Trails Across New York:
A Grassroots Guide to Developing Greenway Trails
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**About Parks & Trails New York**

Parks & Trails New York (PTNY) is New York’s leading statewide advocate for parks and trails, dedicated since 1985 to improving our health, economy, and quality of life through the use and enjoyment of green space. PTNY works to expand, protect, and promote a network of parks, trails, and open spaces throughout our state for use and enjoyment by all. For more information, visit www.ptny.org.

**About the New York State Office of Parks, Recreation and Historic Preservation**

The New York State Office of Parks, Recreation and Historic Preservation oversees more than 250 parks, historic sites, recreational trails, golf courses, boat launches and more. 2024 marks the Centennial celebration for New York State Parks and Historic Sites, commemorating the 100th anniversary of the founding the parks and sites system. This system continues to serve as an acknowledgment that public access to open space and recreational assets is a right, and not a privilege, afforded to all New Yorkers. For more information visit: parks.ny.gov/100

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Cover photo: North County Trailway, Westchester County. Photo credit: Call of the Loon Productions.
Introduction

New York State has more than two thousand miles of open greenway trails and nearly fifteen hundred miles of potential trail corridors. With all of the opportunities for growth (including 1,300 miles of planned or proposed greenway trails), there is a need for statewide resources that help local advocates navigate the process for future development opportunities outlined in the Statewide Greenways Trails Plan. The statewide greenway network witnessed tremendous growth over the last decade, due in large part to an influx of funding to support the completion of the Empire State Trail (EST). Efforts to close the gaps in the Hudson River Valley Greenway and the Erie Canalway Trail led Governor Cuomo to announce this ambitious and visionary project in 2017. The EST closed critical gaps in the existing greenway trail network and created a unified branding and standard set of wayfinding and informational signage for this 750-mile megatrail corridor. Completed at the end of 2020, the EST is the nation’s longest statewide shared-use trail network, stretching 750 miles through the Hudson and Champlain Valleys from New York City to the Canadian border, and west along the Erie Canalway Trail from Albany to Buffalo. The EST is a recreation destination, economic driver and tourism generator which connects 20 regional trails into one contiguous statewide signed route. It is 75 percent off-road, providing a safe and accessible route for cyclists, hikers, runners, cross-country skiers and snow-shoers.

Financial support secured through public-private partnerships, as well as state and federal grant funding opportunities have enabled greenway development as part of the EST and beyond throughout the state and cemented New York’s position as a national leader in outdoor recreation. Not only does the greenway network attract visitors from across the nation and abroad to experience the historic communities, as well as varied and beautiful landscapes, but it serves as an accessible transportation alternative for people of all ages and abilities. Ten years ago, New York’s statewide trail network looked much different than it does today—and it will continue to transform as public agencies, nonprofits, members of the general public, and local leaders identify new connections to and from the EST.

This guide should inspire creativity and enthusiasm among various stakeholder groups about the important role that local residents and stakeholders can play in this process. The steps outlined will provide a high-level overview of the various aspects of trail development from initial concept to construction, and how participation from a broad range of individuals, agencies, organizations, and landowners will factor in throughout.

This guide walks advocates and trail planners through the steps needed to see a greenway trail completed. The first section outlines the steps needed to get a project started, from identifying the corridor to cultivating the vision that will help inspire engagement and public support, and eventually lead to buy-in from state and/or local government. The second section walks through the trail planning and development process, including completing a feasibility study for a trail, securing the corridor through purchase or easements, identifying grant funding opportunities, and finally getting the project designed, permitted and built.

What is a Greenway Trail?

Greenways are commonly defined as a corridor of open space with a shared-use trail. More specifically, New York’s Statewide Greenway Trails Plan defines greenway trails as “shared-use paths that are separated from roadways and vehicle traffic; a flat, graded surface and/or improved tread; and allow for non-motorized transportation and recreation use.” Greenway trails, which accommodate bicyclists, walkers, runners, and other non-motorized users, and sometimes allow for motorized use, can be located on abandoned rail beds, take advantage of utility corridors, follow historic or active canals and waterways, or may even just be a sidepath along a roadway.
Getting Organized & Building Support

A former rail corridor left abandoned; two existing trails in neighboring communities with an unsafe, on-road gap between them; limited public access to the waterfront. All of these scenarios present opportunities for a new recreational and transportation resource, but before these resources are made available for enjoyment, trail advocates and local leaders must identify the opportunity, define the potential project scope, and share the concept more broadly with local stakeholders.

Greenway Trail Advocates

New greenway trails come into existence only after trail advocates see an opportunity and formulate a vision for where a new greenway trail could come into being. These greenway trail advocates may have a formal role in local or state government, or reside within a local community, or may just be passionate about the opportunities for additional trails in a region. This guide outlines the steps that advocates must take and inspire others to take for a greenway trail to move from vision to reality.

Greenway trail advocates often take on:

- Communicating the vision - educating officials, the public, and landowners about the benefits of greenway trails in general, or a specific greenway trail project in particular.
- Fostering public input and support - encouraging more people to communicate the vision and build community enthusiasm.
- Organizing events - increasing public awareness of the greenway trail and sharing information with a local media outlet to spotlight the proposed greenway and emphasize the benefits of the potential trail.
- Energizing the project – dedicating personal time and energy to ensure that the project continues to move forward.

Finding a Champion

Strong leadership and inspiration from a single person can influence the success, or failure, of a greenway trail project. Private citizens, nongovernmental organizations, governmental institutions, planning and consulting firms, and the private sector can all play a unique role in the complex process of greenway trail development. Of these stakeholder groups, it’s likely one or two champions will emerge to move the project forward at various stages of development. One person cannot be responsible for every aspect of developing a greenway trail project; however, greenway trail advocates are crucial to the success of a greenway trail project.

Yonkers Greenway

For over a decade Groundwork Hudson Valley, an environmental justice nonprofit, has invested significant resources to help the surrounding community realize the Yonkers Greenway - a proposed 3.1-mile rail to trail conversion along the abandoned Getty Square Branch of the New York Central Railroad’s famed Putnam Division, a trail that will eventually connect New York City’s Van Cortlandt Park to the downtown Yonkers waterfront.

Groundwork has helped unite a coalition of community residents and nonprofit organizations to advocate for the completion of the Yonkers Greenway since 2008. Dedicated meetings and facilitated conversations among community members about the potential to connect local neighborhoods via a greenway corridor were the spark this project needed to reinvigorate local stakeholders. More than ten years later, a concerted effort among state and federal representatives has allowed the project to proceed in earnest, securing $5.4 million in federal funding.
New York State’s extensive, varied network of greenway trails includes thousands of miles of paved and unpaved rail trails, canals, rivers, and other shared-use paths. Many greenway trails follow pre-existing transportation and utility corridors, including former railroad rights-of-way, canal towpaths, highway corridors, or along utility lines. Indeed, many greenways have rich, varied pasts and some have multiple iterations of previous use. Through the efforts of advocates and local and statewide leadership, these corridors are now enjoyed by residents and visitors alike. Today, many of these corridors are pre-existing transportation and utility corridors, including former railroad rights-of-way, canal towpaths, unpaved rail trails, canalway trails, and various other shared-use paths. Many greenway trails follow New York State’s extensive, varied network of greenway trails includes thousands of miles of paved and unpaved rail trails, canals, rivers, and other shared-use paths. Many greenway trails include historic maps, which may display multiple layers of information, including existing, planned, proposed and potential greenway trails, and abandoned rail lines.

Identifying the Corridor

Numerous sources can be consulted to help identify potential greenway corridors. Good starting points can be local, regional or statewide trail or bicycle plans, which may have already identified the corridor as a candidate for greenway trail development. For example, the 2021 Statewide Greenway Trails Plan, authored by NYS OPRHP, features an interactive GIS map that can display multiple layers of information, including existing, planned, proposed and potential greenway trails, and abandoned rail lines.

Other sources of information about potential greenway trails include historic maps, which may show rail lines, canals, or other historic infrastructure no longer in use today. A helpful tool is the United States Geological Survey’s Historical Topographic Map viewer, which features an interactive map viewer showing geographically accurate maps dating back to the 19th century. Various historic maps dating further back are available online but may not be as geographically accurate. Consider contacting local historical societies and the offices of town and county historians, which may have more detailed information on the past use of a corridor, the story of which may help to strengthen the case for converting the corridor into a greenway trail.

Research on ownership will help determine viability for abandoned corridors. Rail and other transportation corridors were originally assembled through a variety of legal processes, including the direct purchase of the land, the use of easements, and federally granted right-of-way. Since being abandoned, the land may still be owned by the railroad, utility, or other private business, or may have been sold, either to the local municipality, to the state, or to private citizens. Preliminary research on the current ownership status of potential greenway trail corridors can often be done through county real property department websites, which maintain maps of all parcels for property tax assessment purposes, although the information provided should always be confirmed with local officials.

Former Railroads

Many of the greenway trails in New York State are known as “rail-to-trail conversions,” or “rail trails.” These trails take advantage of the gentle grades known as “rail-to-trail conversions,” or “rail trails.” These trails take advantage of the gentle grades and linear nature of former rail lines for the route of a trail. The process of converting a rail corridor to a greenway trail may vary from project to project, but often follows a similar trajectory.

To determine if a corridor will allow for a rail-to-trail conversion, the first step is to identify the current status of the corridor as determined by the U.S. Surface Transportation Board (STB) - formerly the Interstate Commerce Commission (ICC) - the federal agency tasked with the oversight of significant changes made by railroad companies. A map of currently abandoned and railbanked rail lines can be found on the STB’s “Railroad Map Depot.”

Rail corridors can be active, inactive, or abandoned. A rail line being deemed “active” or “abandoned” does not refer to its current level of use; rather it refers to the line’s standing with the STB. An “active” rail line does not necessarily have ongoing use; there is no level of use by the railroad that deems a line active or inactive. By contrast, a line is only deemed officially “abandoned” if three steps in the abandonment process have all been met:

1. The railroad has applied to the STB to authorize the abandonment of the line.
2. The STB has issued an order authorizing abandonment of the line.
3. The railroad has notified the STB that the line has been fully abandoned.

Genesee Valley Greenway

In the early 19th century, numerous canals were proposed to connect navigable waterways with areas that had natural resources, such as the fertile lands along the Genesee River. In 1840, the first stretch of the Genesee Valley Canal opened, running from Mount Morris north to the Erie Canal in Rochester. Eventually, the canal was extended south to Oneonta on the Allegheny River.

By this point, however, railroads had superseded canals as the most efficient form of transportation for goods, and the Genesee Valley Canal was abandoned in 1878. The corridor was then sold to become the Genesee Valley Canal Railroad, which opened in 1882 from Rochester to Hinsdale running on the canal’s former towpath. Eventually, this rail line became the Rochester Branch of the mighty Pennsylvania Railroad.

The railroads eventually also saw their ascendency come to an end, and in 1963, the Pennsylvania Railroad abandoned the line. After 20 years of disuse, New York State purchased the northernmost ten miles of the corridor directly from the railroad. The rest of the corridor passed into the ownership of a local utility company, Rochester Gas & Electric. In the early 1990’s, PTNY worked with RG&E, local governments, citizens, the National Park Service and the then-newly formed Friends of the Genesee Valley Greenway to open sections of the trail to public use. This led to the purchase of the remaining 80 mile corridor by New York State in 2000. While work continues to open the full corridor to public use and improve connections to other long-distance trail corridors, the Genesee Valley Greenway State Park is one of New York’s premier greenway trails, enjoyed by thousands of visitors each year and providing critical recreational and transportation connectivity to communities along the historic corridor.

Adirondack Rail Trail

The proposal to create a 34-mile recreation trail from Lake Placid to Tupper Lake has a deep history dating back to 1992. Abandoned in 1972, the right-of-way has been preserved ever since until “the best use could be determined.” The debate about the best use of the railroad right-of-way has been at the forefront of recent conversations for more than a decade. The concept for a rail to trail conversion was met with opposing views—those that favored a return to passenger service, and those that favored the construction of a recreational trail in its place. Opponents of the rail to trail project wanted the state to refurbish the entire line to create a functioning tourist train service from Old Forge to Lake Placid, while proponents of the project supported the state’s proposal to pull up all the railroad ties and create a recreational trail for hikers, cyclists and snowmobilers. A compromise was reached in 2016, but plans were quickly derailed following a complicated lawsuit.

After several more years of negotiation, the project is back on track and the compromise will result in an $11 million investment to restore the tracks from the Remsen-Old Forge area to Tupper Lake, and $7.8 million investment to build a new multi-use trail from Tupper to Lake Placid. Phase I of the project opened to the public in the fall of 2023.
If a line remains legally active and is a priority corridor for trail development, two options are available. For corridors with active rail lines, consider a rail-with-trail. For more information on the process for creating a rail-with-trail, the U.S. Department of Transportation released the Rails with Trails: Best Practices and Lessons Learned report in 2020. For corridors no longer in active use but still listed as "active", railbanking may be an option. Railbanking only occurs on lines that are still legally considered to be active by the STB. A railbanked corridor is one that the railroad company has "banked" for future rail use if necessary. During the time the corridor is railbanked, interim rail use is a legally viable option. Once a project is moving forward, hiring a title company or real estate attorney experienced in railroad rights-of-way to assist with the railbanking process can be a wise investment.

In order to successfully work with rail companies, it is important to keep in mind that most railroads are private transportation businesses, with a primary focus on making a profit from the movement of cargo and/or people. Railroads are complex organizations that consist of multiple, distinct entities involved in ownership, maintenance, operations, or other facets of rail operation. There are generally two types of railroads - passenger and freight. Passenger rail in New York State includes Amtrak's intercity services, Metro-North and Long Island Railroad's commuter services, and about ten historic or tourist railroads. Freight railroads are classified by the STB as Class I (largest), II or III. As of 2019, Class I railroads operate within New York State (CSX Transportation, Canadian National Railway, Canadian Pacific Kansas City, and Norfolk Southern Railway), as do roughly 35 regional and short line railroads (Class II and III). For more information on working with railroads to build greenways trails, refer to PTNY’s guide Getting on Track: Working with Railroads to Build Trails in New York State.22

### Railbanking

In 1983 the term “Railbanking” was included as an amendment to Section 8(d) of the National Trails System Act. This voluntary agreement between a railroad company and a trail advocate (including a trail organization or governmental agency) sets a clear expectation that an out-of-service rail corridor can be used as a trail until a railroad decides that the corridor is required for rail service again.23 In 2018, Erie Cattaraugus Rail Trail, Inc. and Buffalo Pittsburgh Railroad signed a 25-year rail banking agreement that enabled the non-profit organization to construct a multi-use recreational trail on the 27-mile former rail line in Western New York.

### Utility Corridors

A significant opportunity for trail development is along current and former utility corridors. Utilities can either run above a trail (such as power transmission line corridors) or below ground (such as water or gas pipeline corridors). However, the use of utility corridors comes with a number of significant complications.

Utility companies often will have unique needs and will want to ensure that trail use can safely coexist with the corridor’s primary use. In some instances, concerns will primarily stem from a desire to avoid liability from potential trail user injuries; in others, the concerns will be focused on ensuring that trail use doesn’t impede the ability of the utility company to provide the service that the corridor is primarily used for. Trail users and adjacent landowners can often have additional concerns about the safety of a corridor that is also used for a utility purpose.

Utility corridors are attractive for trail development for a number of reasons. Long uninterrupted corridors are ideal for linear utility purposes, the same dynamic that makes them attractive for greenway trails. Historically, some abandoned rail corridors have been purchased by utility companies in a single transaction to prevent the corridor from being sold in a piecemeal nature. In many places, former electric trolley corridors remained under the ownership of utility companies once trolley service ended. Today, these former trolley corridors are potential trail corridors. One such example, the Albany-Hudson Electric Trail, was constructed between its two namesake communities as part of the Empire State Trail effort and runs along a corridor now owned by the utility company National Grid. The trail was constructed and is managed by the Hudson River Valley Greenway, under a license from National Grid.

Not every utility corridor will be a perfect fit for trail development. Some corridors are owned outright by the utility company while others use easements over the property of others for the routing of the trail. Some utility corridors may have significant physical challenges constraining their suitability for greenway trail development, such as large wetlands, stream crossings, and steep grades where utility corridors cross hilly terrain. Although high tension utility lines and gas pipelines are easily routed over or under wetlands, streams, or steep grades, these features may complicate or even preclude trail construction.

In New York, electric, gas, steam, telecommunications, and water services are provided by a mix of private and public entities. These utilities are under the regulation of the New York State Public Service Commission (PSC) and the New York State Department of Public Service (DPS). The PSC exercises jurisdiction over the siting of major gas and electric transmission facilities and other utility decisions. Public utilities may be operated as a function of a local government, or may be a state public benefit corporation, such as the New York Power Authority or the Long Island Power Authority. Private utilities will typically be for-profit businesses, such as National Grid, Central Hudson, or ConEd. Utilities may have complicated relationships between multiple entities, as generation, transmission, and land ownership may be handled by different entities.

Some utilities, having seen the benefit of having trails run along their corridors, may be open to working with trail advocates for additional corridors, while others may be less familiar or comfortable with the idea and may be more resistant. It is important to remember that for any utility, their primary focus will be ensuring safety and efficiency for their operations, and greenway trail proposals should focus on the ability to enhance those operations, not make it more challenging. DPS staff may be able to provide contact information for any given utility. PTNY also plans to continue working with utility companies and encouraging them to embrace allowing greenway trails on their corridors.

### North Shore Rail Trail

Without a collaborative effort between all levels of government, especially the persistence from the Suffolk County Legislature, including Sarah Anker and County Executive Steve Bellone, the Long Island Power Authority, local civic groups, and community members, the North Shore Rail Trail would not have been possible. More than 50 years ago, the concept for a 10-mile multi-use path running from Mt. Sinai to Wading River was proposed during a public meeting at the Sound Beach Civic Association, and later re-introduced in 2001 by advocates of a local bicycle organization. Agreeing to a memorandum of agreement for a 25-year lease between the County and the Long Island Power Authority - owner of the right-of-way as a power line corridor - this 10-mile, multi-use path now runs parallel to Route 25A and serves as a recreational asset and economic driver for the county.

### Albany Hudson Electric Trail

“When we began construction on AHET, National Grid could not travel end to end along the corridor. It was so overgrown that any outage requiring repair would first have to clear a path for utility vehicles to access the area. Six bridges were either completely gone or in such poor shape a vehicle could not travel on them, requiring on-road detours to access the full scope of the corridor. With construction of a ten-foot wide trail, and bridges built to highway standards, the utility has a road HRVGA maintains and much of the ROW is mowed by us, resulting in easier access when outages occur in the summer, and significant savings for the utility by no longer having to pay for vegetation management to keep the corridor open.”

— Scott Keller, Executive Director of the Hudson River Valley Greenway

### Other Corridors

Beyond railways and utility lines, there are many other corridors where greenway trails might be built, from historic canal towpaths to river walks to roadway side paths. Each of these corridors will come with its own unique set of opportunities and challenges, the breadth of which is too wide to cover in this guide. Generally however, they will follow the same overarching process as any other greenway trail project, starting with a vision.
Section 1: Getting Organized & Building Support

Cultivating the Vision

After local advocates can articulate a basic concept for a new greenway (at this early stage this might just be a known corridor or undeveloped land), this vision will need to be shared with other stakeholders and members of the general public. It is critical to describe the project comprehensively, conveying the benefits of a new greenway trail, a conceptual route of the trail, and any challenges associated with development.

Project Description

Creating a one- to two-page summary of the greenway trail project, either in print form or on a website, is a good first step to promote the concept. The document should include a summary or background of the project, including:

- Who currently owns the land and land adjacent to it?
- Where might a greenway trail start and end?
- Are there any challenges that could impact the project (i.e., nearby waterway, major roadway, or rail line)?
- Who will be the primary users of the greenway trail?
- How can the greenway trail be used by people of all ages and abilities?

This is also a chance to research and communicate information about the benefits the greenway trail would have, such as:

- What points of interest would the greenway trail link (such as local parks, schools, libraries, businesses)?
- What makes the greenway trail interesting (natural features, historic significance, connection with larger greenway trail networks)?
- Who would this greenway trail serve?
- How could this greenway trail improve community health?
- How could the greenway trail provide safer places to walk or bike to work or to school?
- How could the greenway trail help protect open space, river or stream corridors, or historic resources?
- How could the greenway trail positively impact community image, character and sense of place?
- How could the greenway trail support local economic growth?

Numerous sources exist for collecting data about the benefits of trails, including resource pages on the Rails-to-Trails Conservancy and American Trails websites. For guidance on making the case for the benefits of trails consult these resources and connect with statewide and regional trails organizations, such as Parks & Trails New York.

Part of the process of creating this summary will include collecting large amounts of information from multiple sources, some of which may not be of immediate use. This information should be kept in a reference database to ensure that it can be quickly and easily found in the future.

Conceptual Map

A map is often the most effective visual tool for sharing a project proposal. Online mapping tools are available for creating maps, and many of these resources do not require advanced cartography or GIS skills.

The map should display the general route the greenway trail might take, and the locations where greenway trailside amenities or parking might be located. At this point, the map should be purely conceptual; it does not need to necessarily represent the exact route the trail will follow, given the need to complete engineering and environmental reviews. To reduce confusion or potential opposition at the outset, avoid proposing anything on, or running through, private property without speaking to the landowners first (see “Addressing Concerns of Landowners and Neighbors” on page 16). If the proposed route and the encompassing lands are relatively certain, an interactive online map is a first step to take. If there are factors (such as private land ownership) that could cause conflict, a fixed image or an interactive map that does not show a granular level of detail or limits the scale at which the proposed route can be viewed may be more appropriate.

Sharing the Vision & Getting Others on Board

Support from a wide range of community members, public leaders, and other key stakeholders is critical in order for a greenway trail proposal to gain real momentum. As a greenway trail project progresses, the role played by each partner will become more clearly defined, recognizing that arrangements will vary from community to community. Local municipalities are usually key partners. While some public sector partners may be reluctant to assume a role in the process until public support is solidified, it is critical to connect with local government at an early stage.

Organizing supporters

Securing a broad range of support for a trail project will require help from others. A well-thought-out greenway trail project will be able to attract the interest of others in the community who understand the potential benefits that the project brings.

Getting the most out of a group of trail supporters requires good organization and effective tools to communicate with those who are invested in the outcome.

Start to build a potential roster of trail enthusiasts by reaching out to those who might potentially be supportive. Recruiting trail supporters early on in the process will allow these individuals to take on other responsibilities that will move the trail project along. Anyone can help recruit, bringing new passionate advocates into the project can help empower others to get involved and utilize their unique skill sets to advance the greenway trail project. The most successful organizers establish goals and tasks from the outset to avoid confusion and uncertainty among community members, which can lead to disengagement and inaction.

The best organizers will:

- Spread the workload around, making sure that everyone is engaged, while being realistic about capacity constraints. Volunteers should not feel overburdened or coerced into tasks that they don’t feel passionate about.
- Delegate roles, not just one-off tasks, giving people autonomy to make decisions and feel full ownership over the final outcomes.

Oneida Rail Trail My Map. Source: Oneida Improvement Committee

One of the most accessible, free, and easy to use tools is Google’s “My Map” feature (mymaps.google.com), which allows users to draw lines that can be used for greenway trail routing. Users can place points to indicate the locations of amenities or parking. An additional helpful aspect of “My Map” is the ability to change the basemap, so satellite imagery can be used to help identify the route that a former rail or canal corridor followed, as well as other obstacles, such as streams or creeks that the trail would need to cross. Other tools, including WikiMapping or ArcGIS Online, should also be considered although some require funding for full access.

As a supplement to the 2021 New York State Greenways Trails Plan, a website and mapping application was created to give the public an opportunity to review the inventory of existing, planned, and proposed greenway trails located across the state. This mapping tool can be used to identify corridors that might be appropriate for a new greenway trail, or to identify other existing, planned or proposed trails to which a new trail might connect. Visit: https://greenway-trails-plan.nysparks.hub.arcgis.com/
Section 1: Getting Organized & Building Support

Organizational Models

At this point, committee members may want to formalize the group through incorporation and not-for-profit status. The decision about whether or not to incorporate as a not-for-profit organization must be weighed carefully. Benefits of incorporation include the ability to accept grants and tax-deductible donations, enter into contracts, hire employees, participate in group insurance plans, and hold titles and easements. Incorporating as a nonprofit may also limit the liability exposure of committee members.

While the benefits of incorporating can be significant, they must be balanced against the time and expense involved with filing for not-for-profit status and keeping necessary records. Section 501(c)(3) of the U.S. Internal Revenue Code defines and limits the activities of tax-exempt not-for-profit organizations. To incorporate as a not-for-profit, the committee will need to file articles of incorporation, adopt formal by-laws, and formally apply to the Internal Revenue Service and New York State Department of Taxation and Finance for tax-exempt status. Obtaining legal advice to guide the incorporation process can be beneficial for some nascent organizations. For additional information on incorporation, contact the NYS Department of State Division of Corporations at (518) 473-2492 or corporations@dos.ny.gov.

Several alternatives exist to establishing a new not-for-profit organization. If the committee is working closely with a municipal government, the municipality can accept and administer funds for the committee. Another option is to affiliate with an established not-for-profit organization, such as a land trust, parks organization, or chamber of commerce, either temporarily or on a more permanent basis, with the established organization serving as a fiscal agent for the newer organization.

Digital Communication

Modern organizing efforts must take full advantage of both in-person and digital communication channels. Organizations must be able to communicate their ideas using social media and use the full potential of web-based networks to organize potential project supporters. Use of social media and other web-based resources should be guided by a clear understanding of the primary audience and how the information should be conveyed.

Some efforts will be focused on existing supporters and those who are likely already familiar with and sympathetic to a project. In these instances, the use of newsletters or forums such as Facebook groups can be most efficient in keeping supporters informed. A number of free or low-cost resources exist to keep supporters updated by email, such as Mailchimp and Constant Contact, and others. For those who may be opposed to a project, consider developing and promoting talking points to help unpack any concerns that might be raised publicly.

Dedicated posts on social media accounts and encouraging partner organizations to share information about a proposed project can be effective ways to introduce projects to new audiences. This does not necessarily mean that every greenway project should have a dedicated account. Gaining followers for a new social media page can be a slow process and will not necessarily reach beyond groups and people already aware of the proposals. On the other hand, creating dedicated social media pages for a trail early on may prove useful down the line to keep trail users up to date on conditions, events, and other happenings related to the trail.

Establishing a purpose and goals

Initial trail committee meetings should primarily focus on defining the group’s purpose and establishing goals. The committee’s goal may range from acquiring and managing the trail corridor itself to activating stewards on the ground so that a governmental entity is more likely to assume a role in the management or maintenance. Adopting clear and realistic goals early on will help the group prioritize activities and make the most of limited resources and people power. Specific objectives should be established after the issues, concerns, and desires of the public become known.

Well-Rounded Trail Committees

When considering possible sources for members of the committee, look to:

- **Community leaders:** municipal officials, scout leaders, teachers, coaches, and administrators, religious leaders, corporate leaders, board members of civic organizations such as Rotary, Lions, Kiwanis, and garden clubs
- **Outdoor recreation/user groups:** trail and hiking organizations, bicyclists, runners, equestrians, cross-country skiers, bird watchers, snowmobilers, school athletic departments, scout groups, senior citizens, and individuals with disabilities
- **Local businesses:** downtown business associations, chambers of commerce, individual shop owners, utilities, corporations, restaurants, and lodging establishments
- **Public agencies at the state, national, regional, county, and municipal level:** planning, take and recreation, public works, environmental conservation council, soil and water conservation, waterfront revitalization, health, transportation, tourism, cooperative extension, and management agencies for any open space properties such as nature preserves and state forests
- **Landowners:** neighborhood or homeowner associations, farmers, utilities, and other significant landowners
- **Local organizations or representatives of regional, state, or national organizations with potential interest:** environmental, conservation, fish and game, land trusts, farm bureau, historic preservation, alternative transportation, smart growth, and health
- **Technical experts:** landscape architects, planners, contractors, engineers, foresters, attorneys, and public relations and computer specialists

Although early trail committee meetings tend to be informal, it’s helpful to have someone take notes or minutes to keep a record of decisions and comments to reference at future meetings. During this early organizational stage, it is helpful to compile information about other trails by gathering plans, maps and brochures, reaching out to trail managers and trail friends groups, or by taking a site visit to nearby trails and talking to those who made it happen.
Building Public Support

Greenways offer communities a wide array of benefits - from economic benefit to health impact, from environmental impact to improvements in community cohesiveness and character. A summary of the myriad benefits of trails is beyond the scope of this guide, but the benefits are included in New York’s 2021 Statewide Greenway Trails Plan. Greenways are intended to be community amenities; therefore, engaging with and building support from local residents from the start of the greenway development process is essential.

An understanding of who local residents are - the demographics of the community - is essential to ensure that outreach is carried out in an inclusive way that reaches diverse populations. To successfully give all groups a voice and meaningful opportunities for participation, a detailed outreach plan is critical. A public participation plan will lay out the process by which all interested and affected individuals, organizations, agencies, and government entities will be included in the greenway planning process. A successful participation plan requires an understanding of who makes up the community, whose support is being sought, and what are likely to be their interests and concerns.

Community participation involves both informing the public about the proposed greenway trail, but also listening to their ideas and concerns. For the greatest likelihood of success, the engagement plan should be able to identify who the key audiences are, where they live, what form of engagement would be most effective (including both when and where to speak to the community), and what resources (such as funding or volunteer help) are available to help with public participation.

Public engagement should be conducted with an open mind. A discussion at a community meeting might include more than details about the greenway trail project; issues that are relevant and important to the neighborhoods and communities that could be impacted are inevitable, and need to be heard and taken into consideration, not dismissed as “not a part of the project” or “not a real concern.” Discovering, and when possible, addressing, community concerns is the responsibility of those involved in greenway development. Good community participation should be followed by responsive action. Having contacts or resources available to potentially help alleviate problems in real time is a critical piece of successful public engagement. This will build trust and show a level of care for the lived experiences of the community.

Public Participation Strategies

Traditionally, the most common technique for gathering input is through a public meeting. While public meetings can be effective, they may not attract a broad and representative audience. Rather, creative approaches can be used to help reach all audiences, using both web-based and in-person input gathering. Public participation should be both informative and interactive. While presentations to neighborhood meetings, community groups, or at other scheduled events can be effective, walking tours or other community events can promote further engagement and discussion. By providing input opportunities that are more engaging for diverse audiences, a project will be more likely to get a full picture of community concerns and support. In addition, public participation opportunities should be made available, whenever possible, to those with “non-traditional” schedules to participate as equal members of the community, and offered in languages other than English.

Addressing Concerns of Landowners and Neighbors

Many greenway projects are delayed or entirely prevented from coming to fruition due to opposition from adjacent landowners or other neighbors. This opposition is usually fueled by a lack of information and unanswerable criticism of trail proposals. Trail opponents will cite issues such as property rights, concerns over loss of property values, liability, and fears of littering, trespassing, burglary, vandalism, and other crimes. As opposition grows, it can become entrenched, leading to acrimony and conflict, and at worst, the discontinuation of a project. However, if concerns can be addressed early on, and answered openly and honestly, this opposition can be met, and opponents can be turned into project supporters. A majority of those who were initially opposed to trails often find that their fears about the trail never materialize. While there are studies that have refuted claims that greenway trails increase crime, lower property values, or introduce new liability claims, adjacent landowners may be intrinsically skeptical about a new project. Over time, adjacent landowners can become the most avid, enthusiastic trail users and supporters once a new greenway is in place. However, this change in opinion can take time and patience.

Dealing with Opposition

The Rails-to-Trails Conservancy has outlined ten techniques that can be effectively used to deal with project opposition:

1. Reach Out: Don’t wait for nearby residents to learn about your proposal by reading about it in the newspaper. Talk to them directly, either by traveling door-to-door, circulating an open letter or giving a presentation at a community gathering.
2. Listen: Take time to understand why adjacent landowners are opposed to the trail. Many of their concerns stem from fear of the unknown. Listen carefully, address specific concerns and try to arrive at solutions that benefit as many people as possible. While you may think these concerns are unreasonable, your opponents take their interests, however misinformed they might seem to you, seriously. Never trivialize your opposition’s concerns.
3. Find Allies: Among the people who live adjacent to the proposed rail-trail, you may find bicyclists, walkers, runners, horseback riders; families with active children or individuals with disabilities—all of whom represent likely trail supporters. Seek out these individuals, explain the trail’s benefits, and urge them to get involved in supporting the project.
4. Get Involved: Establish a trail advisory committee and ask adjacent residents to serve along with advocates and user groups. Often, when given a chance to participate in the process, a group of adjacent landowners may be more willing to work toward developing solutions.
5. Enlist Converts: If your group has some travel money, invite an articulate landowner who was once opposed to a rail-trail to come and speak in your community. Hearing the story of how an opponent became a trail advocate can help ally the concerns of future trail neighbors.
6. Build Consensus: If you are having difficulty building consensus, consider enlisting a third party to identify the concerns of trail opponents and trail supporters. Bring in someone who is respected and trusted by both sides, such as an official from the National Park Service’s Rivers, Trails, and Conservation Assistance Program or the New York State Department of Environmental Conservation.
7. Be Positive: Although it may be difficult at times, do not react in anger to claims that trail opponents make. No matter how unpleasant a discussion becomes, always treat everyone with fairness and sincerity. Be firm, factual and reasonable.
8. Work Hard: Don’t let outspoken opponents sidetrack your project. Identify milder opponents of the trail and those individuals who are still undecided. Work hard to address the concerns of these individuals and convert them to your cause; they can add to your majority and help persuade other detractors.
9. Differentiate: A completed rail-trail is quite different from an abandoned railroad corridor. Clearly inform people who are unhappy with a littered, overgrown and unmanaged corridor that a developed rail-trail is managed and maintained, has permitted uses and trail rules and often enhances the surrounding landscape.
10. Work the Media: Favorable coverage in the media helps defuse the opposition and generate support for your cause. Give your project the best opportunity for positive exposure by supplying television, radio and newspaper reporters and editors with interesting and accurate factual information.
Statewide & Regional Governments

Public agencies play a critical role in the greenway trail development process and should be involved in the early phases of the project. State funding opportunities, such as the Transportation Improvement Program or Regional Economic Development Councils follow set schedules (see Section 3 for more information on funding opportunities). It is important to be familiar with these timelines and identify at what point conversations with key decision makers may be necessary to have a project included in a broader regional strategy.

State Agencies

There are six primary state agencies that own and operate greenway trail corridors or have a direct role in establishing a network of state greenway trails, along with numerous smaller state agencies, public benefit corporations or other quasi-governmental entities that may have a current or potential future role in greenway trails.

NYS Office of Parks, Recreation and Historic Preservation

Divided into eleven regions, the Office of Parks, Recreation, and Historic Preservation (OPRHHP) is primarily responsible for managing the State Park system, which includes over 250 parks, recreational trails, historic sites, golf courses, boat launches, and more, encompassing nearly 350,000 acres. The agency’s work also includes preparing, updating, and implementing portions of the NYS Greenway Trails Plan, published in 2021. The agency also administers the Recreation Trails Program, a competitive state grant that can be used to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. NYS OPRHHP also coordinates the Empire State Trail Program at a statewide level.

NYS Department of Environmental Conservation

In 1970 the New York State Department of Environmental Conservation (DEC) was established with the intention of merging all state programs dedicated to protecting and enhancing the natural environment into one agency. Split into 9 regions and more than two dozen specific program units, including environmental permitting, DEC is tasked with administering environmental programming and grants, generating reports, and facilitating volunteer opportunities. DEC directly operates trails in the Adirondack and Catskill Parks, as well as a limited number of other greenway trails across other parts of the state. Permits from DEC may be required for greenway trail projects, especially when work may impact natural resources such as wetlands.

NYS Department of Transportation

The Department of Transportation provides guidance on transportation policy for the State, including planning and designing safety facilities for bicyclists, and offers assistance on the development and operation of transportation facilities and services for major highways, railroads, roadways, mass transit systems, ports, waterways and aviation facilities. NYS DOT administers numerous state and federal grant programs that can be used for the construction of bicycle and pedestrian facilities, such as greenway trails. NYS DOT also administers the regional bicycle-pedestrian coordinator for each of the eleven DOT regions.

NYS Canal Corporation

The New York State Canal Corporation, a subsidiary of the New York Power Authority, ensures proper operation and maintenance needs are met along the New York State Canal system including the Erie, Champlain, Oswego, and Cayuga-Seneca Canals as well as the adjacent Canalway Trail system, which includes the Erie and Champlain Canalway Trails.

Hudson River Valley Greenway

The Hudson River Valley Greenway Act of 1991 (the “Greenway Act”) established two organizations to carry out the process for coordinating between agencies and counties, promote greenway trails throughout the Hudson River Valley. The Greenway Conservancy for the Hudson River Valley, Inc. helps to coordinate between agencies and counties, promote system-wide trails development and tourism opportunities, and preserve scenic, natural, historic, cultural and recreational resources. The Hudson River Valley Greenway administers multiple grant programs, including dedicated funding for the development of trails throughout the Hudson River Valley.

NYS Thruway Authority

The NYS Thruway Authority also plays a role in local greenway projects, either through the ownership, management, or regulation of state land, or through the administration of grants and other funding sources that may be useful for completing trail projects. For more information on grants administered by state agencies, see pages 37-39.

For larger, statewide agencies, a regional office is typically a good starting point to open conversations about a potential project. These offices can provide a connection with the correct person to help advance a project. PTNY maintains working relationships with larger state agencies and may be able to help identify a key contact. State legislators can also help establish a connection with key staff at the agency level.

State agency | Greenway trail-related work
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NYS Office of General Services (OGS) | OGS provides a broad spectrum of services to state agencies, local governments, and the public, including management of state projects such as the construction of the Adirondack Rail Trail.
NYS Thruway Authority | The NYS Thruway system includes the 31-mile Governor Mario M. Cuomo Bridge, which features a walking and biking path.
NYS Bridge Authority | New York State Bridge Authority maintains and operates five crossings of the Hudson River for motorists that also serve as vital transportation and scenic routes for walkers and cyclists.
Metro-North Railroad | Metro-North Railroad (part of the Metropolitan Transportation Authority) owns the “rail-with-trail” route home to the Beacon Line and the Maybrook Trailway.
Port Authority of New York and New Jersey | The Port Authority of New York and New Jersey oversees regional transportation infrastructure between its two states, including several bridges with bike and pedestrian accessibility.
Hudson River Park Trust | The Hudson River Park Trust operates and maintains a public park and estuarine sanctuary along the Manhattan shoreline. The park is home to miles of the Hudson River Greenway and Empire State Trail.
Battery Park City Authority | The Battery Park City Authority owns and maintains the Battery Park City neighborhood in Lower Manhattan, home to the southernmost mile of New York’s Empire State Trail.
The Roosevelt Island Operating Corporation | The Roosevelt Island Operating Corporation (RIOC) operates and maintains Roosevelt Island, including parks and greenway trails on the island.
Defining Success

By having a clearly identified vision that has been shared out and gained broad support within the community and beyond, a greenway trail project will have come a long way. A key milestone in the success of many greenway trails happens when a lead agency is identified and commits to making the project a reality. The entity that takes ownership of a greenway trail project may be the municipality, county, Metropolitan Planning Organization or other level of government with the capacity, or a non-profit organization. This commitment usually comes in the form of hiring a consultant to conduct a feasibility study, discussed in the next section of the guide.

Metropolitan Planning Organizations

A key regional partner in many trail projects is the Metropolitan Planning Organization (MPO). MPOs are established by federal law for urban areas with at least 50,000 residents. Each MPO develops a long-range regional transportation plan and a short-range program of projects to fund with federal transportation money (known as the Transportation Improvement Program, or TIP). For each plan, the MPO engages with stakeholders, including the general public, in the planning process. By creating a vision for the region in the Plan and by identifying projects and investments that help achieve that vision, the MPO ensures that public funds are spent in such a way that advances regional planning goals. Getting a trail project included in a region’s TIP can be critical for accessing federal funding for the project. For areas not served by an MPO, the county’s Department of Transportation or Department of Public Works works with NYSDOT to administer federal funding.

MPOs in New York State:

- Adirondack/Glens Falls Transportation Council (Warren and Washington Counties, and part of Saratoga County)
- Binghamton Metropolitan Transportation Study (Broome and Tioga Counties)
- Capital Region Transportation Council (Albany, Rensselaer, and Schenectady Counties, and most of Saratoga County)
- Dutchess County Transportation Council (Dutchess County)
- Elmira-Chemung Transportation Council (Chemung County)
- Genesee Transportation Council (Genesee, Livingston, Monroe, Ontario, Orleans, Seneca, Wayne, Wyoming, and Yates Counties)
- Greater Buffalo Niagara Regional Transportation Council (Erie and Niagara Counties)
- Herkimer-Oneida Counties Transportation Council (Herkimer and Oneida Counties)
- Ithaca-Tompkins County Transportation Council (Tompkins County)
- New York Metropolitan Transportation Council (New York City, and Nassau, Putnam, Rockland, Suffolk and Westchester Counties)
- Orange County Transportation Council (Orange County)
- Syracuse Metropolitan Transportation Council (Onondaga County and parts of Madison and Oswego Counties)
- Ulster County Transportation Council (Ulster County)
- Watertown Jefferson County Transportation Council (Jefferson County)

Map of the 14 MPOs in NYS

Once the concept for a new greenway has enough support from the community to proceed, and regional agency partners have been engaged, a lead entity should be identified to complete a concept plan or feasibility study either in-house or by hiring a consultant. A completed feasibility study will provide the project with an understanding of any necessary land acquisition or access needed to undertake the project, and a detailed cost estimate which will allow project partners to begin seeking funding in earnest. Funding will initially be used to complete design documents needed to construct the trail. After sufficient funding has been secured and environmental review and permitting has been conducted, construction can begin and the greenway trail can become reality.

Feasibility studies help create a vision for the project, and will map key data, opportunities, and constraints. Through this process, the preferred greenway route and key access points can be identified. A feasibility study should also include information on surface type and characteristics, furnishings, other key features, and what other steps might be required to complete the project such as land access and/or acquisition or capital construction costs. Finally, a feasibility study will include a plan for short and long-term maintenance needs and any other considerations for after the project is complete.

Feasibility studies vary greatly in complexity and cost. Feasibility studies for shorter, less complex projects can be completed from $5,000 to $10,000 and can be done either entirely by volunteers or in-house staff for a local agency. By contrast, for more complex projects professional assistance from a consultant or team of consultants, including planners, landscape architects, and/or engineers is typically required, which will likely come at a significant cost, likely between tens of thousands to hundreds of thousands of dollars. The lead agency seeking to undertake the feasibility study should prioritize its budget to include funds for a feasibility study, or should seek a grant to fund it. Greenway advocates can play a key role in securing grants to cover the cost of consultant support to develop a feasibility study. Once the feasibility study begins, managing the study process and timeline is the responsibility of the entity that hired the consultant. For many feasibility studies, a steering committee of key stakeholders is established to help provide input on the process and inform key decisions.

A final feasibility study should clearly outline next steps required to advance the greenway trail. The study should evaluate the proposal from every reasonable and conceivable angle by analyzing various alternatives, and provide evidence of need, compatibility with the local context, the benefits, any potential impacts and a prioritized list of next steps.

A few examples of high-quality, well-executed feasibility studies include the Patroon Creek Greenway Trail Planning Overview

Greenway Trail Planning Overview

If using a consultant to complete the feasibility study, develop a Request for Proposals and select the consultant or consultant team to be used for the study.

Complete the feasibility study, including mapping and selection of a preferred alignment, facility type and features, necessary land access and acquisition.

Initiate the State Environmental Quality Review Act (SEQRA) process and begin to seek relevant regulatory approvals.

Secure funding to complete design documents and construction plan. This can be secured at the same time as full project funding.

Select a contractor for construction through an RFP or other process. Begin construction.

Select the lead entity for a greenway trail project (municipality, state agency, or other).

Conduct community engagement to collect public input and inform the feasibility study.

Release the feasibility study to the public.

If land acquisition or access is necessary, secure funding and acquire land or right to use land.

Use a consultant or in-house capacity to complete the design documents and construction plan.

Complete design and construction documents.

Environmental review & permitting.

Secure funding.

Select contractor & begin construction.

Community Engagement

 Gathering community feedback should never take a one-size-fits-all approach. A traditional evening workshop featuring a PowerPoint presentation and opportunity for Q&A won’t work for everyone. The timing of these presentations can inadvertently exclude people, and the key project details might get lost amongst the nuances of the planning process. Across the country, “pop-up” demonstrations are helping to re-engage local residents by meeting residents where they will already be, and soliciting public comment at the site of the proposed project.

Greenway (listed under “Implementing the Capital District Trails Plan”), the Saranac River Trail Greenway, the Southern Tier Trail, and the Arcade Trails Plan.

Engagement Process

The most impactful, successful feasibility studies are those which follow an open, community-oriented process where key decisions and priorities are guided by public input. The consultant conducting the feasibility study should use this input to help inform key components of the development process; therefore, feedback should be captured throughout the duration of the study period, with numerous opportunities (both in-person and virtually) available and open to all members of the community. Ways to gain input will vary by community but should be responsive to the needs of those who will be most impacted by the greenway, both positively and negatively.

Opportunities for public input include:

- Public meetings
- Design charrettes
- Pop-up events
- Surveys & questionnaires
- Interviews
Mapping

A key part of the feasibility study is the completion of various maps that help illustrate how the proposed greenway will be impacted by, and could potentially have an impact on, other aspects of the surrounding community. This is typically accomplished by analyzing mapping data from various sources and layering them on one another to identify potential issues that could impact construction, issues that might require further environmental approvals, or issues that could lead to pause from members of the community.

Mapping is typically completed by planning or Geographic Information Systems (GIS) professionals. The standard set of maps will illustrate the trail route, and will overlay data with information on land parcels and who owns them, zoning, topography, water bodies, wetlands, or demographics.

The mapping process is not simply an informative tool that displays geographic information. Through the mapping process, the consultant completing the feasibility study will undertake a methodical inventory of information within the study area. The report will analyze available data, including tax information, demographics, locations of key facilities, etc. However, other information may require more work-intensive data collection, either through on-the-ground field work or through the study of disparate file sources not easily accessible as mapped data.

The mapping process for a feasibility study should also include an opportunity for community input. Through this process, the project team should collect information on the preferences of local residents and expected trail users, and on relevant trends from similar facilities to understand how facilities, such as the proposed project, is likely to be used. A concerted effort should be made to solicit public comment to ensure that impacted property owners, public works departments, utility companies, any owners of highways/rail lines/etc. that the greenway would cross have an opportunity to provide context or offer additional details. Using this data, the consultant can ensure that the feasibility study accurately anticipates how the completion of the proposed trail and its design features may impact surrounding neighborhoods or other nearby areas.

Example Map: Patroon Creek Greenway

The mapping process will involve the aggregation of large amounts of data and distillation of that information into key takeaways that will impact both the design of the greenway and the process required to get the greenway built. Mapping should also identify key opportunities that support the rationale for constructing the greenway: proximity to key facilities such as schools and universities, parks and open spaces, and nearby commercial districts. All of this information will help to guide the alignment of the greenway itself, the location of access points, and key connections.

Selecting a Preferred Alignment

A key outcome of any feasibility study process is the identification of alignment and access alternatives and the selection of a preferred alternative.

For some proposed greenways, the alignment is straightforward; for projects such as rail trails, the alignment simply follows the rail bed. However, there may be instances in which issues such as cost, ease of construction, environmental impact, community preference, aesthetics, recreation value, or other factors will offer several different potential routings. The comparison of various alignments should also include an analysis of the potential access points offered by each routing. The feasibility study will typically aggregate multiple potential inputs into a set number of route alternatives. These will then be compared to identify a preferred alignment.

The process by which the consultant will identify the preferred alignment should be agreed upon with the project managers, as the relative weight given to various factors in making this decision could greatly influence the chosen preferred alignment. Each of the alternatives should be chosen, and subsequently evaluated, by how well they complement the vision statement for the greenway. Choosing a preferred alignment should integrate public input, and should include a list of benefits afforded by, and the drawbacks to, each of the proposed alternatives. To the extent possible, the preferred alignment should be a consensus choice. In many instances, the project team completing the feasibility study will host one or more community input sessions or perform other types of public outreach to gain input from potential trail users and others on the community’s preferred alignment.

Any discussion of potential routes and access points, and the choices of a preferred alignment should include an understanding of how any adjacent or otherwise affected landowners may support or oppose the greenway concept, and how the presentation, and ultimate selection, of a routing may impact the support or opposition from those landowners. The study should also outline what, if any, work is needed to acquire necessary land or secure easements to complete the project.

The selection of a preferred alignment may also involve breaking the project into a series of phases. Phasing a project can allow the larger greenway to be broken into smaller segments that are cheaper to fund and/or more easily constructed. This approach can allow early phases of a greenway to build public appreciation for the trail - and public support for future phases - while sorting out any potential challenges and acquiring additional funding to complete the greenway.

Facility Type and Features

The feasibility study will be a formal declaration of many of the expected features of the new greenway. A number of factors will influence the choice of the greenway design and what features are included in the plan for the new greenway, including the terrain, the context (urban vs. suburban vs. rural), community preferences, costs vs. available funding, plans for phasing, and maintenance capacity. The choice of facility type and features is critical to developing a reliable cost estimate, even if the estimates are only rough at this stage.

Key decisions to be made with regard to facility type and features include:

Facility Type: Will the greenway be a fully separated shared-use trail or some other facility type, such as a path along a roadway or a waterfront promenade? Will portions be on-road or use other existing infrastructure? Or will the trail be a combination of facility types?

Surface Type: Will the new greenway be paved with asphalt or concrete, or will it have a crushed stone (stone dust) or a natural surface? Are there specific locations where different surface types are needed (at roadway crossings or over bridges)?

Width: How wide will the greenway need to be? This will be dependent on the available space, as well as on expected volume of use.

On-road Segments: Will any portion of the greenway require on-road sections? How will the routing of the greenway be communicated to users and others? What, if any, changes are necessary to the roadways to ensure the safety of users?

Context: How should the design of the greenway change from urban to suburban and rural contexts? What facility choices should be adopted for each of these contexts?
Crossings: Where does the greenway have to cross potential barriers, such as roads, waterways, or railroad tracks? How does the design account for these crossings and ensure the safety of greenway users at these crossings?

Feasibility studies and concept plans may also explore the following topics, although these are often figured out as part of the design process and are dependent on the amount of funding available for construction:

**Finish Level:** How built out will the “finish” along the greenway be? Will the greenway have a more rustic, rural feel to it or will the greenway be more urban and fully developed?

**Furnishings and Amenities:** How many and at what locations will basic amenities such as benches, lighting, trail use counters, gardens or public art, and bike racks be located? What additional furnishings or amenities are desired to complete the greenway?

**Bathroom Facilities and Water:** Are there locations along the greenway at which users will be able to access bathroom facilities? Anywhere that users will be able to access drinking water?

**Accessibility:** Is the greenway designed in such a way that ensures that all members of the community will be able to use it? Are facilities, such as access points, benches, drinking fountains, and bathrooms designed to the required accessibility standards and in such a way that ensures that users of all ages and abilities feel comfortable and welcome on the greenway?

**Wayfinding and Signage:** Where will signage be placed? What information will signage be conveying? (More information on wayfinding signage is in the section below).

**Operation and Maintenance:** This piece of the feasibility study will answer a simple but critical question - who will ultimately own and maintain the completed greenway? In many cases the owner established through the construction process is also the owner once complete, however this will not always be the case. The study should include a preliminary plan for the operation of the greenway when complete, specifically identifying what maintenance will be required and who will be responsible for that maintenance. As part of this, the study should consider the capacity that the greenway owner may currently have to maintain the property, and how those needs may change and therefore require additional capacity to adequately maintain the greenway. This may also include a consideration of ways in which the greenway can be designed to accommodate maintenance, such as ensuring that entrance points are sufficiently wide to allow maintenance vehicles to access the greenway, or that any bollards installed at entrance points are moveable. Where possible, machinery and/or fleet standards should be maintained to minimize additional costs and eliminate a potential burden for the party responsible for maintenance.

Additional, the feasibility study should identify instances where the greenway would cross jurisdictional boundaries and should clearly define who is responsible for maintaining or warrancing of the greenway. The operations and maintenance plan will be refined and finalized towards the end of the design process.

Off-road signs are not intended for vehicular visibility, so there is greater flexibility in their design. However, signage should be designed with the intended audience in mind; if signage is geared towards bicyclists, it should be designed and implemented in such a way that bicyclists can easily read the signage while riding more than 10 mph. Any traffic control device installed on streets, highways, bikeways, and private roads open to public travel must comply with the two regulatory standards: the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and 17 NYCRR Chapter V (New York Supplement), as well as design standards established by the Americans with Disabilities Act (ADA). Local jurisdictions may have additional requirements. During each phase of a project, design professionals should coordinate with all local jurisdictions to determine what, if any, additional processes and procedures are necessary for the project.

**Regulatory or warning signage**: Regulatory or warning signage is in the section above (image).

The Brooklyn Waterfront Greenway runs for 26 miles along the waterfront from Greenpoint to East New York, with 215 miles open for use as of 2023. In 2008, the Brooklyn Greenway Initiative (BGI), working in partnership with the Regional Plan Association, laid out a plan for stewardship and maintenance of the trail as new sections were built. Through this plan, BGI took on the role of the “greenway conservator” helping to coordinate between the eight public agencies and property owners that own sections of the greenway, by offering supplemental, private monies for services they provide. The role of the Brooklyn Greenway Initiative serves to unite the agencies and private property owners by helping to facilitate collaboration among several stakeholders. In 2015, the BGI developed a cost estimate for the greenway. The Capital Improvement Program was projected to cost $197 million, and the construction phase, for which funds were appropriated, was estimated at $171 million. The BGI also conducted a financial analysis that estimated the operating costs of the greenway to be $4.5 million per year, and the maintenance costs to be $7 million per year. The BGI estimated that $15 million per year would be needed to cover all costs.

When developing a stewardship and maintenance strategy for the Brooklyn Waterfront Greenway, BGI found that “overall cost effectiveness is best achieved when agencies provide maintenance services that are part of their core competency.” Each agency is therefore encouraged to take on services that are already in their purview (i.e., New York City Parks providing tree maintenance and NYC DOT providing striping). In a comprehensive survey of trail maintenance costs, Rails to Trails Conservancy found that “maintenance costs on average range from $500 to $1,000 per trail mile per year depending on surface.”

Local, state, or federal agencies, or a non-profit organization, or any combination, can assume primary responsibility for the management and maintenance of a trail; or, the responsibilities can be shared and formalized by establishing the terms in a Memorandum of Agreement with a volunteer organization. The trail manager will be responsible for conducting routine maintenance, ensuring that the greenway trail remains accessible and safe for users, responding to issues as they arise and knowing and tracking the potential need for long-term maintenance and significant repairs.

Design considerations should be made in concurrence with an effective management structure, maintenance plan, and maintenance schedule. Even minor maintenance tasks will require a monetary investment and time commitment and should always be factored into the trail design and location. Factors such as surface type, route...
alignment, grade, or trailside amenities may require specialized equipment or personnel, and will therefore directly influence maintenance considerations. Understanding the role that the owning entity will play in partnership with the trail manager (if the owning entity will not be responsible for management and maintenance), and how the trail manager will delegate responsibilities, should be established before construction begins.

Maintenance will fall into two categories - routine and larger scale capital maintenance. A maintenance plan within the feasibility study will outline who would be responsible for each of those categories of maintenance work, as well as providing detail on specific activities (i.e., sweeping/blowing debris from the trail, mowing of shoulders, vegetation management, trash pickup, cleaning graffiti and drainage), costs, timeframe, and staffing responsibilities for maintaining a trail. The plan should enable the trail manager to understand on-going and anticipated maintenance needs and associated staffing requirements. A maintenance plan and maintenance schedule provide trail managers with a systematic and thorough process for identifying, tracking, and addressing maintenance needs.

**Responding to issues and concerns**

While it can be time consuming to address inquiries from the general public, trail users will often seek out a point of contact for questions, comments, or concerns about the trail, or in response to an encountered issue. Some users prefer to speak with someone directly, while others may prefer to send an email. In either scenario, a point of contact should be established at this stage, so that when the trail opens, trail users know exactly how to report an issue, and who they should report the issue to. The process for collecting, tracking, and responding to issues can be challenging, especially when certain issues are within the purview of the owning/managing entity (i.e., maintenance considerations) and others that fail outside of it (i.e., law enforcement matters). Clarifying exactly what issues are within the scope of the trail manager or owner, and publishing this information provides the general public with guidance and can help filter inquiries received from the general public. Depending on the circumstances, a public email, phone number, or online form could be used to capture this information.

**Long-term maintenance**

The feasibility study should also identify the potential need for significant capital repair or reconstruction after a period of time has passed. For example, if the greenway trail is envisioned with a paved, asphalt surface, at what point will the trail need to be repaved with fresh asphalt? While routine maintenance will help prolong the life of the trail surface and other trail assets, these will likely need eventual replacement. If routine maintenance is deferred, issues can snowball into more significant issues that negatively impact the trail user experience and require costly, capital repair work.

**Volunteer Support**

Local volunteer groups can also offer supplemental services, free of charge, to assist with light maintenance needs along a greenway trail. While the potential for volunteer stewardship of a greenway should be considered at this point, without a guaranteed long-term agreement, volunteer work should not be substituted for a true maintenance plan for a greenway. Stewardship should be viewed as a way to enhance or augment planned maintenance activities.

**Downed tree on the Erie Canalway Trail/ Empire State Trail in Utica, NY. Source: Parks & Trails New York.**

**Climate Change & Resilience**

Greenway trails are a significant part of the infrastructure solution to climate change, providing opportunities for alternative mobility that can reduce dependency on fossil fuels. In the short term however, climate change and extreme weather are impacting New York with increasing frequency and severity. To maximize their role as community assets, greenways should be designed to ensure that they can withstand the impacts of severe weather. Greenways should also be designed to maximize overall resiliency benefits, providing non-motorized transportation options and enhancing the resilience of surrounding communities. Effective feasibility studies should document and quantify these benefits that can be expected as part of a new greenway trail project.

Greenway trails can be planned, designed and maintained in a manner that maximizes their resilience to natural hazards. Greenway design should consider erosion and the potential for flooding, especially when running along rivers or streams, or at places where a greenway crosses a body of water. Runoff should be designed to flow off of the greenway, and limit pooling. Funding may need to be identified for substantial repairs to greenways that are damaged by severe flooding events. Additionally, while less of a concern in New York than in many other states, greenway trails should also be designed in ways that limit the potential risks from heat and sun exposure, primarily by having shade coverage wherever possible.

While greenways need to be designed to be resilient, they can also provide significant resilience benefits for their surrounding environments. Greenway trails can incorporate “ecosystem services” by incorporating natural or green infrastructure, which can enhance flood prevention and mitigation by capturing water for stormwater management or enhance water quality by establishing buffers to prevent runoff. Greenway trails can also promote habitat conservation and connectivity, reduce the urban heat island effect, connect wetlands and habitats, and in coastal locations, provide a buffer that protects from floods, storm surges, and coastal erosion.
Environmental Review & Permitting Requirements

Environmental Review/SEQR Process

The New York State Environmental Quality Review Act (SEQR) requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decision-making, which means that these agencies must assess the environmental significance of all actions they have the discretion to approve, fund, or directly undertake. SEQR requires the agencies to balance the environmental impacts with social and economic factors when deciding to approve or undertake an action, and the sponsoring or approving governmental body is required to identify and mitigate any significant environmental impacts resulting from the action. The SEQR decision-making process “should begin as soon as the principal features of a proposed action and its environmental impacts can be reasonably identified.”

The SEQR process can be lengthy and complicated, depending on the complexity of the project and the number of state or local governmental agencies involved in reviewing the project. New York State provides numerous resources to aid in the completion of SEQR reviews, including a comprehensive SEQR Handbook, what's known as the SEQR Cookbook, a step-by-step guide to the process, a Citizen's Guide to SEQR, and a Local Official's Guide to SEQR. Many of these resources are also available in Spanish. All of these resources are available in both languages on the dedicated State Environmental Quality Review Act (SEQR) page on DEC's website. At a minimum, the feasibility study should identify the likely governmental agencies that would be involved for SEQR purposes.

Permitting

The feasibility study should include a listing of state, federal, and local government regulatory approvals that may be required to construct the trail. Applicable regulatory programs may include:

- State and federal wetland and/or stream crossing permits for trails constructed near water bodies issued by the U.S. Army Corps of Engineers (ACOE) or the NYS Department of Environmental Conservation.
- Historic Preservation reviews to identify whether any sensitive historic or archeological features might be impacted by construction, coordinated with the New York State Historic Preservation Office (SHPO).
- NYSDOT and local government Highway Work Permits for installation of crosswalks, signage, or traffic signals across or along public roadways.

The purpose of identifying potential permitting approvals is to identify state, federal, and local government agencies that have regulatory involvement in the project, as these permitting processes can be technical and lengthy. For NYSDOT or other local road crossings, this is a chance to consult with them while the concept is still in development. Formal permit applications are submitted to involved agencies later, when trail planning has advanced to the stage where draft construction plans are developed.

Cost Estimates

A critical element of any feasibility study is the completion of a cost estimate. The information laid out in a feasibility study will help inform and lead to the elements identified in the cost estimate. The cost to construct a new greenway can vary greatly depending on the trail surface, width, location, structures or gateway treatments, signage, parking areas, or desired amenities. Any significant features that are absolutely necessary - such as a bridge over a waterway or other feature - will add to the cost. Costs are also variable by region, and based on the construction timeline; finally, the cost of raw materials can fluctuate month to month, and have increased in recent years. A thorough feasibility study will identify which elements will be needed to complete the project and how they should be prioritized, what the expected costs of those elements will be, and potential funding sources that can be used to fund the project. Cost estimates will typically include a 20-30% contingency for miscellaneous or unforeseen costs.

Due to the substantial cost of constructing greenway trails, many longer trails are constructed in phases, as capital funding is secured for each trail segment. For complex trails, the feasibility study may identify preferred sequencing for construction phasing, with logical starting/ending points such as public parks or road crossings for each trail segment.

The feasibility study should also estimate the cost of maintaining and operating the completed greenway, although that cost should not be conflated with the construction cost, as the funding for those purposes will need to come from different sources. Typically, capital funding used for constructing new infrastructure cannot be used for maintenance and operations purposes.

Implementation Plan

The final component of the feasibility study is determining how the greenway will come to pass, through a strategic or implementation plan. Ideally, the items to be summarized in this section will have been discussed throughout the plan, and this section will just simply lay out who does what at what times.

Determinants of Cost

The largest determinants of the cost of a greenway will be those elements discussed earlier in the feasibility study, namely:

- Surveying, geotechnical investigations, design, permitting, inspection and construction management.
- Any land acquisition or access needed to complete the greenway.
- The facility and surface type, including any landscaping, grading or crossings (such as bridges) necessary for the project.
- Amenities and design features, including bollards or planters, striping, lighting, benches, litter receptacles, bike racks, lighting, and wayfinding, advisory, and interpretive signage.
- On-road elements and roadway crossings, such as crosswalk improvements, ADA accessibility measures, traffic signal improvements.
- Any wetland or stream mitigation that will be needed to receive all of the necessary permits for the project.
- Drainage and other design elements needed to ensure that stormwater and other potential sources of flooding can flow off of the greenway.
- Expected construction timeframe, as delays in construction and modified schedule can add additional cost.
Land Acquisition & Liability

The feasibility study will also explore what is necessary to obtain the legal right to construct the greenway, either through the acquisition of the property itself or through the use of easements or other legal use agreements. The necessary land access process will vary in scope and complexity for each project. In some cases, the greenway will already be publicly owned, and land access will not be a major consideration.

The most critical part of an implementation plan is that the intended audience - those responsible for making the greenway happen - have a clear understanding of the next step. Implementation plans often include matrices that outline key information such as broader strategies, specific actions, timeframes, and roles and responsibilities. The implementation plan may also lay out goals. Any goals laid out should be “SMART” (Specific, Measurable, Achievable, Relevant, Time-Bound).

Implementation plans typically also include a discussion of how the project could - or should - be funded (see below).

For many greenways, however, there may be private parcels envisioned as part of the greenway, either for the route itself or for access. In these instances, the feasibility study should address what is required to secure access at these locations and should identify the appropriate party to complete that process. Most governmental entities have the legal ability to purchase property and to hold public easements. In other cases, a local land trust or other non-profit organization may have a role to play, if they are legally able to purchase and own property. Determining the purchase and ownership of the proposed greenway should be undertaken through consultation with the project team and may require input from professionals or consultants that specialize in the land acquisition process. The land acquisition process should ensure coordination with government officials and agencies at all levels to explore how the potential greenway can take advantage of economies of scale by coordinating with other potential or planned land acquisitions.

Purchasing a Corridor

Local or state governments, non-profit organizations such as a land trust, or a private citizen or group of private citizens can purchase a corridor. The exact process will vary depending on the organization doing the acquisition, and on the current status of the corridor in question.

Land acquisition can be a complicated process that requires significant research to determine current ownership, and often requires environmental or historic preservation research, surveys, appraisals, or other legal services. Depending on the size of a municipality, staff may already have these skill sets, and non-profit land trusts are typically savvy about the land acquisition process. Smaller groups or private individuals may need to be creative at identifying how, and with what support, to complete the research, survey and appraisals necessary to acquire land.

The purchase of long stretches of railroad or utility corridor right-of-way can be complicated because of their linear nature, often passing through and by many properties, and potentially crossing city, town, village, and/or county boundaries. Negotiating to secure right-of-way is often slow, with delays along the way, and periodically will require the use of alternative alignments, at least as an interim measure.

Private Easements

For some greenway trails, fully purchasing the trail may not be an immediate option - and may never be possible. As an alternative, easements can be granted allowing for the use of private lands. An easement is a legal permission to use private land for a specific purpose. Easements are commonly used for hiking trails, especially long-distance hiking trails, but can also be used for greenway trails. Easements are often permanent, although it is possible to establish an easement with a limited term, or an easement that only allows use of land for a portion of the year. Establishing an easement involves recording the agreement between the landowner and the trail organization or municipality with the property deed at the local county clerk’s office. In some instances, the use of easements may qualify a landowner for income and estate tax benefits. A trail use easement may also be paired with a conservation easement, which protects wildlife habitat, farmland, wetlands, scenic areas, or other special characteristics of private property which landowners may wish to preserve.

Addressing Liability

Minimizing risk, and addressing liability concerns before they become a problem, should be factored into the initial design phase of trail development. Potential hazards and dangerous locations should be identified and avoided. In addition, permitted trail uses and the risks associated with each should be clearly identified so that the trail can be designed and constructed in accordance with applicable laws and guidelines.

Private landowners who grant use of their land for trail purposes are protected from unwarranted lawsuits by New York’s Recreational Use Statute (General Obligations Law 9-103). The recreational use statute clarifies that property owners who give permission to others to use their land for a specific, limited list of activities - including hiking, cross-country skiing, horseback riding, bicycle riding, motorized vehicle operation for recreational purposes, or snowmobile operation - have no legal responsibility to give warning of any hazardous condition or use of the property, owe no duty of care to those using the land, and do not assume responsibility for or incur liability for any injury to person or property by those using the land.

Allgeheny River Valley Trail

The 5.6-mile Allegheny River Valley Trail, which runs along the Allegheny River and connects Olean and Allegany in New York’s southern tier, was made possible by a willing and open-minded university president. Nearly half of the 5.6-mile recreational trail is located on St. Bonaventure campus due to an existing easement that provides access for the general public. In 2018 the Village of Olean identified “expanding the downtown trail network, linking it to the existing Allegheny River Trail,” as a future opportunity for development in the Downtown Revitalization Initiative Strategic Investment Plan. In 2022 the city held its first ribbon cutting ceremony to mark the completion of the first public project funded by the state’s $10 million Downtown Revitalization Initiative, with plans to continue to advance projects into 2024.

Village of Allegheny River Valley Trail Map

Map of the Allegheny River Valley Trail demonstrating the portion of trail that runs through St. Bonaventure University. Source: Enchanted Mountains: Allegheny River Valley Trail Brochure & Map (2017)
Section 2: Trail Planning & Development

Funding & Grant Opportunities

Funding for greenway trail development is available at the federal and state levels, and may be available from local or private sources, depending on the project. Funding typically comes from competitive grant applications that follow set timelines, although different funding sources may be available on a non-competitive basis.

Federal Funding

There is more federal funding available for greenway trails now than at any time in history. However, the challenge is in identifying the funding that best fits a proposed project and creating a competitive application to differentiate the project from the numerous other applications that any granting entity will receive.

Federal grants can be broken down into two broad categories - direct and pass-through grants. Direct grants are awarded to recipients by federal agencies, while pass-through grants are awarded to other entities, often to states, to be awarded. Specific pass-through grants will be discussed in the section below corresponding to the level at which the funding would be directly requested and awarded.

There are three steps that must be completed before federal funding can be made available to potential applicants. First, the funding source must be created or continued in what is known as “authorizing legislation”. Different sources of funding are authorized through different pieces of legislation. The most significant piece of authorizing legislation is the Surface Transportation Act. While funding sources may be established by other authorizing legislation, some of which may be tied to the project, others may be permanent.

Second, funding must be appropriated by Congress. This process actually allocates funding at a level up to the amount allowed by the authorizing legislation. Appropriation bills cover one year at a time, and a new appropriation bill must be passed each year. Finally, appropriated funding is given to the agency which either passes it through to state or local governments or makes it available through a grant application.

The national Rails-to-Trails Conservancy tracks federal funding sources for trails as part of their federal policy advocacy. Much of the information included in this guide is adapted from their resources, and for the most up-to-date information on federal funding for trails, visit www.railstotrails.org/policy/funding. The U.S. Department of Transportation has also created a detailed chart outlining the various grant programs and identifying what programs may be used for what activity or project type.

Direct Federal Grants

Active Transportation Infrastructure Investment Program

The largest pot of federal funding dedicated to greenway trails and other bicycling and walking projects is the new Active Transportation Infrastructure Investment Program (ATIP). This program was newly authorized at $200 million per year by the Bipartisan Infrastructure Law in 2021. However, only $45 million was appropriated for the program in FY 2023. Eligible applicants for the funding include states, local or regional governments, and multijurisdictional or regional transportation planning organizations. The program is designed for larger projects, as the total cost of the project or group of projects must be over $15 million. Planning and design grants are also available, with a minimum cost of $100,000. As of the writing of this guide, no information is available on the timeline for application or process for applying for these grants, but given the relatively small amount of available funding and the large minimum project size, applications are expected to be incredibly competitive and only see a small number of projects nationwide receive funding.

Rebuilding American Infrastructure with Sustainability and Equity (RAISE)

The largest, most well-known transformative competitive Federal grants, the RAISE program is intended to make significant investments in projects that achieve national objectives. Previously known as TIGER or BUILD grants, the program emphasized projects that “improve infrastructure, strengthen supply chains, make us safer, advance equity, and combat climate change.” The most recent round of grants saw about 19% of funding go to trails-related projects, with another 21% for projects that make roads safer for vulnerable road users. Eligible project types include large capital construction projects, as well as planning, preparation or design of eligible projects.

Safe Streets and Roads for All (SS4A)

The Safe Streets for All Program was authorized by the Bipartisan Infrastructure Law, and awards grants to county and local governments and metropolitan planning organizations to develop, complete, or supplement comprehensive safety action plans, or to implement projects and strategies identified in an Action Plan to address roadway safety issues. The creation of off-road alternatives for walking and bicycling, such as bridges or tunnels to bypass dangerous road crossings, is an eligible use of funding, but will require a documented, direct link to improved roadway safety. In 2022, twelve grants were awarded to New York State entities for the creation of a new action plan or for supplemental funding on an existing action plan, and two grants totaling over $30 million were awarded for two implementation projects in New York.

Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT)

The Bipartisan Infrastructure Law authorized the new PROTECT program that includes both competitive grants and formula funding for states and localities. The program is designed to make transportation more resilient to the effects of climate change, including rising sea levels, increased flooding, and more frequent natural disasters. Greenway trails are eligible for funding as solutions to climate impacts. Up to $848 million was made available in the first round of funding, broken into four broad categories. Most categories have a minimum award of $500,000 with a maximum 80% federal share, while planning grants have a $100,000 minimum and can be 100% federal funded. Applications for the first round of funding closed in August 2023, with additional rounds of funding expected in the future.
Reconnecting Communities and Neighborhoods (RCN)

This funding opportunity combined two separately authorized programs, the Reconnecting Communities Pilot Program and the Neighborhood Access and Equity Program. Trails and active transportation are eligible for funding, which is available to support planning and construction grants and regional partnership grants. By combining these grant opportunities, up to $316 billion in funding is available. The programs seek to prioritize disadvantaged communities, improve access to daily needs, foster equitable development and restoration, and reconnect communities by removing, retrofitting, or mitigating highways or other transportation facilities that create barriers to community connectivity.

Congressionally Directed Funding (Earmarks)

Members of Congress are able to direct funds to community-supported local priority projects through the annual appropriations process or through other legislative processes. The rules that govern what projects can be funded through earmarks can change from year to year, as each newly elected Congress (every two years) sets their own rules for the earmark process. Earmark project submissions will be requested by each member of Congress separately - be sure to build and maintain a relationship with local Congressional representatives to ensure that proposed projects will be supported when the opportunity arises.

Regional Commissions

Four federally authorized commissions also may support or give funding to greenway trail projects. Two of these, the Delaware River Basin Commission and the Susquehanna River Basin Commission, are based around the watersheds of their namesake rivers. Two others, the Appalachian Regional Commission and the Northern Border Regional Commission are more broadly regional, seeking to support economic development in historically impoverished areas. Each of these commissions has discrete geographic areas in which projects they fund must be located. For information on those geographies and for an overview of grant opportunities that may be offered by each of these agencies, visit each commission’s respective website.

Other Competitive Federal Grant Programs

Numerous other grant programs can be used to support trail development, although these programs typically focus on other areas and must have trail development as a component of a larger strategy, or can be used to fund enhancement or activation strategies related to trail networks. The Rural Surface Transportation Grant is primarily for highway projects in rural areas, but funds can be used for right-of-way acquisition, planning, development and construction. Most projects have a minimum size of more than $25 million, although 10% is set aside for smaller projects.

The Thriving Communities Program provides technical assistance and capacity building for communities that have experienced longstanding and systemic disinvestment and economic distress. The US Department of Transportation has a funding dashboard that can help identify grant opportunities and allows for filtering by transportation type (choose “bike/ped”). For more information on strategies for accessing federal funding for greenway trails and other active transportation efforts, visit the Federal Highway Administration Bicycle and Pedestrian Program’s Active Transportation Funding and Finance Toolkit.

Consolidated Funding Application

Many state grants are awarded through the annual Consolidated Funding Application (CFA) process, which requires one central application to apply for numerous sources of funding and supports the Regional Economic Development Council (REDC) strategy. Typically, CFA applications are open from late spring until the end of July, with awards announced in late November or early December. Specific state grants that are applied for using the CFA will be denoted in the sections below (Note: this reflects 2023 CFA programs. This list is subject to change on an annual basis- consult the state’s website for the most recent list of programs included in that year’s CFA and for the timelines for each year).

Recreational Trails Program (RTP)

Administered by OP-RHP, the federally-funded Recreational Trails Program (RTP) is the primary source of funding in the state dedicated solely to the construction, enhancement and maintenance of recreational trails. The federal authorizing legislation requires that 30% of RTP funding is used for non-motorized recreation, 30% for motorized recreation, and the remaining 40% for projects that benefit more than one mode of use. In odd-numbered years (2023, 2025, etc.), municipalities and not-for-profit organizations can apply for RTP funding through the Consolidated Funding Application (CFA) process.
Canalway Grants Program

Awarded through the CFA, the annual Canalway Grant Program awards up to $1.0 million dollars for capital projects across the state’s Canal System. Grant awards range from $25,000 to $150,000, with a 50% grant match required. For 2023, projects were prioritized that address one of the program’s priority focus areas, including enhancement or connection to the Empire State Trail, addressing strategic priorities consistent with the Regional Economic Development Council’s Strategic Planning efforts, or addressing strategic priorities, goals, and connections between the canal and the corresponding region consistent with the Reimagine the Canals initiative.

Climate Smart Communities

New York’s Department of Environmental Conservation awards funds through numerous competitive grant programs that address diverse topics such as waste management, water protection, environmental cleanup, wildlife protection, land and forest protection, environmental justice, and climate change mitigation. Funding for greenway trails may be eligible through some of these programs, most notably land protection grant opportunities and the Climate Smart Communities Grant Program. The Climate Smart Communities program is awarded through the CFA process, and provides 50% matching funds to local governments for climate change mitigation, adaptation, and planning and assessment projects. Projects eligible for funding through this initiative include Greenhouse Gas Mitigation Projects that reduce vehicle miles traveled through improvements to non-recreational, non-motorized transportation.

Local Waterfront Revitalization Program

Administered by the NYS Department of State through the CFA process, the Local Waterfront Revitalization Program (LWRP) provides matching grants to local governments along New York’s coasts or designated inland waterways for planning, design, and construction projects that seek to revitalize those communities and their waterfronts. Funds can be used for four categories of eligible activities: preparing or updating a local waterfront revitalization plan, updating a plan to be more resilient to climate risks, preparing a component of a local waterfront revitalization plan, or implementing a local waterfront revitalization program. Through this program, numerous waterfront communities have planned for or constructed standalone greenway trails or trails that serve as connectors of broader greenway trail networks.

Non-CFA Grants

Outdoor Recreation Legacy Partnership Program

The Outdoor Recreation Legacy Partnership Program, part of the federal Land & Water Conservation Fund (LWCF), is a nationally competitive grant program that targets assistance to economically disadvantaged urban communities with limited access to outdoor recreation. Funds can be used for acquisition and development of outdoor recreation spaces. For this program, NYS OPRIHP accepts applications for a state-level selection process, and then submits the chosen projects to the National Park Service for consideration in the national competition.

Transportation Alternatives and Congestion Mitigation and Air Quality Improvement (CMAQ) Program Funding

The largest dedicated pot of funding for bicycle and pedestrian-focused improvements is through the federal Transportation Alternatives program. This funding, which includes smaller suballocations including the Recreational Trails Program and the Safe Routes to School Program, provides formula-based funding to states to be allocated following federal guidelines. In New York, Transportation Alternatives funding has been combined with funds from the Congestion Mitigation and Air Quality (CMAQ) Improvement Program to be jointly awarded. Funding from TAP and CMAQ cover up to 80 percent of total project costs and are required to demonstrate how proposed improvements will increase the use of non-vehicular transportation alternatives, reduce vehicle emissions, and/or mitigate traffic congestion. The past two rounds of funding have been awarded in 2018 and 2021, suggesting a three-year cycle for grants. If that holds true, additional funding will be made available in 2024.

Hudson River Valley Greenway Conservancy Trail Grants

The Hudson River Valley Greenway awards two grant programs. Of these, the Conservancy Trail Grants are dedicated to funding recreational trail projects, with an emphasis on connections to the Empire State Trail. Eligible project categories include trail construction, planning and design, trail rehabilitation or improvement, trail education or interpretation, and disaster recovery and reconstruction on trails. Conservancy Trail Grants cannot exceed 50% of the project cost and require a 1:1 match of non-state funds in cash or in-kind services. Municipalities and non-profit organizations from within the 14 counties included in the Greenway area are eligible.

Clean Water, Clean Air and Green Jobs Environmental Bond Act

In November 2022, New York State voters approved a ballot proposition to make $4.2 billion available for environmental and community projects through the Clean Water, Clean Air and Green Jobs Environmental Bond Act. As of the publication of this guide, specific details were not yet available on the means by which bond act funding will be made available. However, the authorizing legislation established four broad categories, of which two - climate change mitigation and open space land conservation & recreation - are likely to have funding opportunities through which greenway trail projects will be eligible for funding.

Creating Healthy Schools and Communities

Through the Creating Healthy Schools and Communities program, the NYS Department of Health seeks to support sustainable communities as places where it is easier to practice healthy behaviors. One of the grant’s goals is the implementation of community planning and active transportation interventions, including collaborations that seek to connect safe off-road transportation and recreation facilities with homes, early care and education sites, and other destinations. The Creating Healthy Schools and Communities program works through a network of subgrantees in each region; these subgrantees work to develop and execute a comprehensive implementation plan for their defined catchment area.

Other State Funded Programs

Numerous other programs, with funding available both through the CFA and through discrete opportunities, can be used to support and enhance greenway trail projects. Grant sources geared towards other aims, such as economic development, housing, or the arts, can be used to benefit or enhance a greenway trail project. Making the connection between a greenway trail project and the benefits it can bring to a community can allow for creative uses of funding.
Other Funding Opportunities

While many greenway trail projects are constructed solely through the use of state and federal funding, others take advantage of a wide array of other funding sources.

Local Funding

Every county and local government will vary in how much funding they may have available to contribute towards greenway trail projects. Some may only be able to contribute staff time - but that is still a valuable contribution, and for many grants staff time can count as the “in-kind” match for a funding source. Local open space bond acts have also been used as matching funds. Many counties and local governments will receive pass-through formula funding from both the federal and state government for specific purposes. By meeting with local officials, trail advocates can explore possible creative uses of these funding sources. Across the country, local governments are using creative taxing mechanisms to support trail development, including tax increment financing and real estate transfer fees that can help create an ongoing funding stream for trail development or as part of broader efforts to fund investment in parks or in walking and bicycling infrastructure.

Foundation Funding

Numerous private foundations have funding that can be used to support greenway trail planning, design, and/or construction. The most notable foundation supporting trail work in New York State as of 2023 is the Ralph C. Wilson Jr. Foundation, which committed $50 million in October 2018 to make connections and eliminate gaps in Western New York’s regional trails system. The Wilson Foundation has also made funding available through the Community Foundation for Greater Buffalo’s Legacy Fund for Design and Access. Other foundations may be designated to support a specific region, such as community foundations, or to leave a charitable impact for a person’s individual legacy.

Fundraising & Philanthropy

Private fundraising can help raise funds needed to get a project started, especially early in a project’s lifespan. Fundraising activities can take advantage of public support for a project, and can be relatively simple to begin collecting. Fundraising efforts can include efforts to get more modest amounts of funding from a larger number of project supporters, or can focus on getting more well-heeled advocates to support trail projects through their philanthropic efforts.

Fundraising websites, such as GoFundMe, can be a simple way to collect funding to benefit a project. However, it is critical to ensure that all donations received are tracked, and that all laws regarding reporting of funding are followed. Donations to a registered 501(c)(3) non-profit organization are tax-deductible, if they are not directly used for the purchase of goods or services for the donor. If funds are intended to be used for the completion of feasibility study or other work likely to be directly led by a governmental agency, it is critical to ensure that the agency in question is familiar with the project and has a legal mechanism to accept funds raised for this purpose.

Recent Greenway Trail Project State & Federal Grant Awards

**Sterling-Fair Haven Community Connection Trail Feasibility Study**

Recipient: Cayuga County

Year: 2022

Award: $103,807

Funding Agency & Program: Department of State - Local Waterfront Revitalization Program

Description: Cayuga County, in partnership with the Town of Sterling and Village of Fair Haven, will prepare a feasibility study for a pedestrian and bicycle trail, which will determine the final layout of the trail, identify permitting and easement requirements, and develop construction cost estimates.

**Cascade Bridge Planning & Trail Development**

Recipient: Erie Cattaraugus Rail Trail, Inc.

Year: 2023

Award: $278,800

Funding Agency & Program: Office of Parks, Recreation and Historic Preservation - Environmental Protection Fund

Description: Erie Cattaraugus Rail Trail (ECRT), Inc. will assess the structural integrity of the historic, high trestle Cascade Bridge spanning Cattaraugus Creek and determine a cost estimate for a new decking design. The ECRT will also design and construct a trail approaching from north to the bridge.

**Sullivan O&W Rail Trail Parksville Extension**

Recipient: Town of Liberty

Year: 2023

Award: $750,000

Funding Agency & Program: Office of Parks, Recreation and Historic Preservation - Recreational Trails Program

Description: The Town of Liberty will use funding to extend the Parksville section of the Sullivan O&W Rail Trail. The project includes improvements to existing former railroad infrastructure and on road signage.

**NYC Greenway Expansion**

Recipient: City of New York

Year: 2022

Award: $7,250,000

Funding Agency & Program: USDOT - RAISE

Description: This planning project will enable a major expansion of the NYC greenway network, with a focus on under-developed greenways sections located within low- and moderate-income communities.
From Design to Construction

Once the feasibility study is complete, any required land has been acquired or has agreements in place for use of easements or acquisition, and the project is fully funded, the project is ready to move into the “final” phase. If a project has been broken down into multiple, shorter phases to facilitate construction, the design process may only address one phase at a time. At this point, any greenway trail project should have a clearly defined project lead - be it the state, a county government, a municipality, or a non-profit. That project lead will be responsible for overseeing the creation of final design and engineering documents, obtaining any necessary permits, and hiring the contractor who will do the work of building the new trail.

While the process for drafting and finalizing the feasibility study may have been more conceptual, the design and construction phase is more technical and will provide contractors with the information they need to shape this concept into reality. Design work, permit applications, and any construction should be done by licensed professionals.

Outside consultants with a wide array of different skill sets are often hired to prepare the final design documents. This team should have expertise and a track record in landscape architecture, public participation and communication, site engineering, permitting, civil engineering, and cost estimating. This team will produce a final set of design documents for the new greenway trail, ensuring that the design meets applicable regulatory requirements, follows established design standards, and can feasibly be constructed.

Survey and Design

An important precursor to the creation of design documents is the completion of a professional survey of the proposed greenway corridor. The survey will provide the detail needed, depending on the complexity of the project, potentially including accurate, precise measurements of the topography, delineation of sensitive areas such as wetlands, property boundaries, and inventories of existing features such as utilities, drainage, trees, or historic structures.

The feasibility study and the site survey will allow for the creation of an advanced concept design for the proposed greenway trail. The advanced design will incorporate the routing details proposed within the feasibility study, making necessary adjustments to limit impacts to sensitive areas and safeguard existing landscape and historic features (trees, utilities, etc.), while ensuring that the design is compliant with the Americans with Disabilities Act and appropriate access for maintenance and emergency vehicles is identified.

Similar to the outreach conducted during the feasibility study, decision-makers and members of the general public should be given an opportunity to offer comments or insights on the preliminary design. Targeted meetings with adjacent property owners, nearby public works departments, utility companies and other key stakeholders are key to addressing any outstanding concerns or questions.

Permits

To receive approval needed to construct a greenway, the appropriate permits must be obtained. The necessary permits will vary from project to project, depending on the location of the greenway and whether it passes through any sensitive or regulated areas.

The same consultants that prepared the contract documents and advanced concept design can also prepare the environmental permit applications required under the Uniform Procedures Act (UPA), Article 70 of the Environmental Conservation Law (ECL). In New York State the Department of Environmental Conservation is responsible for implementing the UPA.

Depending on the location of the project, specific permits may be required. For example, projects along waterways, coastlines and wetlands might require multiple DEC permits. Applications should be reviewed by the project team and submitted to the appropriate regulatory agencies, including DEC, ACOE, DOS, and/or OGS. If the agencies have comments or questions about the applications, the consultants should respond to these inquiries and resubmit the application materials. Keep in mind that all easements, encroachments, and/or permits required for on and offsite facilities should be obtained by the applicant prior to beginning construction.

Final Design and Contract Documents

Once the necessary permits have been obtained, and the owner and the entity that will be responsible for maintenance are confirmed, the final draft design and specifications can be developed. The type of design plans varies according to the complexity of a specific greenway trail. Shorter trails that are constructed by local governments – typically town highway departments or county departments of public works – may only require preparing “typical trail section” drawings depicting the trail width, subbase, and surface material. More complex projects, including trails requiring significant earthwork, culverts, bridges, road crossings, and other features usually require highly detailed construction plans stamped by a licensed engineer. Although some larger government entities have the capability to develop in-house plans with their own staff, generally the project sponsor engages a private engineering firm to develop formal construction plans and assist in developing detailed permit submittals to involved state and federal regulatory agencies. The final engineer’s estimate and construction specifications should be finalized during this phase.

After all of the design considerations have been addressed, the design team is responsible for issuing the final contract documents. The owner of the greenway can then put the project out to public bid. Construction contractors will use the plans and specifications to develop their own construction cost estimates for the project. The greenway owner will then be in the position to award the project to a contractor (usually the lowest qualified bidder in the case of the government). The construction contract documents may be completed by municipal or county staff or may require that a professional consulting firm be hired.

Construction

While the project is under construction, detours might be put in place and certain areas deemed off limits for the general public. Responsibility for overseeing the construction process should be handled either directly by the lead agency or by a separate firm hired to supervise the contractor hired to complete the work. Construction administration ensures that any questions about issues in the field, construction methods and materials, and general questions from the public can be addressed as they arise.

Once the construction contract is awarded, a groundbreaking ceremony can be held to acknowledge all of the stakeholders that have participated in this process and to celebrate project implementation. Inviting the local press, elected officials, and relevant stakeholder groups (including any agencies or organizations who have provided funds to the project) is common.

The timeframe from groundbreaking to ribbon cutting to mark the completion of the project could take several years. However, keeping the public aware of the anticipated timeline, and updates, can help build enthusiasm for project completion. The ribbon cutting ceremony is an exciting milestone for everyone that has been involved in the process. Since this will be the first opportunity for people to access and use the greenway facility for the first time, consider additional activities, such as an organized bike ride, to garner additional press and support.
Looking Down the Trail

New York’s trail network has seen tremendous growth over the past 10 years, underscored by the completion of the Empire State Trail. Greenway trails have been proven as popular community amenities, drawing tens of millions of users statewide and encouraging residents and visitors alike to be more active. They have been especially popular and appreciated during the difficult COVID pandemic.

All it takes is one dedicated person to spark an entire movement dedicated to the rehabilitation or construction of a greenway, this one person, and one conversation, could eventually impact millions of people, and serve future generations for years to come.

As this guide has demonstrated, taking even one mile of trail from concept to construction is a huge accomplishment, and one to be celebrated. The work, however, does not end when the ribbon is cut. The completion of a trail marks the beginning of a new phase of work, as volunteers and the communities that the trail passes through take on new roles and responsibilities to make the greenway the best community asset it can be.

From Advocate to Activator

The opening of a trail marks a good opportunity for the creation of a “Friends” group to help provide additional support to the existing trail management and maintenance entities. If a volunteer advocacy group was formed to promote the development of the greenway, the group may take the opportunity to shift to this Friends group model. Volunteer organizations may provide support in the form of performing light maintenance, serving as trail ambassadors, conducting trail user counts and surveys, promoting the trail and coordinating programming and events.

Volunteer groups can play a critical role in creating an enjoyable trail experience by helping with tasks like brush removal or litter pick-up and being the eyes and ears on the trail as ambassadors. Having volunteers out on the trail on a regular basis can ensure that any maintenance issues are addressed early on before they become more serious. It is recommended that if a volunteer organization is going to take on these types of responsibilities that they enter into a Memorandum of Agreement with the trail manager/owner to ensure that everyone is on the same page and that any issues of liability are addressed.

Once a trail is built, it is important to demonstrate the value of continued investment (and potential future expansion) of the greenway. Trail user counts are one way to accomplish this. Volunteer organizations may wish to engage in manual trail counts, or secure funds for the installation of an electronic trail use counter which tracks usage 24/7. If the electronic trail counter route is pursued, it is important to start the conversations with the landowner early on to choose a location and ensure that all parties agree to it. Trail user surveys are another tool that volunteers may wish to employ to better understand who is using the trail and how.

Volunteer organizations may also be a key player in promoting the trail to the public. This may come in the form of developing and maintaining a website and social media accounts for the trail to keep trail users informed regarding trail closures, detours, or special events. A map of the trail is an especially useful tool to provide on the website, to help trail users locate access points, trailheads, and other amenities. A paper brochure and map highlighting the trail, its distinguishing features, and other helpful information is another good way to get the word out.

Greenway trails serve as “third spaces,” a concept in sociology that refers to places where people spend time between home (‘first’ place) and work (‘second’ place). They are locations where people exchange ideas, have a good time, and build relationships. Special events and programs held on the trail can be a great way to foster community and attract new visitors to the trail. Everything from fun runs/walks to chalk art contests are fair game. This is the chance to get creative!

Trail Town Programs

Greenways can help unite community members, improve access to recreational opportunities for residents, and grow the local economy by attracting visitors. The growth of outdoor recreation opportunities directly benefits area restaurants, lodging, and service stations and spurs the growth of businesses selling recreational gear and other goods, sometimes called the “outdoor recreation economy.” Rail-trails, especially, can breathe new life into small towns no longer served by the rail line.

In order to reap the benefits these trails can bring, communities must invest in strategies to entice trail users off the trail and into their downtowns. For the past several decades, communities around the country have been acknowledging the benefits that trails bring to their communities and seeking to enhance them through “Trail Town” programs. According to the leading expert on Trail Towns, Amy Camp, “a Trail Town is a community through which a trail passes that supports trail users with services, promotes the trail to its residents, and embraces the trail as a resource to be protected and celebrated.” More often than not, Trail Town programs work by activating a network of municipalities along a trail system, but a community need not be part of a larger program in order to commit to the trail town vision.

Building out the Network

Trails are only as strong as the connections they provide. What is the next step for the trail? Extending out the trail at one (or both) of the ends to add to the mileage? Constructing a new branch trail to reach a community destination? Creating a loop around town? Greenway trails work best as transportation and recreational assets when they are part of an interconnected network. Now that this one stretch of trail is done, head back to the beginning to start the process over to keep building out your web.
References & Additional Resources


17. Previous federal surface transportation authorization legislation include the “Intermodal Surface Transportation Efficiency Act” (ISTEA), which was passed in 1991 and was the first time that federal dollars were used to support bicycle-pedestrian infrastructure. Subsequent legislation included the “Transportation Equity Act for the 21st Century” (TEA-21), which covered 1998-2003; the “Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users” (SAFETEA-LU), which covered 2005-2009; “Moving Ahead for Progress in the 21st Century (MAP-21), which covered 2013-14; and Fixing America’s Surface Transportation (FAST) Act, which covered 2016-2020. Years not covered by those bills typically saw short term extensions that continued the terms of the previous authorizing legislation.


Trails Across New York:
A Grassroots Guide to Developing Greenway Trails

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