

MEMORANDUM

May 11, 2023

To: Keith Hamas

Organization: North Jersey Transportation Planning Authority

CC: Project Technical Advisory Committee and Regional Transportation Advisory Committee

From: Lily Ko, Theja Putta, and Michael Blau

Project: North Jersey Transportation Planning Authority Regional Active Transportation Plan

Re: Regional Active Transportation Network Recommendations – FINAL¹

Introduction

North Jersey is uniquely situated among urban regions nationwide to capitalize on the growing demand and need for active transportation. As the most densely populated state, much of New Jersey's built environment and transportation network is naturally conducive to walking and bicycling. Historically compact development patterns that grew around rail stations, streetcar lines, and town centers continue to concentrate activity in areas across the region. The region's walking and bicycling mode share is already above the national average.

However, the region is not monolithic, and people walking and bicycling in less densely populated areas face distinct challenges from those in urban places. In some rural areas long distances between destinations and auto-oriented transportation networks discourage the use of active transportation. In other parts of the region, low traffic volumes, pastoral scenery, and moderate terrain make an ideal destination for recreational bicyclists. In short, there is no one size fits all approach to accommodating the region's diversity of active transportation users. From students walking to school in Jersey City to recreational riders on Monmouth County's Henry Hudson Bike Trail, North Jersey's active transportation network attracts a variety of people with different needs, comfort levels, abilities, and safety concerns.

¹ Information contained in this document is for planning purposes and should not be used for final design of any project. All results and recommendations contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein. Geographic and mapping information presented in this document is for informational purposes only, and is not suitable for legal, engineering, or surveying purposes. Mapping products presented herein are based on information collected at the time of preparation. Toole Design Group, LLC makes no warranties, expressed or implied, concerning the accuracy, completeness, or suitability of the underlying source data used in this analysis, or recommendations and conclusions derived therefrom.

This memo presents recommendations for a conceptual, regional active transportation network for the NJTPA region. The network is intended to provide a safe, functional, and connected system that accommodates a variety of trip types and users, including local and regional recreation, commuting, and other local transportation trips (errands/shopping, etc.) for people walking and biking. These recommendations are meant to both fill gaps in the existing network and to expand the network to better connect the region. The project team developed the regional network based on information gathered from a series of analyses, including Trip Potential Analysis, Barrier Analysis, Environmental Justice Analysis, and Network Screening Analysis, as well as public input from the region's residents and stakeholders, and extensive collaboration with NJTPA staff, counties, and municipalities. The project team then synthesized these analyses and feedback to develop the regional network recommendations.

The network is aspirational in scope, envisioning North Jersey's ideal regional active transportation system, unconstrained by fiscal and other limitations, and does not delve into the particulars of facility types and exact alignments. The purpose of creating a conceptual regional active transportation network is to establish a common framework for all jurisdictions – municipal, county and state – to refer to when creating active transportation facilities so that, in the long term, these facilities together support all types of walking and biking trips. An excellent example of this is the Circuit Trails in Greater Philadelphia. When complete, the network will include 800 miles of trails and connect urban, suburban and rural communities in one of the largest metropolitan regions in the country.²

Planning for Walking at the Regional Scale

Planning for walking at the regional scale usually takes a different approach than for bicycling. The regional network focuses on accommodating bicycle travel, acknowledging that walking trips tend to be short distances. However, as both pedestrians and cyclists are vulnerable road users, it is important to ensure that low-stress bicycle corridors are similarly accessible for pedestrians and equipped with ADA-compliant surfaces, sidewalks, and crossing treatments. This section provides general guidance for future pedestrian network planning in conjunction with the implementation of the regional active transportation network.

- Identify pedestrian zones or corridors with high expected levels of pedestrian activity. The regional trip pedestrian potential analysis is a starting point. Regionally significant pedestrian zones and corridors should connect multiple jurisdictions, provide direct access to regional destinations, or support recommendations from other local or regional plans. These corridors should be highly comfortable, including wide, separated facilities designed to accommodate expected levels of pedestrian activity.
- It is important to design and implement connected pedestrian networks that are safe and comfortable for all ages and abilities, since most people are pedestrians in some way or form on any given day. The transportation network should accommodate pedestrians with a variety of needs and abilities. While age may be a major indicator, there is no one universal approach to pedestrian types and needs. Other categories that could be used to describe different types of pedestrians include activity, social use, and trip purpose.
- Pedestrian facility selection at intersections is critical since these locations are the chief conflict points between pedestrians and motor vehicles. Well-designed and appropriately placed treatments can increase pedestrian safety and comfort.

² Circuit Trails Coalition. (2022). About the Circuit Trails. Retrieved from: <https://circuittrails.org/what-is-the-circuit/>

Network Recommendations

Conceptual Network

A conceptual network provides a framework for expanding active transportation opportunities throughout the region. Because local jurisdictions are primarily responsible for building and maintaining active transportation infrastructure, the NJTPA plays a limited role in the facility selection and design of individual routes. For this reason, network recommendations are not tied to specific facility types. NJTPA staff will work with local jurisdictions and other stakeholders to identify the most appropriate treatments as projects are selected for further study, funding, and implementation.

A conceptual network also helps the NJTPA make the financial and political case for the type of local-level interventions that will be needed from one jurisdiction to the next. Building consensus around a shared vision for active transportation in North Jersey lays the groundwork for productive conversations about facility selection and other implementation details moving forward.

As individual municipalities complete and update their own ATPs, connections between communities should be a central focus. According to the Barrier Analysis, many of the proposed routes between communities are on high-stress roads. These roads would need substantial improvements to convert them to low-stress routes that are comfortable for people of all ages and abilities. In some cases, existing parallel low-stress routes could serve as primary active transportation corridors and would require fewer changes. These corridors may take the form of shared use paths and trails that are comfortable for users of all ages and abilities, or separated facilities that follow existing roads – such as separated bike lanes, sidepaths, and sidewalks – that provide a high degree of comfort to users as well as direct access to important destinations. In cases where traffic volumes and speeds are low, paved shoulders or signed routes³ may provide enough accommodation for most riders.

Counties and municipalities should refer to the conceptual network when developing local projects, and study potential low-stress alternatives and parallel routes in more detail to supplement these recommendations.

The proposed network would dramatically expand North Jersey's active transportation accommodations. It would also connect to existing facilities and fill gaps in the region's current active transportation network. For example, the network improves access to NJ TRANSIT commuter and light rail lines, providing a strong opportunity to strengthen first- and last-mile connections from transit stations to population centers throughout the region. It also expands the reach of regionally significant trails, such as the Middlesex Greenway and East Coast Greenway; and increases access to existing trail systems with on-street connections. In both urban, suburban, and rural settings, the network would enhance recreational and utilitarian trips for people walking and biking throughout North Jersey.

Network Development Methodology

One of the most significant challenges in planning a regional bicycling network is the NJTPA region's size. The region is more than 4,200 square miles, about 70 miles from west to east, and approximately 130 miles north to south.

The project team sought to understand what trips are in greatest demand and likely to occur, and how to quantify and visualize that understanding. To do this, the ATP began by analyzing selected datasets to develop the initial

³ Signed routes can also be installed with separated facilities such as protected bike lanes and trails.

network, and then expanded the network's coverage based on initial NJTPA feedback to ensure it addresses the region's active transportation needs with a multifaceted and empirical approach (i.e., relying on documented connectivity, safety, and environmental justice priorities). This approach involved an iterative process in which multiple analyses were overlaid to identify network segments with the strongest potential for addressing active transportation needs.

Roadway Network

The regional network follows the NJ street centerlines dataset from OpenStreetMap. The project team filtered the dataset to show only the following types of street segments based on OpenStreetMap's functional class system⁴:

- Trunk: The largest and busiest roads in the transportation system, excluding restricted access highways. OSM Trunk roads correspond to NJDOT's Principal Arterial classification.
- Primary: The next most important roads in the transportation system (often link larger towns.). OSM Primary roads correspond to NJDOT's Minor Arterial classification.
- Secondary: The next most important roads the transportation system (often link towns). OSM Secondary roads correspond to NJDOT's Major Collector classification.
- Tertiary: The next most important roads in the transportation system (often link smaller towns and villages). OSM Tertiary roads correspond to NJDOT's Minor Collector classification.

Local roads were not included because they are less likely to traverse county lines and are therefore less useful for developing a regional active transportation network. However, local roads that parallel regional network corridors may be used as alternate low-stress routes if improvements are not feasible on larger roads and similar levels of connectivity can be achieved. This is indicated on the maps through a half-mile buffer around all regional network segments to show that nearby local roads may be considered.

It is expected that local jurisdictions will develop their own plans centered on selecting and improving local roads that align with and contribute to the connectivity of this proposed regional network as it is implemented, which will take many years to complete. The NJTPA will consider using policy and funding mechanisms to ensure that the planned regional network adapts over time and connects to new local facilities, and vice versa.

Scenic Byways

New Jersey has eight designated Scenic Byways. These routes are specially designated for their scenic, natural, recreational, cultural, historic, and archaeological qualities. Due to their lower traffic volumes and many points of interest, the Scenic Byways are also ideal for recreational cycling. Approximately 35 percent of the regional network overlaps with Scenic Byways.

Trail Network

In addition to the roadway network, expanding and connecting the region's existing and planned trails was a key consideration during network development. NJTPA staff and the project team identified regionally significant trails that connect to the regional network using the following criteria:

- Any trail that spans two or more counties or crosses multiple municipal boundaries.
- Any trail that connects to other states/regions
- Trails that parallel major transportation corridors (transit and/or major roads)

⁴ OpenStreetMap. (2022). Retrieved from: <https://wiki.openstreetmap.org/wiki/Key:highway>

- Trails that are not regionally significant in length but provide connections between important destinations (e.g., between a transit hub and a downtown)
- These existing trails connect to and enhance the proposed conceptual network. Taken together, existing/planned trails and the proposed corridors identified in this plan form a comprehensive regional transportation system for walking and biking.

This process identified the following regionally significant trails:

- Appalachian Trail
- Barnegat Branch Trail
- Columbia Trail
- D&R Canal Trail
- East Coast Greenway
- Goethals Bridge bicycle and pedestrian path
- GW Bridge bicycle and pedestrian path
- Hackensack River Greenway
- Henry Hudson Bike Trail
- Lenape Trail
- Middlesex Greenway
- Morris Canal Greenway
- Patriots Path
- Paulinskill Valley Trail
- Pompton Valley Rail Trail
- Traction Line
- Union Transportation Trail

Rails-to-Trails

Rail-trails are corridors of protected open space managed for transportation, recreation and conservation purposes - they are multipurpose public paths created from former railroad corridors. Considering the conversion of abandoned rail right-of-way to trails is beyond the scope of this particular study. However, the NJTPA and local partners recognize the great potential that these corridors present for future active transportation connections across the region. The proposed Essex Hudson Greenway, which is under study for planning and construction, is a prime example. The project will use the old Boonton rail line, which ceased operations in 2002, to provide a critical active transportation link in the region's most densely populated counties.⁵ The NJTPA and other agencies will consider similar projects to expand and connect to the proposed conceptual network.

Network Building Blocks

To envision a regional network that connects communities to each other, the regional network underwent several iterations and was informed by multiple sources and datasets:

- Understanding the region's current active transportation infrastructure was a critical first step in developing the regional network. In 2022, the New Jersey Department of Environmental Protection (NJDEP) released the ***NJ Statewide Trails layer***, which consolidates trail data from multiple agencies

⁵ Open Space Institute. (2023). Essex Hudson Greenway Project. Retrieved from: <https://www.essexhudsongreenway.org/>

into one GIS dataset. The dataset includes federal, state, county, municipal, and non-profit owned and managed trails. Trail types include walking, biking (road and off-road) and multi-use trails.⁶ This dataset helped ensure that proposed routes connect to and expand upon existing trails.

- The **Trip Potential Analysis** helped identify how and where proposed segments should be adjusted to create a continuous regional network, by highlighting areas of high trip potential (i.e., demand) for biking that require infrastructure improvements.
- Increasing safety for active transportation users is an agencywide goal, which is reflected in the NJTPA's guiding documents.⁷ To capture this priority in the regional network, the project team overlaid proposed routes with **Network Screening Analysis**, which uses three 2019 crash layers developed by NJDOT:
 1. Pedestrian-Bicycle Intersection Top 100
 2. Pedestrian Intersection Top 100
 3. Local Pedestrian Corridor Top 100.

Most of the top crash intersections and corridors from these layers are included in the regional network.

- The **Environmental Justice Analysis** uses the NJDEP's Overburdened Communities dataset, developed under the New Jersey Environmental Justice Law,⁸ which identifies Overburdened Communities (OBCs) at the census block group level using demographic information from 2020 Census Data. The analysis overlays the regional network with Overburdened Communities by census block group in which:
 - » at least 35 percent of the households qualify as low-income households;
 - » at least 40 percent of the residents identify as a minority or as members of a State recognized tribal community; or
 - » at least 40 percent of the households have limited English proficiency.

The regional network connects to nearly every OBC census block group in North Jersey that meets the above criteria. If this network were constructed, it would dramatically increase connectivity, safety, and comfort for communities that rely on walking and bicycling the most, and who suffer a disproportionate number of traffic fatalities and serious injuries.

- During the planning process, the NJTPA collected **public feedback** on routes that need improvement, specific project priorities, and locations of safety concerns for walking and bicycling. NJTPA and the project team used a webmap to gather this information, as well as in-person conversations with community members at a series of pop-up events across the region. More than half of all webmap responses overlap with the regional network.
- The **Barrier Analysis** identifies high-stress links in the network that form barriers to connectivity. If high-comfort facilities were added to these roads to reduce bicyclist stress levels, they would likely attract significant bicycle ridership. The analysis quantifies the importance of a link in the network by identifying how many shortest-paths use the link. Shortest path is the shortest routable distance between two

⁶ NJDEP Bureau of GIS. (March 9, 2022). Statewide Trails in New Jersey. Retrieved from: <https://gisdata-njdep.opendata.arcgis.com/datasets/njdep::statewide-trails-in-new-jersey/about>

⁷ NJTPA. (2022). Plan 2050: Transportation. People. Opportunity. Retrieved from: <https://www.njtpa.org/Planning/Plans-Guidance/Plan-2050.aspx>; NJTPA. (2022). Goals & Objectives. Retrieved from: <https://www.njtpa.org/About-NJTPA/Who-We-Are/Goals-Objectives.aspx>

⁸ New Jersey Department of Environmental Protection, Office of Environmental Justice. (2022). What are Overburdened Communities (OBC)? <https://www.nj.gov/dep/ej/communities.html>

destinations.⁹ It also identifies potential parallel alternative routes to major streets where infrastructure improvements may not be feasible. The link importance is weighted by the location of origins and destinations in the study area to account for variability in trip destination density. An equity focused weighting of destinations was also applied using socio-economic and demographic datasets. In addition to identifying high-stress barriers, the analysis also shows low-stress links that will likely see increase in usage if adjacent high-stress barrier links are improved.

The Barrier Analysis will be especially useful for local agencies in identifying roads for active transportation network development. While the regional network recommendations in this memo focus on regional connections, the Barrier Analysis incorporates local roads. Refer to the Barrier Analysis memo for more information.

- ***NJTPA staff reviewed the first draft of the regional network*** in Fall, 2022. Based on their feedback, the project team made significant updates to the recommendations, which are reflected here. Updates include:
 - » Adding more proposed east-west routes throughout the region.
 - » Major cartography updates to make maps more legible.
 - » Dataset consolidation and cleaning.
 - » Addition of a half mile buffer around the regional network, to reflect its conceptual nature.

The regional network is shown in Figure 1 and Figure 2.

⁹ The project team created an intersections layer from the NTJPA's Level of Bicycle Compatibility analysis, based on the start and end points of LBC segments. These intersection points were then joined to the streets to build a graph on which shortest path analysis was completed. The links in the routing graph are given a cost based on their length and stress level. The cost of low-stress links is equal to their length while the cost of high-stress links is 1.2 times the length. This is to account for the fact that people might choose lower stress links even if they are slightly longer than a parallel high-stress route. The 20 percent penalty applied is consistent with findings and usage in other studies that compared low-stress routes to high stress connectivity. Refer to the Barrier Analysis Memo for more information.

Figure 1: Regional Network

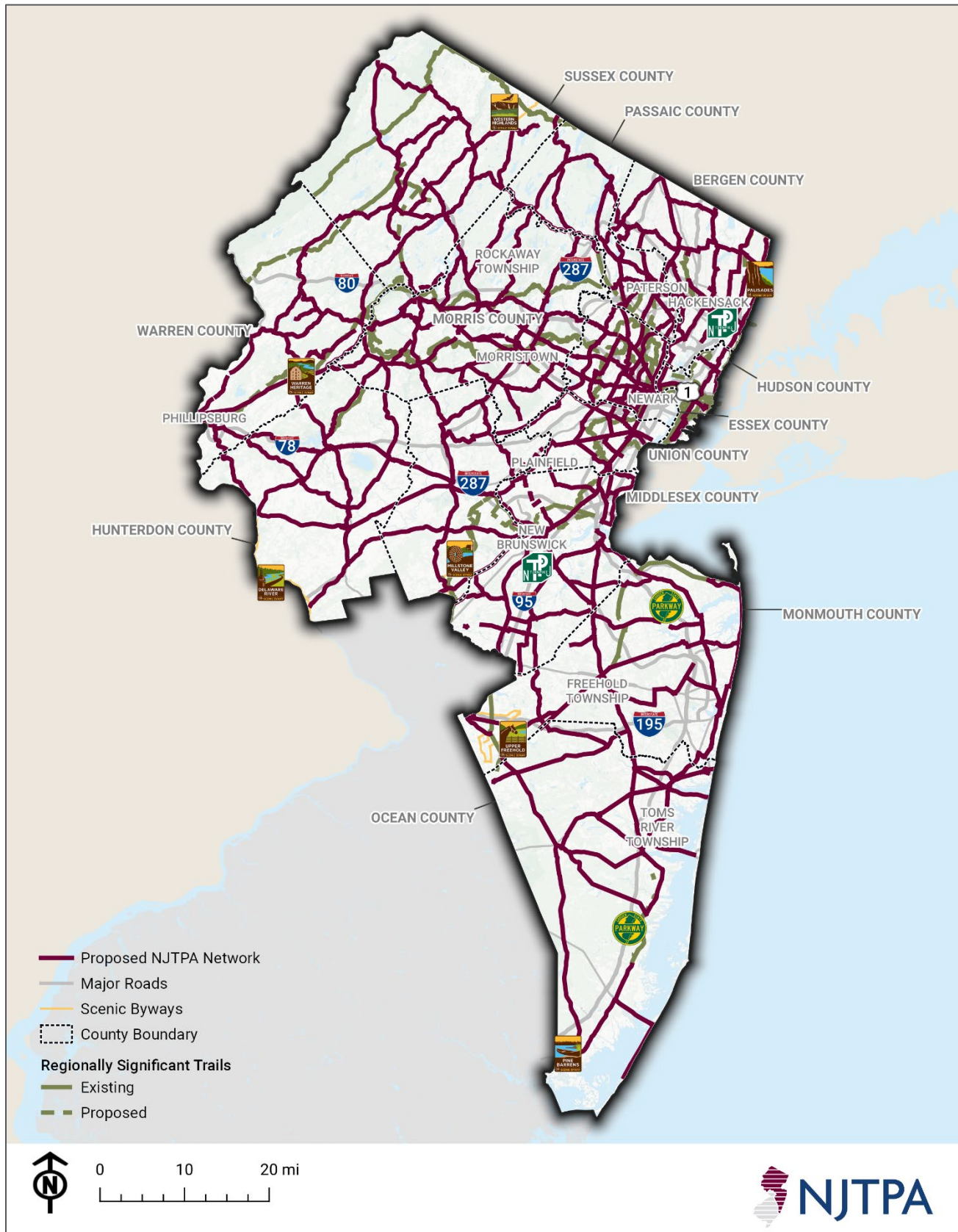
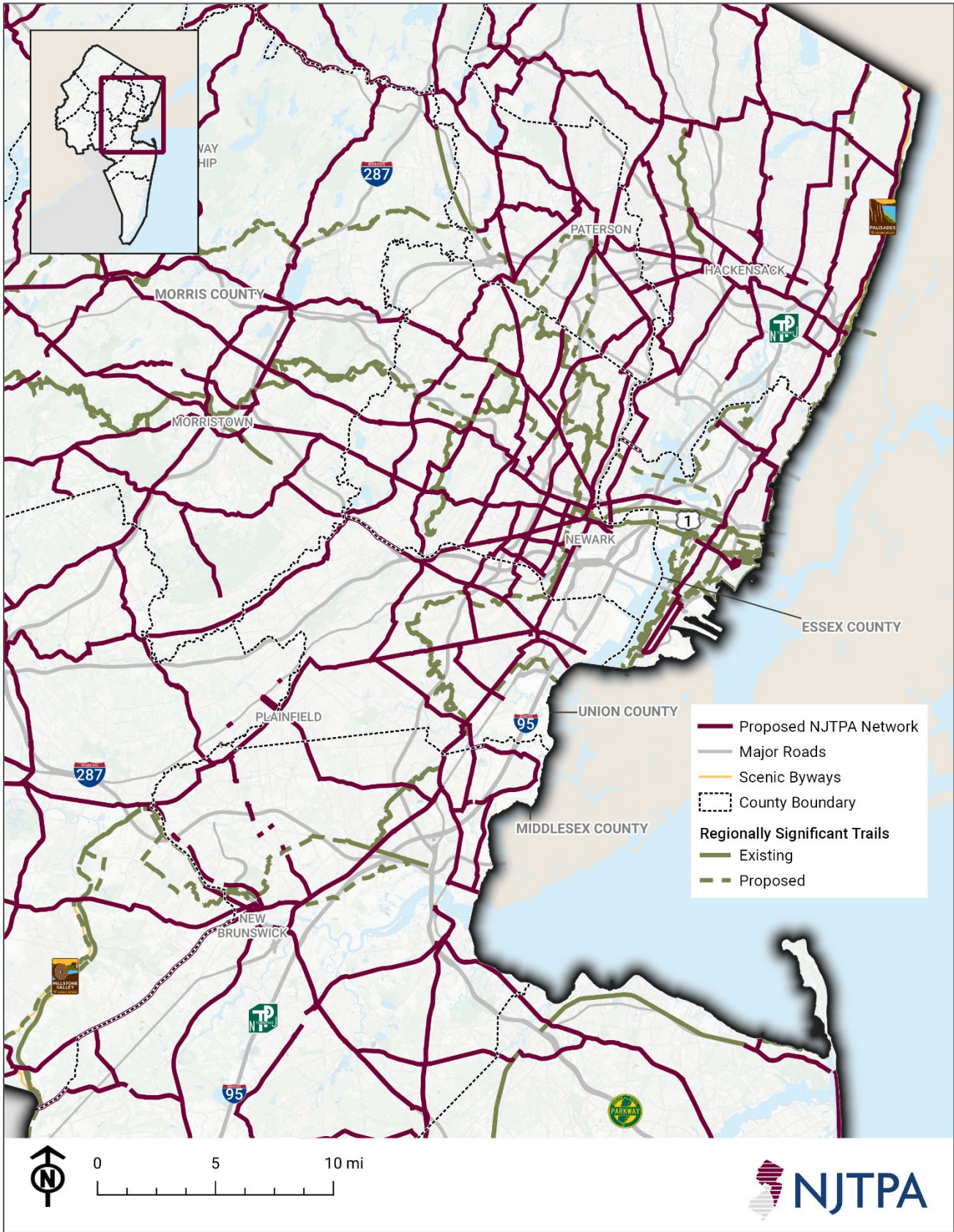


Figure 2: Regional Network – Urban Areas



Trip Potential Analysis

The project team developed the regional network by first selecting street segments between activity centers (areas with high trip potential scores) within and between counties. Trip potential shows where people would be most likely to bike in the NJTPA region based on factors that are positively associated with bicycle trip attraction or generation. The factors used include population, employment, intersection density, vehicle access, transit stops, land use mix, and poverty. Poverty was especially important to consider, given the NJTPA's goal of addressing the needs of low-income and minority communities, which have been traditionally underserved.¹⁰ Broader trends also indicate the vital role of active transportation in low-wealth communities. Nationally, low-income individuals are bicycling more than higher earners. The bottom quartile of workers by income accounts for 39 percent of bicycle commuting in the U.S., compared to only 20 percent for the wealthiest quartile. Similarly, the highest rates of walking and bicycling are seen among those making less than \$10,000.¹¹

Higher scoring locations have the most potential to support active transportation trips, and are shown in black and dark purple in Figure 3 and Figure 4. Scores do not translate directly into estimated bicycle and pedestrian volumes; however they can be compared to the NJTPA's Pedestrian Counts Project results to determine any correlations between observed volumes and trip potential.

The project team calibrated trip potential analysis results for each county based on development density and land use patterns:

- There are many activity centers in urban counties (Hudson, Bergen, Essex, Union), so a trip potential score of 70+ was used to filter for only the highest activity centers in those counties.
- Conversely, for suburban counties (Passaic, Morris, Somerset, Middlesex, Monmouth, Ocean) the threshold was lowered to a score of 50+ to capture the smaller activity centers in those counties, which are still busy areas compared to their surroundings (e.g., small town and village centers, crossroads, etc.).
- In Hunterdon, Sussex, and Warren counties, which are the rural areas in the region, trip potential scores were significantly lower. A threshold of 30+ was used for these counties.

Composite bike trip potential results are overlaid with the regional network in Figure 3 and Figure 4.

¹⁰ NJTPA. (2022). Plan 2050: Transportation. People. Opportunity. Retrieved from: <https://www.njtpa.org/Planning/Plans-Guidance/Plan-2050.aspx>

¹¹ Andersen, M., and Luran Hall, M. (2015). *Building Equity. Race, ethnicity, class, and protected bike lanes: An idea book for fairer cities.* PeopleForBikes Green Lane Project and Alliance for Biking & Walking. Retrieved from: https://nacto.org/wp-content/uploads/2015/07/2015_PeopleForBikes-and-Alliance-for-Walking-Biking_Building-Equity.pdf

Figure 3: Composite Bike Trip Potential and Regional Network

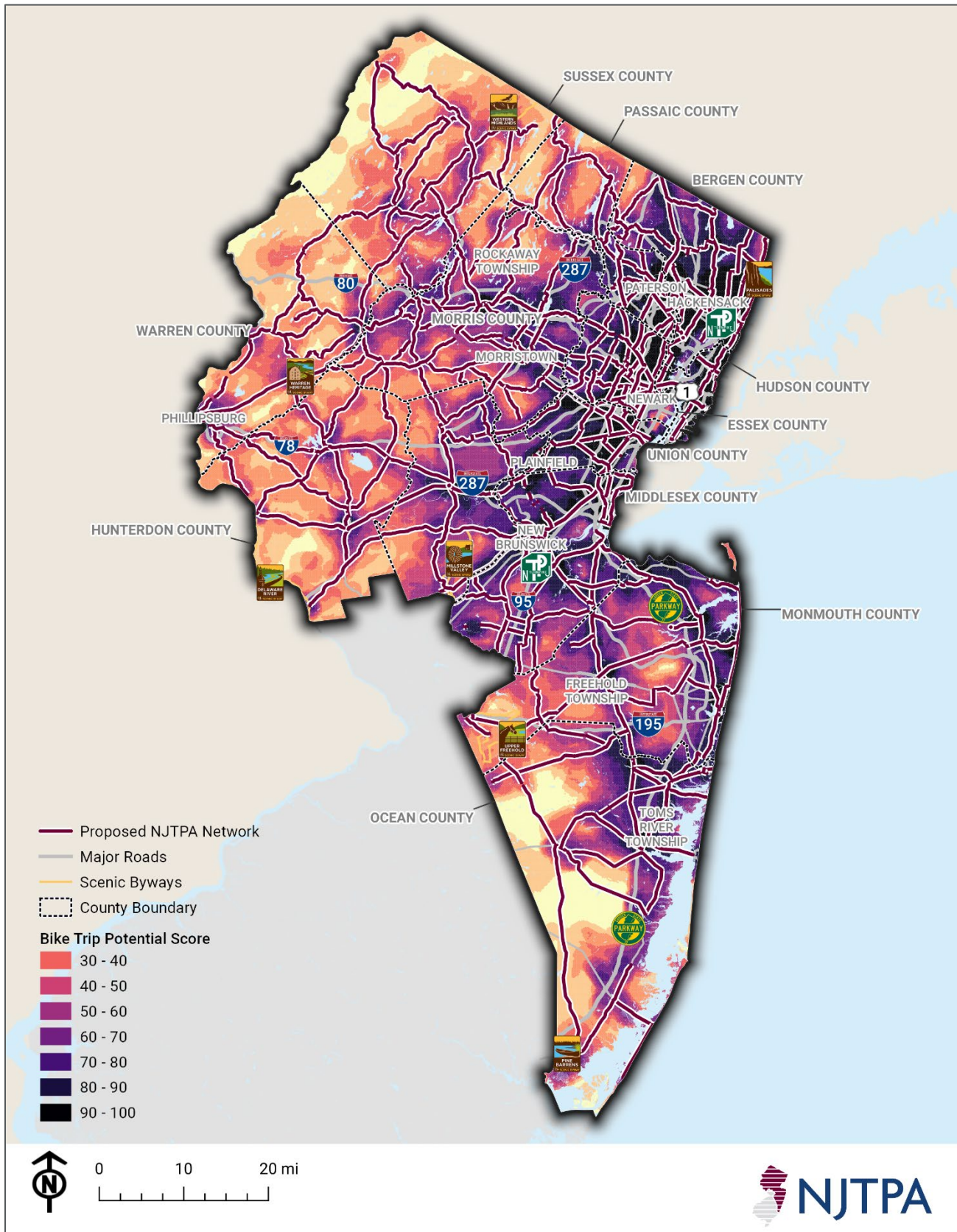
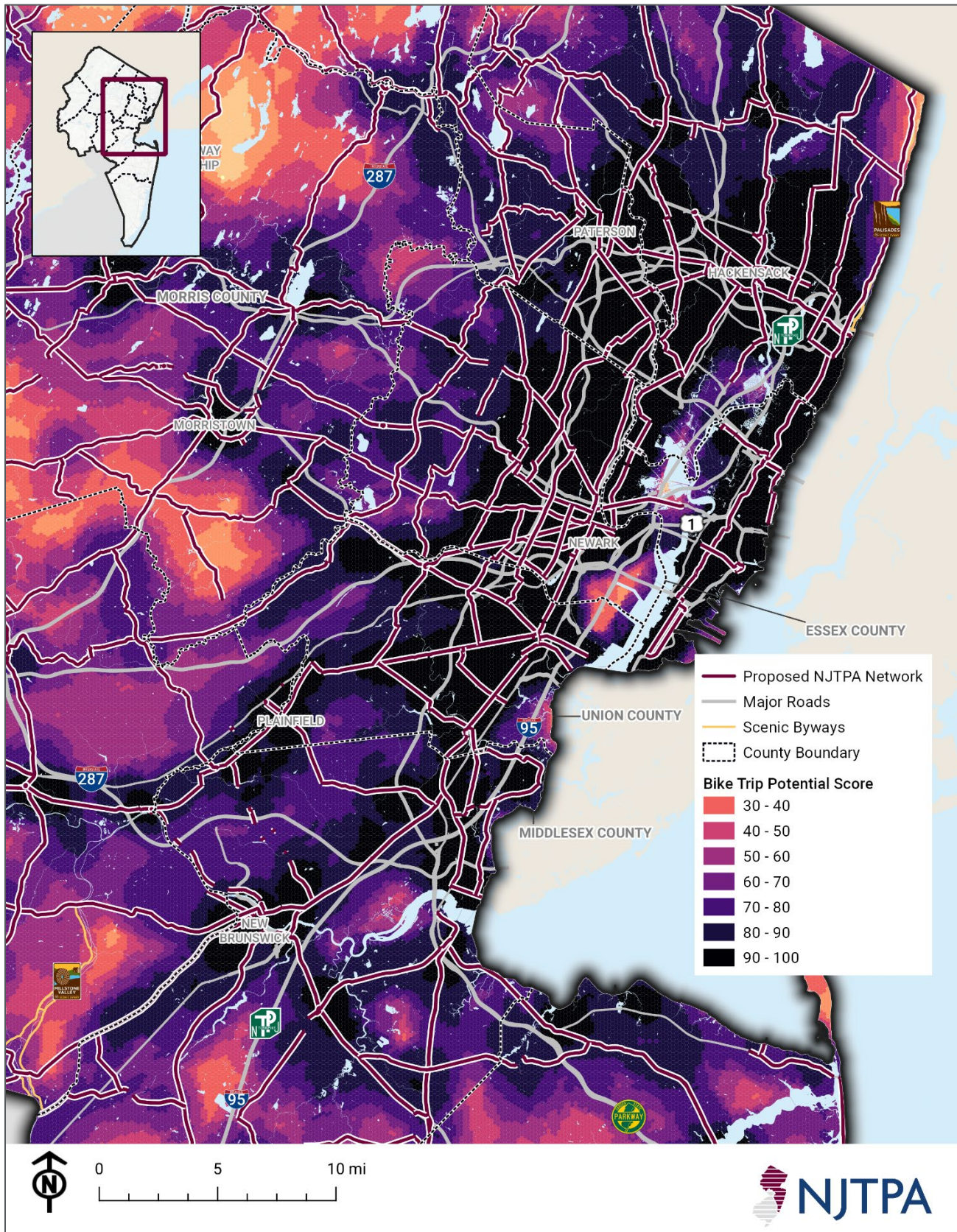


Figure 4: Composite Bike Trip Potential and Regional Network – Urban Areas



Network Screening Analysis

The Network Screening Analysis uses three 2019 crash layers developed by NJDOT:

1. Pedestrian-Bicycle Intersection Top 100
2. Pedestrian Intersection Top 100
3. Local Pedestrian Corridor Top 100.

Most of the top crash intersections and corridors from these layers are included in the regional network. Some clusters of high-crash intersections were omitted, primarily in cases where there was such a high density of crashes that including every road in the cluster would be infeasible. However, these locations were still incorporated into the network using the half-mile buffer. Similarly, some high-crash pedestrian corridors were not included; where multiple parallel high-crash corridors exist, the project team selected only one corridor to include in the network.

Network Screening Analysis results are overlaid with the regional network in Figure 5 and Figure 6.

Figure 5: Network Screening and Regional Network

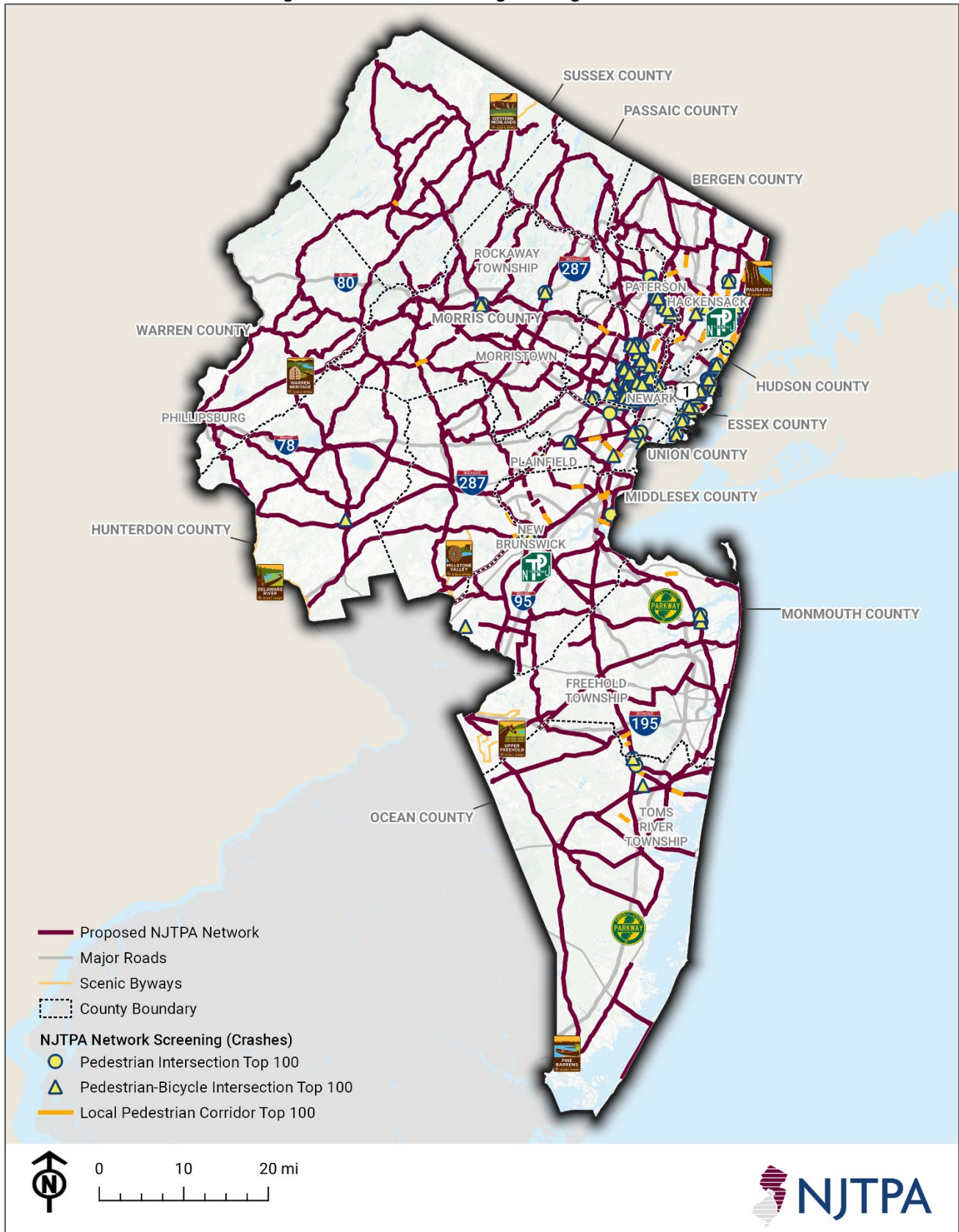
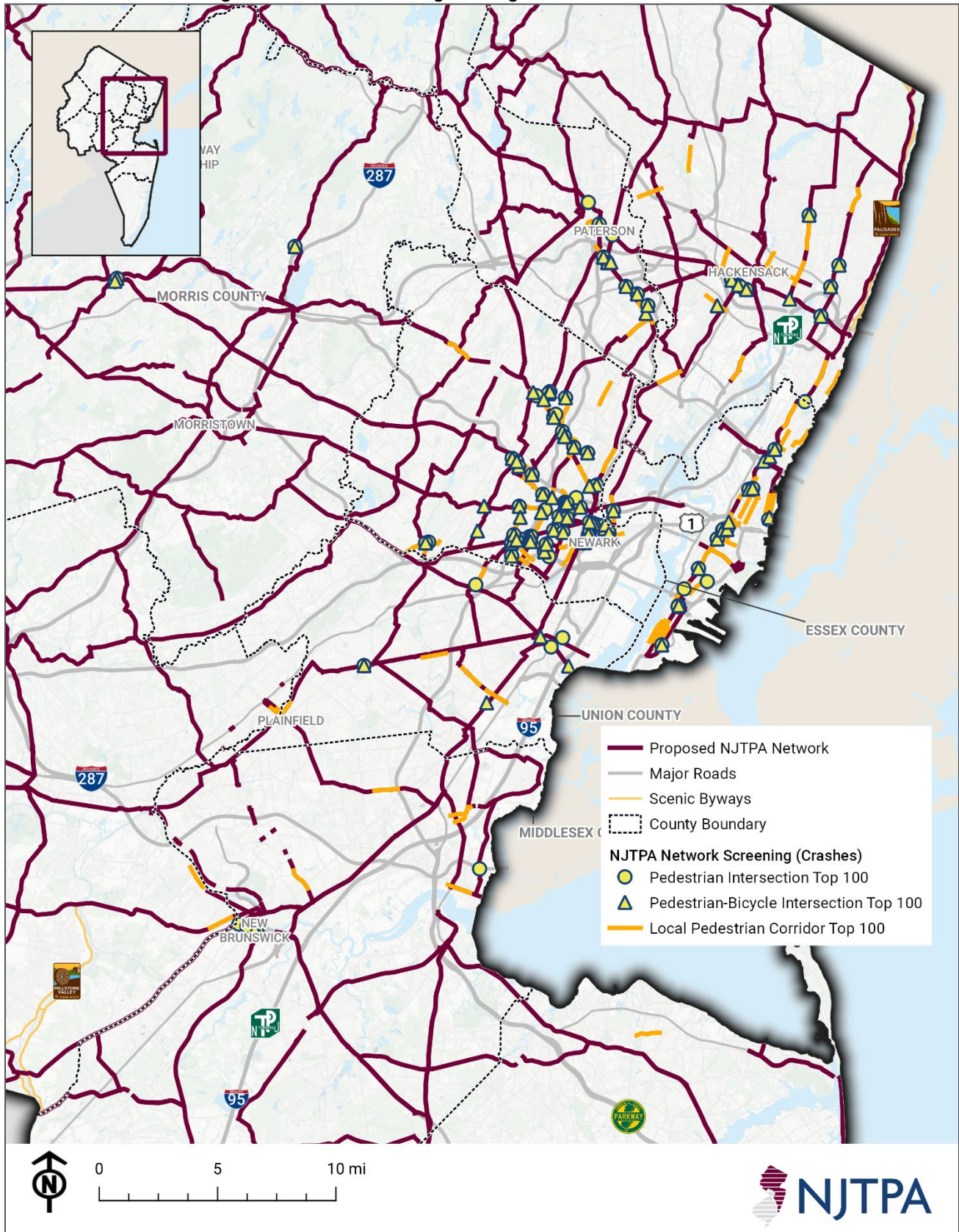


Figure 6: Network Screening and Regional Network – Urban Areas



Environmental Justice Analysis

The Environmental Justice Analysis uses the NJDEP's Overburdened Communities dataset, developed under the New Jersey Environmental Justice Law,¹² which identifies Overburdened Communities (OBCs) at the census block group level using demographic information from 2020 Census Data. Figure 7 and Figure 8 overlay the regional network with Overburdened Communities by census block group in which:

- at least 35 percent of the households qualify as low-income households;
- at least 40 percent of the residents identify as a minority or as members of a State recognized tribal community; or
- at least 40 percent of the households have limited English proficiency.

The regional network connects to nearly every OBC census block group in North Jersey that meets the above criteria. If this network were constructed, it would dramatically increase connectivity, safety, and comfort for communities that rely on walking and bicycling the most, and who suffer a disproportionate number of traffic fatalities and serious injuries.

Environmental Justice Analysis results are overlaid with the regional network in Figure 7 and Figure 8. For more information, refer to Appendix B: Individual Overburdened Community Categories and Regional network Maps.

¹² New Jersey Department of Environmental Protection, Office of Environmental Justice. (2022). What are Overburdened Communities (OBC)? <https://www.nj.gov/dep/ej/communities.html>

Figure 7: Environmental Justice Analysis and Regional Network

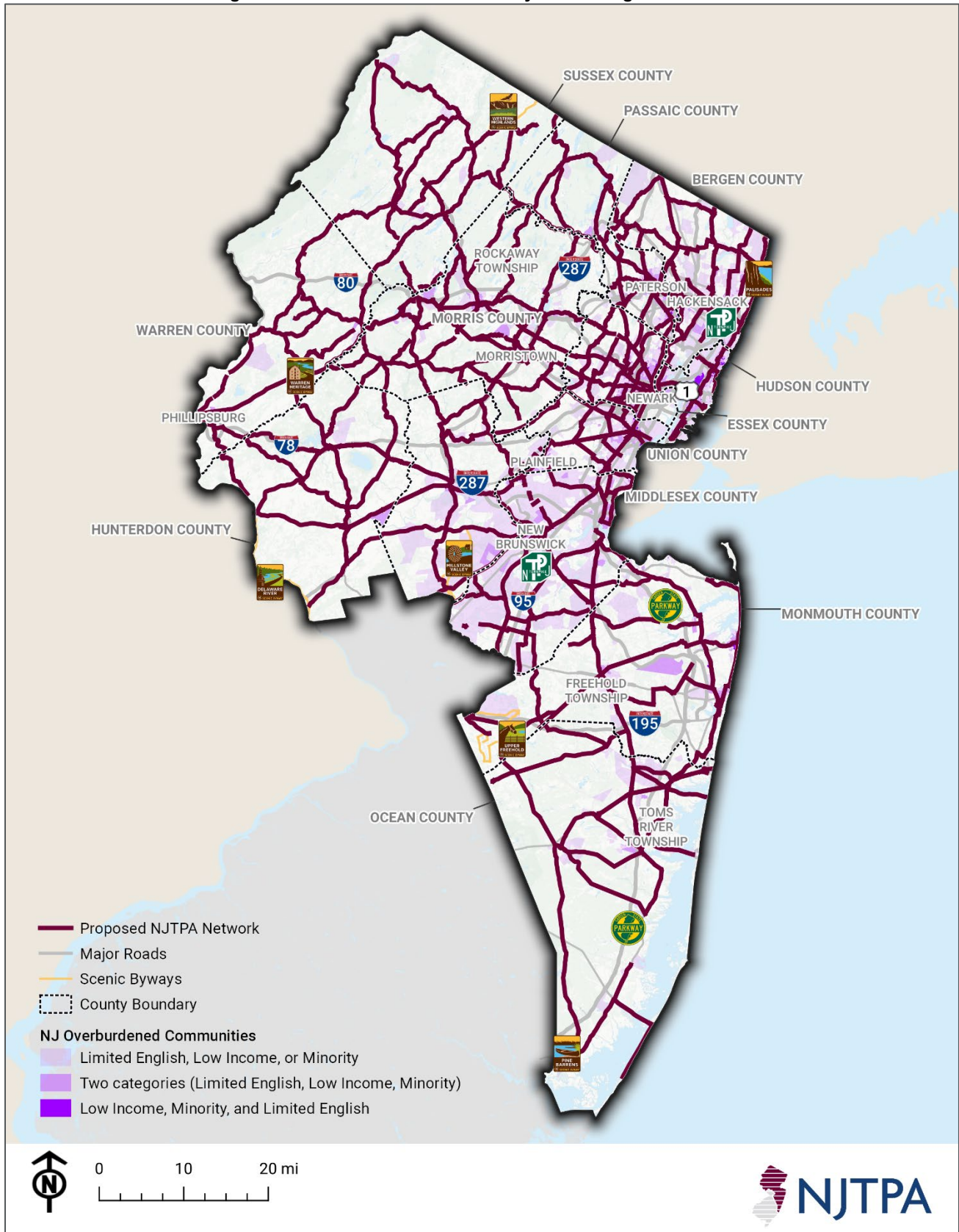
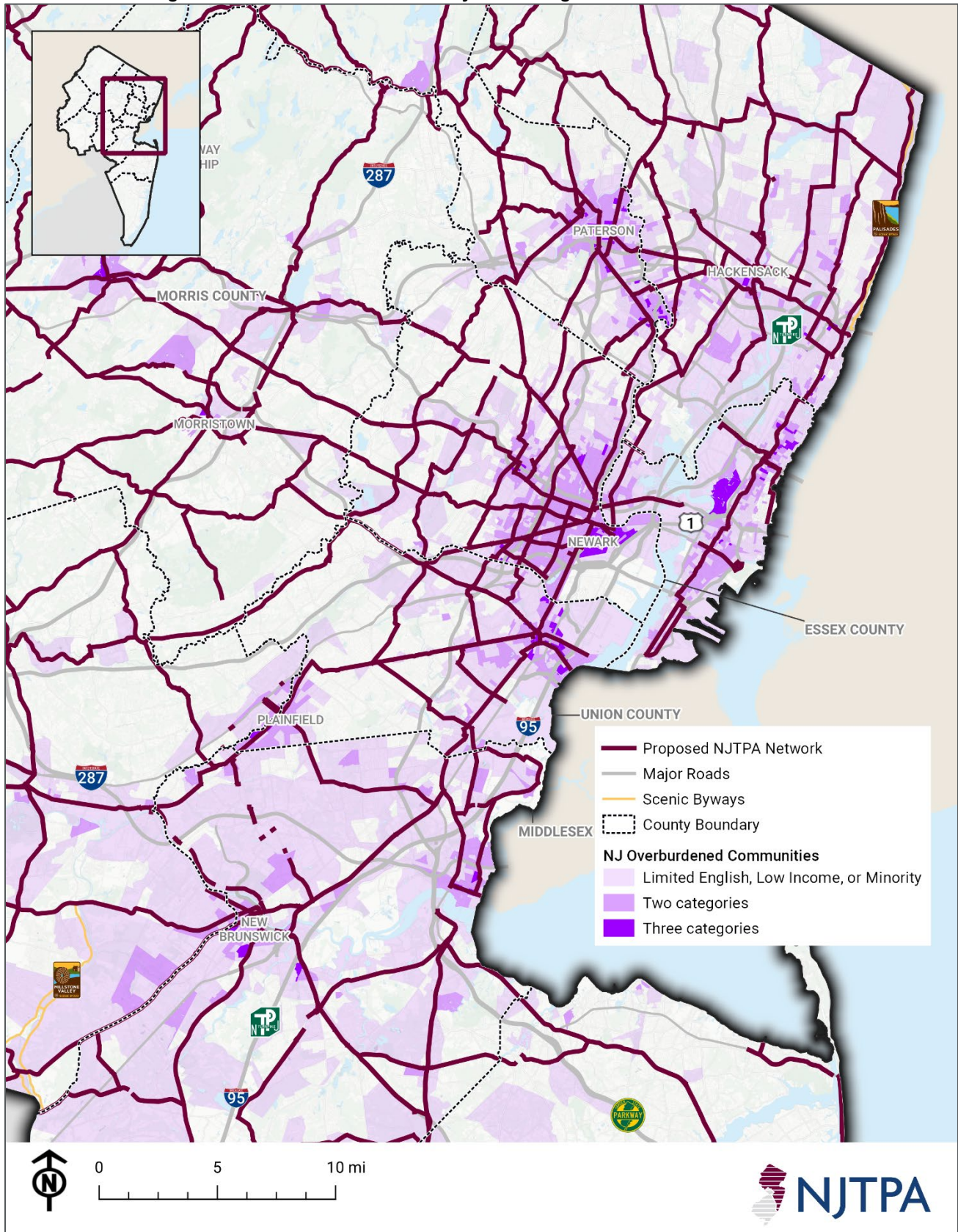


Figure 8: Environmental Justice Analysis and Regional Network – Urban Areas



Public Feedback

During the planning process, the NJTPA collected information from local governments and the public on routes that need improvement, specific project priorities, and locations of safety concerns for walking and bicycling. NJTPA and the project team used a webmap to gather this information, as well as in-person conversations with community members at a series of pop-up events across the region. The webmap collected a total of almost 400 responses. While these responses are not a representative sample of the North Jersey population, they do provide some insight on public priorities regarding active transportation improvements. The webmap responses are clustered in Jersey City, Newark, Hackensack, and Elizabeth. Over 78 percent (n=118) of the segments noted in the survey are within or intersect an area identified as overburdened communities (OBC).

Approximately 45 percent of survey responses (n=178) completely overlap with the regional network and its half-mile buffer, and 72 percent of responses (n=285) partially overlap. A majority of the respondents noted desired improvements and/or current use along local roadways. Very few respondents identified high-volume corridors as places where they currently walk and bike or *would* walk and bike. Instead, respondents largely selected smaller roadways parallel to or crossing the regional network corridors as places where they would like to see improvements.

Webmap responses results are overlaid with the regional network in Figure 9 and Figure 10.

Figure 9: Webmap Comments and Regional Network

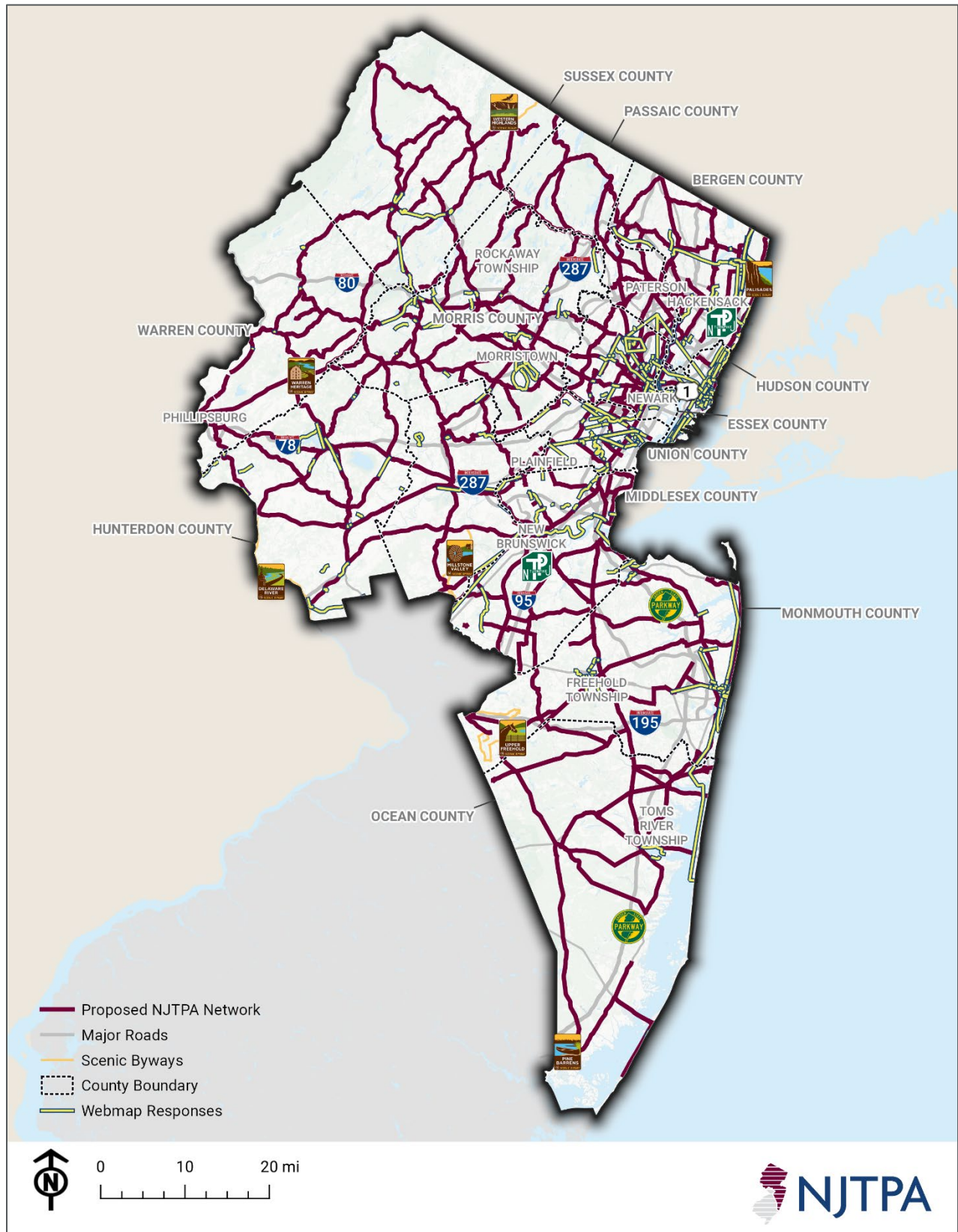
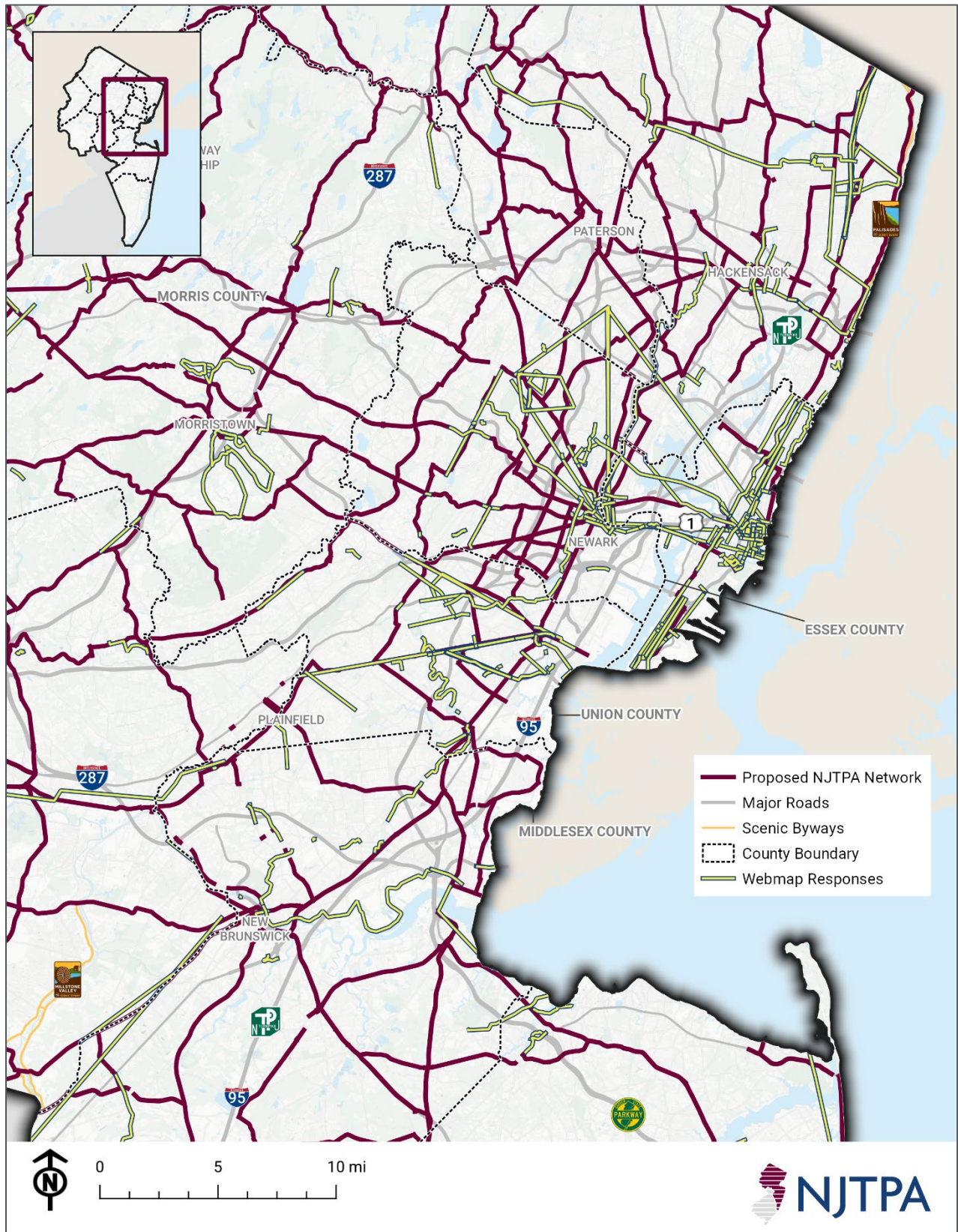


Figure 10: Webmap Comments and Regional Network – Urban Areas



Appendix A: County Level Recommendations

Appendix A describes regional network recommendations for each NJTPA county. County profiles include a discussion of network building blocks and how Trip Potential,¹³ Network Screening, and Environmental Justice analyses informed the development of county-level recommendations. This section also examines the regional network's overlap with public webmap comments, and discusses connections between existing active transportation networks and proposed improvements.

Figures 11-23 show the regional network for each county, along with the following features:

- Municipal boundaries
- NJ TRANSIT rail lines
- Major roads
- Existing trails and bike lanes¹⁴
- Proposed trails and bike lanes

The corridors were selected because of the regional connectivity they provide. Local roads were not included because they are less likely to traverse county lines and are therefore less useful for developing a regional active transportation network. However, local roads that parallel regional network corridors may be used as alternate low-stress routes if improvements are not feasible on larger roads. This is indicated on the maps through a half-mile buffer around all regional network segments to show that nearby local roads should be considered.

Bergen County

Analysis Inputs

Almost all of Bergen County has high bicycle trip potential, with an overall score of 90 or above for most municipalities. The only pockets of low demand are the Ramapo Valley County Reservation and the northern end of the Palisades Interstate Park. These destinations do attract recreational users but did not score highly due to the variables included in the analysis.¹⁵ The northern end of the Palisades Interstate Park corridor is home to one of the most well-travelled bicycle routes along US 9W (between the New York State Line and the George Washington Bridge). The Palisades Interstate Park itself contains a wealth of recreation activities and a continuous recreational corridor along the Henry Hudson Drive. There is broad support for improving active transportation accommodations along this corridor. Specifically, a 2023 study commissioned by the New York State Department of Transportation is examining the feasibility of connecting the George Washington Bridge and Mario Cuomo Bridge with shared use paths on both sides of the Hudson River. Likewise, connecting US 9W to the George Washington Bridge would greatly enhance regional connectivity and help expand the reach of the bridge's newly constructed bike path. Similarly, the Ramapo Valley County Reservation is a heavily-used recreational area, with trails maintained by the NY-NJ Trail Conference. Most of the regional network is

¹³ As discussed in the Trip Potential Analysis section, higher scoring locations have the most potential to support active transportation trips, and are shown in black and dark purple in Figure 3 and Figure 4. Scores do not translate directly into estimated bicycle and pedestrian volumes; however they can be compared to the NJTPA's Pedestrian Counts Project results to determine any correlations between observed volumes and trip potential.

¹⁴ Includes on-street bike facilities, off-street bike paths, shared use paths, and both paved and unpaved trails.

¹⁵ Population, employment, intersection density, vehicle access, transit stops, land use mix, and poverty.

concentrated in the densely populated southern part of Bergen County, serving Fort Lee Borough, Edgewater Borough, and other large communities.

There are 32 bicycle or pedestrian high-crash locations in Bergen County, with clusters on Essex Street in City of Hackensack and Grand Avenue in City of Englewood. All but three high-crash areas are captured in the regional network.

Table 1 shows the most predominant EJ populations in Bergen County by census block. Racial minorities comprise the largest share of EJ groups, including at least 40 percent of the population in larger communities like Fort Lee Borough and Edgewater Borough. The regional network serves these areas well, and should accommodate EJ populations in these communities.

Table 1: Overburdened Communities in Bergen County

OBC Category	Number of census blocks
Limited English	2
Low Income	16
Low Income and Minority	61
Low Income, Minority, and Limited English	7
Minority	349
Minority and Limited English	6

Public Feedback

Many webmap and survey responses identified the Northern Valley Greenway as a priority in planning, technical assistance, and funding decisions. The greenway is a proposed 8-mile-long trail that would connect Tenaflly Borough, Cresskill Borough, Demarest Borough, Closter Borough, Norwood Borough and Northvale Borough. The trail would be built on an existing unused section of CSX Transportation’s Northern Branch Corridor rail line north of City of Englewood.¹⁶ The regional network overlaps with the proposed Northern Valley Greenway alignment.

Existing Network and Proposed Improvements

With the exception of Henry Hudson Drive in the Palisades Interstate Park and the US 9W Bike Route, there are few regional bicycle facilities in Bergen County, and the regional network would significantly expand the reach of existing routes. The network adds north-south connections that span the western part of the county, which currently lacks any bicycle facilities. East-west routes would also connect more densely populated communities in the southern part of the county to one another. Proposed routes would also expand the Saddle River Trail, connecting to destinations in the northwestern part of the county.

There is significant overlap with several regional network corridors and NJ TRANSIT commuter rail lines and stations:

¹⁶ Tenaflly Rotary Club Charitable Organization. (2018). About the Northern Valley Greenway. Retrieved from: <https://www.northernvalleygreenway.org/about/>

- Bergen County Line: Rutherford, Plauderville, Ridgewood, Ho-Ho-Kus, Waldwick, Allendale, Route 17 Ramsey, Mahwah
- Main Line: Lyndhurst, Glen Rock-Main
- Pascack Line: Wood-Ridge, Teterboro-Williams Ave, Essex Street-Hackensack, Anderson Street-Hackensack, New Bridge Landing, River Edge, Oradell, Emerson, Westwood, Hillsdale, Woodcliff Lake, Park Ridge, Montvale

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers.

Table 2 lists all roads in Bergen County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

Table 2: Bergen County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Franklin Turnpike	CR 507	Borough of Allendale	East Allendale Avenue, North Franklin Turnpike, West Allendale Avenue	North Franklin Turnpike	1.96
Sylvan Avenue	US 9W	Borough of Alpine	Lemoine Avenue	N/A	10.19
Closter Dock Road	CR 502	Borough of Alpine	Sylvan Avenue	High Street	2.56
North Washington Avenue	CR 39	Borough of Bergenfield	East Main Street, South Washington Avenue, West Main Street	Columbia Avenue, Washington Avenue	0.59
South Washington Avenue	CR 39, CR 49	Borough of Bergenfield	East Main Street, North Washington Avenue, West Main Street	Liberty Road, Teaneck Road	1.09
West Main Street	CR 56	Borough of Bogota	East Main Street	Salem Street	0.54
East Main Street	CR 56	Borough of Bogota	West Main Street	Crestview Place, Degraw Avenue	0.34
Washington Avenue	CR 503	Borough of Carlstadt	N/A	N/A	0.82
High Street	CR 502	Borough of Closter	Center Street, Old Hook Road	Closter Dock Road	1.08
Knickerbocker Road	CR 505	Borough of Closter	Camp Merritt Memorial Circle	Harrington Avenue, Livingston Street	2.83
Anderson Avenue	CR S-33	Borough of Demarest	County Road	Closter Dock Road	0.83
Washington Avenue	CR 39	Borough of Dumont	Columbia Avenue, North Washington Avenue	East Madison Avenue, West Madison Avenue	0.30
East Madison Avenue	CR 74	Borough of Dumont	Washington Avenue, West Madison Avenue	Camp Merritt Memorial Circle	0.87
Carlton Avenue	CR 507	Borough of East Rutherford	Jackson Avenue	Locust Lane	0.51
Midland Avenue	CR 67	Borough of Elmwood Park	Grace Avenue, North Midland Avenue	North Midland Avenue	0.53
Market Street	CR 56	Borough of Elmwood Park	Essex Street	N/A	2.86
Plaza Road North	N/A	Borough of Fair Lawn	Radburn Road	Howard Avenue, Plaza Road	0.62
Plaza Road	N/A	Borough of Fair Lawn	Broadway	Howard Avenue, Plaza Road North	1.40
Midland Avenue	CR 67	Borough of Fair Lawn	Arcadia Road, North Midland Avenue	Broadway	0.27

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Anderson Avenue	CR 29	Borough of Fairview	N/A	N/A	2.34
Main Street	CR 29, CR 56	Borough of Fort Lee	Hudson Terrace	Fort Lee Road, Irving Street, Oratam Terrace	1.13
Palisade Avenue	NJ 67	Borough of Fort Lee	Central Boulevard	Lemoine Avenue	0.74
Central Boulevard	CR 54, NJ 5	Borough of Fort Lee	Palisade Avenue	14th Street, E. Central Boulevard	0.53
Lemoine Avenue	NJ 67	Borough of Fort Lee	Schlosser Street	Palisade Avenue	0.28
Lemoine Avenue	NJ 67	Borough of Fort Lee	New York Avenue	Main Street	0.64
N/A	N/A	Borough of Fort Lee	Lemoine Avenue, Myrtle Avenue	Lemoine Avenue, New York Avenue	0.27
Colonial Road	CR 117	Borough of Franklin Lakes	Franklin Lake Road	Franklin Avenue	2.50
Franklin Avenue	CR 502, CR 84, CR S-89	Borough of Franklin Lakes	Godwin Avenue	Colonial Road	2.67
Ewing Avenue	CR 502, CR 97	Borough of Franklin Lakes	High Mountain Road	Franklin Avenue	2.22
Franklin Lake Road	CR 502, CR 93	Borough of Franklin Lakes	Long Hill Road	Colonial Road	0.51
Maple Avenue	CR 507	Borough of Glen Rock	South Maple Avenue, Stillwell Place	N/A	2.62
Radburn Road	N/A	Borough of Glen Rock	Plaza Road North	Harristown Road	0.40
Glen Avenue	N/A	Borough of Glen Rock	Maple Avenue	Harristown Road	0.37
Terrace Avenue	CR 55	Borough of Hasbrouck Heights	N/A	N/A	1.86
North Franklin Turnpike	CR 502, CR 507	Borough of Ho-Ho-Kus	Franklin Turnpike, Maple Avenue, Sheridan Avenue	Franklin Turnpike, Rosencrantz Lane	0.85
Fort Lee Road	CR 56	Borough of Leonia	Degraw Avenue	Irving Street, Main Street, Oratam Terrace	1.08
Broad Avenue	N/A	Borough of Leonia	E. Central Boulevard, West Central Boulevard	Van Nostrand Avenue	2.32
River Street	CR 49	Borough of Little Ferry	N/A	N/A	0.19
Bergen Turnpike	CR 124	Borough of Little Ferry	N/A	N/A	0.64
Washington Avenue	N/A	Borough of Little Ferry	Liberty Street	Bergen Turnpike, Main Street	0.68
Essex Street	CR 56	Borough of Lodi	Market Street	Maywood Avenue, West Essex Street	0.68
Main Street	CR 61	Borough of Lodi	N/A	Essex Street, Rochelle Avenue	0.48

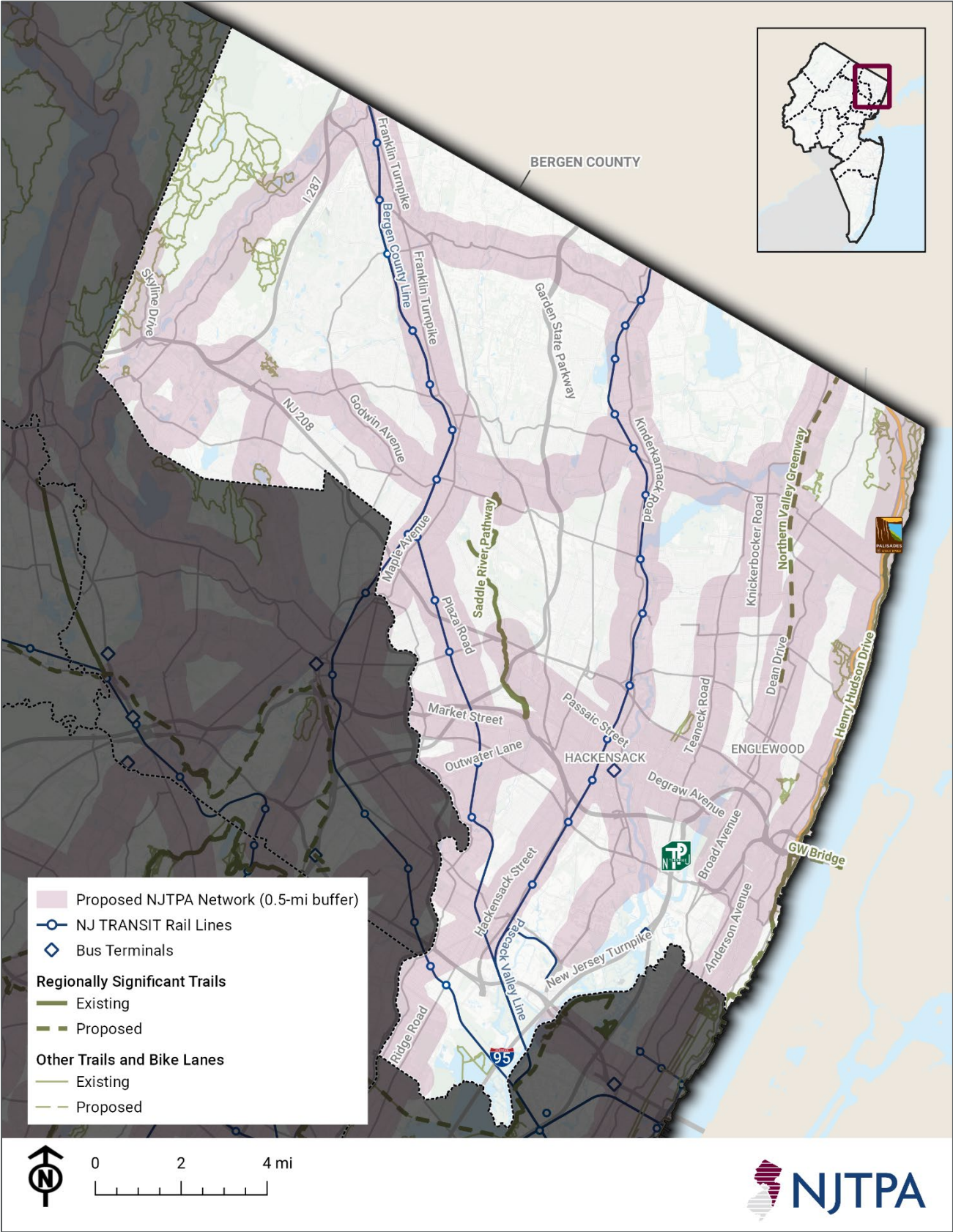
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Maywood Avenue	CR 59	Borough of Maywood	Essex Street, West Essex Street	Passaic Street, West Passaic Street	0.99
West Passaic Street	CR 62	Borough of Maywood	Maywood Avenue, Passaic Street	East Passaic Street	0.51
Franklin Avenue	N/A	Borough of Midland Park	Maltbie Avenue, West Ridgewood Avenue	Godwin Avenue	0.56
Godwin Avenue	CR 84	Borough of Midland Park	Franklin Avenue	Franklin Avenue	1.96
Grand Avenue West	CR 94, CR 96	Borough of Montvale	N/A	N/A	2.64
West Grand Avenue	CR 94	Borough of Montvale	Grand Avenue West, Lawn Street, Woodland Road	Grand Avenue East, North Kinderkamack Road, South Kinderkamack Road	0.63
North Kinderkamack Road	CR 503	Borough of Montvale	Grand Avenue East, South Kinderkamack Road, West Grand Avenue	N/A	0.92
Moonachie Road	CR 503	Borough of Moonachie	Liberty Street	Empire Boulevard, Moonachie Avenue, Washington Avenue	0.88
Jauncey Avenue	CR 26	Borough of North Arlington	River Road, Riverside Avenue	Ridge Road	0.49
Belleville Turnpike	CR 506, CR 507, NJ 7	Borough of North Arlington	Passaic Avenue, River Road	Kearny Avenue, Ridge Road	0.48
Ridge Road	NJ 17	Borough of North Arlington	Belleville Turnpike, Kearny Avenue	Jauncey Avenue	1.28
Livingston Street	CR 102, CR 505	Borough of Norwood	Harrington Avenue, Knickerbocker Road	N/A	2.89
McCoy Road	N/A	Borough of Oakland	Yawpo Avenue	Colonial Road	0.45
Skyline Drive	CR S-91	Borough of Oakland	N/A	N/A	2.05
West Oakland Avenue	CR S-91	Borough of Oakland	Skyline Drive	Ramapo Valley Road	0.69
Breakneck Road	CR 502	Borough of Oakland	Berdan Avenue	Long Hill Road	0.75
Yawpo Avenue	N/A	Borough of Oakland	McCoy Road	Ramapo Valley Road	0.91
Skyline Drive	CR S-91	Borough of Oakland	N/A	N/A	0.28
Kinderkamack Road	CR 503	Borough of Oradell	N/A	N/A	9.14
E. Central Boulevard	CR 501, CR 54	Borough of Palisades Park	Broad Avenue, West Central Boulevard	14th Street, Central Boulevard	0.77
Paramus Road	CR 62	Borough of Paramus	N/A	N/A	0.50
Paramus Road	CR 62	Borough of Paramus	East Ridgewood Avenue	Linwood Avenue West	0.59
N/A	N/A	Borough of Ramsey	Lake Street	Franklin Turnpike	0.81

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
North Franklin Turnpike	CR 507	Borough of Ramsey	Franklin Turnpike	Fergus Avenue, Franklin Turnpike	0.65
N/A	N/A	Borough of River Edge	N/A	N/A	0.64
Main Street	CR 503, CR 68	Borough of River Edge	N/A	Hackensack Avenue, New Bridge Road	0.32
West Erie Avenue	CR 32	Borough of Rutherford	N/A	N/A	1.18
Park Avenue	CR 30	Borough of Rutherford	N/A	N/A	1.84
County Road	CR 501	Borough of Tenafly	East Clinton Avenue, Piermont Road	Anderson Avenue	1.93
Dean Drive	CR 501	Borough of Tenafly	North Dean Street, Phelps Avenue	East Clinton Avenue, New Street	0.84
Lake Street	CR 96	Borough of Upper Saddle River	N/A	Grand Avenue West	2.72
Franklin Turnpike	CR 502, CR 507	Borough of Waldwick	North Franklin Turnpike, Rosencrantz Lane	East Orchard Street, North Franklin Turnpike, West Orchard Street	1.41
Main Avenue	CR 507	Borough of Wallington	8th Street, Locust Avenue	Midland Avenue	0.40
Locust Avenue	CR 507	Borough of Wallington	Locust Lane, Paterson Avenue	8th Street, Main Avenue	0.41
Old Hook Road	CR 502	Borough of Westwood	N/A	N/A	2.97
Washington Avenue	CR 110, CR 502	Borough of Westwood	Broadway, Westwood Avenue	Lafayette Avenue	0.65
Lafayette Avenue	CR 110	Borough of Westwood	Forest Avenue, Ridgewood Road	Washington Avenue	0.79
Hackensack Street	CR 55	Borough of Wood-Ridge	Terrace Avenue	East Erie Avenue, Meadow Road	2.05
N/A	N/A	City of Englewood	Broad Avenue	Grand Avenue, Van Nostrand Avenue	0.28
Grand Avenue	CR 501	City of Englewood	Van Nostrand Avenue	East Palisade Avenue, Engle Street	0.99
North Dean Street	CR 501	City of Englewood	Dean Drive, Phelps Avenue	East Palisade Avenue, South Dean Street	1.28
Outwater Lane	CR 42	City of Garfield	N/A	N/A	2.29
Midland Avenue	CR 507, CR 67	City of Garfield	N/A	N/A	2.21
Hackensack Avenue	CR 49, CR 503	City of Hackensack	N/A	N/A	1.31
East Anderson Street	CR 60	City of Hackensack	N/A	N/A	0.22

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Essex Street	CR 124, CR 56	City of Hackensack	N/A	N/A	1.41
River Street	CR 49, CR 503, CR 56	City of Hackensack	Hackensack Avenue, University Plaza Drive	Court Street, South River Street	1.20
Salem Street	CR 56	City of Hackensack	East Salem Street, Midtown Place	West Main Street	0.27
Polifly Road	CR 55	City of Hackensack	1st Street, Essex Street	Terrace Avenue	0.70
South River Street	CR 49, CR 503	City of Hackensack	Court Street, River Street	River Street	1.44
Passaic Street	CR 62	City of Hackensack	Maywood Avenue, West Passaic Street	Union Street	1.29
Riverside Avenue	CR 507	Township of Lyndhurst	Park Avenue, Valley Brook Avenue	Jauncey Avenue, River Road	1.10
Ramapo Valley Road	US 202	Township of Mahwah	N/A	N/A	9.61
Franklin Turnpike	CR 507	Township of Mahwah	Fergus Avenue, North Franklin Turnpike	Ramapo Valley Road	2.89
West Passaic Street	CR 62	Township of Rochelle Park	East Passaic Street, Rochelle Avenue	Paramus Road	0.92
East Passaic Street	CR 62	Township of Rochelle Park	West Passaic Street	Rochelle Avenue, West Passaic Street	0.26
North Midland Avenue	CR 67	Township of Saddle Brook	Midland Avenue	Arcadia Road, Midland Avenue	1.36
Degraw Avenue	CR 56	Township of Teaneck	N/A	N/A	1.74
Cedar Lane	CR 60	Township of Teaneck	N/A	N/A	1.61
Teaneck Road	CR 39	Township of Teaneck	Liberty Road, South Washington Avenue	Degraw Avenue	2.91
East Cedar Lane	N/A	Township of Teaneck	Cedar Lane, Teaneck Road	N/A	0.60
Ridgewood Road	CR 110	Township of Washington	East Glen Avenue, Pascack Road	Forest Avenue, Lafayette Avenue	1.00
Pascack Road	CR 110, CR 63	Township of Washington	Linwood Avenue East	East Glen Avenue, Ridgewood Road	0.42
Garber Square	CR 80	Village of Ridgewood	West Ridgewood Avenue, Wilsey Square	West Ridgewood Avenue, Wilsey Square	0.16
Linwood Avenue East	CR 110	Village of Ridgewood	N/A	N/A	1.36
North Maple Avenue	CR 507, CR 80	Village of Ridgewood	East Ridgewood Avenue, South Maple Avenue	Brookside Avenue, Maple Avenue	1.31
Linwood Avenue	CR 110	Village of Ridgewood	North Maple Avenue	Linwood Avenue West	1.17

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
West Ridgewood Avenue	N/A	Village of Ridgewood	Garber Square, Wilsey Square	Franklin Avenue, Maltbie Avenue	0.70
South Maple Avenue	CR 507	Village of Ridgewood	East Ridgewood Avenue, North Maple Avenue	Maple Avenue, Stillwell Place	0.55
Franklin Avenue	CR 80	Village of Ridgewood	North Maple Avenue	Garber Square, North Broad Street	0.39
Franklin Turnpike	CR 507	Borough of Allendale	East Allendale Avenue, North Franklin Turnpike, West Allendale Avenue	North Franklin Turnpike	1.96

Figure 11: Bergen County Regional Network



Essex County

Analysis Inputs

Almost all of Essex County has high bicycle trip potential, with particularly high pockets of demand in downtown Newark and the Ironbound neighborhood, as well as Nutley Township, Bloomfield Township, Belleville Township, and many other communities in the eastern half of the county, where scores above 90 are prevalent. With the exception of some low-scoring pockets in Short Hills and Fairfield Township (home to Great Piece Meadows) in the west and Port Newark and Newark Liberty International Airport in the east, the entire county scores above 70 on overall bike trip potential.

High-crash intersections and corridors from the Network Screening Analysis are concentrated in Newark and surrounding communities, such as Bloomfield Township and Irvington Township. This finding corresponds with the City of Newark’s goal to implement low-cost, high-impact safety improvement efforts at high-crash locations identified in its Pedestrian and Bicycle Safety Action Plan. The regional network overlaps with all Network Screening Analysis crash locations.

Table 3 shows the most predominant EJ populations in Essex County by census block. Overburdened community census block groups in Essex County are evenly split between minority populations and low-income/minority populations. Almost all of Newark consists of the latter category, with minority only populations distributed more broadly across the county. There are also several pockets of low-income/minority/limited English populations in Downtown Newark. The regional network connects to most of these communities.

Table 3: Overburdened Communities in Essex County

OBC Category	Number of census blocks
Low Income	4
Low Income and Limited English	1
Low Income and Minority	244
Low Income, Minority, and Limited English	23
Minority	224
Minority and Limited English	5

Public Feedback

Several webmap comments noted the lack of bicycle connections between Newark and suburban communities to the west, specifically Montclair Township, West Orange Township, and Verona Township. Others focused on connections to neighboring counties and communities. For example, one comment highlighted the need to build active transportation routes between Newark and Jersey City. Others promoted the idea of a trail along the Passaic River connecting Bergen County to Newark, which could benefit large populations of urban travelers with a safe route between regional activity centers. Many comments also focused on Newark’s disconnected bicycle and pedestrian network and the need for local improvements as well. The regional network addresses many of these concerns, including the Essex Hudson Greenway that links to Jersey City, and many proposed routes in Newark and throughout the rest of the county.

Existing Network and Proposed Improvements

There are several regional trails in Essex County. These include the Liberty-Water Gap Trail, which begins in West Orange and continues into Morris County, and the Lenape Trail, which travels through northern Newark and into neighboring communities. The regional network would build upon these trails, adding east-west routes that

parallel the Liberty-Water Gap Trail and connect more communities in the western part of the county, as well as alternative routes to the Lenape Trail. These additions to the current bicycle network would connect almost all of Essex County's communities. The regional network and its half-mile buffer cover most of Newark as well, which would significantly expand connectivity in the region's largest city and create many more options for people bicycling than the city's existing infrastructure.

The regional network overlaps with all NJ TRANSIT commuter and light rail lines in Essex County and most stations:

- North Jersey Coast Line: Newark Airport
- Newark to Grove Street: Military Park, Washington Street, Warren Street, Norfolk Street, Orange Street, Park Avenue, Bloomfield Avenue, Davenport Avenue, Silver Lake, Grove Street
- Newark to Broad St: NJPAC/Center Street, Washington Park, Broad Street
- Gladstone Branch: Newark Broad Street, East Orange, Brick Church, Orange, Highland Avenue, Mountain Station, South Orange, Maplewood, Millburn
- Montclair-Boonton Line: Watsessing, Bloomfield, Glen Ridge, Bay Street-Montclair, Walnut Street, Watchung Avenue, Montclair Heights

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers both within Essex County and neighboring counties.

Table 4 lists all roads in Essex County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

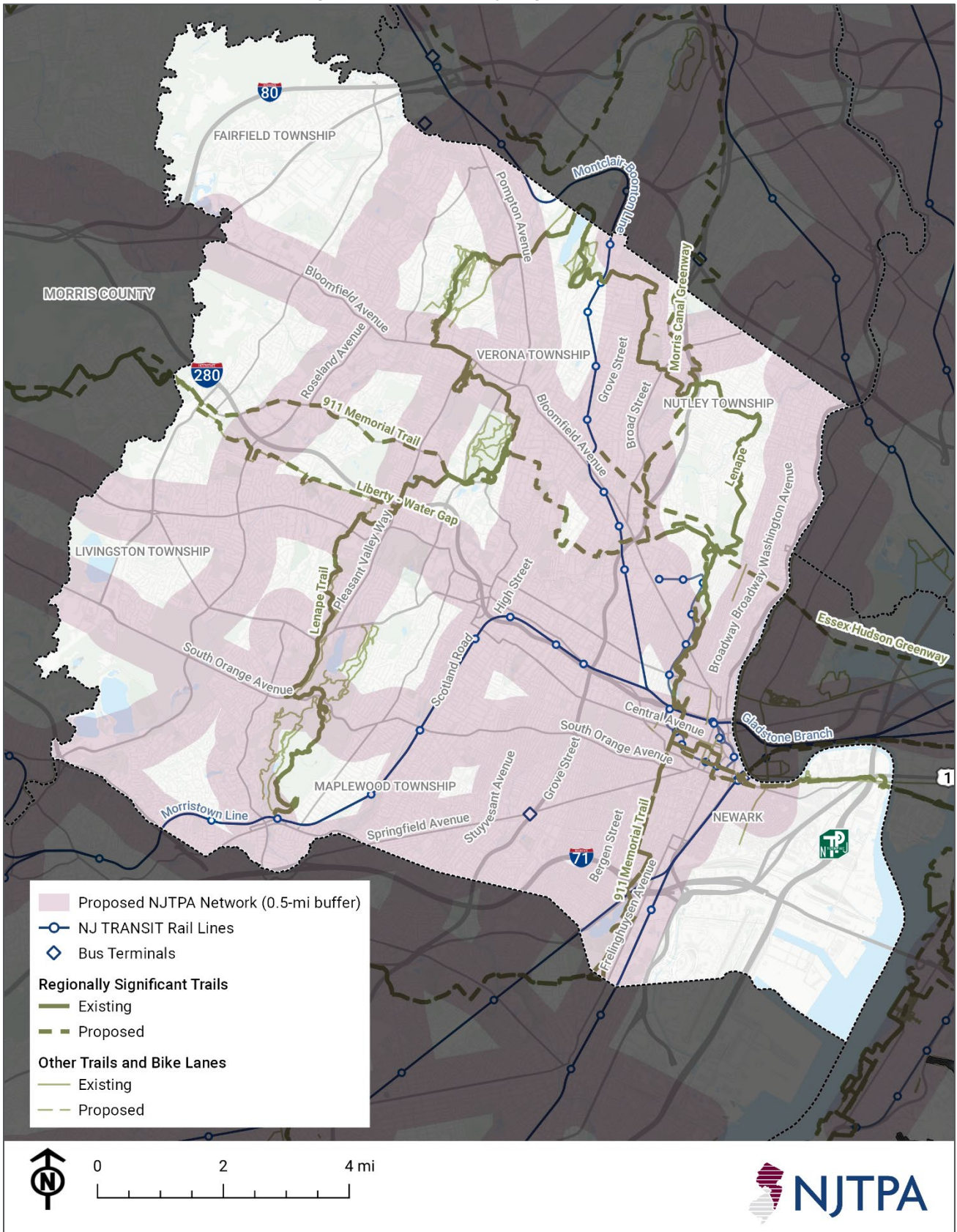
Table 4: Essex County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Roseland Avenue	CR 527	Borough of Essex Fells	Bloomfield Avenue	Eagle Rock Avenue	1.62
Grandview Avenue	CR 631	Borough of North Caldwell	Central Avenue	Little Falls Road, Main Street	1.25
N/A	N/A	Borough of Roseland	North Livingston Avenue	North Livingston Avenue	0.82
Central Avenue	CR 508	City of East Orange	N/A	N/A	4.06
North Grove Street	CR 509	City of East Orange	Grove Street	Dr. Martin Luther King Jr. Boulevard, South Grove Street	1.21
Washington Street	N/A	City of East Orange	North Harrison Street, William Street	Park Avenue	0.41
South Grove Street	CR 509	City of East Orange	Dr. Martin Luther King Jr. Boulevard, North Grove Street	Grove Street	0.65
South Harrison Street	N/A	City of East Orange	Dr. Martin Luther King Jr. Boulevard, North Harrison Street	Central Avenue	0.48
Glenwood Avenue	N/A	City of East Orange	Washington Street	Bloomfield Avenue, Broad Street	1.91
South Orange Avenue	CR 510, CR 577	City of Newark	N/A	N/A	11.31
Clinton Avenue	N/A	City of Newark	N/A	N/A	2.72
Broadway	CR 506 Spur, CR 667	City of Newark	N/A	N/A	2.34
Chancellor Avenue	CR 601	City of Newark	Elizabeth Avenue, Gordon Court	Stuyvesant Avenue	2.21
Ferry Street	N/A	City of Newark	Market Street	Wilson Avenue	0.61
Springfield Avenue	CR 510, CR 603, NJ 124	City of Newark	N/A	N/A	5.43
Bergen Street	N/A	City of Newark	1st Street, West Market Street	Chancellor Avenue	3.13
Broad Street	CR 506 Spur	City of Newark	Bloomfield Place	Grant Street, University Avenue	0.38
University Avenue	N/A	City of Newark	Broad Street, Grant Street	Market Street	0.83
Market Street	CR 510	City of Newark	Springfield Avenue	Jackson Street	1.20
Frelinghuysen Avenue	NJ 27	City of Newark	Emmet Street	Newark Avenue	2.55

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Broad Street	N/A	City of Newark	Broad Street / Kenneth A. Gibson Blvd	Emmet Street, Emmett Street	0.73
Broad Street / Kenneth A. Gibson Blvd	N/A	City of Newark	Market Street	Broad Street	0.41
Washington Avenue	CR 506, NJ 7	Township of Belleville	Broadway	Walnut Street	3.17
Broad Street	CR 509, CR 663	Township of Bloomfield	N/A	N/A	3.14
Bloomfield Avenue	CR 506, CR 506 Spur	Township of Bloomfield	N/A	N/A	6.90
Grove Street	CR 509	Township of Bloomfield	North Grove Street	Florence Avenue, Watsessing Avenue	0.71
West Passaic Avenue	CR 622	Township of Bloomfield	Broad Street	Darling Avenue, Kingsland Street	0.93
Pompton Avenue	NJ 23	Township of Cedar Grove	N/A	N/A	4.21
Main Street	CR 659	Township of City of Orange	North Essex Avenue, South Essex Avenue	Mount Pleasant Avenue, Renna Plaza	0.67
Scotland Road	CR 638	Township of City of Orange	High Street, Main Street	South Orange Avenue, Valley Street	2.36
South Essex Avenue	N/A	Township of City of Orange	Main Street, North Essex Avenue	Carteret Place, Central Avenue, Jackson Street	0.47
High Street	CR 638	Township of City of Orange	Main Street, Scotland Road	Washington Street	0.80
Stuyvesant Avenue	CR 619	Township of Irvington	N/A	N/A	3.05
Coit Street	CR 509	Township of Irvington	Grove Street, Welland Avenue	Chestnut Avenue	0.55
Grove Street	CR 509	Township of Irvington	South Grove Street	Coit Street, Welland Avenue	2.53
East Northfield Road	CR 508	Township of Livingston	N/A	N/A	0.13
Columbia Turnpike	CR 510	Township of Livingston	N/A	N/A	1.48
West Mount Pleasant Avenue	NJ 10	Township of Livingston	N/A	N/A	2.56
South Livingston Avenue	CR 527, CR 649	Township of Livingston	East Mount Pleasant Avenue, North Livingston Avenue, West Mount Pleasant Avenue	East Hobart Gap Road, John F. Kennedy Parkway, West Hobart Gap Road	1.91
East Cedar Street	CR 527	Township of Livingston	Old Short Hills Road	N/A	0.47
East Mount Pleasant Avenue	NJ 10	Township of Livingston	North Livingston Avenue, South Livingston Avenue, West Mount Pleasant Avenue	Mount Pleasant Avenue, Nance Road	1.53

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
North Livingston Avenue	CR 527	Township of Livingston	East Mount Pleasant Avenue, South Livingston Avenue, West Mount Pleasant Avenue	N/A	1.09
Prospect Street	CR 665	Township of Maplewood	Springfield Avenue	South Orange Avenue	1.97
John F. Kennedy Parkway	CR 649	Township of Millburn	N/A	N/A	3.84
Old Short Hills Road	CR 527	Township of Millburn	East Cedar Street	Main Street	3.04
Main Street	CR 527, CR 577	Township of Millburn	Old Short Hills Road	Bleeker Street	0.72
Morris Turnpike	CR 527, NJ 124	Township of Millburn	Baltusrol Way, Morris Avenue	North Service Road, South Service Road, South Terrace	0.87
Grove Street	CR 623	Township of Montclair	Bloomfield Avenue, Elm Street	N/A	3.30
Orange Road	N/A	Township of Montclair	Bell Street, Bloomfield Avenue	Harrison Avenue, Union Street	0.47
Harrison Avenue	N/A	Township of Montclair	Orange Road, Union Street	Franklin Avenue	1.00
Bloomfield Avenue	CR 506, CR 527, NJ 159	Township of West Caldwell	N/A	N/A	4.62
Central Avenue	CR 631	Township of West Caldwell	Bloomfield Avenue	Grandview Avenue	2.16
Northfield Avenue	CR 508	Township of West Orange	N/A	N/A	0.89
Mount Pleasant Avenue	CR 577, CR 660, NJ 10	Township of West Orange	N/A	N/A	3.11
Washington Street	CR 671	Township of West Orange	N/A	N/A	0.44
Franklin Avenue	N/A	Township of West Orange	N/A	N/A	0.72
Pleasant Valley Way	CR 636	Township of West Orange	Lakeside Avenue	Curtis Avenue, Hooper Avenue, Lenape Trail	1.68
Pleasant Valley Way	CR 636	Township of West Orange	Elmwood Avenue, Lenape Trail	Cherry Lane, Northfield Avenue	2.11

Figure 12: Essex County Regional Network



Hudson County

Analysis Inputs

Nearly the entirety of Hudson County has high bicycle trip potential, scoring 90-100 throughout all municipalities except for the eastern portion of Town of Kearny, portions of Town of Secaucus bordering Town of Kearny and Bergen County, and the portions of City of Bayonne and Jersey City on the harbor by the Upper Bay of the Hudson River. Most of these exceptions still have high trip potential with scores of 50 or greater, except for eastern Kearny which is low-scoring due to its industrial land use.

High-crash intersections and corridors from the Network Screening Analysis are spread throughout the County in Jersey City, City of Bayonne, Town of Harrison, Weehawken Township, City of Hoboken, and North Bergen Township. Through Jersey City's Bicycle Master Plan, Let's Ride JC¹⁷, the City has implemented several bike facilities to create a grid of protected lanes and a dense network of neighborhood greenways that covers many of the top crash locations. Jersey City's Pedestrian Enhancement Plan¹⁸ also prioritized some corridors that overlap with the top crash locations, such as Sip Ave by John F. Kennedy Blvd. The half-mile buffer around the regional network covers all high-crash locations throughout the County.

Table 5 shows the most predominant EJ populations in Hudson County by census block. The OBC census block groups in Hudson County largely consist of minority or low-income/minority populations – almost all municipalities within Hudson County have both populations. There are several small pockets of minority/limited English populations in Town of Kearny, Jersey City, and Union City. The same is true for low-income populations in Town of Kearny, Town of Secaucus, and City of Bayonne. Combined low-income/minority/limited English populations are present in Jersey City, Union City, and Town of West New York. While most of Town of Harrison, Town of Kearny, Town of Secaucus, and North Bergen Township consist of minority populations, most of Jersey City and Weekhawken Township have low-income/minority populations.

The regional network connects to the vast majority of these communities. Where the network does not connect, the areas are significantly less populated (such as the northwest part of North Bergen Township, southwest part of Town of Secaucus, the eastern part of Town of Kearny, and the harbor along the Hudson River in City of Bayonne and Jersey City).

Table 5: Overburdened Communities in Hudson County

OBC Category	Number of census blocks
Low Income	6
Low Income and Minority	166
Low Income, Minority, and Limited English	16
Minority	227
Minority and Limited English	4

¹⁷ City of Jersey City (2019). Let's Ride JC: Bicycle Master Plan. Retrieved from https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_6189660/File/Community/Transportation/LetsRideJCMasterPlan-FinalDraft%206.16.19_09_30.pdf

¹⁸ City of Jersey City (2018). Pedestrian Enhancement Plan Final Report. Retrieved from https://www.njtpa.org/NJTPA/media/Documents/Planning/Subregional-Programs/Studies/Jersey%20City%20Pedestrian%20Enhancement%20Plan/JCPEP_Final_Report_FINAL_053018.pdf?ext=.pdf

Public Feedback

The public drew 88 lines on the webmap covering every municipality in Hudson County. Sixty-six lines are where people would like to walk or bike, 42 lines are where people currently walk or bike, 41 lines are where people want more space to bike, and 41 lines are where safer crossings are desired. There were also many comments regarding aggressive driving and vehicle speeding, as well as poor sidewalk or pavement conditions. Nearly two-thirds of the webmap responses are in Jersey City. There were also several responses in the eastern part of the county in Town of Harrison and Town of Kearny, as well as in City of Bayonne. While many comments focused on local issues, several comments spanned across municipal lines (such as between North Bergen Township, Town of West New York, and Union City; between Jersey City and Town of Kearny, City of Bayonne, Town of Secaucus, and Union City) or county lines (for example, connections to Essex and Passaic) – requesting the development of regional trails and bike lanes, noting locations where people wanted to walk or bike, and commenting on the difficulty of getting between neighboring municipalities due to lack of active transportation infrastructure when municipalities are otherwise geographically close.

Existing Network and Proposed Improvements

There are many bike lanes in Hudson County, mostly in Jersey City and City of Hoboken. Jersey City has bike facilities along several groups of parallel streets. City of Hoboken is similar, though it has several perpendicular segments to form a more gridded bike network. Through the northeast to southwest connection that would run the length of the county, the regional network would connect to many existing bike facilities in these two cities, as well as to bike lanes in Town of West New York, Union City, and City of Bayonne. The proposed Hackensack Riverwalk would span the west side of Hudson County from Town of Secaucus in the north to City of Bayonne in the south, via Jersey City. The Passaic River Waterfront Walkway is a proposed trail on the west side of Hudson County that would extend the existing Kearny Riverwalk from Town of Kearny to Town Harrison. On the other side of the county, the existing Hudson River Waterfront Walkway, which forms part of the September 11th National Memorial Trail, runs from North Bergen Township in the north to City of Bayonne in the south, via Town of West New York, Weehawken Township, City of Hoboken, and Jersey City. Through the regional network half-mile buffer, there are multiple connections to both the Hackensack Riverwalk and the Hudson River Waterfront Walkway in each municipality. Additionally, the regional network connects to the Essex Hudson Greenway, a 9-mile proposed rail trail project that connects to Liberty State Park, as well as to the entire length of the Kearny Riverwalk.

The regional network overlaps with all NJ TRANSIT commuter and light rail lines in Hudson County and most stops:

- Hoboken to 8th Street: 8th Street, E 22nd Street, E 34th Street, E 45 Street, Liberty State Park, Jersey Avenue
- Tonnelle to West Side: West Side Avenue, Martin Luther King Drive, Garfield Avenue, Lincoln Harbor, Bergenline Avenue, Tonnelle Avenue
- North Jersey Coast Line: Hoboken Terminal

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers within Hudson County. The network also serves most of the light rail system in City of Bayonne, Jersey City, City of Hoboken, Weehawken Township, Union City, and North Bergen Township. These active transportation corridors could serve as alternatives to transit when there are delays or other service issues.

Table 6 lists all roads in Hudson County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such

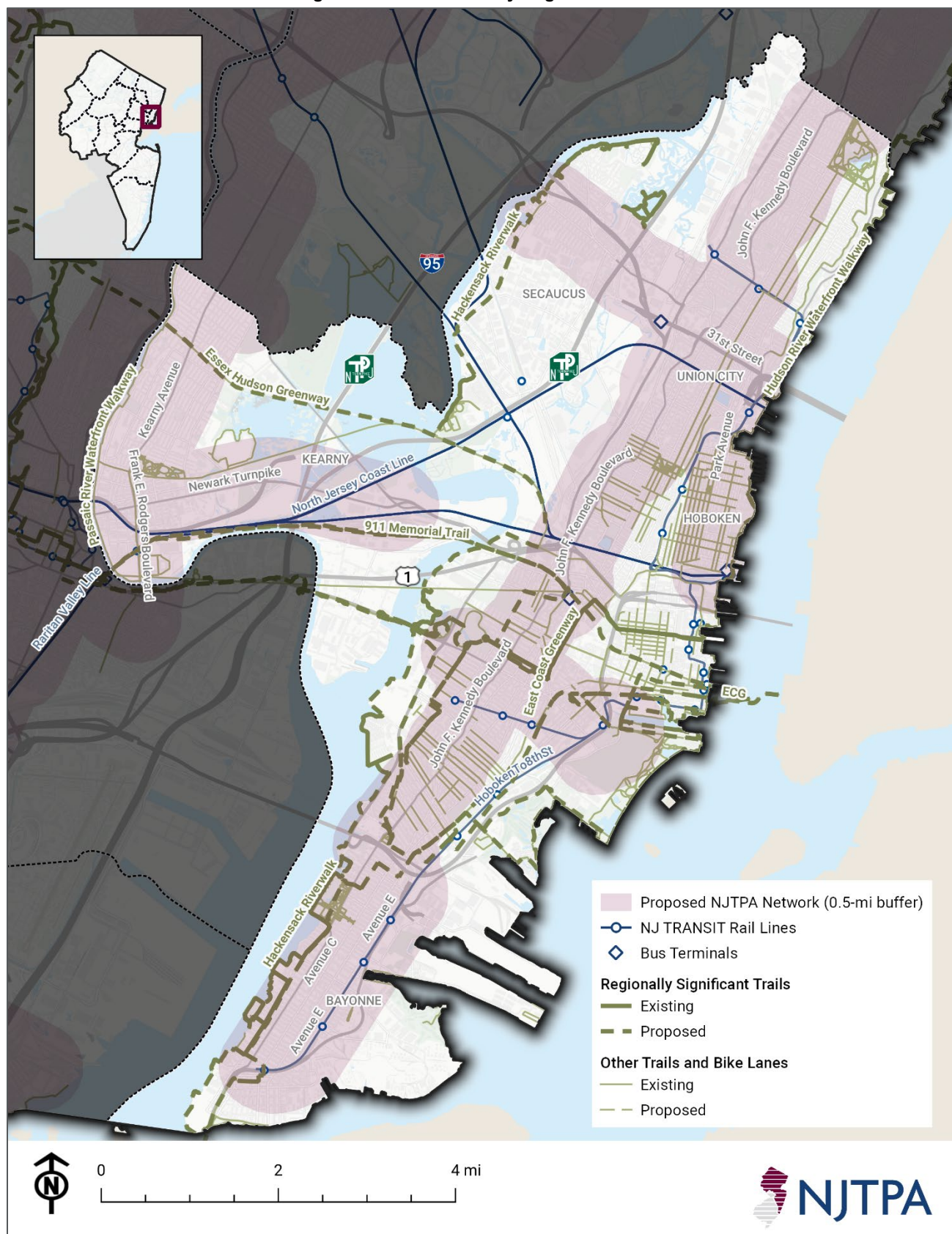
as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

Table 6: Hudson County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Avenue E	N/A	City of Bayonne	N/A	N/A	2.57
N/A	N/A	City of Bayonne	John F. Kennedy Boulevard	Avenue C	0.26
Avenue C	N/A	City of Bayonne	North Street, West 8th Street	N/A	2.79
Park Avenue	N/A	City of Hoboken	19th Street, John F. Kennedy Boulevard East	14th Street	0.44
Washington Street	N/A	City of Hoboken	Observer Highway, Vezzetti Way	14th Street	1.25
John F. Kennedy Boulevard	CR 501	City of Jersey City	N/A	N/A	7.71
Communipaw Avenue	N/A	City of Jersey City	Mallory Avenue	Johnston Avenue	1.95
Phillip Street	N/A	City of Jersey City	N/A	Audrey Zapp Drive, Jersey Avenue, Johnston Avenue	0.42
31st Street	N/A	City of Union City	Cantello Street, Hudson Avenue	John F Kennedy Boulevard, John F. Kennedy Boulevard	0.50
South Marginal Highway	N/A	City of Union City	30th Street, 32nd Street, Palisade Avenue	John F. Kennedy Boulevard East	0.37
30th Street	N/A	City of Union City	John F Kennedy Boulevard	32nd Street, Palisade Avenue, South Marginal Highway	0.44
Frank E. Rodgers Boulevard	CR 697	Town of Harrison	Kearny Avenue	Jackson Street	1.28
Harrison Avenue	CR 508	Town of Harrison	Bridge Street, Waterfront Walkway	Newark Turnpike, Schuyler Avenue	1.07
Newark Turnpike	CR 508	Town of Kearny	N/A	N/A	0.33
Newark Turnpike	CR 508	Town of Kearny	N/A	N/A	2.55
Kearny Avenue	CR 697	Town of Kearny	Frank E. Rodgers Boulevard	Midland Avenue	1.45
Kearny Avenue	CR 697	Town of Kearny	N/A	Belleville Turnpike, Ridge Road	0.68
Belleville Turnpike	CR 506, CR 507, NJ 7	Town of Kearny	Kearny Avenue, Ridge Road	Elm Street	0.40
Paterson Plank Road	N/A	Town of Secaucus	N/A	N/A	1.77

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Front Street	N/A	Town of Secaucus	Humboldt Street, Plaza Center	10th Street	0.62
John F Kennedy Boulevard	CR 501	Township of North Bergen	31st Street, John F. Kennedy Boulevard	31st Street, John F. Kennedy Boulevard	0.18
N/A	N/A	Township of North Bergen	N/A	N/A	0.30
John F. Kennedy Boulevard	CR 501	Township of North Bergen	N/A	N/A	3.95
Union Turnpike	N/A	Township of North Bergen	39th Street, Bergen Turnpike	Paterson Plank Road	0.34
John F. Kennedy Boulevard East	N/A	Township of Weehawken	North Marginal Highway	19th Street, Park Avenue	0.64

Figure 13: Hudson County Regional network



Hunterdon County

Analysis Inputs

The majority of Hunterdon County has low trip potential, with scores below 30, indicating that demand for bicycle trips is low. Large areas of higher potential include Raritan Borough, Flemington Borough, Lebanon Borough, High Bridge Borough, Town of Clinton, Clinton Township and City of Lambertville, with smaller pockets of demand in Milford Borough, Hampton Borough, Califon Borough, Frenchtown Borough, and Bloomsbury Borough. The regional network connects to almost all of these communities. It also links population centers to regional destinations like the Spruce Run Recreation Area, which webmap responses highlighted as an important destination in need of better active transportation access.

There are no high-crash bicycle or pedestrian corridors in Hunterdon County, and only one high-crash intersection, at North Main Street and Walter Foran Boulevard in Flemington Borough; the regional network overlaps with this location.

Table 7 shows the most predominant EJ populations in Hunterdon County by census block. There are only five census block groups in Hunterdon County where EJ populations are present: in Readington Township (low-income), Clinton Township (minority), High Bridge Borough (minority), and Flemington Borough (low-income/minority). The regional network connects to all of these communities except for the census block group in Clinton Township, which is already served by the Columbia Trail and Springside Farm Trail; these existing trails also connect to the regional network.

Table 7. Overburdened Communities in Hunterdon County

OBC Category	Number of census blocks
Low Income and Minority	2
Minority	3

Public Feedback

Most webmap responses for Hunterdon County focused on dangerous conditions for people walking and bicycling along the county’s roads. These include US 22 and NJ 31 as well as local roads intersecting those highways, and County Roads 512 and 513 in Califon. The regional network highlights the importance of these roads and/or parallel routes, where appropriate, for regional connectivity of active transportation facilities.

Other comments highlighted the need for improvements on the Delaware and Raritan Canal State Park Trail (D&R Canal Trail), which follows the county’s border with Pennsylvania along the Delaware River. The D&R Canal Trail is a major active transportation corridor, connecting to Phillipsburg in the north and Trenton in the south, with multiple crossings over the river connecting to Pennsylvania’s Delaware Canal Towpath. Respondents suggested safety improvements at the crossing on Bridge Street in Lambertton, and a D&R Canal Trail extension in Milford Borough. Along with the Columbia Trail, the D&R Canal Trail comprises Hunterdon County’s existing trail network.

Existing Network and Proposed Improvements

The regional network would dramatically expand upon Hunterdon County’s current infrastructure, and it would add redundancy to existing routes. For example, adding active transportation facilities on or next to CR 513 would provide a paved on-road alternative to the Columbia Trail for winter travelers, when the trail is often inaccessible due to snow and ice. Most of the county’s existing trails and bike lanes are disconnected and isolated from population centers and regional destinations. The regional network would stitch these segments together with

routes that traverse the entire county, following major corridors such as US 202, US 22, NJ 172, NJ 31, NJ 12, and many county roads as well.

The NJ TRANSIT Raritan Valley Line, which ends in High Bridge Borough, overlaps with the regional network at all stations in Hunterdon County. While transit is less prevalent in Hunterdon County than more urban parts of the region, this overlap provides a strong opportunity to improve first- and last-mile connections from train stations to population centers, specifically High Bridge Borough, Annandale, Lebanon Borough, and White House, all of which overlap with high bicycle trip potential.

Table 8 lists all roads in Hunterdon County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

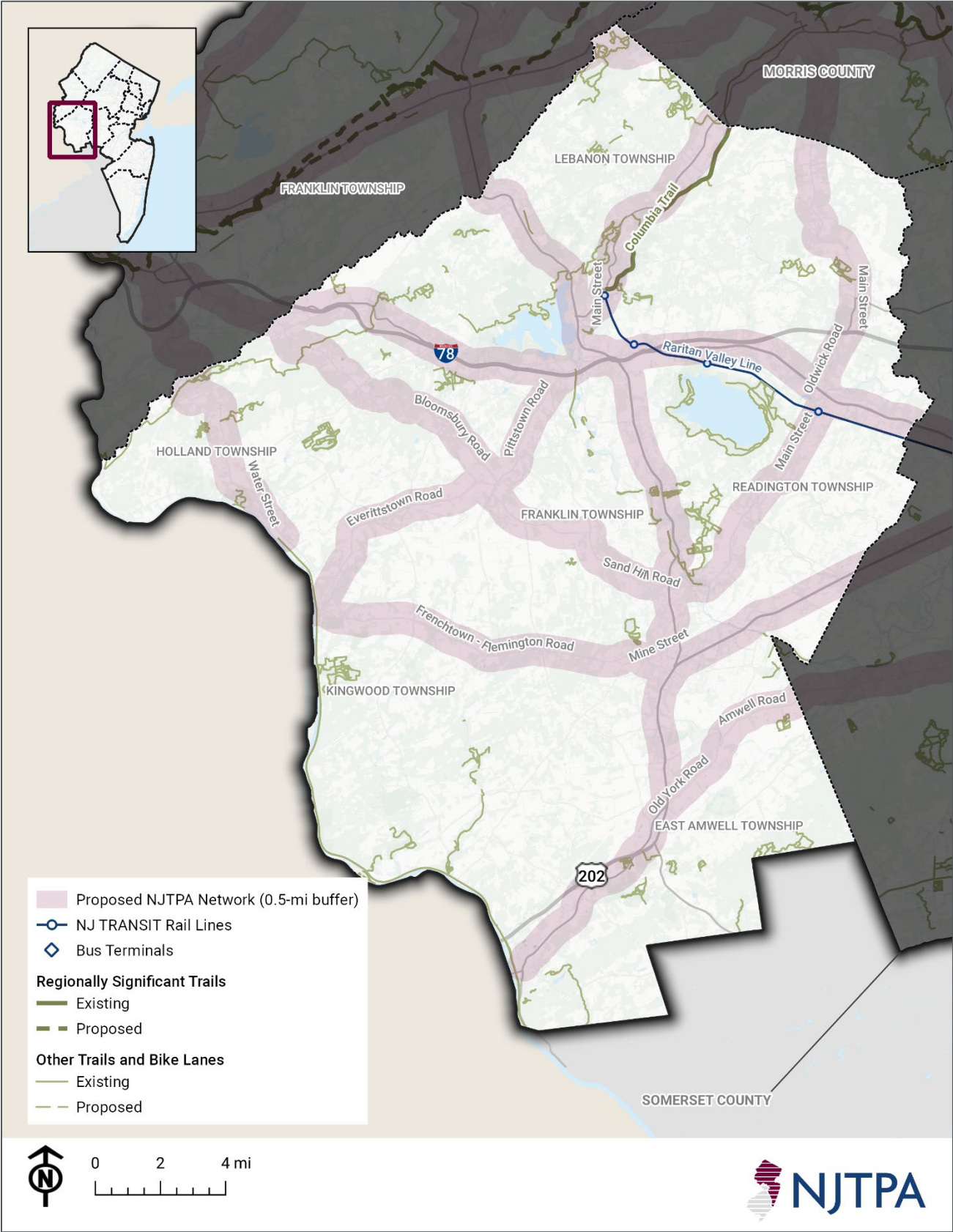
Table 8: Hunterdon County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	N/A	Borough of Bloomsbury	Brunswick Pike	N/A	0.59
Church Street	CR 579	Borough of Bloomsbury	Bloomsbury Road	N/A	0.48
Packer Avenue	NJ 12	Borough of Flemington	N/A	N/A	0.21
N/A	N/A	Borough of Flemington	US 202	NJ 31	0.26
Parker Avenue	NJ 12	Borough of Flemington	N/A	N/A	0.25
Mine Street	CR 523	Borough of Flemington	N/A	N/A	0.66
Park Avenue	CR 523	Borough of Flemington	North Main Street, Walter E. Foran Boulevard	Mine Street	0.53
Kingwood Avenue	NJ 12	Borough of Frenchtown	Race Street	Frenchtown Flemington Road	0.78
Everittstown Hill Road	CR 513	Borough of Frenchtown	Milford Road, Race Street	Everittstown Road	0.82
West Main Street	CR 513	Borough of High Bridge	Bridge Street	W. Main Street	1.08
Fairview Avenue	CR 513	Borough of High Bridge	Church Street, Mill Street	High Bridge - Califon Road	0.83
Water Street	CR 519	Borough of Milford	Milford - Warren Glen Road	Bridge Street, Frenchtown Road	0.73
Frenchtown Road	CR 619	Borough of Milford	Milford - Mount Pleasant Road, NJ State Long Trail	Milford - Frenchtown Road, NJ State Long Trail, Stamets Road	0.82
Old Highway 22	CR 513, NJ 173	Town of Clinton	N/A	N/A	1.21
West Main Street	NJ 173	Town of Clinton	Union Road	Village Road	0.39
West Main Street	CR 513, NJ 173	Town of Clinton	Pittstown Road	Old Highway 22 (CR 513)	0.36
Everittstown Road	CR 513	Township of Alexandria	N/A	Everittstown Hill Road	6.52
Bloomsbury Road	CR 579	Township of Bethlehem	N/A	Church Street	1.13
Brunswick Pike	NJ 173	Township of Bethlehem	N/A	N/A	4.05
N/A	N/A	Township of Bethlehem	Bloomsbury Road	Bloomsbury Road, Turkey Hill Road	0.61
N/A	NJ 31	Township of Clinton	Halstead Street	Walter E. Foran Boulevard	9.06
Route 31 (CR 513)	CR 513, NJ 31	Township of Clinton	N/A	N/A	0.62
Route 31 Southbound	NJ 31	Township of Clinton	N/A	Country Club Drive	0.50
Beaver Avenue	CR 626	Township of Clinton	Grayrock Road	N/A	1.20

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Old York Road	CR 514, CR 579, NJ 179	Township of East Amwell	N/A	N/A	5.07
Quakertown Road	CR 579, CR 616	Township of Franklin	Cherryville Road	Pittstown Road	3.48
Pittstown Road	CR 513, CR 579, NJ 173	Township of Franklin	N/A	N/A	4.65
Cherryville Road	CR 617	Township of Franklin	Klinesville Road	Quakertown Road	0.51
Milford - Warren Glen Road	CR 519	Township of Holland	N/A	Water Street	5.13
Frenchtown Flemington Road	NJ 12	Township of Kingwood	Frenchtown Flemington Road; Baptistown Road, Kingwood Own Road	Kingwood Avenue	2.18
Frenchtown Flemington Road	NJ 12	Township of Kingwood	Fitzer Road, Frenchtown - Flemington Road, Old State Route 12	Frenchtown Flemington Road; Baptistown Road, Lower Oak Grove Road	0.61
N/A	NJ 31	Township of Lebanon	N/A	N/A	5.63
Penwell Road	N/A	Township of Lebanon	N/A	Pleasant Grove Road	1.72
High Bridge - Califon Road	CR 513	Township of Lebanon	Fairview Avenue	Califon - Chester Road, School Street, Sliker Road	4.44
High Bridge-Califon Road	CR 513	Township of Lebanon	Califon - Chester Road, Maple Lane	Califon-Chester Road	0.64
Califon - Chester Road	CR 513	Township of Lebanon	High Bridge - Califon Road, School Street, Sliker Road	High Bridge-Califon Road, Maple Lane	0.75
N/A	NJ 31, US 202	Township of Raritan	N/A	N/A	4.28
US 202	NJ 31, US 202	Township of Raritan	N/A	N/A	1.69
Walter E. Foran Boulevard	CR 523	Township of Raritan	N/A	N/A	0.50
Frenchtown - Flemington Road	CR 523, NJ 12	Township of Raritan	N/A	N/A	7.33
Klinesville Road	CR 617	Township of Raritan	Cherryville Klinesville Road, Norton Drive, Quail Ridge Drive	Cherryville Road	1.39
Amwell Road	CR 514	Township of Raritan	Cloverhill Road, Rainbow Hill Road	Old York Road	2.04
Sand Hill Road	CR 612	Township of Raritan	Cherryville Klinesville Road, Thatchers Hill Road	Bartles Corner Road	1.32
Bartles Corner Road	CR 612	Township of Raritan	N/A	Flemington Road, Flemington - Whitehouse Road	0.58

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	US 22	Township of Readington	Phillipsburg-Newark Expressway	France Drive	9.85
N/A	US 202	Township of Readington	N/A	N/A	4.83
Oldwick Road	CR 523	Township of Readington	N/A	N/A	3.75
Flemington Whitehouse Road	CR 523	Township of Readington	Woodschurch Road	Flemington - Whitehouse Road	1.91
Flemington - Whitehouse Road	CR 523	Township of Readington	Pleasant Run Road, Springtown Road, Stanton Road	Main Street	1.75
Flemington Whitehouse Road	CR 523	Township of Readington	Flemington - Whitehouse Road, Pleasant Run Road, Springtown Road, Stanton Road	Flemington Whitehouse Road, Woodschurch Road	1.13
Main Street	CR 523	Township of Readington	Flemington - Whitehouse Road	Old Hwy 28	2.80
Old Turnpike Road	CR 517	Township of Tewksbury	Beacon Light Road, Fairmount Road	Church Street, King Street, Main Street	5.33
Main Street	CR 517	Township of Tewksbury	Lamington Road, Oldwick Road	Church Street, King Street, Old Turnpike Road	0.46
Village Road	N/A	Township of Union	N/A	N/A	0.71
N/A	NJ 173	Township of Union	N/A	N/A	4.45
Bloomsbury Road	CR 579	Township of Union	Pittstown Road	N/A	6.98
N/A	NJ 179	Township of West Amwell	Washington Street	Old York Road	5.24

Figure 14: Hunterdon County Regional Network



Middlesex County

Analysis Inputs

Middlesex County has high bicycle trip potential throughout the county in every municipality. Very high trip potential communities include North Brunswick Township, City of New Brunswick, Piscataway Township, Middlesex Borough, Dunellen Borough, South Plainfield Borough, Highland Park Borough, Edison Township, Metuchen Borough, Woodbridge Township, Carteret Borough, and City of Perth Amboy. There are pockets of high demand (with a bike trip potential score of 70+) in large parts of Plainsboro Township, Cranbury Township, Old Bridge Township, Sayreville Borough, East Brunswick Township, Milltown Borough, and City of South Amboy, as well as western Monroe Township and South Brunswick Township. The regional network connects to all these communities.

High-crash intersections and corridors from the Network Screening Analysis are largely concentrated in City of New Brunswick, plus several high-crash locations in Edison Township, Woodbridge Township, City of Perth Amboy, and Plainsboro Township. The half-mile regional network buffer overlaps with all Network Screening Analysis crash locations.

Table 9 shows the most predominant EJ populations in Middlesex County by census block. Most of Middlesex County has at least one category of Overburdened Community. OBC census block groups consist largely of minority populations, which are present in every municipality except Cranbury Township. These groups are located in most of Plainsboro Township, South Brunswick Township, North Brunswick Township, Piscataway Township, South Plainfield Borough, and Woodbridge Township; as well as significant portions of Monroe Township, Old Bridge Township, East Brunswick Township, Sayreville Borough, Metuchen Borough, Carteret Borough, and City of South Amboy. Most of City of New Brunswick and City of Perth Amboy have low-income/minority populations and there are scattered areas of low-income/minority populations in North Brunswick Township, Middlesex Borough, Dunellen Borough, Edison Township, Woodbridge Township, Carteret Borough, and Old Bridge Township. The regional network covers most of these areas. Additionally, there are small pockets of low-income groups in Monroe Township, South River Borough, East Brunswick Township, Milltown Borough, Edison Township, City of New Brunswick, Middlesex Borough, and Old Bridge Township; as well as small pockets of low-income/minority/limited English populations in East Brunswick Township, North Brunswick Township, City of New Brunswick, and City of Perth Amboy, all of which overlap with the regional network.

Table 9. Overburdened Communities in Middlesex County

OBC Category	Number of census blocks
Low Income	9
Low Income and Minority	68
Low Income, Minority, and Limited English	7
Minority	321

Public Feedback

There were 25 webmap responses in Middlesex County distributed across Plainsboro Township, South Brunswick Township, Middlesex Borough, Piscataway Township, Edison Township, Metuchen Borough, Woodbridge Township, City of Perth Amboy, City of South Amboy, Sayreville Borough, and Old Bridge Township. Some comments noted locations where people wanted to walk and bike, such as Route 1 and New Road in South Brunswick Township, and Scotts Corner Road in Plainsboro Township. Several comments in Piscataway Township focused on the need for an I-287 crossing, which the regional network provides. Other comments

focused on connections to or along the Middlesex Greenway (between Metuchen Borough and Woodbridge Township), envisioned East Coast Greenway and September 11th National Memorial Trail (along Raritan River between Edison Township and Woodbridge Township), the Henry Hudson Trail (in Monmouth County), and proposed connection between Roosevelt Park Path and Merrill County Park Path (between Edison Township and Woodbridge Township). Connections included local parks such as Roosevelt Park Path and Merrill County Park Path. The regional network addresses many of the webmap suggestions.

Existing Network and Proposed Improvements

The Middlesex Greenway is the only regionally significant trail in Middlesex County, which runs east-west from Woodbridge Township to Metuchen Borough via Edison Township. The Middlesex Greenway Access Plan¹⁹ recommends bike and pedestrian access improvements on several roadways around the Greenway, as well as several proposed trail connections that would extend or connect to the trail. The regional network aligns with the proposal to provide a northeast-southwest connection perpendicular to the trail around Route 1. Additionally, the network would provide a north-south perpendicular connection across the trail, linking several communities in the western part of the county to the Middlesex Greenway. There are some bike paths and planned bike lanes in Plainsboro Township, East Brunswick Township, and Piscataway Township – which would connect to the regional network. There are also several parks with trails throughout the county, such as Thompson Park in Monroe Township, Roosevelt Park in Edison Township, Davidson's Mill Pond Park in South Brunswick Township, and William Warren Park in Woodbridge Township. The regional network makes connections to each of these parks. Overall, proposed corridors have the potential to connect all of Middlesex County's communities, creating many more options for people walking and bicycling.

The proposed network overlaps with two NJ TRANSIT commuter lines and several stops in Middlesex County:

- Northeast Corridor: Edison, Metropark
- North Jersey Coast Line: South Amboy, Perth Amboy, Woodbridge

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers within Middlesex County. Additionally, a major north-south regional network connection from Woodbridge Township to South Brunswick Township (via Edison Township, Metuchen Borough, City of New Brunswick, North Brunswick Township) could serve as an alternative to transit along the Northeast Corridor when there are delays or other service issues.

Table 10 lists all roads in Middlesex County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

¹⁹ Together North Jersey (2014). Middlesex Greenway Access Plan and Health Impact Assessment. Retrieved from <https://s3.us-east-1.amazonaws.com/rpa-org/pdfs/TNJ-Middlesex-Greenway-Access-Plan.pdf>

Table 10: Middlesex County Regional Network Corridors

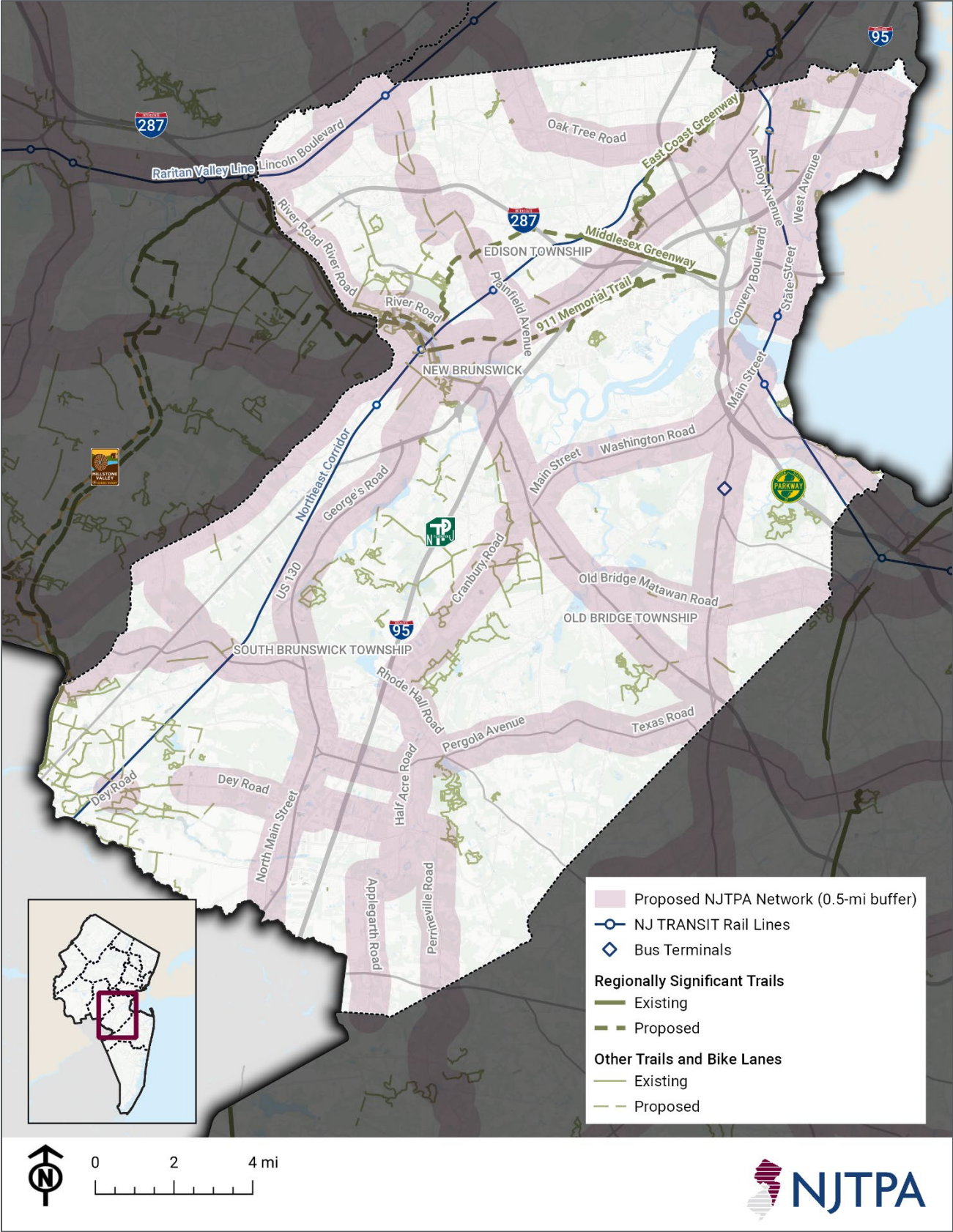
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Industrial Road	N/A	Borough of Carteret	Harrison Avenue, Roosevelt Avenue	Peter J. Sica Industrial Highway, Roosevelt Avenue	1.65
Roosevelt Avenue	CR 602	Borough of Carteret	N/A	N/A	1.64
Roosevelt Avenue	CR 602, CR 604	Borough of Carteret	Arthur Avenue, Edwin Street, Port Reading Avenue	Industrial Road, Peter J. Sica Industrial Highway	0.77
New Market Road	CR 665	Borough of Dunellen	South Washington Avenue	Lakeview Avenue, William Street	1.05
North Avenue	NJ 28	Borough of Dunellen	Bound Brook Road, Grove Street	Jefferson Avenue, West Front Street	0.69
River Road	CR 622	Borough of Highland Park	N/A	N/A	0.52
Woodbridge Avenue	CR 514	Borough of Highland Park	N/A	N/A	1.02
Raritan Avenue	CR 514, NJ 27	Borough of Highland Park	Albany Street Bridge	6th Avenue, North 6th Avenue, Woodbridge Avenue	0.75
Gatzmer Avenue	CR 522, CR 615	Borough of Jamesburg	Half Acre Road	Browns Hall Road, Dayton Road, Pergola Street	0.38
Warrenville Road	N/A	Borough of Middlesex	Bound Brook Road, Smalley Avenue	N/A	0.49
River Road	CR 622	Borough of Middlesex	N/A	Lincoln Boulevard	0.83
Lincoln Boulevard	CR 607, CR 622	Borough of Middlesex	East Main Street	South Lincoln Avenue	2.23
Bound Brook Road	NJ 28	Borough of Middlesex	North Lincoln Avenue, South Lincoln Avenue	Grove Street, North Avenue	1.16
South Lincoln Avenue	CR 607	Borough of Middlesex	Bound Brook Road, North Lincoln Avenue	Lincoln Boulevard	0.45
Washington Road	CR 535	Borough of Sayreville	Main Street, Raritan Street, Washington Avenue	Vet Memorial Bridge	4.32
Park Avenue	CR 531	Borough of South Plainfield	N/A	Oak Tree Road	1.70
Main Street	CR 535	Borough of South River	Vet Memorial Bridge	Cranbury Road, Old Bridge Turnpike	1.42
Johnson Drive	N/A	City of New Brunswick	N/A	N/A	0.35
N/A	N/A	City of New Brunswick	N/A	N/A	0.35

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
George Street	CR 527, NJ 172	City of New Brunswick	N/A	N/A	0.49
French Street	CR 644, NJ 27	City of New Brunswick	N/A	N/A	1.10
Hamilton Street	CR 514	City of New Brunswick	George Street, Johnson Drive	Woodbridge Street	0.76
Easton Avenue	CR 514, CR 527	City of New Brunswick	Albany Street, French Street	N/A	1.27
Somerset Street	NJ 27	City of New Brunswick	School Avenue	How Lane, Lincoln Highway, Veronica Avenue	0.56
Donald Goodkind Bridge	US 1	City of New Brunswick	N/A	N/A	0.37
Paul Robeson Boulevard	N/A	City of New Brunswick	Suydam Street	George's Road, Sandford Street	0.35
Morris Goodkind Bridge	US 1	City of New Brunswick	N/A	N/A	0.36
State Street	CR 611	City of Perth Amboy	New Brunswick Avenue, Smith Street	West Avenue	2.84
Convery Boulevard	NJ 35	City of Perth Amboy	N/A	N/A	2.29
Smith Street	CR 656	City of Perth Amboy	Convery Boulevard	Front Street	1.38
Main Street	CR 684	City of South Amboy	N/A	N/A	1.30
Upper Main Street	N/A	City of South Amboy	N/A	N/A	0.42
Washington Avenue	CR 670, CR 684	City of South Amboy	Main Street, Raritan Street, Washington Road	Main Street, Thompson Street	0.62
South Main Street	CR 535, CR 539, CR 615	Township of Cranbury	North Main Street	N/A	1.23
North Main Street	CR 535	Township of Cranbury	South Main Street	N/A	1.31
Dey Road	CR 614	Township of Cranbury	Scotts Corner Road	South River Road	3.25
North Main Street	CR 539	Township of Cranbury	N/A	Brick Yard Road	0.32
Cranbury Road	CR 535	Township of East Brunswick	N/A	N/A	0.86
N/A	SR 18	Township of East Brunswick	N/A	N/A	10.24
Cranbury Road	CR 535	Township of East Brunswick	N/A	N/A	3.15
N/A	US 1	Township of Edison	N/A	N/A	8.28
Woodbridge Avenue Extension	CR 514	Township of Edison	N/A	N/A	0.15
Plainfield Avenue	CR 529	Township of Edison	N/A	Mindy Lane, Stelton Road	2.04

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Oak Tree Road	CR 604	Township of Edison	Green Street, Lincoln Highway	Park Avenue	3.73
Union Valley Road	CR 615	Township of Monroe	Applegarth Road, Cranbury Station Road	Union Valley-Half Acre Road	0.97
Forsgate Drive	CR 612, NJ 32	Township of Monroe	Buckelew Avenue, East Railroad Avenue	N/A	3.44
Rhode Hall Road	CR 522	Township of Monroe	Cranbury-South River Road, Ridge Road	Browns Hall Road	1.00
Half Acre Road	CR 615	Township of Monroe	Prospect Plains Road	Gatzmer Avenue	2.37
Union Valley-Half Acre Road	CR 615	Township of Monroe	Union Valley Road	Prospect Plains Road	1.25
Matchaponix Avenue	CR 612	Township of Monroe	Pergola Avenue, Spotswood-Gravel Hill Road	Texas Road	1.94
Butcher Road	CR 619	Township of Monroe	Applegarth Road	Disbrow Hill Road	1.04
Prospect Plains Road	CR 614	Township of Monroe	N/A	N/A	3.15
Pergola Avenue	CR 612	Township of Monroe	Buckelew Avenue	Matchaponix Avenue, Spotswood-Gravel Hill Road	1.61
Perrineville Road	CR 625	Township of Monroe	Prodelin Way	Prospect Plains Road	3.90
Applegarth Road	CR 619	Township of Monroe	Butcher Road	Cranbury Station Road, Union Valley Road	2.40
George's Road	NJ 171, US 130	Township of North Brunswick	Paul Robeson Boulevard, Sandford Street	US 130	5.66
Lincoln Highway	NJ 27	Township of North Brunswick	Gallop Lane	N/A	1.65
Lincoln Highway	NJ 27	Township of North Brunswick	Larose Avenue	N/A	0.52
Spring Valley Road	N/A	Township of Old Bridge	N/A	N/A	0.60
Old Bridge Matawan Road	CR 516	Township of Old Bridge	N/A	N/A	6.19
Texas Road	CR 520	Township of Old Bridge	Matchaponix Avenue	Marlboro Road	2.98
Marlboro Road	CR 520	Township of Old Bridge	Texas Road	N/A	0.42
N/A	NJ 35	Township of Old Bridge	US 9	County Road	4.24
N/A	US 9	Township of Old Bridge	Texas Road	NJ 35	8.09
Washington Avenue	CR 665	Township of Piscataway	N/A	N/A	0.48
River Road	CR 622	Township of Piscataway	N/A	N/A	0.21
River Road	CR 622	Township of Piscataway	N/A	Orange	1.48

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
River Road	CR 622	Township of Piscataway	Hoes Lane West, Johnson Drive	Runyon Avenue	1.74
Promenade Boulevard	N/A	Township of South Brunswick	N/A	N/A	1.35
Monmouth Junction Road	CR 522	Township of South Brunswick	N/A	N/A	1.35
Monmouth Junction Road	CR 522	Township of South Brunswick	N/A	N/A	2.29
New Road	N/A	Township of South Brunswick	N/A	N/A	2.84
N/A	US 130	Township of South Brunswick	N/A	N/A	5.97
Cranbury-South River Road	CR 535	Township of South Brunswick	Cranbury Road, Dunhams Corner Road, Helmetta Boulevard	Rhode Hall Road, Ridge Road	1.86
US 130	US 130	Township of South Brunswick	George's Road	N/A	0.53
Lincoln Highway	NJ 27	Township of South Brunswick	Main Street, Raymond Road	N/A	0.51
Lincoln Highway	NJ 27	Township of South Brunswick	N/A	N/A	0.44
Main Street	NJ 27	Township of South Brunswick	Kingston Terrace	Lincoln Highway, Raymond Road	0.25
St. George's Avenue	NJ 35	Township of Woodbridge	N/A	N/A	2.24
Randolph Avenue	CR 602	Township of Woodbridge	Blair Road, Roosevelt Avenue	Hart Street	0.39
Green Street	CR 604	Township of Woodbridge	N/A	Lincoln Highway, Oak Tree Road	1.36
Port Reading Avenue	CR 604	Township of Woodbridge	N/A	Arthur Avenue, Edwin Street, Roosevelt Avenue	1.98
Port Reading Avenue	CR 604	Township of Woodbridge	Rahway Avenue	Watson Avenue	0.28
Rahway Avenue	CR 514, CR 604	Township of Woodbridge	East Green Street, Green Street	Randolph Avenue, Woodbridge Road	2.74
Amboy Avenue	CR 653, NJ 35	Township of Woodbridge	Convery Boulevard	St. George's Avenue	1.69
West Avenue	CR 611	Township of Woodbridge	State Street	Port Reading Avenue	1.38
Green Street	CR 604	Township of Woodbridge	Barron Avenue	Amboy Avenue	0.28

Figure 15: Middlesex County Regional Network



Monmouth County

Analysis Inputs

Areas with high trip potential in Monmouth County are confined to the heavily populated corridor along the coast, between Matawan Borough in the north, through Red Bank Borough, City of Long Branch, and City of Asbury Park, and down to Manasquan Borough in the south. In the center of the county, Freehold Borough also has high demand for bicycle trips. The regional network connects all of these communities to each other, with multiple proposed routes through the densely developed part of the county on the shore, and several routes connecting further inland to smaller communities and adjacent counties.

All four of the County’s high-crash intersections are in Red Bank Borough and overlap with the regional network. There are three high-crash pedestrian corridors, one in City of Middletown, which is not part of the regional network, and two in Howell Township, which are connected to the network.

Table 11 shows the most predominant EJ populations in Monmouth County by census block. Census block groups with EJ populations are spread throughout Monmouth County, although they are less numerous than EJ populations in neighboring Middlesex and Ocean Counties. Minority census block groups are more common than other EJ categories, and are concentrated in Upper Freehold Township, Freehold Borough, Marlboro Township, Holmdel Township, Neptune Township, and several other smaller communities. Low-income/minority populations are mostly present along the shore, as well as in Colts Neck Township, Keyport Borough, Freehold Borough, and Red Bank Borough. The regional network connects either directly or runs parallel to all EJ communities in Monmouth County.

Table 11: Overburdened Communities in Monmouth County

OBC Category	Number of census blocks
Low Income	19
Low Income and Minority	38
Low Income, Minority, and Limited English	2
Minority	48

Public Feedback

Of the 30 webmap comments received for Monmouth County, the majority are along the shore, particularly in City of Asbury Park. Respondents confirm that many shore towns (Mantoloking Borough, Point Pleasant Borough, Manasquan Borough, Lavallette Borough, Brielle Borough, Sea Girt Borough, Belmar Borough) would all benefit greatly from designated bike facilities or trails, as well as more sidewalks. During the summer these towns see a significant increase in tourist activity, and many visitors, seasonal workers, and residents rely on active transportation for local travel. Other respondents noted that bike lane design varies considerably among shore communities and there is a lack of continuity along the coast for regional travelers.

Intersection improvements, safer pedestrian crossings, and more sidewalks were also a theme among Monmouth County webmap responses, both along the shore and further inland. The public also identified US, state, and county roads as barriers to biking and walking, particularly due to dangerous crossing conditions. Lastly, several respondents voiced the need for improvements and repairs along the Henry Hudson Bike Trail.

Existing Network and Proposed Improvements

The Henry Hudson Bike Trail is the only regionally significant active transportation facility in Monmouth County. Spanning 24 miles from Atlantic Highlands Borough to Freehold Borough, it connects communities in the northern

part of the county to commercial areas, recreational destinations, and shore attractions. It also contains several major gaps that the regional network would fill in.²⁰ The Union Transportation Trail spans nine miles across the far western portion of Monmouth County, connecting Hornerstown, Polhemustown, and other small communities in Upper Freehold Township. It is not connected to the rest of the county. The regional network would link the Union Transportation Trail to points north via the Monmouth Road corridor.

The rest of the county's existing network is confined mostly to unpaved hiking and nature trails in recreational areas, which do not serve an active transportation purpose. There are also several bike lanes along the shore, but these are disconnected and do not span the length of the county, as noted in public feedback. The regional network includes a continuous corridor spanning the length of the county that would connect all shore communities.

The regional network overlaps with two NJ TRANSIT commuter lines and several stops in Monmouth County:

NJ TRANSIT's North Jersey Coast line serves all shore communities as well as Hazlet Township, Middletown Township, Red Bank Borough, and other inland destinations. Many commuter rail stations overlap with the regional network, including: Hazlet, Red Bank, Long Branch, Elberon, Allenhurst, Asbury Park, Bradley Beach, Belmar, Spring Lake, Manasquan.

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers on the Jersey Shore and elsewhere in Monmouth County. In addition to transit connections, the regional network would add multiple north-south and east-west routes, both along the shore and in the western part of the county. These additions would create many more options for people walking and bicycling in Monmouth County, for visitors and year-round residents alike.

Table 12 lists all roads in Monmouth County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

²⁰ NJ TRANSIT has a study underway to expand the Henry Hudson Bike Trail, which includes:

1. Phase 1A-Matawan Creek Bridge – NJ TRANSIT is using State funding and working with Monmouth County to reconstruct a 400' trestle bridge to accommodate bicycle and pedestrian crossing, effectively extending the Henry Hudson Bike Trail to the Matawan Region High School neighborhood.
2. Phase 1B – NJ TRANSIT is looking to use repurposed CMAQ funds to construct an ADA compliant trail on an existing abandoned trestle off the main ROW used for the Henry Hudson Bike Trail. This spur trail would connect the Matawan Region High School neighborhood to the Aberdeen Matawan train station.
3. Phase 2 – NJ TRANSIT will consider a connection on the Keyport (north) portion of the trail. In addition to working with Monmouth County, there is a high level of rail operations planning that would be required to consider an off-road continuation of the Henry Hudson trail, and additional environmental permitting. No work on this has been initiated at this point other than new topographic survey.

Both Phase 1A and Phase 2 may require exploration of complete street alternatives.

Table 12: Monmouth County Regional Network Corridors

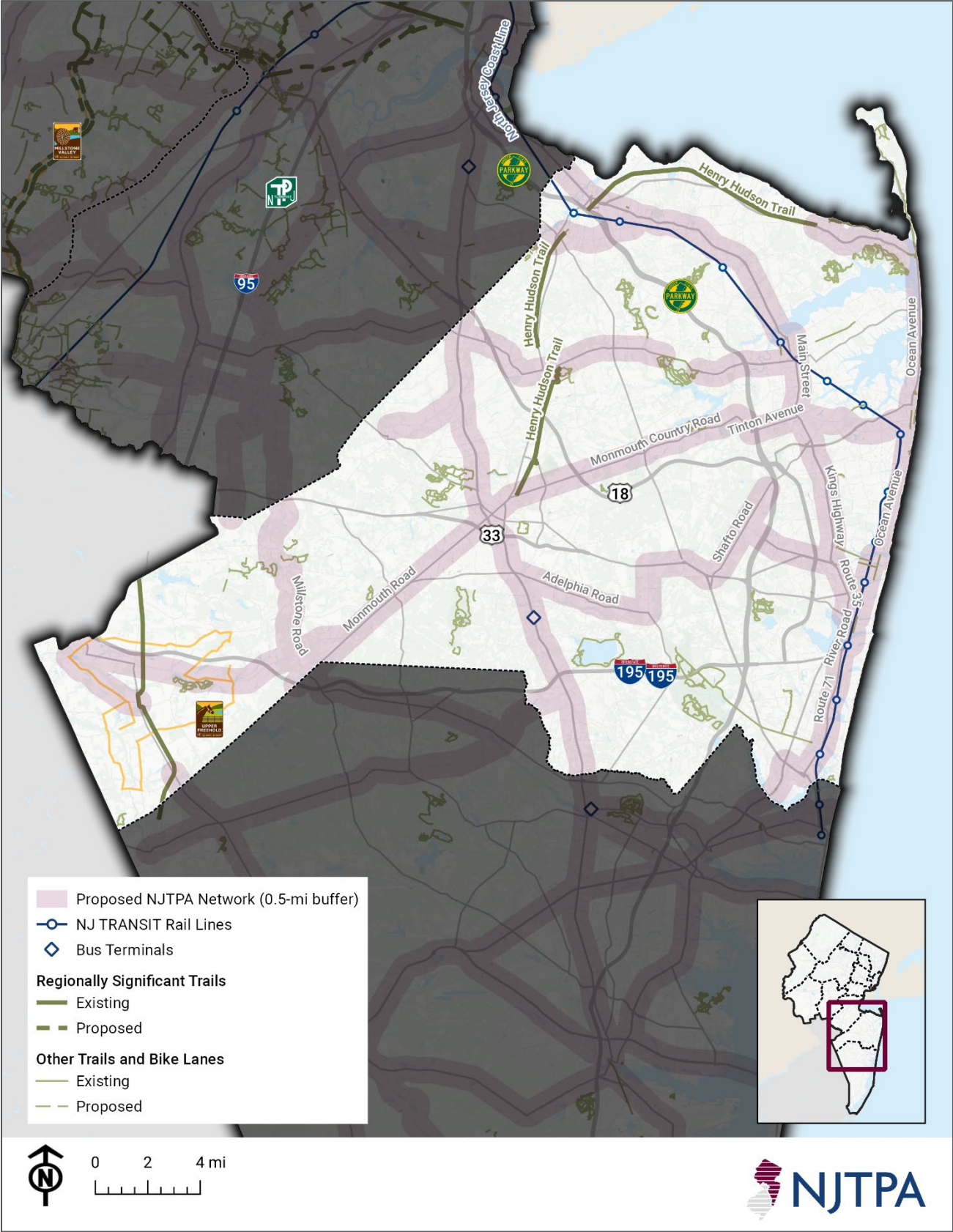
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Ocean Avenue North	N/A	Borough of Allenhurst	Neptune Avenue, Ocean Avenue	Elberon Avenue, Ocean Avenue South	0.36
1st Avenue	N/A	Borough of Atlantic Highlands	Sutton Walk	Memorial Parkway, Valley Drive East	0.49
8th Avenue	NJ 71	Borough of Belmar	River Road	River Road	0.16
River Road	NJ 35, NJ 71	Borough of Belmar	N/A	N/A	0.80
Main Street	NJ 71	Borough of Belmar	8th Avenue	Poole Avenue	0.45
Main Street	NJ 71	Borough of Bradley Beach	Lakeside Avenue	South Main Street	0.89
Union Avenue	NJ 71	Borough of Brielle	N/A	N/A	1.13
Ocean Avenue	CR 57	Borough of Deal	Ocean Boulevard	Neptune Avenue, Ocean Avenue North	3.19
Main Street	NJ 35	Borough of Eatontown	N/A	N/A	1.65
Broad Street	CR 537, CR 547, NJ 35, NJ 71	Borough of Eatontown	Eatontown Boulevard, Monmouth Road	Avenue of Memories, Main Street, Tinton Avenue	1.43
Tinton Avenue	CR 537	Borough of Eatontown	Avenue of Memories, Broad Street, Main Street	Trotters Way, Wayside Road	1.85
North Main Street	CR 35	Borough of Farmingdale	Colts Neck Road	Main Street, West Main Street	0.37
West Main Street	CR 524	Borough of Farmingdale	Main Street, North Main Street	Adelphia Road	0.34
East Main Street	CR 537	Borough of Freehold	Broadway Road, Center Street, Spring Street, West Main Street	N/A	0.53
West Main Street	CR 537, NJ 79	Borough of Freehold	Broadway Road, Center Street, East Main Street, Spring Street	N/A	1.76
Navesink Avenue	NJ 36	Borough of Highlands	Memorial Parkway, Miller Street	Memorial Parkway, Portland Road	0.38
West Sylvania Avenue	NJ 35	Borough of Neptune City	N/A	N/A	1.34
Eatontown Boulevard	CR 547	Borough of Oceanport	Broadway, Springfield Avenue	Broad Street, Monmouth Road	0.83
Riverside Avenue	NJ 35	Borough of Red Bank	West Front Street	North Bridge Avenue, Rector Place	0.36

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Broad Street	CR 11	Borough of Red Bank	East Front Street, West Front Street	Main Street, Pinckney Road	0.83
West Front Street	CR 10, NJ 35	Borough of Red Bank	Riverside Avenue	Broad Street, East Front Street	0.26
Ocean Avenue	NJ 36	Borough of Sea Bright	Hartshorne Drive	Ocean Boulevard North	4.92
7th Avenue	NJ 71	Borough of Sea Girt	Parker Avenue, Sea Girt Avenue	Jersey Avenue, Route 71	0.80
Main Street	CR 520, NJ 35	Borough of Shrewsbury	Broad Street, Pinckney Road	Avenue of Memories, Broad Street, Tinton Avenue	2.33
Route 71	NJ 71	Borough of Spring Lake Heights	7th Avenue, Jersey Avenue	H Street	2.56
Tinton Avenue	CR 537	Borough of Tinton Falls	N/A	N/A	0.76
Shafto Road	CR 547	Borough of Tinton Falls	Wyckoff Road	Tormee Drive	3.93
Deal Lake Drive	NJ 71	City of Asbury Park	Main Street	Ocean Avenue	0.61
Main Street	NJ 71	City of Asbury Park	South Main Street	N/A	1.10
Ocean Boulevard North	NJ 36	City of Long Branch	Joline Avenue, Ocean Boulevard	Joline Avenue, Ocean Boulevard	0.70
Ocean Boulevard	CR 57	City of Long Branch	Melrose Terrace	Melrose Terrace	1.16
Ocean Boulevard	CR 57	City of Long Branch	N/A	N/A	0.24
Broadway	CR 547	City of Long Branch	2nd Avenue, South Broadway, Union Avenue	Eatontown Boulevard, Springfield Avenue	2.39
Church Street	CR 45	Township of Aberdeen	Henry Hudson Bike Trail	Bethany Road, Line Road	1.23
New Brunswick Avenue	CR 516	Township of Aberdeen	Broad Street, Main Street	N/A	0.64
Monmouth Country Road	CR 537	Township of Colts Neck	School Road East	N/A	6.31
N/A	N/A	Township of Colts Neck	Colts Neck Road	Monmouth Country Road, School Road East	0.44
US Highway 9	US 9	Township of Freehold	N/A	South Street	0.59
Elton Adelpia Road	CR 524	Township of Freehold	N/A	Adelpia-Farmingdale Road, Spy Glass Hill Road	0.46
Monmouth Road	CR 524, CR 537	Township of Freehold	N/A	Hospital Drive, Iron Bridge Road, West Main Street	6.76
Colts Neck Road	CR 537	Township of Freehold	Harding Road, Wilson Avenue	N/A	1.68

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
West Main Street	CR 537	Township of Freehold	Hospital Drive, Iron Bridge Road, Monmouth Road	N/A	0.76
N/A	N/A	Township of Freehold	Colts Neck Road, Harding Road, Wilson Avenue	East Main Street	0.39
Bethany Road	N/A	Township of Hazlet	Poole Avenue	Church Street, Line Road	2.01
East Main Street	CR 520	Township of Holmdel	Newman Springs Road, Old Mill Road	Cross Lane	0.45
N/A	N/A	Township of Howell	N/A	N/A	multiple
N/A	NJ 34	Township of Howell	N/A	N/A	2.83
Adelphia Road	CR 524	Township of Howell	Adelphia-Farmingdale Road, Wyckoff Mills Road	West Main Street	4.44
Aldrich Road	N/A	Township of Howell	N/A	N/A	1.37
Colts Neck Road	CR 35	Township of Howell	NJ 33, Route 33	North Main Street	1.42
Gordons Corner Road	CR 22	Township of Manalapan	Tennent Road	Main Street, Wilson Avenue	3.02
Newman Springs Road	CR 520	Township of Marlboro	N/A	East Main Street, Old Mill Road	4.40
Memorial Parkway	CR 8, NJ 36	Township of Middletown	N/A	N/A	3.22
N/A	NJ 35	Township of Middletown	N/A	N/A	10.31
Valley Drive East	NJ 36	Township of Middletown	N/A	N/A	0.48
Newman Springs Road	CR 520	Township of Middletown	N/A	N/A	4.98
Perrineville Road	CR 1	Township of Millstone	Millstone Road, Sweetmans Lane	Baird Road, Prodelin Way	1.16
Prodelin Way	N/A	Township of Millstone	Baird Road, Perrineville Road	Perrineville Road	2.11
Millstone Road	CR 571	Township of Millstone	Millstone Rd; Trenton Lakewood Rd, Trenton Lakewood Road	Perrineville Road, Sweetmans Lane	3.77
Trenton Lakewood Road	CR 526	Township of Millstone	Allentown Lakewood Road	Spring Road	2.09
Millstone Rd;Trenton Lakewood Rd	CR 526, CR 571	Township of Millstone	Cassville Road, Monmouth Road	Millstone Road, Trenton Lakewood Road	0.67
Paint Island Springs Road	N/A	Township of Millstone	Brookside Road, Carrs Tavern Road	Blueberry Hill, Monmouth Road	0.97

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Carrs Tavern Road	N/A	Township of Millstone	Spring Road	Brookside Road, Paint Island Springs Road	1.48
Route 35	NJ 35	Township of Neptune	N/A	N/A	1.92
South Main Street	NJ 71	Township of Neptune	Main Street	Main Street	0.42
Asbury Park Circle	CR 16, NJ 35	Township of Ocean	Asbury Avenue	Asbury Avenue	0.30
Kings Highway	NJ 35	Township of Ocean	N/A	N/A	4.31
Asbury Avenue	CR 16, NJ 66	Township of Ocean	N/A	N/A	4.82
County Road 526 Spur	CR 526 Spur	Township of Upper Freehold	North Main Street	Allentown - Lakewood Road, Galloping Brook Drive	0.44
High Street	CR 539	Township of Upper Freehold	Forked River Road, Sharon Station Road	Yardville - Allentown Road	3.30
Allentown Lakewood Road	CR 43, CR 526	Township of Upper Freehold	Trenton Lakewood Road	Allentown - Lakewood Road, Sharon Station Road	4.14
Allentown - Lakewood Road	CR 526	Township of Upper Freehold	Allentown Lakewood Road, Sharon Station Road	Waker Street	1.93
Waker Street	CR 526	Township of Upper Freehold	Allentown - Lakewood Road	N/A	0.27
Forked River Road	CR 539	Township of Upper Freehold	Monmouth Road, Pinehurst Road	Union Transportation Trail	0.57

Figure 16: Monmouth County Regional Network



Morris County

Analysis Inputs

Many municipalities in Morris County have high bicycle trip potential, scoring 50 and above. There are high pockets of demand, scoring 70 and above, in all of Town of Dover, Town of Boonton, Madison Borough, Chatham Borough, Butler Borough, and Netcong Borough; in most of Florham Park Borough, Denville Township, Parsippany-Troy Hills Township, Lincoln Park Borough, Pequannock Township, East Hanover Township, and Hanover Township; and in parts of Roxbury Township, Jefferson Township, Kinnelon Borough, Montville Township, Chatham Township, Morris Township, Mine Hill Township, Randolph Township, and Long Hill Township. The majority of Rockaway Borough, Jefferson Township, Washington Borough, Chester Borough, Mendham Borough, and Harding Township have low trip potential (scoring under 50), although some areas are known to attract a lot of recreational cyclists such as the Great Swamp Ride in Harding Township.

Several high-crash intersections are concentrated in the Town of Dover and Town of Boonton. There is a high-crash corridor in Chester Borough along Main Street. The half-mile regional network buffer overlaps with all Network Screening Analysis crash locations in Morris County.

Table 13 shows the most predominant EJ populations in Morris County by census block. Overburdened community census block groups in Morris County consist mostly of minority and combined low-income/minority populations. There is a high concentration of minority populations in Wharton Borough, Mine Hill Township, and Parsippany-Troy Hills Township. Smaller minority populations are in Florham Park Borough, Madison Borough, Jefferson Township, Montville Township, Town of Boonton, Hanover Township, Morris Township, Town of Morristown, Mount Olive Township, Roxbury Township, Town of Dover, and Randolph Township. Low-income/minority populations are present in Mount Olive Township, Roxbury Township, Town of Dover, Parsippany-Troy Hills Township, and Morris Township. OBC groups cover all of Town of Dover and Wharton Borough. The regional network connects to most of these locations.

Table 13: Overburdened Communities in Morris County

OBC Category	Number of census blocks
Low Income	1
Low Income and Minority	14
Low Income, Minority, and Limited English	2
Minority	68
Minority and Limited English	1

Public Feedback

There were 35 webmap responses in Morris County in several municipalities. Comments included requests for safer spaces to walk, bike, and cross (including locations where drivers speed or are aggressive towards pedestrians) to parks and recreation areas, train stations, retail areas/shops, as well as schools and community centers (particularly in Mount Olive Township, Netcong Borough, Wharton Borough, Parsippany-Troy Hills Township, Morris Plains Borough, and Morris Township). Requests also focused on connections between Netcong Borough and neighboring Roxbury Township and Mount Olive Township, as well as between Town of Morristown, Morris Township, Chatham Borough, and Madison Borough. There were several complaints about lack of maintenance along a part of the Morris Canal Greenway in the northern part of Mount Olive Township. The regional network has the potential to address many of the requests, including forming connections between Netcong Borough and neighboring municipalities.

Existing Network and Proposed Improvements

There are several regional active transportation corridors in Morris County. Foremost, the Morris Canal Greenway is a preserved, historic right-of-way providing an east-west connection through the entire state – traversing the central part of Morris County from Lincoln Park to Mount Olive Township, via Montville Township, Town of Boonton, Boonton Township, Denville Township, Rockaway Borough, Rockaway Township, Town of Dover, Wharton Borough, Roxbury Township, and Netcong Borough. The NJTPA spearheaded the Morris Canal Working Group to coordinate the study and development of a continuous greenway facility for recreation and active transportation. The existing greenway connects all remaining segments of the original canal towpath, and many more projects are identified to fully restore connectivity and provide convenient access to regional active transportation opportunities.

The Patriots Path (also part of the September 11th National Memorial Trail) forms a major east-west connection. The path runs through the southern part of Morris County from East Hanover to Mount Olive, and travels through Hanover, Morristown, Morris, Mendham, Randolph, Chester Borough, Chester Township, and Washington. The Columbia Trail in Washington spans 15 miles and connects to High Bridge in neighboring Hunterdon County. There are three minor northeast-southwest trails: the Black River Wildlife Management Area Trail that travels from Chester Township to Randolph Township, the West Morris Greenway that extends the Black River Wildlife Management Area Trail north to Roxbury Township, and the Traction Line Recreation Trail that runs from Town of Morristown to Madison Borough. Additionally, there are several local trail systems, such as Randolph Township's Trails. The regional network connects to all these trails, forming new links to neighboring municipalities and counties. Additionally, the regional network connects to several local nature paths, including Pyramid Mountain Natural Historic Area in Montville Township, Hedden County Park in Mine Hill Township, Lewis Morris Park in Town of Morristown, and Freedom Park in Randolph Township.

The regional network overlaps with 13 NJ TRANSIT stations in Morris County across three commuter rail lines:

- Montclair-Boonton Line: Lincoln Park Borough, Towaco, Town of Boonton, Town of Dover, Mt Arlington Borough, Netcong Borough
- Morristown Line: Chatham Borough, Madison Borough, Town of Morristown, Morris Plains Township
- Gladstone Branch: Gillette, Stirling

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers and residential areas within Morris County. Additionally, several parts of the regional network overlap with the Morristown Line (from Chatham Borough to Madison Borough, from Town of Morristown to Morris Plains Township) or parallel the line (from Town of Dover to Netcong Borough). Similarly, the network overlaps with the Montclair-Boonton Line (from Lincoln Park Borough to Town of Boonton, in Town of Dover) or parallel the line (from Mountain Lakes Borough to Denville Township). This will provide an alternative travel mode for when there are transit delays or issues.

Table 14 lists all roads in Morris County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

Table 14: Morris County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Main Street	CR 511	Borough of Butler	N/A	Elizabeth Street, River Place Walkway	0.63
West Main Street	CR 513	Borough of Chester	Old Route 24 (Washington Turnpike)	Lackawanna Place, Main Street (Old Rt. 24), Patriots Path	0.59
Columbia Turnpike	CR 510	Borough of Florham Park	N/A	N/A	4.91
Ridgedale Avenue	CR 608, CR 632	Borough of Florham Park	N/A	N/A	2.47
Boonton Avenue	CR 511	Borough of Kinnelon	N/A	N/A	8.19
Paterson – Hamburg Turnpike	NJ 23	Borough of Kinnelon	Paterson - Hamburg Turnpike	N/A	1.34
Green Village Road	CR 647	Borough of Madison	Main Street	Shunpike Road, Southern Boulevard	1.31
Main Street	NJ 124	Borough of Madison	N/A	N/A	2.95
Hilltop Road	CR 525	Borough of Mendham	Mendham Road, Mountain Avenue	Bernardsville Road	1.49
Bernardsville Road	CR 525	Borough of Mendham	Hilltop Road	County Line Road, Mendham Road	0.92
Mendham Road	CR 510	Borough of Mendham	Roxiticus Road, Washington Turnpike (Old Rt. 24)	Mendham Road (Old Rt. 24), Tempe Wick Road	2.06
Mendham Road (Old Rt. 24)	CR 510	Borough of Mendham	East Main Street	Mendham Road, Tempe Wick Road	0.26
Hanover Avenue	CR 650	Borough of Morris Plains	Burnham Road, Stiles Avenue, West Hanover Avenue	East Hanover Avenue, Speedwell Avenue	0.42
Howard Boulevard	CR 615	Borough of Mount Arlington	Espanong Road, Minnesink Road	Mount Arlington Road	4.69
N/A	N/A	Borough of Netcong	N/A	N/A	0.64
Flanders Road	N/A	Borough of Netcong	Flanders Drive	Bank Street	0.28
Ledgewood Avenue	US 46	Borough of Netcong	Barone Street, Ledgewood Road	N/A	0.25
Paterson-Hamburg Turnpike	CR 511 Alt, CR 694	Borough of Riverdale	N/A	Brandt Lane, Main Street	1.34
Newark-Pompton Turnpike	CR 511 Alt	Borough of Riverdale	Paterson-Hamburg Turnpike	Windbeam Road	0.95

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
West Main Street	CR 513	Borough of Rockaway	East Main Street, Wall Street	Dover Rockaway Road, Swede Mine Road	1.34
Church Street	CR 513	Borough of Rockaway	Dock Street, Wall Street	Halsey Avenue	0.33
Hibernia Avenue	CR 513	Borough of Rockaway	Halsey Avenue, Hoagland Avenue, White Meadow Avenue	Vanderhoof Avenue	0.32
West Union Turnpike	NJ 15	Borough of Wharton	N/A	N/A	0.75
Main Street	CR 511, US 202	Town of Boonton	Lathrop Avenue, Washington Street	Boonton Avenue	0.35
Washington Street	CR 511, US 202	Town of Boonton	Lathrop Avenue, Main Street	N/A	0.48
Prospect Street	CR 513	Town of Dover	West Blackwell Street	Reservoir Avenue, VanNostrand Avenue	0.66
N/A	N/A	Town of Dover	East McFarlan Street, E. McFarlan Street	Bloomfield Avenue	0.58
N/A	N/A	Town of Dover	West Blackwell Street	West McFarlan Street	0.25
West McFarlan Street	US 46	Town of Dover	N/A	East McFarlan Street, North Sussex Street	0.33
West Clinton Street	NJ 15	Town of Dover	West McFarlan Street	North Street, West Union Turnpike	1.00
W. Blackwell Street	US 46	Town of Dover	Hurd Street, Main Street	West Blackwell Street	0.44
South Salem Street	CR 665	Town of Dover	S. Salem Street	S. Salem Street	0.75
East Blackwell Street	CR 513	Town of Dover	North Sussex Street, West Blackwell Street	E. Blackwell Street	0.56
E. McFarlan Street	US 46	Town of Dover	Bergen Street, East McFarlan Street, Mount Hope Avenue	East McFarlan Street	0.36
Morris Street	CR 510	Town of Morristown	N/A	N/A	0.83
Spring Street	N/A	Town of Morristown	N/A	N/A	0.41
Madison Avenue	NJ 124	Town of Morristown	South Street	Kahn Road, Old Glen Road	1.18
Speedwell Avenue	US 202	Town of Morristown	N/A	Franklin Place, Grannis Avenue, Littleton Road	2.19
South Street	NJ 124	Town of Morristown	N/A	N/A	0.72
Washington Street	CR 510	Town of Morristown	Bank Street, North Park Place, West Park Place	Mendham Avenue (Old Rt. 24)	0.68
Morris Avenue	CR 510	Town of Morristown	Ford Avenue, Morris Street, Taft Lane	Columbia Road	0.66

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Green Village Road	CR 646	Township of Chatham	N/A	Dicksons Mill Road, Village Road	1.46
Lackawanna Place	US 206	Township of Chester	N/A	N/A	6.23
Main Street	CR 510, CR 513	Township of Chester	Budd Avenue, Grove Street, Hillside Road, Main Street (Old Rt. 24), Patriots' Path	Washington Turnpike	3.44
Old Chester-Gladstone Road	N/A	Township of Chester	N/A	N/A	1.09
North Road	CR 513	Township of Chester	Main Street, Oakdale Road, Patriots' Path	Dover - Chester Road, Hugg Road, Ironia Mendham Road, Patriots' Path	3.82
Old Route 24 (Washington Turnpike)	CR 513	Township of Chester	Old Route 24	West Main Street	0.71
Old Chester Road	N/A	Township of Chester	Old Chester-Gladstone Road, Ryan Court	Old Chester-Gladstone Road	1.37
Rt 10 East	NJ 10	Township of Denville	Rt 10 West	Franklin Road, Rt 10 West	0.71
West Mount Pleasant Avenue	NJ 10	Township of East Hanover	N/A	N/A	0.32
N/A	NJ 10	Township of Hanover	N/A	N/A	9.53
East Hanover Avenue	CR 650	Township of Hanover	N/A	N/A	0.43
North Jefferson Road	N/A	Township of Hanover	N/A	N/A	1.18
Park Avenue	N/A	Township of Hanover	Cedar Knolls Road, Warren Street	Whippany Road	0.28
South Jefferson Road	N/A	Township of Hanover	Patriots' Path	North Jefferson Road	0.84
Village Road	CR 646	Township of Harding	Glen Alpin Road	Dicksons Mill Road, Green Village Road	2.35
Glen Alpin Road	CR 646	Township of Harding	Mount Kemble Avenue, Tempe Wick Road	Village Road	1.68
Long Hill Road	CR 604	Township of Harding	Lee's Hill Road, Lees Hill Road	New Vernon Road	2.62
Mount Kemble Avenue	US 202	Township of Harding	Bank Street, MacCulloch Avenue, Market Street	Morristown Road	5.20
Lees Hill Road	CR 663	Township of Harding	Lee's Hill Road, Long Hill Road	Village Road	0.40
Newfoundland Road	NJ 23	Township of Jefferson	N/A	N/A	0.21
N/A	N/A	Township of Jefferson	N/A	N/A	0.57
Espanong Road	CR 615	Township of Jefferson	N/A	N/A	2.33

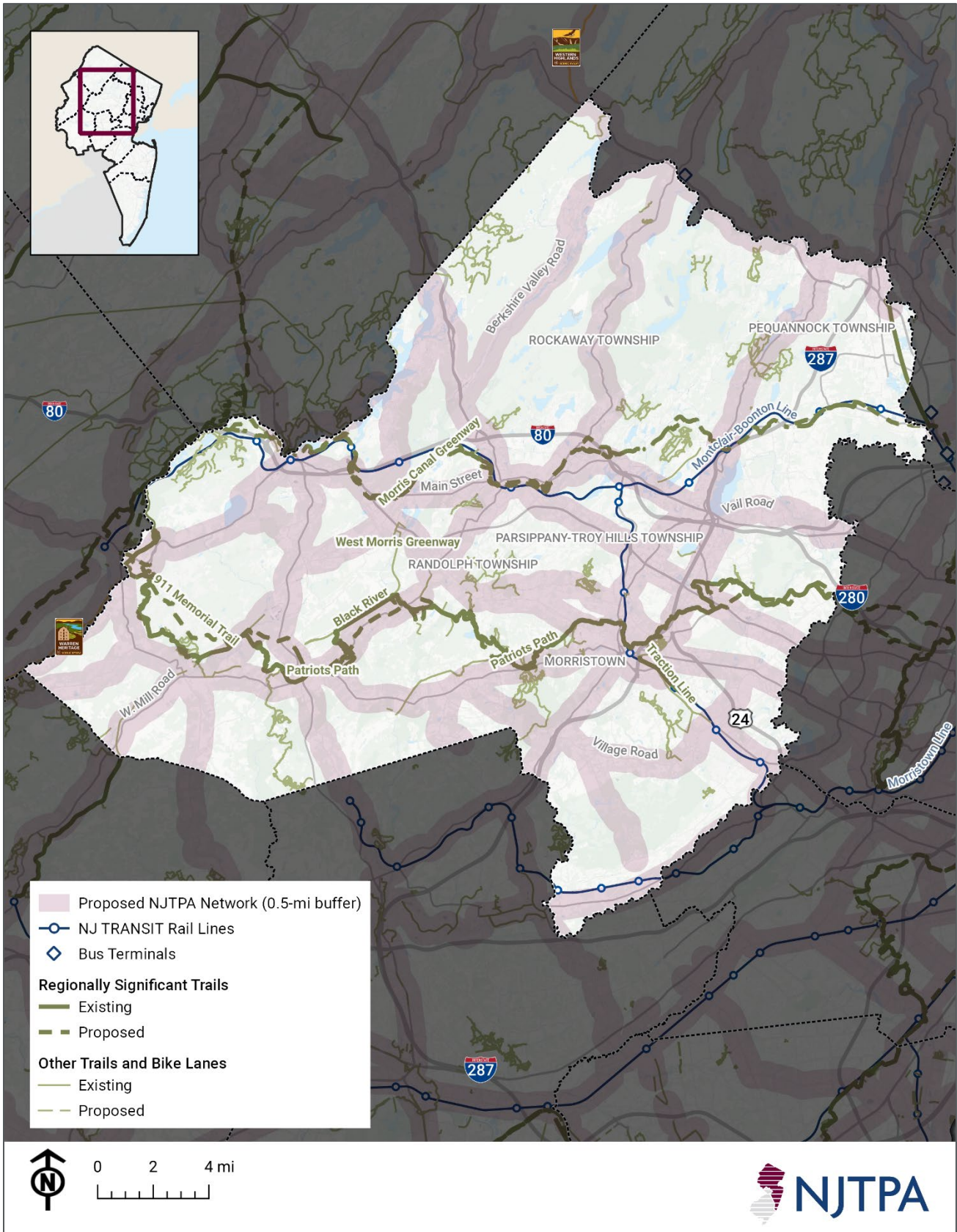
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	NJ 181	Township of Jefferson	Woodport Road	Espanong Road	1.61
Berkshire Valley Road	CR 699	Township of Jefferson	N/A	N/A	9.45
Rt 15 North	NJ 15	Township of Jefferson	Berkshire Valley Road	N/A	2.04
Hurdtown Trail	NJ 15	Township of Jefferson	N/A	Edison Road, Rt 15 South	0.51
Rt 15 South	NJ 15	Township of Jefferson	Edison Road, Hurdtown Trail	Berkshire Valley Road	2.09
N/A	N/A	Township of Jefferson	Rt 15 North	Bowling Green Parkway, Compton-Gobel Road	0.37
New Vernon Road	CR 604	Township of Long Hill	Meyersville Road	Long Hill Road	1.40
Valley Road	CR 512	Township of Long Hill	Springfield Avenue	River Road	4.30
Tempe Wick Road	CR 646	Township of Mendham	N/A	N/A	4.28
Mendham Road	NJ 24, CR 510	Township of Mendham	Washington-Mendham Road E. (Old Rt. 24)	East Main Street, Mendham Road (Old Rt. 24)	3.23
Washington Turnpike	CR 510	Township of Mendham	Main Street	Washington Turnpike (Old Rt. 24)	0.74
Main Street	US 46	Township of Mine Hill	W. Blackwell Street	Hurd Street, W. Blackwell Street	1.89
Bloomfield Avenue	NJ 159	Township of Montville	N/A	N/A	0.44
N/A	N/A	Township of Montville	N/A	N/A	0.98
Changebridge Road	CR 621	Township of Montville	Stiles Lane	N/A	1.23
Whippany Road	CR 511	Township of Morris	N/A	N/A	1.46
East Hanover Avenue	CR 650	Township of Morris	N/A	N/A	1.98
Washington-Mendham Road E. (Old Rt. 24)	CR 510	Township of Morris	Burnham Parkway, Mendham Avenue (Old Rt. 24)	N/A	1.62
Sussex Avenue	CR 617	Township of Morris	Speedwell Avenue	Mount Pleasant Road, Raynor Road, Sussex Turnpike	3.27
West Hanover Avenue	CR 650	Township of Morris	N/A	Burnham Road, Hanover Avenue, Stiles Avenue	0.71
Mendham Avenue (Old Rt. 24)	CR 510	Township of Morris	Washington Street	Burnham Parkway, Washington-Mendham Road E. (Old Rt. 24)	0.33
Normandy Parkway	N/A	Township of Morris	Madison Avenue	Columbia Road, Normandy Heights Road	0.63
Columbia Road	CR 510	Township of Morris	Morris Avenue	Columbia Turnpike, Wyndmoor Drive	1.00

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	US 46	Township of Mount Olive	N/A	N/A	9.42
Flanders Road	CR 667	Township of Mount Olive	Mount Olive Road	Drakesdale Road, Flanders Netcong Road	1.67
Flanders Netcong Road	CR 613	Township of Mount Olive	Drakesdale Road, Flanders Road	Main Street, U.S. Route 206	1.13
Sand Shore Road	N/A	Township of Mount Olive	Netcong Road	Woods Edge Avenue	0.78
U.S. Route 206	US 206	Township of Mount Olive	Gold Mine Road, Lackawanna Place	Flanders Netcong Road, Main Street	2.40
Hillside Avenue	CR 619	Township of Mount Olive	Eyland Avenue	North Road, Park Place	0.68
N/A	US 206	Township of Mount Olive	Flanders Netcong Road, Main Street, U.S. Route 206	Lackawanna Place	1.12
Netcong Road	N/A	Township of Mount Olive	N/A	Sand Shore Road	0.66
Bartley - Long Valley Road	CR 625	Township of Mount Olive	N/A	Bartley Road	0.27
North Road	CR 619	Township of Mount Olive	Main Street	Hillside Avenue, Park Place	0.27
N/A	US 46	Township of Parsippany-Troy Hills	N/A	N/A	5.87
Smith Road	N/A	Township of Parsippany-Troy Hills	N/A	N/A	0.54
Littleton Road	CR 630, US 202	Township of Parsippany-Troy Hills	N/A	N/A	5.83
Parsippany Boulevard	CR 511, US 202	Township of Parsippany-Troy Hills	N/A	N/A	1.80
Vail Road	N/A	Township of Parsippany-Troy Hills	N/A	N/A	2.85
Intervale Road	CR 511, US 202	Township of Parsippany-Troy Hills	Parsippany Boulevard	Fanny Road, Parsippany Boulevard	0.27
Jefferson Road	N/A	Township of Parsippany-Troy Hills	Smith Road	Parsippany Road	1.13
N/A	N/A	Township of Pequannock	N/A	Newark-Pompton Turnpike, Windbeam Road	0.69
Sussex Turnpike	CR 617	Township of Randolph	N/A	Mount Pleasant Road, Raynor Road, Sussex Avenue	6.07
West Hanover Avenue	CR 650	Township of Randolph	Brookside Road, Sussex Turnpike	N/A	3.30
Dover - Chester Road	CR 513	Township of Randolph	Quaker Church Road, Randolph Avenue	Guerin Drive	2.51

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Quaker Church Road	CR 513	Township of Randolph	Reservoir Avenue	Dover - Chester Road, Randolph Avenue	0.37
Reservoir Avenue	CR 513	Township of Randolph	Prospect Street, VanNostrand Avenue	Quaker Church Road	0.95
Dover - Chester Road	CR 513	Township of Randolph	Randolph Trails, South Road	Hugg Road, Ironia Mendham Road, North Road, Patriots' Path	0.64
Rt 10 West	NJ 10	Township of Randolph	Franklin Road, Rt 10 East	Rt 10 East, South Salem Street	0.71
N/A	NJ 15	Township of Rockaway	N/A	N/A	1.71
Green Pond Road	CR 513	Township of Rockaway	Hibernia Avenue	N/A	11.98
Bloomfield Avenue	US 46	Township of Rockaway	Woodland Avenue	N/A	0.90
NJ 15 North	NJ 15	Township of Rockaway	West Union Turnpike	Phillips Road	1.00
N/A	N/A	Township of Roxbury	N/A	N/A	0.44
N/A	N/A	Township of Roxbury	N/A	N/A	0.99
Lackawanna Place	NJ 183, US 206	Township of Roxbury	Gold Mine Road, U.S. Route 206	N/A	1.31
Ledgewood Road	CR 631, US 46	Township of Roxbury	N/A	N/A	0.45
Hillside Avenue	CR 619	Township of Roxbury	Eyland Avenue, Nyma Way	North Hillside Avenue, Route 10 East, Route 10 West	2.67
Route 10 East	NJ 10	Township of Roxbury	N/A	Eyland Avenue	1.44
Ledgewood Road	US 46	Township of Roxbury	N/A	Barone Street, Ledgewood Avenue	0.74
Route 10 West	NJ 10	Township of Roxbury	Eyland Avenue	Main Street, Route 10 East	1.31
Mount Arlington Road	N/A	Township of Roxbury	Mount Arlinton Road	Howard Boulevard	0.56
W. Blackwell Street	US 46	Township of Roxbury	Main Street	Jones Street	0.51
Schooleys Mountain Road (Old Rt. 24)	CR 517	Township of Washington	Newburg Road, Old Route 24	Fairmount Road, Old Route 24, W. Mill Road	4.01
Bartley Road	CR 625	Township of Washington	Old Route 24	Patriots' Path	1.99
Fairmount Road	CR 517	Township of Washington	Old Route 24, Schooleys Mountain Road (Old Rt. 24), W. Mill Road	Beacon Light Road, Old Turnpike Road	3.58
Pleasant Grove Road	N/A	Township of Washington	Penwell Road	Schooleys Mountain Road (Old Rt. 24)	3.73
Bartley Road	CR 625	Township of Washington	N/A	Bartley - Long Valley Road	1.27

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
W. Mill Road	CR 513	Township of Washington	Fairmount Road, Old Route 24, Schooleys Mountain Road (Old Rt. 24)	Califon-Chester Road	3.93
Old Route 24	CR 513	Township of Washington	Fairmount Road, Schooleys Mountain Road (Old Rt. 24), W. Mill Road	Old Route 24 (Washington Turnpike)	3.18
Old Route 24	CR 517	Township of Washington	N/A	Newburg Road, Schooleys Mountain Road (Old Rt. 24)	1.01

Figure 17: Morris County Regional Network



Ocean County

Analysis Inputs

Toms River and Lakewood Townships are the only communities in Ocean County with very high trip potential (above 90). Bicycle demand follows a similar pattern as in neighboring Monmouth County: strong potential up and down the shore, with less activity further inland and in the southwestern part of the county (although New Egypt, Jackson Township, and Manchester Township do show medium trip potential for bicycling). These communities are connected to the regional network.

All of Ocean County's nine bicycle or pedestrian high-crash areas are in Lakewood Township, with the exception of County Roads 571 and 528, in Manchester and Brick Townships, respectively. The regional network overlaps with each high-crash location, except for County Road 571.

Table 15 shows the most predominant EJ populations in Ocean County by census block. The vast majority of EJ census block groups in Ocean County are low-income, clustered around Lakewood Township, Manchester Township, and Toms River Township, with only a handful of minority locations around Toms River and Lakewood Townships, and some combined low-income/minority areas in those communities as well. With the exception of several census block groups in Manchester Township in the central part of the county and Little Egg Harbor Township at the southern tip of the county, the regional network connects to all EJ populations.

Table 15: Overburdened Communities in Ocean County

OBC Category	Number of census blocks
Low Income	66
Low Income and Minority	9
Minority	11
Minority and Limited English	1

Public Feedback

There were only four webmap responses for Ocean County, concentrated along the shore in Lavallette Borough and Toms River Township. All four comments voiced the need for trails or separated bicycle facilities in these locations, which would be especially beneficial during busy summer months. The regional network addresses many of these concerns, including a proposed corridor that parallels Barnegat Bay.

Existing Network and Proposed Improvements

Ocean County's existing network consists of the Barnegat Branch Trail, a 12-mile rail trail that runs from Barnegat Township to Bayville, with eventual plans to connect to Toms River Township.²¹ There are also several bike facilities throughout the county, including a sidepath on Lake Road in Manchester Township, bike lanes on Princeton Avenue in Brick Township, and bike lanes on NJ 35 in Seaside Heights Borough, Seaside Park Borough, and Lavallette Borough. The regional network would connect to these existing facilities. A proposed

²¹ A 2019 NJTPA study provided recommendations on safe pedestrian and bicycle linkages to the Barnegat Branch Trail in the northern portion of Ocean County, which the preliminary network also supports.

corridor parallel to US 9 would extend the Barnegat Branch Trail south to Tuckerton Borough and north to Toms River Township and Point Pleasant Borough. The regional network would also enhance connectivity further inland, connecting Plumsted Township and Jackson Township to shore communities as well as nearby areas in Monmouth County.

The NJ TRANSIT North Jersey Coast Line terminates in Bay Head Borough, in the northeastern tip of Ocean County. The two commuter rail stations in the county, at Bay Head and Point Pleasant Beach, both overlap with the regional network, providing an opportunity to improve first- and last-mile connections in these areas.

Table 16 lists all roads in Ocean County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

Table 16: Ocean County Regional Network Corridors

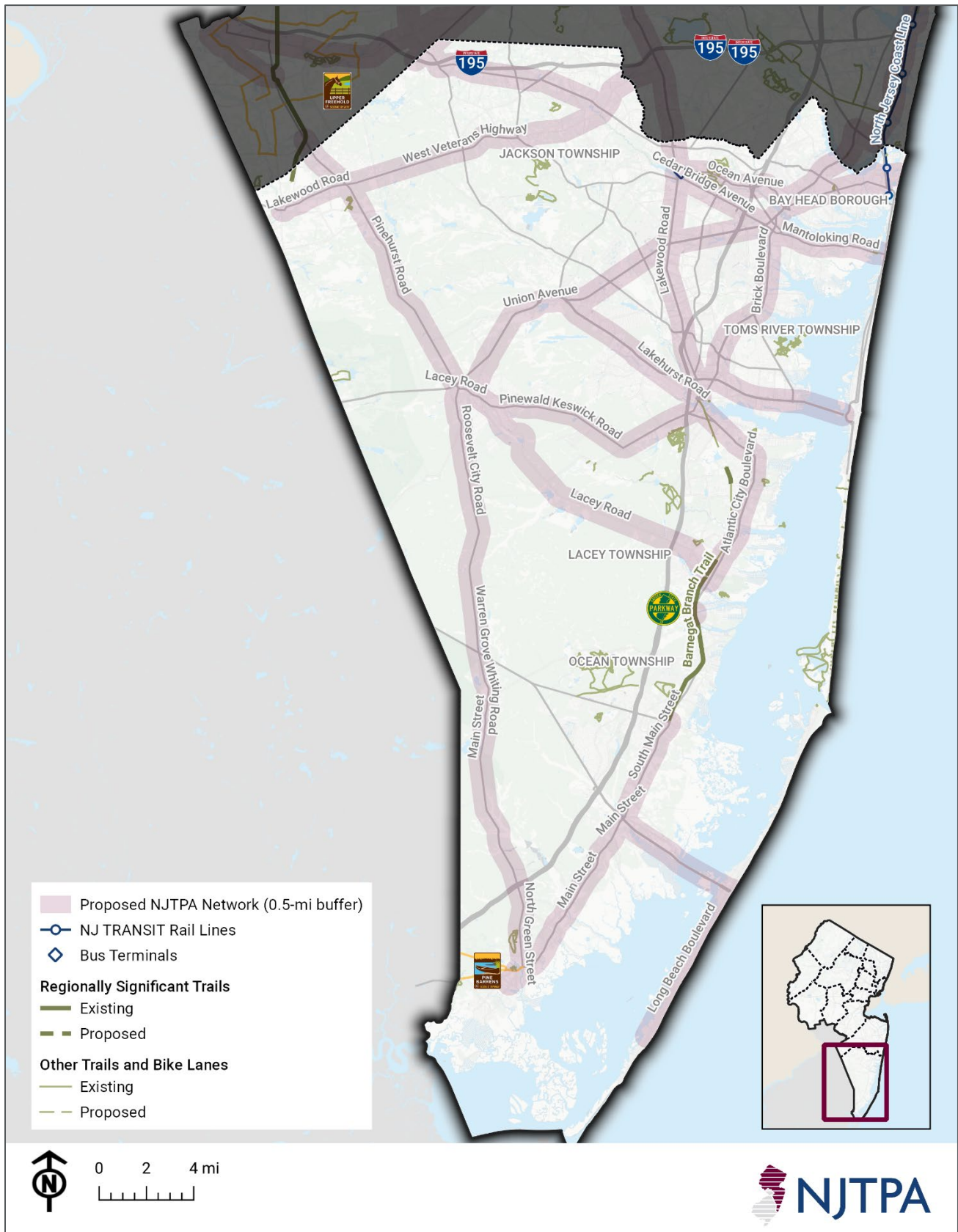
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Union Avenue	N/A	Borough of Lakehurst	Brown Avenue, Fays Lane, Railroad Avenue	John Davison Rockefeller Memorial Highway	0.87
Brown Avenue	N/A	Borough of Lakehurst	Wranglebrook Road	Fays Lane, Railroad Avenue, Union Avenue	0.30
Herbert Street	CR 528	Borough of Mantoloking	Mantoloking Road	Beach Access, Ocean Avenue	0.27
Ocean Road	NJ 88	Borough of Point Pleasant	Lakewood Road	N/A	0.75
Lakewood Road	NJ 88	Borough of Point Pleasant	N/A	N/A	1.25
Rue Avenue	N/A	Borough of Point Pleasant	Ocean Road	Trenton Avenue	0.42
Atlantic Avenue	N/A	Borough of Point Pleasant Beach	Ocean Avenue	Rue Avenue	1.07
West 9th Street	NJ 72	Borough of Ship Bottom	N/A	East 9th Street, Long Beach Boulevard	0.44
West 8th Street	NJ 72	Borough of Ship Bottom	East 8th Street, Long Beach Boulevard	N/A	0.41
Flint Road	N/A	Borough of South Toms River	Mill Street	Ivy Way	0.30
Radio Road	CR 601	Borough of Tuckerton	Oak Lane	Great Bay Boulevard	0.38
East Main Street	US 9	Borough of Tuckerton	Water Street, West Main Street	N/A	1.52
Great Bay Boulevard	CR 601	Borough of Tuckerton	Radio Road	West Main Street	0.36
South Main Street	US 9	Township of Barnegat	Beachview Avenue	East Bay Avenue, North Main Street, West Bay Avenue	2.24
Warren Grove Whiting Road	CR 539	Township of Barnegat	Main Street	N/A	4.05
Atlantic City Boulevard	NJ 166, US 9	Township of Berkeley	N/A	N/A	6.16
Pinewald Keswick Road	CR 530	Township of Berkeley	Lacey Road	N/A	5.98
Dover Road	CR 530	Township of Berkeley	Flint Road	N/A	3.63
Brick Boulevard	NJ 70	Township of Brick	N/A	N/A	3.10
Brick Boulevard	CR 549, CR 631	Township of Brick	Hooper Avenue	Hooper Avenue	3.09
John Davison Rockefeller Memorial Highway	NJ 70	Township of Brick	N/A	N/A	0.63
N/A	NJ 88	Township of Brick	N/A	N/A	2.06
Mantoloking Road	CR 528	Township of Brick	Cedar Bridge Avenue, Hooper Avenue	Herbert Street	4.27

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	NJ 88	Township of Brick	N/A	9 Post Road	1.94
Main Street	US 9	Township of Eagleswood	N/A	South Main Street	3.04
North County Line Road	CR 526	Township of Jackson	N/A	N/A	2.48
Bennetts Mills Road	CR 636	Township of Jackson	Aldrich Road, North New Prospect Road, South New Prospect Road	Cedar Swamp Road, East Veterans Highway, West Veterans Highway	4.82
Cassville Road	CR 526, CR 571	Township of Jackson	Millstone Rd;Trenton Lakewood Rd, Monmouth Road	West Commodore Boulevard	0.90
West Veterans Highway	CR 528	Township of Jackson	Bennetts Mills Road, Cedar Swamp Road, East Veterans Highway	Hawkin Road, Lakewood Road	6.35
West Commodore Boulevard	CR 526	Township of Jackson	Cassville Road	Cedar Swamp Road, East Commodore Boulevard	3.36
Aldrich Road	CR 636	Township of Jackson	N/A	Bennetts Mills Road, North New Prospect Road, South New Prospect Road	0.84
Monmouth Road	CR 537	Township of Jackson	N/A	N/A	0.58
East Commodore Boulevard	CR 526	Township of Jackson	Cedar Swamp Road, West Commodore Boulevard	N/A	0.86
Lacey Road	CR 614	Township of Lacey	East Lacey Road, North Main Street, South Main Street	Dover Road, West Lacey Road	8.35
N/A	CR 539	Township of Lacey	Warren Grove Whiting Road	Roosevelt City Road	5.37
North Main Street	US 9	Township of Lacey	N/A	Atlantic City Boulevard	2.18
West Lacey Road	CR 614	Township of Lacey	Dover Road, Lacey Road	Humane Way, Whiting Lacey Road	0.78
John Davison Rockefeller Memorial Highway	NJ 70	Township of Lakewood	N/A	N/A	5.96
Ocean Avenue	NJ 88	Township of Lakewood	N/A	N/A	3.35
Cedar Bridge Avenue	CR 528	Township of Lakewood	N/A	N/A	5.26
River Avenue	US 9	Township of Lakewood	N/A	N/A	2.66
Madison Avenue	CR 547, US 9	Township of Lakewood	Main Street/Route 88	River Avenue	0.38
Clifton Avenue	N/A	Township of Lakewood	East Kennedy Boulevard	Main Street, Main Street/Route 88, South Clifton Avenue	1.17

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	CR 539	Township of Little Egg Harbor	North Green Street, Parkertown Drive	Main Street	7.14
N/A	US 9	Township of Little Egg Harbor	East Main Street	Main Street	1.16
North Green Street	CR 539	Township of Little Egg Harbor	East Main Street, South Green Street	Parkertown Drive	2.72
Long Beach Boulevard	CR 607	Township of Long Beach	East 29th Street, North Bay Avenue, West 29th Street	East 7th Street, West 7th Street	5.51
North Bay Avenue	CR 607	Township of Long Beach	Centre Street, South Bay Avenue	East 29th Street, Long Beach Boulevard, West 29th Street	1.41
Colonial Drive	N/A	Township of Manchester	N/A	N/A	0.60
Lacey Road	CR 530	Township of Manchester	N/A	N/A	1.82
Whiting Lacey Road	CR 614	Township of Manchester	Pinewald Keswick Road	Humane Way, West Lacey Road	3.55
John Davison Rockefeller Memorial Highway	NJ 70	Township of Manchester	Union Avenue	Manchester Boulevard	3.24
Warren Grove Whiting Road	CR 539	Township of Manchester	Roosevelt City Road	Lacey Road	1.40
Manchester Boulevard	CR 2	Township of Manchester	Lacey Road	John Davison Rockefeller Memorial Highway	1.82
John Davison Rockefeller Memorial Highway	NJ 70	Township of Manchester	N/A	Colonial Drive	1.32
Roosevelt City Road	CR 539	Township of Manchester	N/A	Warren Grove Whiting Road	2.61
N/A	CR 539	Township of Manchester	Lacey Road, Warren Grove Whiting Road	Horicon Avenue, Whiting-New Egypt Road	2.33
Whiting-New Egypt Road	CR 539	Township of Manchester	Horicon Avenue	Pinehurst Road	1.51
Pinehurst Road	CR 539	Township of Plumsted	Whiting-New Egypt Road	Woodruff Road	4.28
Pinehurst Road	CR 539	Township of Plumsted	East Colliers Mills Road, West Colliers Mills Road	Forked River Road, Monmouth Road	3.45
Lakewood Road	CR 528	Township of Plumsted	Fort Avenue, North Main Street	Hawkin Road, West Veterans Highway	4.04
Main Street	US 9	Township of Stafford	South Main Street	South Main Street	0.32
East Bay Avenue	NJ 72	Township of Stafford	N/A	N/A	5.05
South Main Street	US 9	Township of Stafford	Main Street	Main Street	1.94
Main Street	CR 539	Township of Stafford	N/A	Warren Grove Whiting Road	1.91

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
North Main Street	US 9	Township of Stafford	Main Street, Stafford Avenue	Beachview Avenue, South Main Street	2.20
Hooper Avenue	CR 549	Township of Toms River	N/A	N/A	4.75
Little League World Champions Boulevard	NJ 37	Township of Toms River	N/A	N/A	4.79
N/A	N/A	Township of Toms River	N/A	N/A	0.72
North Main Street	NJ 166	Township of Toms River	N/A	N/A	0.94
Lakewood Road	NJ 166, US 9	Township of Toms River	N/A	N/A	6.78
Lakehurst Road	CR 527	Township of Toms River	Little League World Champions Boulevard	Lien Street, West Water Street	1.67
Little League World Champions Boulevard	NJ 37	Township of Toms River	N/A	Lakehurst Road	4.99
West Water Street	CR 527, NJ 166	Township of Toms River	Atlantic City Boulevard, East Water Street, North Main Street	Lakehurst Road, Lien Street	0.30
Thomas A. Mathis Bridge	NJ 37	Township of Toms River	Little League World Champions Boulevard	N/A	0.93
J. Stanley Tunney Bridge	NJ 37	Township of Toms River	N/A	Little League World Champions Boulevard	0.94

Figure 18: Ocean County Regional Network



Passaic County

Analysis Inputs

Urbanized parts of Passaic County with high scoring trip potential include the City of Passaic, City of Clifton, City of Paterson, Woodland Park Borough, Little Falls Township, Totowa Borough, Wayne Townships, Haledon Borough, North Haledon Borough, and Pompton Lakes Borough. Bloomingdale Borough, Wanaque Borough, and Ringwood Borough in the northern part of the county have some locations with high scoring trip potential. Most of West Milford Township and Ringwood Borough have low-scoring trip potential (less than 50).

All 22 bicycle and pedestrian high-crash intersections and corridors from the Network Screening Analysis are concentrated in the southern part of Passaic County. There are clusters of high-crash crash intersections in City of Paterson, City of Clifton, and City of Passaic; and high-crash corridors in City of Paterson and City of Passaic. The half-mile regional network buffer overlaps with all Network Screening Analysis locations.

Table 17 shows the most predominant EJ populations in Passaic County by census block. Overburdened community census block groups in Passaic County are largely in City of Paterson, City of Clifton, and City of Passaic, which mainly consist of minority and low-income/minority populations. There are also small pockets of these groups in northern Ringwood Borough, southern Wanaque Borough, southeastern Bloomingdale Borough, northeastern Woodland Park Borough, eastern Wayne Township, southern North Haledon Borough, and southern Hawthorne Borough. Pockets of low-income communities are in West Milford Township, Wayne Township, Hawthorne Borough, City of Clifton, and City of Passaic. Minority/limited English populations are in City of Paterson and City of Passaic, and low-income/minority/limited English populations are there as well as Clifton. OBC census block groups cover all of City of Paterson and most of City of Clifton and City of Passaic. The regional network connects to most of these communities.

Table 17: Overburdened Communities in Passaic County

OBC Category	Number of census blocks
Low Income	5
Low Income and Minority	121
Low Income, Minority, and Limited English	24
Minority	94
Minority and Limited English	4

Public Feedback

There were only two webmap responses in Passaic County, located in City of Clifton. They included requests for bike connections between City of Clifton and City of Hoboken in Hudson County, as well as City of Newark and Verona Township in Essex County. The regional network provides connections from City of Clifton into Essex County to City of Newark and Verona Township.

Existing Network and Proposed Improvements

Passaic County’s on-road bike network facilities are mostly aligned with the on-road segments of the Morris Canal Greenway and include sharrows connecting sections of City of Clifton, City of Passaic, City of Paterson, Little

Falls Township²² and Woodland Park Borough. There are several disconnected bike lanes, such as High Mountain Road in North Haledon Borough and Ratzer and Valley Roads in Wayne Township,²³ which do not form any connections between communities. There are few regionally significant off-road trails in Passaic County. The north part of Passaic County has a number of hiking trails covering significant distance, but these are primarily meant for recreation rather than active transportation. The Highlands Trail connects West Milford Township to Jefferson Township in Essex County and Franklin Borough in Sussex County. The Cannonball Trail connects Wanaque Borough to Mahwah in Bergen County. The Hasencleaver Iron Trail connects West Milford Township and Ringwood Borough. The regional network would enhance connectivity, with several links from more urban areas of Passaic City and City of Paterson to neighboring municipalities, and all the way north through Wayne Township to Ringwood Borough and West Milford Township.

The regional network overlaps with seven NJ TRANSIT stations along two lines:

- Main Line: Delawanna, Passaic, Paterson, Hawthorne
- Montclair-Boonton Line: Montclair State University, Little Falls, Mountain View-Wayne

This overlap provides a strong opportunity to improve first- and last-mile connections from transit stations to population centers within Passaic County. The network runs parallel to the Main Line from City of Passaic to City of Paterson, and will be able to provide an additional transportation option when there are transit delays or other service issues.

Table 18 lists all roads in Passaic County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

²² Passaic County is designing a trail segment of the Morris Canal Greenway through Wayne and Little Falls.

²³ Morris County is constructing a rail trail in Pequannock that will connect with the Morris Canal Greenway in Wayne.

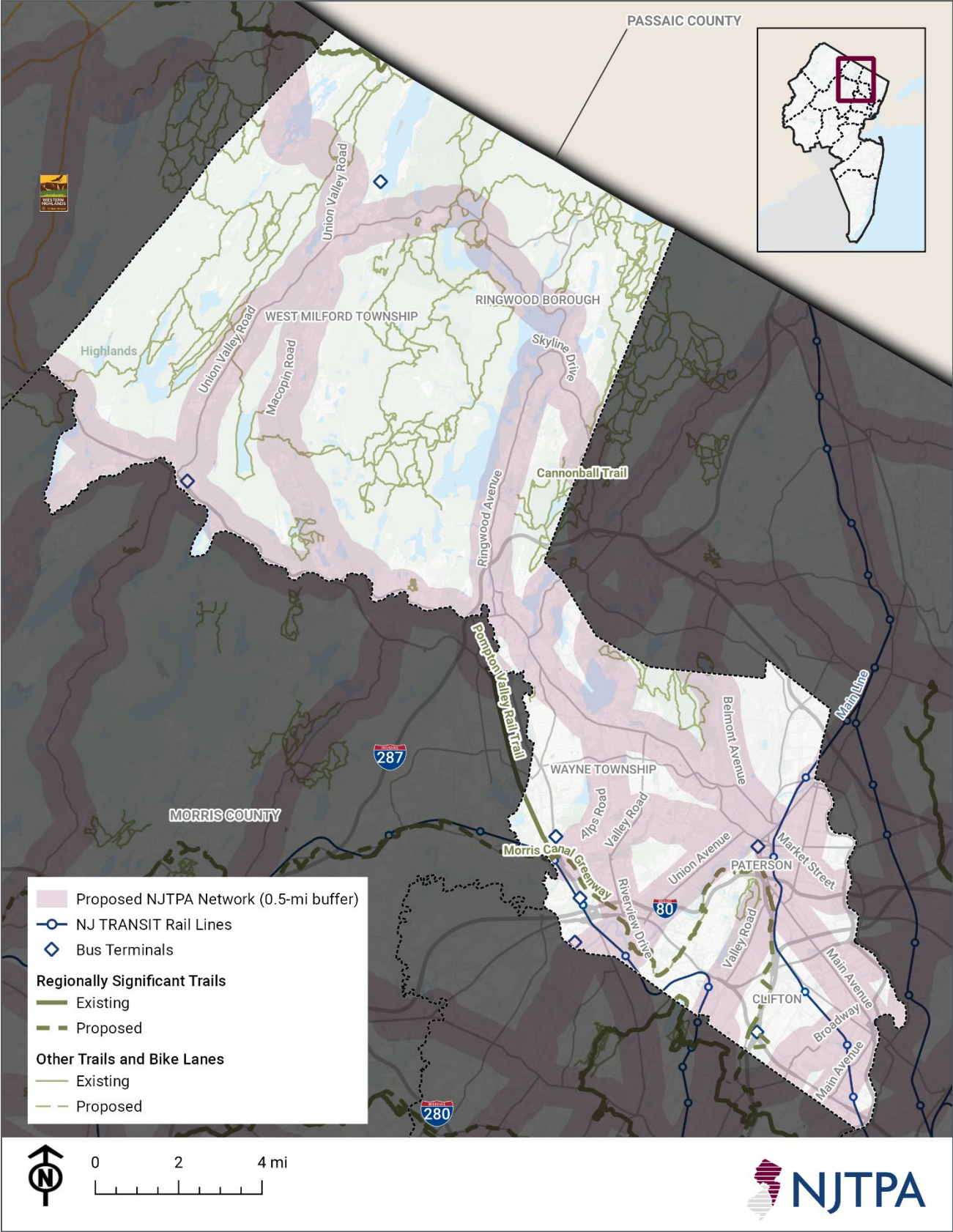
Table 18: Passaic County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Paterson-Hamburg Turnpike	CR 694	Borough of Bloomingdale	Macopin Road	Main Street	1.19
Main Street	CR 511, CR 694	Borough of Bloomingdale	N/A	Brandt Lane, Paterson-Hamburg Turnpike	0.68
Pompton Road	CR 504	Borough of Haledon	Paterson-Hamburg Turnpike, Ratzer Road	Pompton Avenue, West Haledon Avenue	1.01
Belmont Avenue	CR 675	Borough of North Haledon	West Broadway	High Mountain Road	3.39
High Mountain Road	CR 677	Borough of North Haledon	Belmont Avenue	Preserve Shoreline Loop, Reservoir Drive	0.68
Greenwood Lake Turnpike	CR 511	Borough of Ringwood	N/A	N/A	8.79
Skyline Drive	CR 692	Borough of Ringwood	N/A	N/A	2.71
Union Boulevard	CR 646	Borough of Totowa	N/A	N/A	2.90
Riverview Drive	CR 640	Borough of Totowa	French Hill Road, Valley Road	Union Boulevard	2.17
Skyline Drive	CR 692	Borough of Wanaque	N/A	N/A	0.36
Ringwood Avenue	CR 511, CR 511 Alt	Borough of Wanaque	Paterson-Hamburg Turnpike	Greenwood Lake Turnpike, West Brook Road	5.14
Ackerman Avenue	N/A	City of Clifton	N/A	N/A	0.20
Bloomfield Avenue	CR 622	City of Clifton	N/A	N/A	1.35
Valley Road	CR 621	City of Clifton	N/A	N/A	3.56
Clifton Avenue	CR 611	City of Clifton	Cheever Avenue, Randolph Avenue	Main Avenue	0.80
Main Avenue	CR 601	City of Passaic	N/A	N/A	5.87
Broadway	CR 622	City of Passaic	Bloomfield Avenue	Main Avenue	1.36
N/A	N/A	City of Paterson	Market Street	East 42nd Street, Market Street	0.34
Madison Avenue	CR 649	City of Paterson	N/A	N/A	3.53
Market Street	CR 648	City of Paterson	East 42nd Street	18th Avenue, Madison Avenue	1.28
Haledon Avenue	CR 504, CR 650	City of Paterson	North Bridge Street	Belmont Avenue, West Haledon Avenue	1.39
West Broadway	CR 673	City of Paterson	Belmont Avenue	Burhans Avenue, Doremus Avenue	0.29

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Burhans Avenue	CR 662	City of Paterson	Haledon Avenue	Doremus Avenue, West Broadway	0.63
Straight Street	CR 647	City of Paterson	Lafayette Street, River Street	Getty Avenue	1.42
Main Street	CR 601	City of Paterson	Hospital Plaza, Mary Street	Crooks Avenue, Main Avenue	1.16
Union Avenue	CR 646	City of Paterson	Cumberland Avenue, Union Boulevard	West Broadway	1.33
Main Street	CR 631	Township of Little Falls	Grandview Avenue, Little Falls Road	Union Avenue	1.21
Newark - Pompton Turnpike	NJ 23	Township of Little Falls	Main Street	Pompton Avenue	0.38
Valley Road	CR 681	Township of Wayne	N/A	N/A	0.45
Nellis Drive	N/A	Township of Wayne	N/A	N/A	0.97
Paterson-Hamburg Turnpike	CR 504, CR 511 Alt, CR 689, CR 869, US 202	Township of Wayne	N/A	N/A	7.46
Parish Drive	CR 668	Township of Wayne	Maple Avenue	N/A	0.43
Alps Road	CR 504, CR 670	Township of Wayne	Berdan Avenue, Brittany Drive	Maple Avenue	3.64
Preakness Avenue	CR 666	Township of Wayne	Valley Road	Union Avenue	2.44
Berdan Avenue	CR 502	Township of Wayne	Breakneck Road	Alps Road, Brittany Drive	2.15
Terhune Drive	US 202	Township of Wayne	Ramapo Valley Road	Paterson-Hamburg Turnpike	1.84
French Hill Road	CR 640	Township of Wayne	Alps Road	Riverview Drive, Valley Road	0.80
Maple Avenue	CR 669	Township of Wayne	Alps Road	Parish Drive	0.26
Hamburg Turnpike	CR 504	Township of Wayne	Church Lane, Paterson-Hamburg Turnpike	Paterson-Hamburg Turnpike, Valley Road	0.51
Paterson – Hamburg Turnpike	NJ 23	Township of West Milford	N/A	N/A	3.44
N/A	N/A	Township of West Milford	N/A	N/A	0.77
Paterson – Hamburg Turnpike	NJ 23	Township of West Milford	N/A	N/A	4.42
Warwick Turnpike	N/A	Township of West Milford	N/A	White Road	3.34
Paterson - Hamburg Turnpike	NJ 23	Township of West Milford	N/A	N/A	2.71

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Macopin Road	CR 693	Township of West Milford	Union Valley Road	Paterson-Hamburg Turnpike	9.67
Oak Ridge Road	CR 699	Township of West Milford	N/A	N/A	2.77
Marshall Hill Road	CR 696	Township of West Milford	Union Valley Road	N/A	1.47
Union Valley Road	CR 513	Township of West Milford	White Road	N/A	8.55
Paterson - Hamburg Turnpike	NJ 23	Township of West Milford	Charlottesburg Road, Echo Lake Road	Paterson - Hamburg Turnpike	0.92
White Road	N/A	Township of West Milford	Warwick Turnpike	Union Valley Road	0.34

Figure 19: Passaic County Regional Network



Somerset County

Analysis Inputs

Somerset County’s high-scoring trip potential is concentrated in Somerville Borough, with smaller pockets of demand in Pluckemin, Bound Brook Borough, and Watchung Borough. Most other communities fall within the medium trip potential range, with the exception of the southwestern and northwestern parts of the county, where parts of Hillsborough Township and Bedminster Township have very low demand. There is also a low-scoring area in Franklin Township, on undeveloped land near the D&R Canal Trail. This area likely has higher demand than the analysis indicates, due to the nearby trail’s recreational draw.

There are no high-crash intersections for active transportation users in Somerset County, and only three high-crash corridors, in North Plainfield Borough and Franklin Township. The regional network overlaps with all three Network Screening Analysis locations.

Table 19 shows the most predominant EJ populations in Somerset County by census block. The most predominant EJ population in Somerset County is minorities, which comprise about 34 percent of the population in larger communities like Somerville Borough. Minority populations are also present across much of western and southern Somerset County, including Hillsborough, Franklin, Montgomery, Green Brook, and Bernard Townships, and North Plainfield, Watchung, and Manville Boroughs. The regional network serves most of these areas well, although there are gaps in some of the less populated areas of Franklin Township.

Table 19: Overburdened Communities in Somerset County

OBC Category	Number of census blocks
Low Income and Minority	14
Minority	85
Minority and Limited English	1
Low Income	8
Minority	3

Public Feedback

Webmap responses for Somerset County do not reveal any overarching themes, and with only nine responses for the entire county, it is difficult to draw any conclusions about public priorities. Responses ranged from concerns about the lack of camping facilities for long-distance bike tourists on the D&R Canal Trail, to the need for more sidewalks and bike lanes in various communities. Several respondents voiced the desire to bike more often, but refrain from doing so due to lack of accommodations on US and NJ routes and county roads.

Existing Network and Proposed Improvements

The D&R Canal Trail section starting in Trenton and continuing north to Bound Brook Borough and onto City of New Brunswick is the most regionally significant active transportation corridor in Somerset County. Smaller trails include the Six Mile Run Trail, which connects to the D&R Canal Trail and ends at the Middlesex County line (NJ 27/Lincoln Highway); the Bedminster Hike and Bikeway, which extends about 2.5 miles through Bedminster; as

well as many local unpaved trail networks in recreational areas, and several disconnected bike lanes throughout the county.²⁴

The regional network would connect to most of these locations, especially the larger trails in Somerset County. It intersects with the D&R Canal Trail at several points and overlaps with many of the local recreational trail systems as well. The network would also extend active transportation options to communities that currently lack them, in the southwestern and northwestern parts of the county, as well as smaller communities throughout the county that are not connected to any regional corridors. The regional network also overlaps with recommendations from previous planning efforts,²⁵ although Somerset County's regional network corridors are less detailed than previous planning efforts in terms of alignment.

Both NJ TRANSIT lines that serve Somerset County, the Raritan Valley Line and Gladstone Branch, and all stations completely overlap with the regional network's 0.5 mile buffer:

- Gladstone Branch: Lyons, Basking Ridge, Bernardsville, Far Hills, Peapack, Gladstone
- Raritan Valley Line: Bound Brook, Bridgewater, Somerville, Raritan, North Branch

This overlap provides opportunities to improve first- and last-mile connections within the county, particularly in more densely populated areas.

Table 20 lists all roads in Somerset County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

²⁴ For a more comprehensive inventory of Somerset County's existing network, refer to [Walk Bike Hike Somerset County](#), published in 2019.

²⁵ Ibid.

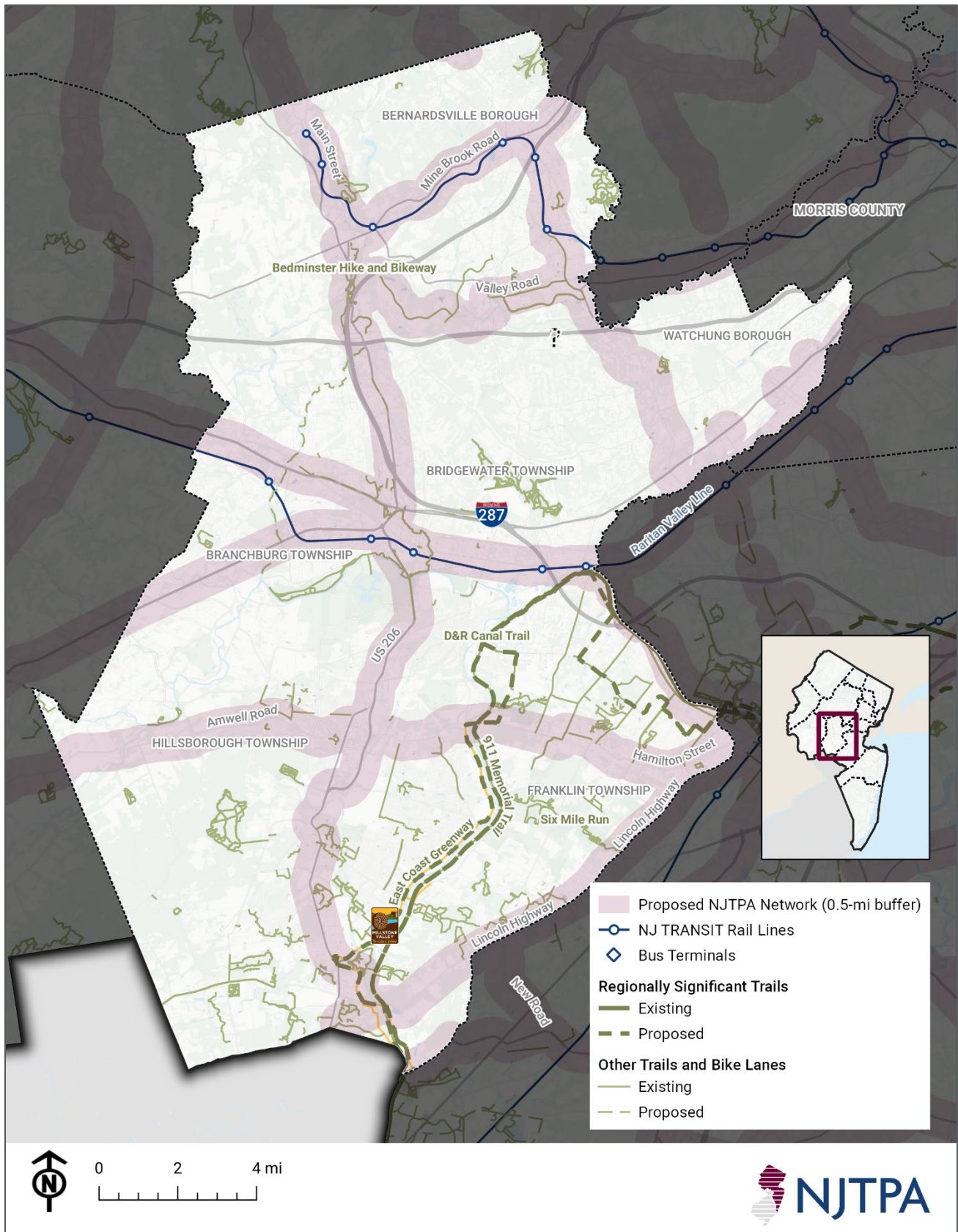
Table 20: Somerset County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Mine Brook Road	CR 525, US 202	Borough of Bernardsville	Mount Airy Road, Olcott Square	Main Street	3.19
East Main Street	CR 527, CR 533, CR 607	Borough of Bound Brook	N/A	N/A	0.58
Talmage Avenue	CR 533	Borough of Bound Brook	Columbus Place	Main Street, Tea Street	0.57
Main Street	CR 512, US 202	Borough of Far Hills	Mine Brook Road	Hillside Avenue, Lamington Road, Somerville Road	1.79
Peapack Road	CR 512	Borough of Far Hills	Main Street	Main Street	1.19
Watchung Avenue	CR 531	Borough of North Plainfield	Pearl Street	N/A	0.70
Somerset Street	CR 531	Borough of North Plainfield	N/A	N/A	0.77
Old Chester Road	CR 671	Borough of Peapack and Gladstone	Jackson Avenue, Main Street	Old Chester-Gladstone Road	0.61
Main Street	CR 512	Borough of Peapack and Gladstone	Peapack Road	Mendham Road	1.75
Mendham Road	CR 647	Borough of Peapack and Gladstone	Main Street	Jackson Avenue	0.45
Frelinghuysen Avenue	CR 644	Borough of Raritan	N/A	N/A	0.26
Princeton Avenue	N/A	Borough of Rocky Hill	Blue Spring Road	Washington Street	0.99
Montgomery Avenue	N/A	Borough of Rocky Hill	Montgomery Road	Reeve Road, Washington Street	0.53
Washington Street	CR 518	Borough of Rocky Hill	Georgetown Franklin Turnpike	Montgomery Avenue, Reeve Road	0.49
W. End Avenue	NJ 28	Borough of Somerville	N/A	N/A	0.65
West Main Street	NJ 28	Borough of Somerville	East Main Street, North Bridge Street, South Bridge Street	North Doughty Avenue, South Doughty Avenue, West End Avenue	0.35
Schley Mountain Road	CR 652	Township of Bedminster	N/A	N/A	0.91
Allen Road	CR 652	Township of Bernards	N/A	N/A	4.03
Valley Road	CR 512, CR 525	Township of Bernards	N/A	N/A	2.88
South Finley Avenue	CR 613	Township of Bernards	N/A	N/A	1.72
Stonehouse Road	CR 613	Township of Bernards	N/A	Valley Road	1.35
Morristown Road	US 202	Township of Bernards	Olcott Square	Mount Kemble Avenue	1.95

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Finley Avenue	CR 613	Township of Bernards	North Finley Avenue	Childs Road, Morristown Road	0.47
North Finley Avenue	CR 613	Township of Bernards	East Oak Street, South Finley Avenue, West Oak Street	Finley Avenue	0.61
Main Street	CR 533	Township of Bridgewater	N/A	N/A	0.37
East Main Street	CR 533, CR 612, NJ 28	Township of Bridgewater	North Bridge Street, South Bridge Street, West Main Street	Main Street, Promenade Boulevard	3.08
US Route 22 Eastbound	US 22	Township of Bridgewater	Milltown Road	Easton Turnpike	0.59
N/A	US 202	Township of Bridgewater	Lamington Road	county line	14.38
N/A	US 206	Township of Bridgewater	US 202	Old Camplain Road	3.08
N/A	US 22	Township of Bridgewater	US 202	Easton Turnpike, France Drive	4.58
Georgetown Franklin Turnpike	CR 518	Township of Franklin	Gateway Boulevard, Lincoln Highway	Washington Street	2.79
Hamilton Street	CR 514	Township of Franklin	Amwell Road, Susan Drive	Woodbridge Street	3.18
Somerset Street	NJ 27	Township of Franklin	French Street, Main Street	School Avenue	1.22
Lincoln Highway	NJ 27	Township of Franklin	N/A	N/A	0.93
Lincoln Highway	NJ 27	Township of Franklin	N/A	Gallop Lane	0.86
Lincoln Highway	NJ 27	Township of Franklin	Beekman Road	N/A	1.75
Main Street	NJ 27	Township of Franklin	Heathcote Road, Laurel Avenue	Kingston Terrace	0.42
Easton Avenue	CR 527	Township of Franklin	N/A	Foxwood Drive	0.90
Warrenville Road	CR 634, CR 651	Township of Green Brook	N/A	Mount Bethel Road, Washington Valley Road	2.04
Peter J. Biondi Memorial Bypass	US 206 BYP	Township of Hillsborough	N/A	N/A	2.84
State Road	US 206	Township of Hillsborough	N/A	N/A	1.74
Amwell Road	CR 514	Township of Hillsborough	Hamilton Street, Susan Drive	Cloverhill Road, Rainbow Hill Road	15.17
US 206	US 206	Township of Hillsborough	N/A	Valley Road	0.66
Montgomery Road	N/A	Township of Montgomery	N/A	Montgomery Avenue	0.88

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Van Horne Road	US 206	Township of Montgomery	Mountainview Road, Peter J. Biondi Memorial Bypass	Montgomery Road	4.80
Mount Bethel Road	CR 651	Township of Warren	N/A	N/A	2.27
King George Road	CR 651	Township of Warren	N/A	N/A	2.24

Figure 20: Somerset County Regional Network



Sussex County

Analysis Inputs

Compared to other counties in the region, Sussex County has low-scoring bicycle trip potential. With an overall score of 82, Town of Newton has the highest demand in the County. About half of the County scores between 30 and 80, with most locations scoring below 50. Communities with medium trip potential include Branchville Borough, Sussex Borough, Franklin Borough, Hamburg Borough, Ogdensburg Borough, Vernon Township, Sparta Township, Hopatcong Borough, Byram Township, Andover Borough and Township, and other communities surrounding Town of Newton. Most areas in the County score low on population and employment density, presence of low-income communities, and land use mix, which contributes to low bicycle demand overall. The regional network connects to most medium- and high-scoring areas, except for the northern corners of Montague and Vernon Townships.

There is only one bicycle or pedestrian high-crash location in Sussex County. A small segment of Madison Street in Town of Newton is in the top 100 pedestrian crash corridors in the region. The regional network overlaps with this location.

Table 21 shows the most predominant EJ populations in Sussex County by census block. Sussex County has 11 census block groups that include EJ populations, primarily low-income. They are in Town of Newton, Sussex Borough, Franklin Borough, Hopatcong Borough, Montague Township, and Andover Township. Minority areas are confined to Town of Newton and Hopatcong Borough. The regional network connects to every EJ population in the county.

Table 21: Overburdened Communities in Sussex County

OBC Category	Number of census blocks
Low Income	8
Minority	3

Public Feedback

Sussex County received eight webmap comments, so it is difficult to draw any conclusions about public priorities with such a limited sample size. One respondent mentioned maintenance concerns on the Sussex Branch Trail, . Several respondents shared concerns about US 206 in City of Newton and Hopatcong Borough. Concerns included a need for more sidewalks, separated bike facilities, and more frequent and safer signalized crossing opportunities. Lack of sidewalks was a theme among responses, particularly in Sparta Township and Town of Newton, and on Newton Sparta Road. The regional network overlaps with all of these comments, which provides a strong foundation for addressing public priorities through the regional ATP.

Existing Network and Proposed Improvements

There are several trails throughout Sussex County that connect communities. The Sussex Branch Trail begins in Mt Olive Township in neighboring Morris County, travels through Byram Township, Andover Township and Borough, Town of Newton, and Lafayette Township, and terminates in Branchville Borough. The trail overlaps with some of the higher demand areas for bicycling in the County. The regional network would expand on this corridor and provide alternate routes, fill in gaps, and create safer connections between communities. The Paulinskill Valley Trail is a recreational, unpaved facility that begins in Lafayette Township, intersects the Sussex Branch Trail and connects to Warren County. There are also many recreational walking trails in High Point State Park, Wawayanda State Park, and the Delaware Water Gap National Recreation Area, including the Appalachian

Trail. There are very few on-road bike facilities in the County, so the regional network would both expand existing trails and introduce more direct on-road routes to destinations.

There is currently no NJ TRANSIT commuter rail service in Sussex County. However, the Lackawanna Cutoff restoration project (approved for funding in 2022) will eventually renew NJ TRANSIT commuter rail service through Andover Borough and Township.

Table 22 lists all roads in Sussex County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

Table 22: Sussex County Regional Network Corridors

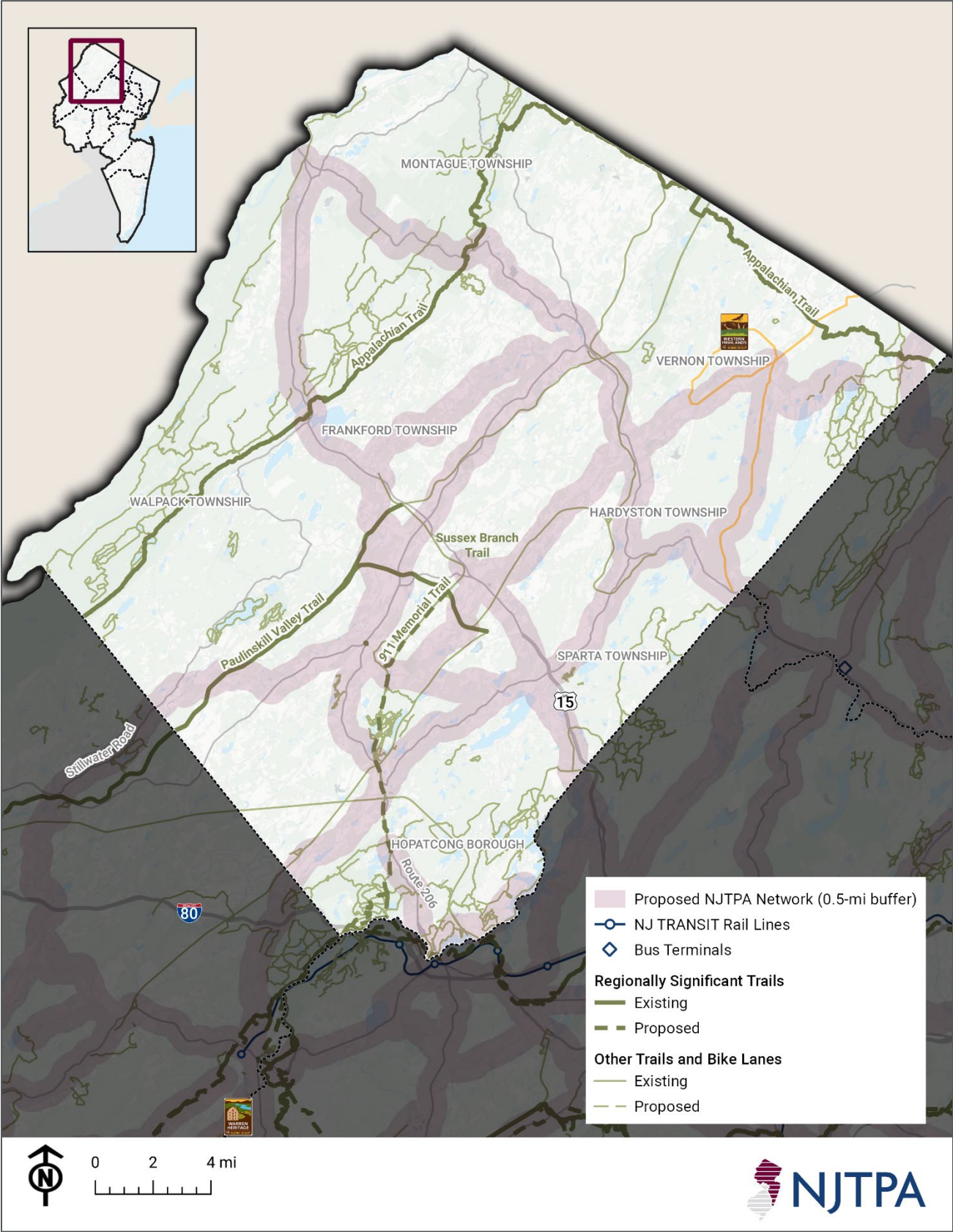
Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Lenape Road	CR 517	Borough of Andover	Main Street	Andover Sparta Road, Old Creamery Road	0.64
Tranquility Road	CR 517	Borough of Andover	Decker Pond Road	Brighton Avenue, Brighton Road, High Street, West High Street	0.62
Mill Street	CR 519	Borough of Branchville	Newton Avenue	Broad Street, Mattison Avenue	0.35
Wantage Avenue	CR 519	Borough of Branchville	Broad Street	Kice Road, Wykertown Road	1.20
Munsonhurst Road	CR 517	Borough of Franklin	Main Street	N/A	1.27
Hamburg Turnpike	CR 517, NJ 23	Borough of Hamburg	Warren Street	N/A	2.27
Vernon Avenue	NJ 94	Borough of Hamburg	Ames Boulevard, Hamburg Turnpike	Michael Court	0.54
Lakeside Boulevard	CR 607	Borough of Hopatcong	N/A	N/A	1.70
Wills Avenue	CR 602	Borough of Hopatcong	Brooklyn - Stanhope Road, Frances Avenue	Brooklyn Road	0.62
N/A	N/A	Borough of Stanhope	Ledgewood Avenue, Main Street	Dell Road	0.84
Brooklyn Road	CR 602	Borough of Stanhope	Wills Avenue	Sparta Road	0.48
Clove Avenue	CR 643, NJ 23	Borough of Sussex	N/A	N/A	0.51
Main Street	CR 643, NJ 23	Borough of Sussex	N/A	Clove Avenue, New Jersey Route 284, Newton Avenue	0.47
Walling Avenue	NJ 23	Borough of Sussex	County Highway 639, Loomis Avenue	Lower Unionville Road	0.48
Mill Street	CR 519	Town of Newton	Trinity Street, Water Street	Newton - Halsey Road	0.88
Water Street	CR 519, NJ 94, US 206	Town of Newton	N/A	N/A	0.72
High Street (CR 519)	CR 519, NJ 94	Town of Newton	Academy Street, High Street, West End Avenue	N/A	0.28
Main Street	CR 519, NJ 94, US 206	Town of Newton	Woodside Avenue	Spring Street	0.87
Sparta Avenue	CR 616	Town of Newton	Woodside Avenue	Newton Sparta Road	0.71
Woodside Avenue	CR 621, US 206	Town of Newton	N/A	Sparta Avenue	1.07
High Street	NJ 94	Town of Newton	N/A	N/A	0.70

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	US 206	Township of Andover	Main Street, Sussex Branch Trail	Woodside Avenue	3.43
Andover Sparta Road	CR 517	Township of Andover	Andover Road, Perona Road	Lenape Road, Old Creamery Road	3.34
Newton Sparta Road	CR 616	Township of Andover	Sparta Avenue	Andover Road, Sparta Avenue	4.16
Germany Flats Road	CR 623	Township of Andover	Lawrence Road, Pierce Road	Randazzo Road, Sunset Inn Road	1.11
Lawrence Road	CR 623	Township of Andover	Lake Iliff Road, Newton Sparta Road	Germany Flats Road, Pierce Road	1.41
N/A	US 206	Township of Byram	N/A	N/A	1.07
Route 206	US 206	Township of Byram	Main Street, South Shore Road, Willor Drive	N/A	1.30
Main Street	US 206	Township of Byram	Sussex Branch Trail, Tamarack Road	Route 206, South Shore Road, Willor Drive	0.31
Wykertown Road	CR 629	Township of Frankford	Kice Road, Wantage Avenue	Haggerty Road, Meyer Road	2.70
Ross Corner - Sussex Road	CR 565	Township of Frankford	N/A	N/A	4.96
Newton Avenue	CR 519	Township of Frankford	Branchville - Lawson Road, Morris Turnpike	Mill Street	1.70
Stillwater Road	CR 610	Township of Fredon	Phil Hardin Road	East Shore Drive, Main Fredon Road	1.92
N/A	NJ 94	Township of Fredon	Phil Hardin Road, Stillwater Road	High Street	2.68
Decker Pond Road	CR 517	Township of Green	Hackettstown Road	Whitehall Road	3.48
N/A	CR 519	Township of Hampton	Newton - Halsey Road	Morris Turnpike, Smith Hill Road	1.76
Hampton House Road	NJ 94, US 206	Township of Hampton	N/A	N/A	4.45
Newton - Halsey Road	CR 519	Township of Hampton	N/A	Mill Street	1.69
Morris Turnpike	CR 519	Township of Hampton	Branchville - Lawson Road, Newton Avenue	Smith Hill Road	0.69
Newfoundland Road	NJ 23	Township of Hardyston	N/A	N/A	0.96
N/A	NJ 23	Township of Hardyston	N/A	N/A	6.71
Stockholm - Vernon Road	CR 515	Township of Hardyston	Vernon - Stocholm Road	Newfoundland Road	3.25
Ames Boulevard	NJ 94	Township of Hardyston	Forest Hills Way	Hamburg Turnpike, Vernon Avenue	1.06

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
N/A	NJ 94	Township of Hardyston	North Church Road	Ames Boulevard, Forest Hills Way	3.27
N/A	NJ 94	Township of Hardyston	N/A	N/A	2.13
Sunset Inn Road	CR 623, NJ 94	Township of Lafayette	North Church Road	Germany Flats Road, Randazzo Road	1.90
Lafayette Road	NJ 15	Township of Lafayette	Meadows Road, Morris Farm Road	N/A	0.50
Deckertown Turnpike	CR 650	Township of Montague	Libertyville Road	Clove Road	8.71
Clove Road	CR 653	Township of Montague	N/A	Deckertown Turnpike	0.52
N/A	US 206, CR 521	Township of Sandyston	N/A	N/A	13.23
N/A	N/A	Township of Sparta	N/A	N/A	0.31
Lafayette Road	NJ 15	Township of Sparta	N/A	N/A	3.39
Sparta Avenue	CR 517	Township of Sparta	N/A	N/A	2.81
Woodport Road	NJ 181	Township of Sparta	N/A	N/A	3.87
Lafayette Road	NJ 181	Township of Sparta	Main Street, Woodport Road	N/A	2.04
North Church Road	NJ 94	Township of Sparta	N/A	Sunset Inn Road	3.13
Main Street	CR 517	Township of Sparta	Munsonhurst Road	Sparta Avenue	3.28
Andover Road	CR 517	Township of Sparta	Andover Sparta Road, Perona Road	Newton Sparta Road, Sparta Avenue	1.61
Main Fredon Road	CR 610	Township of Stillwater	East Shore Drive, Stillwater Road	Maple Avenue, Stillwater Road	2.02
Maple Avenue	CR 521	Township of Stillwater	Stillwater Road	Main Fredon Road, Stillwater Road	1.06
N/A	N/A	Township of Vernon	N/A	N/A	0.51
Breakneck Road	N/A	Township of Vernon	Vernon - Stockholm Road	Canistear Road, Wawayanda Road	2.31
Wawayanda Road	N/A	Township of Vernon	N/A	Breakneck Road, Canistear Road	1.76
McAfee - Vernon Road	CR 517, NJ 94	Township of Vernon	N/A	N/A	3.71
Warwick Turnpike	N/A	Township of Vernon	N/A	N/A	2.01
Vernon - Stocholm Road	CR 515	Township of Vernon	Stockholm - Vernon Road	Vernon - Stockholm Road	2.46
Vernon - Stockholm Road	CR 515	Township of Vernon	Vernon - Stocholm Road	Breakneck Road	2.25
N/A	NJ 23	Township of Wantage	N/A	N/A	4.05

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Libertyville Road	CR 650	Township of Wantage	N/A	Deckertown Turnpike	2.24
Libertyville Road	CR 650	Township of Wantage	Coykendall Road, Deckertown Turnpike, Hickory Road	Deckertown Turnpike	1.07
County Highway 639	CR 639	Township of Wantage	N/A	Loomis Avenue, Walling Avenue	1.43
Haggerty Road	CR 635	Township of Wantage	Meyer Road, Wykertown Road	Pidgeon Hill Road	3.76
Deckertown Turnpike	CR 650	Township of Wantage	Libertyville Road	Coykendall Road, Hickory Road, Libertyville Road	0.55
N/A	N/A	Township of Wantage	Clove Avenue, Torel Road	Libertyville Road	0.31

Figure 21: Sussex County Regional Network



Union County

Analysis Inputs

Union County is one of the most densely populated areas in the region, and its bicycle trip potential is commensurately high: most of the county scores in the 90th percentile, and there are only a few pockets that dip below a score of 70. The greatest demand for bicycle trips is in City of Elizabeth, where scores exceed 95, and its suburbs, with scores in the low 90s. The dense street grid, mix of land uses, and high population and employment density in these areas are very conducive to bicycle trips. The regional network covers all high trip potential communities, with several suggested corridors between City of Elizabeth and its suburbs, and between the suburbs themselves.

There are six high-crash corridors and eight high-crash intersections for pedestrians and bicyclists in Union County. These locations are concentrated in the larger communities of City of Elizabeth, City of Plainfield, Cranford Township, Roselle Borough, and Roselle Park Borough, and the NJ 28 corridor that connects them, as well as several smaller communities (City of Linden and Union Township). The regional network overlaps with all high-crash locations.

Table 23 shows the most predominant EJ populations in Union County by census block. Minority census block groups comprise the majority, followed by combined low-income/minority and low-income/minority/limited English. These groups are more prevalent in City of Plainfield and City of Elizabeth but are also spread widely throughout the county. The only areas that do not have EJ populations are New Providence Borough, Berkeley Heights Township in the western part of the county, and parts of Scotch Plains Township and Town of Westfield. The regional network connects to most EJ populations in Union County, with the exception of some minority communities along the I-95 corridor, and several census block groups in less populated parts of the county.

Table 23: Overburdened Communities in Union County

OBC Category	Number of census blocks
Low Income	1
Low Income and Minority	81
Low Income, Minority, and Limited English	19
Minority	180
Minority and Limited English	3

Public Feedback

Union County received 77 webmap comments, The second highest number in the region, this response rate indicates a relatively engaged populace invested in active transportation improvements. Comments follow the county's population density, and are centered around City of Elizabeth and neighboring communities. More than half of the comments discuss opportunities for rail-trail development in the county, with a particular focus on the Staten Island Rapid Transit Railroad, the CNJ Railroad, and the Rahway Valley Railroad.

Existing Network and Proposed Improvements

The East Coast Greenway (ECG) is the most regionally significant active transportation facility in Union County. It follows the Rahway River, and travels through Nomahegan, Lenape, and Black Brook Parks. It also follows many of the quiet suburban streets alongside the Rahway River Parkway. The ECG connects with the County's greenway system in Lenape Park, providing additional recreational opportunities in Lenape and Echo Lake

Parks.²⁶ The Goethals Bridge bicycle and pedestrian path, which connects New Jersey to Staten Island, NY, also provides regional active transportation connectivity in Union County. Additionally, there are several local path systems, such as the Elizabeth River Trail, Lenape Park and Nomahegan Park in Cranford, and Watchung Reservation and Echo Lake Park in Mountainside. There are very few on-road facilities in Union County.

The regional network would establish a key connection along or parallel to the NJ 28 corridor, linking the county's most populous communities. It would also link these communities to destinations in surrounding counties; this is a key consideration for Union County, which shares borders with five other counties and is economically integrated with the larger region. Proposed corridors connect to population centers, recreational areas, and downtowns. These improvements would link communities whose active transportation networks are currently isolated or non-existent.

Multiple NJ TRANSIT commuter rail lines travel through Union County, including the Raritan Valley Line, North Jersey Coast Line, Morristown Line, Northeast Corridor, and Gladstone Branch. The regional network overlaps with almost all 16 NJ TRANSIT rail stations in the County, which can help establish better first- and last-mile connections from transit stations to population centers, and achieve stronger integration between active transportation facilities and transit systems:

- North Jersey Coast Line and Northeast Corridor: North Elizabeth, Elizabeth, Linden, Rahway
- Raritan Valley Line: Union Township, Roselle Park, Cranford, Garwood, Westfield, Fanwood, Plainfield
- Gladstone Branch: Summit, New Providence, Berkeley Heights
- Morristown Line: Summit

Table 24 lists all roads in Union County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

²⁶ Union County. (2023). East Coast Greenway. Retrieved from: <https://ucnj.org/parks-recreation/paths-trails-greenways/east-coast-greenway/>

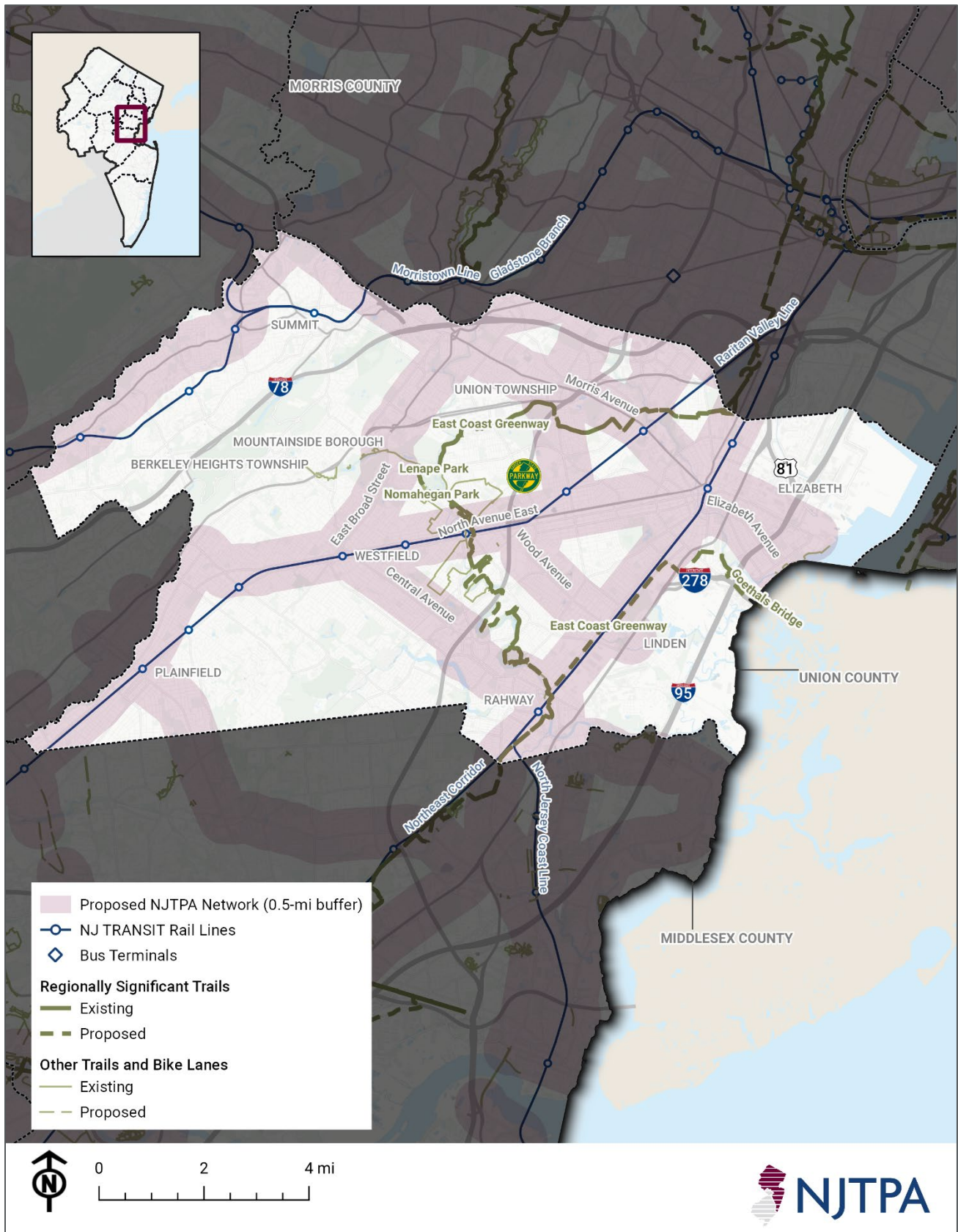
Table 24: Union County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Midway Avenue	CR 610	Borough of Fanwood	North Martine Avenue, Woodland Avenue	North Avenue	0.64
North Avenue	NJ 28	Borough of Garwood	Lincoln Avenue West, North Avenue West	North Avenue East	1.00
Springfield Avenue	CR 512	Borough of New Providence	Constantine Place	Valley Road	4.17
Amsterdam Avenue	CR 617	Borough of Roselle	West 1st Avenue	Wood Avenue	0.62
Wood Avenue	CR 617	Borough of Roselle	N/A	N/A	1.31
Westfield Avenue West	CR 617, NJ 28	Borough of Roselle Park	N/A	N/A	1.03
Westfield Avenue East	NJ 28	Borough of Roselle Park	N/A	N/A	0.91
Westfield Avenue	NJ 27, NJ 28	City of Elizabeth	N/A	N/A	1.33
North Broad Street	CR 623, NJ 27	City of Elizabeth	N/A	N/A	0.59
Rahway Avenue	NJ 27	City of Elizabeth	N/A	N/A	0.94
Elizabeth Avenue	N/A	City of Elizabeth	1st Street, South 1st Street	Broad Street, Rahway Avenue, South Broad Street	1.76
East Grand Street	N/A	City of Elizabeth	Division Street, Trumbull Street	Broad Street	0.92
Fay Avenue	N/A	City of Elizabeth	East Elizabeth Avenue	South Elmora Avenue	0.30
Broad Street	CR 623	City of Elizabeth	Elizabeth Avenue, Rahway Avenue, South Broad Street	East Broad Street, North Broad Street	0.39
Newark Avenue	NJ 27	City of Elizabeth	Fairmount Avenue	Frelinghuysen Avenue	0.88
Trumbull Street	N/A	City of Elizabeth	1st Street, Puleo Plaza	Division Street, East Grand Street	1.27
North Wood Avenue	CR 617	City of Linden	South Wood Avenue	East Saint Georges Avenue, Wood Avenue, W. Saint Georges Avenue	0.85
West Elizabeth Avenue	CR 514	City of Linden	Elizabeth Avenue, Kearny Avenue	East Elizabeth Avenue, North Wood Avenue	1.21
East Elizabeth Avenue	CR 514	City of Linden	North Wood Avenue, West Elizabeth Avenue	Fay Avenue	1.83
South Wood Avenue	CR 617	City of Linden	North Wood Avenue	East Edgar Road	0.48
Park Avenue	CR 531	City of Plainfield	East Front Street, Somerset Street, West Front Street	N/A	1.76

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
East Front Street	CR 620	City of Plainfield	Park Avenue, Somerset Street, West Front Street	Front Street, Terrill Road	1.94
West Front Street	CR 620, NJ 28	City of Plainfield	Jefferson Avenue, North Avenue	East Front Street, Park Avenue, Somerset Street	2.45
Irving Street	N/A	City of Rahway	East Milton Avenue, Fulton Street	Elizabeth Avenue	0.26
Westfield Avenue	CR 613	City of Rahway	St. George's Avenue, West Grand Avenue	N/A	1.12
Elizabeth Avenue	CR 514	City of Rahway	Irving Street	Kearny Avenue, West Elizabeth Avenue	0.74
New Brunswick Avenue	CR 609	City of Rahway	St. George's Avenue	East Emerson Avenue	1.06
West Grand Avenue	CR 514, CR 613	City of Rahway	East Grand Avenue	St. George's Avenue, Westfield Avenue	0.78
Lawrence Street	CR 514	City of Rahway	East Hazelwood Avenue, Woodbridge Road	East Grand Avenue	0.78
Randolph Avenue	CR 602	City of Rahway	Hart Street	Rahway Avenue, Woodbridge Road	0.45
River Road	CR 649	City of Summit	N/A	N/A	0.99
Passaic Avenue	CR 649	City of Summit	Old Springfield Avenue, Springfield Avenue	River Road	1.23
South Service Road	NJ 124	City of Summit	N/A	N/A	1.06
N/A	N/A	City of Summit	N/A	South Service Road	0.39
Springfield Avenue	CR 577	Town of Westfield	East Broad Street, Nomahegan Drive	South Springfield Avenue	0.69
Central Avenue	CR 613	Town of Westfield	N/A	N/A	2.99
East Broad Street	CR 509	Town of Westfield	North Avenue West	Nomahegan Drive, Springfield Avenue	1.96
North Avenue East	NJ 28	Town of Westfield	Central Avenue, North Avenue West	North Avenue	0.70
North Avenue West	CR 610, NJ 28	Town of Westfield	Central Avenue, North Avenue East	North Avenue	1.09
Brant Avenue	CR 613	Township of Clark	N/A	Central Avenue, Valley Road	0.28
North Avenue East	NJ 28	Township of Cranford	N/A	N/A	1.51
North Avenue West	NJ 28	Township of Cranford	Eastman Street	Lincoln Avenue West, North Avenue	0.44

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Liberty Avenue	CR 509	Township of Hillside	Salem Road	Hillside Avenue	0.95
Chestnut Avenue	CR 509	Township of Hillside	Hillside Avenue	Coit Street	0.39
Hillside Avenue	CR 509	Township of Hillside	Liberty Avenue	Chestnut Avenue	0.29
North Avenue	CR 610	Township of Scotch Plains	Midway Avenue	North Avenue West	0.67
Park Avenue	CR 655	Township of Scotch Plains	Front Street	North Martine Avenue, Portland Avenue	0.37
Front Street	CR 620	Township of Scotch Plains	East Front Street, Terrill Road	Park Avenue	0.68
Maple Avenue	CR 577, NJ 124	Township of Springfield	Meisel Avenue	Springfield Avenue, Victory Road	0.33
South Springfield Avenue	CR 577	Township of Springfield	N/A	N/A	1.30
Meisel Avenue	CR 577, NJ 124	Township of Springfield	Morris Avenue, Springfield Avenue	South Springfield Avenue	1.26
Springfield Avenue	CR 577, NJ 124	Township of Union	N/A	N/A	2.08
Morris Avenue	CR 629, NJ 124, NJ 82	Township of Union	N/A	N/A	7.48
Chestnut Street	CR 619, CR 627	Township of Union	N/A	N/A	2.34
Stuyvesant Avenue	CR 619	Township of Union	N/A	N/A	1.86
Salem Road	CR 509	Township of Union	Morris Avenue	Liberty Avenue	0.30

Figure 22: Union County Regional Network



Warren County

Analysis Inputs

Most of Warren County has low bicycle trip potential due to its low-density development pattern. A threshold score of 30+ was used to identify activity centers in Warren County, which highlighted Town of Phillipsburg, Town of Belvidere, Town of Hackettstown, and Blairstown Township as high demand areas. The regional network connects to all of these communities.

There are no high-crash bicycle or pedestrian intersections or corridors in Warren County. Table 25 shows the most predominant EJ populations in Union County by census block. There are 14 census block groups in Warren County containing EJ populations. They are split roughly evenly between low-income and low-income/minority groups, and are concentrated in Town of Phillipsburg, Town of Hackettstown, and White Township. The regional network includes all these locations.

Table 25: Overburdened Communities in Warren County

OBC Category	Number of census blocks
Low Income	6
Low Income and Minority	5
Minority	3

Public Feedback

There are only six webmap responses for all of Warren County. Most of them describe concerns about motorist behavior, truck traffic, and lane configurations on county roads. The regional network does not directly address these locations, but by providing more high-comfort and separated facilities, an expanded bike network in Warren County would reduce interactions and potential conflicts between active transportation users and motorists.

Existing Network and Proposed Improvements

The regional network intersects with the Paulinskill Valley Trail, a 27-mile rail trail²⁷ that starts in Columbia and extends north into Sussex County, ending in Lafayette Township. The trail is a strong asset, as it provides a high-comfort east-west option for bicyclists in the northern part of the county; the regional network would connect the Paulinskill Valley Trail to points south, such as Town of Phillipsburg and Town of Belvidere. It would also connect to the Warren Highlands Trail, which extends 52 miles across the county²⁸ (most of the trail is not accessible by bicycle).

The NJ TRANSIT Montclair-Boonton Line and Morristown Line both terminate at the Hackettstown stop, which overlaps with the regional network. While there are no other regional transit services in the county, this overlap does offer opportunities to connect local active transportation trips in Town of Hackettstown to commuter rail service.

Table 26 lists all roads in Warren County's regional network. It includes road name, municipality, and length of each segment. Network segments that are less than 0.25 miles in length are not listed. Many network segments

²⁷ Rails-to-Trails Conservancy. (2022). Paulinskill Valley Trail. Retrieved from: <https://www.trailink.com/trail/paulinskill-valley-trail/>

²⁸ Warren Parks, Department of Land Preservation. (2022). About The Warren Highlands Trail. Retrieved from: <https://warrenparks.com/warren-highlands-trail/>

are on high-volume state highway corridors; as such they are not presently conducive to active transportation. However, walk/bike potential does exist in these areas, and more suitable parallel routing could be explored, such as sidepaths, trails, and other separated facilities, as well as improved transit service for longer distance connections. Local roads that parallel the regional network may also be used as alternate low-stress routes during network implementation.

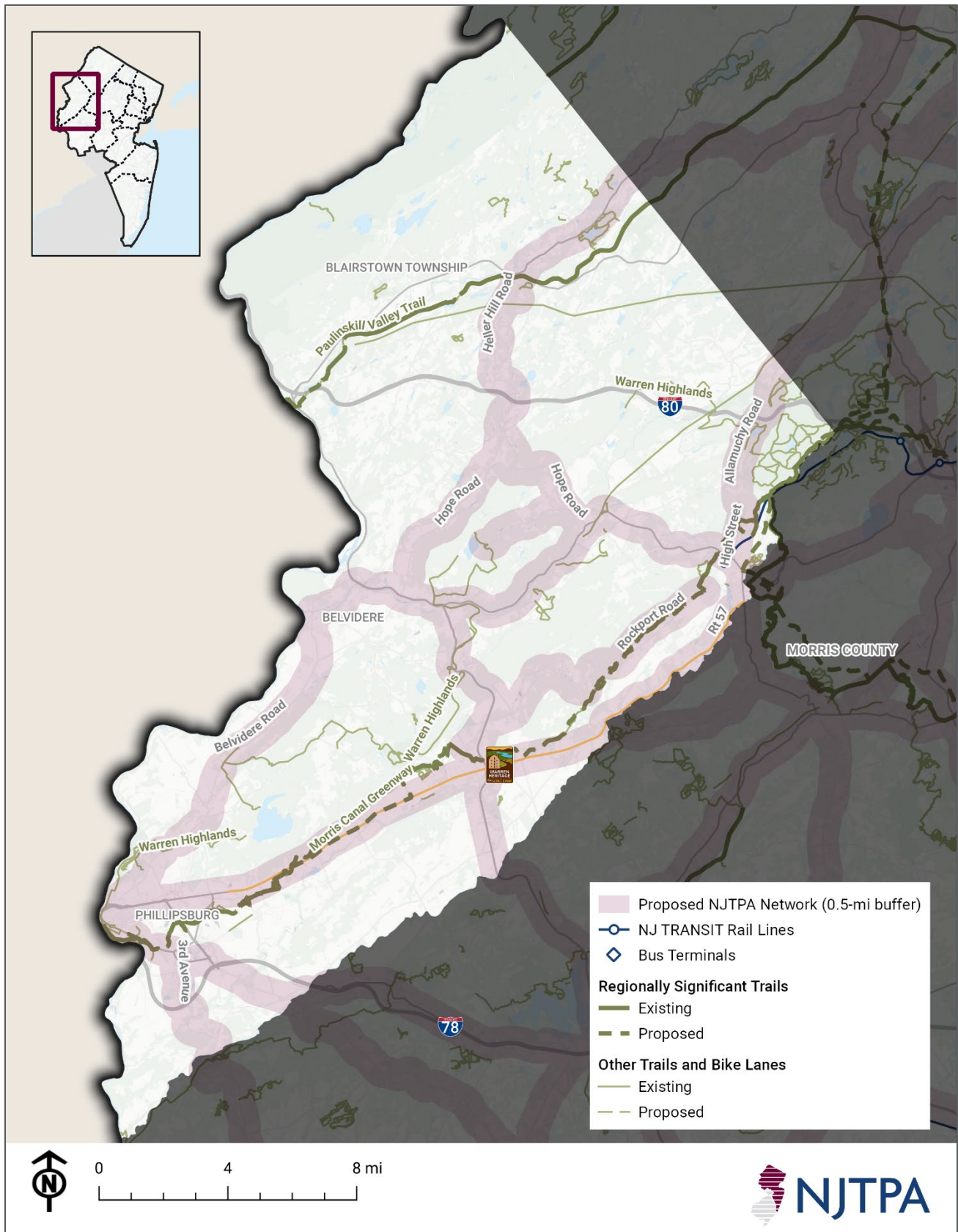
Table 26: Warren County Regional Network Corridors

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
3rd Avenue	CR 519	Borough of Alpha	N/A	N/A	1.07
E. Washington Avenue	NJ 57	Borough of Washington	Boulevard, East Washington Avenue, Prosper Way	N/A	0.74
Water Street	CR 620	Town of Belvidere	Market Street	N/A	1.55
Greenwich Street	CR 620	Town of Belvidere	Phillipsburg-Belvidere Road	Market Street	0.55
Main Street	CR 517, US 46	Town of Hackettstown	Canal Lane, N. Main Street	Mill Street, Mountain Avenue	1.06
N/A	N/A	Town of Hackettstown	Rt 57	Mountain Avenue, Old Route 24, Riveredge Trail	0.56
Mountain Avenue	CR 517, NJ 182	Town of Hackettstown	Main Street, Mill Street	Old Route 24, Riveredge Trail	0.97
High Street	CR 517	Town of Hackettstown	Allamuchy Road	Main Street	1.00
Lincoln Road	CR 646	Town of Phillipsburg	N/A	N/A	0.25
Hudson Street	N/A	Town of Phillipsburg	South Main Street	Warren Street	0.82
South Main Street	CR 678	Town of Phillipsburg	Stockton Street	Center Street	0.53
Allamuchy Road	CR 517	Township of Allamuchy	N/A	N/A	3.65
Hackettstown Road	CR 517	Township of Allamuchy	N/A	N/A	2.06
Edgehill Road	CR 607	Township of Blirstown	Hope Road	Cedar Lake Road	0.76
Heller Hill Road	N/A	Township of Blirstown	Hope - Blirstorm Road, Hope Road	Edgehill Road	2.60
W. Washington Avenue	NJ 57	Township of Franklin	Richline Hill Road	West Washington Avenue	4.13
West Washington Avenue	NJ 57	Township of Franklin	W. Washington Avenue	Little Philadelphia Road, W. Washington Avenue	1.32
N/A	NJ 173	Township of Greenwich	N/A	N/A	3.74
Stillwater Road	CR 521	Township of Hardwick	Bridge Street	Maple Avenue	4.73
Belvidere Road	CR 519, CR 646	Township of Harmony	N/A	N/A	2.76
Belvidere Road	CR 519	Township of Harmony	N/A	Phillipsburg - Belvidere Road	1.65
Hope - Great Meadow Road	CR 611	Township of Hope	Hope - Great Meadows Road	Hope Road	1.74

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
Hope - Blaiirstorm Road	CR 521	Township of Hope	Hope - Blairstown Road	Heller Hill Road, Hope Road	0.42
Hope - Blairstown Road	CR 521	Township of Hope	N/A	Hope - Blaiirstorm Road	0.80
Hope - Blairstown Road	CR 521	Township of Hope	High Street, Hope - Bridgeville Road	N/A	1.16
Hope - Bridgeville Road	CR 519	Township of Hope	Hope Road	High Street, Hope - Blairstown Road	2.46
Hope Road	CR 519	Township of Hope	Hope - Bridgeville Road	North Bridgeville Road	1.04
Hope Road	CR 611	Township of Liberty	Hope - Great Meadow Road	N/A	2.79
Mountain Lake Road	CR 679	Township of Liberty	Hope Road	Lakeside Drive East, Lakeside Drive North	2.94
Memorial Parkway	NJ 57, US 22	Township of Lopatcong	Morris Street	South Hillcrest Boulevard	1.52
Belvidere Road	CR 646	Township of Lopatcong	North 1st Street	N/A	1.94
Memorial Parkway	NJ 57	Township of Lopatcong	N/A	N/A	2.81
Penwell Road	N/A	Township of Mansfield	N/A	N/A	0.41
Jackson Valley Road	CR 628	Township of Mansfield	Karrsville Road	Belvidere Avenue, Kinnaman Avenue, Mine Hill Road	4.20
Karrsville Road	CR 628	Township of Mansfield	Jackson Valley Road	Karrville Road	0.47
Karrville Road	CR 628	Township of Mansfield	Karrsville Road	Main Street, Rockport Road	0.73
Rockport Road	CR 629	Township of Mansfield	Karrville Road, Main Street	College View Drive, Grand Avenue	5.13
N/A	NJ 57	Township of Mansfield	Main Street	Airport Road, Rt 57	7.48
Rt 57	NJ 57	Township of Mansfield	Airport Road	N/A	1.20
N/A	CR 519	Township of Pohatcong	Springtown Road	Riegelsville Warren Glen Road, Warren Glen Road	2.07
New Brunswick Avenue	CR 519, NJ 122	Township of Pohatcong	Saint James Avenue, South Main Street	N/A	1.21
South Main Street	NJ 122	Township of Pohatcong	N/A	New Brunswick Avenue, Saint James Avenue	0.48
Riegelsville Warren Glen Road	CR 519	Township of Pohatcong	Milford - Warren Glen Road	Warren Glen Road	0.31
Springtown Road	CR 519	Township of Pohatcong	3rd Avenue	N/A	0.30
N/A	NJ 31	Township of Washington	N/A	Port Colden Road, Wall Street	7.43

Road Name	County/NJ/US Route	Municipality	Start Point	End Point	Length (Miles)
W. Washington Avenue	NJ 57	Township of Washington	Little Philadelphia Road, West Washington Avenue	Belvidere Avenue, Broad Street, East Washington Avenue	2.24
North Bridgeville Road	CR 519	Township of White	N/A	Hope Road	2.86
Phillipsburg-Belvidere Road	CR 620	Township of White	Phillipsburg - Belvidere Road	Greenwich Street	1.03
Phillipsburg - Belvidere Road	CR 519	Township of White	Belvidere Road	Phillipsburg-Belvidere Road	2.07
N/A	NJ 31	Township of White	US 46	Port Colden Road	1.91
N/A	US 46	Township of White	Water Street	Overlook Drive	13.56

Figure 23: Warren County Regional Network



Appendix B: Individual Overburdened Community Categories and Regional network Maps

Figure 24: Individual Overburdened Community Categories and Regional Network

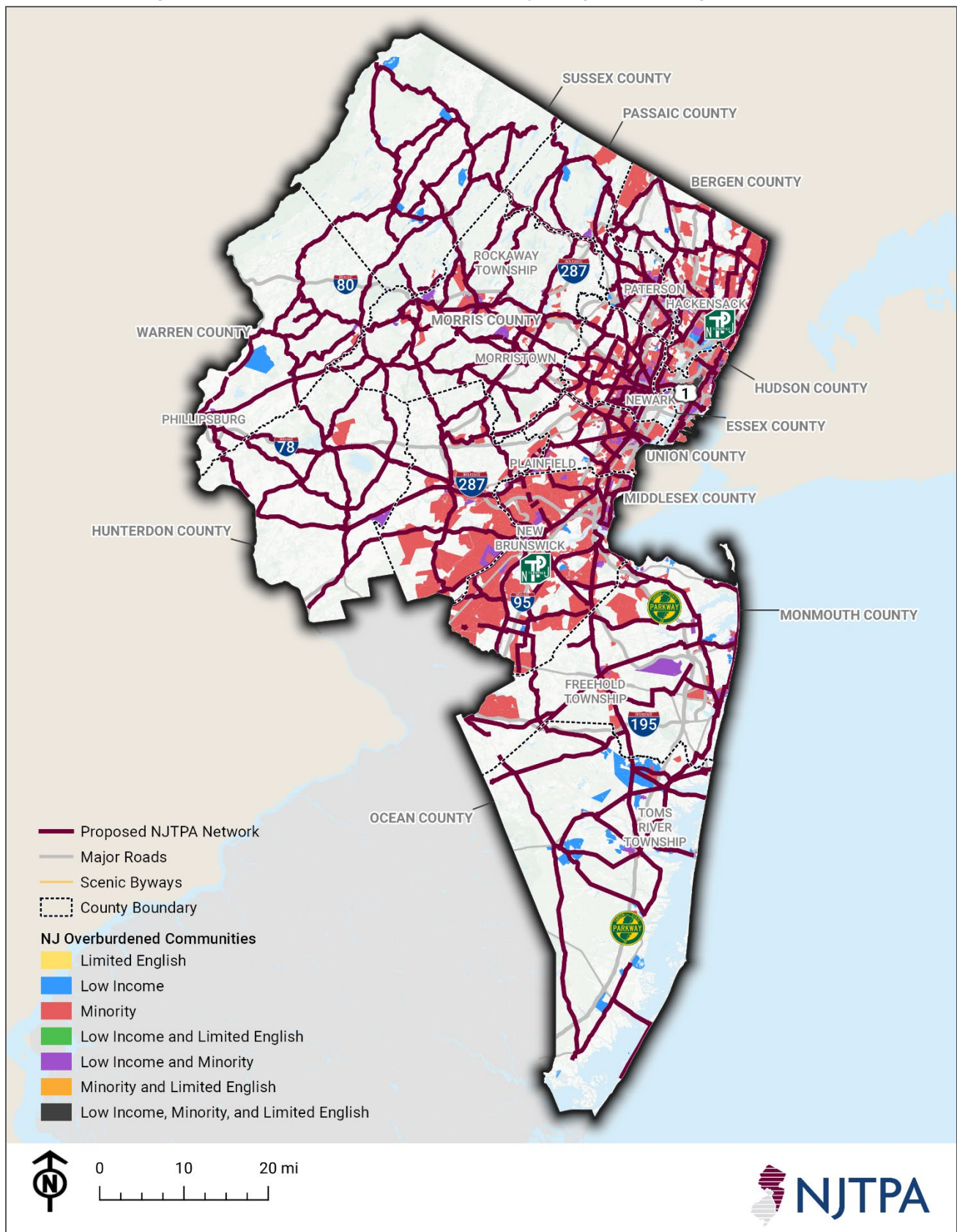


Figure 25: Individual Overburdened Community Categories and Regional network – Urban Areas

