

# ATLANTIC COUNTY BIKEWAY WEST Feasibility Study

December 2021



South Jersey  
Transportation  
Planning Organization

# ACKNOWLEDGEMENTS

Thank you to the members of the Atlantic County Bikeway West Study Advisory Committee and the citizens of Atlantic County who contributed comments.

## Client



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# **PROJECT BACKGROUND**



# Planning Background

The South Jersey Transportation Planning Organization (SJTPO) sponsored this study to identify a feasible route for an off-road trail segment between the planned eastern terminus of the Camden County Link Trail in Winslow Township, Camden County, and the existing western terminus of the Atlantic County Bikeway in Hamilton Township, Atlantic County. Referred to as the “Atlantic County Bikeway West,” this new segment will fill the 16-mile gap separating these trails and help advance development of a continuous, regional, off-road trail spanning 105+ miles from Philadelphia to Ocean City and Cape May.

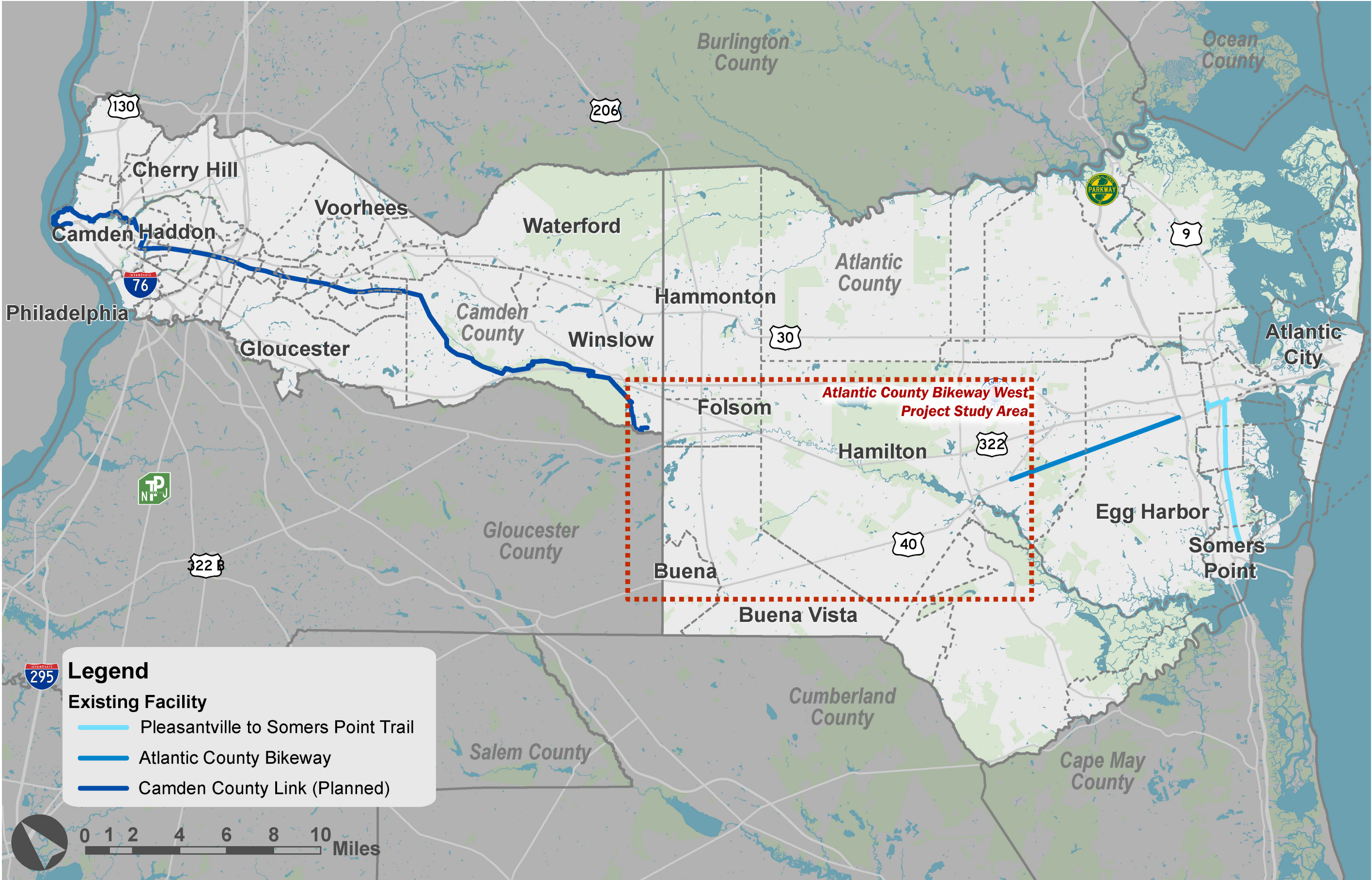
The **Camden County Link** is a planned 33-mile off-road trail located primarily on public, utility, or Conrail property terminating near the intersection of Camden, Gloucester, and Atlantic counties. Once completed, the trail will traverse 17 municipalities and connect a variety of municipal and County parks, several downtown business districts, and provide access to hundreds of acres of public open space in Winslow Township.

The **Atlantic County Bikeway** is an existing 7.5-mile long shared use path maintained by the Atlantic County Park System. The trail runs between Harbor Square in Egg Harbor Township and the Atlantic County Institute of Technology in Hamilton Township. Amenities include three parking areas and a pedestrian-actuated traffic signal at English Creek Avenue.

The project study area comprises the area between the planned Camden County Link to the west and the existing Atlantic County Bikeway to the east and includes Folsom Borough, Buena Vista Township, and Hamilton Township in Atlantic County. Since the Camden Link is expected to terminate nearly a mile west of the Atlantic County border in Winslow Township, the study area also includes a small portion of Camden County.







Map 1.1: Study Area



# Planning Context

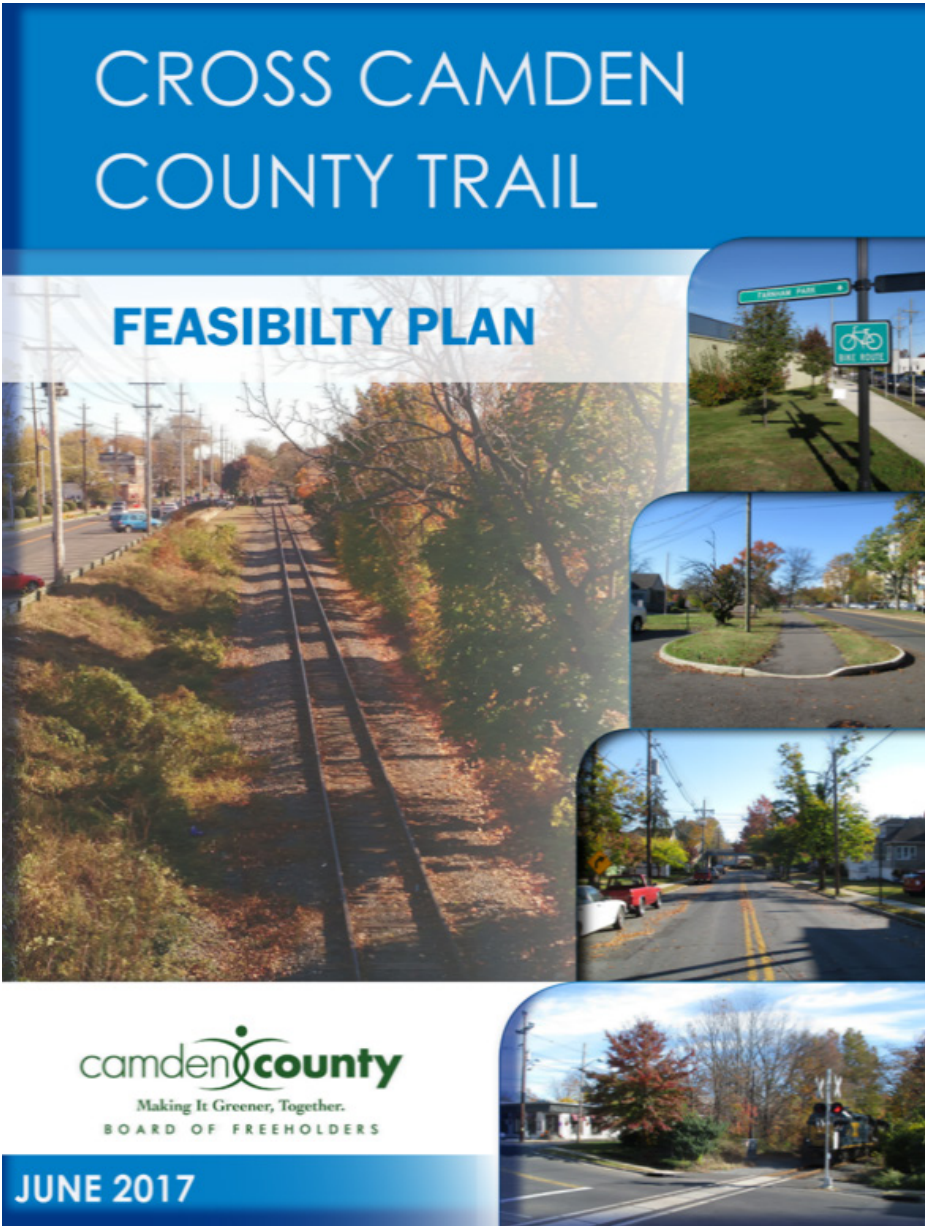
## Previous Studies

This trail feasibility study will help advance goals of SJTPO’s **South Jersey Trails Design Guide**, published in 2019 as an outgrowth of their Transportation Matters regional plan. The design guide provides a framework for a comprehensive trails network in South Jersey similar to the Delaware Valley’s Circuit Trail Network. Identified as a priority trail segment in the design guide, the Atlantic County Bikeway West will improve local connectivity as well as build connections with the Circuit Trail Network.

Completed by Camden County in 2017, the **Cross Camden County Trail Feasibility Study** developed a proposed trail alignment for the Camden County Link, along with a supporting economic impact analysis and trail concept plan. In the years since the study was completed, planning and design of the trail has advanced under a phased approach with segments of the trail nearing construction.



South Jersey Trails Design Guide



Cross Camden County Trail Feasibility Study



# Benefits of Trails

Communities across South Jersey are discovering that trails offer more than simply recreation – they attract visitors who spend money at local businesses, they attract residents who have a choice in where to live, they give communities places to engage in safe, healthy activities – in short they are **an investment in South Jersey communities.**

Trails can provide a multitude of benefits to both trail users and the community. Transportation benefits include improved mobility and safety through a dedicated travel space separated from traffic. These benefits are most pronounced for those who do not own a car and thus rely on non-motorized transportation for essential travel. Economic benefits can include the short-term impact of job creation for constructing a trail as well as the long-term impact of increased tourism from trail users, while environmental benefits

include reduced carbon emissions through a decrease in driving and preservation of open spaces. Equally important are the health benefits resulting from an increase in active transportation, including reductions in obesity, heart problems, and stress.





# Benefits of Trails

## Why invest in trail projects?

There are many reasons to invest in trail projects, which include:



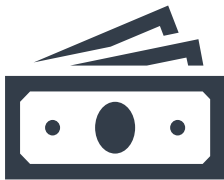
### Transportation Benefits:

- Increased mobility
- Increased safety



### Environmental Benefits:

- Reduction in emissions & energy use
- Preservation of ecosystems



### Economic Benefits:

- Increased tourism and retail revenue
- Construction investment



### Social Benefits:

- Improved accessibility
- Increased social interaction



### Health Benefits:

- Increased active transportation
- Reduced risk of obesity and related conditions
- Reduced stress

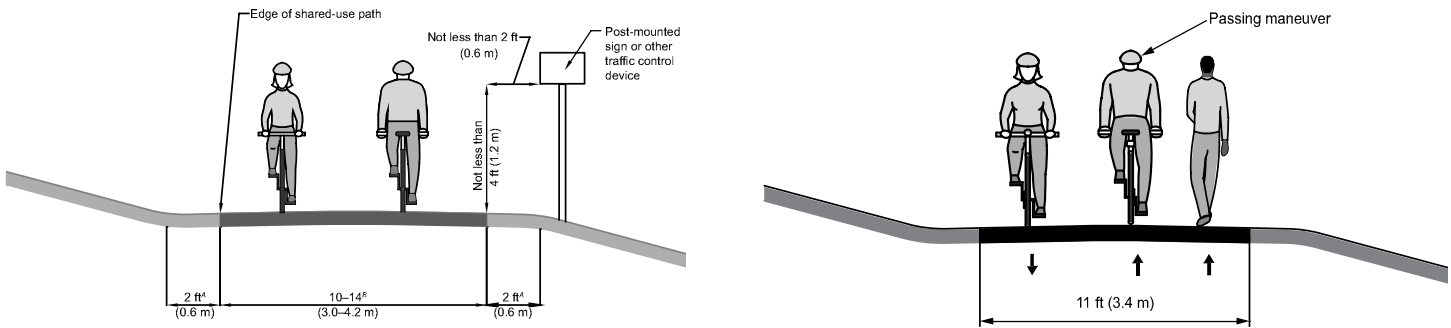




# Trail Characteristics

## What Will the Trail Look Like?

The proposed Atlantic County Bikeway West will be **a multi-use trail that can be considered a shared use path, sidepath, or some combination** of the two. Both shared use paths and sidepaths offer bi-directional travel for cyclists and pedestrians on a paved surface with an absolute minimum width of 8 feet and a preferred minimum of 10 feet. The main difference between the two facility types is determined by how they are separated from traffic. Shared use paths are often located in parks, open space, or forested areas with complete separation from nearby roads, while sidepaths are located adjacent to roadways. Buffer areas between a sidepath and roadway can vary from as little as two feet to much greater widths, depending on available right-of-way and other constraints.



Typical Cross-Sections of a Two-Way Share-use Path, Source: AASHTO Guide for the Development of Bicycle Facilities, 4th Edition, 2012



Example of a Shared Use Path



Example of a Sidepath




# Trail Characteristics


## Who might use the trail?

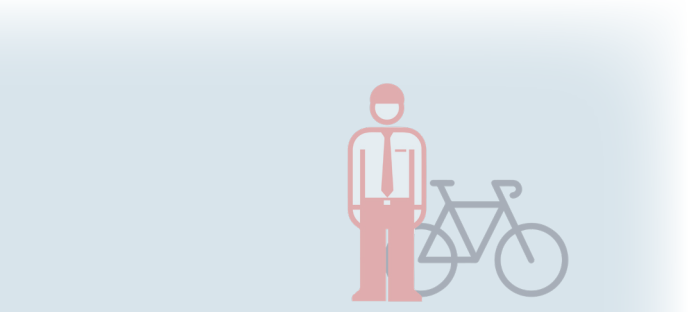
The trail will be open to all interested users ranging from local community members to those visiting from outside the region. To provide real-life examples of expected trail uses, a series of “**trail user profiles**” were developed. The profiles are not intended to encompass every possible trail user, but to assist with the evaluation of trail alignments. Three profiles were developed and discussed in this section.





Local Recreational User








### Local Recreational User

Lives within a short walk or drive of the trail and uses it for recreation, exercise, socializing, walking the dog, etc.

#### Sample Itinerary

A woman from Hammonton goes for a walk with her dog along the trail, parking in a nearby lot. She runs into friends along the trail and ends their trip with a late lunch at a diner in Mays Landing.



Gaskill Park, Mays Landing, NJ

#### Purpose:

- Recreation
- Exercise
- Social

#### Distance:

- < 2 mi. walking
- < 5 mi. biking

PROJECT BACKGROUND

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# Trail Characteristics

Who might use the trail?



Regional Recreational User

### Regional Recreational User



Lives outside the study area and uses the regional trail system to make longer trips related to recreation and tourism

**Purpose:**

- Recreation
- Tourism
- "Bikepacking"

**Distance:**

~25-75+ miles

**Sample Itinerary**

A group of regional cyclists in Philadelphia crosses into NJ over the Ben Franklin Bridge, uses the Camden County Link to access the Atlantic County Bikeway, stops overnight at campgrounds along U.S. 40, then continues down to Ocean City

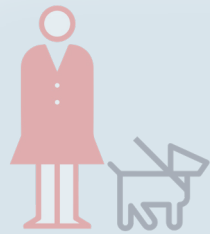


NJ 52 Bikeway, Somers Point, NJ



# Trail Characteristics

Who might use the trail?



## Commuting/Functional User

Lives either within or outside of the study area and uses the trail as a transportation link to reach work, school, errands, etc.

### Purpose:

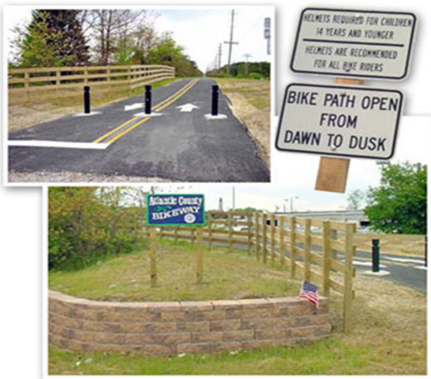
- Commuting
- Errands
- Functional Trips

### Distance:

~ 1-10+ miles

### Sample Itinerary

A local worker without a car, but an avid biker, living in Hamilton Township bikes 10 miles each way to reach their job at a hotel in Pleasantville.



Existing Atlantic County Bikeway



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**PLANNING PROCESS**



# Planning Process

## Key Organizations

### Study Team

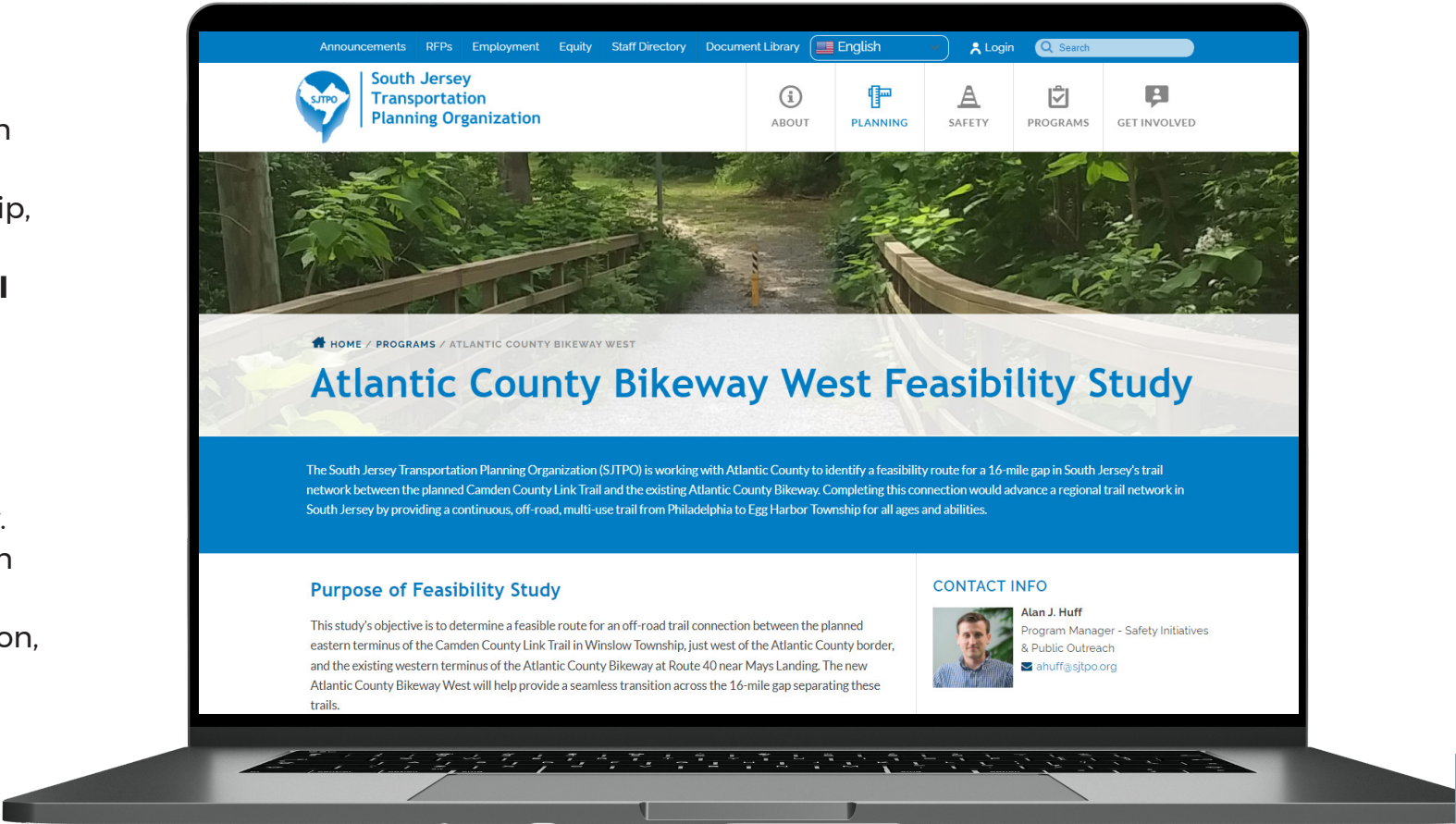
This study was sponsored by SJTPO in partnership with Atlantic County. SJTPO is the regional metropolitan planning organization serving Atlantic, Cape May, Cumberland, and Salem counties. WSP USA, Inc. (WSP) and KMA Consulting Engineers (KMA) conducted the technical analysis as consultants to SJTPO. As the prime consultant, WSP managed the project and led the planning and engineering tasks. KMA supported the existing conditions inventory and provided guidance regarding environmental resources and permitting considerations.

### Steering Advisory Committee

A **Study Advisory Committee** of local stakeholders was formed to guide the study process. The committee included representatives from the New Jersey Department of Transportation (NJDOT), Atlantic County, Camden County, and local municipalities including Hamilton Township, the Town of Hammonton, Folsom Borough, Buena Borough, Buena Vista Township, Somers Point City, and Egg Harbor City. Two Study Advisory Committee meetings were held over the course of the project (available meeting minutes are included in the **Technical Appendix**).

### Public Outreach Events

Two public meetings were conducted for the Atlantic County Bikeway West feasibility study. Due to the ongoing COVID-19 pandemic, the project team decided to hold both meetings in a virtual format. Several outreach methods were used to educate and seek feedback from members of the public. These methods included a project web page, a narrated presentation, virtual Live Q&A sessions, and a project survey, as described in the following section.





# Planning Process



## Virtual Public Meeting #1 (June 2021)

The goal of the first public meeting was to introduce the project to the public and inform the early planning tasks. A **project-specific web page** hosted on SJTPO's website was developed to distribute information to the public. The web page, which went live on June 16, contained text, images, and maps with information about the project background and work progress. In addition, a 20-minute long narrated presentation was made available on the website in both English and Spanish. The presentation provided an overview of the project including potential trail user profiles, routing options, and next steps.

As part of the first public meeting, a **Live Q&A session** was held on Wednesday, June 23rd at 5:00pm. The session was held in a virtual format via GoToMeeting and Spanish translation was made available. The event consisted of an abbreviated presentation followed by a Q&A session with the project team.

In addition, a **survey was distributed** to garner feedback on how the trail would be used and the preliminary routing alternatives being considered. The survey was open for a three-week period (June 16th to July 9th) and included a mix of multiple choice and open response questions. SJTPO distributed the survey via a project information flyer (in both English and Spanish) and their regular newsletter. A summary of the survey results is included in the **Technical Appendix**.

## Virtual Public Meeting #2 (November 2021)

A second public meeting was held virtually in November 2021 to gather feedback on the trail concept plan and other aspects of the trail development. The web page content was updated to include new information about the proposed trail alignment, specific areas of focus, and other aspects of the trail development. Similar to the first meeting, a Live Q&A session was held on Thursday, November 18th at 5:00pm. The session was held in a virtual format via Zoom and consisted of a presentation followed by a Q&A session with the project team. Meeting minutes from this event are also included in the **Technical Appendix**.







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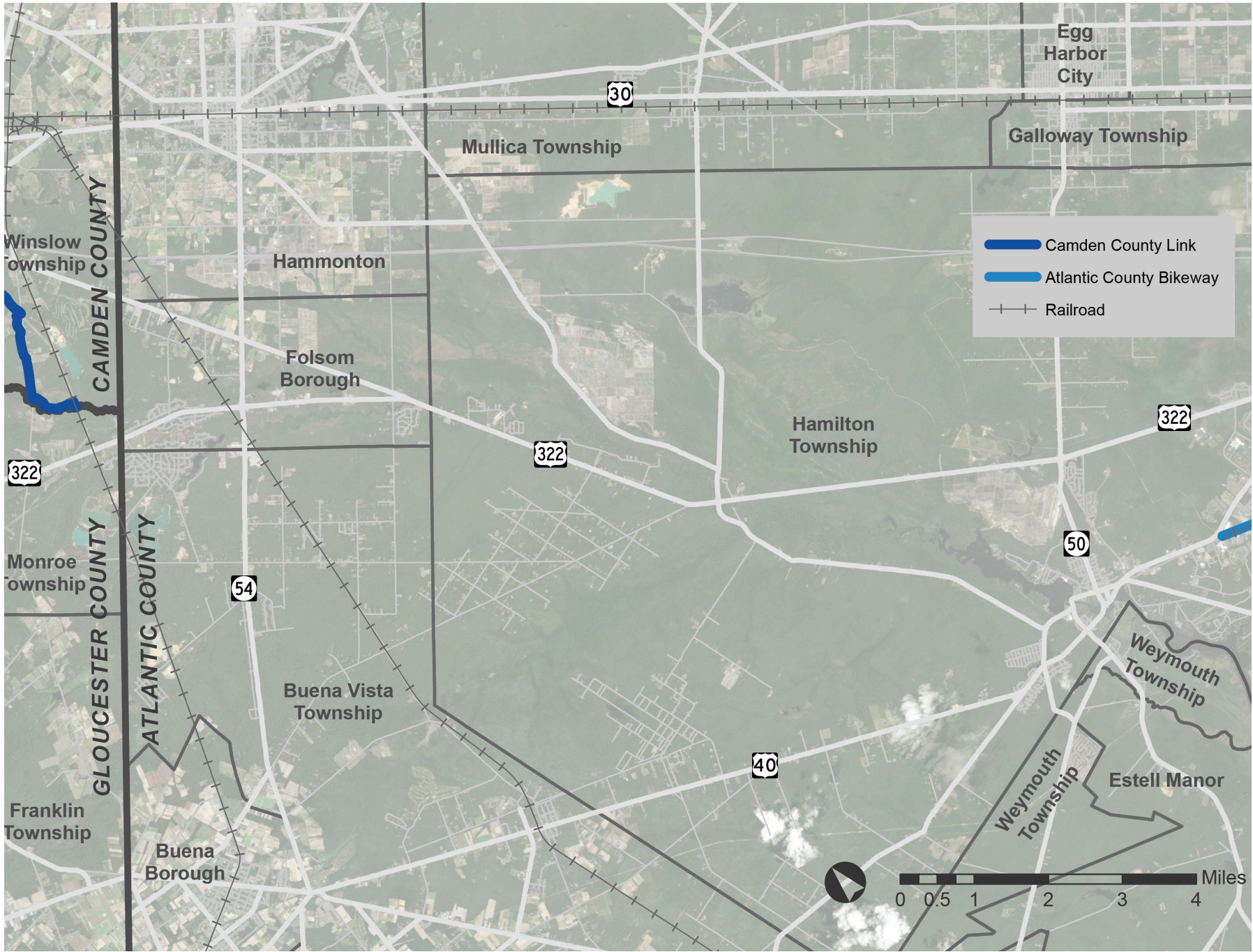
**TRAIL ROUTING  
ANALYSIS**



# Existing Conditions

Project mapping was gathered from several sources and includes points of interest, zoning, land use, existing bike and pedestrian facilities, and natural features and hazards. In addition, the study team conducted a site visit on June 9, 2021 to tour the project study area, observe field conditions first-hand, and take photographs along potential alignments. Together, these variables helped identify demand for the trail as well as opportunities and constraints along the corridors under consideration. Specific GIS data sources included:

- **Transportation Features:**
  - Roadway centerlines from Atlantic County GIS
  - Existing and proposed bike paths from Atlantic County GIS
  - Existing transit routes and active/abandoned rail lines from NJGIN
- **Environmental Features:**
  - Wetlands, streams, and contaminate sites from NJDEP Bureau of GIS
- **Parcel Boundaries:**
  - Property boundaries from NJDEP Bureau of GIS
  - Parcel ownership from NJ Geo-Web and confirmed by Atlantic County
- **Points of Interest/Activity Centers:**
  - Commercial centers from NJDEP Land Use Data
  - Parks from NJGIN and Atlantic County Preserved Open Space
  - School point features and locations from Atlantic County GIS
- **Steep Slopes**
  - 2-foot elevation contours from Atlantic County Planning



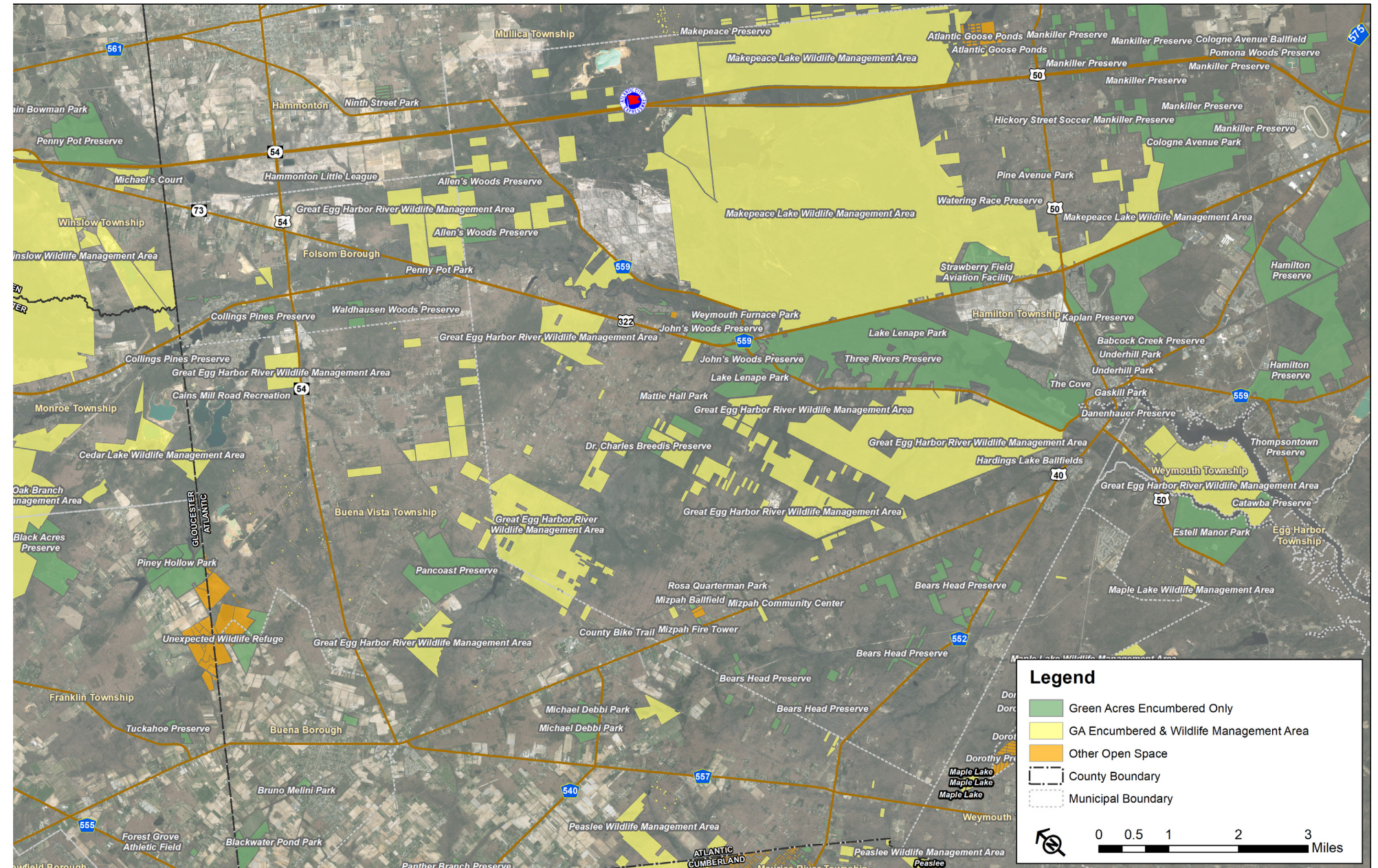
Map 3.1: Area Overview



## Parkland and Open Space

The New Jersey Department of Environmental Protection (NJDEP) Green Acres Program, created in 1961, serves as an agent for NJDEP to manage the acquisition of land when it becomes part of the system of state parks, forests, natural areas, and wildlife areas. The NJDEP Green Acres Program Recreation and Open Space Inventory (ROSI), in conjunction with NJ GeoWeb, was used to identify public open space and/or parklands within the study area, which are shown in Map 3.2. Listed below are the most significant Green Acres Encumbered properties within the study area, while the **Technical Appendix** includes lists of Green Acres properties adjacent to proposed alternatives:

- Winslow Wildlife Management Area
- Collings Pines Preserve
- Great Egg Harbor Wildlife Management Area
- Cedar Lake Wildlife Management Area
- Mizpah Ballfield
- Rose Quarterman Park
- Gaskill Park
- Forest Fire Division C Headquarters
- Atlantic County Bikeway East
- Penny Pot Park of Atlantic County
- John's Woods Preserve
- Lake Lenape Park
- Estell Manor Park
- Three Rivers Preserve
- Makepeace Lake Wildlife Management Area
- Pine Avenue Park
- Kaplan Preserve



Map 3.2: Open Spaces

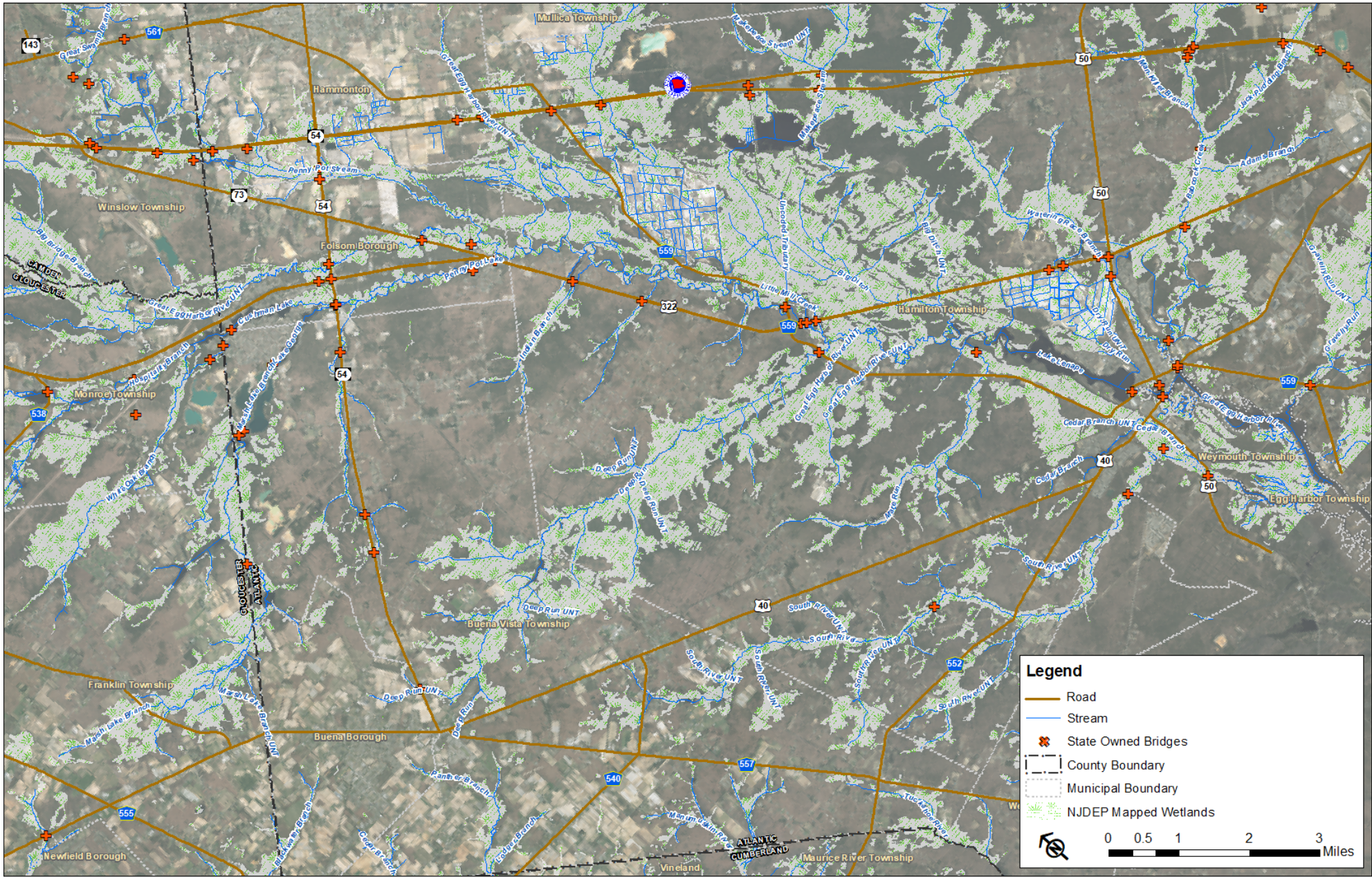


# Existing Conditions

## Wetlands And Streams

The New Jersey Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A-3.2) establish the procedures by which the New Jersey Department of Environmental Protection (NJDEP) reviews applications for permits to conduct regulated activities in wetlands and their transition areas. The Flood Hazard Area Control Act Rules (N.J.A.C. 7:13) rate strict standards for development in flood hazard areas and adjacent to surface waters in order to mitigate the adverse impacts to flooding and the environment. As such, identification and consideration of these resources in the early stages of project development is of great importance.

Wetlands, streams, and state-owned bridges within the study area were identified using NJ GeoWeb, the NJDEP Bureau of GIS' interactive mapping application. The extent of NJDEP mapped wetlands and streams adjacent to the proposed trail alignments is included in the **Technical Appendix**.



Map 3.3: Streams, Wetlands, Bridges



## Contaminated Sites

A list of the NJDEP mapped Known Contaminated Sites (KCS) and groundwater contamination areas within 300 feet of each of the potential trail alignments is included in the **Technical Appendix**.





# Preliminary Alignment Alternatives

The existing conditions analysis – along with input from SJTPO, Atlantic County, and the Steering Advisory Committee – led to the identification of three potential trail alignments:

- ACE/NJ 50 Alignment
- US 322/Weymouth Road Alignment
- NJ 54/Rail Corridor Alignment

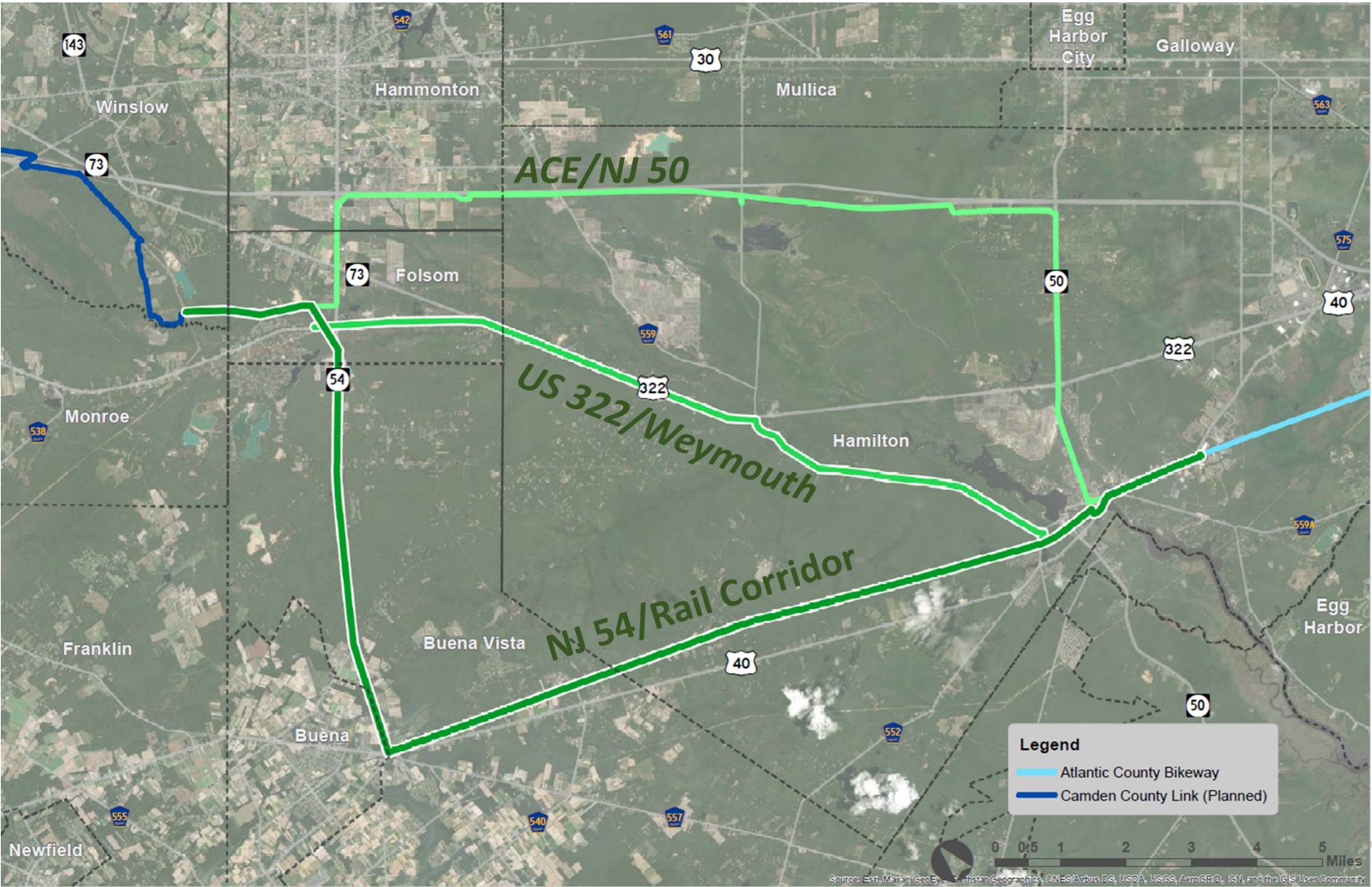
Each of these alignments would connect the planned terminus of the Camden County Link to the existing Atlantic County Bikeway. The three alignments overlap at both ends, i.e. near the planned Camden County Link terminus and the existing Atlantic County bikeway. Once developed, the alignments were evaluated based on set criteria including:

- Right-of-way availability
- Separation from traffic
- Conflict points between trail users and vehicles
- Proximity to population centers, amenities, and bicycle/pedestrian connections
- Environmental constraints
- Maintenance, security, and emergency access

Details of the three alignments are discussed in the following section.

## ACE/NJ 50 Alignment

This alignment would run adjacent to Route 54 as a sidepath, transition to a utility corridor running parallel to the south side of the Atlantic City Expressway, and then run as a sidepath adjacent to Route 50 into Mays Landing. This alignment was dismissed early on due to a lack of available right-of-way along Route 50, difficulty in crossing the interchange with Route 322, potential impacts through the MakePeace Wildlife Management Area, and the trail’s isolation from population centers and amenities.



Map 3.5: Preliminary Set of Alternatives



# Preliminary Alignment Alternatives

## US 322/Weymouth Alignment

This alignment would run adjacent to Route 322 as a sidepath before traveling southeast along Weymouth Road, signed as County Route 559, into Mays Landing. Existing and potential future conditions along the US 322/Weymouth Road corridors are shown in the images to the right, with opportunities and issues listed below.

### Opportunities

- More direct route
- Many access points along route; easier security and maintenance access

### Issues

- Limited right-of-way along US 322 and Weymouth Road
- Less separation from traffic; may be directly adjacent to roadway shoulder
- Numerous conflict points between drivers and trail users at driveways
- More isolated from population centers

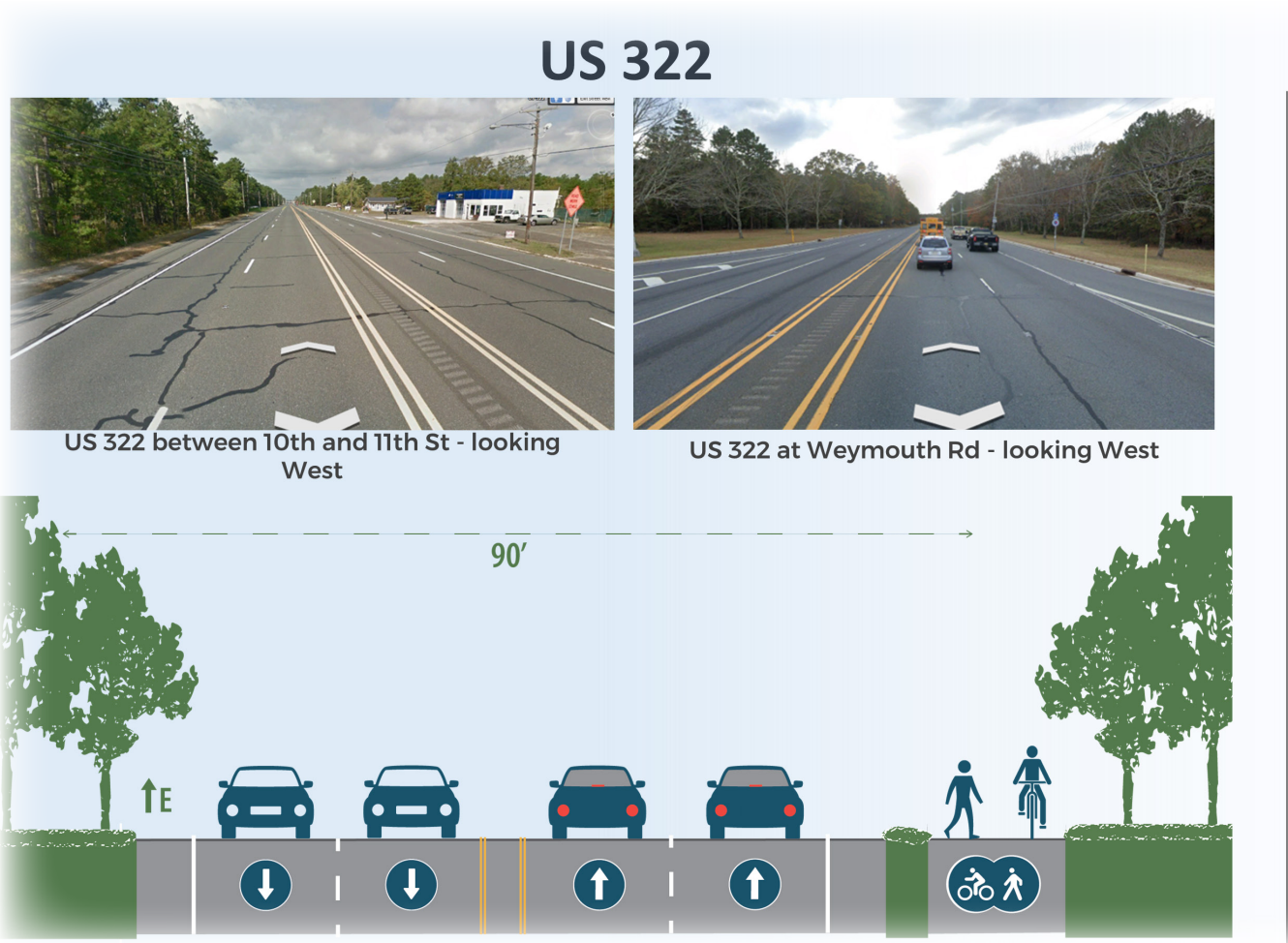
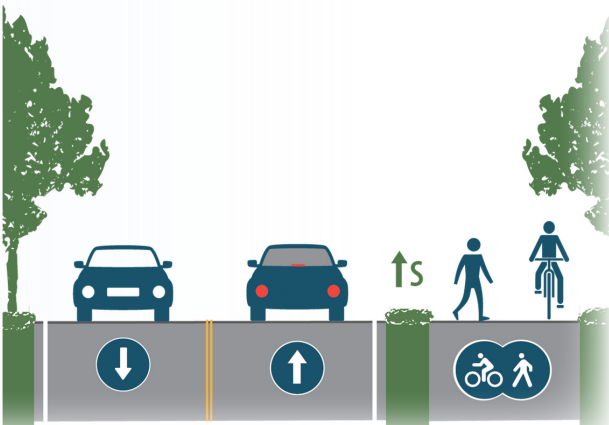


Image 3.1: US 322/Weymouth Alignment Cross-sections

## Weymouth Rd



Weymouth Rd south of Mitzpah Rd - looking South





# Preliminary Alignment Alternatives

## NJ 54/Rail Corridor Alignment

This alignment would run south as a sidepath within the wide Route 54 right-of-way. Near the intersection with Route 40, the trail would turn and run east along an unused rail right-of-way paralleling Route 40. This shared use path segment would continue east through Mizpah, intersecting with several side streets before continuing off-road into Mays Landing.

Existing and potential future conditions along the NJ 54/ Rail Corridor alignment are shown in the images to the right, with opportunities and issues listed below.

### Opportunities

- Wide/available right-of-way along Route 54
- High degree of separation from traffic, particularly along the rail corridor
- Proximity to population centers and bicycle/pedestrian connections

### Issues

- Less direct route
- Fewer potential access points for maintenance/security along rail corridor portion

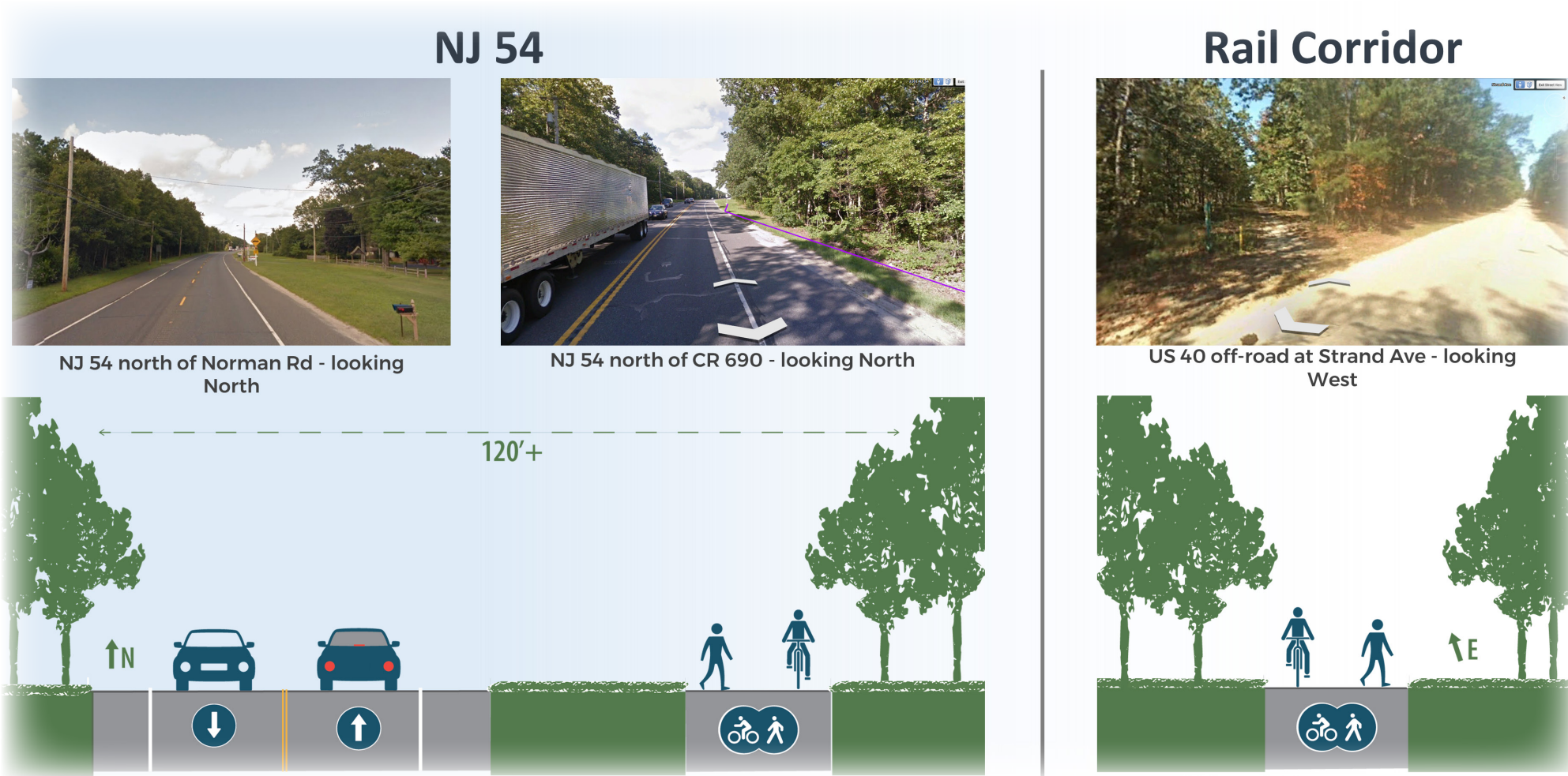


Image 3.2: NJ 54/Rail Corridor Alignment Cross-sections



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**TRAIL CONCEPT PLAN**



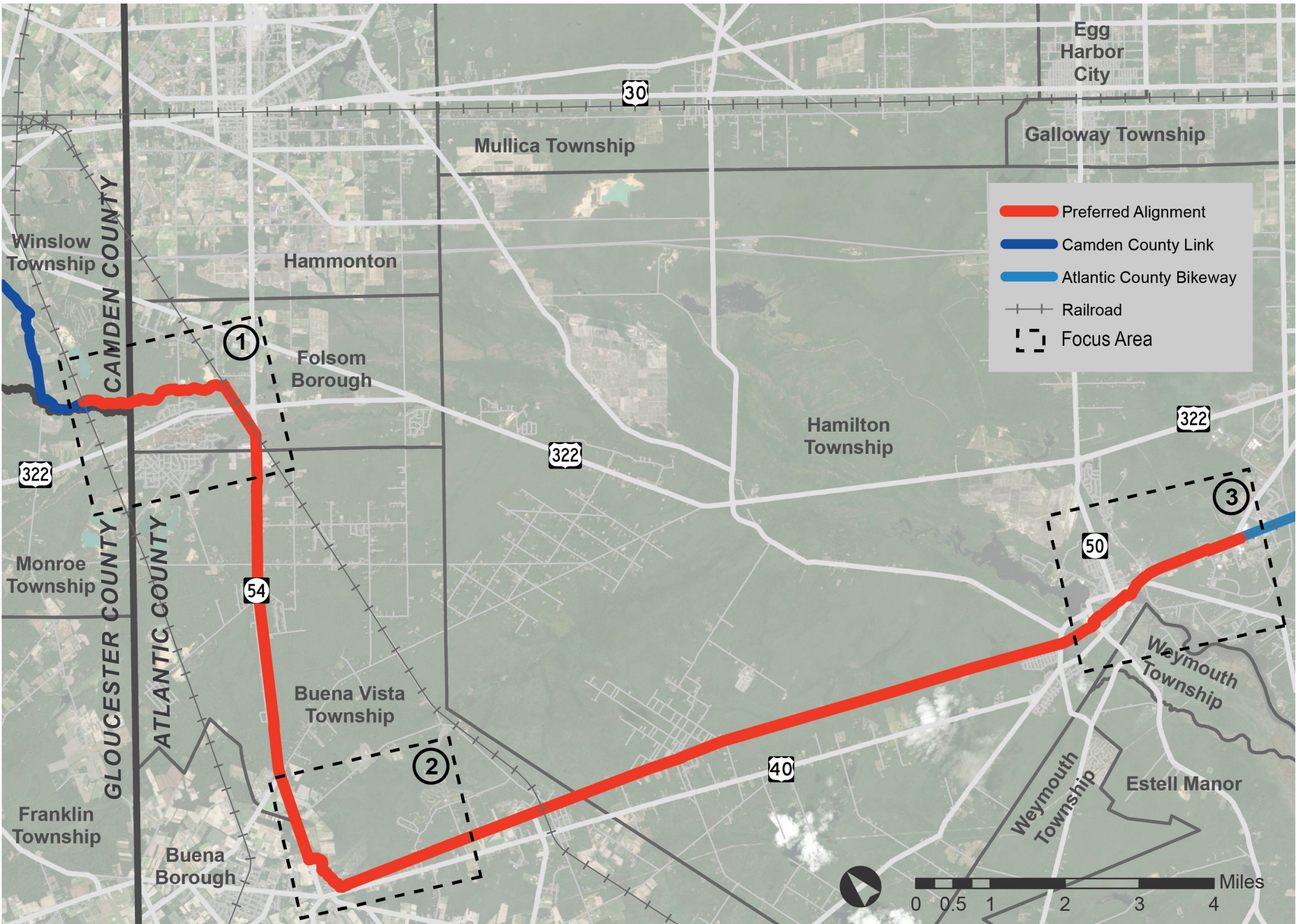
# Proposed Trail Alignment

The NJ 54/Rail Corridor alignment was selected as the preferred overall alignment based on the same evaluation criteria that were used to develop alignments, while also considering public feedback and discussions with the steering committee. Primary factors for selecting this alternative included:

- Availability of public right-of-way along NJ 54
- A high degree of separation from traffic, particularly along the rail corridor segment, which leads to a safer and more enjoyable user experience
- Proximity to population centers and bicycle/pedestrian connections

The proposed alignment would travel east from the planned terminus of the Camden County Link in Winslow Township to the Beasley’s Point secondary rail corridor, along the west side of the rail tracks until they meet NJ 54, and then run along the east side of NJ 54’s wide right-of-way. The trail would then turn and continue east into Buena Vista and Hamilton Townships along the vacant rail corridor parallel to US 40 before continuing off-road as a sidepath through Mays Landing to the existing Atlantic County Bikeway.

Subsequent planning for the trail was focused on three challenging areas along the alignment, which are referred to as “Focus Areas” and described in the following section:



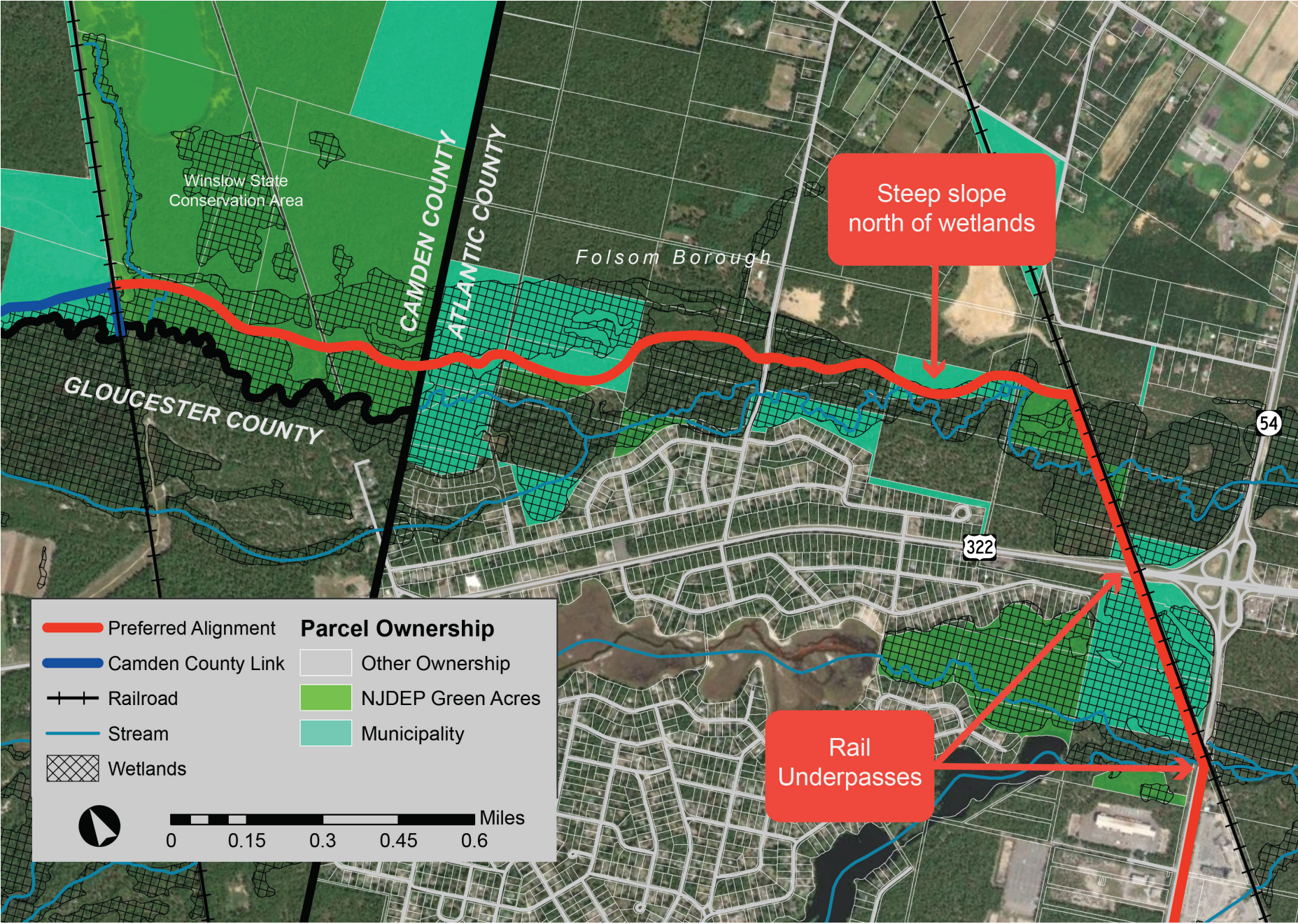
Map 4.1: Proposed Trail Alignment



# Proposed Trail Alignment

## Focus Area #1 – Camden County Link to NJ 54

Beginning at the planned terminus of the Camden County Link in Winslow Township, the proposed alignment would extend east for about two miles before reaching a currently inactive rail corridor owned by Conrail. Most of this stretch is located on publicly owned parcels, except for two residential parcels near 14th Street. The trail would then run for  $\frac{3}{4}$  of a mile along the west side of the rail right-of-way and pass beneath the US 322 and NJ 54 bridges. Once through the NJ 54 bridge, the trail would run up the slope to meet the highway and run along the east side of NJ 54 as a sidepath for approximately five miles.



Map 4.2: Focus Area 1 (Folsom Borough)



# Proposed Trail Alignment

## Focus Area #1 – Camden County Link to NJ 54

Primary considerations in this focus area include:

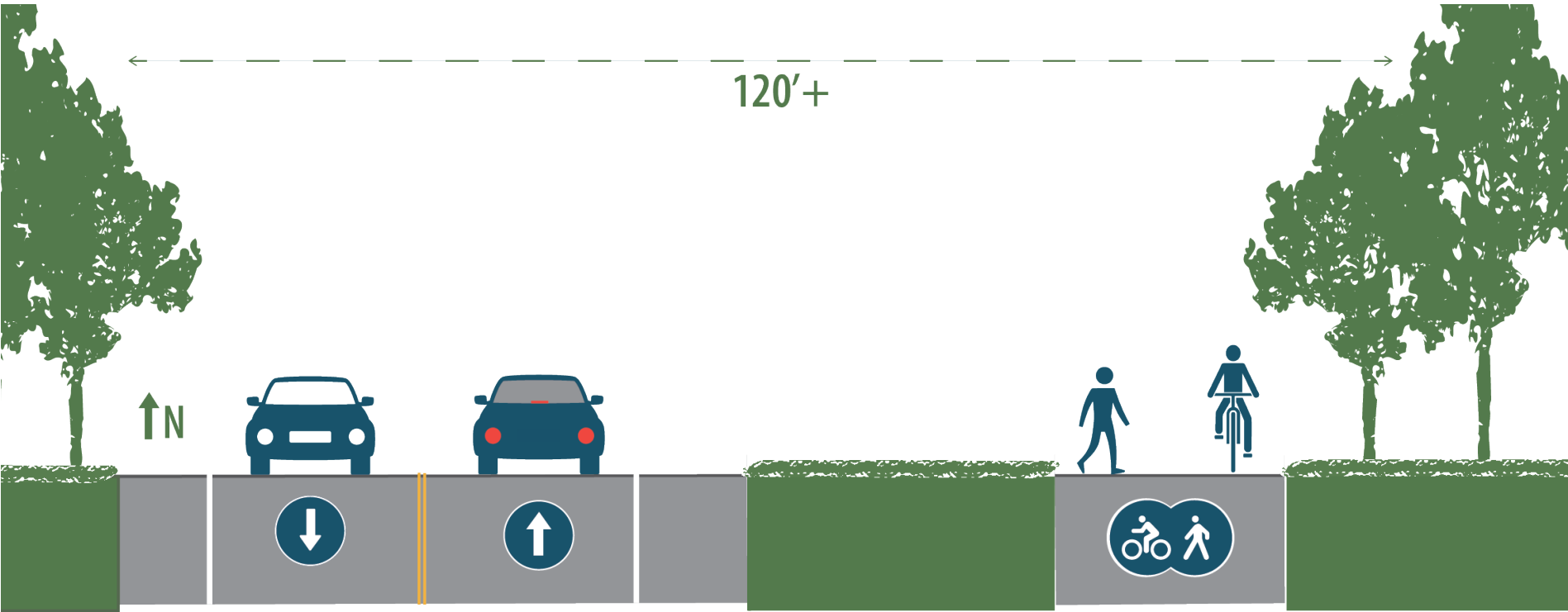
- Coordination with NJDEP and hunting groups for the segment within the Winslow Wildlife Management Area
- Negotiating access across private properties near 14th Street
- Minimizing wetland impacts and avoiding steep slopes near 13th Street
- Coordination with Conrail to use their right-of-way for the rails-with-trails segment
- Coordination with NJDOT to use their right-of-way along NJ 54



Access to NJ 54 bridge over Conrail corridor



Rails with Trails Corridor



NJ 54 Proposed Alignment

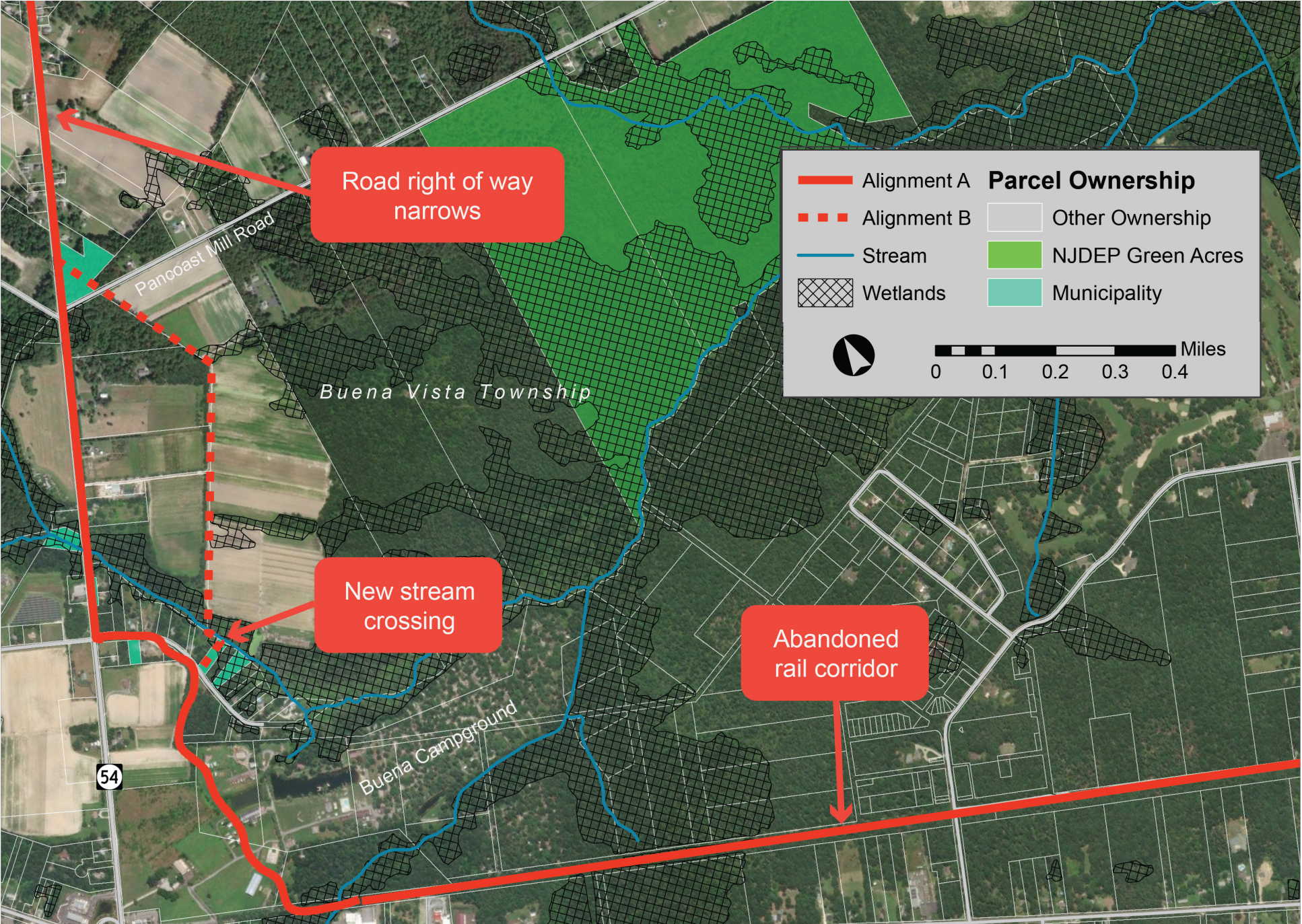


# Proposed Trail Alignment

## Focus Area #2 – NJ 54 to Rail Corridor/Richland Village

This area covers the stretch of NJ 54 from Weymouth-Malaga Road to US 40. Two potential alignments are being considered to connect the NJ 54 alignment with the abandoned rail corridor paralleling US 40. Both alignments would use the Buena Vista Campground to connect with Railroad Boulevard, as follows:

- **Alignment “A”** runs south along NJ 54 until Fursin Avenue, then travels along the south side of Fursin Avenue before veering to the south through privately owned parcels to the campground. This option has the benefit of running along public right of way but is not as desirable from a trail user perspective due to the proximity to NJ 54, which has a narrower right-of-way in this area.
- **Alignment “B”** veers away from NJ 54 just north of Pancoast Mill Road, crosses at a midblock location, and then runs between private properties along an existing farm road before connecting across Fursin Avenue to the campground. This option would be most desirable for trail users due to its separation from vehicular traffic but is contingent on the ability to secure an easement or right of way from private property owners.



Map 4.3: Focus Area 2 (Buena Vista Township)



# Proposed Trail Alignment

## Focus Area #2 – NJ 54 to Rail Corridor/Richland Village

East of the campground, the trail would run along the former railbed parallel to Railroad Boulevard for about three miles until reaching Richland Village. Most of this right-of-way is cleared of structures and vegetation; however, there are four structures near St. Augustine’s School located within the rail corridor. In these areas, the trail will likely need to run adjacent to Railroad Boulevard for short segments and/or private ROW may need to be acquired.

Primary considerations in this focus area include:

- Further investigation of right-of-way and frontage impacts for the segment south of Malaga Road, where NJDOT’s right-of-way narrows from 120 to 50 feet
- Most of the railroad right-of-way in Buena Vista Township is privately owned, thereby requiring coordination with property owners
- Several buildings west of St. Augustine’s School situated within the railroad corridor will need to be addressed
- Creating access routes to connect the trail with US 40 and Richland Village



*Buena Vista Campground Entrance Road*



*Strand Ave (East End)*



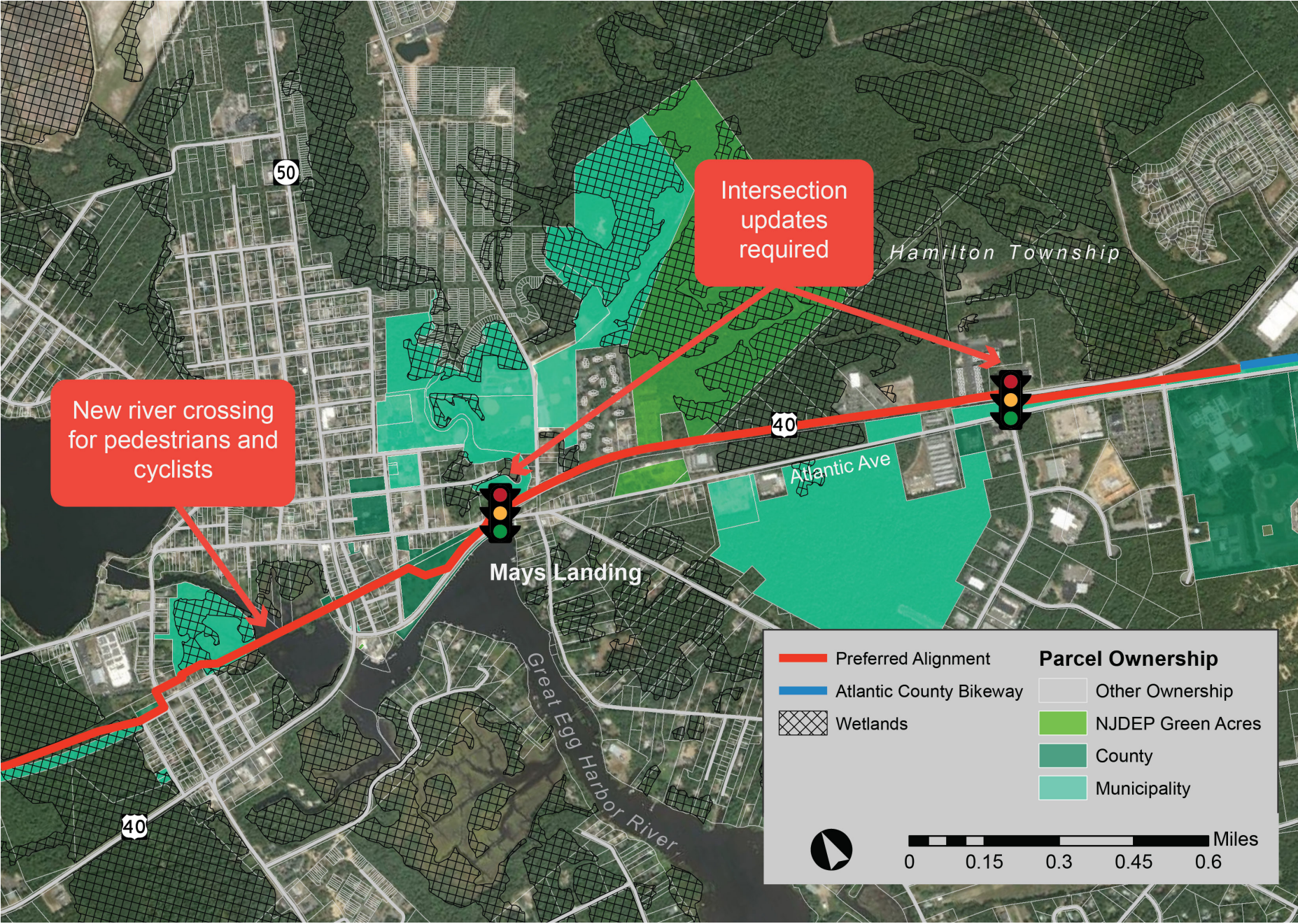
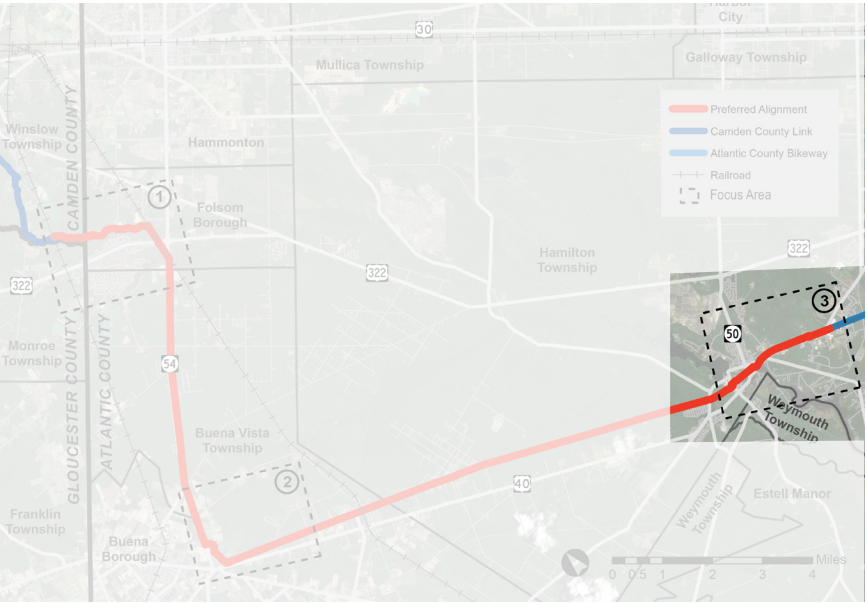
*Proposed Trail Section Along Rail Right-of-Way*



# Proposed Trail Alignment

## Focus Area #3 – Mays Landing to Existing AC Bikeway

East of Richland Village, the trail would extend for about seven miles along the rail right-of-way – which is owned by Hamilton Township – before reaching Mays Landing. It's proposed that the trail would run parallel and to the north of Reliance Avenue near the Mays Landing Fire Department. The trail would then access Mays Landing and the Taylor Avenue train station via a new bicycle/ pedestrian bridge over the Great Egg Harbor River, which is needed to replace the existing deteriorated structure. After crossing the river, the trail would continue east along County right-of-way – passing directly by the Taylor Avenue train station – until reaching Farragut Avenue.



Map 4.4: Focus Area 3 (Hamilton Township)



# Proposed Trail Alignment

## Focus Area #3 – Mays Landing to Existing AC Bikeway



Crossing at Great Egg Harbor River



Taylor Avenue Train Station



Map 4.5 - Proposed Trail Alignment near Reliance Avenue



# Proposed Trail Alignment

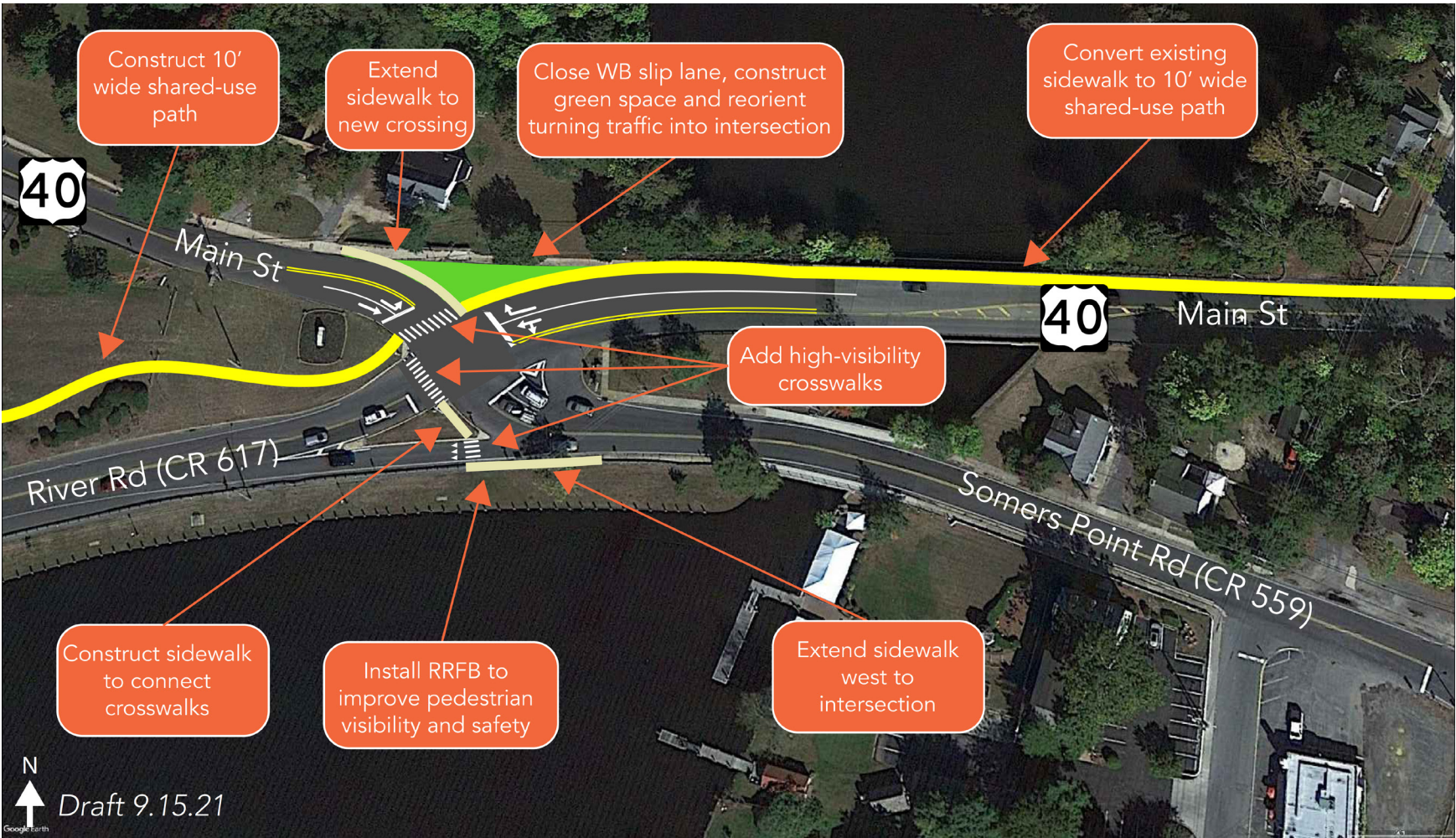
## Focus Area #3 – Mays Landing to Existing AC Bikeway

After crossing Farragut Avenue, the trail would weave through Gaskill Park to the intersection of Main Street (US 40), River Road (CR 617) and Somers Point Road (CR 559). Modifying the existing intersection geometry and widening the sidewalk along the north side of the US 40 bridge are proposed to create a safe and accessible trail connection through the intersection.

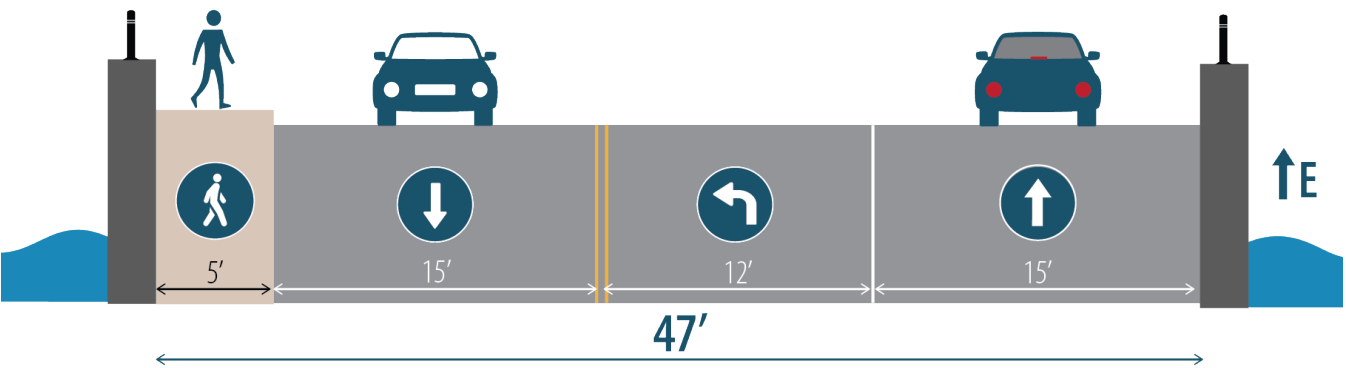
East of the intersection, the trail would continue for approximately 1.5-miles along the north side of US 40, cross at the signalized intersection of Cantillon Boulevard, and then connect with the existing Atlantic County bikeway on the south side. There is enough right-of-way along US 40 to create a substantial buffer between the trail and the roadway.

Primary considerations in this focus area include:

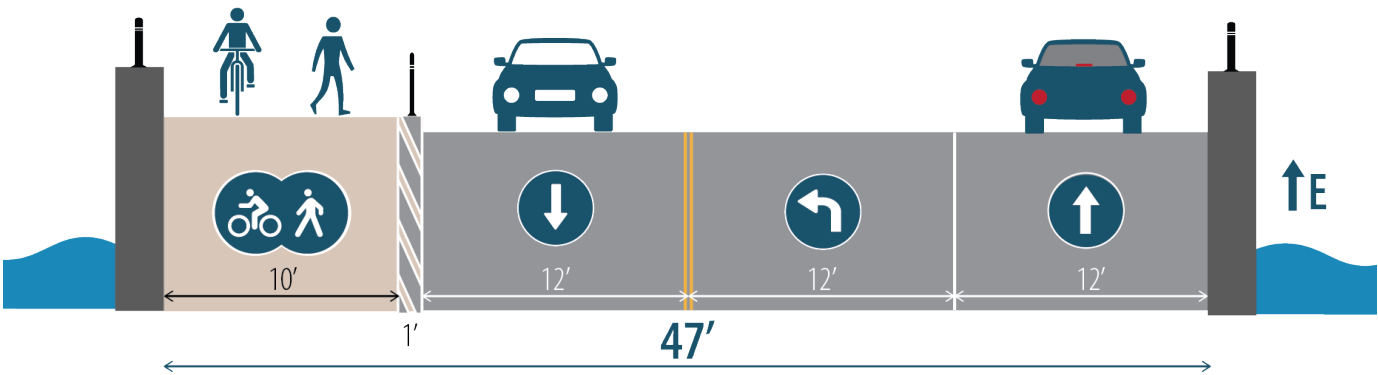
- Minimizing wetland impacts and negotiating a right-of-way for the segment parallel to Reliance Avenue
- Permitting and design for a new bicycle/pedestrian bridge over the Great Egg Harbor River
- Coordination with NJDOT and Atlantic County to reconfigure the US 40/CR 617 intersection
- Coordination with NJDOT to use their right-of-way along NJ 40



Map 4.6: Proposed Alternatives at Intersection of Main St and River Road in Mays Landing



Existing Cross-section along Route 40 Bridge east of River Rd



Proposed Cross-section along Route 40 Bridge east of River Rd



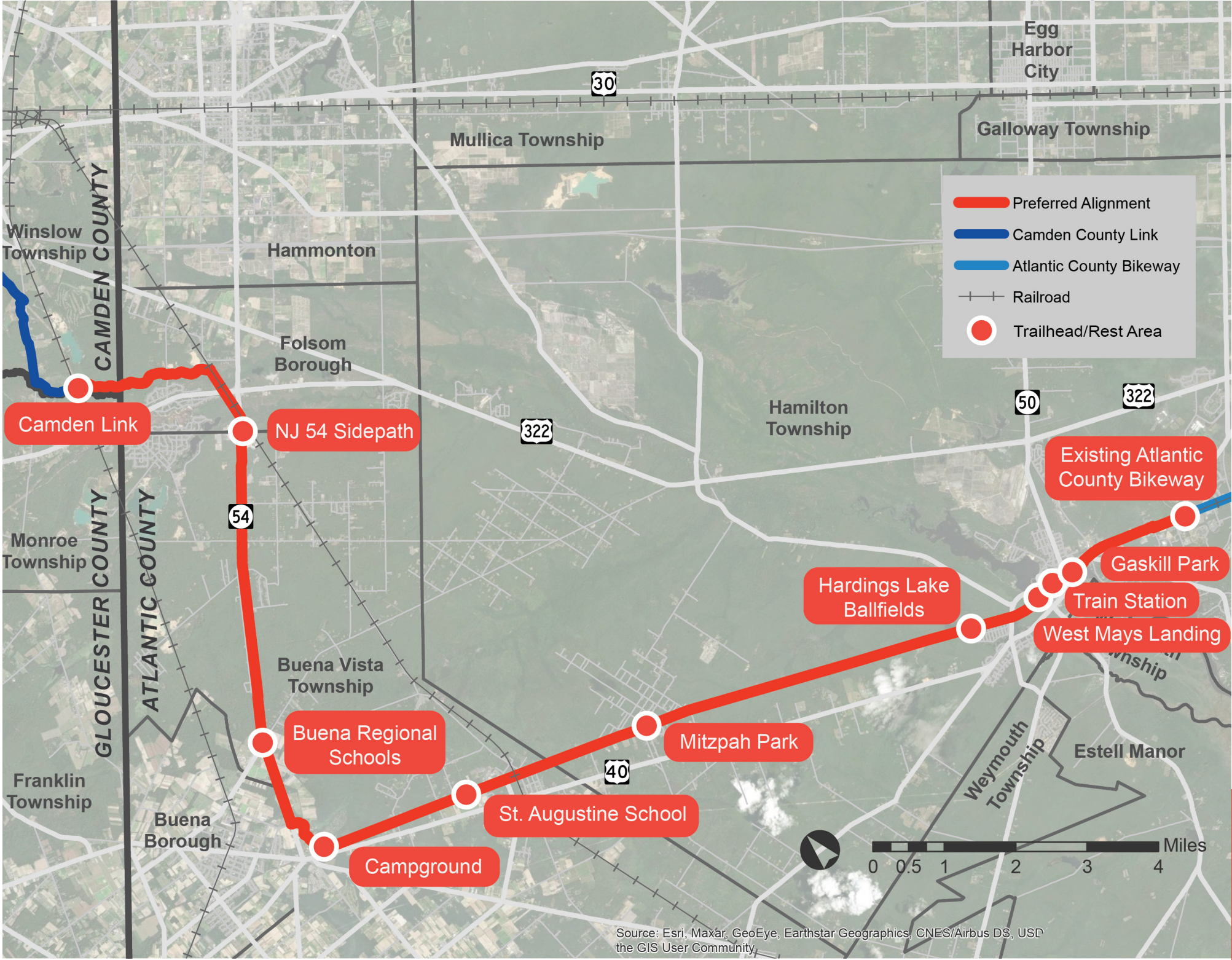
# Proposed Trail Alignment

## Trailheads & Rest Areas

Trailheads are designated locations where access to the trail is provided. Trailheads often include vehicle and bicycle parking and can also serve as rest areas with amenities such as restrooms, benches, and kiosks. Providing trailheads at regular intervals can help maximize public use of the trail, particularly for those who may not be able to arrive on foot or bike.

This plan includes **eleven candidate locations for trailheads** with differing levels of amenities. The proposed trailhead locations, type of trailhead, and approximate milepost are listed below. Several sites would require new parking facilities, while others would take advantage of existing parking at or near the location.

- **Camden Link** (rest area without parking), MP 0.00
- **NJ 54 Sidepath**, NJ 54 at rail overpass (trailhead with new parking), MP 2.86
- **Buena Regional Schools**, NJ 54 at Weymouth Rd (trailhead using school parking), MP 7.14
- **Bella Vista Campground** (trailhead with new parking), MP 9.13
- **St. Augustine's School**, West Jersey Blvd at Cedar Ave (trailhead using school parking), MP 11.94
- **Mizpah Park**, Jefferson Ave at Railroad Blvd (trailhead with new parking), MP 13.95
- **Harding Lake Ballfields**, Reading Ave at Knight Ave, (trailhead using existing parking), MP 18.87
- **West Mays Landing**, Central Ave at Reliance Ave (rest area for fishing access), MP 20.03
- **Taylor Avenue Train Station** (trailhead with new parking), MP 20.31
- **Gaskill Park**, Farragut Ave (trailhead using existing parking), MP 20.48
- **Atlantic County Bikeway**, 19th St at Atlantic Ave (trailhead using existing parking), MP 22.30



Map 4.7: Candidate Locations for Trailheads and Rest Areas



# Proposed Trail Alignment

## Bicycle & Pedestrian Connections

Once completed, the Atlantic County Bikeway – in concert with the Camden County Link and Somers Point-Pleasantville trail – will serve as a recreational and transportation asset that helps connect South Jersey communities. Since the bikeway cannot pass through every population center, it is essential that bicycle and pedestrian facilities be developed to connect the trail with nearby communities and activity centers. These connections will facilitate non-motorized access to the local and regional trail network and help the system reach its maximum potential.

Examples of primary connections are highlighted below (north to south). Further opportunities to connect the Atlantic County Bikeway with nearby destinations including Vineland, Atlantic Cape Community College, the Hamilton Mall, Egg Harbor City, and other local and regional destinations should also be explored.

- **Town of Hammonton** – it will be important to link the northern portion of the trail with Hammonton, which is a major local population center and attraction. This spur could be developed as a separate off-road path along NJ 54 or other roads through Folsom and Winslow.
- **Buena Regional Schools** – sidewalk and intersection improvements will be needed near the NJ 54/ Weymouth Road intersection to provide safe access to and from Buena Regional High School and Middle School.
- **Buena Borough** – bicycle/pedestrian facilities along Plymouth Street would connect the bikeway with the communities of Landisville and Minotola in Buena Borough, including an existing trail running along Northwest Boulevard.
- **Richland Village** – this commercial center in Buena Vista Township can serve as a major tourism stop and local rest area along the trail. Bicycle and pedestrian-friendly connections should be provided along Cedar Avenue and/or Main Avenue.





# Demand Analysis

## Trail User Profiles

The demand and economic impact analyses combine both a quantitative and qualitative approach to estimate use of the Atlantic County Bikeway West along the preferred alignment. The demand analysis included reviewing demographic data, and bicycle and pedestrian use along comparative trails nationwide, as well as developing user demand profiles to help consider archetypical users. The demand analysis provided fuel for the economic impact analysis which quantifies the economic benefit to the construction of the trail as well as from additional foot traffic and tourism.

## Trail Demand Estimation

In contrast to vehicle trip generation, there is currently no standard practice or methodology for estimating trail demand for a new trail facility. Estimating demand for new trails is often based on analyzing actual usage for existing trails operating in similar contexts, and then applying those averages to the new facility. Using this methodology, the trail project team gathered and analyzed available trail usage data from sources including the Delaware Valley Regional Planning Commission (DVRPC), the Cross Camden County Trail Feasibility Plan, and the Rail to Trails Conservancy. This included trail counts for the existing Atlantic County Bikeway East.

**Table 4.1** shows characteristics of the trails used in the analysis, including location, length, annual trail users, data source, and annual users per mile. Examples were limited to trails located in rural or suburban areas, which were categorized as such based on aerial imagery. The two broad categories – rural and suburban – were then averaged to determine an annual “Users-per-Mile” value for each land type. This resulted in an average of 2,500 annual users per mile for rural portions and approximately 35,000 annual users per mile for suburban portions.

Trail	State	Miles	Land Type	Trail Users	Users Per Mile
Chase Trail	AK	14	Rural	36,500	2,607
Lehigh Gorge Rail-Trail	PA	25.7	Rural	62,800	2,444
LaCrosse River Trail	WI	22	Rural	40,000	1,818
Oil Creek State Park	PA	9.7	Rural	5,042	520
Samuel Justus Trail	PA	5.8	Rural	43,506	7,501
Sandy Creek Trail-Rockland	PA	12	Rural	15,066	1,256
Queen City Trail	PA	1.4	Rural	1,637	1,169
Santa Maria Valley RR Trail	CA	1.2	Suburban	7,500	6,250
Fairborn Wright Brothers Huffman Prairie Bikeway	OH	4.6	Suburban	27,000	5,870
WOW Trail	NH	1.3	Suburban	41,000	31,538
Richland Creek Greenway	TN	5	Suburban	100,000	20,000
Rose Canyon Bike Path	CA	1.1	Suburban	120,000	109,091
Power Trail	CO	3.9	Suburban	250,000	64,103
Manteca Tidewater Bikeway	CA	3.4	Suburban	100,000	29,412
Peace Trail	WI	7	Suburban	25,000	3,571
Linwood Bikepath	NJ	2.5	Suburban	114,412	45,765
Northfield Bikepath	NJ	1.8	Suburban	15,966	8,870
Pleasantville Bikepath	NJ	1	Suburban	34,360	34,360
Somers Point Bikepath	NJ	1.1	Suburban	62,826	57,115

Table 4.1: Characteristics of Trails Used in Demand Analysis



# Demand Analysis

## Trail Demand Estimation

The next step was to apply these average values to the proposed Atlantic County Bikeway West alignment to estimate overall demand. The proposed 22.2-mile alignment was split into rural and suburban portions, with only the east-most 2.3 miles near Mays Landing being classified as suburban. As shown in **Table 4.2**, applying the “Users-per-Mile” value results in 128,945 total expected annual users along the length of the trail, which translates into 353 daily users. Based on data provided by The Rails-to-Trails Conservancy and used in the Camden Link study, it is expected that 26% of trail users will be non-local (i.e. outside of the County) and 5% will stay in the area overnight. This translates into 33,526 annual non-local or out-of-town users, with 1,676 staying overnight each year. These metrics serve as the foundation for the economic impact analysis.

	Rural	Suburban	Total Trail
Miles of Trail	19.9	2.3	22.2
Estimated Users per Mile per Year	2,474	34,662	n/a
Users per Year	49,223	79,723	128,945
Out-of-Town (26%)	12,798	20,728	33,526
Overnight Out-of-Town (5%)	640	1,036	1,676

Table 4.2: Total Expected Annual Users



Lehigh Valley Rail Trail, PA



# Economic Impact Analysis

## Tourism

The economic impacts of the Atlantic County Bikeway West are derived by understanding how much annual spending will be generated by new tourists brought to the area due to the Bikeway project. The analysis relies on the annual user demand numbers described above, as well as assumptions related to the daily direct expenditures of tourists across different spending categories and the economic multipliers associated with those spending categories.

### Direct Expenditure and Allocation of Spending

As described above, it is estimated that the AC Bikeway would attract **33,526 out-of-town tourists annually**, of which 1,676 are overnight tourists and 31,850 are day trip tourists.

Daily direct expenditures for overnight and day trip tourists were calculated separately, given their different spending profiles. Day trip tourists were assumed to stay in the area for a few hours before their return trip, spending approximately \$20 on food. This is half the daily food expenditure of a typical tourist to Atlantic City and is in line with the daily spending assumed in a similar study conducted for the Camden Link Trail in Camden County, New Jersey. For overnight trips, visitors by bicycle were assumed to have a similar spending profile to other Atlantic City tourists, based on average costs compiled by Budget Your Trip, an online trip planner. This includes daily spending on food, entertainment, and lodging as shown in Table 1. Transportation expenses were excluded on the assumption that visitors would be using their bicycles.

The total direct expenditures for all overnight and day trip tourists were then summed to determine the total direct expenditures for each spending category, detailed in **Table 4.4** to the right.

Spending Category	Overnight Tourist	Day Trip Tourist
Food	\$40	\$20
Entertainment	\$35	\$0
Lodging	\$58	\$0
Total	\$133	\$20

Table 4.3: Total Trip Direct Expenditures, by Tourist Type and Spending Category

Spending Category	Overnight Tourists	Day Trip Tourists	Total
Food	\$67,000	\$637,000	\$704,000
Entertainment	\$58,700	\$0	\$58,700
Lodging	\$97,200	\$0	\$97,200
Total	\$222,900	\$637,000	\$859,900

Table 4.4: Total Annual Direct Expenditures by Spending Category and Tourist Type, 2021\$



# Economic Impact Analysis

## Tourism

To estimate the economic impacts of the increase in tourism spending, this analysis uses input-output multipliers. These multipliers, purchased from the Bureau of Economic Analysis' Regional Input-Output Modeling System (RIMS II), reflect how an initial change in spending (direct impact) can result in downstream changes, including to suppliers of the initially impacted businesses (indirect impacts), and to the many other businesses that employees of the directly and indirectly impacted industries patronize (induced impacts). Multipliers differ by industry and region depending on how much of an industry's supply chain is available in the region.

Three types of economic indicators are evaluated in this analysis: output, earnings, and employment. Output can generally be thought of as sales; the change in direct output is equal to the change in spending/sales described above for non-retail industries. For retail industries, output is adjusted to account for the cost of goods sold. Earnings includes wages and salaries, benefits, and proprietors' income. Employment represents total jobs, including full-time and part-time employment. This change is not cumulative over time, but rather represents the steady state change in employment expected based on the change in spending.

RIMS II industry categories were assigned to the spending categories as shown below in Table 3. The Food and Entertainment spending categories were represented in more than one RIMS II multiplier category. To address this, the multipliers from each RIMS II category were averaged and used in the final calculation.

### Tourism Economic Impact Results

Annual direct expenditures of tourists of \$859,900 are expected to have a **total output impact of \$888,900**. Tourism dollars are expected to support 7.2 jobs annually and result in \$228,800 in earnings. The total economic impact is detailed to the right in **Table 4.6**.

Spending Category	RIMS II Category Number	RIMS II Category
Food	29	Food and beverage stores
	62	Food services and drinking places
Entertainment	59	Performing arts, spectator sports, museums, and related activities
	60	Amusement, gambling, and recreation industries
Lodging	61	Accommodation

Table 4.5: Tourism Spending Categories and Associated RIMS II Categories

Economic Impact	Economic Output (2021\$)	Jobs	Earnings (2021\$)
Direct	\$624,800	5.9	\$167,400
Indirect	\$131,900	0.6	\$28,800
Induced	\$132,200	0.8	\$32,600
Total	\$888,900	7.2	\$228,800

Table 4.6: Total Annual Economic Impact of Tourism Spending



# Economic Impact Analysis

## Capital Spending

There are additional economic impacts that result from the design and construction of the trail. This analysis relies on cost estimates for capital spending of the trail to estimate the resulting economic impacts. Unlike the economic impacts of tourism spending, which are calculated as an annual benefit, the economic impacts of construction expenditures are calculated over the entire construction period and represent the total impacts over that time.

### Direct Expenditures

This analysis quantifies the economic impacts associated with two categories of construction-related expenditures that are relevant to the Atlantic County Bikeway West Project: construction and planning/design. These categories and the associated expenditures are detailed in **Table 4.7** to the right. Certain project elements, such as the cost of land required for the project’s right-of-way, do not generate economic benefits, and are therefore excluded from the input-output analysis. Similarly, escalation costs are excluded from the analysis.

### Construction Economic Impact

As with the tourism analysis, the capital spending economic impact analysis uses input-output multipliers from RIMS II to capture the direct, indirect, and induced impacts on economic output, employment, and earnings. The RIMS II industry categories were assigned to spending categories as shown in **Table 4.8**.

The direct construction expenditures of \$25,946,800 are expected to result in **total economic output of \$34,594,300**. Construction expenditures are expected to support 118 jobs over the course of the construction period and result in \$7,651,000 in earnings. These economic impacts are detailed to the right in **Table 4.9**

Spending Category	Expenditure
Construction	\$21,439,000
Planning/Design	\$4,507,800
Total	<b>\$25,946,800</b>

Table 4.7: Total Direct Expenditures for Construction Spending

Spending Category	RIMS II Category Number	RIMS II Category
Construction	2332FO	Transportation structures and highways and streets
Planning/Design	541300	Architectural, engineering, and related services

Table 4.8: Construction Spending Categories and Associated RIMS II Categories

Economic Impact	Economic Output (2021\$)	Jobs	Earnings (2021\$)
Direct	\$25,946,800	75.5	\$5,585,500
Indirect	\$4,224,100	15.9	\$974,900
Induced	\$4,423,400	26.1	\$1,090,600
Total	<b>\$34,594,300</b>	<b>118</b>	<b>\$7,651,000</b>

Table 4.9: Total Annual Economic Impact of Construction Spending



# Environmental Considerations

Several sections of the proposed trail alignment are located within or near environmentally sensitive areas. Environmental regulations governing these areas will need to be addressed as planning and design of the trail advance, including conducting environmental studies and obtaining necessary construction permits. These considerations are detailed below, including the general timeframe:

## A. Pinelands Consideration

The trail is located within the New Jersey Pinelands Management Area and is under the jurisdiction of the New Jersey Pinelands Commission (NJPC). The Pinelands Protection Act Rules regulate the use of resources and “development” within the Pinelands jurisdictional boundary. Construction of the trail is considered “development” under the Pinelands Protection Act Rules, and it is anticipated that a Pinelands Public Development Application will be required for project implementation. Coordination with the Pinelands Commission should be conducted during Preliminary Engineering (PE) to confirm if a Pinelands Public Development Application is required for construction of the trail.

## B. NJDEP Flood Hazard Area Considerations

Construction of the trail may impact resources regulated under the Flood Hazard Area Control Act Rules (i.e. floodway, flood hazard areas, and riparian zones) and may require a NJDEP Flood Hazard Area Control Act Permit.



*Drainage Considerations*



# Environmental Considerations

## C. NJDEP Freshwater Wetland Considerations

Segments of the trail are located within areas mapped as NJDEP wetlands. Construction of the trail could potentially impact wetlands and wetland transition areas. A NJDEP Freshwater Wetland Permit would be required for any impacts to wetlands, wetland transition areas, and State open waters. It is recommended that a wetland delineation be performed during PE.

## D. No Net Loss Reforestation

No Net Loss Reforestation may be applicable if  $\frac{1}{2}$  acre or more of forested land is affected. The affected forested area must be maintained or owned by the state to qualify. There are several state-owned forested parcels adjacent to the proposed trail alignment. Deforestation impacts should be calculated when more detailed engineering has been performed to determine if the project will be impacted by the No Net Loss Reforestation Act.

## E. Open Space, Green Acres, and Wildlife Management Areas

The trail traverses several Wildlife Management Areas, Open Space/Parks, and Green Acres properties. Preliminary coordination with Nancy Lawrence of the Green Acres State House in September 2021 suggests that construction of a recreational trail would more than likely be allowed, without State House Commission approval, provided the trail does not negatively impact the ecosystem (i.e. threatened and endangered species habitat). However, it is recommended that when project



*Crossing at Great Egg Harbor River*



# Environmental Considerations

plans and areas of proposed right-of-way acquisitions are known, they are submitted to the Green Acres State House Commission for review and confirmation that State House Commission approval is not required.

The trail is adjacent to NJ Natural Land Trust Parcels. Coordination with NJ Natural Land Trust is recommended to determine what approvals, if any, would be required.

## F. Threatened and Endangered Species

A review of the NJDEP Landscape Project Version 3.3 was conducted in order to determine if any records of State rare, threatened, or endangered species or their habitat have been in the vicinity of the proposed trail alignment. Based upon this review, the barred owl (*Strix varia*, State Threatened); red-shouldered hawk (*Buteo lineatus*, State Endangered); and pine barrens treefrog (*Hyla andersonii*, State Threatened) could potentially be located in the vicinity of the proposed trail.

The United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) system was reviewed to determine if any species protected by the Endangered Species Act are documented within the study area. Based on the USFWS IPaC Species List generated November 16, 2021, the northern long-eared bat (*Myotis septentrionalis*, federally threatened); American chaffseed (*Schwalbea americana*, federally endangered); knieskern's beaked-rush (*Rhynchospora knieskernii*, federally threatened); sensitive joint-vetch (*Aeschynomene virginica*, federally threatened); and swamp pink (*Helonias bullata*, federally threatened) could



*Paved trail in Westfield, NJ*



# Environmental Considerations

potentially be located in the vicinity of the proposed trail limits.

Consultation with the USFWS NJ Field Office and coordination with the NJDEP Endangered and Nongame Species Program (ENSP) should be initiated during PE to identify and resolve any potential effects that the project may have on Federal and State listed threatened or endangered species.

## G. Hazardous Waste/Contamination Considerations

Rail lines are generally associated with contamination, usually polynuclear aromatic hydrocarbons (PAHs) and metals due to the nature of rail operations. A  $\frac{3}{4}$  mile segment of the trail is proposed to run along a rail corridor including two rail underpasses. Hazardous waste investigations should be conducted in PE to determine the potential for encountering contaminated materials during construction. These investigations should focus on areas where construction activities will result in soil excavations and ground disturbance.

## H. Historic Resources Considerations

The trail traverses several historic districts including: Mays Landing Historic District; West Jersey and Atlantic Railroad Historic District; Mays Landing Mill District; and Sugar Hill Historic District. Coordination with the New Jersey State Historic Preservation Office (NJSHPO) is recommend during the next phase of the project to determine if implementation of the project will require a Cultural Resource Survey. The NJSHPO may offer recommendations for landscaping, aesthetic treatments, interpretive signage, etc. within the historic districts along the trail alignment.



Taylor Avenue Train Station







# Operations, Maintenance, & Security

## Operations & Maintenance

There are multiple models for addressing trail maintenance and operations. These range from public entities such as the County or local municipality having sole responsibility, to non-profits or other non-government entities – including local “friends” groups – sharing responsibility. It is often dependent on who owns the trail right-of-way, though ownership does not necessarily equate to maintenance responsibilities, as well as budgetary considerations.

As an example, the existing Atlantic County Bikeway is owned and maintained by the Atlantic County Park System. Other trail facilities within the County are owned by the local municipality; including the Pleasantville to Somers Point Bike Path which passes through Northfield, Linwood, Pleasantville, and Somers Point in Atlantic County. In Philadelphia, most of the trail system is owned by the City, but many trails are maintained by non-profits established specifically for that purpose. Trail maintenance tasks can vary based on the context and design of the trail, but often include turf mowing, tree pruning/vegetation pruning, vegetation removal, trash removal/cleanup, fence/sign/lighting repairs, surface repairs, and snow removal, among others.

Given the extensive 22-mile length of the proposed Atlantic County Bikeway West alignment, maintenance will most likely require a partnership between Atlantic County and the local municipalities including Folsom Borough, Buena Vista Township, and Hamilton Township. Since the County already has equipment and staff in place to maintain the existing bikeway, it could be feasible to expand County maintenance responsibilities to sections of the new bikeway. At the same time, the County has limited ranger staff for operations and security and would benefit from assistance from municipal police for items





# Operations, Maintenance, & Security

## Operations & Maintenance

including security patrols, emergency access, and other operational concerns.

To get a sense of potential maintenance costs for the proposed Atlantic County Bikeway West, it was useful to examine operational data for the existing bikeway. The Atlantic County Park System, which maintains the existing 7.5-mile bikeway, provided WSP with estimated maintenance costs for the 5-year period between 2016 and 2020. These costs covered mowing along the path (estimated at twice per month), minor repairs to fencing, bollards, etc., vegetation trimming, and trash collection. The costs include both labor and equipment and ranged from \$10-20,000 per year.





# Operations, Maintenance, & Security

## Safety, Security, and Emergency Access

In this section, safety generally refers to “roadway safety” while security relates to personal security. For some portions of the trail, particularly the more isolated sections, security concerns will need to be carefully considered for the public to be comfortable using the trail. Emergency access is also an important component that contributes to safety and security.

### Key principles to consider:

- Lighting can be important for both safety and security. At the same time, lighting can be expensive and is currently not provided along the existing Atlantic County Bikeway. While providing continuous lighting along the trail may not be feasible, it should be considered for key areas such as roadway crossings, parking lots, and trailheads.
- Providing regular access points for emergency vehicles should be incorporated into the design
- Providing safe crossing treatments wherever the trail crosses a roadway, driveway, or intersection
- Providing security call boxes along the more isolated stretches
- Using mile markers along the trail so users can identify their location in case of an emergency
- Incorporating design treatments and other methods to keep unauthorized vehicles such as ATVs from using the trails

Each of the items listed above should be evaluated during further stages of project development and integrated in the design as appropriate. Design measures should be informed by national, state, and local design guides; lessons learned from local trails, and guidance from the Rails-to-Trails Conservancy and other trail-related groups.





Conceptual Cost Estimate

	Segment Name	ExtentA	ExtentB	Length (mi)	Estimated Costs			
					Trail	ROW	Structures	Total
1	Winslow	Camden Link Terminus	Begin NJ 54 Wide ROW	2.6	\$3,510,000	\$50,000	\$-	\$3,560,000
2	NJ 54 Wide ROW	Begin NJ 54 Wide ROW	End NJ 54 Wide ROW	4.5	\$4,852,000	\$-	\$-	\$4,852,000
3	NJ 54 Narrow ROW	End NJ 54 Wide ROW	Abandoned RR Trailhead	1.9	\$2,086,000	\$500,000	\$250,000	\$2,836,000
4	Rail Corridor West	Abandoned RR Trailhead	St. Augustine's/Main Ave	3.1	\$1,299,000	\$500,000	\$-	\$1,799,000
5	Rail Corridor Central	St. Augustine's/Main Ave	Strand Ave	2.5	\$1,044,000	\$-	\$-	\$1,044,000
6	Rail Corridor East	Strand Ave	Harding Ave Ballfields	4.2	\$1,767,000	\$-	\$-	\$1,767,000
7	Mays Landing West	Harding Ave Ballfields	Taylor Avenue Train Station	1.5	\$1,589,000	\$50,000	\$2,000,000	\$3,639,000
8	Eastern End	Taylor Avenue Train Station	Existing Atlantic County Bikeway	1.9	\$2,042,000	\$-	\$1,000,000	\$3,042,000
				22.3	\$18,189,000	\$1,100,000	\$3,250,000	\$22,539,000

Table 4.10: Conceptual Cost Estimates

An order-of-magnitude cost estimate was developed for the preferred trail alignment. The primary purpose of this planning-level estimate is to guide future phases of the project including pursuit of planning, design, and construction funding. Shown in **Table 4.10**, the estimate is broken down by construction, right-of-way, and planning/design costs.

It is anticipated that the overall 22-mile alignment will be constructed in phases, and thus it makes sense to subdivide the overall cost estimate into distinct segments for programming purposes. A total of eight segments were selected based on logical begin and end points. Some of these points represent physical constraints, for example entry to a rails-with-trails corridor or a major waterway crossing, while others represent changes in right-of-way or jurisdiction (for example segments along the NJDOT right-of-way vs. segments along the abandoned rail right-of-way).

Recognizing that actual costs and quantities are hard to pinpoint during early planning stages due to the large range of unknowns, a parametric approach was used to estimate costs. This approach is based on using average per-mile unit costs from constructed trail projects that are similar in nature. Three per-mile cost

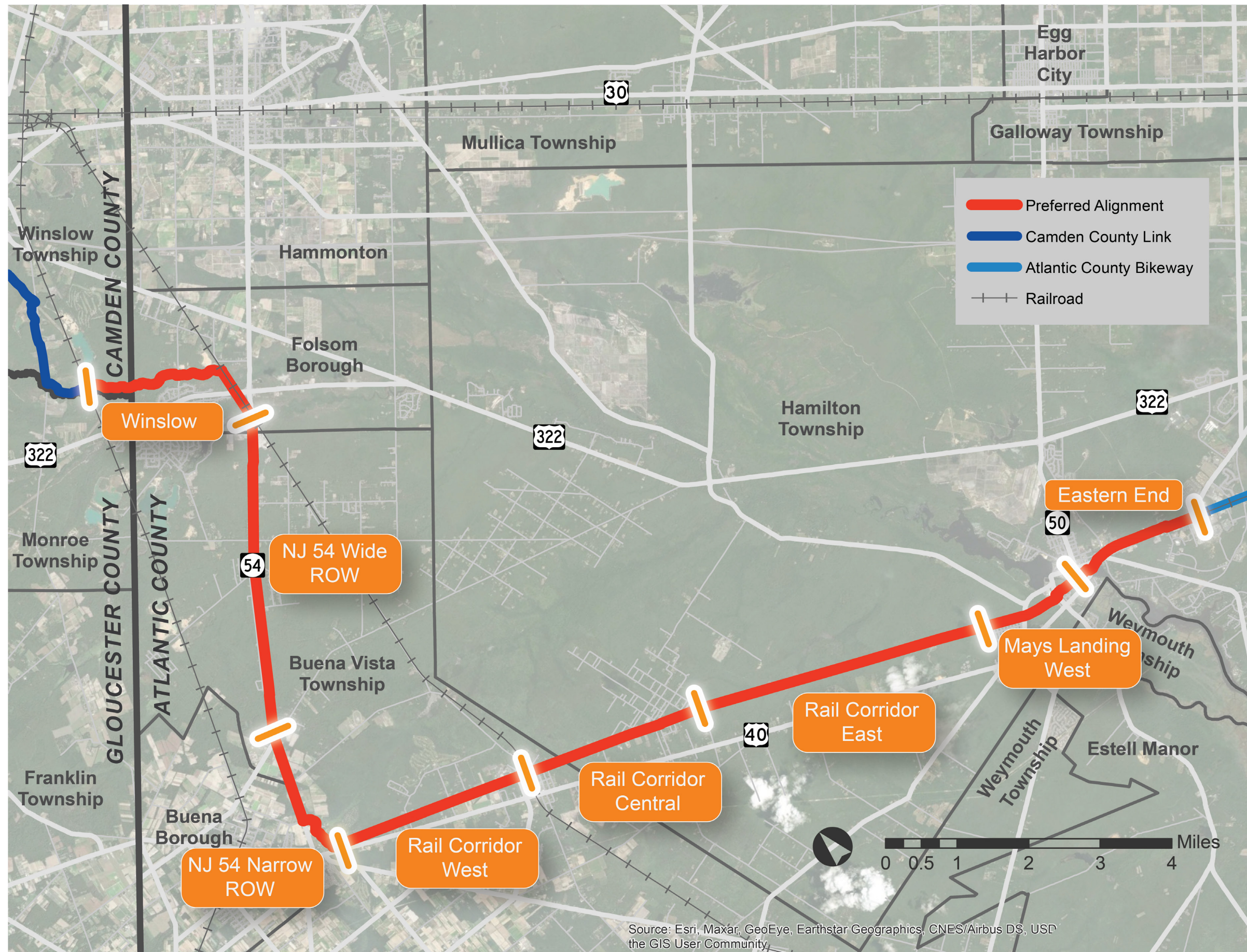
categories – sidepath, rails-to-trails (cleared/simple), and rails-to-trails (forested/complex) – were developed and applied to each of the eight segments. The following projects were used to develop the per-mile unit costs:

- Delaware River Heritage Trail – Burlington County, NJ (2018)
- Maybrook II Bikeway Phase A & B – Putnam County, NY (2015)
- Maybrook Trailway – Dutchess and Putnam County, NY (2015)
- Existing Atlantic County Bikeway, Atlantic County, NJ (2000)

Since some of these sources are several years old or more, actual construction costs were escalated to 2021 dollars based on FHWA Construction Cost indices. Note that a construction contingency was not applied to the total, as any contingency can be considered as being “built into” the per-mile costs.

Construction Total	\$22,539,000
Planning/Design Costs (20%)	\$4,507,800
Project Total	\$27,046,800





Map 4.8: Potential Cost/Phasing Segments



5

**NEXT STEPS &  
PHASING**



# Next Steps

Through this feasibility study, the South Jersey Transportation Planning Organization (SJTPO) advanced project development for the Atlantic County Bikeway West, which will connect the planned eastern terminus of the Camden County Link Trail in Winslow Township, Camden County, to the existing western terminus of the Atlantic County Bikeway in Hamilton Township, Atlantic County. The study process identified three alternative trail alignments, evaluated the feasibility and pros/cons of each alignment, selected a preferred trail alignment, and developed an order-of-magnitude cost estimate for the proposed alignment.

The proposed trail alignment consists of three “focus areas” where most of the challenges are located from a feasibility perspective. An important next step in advancing the Atlantic County Bikeway West will be to conduct advanced feasibility/conceptual design studies for these three areas. These studies are needed to further evaluate considerations related to right-of-way, environmental permitting, traffic operations, and physical layout prior to initiating preliminary engineering. Specific considerations for each “focus segment” are outlined below:





# Next Steps

## Focus Segment #1 – Camden County Link to NJ 54

From the planned terminus of the Camden County Link, this segment would extend east for about two miles before reaching a currently inactive rail corridor owned by Conrail. The trail would then run for  $\frac{3}{4}$  of a mile along the west side of the rail right-of-way and pass beneath the US 322 and NJ 54 bridges. Once through the NJ 54 bridge, the trail would run up the slope to meet the highway and run along the east side of NJ 54 as a sidepath for approximately five miles.

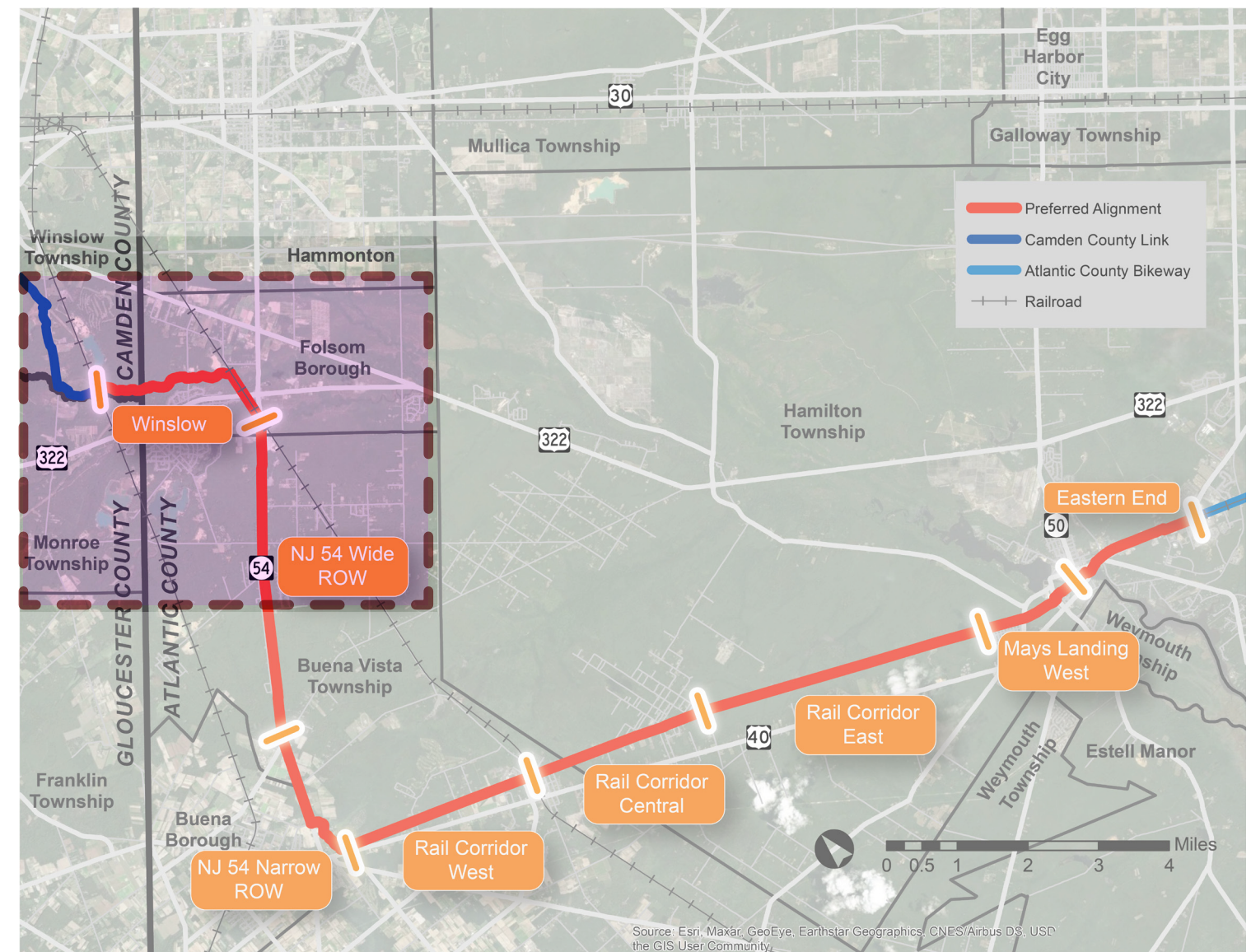
### General Planning/Design Considerations

- Coordination with NJDEP and hunting groups for the segment within the Winslow Wildlife Management Area
- Negotiating access across private properties near 14th Street
- Minimizing wetland impacts and avoiding steep slopes near 13th Street
- Coordination with Conrail to use their right-of-way for the rails-with-trails segment
- Coordination with NJDOT to use their right-of-way along NJ 54

### Environmental/Permitting Considerations

- The trail is adjacent to NJ Natural Land Trust Parcels (Gloucester County, Monroe Township Block: 6201, Lot 15 and Atlantic County, Folsom Borough Block 1902, Lot 4). Early coordination with NJ Natural Land Trust is recommended to determine what approvals, if any, would be required.
- Potential flood hazard area/riparian zone concerns throughout segment
- Potential wetland impacts along the entire length of this segment

- The trail will run for  $\frac{3}{4}$  of a mile along the west side of the rail right-of-way and pass beneath the US 322 and NJ 54 bridges. As discussed in the Hazardous Waste/Contamination Considerations, a hazardous waste investigation should be conducted during preliminary engineering to determine the potential for encountering contaminated materials during construction.
- A segment of the trail runs through the Atlantic City Railroad-Cape May Division Historic District. As such, coordination with the NJSHPO will be required.



Focus Segment #1 – Camden County Link to NJ 54



# Next Steps

## Focus Segment #2 – NJ 54 to Rail Corridor/Richland Village

This trail segment covers the stretch of NJ 54 from Weymouth-Malaga Road to US 40. Two potential alignments are being considered to connect the NJ 54 alignment with the abandoned rail corridor paralleling US 40, as follows:

- **Alignment “A”** runs south along NJ 54 until Fursin Avenue, then travels along the south side of Fursin Avenue before veering to the south through privately owned parcels to the campground.
- **Alignment “B”** veers away from NJ 54 just north of Pancoast Mill Road, crosses at a midblock location, and then runs between private properties along an existing farm road before connecting across Fursin Avenue to the campground.

East of the campground, the trail would run along the former railbed parallel to Railroad Boulevard for about three miles until reaching Richland Village.

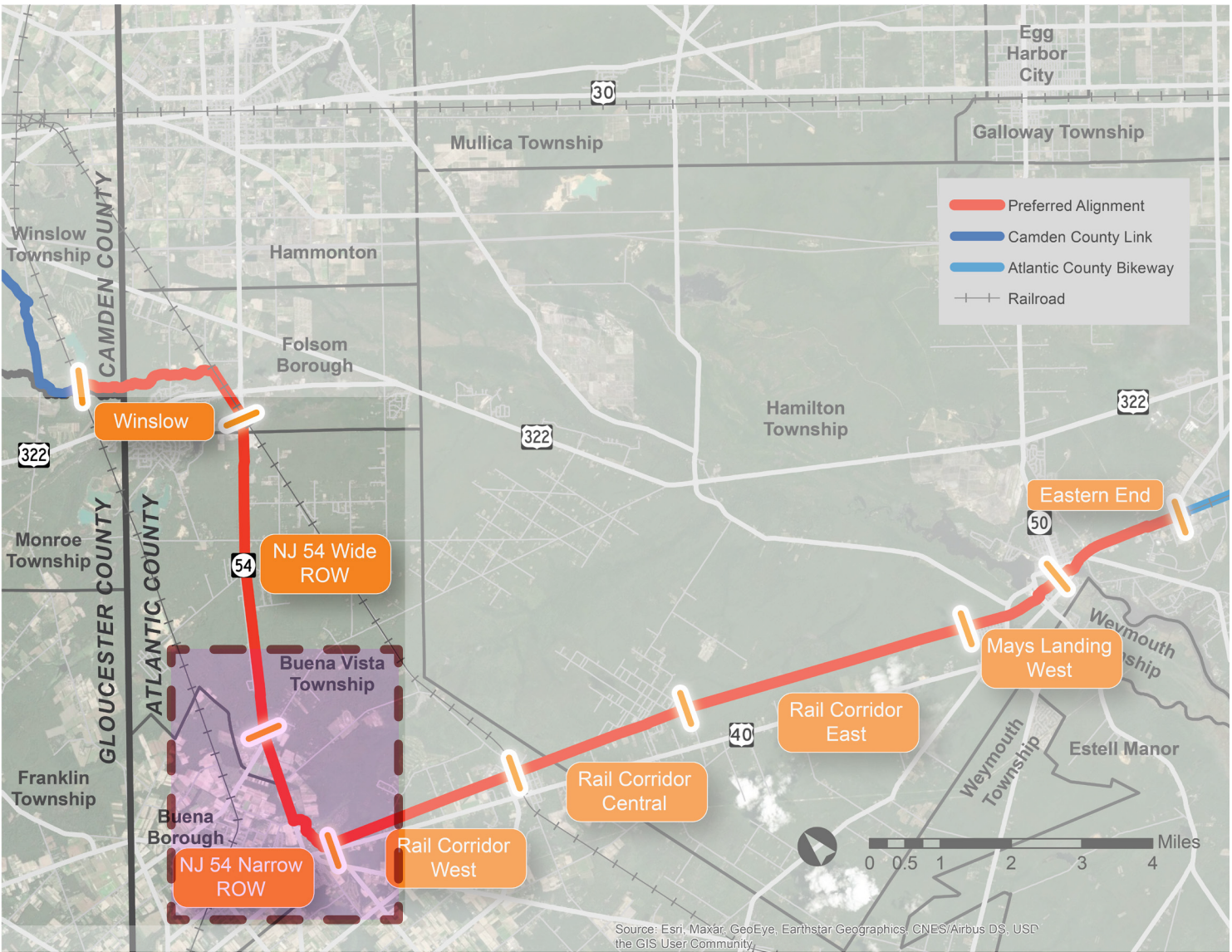
### General Planning/Design Considerations

- Further investigation of right-of-way and frontage impacts for the segment south of Malaga Road, where NJDOT’s right-of-way narrows from 120 to 50 feet
- Most of the railroad right-of-way in Buena Vista Township is privately owned, thereby requiring coordination with property owners
- Several buildings west of St. Augustine’s School situated within the railroad corridor will need to be addressed
- Creating access routes to connect the trail with US 40 and Richland Village

### Environmental/Permitting Considerations

- Alignment option “B” would require a new stream crossing just north of Fursin Ave that would trigger the need for a Flood Hazard Area Control Act Permit

- Potential flood hazard area/riparian zone concerns throughout segment
- Potential to encounter hazardous contamination near or along the abandoned rail line
- Potential wetlands impacts along abandoned rail corridor portion
- Potential woodlands impacts (i.e. No Net Loss Reforestation) along abandoned rail corridor portion
- The trail intersects the Atlantic City Railroad-Cape May Division Historic District. As such, coordination with the NJSHPO will be required



Focus Segment #2 – NJ 54 to Rail Corridor/Richland Village



# Next Steps

## Focus Segment #3 – Mays Landing to Existing AC Bikeway

The proposed trail alignment through this segment would require a new bicycle/pedestrian bridge over the Great Egg Harbor River. After crossing the river, the trail would continue east along County right-of-way – passing directly by the Taylor Avenue train station – until reaching Farragut Avenue. After crossing Farragut Avenue, the trail would weave through Gaskill Park to the intersection of Main Street (US 40), River Road (CR 617) and Somers Point Road (CR 559). East of the intersection, the trail would continue along the north side of US 40, cross at the signalized intersection of Cantillion Boulevard, and then connect with the existing Atlantic County Bikeway on the south side of US 40.

### General Planning/Design Considerations

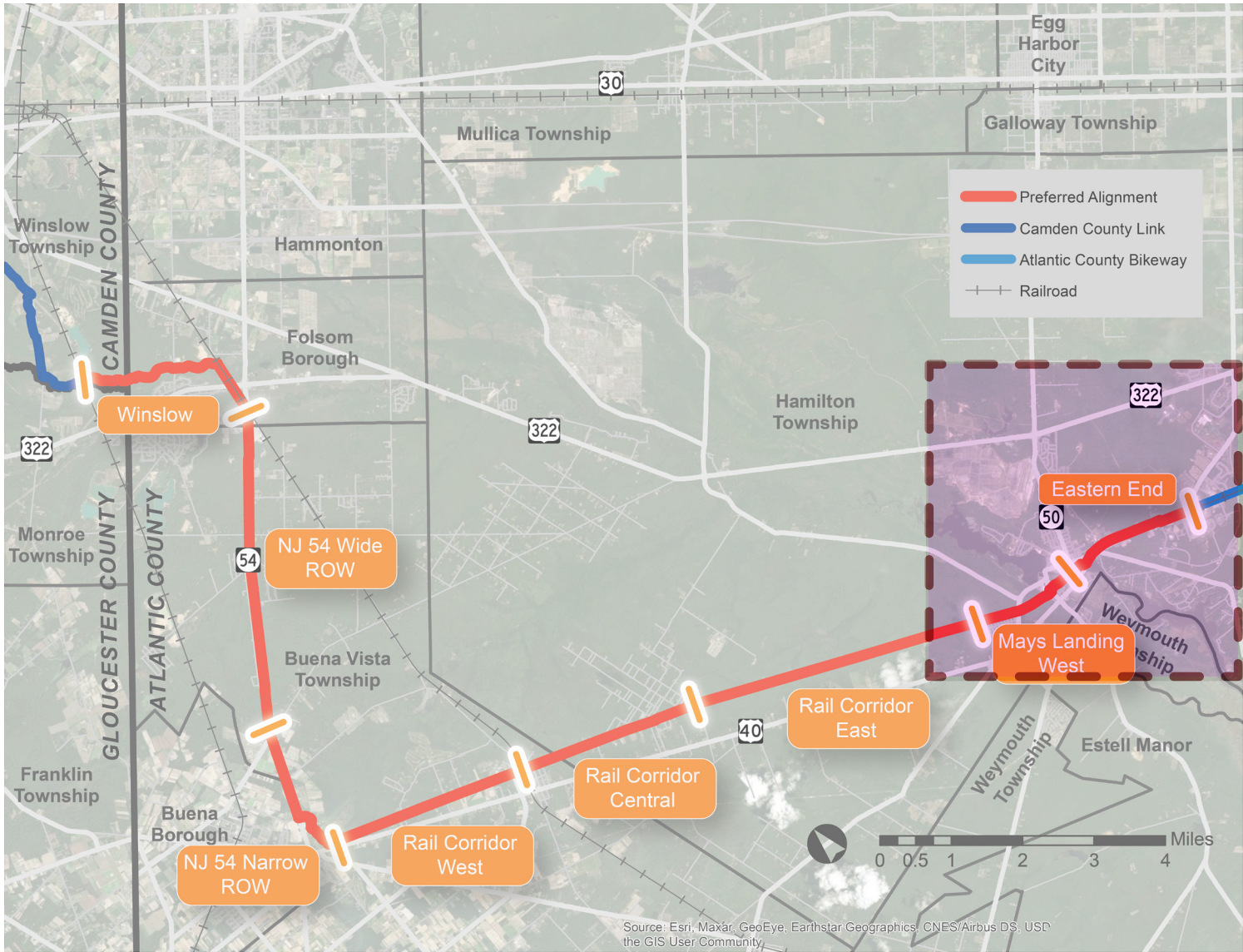
- Determining a right-of-way for the segment parallel to Reliance Avenue
- Design of a new bicycle/pedestrian bridge over the Great Egg Harbor River
- Coordination with NJDOT and Atlantic County to reconfigure the US 40/CR 617 intersection
- Coordination with NJDOT to use their right-of-way along NJ 40

### Environmental/Permitting Considerations

- Potential wetlands impacts along abandoned rail corridor portion
- Potential woodlands impacts (i.e. No Net Loss Reforestation) along abandoned rail corridor portion
- Potential to encounter hazardous contamination in proximity of abandoned rail line
- Potential Impacts to Green Acres Properties including Gaskill Park, Lake Lenape Park, and Great Egg Harbor Wildlife Management Area

- Construction of new crossing of Great Egg Harbor River (175’ approximate span length) will require several NJDEP Land Use Permits, including a Flood Hazard Area Permit, Freshwater Wetlands Permit, a Hydraulic and Hydrology Analysis, and an Army Corps of Engineers Permit
- The trail traverses the Mays Landing Historic District, West Jersey and Atlantic Railroad Historic District, Mays Landing Mill District and Sugar Hill Historic District. Coordination with the NJSHPO is recommend

during the next phase of the project to determine if implementation of the project will require a Cultural Resource Survey. The NJSHPO may offer recommendations for landscaping, aesthetic treatments, interpretive signage, etc. within the historic districts along the trail alignment.



Focus Segment #3 – Mays Landing to Existing AC Bikeway



# Project Phasing

It is anticipated that the overall 22-mile alignment will be constructed in phases. To that end, the conceptual cost estimate consists of eight distinct segments, with limits selected based on several factors including:

- **Jurisdiction/Right-of-Way** (governing municipality and right-of-way ownership)
- **Physical Constraints** (major intersections, bridges, change in corridor type, etc.)
- **Complexity** (sections that are easier to implement versus more challenging sections)

Phasing of the bikeway will ultimately be dependent on these and other factors such as available funding, political support, ownership/maintenance considerations, and engineering/permitting considerations. As the project progresses, SJTPO will work with Atlantic County and other stakeholders to determine which phasing scenarios are the most appropriate and realistic in advancing the trail.





