

THE
TRUST
FOR
PUBLIC
LAND



The Long Island Greenway

An Extension of the Empire State Trail

PHASE 1, EISENHOWER COUNTY PARK TO BRENTWOOD STATE PARK

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Partners:



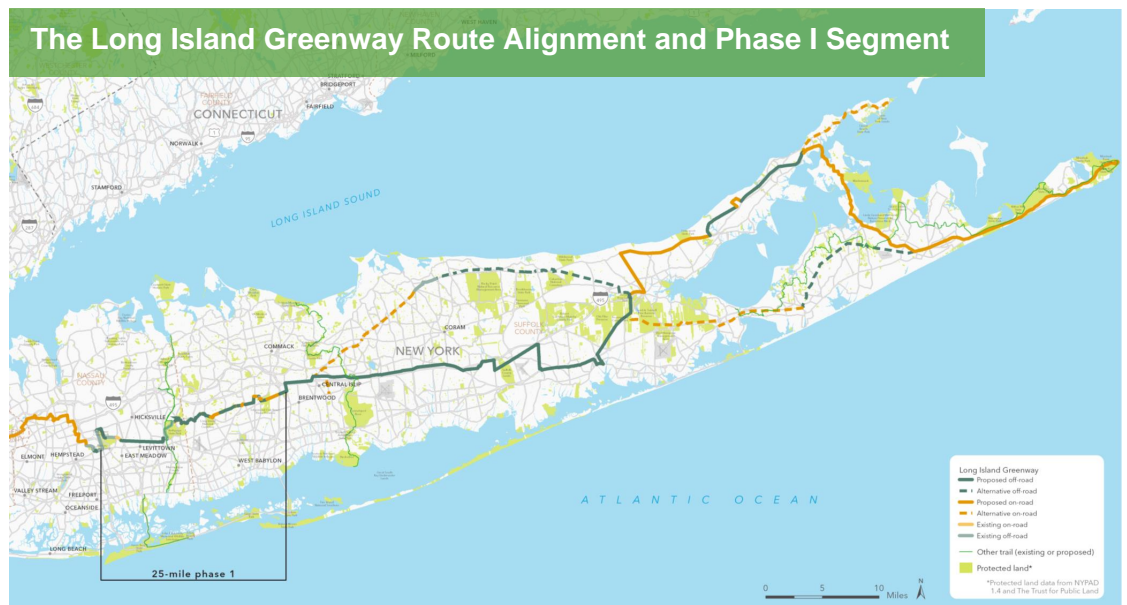
Parks, Recreation and Historic Preservation



Executive Summary

Background

What if you could travel to work, the grocery store, or even Montauk Lighthouse without getting in your car? The Empire State Trail, announced in Governor Cuomo's 2017 State of the State message, is a bold vision: a 750-mile, world class multi-use path from the Canadian borders near both Plattsburgh and Buffalo to Manhattan. The Empire State Trail provides an innovative and uniquely New York response to explosive interest in bicycling and walking-hiking for recreation, health and wellness and in driving local as well as regional economic development via enhanced tourism related opportunities. By ending at the Battery in lower Manhattan, however, it left out the seven million residents of Kings (Brooklyn), Queens, Nassau, and Suffolk Counties. The Long Island Greenway – a 175-mile extension to the Empire State Trail – will complete a truly statewide trail from Buffalo and Plattsburgh to Montauk. It will provide a new open space connecting state and local parks and transit connections, and it will change how Long Islanders and all New Yorkers play, commute, and live healthy lives.



Project Goal

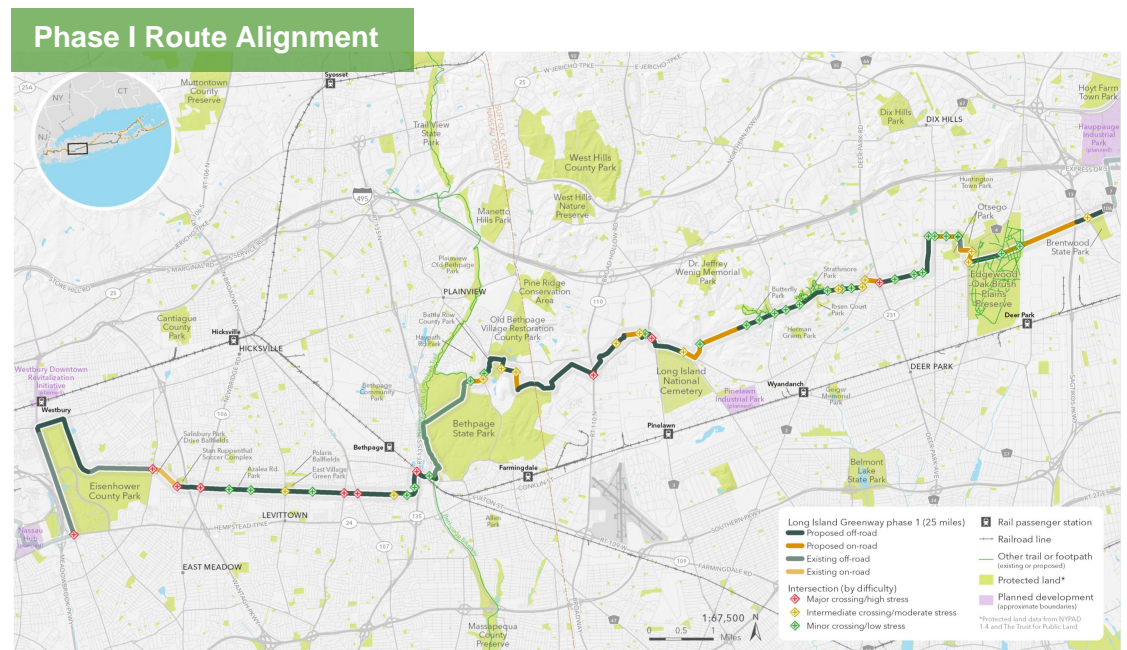
The goal of the Long Island Greenway is to extend the Empire State Trail across Long Island and to link together existing trails, parks, and communities, as well as to provide a central spine for future trails. We have closely coordinated with State Parks as it works to complete the Buffalo and Plattsburgh to Manhattan trails by the end of 2020.

Overall Feasibility Study

In 2018, the Trust for Public Land mapped out a potential east-west multi-use trail across Long Island. The focus of our feasibility study was electric transmission line rights of way that could contain off-road bike paths, as is increasingly common across the country. In fact, the Long Island Power Authority has agreed to allow Suffolk County to build the 10-mile North Shore Rail Trail on one of its rights of way. Building on these developments, we have identified a feasible route across Long Island, with input and support from Nassau and Suffolk Counties, key business leaders, and biking and hiking clubs. The proposed 175-mile route is 60% off-road. We also identified a potential first phase segment spanning Nassau and Suffolk Counties.

Phase I Feasibility Study

In 2019, the Trust for Public Land conducted an in-depth existing conditions report and feasibility study of the 24-mile Phase I segment, which is 75% off road and runs from Eisenhower Park through Bethpage State Park to Brentwood State Park. The Trust for



Public Land conducted a detailed ground survey, analyzed infrastructure issues, identified trail access points, developed a list of trail amenities, addressed maintenance issues, and identified potential funding sources. The Trust for Public Land also obtained feedback from extensive outreach to stakeholders, business leaders, government officials, and biking and hiking communities. The report will be published in early 2020. In December 2019 the project was awarded a \$600,000 matching grant from the State for additional pre-design studies.

Economic Benefits

- ✓ A 2010 study found that Long Island's parks and open space provide quantifiable economic benefits worth over \$2.74 billion a year, including \$600 million spent in parks that alone generated \$27 million in tax revenue. These figures are even larger today.
- ✓ Nationwide, homeowners adjacent to trails see a 3% increase in home value.
- ✓ Statewide, the high-growth outdoor recreation industry represents \$42 billion in consumer spending, 313,000 direct jobs (4th highest sector), and \$3.6 billion in state and local tax revenue.
- ✓ Trails anchor economic revitalization and complement redevelopment areas such as the Nassau Hub.

Project Schedule

Pending the availability of adequate funding, the Long Island Greenway can be shovel-ready in the near term, according to the following schedule:

- Overall feasibility study (2018-2019) (completed)
- Phase 1 feasibility study (2019-2020) (completed)
- Outreach, community support (2020-2021)
- Survey, LIDAR, and environmental studies; 30% design (2020-2021)
- Design and construction documents (2021-2022)
- Construction (2022-2023)

Introduction

Overview

This study represents the continuation of *The Long Island Extension to the Empire State Trail: A Feasibility Study & Preliminary Route Alignment* (January 2019). The preliminary trail alignment study by The Trust for Public Land examined the opportunity to connect Long Island’s communities, parks, and trail networks with a safe, off-road trail by extending the Empire State Trail 175 miles east from its southern terminus in Battery Park to Montauk. The purpose of this follow-up study is to advance that plan with an on-the-ground site condition assessment, detailed feasibility study, and conceptual trail design of a proposed first segment from Eisenhower Park in Nassau County through Bethpage State Park to Brentwood State Park in Suffolk County. This segment will be the first phase of a new **Long Island Greenway** intended to connect parks and communities across Long Island, and serve as the easternmost extension to the Empire State Trail. The result is a **25-mile** segment connecting **250,500 New Yorkers** in **9 communities** across both Nassau and Suffolk counties through **13 parks** and **36 academic institutions** as well as numerous existing trails.

“The creation of the first phase parallels and complements several County efforts, including the broader Connect Long Island plan.”

- Steve Bellone
Suffolk County
Executive



Long Island
Greenway
Rendering

The Long Island Greenway Route Alignment

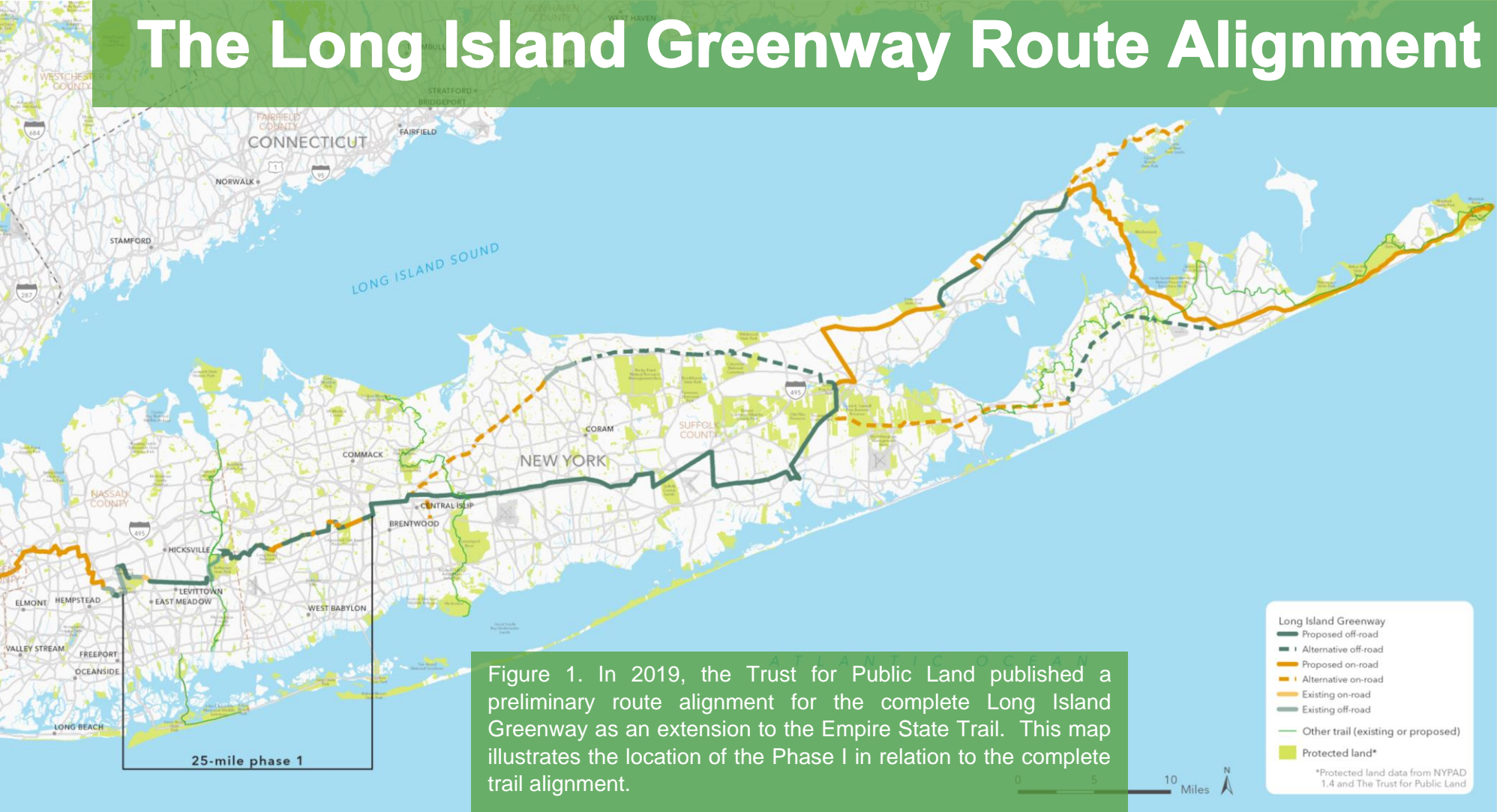


Figure 1. In 2019, the Trust for Public Land published a preliminary route alignment for the complete Long Island Greenway as an extension to the Empire State Trail. This map illustrates the location of the Phase I in relation to the complete trail alignment.

Long Island Greenway
 Proposed off-road
 Alternative off-road
 Proposed on-road
 Alternative on-road
 Existing on-road
 Existing off-road
 Other trail (existing or proposed)
 Protected land*
*Protected land data from NYPAD 1.4 and The Trust for Public Land

The Long Island Greenway – Phase I



Figure 2. Phase 1 of the Long Island Greenway conceptual design, with the route alignment, trail crossings and existing right-of way conditions along the 25-mile route.

“Phase 1 will have a positive impact both as a stand-alone project and as an example of how the entire Long Island Extension of the Empire State Trail can transform the region through multiple benefits.”

- Laura Curran
Nassau County
Executive

The following sections outline background on the Empire State Trail and subsequent extension feasibility study as well as key goals, methodology, findings, and a conceptual design for the first segment of the Long Island Greenway.

Long Island Greenway Goals



Increase Connectivity

- The proposed route will serve as a transportation resource, connecting communities as well as existing trails throughout Long Island.



Promote Community Vitality

- The proposed route will take advantage of Long Island’s unique parks and cultural resources to promote active recreation and tourism.



Foster Equity & Public Health

- The proposed route will be accessible to all users, and promote positive health outcomes via active recreation/transportation.

Specific Objectives of this Study

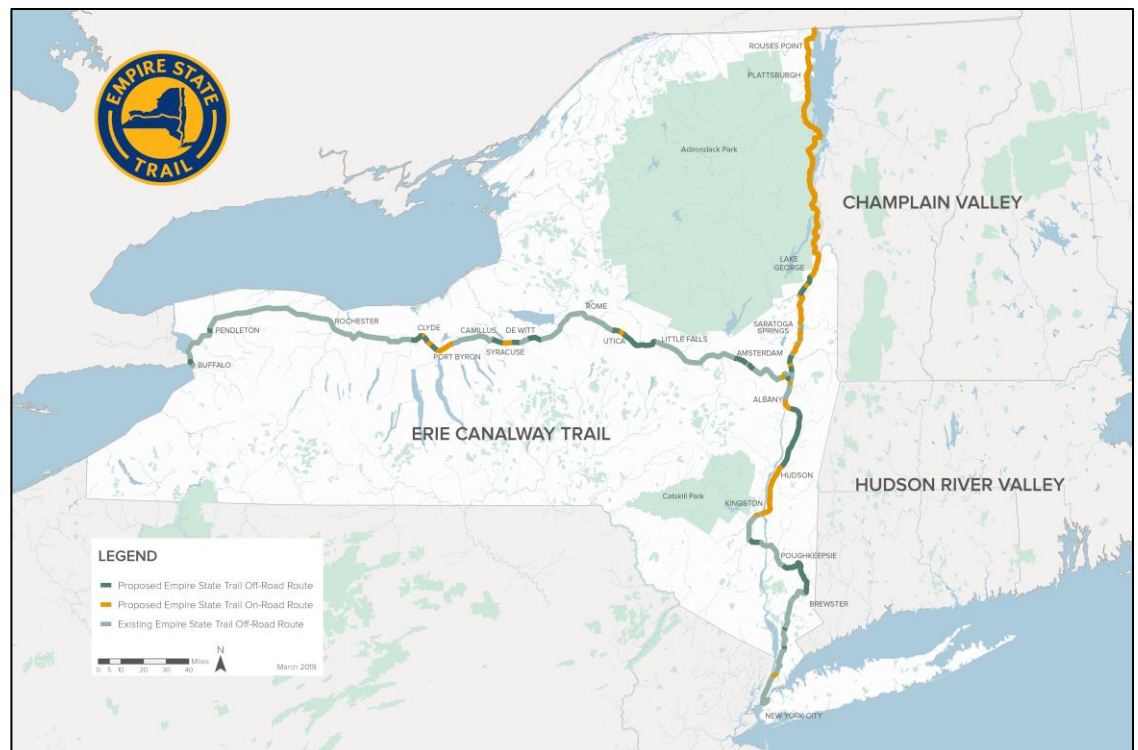
This study accomplishes three specific objectives in pursuit of the goals above including:

1. Demonstrate the feasibility of a first segment of the Long Island Greenway, from Eisenhower County Park to Brentwood State Park, maximizing the use of utility corridors and other off-road assets as well as links to existing trails and parks.
2. Solicit broad public input to refine the Long Island Greenway alignment for this phase I study and garner support from stakeholders across Long Island.
3. Develop a conceptual design, cost estimate and implementation plan to guide the next phase of trail development and lay the foundation for engineering, design, and construction so that the segment is shovel-ready as soon as possible.

Background

The Empire State Trail

In 2017, Governor Andrew Cuomo announced the development of the Empire State Trail – a \$200 million investment to develop a 750-mile trail connecting Buffalo and Plattsburgh with Albany and New York City. Led by the Hudson River Greenway, a division of New York State Department of Parks and Recreation (NYS Parks) and working in collaboration with the New York State Department of Transportation (NYSDOT), the Empire State Trail leverages nearly 400 miles of existing trails and on-road routes with the design and construction of 350 miles of new trails, trailheads, and other facilities. When complete at the end of 2020, the Empire State Trail will be the country's longest statewide trail and an unprecedented investment in active transportation and recreation across New York State. Approximately 65% of the trail is off-road with the remaining 35% on-road, on demarcated bike lanes or designated bike routes. A set of unified wayfinding standards and design guidelines ties these facilities together.¹ The current southern-most terminus of the trail is Battery Park in Manhattan and it does not continue to Brooklyn, Queens, or Long Island.



Long Island Motor Parkway Trail

The Long Island Motor Parkway Trail is a longstanding trail plan by Nassau County to take advantage of the now defunct Vanderbilt Motor Parkway alignment from the Queens border to Old Bethpage Restoration, with eight (8) segments combining on and off-road routes. Taking advantage of this work and following the co-alignment philosophy of the Empire State Trail, the proposed Long Island Greenway follows the Long Island Motor Parkway Trail as much as possible through eastern Queens and Nassau County. Nassau County has completed or started construction of parts of the Long Island Motor Parkway Trail, helping connect parks and trails in that segment and advancing the Long Island Greenway concept.

North Shore Rail Trail

In the 1970's Suffolk County began discussing the development of a trail from Port Jefferson to Wading River utilizing a former rail right of way that went out of service in 1938. In 2001, advocates of the Setauket-Port Jefferson Station Greenway Trail formally submitted a plan for this path. Despite support for the plan, one of the most challenging barriers to advancing this project was the question of liability on a utility right-of-way owned by the Long Island Power Authority (LIPA). Over time, Suffolk County was able to negotiate an agreement that indemnifies LIPA from user-related liability. The final design was for a 10-mile trail connecting Port Jefferson Station, Mount Sinai, Miller Place, Sound Beach, Rocky Point, Shoreham and Wading River. Design features include kiosks at trailheads, quarter-mile markers and railings on inclines. Today, this trail is currently in the construction phase at a cost of \$8,820,000, funded by the TAP-CMAQ program as well as a 5% local match from Suffolk County.

This particular multi-use path provides important precedent for the Long Island Greenway by establishing a legal framework for additional mixed-use paths within utility corridors in Suffolk County. The legal agreement between LIPA and Suffolk County lays the foundation for a similar agreement between Nassau County, LIPA and the Long Island Rail Road (LIRR).

Connect Long Island Plan

Connect Long Island is a regional transportation and development plan to drive sustainable growth in Suffolk County through transit-oriented development and specific measures intended to build a modern transportation system connecting the region's research and educational institutions with emerging high-tech companies. There are five components to this plan including:

1. Transit-Oriented Development (TOD) incentivizing growth on and around mass transit corridors;
2. Expansion of Mass Transit Opportunities including three major projects with Long Island Rail Road;
3. Three new north-south Bus Rapid Transit lines;
4. The establishment of an Innovation Zone to connect and spur collaboration between major research and educational institutions;
5. Stronger and safer connections between downtown areas and recreational assets such as parks and trails.

Suffolk County Hike/Bike Master Plan

In 2017 Suffolk County received a \$250,000 grant from the New York Metropolitan Transportation Council (NYMTC) to develop a county-wide hike and bike master plan. Since then, the County has hired a consultant team and embarked on an ambitious public outreach effort. This included an online map that allows users to make specific comments, recommend routes and trail improvements to Suffolk County's network of hiking and biking trails. The final plan is anticipated to be complete in early 2020. The Trust for Public Land has worked in close collaboration with the County and its consultant team to ensure that the proposed Long Island Greenway is integrated into the final planning documents.

The Long Island Extension to the Empire State Trail: A Feasibility Study & Preliminary Route Alignment (January 2019)

Long Island is home to more than 7.5 million New Yorkers across Kings, Queens, Nassau and Suffolk Counties – nearly 40% of the state's total population. The exclusion of Long Island from the Empire State Trail was met with considerable consternation from local officials, regional stakeholders and the general public. In response to those concerns, The Trust for Public Land led a feasibility study to extend the Empire State Trail across Long Island. The goal of this project was to identify a conceptual trail alignment from Battery Park to Montauk that maximized the off-road experience. The Trust for Public Land's experience in creating green infrastructure parks and other dual-purpose infrastructure provided encouragement that this was possible by utilizing utility rights-of-way that are already owned by public entities, in this case LIPA and LIRR, whose State charters stipulate that they operate in the broader public interest.

In addition to connecting the Empire State Trail with Long Island Communities, the Long Island Greenway addresses longstanding local needs for safe places to walk and cycle,

car-free transportation options, and additional community spaces. Nassau and Suffolk County are among New York State's most dangerous counties in terms of pedestrian and bicycle crashes with automobiles. While there are a number of north-south trails throughout the island, there is no longitudinal trail connecting them, and very little adequate infrastructure for car-free, active transportation to parks, workplaces, neighbors, or train stations. Much of Long Island is oriented around mid-20th century infrastructure, the infamous and crowded Long Island Expressway. In order to become a safe, equitable, and sustainable 21st century suburb, business and civic leaders agree that Long Island needs to:

- Attract and retain young professionals with amenities comparable with any major city and by solidifying the strong “sense of place” across the Island;
- Revitalize downtown areas with walkable communities and affordable multifamily housing;
- Modernize and leverage the LIRR with other transportation modes, and divert car trips to transit; and
- Connect more Long Island neighborhoods to coastal areas and parks with a network of accessible walking and biking trails.ⁱⁱ

This study relied on aerial imagery to determine the route, and was vetted through on-the-ground observations of site conditions and targeted stakeholder engagement. The Trust for Public Land consulted with 16 public agencies, 121 organizations and elected officials and more than 60 individuals with first-hand knowledge of the trail and transportation landscape on Long Island.



The entire proposed route spans nearly 175 miles and connects more than 27 communities, numerous existing parks, and hundreds of thousands of New Yorkers. It will bisect and tie together Long Island's extensive inventory of world-class north-south trails including the Bethpage Bikeway, Setauket-Port Jefferson Greenway, Long Island Greenbelt Trail and others. Roughly half of the Long Island Greenway is off-road, while the remainder utilizes on-road infrastructure, running parallel with several LIRR lines and close to numerous trail stations. Beyond the transportation and recreational utility of this route, the trail is close to fourteen (14) of Long Island's largest employers and numerous educational institutions. In addition to the primary Empire State Trail route alignment, this study identifies two "alternate routes" worthy of future study for development. Estimated construction cost for this trail is approximately \$114 million, based on figures from the 10-mile Port Jefferson to Wading River Trail. As an immediate next step, that study recommended a more detailed feasibility study and conceptual design of a section of the route covering parts of Nassau and Suffolk Counties and connecting several major parks and existing trails. This study is a direct result of that recommendation.



Existing conditions in Suffolk County were observed directly from the Right-of-way (ROW). This overgrowth is typical of much of the ROW in Suffolk County.

Phase 1 Study Process

This detailed feasibility report and conceptual design of the first phase of the Long Island Greenway is informed by a variety of sources including quantitative data, on-site observations, geo-spatial analysis, stakeholder interviews, and other community engagement activities. Qualitative information was obtained directly from stakeholders in the community and site visits, while quantitative datasets were obtained from a variety of public databases. This section details the process employed to assemble this plan.

Field Observation

Urban Cycling Solutions conducted three (3) site visits to verify ground conditions and make adjustments as necessary. Prior to each site visit, the segment of the overall 2019 conceptual route alignment was reviewed using aerial photography via Google Earth. Local stakeholders with in-depth knowledge of field conditions were also consulted during the route formation. Adjustments to the route were made prior to each site visit, based on a thorough screening of visible ground conditions and informed stakeholders with detailed information about the areas. Areas obscured by tree canopy coverage or other unidentifiable obstructions were specifically noted for field observation. Any major obstructions to the route observed in the field were noted, and adjustments were investigated on-site.

The majority of the proposed trail alignment is located within above-ground utility rights-of-way that are currently owned or operated by LIPA. In Nassau County, the right-of-way is (still owned by LIRR even though it is no longer used for rail purposes, and is leased to LIPA. In Suffolk County, the right-of-way was transferred from LIRR to LIPA decades ago. The Trust for Public Land and Urban Cycling Solutions obtained an access agreement for LIPA's utility ROW in Suffolk County. UCS biked and/or hiked through the entirety of all corridors included on this section of the route. Where overgrowth or other major physical obstructions prevented passage, UCS circumvented the obstruction and continued observations in the right of way. Overgrowth was not considered an impediment to the trail alignment, as construction would require trail clearance. Rather, extreme grade changes and the crossing of busy roads were noted as route challenges to be circumvented or otherwise addressed through engineering designs.

Because the team was unable to obtain an access agreement for the right-of-way owned by LIRR in Nassau County, trail observations were made from the numerous intersections bisecting the right of way (which contains a well-trodden if unsanctioned existing trail, as shown in site photographs). All other existing trails and on-street routes

were observed via bicycle, documented with photography, and confirmed with geo-spatial analysis and commercial satellite imagery, where available. In addition to the trail alignment, Urban Cycling solutions specifically observed and documented conditions at each of the fifty (50) intersections along the proposed trail.

Data Analysis

Urban Cycling Solutions worked with a variety of datasets from different sources, combining quantitative metrics such as demographics and crash data with qualitative information obtained directly from community stakeholders. A complete list of sources is included in the bibliography.

Community Engagement

Community and stakeholder engagement was a central component in the development of this plan. The Trust for Public Land conducted a variety of meetings, presentations, and interviews to gain support, gather information and refine the project approach as summarized on the following page.

Overall Route Realignment

The focus of this study was the Phase I alignment between Eisenhower Park and Brentwood State Park. The team used the original 2018 Empire Trail Extension Route Alignment as a baseline, and made refinements based on observed field conditions. In addition to changes within the Phase I study area, alterations to the overall Long Island Greenway route alignment were made to the west of Eisenhower Park to ensure that the route aligned with the preferred entry point to the Park. The impact of this reroute optimizes the overall Long Island Greenway route by taking advantage of more existing county trails, and providing direct access to the Nassau Hub and Hofstra University.

11

Organizational
Letters of Support



- ✓ Nassau County Resolution of Support
- ✓ Suffolk County Resolution of Support
- ✓ Nassau County Executive
- ✓ Suffolk County Executive
- ✓ Suffolk County Legislator Sarah Anker
- ✓ Nassau County Dept. of Public Works
- ✓ NYS Assemblyman Fred Thiele
- ✓ NYS Assemblyman Steve Stern
- ✓ State Senator Monica Martinez
- ✓ NYS Assemblyman Steven Englebright



10

Government Letters
of Support and
Resolutions

20+

Stakeholder
Meetings &
Visioning
Workshops



Existing Conditions

Overview

This section breaks down relevant data within the study area encompassing the proposed trail. The study area is defined as a linear 24-mile corridor from Eisenhower Park to Brentwood State Park and its environs. The study area encompasses nine (9) census “places” including the Hamlets of Salisbury, East Meadow, Levittown, Bethpage, Old Bethpage and Melville, Dix Hills and Brentwood.ⁱⁱⁱ The study area includes the corridor’s immediate environs such as transit facilities, development sites, major employers and other institutions. This existing conditions analysis will examine traffic crash statistics, transit ridership, demographics, major investments, and ground conditions within the study area.

Bicyclist and Pedestrian Safety

Traffic safety is a significant issue in both Nassau and Suffolk Counties. From 2015-2017, Nassau and Suffolk County were consistently ranked as the state’s top two worst counties in terms of the number of fatalities, personal injuries and property damage resulting from traffic crashes. In 2018, Queens County recorded the highest number of crashes in New York State, however Nassau and Suffolk County still ranked second and fourth respectively. This consistently high number of crashes is particularly troubling when viewed in comparison to population density relative to other high-crash counties.

From 2015-2017 Nassau and Suffolk County had the highest number of crashes (across modes) in New York State.

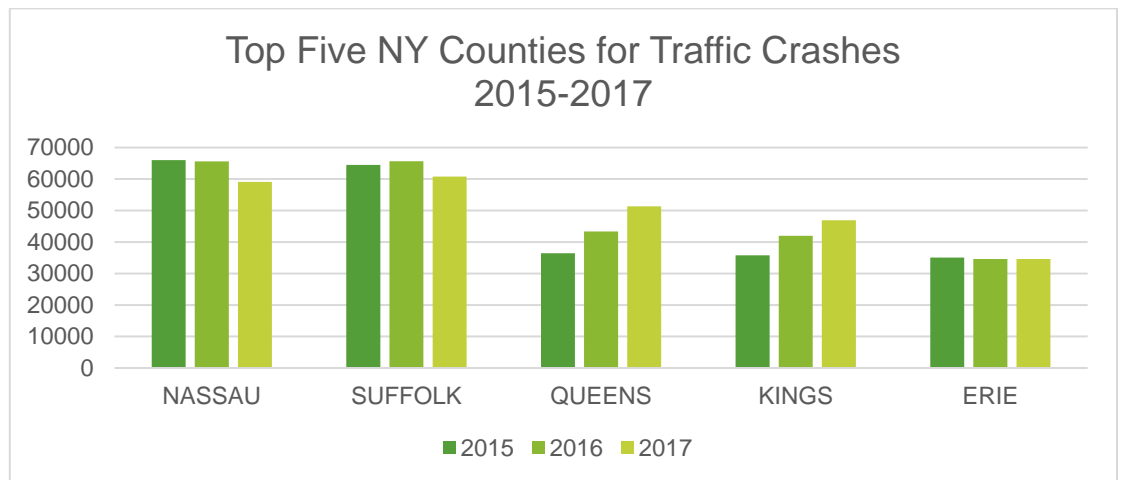


FIGURE 2. THIS FIGURE COMPARES THE TOP FIVE NEW YORK COUNTIES IN TERMS OF THE NUMBER OF TRAFFIC CRASHES OVER A THREE-YEAR PERIOD (2015-2017).^{iv}

Nassau and Suffolk County have more traffic crashes (across all modes) per capita than Queens and Brooklyn.

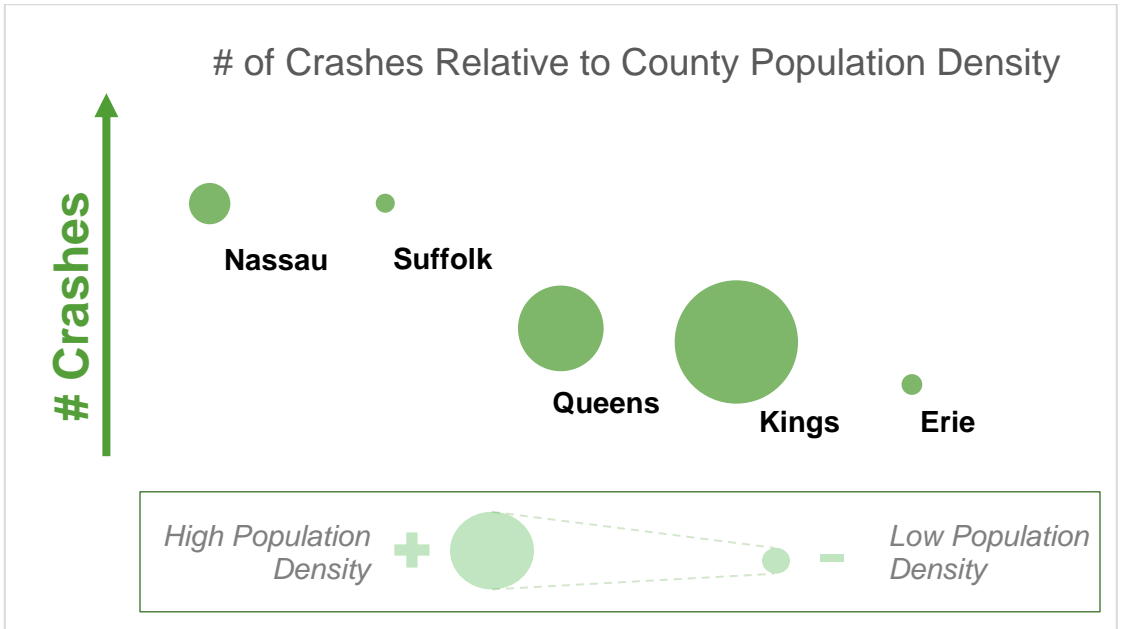


FIGURE 3. THIS FIGURE ILLUSTRATES THE AVERAGE NUMBER OF CRASHES OVER A THREE-YEAR PERIOD (2015-2017) RELATIVE TO POPULATION DENSITY (REPRESENTED BY THE SIZE OF EACH CIRCLE). DESPITE HIGHER POPULATION DENSITY IN QUEENS AND KINGS COUNTY NASSAU AND SUFFOLK COUNTIES HAVE A DISPROPORTIONALLY HIGHER NUMBER OF CRASHES RELATIVE TO POPULATION DENSITY. ^v

This consistently high number of crashes is particularly troubling in terms of pedestrian safety. In 2018, Long Island accounted for 24% of all pedestrian fatalities in New York State. Worse yet, Suffolk County ranked highest in terms of pedestrian fatalities in comparison to population size.

Suffolk County has the highest number of pedestrian fatalities in New York State.

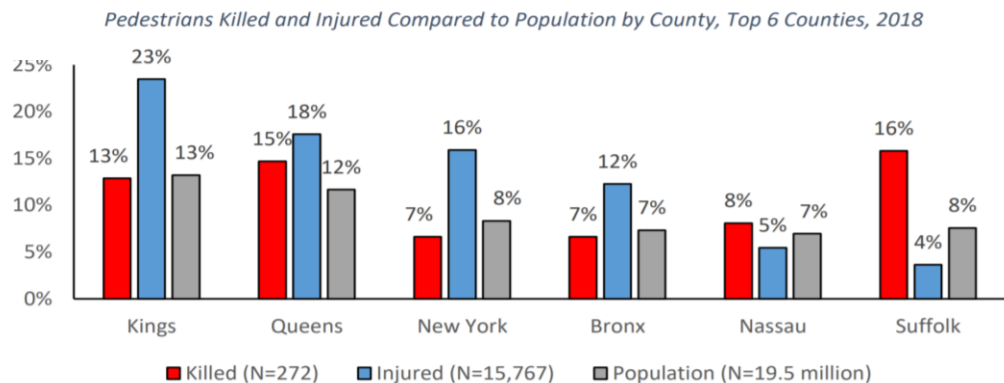


FIGURE 4. IN 2018, SUFFOLK COUNTY RANKED HIGHEST IN NEW YORK STATE FOR PEDESTRIAN FATALITIES. ^{vi}

Nassau and Suffolk County have the highest number of bicycle fatalities in New York State.

In 2018, Suffolk and Nassau Counties ranked fifth and sixth, respectively in terms of the total number of bicycle crashes, but ranked highest in terms of fatalities. In total Long Island accounts for 33% of New York State's bicycle fatalities.

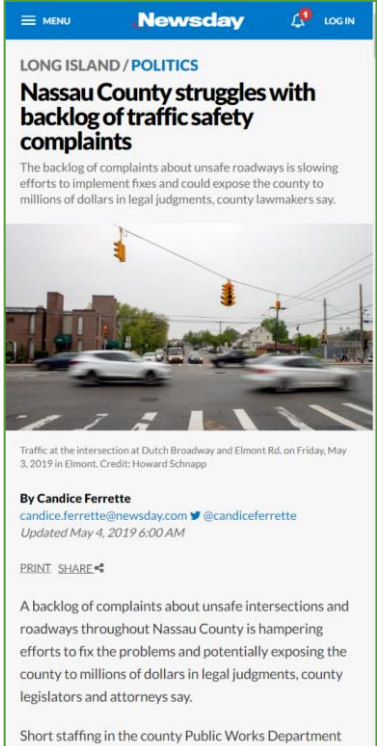
This is an acknowledged challenge for both Nassau and Suffolk County. In 2012, Nassau County launched 'Walk Safe Nassau', a "county-wide initiative to educate the public about pedestrian safety." This program includes public service announcements and the distribution of informational fliers and posters to local businesses in order to educate pedestrian and drivers on the rules of the road.^{vii} In 2019, Suffolk County initiated a comprehensive hike/bike master plan to build a more robust, interconnected network of trails and on-street facilities.

The Statewide Comprehensive Outdoor Recreation Plan shows that Long Island has a high need for biking, multi-use trails, and Nassau and Suffolk counties have the highest rate of pedestrian and cyclists deaths in the state. A 2007 study found that 55% of survey respondents do not feel safe bicycling on Long Island roadways.

In May of 2019 Newsday published an article noting a backlog of complaints about unsafe intersections, exposing Nassau county to significant liability and millions of dollars in potential legal judgements.

According to the article, the county's department of public works is short staffed due to a combination of retirements and recruiting challenges in a competitive job market. Meanwhile aging infrastructure (including pavement conditions), growing congestion and an increasing amount of cell phone use resulting in traffic accidents has empowered residents to file complaints via the county's online reporting system.

In addition to complaints, this backlog reveals a demand for complete street improvements amongst Nassau county residents. This includes requests for the removal of traffic lanes, the addition of sidewalk infrastructure and a demand for active transportations.



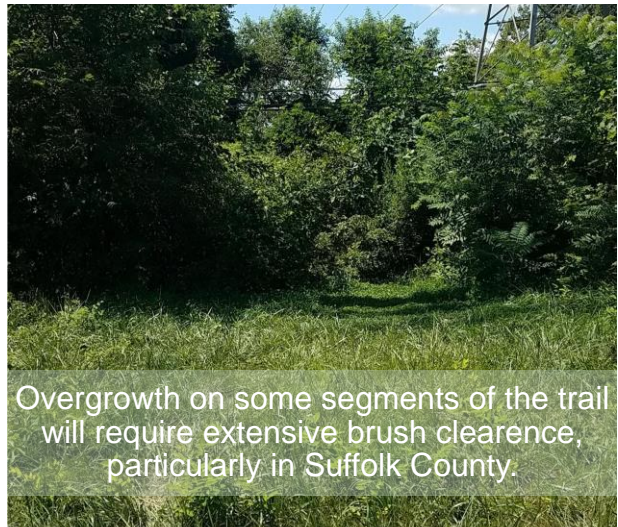
The screenshot shows a Newsday article from May 4, 2019. The article title is "Nassau County struggles with backlog of traffic safety complaints" under the "LONG ISLAND / POLITICS" category. The sub-headline reads: "The backlog of complaints about unsafe roadways is slowing efforts to implement fixes and could expose the county to millions of dollars in legal judgments, county lawmakers say." Below the text is a photograph of a busy street intersection with traffic lights and cars. A caption below the photo states: "Traffic at the intersection at Dutch Broadway and Elmont Rd. on Friday, May 3, 2019 in Elmont. Credit: Howard Schnapp". The author is Candice Ferrette, with contact information: candice.ferrette@newsday.com and @candiceferrette. The article was updated on May 4, 2019 at 6:00 AM. There are links for "PRINT" and "SHARE". A second paragraph of text is visible at the bottom of the screenshot: "A backlog of complaints about unsafe intersections and roadways throughout Nassau County is hampering efforts to fix the problems and potentially exposing the county to millions of dollars in legal judgments, county legislators and attorneys say." and a final line: "Short staffing in the county Public Works Department".

General Trail Conditions

The primary focus of this study is a series of utility corridors and connecting roadways within the study area. Conditions in the right of way vary, but are generally flat in Nassau County with some overgrowth obstructing access in some areas. Suffolk County presents two areas of notable elevation changes and significant overgrowth along the trail. General details are described below with additional conditions detailed in the route description beginning on page 29:



Passive security measures, such as this gate in Nassau County are not common along the right-of-way (ROW). While typically open, many of the entrances to the ROW are overgrown making passage difficult.



Overgrowth on some segments of the trail will require extensive brush clearance, particularly in Suffolk County.



Two areas in Suffolk county have significant elevation changes which will require design intervention.



Some portions of the ROW in Nassau County are already unobstructed and accessible to adjacent residential properties for recreational purposes.



The Bethpage Bikeway is a well-used and maintained existing trail which makes use of utility corridors through Bethpage State Park.



Private property owners abutting the right of way in Nassau County have created entry points for pedestrian and even vehicle access.



Some areas of the trail in Suffolk County show significant signs of informal usage including all-terrain vehicles.

What are Transit Catchment Areas?

Transit “Catchment Areas” represent the land around a rail station, bus stop or depot. Catchment areas signify a variety of different land-use and transportation contexts based on distance from the transit facility.

Multimodal Connectivity Analysis

The Long Island Greenway represents a key access corridor to transit, enabling safe active connections to high-volume rail stations without the use of a car. The proposed first segment of the Long Island Greenway runs parallel to the LIRR for much of its 24-mile length, and this segment of the trail is within one to three miles of seven (7) LIRR stations on the Ronkonkoma and Port Jefferson Branches --- the Westbury, Hicksville, Bethpage, Farmingdale, Pine Lawn, Wyandanch and Deer Park stations. According to LIRR data from 2012 to 2014, these seven (7) stations averaged 87,952 riders per day in the aggregate. This represents nearly ten percent (10%) of total daily LIRR ridership, and a significant opportunity to promote active connections to and from mass transit.^{viii} In addition, this 24-mile segment of the Long Island Greenway intersects and or parallels eight bus routes from Nassau Inter-County Express (NICE) and ten routes from Suffolk County Transit Bus service as illustrated in the table below:

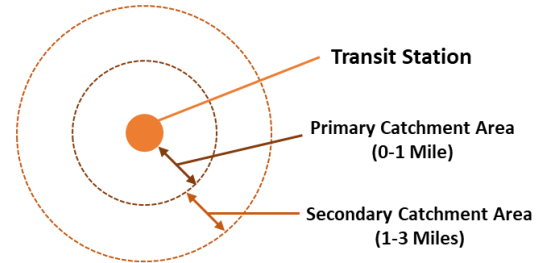




FIGURE 5. THE SECONDARY CATCHMENT AREA SURROUNDING A TRANSIT STATION REPRESENTS AN AREA OUTSIDE OF WALKING DISTANCE, BUT WITHIN A COMFORTABLE 15-MINUTE RIDE.

Transit Operator		
Routes	48/49, 70, 71, 72, 78, 79, 80	33, N72, N70, S1, 1A, 3A, 27, 2A, 2B 41

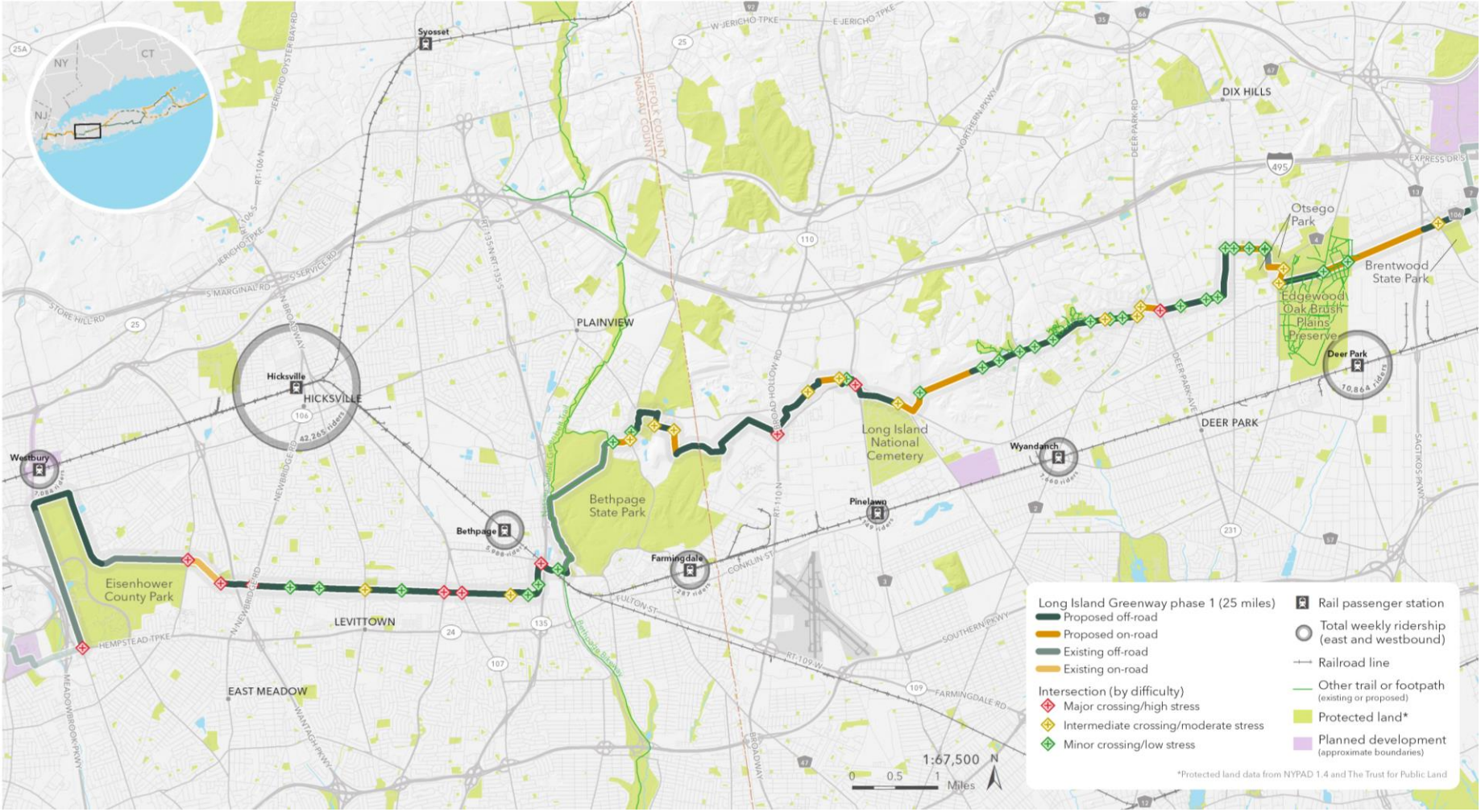


FIGURE 6. THIS MAP INCLUDES PROXIMATE TRANSIT STATIONS AND RELATIVE RIDERSHIP IN RELATION TO THE PROPOSED TRAIL. THE CONCENTRIC CIRCLES AROUND EACH TRANSIT STATION REPRESENT THE RELATIVE SCALE OF RIDERSHIP.



**NYS
Downtown
Revitalization
Initiative (DRI)**

The DRI is a state investment program enabling communities to transform their downtown neighborhoods into more vibrant, walkable 'places' for New Yorkers to live, work and play. Communities are nominated by Regional Economic Development Councils and receive up to \$10 million. The program is currently in its fourth year.

The Future of Long Island

Long Island is undergoing a period of growth and renewed investment from both the private and public sectors. Efforts are underway across Nassau and Suffolk counties to connect neighborhoods with park space, revitalize downtown areas, build affordable multifamily housing and enhance transportation networks. These efforts range from modernization of the LIRR to major private sector investments in commercial and residential development and redevelopment areas clustered around train stations. This is an exciting, once-in-a-generation opportunity to make Long Island communities more sustainable and equitable, and The Trust for Public Land wants to make sure that public space and active transportation are integrated into the revitalization of these communities. The Long Island Greenway is an answer to anticipated demand – from future residents and workers – for an active transportation network, complementing other efforts to attract and retain young professionals. The study area encompasses areas receiving significant private and public investment, including Westbury and Central Islip, which are both receiving \$10 million grants through New York’s Downtown Revitalization Initiative. Some of the projects funded through these grants are summarized below:



There are also three significant development sites adjacent to the proposed Long Island Greenway Phase 1 alignment including the Hauppauge Industrial Complex, Nassau Hub and Pinelawn Industrial Park.^{ix}



The Nassau Hub is currently in development by a joint venture of RXR and BSE Global. In 2016, the New York State Legislature allocated an initial investment of \$85 million for critical infrastructure in support of the Hub’s development. An additional investment of \$40 million was appropriated in the State’s FY2020 budget to support the development of Northwell Health’s new “Innovation Center.” This facility will house both laboratory and educational space.^x The Long Island Greenway route (west of Eisenhower Park) will be routed through the Nassau Hub campus. This represents a change to the original route alignment, based on a preferred entry point to Eisenhower Park identified in this Phase I study.

The Long Island Innovation Park at Hauppauge is an existing commercial park with the “largest concentration of tradable business on Long Island.”^{xi} A number of economic development stakeholders – including the Hauppauge Industrial Association of Long Island, Suffolk County Industrial Development Agency and Regional Plan Association – have come together to plan improvements to the industrial park and expand its potential.

Pinelawn Industrial Park is a proposed 100-acre development site in the Town of Babylon. The property is an undeveloped site that is relatively flat and forested. It is adjacent to the Long Island Railroad and readily accessible to major Long Island highways. The property will require rezoning to a Planned Industrial Park from the Town of Babylon. The property was put on the market in November 2019.

Suffolk County is also fostering development along the Route 110 Corridor as part of the Connect Long Island Plan. Otherwise known as Long Island's "high tech main street," the corridor runs from Route 27A (Montauk Highway) in the Village of Amityville to Halesite in the Town of Huntington, and supports approximately 10% of the workforce in both Nassau and Suffolk Counties. The corridor includes a variety of educational and research institutions as well as retail destinations and corporate headquarters of several major technology companies. Roadway congestion is a major issue in this corridor given the volume of employees, and limited transportation options aside from the personal automobile. A 2015 Alternative Analysis study examined opportunities to enhance transportation alternatives in this corridor, including a 10.5-mile bus rapid transit trunk route between LIRR Amityville Station and the Walt Whitman Shops.^{xii}

In addition to these industrial development sites and the Route 110 Corridor, Cannon U.S.A., Inc maintains its headquarters at 'One Cannon Park.' This 52-acer campus is located off of the Long Island Expressway near the route 110 technology corridor and just over one mile from the proposed trail alignment.^{xiii}

The Long Island Greenway, Phase I

Long Island needs a trail – a central, longitudinal trail running from east to west, connecting a lush array of parkland with existing hiking, biking and mountain bike trails. Beyond connecting recreational assets, both Nassau and Suffolk counties are in need of a safe, protected space that enables active recreation and commuting as well as regional connections with transit and New York City. Long Island needs a trail that stands on its own, and celebrates the unique identity, culture and landscape of this region.

The Long Island Greenway is an ambitious project requiring extensive planning, outreach, engineering and coordination across Long Island. In order to move forward on what might be a multi-year or even multi-decade effort, the Trust for Public Land has identified a first phase to expedite through design, engineering and construction so that it is shovel-ready when the planned Empire State Trail is completed through its current terminus at the tip of Manhattan. Phase 1 is a **25-Mile^{xiv}** route from Eisenhower Park through Bethpage State Park to Brentwood State Park, leveraging utility corridors. This particular segment exemplifies the core values of the full Long Island Greenway by connecting more than **250,500 New Yorkers** [who live within a mile of the trail] in **nine (9) communities** across both Nassau and Suffolk counties through **thirteen (13) parks with over 1.5 visitors per year** and **thirty-six (36)** academic institutions as well as existing trails, safe corridors for walking and cycling, and active connections with mass transit. Phase 1 will both stand on its own as a valuable community and establish precedent for the completion of the entire Long Island Greenway. This feasibility study provides a refined trail alignment as well as conceptual design recommendations for road crossings and for the trail itself.

LONG ISLAND GREENWAY: PHASE 1 OVERVIEW

25 MILES



80% Off-Road
20% On-Road

13
PARKS

Eisenhower | Salisbury | Stan Ruppenthal
Azalea | East Village Green | Bethpage
Battle Row | Butterfly | Strathmore
Ibsen | Edgewood Oak Brush Preserve
Otsego | Brentwood



9 CONNECTED
COMMUNITIES

Westbury | Salisbury | East Meadow
Levittown | Bethpage | Old Bethpage
Melville | Dix Hills | Brentwood

36



SCHOOLS AND UNIVERSITIES
WITHIN 1 MILE

250,500+

RESIDENTS AND



1.5M
VISITORS

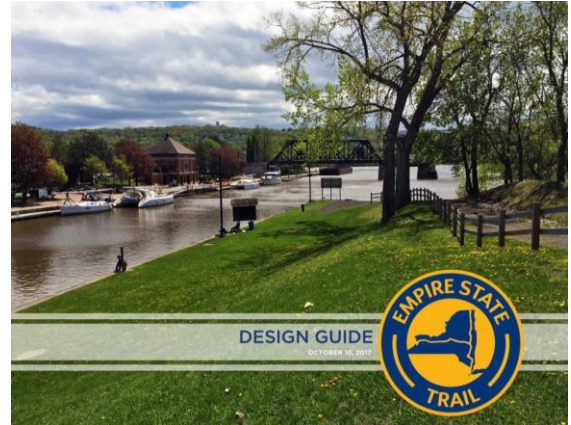
Property Ownership

Approximately 22 miles (95%) of the of the Long Island Greenway's Phase I trail alignment is set within land parcels owned and administrated by public agencies. This limits the need for land acquisition and invites public usage. Three percent (3%) of the route (approximately 0.7 miles) is privately owned; two percent (2%) of the route's ownership was not able to be identified. The table below provides a high-level summary of ownership along the Phase I section of the Long Island Greenway based on data from public records provided by Nassau and Suffolk Counties.

Long Island Greenway Trail Alignment Property Ownership			
Private vs Public	Owner	Miles	% of Total Route
Nassau County			
Public	Nassau County	5.2	21.2%
Public	Long Island Rail Road	3	12.2%
Public	New York State	2.4	9.8%
Public	Towns	1	4.1%
Private	King Kullen Grocery HQ	.3	1.2%
Public	Local Roadways	1.1	4.5%
Suffolk County			
Private	Dardad LLC	.1	.4%
Public	Lilco (LIPA)	5.2	21.2%
Private	PF Melville Realty Co LLC	.04	.2%
Private	Pilgrim East LP	.2	.8%
Private	POM Melville LLC	.05	.2%
Public	Suffolk County	.4	1.6%
Public	New York State	2.2	9.0%
Public	Local Roadways	2.4	9.8%
Public	Towns	.4	1.6%
Unknown	No Information Available	.5	2.0%
Total Unknown		0.50	2%
Total Private Property		0.70	3%
Total Public Property		23.3	95%

Design Best Practices

The Long Island Greenway is ultimately intended to serve as an extension to the Empire State Trail from its current terminus at Battery Park in Manhattan to a new terminus in Montauk. Accordingly, we adhere to standards outlined in the Empire State Trail Design Guide. There are three (3) typical design treatments applicable to the existing conditions on the proposed Long Island Greenway trail alignment. These include *Shared Use Paths within Utility Corridors*, *Accessibility of Shared Use Paths* and *On-Road facilities*.



This section provides a summary of Empire State Trail design guidance for each condition as a template for the Long Island Greenway.^{xv}

Trail Surface Materials

The Empire State Trail Design Guide references a variety of surface materials which may be used. Consistent with the Empire State Trail, the majority of newly constructed off-road segments of the Long Island Greenway will consist of asphalt. This approach also echoes existing trail facilities within the Long Island Greenway including the Bethpage Bikeway. Several sections of the Long Island Greenway include the conversion of existing sidewalks into wider shared-use paths. Integrally colored concrete with a scoring pattern for tread will be used in these instances.






Asphalt Trail



Integrally Colored Concrete: Scofield Shadow Slate C-31

Intersections

The proposed trail capitalizes on utility corridors to maximize off-street miles, which will ensure the safest and most comfortable riding/walking/hiking experience. These rights of way along the 24-mile segment transect roadways of varying scales at fifty (50) discrete locations. Each of these intersections were observed and categorized based on a variety of conditions including roadway width, traffic volume, lanes and proximity to crossings. Intersections were categorized as follows:

Type	Minor Crossing	Intermediate Crossing	Major Crossing
Stress Level	Low	Moderate	High
Total #	27	15	8
Attributes*	No lane markings to two lanes <400 Annual average daily trips	Up to four lanes 30-60 ft roadway width	Four or more lanes with turning lane 60+ ft roadway width
Example	 <p>Strawberry Lane</p>	 <p>Stewart Avenue</p>	 <p>North Wantagh Avenue</p>

**These are general attributes which tend to be true within a given intersection type. Roadways were evaluated generally and do not necessarily meet all of these criteria to be classified as one type or another.*

Different types of intersections require specific design treatments to facilitate safe, visible trail crossings. The majority of intersections on the proposed trail minor crossings, requiring lower cost design solutions such as signed crossings. The recommended design treatments in this Phase I study follow those outlined in the Albany Hudson Electric Trail, a 30-mile segment of the Empire State Trail currently under construction.

The Long Island Greenway will use the following typical treatments (pending final design).

The majority of crossings will be addressed with two design treatments: Signed crossings and Rectangular Rapid Flash Beacons. Existing signalized intersections will be treated as signed crossings with visibility upgrades, signage and crosswalk paint enhancements.

Signed Crossing



- Uses signage, roadway markings and bollards to create a high-visibility crossing.
- Does not utilize electronic traffic control devices.
- Typically used for low-stress intersections and/or intersections with an existing traffic signal.

Rectangular Rapid Flash Beacon



- Uses bright user-activated LEDs mounted on a sign post in a rapid, irregular flashing pattern.
- Typically used in moderate stress intersections without existing traffic control devices.



Bicycle repair stands provide essential tools for basic repairs, and air pumps for bicycle tires.

Parking and Amenities

The proposed Long Island Greenway trail alignment includes both existing and proposed parking locations to enable a variety of access points for users outside of walking and/or biking distance, handicapped users, and operations, maintenance, and emergency services. Each of these instances is identified in the detailed route segment descriptions. Key design recommendations for automobile parking include:

- Parking stalls and lanes that accommodate loading and off-loading bicycles with adequate Americans with Disabilities Act (ADA) accessible spaces.
- Parking areas must be adequately lit to provide visibility and impressions of safety for trail users arriving by car.

The user experience on the Long Island Greenway would be greatly enhanced by bicycle parking and related amenities at all automobile parking facilities. The Empire State Trail Design Guide uses bicycle parking design, placement and spacing standards established by the Association for Pedestrian and Bicycle Professionals. Bicycle repair stands will also be installed in parking areas and other major trail “gateways” or access points. Because the Phase I trail segment is routed through existing parks with bathrooms and water fountains, this study does not suggest that additional such facilities are needed along this segment of the Long Island Greenway. Similarly, benches and other seating are available in existing parks along the route. Other opportunities for seating in the utility corridor sections of the route will be evaluated during the design phase.



FIGURE 7. THE ASSOCIATION OF PEDESTRIAN AND BICYCLE PROFESSIONALS (APBP) HAS PUBLISHED EXTENSIVE GUIDANCE ON BIKE PARKING INCLUDING ‘THE ESSENTIALS OF BIKE PARKING’ (2015) AND ‘BICYCLE PARKING GUIDELINES, 2ND EDITION’ (2010).

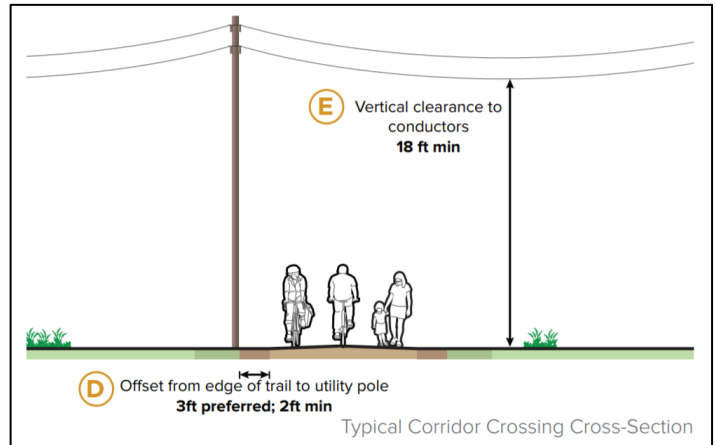
Wayfinding

The Empire State Trail Design Guide contains extensive documentation on a variety of sign types for varying conditions. The Long Island Greenway will use Empire State Trail signs to ensure continuity with the rest of the trail and consistent wayfinding.



Shared Use Paths within Utility Corridors

The Empire State Trail Design Guide includes design standards for shared use paths within utility corridors. The same eight (8) to twelve (12) foot trail width guidelines will apply to the Long Island Greenway. Electric transmission lines require utility poles which create unique constraints within the trail right of way. The Empire State Design Guide recommends a three (3) foot buffer, with allowance for a minimum of two (2) feet where constrained. The Empire State Trail design guide also recommends a minimum of 18 feet of vertical clearance between the trail surface and overhead conductors.

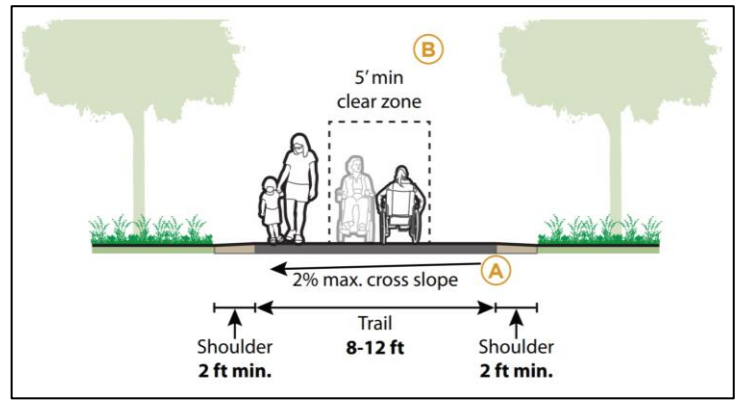


Vertical clearance requirements may vary for the Long Island Greenway based on LIPA requirements.

Accessibility of Shared Use Paths

The Long Island Greenway, Phase 1, should be designed to accommodate all users including those with mobility challenges wherever possible.¹

Per the Empire State Trail Design Guide, the trail surface will generally be designed with a 1.5% cross slope (with a maximum allowance for 2%) from one edge of the trail surface to the other. This grade standard ensures that the trail surface is consistently flat and does not present a mobility challenge for users in wheelchairs. The trail width should also enable a minimum five (5) foot clearance zone within the trail width to enable safe crossings between bicyclists, pedestrians and persons in wheelchairs. The Empire State Trail Design Guide calls for accessibility information to be posted on trailheads and gateway signage. This includes trail gradients, elevation profiles, distances, tread conditions and location of amenities.



Signalized crossings with pedestrian-actuated buttons should be no more than four (4) feet off the ground to ensure access.

¹ The Empire State Trail Design Guide provides guidelines to enhance trail accessibility to the maximum extent possible, but notes that conditions can sometimes be prohibitive. These instances include 'harm to significant cultural or natural resources; a significant change in the intended purpose of the trail; construction requirements in conflict with federal, state, or local regulations; or terrain characteristics that prevent compliance.'

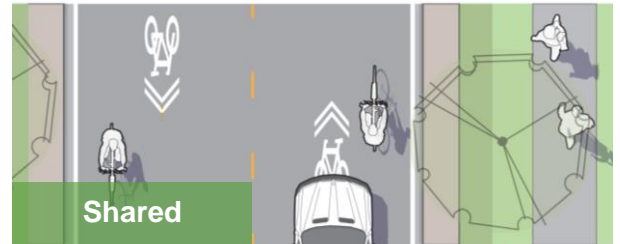
Shared Roadway Signs



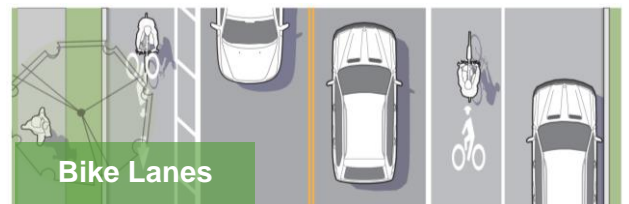
Roadway signs are an important feature for shared routes as they alert drivers to the potential presence of a cyclist in the roadway.

On-Road Facilities

Approximately twenty percent (20%) of the proposed phase I route is composed of on-road facilities. In each instance, bicyclists are diverted into an on-road facility while pedestrians continue in a sidewalk. The Long Island Greenway uses two types of on-road facilities: shared routes and dedicated bike lanes. Shared routes utilize “sharrow” pavement markings and associated regulatory signage to indicate bicycle activity within the roadway. In these instances, bicyclists are entitled to a full lane of traffic; as such, pavement markings should be positioned in the center of each lane to reduce instances of conflict between drivers and cyclists. Shared routes are ideal for short divergences from off-road segments and can be used on roadways with a maximum lane width of 13.5 feet (though 12 feet is recommended).



Instances with lane widths above 13.5 feet can be converted into a dedicated bike lane. These are portions of the roadway that are dedicated for bicycle use and delineated with painted lane markings. The Empire State Trail Design Guide calls for a standard bike lane width of seven (7) feet with allowances of six (6) feet adjacent to on-street parking, five (5) feet adjacent to curb faces, and four (4) feet adjacent to roadway edges.



Route Segment Breakdown

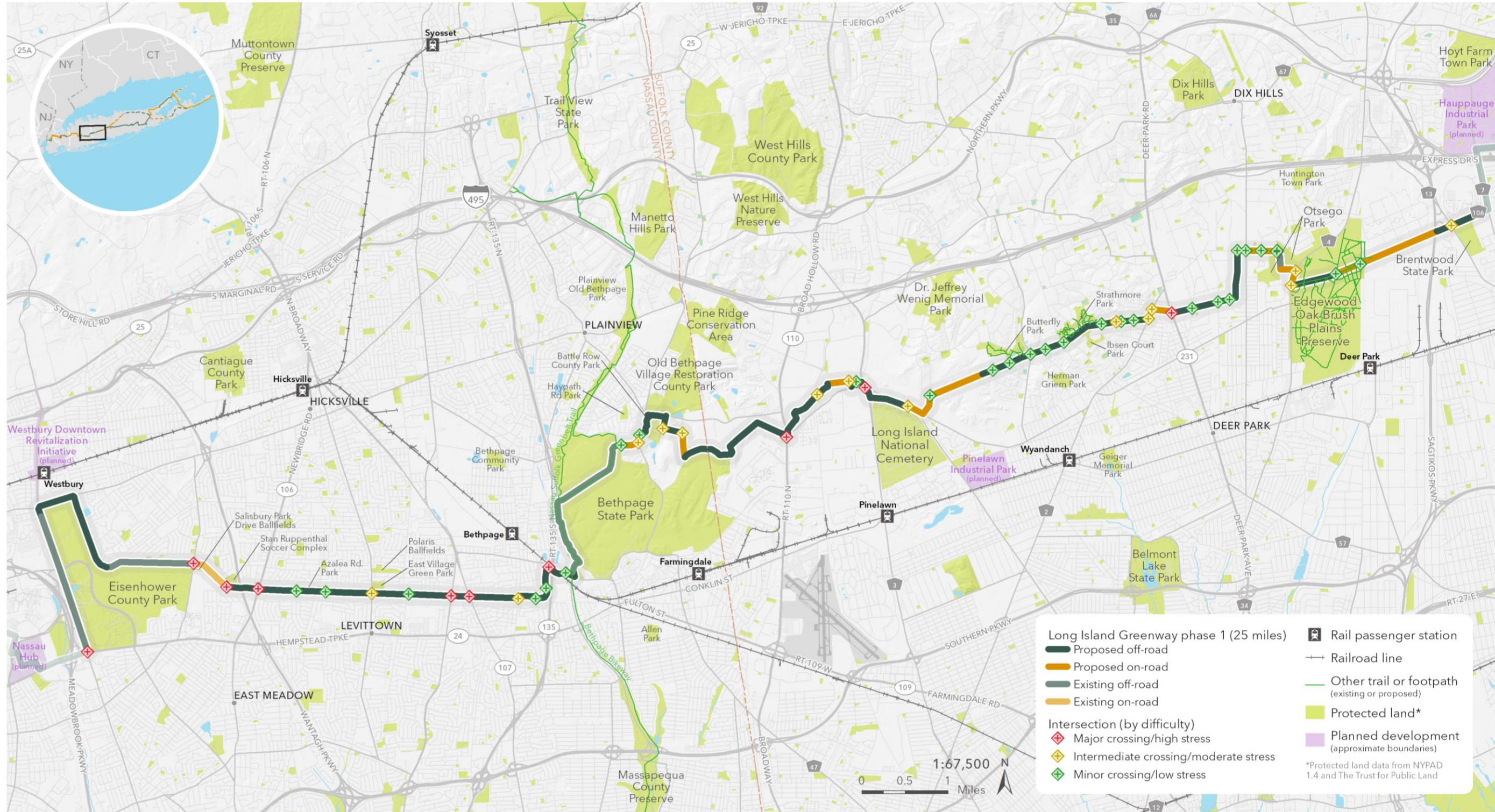
For the purpose of this report, the proposed Phase 1 route is broken down into five (5) discrete segments. These include:

- Segment 1A: Eisenhower County Park to Salisbury Park Drive
- Segment 1B: Newbridge Road to Central Avenue
- Segment 1C: Bethpage State Park to Pinelawn Road
- Segment 1D: Pinelawn Road to Otsego Avenue
- Segment 1E: Otsego Park to Brentwood State Park

Each segment is detailed below, noting specific existing and proposed features such as parking locations, alignment changes and key connections. Maps are provided in Appendix A.

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The Long Island Greenway, Phase I Overview Map



Segment 1A: Eisenhower Park to Newbridge Road

ROUTE ALIGNMENT

Nassau County has plans to extend the shared-use path from along the northern edge of Eisenhower Park from Privado Rd to Stewart Ave, connecting existing shared-use paths.



Trail begins on the west side of Eisenhower Park in an existing off-street shared-use path at the corner of Merrick Ave and the Hempstead Bethpage Turnpike, and terminates in a sidewalk just South of Privado Rd. This represents a change from the 2018 EST Extension route alignment which entered the park at Charles Lindburg Blvd. This alteration to the alignment enables the trail to take advantage of an existing off-road county bike route running parallel to the Hempstead Bethpage Turnpike, and enables enhanced connections with Hofstra University and the Nassau Hub to the west.



The proposed Long Island Greenway trail bypasses the Wantagh State Parkway by continuing over a bridge on Salisbury Park Drive. Given the roadway and traffic volume, the existing sidewalk should be upgraded into a shared-use path.



The existing shared-use path continues to the eastern-most edge of Eisenhower Park before continuing into an on-road bike lane on Salisbury Park Drive.



The proposed trail diverts into a LIPA utility corridor at Newbridge Rd.

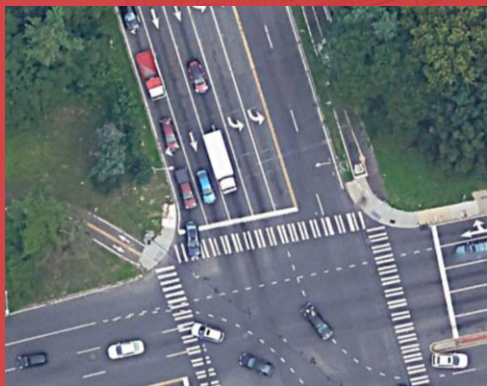


MAJOR CROSSINGS

Segment A of the proposed trail includes three (3) major crossings on wide multi-lane streets. Each crossing occurs at a signalized intersection. Given the presence of existing signals these intersections will be updated with high visibility crossing signage and crosswalk pavement markings.



This signalized intersection already connects two existing county trails, and has been freshly striped. As noted in the route alignment, this is a key intersection as it connects Eisenhower park with major Nassau institutions such as Hofstra University and the Nassau Hub.



Newbridge Road is a major crossing; while there is a signalized pedestrian crossing, the width and condition of the intersection will require upgrades to enhance visibility for trail users.



The termination of the bike lane at Old Westbury Road creates ambiguity for cyclists continuing along the proposed route on Salisbury Park Drive. Directional signs and a clearly delineated crossing will guide bicyclist and pedestrians to the proposed shared use path.



Segment 1B: Newbridge Road to Central Avenue

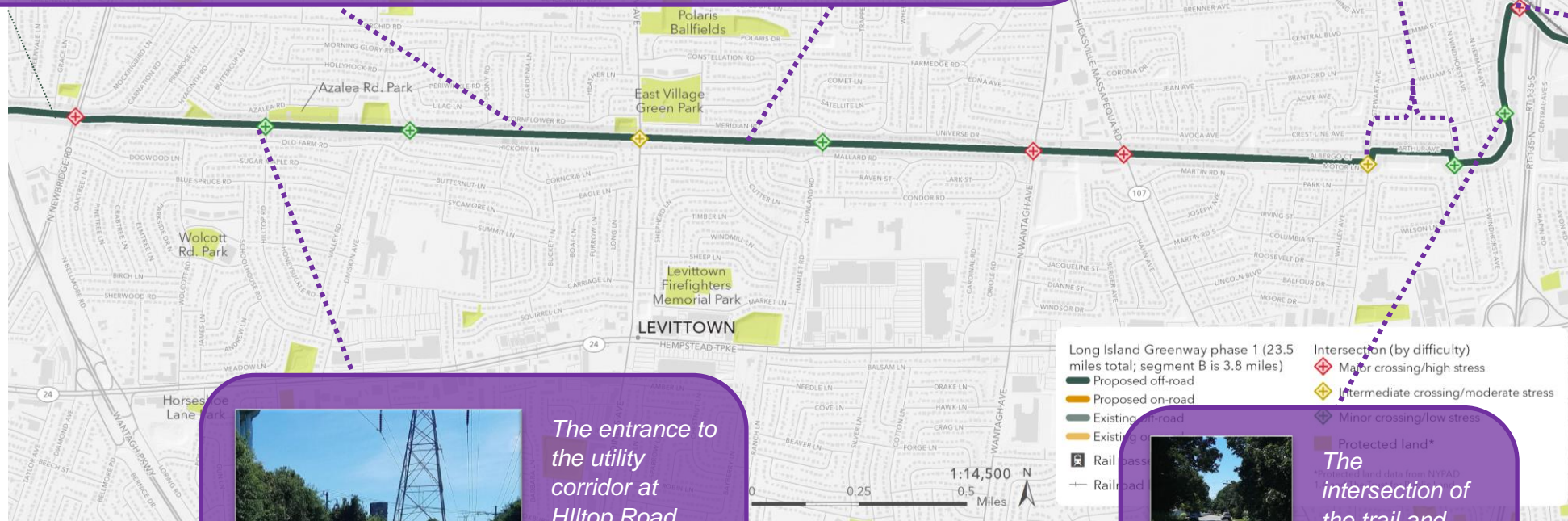
ROUTE ALIGNMENT



The majority of this proposed route segment is situated within a straight, contiguous east-west utility corridor representing an ideal off-road trail. Some areas are already easily accessible without obstruction, while others within a constrained right-of-way



This brief segment circumnavigates a stormwater basin obstructing the utility corridor. A new shared use path is recommended on the South side of Arthur Avenue to provide a consistent rider experience.



The entrance to the utility corridor at Hilltop Road was identified as a potential location for trail parking.



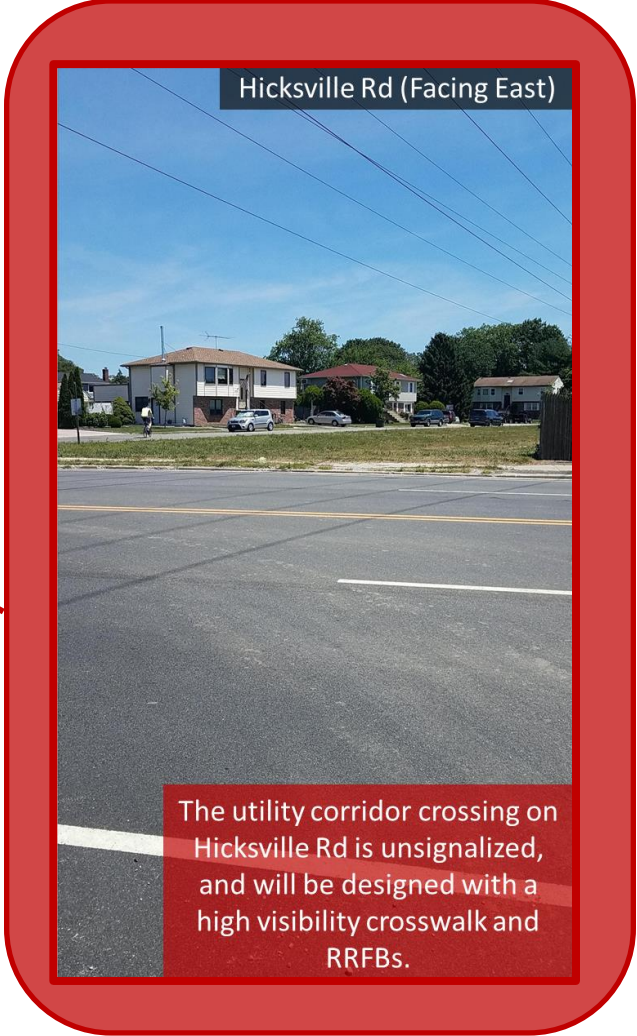
The intersection of the trail and Sophia Street was identified as a potential location for trail parking.



The existing sidewalk on the north side of the Central Avenue should be widened and upgraded to a shared-use path to provide an off-road alternative to bicyclist riding in-lane with car traffic.

MAJOR CROSSINGS

Central Avenue is a key transition point between the utility corridor and the entrance to Bethpage State Park. There is an existing signalized intersection with a pedestrian actuated signal. The entry/exit point from the utility corridor is a driveway for an office building. Design upgrades will include high visibility signage and crosswalks at the driveway entrance to alert drivers to trail users to potential conflicts.




Segment 1C: Bethpage State Park to Pinelawn Road

ROUTE ALIGNMENT

Segment 1C takes advantage of many existing and planned trails, including the Bethpage Bikeway.

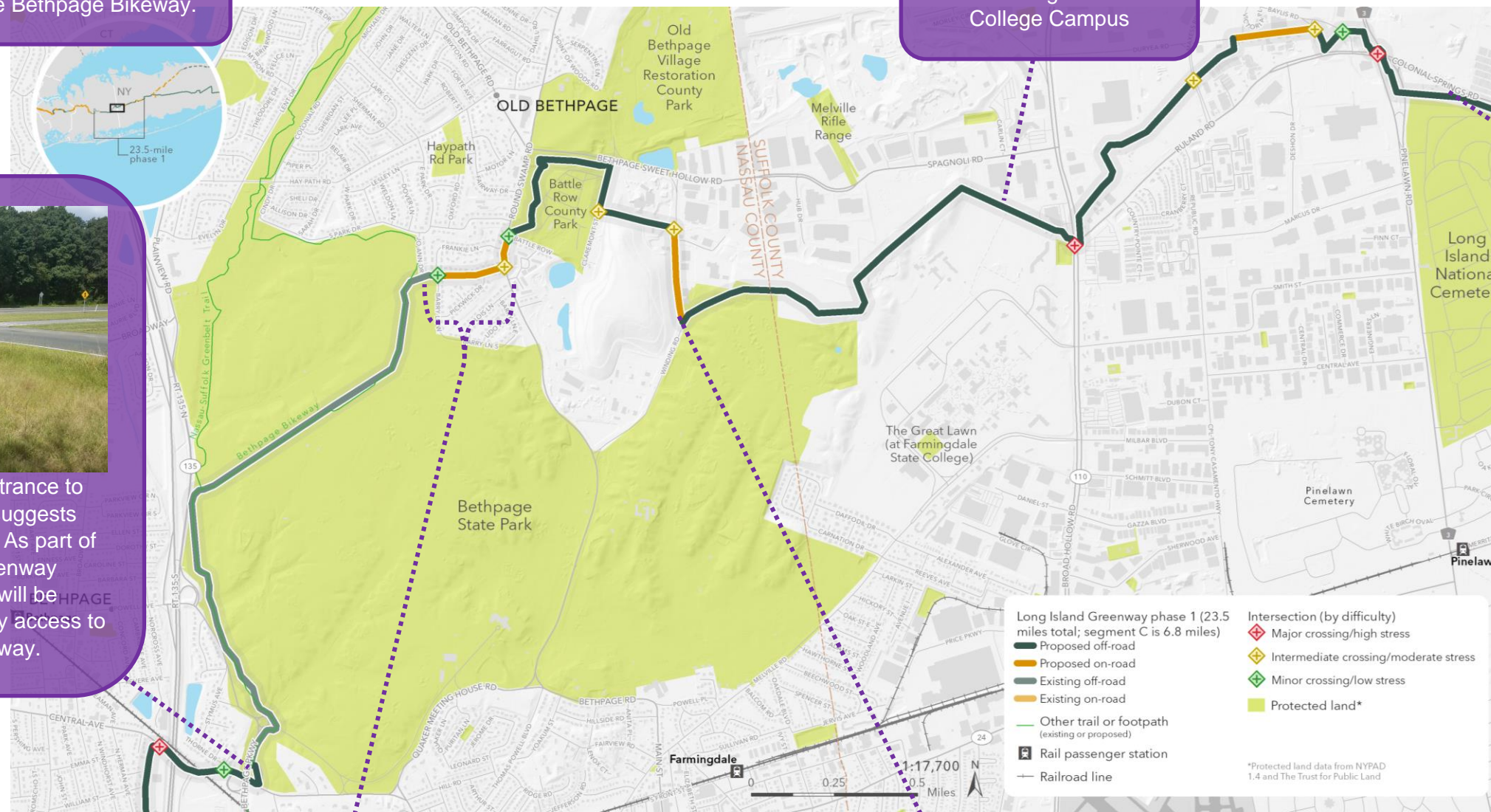
This portion of the trail is aligned on the edge of the Farmingdale State College Campus



A "goat path" at the entrance to Bethpage State Park suggests existing informal usage. As part of the Long Island Greenway alignment, this path will be formalized to provide easy access to the Bethpage Bikeway.



The trail continues in a utility corridor bordering the northern edge of Pinelawn Cemetery.



The Long Island Greenway aligns with Nassau County's Motor Parkway Trail Plan to build a path from the Bethpage Bikeway to Battle Row County Park. This route combines on and off-road segments.

The Long Island Greenway route enters Bethpage State Park near the Equestrian Center. This entrance requires further study in the design phase to determine a path which does not conflict with equestrian use. This may require parallel woodland clearance for a separate path.

MAJOR CROSSINGS

There are two major crossings which require specific attention in the design phase. These include Broadhollow Road/Route 110 and Pinelawn Road.



Broadhollow Road/Route 110

Proposed Bridge Crossing

Broadhollow Road/Route 110 is the widest and most dangerous crossing in this 24-mile Phase 1 of the Long Island Greenway. While the existing signalized intersection does include a pedestrian actuated signal, there is no pedestrian refuge to shorten the crossing distance. There is also no direct connection from the crosswalk to the continuation of the utility corridor just north of the intersection. A bicycle and pedestrian bridge is proposed to facilitate this crossing, and will present a high-visibility marker of the trail. The preliminary design study will further assess the feasibility of this treatment, including required minimum clearances and grade specifications for the bridge approaches.

Pinelawn Rd and Colonial Springs Rd

The intersection of Pinelawn Road and Colonial Springs Road is particularly challenging due to the high traffic volume and road width on both streets. While a direct crossing is not possible, recent upgrades to the intersection have provided a network of high-visibility crossings. The Long Island Greenway will utilize a combination of RRFBs and signal timing modifications to optimize the bicycle and pedestrian crossing experience.

Segment 1D: Pinelawn Road to Otsego Avenue

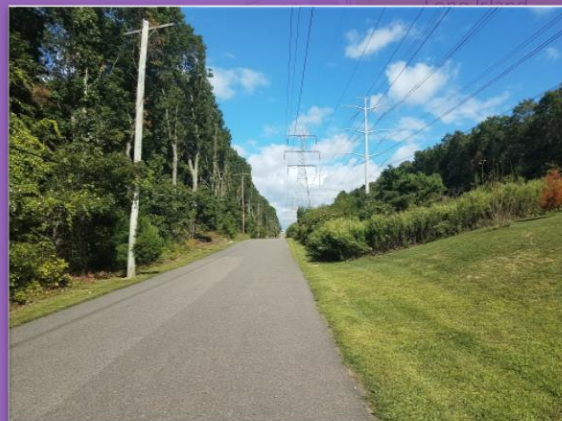
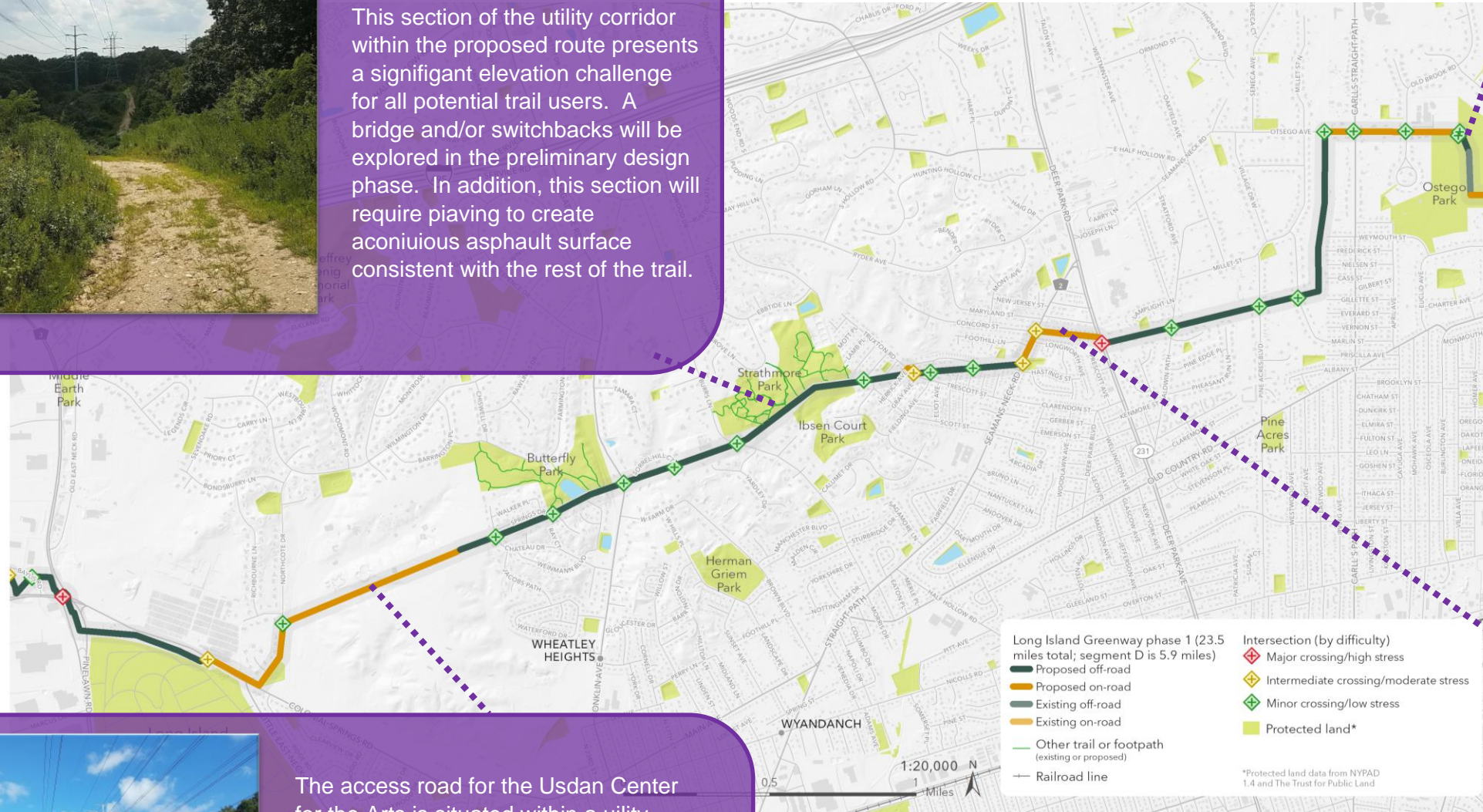
ROUTE ALIGNMENT



This section of the utility corridor within the proposed route presents a significant elevation challenge for all potential trail users. A bridge and/or switchbacks will be explored in the preliminary design phase. In addition, this section will require paving to create a continuous asphalt surface consistent with the rest of the trail.



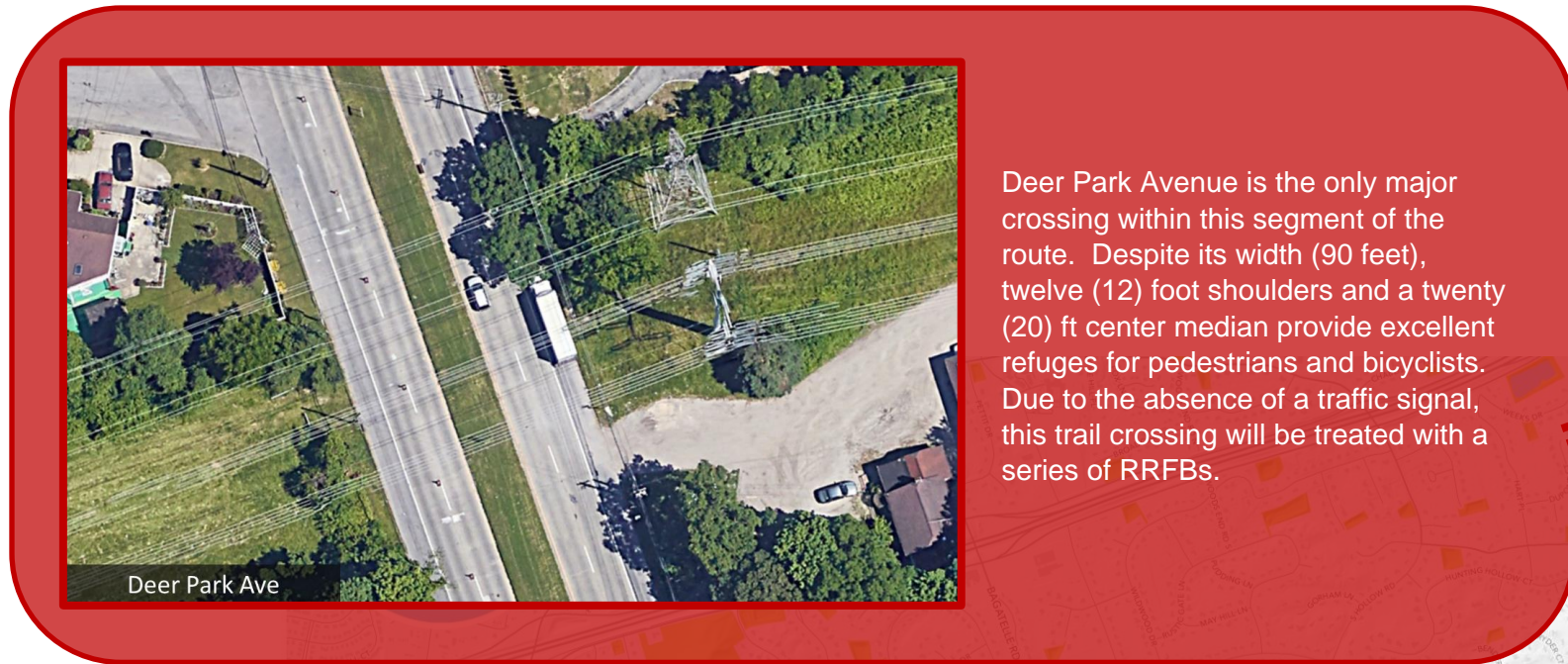
The approach and entrance to Ostego park will need to be formalized with Empire State Trail gateway signage and an on-road bike route.



The access road for the Usdan Center for the Arts is situated within a utility corridor. This low-volume roadway is ideal for a shared on-road route. The paved road surfaces transitions to gravel before terminating in a gravel storage pit. The Long Island Greenway would continue as an off-road route through this utility corridor.

Private property easements within the utility right-of-way necessitate a brief on-road

MAJOR CROSSINGS



Deer Park Avenue is the only major crossing within this segment of the route. Despite its width (90 feet), twelve (12) foot shoulders and a twenty (20) ft center median provide excellent refuges for pedestrians and bicyclists. Due to the absence of a traffic signal, this trail crossing will be treated with a series of RRFBs.



Segment 1E: Otsego Park to Brentwood State Park

ROUTE ALIGNMENT

This section of the proposed route traverses three major parks including Otsego Park, Edgewood Oak Brush Plains Preserve, and Brentwood State Park. There are no major crossings on this section of the route.

The intersection of G Road and the utility corridor was identified as a potential site for trail parking.

This section of the proposed trail intersects with a network of New York State mountain bike trails.

The existing sidewalk on the south side of G Road/College Road should be widened and upgraded to a shared-use path to provide an off-road alternative to bicyclist riding in-lane with car traffic.

Pavement conditions on the G Road vary from gravel to poorly maintained concrete. The design phase of this project will ensure a consistent trail surface.



Operations and Maintenance Considerations

Guiding Principals

Maintenance of the trail is critical to ensuring the Long Island Greenway's longevity and safe use for all Long Islanders and visitors. These core principals will guide the approach to trail maintenance:



The Long Island Greenway will be designed with maintenance in mind – The trail will be designed sustainably such that it minimizes environmental impact while minimizing long-term maintenance needs. In addition to maintenance of the trail surface and its immediate surroundings, the trail will be designed to ensure LIPA has access to the utility assets within the corridor while minimizing impacts on trail users.



The Long Island Greenway should be treated as an asset for connecting and strengthening communities across Long Island – When complete, the trail will serve as both a recreational and transportation corridor. This dual functionality, expansive scale, and ultimate utility calls for a dedicated, public funding streams.



A well-maintained trail is a viable transportation corridor and recreational amenity – Regular maintenance is critical to the Long Island Greenway's integrity. Practically, the trail must remain passible – free from abrasions in pavement and brush as well as any other natural or man-made obstructions – and provide a smooth, safe, comfortable user experience. This user experience is a key driver for influencing perception of the trail via word-of-mouth and other means.



Continuous feedback from users will inform maintenance needs – The community must have a voice in trail development, implementation and maintenance. This builds trust and buy in – ensuring that the community is able to meaningfully influence decisions about the Long Island Greenway.



Regular and ongoing evaluation activities will ensure high standards– The Long Island Greenway will create a framework for evaluation to ensure that the trail continues to meet community expectations. A series of regular performance measures will not only help articulate and quantify the trail's real benefit to the community, but provide a strong dataset to help guide informed decision-making for trail administrators.

Governance and Administration

Establishing a trail governance and administration framework is critical to the long-term success of the trail so that all collaborators and available resources are brought to bear and utilized to their full capacity. The list of potential partners identified and/or interest in the Long Island Greenway is extensive, spanning the private and public sectors at both the state and local levels. But other interested parties include Nassau and Suffolk County governments, municipal leaders and community groups within their jurisdictions as well as private developers, academic institutions, and grassroots trail advocacy groups. Given the longitudinal nature of the trail across numerous jurisdictions and conditions, this framework has the potential to be overly complicated.

We propose a clear administrative division based on ownership. On-road segments of this trail will be administered by the entity owning the roadway. Off-road segments in parks and existing trails will be administered by the owner of that park. Most trail miles in the first segment, however, are on the utility right of way that is owned by LIRR or LIPA. Based on the legal foundation of the Port Jefferson to Wading River utility trail, we expect that LIRR and LIPA will look to Nassau and Suffolk Counties for indemnification and overall responsibility for the trail, and therefore it would follow that the counties should have overall administrative responsibility for those trail segments.

Right-of-Way Easement and Liability

A large portion of the proposed first phase of the Long Island Greenway is within utility corridors that are owned by LIPA or LIRR. Constructing a trail on these corridors will require a long-term easement allowing general public use and construction of a path. There is existing precedent on Long Island for constructing and operating trail facilities within LIPA-owned utility corridors. The Port Jefferson to Wading River Trail is a 10-mile shared-use path running parallel to NYS Route 25A which is currently under construction in Suffolk County.^{xvi} This trail lies within a LIPA-owned utility right of way.

As a general matter, New York law protects landowners and tenants from liability for injuries to recreational users of their property, as long as no fee is charged. (New York General Obligation Law 9-103)

In addition to these general protections, after years of negotiation, LIPA and Suffolk County reached a landmark agreement where the county indemnifies LIPA from all liabilities resulting from trail usage. Per the agreement:

[The] County agrees that it shall protect , indemnify and hold harmless LIPA... from and against all liabilities, fines, penalties, damages, claims, demands, judgements, losses, costs, expenses, suits, actions and other proceedings... direct or indirect, as a result of, arising out of or in any way

connected with, damages or injuries to persons and/or property (a) incurred on the Path at any time; (b) incurred on the Property during Daytime Hours, in connection with the use of the Path; and (c) incurred on the Property at any time due to acts, omissions or negligence of the County, its agents, employees, contractors, subcontractors, officers or officials or due to any other reason which the county is determined to be legally liable.

This language establishes key precedent for portions of the trail in Suffolk County. A similar agreement would have to be reached between the counties and LIRR or LIPA respectively to facilitate the construction and operation of the future Long Island Greenway. The same agreement places care and maintenance of the path within the county's jurisdiction. This includes debris clearance and surface maintenance.

Ongoing Public Engagement

Public outreach and engagement activities are central to the near and long-term success of the Long Island Greenway and its ultimate incorporation into the Empire State Trail route. The Long Island Greenway will need to establish its own unique identity as Long Island's central trail spine while also being co-branded as part of the Empire State Trail brand. This identity and continued engagement ensures continued public support and recognition of the trail's value as a community asset. Ultimately this buy-in will also be critical to trail stewardship and eventual implementation of the remainder of the Long Island Greenway. Public events such as organized trail rides and trail stewardship days will help engage key community stakeholders and build support for the trail.

Hours of Operation

The trail will be open for use during daylight hours – dawn to dusk – absent extenuating weather or operational circumstances. Portions of the trail within utility corridors will be governed by the eventual usage agreement between LIPA, LIRR and the counties. Per the precedent agreement for the Port Jefferson to Wading River Trail, these sections of the Long Island Greenway may be closed in cases of inclement weather (such as snow or more severe conditions). Any changes to regular operational hours will be posted at all entry points.

Safety & Security

When complete the trail will require occasional patrolling and a clear chain of response for complaints and incidents reported along the trail ROW. Given the trans-jurisdictional nature of the trail it is recommended that the trail fall within the joint jurisdiction of the Nassau and Suffolk County Sherriff's Office. Subsequent roles and



responsibilities such as patrolling and emergency response will be determined by both authorities. This may include delegation of complaint and emergency response to the local community authorities. In addition to active security and enforcement measures, the LIG will be designed to optimize trail safety. This includes adequate lighting, emergency information on trail signage and adequate protection against utility infrastructure. Lighting will be installed where necessary, particularly at trail entrances. Solar powered lights are recommended in order to reduce maintenance needs and minimize the frequency of outages. Technology solutions such as security cameras will only be considered in areas where passive methods fail to address challenges.

A robust maintenance plan will ensure that the trail remains free from potential hazards within the right of way Empire State Trail. Beyond physical hazards, a well-kept trail enhances the quality of each user's experience and creates greater safety and security.

Privacy is a significant concern for many property owners abutting the trail right of way. Some sections of the utility right of way, particularly in Nassau County, are slightly elevated potentially providing line-of site from the trail centerline into adjacent private property. Privacy plantings or screens and fencing will be investigated in the engineering phase of the project. The trail itself represents a tool to enhance security throughout all communities it touches, by displacing unauthorized use of the existing corridor with sanctioned, low-impact uses.



FIGURE 8. PRIVACY CONCERNS FROM PRIVATE PROPERTY OWNERS ABUTTING THE TRAIL CORRIDOR WILL BE ADDRESSED IN THE DESIGN PHASE OF THIS PROJECT.



Passive lighting systems, such as illuminated bollards, are an alternative to overhead lighting, and can represent a unique trail feature.

Routine Maintenance

The Long Island Greenway should adopt a maintenance plan consistent with the Albany Hudson Electric Trail, a portion of the Empire State Trail currently under construction. The Albany Hudson Electric Trail represents an ideal peer benchmark for comparison as it also utilizes utility right of way for large segments of the trail. As conditions within the corridors are similar, similar maintenance tasks are anticipated such as routine grass mowing, brush cleanup and trash removal. Where possible, the Long Island Greenway will use slow growing native plants to minimize the need for mowing. The following chart outlines several key maintenance activities as well as their frequency and anticipated cost. All costs are based on figures from the 2018 Albany Hudson Electric Trail Operations Plan.^{xvii}

Task	Frequency	Unit Cost/Mile	Cost Per Mile Per Year	Description
Inspection	1-3 times per year	\$35	\$35 - \$105	
Grass Mowing	4 -10 times per year	\$50	\$200 - \$500	Some of this mowing may be incorporated into existing LIPA standard operating procedures for maintenance of the utility right of way
Weed Whacking, Landscaping, and Trimming	2-4 times per year	\$250	\$500 - \$1,000	
Fallen Tree, Leaf and Brush Removal	As Needed (3-5 times per year)	\$25	\$75 - \$125	Includes leaf removal
Litter and Dumping	2 – 4 times per year	\$25	\$50 - \$100	Can be supplemented with volunteer efforts.
Total Annual Cost Per Mile			\$855 - \$1,830	
Total Annual Cost:			\$20,947 - \$44,835	

Volunteer Trail Maintenance on Long Island



Concerned Long Island Mountain Bikers (CLIMB) is responsible for the maintenance of more than 175 miles of mountain bike trails, including many along the proposed trail in Edgewood Oakbrush Plains Preserve. The Long Island Greenbelt Trail Conference maintains 129 miles of trails.



Consistent with the Albany Hudson Electric Trail, this operations plan stipulates an annual end-to-end inspection of the Long Island Greenway. This responsibility can be shared between Nassau and Suffolk counties or an approved designee such as those listed in the Maintenance Responsibilities and Partners section below. The purpose of this inspection is to evaluate any capital needs – such as pavement conditions, sign integrity, vandalism mitigation and signal operation – as well as any general conditions worth noting for consideration. In addition to the annual evaluation, inspection duties can be integrated into regular maintenance activities such as mowing. Major or capital maintenance activities are more intensive and less frequent. These include pavement reconstruction, root mitigation, trail way markings and other structural rehabilitations. Paved trail surfaces typically last for approximately ten (10) years before significant degradation. Periodic maintenance should include periodic seal coating to extend the life of paved trail surfaces.

Maintenance Responsibilities and Partners

Maintenance of the trail is particularly complicated, given that different segments fall within a variety of local, county and state jurisdictions. There are a number of different permutations of organizational partnership that tie together various agencies and actors to maintain trails. While the ultimate responsibility may fall to the public sector, volunteer efforts and nonprofit groups could be engaged to complete some or all of the required maintenance activities. Long Island has an existing network of trail user groups which routinely assist in the regular maintenance of trail facilities.

Establishing a trail “friends” group is an excellent method for organizing volunteer activities and/or overseeing the dissemination of financial resources from a variety of sources. This conceptual design study focused on establishing a trail alignment; As the Long Island Greenway moves toward implementation, a broad outreach effort – across both Nassau and Suffolk Counties – should bring together relevant stakeholders to discuss maintenance needs, identify resources and a strategy for organizing efforts. Businesses may be recruited as partners in stewardship and/or funding for maintenance activities. Regardless of the volume of interested partners, it is recommended that a single entity be established or designated to oversee these efforts.

Implementation

Preliminary Capital Cost Estimate

The following cost estimate includes design and construction costs broken down by route segment. The estimate was derived using Empire State Trail cost figures for off-road and on-road segments and Federal Highway Administration national cost data for on-road bicycle lanes and road treatments. The cost estimate excludes costs for those portions of the trail that are currently in the planning and development phase by Nassau County.

Route Segment	Cost	Conditions
A: Eisenhower Park to Newbridge Road	\$530,000	Majority of route is on existing separated paths.
B: Newbridge Road to Central Avenue	\$4,620,000	Majority of route is situated in utility right-of-way requiring ground clearing and trail paving.
C: Central Avenue to Pinelawn Road	\$4,610,000	Utilizes a planned county trail route connecting Bethpage to Battle Row.
D: Pinelawn Road to Otsego Park	\$5,380,000	Final Design will require special consideration for grade changes in this section which may significantly impact construction costs.
E: Otsego Park to Brentwood State Park	\$1,830,000	Majority of route is on existing separated paths.
Total Estimated Cost	\$16,980,000	

Cost assumptions:

- Trail miles that are part of planned county and state trail routes that are in design and/or construction are **not** included in this cost estimate as they will be constructed from other funding sources. Such trails comprise 2.14 miles of the 25-mile phase I route.
- Existing signalized intersections are priced as signed intersections, because they require similar treatments to compliment pedestrian signals.

- The trail cost uses the Federal Highway Administration’s national average bikeway design cost of \$25,070 per mile for signed bikeways. Note that this cost may be lower in some areas based on existing roadway design.^{xviii}
- The estimate is inclusive of design (10%), construction (80%) and construction management (10%) costs in 2019 dollars.

Capital Funding Strategy

Securing funds for trail development – including design and land acquisition where necessary through construction and inspection – is critical to the final implementation and long-term maintenance of the Long Island Greenway. To ensure stability it is recommended that the Long Island Greenway be supported through a diversified funding approach as well as accommodations for in-kind services such as volunteer efforts and county staff support. State and federal grants will require staff support from both counties and other organizations. Securing private funding will require continuing outreach to corporate funders, community foundations, civic organizations and other potential sponsors that could support the trail in cash or in-kind materials and manpower.

A detailed funding strategy should be developed to guide specific activities and lead agencies in the acquisition of funds. The ultimate plan should be developed as a living document, flexible to change and new opportunities as relationships and networks evolve. The following section provides public, private and philanthropic funding opportunities for consideration.

Public Sector Funding

In December 2019, the Trust for Public Land was awarded a \$600,000 grant to proceed with engineering, environmental, and others studies for Phase 1 of the Long Island Greenway. The grant from OPRHP was obtained through a New York State’s Consolidated Funding Application and will be administered through the Long Island Regional Economic Development Council. The Trust for Public Land is in the process of raising the required 1:1 match.

The federal government’s Transportation Alternatives Program was established by Congress in the Moving Ahead for Progress in the 21st Century Act of 2012. The Fixing America’s Surface Transportation Act of 2015 replaced the Transportation Alternatives Program with a Transportation Alternative set-aside of the Surface Transportation Block Grant Program, a core Federal-aid Highway Program. Eligible activities include most activities historically funded as "Transportation Enhancements," the Recreational Trails Program, and the Safe Routes to School program.^{xix} In order to be eligible for Statewide Transportation Improvement Program funds, the Long Island Greenway will need to be included on New York’s list of projects receiving support from federal funds. This list of

Transportation Alternatives Program

Transportation Alternatives uses funds from the federal government to expand travel choice, strengthen the local economy, improve the quality of life, and protect the environment.

projects is published every four years and allocates more than \$12 billion in federal infrastructure reimbursement. We understand that the next round in New York State is in fall of 2020.

New York State has several funding sources that can be used to advance the trail, including the Environmental Protection Fund, Consolidated Local Street and Highway Improvement Program, which provides State funds to municipalities to support the construction and repair of highways, bridges, railroad crossings, and other facilities that are not on the State highway system. This can be used for on-road route segments which are situated on local roadways. This funding can be used as the local match for other state and/or federal aid programs. Given the Long Island Greenway's broader implications as an extension of the Empire State Trail and the size of the budget, an appropriation in Governor's budget would be essential to securing the majority of the required capital funds for trail construction. In 2019, Governor Cuomo announced \$19.3 million in investments on four (4) state-operated roadways on Long Island. Projects include concrete repairs, guardrail repairs and sign replacement. These investments are part of the Governor's "Drivers First Initiative," which "prioritizes the convenience of motorists to minimize traffic congestion and travel delays due to road and bridge work."

Private Sector Sources and Foundations

As noted in the 'Future of Long Island' section of the report on page 25, there is significant private-sector investment in close proximity to the proposed phase I section of the Long Island Greenway. Portions of the trail construction and/or maintenance can be worked into plans for these development hubs, providing an access corridor for new employees and residents. Such investments have been in bicycling and walking have been shown to build community and a stronger sense of place, thus attracting a high-quality, service-sector workforce. In addition to developers and major employers, there are a wide range of foundations which provide funding for bicycling and walking.

Non-Profit Resources and Technical Assistance

Several national non-profits provide assistance in trail and greenway development. Services include technical assistance, research, advocacy tools, grants, and other resources to assist local trail and greenway development. The following represent some of the nonprofit resources available to fund the Long Island Greenway. The Land Trust Alliance manages the "New York State Conservation Partnership Program," which offers competitive matching grants to qualified New York land trusts to advance land conservation, economic development, farmland protection, community conservation and recreation and tourism.^{xx} This program has already provided funds to the planning of the Long Island Greenway. Rails-to-Trails Conservancy manages the Doppelt Family Trail Development Fund for the development of multi-use trails, awarding

approximately \$85,000 per year, distributed among several qualifying projects, through a competitive process.^{xxi}

People for Bikes provides small community grants for “important projects that build momentum for bicycling in communities across the U.S. These projects include bike paths and rail trails, as well as mountain bike trails, bike parks, BMX facilities, and large-scale bicycle advocacy initiatives.”^{xxii} America Walks manages a community change micro-grant program providing small grants of up to \$1,500.00 in community stipends for projects related to creating healthy, active, and engaged places to live, work, and play. These can be used for public engagement or volunteer activities.^{xxiii}



25+ years of research have found no definitive connections between Electromagnetic frequency radiation and harmful health impacts.

Next Steps

The Trust for Public Land will continue to advance Phase 1 of the Long Island Greenway through outreach and preliminary design. Concurrent with the preliminary design contract, The Trust for Public Land will continue public outreach and stakeholder engagement activities to build support for the Long Island Greenway and to identify opportunities and concerns. The Trust for Public Land has also developed a detailed scope of work for preliminary design studies, including a required vertical separation study using Light Detection and Ranging (LIDAR), technology, an electro-magnetic field study, a site survey of the right-of-way boundaries, and environmental contamination studies. Pending funding, The Trust for Public Land will release this scope of work in a Request for Proposals to qualified consultants and evaluate qualifications for any respondents and will manage the preliminary design contract through completion overseeing the submission of all required project deliverables as detailed below.

This conceptual proposal for Phase 1 of the Long Island Greenway establishes a clear alignment, identifies key design considerations and provides a detailed cost estimate. Pending funding, the next phase of work will require more a more detailed preliminary design and ground survey work before construction documents can be developed. These tasks include:

- ✓ **A LIDAR Survey** - Light Detection and Ranging (LIDAR) is a method of surveying ground conditions which utilizes laser reflections to produce detailed 3D models of the target. This will provide a complete map of the terrain including elevation changes. This survey is required by LIPA to assure adequate vertical clearance between wires and trail users.
- ✓ **Ground Property Boundary Survey** - A detailed ground survey will verify property boundaries and determine precise locations of utility infrastructure within the utility ROW, to assure horizontal clearance between utility infrastructure and trail users.
- ✓ **Electromagnetic Field (EMF) Radiation Study** – utility corridors are ideal for longitudinal trails, however the presence of utility poles, carrying high voltage power lines creates electromagnetic fields. While radiation from electromagnetic fields emanating from power lines are generally classified as Extremely Low Frequency, LIPA requires testing to confirm safe levels.^{xxiv}
- ✓ **Environmental Due Diligence Studies and Analysis** – As part of due diligence, an environmental survey will be conducted to assess the overall environmental impacts of the proposed Long Island Greenway. This analysis will be conducted

in accordance with New State Environmental Quality Review Act (SEQRA) guidelines.

- ✓ **Preliminary Design Report** – The final report will provide both a summary of the studies above as well as design documentation on the route Long Island Greenway Phase I route alignment and a complete overview of relevant impacts. Specific details in the plan will include path alignment, specifications for roadway crossings, amenities and the survey results. The report will make preliminary recommendations for surface materials.

In addition to the environmental and design activities described above, The Trust for Public Land will engage in ongoing outreach activities to facilitate the Long Island Greenway's development. This includes the establishment of a project website as a venue for ongoing updates and feedback from the community. In addition, The Trust for Public Land and other members of the project team will develop an informational flier summarizing the Long Island Greenway Project and make efforts to distribute this at Town and County events such as:

- The Long Island Marathon at Eisenhower Park;
- Long Island Fair
- Suffolk County Earth Day
- ECO Carnival
- Port Jefferson 5K Race
- Suffolk County Marathon

In addition to these organized events, The Trust for Public Land will work to distribute the flier at college and business events as a means to build support. As resources allow, the project team will also:

- Set up a table at local farmers markets and other venues.
- Provide tours of portions of the proposed trail (with the permission of LIPA and/or LIRR as required)
- Establish a periodic Long Island Greenway newsletter to keep supporters up-to-date on trail development.
- Recruit local home owners along proposed greenway to act as spokes people (in addition to our usual hiking/ biking advocates)

In tandem, the Trust for Public Land will set up a public petition to enlist the support of State, County and local officials.

Long Island Greenway Project Timeline

2018-2019 Overall feasibility study

We started by identifying a feasible 175-mile east-west route across Long Island using GIS analysis and gathering input from community members, Nassau and Suffolk County leadership, business leaders, and local outdoor clubs.



2019-2020 Phase 1 feasibility study

We conducted a detailed ground survey, analyzed infrastructure, identified access points, held stakeholder meetings, and addressed maintenance issues for the 24-mile segment from Eisenhower Park through Bethpage State Park to Brentwood State Park. We then published our first report on our findings.



Ground Surveyor



Maintenance



Access Point

2020-2021 Community Outreach

We're seeking even more feedback from residents, business leaders, government officials, and others. You can find us at community events throughout Long Island. We will also undertake environmental and pre-design studies and raise funds to make this greenway a reality.



Resident Feedback



Funding



Policymaker
Feedback

2021-2022 Design + Construction

We'll complete remaining environmental surveys and release a comprehensive design for the first 24 miles of the Long Island Greenway (pending funding).



Design Plan

2022-2023 Construction

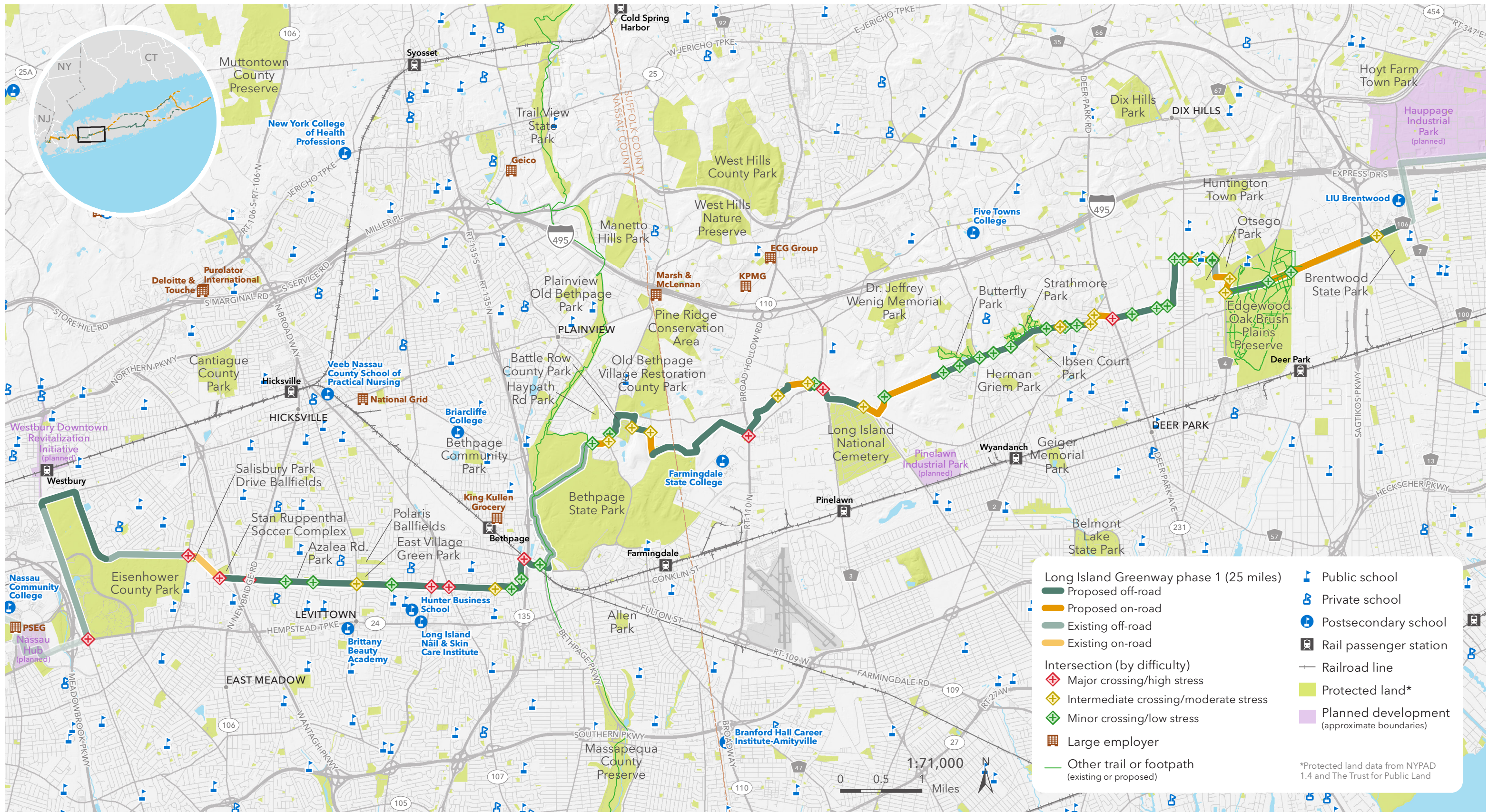
The State of New York will construct the first 24 miles of the Long Island Greenway (pending funding).



Notes & References

- i https://www.ny.gov/sites/ny.gov/files/atoms/files/2017.10.18_EST_Design_Guide_Ir.pdf
- ii <http://fourthplan.org/about/executive-summary>
- iii <https://www.definitions.net/definition/census+designated+place>
- iv https://www.newyork-demographics.com/counties_by_population
- v https://www.newyork-demographics.com/counties_by_population
- vi <https://www.itsmr.org/wp-content/uploads/2019/11/Crashes-Involving-Pedestrians-2014-2018-ITSMR-Research-Note.pdf>
- vii <https://www.nassaucountyny.gov/2661/Traffic-Safety-Home>
- viii <https://www.accessmagazine.org/wp-content/uploads/sites/7/2015/10/Is-a-Half-Mile-Circle-the-Right-Standard-for-TODs.pdf>
- ix <https://libn.com/2019/04/24/positioning-hauppauge-industrial-park-for-the-future/>
- x <https://www.nassauhub.com/wp-content/themes/nassauhub/img/NassauHubQ1DevelopmentReport-April302019.pdf>
- xi <https://www.suffolkida.org/suffolk-ida-and-hia-li-release-report-on-hauppauge-industrial-park/>
- xii <https://townofbabylon.com/DocumentCenter/View/1700/Route-110-AA---Stand-Alone-Executive-Summary?bidId=>
- xiii <https://www.usa.canon.com/internet/portal/us/home/about/about-canon/cusa-headquarters/>
- xiv This mileage figure is rounded to the nearest whole number; the exact route is 24.5 miles.
- xv [https://www.ny.gov/sites/ny.gov/files/atoms/files/2017.10.18_EMPIRE STATE TRAIL_Design_Guide_Ir.pdf](https://www.ny.gov/sites/ny.gov/files/atoms/files/2017.10.18_EMPIRE_STATE_TRAIL_Design_Guide_Ir.pdf)
- xvi <http://longislandstreets.org/news-blog/portjeffersontowadingriver>
- xvii <https://ahettrail.org/wp-content/uploads/2018/03/AHET-Trail-Maintenance-Plan-DRAFT-February-2018.pdf>
- xviii
- http://www.pedbikeinfo.org/cms/downloads/Countermeasure%20Costs_Report_Nov2013.pdf
- xix <https://trade.railstotrails.org/index>
- xx <https://www.landtrustalliance.org/what-we-do/our-regional-programs/northeast/new-york-program/new-york-state-conservation-partnership>
- xxi <https://www.railstotrails.org/our-work/grants/doppelt/>
- xxii <https://peopleforbikes.org/our-work/community-grants/>
- xxiii <https://americawalks.org/america-walks-opens-2019-community-change-grant-applications/>
- xxiv <https://www.americantrails.org/resources/safe-management-of-power-line-trails>

Appendix A: Maps

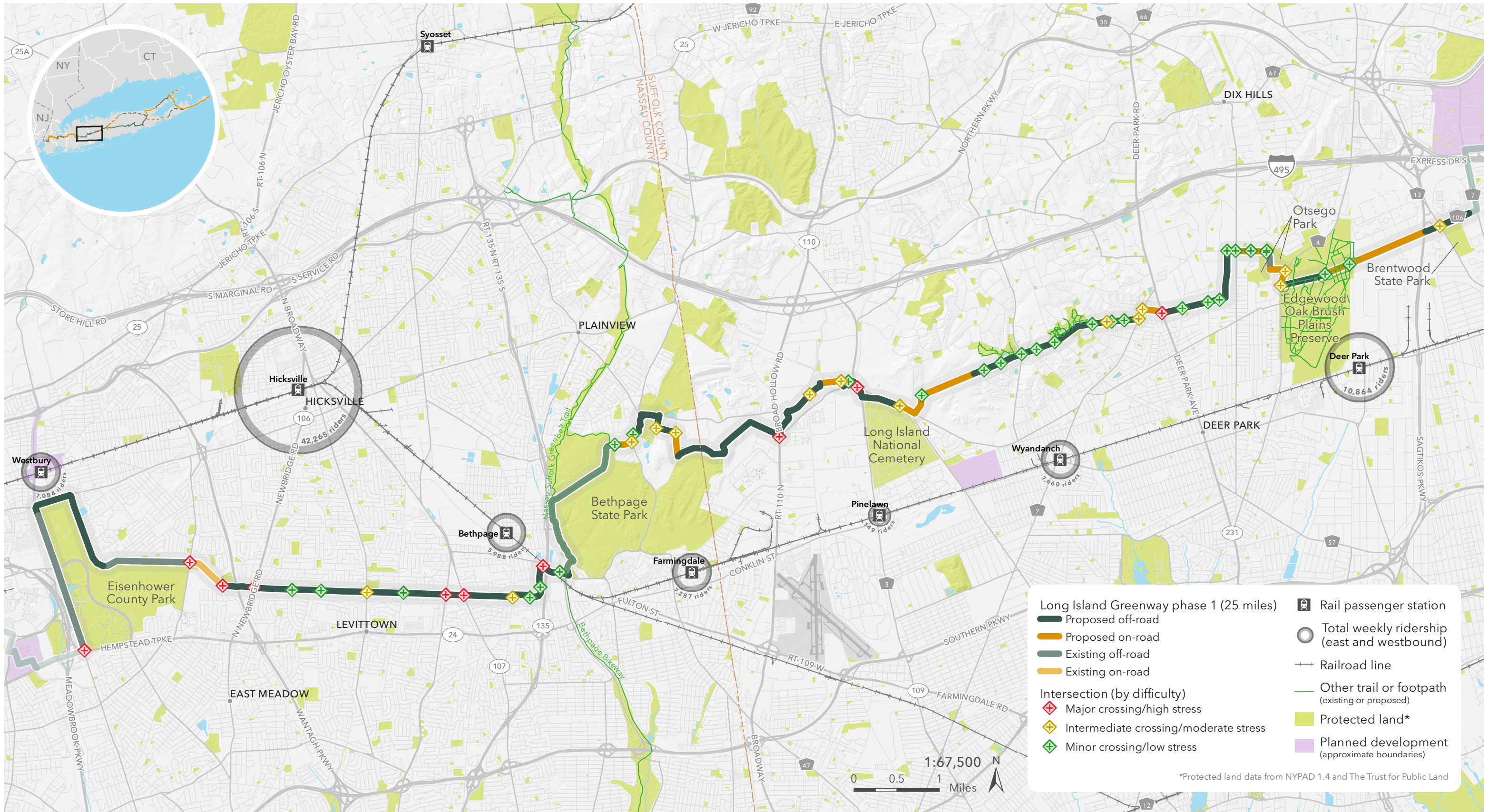


Large employers and schools

LONG ISLAND GREENWAY: PHASE 1 - EISENHOWER TO BRENTWOOD

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Phase 1: Eisenhower to Brentwood

LONG ISLAND GREENWAY

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