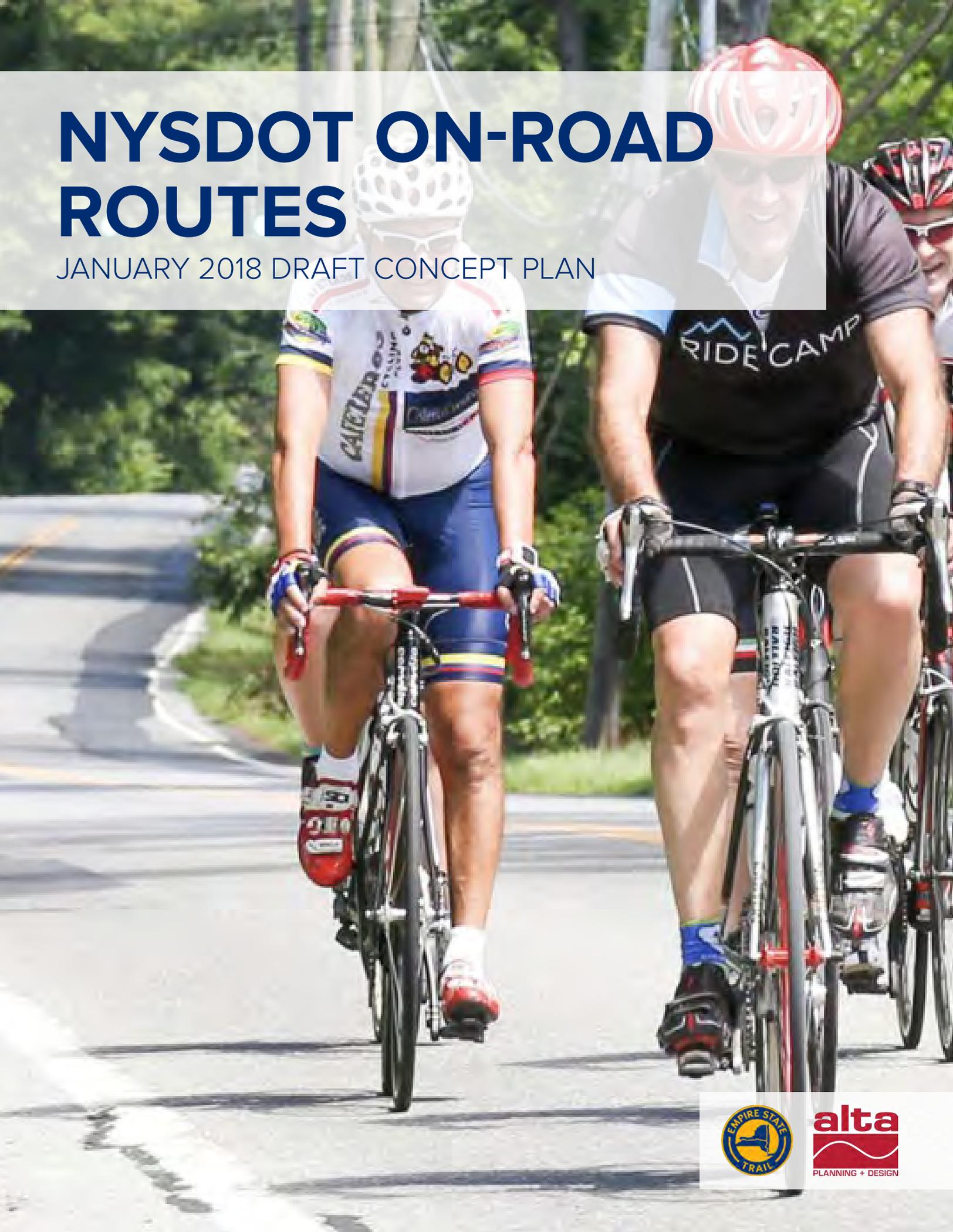


# NYS DOT ON-ROAD ROUTES

JANUARY 2018 DRAFT CONCEPT PLAN



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# EXECUTIVE SUMMARY

## THE EMPIRE STATE TRAIL

New York's Governor Andrew Cuomo has committed to completing the Hudson River Valley Greenway and Erie Canalway trails by 2020 to create the Empire State Trail, the largest statewide multi-use trail in the nation. The state will develop 350 miles of new trail to create a 750-mile pathway for walking and bicycling along scenic vistas and through charming, historic communities.

The Empire State Trail will span the state, from the New York Harbor up through the Adirondack Mountains to the Canadian border – and from the shores of Lake Erie along the historic Erie Canal to the heart of the Capital Region.

The trails are expected to draw tourists from around the world to explore New York's striking landscapes and rich history, while enjoying local

bed and breakfasts, hotels, restaurants, wineries, breweries, farmsteads, and cultural attractions along the way.

Plans are already underway to extend the Empire State Trail's effect by promoting connections to other regional bicycling and hiking trails. Trail users will be linked to the many historic sites and parks, the Appalachian Trail, the Adirondack and Catskill Parks, the St. Lawrence Seaway Trail, the Genesee Valley Greenway, and many others.

Wayfinding signage will be installed along the entire 750-mile route with a distinctive logo. Signage will be installed along the 400 miles of existing trails that will be part of the Empire State Trail route.

**“The scenic natural beauty that spans every corner of this state is key to our prosperity, vital to our future and part of who we are as New Yorkers.”**

– New York State Governor Andrew Cuomo



# THE ROUTE

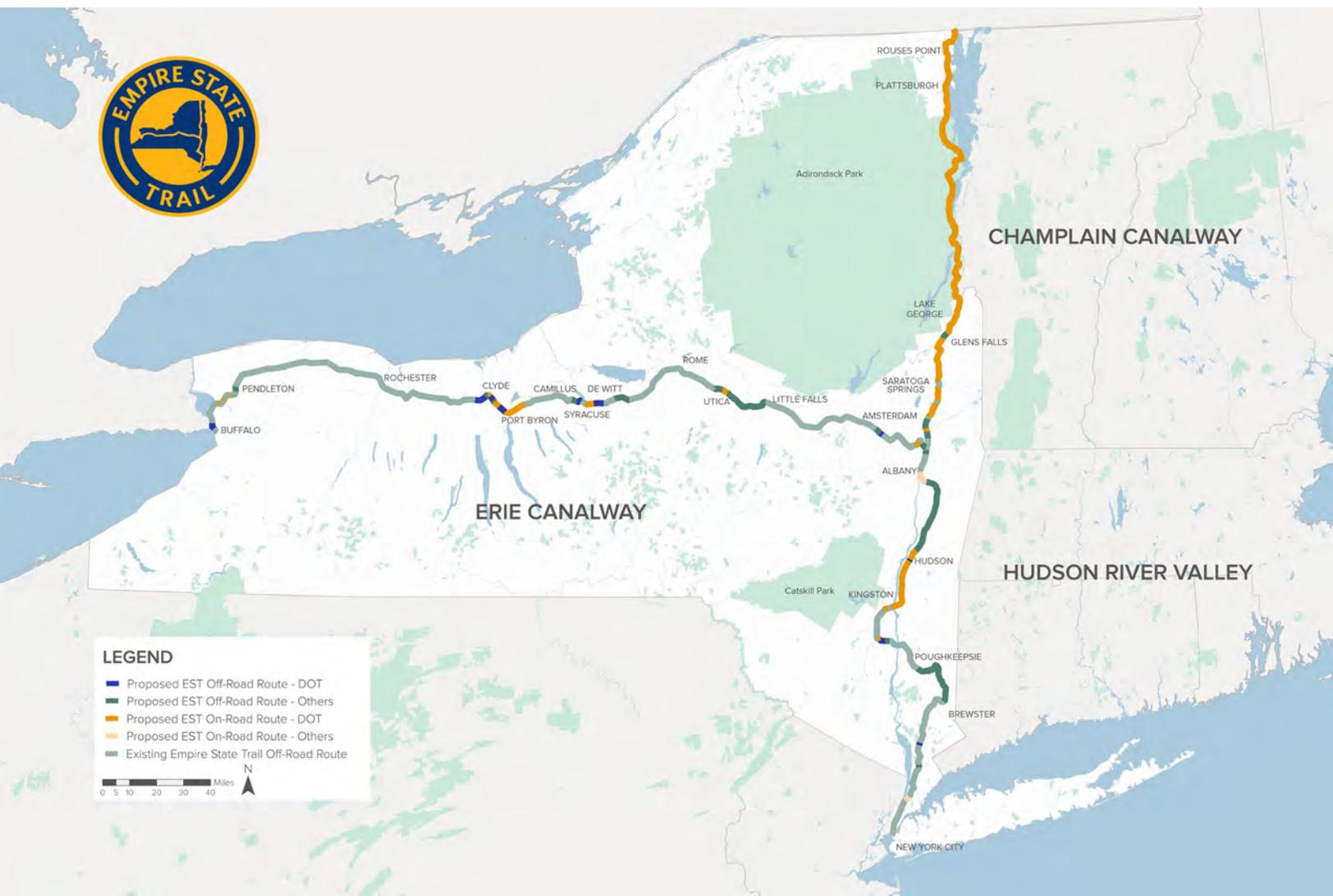
The Empire State Trail is an overlay of local and regional trails for much of its route. 85% of the trail will be off-road between Manhattan and Buffalo. Wherever possible, the Trail follows historic railway routes and canal tow paths. Where no off-road options exist, the Empire State Trail will follow public roadways utilizing shared lanes, shoulders, side paths, bike lanes, sidewalks, and low volume local roads where available.

Empire State Trail funding will be utilized to connect existing trails into a continuous statewide route. For example, the Erie Canalway Trail between Buffalo and Albany is 80% done. Trail

funds will close gaps, such as completing the trail through Syracuse, Camillus, and Dewitt in central New York.

The largest amount of new trail construction will occur in the Hudson Valley, where only about 50% of the complete trail route exists today.

The map below illustrates the proposed route, indicating where the Empire State Trail will be on- or off-road. In general terms, the Empire State Trail will run west (Buffalo) to east (Albany) and south (New York City) to north (Canadian border).



# EMPIRE STATE TRAIL DESIGN GUIDE

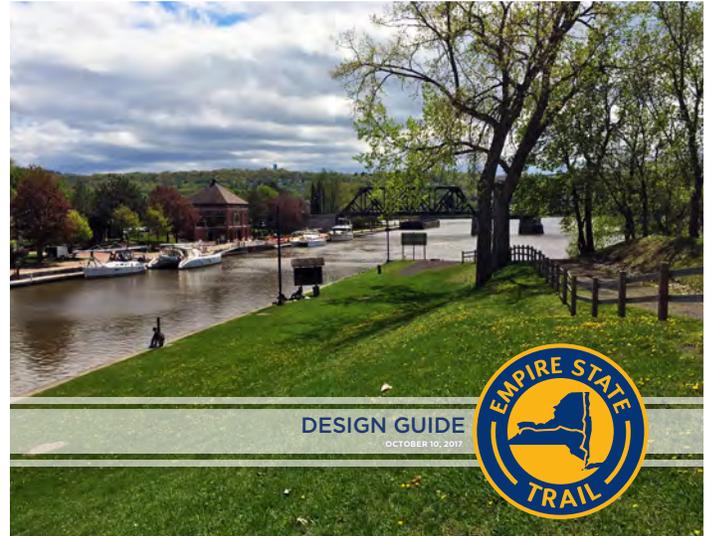
The Design Guide was developed to assist with project scoping, final design, and implementation. Selecting the best facility type for a given route can be challenging due to the range of factors that influence user comfort and safety. In some cases, there is no single correct facility, and the selection of an appropriate on-road facility must balance traffic conditions, land use context, and implementation cost.

The Design Guide helps planners and engineers identify the trail context, select the best facility, and understand how to meet or exceed NYSDOT, FHWA, and AASHTO guidance.

## ENVIRONMENTAL REVIEW

In 2010, the New York State Office of Parks, Recreation and Historic Preservation adopted the NYS Trails Plan and Generic Environmental Impact Statement (GEIS). The Plan and GEIS provide a statewide framework to guide future trail planning and development, and identify trail related issues and strategies to address them. The Plan designates the three major trunks of the Empire State Trail (EST) – the Hudson River Valley Greenway, Erie Canalway, and Champlain Canalway Trails – as “primary greenway trails,” and identifies proposed new trails that will now be developed through the EST initiative.

The 2010 NYS Trails Plan and GEIS reference that review of site-specific environmental impacts and benefits will be accomplished as individual trail segments are advanced to the formal design



and construction phase. Minimization of potential environmental impacts is accomplished through planning, project-specific environmental review, and public participation.

Under the Governor’s initiative, five state entities along with a number of local governments will undertake sixty discrete construction projects to complete the Empire State Trail, ranging from the development of major new rail-trail and canalway trail segments, to minor on-road pedestrian and bicycle improvements. The state or local government entity undertaking each project will be responsible for securing required environmental permits and completing project-specific State Environmental Quality Review Act (SEQRA) and historic preservation reviews, consistent with the 2010 NYS Trails Plan and GEIS.



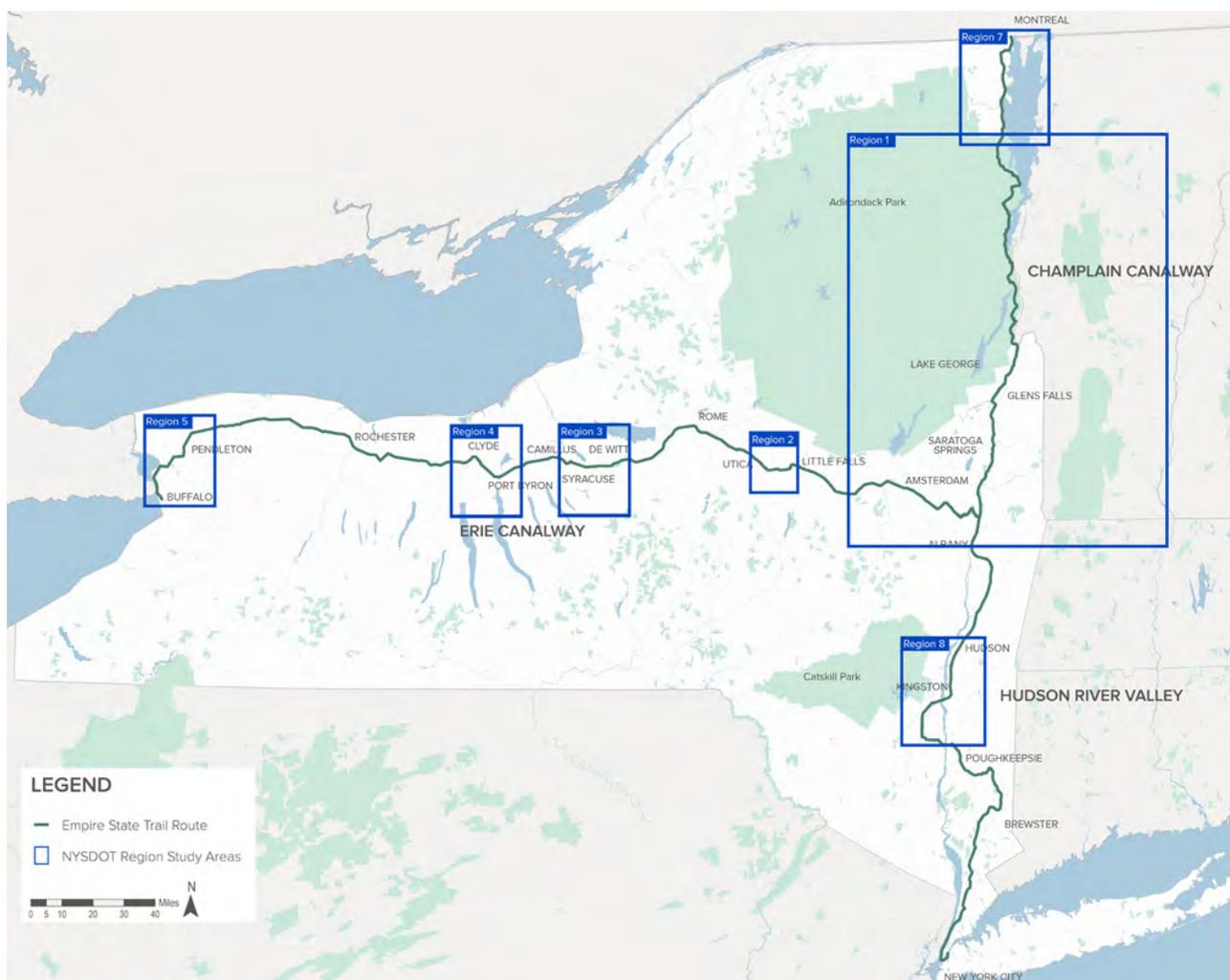
# NYSDOT'S ROLE

The Empire State Trail will utilize existing roadways to fill gaps between off-road trails in the Erie Canalway Corridor and along the Hudson River Valley. The Champlain Valley will also be on-road with much of the route following State Bike Route 9. In order to safely accommodate pedestrians and bicyclists, possible improvements to these roadways have been identified and are outlined in this report.

Scoping of the Empire State Trail through these areas involved six DOT regions: Region 1 (Capital Region), Region 2 (Utica), Region 3 (Syracuse), Region 4 (Rochester), Region 5 (Buffalo), Region

7 (North Country), and Region 8 (Hudson Valley). The work to be evaluated within each region is outlined in the following chapters.

The Empire State Trail On-Road Routes Concept Plan represents the initial thinking of the kinds of project scopes that might be appropriate at the locations outlined below. NYSDOT will progress EST projects in accordance with the policies and procedures set forth in the Project Development Manual, the Highway Design Manual and EB 17-045 concerning the Empire State Trail Design Guide. NYSDOT will utilize this plan as it develops appropriate scoping and design approval documentation in accordance with the above referenced guidance.



# REGION 1

## INTRODUCTION

NYSDOT Region 1 is located at the junction of EST's Erie, Champlain, and Hudson Valley corridors. The region extends from Pattersonville on the west, to Albany/Renssalaer on the south, and Keesville to the north. The landscape provides a varied and interesting trail user experience.

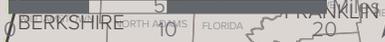
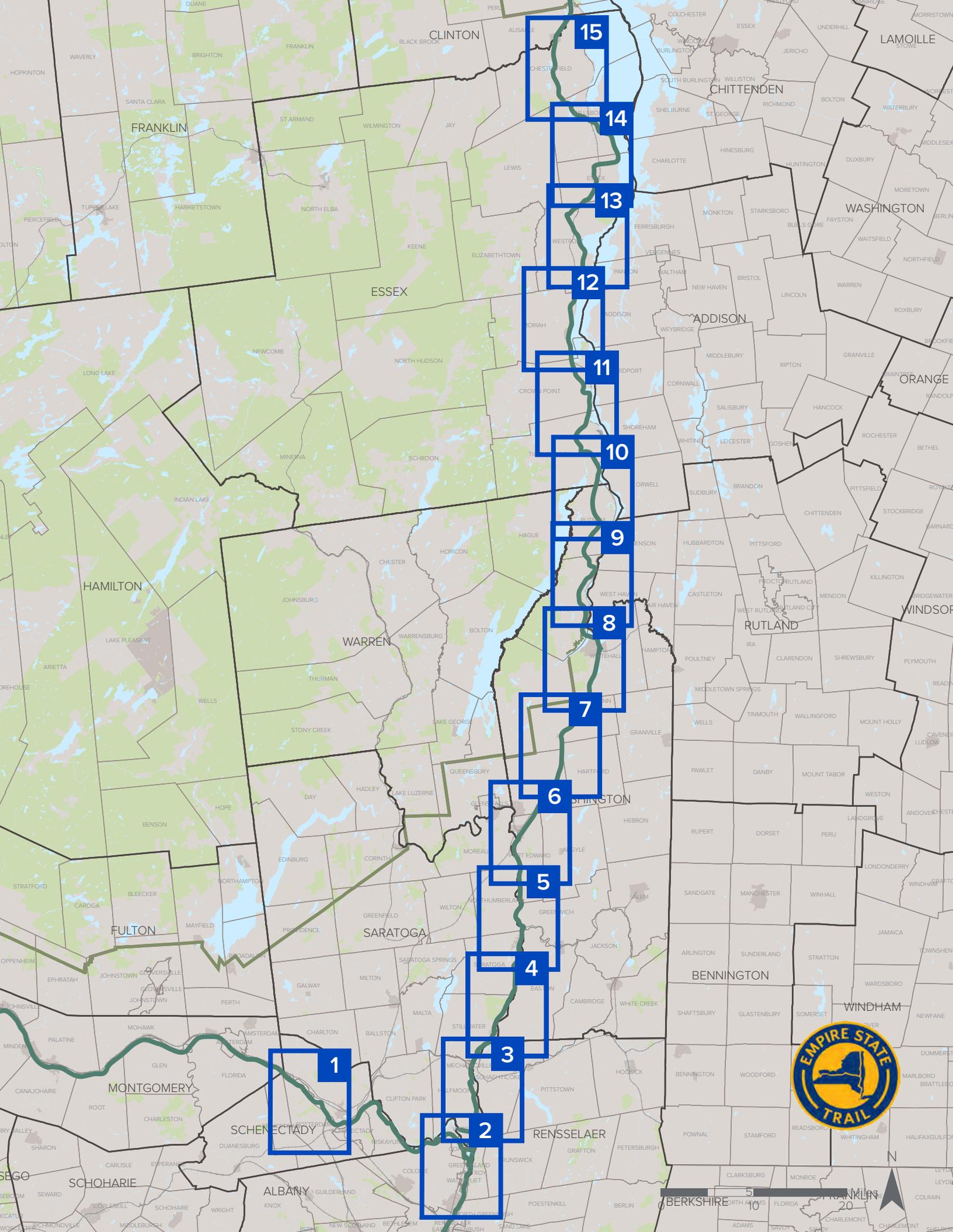
The Region 1 section of the EST will link some of New York's most valuable assets, connecting the Hudson River to the Mohawk River, and the Capital Region to Lake Champlain.

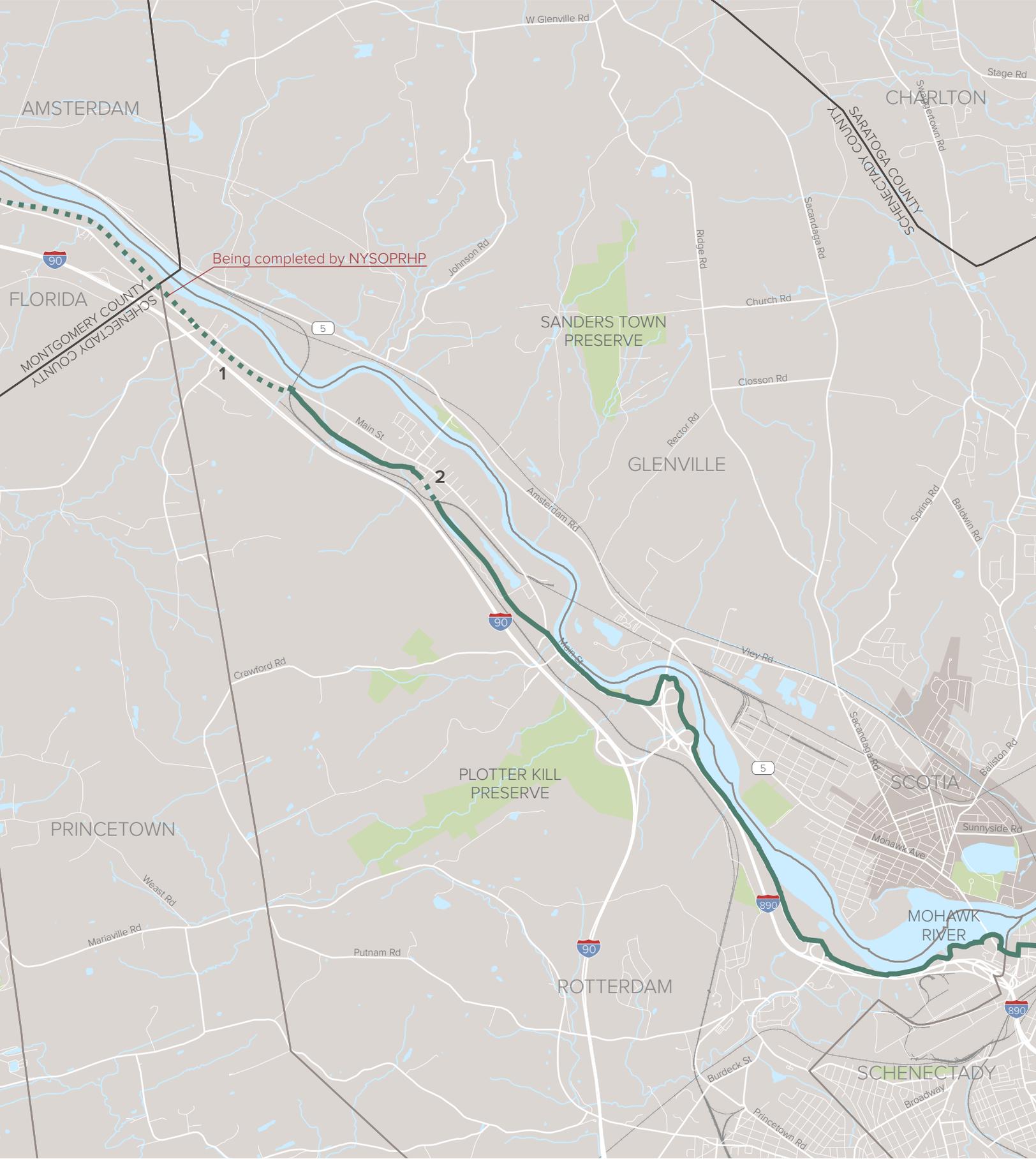
Long sections of shared-use paths exist in the south and west sections of the region, including the Erie Canalway Trail and the Mohawk-Hudson Bike-Hike Trail. These trails connect the Capital

Region's urban centers, and serve as the trunk line of the EST in this part of the region. The Erie Canalway Trail is largely connected between Amsterdam and Albany, but gaps still exist. Proposed EST improvements will complete these gaps through a combination of on-road and off-road improvements.

The EST showcases the Waterford junction of the Erie and Champlain Canals. It then travels north on primarily on-road routes along the Hudson River, connecting many small villages and hamlets along the way. There are a series of off-road trails along the Champlain Canal system in Saratoga and Washington Counties. \$10 to \$12 million of Empire State Trail funds will be invested in closing these gaps in Region 1.

**NYSDOT Region 1 includes the junction of the Erie Canal, Champlain Canal, and Hudson Valley Greenway trail systems. Peebles Island State Park provides a significant opportunity to mark this important junction on the Empire State Trail.**





Being completed by NYSOPRHP

**NYSDOT REGION 1 SECTION 1: NETWORK**

-  Existing Sidepath/Shared-Use Path
-  Proposed Sidepath/Shared-Use Path



## INSET MAP 1: PATTERSONVILLE TO COHOES

The Erie Canalway Trail (ECT) travels west from Cohoes 20 miles to Pattersonville. Nearly the entire corridor is a continuous shared-use path, which is dedicated for non-motorized use only and separated from roadways. There are short stretches along the corridor where shared-use paths do not exist. At these points, the ECT is routed on-road. These on-road sections represent

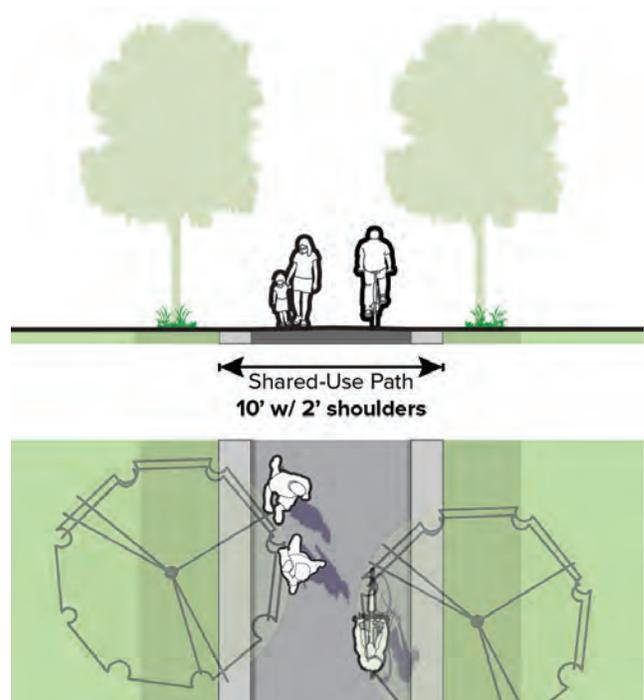
challenges in the ECT, but opportunities to create complete streets or provide a new off road path, to accommodate all ages and abilities. By improving the trail conditions at these gaps, a more comfortable and connected user experience can be achieved. Two primary improvements are being evaluated for this section of the EST.

Table 01: Region 1 Inset Map 1 Preferred Route and Costs

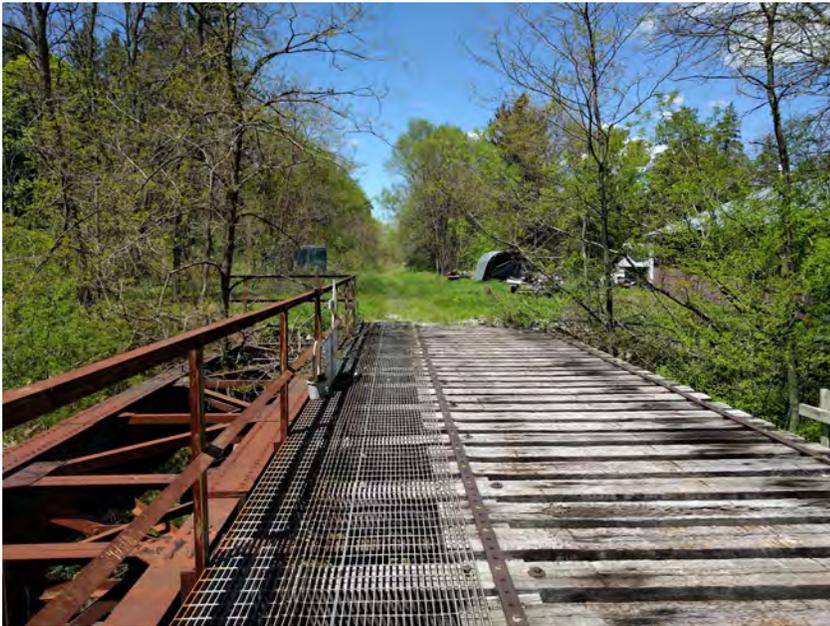
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
1	<b>Pattersonville / 5S Gap</b>	1.1	Shared-Use Path
2	<b>Rotterdam Railroad Crossing</b>	0.3	Shared-Use Path

## 1 PATTERSONVILLE/5S GAP

The shared-use path along the inactive railroad line is proposed to connect the existing Mohawk-Hudson Bike-Hike Trail to the continuation of the Erie Canal Trail to be constructed by NYSOPRHP in 2017/18. To the west, crossing at Route 5S will be required to connect to Erie Canal Trail. The rail trail right-of-way is owned by the state and is mostly clear. A railroad bridge, shown below, will need to be redecked to accommodate the trail. To the east, the path may be a short portion of sidepath underneath the railroad bridge along Route 5S to the east or alternatively building a new tunnel under the railroad to connect to the Mohawk-Hudson Bike-Hike Trail. In order to transition from the railroad right-of-way, property may need to be acquired or an alternative route identified.



Typical Shared-Use Path Cross-Section



Existing railroad bridge along Segment 1



## 2 ROTTERDAM RAILROAD CROSSING

The implementation of this crossing is proposed to replace a mile-long, signed on-road connection in the existing Mohawk-Hudson Bike-Hike Trail near the rural hamlet of Rotterdam Junction. This project may involve creating a tunnel underneath the railroad tracks near Scrafford Lane, and the construction of a shared-use path to Iroquois Street. Right-of-way may need to be acquired to make this connection.



Tunnel to be constructed under existing railroad tracks



NOTE: Section being completed by others

NOTE: Section being completed by others

NYSDOT local project - Watervliet

**NYSDOT REGION 1 SECTION 2: NETWORK**

- Existing Sidepath/Shared-Use Path
- Proposed Sidepath/Shared-Use Path
- Proposed Separated Bike Lane (Bidirectional)
- Proposed Paved Shoulder
- Proposed Shared Roadway (with sidewalk)



## INSET MAP 2: COHOES, GREEN ISLAND & WATERVLIET

The EST recommendations around Cohoes would clarify the navigation between on- and off-road portions of the trail. Several improvements are included to create a more comfortable and logical trail user experience. Ultimately, the EST will help tie together the Mohawk-Hudson Bike-Hike Trail and the Erie Canalway Trail. The EST will also connect trail users to Cohoes, Green Island, and Watervliet.

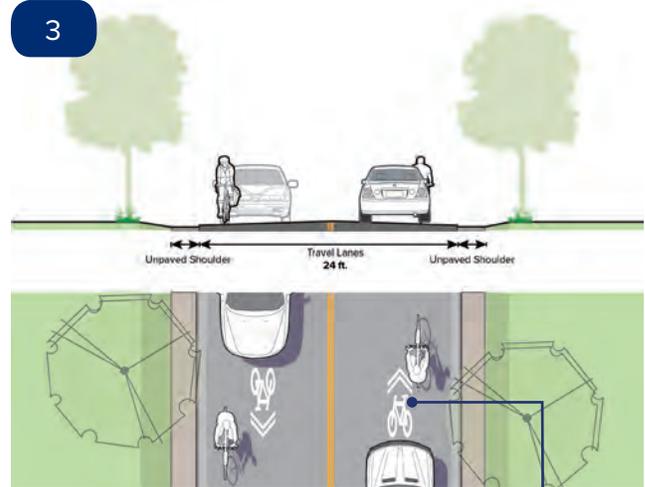
(with sidewalk)

Table 02: Region 1 Inset Map 2 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>3</b>	<b>Twin Bridges Connection</b>	0.5	Shared Roadway
<b>4</b>	<b>Cohoes-Green Island Connection</b>	1.3	Paved Shoulder
<b>6-7</b>	<b>MHBHT Green Island</b>	1.3	Shared Roadway
<b>8</b>	<b>MHBHT Watervliet Cycle Track</b>	1.7	Separated Bike Lane (Bidirectional)

### 3 TWIN BRIDGES CONNECTION

This proposed project fills a short gap in the existing off-road section of the Mohawk-Hudson Bike-Hike Trail, traveling through a primarily suburban setting. The existing on-road route follows Island View Road from the Mohawk-Hudson Bike-Hike Trail under Interstate 87 to the intersection of Dunsbach Ferry Road. The shared roadway portion is a dead-end road for motorists.

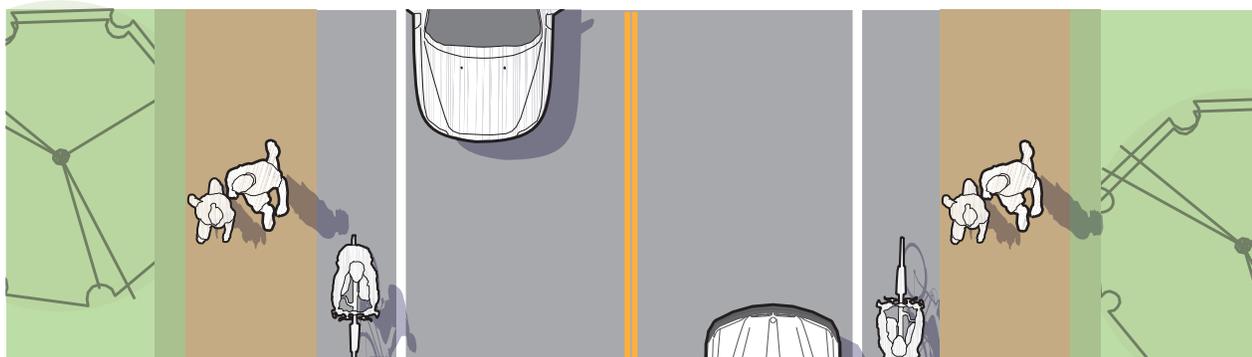
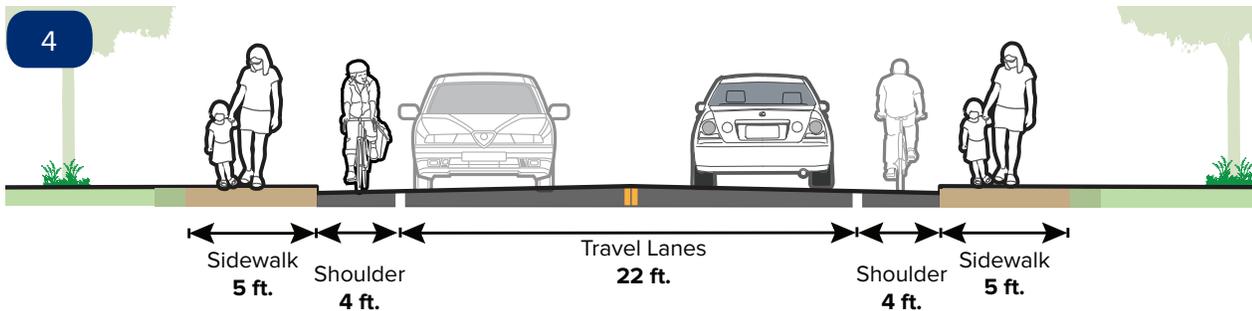


Shared Roadway Cross-Section

*Shared lane markings recommended; Not required.*

### 4 COHOES-GREEN ISLAND CONNECTION

This proposed project fills a gap between the existing Erie Canalway Trail and the Delaware Avenue Bike-Hike Trail on Peeble’s Island. The route follows the route of the Mohawk-Hudson Bike-Hike Trail along Dyke Avenue. The crossing of 787 and coordination with the I-787 reconstruction project is on-going.



Dyke Avenue - Paved Shoulder Cross-Section

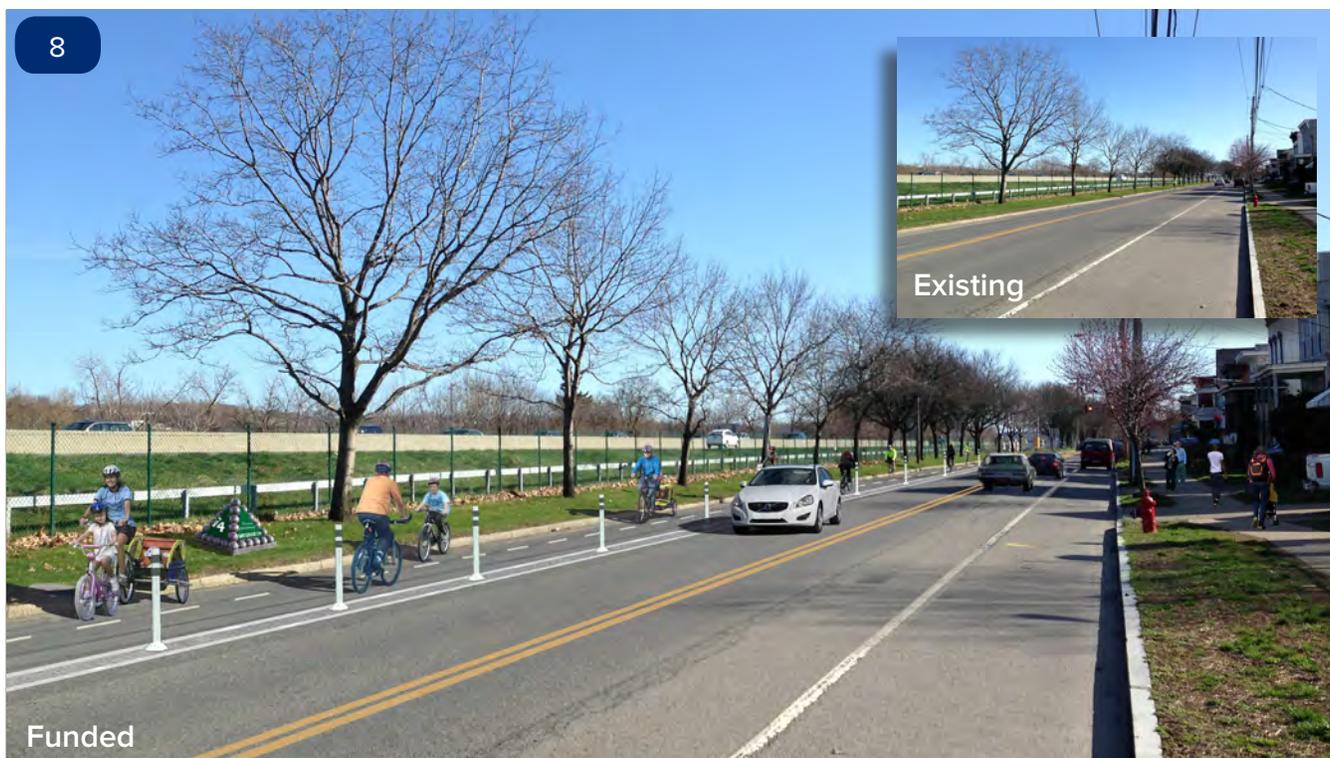


## 6-7 MHBHT GREEN ISLAND

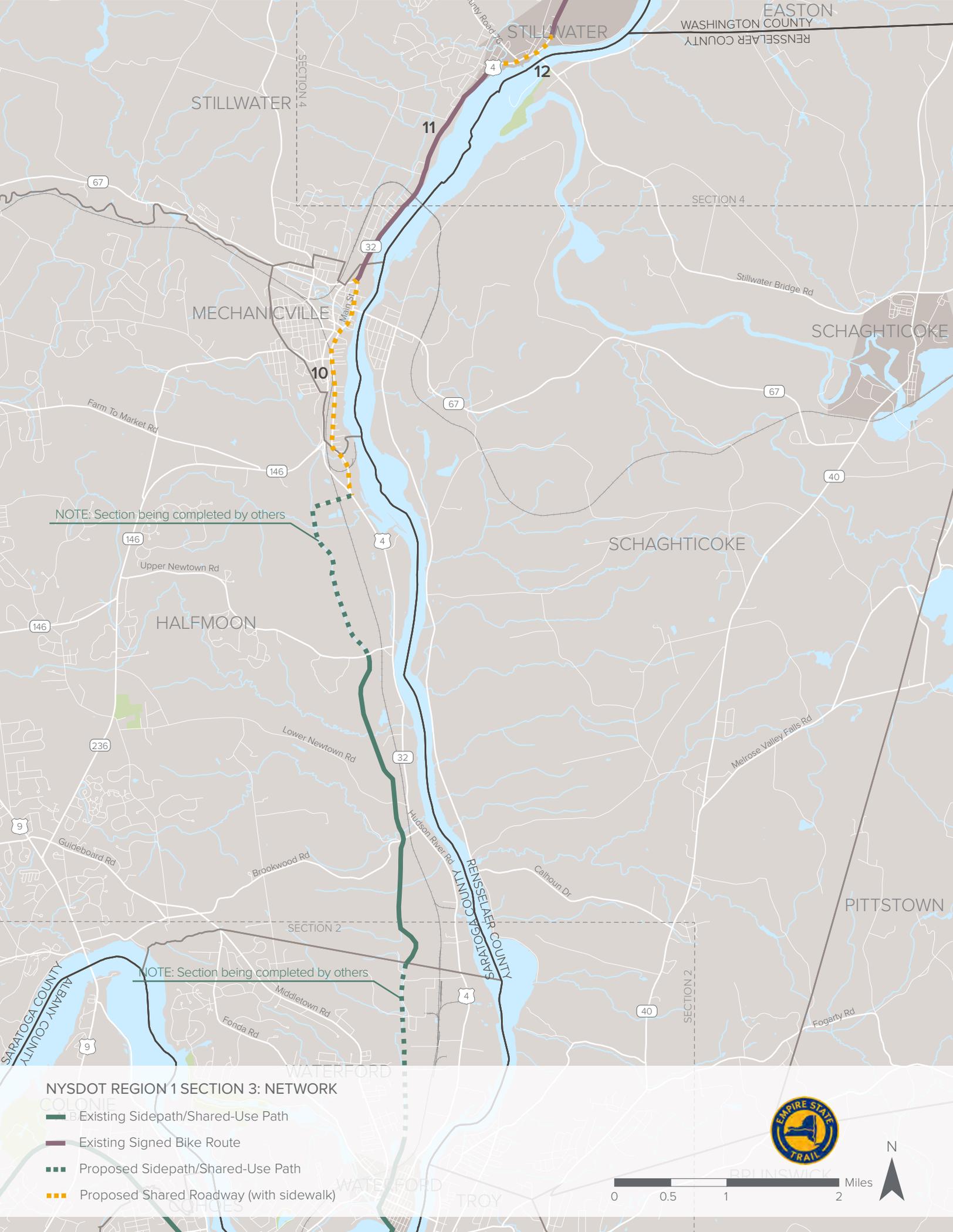
This north-south route connects Green Island and Van Schaick Island to the Mohawk-Hudson Bike-Hike Trail. The proposed route follows the existing Mohawk-Hudson Bike-Hike Trail signed route using a shared roadway and sidewalks.

## 8 MHBHT WATERVLIIET CYCLE TRACK

This is a continuation of the 6-7 alignments connecting to the existing Mohawk-Hudson Bike-Hike Trail. The proposed EST in downtown Watervliet is a combination of a two-way separated bike lane and shared roadway south of Route 32 at the Watervliet Arsenal.



Concept Rendering of Funded Two-Way Separated Bike Lane in Watervliet



NOTE: Section being completed by others

NOTE: Section being completed by others

**NYSDOT REGION 1 SECTION 3: NETWORK**

-  Existing Sidepath/Shared-Use Path
-  Existing Signed Bike Route
-  Proposed Sidepath/Shared-Use Path
-  Proposed Shared Roadway (with sidewalk)



# INSET MAP 3: MECHANICVILLE TO BEMIS HEIGHTS

New sections of the Champlain Canalway Trail will complete the trail from Waterford north to Mechanicville. South of Mechanicville, the EST will travel primarily through urban areas, so a wider range of trail users need to be accommodated.

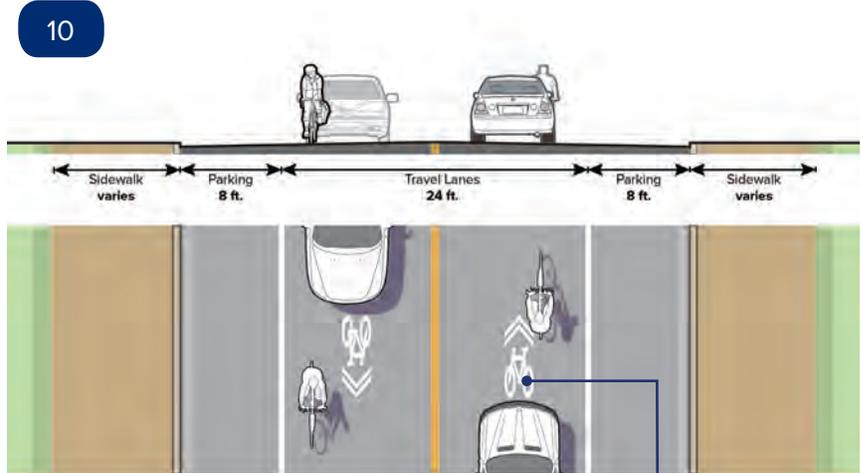
North of Mechanicville, the EST will connect a series of small communities along rural roadways. Experienced bicyclists are the most likely trail users between Mechanicville and Schuylerville.

Table 03: Region 1 Inset Map 3 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
10	Mechanicville	2.0	Shared Roadway

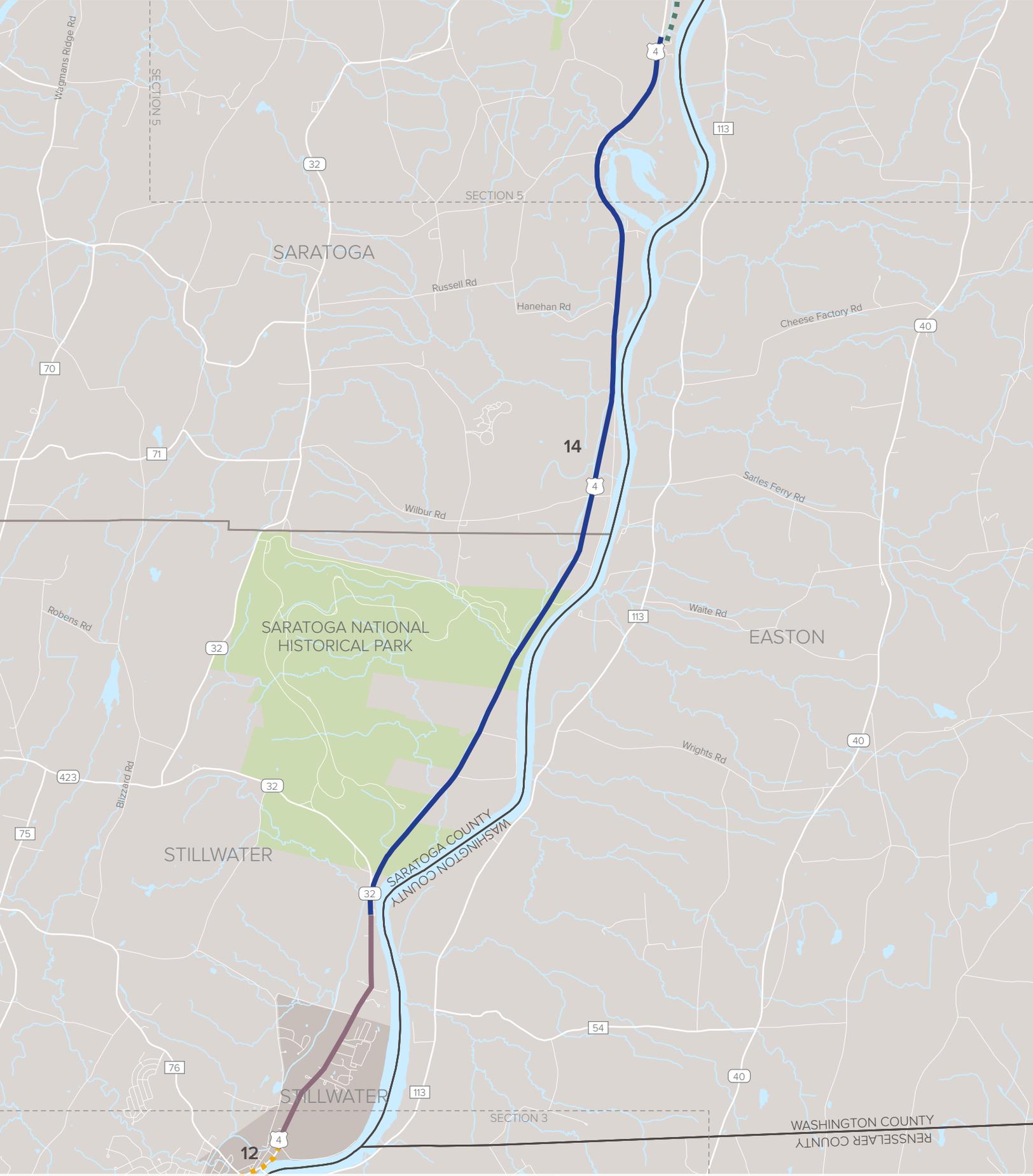
## 10 MECHANICVILLE

In downtown Mechanicville, routing the Empire State Trail along Main Street is proposed to accommodate both pedestrians and bicyclists. The City plans to make sidewalk improvements in the near future, and will be repaving a portion of Main Street.



Shared Roadway Cross-Section

*Shared lane markings recommended; Not required.*



**NYSDOT REGION 1 SECTION 4: NETWORK**

- Existing Paved Shoulder
- Existing Signed Bike Route
- Proposed Sidepath/Shared-Use Path
- Proposed Shared Roadway (with sidewalk)



# INSET MAP 4: BEMIS HEIGHTS TO SCHUYLERVILLE

The EST, follow State Bike Route 9 north of Mechanicville, which is primarily on Route 4, is proposed. Much of the area between Bemis Heights and Schuylerville has wide shoulders that provide a comfortable experience for recreational bicyclists.

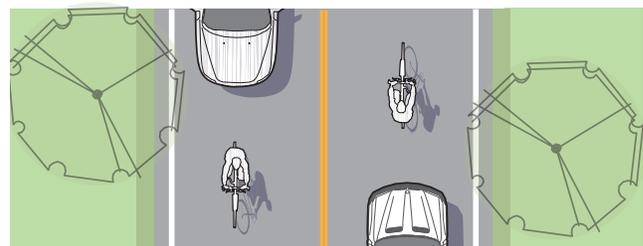
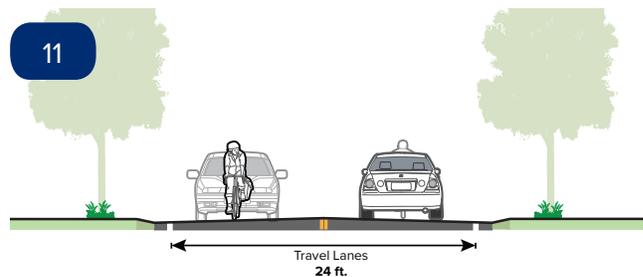
The recommended route passes by Saratoga National Historic Park, representing a prime opportunity to combine tourism and education with the EST. South of Schuylerville, the route connects to a previously funded shared-use path.

Table 04: Region 1 Inset Map 4 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
11*	Mechanicville to Schuylerville: Route 4	2.5	Signed Bike Route
12	Mechanicville to Schuylerville: Main St & Route 4	2.6	Shared Roadway
14	Mechanicville to Schuylerville: Main St & Route 4	8.0	Paved Shoulder / Striped Buffer

## 11 MECHANICVILLE TO STILLWATER: ROUTE 4

North of Mechanicville, the Empire State Trail will remain a signed bike route. This is currently NYS Bike Route 9. Existing shoulder widths vary between 1 foot and 3 feet.

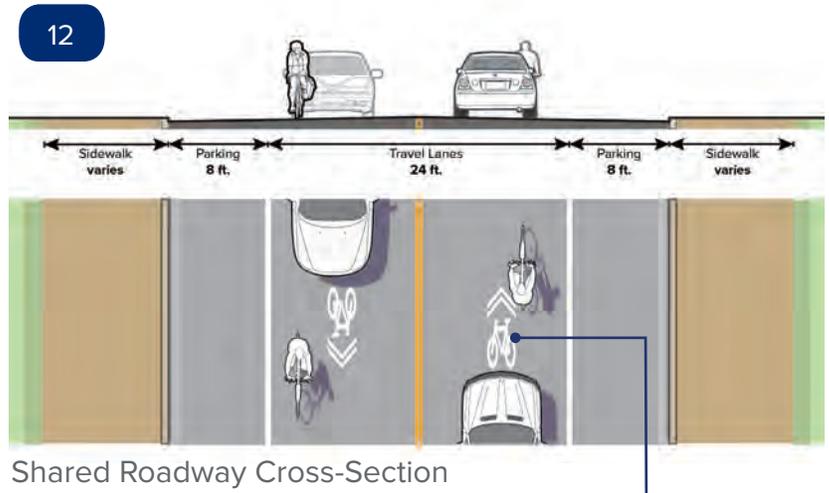


Signed Bike Route Cross-Section

\*Segment 11 shown on Inset Map 3 on page 11

## 12 STILLWATER: ROUTE 4

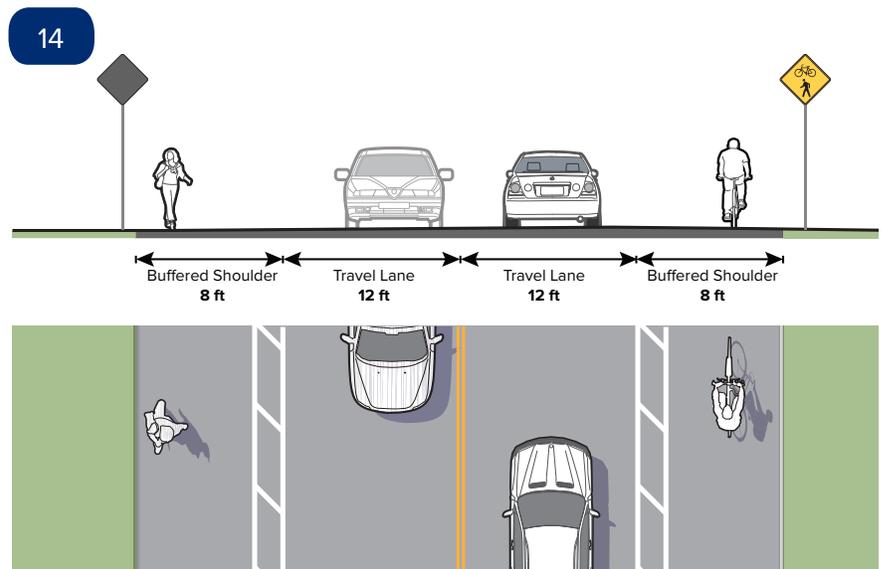
Through the Village of Stillwater, on-street parking is introduced into the roadway cross section. The Empire State Trail will follow a shared roadway with sidewalks.

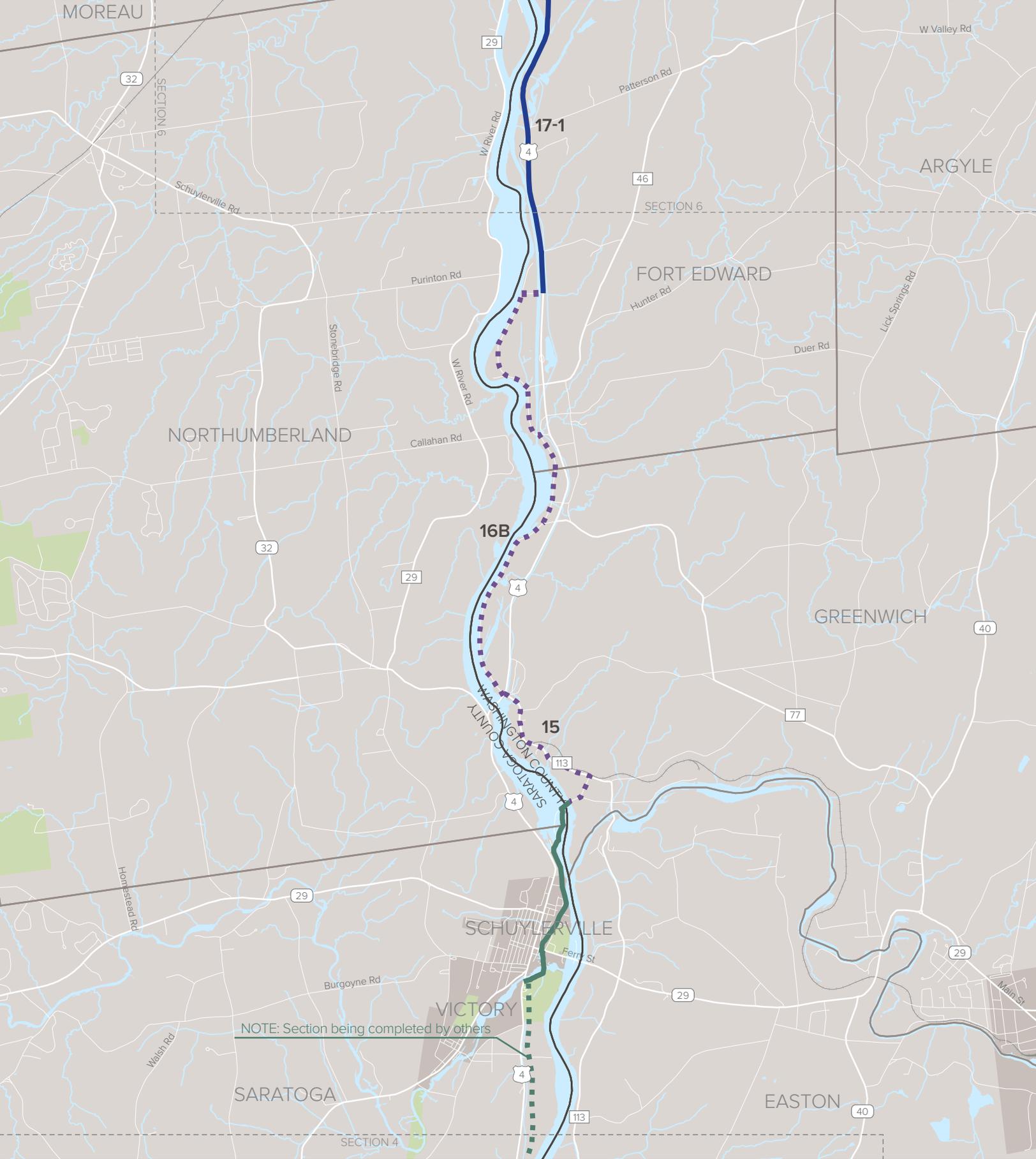


*Shared lane markings recommended; Not required.*

## 14 STILLWATER TO SCHUYLERVILLE: ROUTE 4

This portion of State Bike Route 9 already has wide shoulders. The proposed improvements may include installing striped buffers.



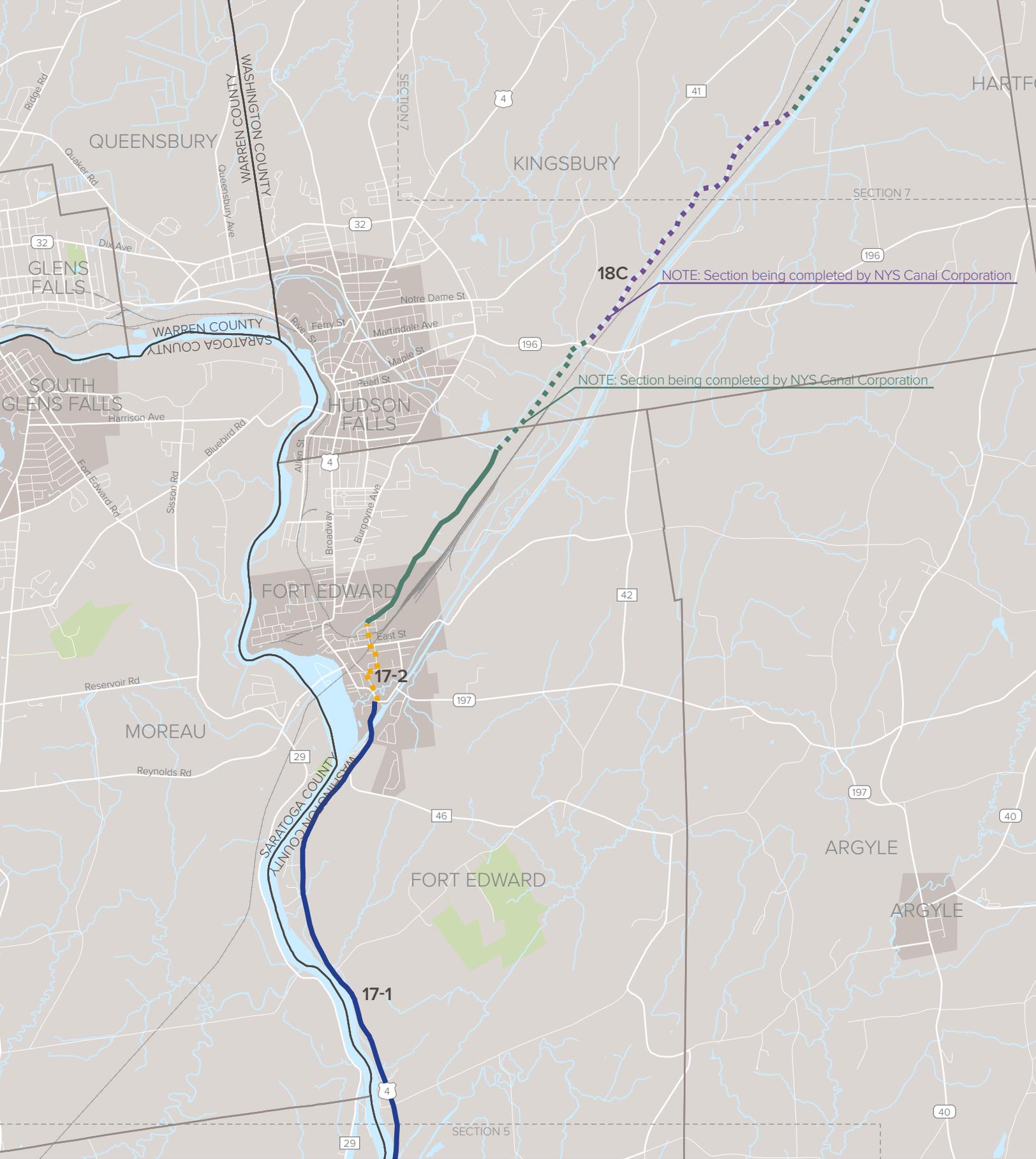


NOTE: Section being completed by others

**NYSDOT REGION 1 SECTION 5: NETWORK**

- Existing Sidepath/Shared-Use Path
- Existing Paved Shoulder
- Proposed Shared Roadway
- Proposed Sidepath/Shared-Use Path





**NYSDOT REGION 1 SECTION 6: NETWORK**

- Existing Paved Shoulder
- Proposed Sidepath/Shared-Use Path
- Proposed Shared Roadway (with sidewalk)
- Proposed Shared Roadway





## INSET MAP 5-6: SCHUYLerville TO FORT EDWARD

The emphasis north of Schuylerville is routing users on State Bike Route 9, and making spot improvements where existing shoulders narrow. Alternate routes are proposed where the EST lacks shoulders or crosses complex intersections.

Table 05: Region 1 Inset Maps 5-6 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>15</b>	<b>Greenwich</b>	1.4	Shared Roadway
<b>16B</b>	<b>Greenwich to Galusha Island: River Road</b>	3.4	Shared Roadway
<b>17-1</b>	<b>Galusha Island to Fort Edward: Route 4</b>	6.2	Paved Shoulder / Striped Buffer
<b>17-2</b>	<b>Fort Edward Local Connection</b>	0.8	Shared Roadway

**15 GREENWICH**

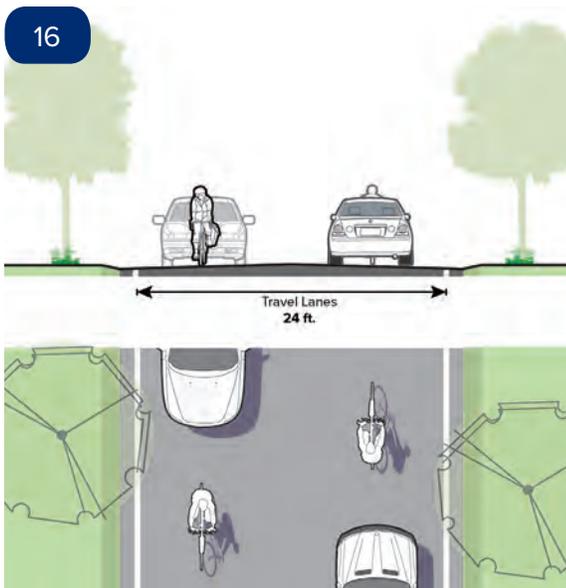
County Route 113 is a low-volume road (about 300 vehicles per day) connecting to Route 4 west of Pleasant Villa Trailer Park Road to Dix Bridge. This is currently part of the Champlain Canalway Trail and proposed as a shared roadway for the Empire State Trail.

**17-1 GALUSHA ISLAND TO FORT EDWARD: ROUTE 4**

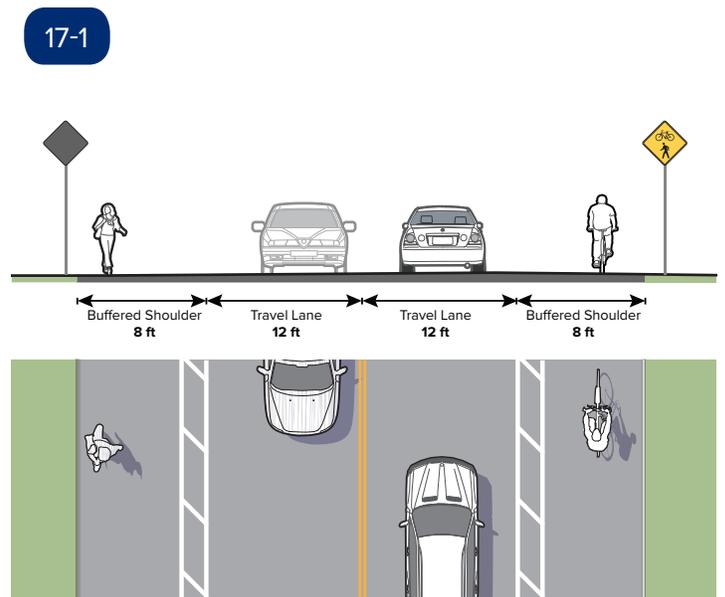
For this segment, the EST is proposed to follow Route 4 along existing State Bike Route 9. Improvements to the existing wide paved shoulder may include striped buffers.

**16 GREENWICH TO GALUSHA ISLAND: RIVER ROAD**

The Champlain Canalway Trail follows River Road from Greenwich to Galusha Island. This is a local and low volume roadway adjacent to the river. There is one bridge that has been closed. This is proposed as a shared roadway for EST trail users. The existing bridge is proposed to be replaced as a bicycle and pedestrian bridge. Improvements are also proposed to be made to the decks of the existing open grate bridges to enhance cyclist safety and comfort.



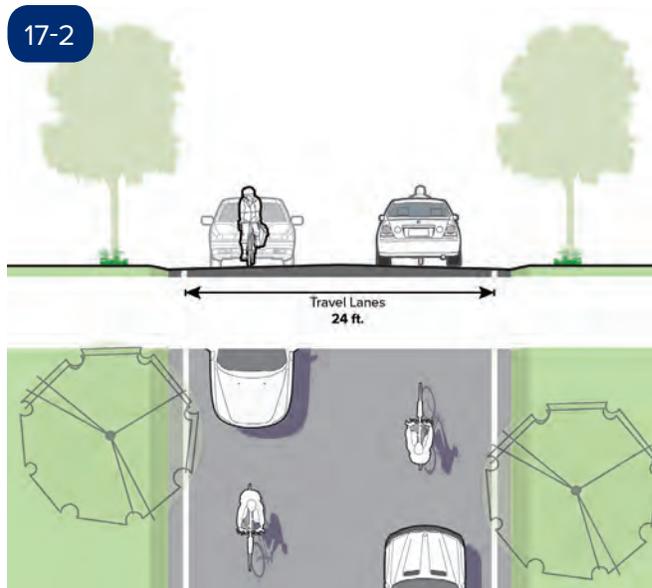
Shared Roadway Cross-Section



Paved Shoulder Cross-Section

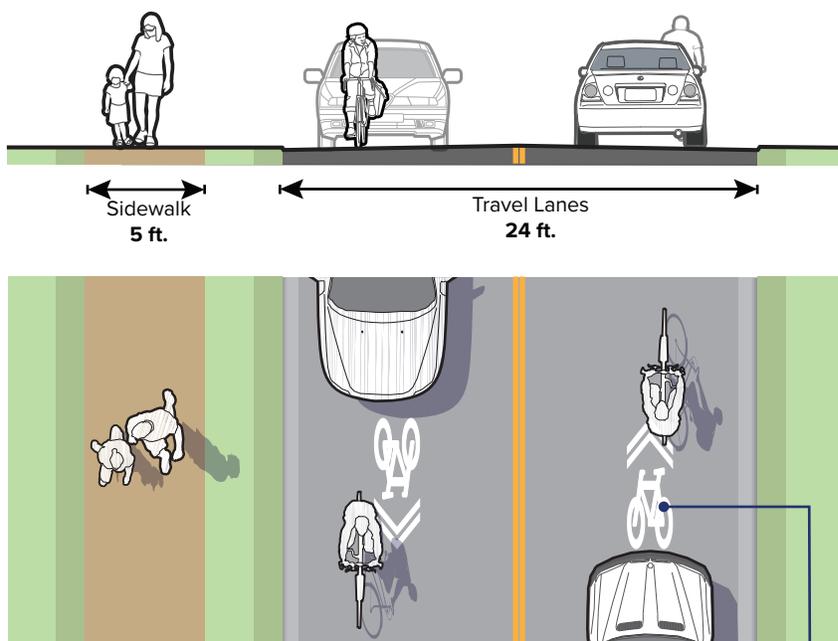
## 17-2 FORT EDWARD LOCAL CONNECTION

To connect NYS Bike Route 9 along Route 4 to the existing Feeder Canal Trail, utilizing local roadways through Fort Edward is proposed. On roadways with no sidewalk, a shared roadway for bicyclists and pedestrians is proposed. Along several roadways, a sidewalk already exists for pedestrians and bicyclists will utilize a shared travel lane. These two cross sections are shown in the images to the right and below.



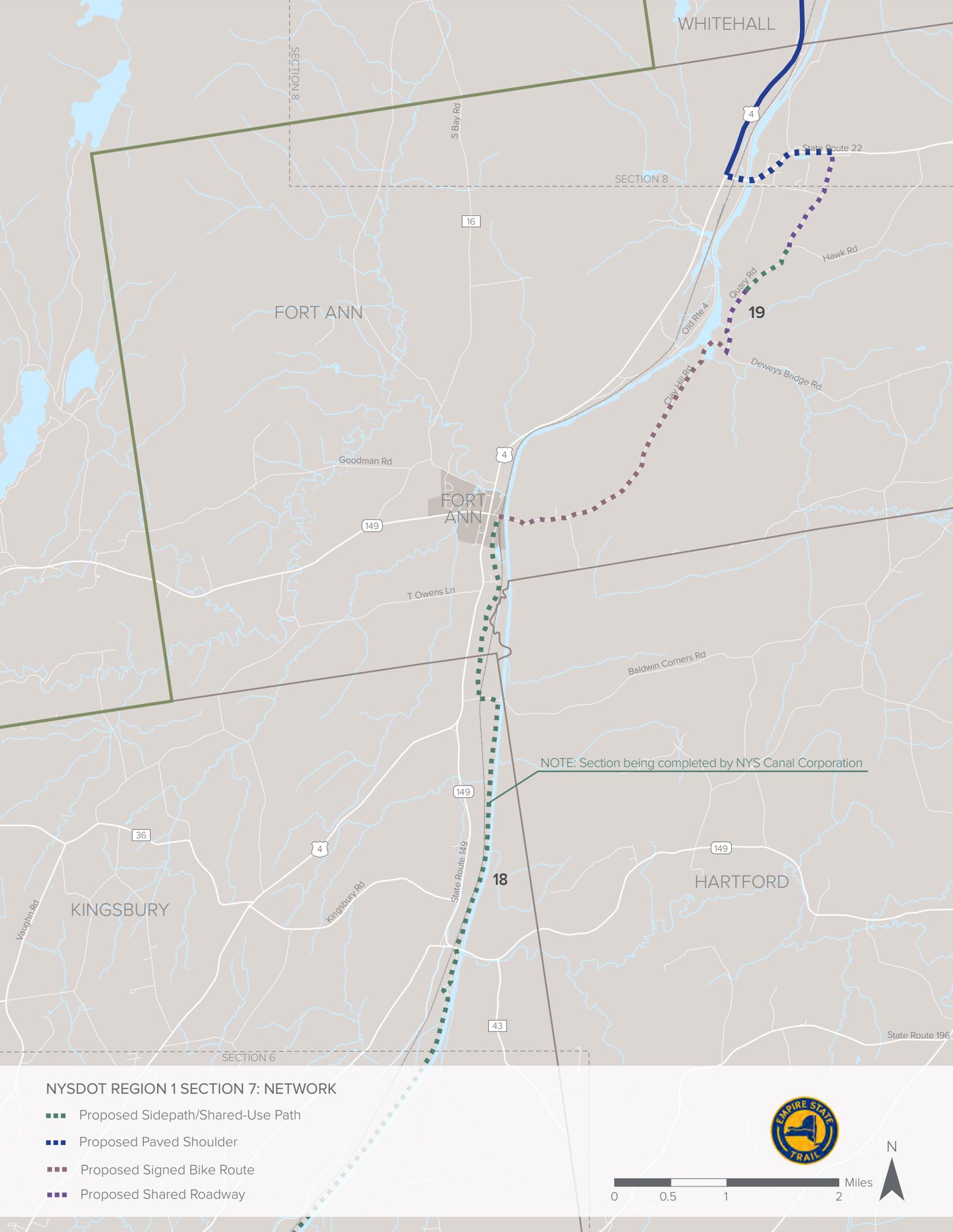
Shared Roadway Cross-Section

## 17-2



Shared Roadway Cross-Section

*Shared lane markings recommended; Not required.*



WHITEHALL

FORT ANN

KINGSBURY

HARTFORD

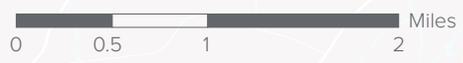
SECTION 8

SECTION 8

SECTION 6

**NYSDOT REGION 1 SECTION 7: NETWORK**

- Proposed Sidepath/Shared-Use Path
- Proposed Paved Shoulder
- Proposed Signed Bike Route
- Proposed Shared Roadway



NOTE: Section being completed by NYS Canal Corporation

S Bay Rd  
16

4

State Route 22

19

Goodman Rd

149

FORT ANN

4

T Owens Ln

Baldwin Corners Rd

149

18

NOTE: Section being completed by NYS Canal Corporation

149

36

4

Kingsbury Rd

149

State Route 149

43

State Route 196

Vaughn Rd

# INSET MAP 7: FORT ANN TO COMSTOCK

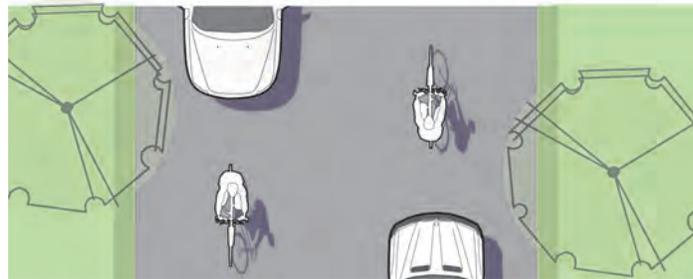
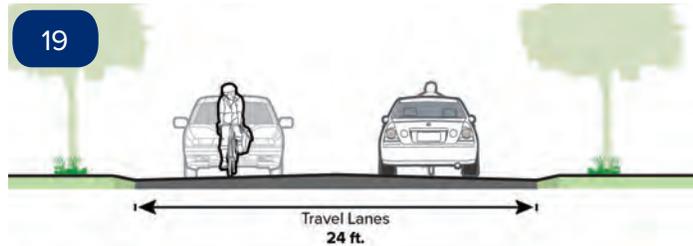
State Bike Route 9 does not provide a comfortable bicycling experience in this area. Right-of-way, environmental, and terrain constraints have prevented wide shoulders for bicyclists. The proposed alignment deviates from State Bike Route 9, traveling instead on the east side of the Champlain Canal, connecting back to Route 4 in Comstock.

Table 07: Region 1 Inset Map 7 Preferred Route and Costs

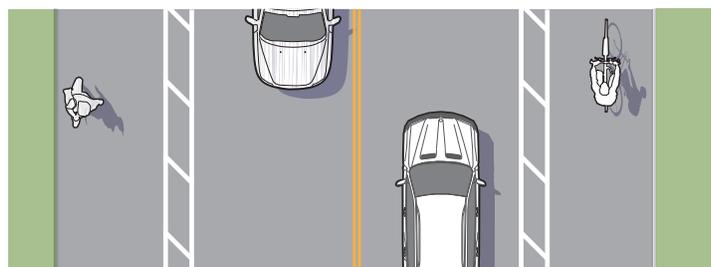
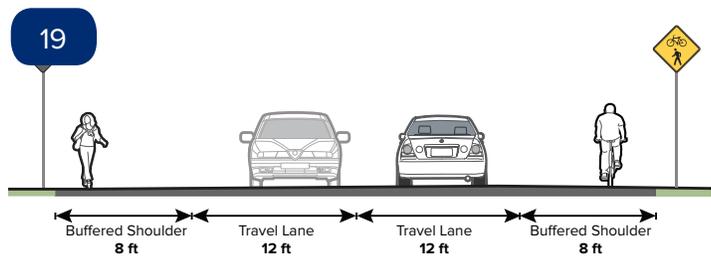
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
19	Fort Ann to Comstock	7.3	Shared Roadway / Shared-Use Path / Signed Bike Route / Paved Shoulder

## 19 FORT ANN TO COMSTOCK

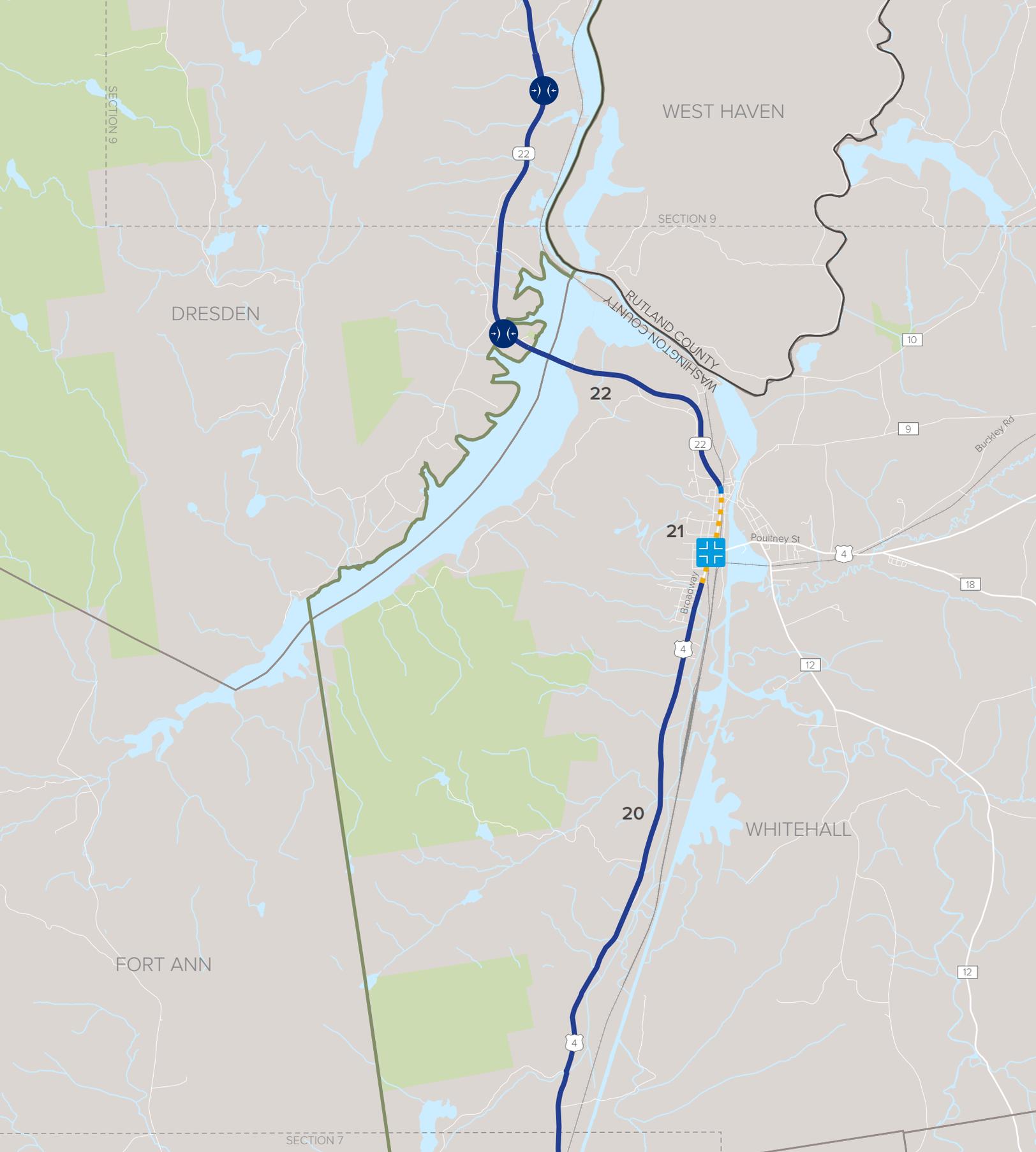
Segment 19 is proposed to connect the shared-use path being constructed by NYS Canal Corporation south of Fort Ann to Comstock. The proposed EST Route will follow Clay Hill Road to the east and Dewey's Bridge Road, which offers lower traffic volumes and vehicle speeds than NYS Route 4. The trail continues north on Quarry Road for a short portion of dirt road. A shared-use path is also proposed to connect to the two ends of Quarry Road, following the existing ROW. The Empire State Trail would then cross the Champlain Canalway using the existing shoulders of Route 22 to connect back to Route 4. The proposed buffered shoulders on Route 4 are pictured below.



Shared Roadway Cross-Section - Clay Hill Road



Paved Shoulder Cross-Section - Route 4 Section

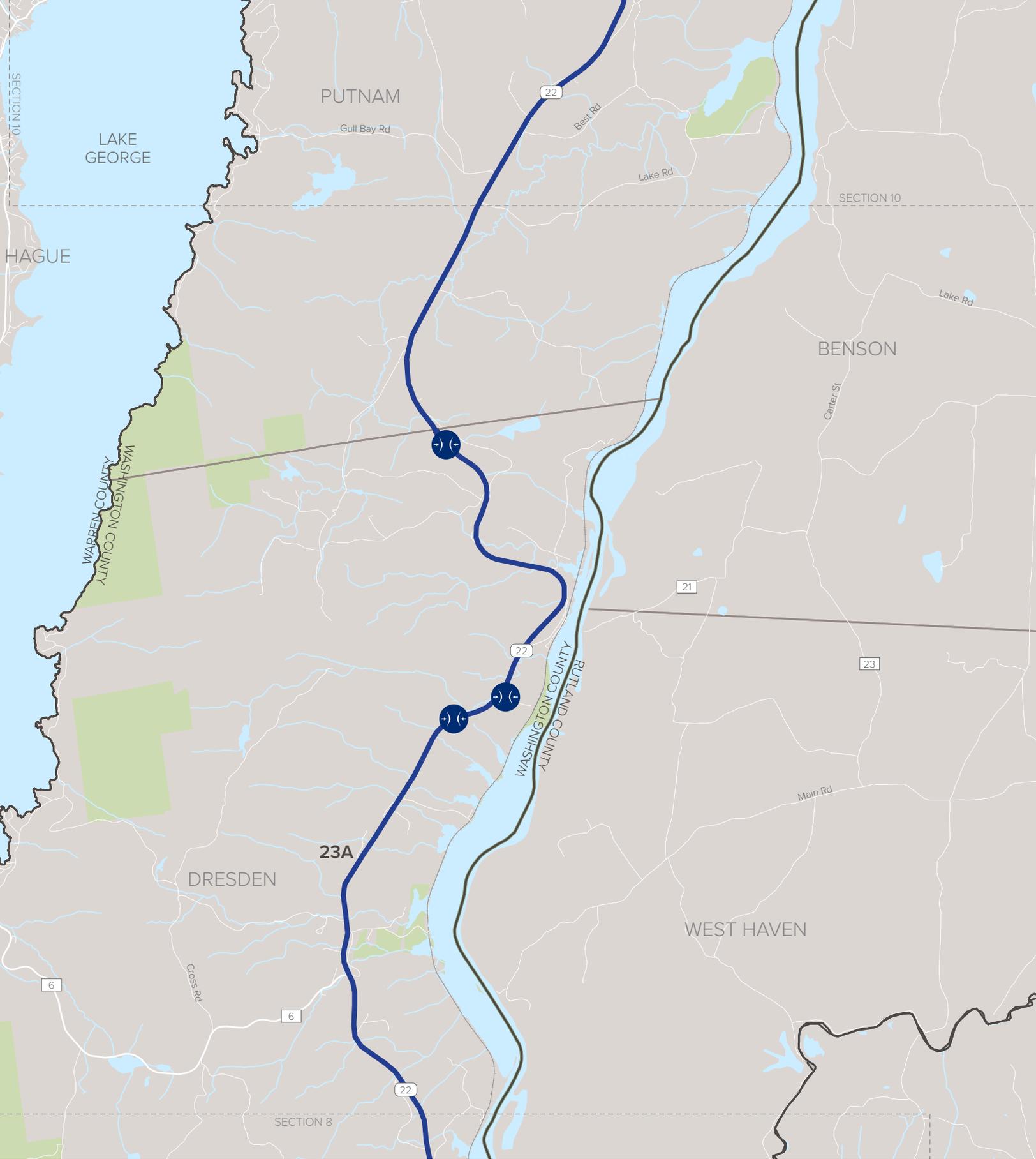


NYSDOT REGION 1 SECTION 8: NETWORK

- Existing Paved Shoulder
- Existing Bike Lane
- - - Proposed Shared Roadway (with sidewalk)
- - - Proposed Shared Roadway
- + Intersection
- ⊖ Pinchpoint



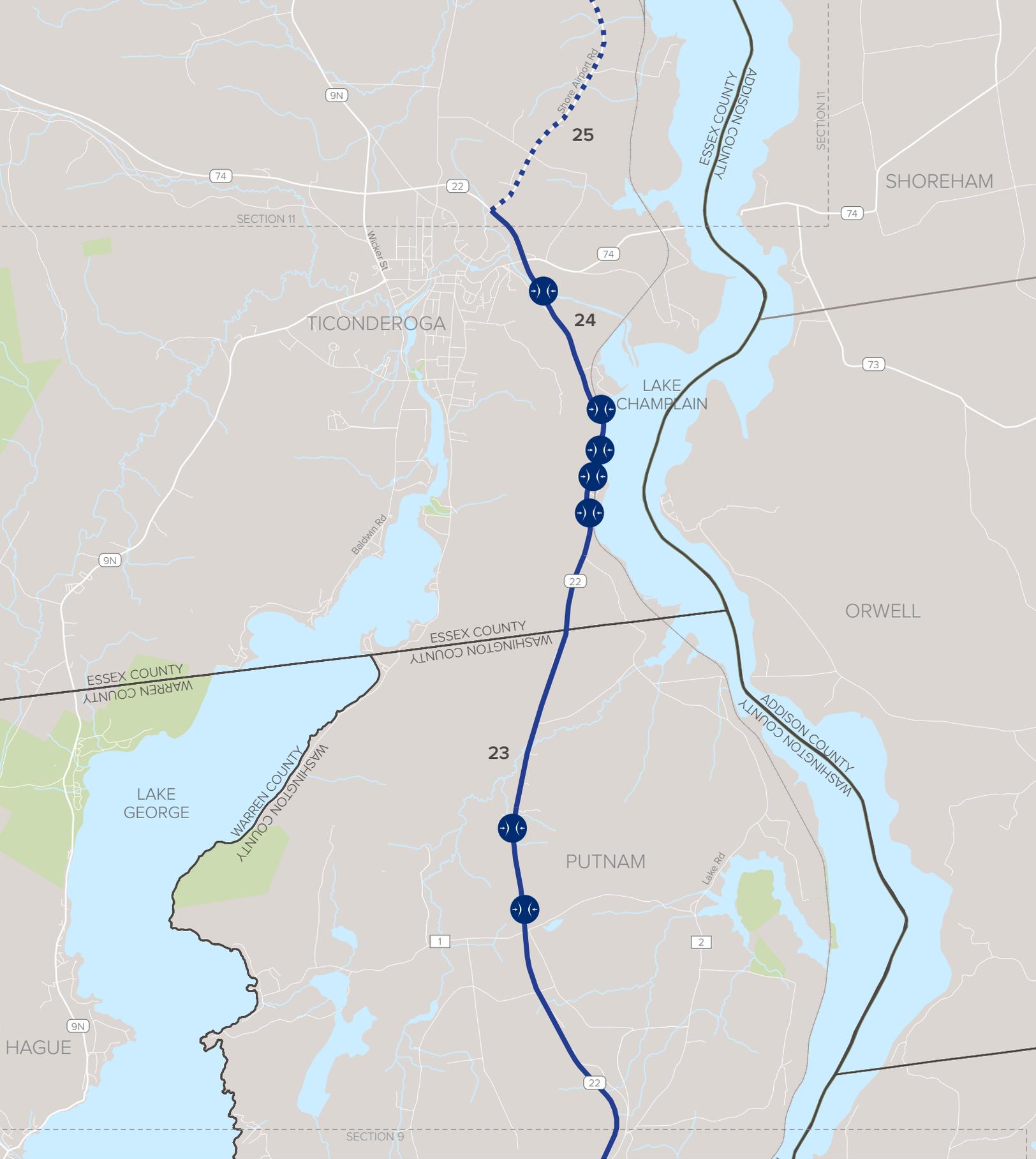
GRANVILLE



NYSDOT REGION 1 SECTION 9: NETWORK

-  Existing Paved Shoulder  Legend Item
-  Pinchpoint  Legend Item  Legend Item
-  Legend Item  Legend Item  Legend Item
-  Legend Item  Legend Item  Legend Item

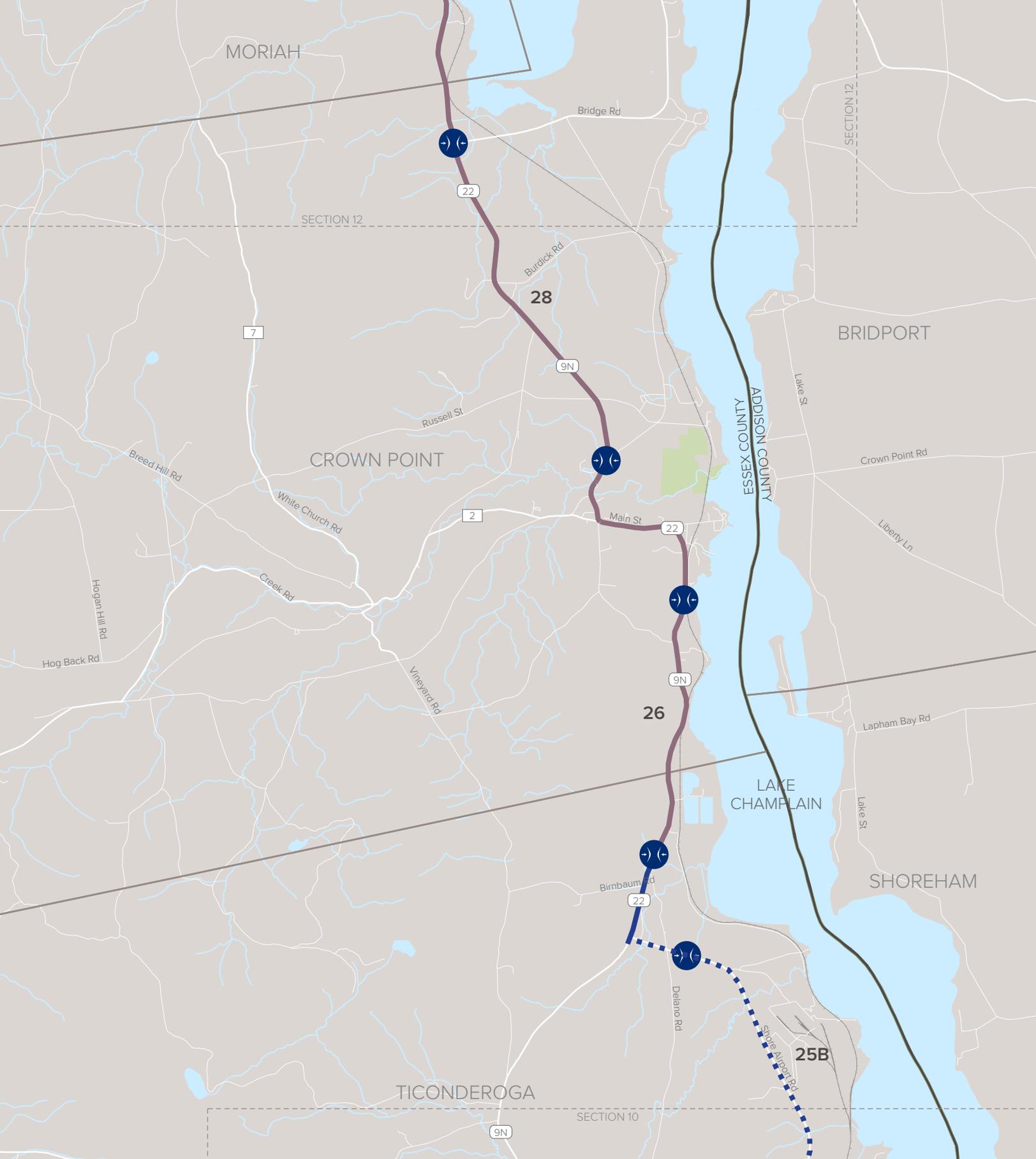




**NYSDOT REGION 1 SECTION 10: NETWORK**

-  Existing Paved Shoulder
-  Proposed Paved Shoulder
-  Pinchpoint





**NYSDOT REGION 1 SECTION 11: NETWORK**

- Existing Signed Bike Route
- Existing Paved Shoulder
- Proposed Paved Shoulder
- Pinch Point



## INSET MAPS 8-11: COMSTOCK TO PORT HENRY

The EST travels north of Comstock through rolling terrain among small villages and hamlets, and features views of several lakes and rivers. This an appealing corridor for recreational bicycling.

The following portions primarily use existing State Bike Route 9, which is routed along Route 22. Ticonderoga is an exception, where the recommended route follows Shore Airport Road. Most of the area has existing, wide shoulders.

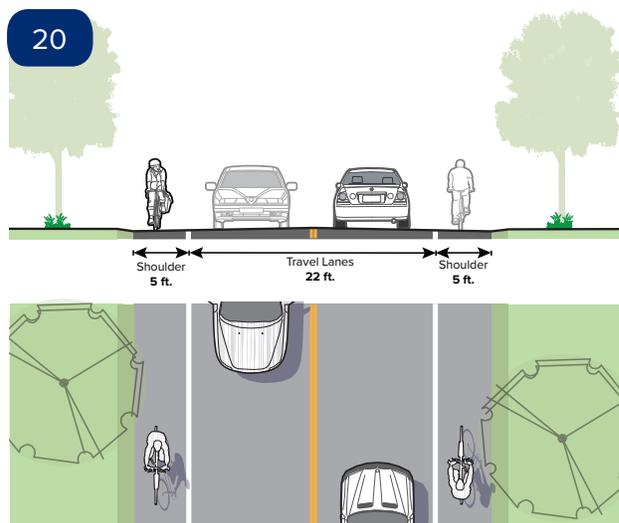
Table 08: Region 1 Inset Maps 8-11 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>20</b>	<b>Comstock to Whitehall: State Bike Route 9</b>	4.5	Paved Shoulder
<b>21</b>	<b>Whitehall: State Bike Route 9</b>	0.8	Shared Roadway
<b>22-24</b>	<b>Whitehall to Ticonderoga: State Bike Route 9</b>	22.6	Paved Shoulder
<b>25-25B</b>	<b>Shore Airport Road</b>	4.2	Paved Shoulder
<b>26-28</b>	<b>Ticonderoga to Port Henry: State Bike Route 9</b>	12.4	Signed Bike Route / Paved Shoulder



## 20 COMSTOCK TO WHITEHALL

This portion follows existing State Bike Route 9 along Route 4. Generally, the route has 3-foot to 4-foot shoulders. As part of the Empire State Trail project, 12-foot travel lanes will be restriped to become 11-foot travel lanes. This will widen the shoulders to 4 to 5 feet.



Proposed Paved Shoulder

## 21 DOWNTOWN WHITEHALL

Through Downtown Whitehall, pedestrians are able to travel on existing sidewalks. A shared roadway is recommended for bicyclists. A bike lane is recommended at the intersection of Broadway and Poultnery Street to help cyclists position themselves and navigate the intersection.



Proposed Intersection Improvements (Broadway at Poultnery Street)

**22-24 WHITEHALL TO TICONDEROGA**

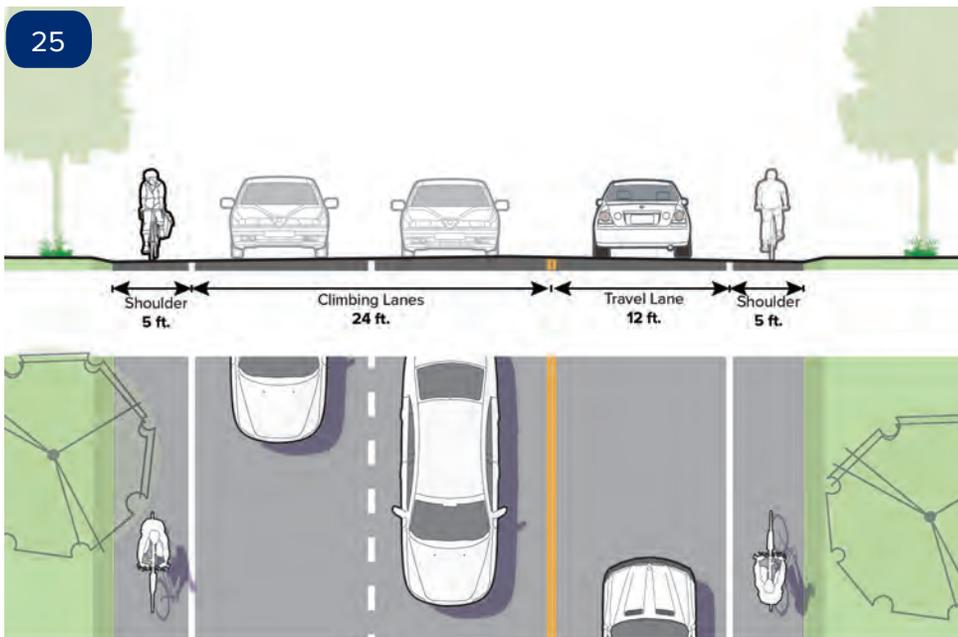
This area generally has wide shoulders and climbing lanes for motorists. The shoulder narrows where climbing lanes exist. There are seven pinch-points where adding a shoulder is not feasible. At these locations, the climbing lane and adjacent lane in the same direction are proposed to be restriped to 11 feet to accommodate a 4 to 5 foot shoulder. Striped buffers are also being considered where shoulders are wide enough.



Select restriping to provide 4 to 5 foot shoulder

**25 SHORE AIRPORT ROAD**

This route has wide, existing shoulders for much of its length. The graphics illustrate the challenges associated with climbing lanes.

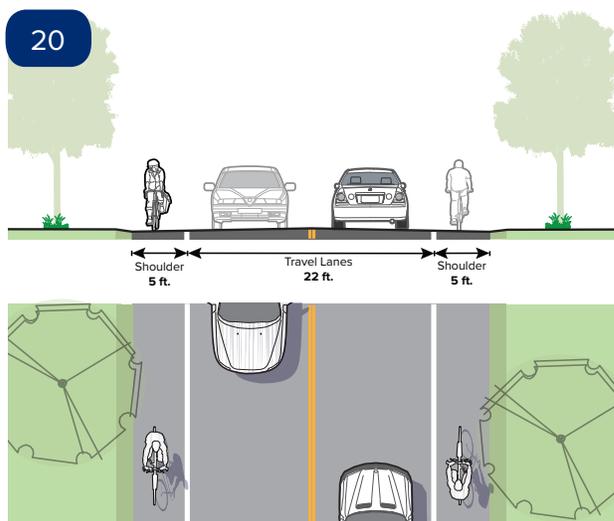


Proposed Lane Reconfiguration - Shore Airport Road Climbing Lane Section



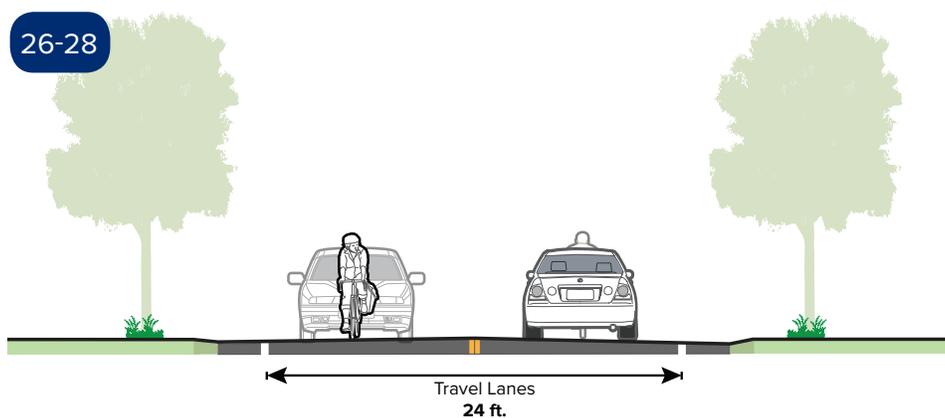
## 26-28 SHORE AIRPORT ROAD TO PORT HENRY

This area follows existing State Bike Route 9. The shoulders along Route 9N narrow about one mile north of Shore Airport Road. From this point north, the shoulder conditions of Route 9N/Route 22 are less than four feet wide. This is proposed as a signed bicycle route as part of the Empire State Trail. Where feasible, travel lanes will be restriped to provide 4 to 5 foot shoulders to accommodate bicyclists outside of the travel lanes.

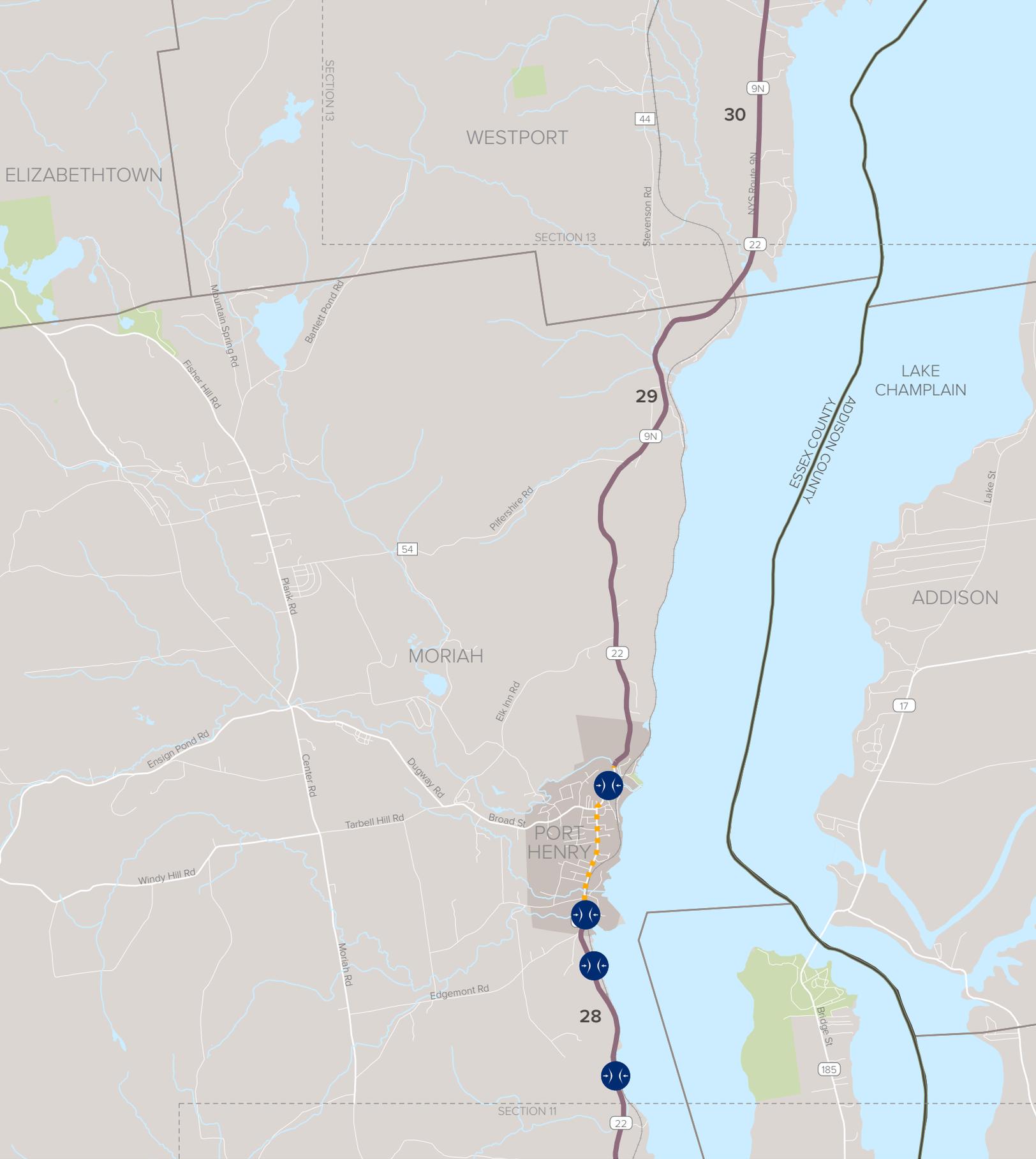


Proposed Paved Shoulder

## 26-28



Signed Bike Route Cross-Section

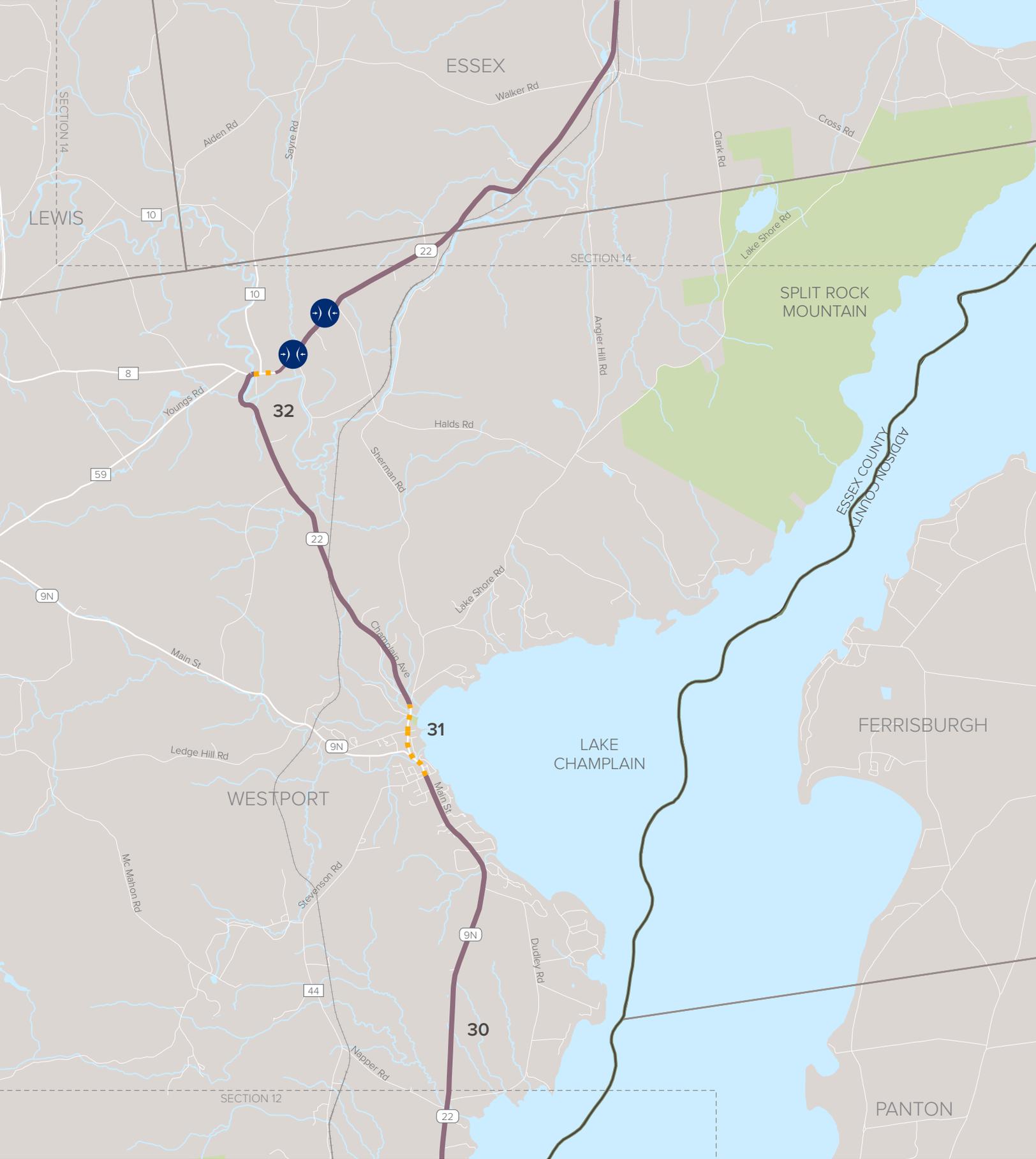


**NYSDOT REGION 1 SECTION 12: NETWORK**

-  Existing Signed Bike Route
-  Proposed Shared Roadway (with sidewalk)
-  Pinchpoint
-  Pinchpoint



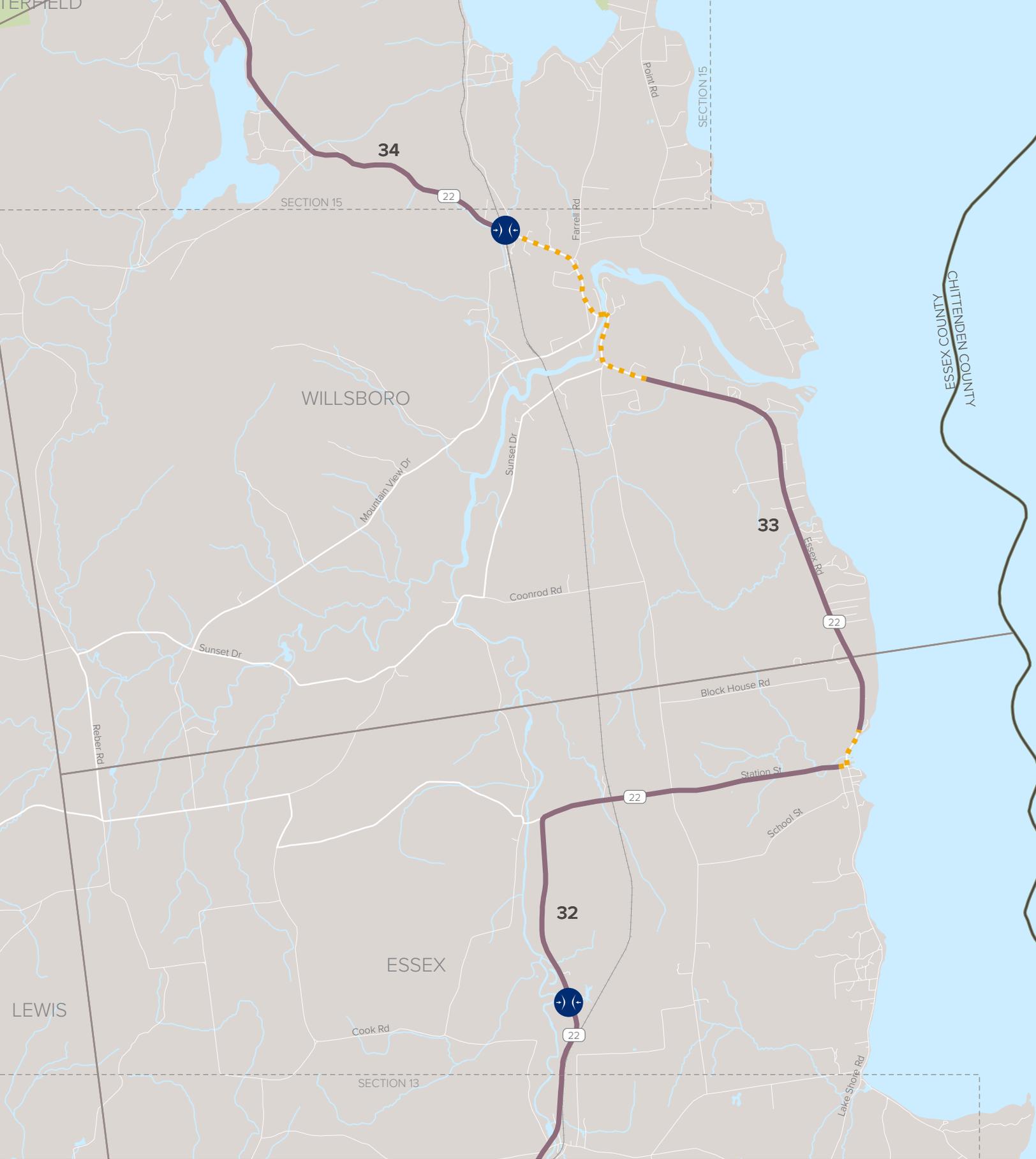
CROWN POINT



**NYSDOT REGION 1 SECTION 13: NETWORK**

-  Existing Signed Bike Route
-  Proposed Shared Roadway (with sidewalk)
-  Pinchpoint

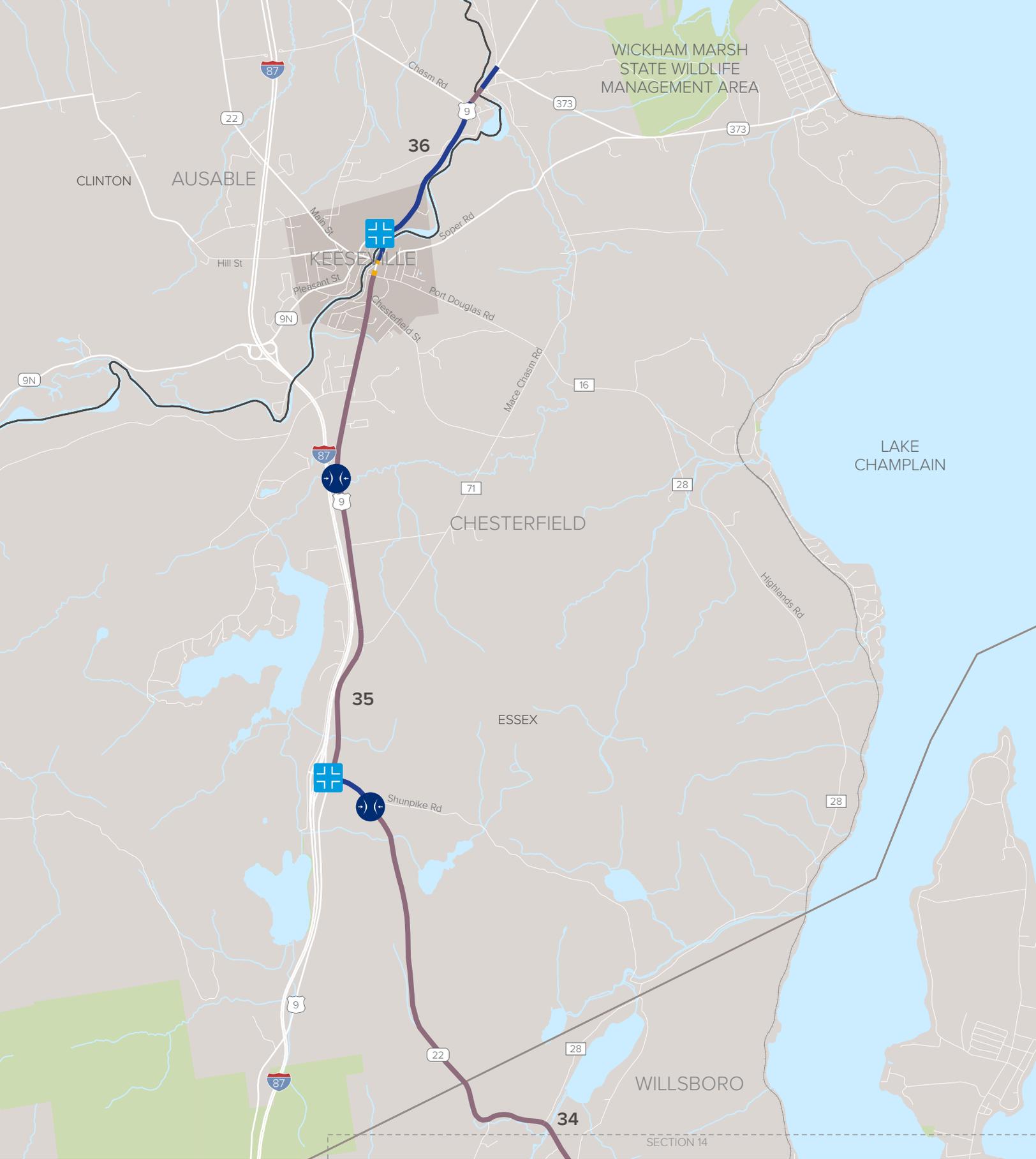




**NYSDOT REGION 1 SECTION 14: NETWORK**

-  Existing Signed Bike Route
-  Proposed Shared Roadway (with sidewalk)
-  Pinchpoint





**NYSDOT REGION 1 SECTION 15: NETWORK**

- Existing Paved Shoulder
- Existing Signed Bike Route
- Proposed Shared Roadway (with sidewalk)
- + Intersection
- ⊖ Pinchpoint



# INSET MAPS 12-15: PORT HENRY TO KEESEVILLE

The EST continues through rolling terrain along Lake Champlain from Port Henry to Keeseville. Proximity to the lake makes it an appealing corridor for recreational users. The EST is routed

along existing State Bike Route 9, using Route 22. This area includes opportunities for trail “pit stops” in the small hamlets and villages.

Table 09: Region 1 Inset Maps 12-15 Preferred Route and Costs

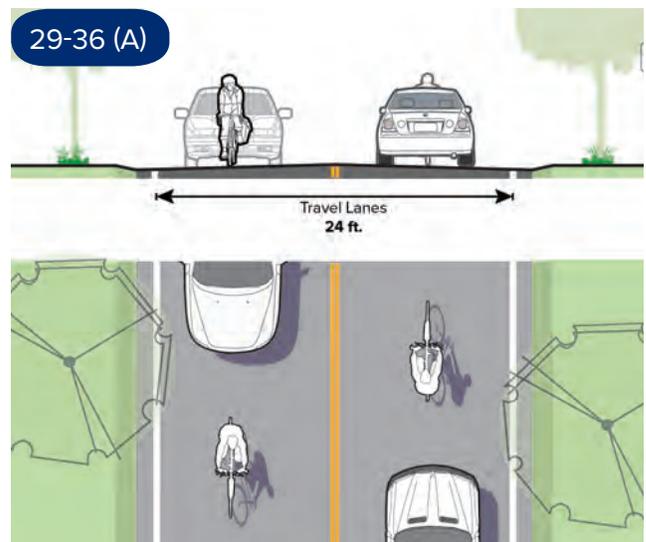
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
29-36	Port Henry to Keeseville: State Bike Route 9	39.2	Shared Roadway / Paved Shoulder / Signed Bike Route

## 29-36 PORT HENRY TO KEESEVILLE

Segments 29 through 36 within Region 1 are proposed primarily as signed bike routes due to limited shoulder widths and inability to widen those shoulders. This cross section is shown in graphic 29-36 (A). Shared roadways, shown in graphic 29-36 (B) with existing sidewalks are proposed through the various villages and hamlets along the corridor, such as Port Henry and Keeseville.

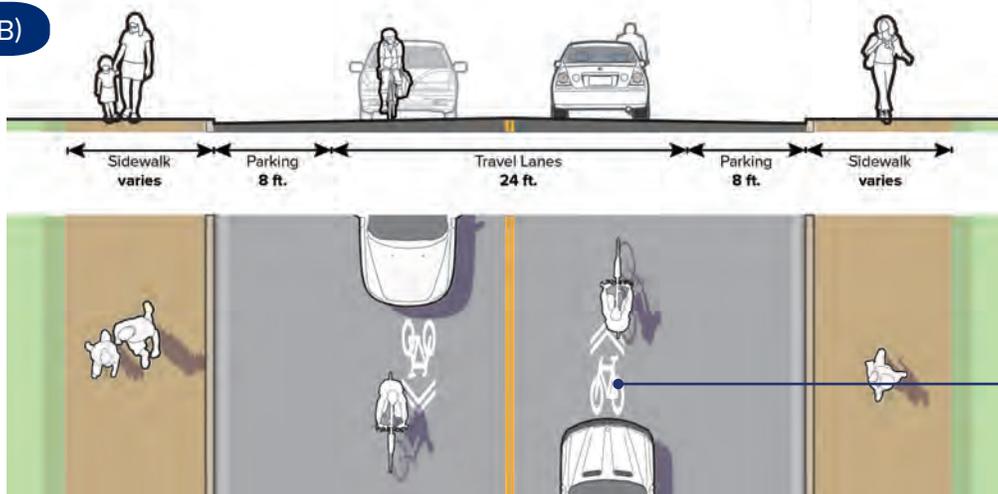
Shoulders along this area of State Bike Route 9 generally range from two to three feet wide. While these shoulders are narrow, they do provide some space for bicyclists to ride adjacent to the road edge. In some instances, shoulders narrow further or completely drop, creating a pinch point. Signage, markings, and flashing beacons can be installed to alert roadway users to the likely presence of bicyclists

operating within the roadway (see graphic 29-36C). These treatments will be evaluated on a case-by-case basis and implemented in priority locations as funding allows.



Signed Bike Route Cross-Section

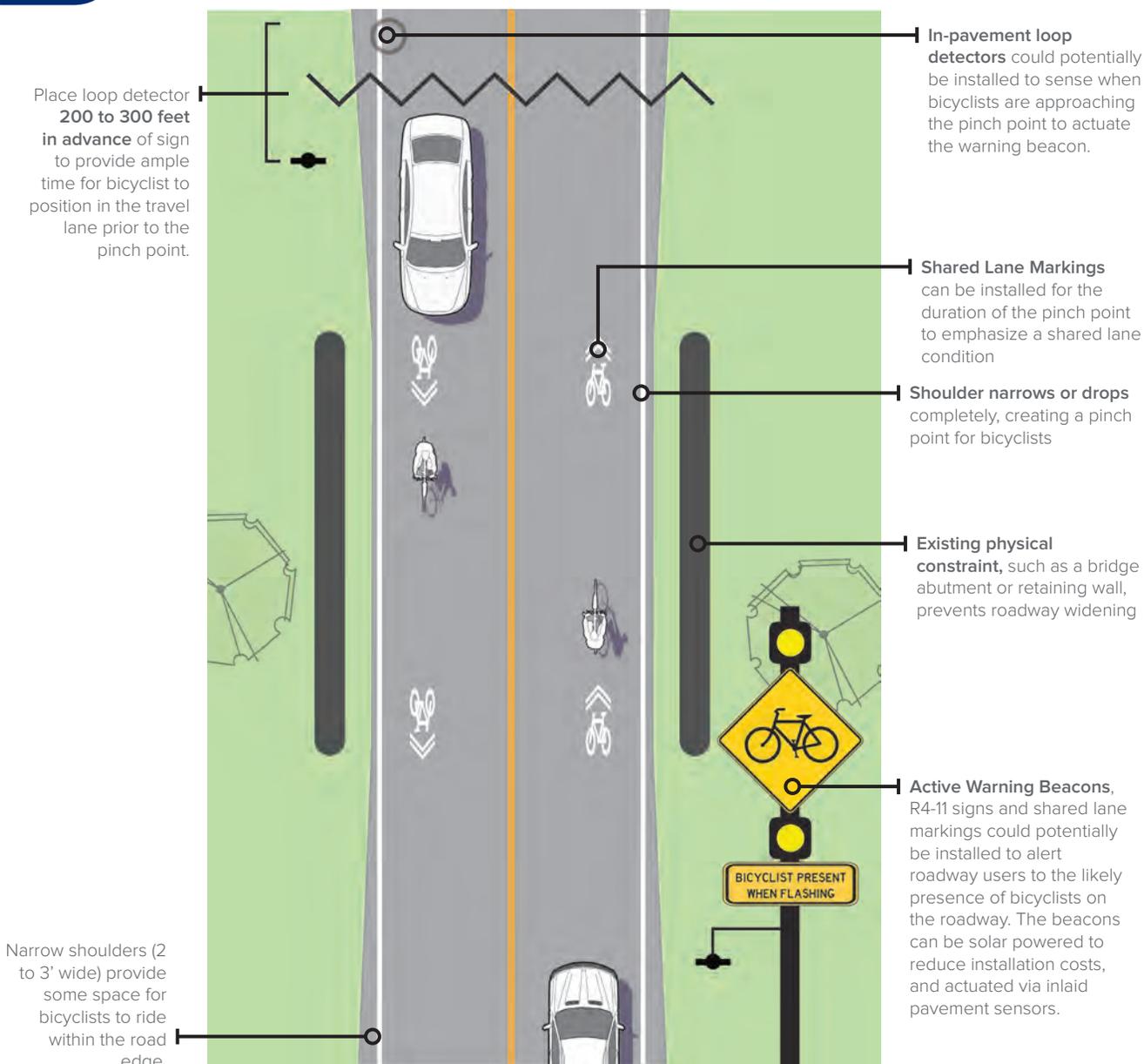
29-36 (B)



Shared Roadway Cross-Section

29-36 (C)

Pinch-Point Treatment Options



# REGION 2

## INTRODUCTION

NYS DOT Region 2 is located in the Mohawk Valley and is home to roughly 500,000 residents in eight cities and 140 villages and towns. The EST route will provide connections to rural villages, suburban towns, and urban town and city centers.

The Village and Town of Frankfort will connect to Empire State Trail segments that are being proposed in Utica and Ilion. The existing trail ends in Utica; and the proposed off-road segment from Utica is recommended on the east side of the Canal. From there, the trail is proposed to utilize

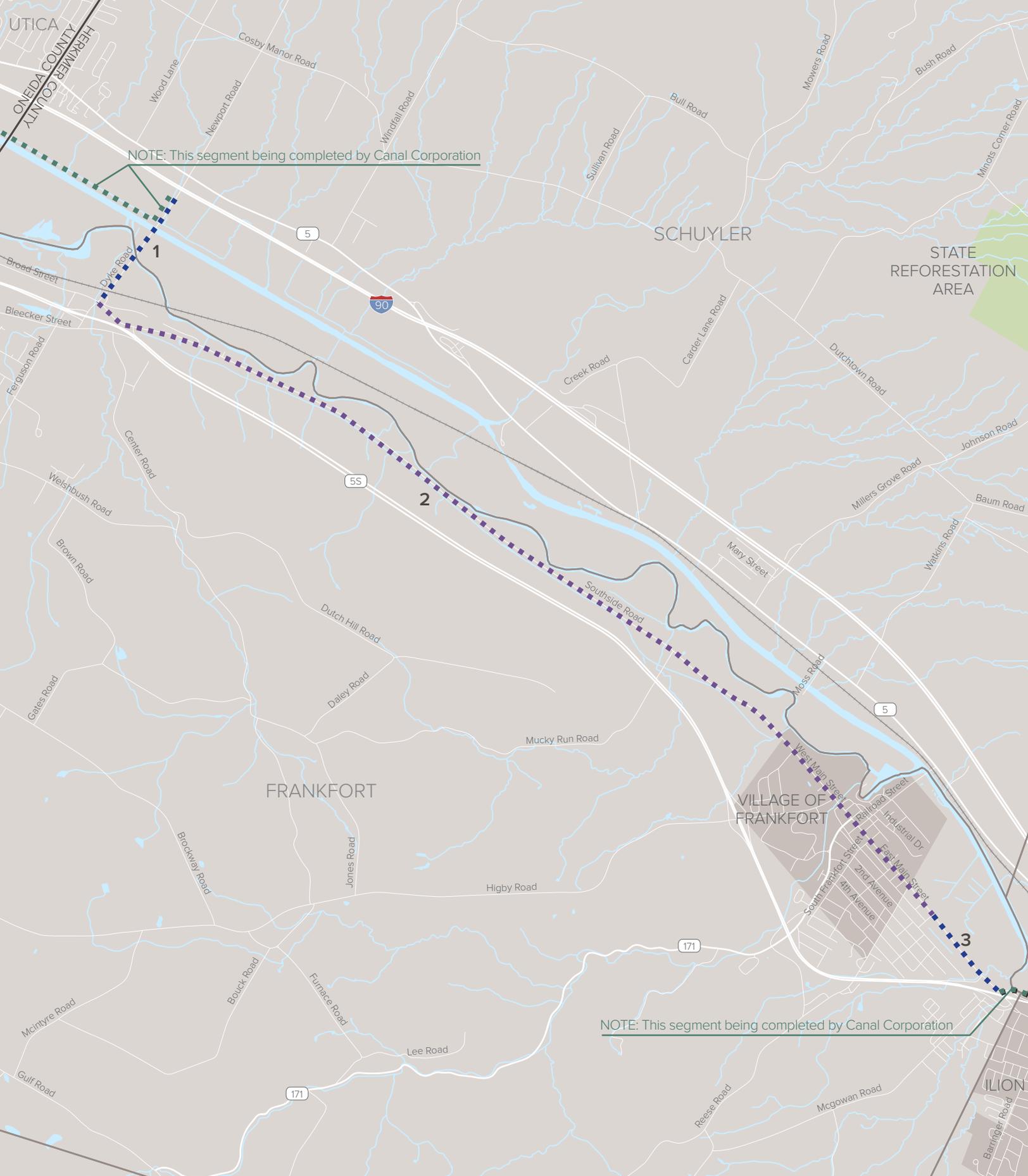
Dyke Road, Southside Road, and a short stretch of Acme Road before connecting to the Canal Corp proposed shared-use path segment to Ilion.

Trail users will find Dyke Road and Southside Road to be low-volume. Southside Road and Acme Road are currently designated 50MPH, so speed reduction is being considered. An overview map shows recommendations in detail. Some segments include existing conditions photos and proposed section view graphics on subsequent pages. \$1 to \$2 million of Empire State Trail funds will be invested in closing this gap in Region 2.

## INSET MAP 1: SCHUYLER TO FRANKFORT

Table 10: Region 2 Inset Map 1 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
1	Dyke Road	0.7	Paved Shoulder/SHARDS
2	Southside Road	7	Shared Roadway
3	Acme Road	0.16	Paved Shoulder with Road Diet



NOTE: This segment being completed by Canal Corporation

NOTE: This segment being completed by Canal Corporation

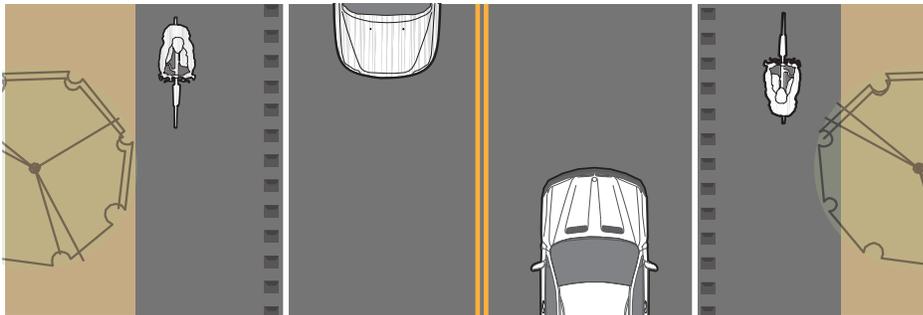
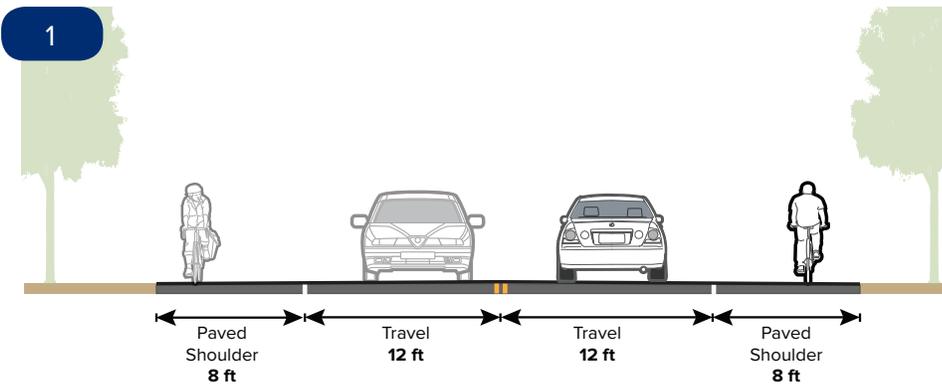
NYSDOT REGION 2 SECTION 1: NETWORK

- Proposed Shared-Use Path
- Proposed Paved Shoulder
- Proposed Shared Roadway



## 1 DYKE ROAD

The Dyke Road segment of Empire State Trail is proposed as a paved shoulder. This roadway sees an average of fewer than 5,000 vehicles per day. Rumble strips are proposed to help remind motorists who deviate from the travel lane to stay out of the shoulder. A high visibility mid-block crossing is proposed to facilitate safe trail user crossing. Section graphics are shown below.



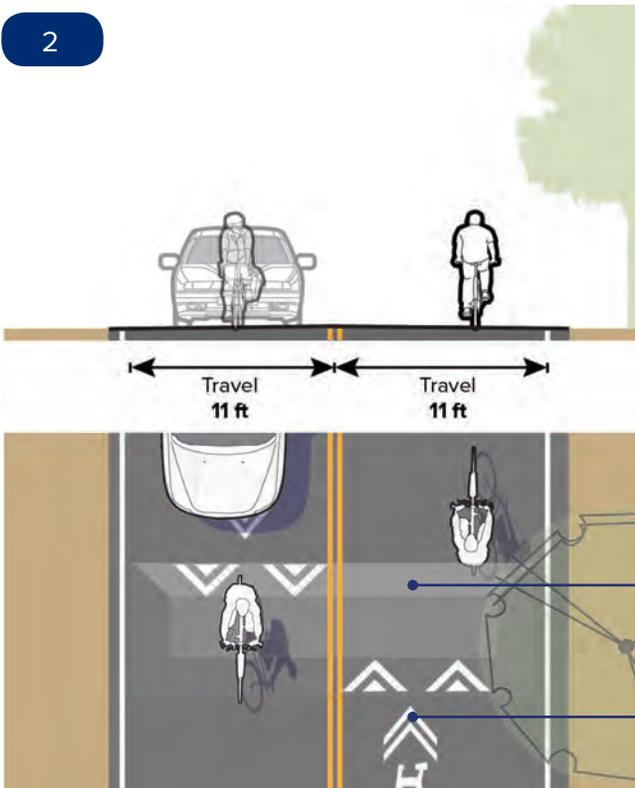
Sidepath Cross-Section - Dyke Road



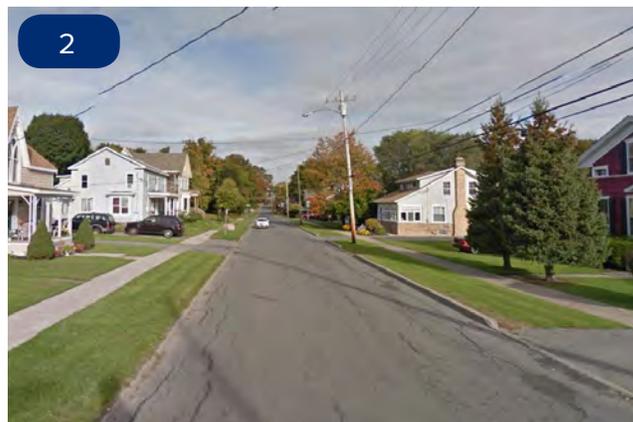
Existing shoulder widths along Dyke Road offer space for paved shoulders. Photo shows approximate location of mid-block crossing (at service road ramp.) Image: google maps.

## 2 SOUTHSIDE ROAD

The Southside Road / West Main Street / East Main Street segment of the trail is proposed as a shared roadway. The existing speed limit is 50 MPH. The proposed speed limit is 40 MPH or less. A combination of roadway striping, speed humps, signage, and other traffic calming elements will encourage motorists to comply with newly posted speed limits.



Shared Roadway Cross-Section - West Main Street



Existing conditions on West Main Street, just north of Cemetery Road. Image: google maps.

*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

*Shared lane markings recommended; Not required.*

### 3 ACME ROAD

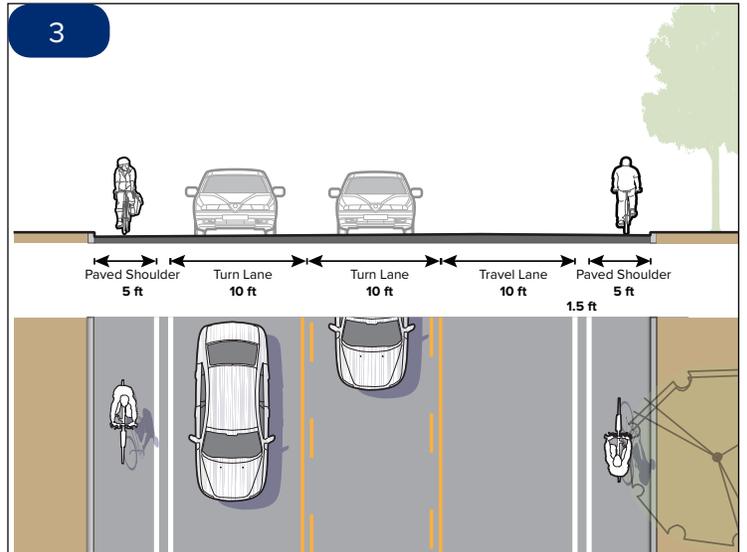
Acme road is a candidate for a road diet, with relatively low motor vehicle traffic volumes and few opportunities for motor vehicles to turn against opposite-direction moving traffic. The segment of Acme Road that is proposed to be reduced from two travel lanes in each direction to one with a center turn lane is roughly 850 feet, and stretches from the 5S Westbound on ramp to the preceding 5S westbound off ramp.



Existing conditions on Acme Road. Photo facing north. Image: google maps.



The location on Acme Road where a new and high-visibility crosswalk is proposed. Photo facing north. Image: google maps.





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# REGION 3

## INTRODUCTION

NYS DOT Region 3 is located in central New York and is known for the dramatic variety in its built and natural environment. The EST route brings connections to rural villages, suburban neighborhoods, and dense city centers.

The Camillus, Syracuse, and DeWitt region contains one of the largest remaining gaps in the Erie Canalway Trail. Approximately 14 miles between the existing trail heads in Camillus and DeWitt require trail users to travel on wide arterials with few to no existing pedestrian and bicycle facilities.

The EST route will follow much of the route of the Erie Canalway Trail, so the two names may be used synonymously in this chapter.

Three overview maps were generated to show recommendations in detail. Each of the maps has a corresponding table that describes each numbered segment on the map in more detail. Some segments include plan view or section view graphics on subsequent pages.

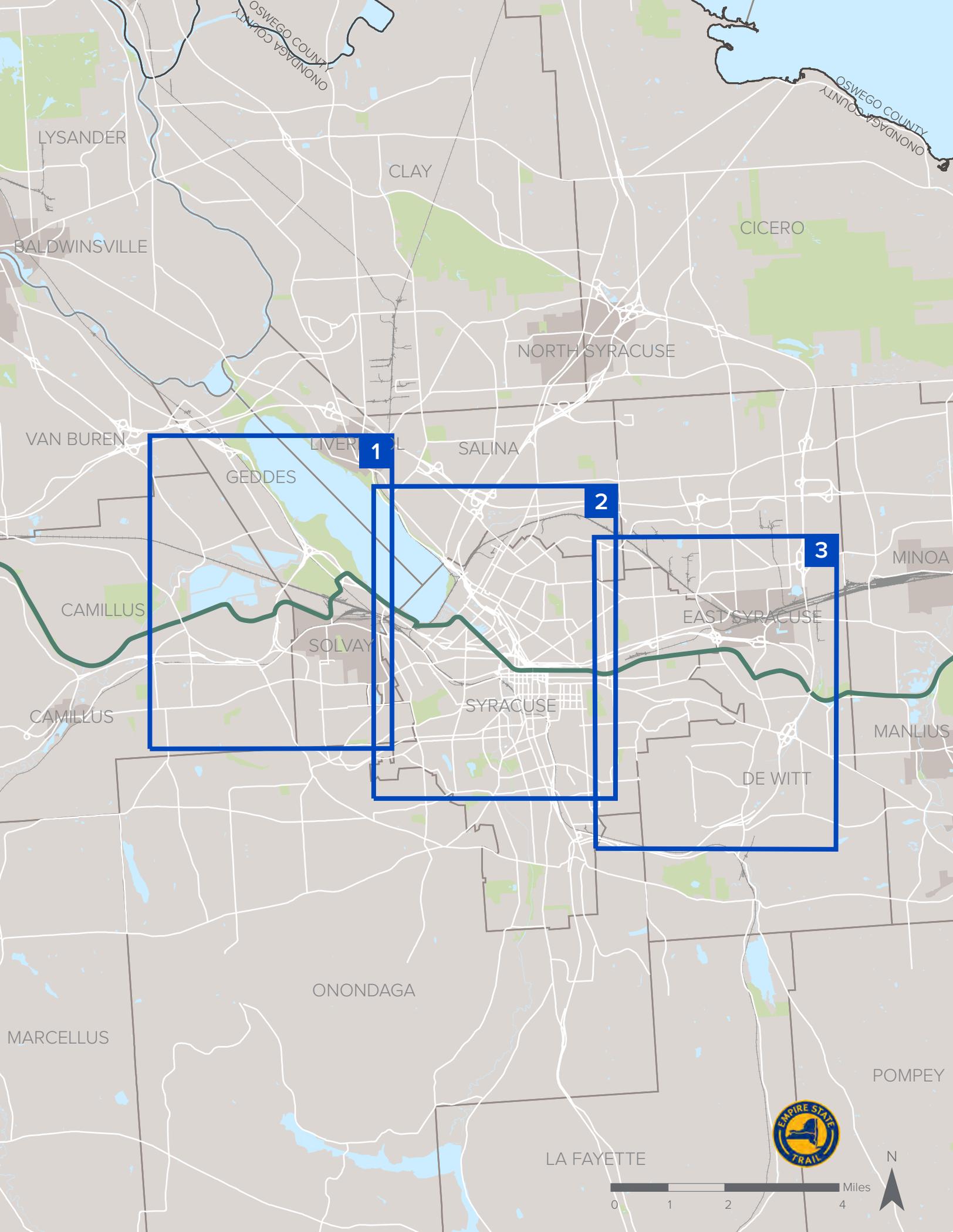
The Camillus section of the Erie Canalway Trail begins at the existing trailhead on Warners Road and winds through undeveloped parcels before crossing beneath I-695. The trail makes a few turns and heads north to link up with the New York State Fairgrounds and the existing Loop the Lake trail. \$28-32M of Empire State Trail funds will be invested in closing these gaps in Region 3.



Bridge Street in Camillus



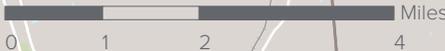
E. Water Street in Syracuse



1

2

3





**REGION 3 SECTION 1: NETWORK**

-  Existing Shared-Use Path/Sidepath
-  Proposed Shared-Use Path/Sidepath
-  Proposed Bike Lane
-  Crossing
-  Underpass



## INSET MAP 1: CAMILLUS

The Camillus portion of the EST is proposed to begin at the existing trailhead on Warners Road. It winds through property owned by the Honeywell Corporation before crossing beneath Route 695. The trail then passes along the edge

of Onondaga Lake and by the ruins of Erie Canal Lock #50, also known as Gere's Lock. Historic, scenic, and cultural opportunities stem from the adjacent lock and unobstructed views of Onondaga Lake.

Table 11: Region 3 Inset Map 1 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>1</b>	<b>Warners Road Crossing</b>	n/a	Upgraded Road Crossing
<b>4</b>	<b>Route 695 Underpass</b>	0.04	Retaining Wall / Sidewalk
<b>5</b>	<b>Horan Road</b>	0.04	Shared-Use Path
<b>8</b>	<b>Gere's Lock Path Extension</b>	0.2	Shared-Use Path

## 1 WARNERS ROAD CROSSING

The recommended pedestrian improvements are located near the existing Erie Canalway trailhead. These will help draw attention to both motorists and trail users about the location of non-motorized traffic on Warners Road.



## 5-8 HORAN ROAD PATH / GERE'S LOCK PATH EXTENSION

Shared-use path installations will dramatically improve connectivity and comfort of the trail. This area includes the trailhead featuring a kiosk, bike racks, and other amenities. The former towpath on the south side of the Erie Canal provides an opportunity for a wayside to Gere's Lock.



## 4 ROUTE 695 UNDERPASS

A new retaining wall on the south abutment will provide the necessary space to accommodate a sidewalk or shared-use path.



Image: Google



## TO BE COMPLETED BY OTHERS

The following portions of the Empire State Trail have been funded by other sources and are projects being completed by other entities.

### 2 HONEYWELL PATH / GERELock ROAD

A shared-use path via an easement is recommended through the Honeywell property. This recommendations includes the south end of Webster Park (final alignment to be determined). Along Gerelock Road, a Widened Shoulder (10' - 12') on the south side with crash barrier and improved crossings at the Frontage Road and Horan Road intersections are recommended.

### 9 BRIDGE STREET PROMENADE

A new retaining wall on the south abutment will provide the necessary space to accommodate a sidewalk or shared-use path. This is a county-funded project, and includes widening the existing sidewalk between Matthews Avenue and State Fair Boulevard.



Image: Google

### 10 PEDESTRIAN OVERPASS IMPROVEMENTS

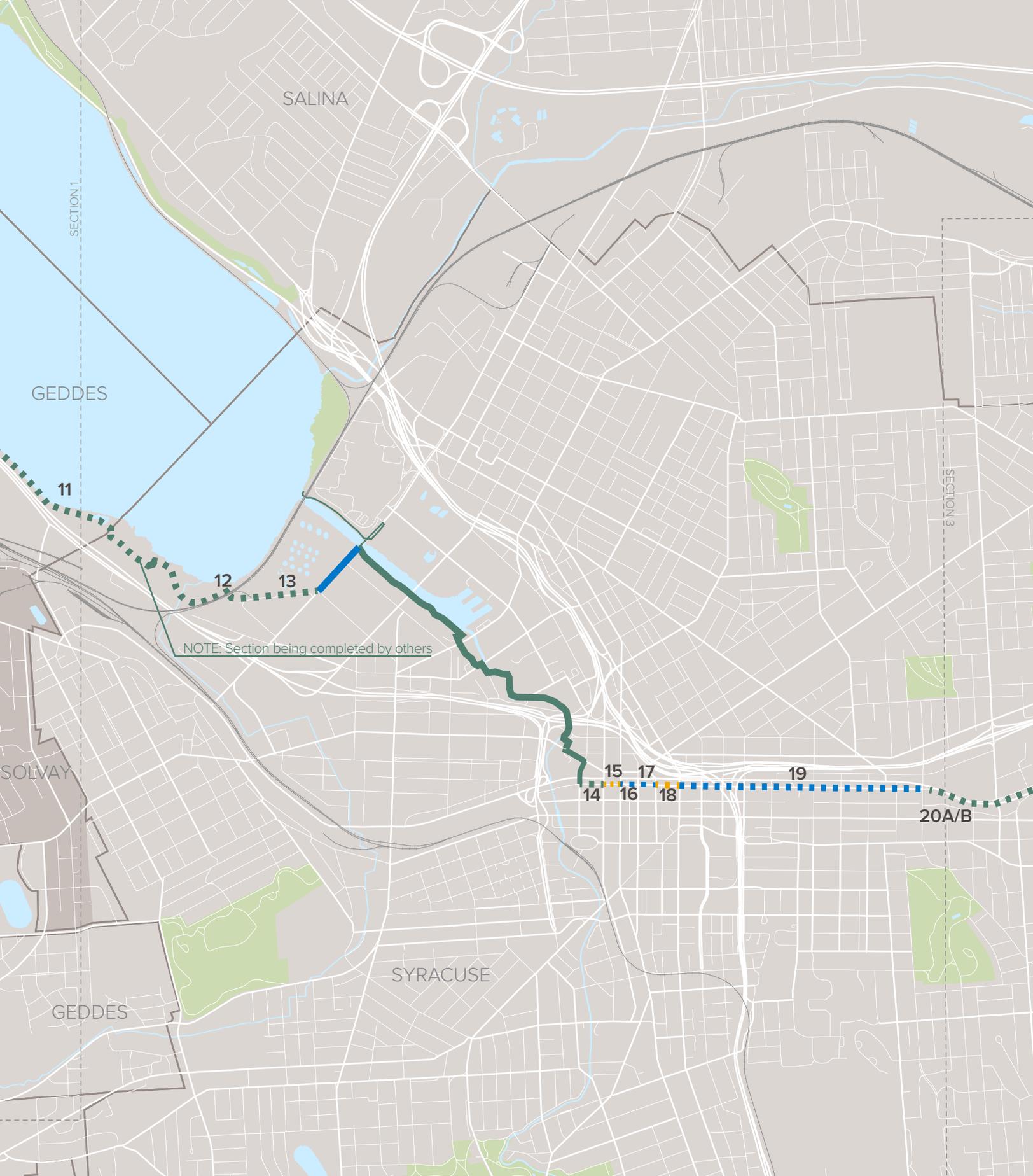
Existing pedestrian overpass will be retrofitted with railing heights to meet AASHTO standards.



Image: Google

### 11 ONONDAGA LAKE PATH

Shared-Use Path project that is a key segment of the County's "Loop the Lake" path initiative to be constructed in 2018.



REGION 3 SECTION 2: NETWORK

-  Existing Shared-Use Path/Sidepath
-  Existing Bike Lane
-  Proposed Shared-Use Path/Sidepath
-  Proposed Bike Lane
-  Proposed Shared Roadway (with sidewalk)



# INSET MAP 2: SYRACUSE

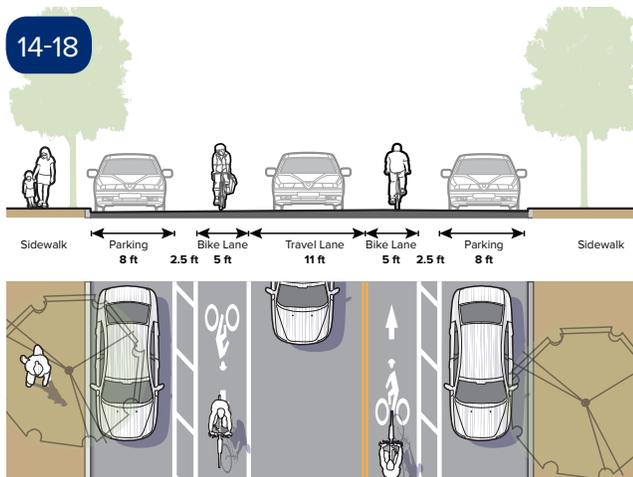
The Syracuse area includes paved shoulders, bike lanes, sidewalks, and shared-use paths. This area should accommodate a wide range of trail users because of its population density.

Table 12: Region 3 Inset Map 2 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
14-19	Water Street through Syracuse	1.4	Bike Lanes / Shared Roadway

## 14-18 E. WATER STREET

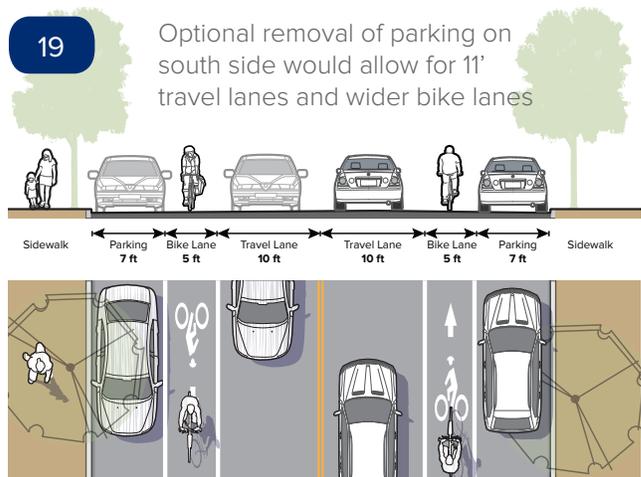
Wide, one-way streets are an opportunity to install bike lanes in both directions. The recommended improvements include a combination of shared-lane markings, standard bike lanes, and contraflow bike lanes. There is also a recommendation to consider parking restrictions along the south side of the block between Warren and Montgomery Streets.



E. Water between Salina and Warren.

## 19 E. WATER STREET

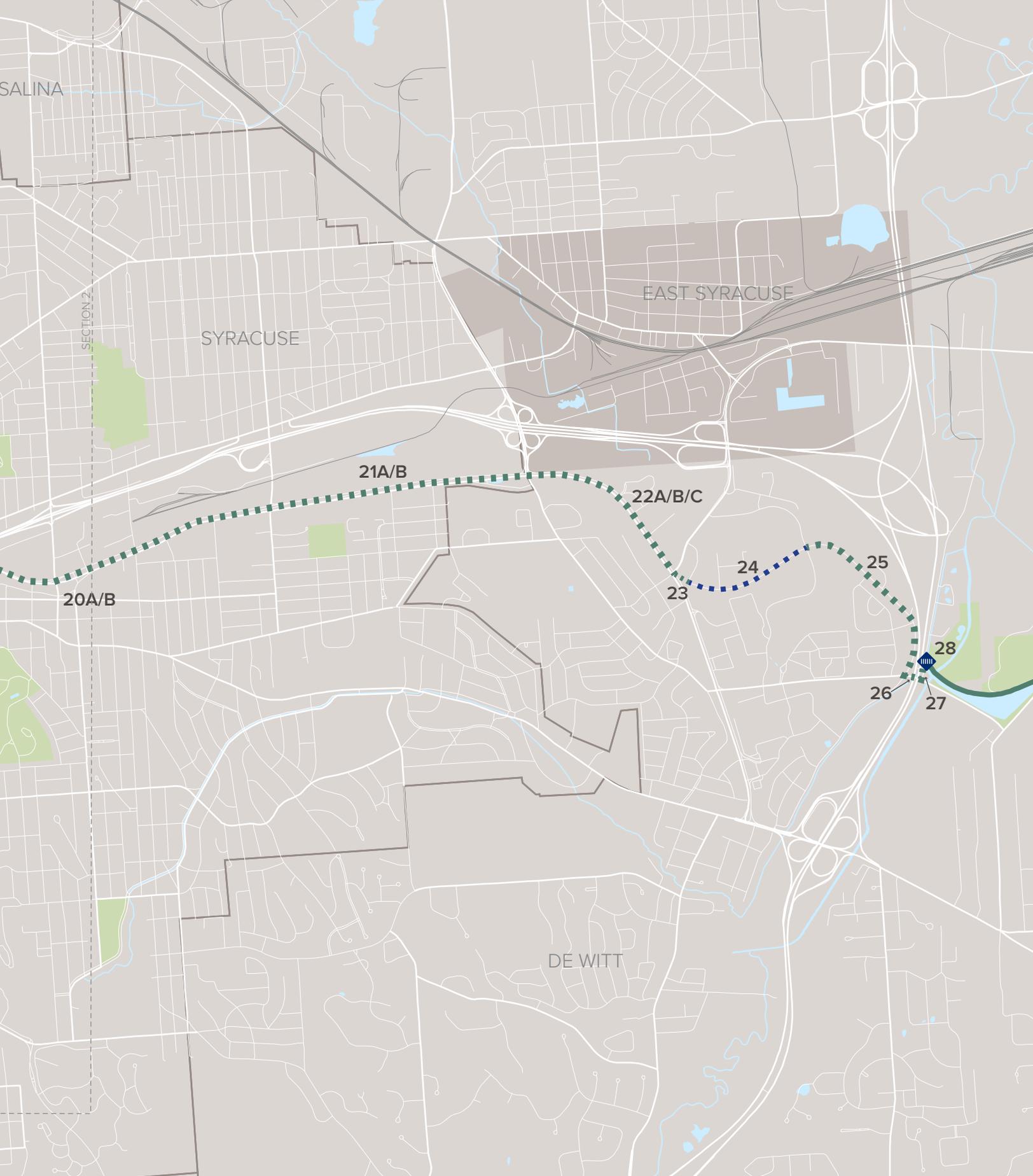
Green paint on existing bike lanes will increase visibility and make EST users more prominent. There is a similar treatment recommended in the Syracuse Connective Corridor project.



E. Water between Warren and Montgomery.

## TO BE COMPLETED BY OTHERS

Sections 11 through 13 have been funded by other sources and are projects being completed by other entities. This includes the completion of the Onondaga Loop the Lake Trail and other trail projects.



REGION 3 SECTION 3: NETWORK

-  Existing Shared-Use Path/Sidepath
-  Proposed Paved Shoulder
-  Proposed Shared-Use Path/Sidepath



## INSET MAP 3: DEWITT + SYRACUSE

A major transition from the underutilized median space of a suburban arterial highway into an innovative paved trail is proposed for the DeWitt section of the Erie Canalway Trail. This will recreate the alignment of the historic canal that was paved over to build Erie Boulevard. The trail within the existing medians will include a paved trail with stone dust shoulder and highly visible crossing treatments at side streets.

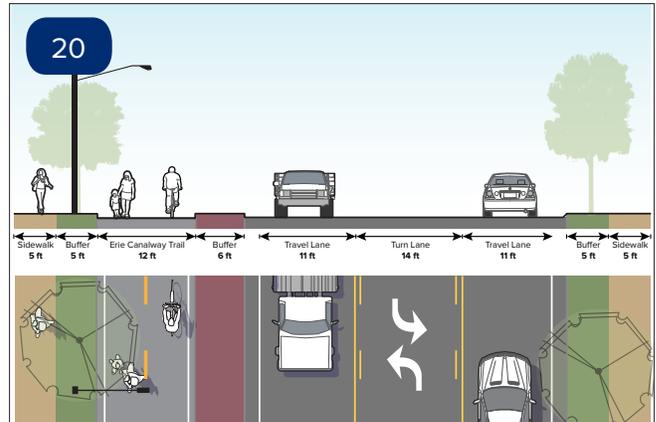
The east end of the Region 3 area features a significant transformation of Erie Boulevard East into multi-use corridor. This portion of the EST is arguably the most difficult to design within Region 3, but will be an economic development catalyst for trail users and locals alike.

Table 13: Region 3 Inset Map 3 Preferred Route and Costs

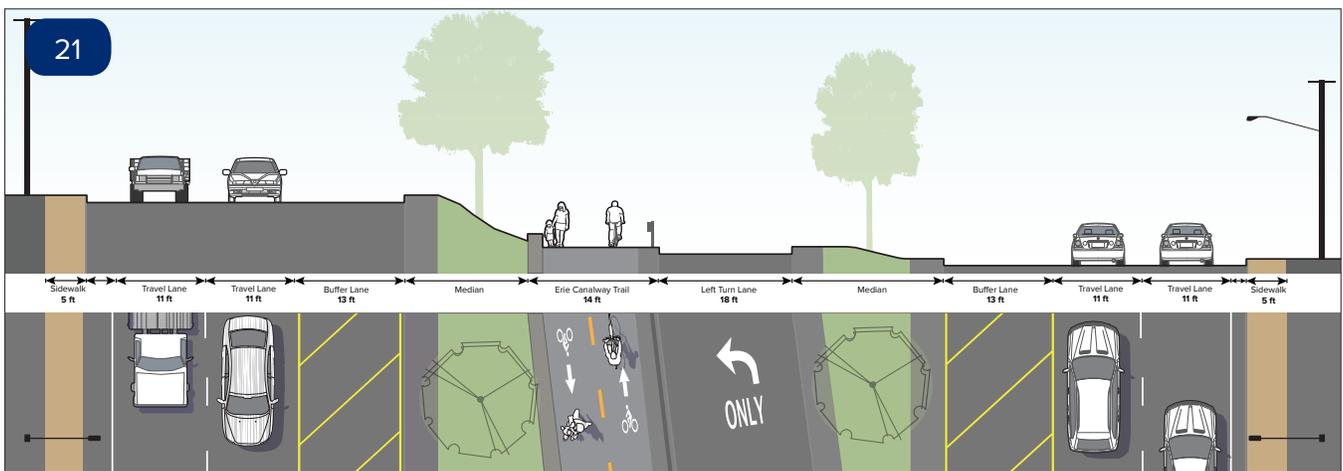
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
20-22	Erie Boulevard East	3.1	Shared-Use Path (located in roadway median)
23	Bridge Street Connection	0.1	Shared-Use Path
24	Towpath Road West	0.5	Paved Shoulder
25	Towpath Road East	0.9	Shared-Use Path
26	Kinne Road Trail Bridge	0.05	Trail Bridge
27-28	Butternut Drive Path + Crossing	0.05	Shared-Use Path (with crossing improvements)

**20-22 ERIE BOULEVARD EAST**

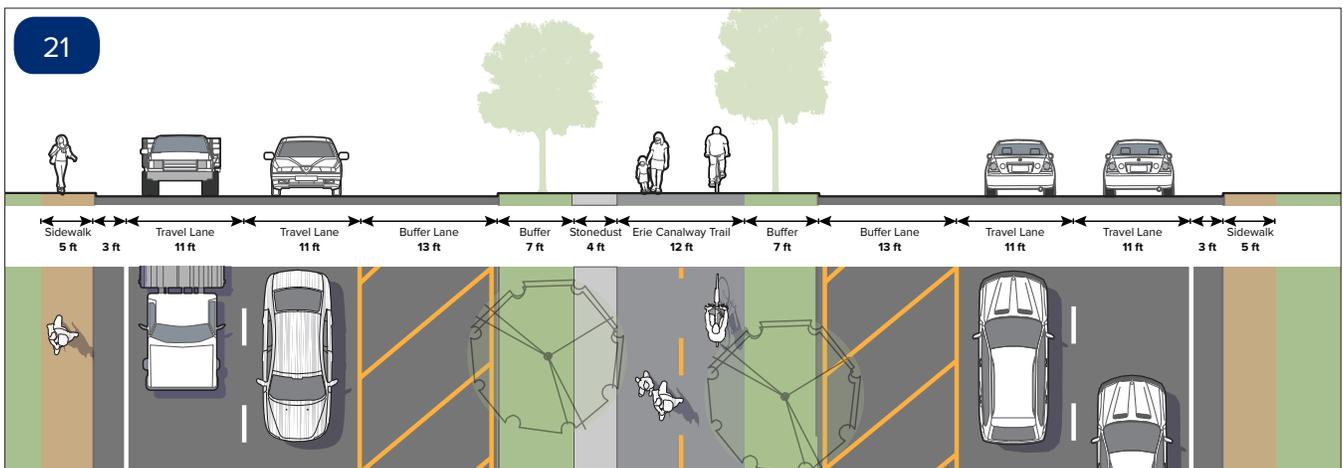
The EST will follow a shared-use path in what is currently the median, widening and altering the median in places and using retaining walls in some stretches to accommodate cross-slopes. Between Beech Street and Columbus Avenue, the shared-use path will shift to one side of the roadway. A road diet may be required in some locations, using striping and curb location.



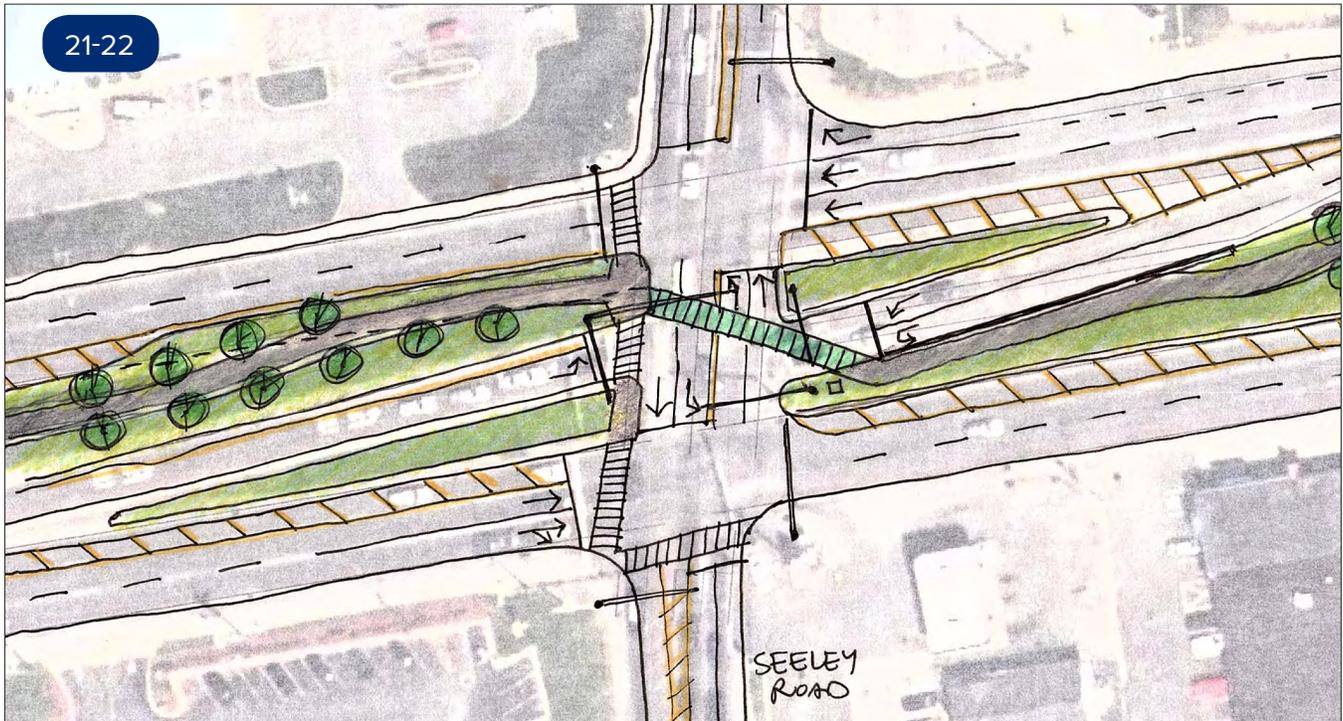
Erie Boulevard at Cherry Street in Syracuse, looking west



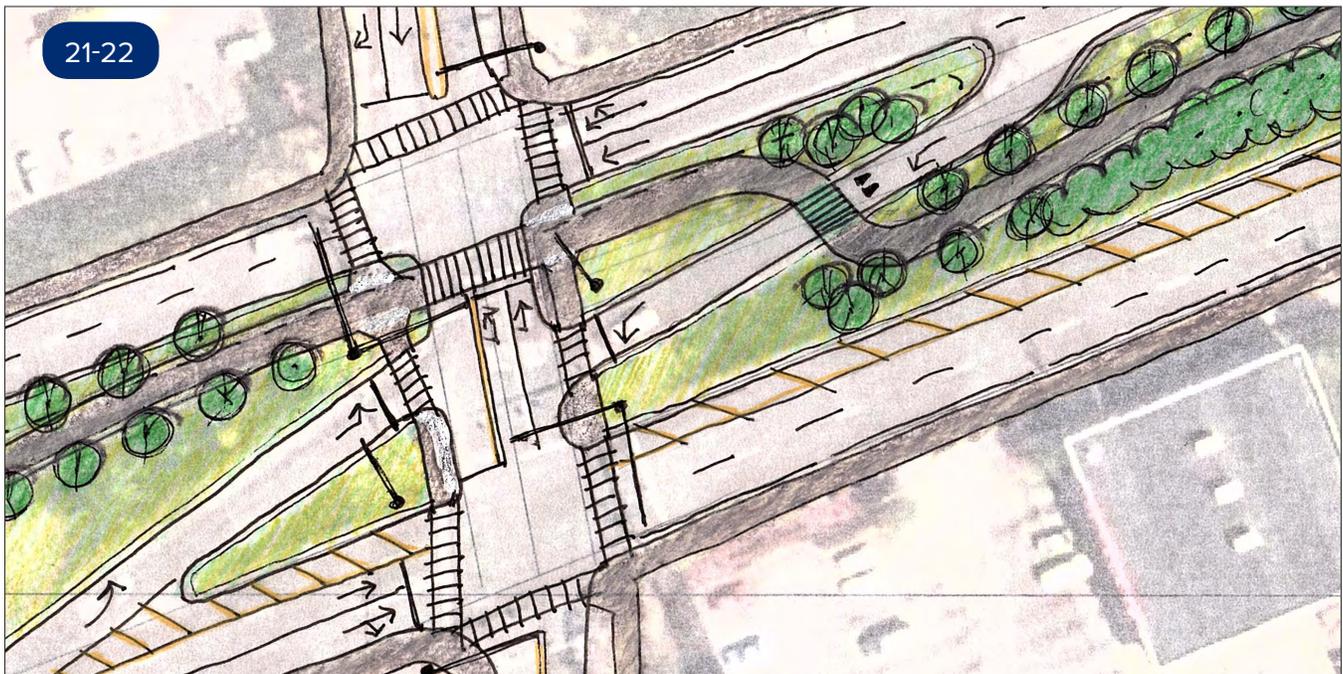
Erie Boulevard at the approach to Midler/Seeley intersection in Syracuse, looking west



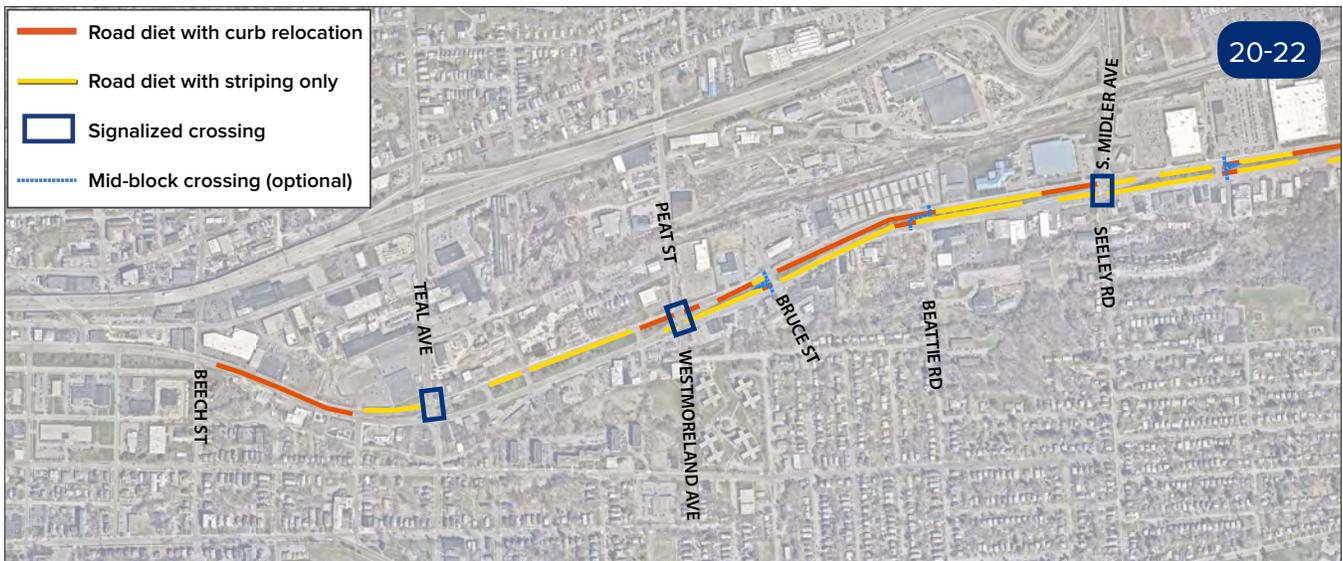
Erie Boulevard at Kravec Drive in DeWitt, looking west



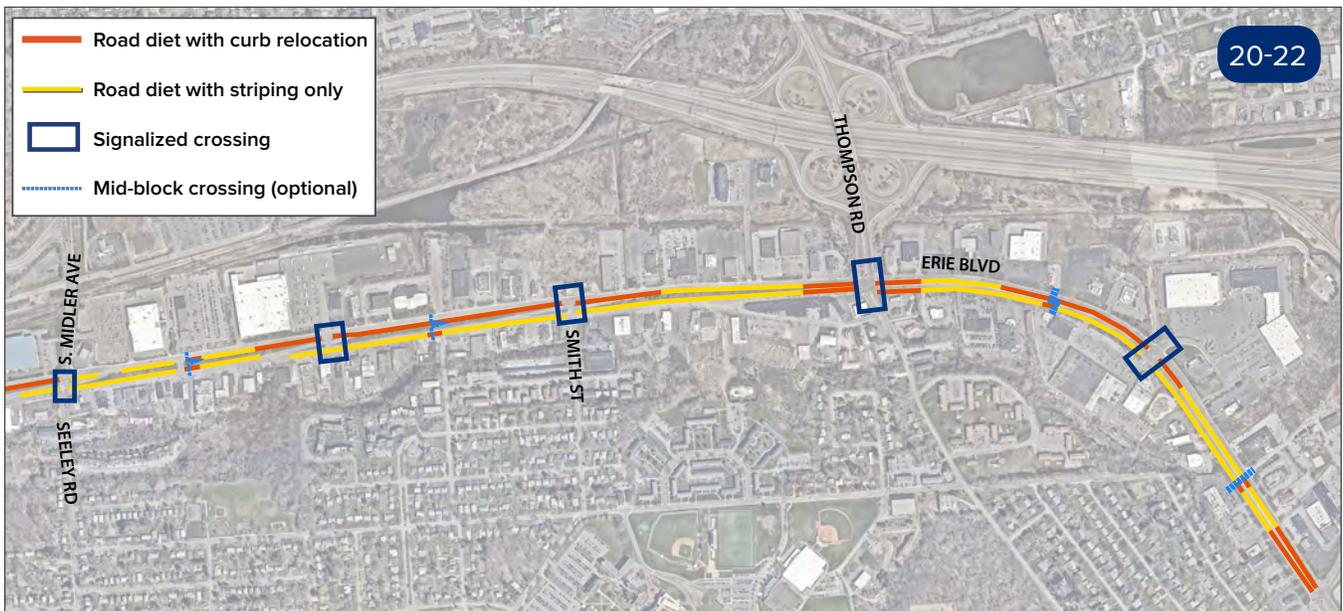
Concept sketch depicting trail design at intersection of Erie Blvd at Midler / Seeley Road



Concept sketch depicting trail design at intersection of Erie Blvd at Peat Street



Syracuse - Erie Boulevard road diet diagram



Syracuse - DeWitt Erie Boulevard road diet diagram

### 23 BRIDGE STREET CONNECTION

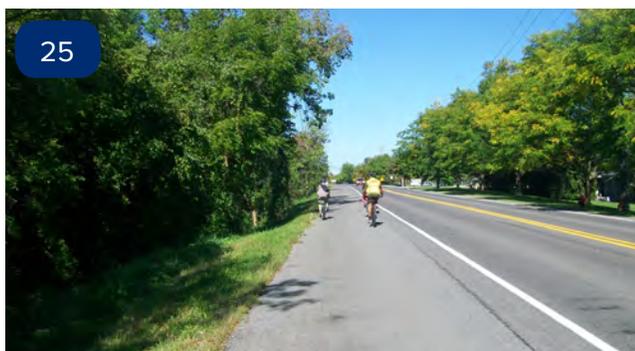
The shared-use path runs along the south edge of the country club property between Bridge Street and Celi drive.

### 24 TOWPATH ROAD WEST

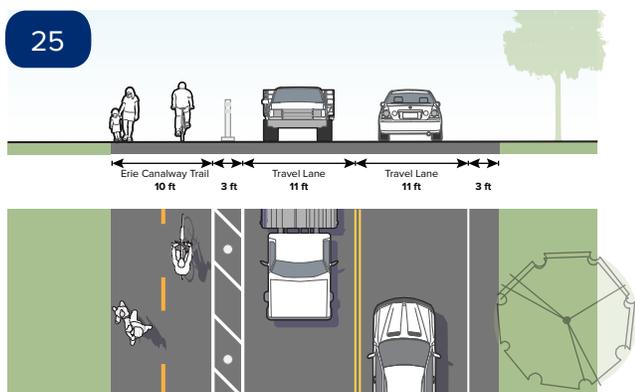
Restriping the road with side shoulders and no centerline will improve the EST user experience. This is recommended between Widewaters Parkway and Celi Drive.

## 25 TOWPATH ROAD EAST

The existing road is wide enough to accommodate 11-foot wide travel lanes, a shared-use path, and a three-foot buffer with delineator posts between motorists and EST users.



Existing conditions on Towpath Road between Widewaters Parkway and Kinne Road.



Section cut shows travel lanes narrowed to 11', a 3' striped buffer with delineator posts, and a 10' Erie Canalway Trail within paved shoulder area.

## 26 KINNE ROAD TRAIL BRIDGE

Building a new trail bridge parallel and adjacent to the Kinne Road bridge is proposed due to the inability to widen the existing structure.



Existing conditions on Kinne Road bridge over I-481.

## 27 BUTTERNUT DRIVE

This portion includes recommendations for a crosswalk, bump-outs, and an RRFB or flashing beacon to improve the connection to the Erie Canalway trailhead. The existing shared-use path terminates just south of vehicle entry to Old Erie Canal Park.



Existing conditions on Butternut Drive, the Erie Canalway Trail trailhead is at the right side of the image.

# REGION 4

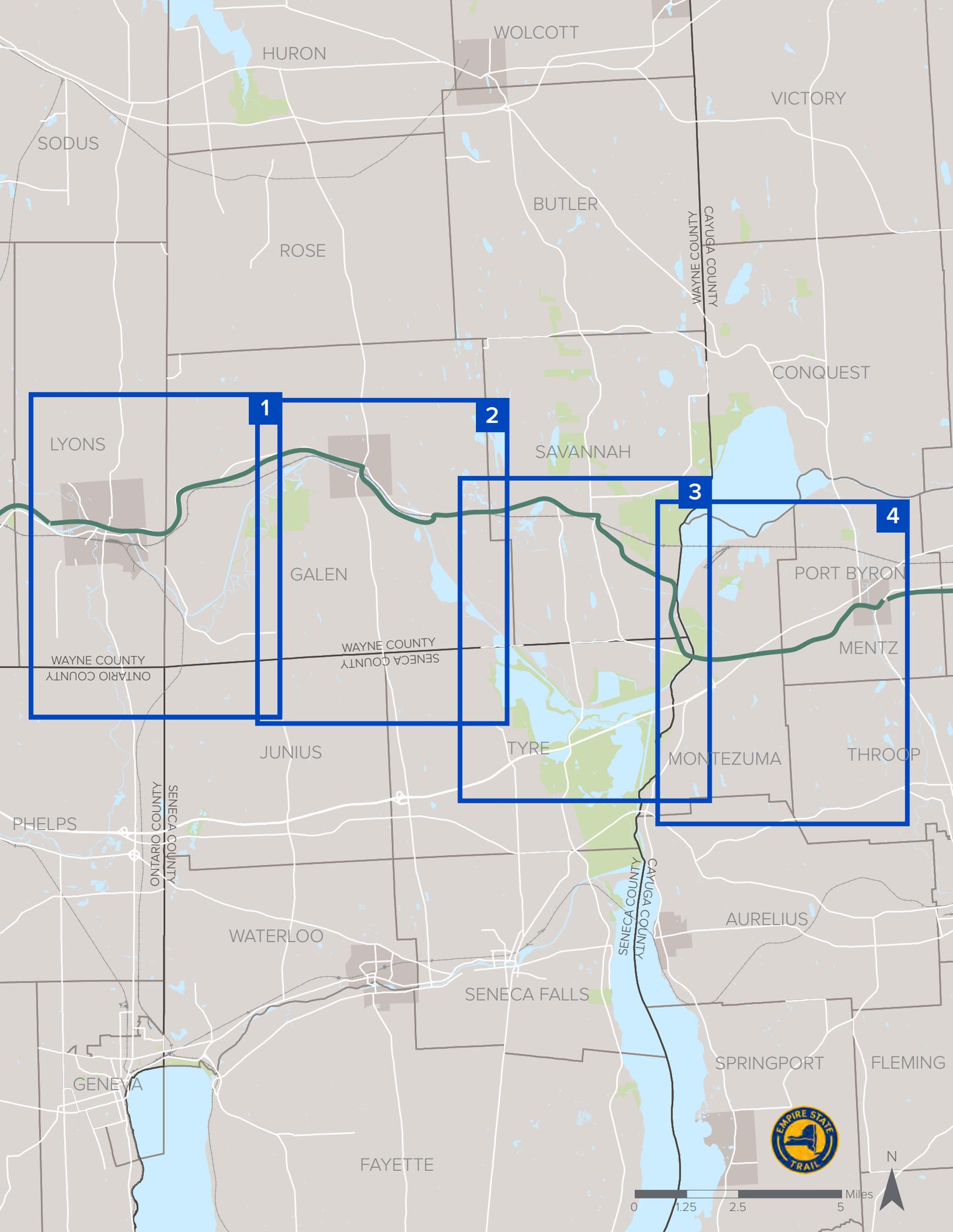
## INTRODUCTION

NYS DOT Region 4 is home to more than a million New Yorkers in seven western counties. The area is best known for the City of Rochester, the Erie Canal, Lake Ontario, and the Genesee River.

The EST brings an opportunity to fill the 24-mile gap in the Erie Canalway Trail through the Towns of Lyons, Clyde, Savannah, and Port Byron. The preferred EST route will be a mix of on-street paved shoulders, widened sidewalks, and shared-use paths. Some of the shared-use path portions will be adjacent to National Grid right-of-way.

Four overview maps were generated to show the recommendations in detail. Each of the maps has a corresponding table that includes information like a project description. Some portions include plan view or section view graphics to clarify proposed improvements.

\$3 to \$4 million of Empire State Trail funds will be invested in closing these gaps in Region 4. It should be noted that there is overlap between NYS DOT Regions 3 and 4.



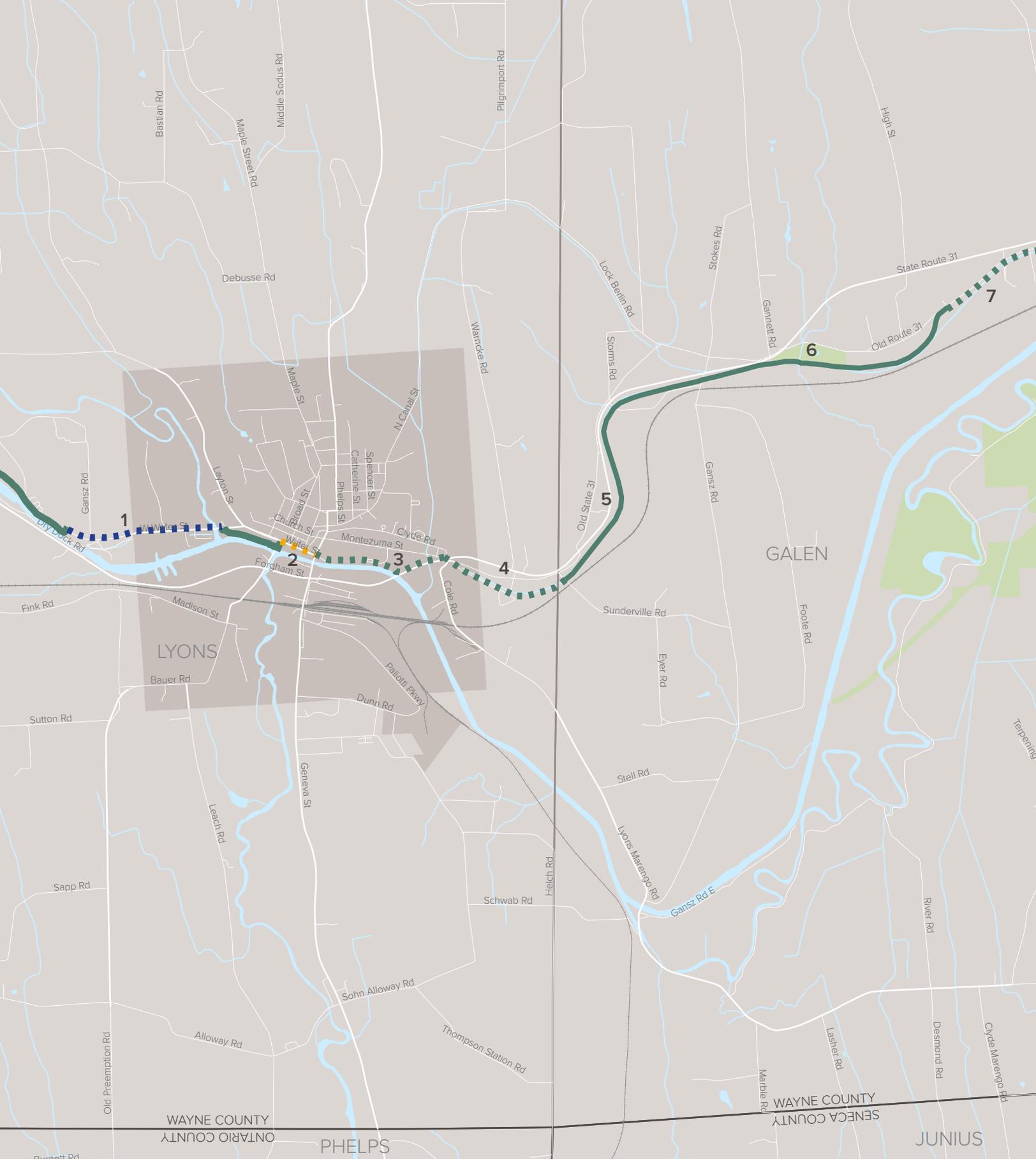
1

2

3

4





**REGION 4 SECTION 1: NETWORK**

-  Existing Shared-Use Path
-  Proposed Shared-Use Path
-  Proposed Paved Shoulder
-  Proposed Shared Roadway (with sidewalk)



## INSET MAP 1: LYONS

The Lyons area recommendations include on- and off-street segments. Significant parts of the existing shared-use path only require upgrading the trail surface from grass to stone dust. Trail users can access the small commercial center for rest, food, and drink. Careful design attention will be given to the area where the trail crosses Route 31 at Cole Road.

Table 14: Region 4 Inset Map 1 Preferred Route and Costs

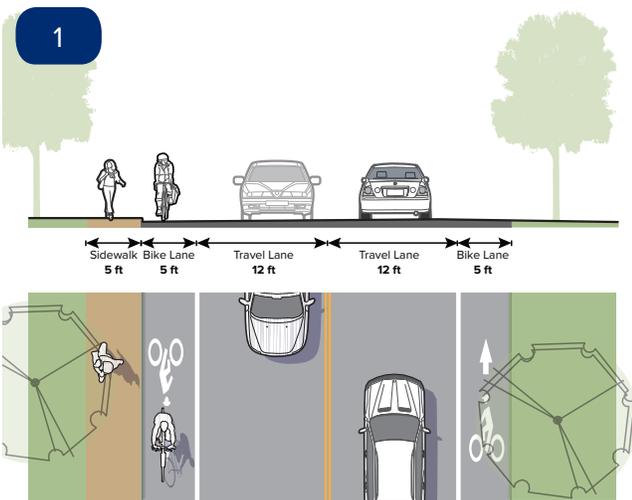
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
1	Water St	0.9	Paved Shoulder
2	Leach Road East	0.2	Shared Roadway / Sidewalk
3	Elm St	0.8	Shared-Use Path
4-6	Hill Road / Sunderville Road to Gansz Road / Black Brook County Park to Old Rte 31	4.9	Shared-Use Path

## 1 WATER STREET

The existing shoulders are proposed to be widened west of Leach Road. Where sidewalks are present, these shoulders are recommended to be marked as bike lanes, as shown in the graphic below.



Image: Google

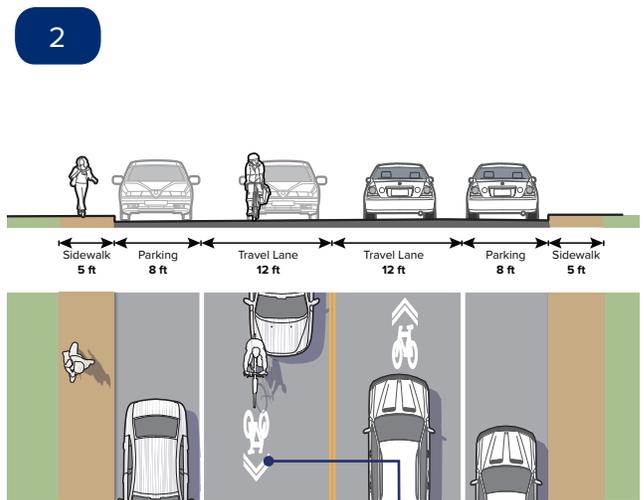


## 2 WATER STREET

New shoulders are recommended to be striped east of Leach Road. Consideration for shared roadway markings should be given where on-street parking prevents paved shoulder accommodations.



Image: Google



*Shared lane markings recommended; Not required.*

### 3 ELM STREET

A shared-use path is recommended from Geneva at Water Street to Clyde Road at Old Route 31. The EST is proposed to utilize the existing park and wide right-of-way along Canalview Drive, then north side of Route 31. The photo below illustrates the dead-end at Canalview Drive, providing a spur connection to Canalview Drive residents.



Image: Google

### 4-6 HILL ROAD / SUNDERVILLE ROAD / TO OLD ROUTE 31

Moving east, the EST is proposed continue on a shared-use path from the end of Hill Road to Suderville Road along the south side of canal. The existing grass path needs stone dust treatment. The photo shows the existing path from Gansz Road looking east.

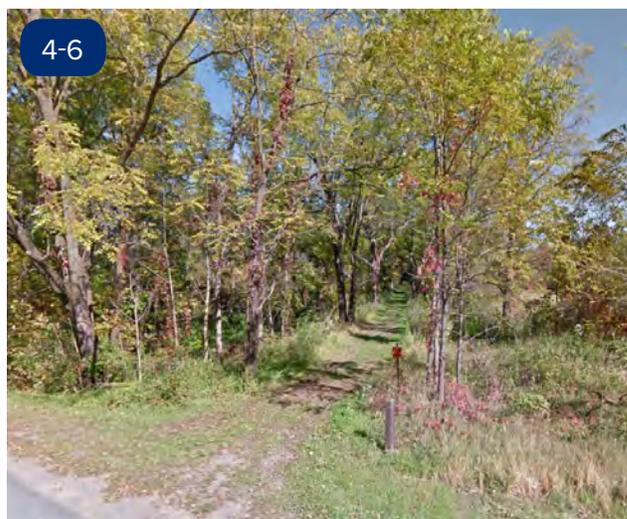
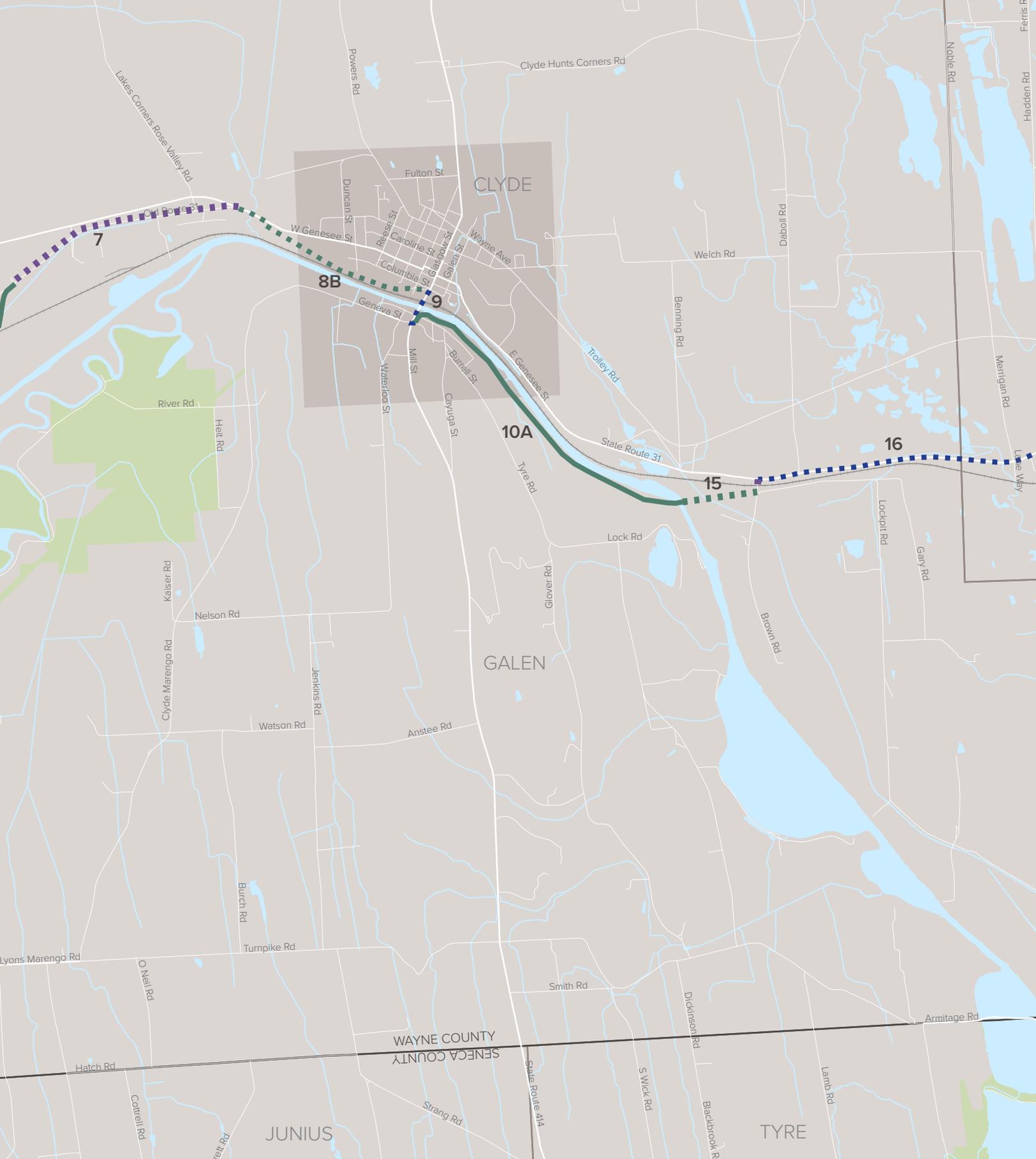


Image: Google



**REGION 4 SECTION 2: NETWORK**

- Existing Shared-Use Path
- Proposed Shared-Use Path
- Proposed Paved Shoulder
- Proposed Shared Roadway
- Proposed Bike Lanes



## INSET MAP 2: CLYDE

The EST recommendations through Clyde include both on-road paved shoulder as well as off-road shared-use path portions. Once completed, the newly re-decked Galen Railroad Bridge will be an attractive feature. Trail users will be able to peer over the edge and see the original Erie Canal. Trail users will enjoy the opportunity to rest and find food and drink in the Village of Clyde.

Table 15: Region 4 Inset Map 2 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>7</b>	<b>Old Rte 31</b>	1.4	Shared Roadway
<b>8B</b>	<b>Old Erie Canal Corridor</b>	1.1	Shared-Use Path
<b>9</b>	<b>Glasgow Street Bridge</b>	0.3	Paved Shoulder
<b>15</b>	<b>Galen RR Bridge to Brown Road</b>	0.4	Shared-Use Path
<b>16</b>	<b>Rte 31</b>	4.4	Paved Shoulder / Shared Roadway

## 7 OLD ROUTE 31

This shared roadway is proposed to carry the EST from east of High Street to Route 31 at Westside Fuels. Intersection improvements are being considered at the intersection of Old Route 31 and Route 31 to reduce vehicle speeds as they turn onto Old Route 31.



Image: google



Intersection of Old Route 31 and Route 31 - existing curb location is shown as a black dashed line.

## 8 W. GENESEE STREET

The road was recently reconstructed. A paved shoulder and shared roadway signage between Westside Fuels and W. Genesee Street/Sodus Street is proposed.

## 9 GLASGOW STREET BRIDGE

The EST is proposed to continue along paved shoulders between Sodus Street (at William Street) and Redfield Street (at Water Street). The bridge may be reconstructed, so EST design efforts should be coordinated.



Image: google



## 15 GALEN RAILROAD BRIDGE TO BROWN ROAD

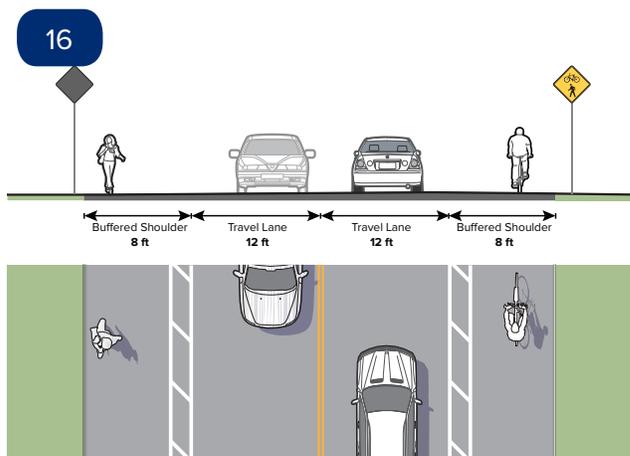
A shared-use path along the county-owned portion of the trail would begin at the bridge and continue to intersection of Brown Road. This recommendation requires surface work and signage. The alignment follows the former railroad right-of-way and intersects Brown Road approximately 50 feet north of Lockpit Road.

## 16 ROUTE 31 FROM BROWN ROAD TO N. MAIN STREET

Separation between trail users and motorists would improve safety in this area. A buffered shoulder with striping and/or rumble strips is proposed. Once in Savannah, the presence of sidewalks would allow these shoulders to be marked as bicycle lanes.



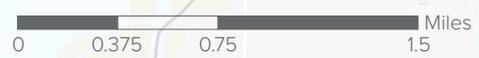
Image: google





REGION 4 SECTION 3: NETWORK

- Existing Paved Shoulder
- Proposed Shared-Use Path
- Proposed Bike Lanes
- Proposed Paved Shoulder
- Proposed Shared Roadway



## INSET MAP 3: SAVANNAH

The proposed Savannah portion of the EST includes substantial lengths of on-road paved shoulder and a combination of shared roadway and shared-use path through wooded parcels between Highway 89 and the USFWS dike.

Table 16: Region 4 Inset Map 3 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>17</b>	<b>Switchback</b>	0.8	Shared-Use Path
<b>18-19</b>	<b>Westshore Trail to USFWS Dike</b>	3.4	Shared Roadway / Shared-Use Path
<b>20</b>	<b>Rte 31</b>	1.6	Paved Shoulder / Shared Roadway

**17 SWITCHBACK**

A short switchback is recommended from the road to trail area leading to town-owned Westshore Trail. Significant fill would be required to mitigate a short, steep slope. Town-owned Westshore Trail is in usable condition, but requires signage.



Image: google



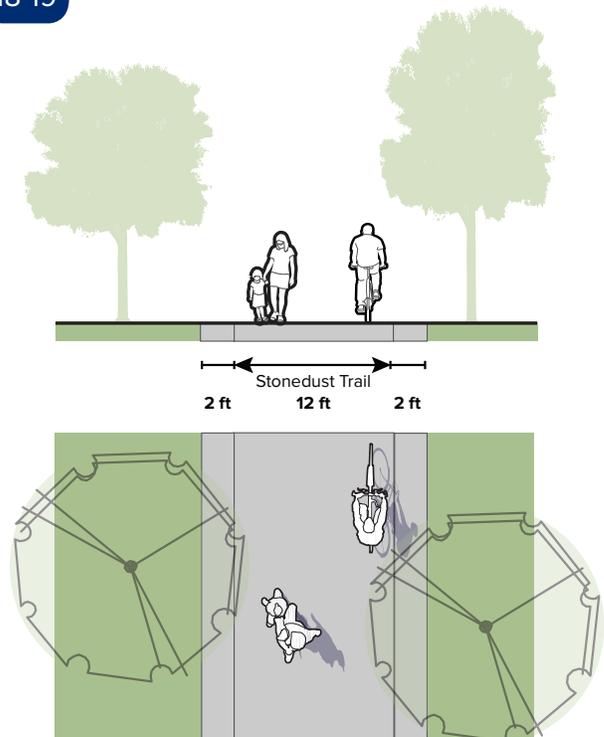
Image: google

**18-19 WESTSHORE TRAIL TO USFWS DIKE**

Town-owned Westshore Trail is in good and usable condition as a trail, however the south end falls short of the USFWS property by approximately 180 feet. Rather than crossing the NYSDEC drainage facility, the Empire State Trail is proposed to follow a recommended shared roadway on Van Dyne Spoor Road to the USFWS property. The photo shows existing Westshore Trail from County Route 277.

The dike is in excellent condition and could easily accommodate the trail, but requires user permits with State and Federal agencies. Minimal grading and surface work would be required.

**18-19**





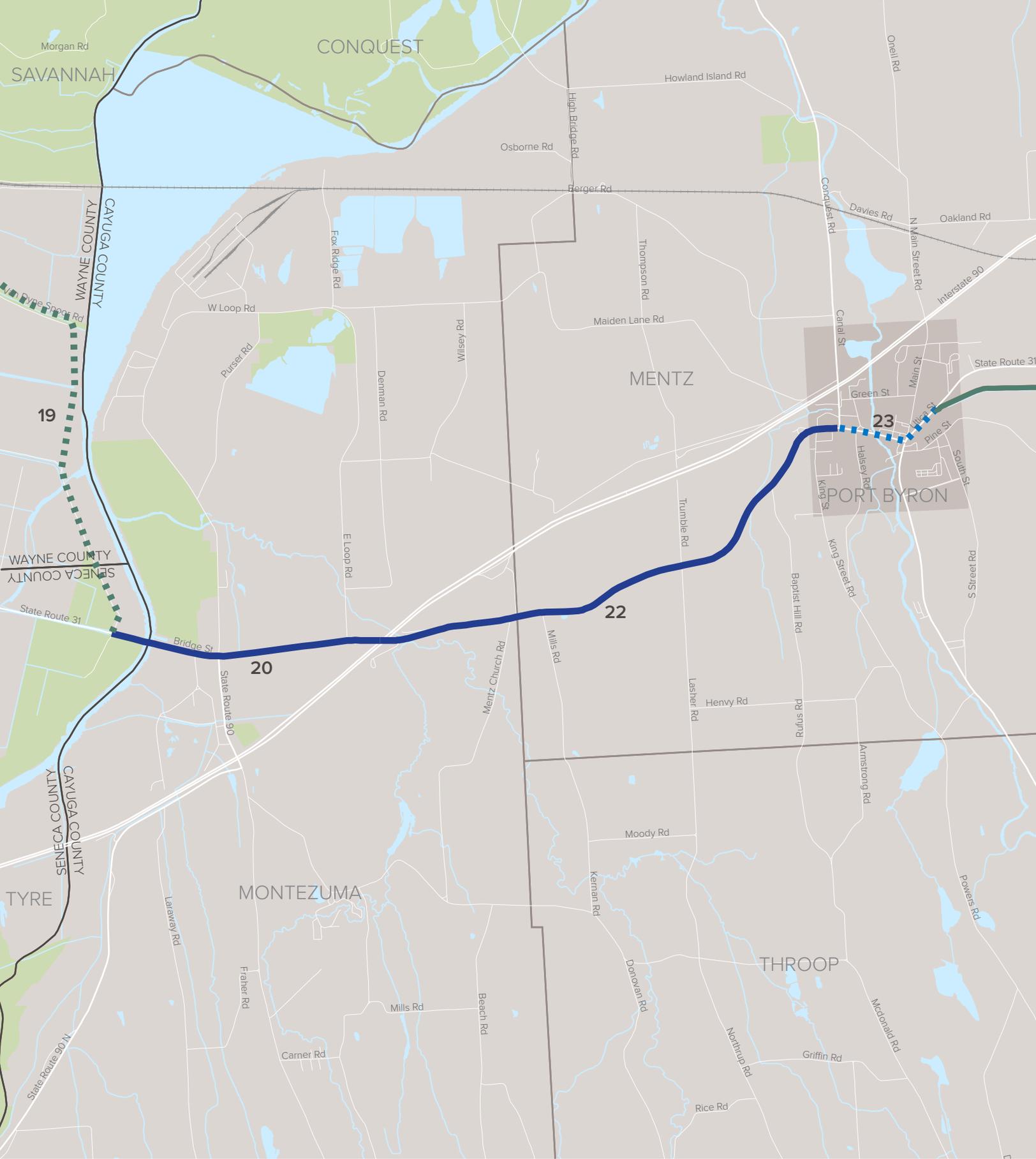
## **NYSDOT REGION 3**

The following segments are located in NYSDOT Region 3. Work will be completed by Region 4 in coordination with Region 3.

### **20 ROUTE 31 INTERSTATE OVERPASS**

The recommendation is to stripe paved shoulders and install shared roadway signage from the intersection with the shared-use path to the Interstate 90 overpass. Pavement condition is in good condition. The photo shows a short segment of Route 31 requiring paved and striped shoulder and signage. The shared-use path would enter roadway on the left side of the image.





**REGION 4 SECTION 4: NETWORK**

-  Existing Shared-Use Path
-  Existing Paved Shoulder
-  Proposed Shared-Use Path
-  Proposed Bike Lanes



# INSET MAP 4: PORT BYRON

The Port Byron area recommendations involve the trail crossing from Wayne County into Seneca County. The trail transitions from off-road shared-use path to on-road paved shoulder. Trail

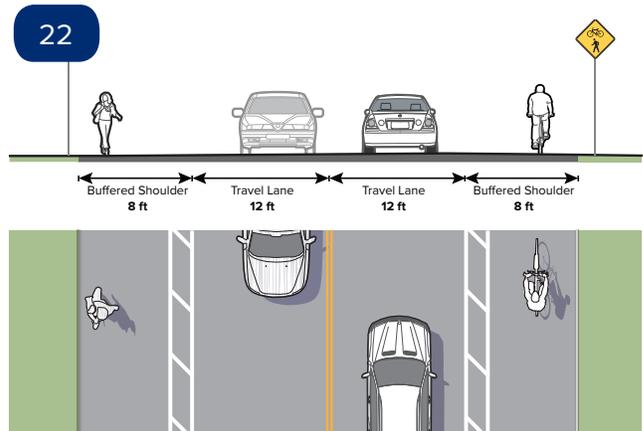
users will enjoy an opportunity to rest or find refreshments in Port Byron and see the recently renovated Erie Canal Heritage Park.

Table 17: Region 4 Inset Map 4 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
22	Rte 31	3.8	Paved Shoulder (with Buffer and Rumble Strip)
23	Rte 31 in Port Byron	0.7	Bike Lanes

## 22 ROUTE 31

Paved shoulders with buffers and rumble strips are proposed to continue along Route 31 into Port Byron. This recommendation will help define the trail on Route 31.



## 23 ROUTE 31 IN PORT BYRON

The EST follows bike lanes from Canal Street to the Erie Canalway trailhead. The photo below shows Route 31 (Rochester Street) east of Canal Street in Port Byron.



Green skip-lane striping enhances visibility for motor vehicles traveling adjacent to bicyclists.



Image: google

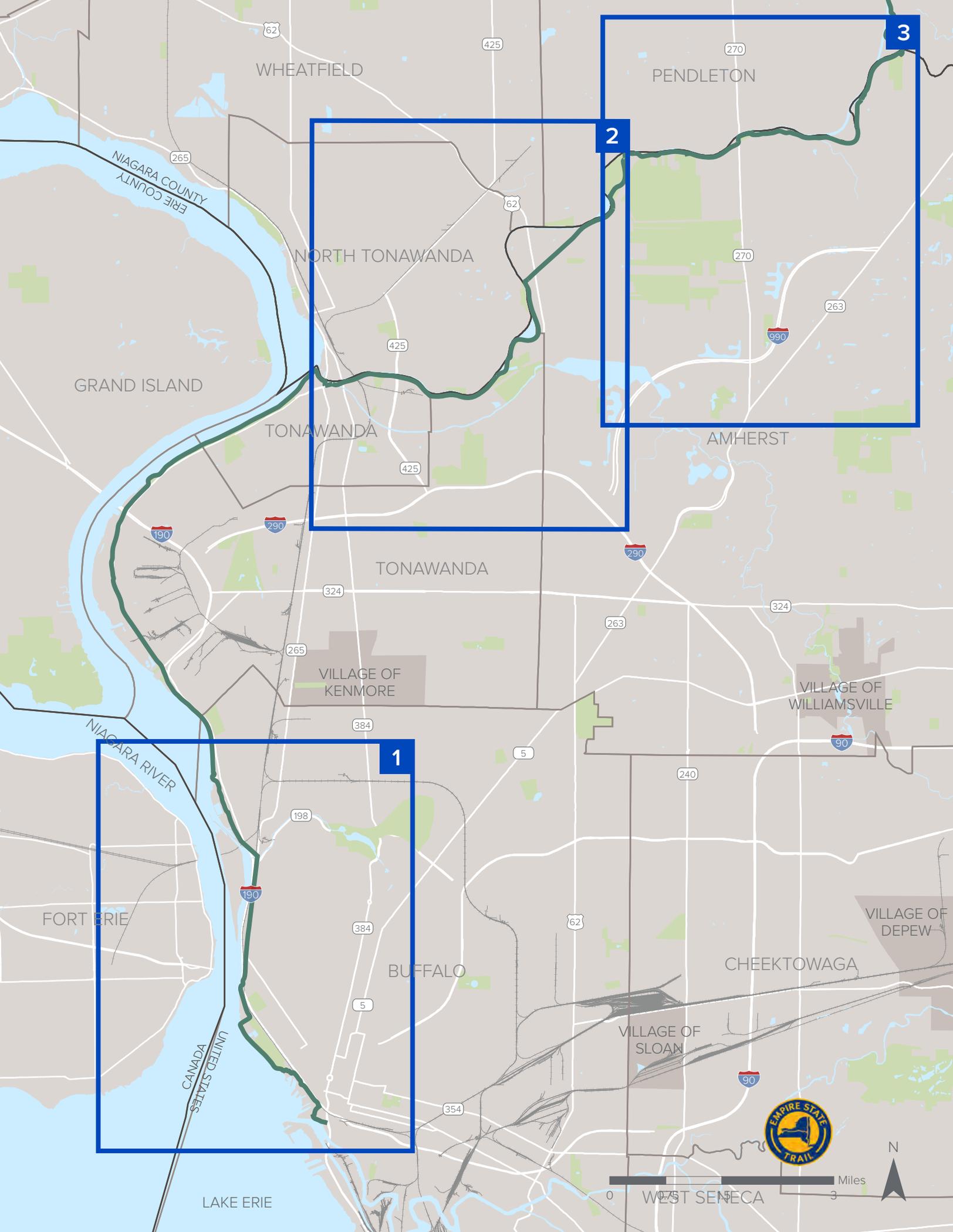
# REGION 5

## INTRODUCTION

The relevant portion of NYSDOT Region 5 encompasses Buffalo and the greater Niagara Region. Currently, a large portion of the Empire State Trail alignment is encompassed by an existing riverfront path system along the remnants of the Erie Canalway and/or the Niagara River. A few significant gaps exist in Tonawanda and Amherst however, along with some discrete connectivity needs within the City of Buffalo. In Buffalo, the Shoreline Trail runs along the Niagara River for long stretches including the west edge of Unity Island. The Unity Island portion of the Empire State Trail, however will be superseded by

the bi-directional cycle track along Niagara Street, set for construction in 2018-19. Because of the difficulty of fixing a gap in the Shoreline Trail south of Hamilton Street, a 1.5 mile portion of Niagara Street will formally be considered part of the Empire State Trail and Erie Canalway Trail.

Three overview maps show the recommendations in more detail. \$1.5 to \$2 million of Empire State Trail funds will be invested in closing these gaps in Region 5.



3

2

1

WHEATFIELD

PENDLETON

NORTH TONAWANDA

GRAND ISLAND

TONAWANDA

AMHERST

TONAWANDA

VILLAGE OF KENMORE

VILLAGE OF WILLIAMSVILLE

NIAGARA RIVER

FORT ERIE

BUFFALO

CHEEKTOWAGA

VILLAGE OF DEPEW

CANADA  
UNITED STATES

VILLAGE OF SLOAN

LAKE ERIE

WEST SENECA



N





Niagara Street bi-directional separated bike lane project to be constructed by others in 2018/19

**NYSDOT REGION 5 SECTION 1:  
PROPOSED ROUTE MAP**



- Existing Shared-Use Path
- Existing Bike Lanes
- - - Proposed Bike Lanes
- - - Proposed Shared-Use Path
- - - Existing Shared-Use Path Improvements
- - - Proposed Separated Bike Lane (Bi-Directional)



0 0.25 0.5 1 Miles

## INSET MAP 1: BUFFALO

Within this portion, the proposed EST route primarily follows the Shoreline Trail alignment that runs along Buffalo's lakefront and riverfront from Canal Place Downtown up to the City line with Tonawanda. While most of the route is on

an existing paved path, a 1.5 mile segment of the Empire State Trail is proposed to utilize the bi-directional separated bikeway to be constructed on Niagara Street starting in 2018 over several phases.

Table 18: Region 5 Inset Map 1 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>1A</b>	<b>Lake Shore Path Improvements</b>	1.5	Improvements to the Existing Shared-Use Path (signage and striping)
<b>1</b>	<b>Erie Street Connection</b>	0.2	Shared-Use Path (with signage and striping)
<b>2</b>	<b>Shoreline Trail improvements</b>	0.3	Shared-Use Path
<b>3</b>	<b>Niagara Street</b>	1.6	Separated Bike Lane (Bi-Directional)
<b>4</b>	<b>Austin Street Connection</b>	0.1	Separated Bike Lane (Bi-Directional)
<b>5</b>	<b>Hertel Ave Crossing</b>	n/a	Crosswalk and ADA curb ramps

## 1A LAKE SHORE PATH IMPROVEMENTS

The sidepath along Ohio Street connects Buffalo Harbor State Park to Veterans Park. Striping and signage will be added to the shared-use path to enhance the experience for bicyclists and pedestrians.

## 1 ERIE STREET PATH: MARINE DR TO LAKEFRONT BLVD

Improve the existing path on the east/south side of Erie Street. The resulting shared-use path provides a connection from the southern terminus of the Shoreline Trail to the existing bike lanes on Marine Drive and the adjacent path through Veteran's Park.



Image: google

## 2 SHORELINE TRAIL: BETWEEN PEACE BRIDGE AND BUSTI-NIAGARA INTERSECTION

Replacement of the sidewalk with a shared-use path is required to improve the current alignment of the Shoreline trail between the pedestrian overpass below the Peace Bridge and the funded bi-directional separated bikeway on Niagara Street (construction to commence in 2018).

## 4 AUSTIN STREET CONNECTION

This will be a continuation of the tbi-directional separated bikeway from Niagara Street to the trail entrance is proposed along the north side of Austin Street.

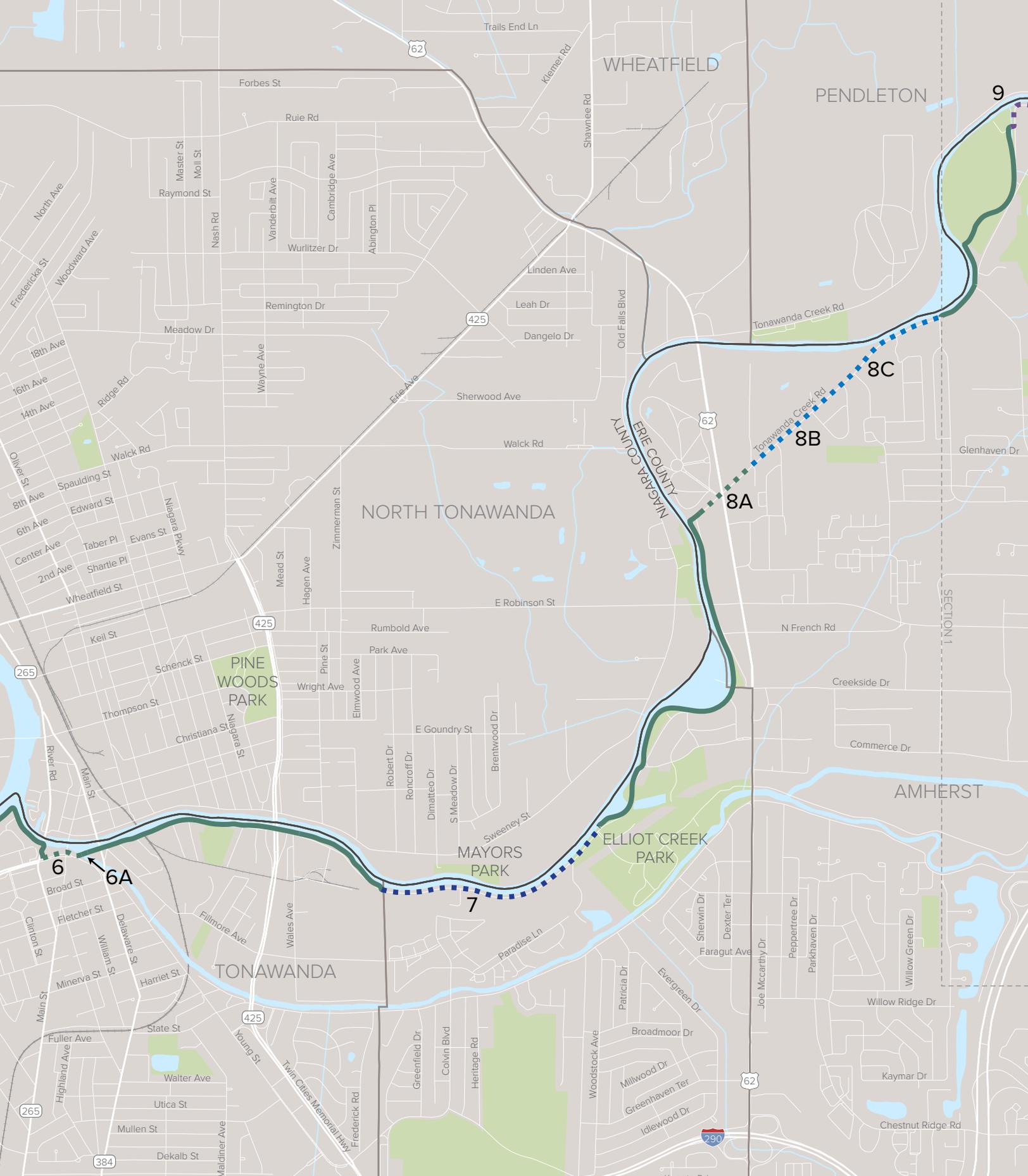


View of Austin Street looking west showing the location of the trail connection to the right. The two way cycle track will run along the northern curb, also to the right.

Image: google

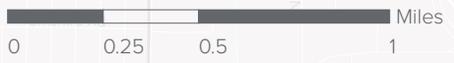
## 5 HERTEL AVE CROSSING

To improve the Hertel Street crossing, a high visibility crosswalk, signage and ADA ramp replacement is recommended.



**NYSDOT REGION 5 SECTION 2: PROPOSED ROUTE MAP**

- Existing Shared-Use Path
- Proposed Sidepath/Shared-Use Path
- Proposed Bike Lane
- Proposed Shared Roadway
- Proposed Paved Shoulder



## INSET MAP 2: TONAWANDA - AMHERST

The portion of the Empire State Trail through Tonawanda is primarily in the form of an off-street path along the former Erie Canal. There are some critical gaps where improvements are recommended, ranging from striped bike lanes, new sidepaths, and widened sidewalks.

Table 19: Region 5 Inset Map 2 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>6</b>	<b>Niagara Street connection</b>	0.1	Shared-Use Path (path on sidewalk)
<b>6A</b>	<b>Long's Homestead Bridge Redecking</b>	0.1	Bridge Redecking
<b>7</b>	<b>Creekside Drive (Town of Tonawanda)</b>	1.0	Paved Shoulder
<b>8A</b>	<b>Tonawanda Creek Rd (West Amherst)</b>	0.3	Sidepath
<b>8B</b>	<b>Tonawanda Creek Rd (West Amherst)</b>	0.6	Bike Lanes
<b>8C</b>	<b>Tonawanda Creek Rd (West Amherst)</b>	0.4	Bike Lanes

## 6 NIAGARA ST CONNECTION: FROM MAIN ST TO SEYMOUR ST

Improvements being considered to the existing north-sidewalk path include revised pavement markings, new signage and consolidation of driveways to minimize conflict areas. (In long term, there is consideration for widening the sidewalk for additional space.)



## 7 CREEKSIDE DRIVE: FROM TONAWANDA LINE TO PARK ROAD

Restripe the roadway's edge line with additional signage to enhance the paved shoulder.

## 6A-6B LONG'S HOMESTEAD BRIDGE REDECKING

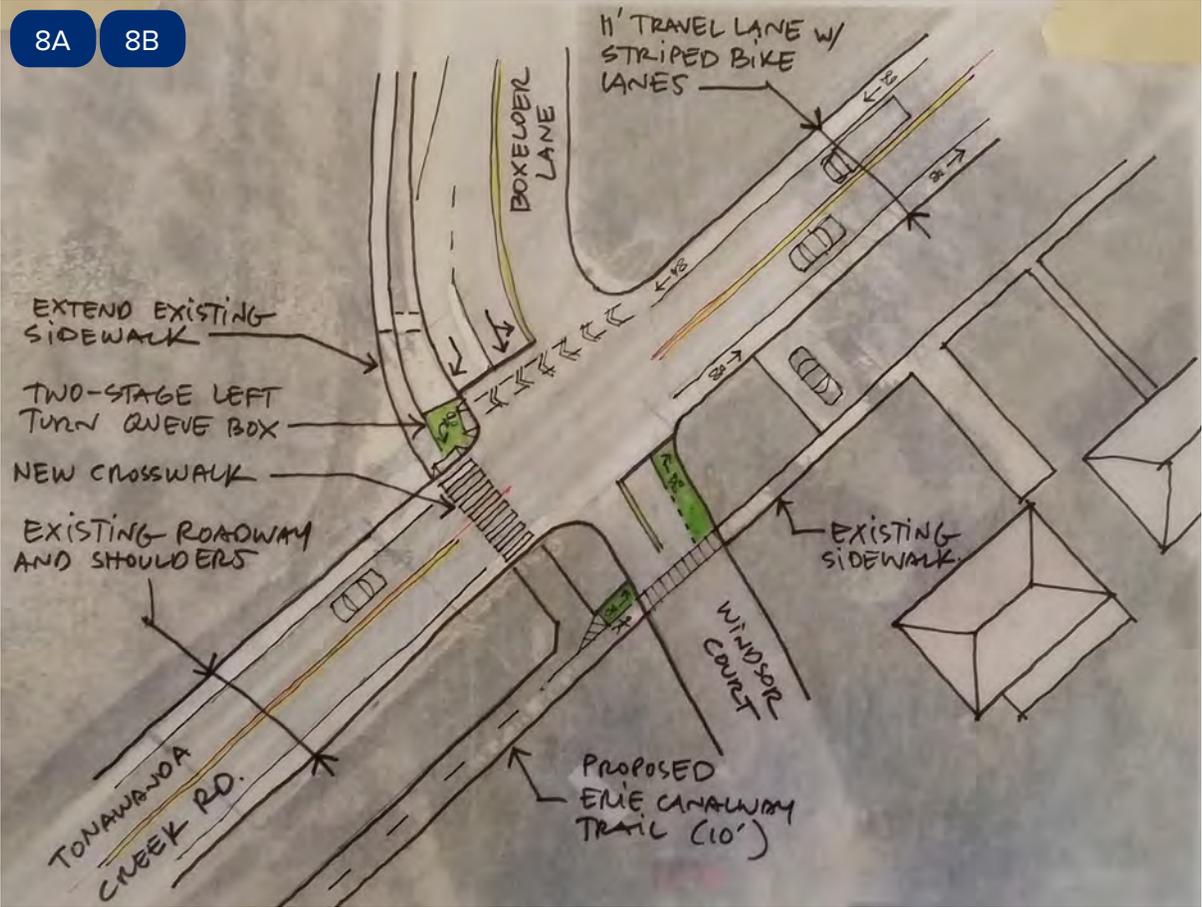
The wood deck on the Long's Homestead Bridge will be replaced with a new wood deck.

## 8A TONAWANDA CREEK RD: FROM OLD NIAGARA FALLS BLVD TO WINDSOR COURT

Development of 10' wide sidepath from the Erie Canalway Trailhead on the north side of Tonawanda Creek Road, with a road crossing midblock between trailhead of Niagara Falls Blvd. Sidepath runs along the south side to Windsor Ct which requires widening existing sidewalk to become a 10' wide sidepath.

**8B TONAWANDA CREEK RD: FROM WINDSOR CT TO WATER TREATMENT PLAN**

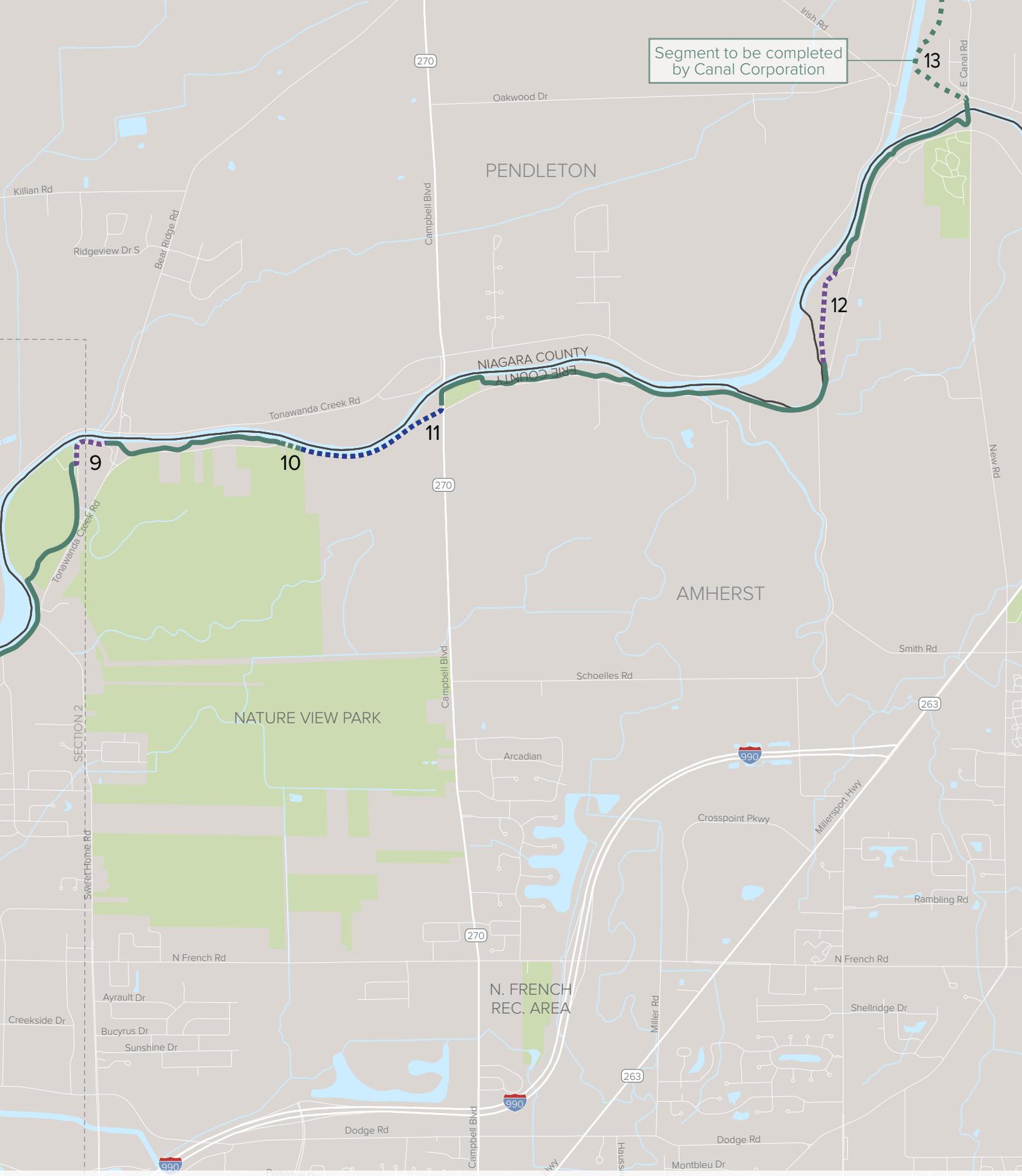
With the adjacent sidewalk between Windsor Ct and the treatment plant, the roadway shoulder could be restriped with a designated 5' wide bike lane. Project may include improvements to existing sidewalks and shoulders at the Windsor/Tonawanda Creek intersection to facilitate the transition for bicyclists from the off-street sidepath to the on-street bike lanes.



**8C TONAWANDA CREEK RD: FROM WATER TREATMENT PLANT TO VINE ST**

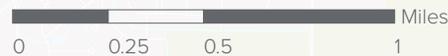
The existing shoulders are proposed to be restriped as 5' bike lanes to access the Erie Canalway Trailhead on the north side across from Vine Street. New crosswalk is also proposed at the trailhead to provide a connection across Tonawanda Creek Road.

Segment to be completed by Canal Corporation



**NYSDOT REGION 5 SECTION 3: PROPOSED ROUTE MAP**

-  Existing Shared-Use Path
-  Proposed Shared-Use Path
-  Proposed Paved Shoulder
-  Proposed Shared Roadway



## INSET MAP 3: AMHERST

The portion of the Empire State Trail through Amherst includes long portions of off-street path along the former Erie Canal. There are some critical gaps however that require improvements that range from striped bike lanes, new sidepaths and sideage and shared lane markings along low volume streets.

Table 20: Region 5 Inset Map 3 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
9	Brennon Road (Amherst)	0.2	Shared Roadway
10	Tonawanda Creek Path	0.1	Improve Existing Shared-Use Path (signage)
11	Tonawanda Creek Road	0.7	Paved Shoulder
12	Orbit Dr	0.4	Shared Roadway
13	E Canal Road Path	2.1	Shared-Use Path

### 9 BRENNON RD: VETERANS CANAL PARK TO TRAIL ACCESS POINT UNDER BEAR BRIDGE RD

Provide shared lane markings and signage to improve connectivity for pedestrians and bicyclists.

### 10 TONAWANDA CREEK PATH: NEAR TONAWANDA CREEK RD INTERSECTION

Improve signage along the two existing path spurs to Tonawanda Creek Road.

### 11 TONAWANDA CREEK ROAD: EAST END OF CREEK PATH TO CAMPBELL BLVD

Restripe the roadway's edge line, along with additional signage, to enhance the paved shoulder.



Image: google



12

## **ORBIT DRIVE: FROM PATH ENDPOINT TO ENDPOINT**

Provide shared lane markings and signage to improve connectivity for pedestrians and bicyclists.

13

## **E CANAL ROAD PATH: FROM TONAWANDA CREEK BRIDGE TO FEIGLE RD**

Funded through the Empire State Trail but under design and construction by the NYS Canal Corporation, this project includes a shared-use path in the buffer between the Erie Canal and E. Canal Rd.

# REGION 7

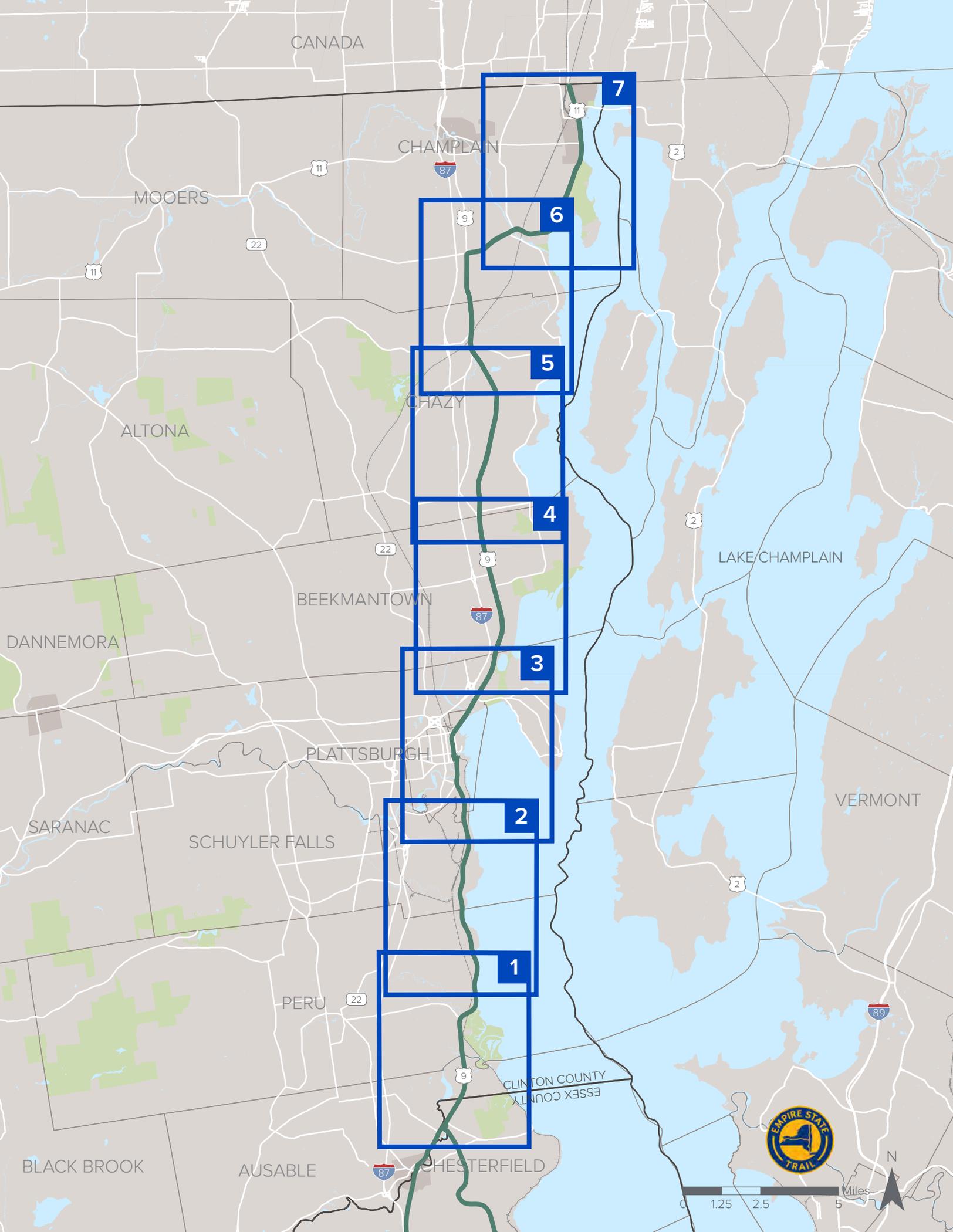
## INTRODUCTION

NYS DOT Region 7 encompasses the rural, five-county area known as the North Country. The regional map shows the context of adjacent counties, bodies of water, Vermont, and Canada. State Bike Route 9 is a signed on-road route that generally follows State Route 9 north into Quebec.

Most of the recommended projects along the preferred bicycle route in Region 7 are located in and around Plattsburgh. This is primarily due

to the population density of Plattsburgh and the likelihood that inexperienced bicyclists would use these trail segments, compared to the long segments of rural road routes on State Route 9.

Seven overview maps were generated to show recommendations in detail. \$1 to \$2 million of Empire State Trail funds will be invested in closing these gaps in Region 7.



CANADA

CHAMPLAIN

MOOERS

ALTONA

CHAZY

BEEKMANTOWN

LAKE CHAMPLAIN

DANNEMORA

PLATTSBURGH

VERMONT

SARANAC

SCHUYLER FALLS

PERU

CLINTON COUNTY  
ESSEX COUNTY

BLACK BROOK

AUSABLE

CHESTERFIELD



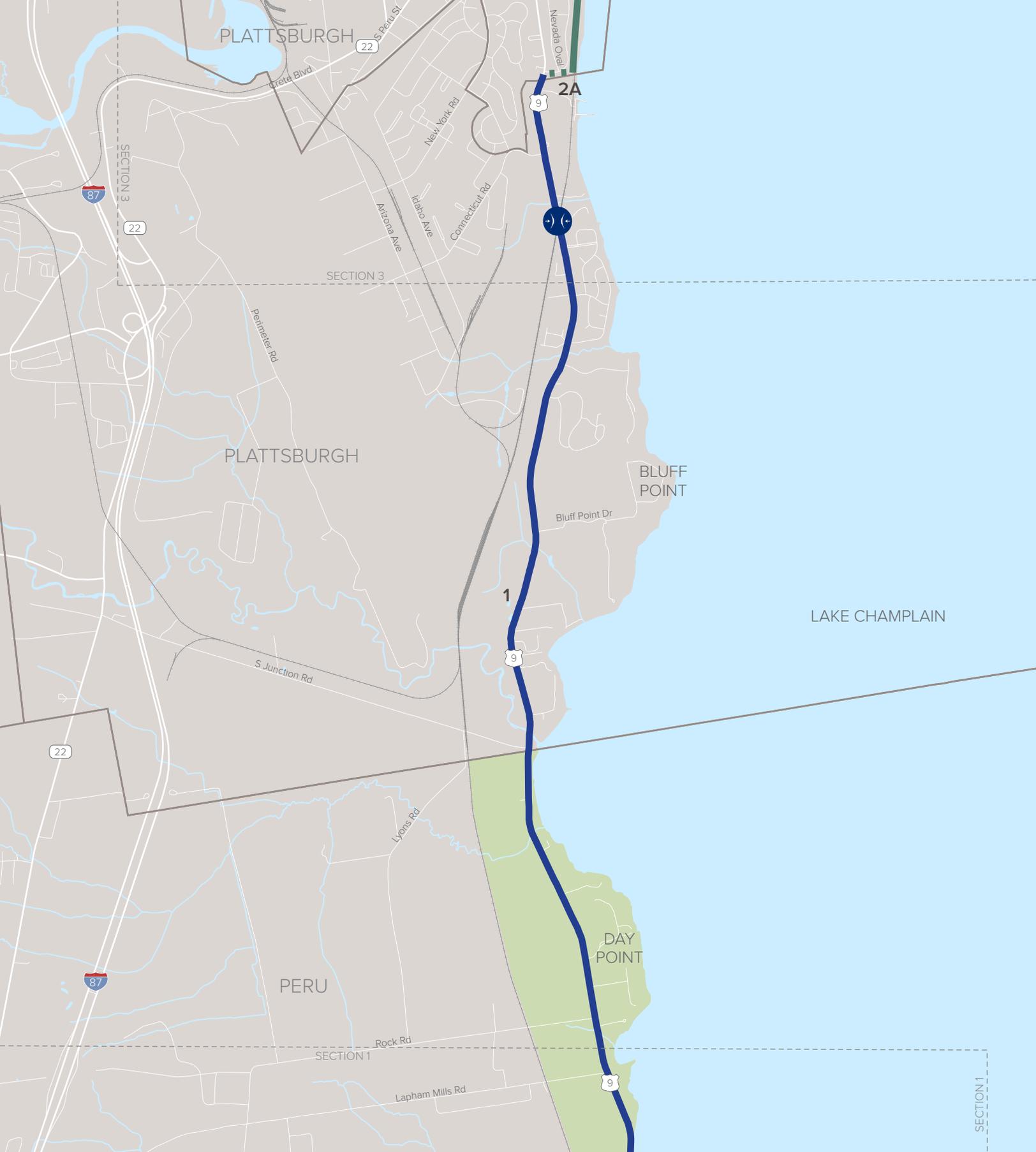


REGION 7 SECTION 1: NETWORK

Existing Paved Shoulder

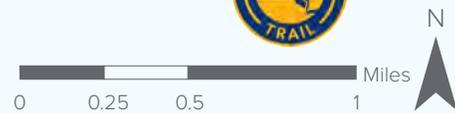
Pinchpoint





**REGION 7 SECTION 2: NETWORK**

-  Existing Paved Shoulder
-  Existing Shared-Use Path/Sidepath
-  Proposed Shared-Use Path/Sidepath
-  Pinchpoint



## INSET MAP 1: KEESVILLE - PLATTSBURGH

The existing signed route is proposed to follow a rural corridor that accommodates bicyclists with a paved shoulder. There is a narrow segment, indicated on the map, that passes under the

railroad, just north of Valcour Boulevard. It is expected that most bicyclists in this section will be confident and experienced.

## INSET MAP 2: AUSABLE CHASM - PLATTSBURGH

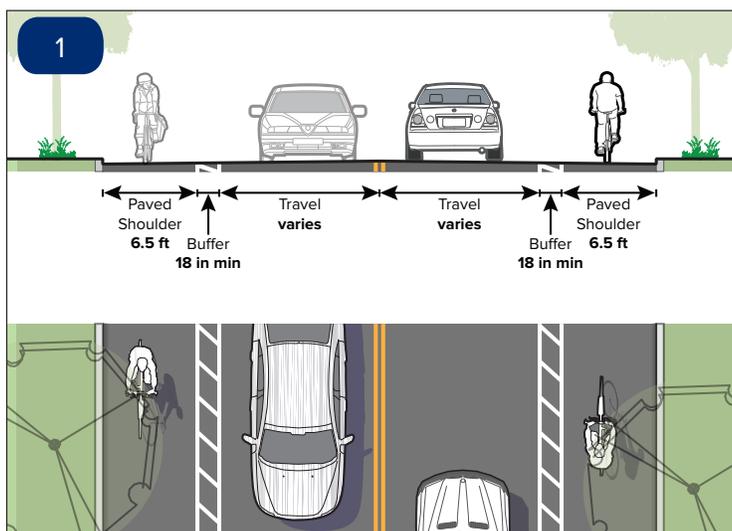
Ausable Chasm and Plattsburgh are noteworthy locations in the North Country region. The chasm, or “Grand Canyon of the Adirondacks,” is one of the oldest attractions in America. This route is currently utilized and is expected to continue to be utilized by a number of experienced cyclists.

Table 21: Region 7 Inset Map 1 & 2 Preferred Route and Costs

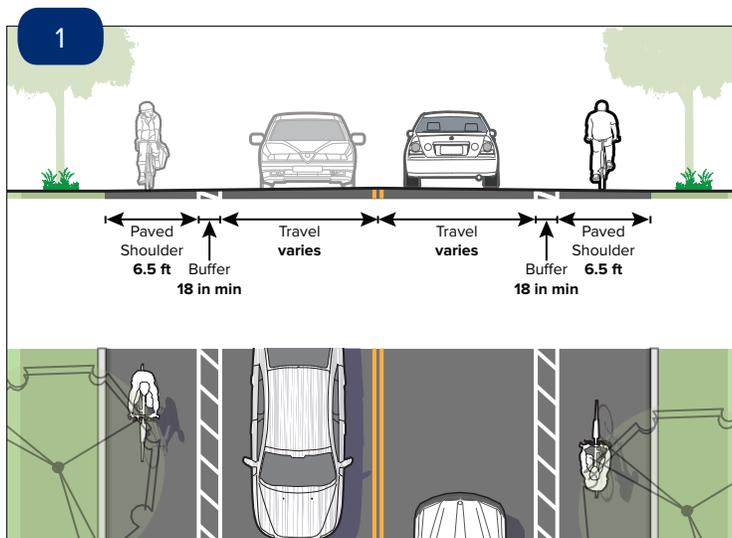
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>1</b>	<b>Keesville to Plattsburgh: State Bike Route 9</b>	9.7	Paved Shoulders
<b>1A</b>	<b>Au Sable Chasm</b>	n/a	Trailhead

# 1 KEESVILLE TO PLATTSBURGH: STATE BIKE ROUTE 9

The Empire State Trail proposes to follow existing State Bike Route 9 from Keeseville into Plattsburgh at Nevada Oval. Additional signage is being considered at pinch points.



Narrow segment under railroad, just north of Valcour Blvd; existing sidepath begins at Nevada Oval.



Keeseville to Plattsburgh (no curb and gutter).

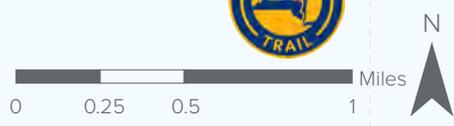
# 1A AUSABLE CHASM

Additional trailhead amenities such as a kiosk and Empire State Trail markers are proposed at the Ausable Chasm trailhead.



**REGION 7 SECTION 3: NETWORK**

- Existing Paved Shoulder
- Existing Shared-Use Path/Sidepath
- Existing Bike Lane
- Existing Shared Roadway
- Proposed Bike Lane
- Proposed Shared Roadway (with sidewalk)
- Proposed Shared-Use Path
- + Intersection



## INSET MAP 3: PLATTSBURGH

The focal point of this area is around the Plattsburgh Marina on Lake Champlain. A series of on- and off-road improvements are recommended to provide continuity for the EST.

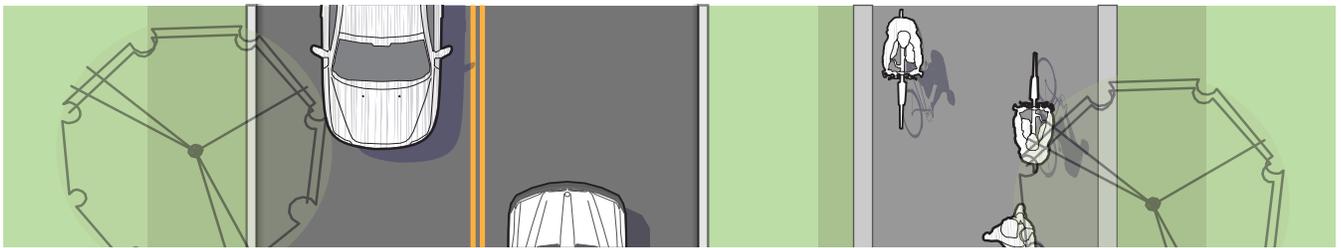
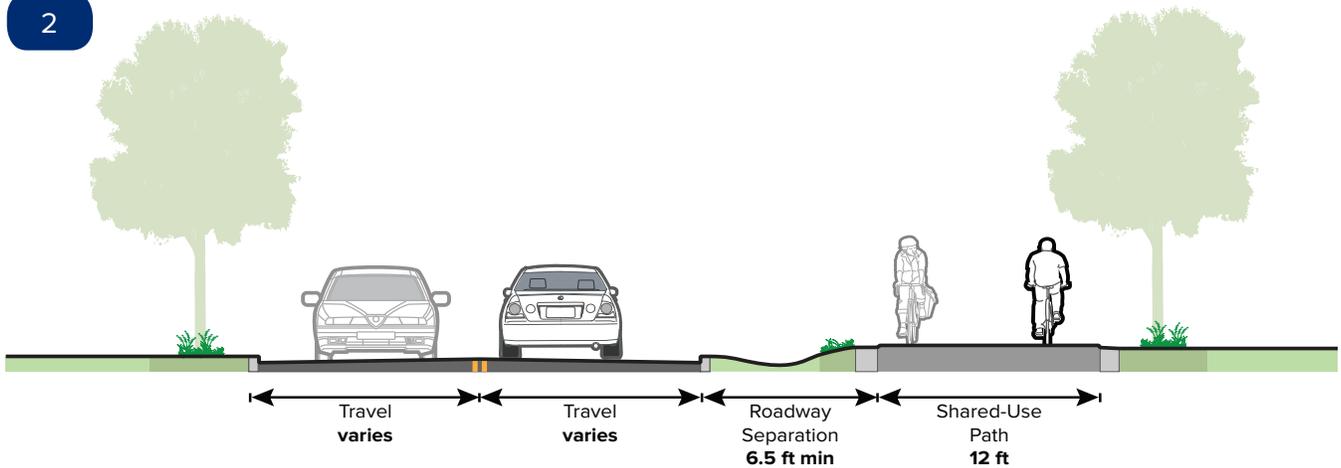
Table 22: Region 7 Inset Map 3 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
<b>2</b>	<b>Plattsburgh - Terry Gordon Path Connection</b>	0.1	Shared-Use Path
<b>3B</b>	<b>Plattsburgh - Cumberland Ave</b>	0.6	Shared Roadway
<b>4</b>	<b>Plattsburgh - Rt 9/Rt 314 Intersection</b>	n/a	Intersection Improvements
<b>5</b>	<b>Plattsburgh - Route 9 Road Diet</b>	0.6	Bike Lanes (with road diet)

## 2 TERRY GORDON BIKE PATH

The existing Terry Gordon Bike Path provides an opportunity for a more comfortable “all ages and abilities” ride via Nevada Oval south of downtown Plattsburgh. With the proposed connection between the trail and Route 9, trail users would have the option to take the scenic route instead of the existing Route 9 sidepath.

2



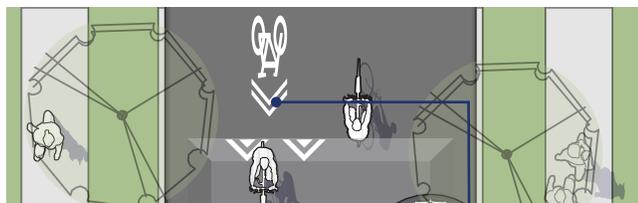
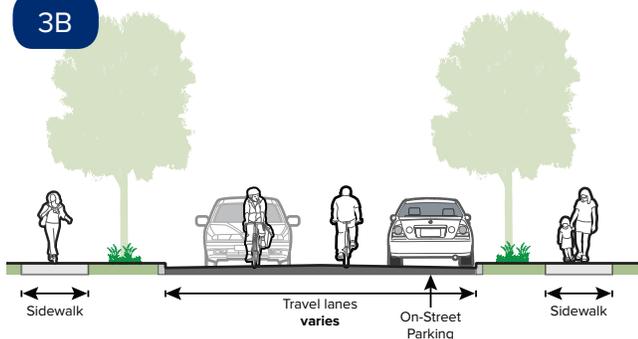
Trail users would have option to take scenic route instead of Route 9 sidepath.



### 3B CUMBERLAND AVENUE

A proposed shared roadway on Cumberland Avenue will give more visibility to trail users. The sidewalks in this area will accommodate pedestrians as part of the Empire State Trail.

3B



Plattsburgh Shared Roadway.

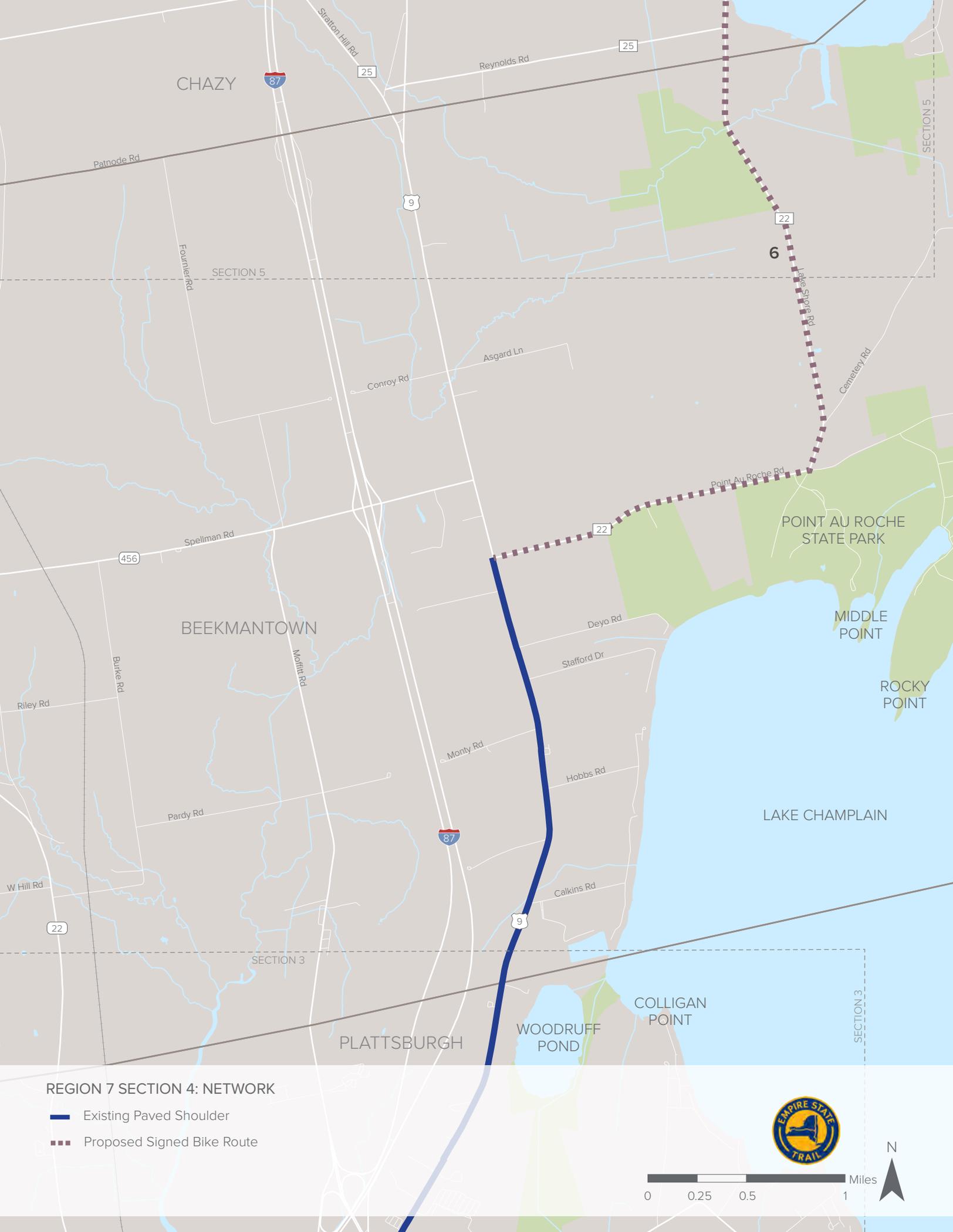
*Shared lane markings recommended; Not required.*

### 4 ROUTE 314 INTERSECTION IMPROVEMENTS

Route 314/Route 9 intersection is a complicated intersection with many modes mixing and crossing each other. Further traffic and engineering studies are required before determining a precise improvement for the EST users.

### 5 ROUTE 9 BIKE LANES AND ROAD DIET

The recently completed road diet is proposed to continue from Scotion Avenue north through the Route 314 intersection to Cumberland 12 Cinemas. Bike lanes are recommended as part of the road diet to accommodate cyclists as part of the Empire State Trail.



CHAZY



25

25

Patnode Rd

Reynolds Rd

9

Fountain Rd

SECTION 5

22

6

Lake Shore Rd

Conroy Rd

Asgard Ln

Cemetery Rd

Spellman Rd

456

22

Point Au Roche Rd

POINT AU ROCHE STATE PARK

BEEKMANTOWN

Deyo Rd

MIDDLE POINT

ROCKY POINT

Riley Rd

Burke Rd

Montic Rd

Stafford Dr

Monty Rd

Hobbs Rd

LAKE CHAMPLAIN

Pardy Rd



22

Calkins Rd

SECTION 3

PLATTSBURGH

WOODRUFF POND

COLLIGAN POINT

SECTION 3

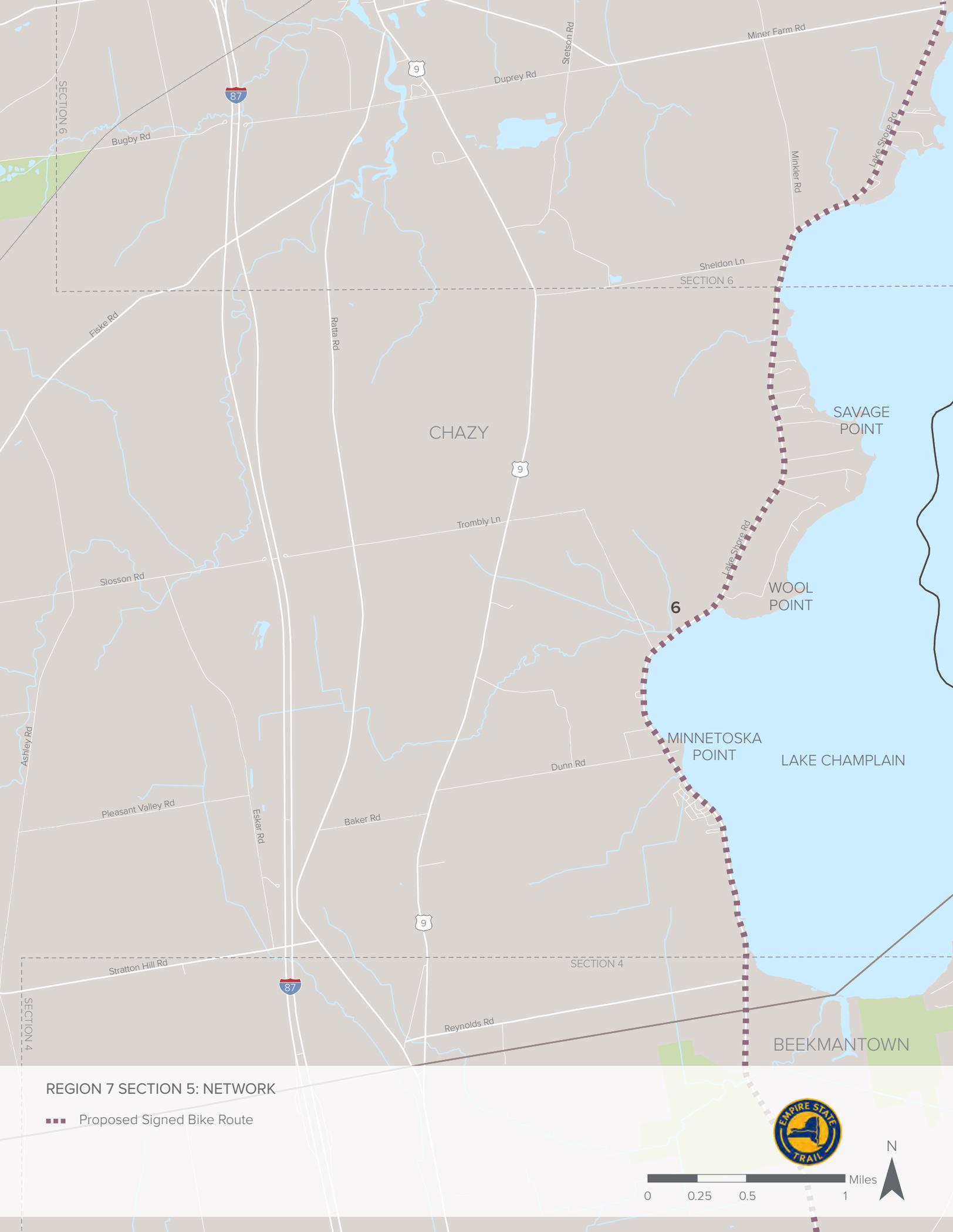
REGION 7 SECTION 4: NETWORK

- Existing Paved Shoulder
- Proposed Signed Bike Route



N

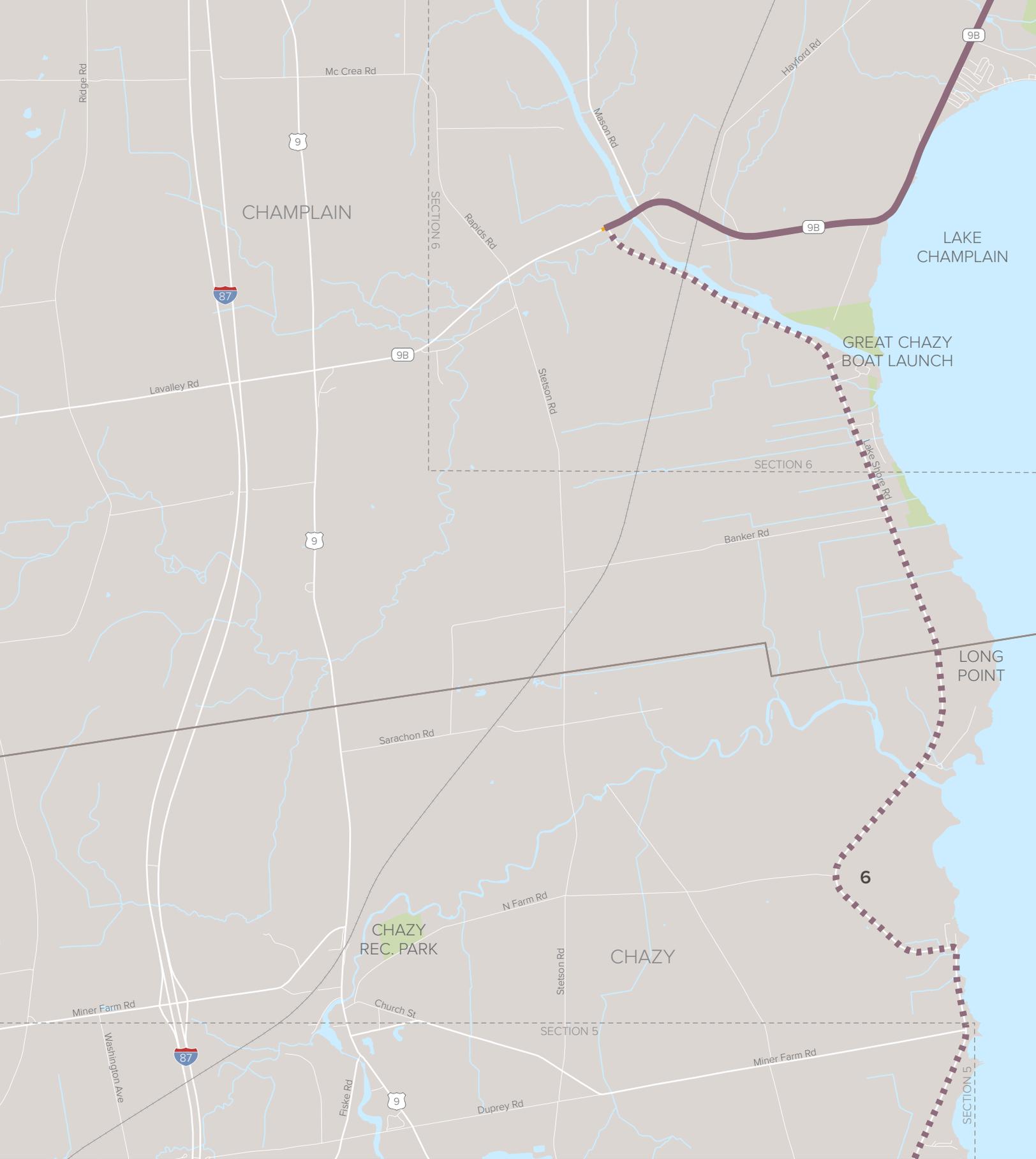




REGION 7 SECTION 5: NETWORK

■■■ Proposed Signed Bike Route





**REGION 7 SECTION 6: NETWORK**

-  Existing Signed Bike Route
-  Proposed Signed Bike Route



# INSET MAP 4-6: POINT AU ROCHE

Lake Shore Road near Point Au Roche carries about 500 vehicles per day. The existing Bike Route 9 is signed for paved shoulders alongside about 4,000 vehicles per day. Moving the route closer to the lake improves the view and reduces the exposure to vehicular traffic.

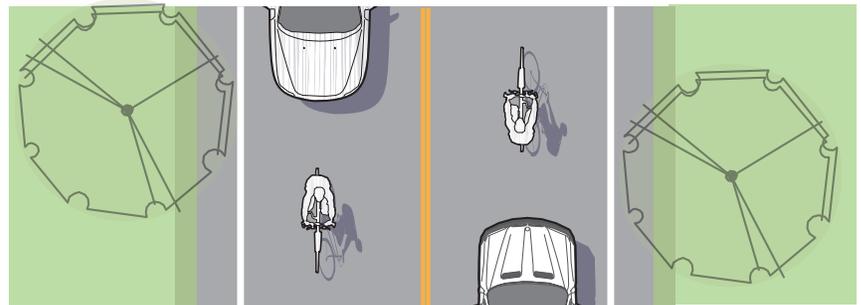
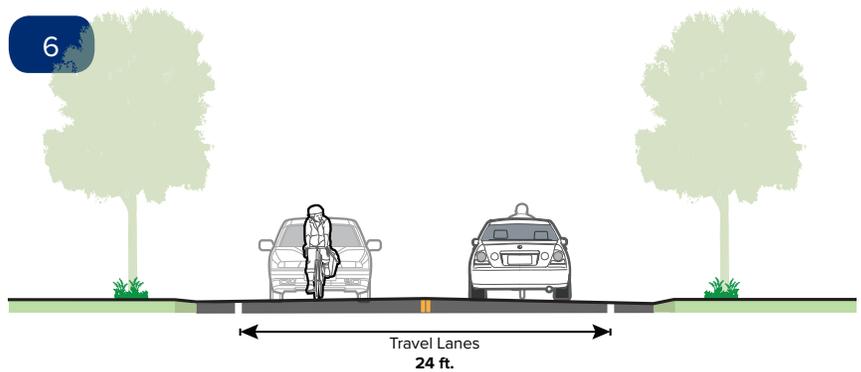
There are notable pinch points at two bridges: Great Chazy River and the railroad overpass at Coopersville.

Table 23: Region 7 Inset Maps 4-6 Preferred Route and Costs

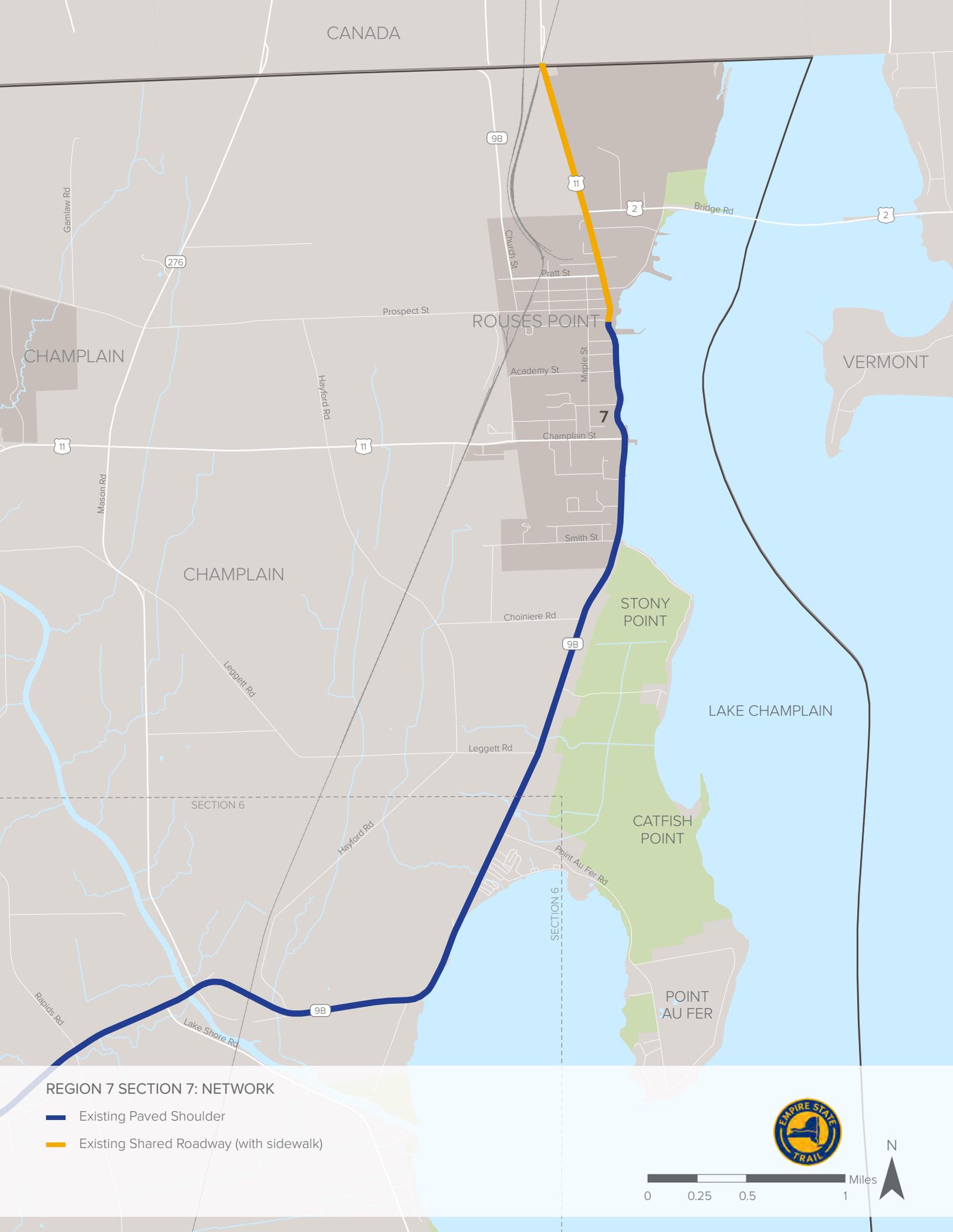
SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
6	Point Au Roche - Lake Shore Road	14.7	Signed Bike Route

**6 POINT AU ROCHE**

The Empire State Trail is proposed to depart from the existing State Bike Route 9 to follow a new signed bike route using Route 22/Lake Shore Road to Route 9B/Lake Street at Coopersville. Lake Shore Road has lower traffic volumes with less than 500 vehicles per day and is closer to Lake Champlain.



Signed Bike Route Cross-Section



REGION 7 SECTION 7: NETWORK

- Existing Paved Shoulder
- Existing Shared Roadway (with sidewalk)



# INSET MAP 7: ROUSES POINT

Rouses Point is New York’s northernmost village. As a gateway to and from Canada, visibility of the Empire State Trail through signage and a trailhead will be important.

Table 24: Region 7 Inset Map 7 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
7	Route 11 Intersection	n/a	Intersection
8	Rouses Point to Border	6.9	Shared Roadway

## 7 ROUTE 11 INTERSECTION

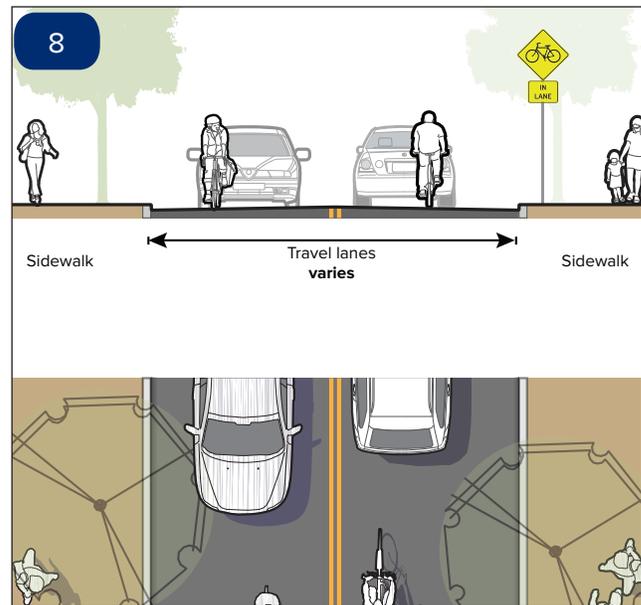
The intersection of Route 11 at 9B needs to be improved for pedestrians and bicyclists. The northwest corner (gas station) is the most obvious opportunity for improving safety conditions for all travel modes. Widening the sidewalk, installing a “pork chop” island, and adding crosswalks and pavement markings are recommended.



Wide SB right turn at gas station; close Lake St access point to gas station.

## 8 ROUSES POINT - BORDER

The preferred EST route follows a shared roadway on Route 9B from Rouses Point to the Canadian border.



Shared Roadway.

# REGION 8

## INTRODUCTION

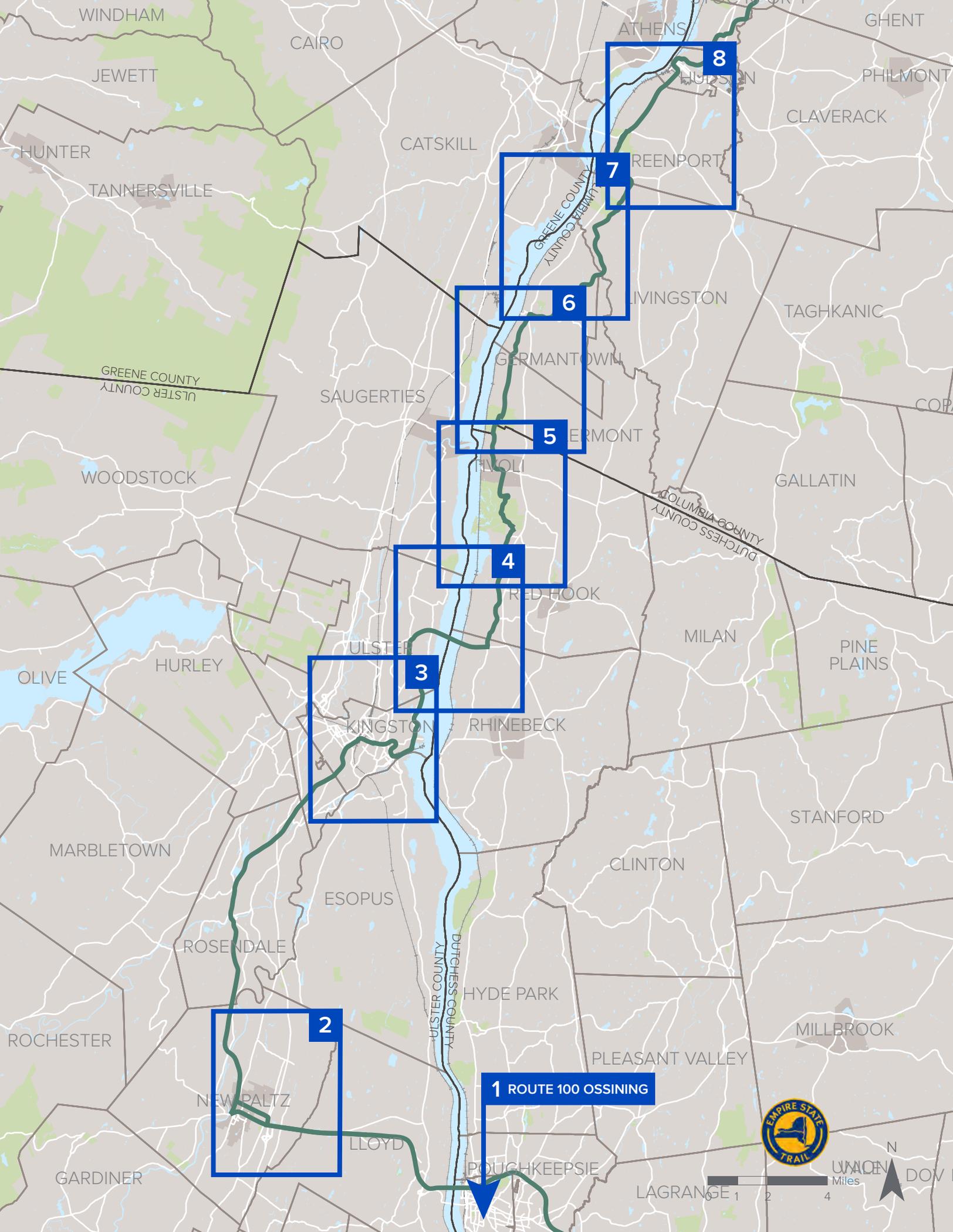
NYS DOT Region 8 hugs the Hudson River from New Paltz in the south to Hudson in the north. This corridor has relatively high demand for walking and biking as it intersects several towns. The surrounding land uses will provide a varied experience, ranging from city or village centers, to quiet residential streets, to rural roads surrounded by wooded areas and farmland.

The EST route through Region 8 utilizes several existing and programmed facilities, such as the existing Wallkill Trail from New Paltz to Kingston, the planned two-way separated bike lane through Kingston's downtown, the access road through Tivoli Bays, and an existing off-street trail in Hudson.

The proposed projects connecting these facilities maintain the highest possible level of comfort with bike lanes, marked shared roadways, yield roadways, advisory shoulders, and paved shoulders, while remaining feasible within New York State's timeline and budget.

Seven overview maps were generated to show recommendations in detail. \$18 to \$20 million of Empire State Trail funds will be invested in closing these gaps in Region 8.

**This area has relatively high demand for walking and biking as it intersects several town centers. The surrounding land uses will provide a varied experience, ranging from city or village centers, to quiet residential streets, to rural roads surrounded by wooded areas and farmland.**



8

7

6

5

4

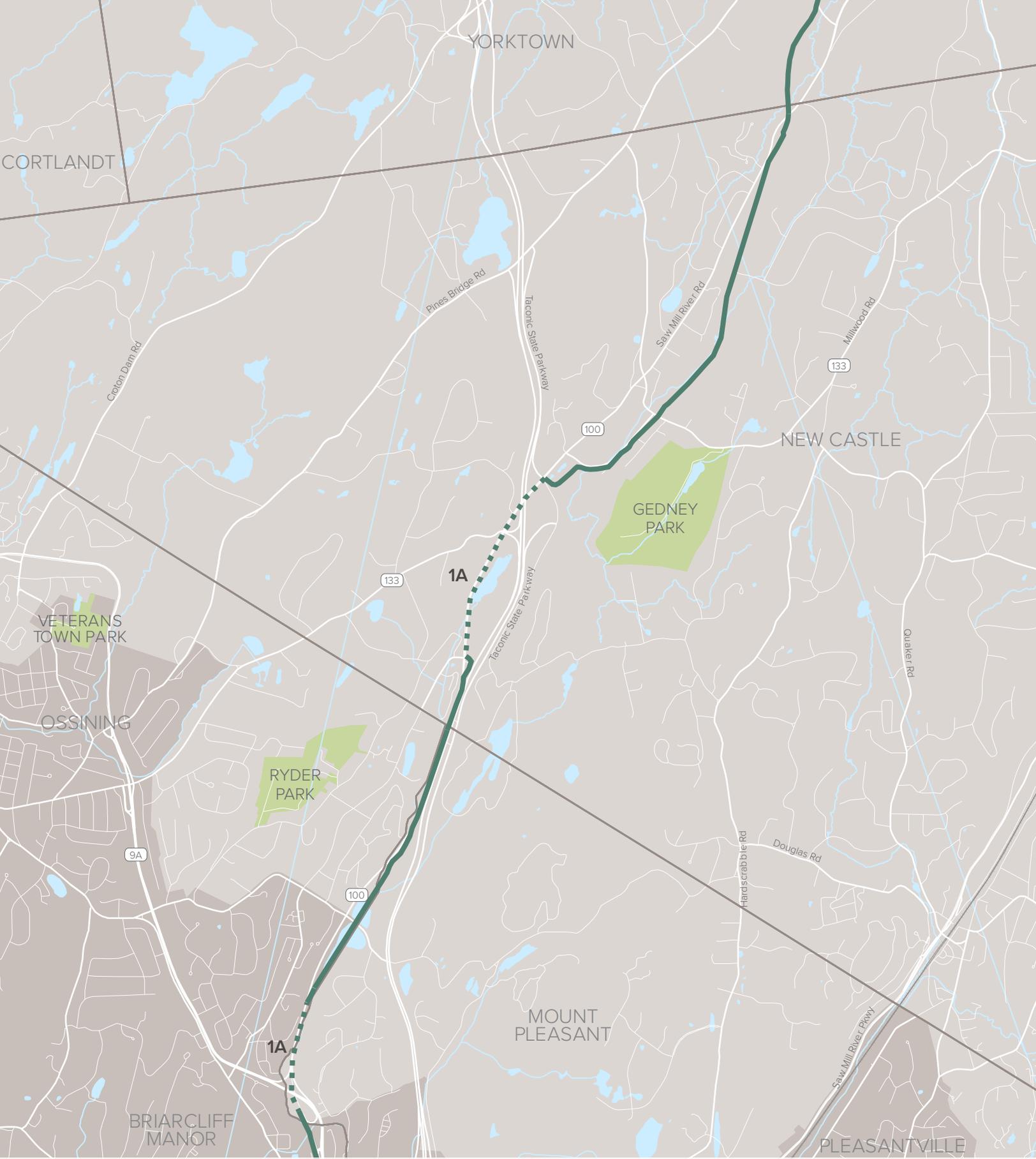
3

2

1 ROUTE 100 OSSINING



Scale bar showing 0, 1, 2, 4 Miles



**REGION 8 SECTION 1: NETWORK**

- Existing Sidepath/Shared-Use Path
- Proposed Sidepath/Shared-Use Path



# INSET MAP 1: OSSINING

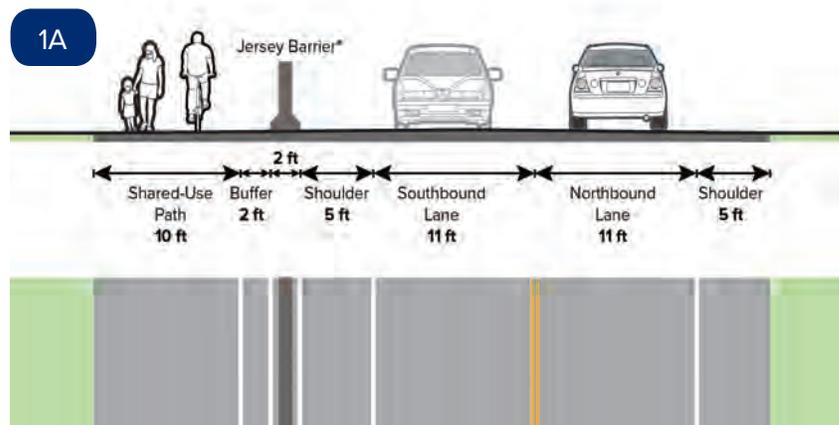
The EST is recommended to follow the North County Trailway along Route 100. There are two existing on-road segments in the area of Ossining, Mount Pleasant, New Castle, and Braircliff Manor.

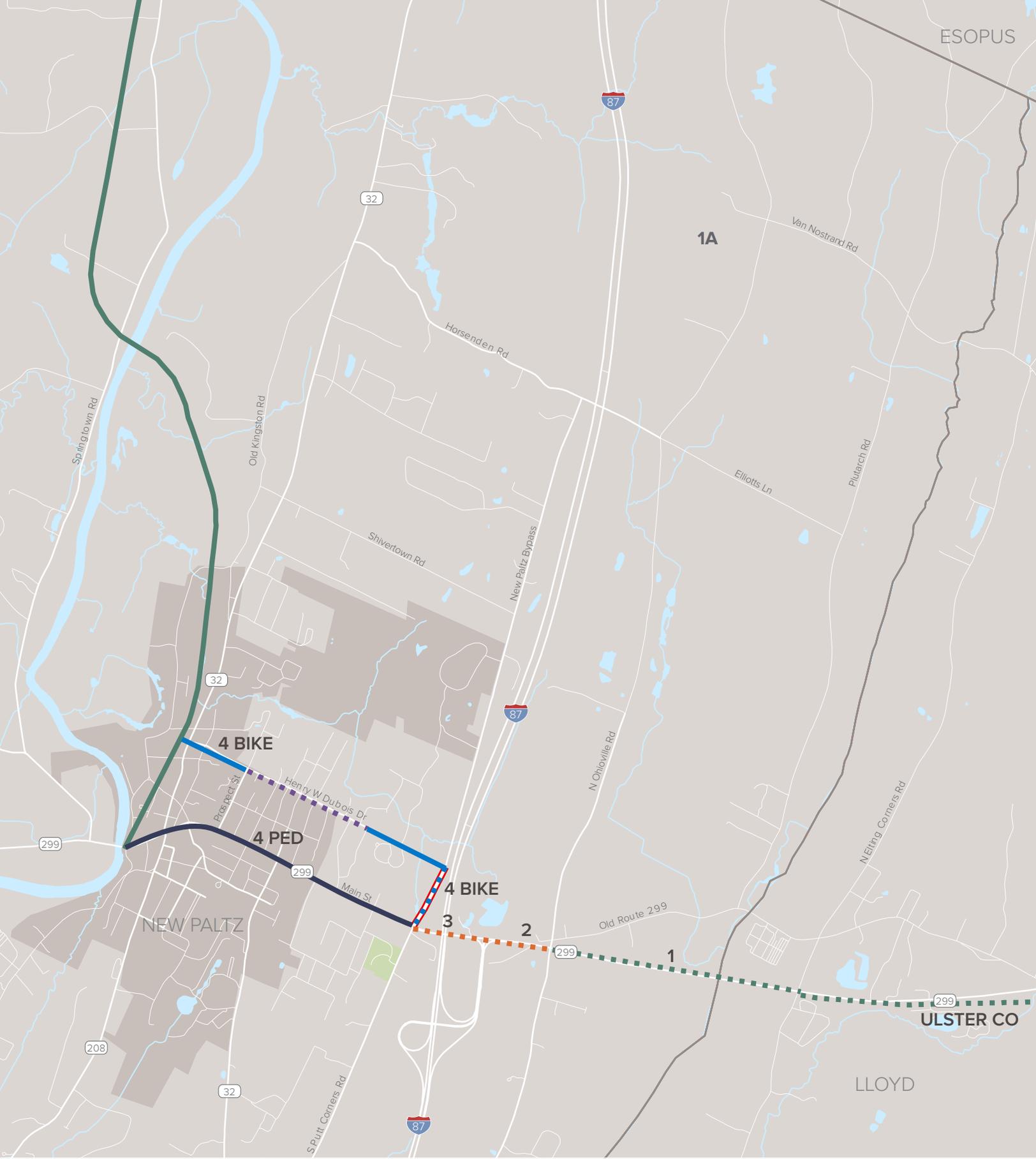
Table 25: Region 8 Inset Map 1 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
1A	North County Trail Realignment	1.5	Sidepath

## 1A NORTH COUNTY TRAIL REALIGNMENT

The North County Trail follows Route 100. For two sections, less than one mile each, the North County Trail utilizes the shoulders of Route 100. The proposed project will create a separated sidepath along the roadway and reduce the number of crossings of Route 100. Existing pavement width will be reallocated to provide the shared-use path. The width and type of separation is still to be determined.





**REGION 8 SECTION 2: NETWORK**

- Existing Bike Lanes
- Proposed Bike Lanes
- Existing Sidepath/Shared-Use Path
- Proposed Sidepath/Shared-Use Path
- Proposed Separated Bike Lane (Bidirectional)
- Proposed Shared Roadway
- Existing Sidewalk
- Requires Road Widening



## INSET MAP 2: NEW PALTZ

The EST is recommended to follow the proposed Hudson Valley Rail Trail west into New Paltz and connect to Main Street/Route 299. At Ohioville Rd, the trail transitions into a bidirectional separated bike lane, and trail users on foot will use the existing sidewalk.

At Putts Corners Rd, the bike route turns north and is routed parallel to Main Street/Route 299 on Henry W. DuBois Drive, an already popular bike route with existing bike lanes in some places.

Pedestrians will continue straight on Main Street/Route 299 through the commercial area and SUNY New Paltz, and connect to the Wallkill Valley Rail Trail via the existing trailhead.

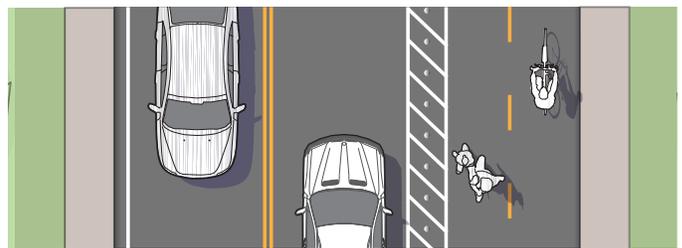
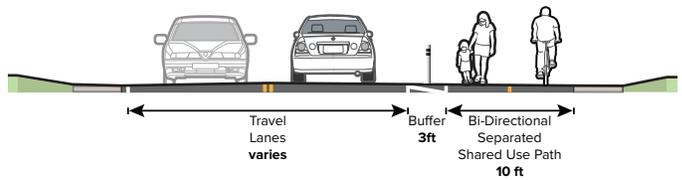
Table 26: Region 8 Inset Map 2 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
1	Hudson Valley Rail Trail - to Ohioville Rd	0.7	Shared-Use Path
2-3	Hudson Valley Rail Trail - South Street	0.6	Sidepath/Separated Bike Lane (Bidirectional)
4	Hudson Valley Rail Trail - New Paltz	0.8	Shared Roadway / Bike Lanes / Sidewalk

**1-3 ROUTE 299**

This portion of the EST includes the proposed Hudson Valley Rail Trail, which will transition to a sidepath on the north side of the road and then to a bi-directional separated bike lane within the existing roadway. Pedestrians will use the existing sidewalk west of Ohioville Rd. This area is important as it provides a crossing over I-87, and ends at the busy intersection of Putt Corners Rd and Main Street/Route 299. From there, pedestrians continue straight along the Main Street existing sidewalk, and bicyclists turn right onto Putt Corners Road.

**3**



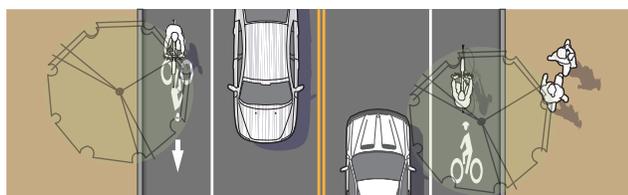
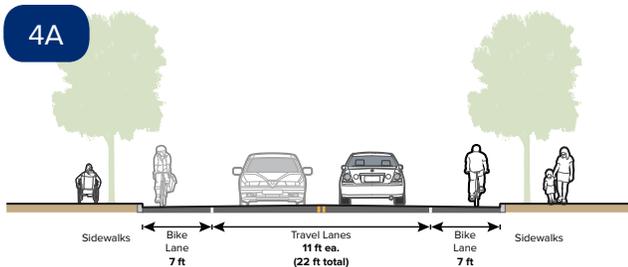
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## PUTT CORNERS ROAD AND HENRY W. DUBOIS DRIVE

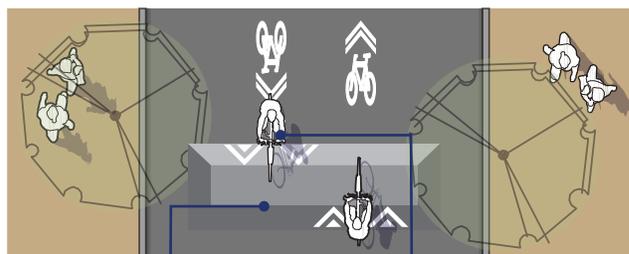
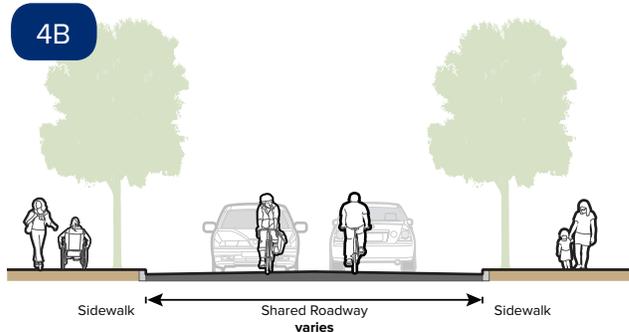
This will accommodate bicycling parallel to the pedestrian route along Main Street. Henry DuBois is currently a popular bike route as it is quiet, has some existing bike lanes, and runs parallel to the more congested Main Street. Proposed improvements may include adding a shoulder along Putt Corners Road to 36 feet, allowing for 7-foot bike lanes and 11-foot travel lanes (see graphic 4A).

Henry W. DuBois Drive improvements include a shared roadway with traffic calming on the middle section of the roadway between Old Mill Road and N Oakwood Terrace. This will connect to existing bike lanes on the eastern and western ends of the roadway (see graphic 4B).

4A



4B



*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

*Shared lane markings recommended; Not required.*



NOTE: Segment funded through other sources

**REGION 8 SECTION 3: NETWORK**

- Proposed Paved Shoulder
- Proposed Shared Roadway (with sidewalk)
- Existing Sidepath/Shared-Use Path
- Proposed Sidepath/Shared-Use Path
- Proposed Shared Roadway
- Proposed Separated Bike Lane (Bidirectional)
- Proposed Contra-Flow Bike Lane
- Proposed Sidewalk
- Requires Road Widening



## INSET MAP 3: KINGSTON

Inset Map 3 shows the connections from the north end of the existing Wallkill Valley Rail Trail to the northern end of the proposed Kingston Promenade Trail. Many of the recommendations align with the City of Kingston's Greenline Plan. New recommendations on State Route 32, Greenkill Ave, Iwo Jima Ln, Cedar St, and

Foxhall Avenue would get people to and through downtown. The Kingston Promenade is being built by the City of Kingston and Ulster County, but NYSDOT will contribute funds from the Empire State Trail to support and expedite their implementation.

Table 27: Region 8 Inset Map 3 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
5 - 10	Wallkill Valley Rail Trail to Kingston Point Rail Trail	1.3	Shared-Use Path/Separated Bike Lane (Bidirectional), Shared Roadway, Contra-Flow Bike Lane
13 & 15	Kingston Point Rail Trail to Kingston Promenade (KP) and KP to Route 32	1.3	Shared Roadway

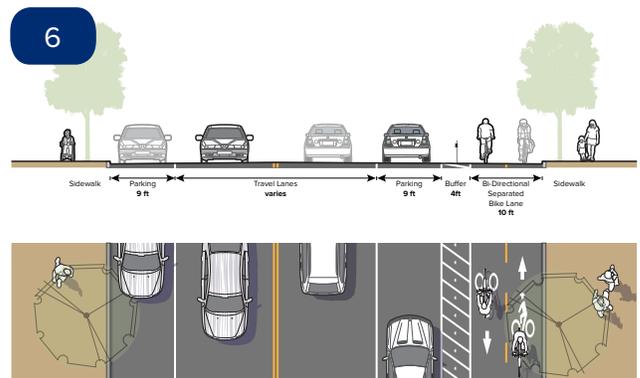
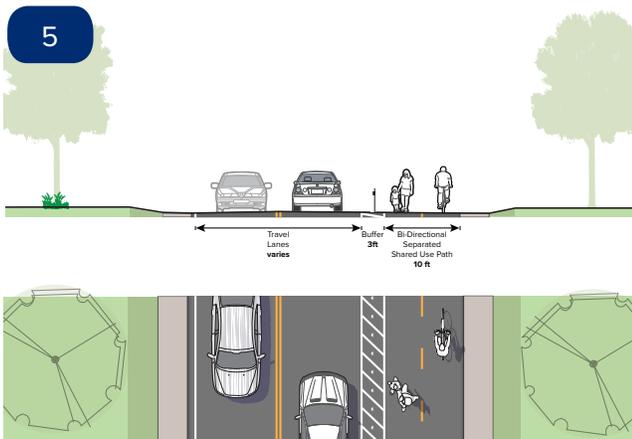
## 5-10 STATE ROUTE 32 TO FOXHALL AVENUE

Recommendations for this portion of the EST are compatible with the Kingston Greenline Plan. The proposal from the end of Wallkill Valley Rail Trail to Greenkill Avenue includes a 3-foot buffer separating the travel lanes from a 10-foot bi-directional separated bike lane, which requires a shoulder addition (see graphic 5).

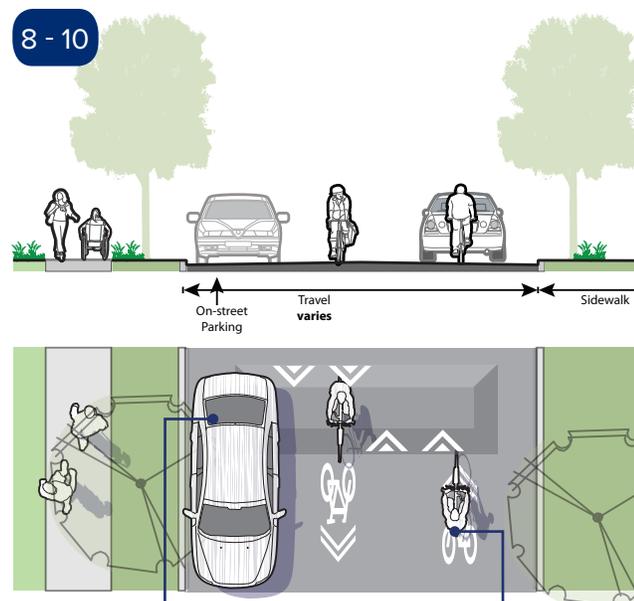
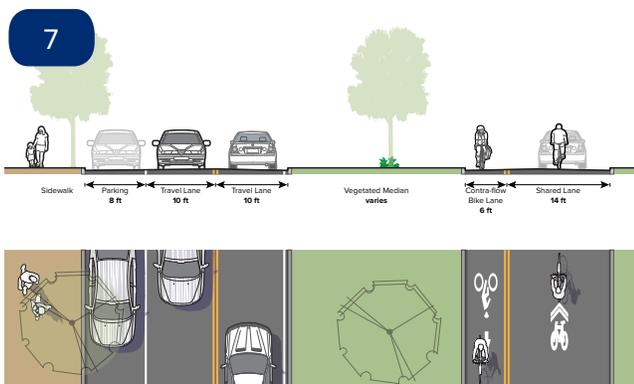
From Route 32, the EST route is proposed to transition to the residential Greenkill Avenue. From Route 32 to Clinton Ave, Greenkill Ave will have a two-way separated bike lane that uses parked cars to protect bicyclists from vehicular traffic (see graphic 6). The bike lane will cross several residential driveways so design strategies like a raised bike lane and pavement markings

can help mitigate conflicts. North of Clinton Street, the trail routes onto the Greenkill Avenue side road, which is converted to one-way with a contraflow bike lane (see graphic 7).

From Greenkill Avenue, users turn onto marked shared roadways along Iwo Jima Lane and then Cedar Street. Cedar Street will connect to a two-way separated bike lane on Broadway being completed by the City of Kingston. From Broadway, the EST will include a series of shared roadway connecting to the proposed Kingston Point Rail Trail on Jensen Avenue. Iwo Jima Lane, Cedar Street, Prince Street, Hasbrouck Ave and Foxhall are shown as shared roadways (see graphic 8).



## 13&15 KINGSTON PROMENADE TO NORTH STREET



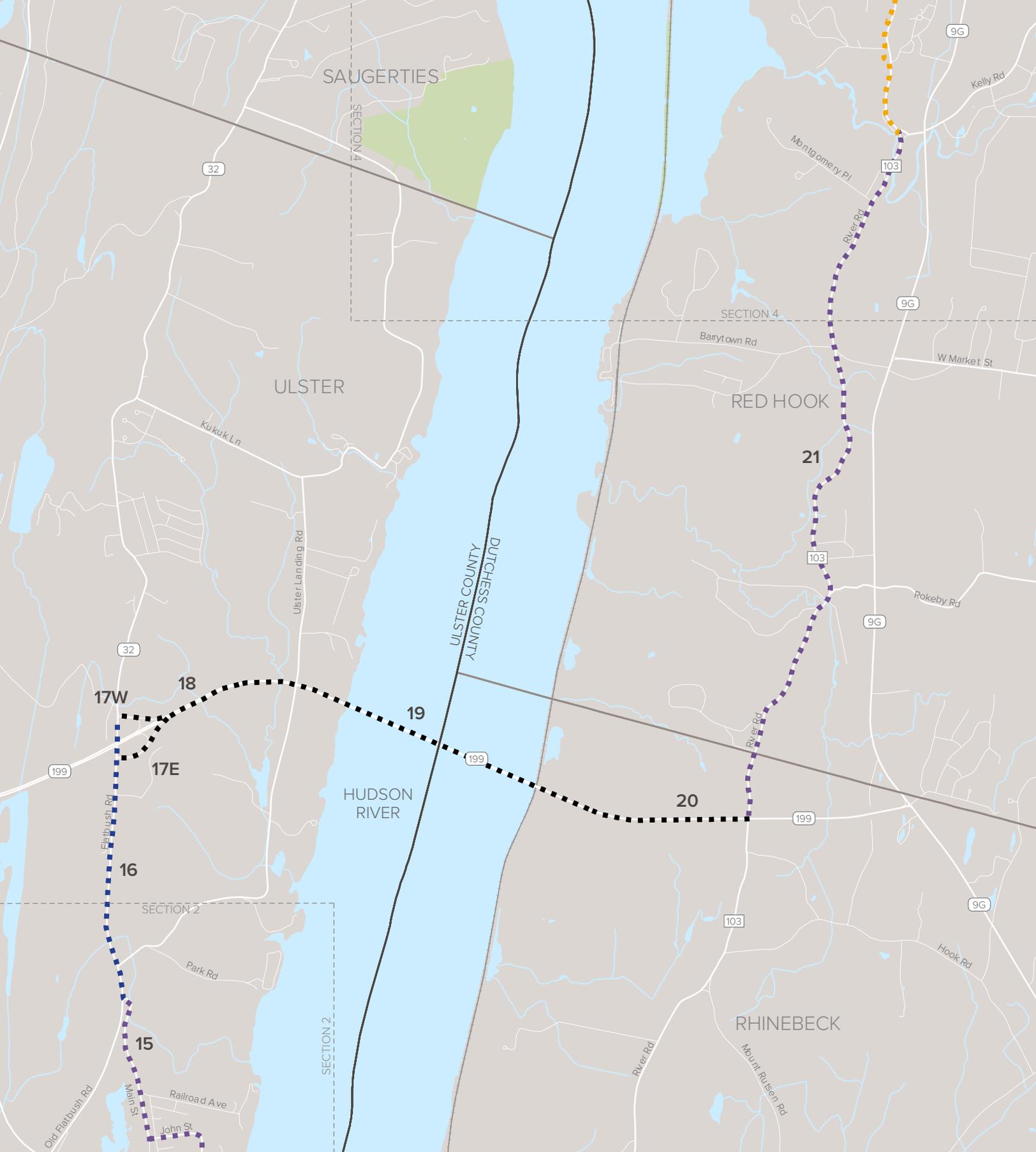
Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.

Shared lane markings recommended; Not required.

The pedestrian route is proposed to follow the railroad, utilizing a proposed five-foot path that extends west along the river to Kingston Point. One of the endpoints is the proposed Kingston Point Rail Trail at the Trolley Museum of New York. From Kingston Point, pedestrian will use on-road connections along Delaware Avenue and North Street to connect to the proposed trailhead of the Kingston Promenade.

The bicycle route to connect the Kingston Promenade is recommended to travel along marked shared roadways on E. Strand Street and North Street to reconnect with the pedestrian route.

The Promenade trail will be evaluated for bicycle use as the design and implementation phases progress. If the trail cannot safely accommodate bicyclists, an alternative route will be determined.



REGION 8 SECTION 4: NETWORK

- - - Proposed Paved Shoulder
- - - Proposed Shared Roadway (with sidewalk)
- - - Proposed Shared Roadway
- - - TBD (BRIDGE AUTHORITY)



## INSET MAP 4: ULSTER TO RED HOOK

Inset Map 4 shows the area where the EST is proposed to transition from the west to the east side of the Hudson River. The crossing uses the Kingston-Rhinecliff bridge, which is owned by the New York State Bridge Authority. On the west side, it connects from the proposed Kingston

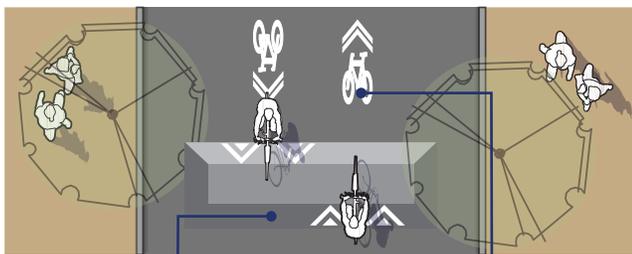
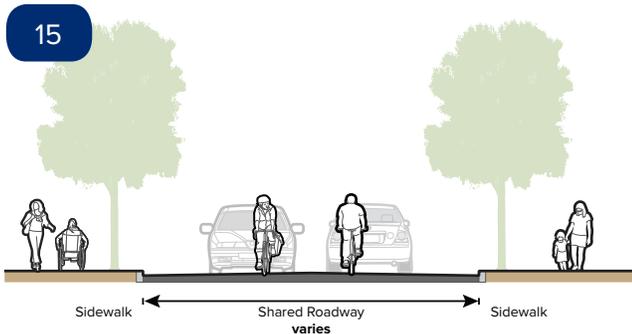
Promenade trail via a shared roadway on John Street and Main Street, and paved shoulders on Flatbush Road/State Route 32. In the east, it continues north on River Rd, a quiet country road with beautiful views that is already popular amongst recreational cyclists.

Table 28: Region 8 Inset Map 4 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
16	Route 32 from Main Street to Route 199	0.6	Paved Shoulder
21-22	River Road/Bard College	4.6	Shared Roadway

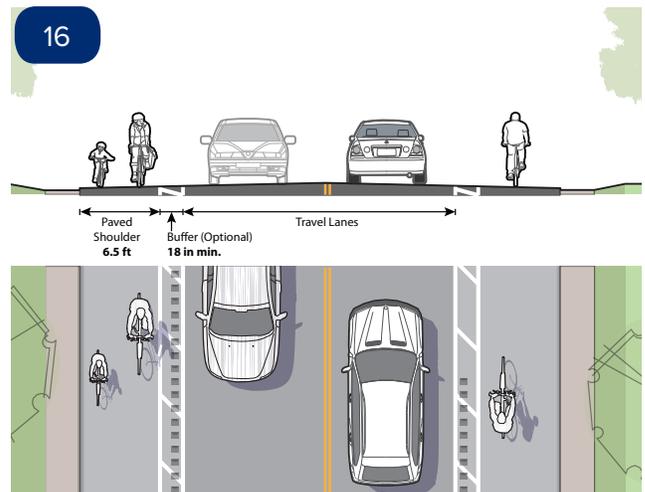
## 15-16 JOHN STREET TO FLATBUSH ROAD

This area covers John Street, Main Street, and Flatbush Road/Route 32 from the northern end of the proposed Kingston Promenade to Route 199. A shared roadway is recommended along John Street and Main Street (see graphic 15). Along Flatbush Road / Route 32, the existing wide shoulders are proposed to be restriped with 18-inch buffers and rumble strips (see graphic 16).



*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

*Shared lane markings recommended; Not required.*



21

## RIVER ROAD

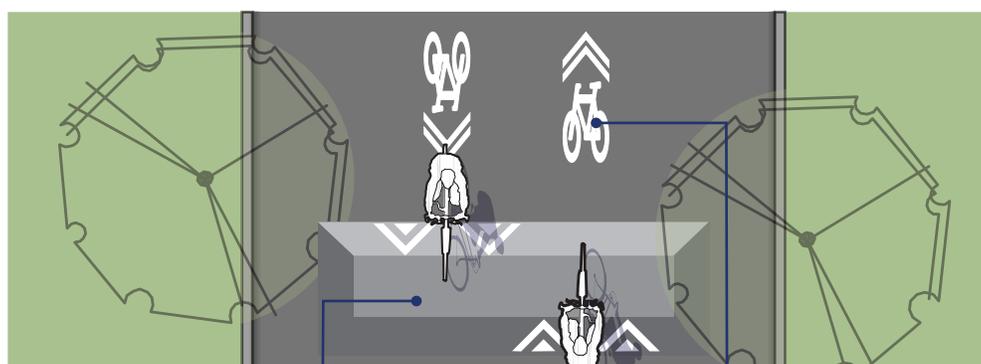
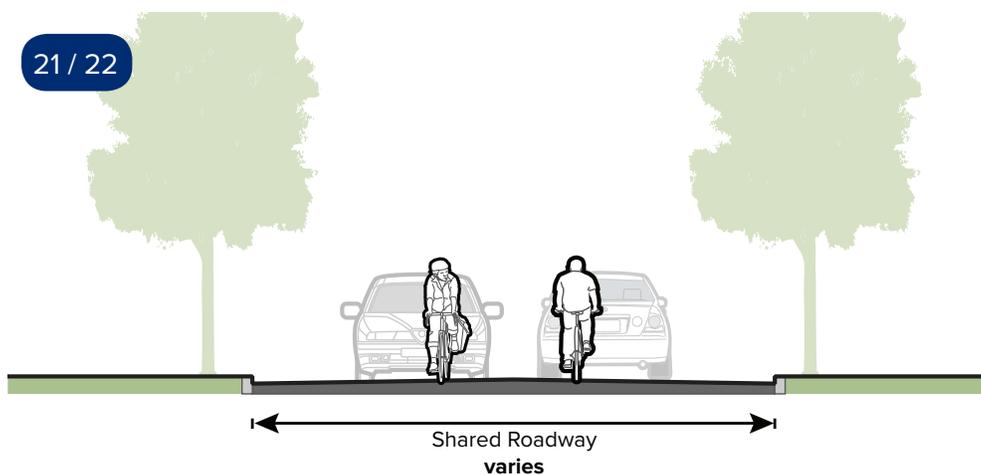
The EST is proposed to be routed from Route 199 to Annandale Road along River Road. River Road is a popular bicycle route today as it is scenic and relatively quiet compared to the parallel Route 9G. The proposed improvements for this section includes a shared roadway with spot traffic calming treatments to keep vehicle speeds low (see graphic 21).

22

## BARD COLLEGE CONNECTION

The EST is proposed through Bard College Campus along Annandale Road from River Road to Tivoli Bays. Annandale Road currently has a path marked as Annandale Path on the west side, but it is not wide enough to accommodate bicyclists and pedestrians, so Annandale Road is recommended as a shared roadway. In the northern end, the route turns onto Robbins Road and connects to the existing access road through Tivoli Bays.

21 / 22



*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

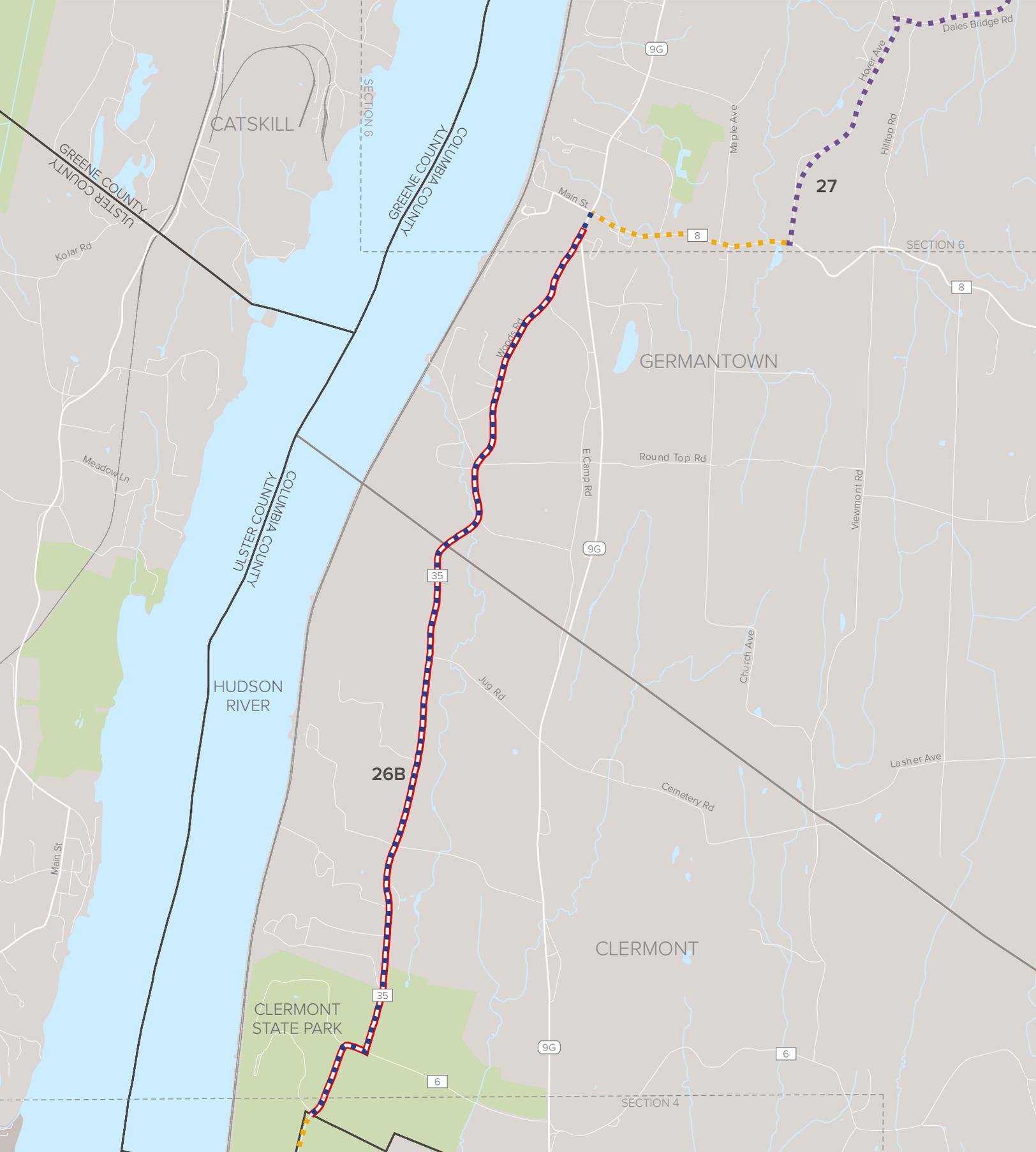
*Shared lane markings recommended; Not required.*



**REGION 8 SECTION 5: NETWORK**

- ■ ■ Proposed Paved Shoulder
- Existing Sidepath/Shared-Use Path
- ■ ■ Proposed Shared Roadway (with sidewalk)
- ■ ■ Proposed Shared Roadway

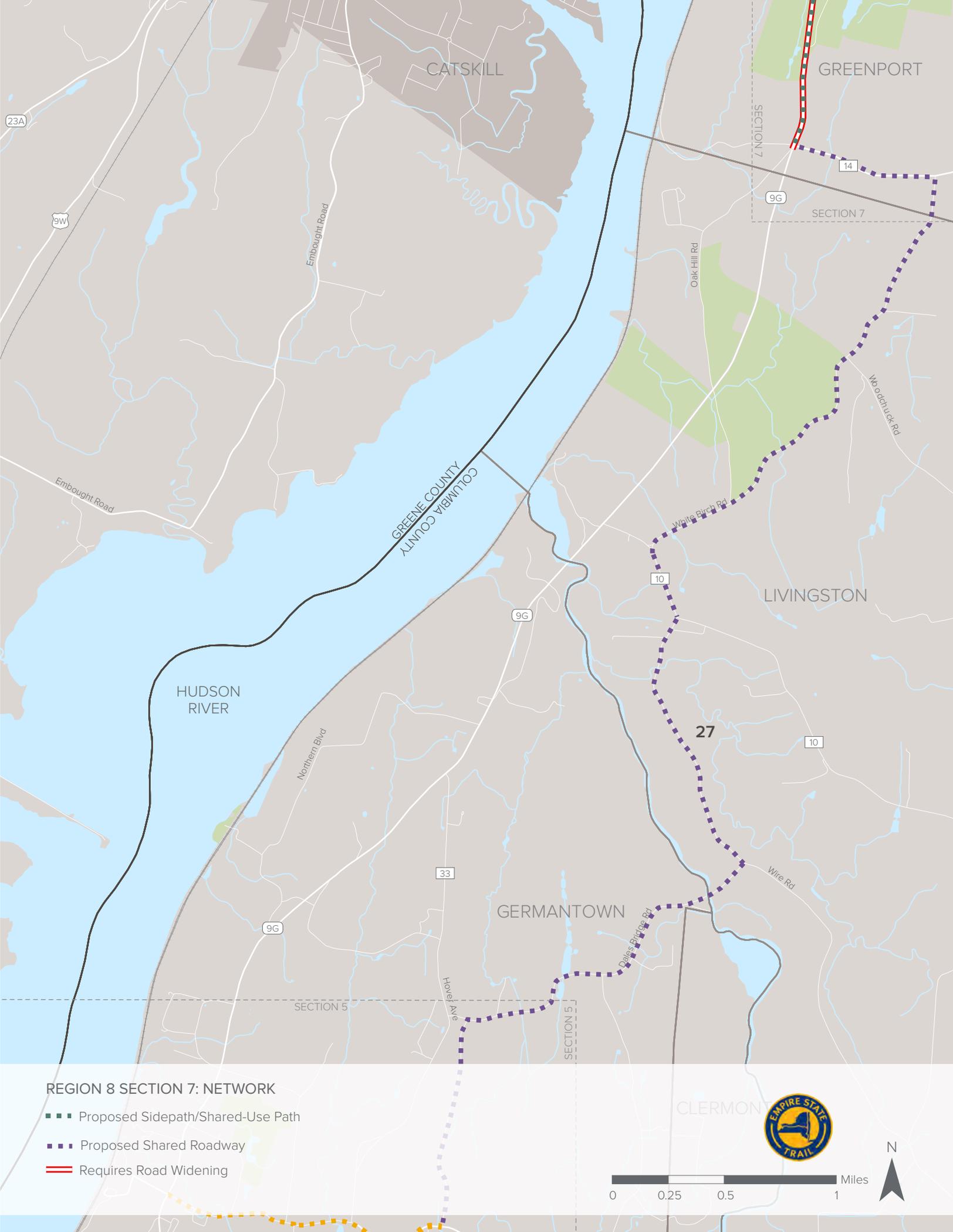




**REGION 8 SECTION 6: NETWORK**

- Proposed Paved Shoulder
- Proposed Shared Roadway (with sidewalk)
- Proposed Shared Roadway
- Requires Road Widening





CATSKILL

GREENPORT

HUDSON RIVER

GREENE COUNTY  
LIVINGSTON COUNTY

LIVINGSTON

GERMANTOWN

CLERMONT

REGION 8 SECTION 7: NETWORK

- ■ ■ Proposed Sidepath/Shared-Use Path
- ■ ■ Proposed Shared Roadway
- == Requires Road Widening



## INSET MAP 5: BARD COLLEGE TO TIVOLI

Inset map 5 shows the area through Bard College and Tivoli. River Road connects to proposed shared roadway on Annandale Road, where there is a sidewalk marked as the Annandale Path that pedestrians will use. This existing path does not meet AASHTO requirements for a shared-use path so bicyclists will ride in Annandale Road. That

road travels through Bard College and connects to an access road through Tivoli Bays.

To the north, the EST extends along Kidd Lane, Montgomery Street, and Broadway and connects to the next segment along Woods Rd.

## INSET MAP 6: CLERMONT TO GERMANTOWN

Inset map 6 shows the majority of the Woods Road EST route, with the very southern portion shown in map 4. Woods Road is similar to River Road in that it is a scenic, quiet county route.

Woods Road may be widened to include paved shoulders due to preferences of Columbia County that county routes include centerlines and fog lines.

## INSET MAP 7: GERMANTOWN TO OLANA

Map 7 shows the county and village roads used to connect Germantown to Olana. This route diverts trail users from 9G, which would require a

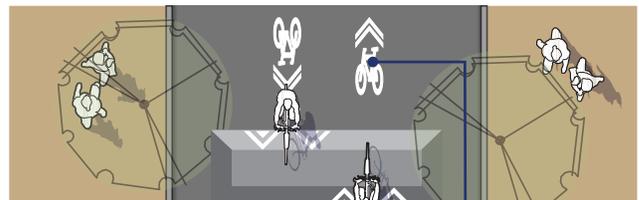
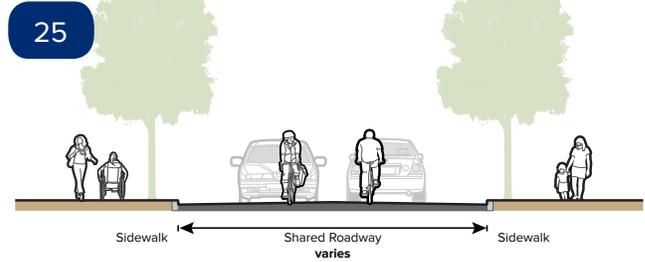
significant shoulder addition and grading work in order to accommodate trail users. The route takes users on shared roadways and paved shoulders.

Table 28: Region 8 Inset Map 5-7 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
24-26	Tivoli Bays to Dutchess Line: Woods Road	2.2	Shared Roadway
26B	Columbia Co Line to 9G: Woods Road	4.9	Shared Roadway/Paved Shoulder
27	9G/Route 8 to 9G/Route 14: local/county roads	8.3	Shared Roadway/Paved Shoulder

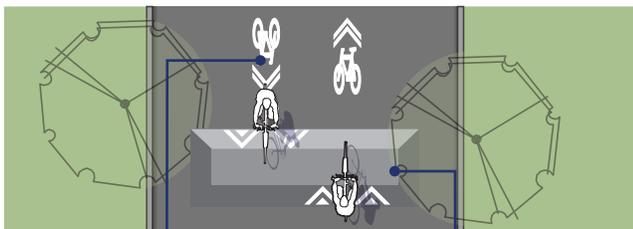
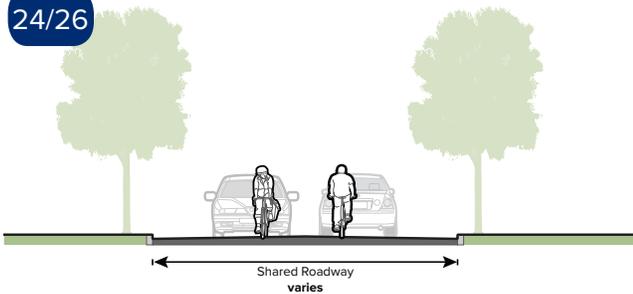
**24-26 TIVOLI BAYS TO DUTCHESS LINE: WOODS ROAD**

This portion is routed from Tivoli Bays to the Dutchess County Line along Kidd Lane, Montgomery Street, Broadway and Woods Road. Kidd Lane and Montgomery Street are residential in character and Broadway serves as the main street for Tivoli. The proposal along Kidd Lane is shared roadways without sidewalks (see graphic 24). Montgomery Street and Broadway are proposed as shared roadways and have existing sidewalks (see graphic 25). Woods Road in Dutchess County is also recommended as a shared roadway for bicyclists and pedestrians.



*Shared lane markings recommended; Not required.*

24/26



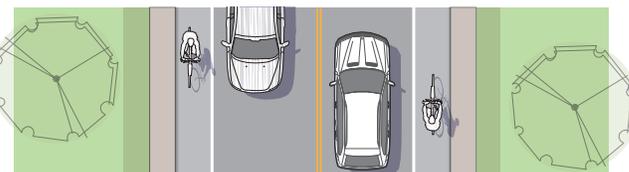
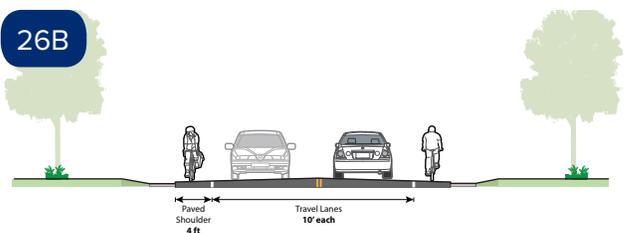
*Shared lane markings recommended; Not required.*

*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

**26B WOODS ROAD (COLUMBIA COUNTY)**

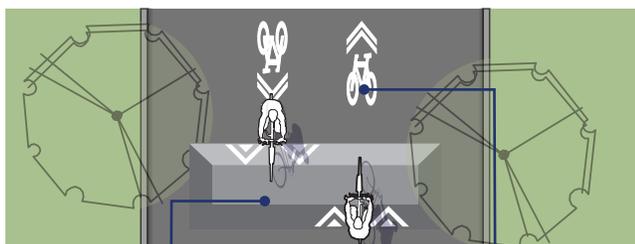
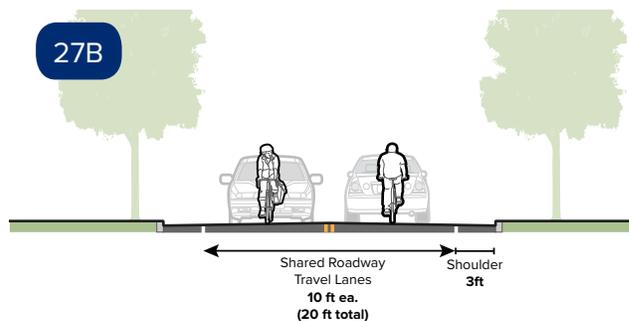
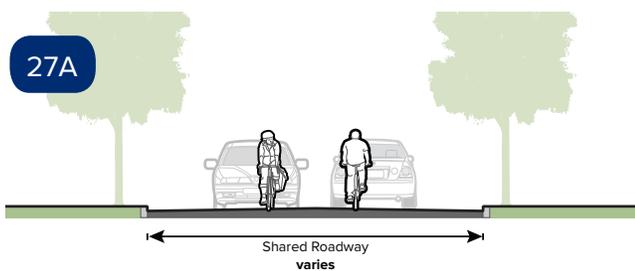
Woods Road in Columbia County is proposed as a paved shoulder for bicyclists and pedestrians, which requires widening the existing shoulder along Woods Road. This approach complies with Columbia County's preference to keep centerlines and fog lines.

26B



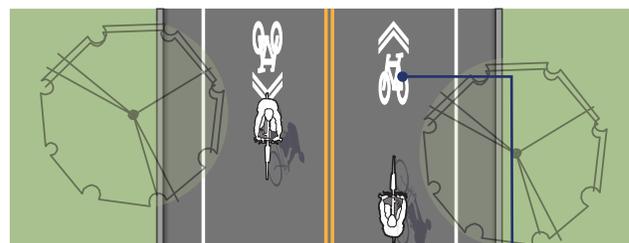
## 27 GERMANTOWN TO OLANA

This route circumvents the more direct route along 9G, which is closer to the Hudson River but would be significantly more expensive due to widening requirements and grading challenges. All town and village roads are recommended to have a typical shared roadway design (see graphic 27A). County roads are proposed as shared roadways with three-foot shoulders (see graphic 27B).

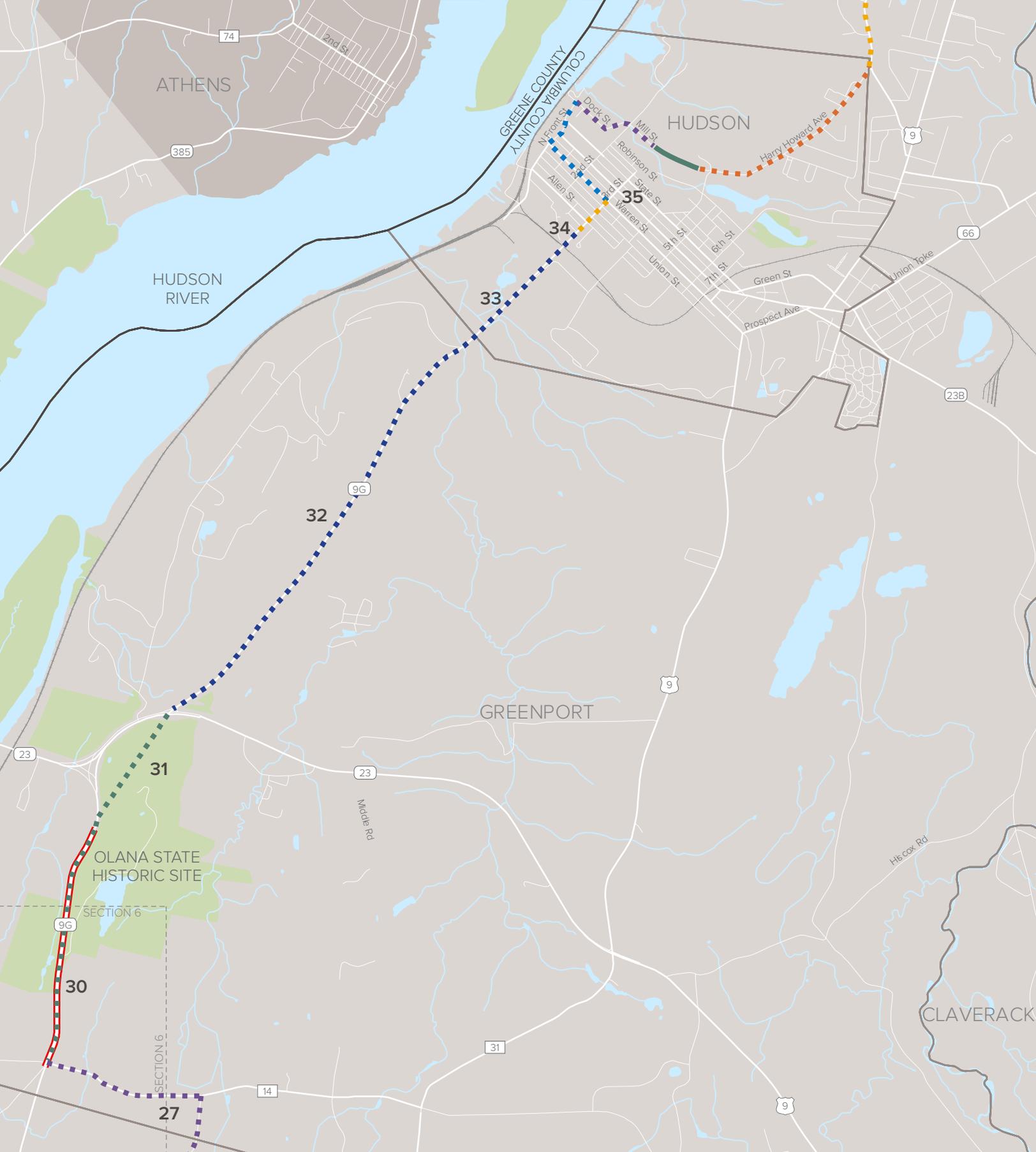


*Traffic calming features, if installed, should be context sensitive and varied, including vertical and horizontal deflection.*

*Shared lane markings recommended; Not required.*



*Shared lane markings recommended; Not required.*



**REGION 8 SECTION 8: NETWORK**

- Proposed Paved Shoulder
- Proposed Shared Roadway (with sidewalk)
- Proposed Sidepath/Shared-Use Path
- Existing Sidepath/Shared-Use Path
- Proposed Separated Bike Lane (Bidirectional)
- Proposed Bike Lane
- Proposed Shared Roadway
- Requires Road Widening



# INSET MAP 8: OLANA TO HUDSON

Inset Map 8 shows the connection from the Olana Historic Site into Hudson, and the connection to the Albany-Hudson Electric Trail (AHET Trail).

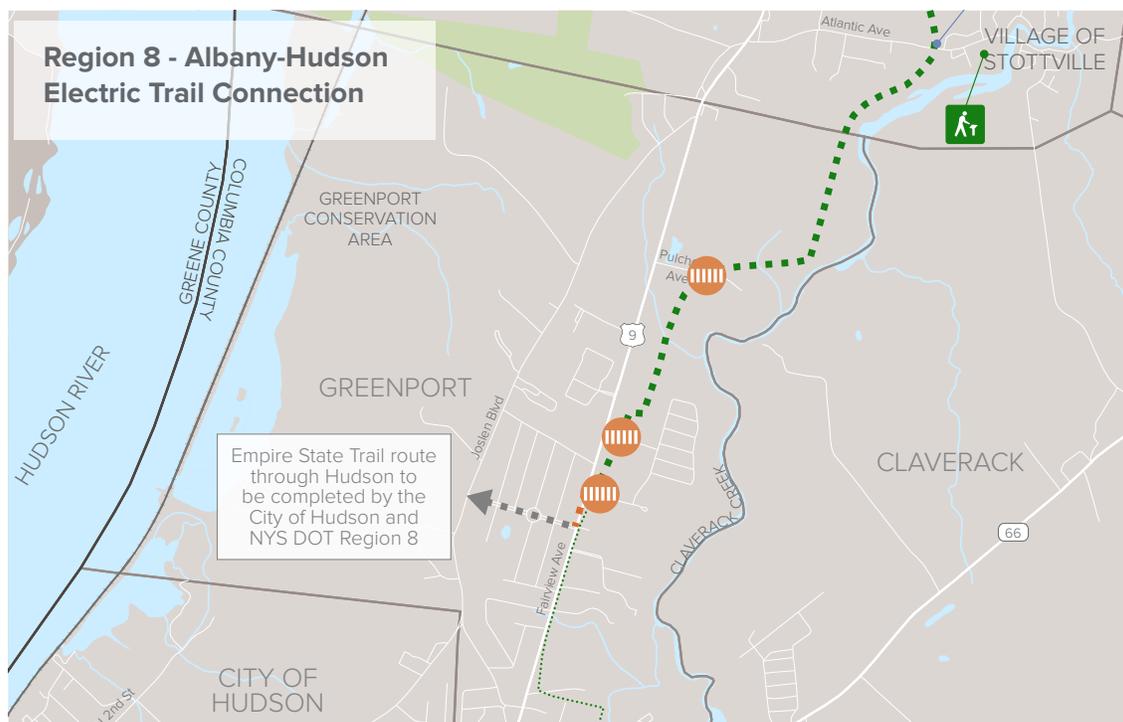
This portion is proposed to include a bi-directional separated bike lane along a short portion of Route 9G, which turns into a shared-use path that runs along the old 9G alignment. Coordination with the Skywalk Improvement Projects is on-going.

The EST continues through Hudson along marked shared roadways until it connects to an existing asphalt path on Mill Street that brings users to Harry Howard Avenue. Coordination with the City's Downtown Revitalization Initiative (DRI) projects is also on-going to determine the optimal alignment for the EST through Hudson.

The Empire State Trail will connect to the AHET Trail at the intersection of Livingston Avenue and Route 9.

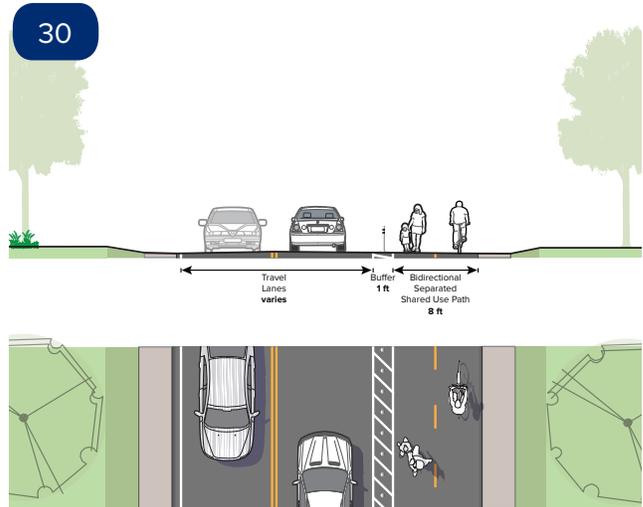
Table 30: Region 8 Inset Map 8 Preferred Route and Costs

SEGMENT	NAME	LENGTH (MI)	FACILITY TYPE
30-32	9G to Hudson: 9G, Olana Path, Route 23	4.2	Shared-Use Path / Shared Roadway
32-36	Hudson to AHET Trail: Warren St, Harry Howard, Joslen Blvd	3.1	Shared-Use Path / Bike Lanes / Separated Bike Lane (Bidirectional) / Shared Roadway



### 30-31 OLANA HISTORIC SITE / ROUTE 23 INTERCHANGE

A 10-foot bi-directional separated bike lane with a three-foot buffer from vehicular traffic is proposed from Route 14 until the Olana State Historic Site. Before the 9G/Route 23 interchange, the trail diverts onto a sidepath which runs along the old roadway alignment through the Olana State Historic Site. The specifications for this sidepath will also include a bicycle and pedestrian at-grade crossing at Route 23 on the northern end of the sidepath to reconnect with Route 9G. Coordination with the Skywalk Improvement Projects is on-going and may result in changes to this alignment.





## 32 ROUTE 9G

The corridor from Route 23 to the railroad tracks just southwest of Hudson will need minor shoulder improvements to accommodate a paved shoulder. The improvements consist of spot widening towards the northern end of the segment.

## 33-36 WARREN ST TO JOSLEN BOULEVARD

The Empire State Trail Route will follow S. 3rd St to Warren St using existing sidewalks and shared lanes. Following Warren St to the west and along N. Front St, bike lanes are proposed. A shared roadway is recommended along Dock Street to connect to the shared-use path connecting to Harry Howard Ave. A bi-directional separated bike lane is proposed along Harry Howard Ave. A proposed sidewalk along the west side of Joselyn Blvd will extend the sidewalk to Livingston Avenue and connect to the walk/bike roadway to the Albany-Hudson Electric Trail along Route 9.

