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The Long Island Greenway

Section 3 West: Brentwood State Park to Medford Athletic Complex

Route Alignment Plan

Contents

Acknowledgements

Presented by:

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Long Island Greenway Project Team
Tamar Renaud
Mike Lieberman
Danny Gold
Ali Goldfarb

Thanks to:

Thomas L. Kempner, Jr., Foundation, Inc.
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US Congressman Andrew Garbarino
NV5

UCS Urban Cycling Solutions

Consultant Team *Dan Suraci, AICP Paul Winkeller Anna Shukeylo*

1. Project Summary

Project Overview

The purpose of this study is to continue advancing the development of the Long Island Greenway by identifying a feasible trail alignment from Suffolk County Community College in Brentwood to the Medford Athletic Complex. Specifically, this route will be designed to provide optimal comfort and mobility for users of all ages and abilities by maximizing the off-road experi-ence and enhancing crossings at more than 100 roadway intersections.

Approach

This project proceeded in four phases:

1) **Digital Route Survey**—Leveraging satellite imagery, a detailed digital route survey was used to identify an optimal trail alignment and document characteristics such as cross-ing typologies and transitions between on and off road facili-ties.
2) **Parcel Analysis**—In tandem with the digital route survey, a parcel analysis was used to identify areas where the route could feasibly align while minimizing private property encroachment.
3) **Stakeholder Consultation**—As an ongoing partner in the development of the LIG, Suffolk County's Department of Economic Development and Planning (SCEDP) participated in a work session to review the route and provide detailed feedback.
4) **On-Site Verification**— With the results of analysis and feedback from the county incorporated into the route, an end to end ground survey was conducted to verify conditions in the field and ensure that there were no fatal flaws not visible through digital imagery.

Results

The final result of this project is a 16.45 mile route from the intersection of Wicks Road and Community College Drive in Brentwood to the entrance of the Medford Athletic complex. The vast majority of this route is aligned within utility corridors, providing more than 14 miles of car free trail for more than 31,000 New Yorkers within one mile of the trail. More than 80% of the route is situated in public or utility-owned land par-cels, streamlining the path to implementation. This route tran-sects more than 100 roadway crossings, 69% of which are low stress, requiring minimal design intervention to enhance trail user safety.

Representing a single section of the full 175-mile greenway, this route serves 11 Long Island communities providing unprec-edented active connectivity to a variety of community assets including 5 transit stops, 9 parks, 17 elementary schools, 2 universities, and more than 100 healthcare facilities—all within a 10 minute walk of the alignment. The results of this feasibility study serve as the basis for preliminary design, including specific facilities and crossing upgrades.

2. Background

Long Island Greenway Overview

The Long Island Greenway (LIG) is a bold, unprecedented vision for a 175-mile, multi-use, active transportation spine stretching from Manhattan to Montauk through the heart of Long Island. This transformational corridor will be an extension of the renowned Empire State Trail (EST), a 750-mile pathway that spans the State of New York from the Canadian borders at Niagara Falls and the North Country down to Manhattan. Importantly, the EST can also serve as a catalyst for regional and local trail development. Despite its name, the EST – currently the longest multi-use trail in the United States – omits the crucial downstate NY geography that contains nearly 8 million people living in Brooklyn, Queens, Nassau and Suffolk Counties. This is particularly jarring considering that downstate NY contains some of the most hazardous, dense, and congested areas of the entire State and could benefit the most from more active transportation options as well as the enhanced mobility and safety they offer residents. In 2018, Trust for Public Land (TPL) conceived of a multi-use east-west trail to extend the EST and run the full length of Long Island. TPL worked with New York State Parks, Nassau County and Suffolk County to complete an island-wide vision study to select a 175-mile, mostly off-road route that uses utility corridors to serve the 7.8 million resi-dents of Brooklyn, Queens, Nassau and Suffolk County and tens of millions of visitors every year. In 2019, TPL collaborated with Suffolk and Nassau Counties and other stakeholders to conduct an in-depth feasibility study of Section 1, a 25-mile segment from Eisenhower Park to Brentwood State Park that will directly connect 128,000 resi-dents (of whom 31% are nonwhite and 35% under 75% of Median Household Income), 36 schools and universities, and 13 parks on or within a mile of the trail.

Figure 1. Long Island Greenway vision overview map.

Long Island Greenway Progress

In tandem with the development of financial resources for the Long Island Greenway, TPL has led the charge in advancing the trail's de-sign. In 2020, TPL engaged a design consultant to develop preliminary design documents for the 25-mile section of the LIG between Eisenhower Park to Brentwood State Park that will directly connect 128,000 resi-dents (of whom 31% are nonwhite and 35% under 75% of Median Household Income), 36 schools and universities, and 13 parks on or within a mile of the trail.

Long Island Greenway Funding

Since the publication of this study, TPL has worked collaboratively with Suffolk County to obtain funds and advance the design of the Long Island Greenway. To date, $30 million in federal and state fund-ing and an additional $5 million in local matching funds for a total of $35 million has been secured to advance various aspects and segments of the LIG. In 2023, Suffolk County, working with TPL, was awarded $3.815 million in FY23 RAISE funding for 100% planning and design of the 50+ mile Section 2 of the LIG. Continuing this collaboration with TPL, in 2024 Suffolk County was awarded another $16.4 million RAISE grant to for construction of the first 12-miles of the Long Island Greenway from Bethpage State Park to Brentwood State park. With the completion of this alignment plan for the 16.45 mile route ernmost 50 miles of the Long Island Greenway from Riverhead to Montauk. This project is expected to be completed in 2026 with construction anticipated in 2027 pending the availability of funds.

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hower Park and Brentwood State Park. As additional funding became available, TPL continued to advance this section of the greenway to the final design phase.

In 2025, Suffolk County initiated the consultant procurement process to begin the planning and final design work on Section 2 - the east-alignment between Suffolk County Community College in Brentwood and the Medford Athletic Complex—otherwise known as section 3 west—this portion of the LIG will proceed to the design phase placing more than 75% of the Long Island Greenway in progress, and/or con-struction ready —including elements of the New York City greenway network.

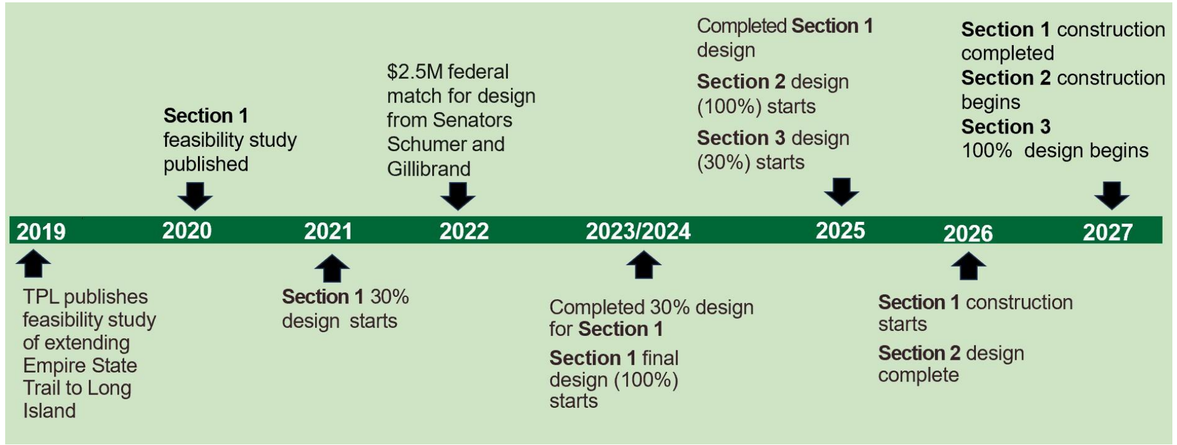


Figure 2. Long Island Greenway project timeline 2018 through 2027.

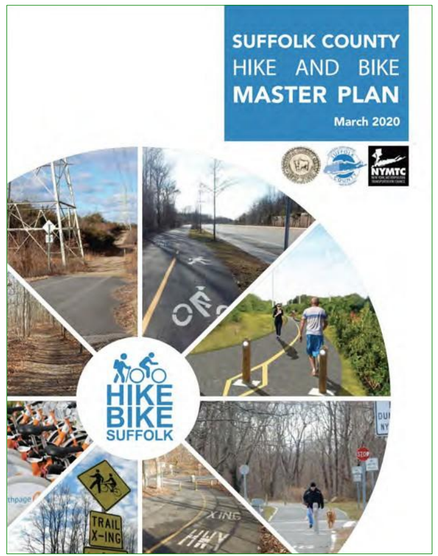
3. Alignment with Local and Regional Goals

Alignment with Local and Regional Goals

The vision for the Brentwood to Medford Athletic complex, and the Long Island Greenway as a whole, aligns with the Suffolk County's goals established in its *Comprehensive Master Plan 2035 – Framework for the Future* (2015) of promoting environmental health and public safety, reducing carbon emissions, and connecting a wide variety of communities, including HDCs, to vital resources such as jobs, health services and recreation. In 2020, Suffolk County published the *Suffolk County Hike & Bike Master Plan* which outlines the LIG as a major feature of the proposed regional active transportation network developed over the course of a multi-year community engagement process. The Hike/Bike Plan details approximately 1,200 miles in suggested active transportation facilities throughout Suffolk County. When constructed, this network will place 84% of SC's 1.5 million residents within ½-mile of a hike or bike facility, connecting all residents to healthier transportation options.

Beyond planning, Suffolk County has worked diligently to advance active transportation opportunities for more than a decade. In 2022, Suffolk County cut the ribbon on the North Shore Rail Trail, a 10-mile shared-use path from Port Jefferson Station to Wading River in north central Suffolk County. This Rail Trail, the first off-road shared-use path built in Suffolk County in nearly thirty years, is located with-in a LIPA right-of-way and serves as a model for interagency cooper-ation for the LIG, which again proposes utilizing significant segments of existing LIPA utility corridors.

In 2026, Suffolk County will begin planning and design of an 11-mile-long multi-use path running parallel to County Road 97 (known as Nicolls Road) and through a utility right-of-way land lease agreement with LIPA and PSEG Long Island (Electric Utility).



Local Plans and the LIG

The geography of Long Island is complex with a large number of hamlets and villages administered by—in some cases multiple—towns. The Long Island Greenway: Brentwood to Medford Connect-

or (LIG-BMC) will connect 11 hamlets across four towns—including Brookhaven, Islip, Huntington, and Smithtown - each with their own set of local plans and priorities. These Hamlets include:

Brentwood | Central Islip | Commack | Farmingville | Hauppauge | Holbrook | Holtsville | Islandia | Lake Ronkonkoma | Medford | Ronkonkoma

The following summary provides an overview of various plans, processes and priorities across these communities, and identifies synergies with the Long Island Greenway's objectives.

TOI– 360 Comprehensive Plan

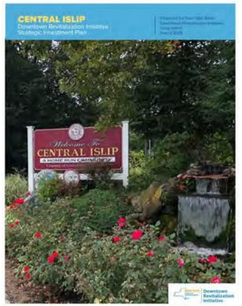
The Town of Islip is currently developing a comprehensive plan called "TOI-360" to guide the town's growth and development over the next 20 years. Encompassing two Long Island Greenway commu-nities—including the Hamlets of Brentwood and Central Islip— as well as a portion of Holbrook this plan, will address key areas like land use, housing, transportation, economic development, and qual-ity of life. While the planning process is ongoing, identifying oppor-tunities to address overreliance on car travel has emerged as a pri-ority. Among initiatives to address the initial plan strategies include the promotion of walking and biking through educational initiatives, improved wayfinding, and maintenance of existing facilities. In addi-tion, the town will work collaboratively with the county and neigh-boring communities to identify and fill gaps within the existing or proposed Greenway stands to assist the town in advancing both these strate-gies by promoting safe walking and biking via a mostly off-road east to west trail, and adding new on-road bike facilities. In addition, the LIG-BMC will include a significant quantity of intersection safety en-hancements at LIG crossing sites that will improve safety for all road-

bicycle and pedestrian networks. As the Long Island

way users, including drivers.

Central Islip DRI Plan

In 2019, Central Islip received $10 million dollars through New York State's Downtown Revitalization Initi-ative to support the implementation of catalytic investment projects and the development of strategies that will attract additional public and pri-vate investment to support down-town revitalization. Per the DRI Stra-tegic Investment Plan, 10 transform-ative, ready-to-implement projects that support revitalization of the Hamlet's downtown, with the po-tential to create or attract more than 50 jobs and leverage more than $21.3 million in public and private funds. This plan allocates $3 mil-lion dollars to streetscape improvements that enhance the pedestri-an experience as well as $29,500 to implement a 5-mile history walk-ing trail that would include markers for 25 historic sites in the com-munity. While many of the other DRI initiatives extend more than a mile beyond the proposed LIG-BMC alignment, improvements to downtown commercial corridors—such as Suffolk Avenue and Car-leton Avenue—represent a significant destination for trail users, es-pecially when paired with planned streetscape improvements.

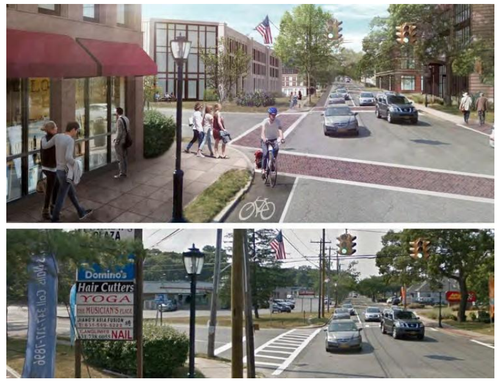


Smithtown Comprehensive Plan

The Long Island Greenway Hamlets of Commack and Hauppauge are included in the Town of Smithtown's Comprehensive Master Plan. The transportation section of this report provides a multi-modal re-view of the Town's transportation network highlighting the needs of bicyclists and pedestrians. Several specific recommendations align with the goals of the Long Island Greenway including:

- The Promotion of traffic calming measures on local roadways;
- Developing and maintaining walking and biking facilities that pro-vide active connectivity;
- Improving Pedestrian safety at intersections and other priority locations.

Another overall goal of both projects is to reduce both congestion and the overall carbon footprint from vehicular traffic. Of particular note is a commitment to continued investment and planning for the Long Island Innovation Park at Hauppauge (formerly the Hauppauge industrial Park), sup-porting over 1,350 com-panies that employ ap-proximately 55,000 peo-ple across 1,600 acres. The LIG-BMC route runs directly along the south side of the industrial park.



Making Mainstreet: A Downtown for Holbrook

This 2019 plan outlines a vision for the future of Holbrook's downtown commercial corridor. Specifically this document seeks to articulates a vibrant "place" with well-maintained side-walks, outdoor restaurant seating and connectivity with transit. While outside the immediate .5 mile radius of the Long Island Greenway trail alignment, one of the core goals of the Long Is-land Greenway is to spur economic development in trail com-munities. In tandem with planned development projects and pedestrian improvements on Main Street, the LIG can serve as a conduit for visitors to local establishments, and a key active transportation corridor for Holbrook residents to access jobs, recreation, and other resources throughout the region.

Horseblock Road Corridor Study and Land Use Plan for Farmingville, NY

Horseblock Road sits at the eastern terminus of the LIG-BMC at the Medford athletic complex. In 2016, the Suffolk County Planning Commission released a detailed study of the Horseblock Road Corri-dor from Nicholls Road to Medford. With poor 'physical and aes-thetic conditions' along the corridor at the time of publication, this plan seeks to 'Support and encourage appropriate roadway improve-ments to adequately serve the adjacent land uses while providing alternate means of access and travel ways and enhancing all trans-portation modes" among other related land use and open space goals. The LIG-BMC directly aligns with this goal by enhancing a por-tion of Horseblock road leading into the Medford Athletic complex, a key public facility. In addition, the LIG-BMC route will also help con-nect residents to a key public facility.

Lake Ronkonkoma Downtown Revitalization Initiative (DRI)

In 2021 Lake Ronkonkoma was selected as a grant recipient through New York State's Downtown Revitalization Initiative. The DRI focuses on improving the overall quality of life in the area, attracting new businesses, and enhancing the public realm. This focus of this study encompasses the "Main Street" corridor of Hawkins Avenue from the 5 corners (Smith Road) south to Division Road as well as Portion Rd from Lake Shore Road to Patchogue-Holbrook Road. This plan seeks to capitalize on the nearby development of the Ronkonkoma Hub—a mixed-use development project consisting of 1,450 residentials units, approximately 195,000 sq. ft of retail, approximately 360,000 sq. ft of office and 60,000 sq. ft of flex space which could include hospitality, conference and exhibition space.

Connectivity is a key theme in this plan, with specific invest-ments focused on:

- Creating transportation connections by implementing safer infrastructure for cars, people and bikes;
- Reducing traffic speeds;
- Widening sidewalks to enhance walkability;
- Specific routes between the Downtown Hamlet;
- Adding transit stops and optimizing routes.

The LIG-BMC route closely aligns with the plan's stated goal to 'build a greenway system that delineates walking, biking, and running routes to Lake Ronkonkoma and Lt. Michael P. Murphy Memorial Park.'

4. Route Development and Methodology

Study Process

Virtual Route Walkthrough

Trust for Public Land conducted an end-to-end walkthrough of this section of the Long Island Greenway as proposed in the original 2019 vision study. This revealed potential opportunities for realignment of the route to maxim-ize off-road milage and provide a safer experi-ence for trail users.

Intersection Analysis

Trust for Public Land conducted land inspected 108 trail crossings across the route alignment, and assigned them a minor, intermediate or major crossing designation based on a variety of criteria such as lane width, posted speed, and traffic volume.

On-Site Verification

TPL conducted a final end-to-end walkthrough of the proposed route with recommended changes from the county. This field observation was used to verify ground conditions as they appear via Satellite imagery, and observe real-time traffic flow to verify safety issues.

Parcel Analysis

TPL conducted a parcel analysis to ensure that the route alignment was free of fatal flaws resulting from private residential property ownership. This analysis informed additional changes to the proposed route to avoid such issues, and maximize the use of parcels that are either publicly held or owned by the Long Island Power Authority.

Stakeholder Feedback

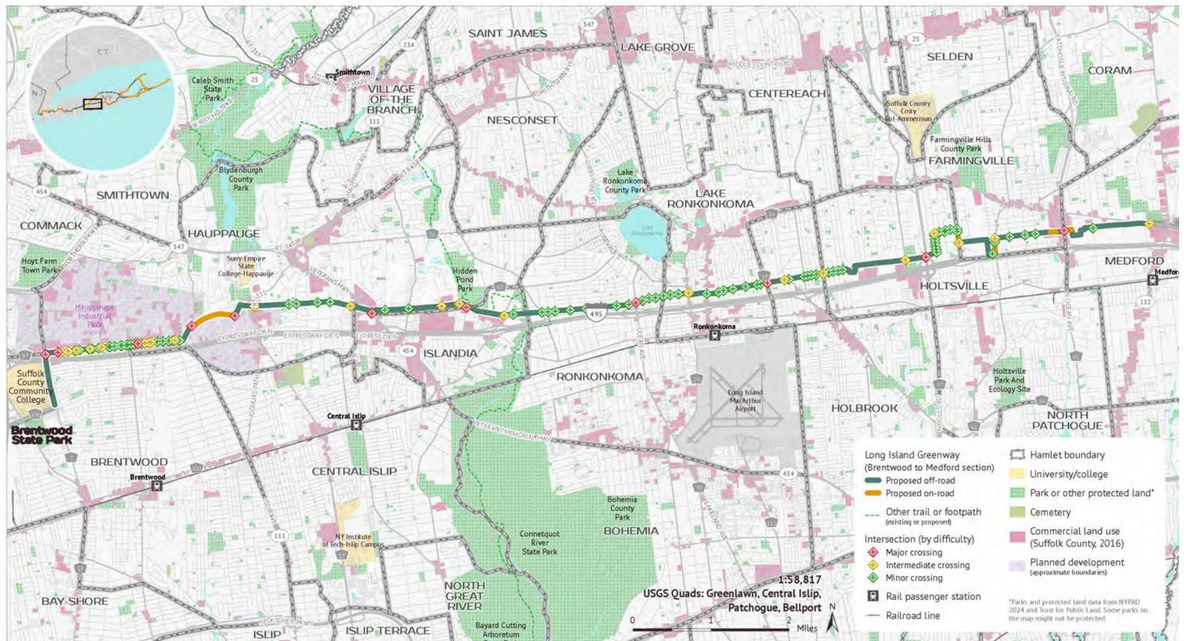
TPL worked closely with Suffolk County's Department of Planning and Economic Development staff to discuss the route alignment and identify any potential challenges or opportunities. In addition to providing a route overview TPL prepared a series of specific questions for the county on potential right-of-way conflicts, and roadway improvements.

Route Overview

Milage		
Total	16.45 miles	100%
On– Road	1.75 miles	11%
Off– Road	14.7 miles	89%

Parcel Ownership by Mile		
Public*	16.45 miles	84%
Private	.91 miles	6%
Unknown**	1.72 miles	10%

Connectivity (within a 10 minute walk			
Hamlets Served	11	Population	31,413
Parks	9	Schools/Colleges	19
Healthcare Facilities	116	Bus Stops	5



**Includes parcels owned by LIPA and its subsidiaries.*
***Parcels are likely public but require title search confirmation in preliminary design phase.*

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Route Intersections

The proposed trail capitalizes on utility corridors to maximize off-road milage and provide the safest and most comfortable riding/walking/hiking experience for Long Island Greenway users. These rights of way along the 16.45-mile segment transect roadways of varying scales at 108 discrete locations, not including private driveways in residential neighborhoods. Each of these intersections were observed and categorized by stress level—high, medium, and low—based on a variety of conditions including roadway width, traffic volume, lanes and proximity to crossings.

Intermediate Crossing

Number	22
User Stress	High
General Attributes	60+ foot crossing across more than three lanes; high traffic volume

5. Brentwood to Medford Connector Route Description

Route Safety

Between 2020 and 2024, there were 5,200 crashes within a half mile of the proposed route alignment. Seven percent (7%) resulted in a serious injury or fatality while more than half 54% resulted in some type of injury and 40% resulted in a possible injury. Two hundred fifty-seven (257) involved bicycles and pedestrians. Of these crashes, 17% resulted in serious injuries or fatalities. The seventeen (17) fa-talities were all pedestrians. While bicycle and pedestrian collisions occur less frequently than vehicle-on-vehicle crashes, they are more likely to result in a fatality or serious injury.

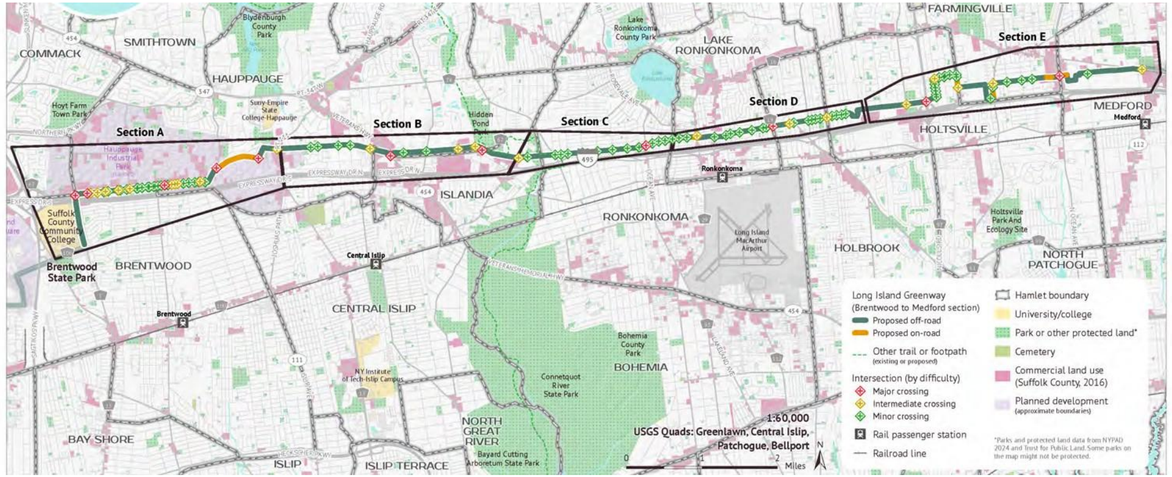
Route Sections

For the purposes of this analysis, the route was broken down into 5 sections to simplify review and presentation. Each of these sections are described via narrative and annotated maps on the following pages. These sections are organized as follows:

- Section A: Community College Drive to Wheeler Road
- Section B: Wheeler Road to Old Nichols Road
- Section C: Old Nichols Road to Pond Road
- Section D: Pond Road to Campus Lane
- Section E: Campus Ln to Medford Athletic Complex

Major Crossing	
Number	11
User Stress	High
General Attributes	60+ foot crossing across more than three lanes; high traffic volume; Requires significant design intervention to enhance safety.

Minor Crossing	
Number	75
User Stress	Low
General Attributes	60+ foot crossing across more than three lanes; high traffic volume



Section A: Community College Drive to Wheeler Road

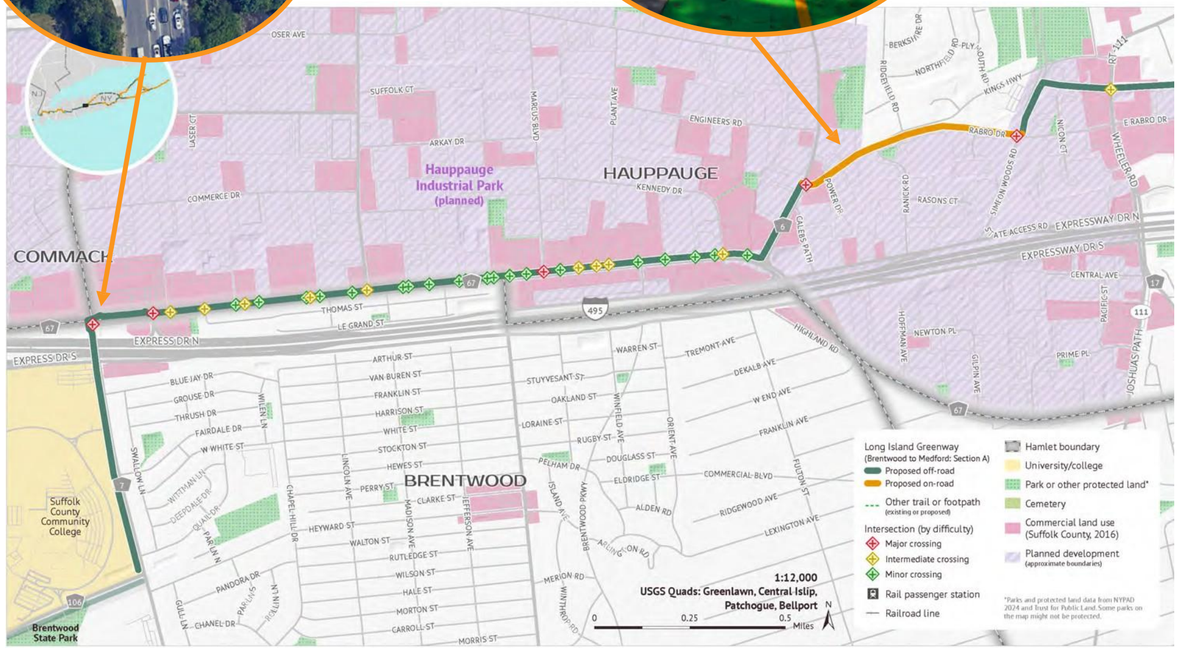
This section of the route picks up where Section 1 of the Long Island Greenway leaves off at the intersection of Community College Drive and Wicks Rd. A new shared use path is proposed running north on the West Side of Wicks Road to the Vanderbilt Parkway. The intersection of Wicks Road and Vanderbilt Parkway will require significant design enhancement to increase safety and shorten bicycle and pedestrian crossings, particularly on the west and north sides of the intersection. The route continues east along the north side of the Vanderbilt Motor parkway—along the edge of the Long Island Innovation Park at Hauppauge — for 1.75 miles utilizing a proposed widening of the existing sidewalk into a shared use path. This stretch of the route is characterized by frequent trail crossings with 32 driveways and roadway intersections between Wicks Road and Old Wil-lets Path. The majority of these are low-stress crossings requiring minimal intervention to optimize safety for LIG users. Nine crossings are considered moderate stress that may require additional site-specific design enhancements. Two additional intersections at the drive way entrance to the office complex at 100/102 Motor Parkway and Marcus Blvd are considered high stress requiring significant site-specific design enhancements to increase greenway user safety and maintain high volumes of vehicular turns.

The Route will turn northward in a new proposed shared use path on the western side Old Willets Path. The route will then continue onto Rabro Rd. The geometry, vehicular turning movements, width, and transition between an off-road section to an on greenway alignment characterize this as a high stress crossing. The LIG-B2B alignment continues for .6 miles along Rabro Rd within the road right of way. Ideally, this portion of the route will be aligned within a curbside protected bidirectional [shared] bicycle/pedestrian lane on the north side of Rabro Rd. This configuration will ensure a consistent experience for east and westbound users and minimize transitions. The feasibility of this option will require further exploration during the design process as it will require significant roadway reconfiguration. Shared bike and pedestrian lanes with physical separation from vehicular traffic on either side of the roadway may be considered as a preferred alternative, but will require additional reconfiguration at the intersection to ensure smooth transitions to facilities on either side of Rabro Rd. The route will continue through the high stress intersection at Simeon Woods Rd before turning north and transitioning into a proposed shared use path on the east side of the State Access Rd. This new shared use paths turns east proceeding through state-owned property - including a facility parking lot - to Wheeler Rd before transitioning into a utility corridor. The Wheeler Rd intersection is considered medium stress which will require design measures to shorten the crossing, provide passive traffic calming and crossing priority for Long Island Greenway users.

This portion of the route along County Rd 67 is characterized by frequent commercial driveways requiring enhanced crossing designs.

This major crossing at Vanderbilt Pkwy and Moreland Rd requires significant safety improvements that may include concrete pedestrian refuges (green) and curb extensions (blue) to shorten crossings for LIG users.

The preferred design for Rabro Rd is a bidirectional protected bike lane on the north side of the roadway as depicted in this example.



Section B: Wheeler Road to Old Nichols Road

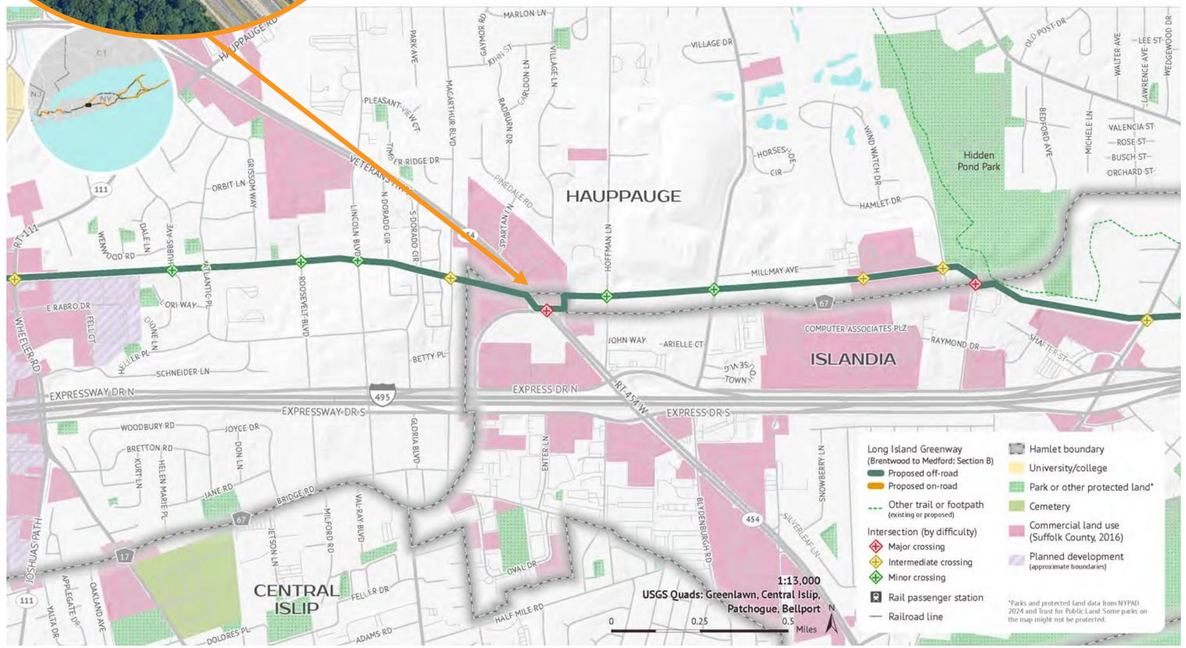
The majority of this section of the proposed route alignment is situated within off-road utility right of way with overhead power lines. There are four low stress roadway crossings between Hubbs Ave and Lincoln Blvd before the route transitions into the Renaissance Hills Multi-Family Housing Community. This section of the route remains within utility-owned right-of-way (ROW) but transects an easement with parking lots and green space before intersecting a medium stress crossing at MacArthur Blvd. In discussion with the property manager, this portion of the alignment will require safety improve-ments - such as a dedicated bicycle and pedestrian lane - within the parking and residential roadways to enhance visibility and provide clear delineation for LIG users. From the parking lot, the route transi-tions back to an off-road lawn space before a medium stress crossing at MacArthur Blvd. The route continues in utility-owned ROW to Rt 454/ Veterans Memorial Highway. The optimal alignment would be ideally situated adjacent to the existing parking facilities. The ideal, lowest impact alignment is adjacent to the three existing parking lots within the utility ROW. This option will require field survey verifica-tion of the precise property boundaries to determine the final align-ment. The route turns southeast before crossing the high-stress in-tersection of the Long Island Motor Parkway and Rt 454/Veterans Memorial Highway. While this intersection does contain a marked crosswalk, the slip road, lack of nonmotorized signalization, and overall crossing distance make it particularly challenging for cyclists and pedestrians. In order to reenter the utility ROW, the route will turn northward on the driveway entrance to the office complex at

"Major" crossing at Bedford Avenue and Long Island Motor Parkway intersecting with the Greenbelt Trail.

1393 Veterans Memorial Highway. This will require a new crossing and the installation of a shared use path on the east side of the driveway providing a direct connection back into the utility ROW.

The route continues .8 miles through two low-stress crossings before entering the Hyatt Regency Complex. At this point, the trail align-ment will require routing around a basketball court which directly abuts the corridor before continuing through a driveway and parking lot within a utility-owned parcel. Existing islands within the parking lot—and utility-owned ROW—present an opportunity for a continu-ous, straight shared use path with minimal reduction in parking ca-pacity and minimal disruption to vehicular flow. As an alternative, pending discussions with the property owner, the route may also be realigned along the southern edge of the parking lot parallel to the Long Island Motor Parkway. The route then re-enters the utility cor-ridor before crossing the Vanderbilt Motor Parkway, and intersecting with the Long Island Greenbelt Trail. The crossing is already the sub-ject of a funded roadway enhancement project, that will ultimately enhance safety and connectivity for both trail alignments, and pro-vide space - via a road diet - to build a new shared use path on the south side of the Motor Parkway to complete the connection back into the ROW. The trail alignment continues to a medium stress crossing at Old Nichols Road.

Currently, this major crossing at Veterans Memorial Highway and the Long Island Motor Parkway presents a major barrier to LIG users. Despite north/south bike lanes on either side of, this 180ft foot crossing is exacerbated by a diagonal roadway geometry and seven travel lanes. The westbound slip road adds additional hazards as potential LIG users enter the roadway with high speed right turns. Formalizing the existing refuge between the primary travel lanes and extending the center median island provide opportunities to provide additional safety for LIG users as depicted in blue. Taking advantage of the extra-wide bike lane on the east side of the roadway may present additional space for another refuge to further shorten the crossing for LIG users.



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Section C: Old Nichols Road to Pond Road

Nearly all of this section of the route is situated in off-road utility ROW. From Old Nichol's Road, trail alignment continues 1.68 miles through nine low-stress intersections before a high-stress crossing at Ocean Ave. This is an unsignalized midblock crossing on a 75 ft roadway with two travel lanes in each direction, a center turning lane, and a posted speed limit of 40 MPH. Curb extensions within the shoulder on both sides of the roadway as well as a concrete hard-ened center median island are recommended at this location to re-duce the crossing distance. A pedestrian actuated hawk signal is also recommended to temporarily stop traffic movement and maximize crossing safety for LIG users. Th trail continues in the utility ROW across four low stress intersections before continuing eastward be-yond Pond Road.

Utility Corridor at Belle Ave facing east

WHAT IS A HAWK SIGNAL?

According to the Federal Highway Administration (FHWA), the primary purpose of a HAWK (High-Intensity Activated crosswalk) signal is to facilitate safe pedestrian crossings. This signal is only activated when a pedestrian pushes a crossing button, and provides a red signal to motor vehicles and a pedestrian crossing light. Studies of HAWK signal implementations have found a statistically significant reduction in crashes.

The LIG-BMC route (depicted here in Orange) is aligned in the utility ROW north of a signalized intersection of Old Nichols Rd and a commercial drive-way with no East/West crossing. This alignment is preferred to reduce LIG user diversion, and add traffic calming to Old Nichol's Rd. Implementation will require mid-block crossing treatments such as a pedestrian actuated rec-tangular rapid flashing Beacon, and a high visibility raised crosswalk. As an alternative, a signalized intersection may be utilized, but will require the ad-dition of a sidewalk, crosswalk, and lateral (east/west) pedestrian signal.

A hawk signal is recommend-ed at this mid-block LIG cross-ing on Ocean Ave. Additional design enhancements such as a center median island and curb extensions, and a paint-ed crosswalk would further enhance safety.

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Section D: Pond Road to Campus Lane

The trail will transition from the utility ROW onto 11th Street in or-der to avoid encroachment on a privately-owned parcel and crossing a medium stress crossing at Ronkonkoma Ave directly into Waltess Estates Park. The trail will make a short connection through the southwest corner of the park, before turning into the center median islands on Waltess Road to maintain an off-road experience. Cur-rently Waltress road dead ends at a fenced utility substation. The LIG will continue through this property crossing Hawkins Ave before reentering the utility corridor to the east. From Hawkins Road, the trail continues .78 miles across 6 low-stress intersections before a high stress crossing at County Route 19. While this roadway does feature buffered bike lanes, a brick center median island, and only one vehicular lane in either direction, the proposed crossing is situated on a bend in the roadway alignment creating potential visibility challeng-es on a 45 MPH roadway. In addition to creating a formal crossing, advanced crossing signage and signals are recommended in both di-rections. The trail continues for another 1.3 miles across two medium stress crossings and 9 low stress crossings, diverting around an electri-cal substation.

The most challenging feature of this major crossing is the roadway's curvature, which creates visibility challenges for trail users. Minimizing crossing distance for LIG users is essential to the viability of this crossing. Existing fea-tures such as buffered bike lanes and a raised brick cen-ter median provide a foundation for concrete extensions from ither curb, and a central pedestrian refuge island.

Utility median islands along Waltess Rd

Waltess Rd Crossing

Section E: Campus Ln to Medford Athletic Complex

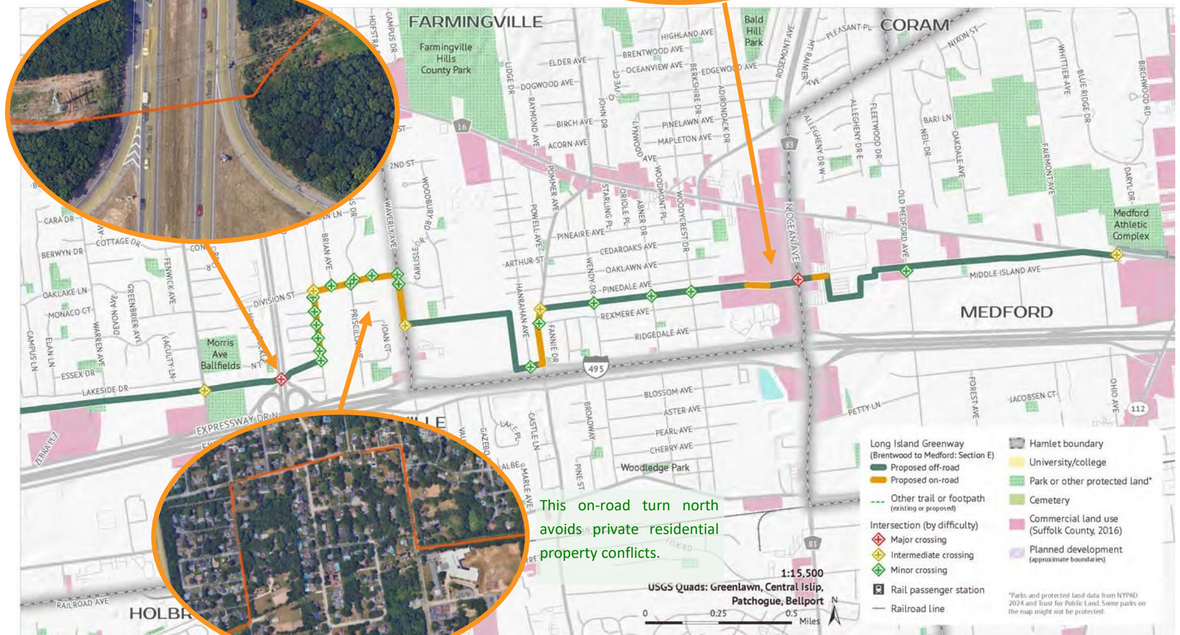
The route continues eastward in Utility corridor parallel to Lakeside Dr. According to parcel data approximately 237.8 yards of the utility ROW falls within Zebra Technologies' property, directly abutting pri-vate homeowner parcels. A more detailed boundary survey is re-quired to determine if this short portion will require an easement with the parcel owner to continue through the ROW. A potential re-route would utilize Lakeside Drive to the north (via 5th Street) be-fore reentering the utility corridor. The utility-controlled ROW con-tinues across a medium stress intersection at Morris Ave before in-tersecting with a high stress crossing at Nicolls Road. This complex interchange requires significant intervention. A dedicated bridge is recommended, but should be aligned lightly south to avoid direct conflicts with the overhead transmission lines. Aligning the trail route to the Northwestern edge of the corridor will avoid two par-cels owned by a private developer. Ownership for the remaining par-cels between this point and Washington Rd is unclear, but appears to fall under public jurisdiction. Given the design complexity and cost of this option, an alternative would utilize division street beginning at Morris Ave. The route then transitions on-road for .7 miles cross-ing 14 local roadways. This on-road diversion avoids numerous pri-vate property conflicts throughout the utility ROW. The trail renters the utility ROW just north of Waverly Avenue Elementary School and continues along the periphery of Sachem Youth Soccer League Soc-cer Park. At Express Drive the trail turns eastward adjacent to the side of the roadway. A shared use path is recommended to maintain an off-road experience before transitioning on-road utilizing existing bike lanes - for cyclists - and sidewalk for pedestrians. While the

The proposed route will align along the perimeter of Sachem Youth Soccer League Soccer Park.

bike lane continues on Blue Point Rd, the sidewalk terminates at Rex-mere Ave. The is section of the LIG will require the implementation of approximately 245 feet of sidewalk to complete the LIG-BMC walking path. The trail continues for .6 miles transecting 3 low-stress cross-ings, with a moderate grade change. The utility corridor enters a com-mercially-owned parcel before a high-stress crossing at North Ocean Ave. Pending agreement from the property owner, the LIG route will leverage existing sidewalks through the commercial property. A new signalized bicycle and pedestrian crossing is required on the south side of the intersection. In order to minimize conflicts with vehicle parking within another private parcel to the east of North Ocean Ave a new shared use path is recommended utilizing lawn space. The route then enters a Public Park and ride facility before heading south along the eastern side of the lot. As the route continues eastward in passes the southern end of a commercial parking lot. This positioning would reduce interference with regular vehicular parking and minimize en-croachment before entering back into utility-controlled ROW to the east. The route continues eastward transecting three additional pri-vate parcels within the utility corridor before exiting onto Horseblock Road. A shared use path is recommended on the south side of the road from the utility corridor to the entrance of the Medford Athletic complex to provide both an off-road connection for the LIG and a safe walking/biking route between residential neighborhoods to the south and the Athletic Complex.

In order to maintain the LIG-BMC alignment within the utility corridor, a bridge structure will be required at Nichol's Road. This bridge must be positioned as far south as possible to avoid direct conflict with overhead power lines. Per the orange route depict-ed left, this will require a slight directional before it continuing back into the right-of-way beneath the overhead transmission lines at ground level. The alternative to this bridge is a .7 mile on -road detour north on Morris Avenue and east on Division Rd.

The utility corridor is situated within private commercial parcels on both sides of Ocean Avenue. The proposed trail alignment mini-mizes any disruption, following the con-tours of these properties where possible. An alternative would require a diversion north on Woodycrest Road, and a signifi-cant safety upgrade to Horseblock Rd.



This on-road turn north avoids private residential property conflicts.

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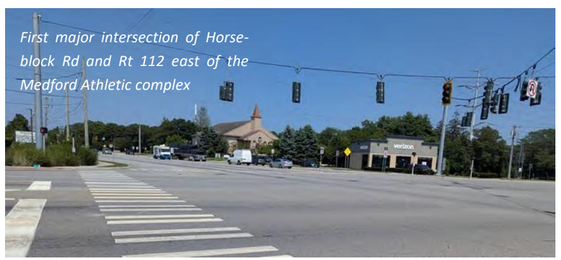
Continuing East to Riverhead

The Medford Athletic Complex is the terminus of the LIG-BMC, but the Long Island Greenway continues eastward to Riverhead and, ultimately, Montauk. The route originally proposed in the 2019 LIG vi-sion study relies heavily on on-road routes using Horseblock Road to connect with Long Island Avenue and Route 101. A fresh, more in-depth review of this section will provide alternatives to expand the off-road milage for a safer and more comfortable experience for LIG users. To achieve this goal, the optimal alignment for this section of the Long Island Greenway will utilize the utility corridor on the south side of the of the Medford Athletic Complex (depicted in yellow below) to the crossing at Rt 112. In order to make the route more comfortable, the existing sidewalk along the north side of Horseblock Road would ideally be expanded into a shared use path before di-verting North—adjacent to a private driveway - and reentering the utility corridor heading East into a utility corridor. Privately-owned parcels between Hagerman Rd and Lincoln Rd prevent the continua-tion of the trail in utility corridors. Further investigation beyond this point is required to optimize the eastward LIG route and maximize off-road milage.



First major intersection of Horse-block Rd and Rt 112 east of the Medford Athletic complex

Utility Corridor heading east from the Medford Athletic Complex to Rt 112.

6. Implementation

Planning Level Cost Estimate

The following cost estimate includes design and construction costs broken down by route segment. The estimate is derived using cost figures from Section 1 of the Long Island Greenway (Eisenhower Park to Brentwood State Park), which provides the best basis for comparison given its recent development directly adjacent to this route.

Condition	Milage	Cost
On-Road	1.75 Miles	$350,000
Off-Road	14.7 Miles	$14,700,000
Nicholl's Rd Bridge	1 Structure	3,000,000
Hawk Signal	1 Unit	$150,000
	Estimated Total	$18,200,000

It is important to note that the LIG-BMC route includes more than double the number of crossings compared to Section 1. While many (69%) of these intersections are minor crossings—requiring minimal design intervention beyond signage and high visibility crosswalks—the increased number of sites requiring design and some degree of construction will likely have an impact on price. A 15% - 20% cost contingency is recommended to accommodate these impacts. This would place the overall project cost between $20,930,500 and $21,840,000.

Preliminary Design Recommendations

As the Long Island Greenway Brentwood to Medford enters into the design phase several actions should be considered:

⇒ Engage with corporate property owners on privately owned sections of the route—such as Zebra Technologies, Woodford Properties LTD, Farmingville Associates, and the New Bay Corpora-tion (among others) - to share the proposed route and discuss easement conditions.

⇒ Engage with commercial property owners –such as the Hyatt Regency in Hauppauge—with private property on or adjacent to utility rights-of-way to discuss the proposed plan and work collaboratively to reduce any conflicts and highlight the potential benefits to their customers.

⇒ Share the route with local leadership and public works staff to identify implementation synergies with planned roadway projects not referenced in publicly available plans.

Playground at the Medford Athletic Complex

We create parks and protect land for people, ensuring healthy, livable communities for generations to come. Being outdoors is essential to our happiness, health, and well-being. Quality parks and green spaces are fundamental to sustaining equitable, resilient communities.

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