

# Eastern Monroe Active Transportation Plan



Final Draft: November 2020

**Prepared by**

McMahon Associates, Inc.

**In association with**

Monroe County Planning Commission



Eastern Monroe

# Active Transportation Plan



**Final Draft: November 2020**

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# 1 | Project Overview



## Introduction

The Eastern Monroe Active Transportation Plan explores opportunities to connect and raise awareness of the existing regional active transportation network, while identifying ways to improve pedestrian infrastructure and expand public transit service in Eastern Monroe County Pennsylvania.

Development of this plan will assist in the establishment of straightforward policies for decision making throughout the region with respect to enhancing and increasing access to recreational, economic, and cultural destinations through safe activity-friendly routes.

The Monroe County Planning Commission (MCPC) secured funding for the Eastern Monroe Active Transportation Plan through the 2020 Walk Works Program, with a grant provided by the Pennsylvania Department of Health in partnership with the University of Pittsburgh Center for Public Health Practice.

Data collection, compilation and mapping for this project was performed in-house and MCPC staff worked closely with McMahan Associates, Inc. and the project steering committee, to analyze data and develop the recommendations included in this plan.

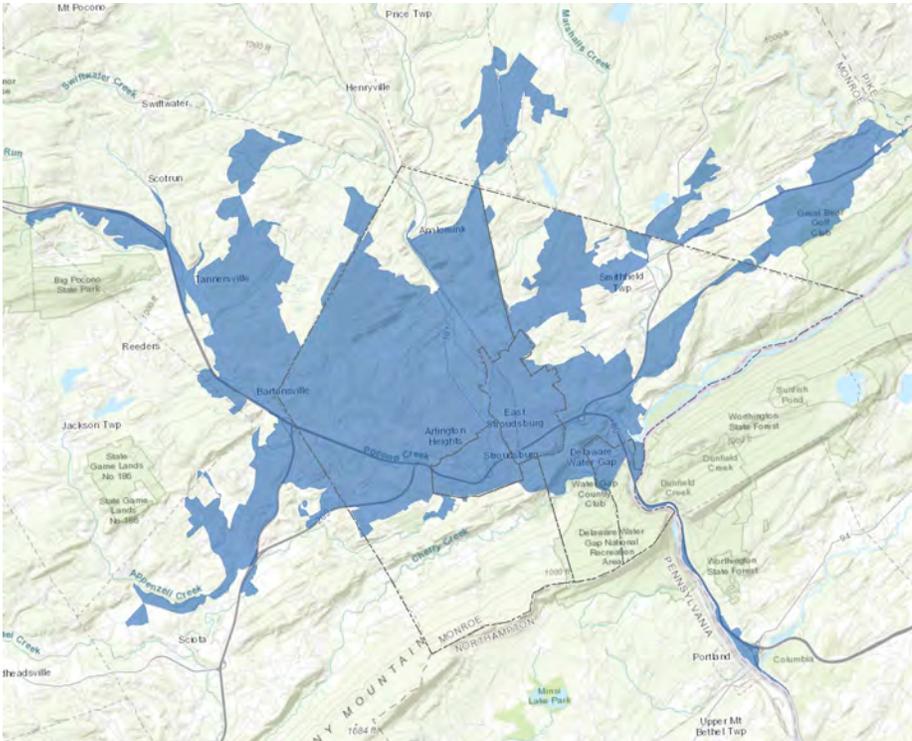
## Background

When determining the project study area MCPC staff analyzed the demographics of the recently designated East Stroudsburg Urbanized Area (ESUA).

The results of the 2010 Census established the urbanized area which affects ten of Monroe County's twenty municipalities; portions of seven townships, along with three boroughs. The 2010 Census indicated that the ESUA contained a population of 54,316 persons.

The most recent American Community Survey (ACS) 2017 5-Year Estimate indicates that the ESUA is estimated to contain a population of 54,035 persons with a household median income of \$57,577. The ACS 2017 5-Year

## US Census 2010: Map of East Stroudsburg Urbanized Area



Estimate also estimates that 77.9% of employed persons, residing within the ESUA, commute to work in a car/truck/van alone.

The ESUA contains a vast number of economic, civic, and cultural destinations. St. Luke's Hospital Monroe Campus, Lehigh Valley Hospital Pocono Campus, as well as a considerable number of personal health care practices and urgent care facilities, are located within the ESUA.

A large number of educational facilities, including East Stroudsburg University, East Stroudsburg Area School District, and Stroudsburg Area School District facilities, are spread throughout the ESUA. Also, areas of mixed-use, high-density housing, single-family housing neighborhoods, commercial corridors, and downtown-main street business district development currently exists within the ESUA.

The road network connecting these areas includes Interstate 80, US Route 209 and PA State Route 33, as well as several other state routes; this includes PA State Route 611, which currently serves as the main corridor for public transit services provided by the Monroe County Transit Authority.

### Eastern Monroe

Several urban and environmentally focused plans of regional significance, with respect to the ESUA, were taken into consideration while determining a study focus area with the greatest potential to increase connectivity to everyday destinations.

The Eastern Monroe Active Transportation Plan focuses on the core of the urban area where BUS 209, SR 209, SR 611, SR 191 and SR 447 converge into the I-80 corridor. The study defines the Eastern Monroe Region as, the

Boroughs of Delaware Water Gap, East Stroudsburg, Stroudsburg, and the Townships of Smithfield and Stroud.

## Previous Plans and Studies

### County Plans

#### Monroe County Comprehensive Plan Update; 2014

Adopted in December of 2014, the County Comprehensive Plan is a document that lays out the goals and challenges of planning for the next 10 years. The plan update makes recommendations for land use, infrastructure, economic development, housing, energy, roadscape, advocacy, and arts and culture. The plan is supplemented by two other documents that specifically address economic development (The Economic Development and Implementation Plan) and open space/recreation (Open Space, Greenway, and Recreation Plan). The plan identifies several community development objectives consistent with the concepts of regional Active Transportation Planning.

- Support infill development that is compact, conserves land, is integrated with existing or planned infrastructure, and results in **well-designed neighborhoods that are walkable and bikeable and connect to village centers.**
- **Provide efficient infrastructure that allows for transportation choice,** provision of wastewater management and drinking water supply for higher density development and green infrastructure in appropriate growth areas, and expansion of service consistent with approved comprehensive plans and implementing ordinances.
- **Maintain and improve recreational and heritage assets** and resources to provide recreational and cultural opportunities for residents and visitors.
- Support multi-municipal, county, and regional planning that has public input and support that is consistent with the above noted objectives.

#### Monroe County Open Space and Recreation Plan; 2001 & 2014 Update

In 2001, the first Monroe County Open Space and Recreation Plan was adopted as an initiative of the county's comprehensive planning process. Over the next decade, the county focused on implementation of the goals identified in this plan by offering funding to municipal and nonprofit conservation partners, for projects that supported protection of the county's green infrastructure. Funding was provided by two open space bond referendums, totaling \$36M, allowing the county to offer grant programs for regional planning, education, promotion and land acquisition. The county's investment helped leverage an additional \$78M, in matching funds, to protect roughly 20,000 acres of land.

Following 13 years of collaborative efforts focused on protection of natural resources, the 2014 Update to the Monroe County Open Space and Recreation Plan, focused on inventory, analysis, and re-evaluating the goals for the county. The updated plan made recommendations to further explore funding opportunities, and continue to focus on developing

partnerships. It also made recommendations for the next steps for planning and promotion of the county's natural resources, with a strong focus on strategic conservation efforts that create interconnected greenways, and provide public access to protected lands.

## Regional Plans

### **I-80 Reconstruction Project: MPMS ID: 76357**

The Pennsylvania Department of Transportation (PennDOT), in cooperation with Federal Highway Administration (FHWA), is in the design process for the Interstate 80 Reconstruction Project (I-80 Project) in eastern Monroe County. This project begins in the Stroudsburg area and includes 3.5 miles of roadway reconstruction, widening, and interchange reconfiguration as the first stage of widening the highway, and eventually the highway widening will be extended further west towards the I-380 interchange. The roadway in this region serves as a major carrier of local and regional commuter traffic; local, regional, and national freight; and local and regional tourism. The project corridor serves as a gateway to the Pocono resort areas as well as the Delaware Water Gap National Recreational Area. The project corridor passes through three municipalities within Monroe County: Stroud Township and the Boroughs of East Stroudsburg and Stroudsburg. Although final design has not been completed at this time, it has been acknowledged that pedestrian considerations are being incorporated into the project; sidewalk/crosswalk repair and development, interchange improvements, signals, and signage will aim to improve the pedestrian environment in the project area.

### **Interstate 80 Exit 308 Reconstruction Project: MPMS ID: 57921**

In addition to the I-80 Project, the Interstate 80 Exit 308 interchange will also undergo a complete reconstruction project. Although the project is driven by several highway transportation criteria, it is understood that several pedestrian accommodations will be considered within the project design. Most notably, improving and expanding the safety and efficiency of sidewalks and crosswalk connections along Prospect Street.

## I-80 Project Area Map



Source: [www.i80project.com](http://www.i80project.com)

## HSPS Multi-Municipal Comprehensive Plan; 2005

In 2005 the Multi-Municipal Comprehensive Plan for Hamilton Township, Stroud Township, Pocono Township and Stroudsburg Borough identified the region as HSPS. This joint comprehensive land use planning effort was initiated because of the recognized need to examine overall planning for the area in light of development trends and pressures in the region.

The plan aimed to determine common goals and objectives for land use, transportation, community facilities and services, housing, economic development, natural, scenic, historic and cultural resources. It recognized the County's Comprehensive Plan (Monroe 2020); and built upon the regional open space and recreation plans adopted for the municipalities in the Region.

Since its adoption there has been significant development pressures along the 611 corridor, particularly in the Bartonsville area in Stroud Township. One example of successful implementation of the pedestrian transportation component of the plan being the installation of sidewalks throughout this area, as required as part of the land development approval process.

The HSPS Regional Comprehensive Plan is currently in the process of being updated with the involvement of the Monroe County Planning Commission and a private consultant. A substantial grant from DCED and matched funding from the county has been secured and the process is anticipated to be completed in 2021. Addressing transportation issues will be a major component of the plan update, as congestion and both motorist and pedestrian safety have become foremost concerns along the 611 corridor due to development pressures.

## Stroud Area Regional Open Space and Recreation Plan; 2002

Stroud Area Regional Open Space and Recreation Plan was prepared in 2002 for the Stroud Township, and the Boroughs of Stroudsburg and East Stroudsburg. Funding for the plan was secured through the Monroe County Open Space Program and was matched with funds from the PA Department of Recreation and Conservation. The vision for the plan was;

*Stroud area residents and visitors will have access to safe walking and biking linkages, connecting destination points, through a system of greenways and open space properties, extending through a variety of landscapes that produce opportunities for art, culture, and recreation.*

The plan explored a variety of strategies and identified goals in regards to land protection, transportation, facilities, programs, funding and partnerships.

One of the most significant recommendations of this plan was to formalize a regional partnership to support the collective open space, park and recreation initiatives. Once the plan was finalized the three municipalities partnered with the region's two school districts and entered into an intergovernmental cooperative agreement; forming the Stroud Region Open Space and Recreation Commission (SROSRC).



With the regional open space and recreation plan as their guiding document, SROSRC, in partnership with the municipalities, county and local nonprofit conservation groups, has worked to explore the feasibility of greenway and trail projects throughout the Stroud region. The multi-municipal organization also works to provide service to the community by maintaining recreational facilities and providing programs.

Among the many other recommendations of the Stroud Area Regional Open Space and Recreation Plan, there are a few in particular that align with objectives of Active Transportation Planning.

- Create diversity in greenway linkages by connecting urban streetscapes, scenic road corridors, abandon rail lines, natural resources, and open spaces and cultural resources.
- Improve and expand access to neighborhood and community parks.
- Provide safe and accessible routes of travel for pedestrian, bicyclist and individuals with disabilities.
- Increase resident’s awareness of current open space conservation efforts, available recreation activities and facilities and volunteer opportunities.

### **Stroud Region Trail Gap Analysis; 2019**

In 2016 SROSRC decided it was time to further explore the opportunities for an interconnected regional trail network through a detailed trail gap analysis. Funding for the study was secured by a grant from the PA Department of Recreation and Conservation and matched by an in kind donation of professional mapping services, through a partnership with the Monroe County Planning Commission.

The study team began with an evaluation of the region’s previous trail and greenway planning initiatives. During this review base mapping was created to inventory the region’s current resource in relation to the recommendations made by each of the following plans;

- Glen to Glen Feasibility Study, 2013
- Terra Greens and Glen Brook Regional Parks Master Site Plan, 2008
- Stroud Region Levee Loop Trail Masterplan, 2005
- The Stroud Area Regional Open Space and Recreation Plan, 2002
- Brodhead, McMichael, and Pocono Creeks Greenways Plan, 2002
- Eastern Monroe Open Space and Recreation Plan, 2002
- The Greenway Project Feasibility Study; Stroudsburg to Delaware Water Gap, 2000
- Flagler Run Greenway Feasibility Study, 2000
- The Master Site Development Plan for Big Pines Park & Greenway Corridor Feasibility Analysis, & Phase One Master Greenway Corridor Plan, 1999
- The Update to the Monroe County Open Space, Greenway and Recreation Plan, 2014

During this analysis new opportunities were explored and maps were updated to delineate the current priorities for an interconnected trail network throughout the region. Once a preferred alignment was selected the plan further explored the feasibility of closing key gaps identified in nine sub regions, identified by previous planning initiatives.

### **The Eastern Monroe Regional Open Space and Recreation Plan; 2002**

The Eastern Monroe Regional Open Space and Recreation Plan was prepared in 2002 for the Borough of Delaware Water Gap, Middle Smithfield Township, Price Township, and Smithfield Township. Funding for the plan was secured through the Monroe County Open Space Program and was matched with funds from the PA Department of Recreation and Conservation. The plan established goals for passive recreation, active recreation and recreation services throughout the region.

Actions recommended by the plan focused heavily on creating greenway links, as a means of formalizing access to open spaces and opportunities for recreation throughout the region. The plan noted that a combination of off road trails and biking/hiking lanes, established as wide smooth shoulders along low traffic roads, would be necessary to complete the system.

In relation to active transportation planning the plan's most significant recommendation is the proposal of a greenway/ trail connection aligning with SR 209 from the eastern end of Middle Smithfield Township heading south west, traversing Smithfield Township and connecting into the Stroud Greenway in the Borough of East Stroudsburg.

Today SR 209 is a transportation asset catering almost exclusively to vehicular traffic; however, a recent effort led by Middle Smithfield Township, aims to provide access and mobility options for pedestrians, bicyclists and regional public transit riders. The townships have been actively seeking funding for this project and have developed plans for continuous shared use path along their length of SR 209 to connect into the Delaware Water Gap National Recreation Area. Although this project is outside of the scope of work for the Eastern Mornoe Active Transportation Plan, Middle Smithfield's vision for a shared use pedestrian side path, should be taken into consideration when identifying opportunities to connect Smithfield Township into the Stroud Greenway.

### **Municipal Plans**

#### **Comprehensive Plan Update - The Borough of Delaware Water Gap; 1986**

The Borough's Comprehensive Plan Update of 1986, embraced the opportunity to expand on their identity as a trail town, and focused on providing a full range of community facilities to meet the desires of all age groups in the community. The plan identified actions to encouraged residential development in relation to existing community facilities & utilities, increase amenities of Village Center area through improved design of street furniture and provision of planting, and improving access to the existing recreational resources.

#### **The Borough of Delaware Water Gap Village Study; 2013**

The vison of the Borough of Delaware Water Gap Village Study is to



maintain the existing sense of community through the preservation of historic features, arts festivals, & connections to the Delaware River, trails, & parks. Streetscape improvements & providing incentives to encourage business development along Main Street are what residents envision for the future of the Borough.

The study outlined key actions to implement the following objectives consistent with the concepts of active transportation planning;

- Develop and maintain a walkable community.
- Implement a palette of design standards for sidewalks, pathways, amenities, and public properties so that public improvements match the desired look and feel of the Borough.
- Improve structural integrity of existing sidewalks along the commercial corridor.
- Improve existing safety features (i.e. crosswalks, signage, and lighting) & implement new safety features such as traffic calming measures to ensure the safety of pedestrians.
- Implement measures to reduce traffic speeds and increase vehicular safety along Main Street in the Borough.

#### **Borough of Delaware Water Gap Side Walk Inventory; 2019**

As a result of the Borough’s geographic location and the surrounding recreation networks, an inventory of the pedestrian infrastructure network (pedestrian network) was completed to better comprehend the Borough’s ability to accommodate current/projected pedestrian demands. The sidewalk inventory is used by Borough administration as a tool for understanding the connectivity and condition of the pedestrian network when identifying the following;

- Gaps in the pedestrian network
- Critical intersections with respect to connectivity and pedestrian safety
- Existing and potential connections to the surrounding recreational networks

#### **The Eastburg 2025 Comprehensive Plan; 2018**

In 2015, Borough Council determined that East Stroudsburg’s 1990 comprehensive plan had been implemented to the extent possible and that a new plan should be prepared. The Council specified that the new plan would cast a new vision and collective identity for a more unified East Stroudsburg community. The members sought a plan that defined near- and long-term goals and outlined a strategic framework of projects, actions, and initiatives.

The plans envisions a complete, multimodal transportation network for the Borough, where downtown, business centers, neighborhoods, schools, and parks are interconnected. Sidewalks and bike routes encourage safe travel on foot or by bicycle. Interconnected trails loop around the town along Brodhead Creek and nearby woodlands. The street network, centered on Courtland and Brown/Ridgeway Streets, is easy to navigate. The Pocono



Pony provides bus connections to regional shopping destinations. East Stroudsburg is efficiently connected to distant markets and destinations by highways and freight rail.

Since its adoption, the Eastburg 2025 Task Force was formed and met consistently to implement the goal as prescribed by the plan. Zoning revisions and updates are in the draft phase, with a clear emphasis to establish a more interconnected and less vehicular-oriented transportation system focused on improving individual neighborhoods of the Borough.

### **Smithfield Township Comprehensive Plan Update; 2001**

The Smithfield Township Comprehensive Plan Update (2001) is an update to the 1968 Comprehensive Development Plan for Smithfield, Middle Smithfield and Price Townships. The update is designed to focus on long-term policies the Township can utilize to facilitate development and preservation throughout the community. Promoting the Township's public health, safety, and general welfare, while maintaining the Township's character as a rural/suburban community is an essential core of the plan.

The update also encourages the development of alternative methods of transportation, including walking and biking trail connections, as well as public transit options. Although sidewalks are referenced within the context of village centers, they are only recommended for areas with an increased population density. Ultimately, collaborating with community organizations, state agencies, and government partners will allow for the strategic development of the Township.

## **Stakeholder and Public Involvement**

Monroe County facilitated various stakeholder and public involvement activities throughout the planning process. These activities provided numerous opportunities for people that live and work in the study area to contribute to the plan. Key activities included stakeholder interviews, a stakeholder online survey, three steering committee meetings, one transportation partner focus group meeting, and two public workshops. Additionally, draft materials were posted on Monroe County's website for public review. Appendix A provides a summary of the public participation for the plan.

## 2 | An Active Future



### What is Active Transportation?

Active transportation refers to traveling by means other than a car. Walking, biking, as well as riding public transit are all forms of active transportation and are the focus of this plan. While recreation can be an important purpose of active transportation, it also emphasizes walking, biking, and using transit for essential purposes such as, trips for work, school, or shopping.

Active transportation can help to support healthier people and places. Potential benefits include improving public health, reducing congestion and air pollution, and providing equitable access for those unable to drive.

- Walking and biking (instead of driving) enables people to be more active; improving personal health and fitness.
- When more people walk, bike, or use transit, there are numerous benefits to the community and environment. These potentially include: reducing traffic congestion, improving air quality, increasing safety for all users, and reducing the need to invest in expensive roadway or parking expansions.
- Infrastructure that supports walking, biking, and public transit is essential to people that do not have access to a car or who are unable to drive. These individuals rely on walking, biking, and public transit for all of their transportation needs.

This active transportation plan will include recommendations for capital improvements, policies, and programs to improve the transportation network for everyone. It will serve as a guide for the County, municipalities, and other partners to provide safe connections between recreational, economic, essential services, and cultural destinations.

## Vision

**A safe, connected, convenient, visible, and inclusive active transportation network that supports the mobility, recreation, and public health needs of all individuals in Eastern Monroe County and beyond.**

At the first steering committee meeting, members were asked to provide quotations from the future. Listed below are some of the responses of what residents, business owners, or visitors might say about eastern Monroe County in the next five, ten, or twenty years if elements of this plan are implemented. These quotations are another expression of the vision for eastern Monroe County's active transportation network.

- *It's easier to enjoy the beauty of the Poconos when you are not sitting in your car.*
- *I feel comfortable enough and safe enough to bike again.*
- *Wow, this multi-use trail connects us right to downtown. So nice to be able to ride our bikes to the farmer's market without worrying that the kids are going to get hit by a car.*
- *Monroe County has an excellent public transit system with great amenities and connections to outdoor recreation opportunities.*
- *It was easy to find and navigate the trail system and it had great connections into the downtown area.*
- *I don't need to use my car to get to work downtown or look for a parking spot.*
- *I can finally walk to \_\_\_ without fearing for my safety.*

## Goals

Implementable plans are guided by clear and concise goals that help to guide communities toward the vision. The eight goals below address key issues and support the vision of the Eastern Monroe County Active Transportation Plan.

1. Improve safety for bicyclists, pedestrians, and transit riders of all ages and abilities
2. Increase bicycle and pedestrian access to downtown areas, recreation areas, and other regional destinations
3. Create safe, comfortable, attractive and convenient environments to walk, bike, and ride transit within the downtown areas
4. Connect and close gaps in the sidewalk and trail network
5. Expand service and supportive infrastructure for public transit
6. Provide a range of bicycle and pedestrian infrastructure that is appropriate to the context of eastern Monroe County and fits the needs of diverse users
7. Develop a consistent wayfinding system to promote use and navigation of the active transportation network
8. Coordinate among partners to plan, expand, and promote the active transportation network

## Aspirations

Improving walking, biking, and public transportation opportunities in the region will be an ever-evolving process that happens over many years. Highlighted below are two long term aspirations for the study area, paired and expressed with future quotes. Partners working together can incrementally implement improvement projects, policies, and programs over time. The cumulative and long term effect of these actions can help to make these aspirations a reality.

### Develop a world class regional trail system

*Eastern Monroe County has some of the best trails anywhere.*

### Make living without a car more practical and convenient

*Owning a car here is a waste of money. I can easily walk, bike, or ride the bus anywhere I need to go.*

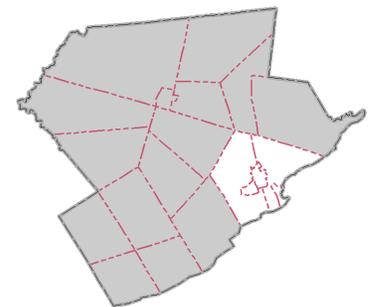
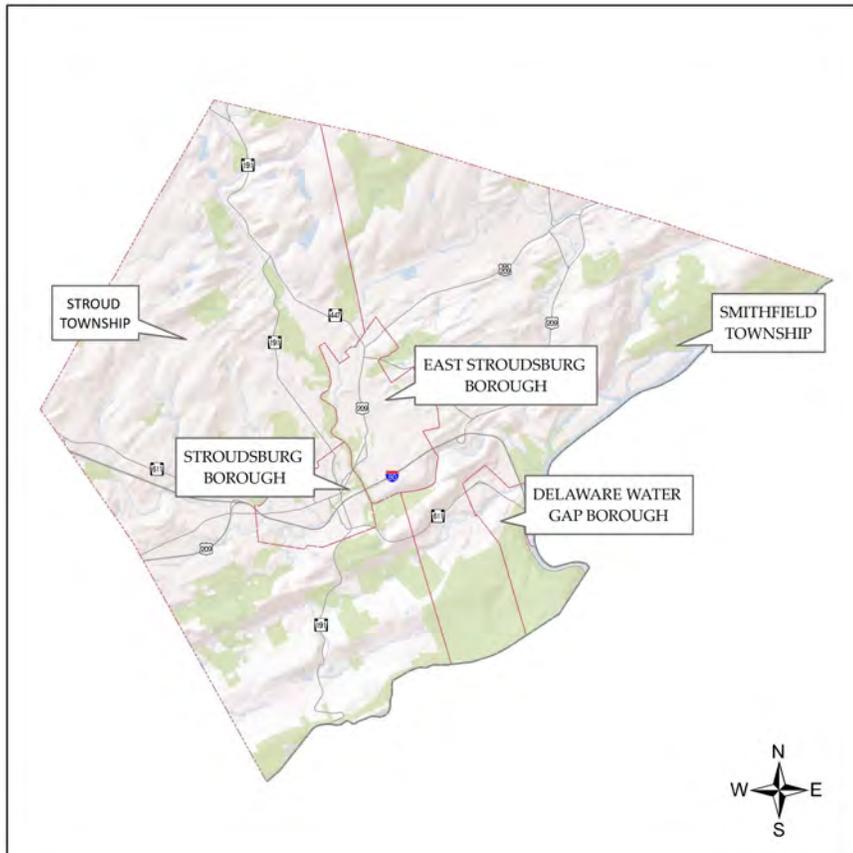
# 3 | Community Snapshot



## Study Area

The Eastern Monroe Active Transportation Plan encompasses five municipalities that make up the core of the East Stroudsburg Urbanized Area; the boroughs of Delaware Water Gap, Stroudsburg, and East Stroudsburg and the townships of Smithfield and Stroud. The study area was chosen due to the high potential to increase connectivity to everyday destinations.

### Study Area Map



- County Boundary
- - - Municipal Boundaries
- Conserved Lands

## Land Use and Destinations

As shown on the following Existing Land Use Map, there is wide range of different types of existing land uses within the study area. The three boroughs have downtown areas, each with a mix of land uses. East Stroudsburg Borough is home to East Stroudsburg University, which is a significant institutional land use. The land uses and development patterns in the boroughs make walking and biking a convenient option for transportation. Outside of the boroughs, commercial uses within the area focused primarily along several key corridors, including Routes 191, 209, 447, and 611. Many of these corridors lack connected sidewalks or other facilities that are critical to supporting safe walking, biking, or accessing public transportation. The study area is bisected by the Interstate 80 corridor, which provides vehicular mobility, but can be a barrier to people walking and biking. The remainder of the study area is dominated by residential and conservation/recreation areas.



### Environmental Features

Streams, water bodies, and other natural features are shown on the Environmental Features Map. The streams create a network of greenways, which also support some existing and planned trails. The greenway trails provide connections between developed areas and conservation/recreation areas. However, some of the streams and water bodies are also a barrier for walking and biking and pose challenges for providing regional trail connections.



### Destinations

The study area includes many popular destinations for active transportation trips, including retail hubs, recreational resources, educational institutions, employment centers, medical centers, and civic buildings. The following Key Destinations Map depicts the location of destinations for active transportation trips and shows clusters of destinations, particularly in the downtown areas for each borough and along key commercial corridors. These areas became the focus of this plan.

### Regional Connections

In addition to destinations within the study area, there are several key destinations beyond the study area boundary. The following Regional Connections Map highlights these significant regional destinations and potential active transportation connections to the study area. The regional destinations include:

- Appalachian National Scenic Trail
- Emerging Liberty-Water Gap Trail and September 11th National Memorial Trail
- Paulinskill Valley Trail (NJ)
- McDade Recreational Trail
- Proposed Route 209 Side Path in Middle Smithfield Township
- Monroe County Transit Authority (MCTA) Bus Routes
- On-Road Bicycle Routes: PA Bicycle Route V, Stroud Bike2Nature

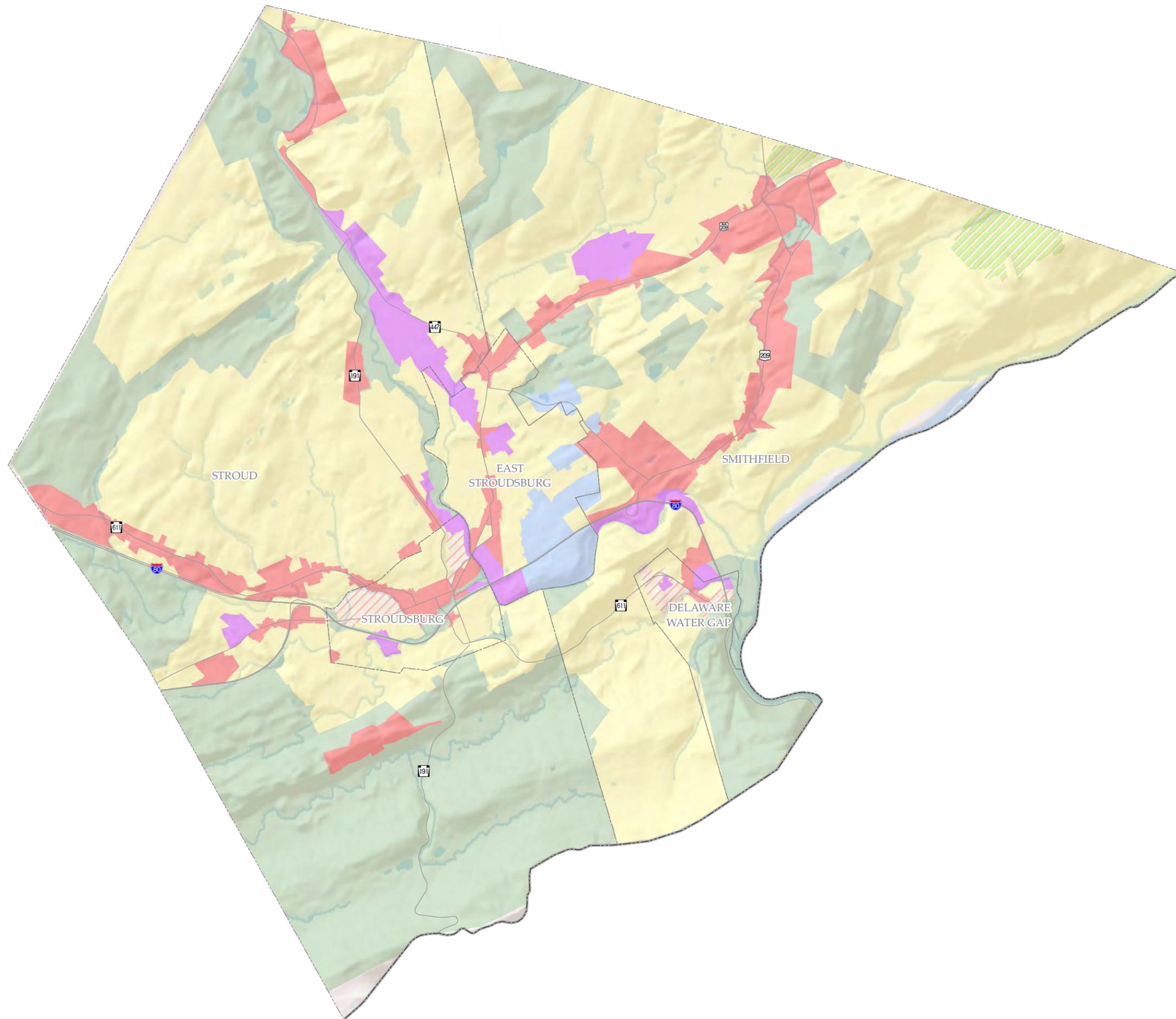
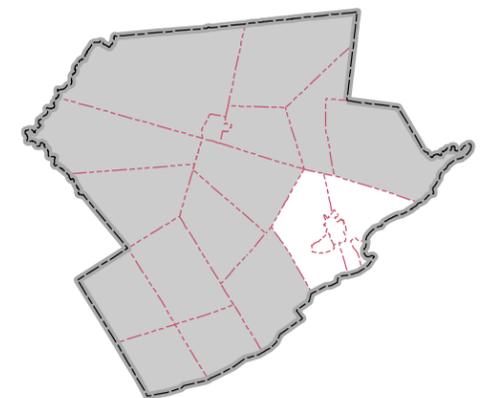
# EXISTING LAND USE

*Eastern Monroe County,  
Pennsylvania*

-  Commercial
-  Conservation/Recreation
-  Industrial
-  Institutional
-  Mixed Use/Village
-  Residential
-  Resort
-  County Boundary
-  Municipal Boundaries



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# ENVIRONMENTAL FEATURES

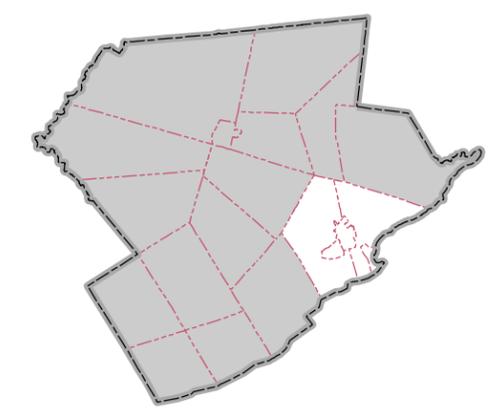
*Eastern Monroe County,  
Pennsylvania*



- Streams
- Ephemeral Streams
- Water Bodies
- NWI Wetlands
- Tree Canopy
- County Boundary
- Municipal Boundaries



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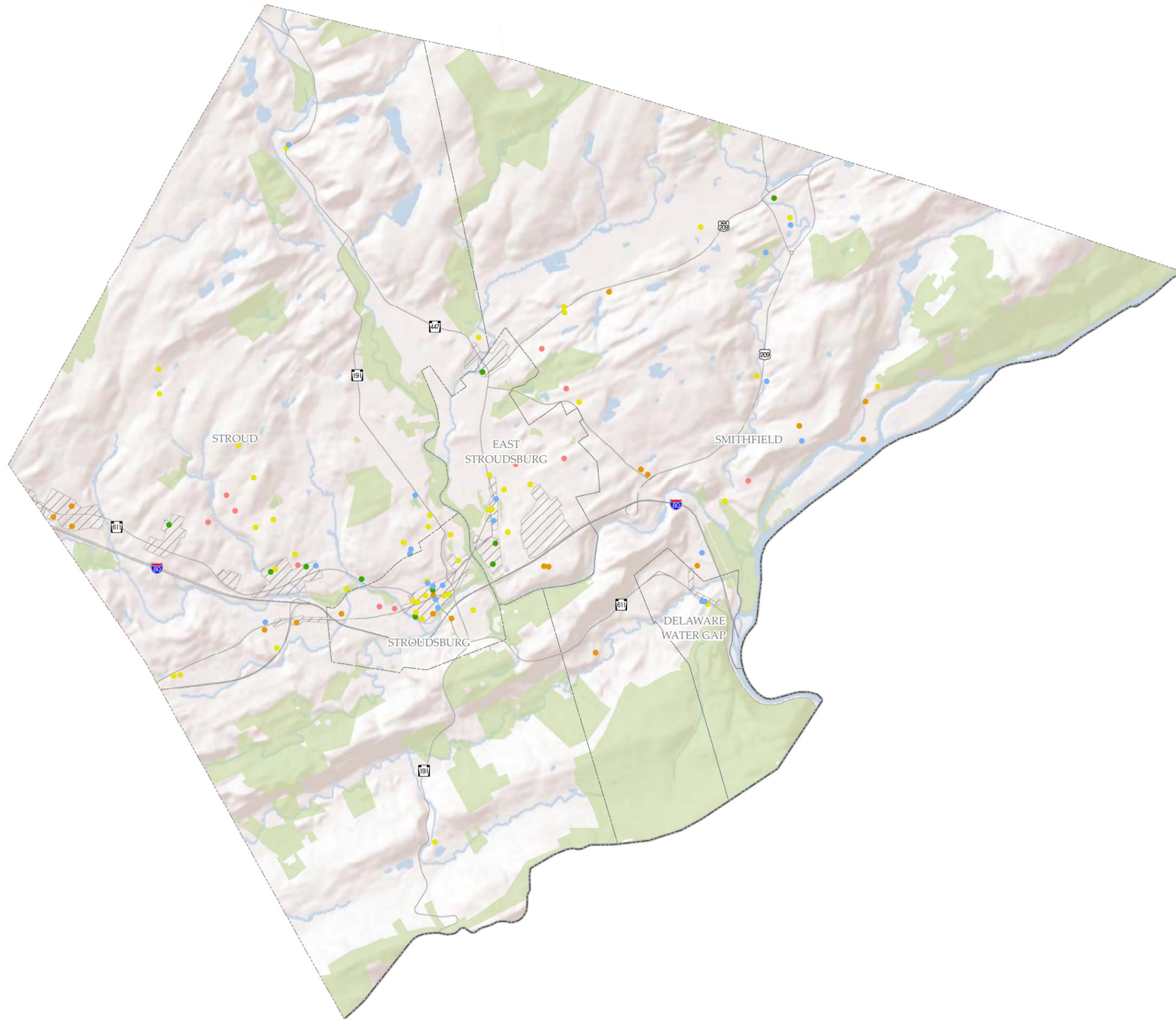
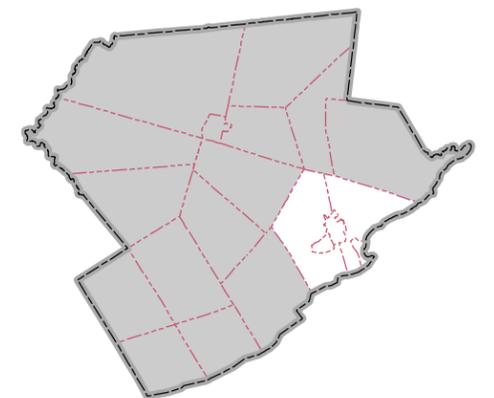
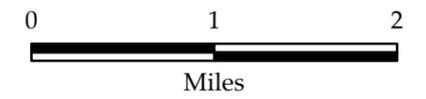
# KEY DESTINATIONS

*Eastern Monroe County,  
Pennsylvania*

- Grocery Store
- School Building
- Civic Building
- Place of Worship
- Hotel/ Motel
- Conserved Lands
- Retail Hub
- County Boundary
- Municipal Boundaries



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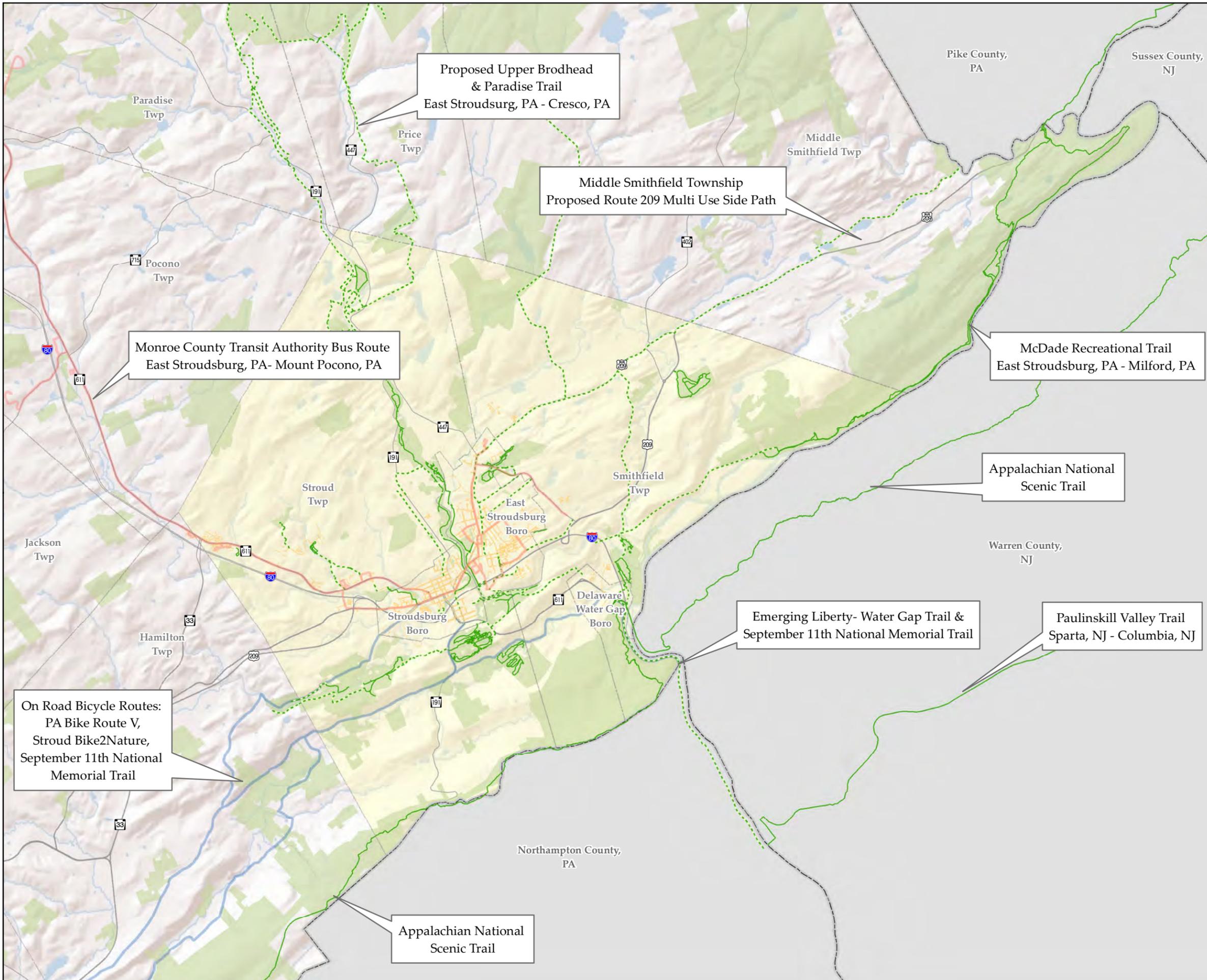
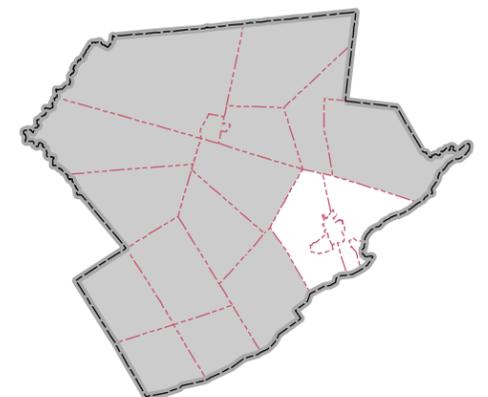
# REGIONAL CONNECTIONS

*Eastern Monroe County,  
Pennsylvania*

-  Municipal Boundary
-  MCTA Bus Route
-  Potential Connection
-  Trail
-  County Boundary
-  Monroe County
-  Sidewalk
-  Bicycle Route
-  Conserved Lands
-  Eastern Monroe County



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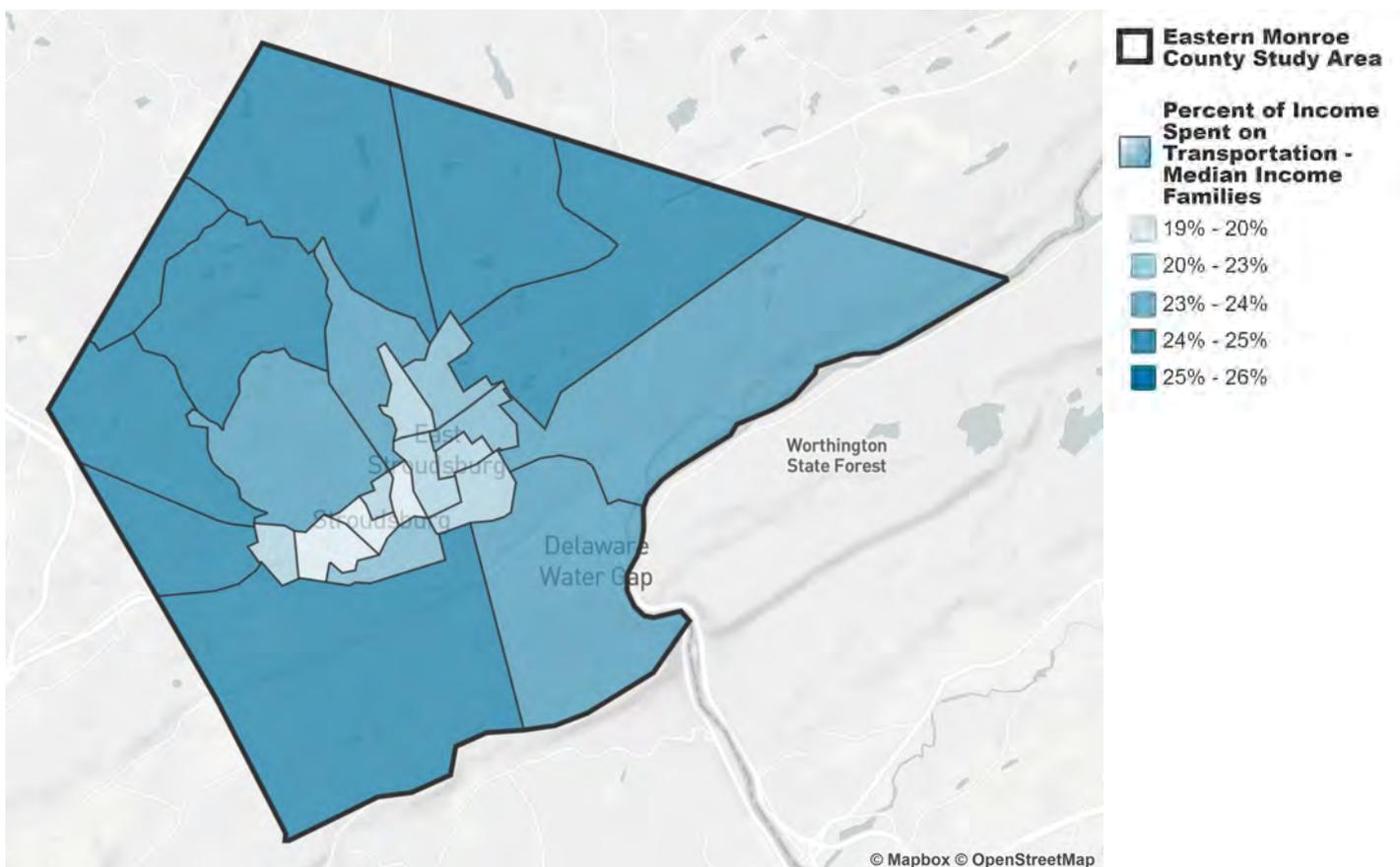


## People

The diversity of the study area is also reflected in the people that live, work, and visit the area. According to the US Census population estimates for 2019, there are over 43,600 people that live within the five municipalities. The following demographics summary presents a snapshot of some key demographics that highlight the potential need, use, and importance of an active transportation network for this study area.

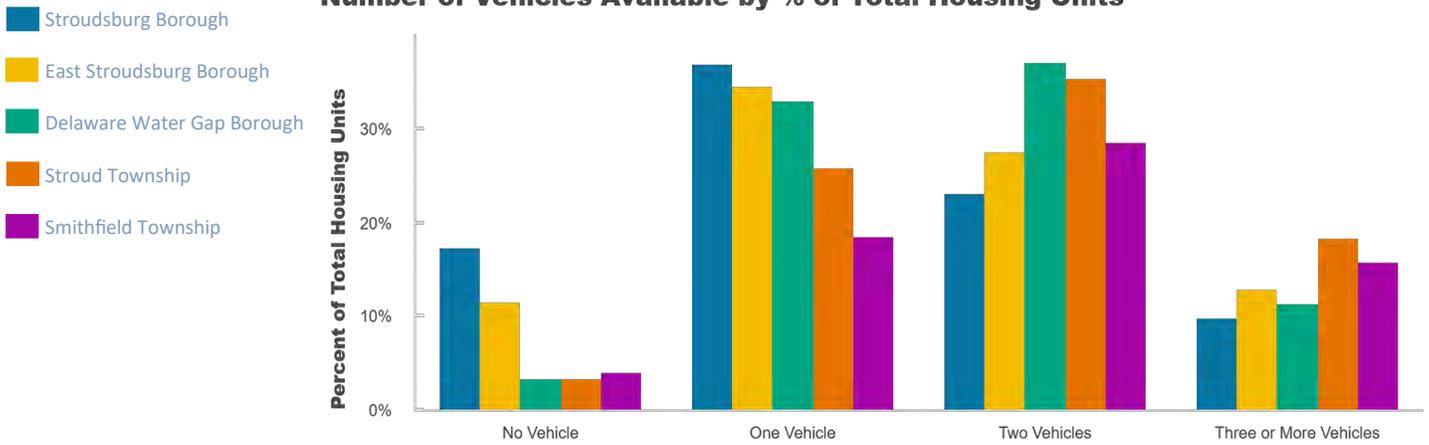
### Cost of Transportation

The cost of transportation comes down to two questions: 1. How are people getting around? 2. How far do they have to go? Typically, these costs increase as you move further away from urban and employment centers. Data about how much people are spending on transportation can help decision makers focus resources to where they would have the most impact. In Eastern Monroe County's case, it is evident that people living in the central part of the study area are spending a smaller percentage of their income on transportation.



Vehicle ownership is a key indicator of a community's wealth and the availability of alternative transportation options. People in households with no vehicle often rely on other modes of transportation for their mobility needs; particularly: walking, biking, and public transit. Within the study area, there is a much higher percentage of households without access to vehicles within the central part of the study area. This indicates a need in those areas for additional transportation options beyond those that cater specifically to automobiles; i.e. sidewalks, trails, bicycle facilities, etc.

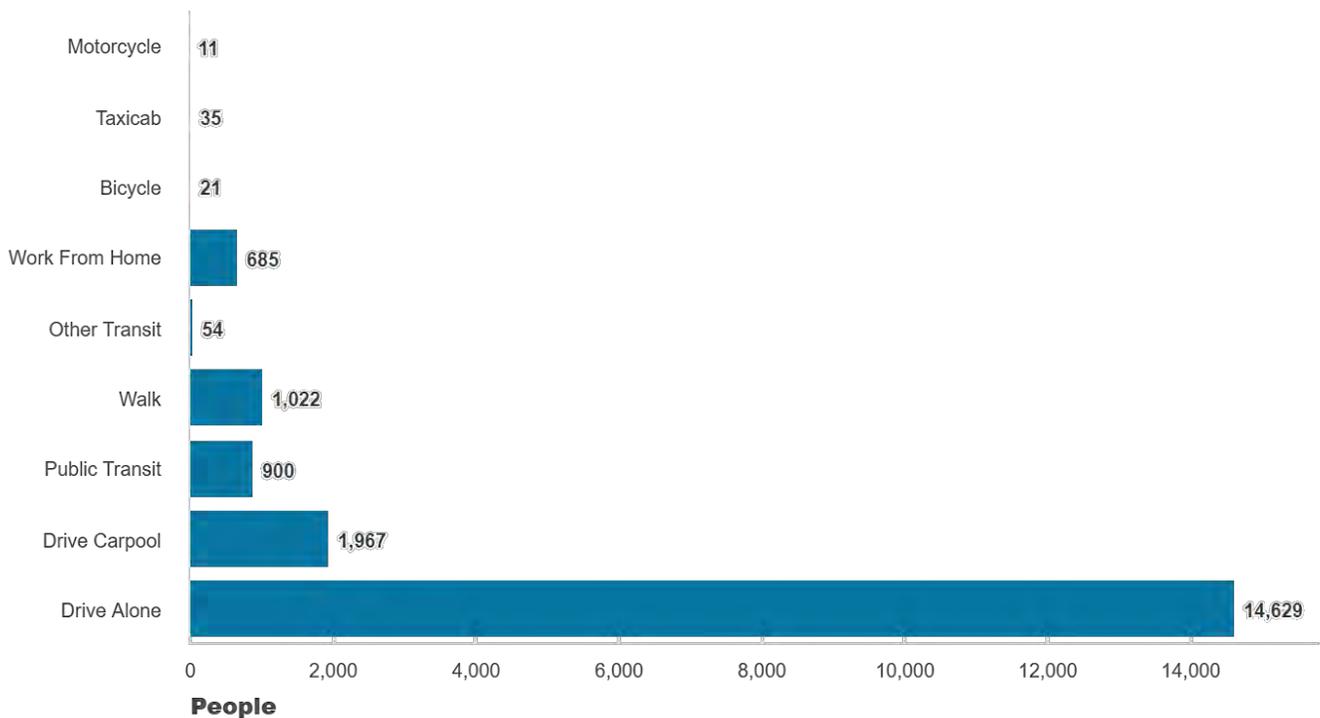
### Number of Vehicles Available by % of Total Housing Units



### Commute Modes

People who walk, bicycle, or take public transit are the most vulnerable users of any transportation network. In the study area, there are approximately 2,000 people who walk, take public transit, or bike to work. This represents 10% of all residents within the study area who commute regularly in the study area. These statistics do not account for the many people who utilize the region’s trails for recreation on a daily basis. Additionally, it is likely that there are many more people who would prefer to not drive, but do not have another option.

### Commute Means of Transportation



Eastern Monroe County Study Area

mySidewalk.com · Sources: US Census ACS 5-year

Understanding how people move about communities is important to determine where to invest in capital improvements that give people options other than a single occupancy vehicle. Within the study area, there is a higher concentration of people walking to work within the central part of the study area than in the surrounding areas.

## Percentage of Commuters Who Walk to Work

**16.9%**

Stroudsburg Borough County Subdivision, Monroe County, PA

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**10.16%**

East Stroudsburg Borough County Subdivision, Monroe County, PA

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**2.4%**

Delaware Water Gap Borough County Subdivision, Monroe County, PA

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**1.44%**

Stroud Township County Subdivision, Monroe County, PA

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**0.83%**

Smithfield Township County Subdivision, Monroe County, PA

*Sources: US Census ACS 5-year*

The central part of the study area is generally more walkable than the surrounding areas. The walkability index listed below is a score out of 20 that characterizes the ease of pedestrian travel in an area. It considers factors such as a mix of employment types and occupied housing, street intersection density, and population density to assign a walkability score. Scores closer to 20 indicate that an area is more walkable, while scores closer to 1 indicate that an area is less walkable. The data shows that Stroudsburg and East Stroudsburg are more walkable than the other three municipalities in the study area.

## Walkability Index

**15.91**

Stroudsburg Borough County Subdivision, Monroe County, PA

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**13.35**

East Stroudsburg Borough County Subdivision, Monroe County, PA

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**7.5**

Delaware Water Gap Borough County Subdivision, Monroe County, PA

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**7.19**

Stroud Township County Subdivision, Monroe County, PA

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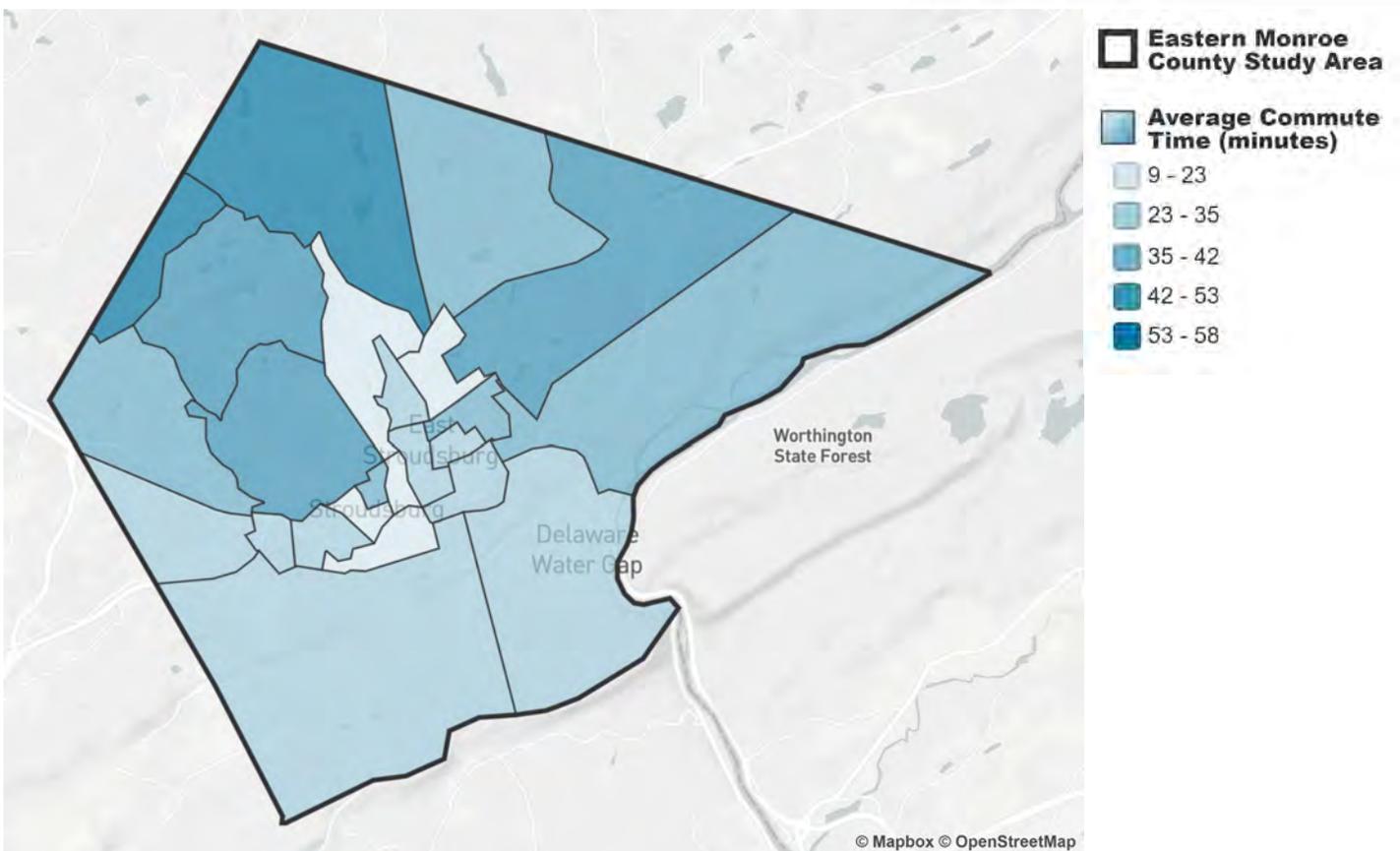
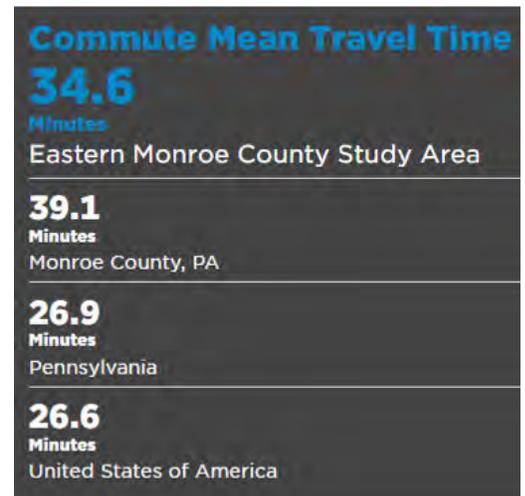
**7.69**

Smithfield Township County Subdivision, Monroe County, PA

*Sources: EPA*

## Time Spent Commuting

Overall in the study area, people have shorter commutes than the Monroe County average, but they have significantly longer commutes than the Pennsylvania average. This is due mostly to the land use character of the county and long distances between home and employment locations. However, a higher concentration of jobs and population in the central part of the study area leads to commute times that are much shorter than the rest of the study area. Focusing recommendations to improve walking and biking opportunities on the central part of the study area will serve the people most likely to live close to work, and thus, more likely to benefit from improved active transportation opportunities on a daily basis.

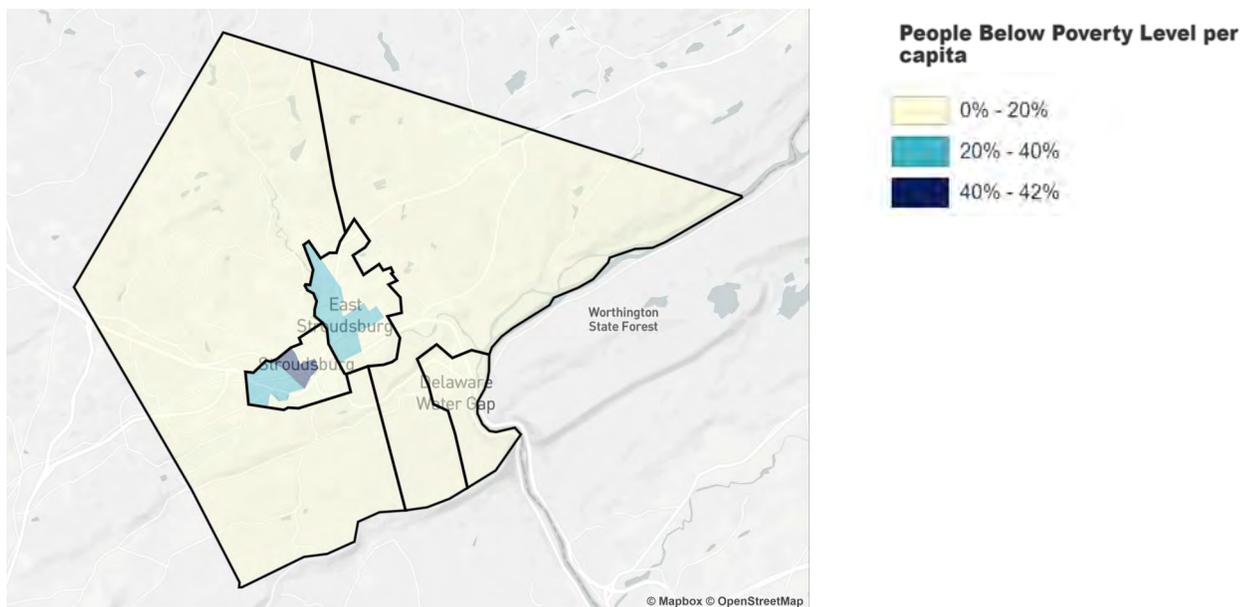


## Vulnerable Populations

A Demographic Analysis for Environmental Justice and Other Traditionally Underserved Populations performed by the Northeastern Pennsylvania Metropolitan Planning Organization identified that all Census Tracts within the study area have at least 3 and up to 6 Indicators of Potential Disadvantage. These are areas which show some overlap in more than three vulnerable populations groups: population below poverty level, no vehicle households, female head of household with child, limited English proficiency, elderly (65 years and up), Hispanic, non-Hispanic minority, or

disabled persons. This data give some indication that an improved active transportation network would benefit this community.

Digging deeper, the data indicates that there is a significantly higher concentration of female head of households with children and low income populations in certain census blocks in Stroudsburg Borough and East Stroudsburg Borough. This demonstrates a need for increased transportation options in those areas.



### Public Health

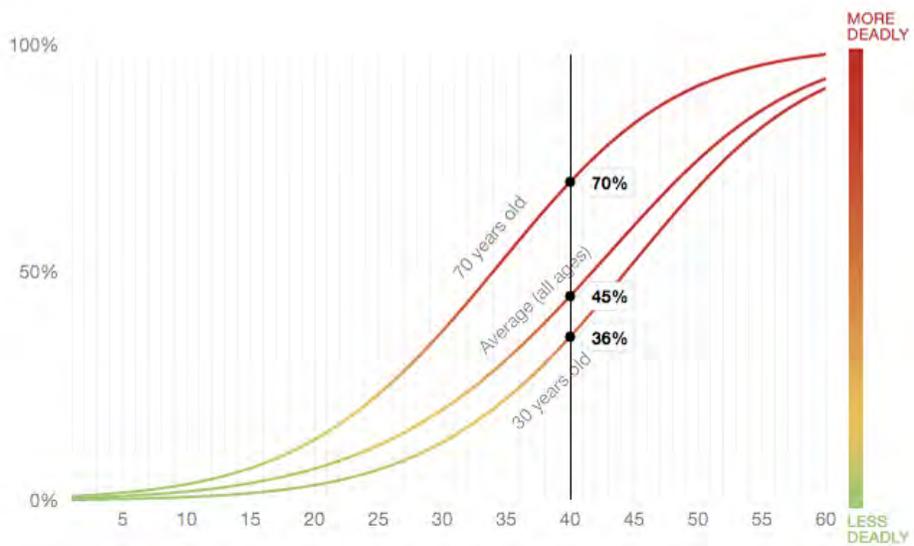
According to research performed by the Pennsylvania Department of Health in 2018, the behavioral health statistics of Monroe County residents are on par with the Pennsylvania average in all categories except the percent of adults that are overweight. This demonstrates a need for additional options for residents of Monroe County to be active in their communities. (Note: Approximately 1/4 of Monroe County’s population lives within the study area.)

### Adult Behavioral Health Risk Factor Statistics, 2015-2017 (PA Department of Health)

Measure	Monroe County	Interval (95%)	Pennsylvania	Comparison
Smoker	22%	(18–27)	18%	Similar
Asthma	14%	(11–19)	10%	Similar
Diabetes	11%	(8–15)	11%	Similar
Poor General Health	21%	(16–25)	17%	Similar
Obese	33%	(28–39)	31%	Similar
Overweight	73%	(68–78)	66%	<b>Higher</b>

## Safety Analysis

People walking or riding bicycles are the most vulnerable roadway users. According to research by the AAA Foundation for Traffic Safety, pedestrians' risk of being fatally injured in a crash increase drastically as vehicle speeds increase. This relationship between vehicle speed and pedestrian risk of fatal injury is illustrated on the graph below.



Source: ProPublica

This study reviewed **reportable crashes** involving pedestrians and bicycles in PennDOT's Pennsylvania Crash Information Tool for the five year period between 2014-2018. Additional crashes involving pedestrians or bicycles may have occurred in the study area, but were not reported to PennDOT. There were a total of 24 crashes involving pedestrians or bicycles during this period. The table below lists the crashes by year of both crashes involving pedestrians and crashes involving bicycles.

A **reportable crash** is one in which there is injury to anyone involved and/or a vehicle must be towed from the scene and cannot be driven.

### Reportable Crashes Involving Pedestrians or Bicycles (2014-2018)

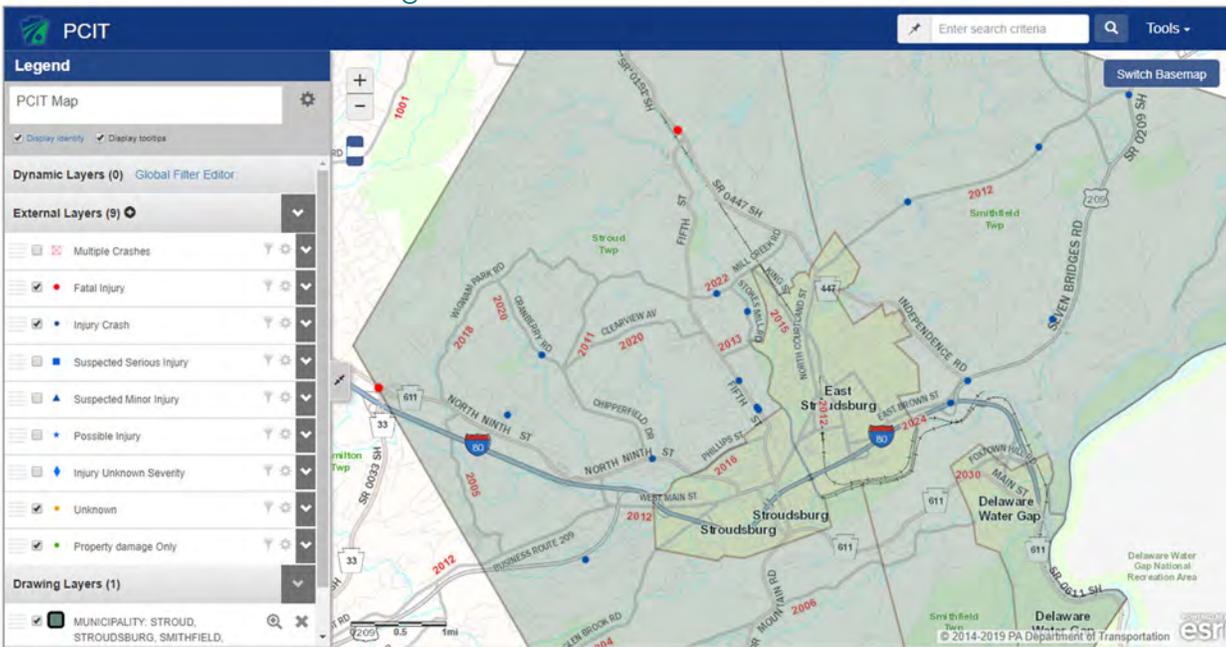
Crash Type	2014 Crashes	2015 Crashes	2016 Crashes	2017 Crashes	2018 Crashes	Total Crashes
Pedestrian	3	4	1	5	4	17
Bicycle	5	0	0	0	2	7

The maps on the following page identify the locations and severity of crashes involving pedestrians and bicycles.

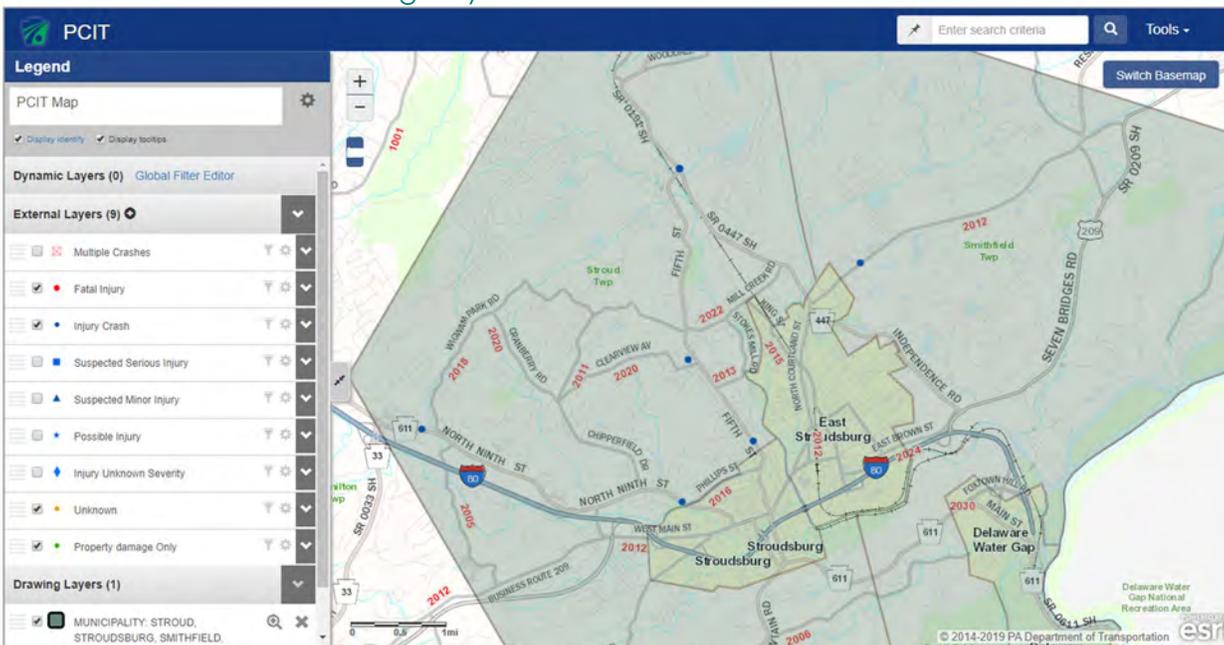
Examining the crash maps, five corridors and locations can be identified as distinct safety risks to pedestrians and bicyclists:

- Intersection of Route 191 and Route 447
- Route 191 between Avenue A and Avenue E
- Intersection of Route 611 and Route 33
- Route 611 between Philips Street and Copperfield Drive
- Milford Road

## Locations of Crashes Involving Pedestrians



## Locations of Crashes Involving Bicycles

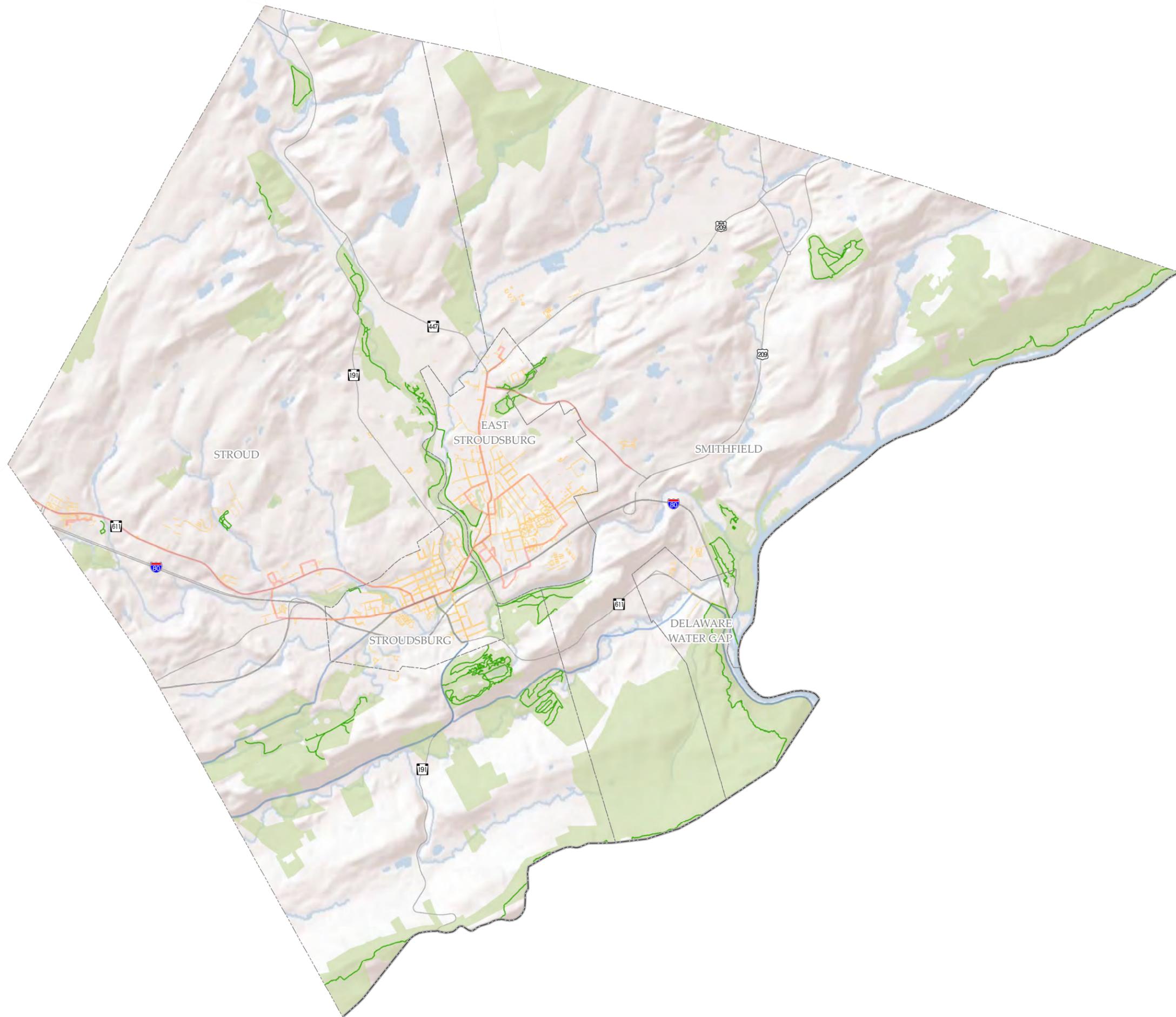


## Existing Active Transportation Network

The study area has over 100 miles of existing sidewalks, trails, and bicycle routes, plus numerous public and intercity bus services. The following Existing Active Transportation Network Map illustrates the location of the existing facilities. The map depicts the established sidewalk networks within the boroughs, existing trails along greenways and within conserved lands, and Monroe County Transit Authority (MCTA) bus routes along key commercial corridors. In addition, the Roadway Ownership Map shows the existing network of roads owned by the state and municipalities. These are the building blocks and foundation for developing an expanded and enhanced active transportation network.

# EXISTING ACTIVE TRANSPORTATION NETWORK

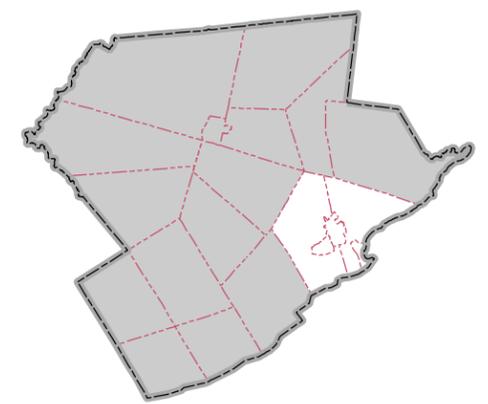
*Eastern Monroe County,  
Pennsylvania*



-  Trail
-  Sidewalks
-  Bicycle Route
-  MCTA Bus Route
-  Conserved Lands
-  County Boundary
-  Municipal Boundaries



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# ROADWAY OWNERSHIP

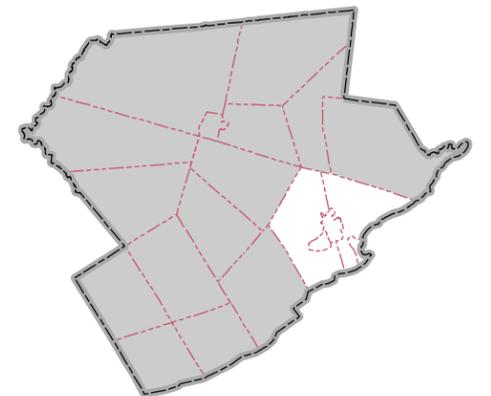
Eastern Monroe County,  
Pennsylvania



-  PennDOT
-  Municipal Road
-  Private/Other
-  County Boundary
-  Municipal Boundaries



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## Key Issues and Gaps

The following key issues and gaps in the active transportation network were identified by community stakeholders.

### Safety

- People do not feel safe walking or biking within eastern Monroe County.
- There is limited dedicated infrastructure for walking, biking, or riding public transit.
  - High traffic volumes and speeds create uncomfortable environments for walking and biking.
  - Intersection configurations and traffic operations make it difficult for bicyclists and pedestrians to cross and make connections.

### Mobility

- It is difficult to travel to destinations within eastern Monroe County without a car.
- MCTA's service area, frequency of service, and transit supportive infrastructure is limited due to current fiscal resources.
- Previous plans have focused primarily on walking and biking for recreation, not transportation. Additionally, some previous plans were ambitious and have not been advanced or implemented.

### Public Health

- Over 73% of the population in Monroe County is overweight, which is a concern for public health.

### Equity

- Based on Census data, there are approximately 1,300 households in the study area without a vehicle. People living in these households rely on walking, biking, and transit.
- About 2,000 people walk, bike, or take transit to work in the study area.

### Gaps

- There are gaps in the existing sidewalk network, particularly in the central part of the study area and along key commercial corridors.
- The regional trail network is disconnected and can be difficult to find and access, particularly without a car.
- There are significant physical barriers to bicycle and pedestrian connections, including I-80, various creeks and waterways, and topography.
- There is a need for consistent wayfinding and promotion of existing trails, on-road bicycle routes, and transit services.

### Limited Resources

- There are limited resources available to expand, enhance, and maintain the region's active transportation network.



## Assets = Opportunities + Obstacles

Eastern Monroe County has a number of key assets that provide the foundation and context for this active transportation plan. Each asset presents a number of opportunities for building a connected active transportation network. However, these key assets also pose some obstacles or challenges that need to be considered or addressed to achieve the plan vision and goals. The key assets, as well as the opportunities and obstacles are summarized below.

### Downtown Areas

Stroudsburg, East Stroudsburg, and Delaware Water Gap Boroughs



#### Opportunities

- Clusters of desirable destinations for active transportation trips
- Sites and events that attract both residents and visitors
- Established street grids
- Historic development patterns
- Attractive streetscapes
- Proximity to regional bicycle routes

#### Obstacles

- Limited space for active transportation infrastructure improvements
- Intersections and roadways with configurations that make it difficult to cross

### I-80 Corridor



#### Opportunities

- Interstate highway access makes the area an attractive place to live, work, and visit
- Ease of access
- Reconstruction presents an opportunity to improve some bicycle and pedestrian connections

#### Obstacles

- Bifurcates communities and limits the number of bicycle and pedestrian connections
- Accidents on I-80, spillover into municipal roadways
- Significant truck traffic (passing through the community)
- Impacts during construction

## Greenways

Brodhead Creek, Cherry Creek, Flagler Run, McMichael Creek, and Pocono Creek



### Opportunities

- Network of creeks and greenways
- Scenic environment for walking and biking

### Obstacles

- Bifurcate Communities
- Need bridges to cross and create connections
- How to connect to downtown areas

## Significant Recreational Resources

Appalachian Trail, Delaware Water Gap National Recreation Area, 911 National Memorial Trail/Liberty Water-Gap Trail, Cherry Valley National Wildlife Refuge



### Opportunities

- Cluster and crossroads for several significant recreational resources, many of which cross state lines
- Attract visitors to the area each year, which is opportunity for economic development

### Obstacles

- Different owners/jurisdictions
- Difficult to access without a car (not connected via a trail network)
- Disconnected from downtown areas, so visitors to recreation areas can't easily access downtown areas for shopping and services

## Public Transit and Inter-City Bus



### Opportunities

- Existing fixed route bus service, as well as flex routes
- Seasonal service offered for access to recreational resources
- Multiple inter-city bus routes to New York City and other destinations
- Campus shuttle bus service for East Stroudsburg University students

### Obstacles

- Existing service area and frequency of bus service is limited due to available fiscal resources
- No multi-modal facility
- Inter-city bus depots located outside of downtown areas; requiring motor vehicles to access

# 4 | Active Transportation Network



## Active Transportation Toolbox

Various transportation infrastructure features, also known as facility types, may be considered to improve active transportation connections in the community. Each of these facility types serve a different purpose to enhance the multimodal network and serve the transportation needs of all individuals, regardless of transportation mode.

The Active Transportation Toolbox presented on the following pages is presented in several different categories. Each category is based on the type of improvement appropriate given the local context.

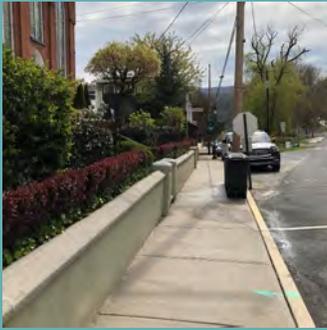
- Off-Road Facilities
- On-Road Facilities
- Bicycle and Pedestrian Road Crossings
- Public Transportation
- Bicycle Amenities
- Access Management
- Traffic Calming
- Streetscapes
- Wayfinding

The toolbox includes a brief description and illustrative photo for each facility type. For some facilities, additional information is provided regarding design guidelines and local examples.

These facility types are used to describe the potential connections identified in the Active Transportation Network. However, they can be useful beyond the purposes of this report as a guide for municipalities to determine the appropriate facility type given unique local circumstances.

## Off-Road Facilities

### Sidewalk



**Description:** Walkway parallel to the road that is intended for use by pedestrians, often with numerous access points to adjacent land uses. The walkway is typically physically separated from the roadway with a curb and/or verge. The verge may contain grass, vegetation, pavers, and sometimes street trees.

**Surface Materials:** Concrete, Brick, Pavers

**Dimensions:** 5 feet wide (minimum)

The verge, when provided, may range in width and 4 feet as a typical width.

**Local Examples:** Various Locations

### Multi-Use Trail



**Description:** A combined bikeway and walkway that is designed for shared use by bicyclists and pedestrians of all abilities, as well as other non-motorized modes of transportation. Trails along or adjacent to a roadway are physically separated from vehicular traffic by a verge, fencing, or other barrier.

**Surface Materials:** Asphalt, Crushed Stone

**Dimensions:** 10-12 feet wide (8 feet is permissible in certain situations)

When a trail is adjacent to a roadway, a 5 foot wide verge is recommended between the edge of the shoulder and the trail. If this width is not feasible, a suitable physical barrier is recommended.

**Local Examples:** McDade Recreational Trail

### Improved Path



**Description:** Walkway for use by pedestrians of all abilities. Improved paths may be through or adjacent to developed or undeveloped land.

**Surface Materials:** Asphalt, Crushed Stone

**Dimensions:** < 8 feet wide (6 feet typical)

**Local Examples:** Brodhead Creek Greenway

### Natural Path



**Description:** Walkway for use by pedestrians, typically for recreation purposes. Natural paths are often through or adjacent to undeveloped land.

**Surface Materials:** Mowed grass, Woodchips, Dirt

**Dimensions:** < 8 feet wide

**Local Examples:** Levee Loop Trail at Dansbury Park

## Off-Road Facilities (continued)

### Hiking Trail



**Description:** Walkway that typically follows the natural landscape and are used for short or long distance hiking for recreation. Hiking trails are typically identified with trailblazers or signs and a worn path that is generally clear of vegetation. Hiking trails can include dirt, rocks, and steep slopes.

**Surface Materials:** Dirt, Rocks, Grass

**Dimensions:** < 6 feet wide (typical)

**Local Examples:** Appalachian Trail

### Mountain Bike Trail



**Description:** Bikeway that typically follows the natural landscape and are used for recreational mountain biking. Mountain Bike Trails typically include rocks, washouts, ruts, loose sand or gravel, roots, and steep slopes. They may be worn into the natural landscape or introduce obstacles specifically constructed to challenge mountain bikers.

**Surface Materials:** Dirt, Rocks, Grass

**Local Examples:** Glen Park and Godfrey's Ridge Greenway

### Boardwalk



**Description:** Elevated walkway that is constructed as a series of low-height bridges through sensitive areas with seasonably variable water depths or low strength soils, such as wetlands. Boardwalks typically include a curb or handrail along at least one, often both, edges.

**Surface Materials:** Wood, Wood Composite, Plastic Composite, Concrete (for decking)

**Dimensions:** 6 feet—10 feet wide (typical)

## On-Road Facilities

### Paved Shoulder



**Description:** A portion of the roadway adjacent to the travel lane that can be enhanced with signage, striping, or coloring to serve as functional space for bicyclists and pedestrians

**Dimensions:** 4 feet wide (minimum); Provide greater width based on feasibility, traffic speeds, and traffic volumes

### Shared Travel Lane (Sharrow)



**Description:** A roadway with signage and pavement markings to indicate the use of a travel lane by both bicycles and motor vehicles. Pavement markings may include a “sharrow,” which is a bicycle symbol with two chevron arrows denoting the direction of travel.

### Bicycle Lane



**Description:** A portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive public use by bicyclists. Bicycle lanes are located directly adjacent to motor vehicle travel lanes and operate in the same direction as motor vehicle traffic.

**Dimensions:** 5—6 feet wide (5 feet minimum)

**Local Example:** Stroudsburg High School Bike Lane

### Buffered Bicycle Lane



**Description:** A bicycle lane with a striped buffer area that separates the vehicular travel lane and the shoulder used for the bicycle lane.

**Dimensions:** 2—3 feet wide buffer (2 feet minimum) plus bicycle lane

## On-Road Facilities (continued)

### Bicycle Boulevard



**Description:** Design treatments to offer priority for bicyclists operating within a roadway shared with motor vehicle traffic. Pavement markings, such as sharrows, and signage make users aware of the priority for bicycle travel and provide wayfinding. Can include traffic calming, access management, and other strategies to create a safe and low-stress environment for biking.

**Places to Use:** Local residential roadways, typically in a small town context

### Advisory Shoulder



**Description:** A delineated, but nonexclusive space available for walking and biking on a roadway that is otherwise too narrow for other dedicated facilities. Area for walking and biking is identified with signage and pavement markings, typically a dashed white line 5 feet from the edge of the pavement on both sides of the roadway.

**Note:** This is a new treatment type in the United States. FHWA is accepting requests for experimentation to install advisory shoulders.

**Dimensions:** 4—6 feet wide (6 feet preferred)

**Places to Use:** Roadways with low to moderate traffic volumes and speeds

### Yield Roadway



**Description:** A narrow roadway without pavement markings that is intended to support walking, biking, and driving in the low-speed travel way. These roads serve bi-directional traffic with no pavement markings, but their narrow design encourages lower speeds.

**Dimensions:** 12—20 feet wide roadway

**Places to Use:** Roadways with low volumes and low speeds

### Bicycle Route



**Description:** Roadways designated with wayfinding signs for bicycle travel shared with motor vehicles. They may include one of the above facility types, but are not a facility type in themselves. Some bicycle routes are designated for long distance travel.

**Local Examples:** BicyclePA Route V; Stroud Bike to Nature; 9-11 Nat. Memorial Trail

# Bicycle and Pedestrian Crossings

## Marked Crosswalk



**Description:** Pavement markings designating a location for pedestrians to cross a road, often connecting sidewalks, paths, or multi-use trails. Crosswalks must be a minimum of 6 feet wide. High visibility crosswalks, also known as continental design, are most visible to motorists.

## Decorative Crosswalks



**Description:** Special paving treatments for crosswalks, which can include brick/pavers, colored or stamped asphalt, or thermoplastic pavement markings. Decorative crosswalks can be designed to reflect the unique character or identity of an area or neighborhood.

## Raised Crosswalk



**Description:** Marked and elevated areas that are an extension of the sidewalk at mid-block locations or intersections. They can be used to increase pedestrian safety, calm traffic, and add to the community character. When used for traffic calming, they are most effective when placed in series. They may be constructed of asphalt, brick, or stone pavers.

## Mid-Block Crosswalk



**Description:** A crosswalk that is not located at an intersection. Additional warning devices for drivers are required to increase pedestrian safety compared to typical crosswalks at intersections. A mid-block crosswalk can include advance signage and pavement markings. Other design treatments could include a pedestrian refuge island or raised crosswalk.

## Bicycle and Pedestrian Crossings (continued)

### Traffic Signal—Equipment



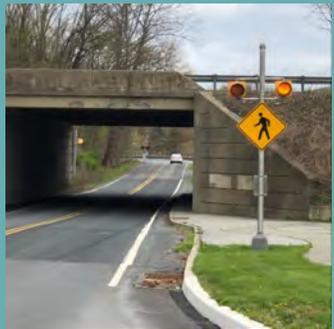
**Description:** Traffic signal equipment for pedestrians can include pedestrian pushbuttons, accessible pedestrian signals, passive detection for bicyclists or pedestrians, pedestrian signal heads, and pedestrian countdown signal heads. Accessible pedestrian signals (APS) communicate information about the WALK and DON'T WALK intervals for pedestrians who are blind or have low vision. Countdown pedestrian signal heads show how much time remains before the traffic signal changes.

### Traffic Signal—Timing



**Description:** Signal timings for pedestrians can include a leading pedestrian interval, which gives pedestrians a head start when entering an intersection. This enables pedestrians to establish their presence and enhances pedestrian visibility.

### Flashing Warning Device



**Description:** A flashing warning device can be used in combination with pedestrian crossing signs and a marked crosswalk at uncontrolled crossing locations. Signs and flashing warning devices can be side-mounted or overhead. Additionally, flashing warning devices can be user activated. Rectangular Rapid Flashing Beacons (RRFBs) are one example of a flashing warning device.

### Pedestrian or Trail Bridge



**Description:** Bridge specifically for use by pedestrians and bicyclists to cross a stream, water body, steep grade, or other existing feature. The design of the bridge should be based on anticipated users, including maintenance or emergency vehicles. Steel, fiberglass, and wood are materials typically used for pedestrian or trail bridges.

**Local Example:** Pocono Creek Pedestrian Bridge

## Public Transportation

### Bus Stop Loading Pad



**Description:** A level loading area where the front, side, or rear door of a bus open to receive and discharge passengers. The clear area allows deployment of a front door ramp on the bus. The loading pad should be a firm and slip-resistant surface, such as concrete. Additionally, it should be free of conflicts, such as landscaping or street furniture. The loading pad should be a minimum of 5 feet wide along the curb and 8 feet deep.

### Bus Shelter



**Description:** Structure located at a bus stop to provide transit riders with protection from the elements while waiting for a bus. Shelters are often placed at stops with higher ridership. Shelters can include signage, traveler information, and benches.

### Bus Bay



**Description:** Area adjacent and separate from the travel lanes on a roadway that provides space for buses to pick-up or drop-off passengers without impeding the flow of traffic. Bus bays are typically used on roadways with higher traffic volumes, higher speeds, or on congested corridors. They are also typically used for bus stops with higher ridership.

## Bicycle Amenities

### Bicycle Racks



**Description:** A frame that is permanently anchored to the ground and is used to secure bikes when not in use. Bicycle racks should be located in visible areas and near major destinations such as employment centers, business and retail districts, parks, and transit

**Placement:** Placement of bicycle racks should consider dimensions when occupied and must maintain clear walkway, particularly when placed along a sidewalk. Bicycle racks should be setback 2' to 3' from the curb when installed along a street. Bicycle racks can be located under shelters or building overhangs.

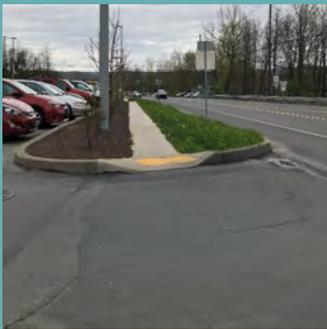
### Bicycle Repair Station



**Description:** A piece of equipment consisting of a simple bicycle stand and tools necessary to perform minor repairs and adjustments. The tools are typically securely attached to the stand, which can be used to hang the bike and allow the pedals and wheels to spin while making adjustments. Fix-It Stations should be located in visible areas, particularly along bicycle routes or near recreational resources.

## Access Management

### Driveway Spacing



**Description:** Adequate spacing and aligning of driveways to reduce conflict points and create a safer environment for walking and biking.

### Joint and Cross Access



**Description:** Providing joint or cross access between adjacent properties allows circulation between the properties and reduces the number of driveways and conflict areas along a roadway. Joint and cross access can be used in combination with shared parking.

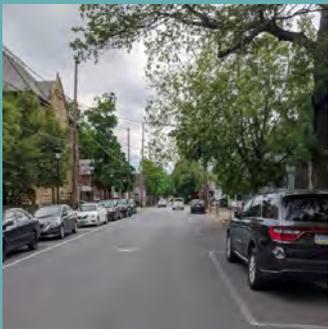
## Traffic Calming

### Pavement Markings / Reduced Lane Widths



**Description:** Reduced excessive lane widths can help to slow traffic by providing a defined area for travel. Also, a reduction in lane widths can provide additional space for bicyclists and pedestrians. Lane widths can be defined by edge line striping, curbing, or other physical roadside treatments.

### On-street Parking



**Description:** Provision of on-street parking on one or both sides that reduces roadway width. Parked vehicles also provide a buffer between traffic and pedestrians on the sidewalk.

### Speed Hump or Speed Table



**Description:** Raised humps in the roadway, typically 3—4 inches high, intended for low volume and low speed roadways. Speed humps are most effective when placed in a series. Speed humps are the most popular traffic calming measure due to their effectiveness at reducing speeds, ease of implementation, and relatively low cost. Speed tables are speed humps with a longer flat top.

**Option:** Speed humps or tables placed at a crosswalk create raised pedestrian crossings, which provide better visibility for pedestrians.

### Speed Cushion



**Description:** Speed humps or speed tables that include wheel cutouts to allow larger vehicles to travel without slowing down to travel over the hump. They are intended to allow emergency vehicles or transit vehicles to travel unimpeded.

## Traffic Calming (continued)

### Median / Pedestrian Refuge Island



**Description:** Medians or raised islands between travel lanes can be designed with landscaping, hardscaping, welcome signs, or provide a mid-point refuge for pedestrian crossings. Medians help to slow traffic by defining travel lanes and can be used to reduce conflicts by physically preventing left turns and restricting turning movements to specific locations.

### Gateway Treatment



**Description:** A combination of special treatments used at the entrance to an area or neighborhood that alert drivers to slow down due to a change in environment. Gateway treatments can include signage to identify the area or neighborhood. Other potential gateway treatments include landscaped medians or landscaped areas on the roadside.

### Curb Extension or Bulb Out



**Description:** Areas of expanded curbing that extend across a parking lane and may narrow a travel lane. Curb extensions create shorter crossing distances for pedestrians while increasing available space for street furniture and plantings.

### Chicane



**Description:** Series of three bulb-outs, staggered at mid-block locations on alternating sides of the street. Chicanes force drivers to slow down to negotiate through the series of extensions. Chicanes can include landscaping to improve the street appearance, but will reduce on-street parking.

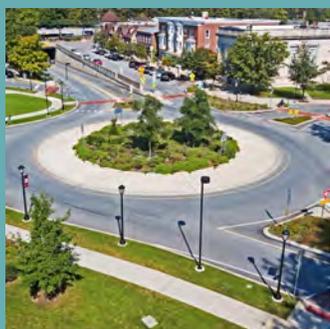
## Traffic Calming (continued)

### Raised / Textured Intersection



**Description:** An entire intersection, including crosswalks, that is built level with the sidewalk and/or has textured pavement. Similar to a speed hump or table, a raised intersection provides a vertical deflection to slow traffic. The elevated crosswalks also make it easier for pedestrians to cross the street. Raised intersections can be built with a variety of materials, including asphalt, concrete, or pavers.

### Roundabout



**Description:** An intersection design treatment that reduces conflict points and slows traffic. Traffic approaching the intersection yields to traffic circulating around the roundabout. Splitter islands at the entries help to slow and direct traffic and serve as pedestrian refuge areas. In some situations, roundabouts can provide increased capacity and reduced delay when compared with traffic signals.

### Mini-Roundabout



**Description:** A roundabout with a small diameter and traversable central island. Mini-roundabouts offer benefits similar to roundabouts, but with a smaller footprint and less cost. Mini-roundabouts are typically used in urban or small town settings on roadways with low speeds.

## Streetscapes

### Pedestrian Scale Lighting



**Description:** Pedestrian-scaled street lights, 10 to 12 feet in height, help provide security along sidewalks, as well as help to create aesthetic appeal to the streetscape.

### Vertical Banners



**Description:** Banners help to announce and publicize special events, as well as help to create an identity and sense of place. Vertical banners may be attached to street light poles, or may be freestanding.

### Public Art



**Description:** Public art may be incorporated into streetscapes through elements such as: planters and / or benches embellished by local artists, unique bike racks, or other art installations. Public art helps to provide character to streetscapes.

### Streetscape Amenities



**Description:** Benches, trash receptacles, and bicycle racks create a more comfortable and convenient environment for walking, biking, and enjoying the street. The design of the streetscape furniture or amenities should be consistent to convey the unique character of the community. Amenities should be placed so they do not obstruct pedestrian walkways, building entrances, fire hydrants.

### Street Trees



**Description:** Street trees provide shade for pedestrians, help with stormwater management, and help to create a sense of place. The tree canopy has a calming effect on traffic with the increased sense of enclosure. The type and location of street trees should be chosen based on site conditions. Street trees can be placed between the sidewalk and curb or between the sidewalk and front yard.

# Wayfinding

## Kiosk / Interpretive Signs



**Description:** Provides detailed information about the facility, such as a map, trail rules, and emergency information. Kiosks can also provide interpretive information about the history of an area. Kiosks are often located at a trailhead or a rest stop along a trail.

## Pavement Markings / Medallions



**Description:** Wayfinding markings that are placed on the pavement to identify a facility and provide basic information, such as directional arrows or mileage.

## Guidance / Navigation Signs



**Description:** Signs that can stand alone or mounted on an existing pole that identify a facility and provide directional information, particularly at key decision points. These signs are often used for on-road bicycle routes because they can be viewed by trail users and motorists.

## Trail Marker/Blaze



**Description:** Markings that are typically found on trees and are easy to see while on a natural path, hiking trail, or mountain biking trail. The markings indicate the beginning or end of a trail or a change in direction. For mountain biking trails, markings can indicate level of difficulty. Paint is most commonly used to mark hiking trails. Other medallions or markers made of metal, plastic, or wood can be nailed into trees.

## Post Signs



**Description:** Small, simple stand alone signs that are used to identify a facility and provide basic information, such as directional arrows or mileage.

## Active Transportation Network

The Active Transportation Network for eastern Monroe County is presented on the following pages in the Priority Connections Map, a series of six Focus Area Maps, and a detailed list of potential connections organized by study area municipality. The maps and descriptions in this chapter present a vision for developing a connected active transportation network over time based on needs and available resources.

The Priority Connections Map and six Focus Area Maps illustrate the existing and potential facilities for walking, biking, and accessing public transit in the heart of the study area. The potential facilities correspond with the Active Transportation Toolbox. Potential alignments and types of facilities were identified, evaluated and prioritized based on previous plans, field visits, and input from the steering committee, stakeholders, and the public.

The list of potential connections includes a brief description of the proposed facilities, including the general location and limits. It also identifies key connections to other facilities or destinations and additional notes relative to potential next steps or other considerations. Each connection was categorized as a high, medium, or long term priority for implementation. The priority level was based on a number of factors, including connectivity, feasibility, safety, potential impacts, potential opportunities for implementation, and stakeholder input.

Potential connections will be implemented in a phased approach. The timing of implementation will depend on a number of factors, such as feasibility, funding availability, community support, coordination with property owners, other nearby transportation improvements, and land development activity. Additional evaluation of feasibility engineering may be necessary before improvements can be implemented. Changes in conditions or travel patterns should be monitored and may influence the need or type of improvements.

One high priority potential connection in each municipality was identified as a Catalyst Capital Improvement. More information for each of the Catalyst Capital Improvement projects is provided in Chapter 5.

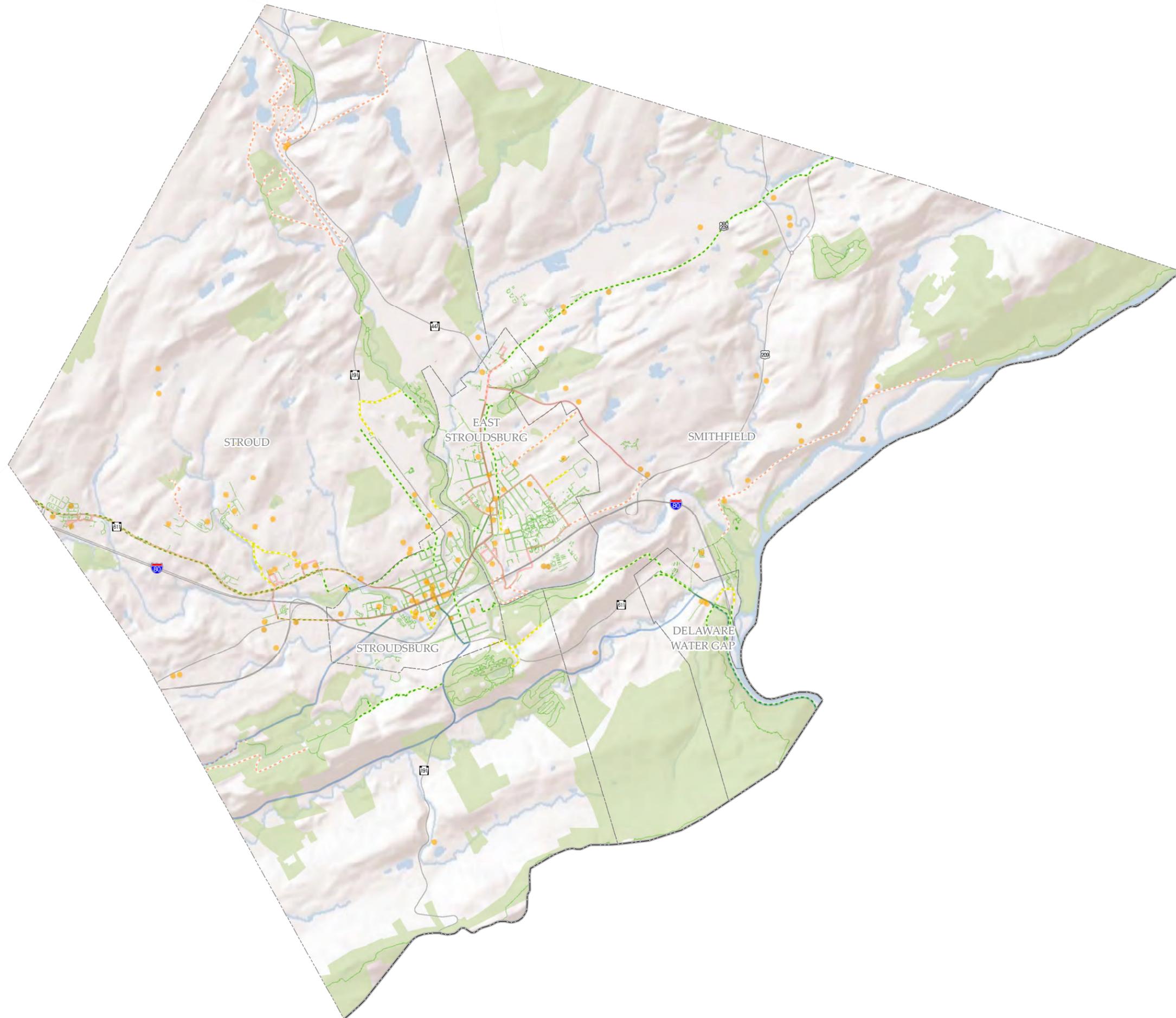
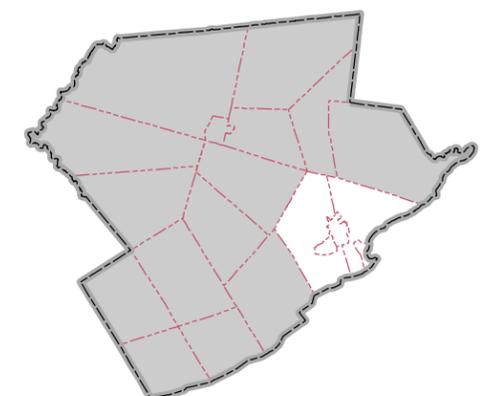
# PRIORITY CONNECTIONS

Eastern Monroe County,  
Pennsylvania

- Key Destination
- MCTA Bus Route
- Bicycle Route
- Existing Connection
- - - High Priority
- - - Long Term Priority
- - - Medium Priority
- Conserved Lands
- County Boundary
- Municipal Boundaries



1:63,360



# FOCUS AREA 1

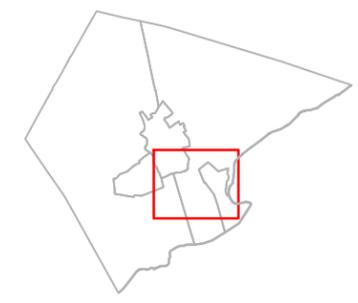
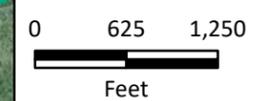
Delaware Water Gap Broro, Smithfield Twp,  
Stroud Twp, & Stroudsburg Boro



- Sidewalk
- Natural Path
- Hiking Trail
- Mountain Bike Trail
- Improved Path
- Potential Sidewalk
- Potential Natural Path
- Potential Improved Path
- Potential Multi Use Trail
- Potential Striped Shoulder
- Potential Advisory Shoulder
- Potential Bicycle Route
- Bicycle Route
- Transit Route
- Non Profit Open Space
- Municipal Open Space
- County Open Space
- Federal Open Space



1:15,000



# FOCUS AREA 2

Stroudsburg Boro, & Stroud Twp



- Sidewalks
- Natural Path
- Hiking Trail
- Mountain Bike Trail
- Multi Use Trail
- Bicycle Lane
- Potential Sidewalk
- Potential Natural Path
- Potential Improved Path
- Potential Multi Use Trail
- Potential Striped Shoulder
- Potential Advisory Shoulder
- Potential Bicycle Lane
- Potential Bicycle Boulevard
- Bicycle Route
- Transit Route
- Non Profit Open Space
- Municipal Open Space
- County Open Space
- Federal Open Space

N  
W E  
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1:15,000

0 625 1,250  
Feet

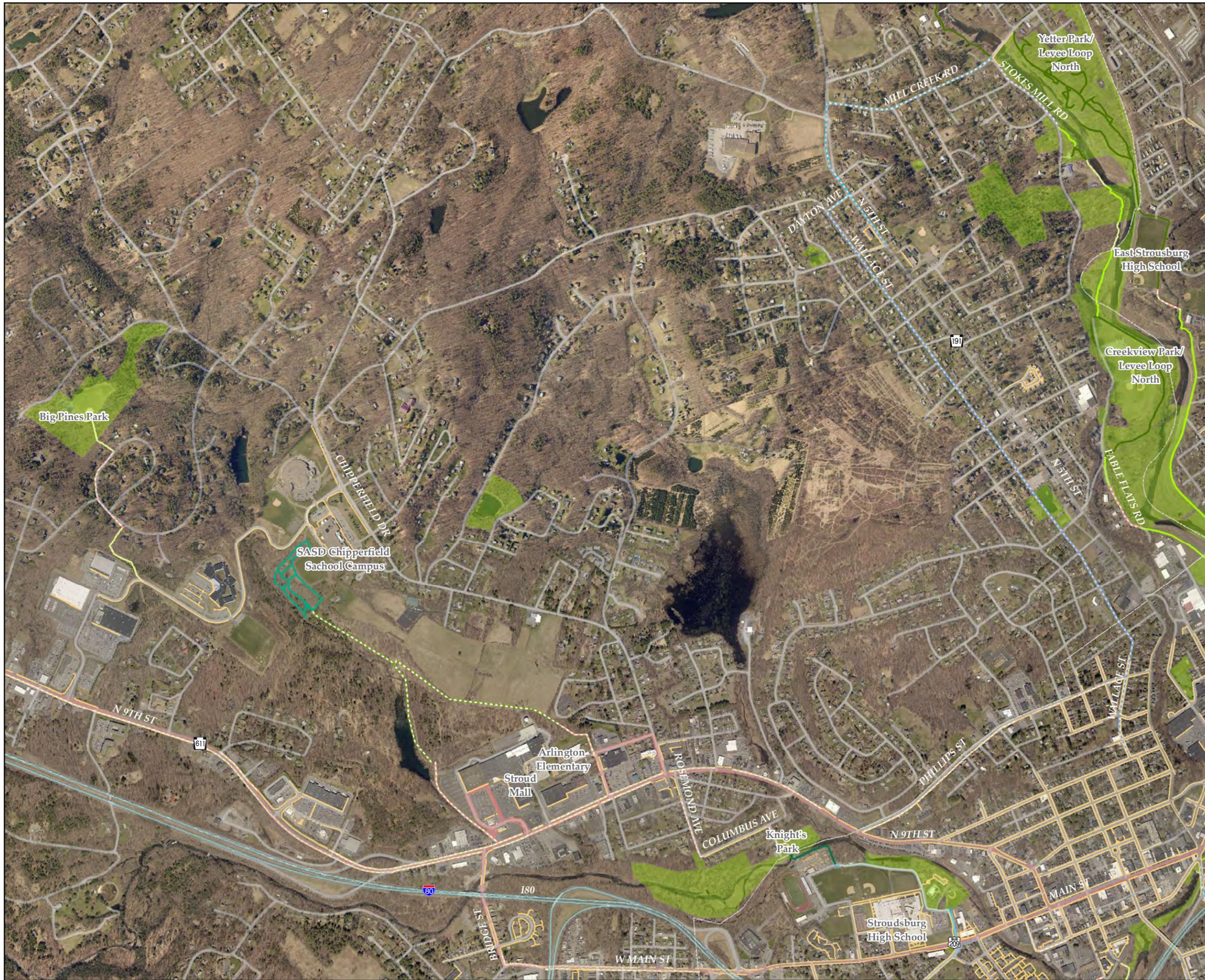
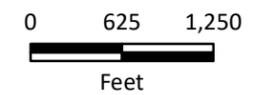
# FOCUS AREA 3

Stroud Twp

- Sidewalks
- Natural Path
- Hiking Trail
- Improved Path
- Multi Use Trail
- Bicycle Lane
- Potential Sidewalk
- Potential Natural Path
- Potential Improved Path
- Potential Striped Shoulder
- Potential Advisory Shoulder
- Potential Yield Roadway
- Potential Bicycle Lane
- Potential Bicycle Boulevard
- Potential Shared Travel Lane
- Bicycle Route
- Transit Route
- Municipal Open Space



1:15,000



# FOCUS AREA 4

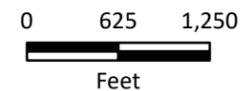
East Stroudsburg Borough & Smithfield Township



- Sidewalks
- Natural Path
- Hiking Trail
- Mountain Bike Trail
- Improved Path
- Potential Sidewalk
- Potential Natural Path
- Potential Improved Path
- Potential Multi Use Trail
- Potential Striped Shoulder
- Potential Advisory Shoulder
- Potential Yield Roadway
- Potential Bicycle Route
- Potential Bicycle Lane
- Potential Bicycle Boulevard
- Bicycle Route
- Transit Route
- Municipal Open Space
- County Open Space
- Federal Open Space



1:15,000



# FOCUS AREA 5

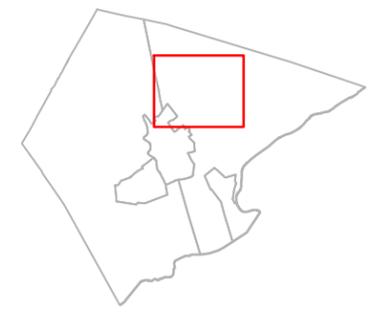
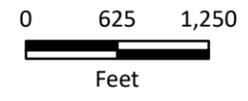
Smithfield Township



- Existing Sidewalks
- Natural Path
- Improved Path
- Potential Sidewalk
- Potential Improved Path
- Potential Advisory Shoulder
- Potential Bicycle Lane
- Potential Bicycle Boulevard
- Transit Route
- Municipal Open Space



1:15,000



# FOCUS AREA 6

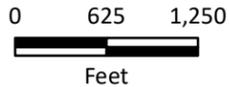
Stroud Township



- Sidewalk
- Natural Path
- Improved Path
- Potential Sidewalk
- Potential Natural Path
- Potential Improved Path
- Potential Striped Shoulder
- Potential Bicycle Lane
- Potential Bicycle Boulevard
- Potential Shared Travel Lane
- Transit Route
- Municipal Open Space



1:15,000



# Delaware Water Gap Borough

## Potential Active Transportation Network Connections

### Main Street / Route 611 / Mountain Road Pedestrian Crossings and Gateway

Catalyst Project  
Chapter 5

High  
Priority

**Description:** Pedestrian crossing and gateway improvements on Main Street / Route 611 in the vicinity of Mountain Road, including:

- 5' wide striped shoulder with 2' wide striped buffer on Main Street in front of the Deer Head Inn for pedestrian access
- Upgraded pedestrian crossings at the intersection of Main Street and Mountain Road with high visibility crosswalk and Rectangular Rapid Flashing Beacons (RRFP)

**Key Connections:** Existing sidewalks on Main Street; Appalachian Trail; Cherry Creek

**Additional Notes:**

- The Borough of Delaware Water Gap Village Study and the Borough of Delaware Water Gap Sidewalk and Pedestrian Access Inventory, both identified this project as a priority for improving pedestrian safety and connectivity to commercial and recreational resources.



### Mountain Road — Appalachian Trail Connection Improved Path

Map:  
Focus Area 1

High  
Priority

**Description:** A dedicated off-road improved path connecting to the Appalachian Trail, at Lenape Lake Trailhead, to the intersection of Mountain Road and Main Street / Route 611.

**Key Connections:** Downtown Delaware Water Gap; Cherry Creek Crossing Loop Trail; Delaware Water Gap National Recreation Area Trails

**Additional Notes:**

- The Borough of Delaware Water Gap Sidewalk and Pedestrian Access Inventory identified Mountain Road as a key pedestrian connection for the Borough.
- This project falls within the boundaries of municipal and federal conserved lands. Next steps include, coordination between the Borough of Delaware Water Gap, the Delaware Water Gap National Recreation Area and the Appalachian Trail Conservancy to explore trail feasibility and identify opportunities to expand parking at the Lenape Lake Trailhead.



### Main Street / Route 611 Sidewalks

Map:  
Focus Area 1

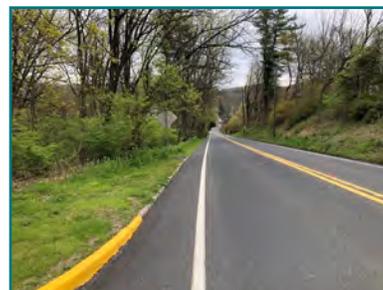
High  
Priority

**Description:** Sidewalks on the east and west sides of Main Street / Route 611 between Foxtown Hill Road and Broad Street. Potential pedestrian crossing at Watergap Village.

**Key Connections:** Existing sidewalks on Broad Street; Watergap Village; Martz Trailways Bus Terminal; future trail connection to Godfrey Ridge

**Additional Notes:**

- This connection was identified as a priority in both the Borough of Delaware Water Gap Village Study and the Borough of Delaware Water Gap Sidewalk and Pedestrian Access Inventory. It is also included on the Borough's draft Official Map. The Borough may consider adoption of an Official Map that includes this connection and other pedestrian facilities identified in this plan.
- Potential funding for construction includes the Community Development Block Grant (CDBG) program.



## Liberty -Water Gap Trail /911 National Memorial Trail *Varying Conditions*

Map:  
Focus Area 1

High  
Priority

**Description:** Multi-use trail on reconstructed retaining wall along Route 611 and on road bike route

**Key Connections:** Downtown Delaware Water Gap; Appalachian Trail; Delaware Water Gap National Recreation Area ; PA Bike Route V; Stroud Bike2Nature

### Additional Notes:

- The Liberty – Water Gap Trail and September 11th National Memorial Trail share an alignment along Route 611 in Delaware Water Gap Borough. This three mile section was included in the Feasibility Study for Extending the Liberty-Water Gap Trail in Pennsylvania from Portland – Delaware Water Gap. The study proposes incorporating a multi-use trail into the design solution for the currently failing retaining wall. The September 11th National Memorial Trail continues through Delaware Water Gap as an on road bike route along Cherry Valley road where it shares an alignment with PA Bike Route V.
- A bi-county partnership, to advance the Liberty- Water Gap Trail in Pennsylvania, was signed by Monroe County and Northampton County in 2020. The counties should continue to coordinate with local partners and serve as the liaison for communication with their respective Municipal Planning Organizations.
  - Next steps include confirmation of the preferred trail alignment, and valuation of cost estimates and feasibility to proceed with implementation. Once the preferred trail route is confirmed design and engineering will require close coordination with PennDOT, the Delaware Water Gap National Recreation Area and the North East Regional Rail Authority.
- In 2019 the Monroe County Planning Commission conducted an inventory of the on road-trail markers for PA Bike Route V and the Stroud Bike2Nature Route, for the September 11th National Memorial Trail Alliance.
  - Next steps to formalize the on road alignment of the trail include, coordination between the Alliance and the Borough to install Penn Dot approved roadway trail markers. This project should be implemented as part of the larger collaborative effort to install trail markers along the length of the trails on road alignment in Monroe County.



## Godfrey—Gap Connection *Multi-Use Trail*

Map:  
Focus Area 1

High  
Priority

**Description:** Off-road multi-use trail through Godfrey Ridge to Glen Park. Trail crossing of Foxtown Hill Road / Route 611 near Main Street to provide a connection to the planned and existing sidewalks in the Borough.

**Key Connections:** Downtown Delaware Water Gap Borough and Stroudsburg Borough

### Additional Notes:

- This project has the potential to enhance the efforts of the Stroud Township and local conservation partners, to develop the Glen to Glen Greenway, by extending the trail network to create a spur into downtown Delaware Water Gap. Next steps include, evaluation of potential alignments for the trail with consideration of the existing mountain bike trails in Godfrey Ridge and coordination with private property owners.
- This project will require coordination between Monroe County, Delaware Water Gap Borough, and Smithfield Township.



## Waring Drive— Minisink Park Connection *Advisory Shoulder*

Map:  
Focus Area 2

Medium  
Priority

**Description:** Advisory shoulder and wayfinding signs on Waring Drive and Oak Street between Delaware Avenue and the Cherry Creek Crossing Loop Trail.

**Key Connections:** Downtown Delaware Water Gap Borough ; Cherry Creek Crossing Loop Trail; Minisink Park; PA Welcome Center; DWG Park-and-Ride; Appalachian Trail

**Additional Notes:**

- The Borough of Delaware Water Gap Sidewalk and Pedestrian Access Inventory identified the connection on Waring Drive as a key pedestrian connection for the Borough.
- The pedestrian crossing and gateway recommendations at Main Street, Route 611, and Mountain Road are a high priority for improving pedestrian safety, and were identified in this plan as the Boroughs Catalyst Project. As improvements to the intersection are implemented, the feasibility of an advisory shoulder on Waring Drive and Oak Street should be further investigated.

# Stroudsburg Borough

## Potential Active Transportation Network Connections

### Broad Street—Levee Loop Trail: South Pedestrian Trailhead

Catalyst Project  
See Chapter 5

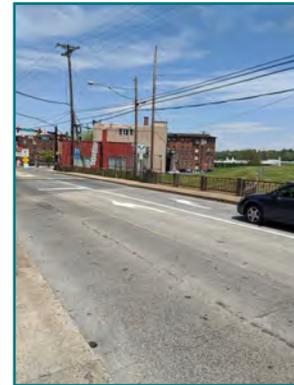
High  
Priority

**Description:** Connection between the sidewalk on the east side of the Broad Street bridge over McMichael Creek, with a pedestrian trailhead for access to the Levee Loop Trail—South. A barrier may be required along the curb between the proposed bike lane and sidewalk. Potential design treatments for the trailhead include an arch to mark the entrance to the Levee Loop Trail, bench, kiosk, or other wayfinding signage.

**Key Connections:** Downtown Stroudsburg Borough; Levee Loop Trail; Glen Park

**Additional Notes:**

- This connection was identified in the Levee Loop Master Site Plans as the preferred alignment for the southern section of the trail. The Stroud Region Trail Gap Analysis further explored its connectivity into the Glen Park and Godfreys Ridge.
- These improvements can be partially or fully implemented as part of PennDOT’s I-80 reconstruction project. Implementation of this project would require close coordination with PennDOT during the design and reconstruction of the Broad Street Bridge over the McMichael Creek. Coordination with DEP may also be required in regard to the design of the gateway and access to the levee.



### Broad Street Bicycle Lanes

Map:  
Focus Area 2

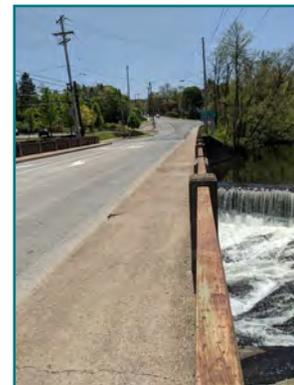
High  
Priority

**Description:** Bicycle lanes on Broad Street between Ann Street and Collins Street.

**Key Connections:** Downtown Stroudsburg Borough; Levee Loop Trail; Glen Park

**Additional Notes:**

- This project is part of PennDOT’s draft conceptual plan for the I-80 reconstruction project. Implementation of this project would require continued coordination with PennDOT during the design and reconstruction of the Broad Street Bridge over the McMichael Creek.
- This project was identified in the Stroud Region Trail Gap Analysis as a key connection between the Levee Loop Trail and the emerging Glen to Glen Trail.



### Huston Ave and Colbert Street—Connection to Glen Park Sidewalks and Advisory Shoulders

Map:  
Focus Area 2

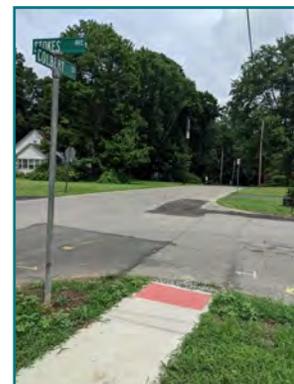
High  
Priority

**Description:** A combination of sidewalks and advisory shoulders on Colbert Street, Huston Avenue, and Collins Street to provide a continuous pedestrian connection from the Levee Loop Trail into Glen Park and Godfreys Ridge.

**Key Connections:** Downtown Stroudsburg Borough; Levee Loop Trail; Glen Park; Godfrey’s Ridge

**Additional Notes:**

- This project was identified in the Stroud Region Trail Gap Analysis as a key gap due to its potential to provide a safe pedestrian connection between the Levee Loop Trail to the emerging Glen to Glen Trail. An early implementation plan was prepared for this project which includes sketch plans, typical sections, and cost estimates. Next steps include engineering and construction.



## Phillips Street Sidewalks

Map:  
Focus Area 2

High  
Priority

**Description:** Sidewalks on both sides of Phillips Street to provide a continuous pedestrian connection between North 5th Street and Route 611.

**Key Connections:** Commercial areas and bus service on Route 611 and Route 191

**Additional Notes:**

- Phillips Street serves as a key connection between the Route 611 / 9<sup>th</sup> Street Route and 191/ 5<sup>th</sup> Street. This project has the potential to provide neighborhood connectivity into commercial corridors, public services, and established downtown areas.
- Sidewalk segments can be implemented as part of future land developments projects.



## Veterans Memorial Bridge Crossing and Levee Loop Trail : South Connection Pedestrian Connection and Crossings

Map:  
Focus Area 2

Medium  
Priority

**Description:** A pedestrian connection and improved crossings of Main Street and McConnell Street, to provide a safe north to south connection from the Levee Loop Trail. Improvements may include, high visibility crosswalks, advanced signage, and potentially flashing warning devices.

**Key Connections:** Downtown Stroudsburg Borough; Downtown East Stroudsburg Borough; Levee Loop Trail North and South

**Additional Notes:**

- The Stroud Region Trail Gap Analysis explored alternative connections and determined this route to be the most feasible option; however, no design solutions were incorporated into the plan. Next steps include , evaluation of potential modifications to traffic patterns to reduce potential conflicts between pedestrians and vehicles, maximize sight distance, and reduce travel speeds.
- Coordination with property owners would be required to secure a public access easement to close the gap between the Levee Loop Trail– South and Main Street.

## Ann Street and 10th Street Sidewalks

Map:  
Focus Area 2

Medium  
Priority

**Description:** Sidewalks on the south side of Ann Street between 9th Street and 10th Street and sidewalks on the west side of 10th Street between Ann Street and Main Street.

**Key Connections:** Downtown Stroudsburg Borough; MCTA Bus Route; Stroud Bike2 Nature; Stroudsburg High School

**Additional Notes:**

- This project could include evaluations of options to provide a path or trail along Pocono Creek, envisioned by the Pocono, McMichael and Brodhead Greenway Plan, as an alternative to 10th Street. Next steps include, further evaluation of existing conditions to determine a preferred alignment, design and construction.

ESSA Trail  
**Natural Path**

Map:  
Focus Area 2

Medium  
Priority

**Description:** Natural path on the north side of McMichael Creek with connections to 8th Street

**Key Connections:** Downtown Stroudsburg Borough

**Additional Notes:**

- This project was identified by the Pocono, Mc Michael and Brodhead Greenway Plan and spurred a partnership between the Borough and ESSA Bank. Next steps include further evaluation of trail surfacing and maintenance options with regards to trails alignment within the floodplain.

## East Stroudsburg Borough

### Potential Active Transportation Network Connections

#### Kistler Street/ Lackawanna Street / Chestnut Street *Bicycle Boulevard*

Catalyst Project  
See Chapter 5

High  
Priority

**Description:** Bicycle boulevard treatment, including shared lane pavement markings and signs, on Kistler Street, Lackawanna Street, between 3rd Street to Analomink Street.

**Key Connections:** Downtown East Stroudsburg; Zacharias Pond Park; Miller Park, Dansbury Depot; Crystal Street; East Stroudsburg University

**Additional Notes:**

- This project has the potential to be the first step in creating a safe, attractive and comfortable environment for biking through the Borough and could serve as a spine for future connections. Implementation for this project may be incorporated into the Boroughs roadway repaving program. Next steps include identifying traffic calming measures to slow motorized vehicles.



#### Salvation Army — Levee Loop Trail: North Connection *Advisory Shoulder*

Map:  
Focus Area 3

High  
Priority

**Description:** Advisory shoulder within pavement markings across the parking lot of the Salvation Army to close a gap in the Levee Loop Trail.

**Key Connections:** Levee Loop Trail; Dansbury Park

**Additional Notes:**

- The recent installation of a pedestrian bridge on the Salvation Army property crossing the Little Sambo Creek created a direct connection into Dansbury Park and elevated this project to a high priority gap in the Levee Loop Trail. The Stroud Region Trail Gap Analysis included an early implementation plan for this gap, which includes sketch plans, typical sections and cost estimates. Next steps include, working with the Salvation Army to secure a public access easement, engineering and construction.



#### Independence Road — Connection to Gregory's Pond *Sidewalks*

Map:  
Focus Area 3

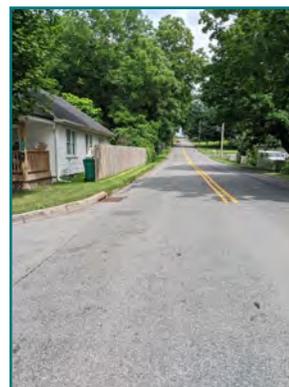
High  
Priority

**Description:** Sidewalks on the north side of Independence Road / Route 447 between Chestnut Street and the existing trails at Gregory's Pond Park.

**Key Connections:** Commercial Destinations on Business Route 209; Gregory's Pond Park; Zacharias Pond Park; Terra Greens; JT Lambert Intermediate; East Stroudsburg Elementary

**Additional Notes:**

- The Stroud Region Trail Gap Analysis explored opportunities to create a safe pedestrian connection from Cortland Street into the Two Ponds Trail network. A sidewalk connection was determined to be the most feasible option for closing this gap and an early implementation plan, was developed for this connection. The plan includes, sketch plans, typical sections and cost estimates. Next steps include, engineering and construction.



## Courtland Street / Day Street / Washington Avenue *Improved Pedestrian Crossing*

Map:  
Focus Area 3

High  
Priority

**Description:** Improve safety for pedestrian crossings at the five way intersection by shortening crossing distances and minimizing conflicts between vehicles.

**Key Connections:** Downtown East Stroudsburg; Dansbury Park; Levee Loop Trail; Crystal Street; East Stroudsburg University; Lehigh Valley Hospital- Pocono

**Additional Notes:**

- Located in the heart of a busy downtown, this five way intersection makes it difficult for both pedestrians and vehicles to navigate when traveling from commercial, educational and recreational destinations. This project proposes a traffic analysis to evaluate potential operational and safety improvements, such as reducing the number of travel lanes, providing curb extensions, or revising traffic signal timing to provide a leading or exclusive phase for pedestrians.



## Crystal Street *Improved Path and Pedestrian Safety Improvements*

Map:  
Focus Area 3

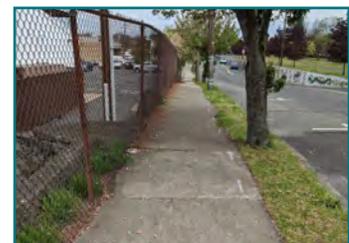
High  
Priority

**Description:** Improved path through a Borough owned property at the corner of Braeside Avenue and Elk Street to Miller Park and Crystal Street. Pedestrian safety improvements along Crystal Street from Bridge Street to Bank Alley .

**Key Connections:** Miller Park; Dansbury Depot; Crystal Street; East Stroudsburg University; Lehigh Valley Hospital- Pocono

**Additional Notes:**

- The Borough-owned lot south of Miller Park meets at the corner of Elk Street and Braeside Avenue. A social trail has been worn down from pedestrians cutting through to access the Miller Park and Crystal Street. This project proposes the development of an improved pedestrian path to formalize the connection. Next steps include exploring design solutions with consideration of existing topography and evaluating the potential need for a trail easement with the Pennsylvania Northeast Regional Rail Authority.
- The recent addition of sidewalks to the Ridgeway Bridge may serve as an opportunity for the Borough to continue the ongoing effort to improve pedestrian access and safety along Crystal Street. This project proposes a focus on access to the southern end of the municipal-owned roadway. Improvements may include upgrades to the existing sidewalks, and the addition of pedestrian scale lighting, streetscape amenities, and wayfinding.



## Milford Road / Business Route 209 *Sidewalks*

Map:  
Focus Area 3

Medium  
Priority

**Description:** Sidewalks on both sides of Milford Road / Business Route 209 between Eagle Valley Corners and JT Lambert School.

**Key Connections:** Commercial Destinations on Route 209; JT Lambert Intermediate

**Additional Notes:**

- The existing sidewalk network is fragmented along Business Route 209 between Eagle Valley Corners and JT Lambert Elementary. Extending the sidewalks would create a safe and comfortable pedestrian connection to the school. Next steps include further evaluation of the gaps and feasibility of extending the sidewalks.

## East 3rd Street Sidewalks

Map:  
Focus Area 3

Medium  
Priority

**Description:** Sidewalks on one side of East 3rd Street between Courtland Street / Business Route 209 and Zacharias Pond Park.

**Key Connections:** Zacharias Pond Park; Gregory's Pond Park; JT Lambert Intermediate; East Stroudsburg Elementary

**Additional Notes:**

- East 3rd Street serves as the main access to Zacharias Pond Park, and currently has no dedicated pedestrian infrastructure. This project proposes further investigation of this gap to identify the feasibility of extending the sidewalks along East 3rd Street from North Cortland.

## Spangenburg Avenue Sidewalks

Map:  
Focus Area 3

Long  
Term

**Description:** Sidewalks on both sides of Spangenburg Avenue between Smith Street and School Drive.

**Key Connections:** East Stroudsburg University; Notre Dame High School

**Additional Notes:**

- The addition of sidewalks on Spangenburg Avenue would require further evaluation due to the narrow width of the roadway, lack of on-street parking, and potential impacts to yards and parking areas for residential properties. Additionally, utility poles may need to be relocated.

## East Broad Street Sidewalks or Bicycle Boulevard

Map:  
Focus Area 3

Long  
Term

**Description:** Sidewalks on both sides of East Broad Street between Independence Road / Route 447 and Franklin Hill Road / Warren Street. Bicycle boulevard with pavement markings and signs, along with traffic calming measures, on East Broad Street between Lackawanna Avenue and Independence Road / Route 447.

**Key Connections:** Downtown East Stroudsburg; JM Hill Elementary

**Additional Notes:**

- The extension of existing sidewalks on East Broad requires further evaluation due to the narrow width of the roadway, lack of on-street parking, and potential impacts to yards and parking areas for residential properties. Additionally, utility poles may need to be relocated.
- The proposed Broad Street bicycle boulevard is one of two proposed options for providing an east-west bicycle connection through the Borough. Implementation for this project may be incorporated into the Boroughs roadway repaving program as a second phase of the Kistler, Lackawanna, Chestnut Bicycle Boulevard identified in this plan as the Boroughs Catalyst Project. The alternative option for a bicycle boulevard on Burson Street should also be taken into consideration.

Burson Street  
*Bicycle Boulevard*

Map:  
Focus Area 3

Long  
Term

**Description:** Bicycle boulevard treatment, including shared lane pavement markings and signs, on Burson Street between Lackawanna Avenue and Independence Road / Route 447.

**Key Connections:** Downtown East Stroudsburg; Planned Bicycle Boulevard on Lackawanna Avenue; Zacharias' Pond Park; Gregory's Pond Park; Terra Greens Golf Club

**Additional Notes:**

- The proposed Burson Street bicycle boulevard is one of two potential options for providing an east-west bicycle connection through the Borough. Implementation for this project may be incorporated into the Boroughs roadway repaving program as a second phase of the Kistler, Lackawanna, Chestnut Bicycle Boulevard (identified in this plan as the Boroughs Catalyst Project). The alternate option for a bicycle boulevard on Broad Street should also be taken into consideration.
- This project would require coordination between East Stroudsburg Borough and Smithfield Township. Additional improvements to provide a connection to Zacharias Pond Park and Gregory's Pond Park could also be explored through this partnership.

Milford Road / Courtland Street  
*Bicycle Lanes*

Map:  
Focus Area 3

Long  
Term

**Description:** Bicycle lanes along Milford Road / Business Route 209 and Courtland Street between Eagle Glen Plaza and East 3rd Street.

**Key Connections:** Zacharias Pond Park; Planned bicycle lanes on Milford Road / Business Route 209 in Smithfield Township; Potential bicycle boulevard on Chestnut Street / Lackawanna Avenue / Kistler Street in East Stroudsburg Borough

**Additional Notes:**

- This project has the potential to serve as a third phase of the Kistler, Lackawanna, Chestnut Bicycle Boulevard (identified in this plan as the Boroughs Catalyst Project). The proposed bicycle lane on Courtland Street would have a direct connection into the proposed bicycle lane on Business Route 209 in Smithfield Township, providing access to a large variety of commercial and recreational destinations.
- This project would require close coordination with Penn DOT to further evaluate feasibility, particularly related to the potential impacts to on-street parking.

Levee Loop: South Connection Under I-80  
*Improved Path and Pedestrian Bridge*

Map:  
Focus Area 3

Long  
Term

**Description:** A improved path from the top of the levee east of Broadhead Creek crossing under Interstate 80 and a pedestrian bridge crossing into Godfrey's Ridge.

**Key Connections:** Levee Loop Trail; Godfrey's Ridge Greenway

**Additional Notes:**

The Levee Loop master site plan identified this alignment as the trails preferred connection into the Godfrey's Ridge Greenway. These improvements could be partially or fully implemented as part of PennDOT's I-80 reconstruction project and would require close coordination between the Borough, the County, and PennDOT.

# Smithfield Township

## Potential Active Transportation Network Connections

### Milford Road / Business Route 209 *Bicycle Lanes*

Catalyst Project  
See Chapter 5

High  
Priority

**Description:** Buffered bicycle lanes on Milford Road / Business Route 209 between Eagle Glen Plaza and the Smithfield and Middle Smithfield Township border. Upgraded shoulders to provide a consistent 5' wide bicycle lane and 2' wide striped buffer and to clear roadside vegetation.

**Key Connections:** Commercial Destinations in East Stroudsburg Borough; JT Lambert Intermediate School; planned side path on Milford Road / Business Route 209 in Middle Smithfield Township; McDade Trail; Delaware Water Gap National Recreation Area

**Additional Notes:**

- This project would have a direct connection to the planned side path in Middle Smithfield Township and has the potential to serve as an asset that provides pedestrian access to a large variety of commercial and recreational destinations. Next steps include, identification and implementation of traffic calming measures to slow motorized vehicles and create a safer and more comfortable environment for biking
- This project would require close coordination with Middle Smithfield Township and Penn DOT.



### Independence Road / Route 447 — Two Ponds Trail *Improved Trail Crossing*

Map:  
Focus Area 4 & 5

High  
Priority

**Description:** Trail crossing on Independence Road / Route 447 connecting the exiting trails at Gregory's Pond Park and Zacharias Pond Parks. Improvements may include a high visibility crosswalk and Rectangular Rapid Flashing Beacon (RRFB) or other flashing warning device.

**Key Connections:** Gregory's Pond Park; Zacharias Pond Park; Terra Greens; JT Lambert Intermediate; East Stroudsburg Elementary

**Additional Notes:**

- A trail crossing over Independence Road would close the gap in the Two Ponds Trail network by providing a safe pedestrian connection. This project would require a shared-use path agreement and close coordination with East Stroudsburg Borough, and Penn DOT.



### Route 209 Bypass *Trailhead for Mount Nebo Regional Park*

Map:  
Key Gaps

Medium  
Priority

**Description:** Trailhead with parking and access to Mount Nebo Regional Park from Route 209 Bypass.

**Key Connections:** Mount Nebo Park

**Additional Notes:**

- This project proposes the construction of a highly visible second access point to Mount Nebo Regional Park off Route 209 bypass. Next steps include, evaluation of the project location with consideration of topography, existing features, and limited points of access along the bypass.
- This project will require close coordination with Penn DOT.

Burson Street  
*Bicycle Boulevard*

Map:  
Focus Area 4

Long  
Term

**Description:** Bicycle boulevard treatment, including shared lane pavement markings and signs, on Burson Street between Lackawanna Avenue (in East Stroudsburg) and Independence Road / Route 447.

**Key Connections:** Downtown East Stroudsburg; Planned Bicycle Boulevard on Lackawanna Avenue; Zacharias' Pond Park; Gregory's Pond Park; Terra Greens Golf Club

**Additional Notes:**

- This project would provide a safe comfortable biking connection into downtown East Stroudsburg Borough. Implementation would require close coordination with the Borough and may be scheduled as a second phase of the proposed bicycle boulevard on Kistler, Lackawanna, Chestnut. Additional improvements to provide a connection to Zacharias Pond and Gregory's Pond may also be explored though this partnership.

Brown Street  
*Striped Shoulder*

Map:  
Focus Area 4

Long  
Term

**Description:** Striped shoulder on Brown Street between Smith Street and Independence Road / Route 447.

**Key Connections:** East Stroudsburg Borough; East Stroudsburg University; Lehigh Valley Hospital– Pocono

**Additional Notes:**

- The existing sidewalks on Brown Street, between Prospect Street and Smith Street, connect a variety of medical and university facilities; however, the extension of the sidewalks to Independence Road may not be a feasible option. A striped shoulder may be investigated as an alternative solution. Next steps include feasibility evaluation to determine the need for shoulder widening, particularly west of University Ridge Drive.
- A partnership with East Stroudsburg University may provide an opportunity to explore off-road connections as an alternative.

River Road  
*Bicycle Route*

Map:  
Key Gaps

Long  
Term

**Description:** Signed bicycle route for wayfinding on River Road between Minisink Park and McDade Trail.

**Key Connections:** Minisink Park; Shawnee on Delaware; McDade Trail; Delaware Water Gap National Recreation Area

**Additional Notes:**

- The Shawnee Greenway Study explored three alternatives for connecting the McDade Trail to various destinations in Smithfield Township. These alternatives should be further explored when considering the feasibility of a signed bike route along River Road. This project would require close coordination with the Delaware Water Gap National Recreation Area.
- Potential connections into Liberty– Water Gap Trail and September 11th National Memorial Trail may also be explored.

# Stroud Township

## Potential Active Transportation Network Connections

### Stokes Mill Road / Route 2013 *Striped Shoulder*

Catalyst Project  
See Chapter 5

High  
Priority

**Description:** A paved or gravel striped shoulder on the east side of Stokes Mill Road from Mill Creek Road to the Levee Loop Trail at Stokes Mill Park. Traffic calming measures and advanced warning signs for pedestrians, particularly south of the Levee Loop Trail connection.

**Key Connections:** Levee Loop Trail; Brodhead Greenway ; Stokes Mill Park; Yetter Park

**Additional Notes:**

- The recent reconstruction to Mill Creek Bridge upgraded the sidewalks to create a safe pedestrian connection for crossing over the Brodhead Creek at the north end of the Levee Loop Trail. The sidewalk ramp tapers off, along the west side of the creek, at the top of Stokes Mill Road, requiring trail users to continue along the roadway. The Stroud Region Trail Gap Analysis identified this section as a key gap in the Levee Loop Trail. Next steps include evaluation of surface material for the shoulder, need for a safety barrier, and potential traffic calming measures.



### Wallace Street *Bicycle Boulevard*

Map:  
Focus Area 2 & 3

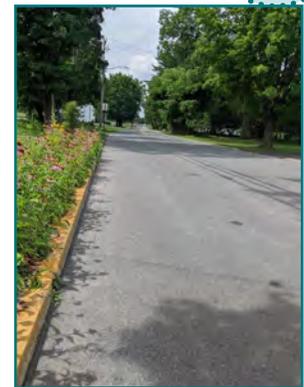
High  
Priority

**Description:** Bicycle Boulevard, including pavement markings and signs, on Wallace Street between Scott Street and Clearview Avenue.

**Key Connections:** Downtown Stroudsburg; Jay Albertson Park

**Additional Notes:**

- This project has the potential to be the first step in creating a safe, attractive and comfortable environment for biking through the Township by providing a connection between residential areas and downtown Stroudsburg. Implementation of this project may be incorporated into the Township's repaving program. Next steps include, identification of traffic calming measures to slow motorized vehicles.



### Route 191—Brodhead Greenway Connection *Striped Shoulder and Safety Improvement*

Map:  
Focus Area 6

High  
Priority

**Description:** Striped shoulder with pedestrian symbol pavement marking and striped buffer, with potential use of flexible delineator posts, along the east side of Route 191. Safety improvements and advance warning signs for pedestrians, particularly to the south.

**Key Connections:** Brodhead Greenway; Levee Loop Trail

**Additional Notes:**

- This project would close the 150-foot gap in the Brodhead Greenway that currently requires trail users to walk along a busy state roadway. Next steps include, coordination with PennDOT to explore roadway safety improvements to slow vehicular travel speeds and secure a shared-use-path agreement.



## Route 611 Sidewalks

Map:  
Focus Area 3

High  
Priority

**Description:** Sidewalks on both sides of Route 611 within Stroud Township.

**Key Connections:** Commercial Destinations on Route 611; MCTA Bus Route

### Additional Notes:

- Connectivity along the Route 611 corridor was identified as a high priority for Stroud Township during the Stroud Region Trail Gap Analysis; however, a multi use path may not be feasible due to the varying conditions along the roadway. The current sidewalks along the corridor are fragmented and should continue to be implemented as part of adjacent land developments.
- PennDOT's Interstate 80 widening project is expected to have an impact on Route 611 and may be an opportunity to explore alternative options for expanding the sidewalks along the corridor.



## West Main Street and Bridge Street Sidewalks

Map:  
Focus Area 2 & 3

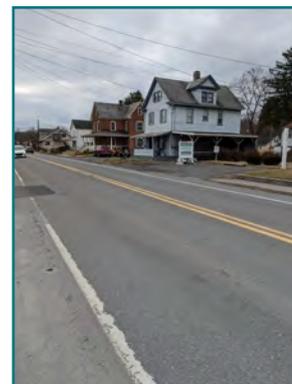
High  
Priority

**Description:** Infill sidewalks, access management, bus stop enhancements, and safety improvements along Bridge Street and West Main Street, particularly from the I-80 interchange area to Miller Street.

**Key Connections:** Commercial Destinations on West Main Street; Commercial Destinations on Route 611; MCTA Bus Route; Downtown Stroudsburg; Stroudsburg High School

### Additional Notes:

- The current connectivity of West Main Street is fragmented, the existing sidewalks are in poor condition and the crossing for the I 80 ramps are poorly marked. Recent upgrades to the Bridge Street bridge improved conditions for its northern connection to Route 611; however, gaps remain in its southern connection to West Main Street. Sidewalks should continue to be implemented as part of future land development projects.
- PennDOT's I-80 widening project is expected to have an impact on West Main Street and may be an opportunity to explore alternative options for expanding the sidewalks along the corridor.



## Levee Loop Trail: North —Off-Road Connections Natural Path or Improved Path

Map:  
Focus Area 3

High  
Priority

**Description:** Natural path to close gaps in the Levee Loop Trail between Stokes Mill Park and Creekview Park.

**Key Connections:** Levee Loop Trail; Brodhead Creek Greenway

### Additional Notes:

- The Levee Loop Master Site Plan identified the east and west banks of the Brodhead Creek as the preferred trail alignment. The Township should continue to work with private property owners along the west side of the creek to acquire public access easements to close key gaps in the trail. Once easements are acquired trail surfacing options will need to be further evaluated.



## Knights Park—Route 611 Advisory Shoulder

Map:  
Focus Area 2 & 3

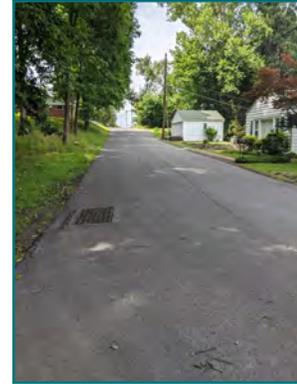
High  
Priority

**Description:** Advisory shoulder on Knight Street and Rosemond Avenue south of Fairview Avenue to provide a connection between Knights Park and Route 611.

**Key Connections:** Stroudsburg High School; Knights Park; Commercial areas on Route 611; Flagler Run Greenway

**Additional Notes:**

- The Flagler Run Feasibility Study envisioned a trail along the creek connecting three schools and a library to commercial corridors, downtown areas and recreational resources. The Stroud Region Trail Gap identified this area a priority gap due to the recent installation for the Pocono Creek Pedestrian Bridge, connecting Stroudsburg High to Knights Street Park. An early implementation plan was prepared for this for this gap, which include sketch plans, typical sections and cost estimates. Next steps include, engineering and construction.



## McMichael Creek—Glen Run Natural Path and Advisory Shoulder

Map:  
Focus Area 2

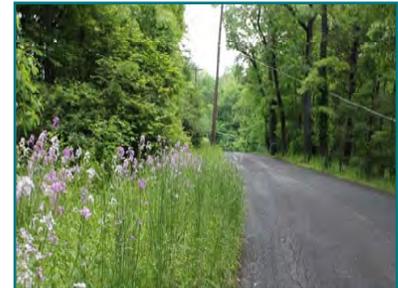
High  
Priority

**Description:** On-road facilities and improved pedestrian crossings to provide a connection from McMichael Creek to Glen Run, likely along Stroudsmoor Road.

**Key Connections:** McMichael Creek Greenway; Glen Run Greenway; Glen Park; Godfrey Ridge; Glen to Glen Trail; Stroudsmoor Inn; Labar Village

**Additional Notes:**

- The Glen to Glen Trail Feasibility Study identified a historic railroad grade, leading out to Stroudsmoor Road, as the preferred alignment for the trail. This section of the proposed trail has been worn down into a social trail and can easily be converted into a natural path. An advisory shoulder along Stroudsmoor Road may be an option for extending the trail to Route 191 and should be further evaluated. The Township should continue to work with private property owners along the route to secure trail easements and further explore surfacing options for the trail.



## Stroudsburg Area School District Chipperfield Campus Infill Sidewalks

Map:  
Focus Area 3

Medium  
Priority

**Description:** Infill sidewalks along Mountaineer Drive to provide complete sidewalk connections between the schools at the Stroudsburg Area School District (SASD) Chipperfield Campus.

**Key Connections:** SASD Chipperfield Campus (Chipperfield Elementary School, Stroudsburg Middle School, Stroudsburg Junior High School); Flagler Run Greenway

**Additional Notes:**

- The SASD Chipperfield Campus currently has a small gap in the sidewalk behind the Jr High along Mountain Drive. Filling this gap has the potential to create a connection into the campus trail network, Mounty Mountain, and the emerging Flagler Run Greenway.
- This project would require coordination with the SASD to identify funding for design and construction of the sidewalk segments.

## Route 611 — SASD Chipperfield Campus *Improved Path*

Map:  
Focus Area 2 & 3

Medium  
Priority

**Description:** An off-road improved path to create the connection between Route 611 and the SASD Chipperfield Campus.

**Key Connections:** SASD Chipperfield Campus (Chipperfield Elementary School, Stroudsburg Middle School, Stroudsburg Junior High School); Arlington Elementary; Emerging Flagler Run Greenway; Route 611 Commercial Destinations

**Additional Notes:**

- The Flagler Run Greenway Study identified two routes for connecting a trail, behind the Stroud Mall, to the SASD Chipperfield Campus. The Stroud Region Trail Gap Analysis highlighted the opportunities that still exists on undeveloped lands. The Township should continue to pursue development of an improved path, through public-private partnerships, as part of future land development projects.

## Glen Run — Godfrey's Ridge *Improved Trail Crossing & On Road Facilities*

Map:  
Focus Area 2

Medium  
Priority

**Description:** On-road facilities and improved pedestrian crossings to provide a connection from Glen Run to Godfrey's Ridge, likely along Foxtown Hill Road / Route 611 and Godfrey's Ridge Drive.

**Key Connections:** Glen Run; Godfrey Ridge Greenway; McMichael Creek Greenway

**Additional Notes:**

- The Stroud Region Trail Gap Analysis explored alternative on and off road alignments for connecting the Glen to Glen Trail from Stroudsmoor Road to the Glen Run Nature Preserve and Godfrey's Ridge. The proposed alignment suggests trail crossings over Route 191 and Foxtown Road / Route 611, and an on-road connection along Godfrey's Ridge Drive. Further development of this section of the Glen to Glen trail will require continued collaboration with the local conservation partners, such as the Pocono Heritage Land Trust, and Monroe County.
- The potential crossing of Route 191 and Foxhill Road/ Route 611 requires further evaluation and close coordination with PennDOT.

## Fable Flats Road — Levee Loop Trail: North *Advisory Shoulder*

Map:  
Focus Area 3

Medium  
Priority

**Description:** Pavement markings and signage along Fable Flats Road to indicate shared use of the private road for a Levee Loop Trail connection.

**Key Connections:** Levee Loop Trail

**Additional Notes:**

- The Levee Loop Master Site plan identified the connection along Fable Flats Road as the preferred alignment for the trail. This project will require further evaluation of appropriate pavement markings and signage to provide wayfinding and indicate shared use of the road for access to properties and the trail. Next steps include, verifying ownership to identify the potential need for a trail easement.
- The Boroughs of Stroudsburg and East Stroudsburg hold an agreement with the Department of Environmental Protection to use the Levee for hiking, biking, running and programming. If the Levee right-of-way is confirmed to fall within the boundary of this project, the Township should pursue a similar agreement.

## McMichael Creek Greenway *Natural Path*

Map:  
Focus Area 2

Medium  
Priority

**Description:** A combination of Natural Paths and Hiking Trails connecting newly acquired protected lands.

**Key Connections:** McMichael Creek Greenway; Glen to Glen Trail; Cherry Valley National Wildlife Refuge

**Additional Notes:**

- The recent protection of Pomeroy McMichael Creek Nature Preserve, in Hamilton Township, along with the addition of new lands to the Cherry Valley National Wildlife Refuge have created new opportunities for expanding the McMichael Creek Greenway. The Township should continue to work with local conservation partners to further explore the feasibility of expanding the existing trail system.

## 5th Street and Mill Creek Road *Bicycle Lanes / Shared Travel Lanes*

Map:  
Focus Area 3

Long  
Term

**Description:** Bicycle lanes on 5th Street between Clearview Avenue and Mill Creek Road and shared travel lanes on Mill Creek Road between 5th Street and Stokes Mill Road.

**Key Connections:** Potential Bicycle Boulevard on Wallace Street; Brodhead Creek Greenway; Levee Loop Trail

**Additional Notes:**

- This project has the potential to serve as a second phase of the proposed Bicycle Boulevard on Wallace Street, extending the connection to the Brodhead Creek Greenway and Levee Loop Trail. A combination of bicycle lanes and shared travel lanes may be possible. Next steps include, further evaluation of existing roadway/shoulder widths, traffic volumes and speeds, and other safety considerations.

## ForEvergreen Nature Preserve Connection *Natural Path/ Hiking Trails*

Map:  
Focus Area 6

Long  
Term

**Description:** A combination of Natural Paths and Hiking Trails connecting the ForeverGreen Nature Preserve to trail systems to the north and south.

**Key Connections:** Broadhead Greenway; Emerging Upper Brodhead and Paradise Trail

**Additional Notes:**

- The Upper Brodhead and Paradise Trail Feasibility Study identified two potential routes for the trail system. The Township should continue to work with local conservation partners to identify opportunities and select a preferred alignment of a trail connecting the ForEvergreen Nature Preserve to the historic Cresco Mountain Train Station.
- Options to extend the network south into the Brodhead Greenway should also be taken into consideration. The Stroud Region Trail Gap Analysis identified a route through the Township owned Stonecrusher property with the potential to connect in Pinebrook Park. Next steps include, further evaluation of key parcels and coordination with private property owners.

## Public Transportation Connections

### Overview

Public transit service is provided by the Monroe County Transit Authority (MCTA) in the study area. The MCTA strengths are characterized by:

- Bus service into downtown Stroudsburg and East Stroudsburg;
- Flex route services offered throughout the region;
- A modern and well maintained fleet, including compressed natural gas buses;
- Existing bus shelters in key locations; and
- Partnership with the National Parks Service for summer recreational access to the Delaware Water Gap National Recreation Area.

The study area benefits from three fixed routes. The Blue Route provides service to and from the Bartonsville Giant to Mt. Pocono and Coolbaugh Township. The Tobyhanna Express provides premium express service to and from the Tobyhanna Army Depot from East Stroudsburg with limited stops in Tannersville, Stroudsburg and East Stroudsburg. The Red Route provides service through Stroudsburg and East Stroudsburg. MCTA offers real time tracking of buses through their website and MyStop app.

The Monroe County Transit Authority also provides the Flex Connect service, which is a weekday service with selected stops. Individuals must register prior to the date of service to reserve a seat. There are three different flex services that serve the study area. The Orange Flex service connects to the Red and Blue fixed routes at the Giant in Bartonsville. The Violet and Yellow Flex service connects to the Red Route at Eagle Valley and the Stroud Mall.

Additionally, there are several intercity bus providers in the region. Thanks to its close proximity to New York City, there are several intercity routes that provide daily connections between the study area and New York City. Many of these buses serve from the Martz Trailways Bus Terminal located on Route 611 in Delaware Water Gap Borough or Martz Trailways Park-and-Ride located on Route 447 in Smithfield Township. Also, East Stroudsburg University operates a bus shuttle service that circulates and provides connections within their campus.

### Potential New Fixed Route

A new fixed bus route between Delaware Water Gap Borough and Stroudsburg/East Stroudsburg and the MCTA system would fill one major gap in the public transportation network. This service would improve transportation options for both residents and visitors. It would connect residents and regional recreational resources in Delaware Water Gap Borough with retail, employment, and service destinations in downtown Stroudsburg and East Stroudsburg. This recommendation requires further evaluation of the potential route, ridership levels, and cost. Delaware Water Gap Borough plans to coordinate with MCTA and survey both residents and visitors (including Appalachian Trail hikers) regarding the potential need for transit service, including potential days and hours of



As a result of this planning process, MCTA added two Flex Connect service stops in Delaware Water Gap Borough in Spring 2020. The Yellow Flex stops are located at Watergap Village Apartments on Main Street / Route 611 and Apple Pike Bakery on Broad Street.

service. Expansion of any transit service to Delaware Water Gap Borough will require identification of financial resources to support the service.

### Pedestrian Connections and Enhanced Bus Stops

Public transit works best in areas where there is a pedestrian network to support people’s “first and last mile” connections. Bus stops should be accessible to everyone. Therefore, all stops should meet current ADA standards and include sidewalk connections to destinations. Providing connected sidewalks along transit routes, such as Main Street and Route 611 in Stroudsburg and Stroud Township, will enhance access to the public transit network. Also, key stops in the network could incorporate other amenities such as bus shelters, benches, and/or bicycle racks. MCTA is proactive in installing bus shelters at key locations. However, retrofitting bus stop elements and coordinating with adjacent landowners can be challenging.

Municipalities in the study area should coordinate with the MCTA on major land development or infrastructure project, particularly along existing bus routes. This coordination can lead to improved placement and design of bus stops. Such partnerships could be formalized in the land development process by making coordination with MCTA a requirement of land development approval.

### Future Multi-modal Hub

There has been some interest recently in locating a multi-modal hub in Stroudsburg Borough. The purpose of the facility would be to provide convenient connections between MCTA service and other transportation options, including ridesharing services and possibly shared bicycles and/or scooters. In addition, the hub could include a park-n-ride facility. However, the demand, feasibility, and sustainability of such a hub must be further explored. This will require evaluation of potential locations and identification of funding for design, acquisition, and/or construction. The evaluation of potential locations should consider connections to the regional trail network.



# 5 | Catalyst Capital Improvements



## Catalyst Capital Improvements

One project was selected in each municipality to serve as a “catalyst” for future improvements to the active transportation network. These catalyst projects are high priority capital improvements recommended in the active transportation plan. They are intended as demonstration projects that will serve as a springboard in each community towards future investments in infrastructure that supports active transportation.

The catalyst projects were selected because they are high priorities for the communities, provide key connections in the active transportation network, posed fewer feasibility concerns, can be completed in the near-to-mid-term, and have low to moderate costs associated with implementation. The projects are:

- Main Street / Route 611 / Mountain Road — Pedestrian Crossings and Gateway (Delaware Water Gap Borough)
- Levee Loop Trail – South at Broad Street (Stroudsburg Borough)
- Kistler/Lackawanna/Chestnut—Bicycle Boulevard (East Stroudsburg Borough)
- Milford Road / Route 209 — Bicycle Lanes (Smithfield Township)
- Stokes Mill Road / Route 2013 — Striped Shoulder (Stroud Township)

The descriptions on the following pages include additional details, graphics, sketches, and cost estimates to help advance these catalyst projects. For each project, identifying funding for design and/or construction is a key next step. The information provided in this plan can be used for municipal budgeting purposes or to pursue grant resources in the future. The cost estimates are rough approximations based on the preliminary scope of improvements and the cost of similar projects. While they are appropriate for planning and budgeting purposes, the cost estimates cannot be used for construction.

## Main Street / Route 611 / Mountain Road — Pedestrian Crossings and Gateway

Pedestrian gateway improvements would make travelers on the Appalachian Trail feel more welcome and improve safety of all pedestrians within the core of the Borough. Key improvements would include upgraded pedestrian crossings of Main Street and pedestrian accommodations along Main Street.



### Legend

-  Crossing Improvement
-  Gateway Treatment
- EM ATP Network**
-  Hiking Trail
-  Potential Improved Path
-  Potential Striped Shoulder
-  Potential Advisory Shoulder
-  Existing Sidewalks
-  Bicycle Route
- Conserved Lands by Owner**
-  Municipal
-  Federal

### Benefits

- Increased safety and visibility for pedestrians
- Creates a gateway and more welcoming to the Borough
- Improves connectivity to the Appalachian Trail, as well as the emerging Liberty Water Gap Trail / September 11th National Memorial Trail

## Existing Conditions



Main Street / Route 611 Looking North

- Disconnected sidewalks and lack of pedestrian infrastructure
- No crosswalk across Main Street / Route 611 at the intersection with Mountain Road (the primary crossing for Appalachian Trail users)
- No dedicated infrastructure for the Appalachian Trail connection along Mountain Road
- Limited parking for the Appalachian Trail and other recreation resources in the area

## Proposed Improvements



Main Street / Route 611 Looking North

- 5' wide striped shoulder with a 2' wide striped buffer (possibly with flexible delineator posts or quick curb to enhance the buffer) on Main Street / Route 611 in front of the Deer Head Inn
- Upgraded pedestrian crossings of Main Street at Mountain Road and Delaware Avenue
- Center median island on Main Street/Route 611 south of Mountain Road
- Rectangular Rapid Flashing Beacons (RRFB) or other flashing warning device for crossing Main Street / Route 611 at Mountain Road



Photo credit: Jen Maizer



## Additional Considerations

- Evaluate potential parking impacts (spaces across Main Street / Route 611 from the Deer Head Inn).
- Advance planning and design of an Off-road improved path along Mountain Road from Main Street to the Appalachian Trailhead.
- Identify opportunities to expand parking, particularly for access to the Appalachian Trail.

## Cost Estimate

- Design: \$50,000—\$175,000
- Construction: \$250,000—\$350,000 (depending upon traffic calming measures)

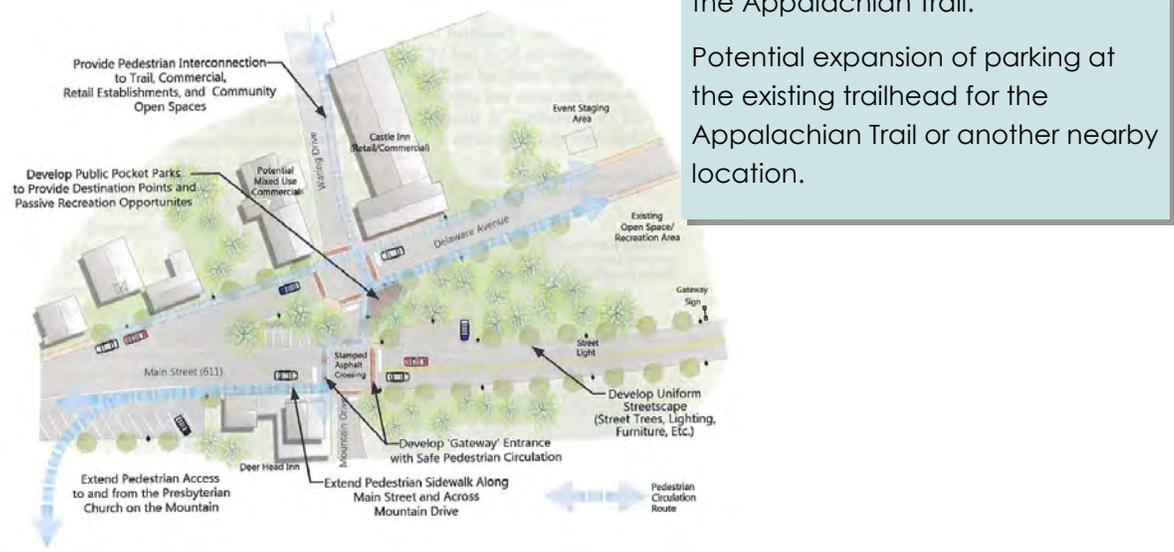
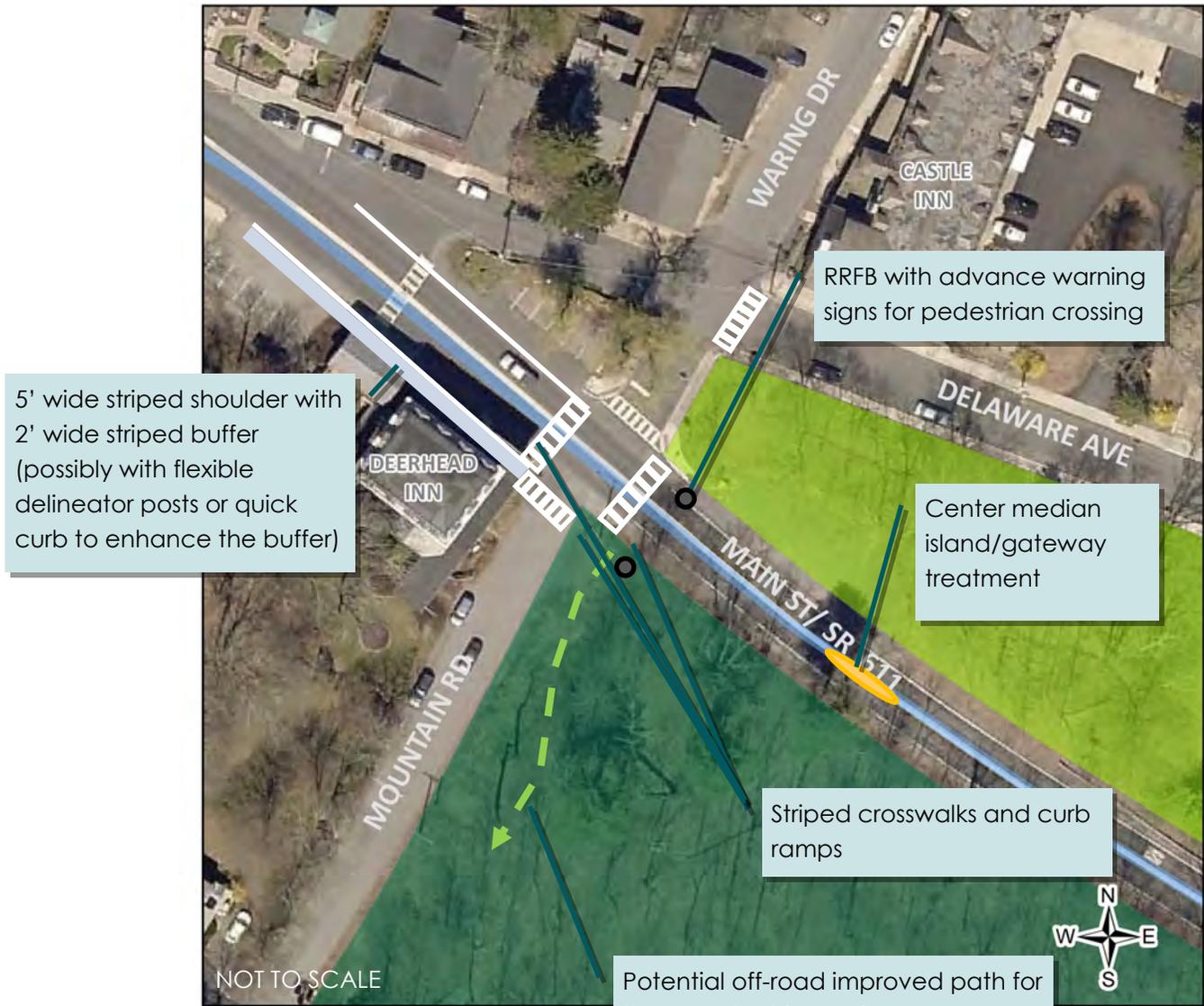
## Next Steps

- Coordinate with property and business owners regarding potential improvements.
- Identify funding for design and construction of the proposed improvements.
- Develop design plans for the proposed improvements.
- Coordinate with the National Park Service regarding the potential Appalachian Trail connection and trailhead parking expansion.



**Rectangular Rapid Flashing Beacon (RRFB)**

Proposed Improvements Sketch



Potential off-road improved path for the Appalachian Trail.

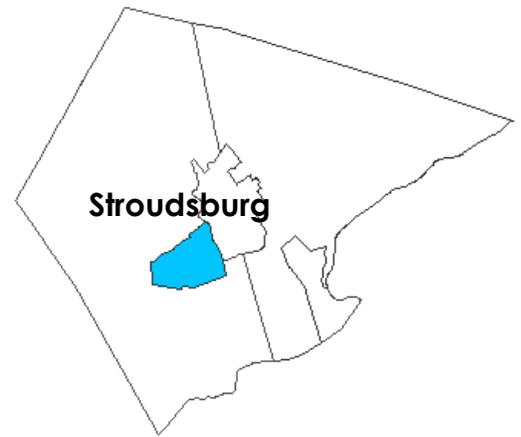
Potential expansion of parking at the existing trailhead for the Appalachian Trail or another nearby location.

The proposed improvements build upon concepts identified in the Borough of Delaware Water Gap Village Study of 2013 for a southern gateway and improved pedestrian circulation.

# Broad Street—Levee Loop Trail: South— Pedestrian Gateway

## Project Summary

A gateway and pedestrian trailhead will provide a direct connection between the Levee Loop Trail—South and sidewalks on Broad Street. In addition, bicycle lanes are proposed for Broad Street. These improvements will help to link Stroudsburg’s downtown business district with the regional trail network and regional recreational resources at Glen Run and Godfrey’s Ridge. This connection was identified in the Levee Loop Master Site Plan (2005) as a preferred alignment and access to the southern section of the trail. The improvements could be partially or fully implemented as part of PennDOT’s I-80 reconstruction project, and specifically as part of the reconstruction of the Broad Street Bridge over the McMichael Creek.



### Legend

- Potential Trailhead
- Natural Path
- Potential Sidewalk
- Potential Bicycle Lane
- Existing Sidewalks
- Bicycle Route
- Transit Route
- Levee Easement
- Municipal Open Space

## Benefits

- Creates a gateway and connection between the downtown business district and the regional trail network
- Key segment in a planned connection between downtown Stroudsburg and the Glen Run and Godfrey’s Ridge park and recreational areas

## Existing Conditions

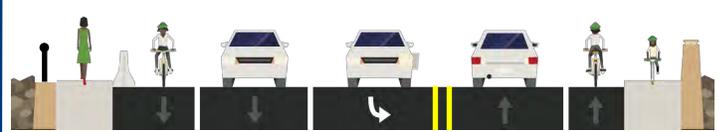


Broad Street Looking North

- Sidewalks on both sides of Broad Street Bridge over McMichael Creek
- Pedestrian railing and a fence with a locked gate restrict pedestrian access between the existing sidewalks on the Broad Street Bridge and the Levee Loop Trail—South
- No dedicated bicycle infrastructure on Broad Street



## Proposed Improvements



Broad Street Looking North

- 5' wide sidewalks and 5' wide bicycle lanes on both sides of the Broad Street Bridge over McMichael Creek (Note: This is part of PennDOT's draft conceptual plan for the I-80 Reconstruction project)
- Barrier along the curb between the bike lane and sidewalk on the east side of the bridge
- Direct pedestrian connection between the sidewalk on the east side of the bridge and the Levee Loop Trail—South with an opening in the pedestrian railing on the outside of the bridge



## Additional Considerations

- Potential design treatments for the gateway and pedestrian trailhead include an arch to mark the entrance to the Levee Loop Trail, bench, kiosk, or other wayfinding signage.
- Consider need for pedestrian scale lighting in the area of the trailhead.

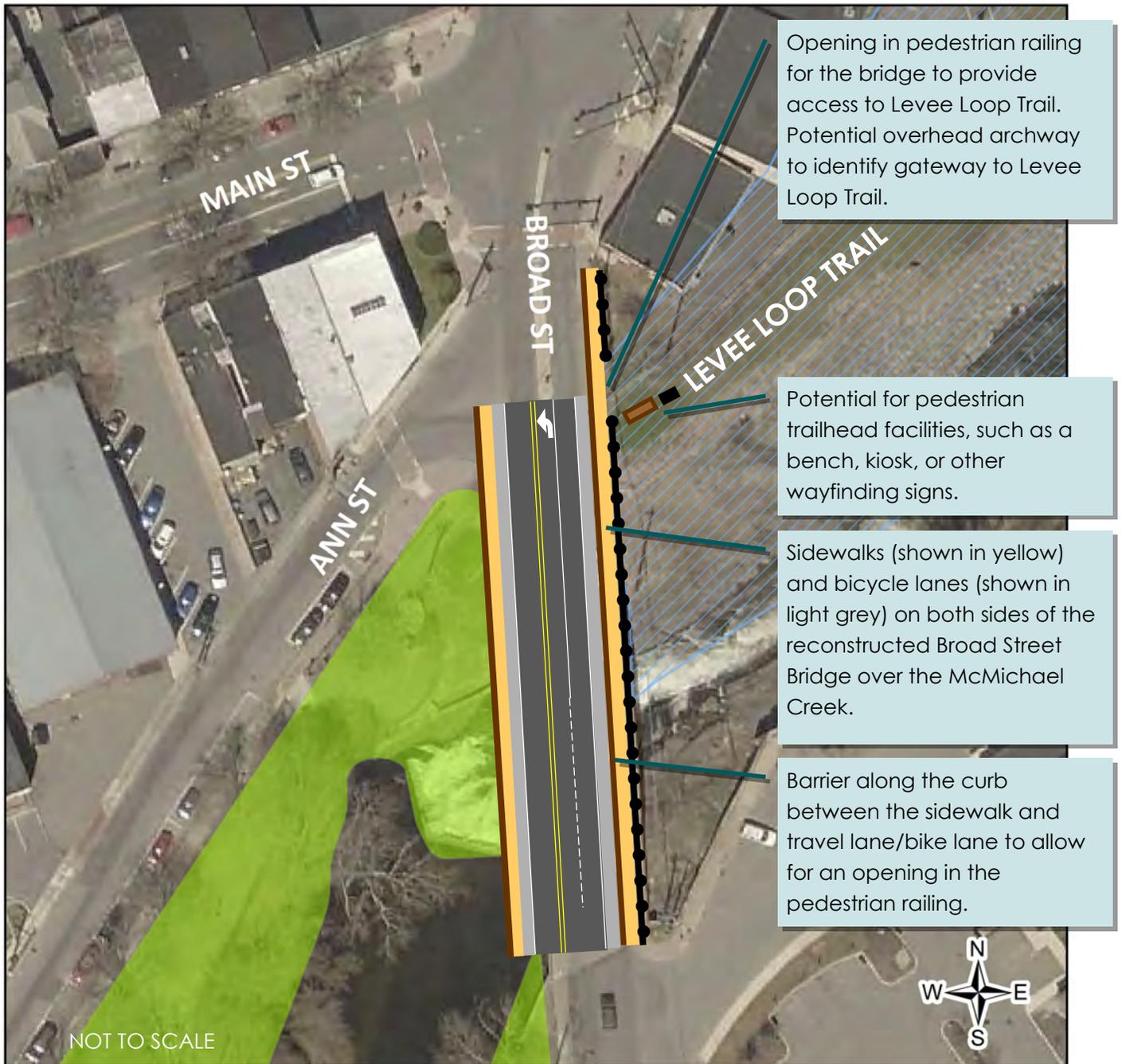
## Cost Estimate

- Barrier: \$200,000 additional cost for construction of the barrier as part of PennDOT's bridge replacement project
- Gateway and pedestrian trailhead treatments \$15,000—\$20,000 for installation

## Next Steps

- Coordinate with PennDOT regarding the design and incorporation of improvements for the reconstruction of the Broad Street Bridge over McMichael Creek.
- Coordinate with DEP regarding design of the gateway and access to the Levee Loop Trail—South.
- Identify funding for design treatments that cannot be incorporated into the reconstruction of the Broad Street Bridge.

Proposed Improvements Sketch



The Conceptual Plan for the I-80 Reconstruction, Phase II Alternative 2D, (Draft 2018) prepared by PennDOT, FHWA, and AECOM and posted on [i80project.com](http://i80project.com) includes replacement of the Broad Street Bridge over McMichael Creek. The draft conceptual plan includes sidewalks and bike lanes on both sides of the bridge. Additional design treatments, such as a barrier between along the curb, may be needed to create the gateway pedestrian connection to the Levee Loop Trail—South.

## Kistler/Lackawanna/Chestnut—Bicycle Boulevard

### Project Summary

A bicycle boulevard along Kistler St., Lackawanna St., and Chestnut St. in East Stroudsburg Borough would provide a safe corridor for people on bikes. The improvements would provide an alternative to Courtland St., which has higher traffic volumes and speeds, and it would provide connections to residential areas in the north to downtown East Stroudsburg, Zacharias Pond Park, Miller Park, Dansbury Depot, and Crystal Street. The approximate limits of this project would be E. 3rd Street to Analomink Street, which is one-mile in length.



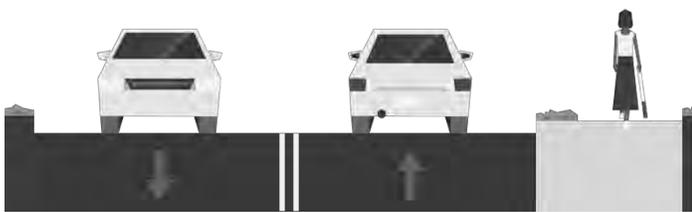
#### Legend

- ..... Potential Bicycle Boulevard
- Existing Sidewalks
- Transit Route
- Municipal Open Space

### Benefits

- Safe connection between Crystal Street and Zacharia’s and Gregory’s Pond Parks
- Design treatments to offer priority for bicyclists operating within a roadway shared with motor vehicle traffic.
- Increases motorists’ visibility and awareness to the possibility of on-road bicyclists
- Encourage people on bikes to utilize lower stress streets

## Existing Conditions

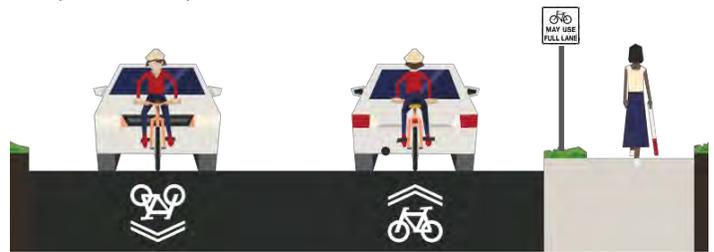


Kistler / Lackawanna / Chestnut Looking North

- One travel lane in each direction (approximately 12' wide lanes)
- Limited and disconnected sidewalk segments on east side
- Railroad tracks on west side
- 25 mph speed limit



## Proposed Improvements



Kistler / Lackawanna / Chestnut Looking North

- Install shared lane pavement markings (sharrows), placed after intersections and at intervals not greater than 250'
- Install Bicycle May Use Full Lane Signs or other bicycle wayfinding signs
- Consider removing center line markings to encourage motorists to pass bicyclists at a safe distance
- Install speed humps to slow traffic



## Additional Considerations

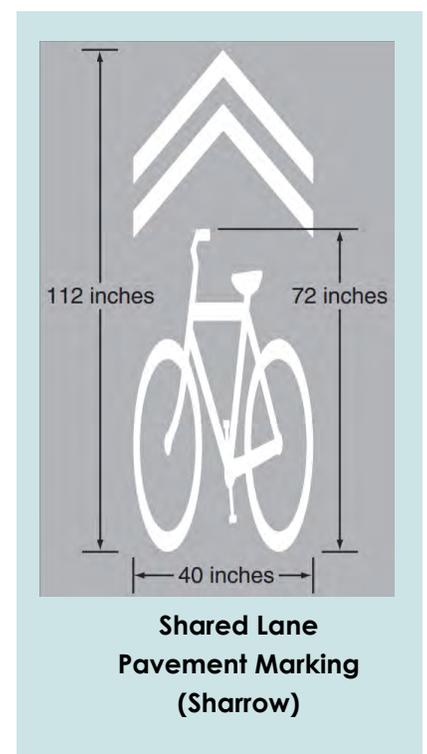
- Provide bicycle racks near Dansbury Depot and/or Crystal Street.
- Consider and evaluate the need for other traffic calming measures.

## Cost Estimate

- Design: \$15,000—\$35,000
- Construction: \$80,000—\$140,000 (depending upon traffic calming measures)
- Implementing bicycle boulevard treatments in conjunction with a roadway repaving project would reduce the costs for design and construction.

## Next Steps

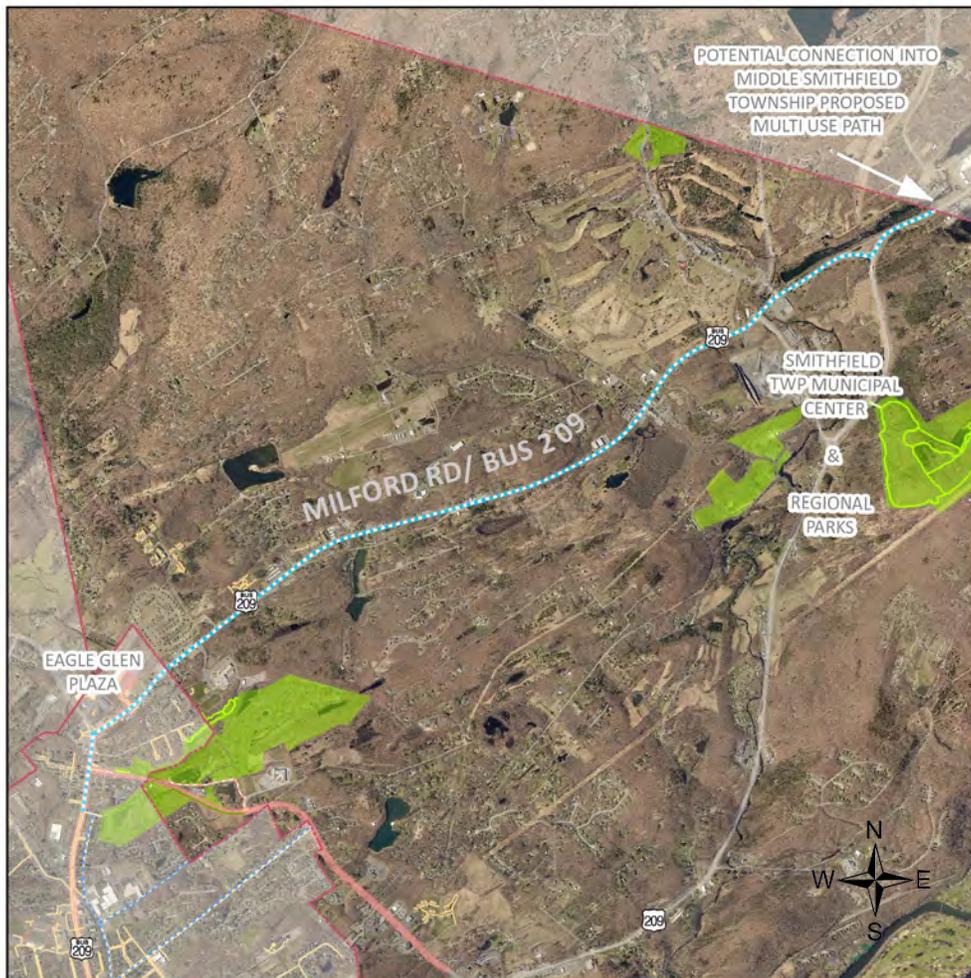
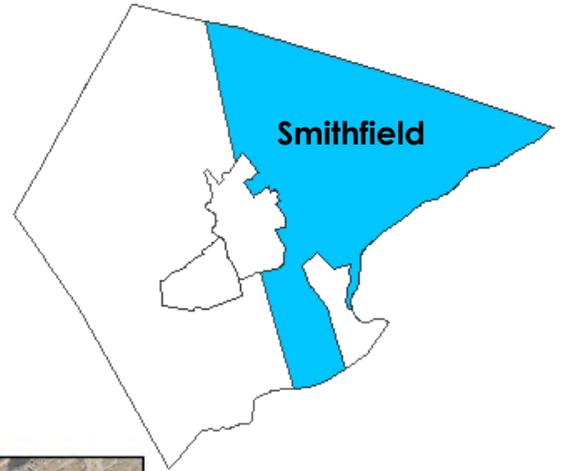
- Further evaluate the placement of speed humps.
- Develop pavement marking and signage plans and/or specifications.
- Consider installing pavement markings and signs as part of a future roadway repaving program.
- Identify funding for recommended improvements, particularly speed humps.



## Milford Road / Route 209 — Bicycle Lanes

### Project Summary

Bicycle lanes on Milford Road would provide a connection between East Stroudsburg Borough, the planned Middle Smithfield Township Side Path, and the McDade Trail. The current relatively wide pavement width, limited cross streets and driveways, and mostly flat grades make this road an ideal candidate for bicycle lanes.



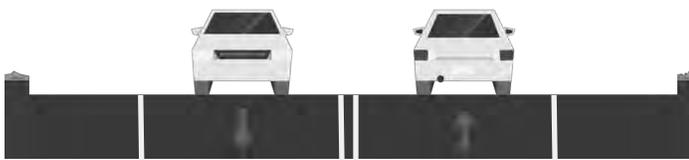
#### Legend

-  Potential Bicycle Lane
-  Municipal Open Space

### Benefits

- Design treatments to offer a separate facility for bicycles; reducing conflict between motor vehicle traffic.
- Increases motorists' visibility and awareness to the possibility of on-road bicyclists.

## Existing Conditions

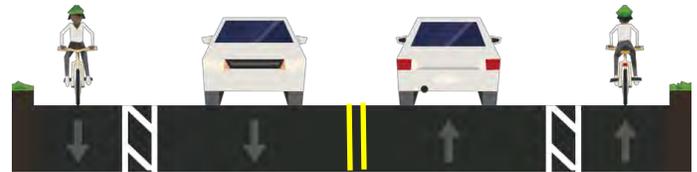


Milford Road / Route 209

- 5' - 6' shoulders on each side
- 12' - 13' travel lanes
- Estimated right-of-way of 40'
- Speed limit varies between 35 and 45 mph



## Proposed Improvements



Milford Road / Route 209

- 5' wide bicycle lane
- 2' wide striped buffer
- 11' travel lanes
- Upgrade shoulders to provide a consistent width
- Clear roadside vegetation
- Traffic calming measures (with a goal of instituting a consistent 35 mph speed limit)



## Additional Considerations

- A speed study would be needed to justify lowering the speed limit.

## Cost Estimate

- Design: \$100,000—\$250,000
- Construction: \$1.4—\$2.0 million (depending upon the need for shoulder upgrades/widening and traffic calming measures)
- Implementing improvements in conjunction with a roadway repaving program would reduce the costs for design and construction.

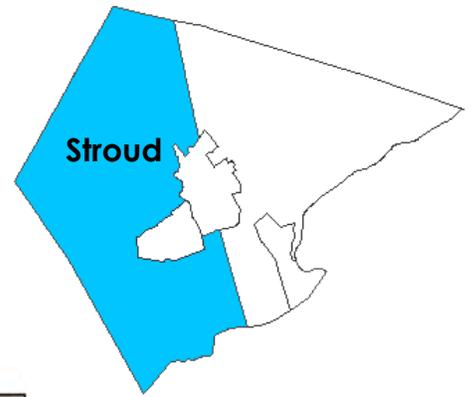
## Next Steps

- Clear roadside vegetation.
- Evaluate the existing shoulders and identify any necessary shoulder upgrades and potential traffic calming measures.
- Develop pavement marking and signage plans and/or specifications.
- Consider upgrading shoulders, installing pavement markings, and installing signs as part of a future roadway repaving program.
- Identify funding for recommended improvements.
- Monitor speeds, conducted target enforcement, and possibly complete a speed study to lower the speed limit.

# Stokes Mill Road / Route 2013 — Striped Shoulder

## Project Summary

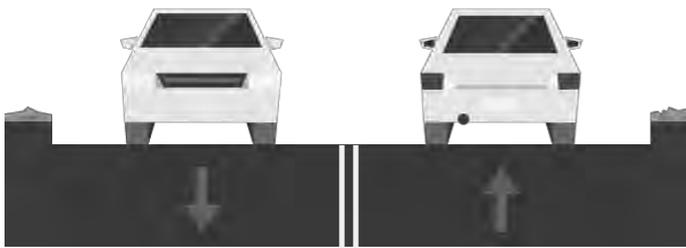
A striped shoulder along Stokes Mill Road (SR 2013) would provide a location for pedestrians to travel between the Levee Loop Trail at Stokes Mill Park and Brodhead Creek Trail/Brodhead Greenway; effectively closing a gap in the regional trail network. Additional consideration should be given to traffic calming measures, signage, and protection from the steep slopes along the Brodhead Creek embankment.



## Benefits

- Closes an important gap in the regional trail network between the Levee Loop Trail and Brodhead Greenway
- Connects various park and recreational resources, including Stokes Mill Park, Yetter Park, and Brodhead Creek Park
- Increases motorists' visibility and awareness to the possibility of pedestrians and on-road bicyclists

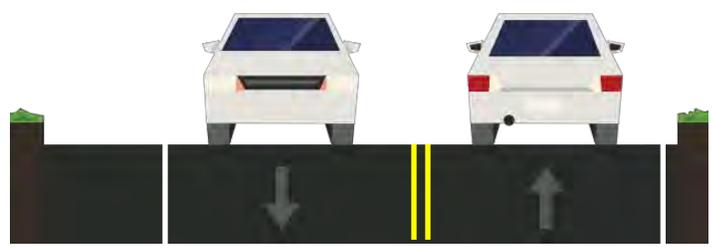
## Existing Conditions



Stokes Mill Road Looking South

- 21' - 22' wide pavement width
- No shoulders
- No edge-line striping
- 35 mph speed limit

## Proposed Improvements



Stokes Mill Road Looking South

- 4' wide striped shoulder (hard surface either paved or gravel) on the east side of Stokes Mill Road and adjacent to creek and within the existing roadway right-of-way
- 10' travel lanes
- Clear roadside vegetation
- Safety barrier or railing at the top of the creek bank to protect pedestrians from steep slopes
- Traffic calming measures and advanced warning signs for pedestrians, particularly south of the Levee Loop Trail connection and near the Moose Lodge



## Additional Considerations

- Evaluate appropriate traffic calming measures.
- The striped shoulder will not likely meet requirements for an ADA compliant pedestrian route.

## Cost Estimate

- Design: \$50,000—\$175,000
- Construction \$250,000—\$350,000 (depending upon traffic calming measures)

## Next Steps

- Evaluate and determine the preferred surface material for the shoulder and the need for a barrier or railing in certain locations.
- Develop pavement marking and signage plans and/or specifications.
- Consider installing pavement markings and signs as part of a future roadway repaving program.
- Identify funding for recommended improvements, particularly traffic calming measures.



# 6 | Transformative Initiatives



## Introduction

In addition to constructing new infrastructure, updating policies and establishing programs can help to implement the Active Transportation Network, encourage use of the network, and achieve the vision and goals of this plan. This chapter includes a review of existing municipal ordinances related to active transportation, as well as potential policies and programs that can be developed by the study area municipalities and other partners.

## Municipal Ordinance Review

The Subdivision and Land Development Ordinances (SALDO) and Zoning Ordinances for each municipality in the study area were reviewed to identify how active transportation themes are addressed. The table on the following page provides a general indication of how well each municipality addresses these themes in the current ordinances. Each theme was categorized as, “consistent, updates encouraged, and adoption of standards encouraged.”

This review can serve as the basis for determining how municipal ordinances can be updated to better address active transportation from a policy perspective. The following recommendations address general regulatory deficiencies. These recommendations give an introduction to how these themes can be regulated in the municipal ordinances. Further, customized research and drafting of ordinance language will be needed to incorporate these recommendations into municipal codes.

### Terminology

It may be useful to define active transportation related terms in municipal ordinances. Defining terms in the municipal code ensures that all parties are in agreement as to what a specific facility is and is not. The Active Transportation Toolbox in this document can serve as a starting point for developing definitions for municipal ordinances.

### Design Standards

Each municipal ordinance contains design standards to regulate specific

aspects of the built environment. Active transportation elements can be incorporated into the design standards. At a minimum, the design standards should include the following:

- Where a feature is required.
- When a feature is required.
- The dimensions of the feature and its elements, including minimum and/or maximum dimensions.
- Any additional design or construction requirements.

The design standards may include references to accepted design standards or build specifications that have also been adopted by the municipality. Listed below are the common issues within municipal ordinances related to active transportation and recommendations to address these deficiencies.

Consistent	Ordinances include effective policies and standards.
Updates Encouraged	Ordinances include some policies or standards that could be updated or expanded.
Adoption of Standards Encouraged	Ordinances do not include policies or standards.

### Summary of Municipal Ordinance Review

Municipality	Off-Road Infrastructure		On-Road Infrastructure	Pedestrian and Trail Crossings	Public Transit Stop Requirements
	Sidewalks	Paths/Trails			
Delaware Water Gap Borough	Updates Encouraged	Adoption of Standards Encouraged	Adoption of Standards Encouraged	Updates Encouraged	Adoption of Standards Encouraged
East Stroudsburg Borough	Updates Encouraged	Adoption of Standards Encouraged	Adoption of Standards Encouraged	Updates Encouraged	Adoption of Standards Encouraged
Smithfield Township	Updates Encouraged	Updates Encouraged	Adoption of Standards Encouraged	Updates Encouraged	Updates Encouraged
Stroud Township	Updates Encouraged	Consistent	Updates Encouraged	Updates Encouraged	Adoption of Standards Encouraged
Stroudsburg Borough	Updates Encouraged	Updates Encouraged	Adoption of Standards Encouraged	Updates Encouraged	Adoption of Standards Encouraged

### Off-Road Infrastructure

#### Sidewalks

The definition of a sidewalk is not consistent in municipal ordinances throughout the study area. Most of the municipal ordinances in the study area require sidewalks to be included in all new development. However, they are inconsistent as to when and where they are required. Some municipalities require sidewalks on the frontage of public streets, some require sidewalks interior to sites, and some require them only to connect to existing facilities on adjacent properties. Additionally, the width requirements are not consistent with current Americans with Disability Act standards. Municipalities should consider:

1. Adopting a consistent definition of sidewalks across the study area;
2. Requiring sidewalks along public and private street frontages for all

land developments; and

3. Referencing current ADA standards for the design of sidewalks, including requiring a 5' minimum width.

### **Paths/Trails**

Although provisions for paths and trails in the municipal ordinances are limited, some of the municipalities identify the importance of connecting proposed trails into the larger municipal network. However, only one of the ordinances identify minimum widths for trails and paths. Municipalities should consider:

1. Adopting consistent definitions for trails and paths;
2. Reference specific plans (including this Active Transportation Plan) for where trails and paths should be constructed; and
3. Include standards for the width, construction, and design of trails and paths based on the anticipated use of the proposed trail.

### **On-Road and Bicycle Infrastructure**

Most of the ordinances do not mention on-road infrastructure such as bike lanes, sharrows, improved shoulders, etc. However, these facilities can be essential to completing gaps in the active transportation network. Municipalities should consider:

1. Adopting consistent definitions for on-road active transportation infrastructure;
2. Reference specific plans (including this Active Transportation Plan) for where on-road facilities should be constructed; and
3. Include standards that are consistent with nationally accepted and statewide guidelines for on-road active transportation features; and
4. Include bicycle parking requirements, particularly for commercial uses.

### **Pedestrian and Trail Crossings**

A crosswalk is any portion of a roadway at an intersection or elsewhere designated for pedestrian crossing, typically by lines or other pavement markings. Crosswalks can be located at an intersection or a midblock location. Additionally, crosswalks can be marked or unmarked. Trail crossings are considered to be intersections, so the definition and design treatments differ from crosswalks. Both crosswalks and trail crossings are only minimally covered in the municipal ordinances in the study area, and when they are, the regulations include inadequate widths or other standards. Municipalities should consider:

1. Adopting consistent definitions for both crosswalks and trail crossings to use throughout the region;
2. Incorporating appropriate design standards and guidelines, including ADA and the Manual on Uniform Traffic Control Devices (MUTCD); and
3. Requiring the evaluation of crosswalks and trail crossings as part of the land development process; and

4. Adopting uniform standards for the type of crosswalks to be painted (parallel lines, diagonal hatching, or perpendicular) based on the functional classification of the roadway or other criteria.

### Public Transit Requirements

MCTA provides a valued service to the residents of the study area. However, there is almost no mention of transit or bus stop requirements beyond specific overlay zones in these municipal ordinances. The municipalities should consider:

1. Adopting standard definitions related to bus stop elements, including an ADA loading pad and bus shelters, to use across the region;
2. Identifying a hierarchy of bus stop improvements based on the utilization of each specific stop; and
3. Requiring coordination with MCTA during the land development review and approval process, particularly for developments along existing bus routes or developments that may warrant future transit service; and
4. Requiring installation of appropriate bus stop elements as part of land developments.

### Transportation Impact Study Requirements

Many municipalities require preparation and submission of a traffic impact study as part of the land development approval process. The requirements for traffic studies are often focused solely on evaluating and mitigating traffic capacity. Mitigating traffic impacts by providing more travel lanes can induce more traffic, reduce the ability of people to use non-auto modes because of wider and busier roadways, and make it more expensive to develop in desirable locations. The requirements for transportation impact studies can be expanded to consider a broader range of transportation options and more balanced strategies to address transportation impacts.

#### Existing Conditions Analysis

Require descriptions and documentation of all existing and proposed elements of the transportation system, including pedestrian infrastructure; bicycle infrastructure; and public transit routes, stop locations, and service.

#### Future Conditions Analysis

Require that proposed improvements shall consider all roadway users, including motorized vehicles, bicyclists, pedestrians, and transit users. Add a requirement to address future public transit service through coordination with MCTA.

#### Alternative Transportation Plans

The municipalities in the study area may choose to adopt a practice whereby major developments are required to submit an Alternative Transportation Plan (ATP). This plan should be completed in concert with a transportation impact study. There are a variety of criteria that could be considered for when an ATP must be prepared, such as zoning district, size of the development, and functional classification of the roadway. The ATP can be used to identify multimodal (bicycle, pedestrian, public transit) infrastructure improvements and Transportation Demand Management

(TDM) measures to offset the traffic impacts associated with the proposed development.

The developer may choose to implement any or all of the improvements identified in the ATP to receive trip reduction credits. The trip reduction credit percentages require approval by the municipality's governing body with guidance from a professional traffic engineer and agreed upon by PennDOT (for state owned roadways). Trip reduction credits could be applied to the transportation impact study to determine the required roadway improvements.

However, for state owned roadways under PennDOT's jurisdiction, ATP's cannot be used as justification for any roadway or intersection to go unimproved through the land development process or for any roadway or intersection to operate below an acceptable LOS during the peak condition. Additionally, all requirements under the current PennDOT HOP process must be met.

### Official Maps

Municipalities in Pennsylvania are enabled to adopt an official map by Article IV of the Pennsylvania Municipalities Planning Code (Act 247). An Official Map is a planning tool that shows locations of planned future public lands and facilities, including streets and trails. It is used to express the municipality's interest in acquiring the identified land for future public purposes. It informs property owners and developers of municipal plans.

All municipalities within the study area should consider adopting an official map or amending their current official map to reference the recommended improvements of this Active Transportation Plan, including proposed sidewalks and trails. The Official Map Handbook developed by PennDOT, DCNR, DCED, and the Pennsylvania Land Trust Association provides an overview of the elements and process to develop and adopt an official map. Delaware Water Gap Borough and Stroud Township are both currently working on official maps. They should consider incorporating the recommendations in this Active Transportation Plan. Additionally, Smithfield Township can incorporate the recommendations in their Official Map, which was adopted in 2013.

### Capital Improvement Plans

Capital improvement plans can help municipalities budget for maintenance or replacement of existing infrastructure and construction of new active transportation facilities. They identify short and long term priorities to help municipalities prioritize and schedule capital improvements. Capital improvement plans may also identify potential funding or financing options. The plan serves to link municipal budgets to planning efforts.

Capital improvement plans typically include a prioritized list of projects, a plan for financing the projects, a timeline for the construction of the project, justification for each project, and an explanation of expenses. They help to explain how and why the municipality is expending public funds to serve the public good. The Eastburg 2025 Comprehensive Plan includes a section on Capital Improvement Planning; showing that East Stroudsburg Borough has taken the first step towards developing a Capital Improvement Plan.

## Other Potential Policies and Programs

Beyond Zoning Ordinances and Subdivision and Land Development Ordinances (SALDO), there are other potential policies that municipalities or other governmental entities in the study area can develop and adopt to expand and support the Active Transportation Network.

### PennDOT Connects

The PennDOT Connects program provides an opportunity for municipalities to coordinate with PennDOT, the county, NEPA Alliance, and other planning partners during the implementation of maintenance and capital improvement projects. This coordination is vitally important to advancing community visions.

Increased communication and coordination, during the pre-planning phase is critical for active transportation plan implementation moving forward. It is the local and county governments opportunity to raise awareness of their local pedestrian and transportation priorities/plans. It is critical that local representatives, county planning staff, representatives from MCTA, as well as other community stakeholders, have the opportunity for input prior to expending resources on engineering/permitting costs.

### Complete Streets

Complete Streets are streets that are designed, operated, and maintained to provide safe access for all users. Complete Streets policies are documents that identify procedural approaches to designing and maintaining roadways that serve the needs of all users, regardless of age, ability, or mode of transportation. Effective Complete Streets policies identify the parties responsible for ensuring that Complete Streets principles are considered in the design process for all transportation projects within a municipal jurisdiction. Municipalities within the study area could develop Complete Streets policies to help develop and expand the active transportation network based on their unique needs, characteristics, and available resources. Grant funding is available for municipalities in Pennsylvania to develop Complete Streets Policies through the WalkWorks program administered by the University of Pittsburgh.

### Access Management

Access management includes a number of strategies to control the ways that vehicles can access major roadways. Access management strategies can be used to create a safer and more comfortable environment for bicyclists and pedestrians by limiting the number of conflict points with turning vehicles. Municipalities can use access management strategies and adopt access management strategies to improve safety and increase the overall efficiency of roadways. PennDOT's Access Management Handbook provides an overview of various access management strategies and includes a model municipal ordinance for access management. In addition to considering an access management ordinance, municipalities in the study area can and should consider ways to provide adequate driveway spacing and opportunities for joint access as part of the review and approval process for new land developments.

#### Ten Elements of a Complete Streets Policy

1. Vision and intent
2. Diverse users
3. Commitment in all projects and phases
4. Clear, accountable expectations
5. Jurisdiction
6. Design
7. Land use and context sensitivity
8. Performance measures
9. Project selection criteria
10. Implementation Steps

Source: Smart Growth America

## Traffic Calming

Traffic calming measures are physical changes to a roadway designed to reduce speeding and cut-through traffic, particularly on residential streets. Traffic calming measures are often implemented in conjunction with bicycle and pedestrian infrastructure to create a safer and more comfortable environment for walking and biking. The Active Transportation Toolbox includes several traffic calming measures that may be appropriate in the study area. Municipalities in the study area can consider developing and adopting a traffic calming policy to outline a process for evaluating and implementing traffic calming measures. These policies often address how municipalities respond when residents express concerns related to speeding or cut-through traffic. The policy can include processes for residents to request a traffic calming study, key steps in the evaluation process, and criteria for determining if traffic calming measures should be installed. PennDOT's Traffic Calming Handbook includes a sample traffic calming process and policy outline.

## Vision Zero

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all users. Vision Zero involves a multidisciplinary and systems approach to improve policies and roadway environments to prevent fatal and severe crashes. This involves a shift from considering traffic deaths inevitable rather than preventable and focus on managing speeds. Municipalities can make a Vision Zero Commitment and develop a Vision Zero Action Plan to outline steps, metrics, and a timeline to achieve zero traffic deaths in the community. In Pennsylvania, Bethlehem, Harrisburg, and Philadelphia have made a commitment to Vision Zero.

## Maintenance

Infrastructure for walking, biking, and riding public transit will require routine and ongoing maintenance. Some maintenance activities are related to changes in seasonal conditions, such as clearing snow and ice or overgrown vegetation. Additionally, sidewalks, paths and trails may require minor, periodic repairs, such as crack filling or patching, and occasionally full replacement. On-road bicycle facilities may require replacement of pavement markings and signs. Municipalities should consider adopting or updating existing policies to address minor maintenance responsibilities, particularly for sidewalks, paths, and trails. Additionally, municipalities and other organizations that own and maintain active transportation infrastructure should consider financial planning and investments for future major repairs or replacement. Municipalities should inventory the condition of existing infrastructure to plan, budget, and prioritize repairs and improvements. Also, when new infrastructure is constructed, the entity can set aside funds each year for the future repairs and replacement of the infrastructure.

The Delaware Water Gap Borough Sidewalk Inventory (2019) identifies locations where the sidewalks within the Borough are in need of maintenance. This is a good first step in developing a maintenance plan for improving the sidewalk conditions. The road safety audit model can be

### Nine Components of a Vision Zero Commitment

1. Political commitment
2. Multi-disciplinary leadership
3. Action plan
4. Equity
5. Cooperation and collaboration
6. Systems-based approach
7. Data driven
8. Community Engagement
9. Transparency

Source: Vision Zero Network



Sidewalks in Delaware Water Gap Borough

used to identify pedestrian and bicycle maintenance concerns. FHWA provides a general overview of the steps in performing a road safety audit on their website.

## Wayfinding

Today, one of the challenges with walking and biking in the study area is the difficulty of actually finding and following trails and other infrastructure. There are a variety of different wayfinding signs within the study area that lack consistency in regards to size, appearance, and placement. Wayfinding signs, when not planned or consistent, can lead to sign clutter and confusion. The current wayfinding signs within the study area reflect the different types of bicycle and pedestrian facilities and also the diversity of organizations that own and/or maintain the facilities and have installed wayfinding signs over time.

Developing a regional wayfinding program for bicycle and pedestrian infrastructure and connections can help to promote walking, biking, and riding transit. The Active Transportation Toolbox highlights different types of physical wayfinding signs, which may be needed to provide information and navigational directions. Development of a Wayfinding Signage Master Plan is a potential next step to providing more consistent and comprehensive wayfinding signage. The Master Plan would identify specific colors, fonts, and logo image(s) that could be used for physical signs. Additionally, the wayfinding plan could also consider online maps and resources that could be developed in conjunction or as an alternative to physical signs. Monroe County, municipalities, and the Pocono Mountains Visitors Bureau are potential project partners to undertake a Wayfinding Master Plan. Funding will need to be identified both for development of the master plan, as well as design and installation of wayfinding signs.

## Enforcement Programs

There are a number of state and local laws and regulations to address bicycle and pedestrian safety issues. Ensuring compliance with these laws can help to provide a safe environment for walking, biking, driving, and riding public transit. Listed below are several ideas of ways to enhance the enforcement of laws that impact bicycle and pedestrian safety.

- Use of non-motorized patrols
- Training for law enforcement officials on walking/biking laws
- Use of driver feedback speed signs
- Targeted speed enforcement, particularly for shared use facilities

## Education and Encouragement Programs

Educating people about the health and safety benefits of walking and biking and encouraging people to walk and bike may help to increase walking and biking activity. The following list includes potential activities and events that could be held to promote and raise awareness for active transportation. The activities could incorporate education, exercise, art, history, nature, recreation, and fun for all ages. Municipalities may need to revise or update ordinances and requirements for holding special events,

particularly for street closures.

- Beautification / Clean-up events
- Bike lessons for kids and adults
- Bike rodeos for kids
- Bike to work day rallies
- Block parties / Free street events
- Downtown / Historic district walking tours
- Public art installations (temporary or permanent)
- Charity walks / Running races / Bike races / Triathlons
- Trail Opening Events
- Walk / Bike tracking and challenge activities
- Walk / Bike to School Day activities
- Walk / Bike safety lessons offered at schools or libraries
- Walk at Lunch Day Activities
- Wellness programs

Programs can be led and managed by a variety of entities or organizations. A regional council or coalition of volunteers who are interested and invested in active transportation can play a key role in implementing programs, as well as advocating for projects and policies. A grassroots coalition can also promote awareness of issues related to walking and biking, provide education, and create accountability. Bicycle and running clubs, as well as bike and running shops, may have members or patrons that would be interested in being part of a coalition. Additionally, East Stroudsburg University and the school districts are potential key partners for successful educational and promotion programs. Some of the most successful programs are developed as a partnership between various organizations.

Chester County led a WalkWorks ChesCo initiative to increase physical activity and reduce obesity rates in the County by promoting places and opportunities to walk and coordinating walking challenges using the Walker Tracer mobile app. The County provided walking tips, locations where to walk, and tracked progress on the County's website. The initiative was part of the County's effort to compete in the Healthiest Cities and Counties Challenge.

Stroud Region Open Space & Recreation Commission's (SROSRC) mission is connecting the community with recreational programs, greenways, trails, parks, recreation amenities and natural areas throughout the Stroud Region. SROSRC already partners with Stroudsburg and East Stroudsburg Boroughs, Stroud Township, Stroudsburg and East Stroudsburg School Districts. Many of SROSRC events and programs already promote walking and biking.

# 7 | Achieving the Vision



## Action Plan

This plan is not the starting point for creating a multimodal network in Eastern Monroe County. It is the culmination of years of hard work by municipal leaders and planning partners and provides a path forward to continually improve the active transportation network in the community.

The foundation for an active transportation network already exists, and planning partners have been working to expand and enhance Eastern Monroe County's active transportation network for many years. Project partners have been collaborating on planning efforts and several new connections are being designed. However, infrastructure projects like these take time; continued development of the network will likely occur in a phased approach over time. It will require commitment and dedication by various project partners to build connections, update policies, and promote programs. These incremental changes over time will help to achieve the long term vision for a safe, connected, convenient, visible, and inclusive active transportation network.

The following summary of implementation priorities includes capital improvements, policy updates, programs, and partnerships. The summary lists key responsible parties and action items. Chapters 4, 5, and 6 provide more details about specific action items for certain projects and initiatives. This action plan is focused on how project partners can work both independently and collectively on an ongoing basis to expand and enhance the active transportation network.

## Capital Improvement Projects

**Summary:** Advance implementation of the new potential connections identified in the Active Transportation Network presented in Chapter 4, focusing on the catalyst and other high priority projects. See descriptions of projects in Chapters 4 and 5.

### Key Responsible Parties and Potential Partners:

- Municipalities (for improvements involving local roads or municipal owned land)
- PennDOT (for improvements involving state roads or federal/state transportation funding)
- Monroe County (for improvements involving County owned land and technical support/assistance for advancing other projects)
- Non-Profit Organizations (for improvements on conserved/preserved land)

### Key Action Items:

- See Chapter 4 and Chapter 5 for action items related to specific projects.
- Evaluate the feasibility and determine the specific scope of improvements for each project. Given the scope and scale, some improvements may need to be implemented in phases, depending upon the availability of funding and other factors.
- Identify partnerships and opportunities to implement improvements as part of other projects, such as planned roadway repaving, PennDOT transportation improvement projects, or adjacent land developments.
- Update or adopt municipal ordinances to advance planning for the improvements, particularly Official Maps.



## Municipal Ordinance and Policy Updates

**Description:** Update existing or develop new municipal ordinances and policies to incorporate design standards and regulate specific aspects of active transportation infrastructure. See Chapter 6 for specific recommendations.

**Responsible Parties and Partners:**

- Municipalities
- Monroe County (for technical assistance and review)

**Action Items:**

- Identify funding or other opportunities to review, revise, and draft ordinance language relative to location, design, maintenance, and other aspects of active transportation infrastructure.

## Maintenance of Existing Infrastructure

**Description:** Maintain existing active transportation infrastructure through routine maintenance activities, clear policies, and inventorying, and budgeting for repairs and/or replacement.

**Key Responsible Parties and Partners:**

- Municipalities
- Monroe County (for maintenance of County-owned infrastructure and technical assistance to municipalities to inventory existing infrastructure)
- Non-Profit Organizations (for maintenance of owned paths and trails)

**Action Items:**

- Budget for and perform maintenance activities related to changes in season conditions, such as clearing snow or overgrown vegetation from both on-road and off-road facilities.
- Update or adopt municipal ordinances to address maintenance responsibilities, particularly for sidewalks, paths, and trails.
- Inventory the condition of existing active transportation infrastructure to plan, budget, and prioritize repairs and improvements. Possibly focus initially on a sidewalk inventory in terms of condition, width, and meeting ADA requirements.
- Plan and budget for future repairs and replacement of active transportation infrastructure.

## Fixed Route Bus Service to Delaware Water Gap Borough

**Summary:** Evaluate and plan for the future extension of fixed route bus service to Delaware Water Gap Borough.

**Key Responsible Parties and Partners:**

- Monroe County Transit Authority (MCTA)
- Monroe County

**Key Action Items:**

- Promote and monitor the use of the Flex Connect service that is available in the Delaware Water Gap Borough.
- Conduct a survey of Borough residents and hikers to determine potential demand for bus service, including days of the week and hours.
- Evaluate potential routing, stop locations, and service options based on the survey results.
- Identify financial resources to support the expanded bus service.

## Enhanced Bus Stops

**Summary:** Provide connected sidewalks along transit routes and enhanced bus stops that meet ADA standards and incorporate other passenger amenities, such as bus shelters, benches, and/or bicycle racks.

**Key Responsible Parties and Partners:**

- Monroe County Transit Authority (MCTA)
- Monroe County
- Municipalities

**Key Action Items:**

- Update municipal ordinances to incorporate bus stop design requirements and encourage coordination with MCTA for major land development projects.

## Multimodal Hub

**Summary:** Develop a multimodal hub to provide convenient connections between MCTA service and other transportation options, including ridesharing services, shared bicycles/scooters, and the active transportation network.

**Key Responsible Parties and Partners:**

- Monroe County Transit Authority (MCTA)
- Monroe County
- Stroudsburg Borough

**Key Action Items:**

- Evaluate demand and options for multimodal connections and potential locations for a hub, focusing in Stroudsburg Borough.

## Promote Regional Partnerships

**Summary:** Support continued proactive planning for active transportation and collaboration among active transportation partners, both within and beyond the Eastern Monroe County region.

**Key Responsible Parties and Partners:**

- Municipalities
- Monroe County
- Monroe County Transportation Authority (MCTA)
- Non-Profit Organizations

**Key Action Items:**

- Facilitate regular meetings or coordination among key partners, particularly Monroe County, municipalities, and non-profit organizations that have a direct role in the active transportation system.
- Coordinate with neighboring municipalities and Monroe County on future regional connections that extend beyond the five municipalities that were the focus of this plan.

## Regional Wayfinding Program

**Summary:** Develop a regional wayfinding program for bicycle, pedestrian, and public transit connections. See additional information in Chapter 6.

**Key Responsible Parties and Partners:**

- Municipalities
- Monroe County
- Non-Profit Organizations, such as the Pocono Mountains Visitors Bureau

**Key Action Items:**

- Identify partners and funding to develop a Wayfinding Signage Master Plan for the active transportation network.

## Educational and Encouragement Programs

**Summary:** Promote the use of the active transportation network through a variety of educational and encouragement programs.

**Key Responsible Parties and Partners:**

- Municipalities
- Monroe County
- Non-Profit Organizations, such as Stroud Region Open Space and Recreation Commission
- Local Businesses

**Key Action Items:**

- Foster creation of a coalition of volunteers who are interested and invested in active transportation and can assist with developing programs, as well as advocating for projects and policies.
- Facilitate coordination among potential partners to identify potential programming needs and opportunities for collaboration.

## Potential Funding Sources

Identifying funding is a critical next step for both capital improvements and new policies. Some projects or efforts may be relatively low cost and can be implemented in conjunction with another project, while others may require phasing and funding from multiple sources.

One potential funding source for capital improvement projects and maintenance of active transportation infrastructure is general funds, capital funds, state liquid fuels funds, and other dedicated funds included in the annual budgets for the study municipalities, Monroe County, and non-profit organizations that own paths and trails. Local funding sources often provide for the most control and flexibility for the implementation of capital improvements and policy updates. Investments of local funds can be used to leverage other funding sources and be used for matching funds for competitive grant programs.

Given the variety of improvements identified, additional funding beyond the general budgets will likely be needed for implementing improvements. Various competitive grant programs are available and provide funding, most often for the design and construction of capital improvements. The Summary of Current Competitive Grant Programs Table on the following page highlights some current grant programs based on the priority improvements. Each grant program has different eligible projects and uses of funds, matching requirements, and timelines for implementation. Grant programs typically require the project sponsor to provide matching funds and commit to administering and fulfilling other grant requirements.

Monroe County offers Open Space Development Grants on a biannual basis. The program funding comes from the county's allocation of impact fees as a result of Act 13, which established the Marcellus Legacy Fund. In 2019, the County awarded approximately \$150,000 to two categories of grants. Projects generally focused on the development and rehabilitation of outdoor parks, recreation areas, or natural areas to provide, or take steps toward providing, features or facilities that are publicly accessible for active or passive recreation. The county is considering restructuring the program guidelines and potentially focusing on projects that improve public access and connectivity to protected lands and increase opportunities for active transportation.

Summary of Current Competitive Grant Programs Table

Program – Administering Agency	Program Details	Capital Improvement Projects					Policies and Plans
		Bicycle & Pedestrian Facilities	Streetscape	Traffic Calming	Public Transit	Wayfinding	
<b>Transportation Alternatives Set Aside</b> – Pennsylvania Department of Transportation (PennDOT) – Northeastern Pennsylvania Alliance (NEPA)	– Federal transportation funds – Match requires funding all pre-construction activities – \$50,000 minimum and \$1 million maximum – 2 year timeframe to complete design, right-of-way, and utility clearance	✓		✓			
<b>CFA/DCED – Multimodal Transportation Fund (MTF)</b> – Commonwealth Financing Authority (CFA) with Department of Community and Economic Development (DCED)	– Annual competitive grant program for state funds (Act 89) – 30% match; \$100,000 minimum; \$3 million maximum – 2 – 3 year timeframe to complete the grant funded activities	✓	✓	✓	✓		
<b>PennDOT – Multimodal Transportation Fund (MTF)</b> – PennDOT	– Annual competitive grant program for state funds (Act 89) – 30% match (based on grant award); \$100,000 minimum; \$3 million maximum – 3 year timeframe to complete the grant funded activities	✓	✓	✓	✓		
<b>Automated Red-Light Enforcement (ARLE) Program</b> – PennDOT	– Annual competitive grant program – Funded by revenue from automated red light enforcement – No matching funds required	✓					
<b>Greenways, Trails and Recreation Program (GTRP)</b> – CFA with DCED & Department of Conservation of Natural Resources (DCNR)	– Annual competitive grant program for state funds (Act 13) – 15% match; \$250,000 maximum – 2 - 3 year timeframe to complete the grant funded activities	✓ Trails					
<b>Community Conservation Partnerships Program (C2P2)</b> – Department of Conservation and Natural Resources (DCNR)	– Annual competitive grant program – Various federal and state funds available for trails and improving access to recreational opportunities – Match requirement depends on program	✓ Trails				✓	✓
<b>Community Development Block Grant (CDBG)</b> – Monroe County Redevelopment Authority (through DCED)	– Annual federal Housing and Urban Development (HUD) funds – Funds allocated to local jurisdictions based on population and other factors	✓	✓	✓		✓	✓
<b>Municipal Assistance Program (MAP)</b> – Department of Community and Economic Development (DCED)	– Grant program with rolling applications (always accepting applications) – 50% match required						✓
<b>WalkWorks Program</b> – University of Pittsburgh	– Annual competitive grant program – No matching funds required – Typically less than 1 year to complete the grant funded activities						✓
<b>PeopleForBikes Community Grant Program</b> – PeopleForBikes	– Annual or biannual competitive grant program for private funds – Grant requests cannot exceed 50% of the project cost and \$10,000 maximum	✓					
<b>Pocono Forest &amp; Waters Conservation Landscape Mini Grants</b> – PA Environmental Council	– Funded by DCNR Environmental Stewards Program – \$2,000—\$10,000 with a 1:1 match	✓				✓	
<b>Local Share Account (LSA) - Monroe County</b> – Commonwealth Financing Authority (CFA) with Department of Community and Economic Development (DCED)	– Annual competitive grant program for funding from the dedicated local share of revenue from certain licensed gaming facilities – Can be used for projects that improve the quality of life in affected communities	✓	✓	✓	✓	✓	
<b>1% for Nature</b> – 1% for Nature, Inc.	– Funding provided by a consortium of Local consortium of businesses – \$1,000 maximum – No required match					✓	
<b>Monroe County Open Space Development Grants</b> – Monroe County	– Biannual competitive grant program for Monroe County’s Allocation of Act 13 – Previous funding round provided \$40,000 maximum with a 2:1 match for Municipal Partnership Grants and \$20,000 maximum with a 1:1 match for Open Space Development Grants	✓					

## Measuring Success

Tracking the success of this Active Transportation Plan will be measured by the completion of linear miles of new multimodal transportation facilities, the number of newly connected destinations, and implementation of priority capital improvements. These metrics are based on guidance provided by the Centers for Disease Control and Prevention and used by the WalkWorks program, which partially funded this plan. The metrics were revised due to the nature and multi-municipal context for this plan. Since improvements will not happen overnight, it will be important to track progress and success using these measures. Monroe County can work closely with the municipalities and other project partners to periodically review and report progress based on these three metrics.



### Potential Linear Miles

The length or linear miles of active transportation facilities is one measure of the size and extent of the active transportation network in the region. The following table below lists the linear miles of existing and potential off-road and on-road facilities based on the Active Transportation Toolbox and Active Transportation Network Map presented in Chapter 4. The specific location of the existing and potential facilities are illustrated in the six focus area maps.

### Length of Active Transportation Facilities

Facility Type	Existing (Linear Miles)	Potential (Linear Miles)	Total (Linear Miles)
<b>Off-Road</b>			
Sidewalks	85	10	95
Multi-use Trails	3	2	5
Improved Paths	13.5	4.5	18
<b>On-Road</b>			
Paved/ Striped Shoulders	0	1.5	1.5
Shared Travel Lanes (Sharrow)	0	.5	.5
Bicycle Lanes / Buffered Bicycle Lanes	.5	5	5.5
Bicycle Boulevards	0	4	4
Advisory Shoulders	0	4	4
Yield Roadways	0	0.15	0.15
Bicycle Routes	14.5	3.5	18
<b>Total</b>	<b>116.5</b>	<b>35.15</b>	<b>151.65</b>

For off-road facilities, length calculations focused on sidewalks, multi-use trails, and improved paths because they support walking and biking trips for transportation (as opposed to recreation) purposes. For on-road facilities, the length is based on the length of the segment roadway that includes the facility. For example, bicycle lanes or shared travel lane markings on both sides along a one-mile segment of roadway is expressed as one-mile of bicycle lanes or shared travel lanes.)

This measure does not include the length of hiking trails, mountain bike trails. While a component of this plan and important to the region, these facilities are often used primarily for recreational purposes. Natural paths, although a valuable asset to the active transportation network, have also been excluded from these calculations. As noted in Chapter 4 many of the proposed greenway connections, specifically in the north, will need further evaluation to identify appropriate surfacing options and preferred alignments. Additionally, the measure does not include existing and potential bus routes, which are a critical element of the region's active transportation network. The plan includes a recommendation to expand fixed route bus service to Delaware Water Gap Borough, but identifying a potential route for the service will require additional evaluation. Additionally, a simple linear distance of bus routes does not capture the frequency of service, which is also a key factor for bus service.

## Connected Destinations

One goal of expanding the active transportation network is to link various destinations within and beyond the region. The connected destinations are places that are desirable, useful, or attractive for people to access by walking, using a bicycle, or taking public transportation. By connecting more destinations with active transportation facilities, it will be safer, easier, and more convenient to walk, bike, or rider transit.

The following table lists the number of destinations that are connected by the various types of active transportation facilities identified in the plan. The calculation of the number of the destinations connected by the existing and potential facility types was based on the Key Destinations Map presented in Chapter 3 and the Active Transportation Network Map presented in Chapter 4.

For the purpose of calculating this metric, parcels containing one or more destination points were counted and considered as one destination if they were within 60 feet of an existing or potential active transportation network facility. This distance was selected to account for the level of accuracy and detail of Geographic Information System (GIS) mapping for existing and proposed facilities. This methodology does not consider the circulation and facilities within a parcel or the connections between the active transportation network and the "front door" of a destination. Also, destination parcels may be connected by more than one type of existing or potential facility, so totaling the number of destinations across facility types is not meaningful. Similar to the linear miles measure, this metric does not include existing or potential natural paths or bus routes.

## Number of Destinations Connected by Active Transportation Facilities

Facility Type	Number of Existing Connected Destinations	Number of Potential Connected Destinations	Total Number of Connected Destinations
<b>Off-Road</b>			
Sidewalks	888	203	1,091
Multi-use Trails	7	8	15
Improved Paths	42	23	65
<b>On-Road</b>			
Paved/ Striped Shoulders	0	14	14
Shared Travel Lanes (Sharrow)	0	3	3
Bicycle Lanes / Buffered Bicycle Lanes	2	34	36
Bicycle Boulevards	0	11	11
Advisory Shoulders	0	42	42
Yield Roadways	0	3	3
Bicycle Routes	126	13	139

## Number of Potential New Connections

Eastern Monroe County's Active Transportation Network will be expanded by building new bicycle, pedestrian, and transit facilities. Tracking the implementation of identified capital improvement projects is a key indicator for the success of this plan. As a summary, the following table provides the number of new connections or projects by municipality and by priority level.

## Number of Potential New Connections By Municipality

Study Area Municipality	High Priority Connections	Medium Priority Connections	Long Term Connections
Delaware Water Gap Borough	5	1	
Stroudsburg Borough	4	3	
East Stroudsburg Borough	4	3	5
Smithfield Township	2	1	3
Stroud Township	8	5	2
<b>Total</b>	<b>23</b>	<b>13</b>	<b>10</b>

Chapter 4 includes a detailed list of 46 potential active transportation connections or capital improvement projects within the five study area municipalities. Tables on the following pages list each potential connection identified in Chapter 4 by municipality. Additionally, the catalyst capital improvement projects presented in Chapter 5 are summarized in the final table. Tracking the status of each connection, and particularly the catalyst projects will provide an indication of improving the active transportation network. Monroe County, the study area municipalities, and other project partners can work together to track the progress of these capital improvement projects from planning through design and construction.

## List of Potential New Connections

Potential Connection	Facility Type	Priority
<b>Delaware Water Gap Borough</b>		
Main Street / Route 611 / Mountain Road	Pedestrian Crossings and Gateway	High *Catalyst
Mountain Road—Appalachian Trail Connection	Improved Path	High
Main Street / Route 611	Sidewalks	High
Liberty Water Gap Trail/ September 11th National Memorial Trail	Varying Conditions	High
Godfrey—Gap Connection	Multi-Use Trail	High
Waring Drive—Minisink Park Connection	Advisory Shoulder	Medium
<b>Stroudsburg Borough</b>		
Broad Street— Levee Loop Trail: South	Pedestrian Trailhead	High *Catalyst
Broad Street	Bicycle Lanes	High
Huston Avenue and Colbert Street—Connection to Glen Park	Sidewalks and Advisory Shoulders	High
Phillips Street	Sidewalks	High
Veterans Memorial Bridge Crossing and Levee Loop Trail: South Connection	Pedestrian Connection and Crossings	Medium
Ann Street and 10th Street	Sidewalks	Medium
ESSA Trail	Natural Path	Medium
<b>East Stroudsburg Borough</b>		
Kistler / Lackawanna / Chestnut	Bicycle Boulevard	High *Catalyst
Salvation Army—Levee Loop Trail: North Connection	Advisory Shoulder	High
Independence Road—Connection to Gregory’s Pond	Sidewalks	High
Courtland / Day / Washington Intersection	Pedestrian Crossings	High
Milford Road / Business Route 209	Sidewalks	Medium
East 3rd Street	Sidewalks	Medium
Braeside Ave and Elk Street	Improved Path	Medium
Spangenburg Avenue	Sidewalks	Long Term
East Broad Street	Sidewalks or Bicycle Boulevard	Long Term
Burson Street	Bicycle Boulevard	Long Term
Milford Road / Courtland Street	Bicycle Lanes	Long Term
Levee Loop Trail: South Connection Under I-80	Improved Path and Pedestrian Bridge	Long Term

## List of Potential New Connections

Potential Connection	Facility Type	Priority
<b>Smithfield Township</b>		
Milford Road / Business Route 209	Bicycle Lanes	High *Catalyst
Independence Road / Route 447—Two Ponds Trail	Trail Crossing	High
Route 209 Bypass	Trailhead for Mount Nebo Regional Park	Medium
Burson Street	Bicycle Boulevard	Long Term
Brown Street	Striped Shoulder	Long Term
River Road	Bicycle Route	Long Term
<b>Stroud Township</b>		
Stokes Mill Road / Route 2013	Striped Shoulder	High *Catalyst
Wallace Street	Bicycle Boulevard	High
Route 191—Brodhead Greenway Connection	Striped Shoulder and Safety Improvement	High
Route 611	Sidewalks	High
West Main Street and Bridge Street	Sidewalks	High
Levee Loop Trail: North—Off-Road Connections	Natural Path or Improved Path	High
Knights Park—Route 611	Advisory Shoulder	High
McMichael Creek—Glen Run	On-Road Facilities and Improved Pedestrian Crossings	High
Stroudsburg Area School District (SASD) Chipperfield Campus	Infill Sidewalks	Medium
Route 611 - SASD Chipperfield Campus	Improved Path	Medium
Glen Run—Godfrey’s Ridge	Improved Pedestrian Crossings and On-Road Facilities	Medium
Fable Flats Road—Levee Loop Trail: North	Advisory Shoulder	Medium
McMichael Creek Greenway	Natural Path	Medium
5th Street and Mill Creek Road	Bicycle Lanes / Shared Travel Lanes	Long Term
ForeverGreen Nature Preserve Connection	Natural Path / Hiking Trails	Long Term

## Enhancements at Key Locations in the Study Area

Catalyst Project	Enhancements	
Main Street / Route 611 / Mountain Road—Pedestrian Crossings and Gateway	<ul style="list-style-type: none"> <li>• 5’ wide striped shoulder with a 2’ wide striped buffer (possibly with flexible delineator posts or quick curb to enhance the buffer) on Main Street / Route 611 in front of the Deer Head Inn</li> <li>• Upgraded pedestrian crossings of Main Street at Mountain Road and Delaware Avenue</li> </ul>	<ul style="list-style-type: none"> <li>• Center median island on Main Street/Route 611 south of Mountain Road</li> <li>• Off-road improved path along Mountain Road</li> <li>• Shoulder</li> </ul>
Broad Street—Levee Loop Trail: South	<ul style="list-style-type: none"> <li>• 5’ wide sidewalks and 5’ wide bicycle lanes on both sides of the Broad Street Bridge over McMichael Creek (Note: This is part of PennDOT’s draft conceptual plan for the I-80 Reconstruction project)</li> <li>• Barrier along the curb between the bike lane and sidewalk on the east side of the bridge</li> </ul>	<ul style="list-style-type: none"> <li>• Direct pedestrian connection between the sidewalk on the east side of the bridge and the Levee Loop Trail—South with an opening in the pedestrian railing on the outside of the bridge</li> </ul>
Kistler / Lackawanna / Chestnut—Bicycle Boulevard	<ul style="list-style-type: none"> <li>• Install shared lane pavement markings (sharrows), placed after intersections and at intervals not greater than 250’</li> <li>• Install Bicycle May Use Full Lane Signs or other bicycle wayfinding signs</li> </ul>	<ul style="list-style-type: none"> <li>• Consider removing center line markings to encourage motorists to pass bicyclists at a safe distance</li> <li>• Install speed humps to slow traffic</li> </ul>
Milford Road / Route 209—Bicycle Lanes	<ul style="list-style-type: none"> <li>• 5’ wide bicycle lane</li> <li>• 2’ wide striped buffer</li> <li>• 11’ travel lanes</li> <li>• Upgrade shoulders to provide a consistent width</li> </ul>	<ul style="list-style-type: none"> <li>• Clear roadside vegetation</li> <li>• Traffic calming measures (with a goal of instituting a consistent 35 mph speed limit)</li> </ul>
Stokes Mill Road / Route 2013—Striped Shoulder	<ul style="list-style-type: none"> <li>• 4’ wide striped shoulder (hard surface either paved or gravel) on the east side of Stokes Mill Road and adjacent to creek and within the existing roadway right-of-way</li> <li>• 10’ travel lanes</li> </ul>	<ul style="list-style-type: none"> <li>• Clear roadside vegetation</li> <li>• Safety barrier or railing at the top of the creek bank to protect pedestrians from steep slopes</li> <li>• Traffic calming measures and advanced warning signs for pedestrians, particularly south of the Levee Loop connection and near the Moose Lodge</li> </ul>

# Appendix A | Public Participation

Public participation was conducted throughout the project and took place in the form of steering committee meetings, stakeholder interviews, focus groups, surveys and public information workshops.

## Steering Committee

### Steering Committee Kick Off March 5th

Meeting Location: Monroe County Planning Commission, Stroudsburg, PA

Committee Members: M. Abell, A. Arthur, L. Breen, C. Dettore, D. Eppley, K. McMahon, M. Molin, L. Paulette, R. Schlameuss, J. Snyder, M. Ta, and L. Troutman.

Project Team: F. Horan, N. Manbeck, N. Staruch

The meeting opened with introductions and an overview of background information for the project including, funding, partners, and data collection. A brief presentation was led by the project consultant, to review the project scope and schedule.

After the presentation a visioning exercise took place and the project team facilitated a discussion on the future of Eastern Monroe County. The committee was then split up into three groups for an interactive mapping exercise to identify assets and challenges within the region.

The meeting concluded with a review of the draft active transportation toolbox and a brief outline of the next steps for the project.

### Steering Committee # 2 – May 7th

Meeting Location: Zoom

Committee Members: M. Abell, B. Barrett, C. Dettore, K. McMahon, L. Paulette, R. Schlameuss, and M. Ta

Project Team: F. Horan, N. Manbeck, E. Koopman, N. Staruch

The committee meeting opened with a summary of key activities since the committee kick-off, including, stakeholder interviews, field visits, base mapping, and drafting of report materials. The project consultant presented a draft of the vision, goals, key issues, and active transposition toolbox for discussion.

Following the review of the draft materials, an interactive mapping exercise was conducted by the project team. During the exercise the committee members provided input on potential projects for capital improvement within each of the five municipalities in the study area.

The meeting concluded with an overview of the findings from the municipal ordinance review, conducted by the project consultant, and a brief outline of the next steps for the project.

### Steering Committee # 3 – June 25th

Meeting Location: Zoom

Committee Members: M. Abell, A. Arthur, B Barrett, L. Breen, D. Eppley, K. McMahon, M. Molin, L. Paulette, R. Schlameuss, M. Ta, and L. Troutman.

Project Team: F. Horan, and N. Manbeck

The meeting opened with introductions and a summary of key activities since the previous meeting including, the public workshop and transportation partner's focus group. The project consultant presented the five Catalyst Capital Improvement Projects with mapping and facilitated an open discussion on the details of each project.

Following the mapping exercise, there was a review of the draft transit recommendation, policies and programs, and funding opportunities. The meeting concluded with a summary of next steps for the project team including the project closeout schedule.

### Steering Committee & Municipal Review of August Draft – August 10th - 28th

The August draft of The Eastern Monroe Active Transportation Plan was available for online review and hard copies were dropped off at each of the municipalities. Municipal officials and the project steering committee were encouraged to submit comments on the draft from August 10<sup>th</sup> – September 28<sup>th</sup>. Feedback from the review period was discussed among the project team and was taken into consideration for the final plan.

## Stakeholder Interviews

One on one interviews were conducted by MCPC staff with representatives from the following organizations. Interviews focused on a SWOT analysis of each municipality and the region as a whole. Priority connections identified in the interviews were vetted through the project steering committee and were further investigated through site visits and GIS mapping.

- Stroud Township (Zoom) - 4/16
- Stroudsburg Borough (Zoom) - 4/8
- East Stroudsburg Borough (Zoom) - 4/7
- DWG Borough (Zoom) - 4/9
- Smithfield Township (Zoom) - 4/21
- Stroud Region Open Space & Recreation Commission (Zoom) - 4/21
- Pocono Heritage Land Trust (Zoom) 3/25
- Delaware Water Gap National Recreation Area (In Person) - 3/9
- The MC Transit Authority (Zoom) - 4/23

## Surveys

### The Eastern Monroe Active Transportation Plan Mind Mixer Survey

An interactive online survey collector was utilized to provide additional opportunities for partners to provide feedback during the Covid-19 quarantine. The survey was open throughout April and the following organizations were invited to participate;

- East Stroudsburg University
- East Stroudsburg Area School District
- Stroudsburg Area School District
- Pocono Mountain United Way
- Pocono Chamber of Commerce
- East Stroudsburg Community Alliance
- Allied Services Integrated Health System
- Pocono Bike Club
- Downtown Stroudsburg Business Association

## Focus Groups

## Transportation Partner's Focus Group – May 19th

Meeting Location: Zoom

Participants: Kate McMahon; NEPA Alliance, Vanessa Koenig Kramer; Penn DOT District 5, Charles H. Richards; PennDot District 5-0, Mary Pat Tumelty; Pennoni

Project Team: F. Horan, N. Manbeck, E. Koopman, N. Staruch

The meeting began with introductions and a presentation led by MCPC staff introducing the project. The presentation provided background information and a summary of the project scope and schedule.

The majority of the meeting focused on an interactive mapping exercise to review the draft active transportation network and discuss the feasibility of connections involving state roadways. The meeting concluded with a brief outline of the next steps for the project.

## Public Workshops

### Public Information Workshop #1

In-person, public information workshops were offered June 17th between 9 am – 12 pm and on June 18th between 4 pm – 6 pm at the Monroe County Administration Center, in Stroudsburg, PA. In addition to the in-person opportunities, all public workshop materials were available for online review, June 17th –30th. Workshop materials included a video presentation, draft active transportation toolbox, draft active transportation network mapping, and draft pedestrian infrastructure improvement projects.

### Public Information Workshop #2

An in-person, public meeting was held on August 10<sup>th</sup> between 5 pm – 7 pm at the Dansbury Park Pavilion in East Stroudsburg, PA. Residents were given the opportunity to review maps and recommendations from the August draft of the Eastern Monroe Active Transportation Plan. MCPC staff was available to answer questions and provide information on accessing the plan and submitting comments.

The draft plan was available for online review and was open to public comment from August 10<sup>th</sup> – September 28<sup>th</sup>. Feedback from the review period was discussed among the project team, steering committee members, and municipalities, and was taken into consideration for the final plan.

# Appendix B | Data Overview

Mapping for this study was provided by Monroe County Planning Commission (MCPC) utilizing Arc Map 10.6.1. Data is projected in NAD83 PA State Plane North Fips. The County of Monroe makes no express or implied warranties concerning the release of this information. The County of Monroe is unaware of the use or uses to be made of this data. Consequently, the County of Monroe does not warrant this data as fit for any particular purpose.

## Active Transportation

### 2018\_MCPC\_Sidewalks

- Produced by: Monroe County Planning Commission
- Description: Digitized by analyzing the 2018 Monroe County ortho photography and oblique photography.

### 2018\_MCPC\_Crosswalks

- Produced by: Monroe County Planning Commission
- Description: Digitized by analyzing the 2018 Monroe County ortho photography and oblique photography.

### EM\_ATP\_Network

- Produced by: Monroe County Planning Commission
- Description: Existing and potential trails from the study region were developed utilizing existing data, MC\_Trail\_Network, and served as the foundation for a custom data set for the Eastern Monroe Region. This data set was edited throughout the project to represent the findings of the plan in correlation to the Active Transportation Toolbox.

### MCTA\_FixedBusRoutes

- Produced by: Monroe County Transit Authority
- Description: Travel Routes of all fixed-bus routes. Provided in February of 2020.

### MC\_Trail\_Network

- Produced by: Monroe County Planning Commission
- Description: This data set was created in July of 2017 and is maintained by MCPC staff. The existing trail data included in this layer was collected in the field by MCPC staff, recreated from various open space and greenway plans with geo referencing tools, and/or received from various state, municipal and nonprofit partners. The potential trail data included in this layer was created utilizing a combination of local knowledge cross referenced with 2018 Monroe County Ortho photography to delineate the potential location of the trails

## Key Destinations

### Civic\_Bldg

- Produced by: Monroe County Planning Commission
- Description: Locations of civic buildings. Includes government offices, libraries, and US post offices.

## GroceryStores

Produced by: Monroe County Planning Commission  
Description: Most current listing of active grocery store locations.

## Hotel\_Motel

Produced by: Monroe County Planning Commission  
Description: Most current listing of active hotel/motels.

## MC\_Conserved\_Lands

Produced by: Monroe County Planning Commission  
Description: The data in this geodatabase is maintained by MCPC staff and is updated regularly through a collaborative effort with the conservation partners utilizing the most current version of the

## Places of Worship

Produced by: Monroe County Planning Commission  
Description: Most current listing of active faith-based organizations.  
county parcel data.

## Retail\_Areas

Produced by: Monroe County Planning Commission  
Description: Generalized retail areas containing a mix of retail and service businesses.

## Schools

Produced by: Monroe County Planning Commission  
Description: Most current representation of school facilities.

## Environmental

### 2018\_MCPC\_EphemStreams

Produced by: Monroe County Planning Commission  
Description: Stream centerlines were derived from a 1-meter DEM utilizing the flow accumulation tool within ArcGIS. Centerlines were then confirmed by analyzing the 2018 Monroe County Aerial Photography and the PaMAP Contour Lines.

### 2018\_MCPC\_Streams

Produced by: Monroe County Planning Commission  
Description: Stream centerlines were manually edited to match the 2018 Monroe County Aerial Photography. Contains Ch93 Stream Names.

### 2018\_MCPC\_Streams\_MAP\_Poly

Produced by: Monroe County Planning Commission  
Description: Stream Polygon layer utilized for final map production.

### 2018\_MCPC\_WaterBodies

Produced by: Monroe County Planning Commission

Description: Polygons were manually edited to match the 2018 Monroe County Aerial Photography. Contains NHD attribute data.

#### USFWS\_NWI

Produced by: US Fish & Wildlife Service

Description: Contains the National Wetland Inventory.

## Reference

#### 2018\_MCPC\_LiquidFuels

Produced by: Monroe County Planning Commission

Description: Based on the Monroe County E911 Road Centerline layer. "Ownership" information is cited from the most recent PennDOT Liquid Fuels Maps.

#### 2018\_Shade\_Relief

Produced by: ESRI

Description: The ArcGIS Online services in this group layer present a worldwide shaded relief map at approximately 1km or 90m per pixel resolution for the world and 30m resolution for the United States. The shaded relief imagery was developed by ESRI using GTOPO30, SRTM, and NED elevation data from the USGS. The ArcGIS Online boundaries and places service is also included for reference

#### MCPC\_Current\_Zoning\_20200212

Produced by: Monroe County Planning Commission

Description: Most current representation of zoning districts.

#### MCPC\_Parcels\_LandUse\_20200211

Produced by: Monroe County Tax Assessment Office

Description: Most current parcel data. Includes attributes related to land-use codes utilized in the tax assessment office.

#### Monroe\_Orthophotos\_2018

Produced by: Pictrometry, an Eagle View Company

Description: This layer is created utilizing high definition imagery that is rectified to fit into a map grid. This imagery is updated every four years and is prepared for the Monroe County Tax Assessment Office through a contract with Pictrometry, an Eagle View Company.

#### MuniBounds

Produced by: Monroe County Tax Assessment Office

Description: Location of municipal boundaries, based on the tax assessment office Tax Map Boundaries.