes \$110 million toward this initiative.

Moreau Lake State Park is a 4,531-acre park that attracts almost 400,000 people each year as a destination for swimming, kayaking, wildlife viewing, hiking, fishing, hunting and more. The park's Nature Center provides educational programming for park visitors and local students throughout the summer months.

With its proximity to both Lake George and Saratoga Springs, the park is attractive to visitors year-round as it offers ice fishing, cross-country skiing, snowshoeing and other winter activities. In recent years the park has become a very popular destination for bald eagle watching in the cold winter months, when eagles winter along the shores of Moreau Lake itself, or along the Hudson River, which runs along the west side of the park property.

- See more at: http://www.nysparks.com/newsroom/pressreleases/release.aspx?r=1202#sthash.nSqSQJWN.dpuf



Appendix D: References

References

- Beeman, Lyman A., interview by Floyd E. Carlson. 1949. *The Story of Finch, Pruyn, and Co., Inc.* Syracuse, NY: Forestry Journal, (June 25).
- Bob Bayle, Andrea Matte, and Tim Weidner. 2012. *Queensbury and Glens Falls*. Charleston, SC: Arcadia Publishing.
- 2012. "Exploring the Backwaters at Big Bay." *Saratoga Woods and Waterways.* September 2. http://saratogawoodswaters.blogspot.com/2012/09/exploring-backwaters-at-big-bay.html.
- Fenton, Rick. 2002. "The Adirondacks...from Exploitation to Conservation." *New York State Conservationist*, February: 20-23.
- Flynn, Andy. 2004. "Breaking the jams was dangerous work." Post-Star, May 9.
- Fox, William Freeman. 1902. A History of the Lumber Industry in New York State. Washington, DC: Government Print Office.
- Gillibrand, Kirsten. 2015. "A Guide to Historic Preservation, Arts & Cultural Institutions, & Tourism Funding Opportunities and Incentives."
- Hargrove, Cheryl. 2002. "Heritage Tourism." CRM Journal, 10-11.
- 1899. "History of Moreau, NY." *Rays Place.* The Saratogian. http://history.rays-place.com/ny/moreauny.htm.
- Humanities, U.S. Department of Commerce and the President's Committee on Arts and the. 2005. "A Position Paper on Cultural and Heritage Tourism in the United States."
- Kandell, Jonathan. 2004. "Adirondacks Style." Smithsonian Magazine, October.
- Lourie, Peter. 1998. *River of Mountains: a Canoe Journey down the Hudson*. Syracuse, NY: Syracuse University Press.
- McHale, Ellen, Lisa Overholser, and Daniel Franklin Ward. 2011. *Cultural Heritage Tourism: Best Practices and Key Concepts for Regional Initiatives.* American Folklore Society.
- New York State Department of Parks, Recreation, and Historic Preservation. 2007. *Heritage Development Resource Guide*. Albany, NY: New York State .
- New York State Department of Parks, Recreation, and Historic Preservation. 2006. *Moreau Lake State Park Maste Plan.* Albany: State of New York.
- Noyes, William. 1910. Handiwork in Wood. Peoria, IL: The Manual Arts Press.



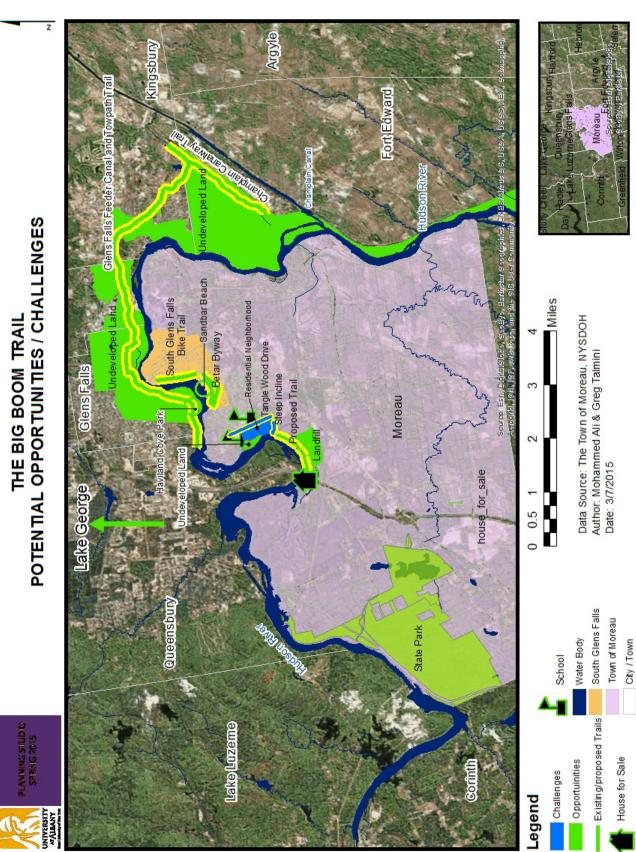
Appendix D: References (continued)

- Parks & Trails New York, Erie Canalway National Heritage Corridor, New York State Canal Corporation. n.d. "Bicyclists Bring Business: A Guide for Attracting Bicyclists to New York's Canal Communities."
- Parks & Trails NY. 2014. "The Economic Impact of the Erie Canalway Trail: An Assessment and User Profile of New York's Longest Multiuse Trail." Albany, NY.

Starr, Timothy. 2010. Lost Industries of Saratoga County. The History Press.







Appendix E: Big Boom Trail Potential Opportunities/Challenges Map



9 TABLE 3.1 - APPROVED OR PENDING PROJECTS Land Use Size our Trips Single Family Homes 70 - 95 lots 76 Single Family Ho 42 lots zed Livi 4 The Nest PUD Mixed Residentia 64 94 Apar eonelli Projec Apartments 64 lots 80 lots 8 Arrowhead M Tee Bird Golf le Fa . 9 ely 300 unit 8 lots left 20 lots left Family Homes Family Homes 100 unit TABLE 3.2 - SPECULATIVE DEVELOPMENT Assumed Development Type PM Peak Hour Trips No. Nan Size 25 ac acres acres with the efore incl Legend Status Approved/Pending Speculative

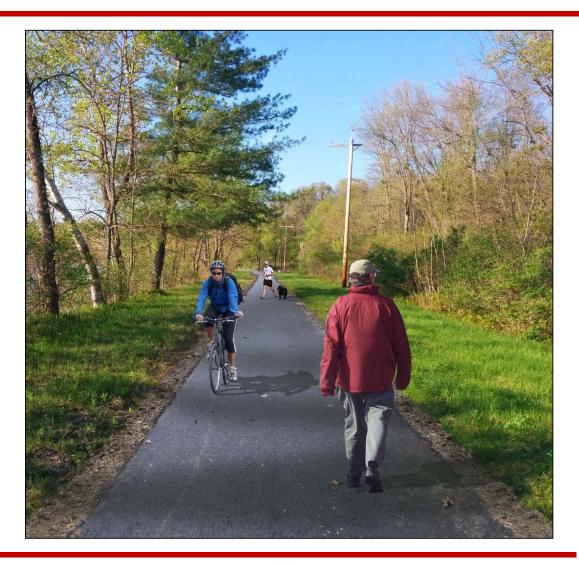
Appendix F: Town of Moreau Approved Pending & Speculative Developments



Town of Moreau, New York: Big Boom Trail Concept Plan University at Albany, State University of New York Masters in Urban and Regional Planning Studio Spring 2015

Appendix G: Town of Moreau Hudson River Trail Study

Town of Moreau Hudson River Trail Study







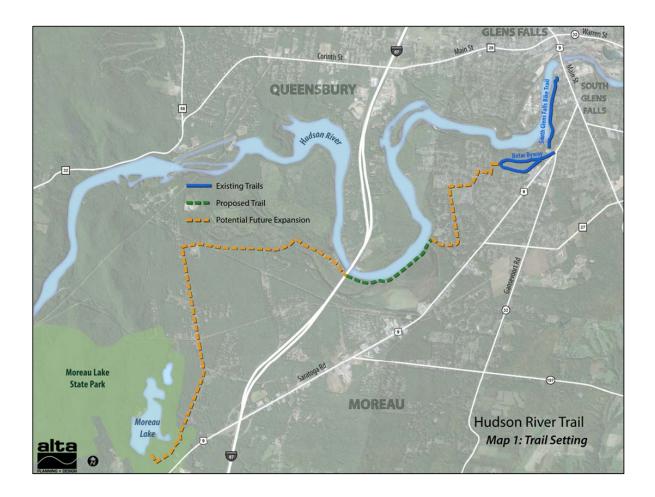
DRAFT Hudson River Trail Study

December 2014

1 Introduction

This memo presents an overview, general alignment, and cost estimate for a proposed trail ("the trail") along the Hudson River in the Town of Moreau in Saratoga County, NY. Envisioned as a multi-use trail that would connect to the Betar Byway and the South Glens Falls Bikeway to the western side of Interstate 87, the trail will follow the south side of the Hudson River between Old Bend Road and Nolan Road. It will serve both as a connector to existing trails and a regional destination. Its alignment directly adjacent to the Hudson River also has the potential to facilitate recreational access, transportation, historical preservation, environmental conservation and economic development. The trail base is part of an historic road and dyke that was used to haul lumber from the Adirondack foothills to the mills in Glens Falls.

The trail segment considered in this report is part of a potential future expansion as a larger Hudson River Trail that would link the South Glens Falls Bikeway and the Betar Byway to Moreau Lake State Park to the west. Map 1 provides an overview of these existing, proposed, and potential alignments.





DRAFT Hudson River Trail Study

December 2014

2 Regional Context

The trail under consideration will be a valuable addition to the Town of Moreau's local opportunities for recreation and active transportation, while also serving the wider region by providing connections to existing trails in Glens Falls, South Glens Falls, and the Fort Edward / Hudson Falls area of neighboring Washington County. Existing trails accessible to the trail would include:

- Champlain Canalway Trail
- Champlain Feeder Canal Trail
- Warren County Bikeway
- South Glens Falls Bikeway
- Betar Byway

In addition, a future extension that builds off of the trail could connect with the trails in Moreau Lake State Park. The trail would also be a significant addition to Saratoga County's system of trails. In this sense, the regional context of the trail and its potential extensions is particularly important when evaluating its benefits. Map 2 displays the full Hudson River Trail build out in the context of existing trails throughout Saratoga, Warren, and Washington Counties.

3 Existing Conditions

About 2,740 feet of the trail extending southwest from Nolan Road has already been graded and cleared, and leads through a private camping site before terminating. Most of the land along the proposed alignment beyond that point is heavily wooded, uneven, and occasionally very narrow. At its narrowest, the trail base is about 10 feet wide and serves as a berm between the Hudson River and adjacent wetlands. Map 3 highlights photos representative of the trail condition.

Parcel ownership and use is another consideration. Map 4 displays parcel information along and adjacent to the proposed trail. The Town of Moreau, Excess Land LLC, and Erie Boulevard Hydropower control the bulk of the land along the trail corridor. Wetlands, forest land, and designated landfills make up the majority of the existing uses. Although three large parcels owned by the Town of Moreau are designated as landfills, only the parcel furthest east (and a small corner of the adjacent parcel) currently contains any actual fill. The trail alignment is protected from existing landfill by forest land, and state-regulated freshwater wetlands make up the bulk of the two western parcels that are nominally assigned for landfill. This wetland designation will likely prevent further encroachment of fill in the direction of the trail. A DEC-generated map of the area's wetlands has been provided for reference as map 5.



Trails with Separated Right-of-Way WB - Warren County Bikeway NP - Neilman Parcel BB - Betar Byway KP - Kalabus-Perry FC - Feeder Canal Trail CT - Champlain Canal Trail CP - Coldbrook Preserve HC - Hudson River Crossing ML - Moreau Lake Trails FC - Fish Creek **OP** - Oppdahl Farm VW - Victory Woods CS - Camp Saratoga LT - Loudon Road Trail OG - Old Gick Farm SR - Spring Run EB - Eddie Bullard BT - Bog Meadow SC - Skidmore College Trails FX - Fox Trail SB - South Glens Falls Bikeaway RR - Railroad Run - / - - = Hudson River Trail (Proposed) D IROND A K C P A R K Glens Falls South Hudson Falls Full build out of the Hudson River Trail Fort WARREN Edward 32 COUNT udson Currently Proposed Phas Moreau 5 P n s 0 I C Z Z 9 (32) 29 0 SARATOGA (9N) COUNTY (29) (29) Saratoga Springs (9P (50) Saratoga Lake Hudson River Trail 5 2.5 Map 2: Regional Context 0 Miles

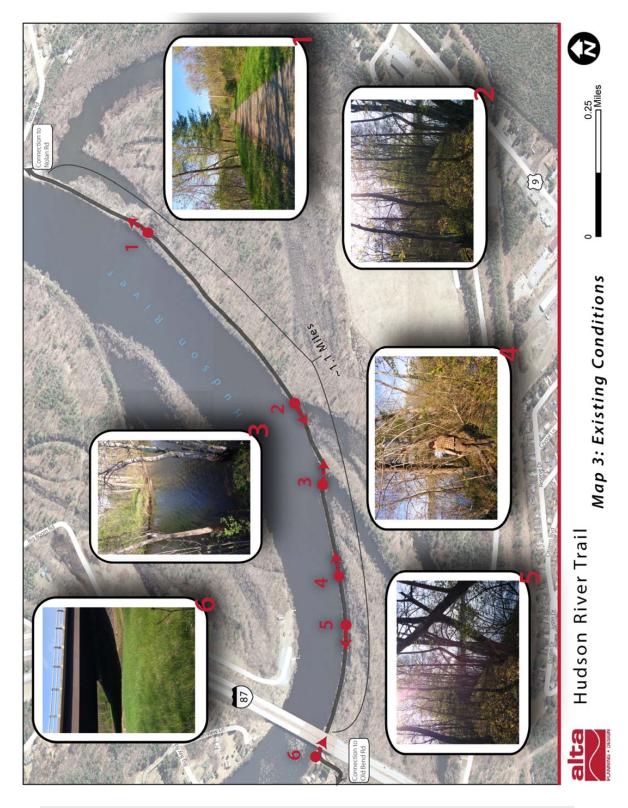
DRAFT Hudson River Trail Study

December 2014



DRAFT Hudson River Trail Study

December 2014

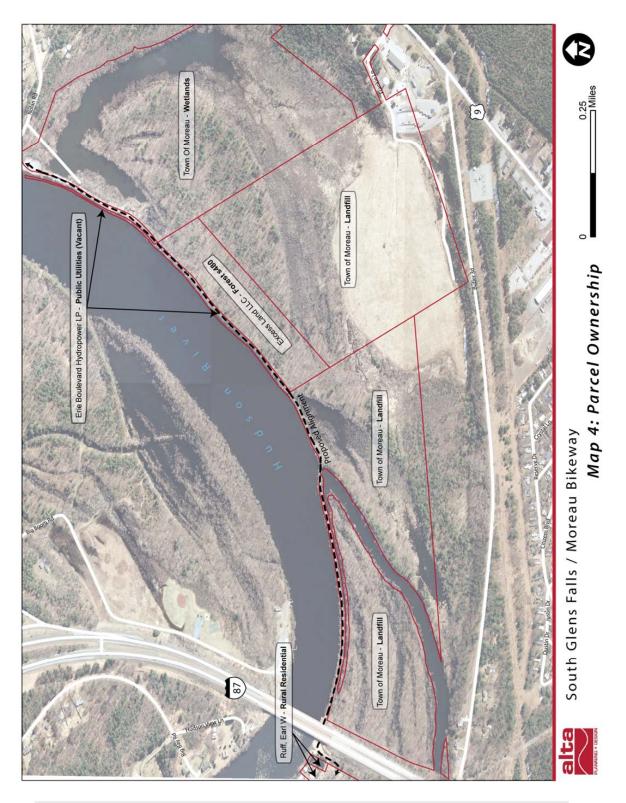


5 | P a g e



DRAFT Hudson River Trail Study

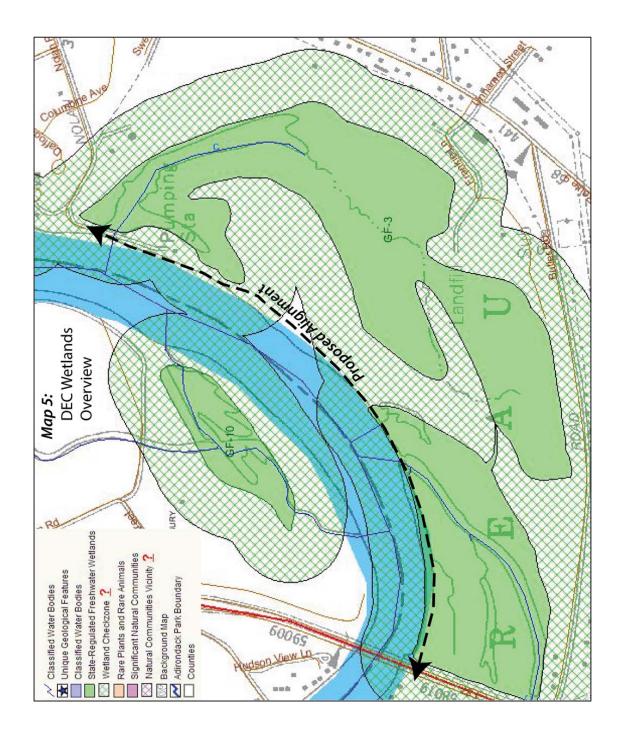
December 2014





DRAFT Hudson River Trail Study

December 2014





DRAFT Hudson River Trail Study

December 2014

4 Alignment Conditions

The conditions along the proposed alignment can be summarized by three general condition typologies:

- **Typology A** Mostly graded and cleared, with some areas containing light vegetative cover and underbrush. Minimal preparation required prior to trail designation. This section runs contiguously from Nolan Road for about 2,740 feet.
- **Typology B** Ungraded with thick vegetation. Grading and clearing required. This type occurs in three different segments of about 475 feet, 180 feet, and 100 feet.
- **Typology C** Ungraded, contains thick vegetation, and runs along a narrow natural berm with a width of as little as ~10 feet. Extensive clearing and grading required, along with the possible necessity of using fill to widen the trail for safe passage. Two stretches of the alignment are best described with this typology, one at about 450 feet and the other coming in as the second longest trail segment at about 1,900 feet.

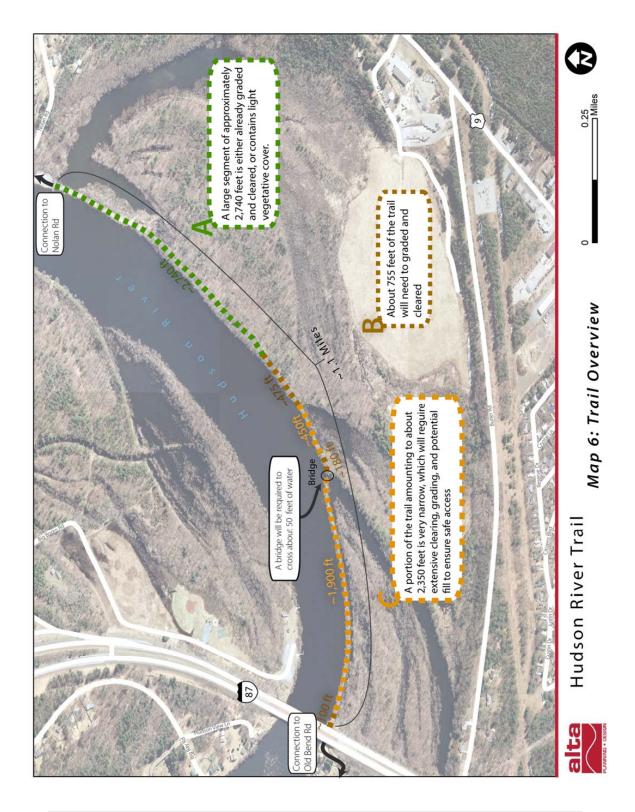
All of these typologies add up to a proposed trail alignment of about 1.1 miles. Additionally, there is a gap of about 50 feet partway through the alignment, which will require a bridge span of up to 75 feet to negotiate. Details on this crossing are presented further along in this document.

Map 6 displays the above typologies in the context of the proposed trail alignment.



DRAFT Hudson River Trail Study

December 2014





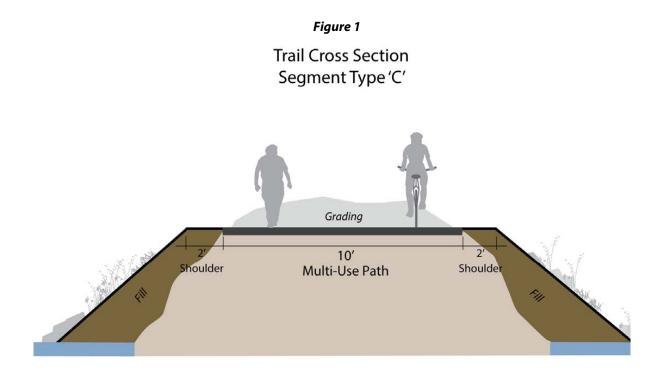
DRAFT Hudson River Trail Study

December 2014

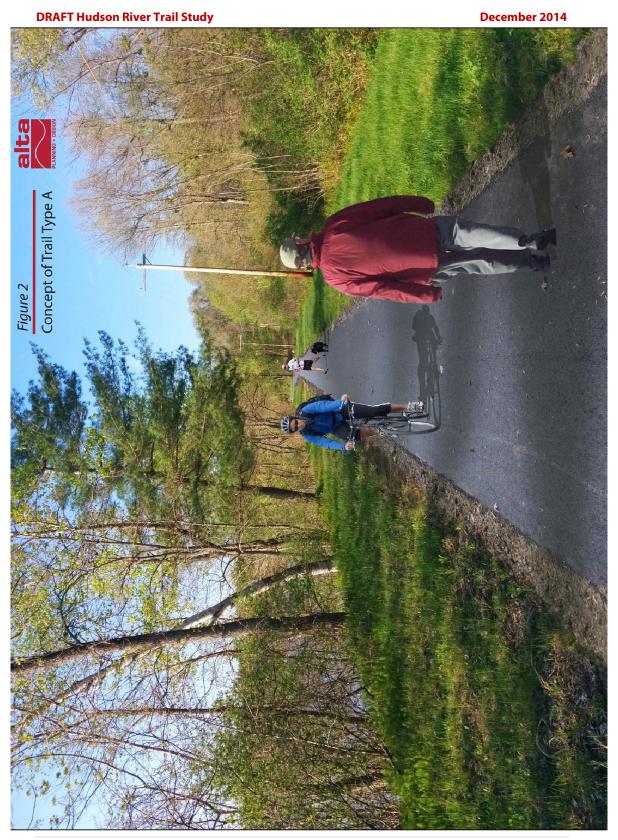
5 Trail Concepts

Trail type C will be the most challenging alignment construction, and as such Alta has provided a conceptual cross section of the proposed trail along those segments (figure 1). The concept represents the narrower stretches of the trail, and will vary depending on actual widths.

Trail type A is more straightforward, and would be the most feasible for a trail conversion in the short term. Figure 2 provides a photo simulation of a fully built-out section of trail type A, from a vantage point looking northeast towards Nolan Road.







11 | P a g e



DRAFT Hudson River Trail Study

December 2014

6 Bridge Details

As noted previously, a bridge will be required to span the inlet between sections A and B. The bridge will require a span of approximately 75 feet. In order to allow navigation of kayaks, canoes, and small boats, it is recommended that a clearance of at least 4 feet be maintained above the ordinary high water mark. To maintain this clearance, abutments on either side of the bridge will need to be constructed to an adequate height. The existing east bank is higher than the west bank. The west bank approach will need to be built up to match the east. In order to maintain a grade of 5% or less, the approach will need to be approximately 60 feet long.

After the approach trail and bridge abutments are in place, the bridge can either be constructed or placed. A prefabricated bridge is ideal for this location. It can be moved into place along the trail from the east or by barge. Several examples of prefabricated trail bridges are shown below.





DRAFT Hudson River Trail Study

December 2014

7 Cost Estimate

A planning level cost estimate has been developed for construction of the Hudson River Trail. Costs have been estimated for both materials and labor, assuming a contractor is hired to complete the work.

Item	Quantity	Unit	Unit Cost	Total
Clearing / Grading	31500	SF	\$10	\$315,000
Bank Stabilization	2350	LF	\$50	\$117,500
Trail Base (stone)	58450	SF	\$1	\$58,500
Trail Surface (asphalt)	58450	SF	\$4	\$235,000
Bridge Approaches	2	LS	\$30,000	\$60,000
Bridge	1	LS	\$100,000	\$100,000
Site Amenities (benches, signs, etc)	20	EACH	\$500	\$10,000
			Sub-Total	\$866,000
			Contingency (20%)	\$173,000
			Total	\$1,039,000

8 Stakeholders

Town of Moreau: The Town owns significant portions of the right-of-way that is being considered for the Hudson River Trail. The Town would also likely lead funding requests, design, and construction. The Town will also likely be the trail owner and be responsible for continued maintenance of the trail. Alternatively, a "friends of" group can be formed to perform routine maintenance.

NYS Office of Parks, Recreation, and Historic Preservation: Coordination with the local NYS Office of Parks should be continued. While they do not own property where the trail will be located, they do own and maintain significant property in the area. There may be interest to assume ownership and maintenance of this segment if so desired by the Town of Moreau.

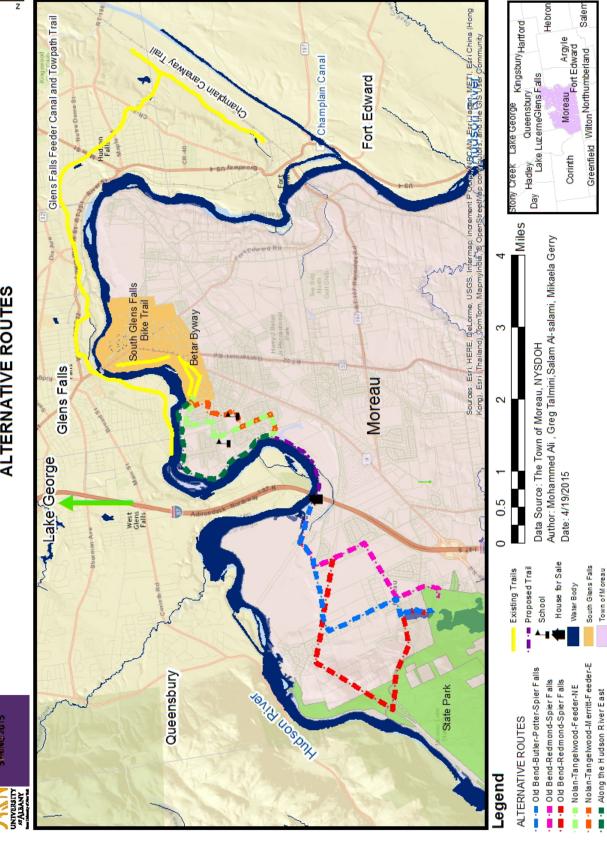
NYS Department of Conservation: The study area is of particular interest to NYSDEC due its proximity to the Hudson and environmental sensitivity. Early conversations with NYSDEC have results in positive support for the project. Even though expanding the berm for the trail will encourage on existing waterways, this project will also offer an opportunity to provide bank stabilization. Continued engagement of NYSDEC is important in order to obtain support to necessary disturbance permits.

9 Next Steps

- 1. *Acquire property adjacent to the Hudson River and Town of Moreau Landfill Site.* This property will not only facilitate the trail but also a rest and recreation area along the trail and Hudson River.
- 2. *Acquire funding for design and construction* of the trail through grants and funding applications such as the NYS CFA (consolidated funding application).
- 3. *Seek volunteer labor*. Volunteers can be utilized to clear the remaining parts of the trail and do simple grading. Heavy equipment, as well as necessary approvals from NYSDEC, will be required to do extensive grading, construct the trail, and install the bridge. Volunteers can also assist with maintenance and adding trail amenities such as benches and signage.



THE BIG BOOM TRAIL ALTERNATIVE ROUTES



Appendix H: Big Boom Trail Alternative Routes Map





Appendix I: Route Assessment Analysis

Route Assessment

Cost

All costs are based on "Costs for Pedestrian and Bicyclist Infrastructure Improvements: A resource for Researchers, Engineers, Planners, and the General Public" 2013. Publication prepared for the Federal Highway Administration by Bushell, Poole, Zegeer, and Rodriguez. Bicycle lanes are assumed to be five feet in width. These costs do not necessarily include extra costs involved in the project such as grading, land acquisition, land clearing, pavement markings etc.

Traffic Flow

All Traffic information gathered from NYS DOT 2012.

Cost Estimate of Dark Green Route Alternative:

Multi-use trail (per mile, 10' paved asphalt)	\$	300,000.00
Number of miles on road		2.60
Total:	\$	780,000.00
Narritave Signage:		
Cost per sign	\$	700.00
Number of signs (every quarter-mile)		10.00
Total:	\$	7,000.00
Amenities:		
Cost per bench	\$	1,550.00
Number of benches (every mile)		2.00
Total:	\$	3,100.00
Cost per bike rack	\$	660.00
Number of bike racks (every mile)		2.00
Total:	\$	1,320.00
Total Amenities:	\$	4,420.00
Right-of-Way Cost:		
Right-of-Way	Pending	
Total Calculation:	\$	780,000.00
	\$	7,000.00
	\$	4,420.00
	Pending	
Dark Green Route Total Cost:	\$	791,420.00



Cost Estimate of Light Green Route Alternative:

Multi-use trail (per mile, 10' paved asphalt)	\$ 300,000.00
Number of miles on road	1.90
Total:	\$ 570,000.00
Narritave Signage:	
Cost per sign	\$ 700.00
Number of signs (every quarter-mile)	8.00
Total:	\$ 5,600.00
<u>Amenities:</u>	
Cost per bench	\$ 1,550.00
Number of benches (every mile)	 2.00
Total:	\$ 3,100.00
Cost per bike rack	\$ 660.00
Number of bike racks (every mile)	 2.00
Total:	\$ 1,320.00
Total Amenities:	\$ 4,420.00
Total Calculation:	\$ 570,000.00
	\$ 5,600.00
	\$ 4,420.00
Light Green Route Total Cost:	\$ 580,020.00



Cost Estimate of Orange Route Alternative:

Multi-use trail (per mile, 10' paved asphalt)	\$ 300,000.00
Number of miles on road	2.00
Total:	\$ 600,000.00
Narritave Signage:	
Cost per sign	\$ 700.00
Number of signs (every quarter-mile)	 8.00
Total:	\$ 5,600.00
<u>Amenities:</u>	
Cost per bench	\$ 1,550.00
Number of benches (every mile)	 2.00
Total:	\$ 3,100.00
Cost per bike rack	\$ 660.00
Number of bike racks (every mile)	 2.00
Total:	\$ 1,320.00
Total Amenities:	\$ 4,420.00
Total Calculation:	\$ 600,000.00
	\$ 5,600.00
	\$ 4,420.00
Orange Route Total Cost:	\$ 610,020.00



Cost Estimate of Blue Route Alternative:

Blue Route Total Cost:	\$	1,127,130.00
	\$	6,630.00
	\$	10,500.00
	\$	135,000.00
Total Calculation:	\$	975,000.00
Total Amenities:	\$	6,630.00
Total:	\$	1,980.00
Number of bike racks (every mile)	_	3.00
Cost per bike rack	\$	660.00
Total:	\$	4,650.00
Number of benches (every mile)	_	3.00
Cost per bench	\$	1,550.00
Amenities:		
Total:	\$	10,500.00
Number of signs (every quarter-mile)		15.00
Cost per sign	\$	700.00
Narritave Signage:		
Total:	\$	135,000.00
Number of Miles on easement		0.45
Multi-use trail (per mile, 10' paved asphalt)	\$	300,000.00
Total:	\$	975,000.00
Number of miles on road		3.25
Multi-use trail (per mile, 10' paved asphalt)	\$	300,000.00



Cost Estimate of Pink Route Alternative:

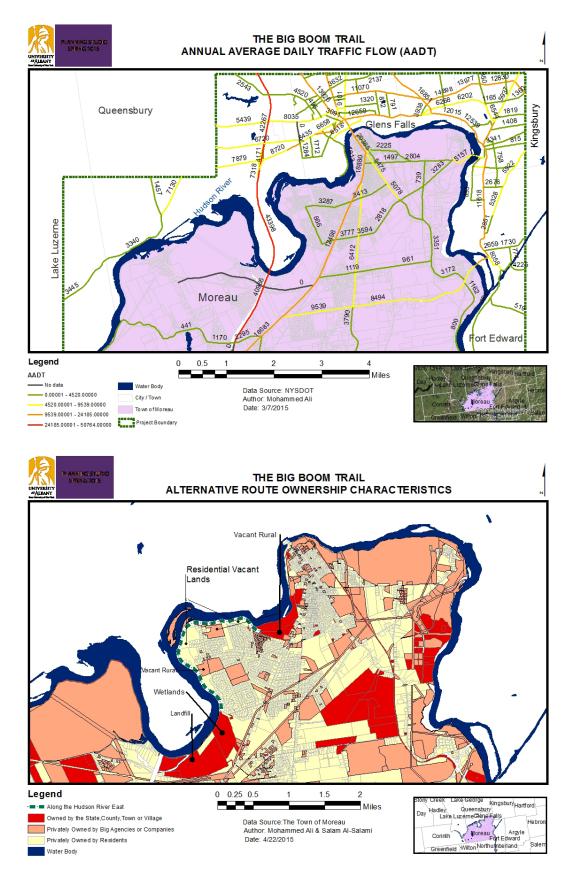
Pink Route Total Cost:	\$	1,034,220.00
	\$ \$	4,420.00
	\$	9,800.00
	\$	267,000.00
Total Calculation:	\$	753,000.00
Total Amenities:	\$	4,420.00
Total:	\$	1,320.00
Number of bike racks (every mile)		2.00
Cost per bike rack	\$	660.00
Total:	\$	3,100.00
Number of benches (every mile)		2.00
Cost per bench	\$	1,550.00
<u>Amenities:</u>		
Total:	\$	9,800.00
Number of signs (every quarter-mile)		14.00
Cost per sign	\$	700.00
Narritave Signage:		
Total:	\$	267,000.00
Number of Miles on easement		0.89
Multi-use trail (per mile, 10' paved asphalt)	\$	300,000.00
Total:	\$	753,000.00
Number of miles on road		2.51
Multi-use trail (per mile, 10' paved asphalt)	\$	300,000.00



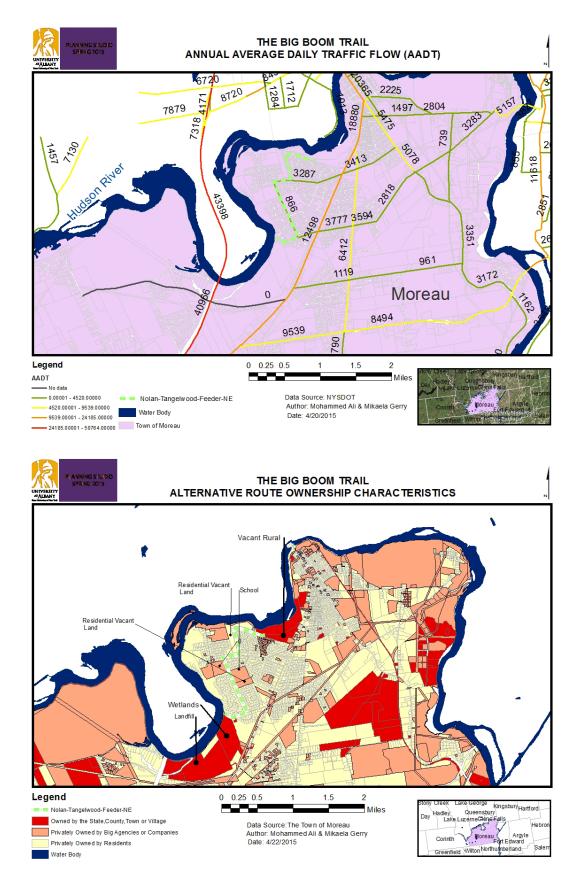
Cost Estimate of Red Route Alternative:

Multi-use trail (per mile, 10' paved asphalt)	\$ 300,000.00
Number of miles on road	 1.28
Total:	\$ 382,500.00
Multi-use trail (per mile, 10' paved asphalt)	\$ 300,000.00
Number of Miles on easement	4.50
Total:	\$ 1,350,000.00
Narritave Signage:	
Cost per sign	\$ 700.00
Number of signs (every quarter-mile)	 23.00
Total:	\$ 16,100.00
<u>Amenities:</u>	
Cost per bench	\$ 1,550.00
Number of benches (every mile)	 6.00
Total:	\$ 9,300.00
Cost per bike rack	\$ 660.00
Number of bike racks (every mile)	6.00
Total:	\$ 3,960.00
Total Amenities:	\$ 13,260.00
Total Calculation:	\$ 382,500.00
	\$ 1,350,000.00
	\$ 16,100.00
	\$ 13,260.00
Red Route Total Cost:	\$ 1,761,860.00



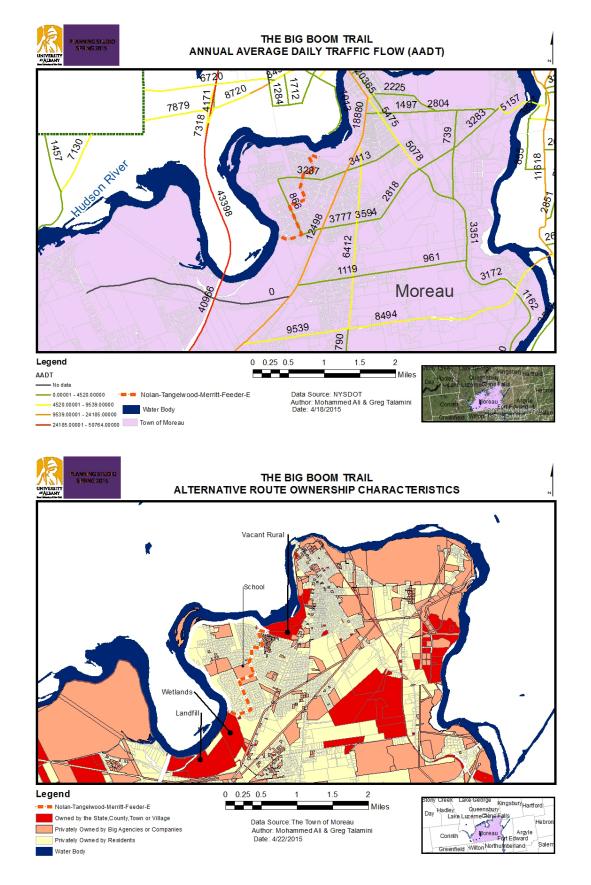






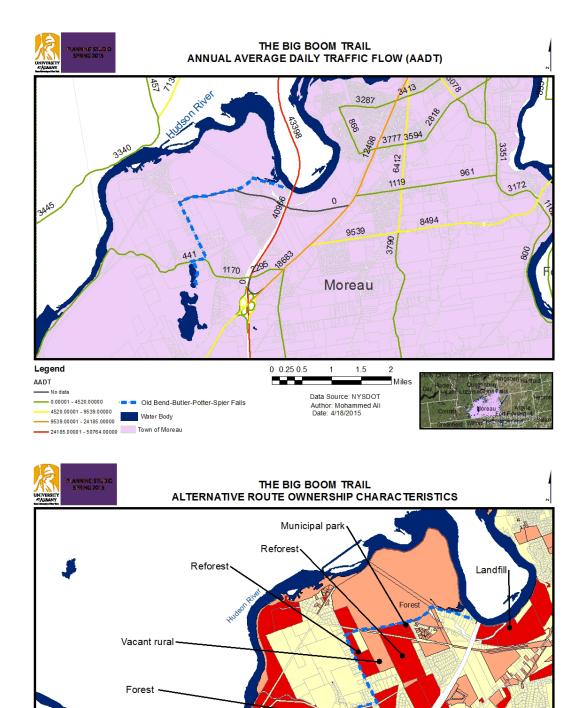


Appendix I: Route Assessment Analysis (continued)





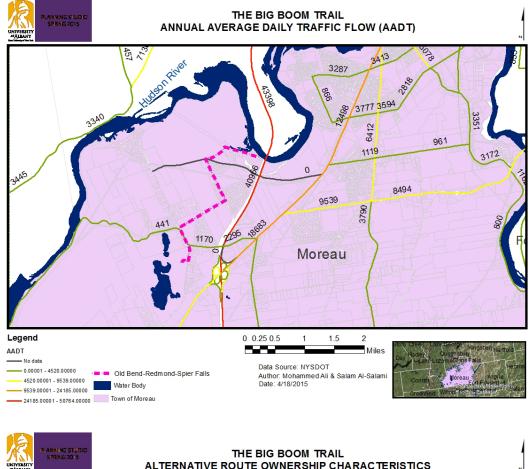


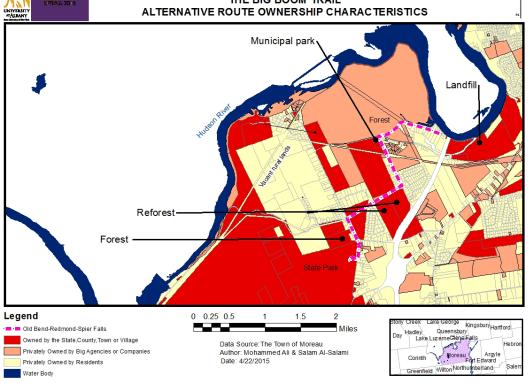


0.5 2 0 1 Legend KingsburyHartford Miles Old Bend-Butler-Potter-Spier Falls Queensb Lake LuzerneGlens Falls Owned by the State County Town or Village Data Source: The Town of Moreau -35 Hebro Argyle Fort Edward ĥ Privately Owned by Big Agencies or Companies Author: Mohammed Ali Date: 4/19/2015 Corinth Privately Owned by Residents Wilton Northur Sale Water Body



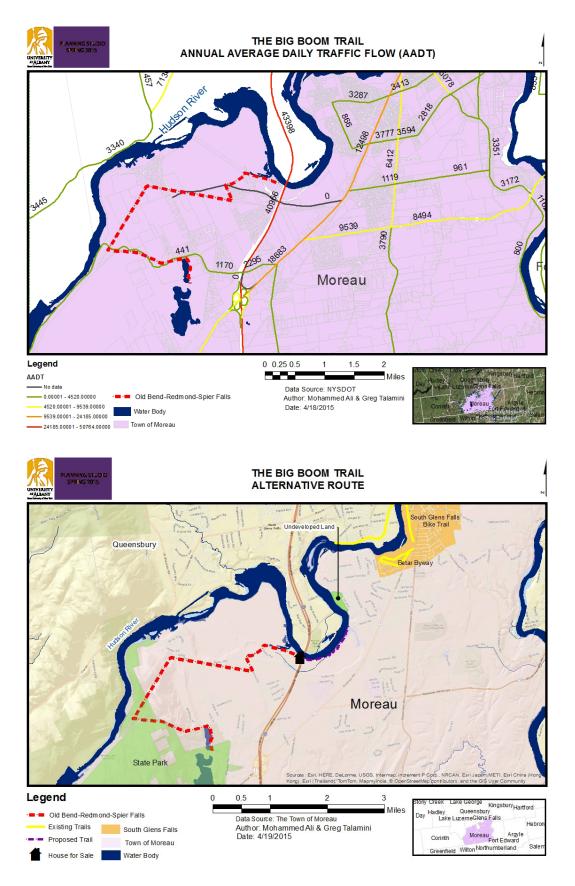














Appendix J: Grant Funding Sources

Federal Government Grant Programs			
Name	Amount	Use	Notes
National Park Service Rivers, Trails and Conservation Assistance Program	No funds, technical assistance from NPS staff	Technical assistance for community groups and local, state, and federal government agencies to conserve rivers, preserve open space, and develop trails and greenway	http://www.nps.gov/orgs/rt ca/apply.htm_
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	Varies	Reduce traffic congestion on local streets and improve air quality in places that do not meet air quality representative	<u>http://www.fhwa.dot.gov/e</u> nvironment/air_quality/cma g/_
US Enviromental Protection Agency (EPA) Smart Growth Implementation	No funds, technical assistance from EPA staff	Communities receive direct technical assistance from a team of national experts in one of two areas: policy analysis (e.g., reviewing state and local codes, school siting guidelines, transportation policies, etc.) or public participatory processes (e.g., visioning, design workshops, alternative analysis, build-out analysis, etc.).	http://www2.epa.gov/smar t-growth/smart-growth- implementation-assistance
Hudson River Valley National Heritage Area Heritage Development Grants	\$1,000- \$5,000	Provides funding for projects that further the goals and mission of the HRVNHA: to recognize, preserve, protect and interpret the nationally significant cultural and natural resources of the Hudson River Valley for the benefit of the Nation.	http://www.hudsongreenw ay.ny.gov/GrantFunding/NH A Grants.aspx
US Housing and Urban Development office (HUD) Sustainable Communities Regional Planning Grant Program	Varies	Metropolitan and multi-jurisdictional planning efforts that integrate housing, land use, economic and workforce development, transportation, and infrastructure investments to encourage economic competitiveness and revitalization; social equity, inclusion, and access to opportunity; energy use and climate change; and public health and environmental impact.	http://portal.hud.gov/hudp ortal/HUD?src=/program of fices/economic_resilience/s ustainable_communities_re gional_planning_grants_
US Department of Agriculture Community Facility Grants	Varies	Grant funds can be used to construct, enlarge, or improve community facilities for health care, public safety, and community and public services. This can include the purchase of equipment required for a facility's operation.	http://www.rd.usda.gov/pr ograms-services/community facilities-direct-loan-grant- program_
National Scenic Byways Program	\$10,000– \$4,000,000	Protect and enhance designated scenic roads. Bicycle and pedestrian facilities can be developed in conjunction with scenic roadway projects	http://www.fhwa.dot.gov/h ep/scenic_byways/grants/_
Surface Transportation Program	Varies	The Surface Transportation Program (STP) is a Federal Highway Administration (FHWA) program that provides flexible funding for a wide variety of projects on any federal-aid highway.	http://www.fhwa.dot.gov/f ederalaid/projects.cfm#c78



Appendix J: Grant Funding Sources (continued)

State/Metropolitan Planning Funds	Varies	programs are administered by the FHWA and FIA.	<u>http://www.fhwa.dot.gov/</u> map21/guidance/guidemetr oplan.cfm
Federal Lands Access Program	Varies	The Federal Lands Access Program (FLAP) is a new Federal Highway Administration (FHWA) program for which bicycle and pedestrian projects connecting to public lands are eligible.	<u>http://flh.fhwa.dot.gov/pro</u> grams/flap/

New York State Grant Programs				
Name	Amount	Use	Notes	
NYS Office for Small CitiesNew York State Community Development Block Grant	Up to \$400,000 for individual applications, \$900,000 for joint applications	Provides grants to eligible cities, towns, and villages with populations under 50,000 and counties with an area population under 200,000, to ensure affordable housing, provide services to the most vulnerable in our communities, create jobs and expand business opportunities directed toward neighborhood revitalization and economic development, and to provide improved community facilities and services. Park & trail projects are eligible in low and moderate income communities in "public facilities" category or as part of broader "comprehensive" project. Discuss with staff before applying.	<u>http://www.nyshcr.org/Pro</u> grams/NYS-CDBG/_	
Hudson River Valley Greenway Grants Program	\$5,000 to \$25,000 per project (no more than 50% total project cost)	Provides funding for trail planning, construction and amenities, water trail implementation, and historic landscape preservation	http://www.hudsongreenw ay.ny.gov/GrantFunding/Gr antsOverview.aspx	
NYS Office of Parks, Recreation and Historic Preservation Recreational Trails Program	\$5,000– \$100,000	Acquisition, development and maintenance of trails.	http://nysparks.com/grants /recreational- trails/default.aspx_	
NYS Department of Transportation Transportation Alternatives Program (TAP)	\$200,00– \$2,000,000	Reimbursement program provides funds for bicycle and pedestrian facilities and the preservation of abandoned railway corridors, including conversion and use for bicycle and pedestrian trails		



N	New York State Consolidated Funding Application Grants			
Name	Amount	Use	Notes	
Parks Matching Grants Program (OPRHP)	Varies	Program for the acquisition or development of parks and recreational facilities.	http://www.nysparks.com/ grants/consolidated-funding app.aspx_	
Historic Preservation Grant Programs (OPRHP)	Varies	A matching grant program to improve, protect, preserve, rehabilitate or restore properties listed on the National or State Registers of Historic Places.	The deadline for 2015 submission is 4:00 p.m. Friday, July 31, 2015.	
Heritage Areas Program (OPRHP)	Varies	A matching grant program for projects to preserve, rehabilitate or restore lands, waters or structures, identified in a management plan approved by the Commissioner.		
Acquisition (OPRHP)	Varies	A matching grant program for the acquisition of a permanent easement or fee title to lands, waters or structures for use by all segments of the population for park, trail, recreation, conservation or preservation purposes.		
Land and Water Conservation Fund Program (OPRHP)	Varies	A matching grant program for the acquisition, development and/or rehabilitation of outdoor park and recreation facilities.		
Local Waterfront Revitalization Program (NYS Department of State)	Up to \$500,000	Waterfront rediscovery; coastal education and tourism programs; preparation or implementation of Local Waterfront Revitalization Program (LWRP) Plans		

Appendix J: Grant Funding Sources (continued)

Non-Governmental Grants				
Name	Amount	Use	Notes	
Preservation League of New York Technical Assistance Grant	Up to \$3,000	Grants support professional services of architects, engineers and other design and preservation professionals working with not-for-profit groups and municipalities to preserve their arts and cultural buildings, structures and other resources.	http://www.preservenys.or g/tagtechnical-assistance- grants.html_	
Preservation League of New York Preserve New York	\$3,000- \$10,000	Cultural resource surveys, historic structure reports, and historic landscape reports	http://www.preservenys.or g/preserve-new-york.html	
Kodak American Greenways	\$2,500 max; normally \$500 \$1000	Planning and design of greenways in communities throughout America	http://www.kodak.com/ekn ec/PageQuerier.jhtml?pq- path=2300617&pq- locale=en_US&_requestid=6 474_	
National Environmental Education Foundation's Every Day Grants	Up to \$5,000	The Every Day Grants provide funding for capacity building which includes, but is not limited to, board development, staff trainings, fundraising support, strategic planning and technology improvements.	http://www.publiclandsday. org/resources/grants-and- awards/every-day-capacity- building-grants_	



Appendix J: Grant Funding Sources (continued)

American Hiking Society National Trails	\$500- \$5,000	Acquisition, constituency building campaigns, and traditional trail work projects. applicants must be	http://www.americanhiking .org/gear-resources/grant-
Fund		members of AHS' Alliance of Hiking Organizations.	opportunities/
People for Bikes		Advocacy work and organizational capacity building; construction costs; matching funds; and education	http://www.peopleforbikes.
Community Grants	Up to \$10,000	programs for bikes paths, trails, routes, lanes, parking,	org/pages/community-
Program		and transit; Mountain bike and BMX facilities; innovative and unique high-profile projects	<u>grants</u>
The Conservation Alliance	Up to \$50,000	Efforts of grassroots citizen-action groups to protect wild and natural lands from resource extraction and commercial development. Before applying for funding, an organization must first be nominated by one of the Alliance's member companies.	http://www.conservationall iance.com/funding-criteria/
Scott's Miracle-Gro Company's GRO1000 Grassroots Grants	Up to \$1,500	The focus is on garden and green space beautification projects that incorporate the involvement and engagement of neighborhood residents. Eligible applicants include nonprofit organizations, educational institutions, and government agencies.	<u>http://scottsmiraclegro.com</u> /corporate- responsibility/gro1000/_
Robert Wood Johnson Foundation	Varies	Projects that improve the health and health care of all Americans	http://www.rwjf.org/en/libr ary/funding- opportunities.html



Town of Moreau, New York: Big Boom Trail Concept Plan University at Albany, State University of New York Masters in Urban and Regional Planning Studio Spring 2015

Appendix K: Course Syllabus COURSE SYLLABUS

UAlbany Spring 2015 Planning Studio: The Hudson River Trail (HRT)

State University of New York at Albany, USA

COURSE #PLN 681, 3 Credits – Graduate Students Only Spring, 2015

Schedule: Monday, 2:45-5:35pm, Room AS123 **Faculty: Jeff Olson, R.A.** (phone: 584-6634 or e-mail: trails2k@aol.com) Office Hours: by appointment

1. LEARNING OBJECTIVES and SCOPE

To develop an action plan for completion of a shared use trail corridor along the Upper Hudson River in Saratoga County, NY. The proposed trail will connect existing trails from the town of Corinth, New York, through Moreau State Park, the town of Moreau and to the existing Feeder Canal Trail in South Glens Falls. The goal is to create a continuous path along the river for walking, running, bicycling, nordic skiing, water craft, equestrians and other uses. A preliminary concept has been identified in the Town of Moreau, and significant public lands have been acquired along the river in this corridor. T he studio's work will support a local advisory committee and project consultants. The scope of services has been set up to be accomplished in phases, with the opportunity to complete key tasks and then proceed as future funding becomes available. Phase 1 will include Tasks 1-3 as described below. Support for this phase will include involvement of the UAlbany Planning Studio during the Spring 2015 semester. The plan will consist of the following tasks:

Task 1. Conduct an interactive public involvement process that provides opportunities for the community to participate in development of the project. Provide a project website that allows for public input in both survey and map formats. Provide up to three (3) public meetings during the planning process.

- Develop a project website, on-line survey and interactive map
- Conduct up to three (3) public workshops: 1) listening session, 2) draft plan and 3) final plan presentation
- Prepare a powerpoint presentation for the project for use at public and stakeholder meetings
- Attend up to (6) strategic meetings or landowners or stakeholders during the planning process



Appendix K: Course Syllabus (continued)

Task 2: Develop baseline data in GIS compatible format to determine a proposed alignment for the HRT based on an analysis of existing conditions, opportunities and challenges, and comparison of potential alternatives as follows: To support the analysis and decision-making necessary to advance this study, the team will conduct a detailed inventory of existing and planned conditions using available GIS data and aerial imagery.

a. Review existing plans and projects in the study area.

b. Use available data to inventory and describe the existing physical and environmental conditions of the study area including topography, soils, streams and rivers, flood plains, historical/cultural / natural resources and state and/or federal wetlands.

c. Inventory and describe existing study area vegetation and wildlife, including the presence of species protected by state and/or federal law.

d. Inventory existing and planned land uses within the study area.

e. Identify property ownership within the study area for those properties potentially affected by prospective alignment alternative(s).

f. Inventory roads that traverse the study area including ownership, functional classification, and general physical and operational characteristics.

g. Inventory easements and rights-of way within the study area that could potentially accommodate a multi-use trail.

h. Prepare a GIS-based map of the study area.

Task 3: Based on the data and information collected in Task 2, the team will perform an assessment of specific physical, operational, design, policy, and regulatory needs and opportunities relevant to the study., including:

a. Describe needs and opportunities relevant to the study and prepare an associated matrix to be considered during study decision-making.

c. Evaluate opportunities and develop strategies for utilizing and/or acquiring private property and/or public right-of-way, as needed to create a continuous trail along the prospective alignment alternative(s).

d. Evaluate opportunities and develop strategies for minimizing and/or mitigating potential conflicts between trail users, motorists, and property owners.



Appendix K: Course Syllabus (continued)

Based on the findings of the previous tasks, the team will develop a minimum of two project alternatives, including both a short term "sign and stripe" alternative and a long term "full build" alternative for the proposed trail, including:

a. Describe each alternative in a matrix or similar analytic format that compares the pertinent characteristics of each to the specific physical, operational, design, policy and regulatory needs and opportunities.

b. Compare the existing proposed alignment with an alternative route developed through the public involvement process.

c. Provide a photo-simulation of each alternative, along with a typical plan view and cross section.

d. Provide a signage and branding scheme for promotions and wayfinding

2. Deliverables:

- Develop an existing conditons report with baseline data from task 1
- Create an opportunities and challenges map of key issues including: land ownership, intersections, structures, environmental factors
- Develop three (3) alignment alternatives and confirm feasibility: 1) short term "sign and stripe" projects, 2) confirm current proposed alignment and 3) alternative alignment based on public input.
- Prepare a Phase 1 Trail Action Plan report summarizing tasks 1-3. (.pdf file and 12 color printed copies)

3. Key Milestones:

Project Kickoff Meeting: January, 2015

Existing Conditions / Data Collection: January-February 2015

Project Website on-line: February, 2015

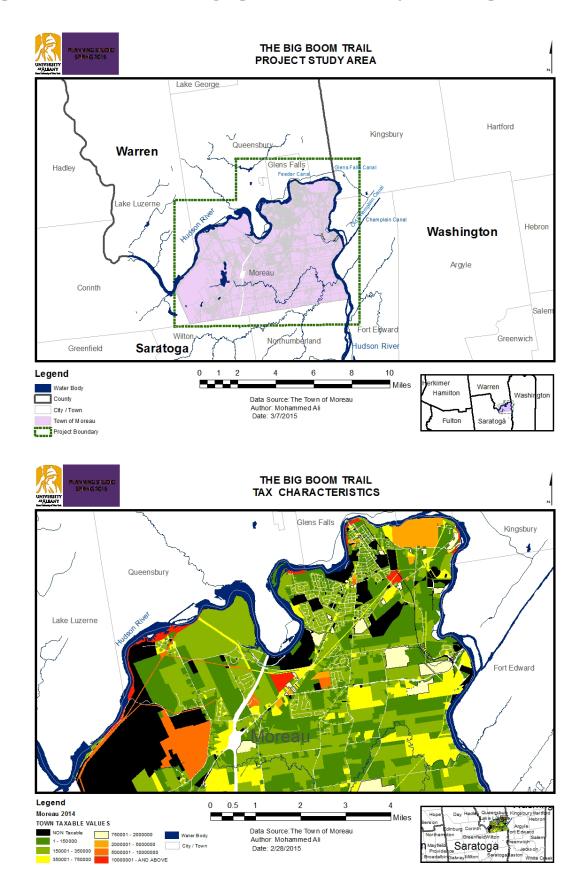
Public Meeting #1: February, 2015

Public Meeting #2: March-April, 2015

Public Meeting #3: May 2015

Phase 1 Alignment Report: May 2015

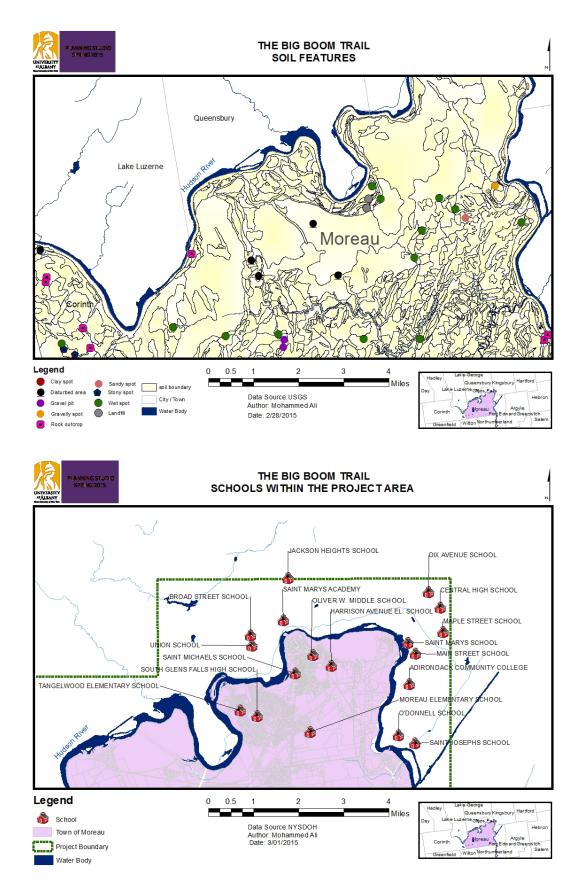




Appendix L: Additional Geographic Information Systems Maps



Appendix L: Additional Geographic Information Systems Maps (continued)





Appendix L: Additional Geographic Information Systems Maps (continued)

