

# Bicycle and Pedestrian Plan



**Cover photos, clockwise from top left:**

Robbins Trail, Montour Township  
(courtesy Susquehanna Greenway Partnership)

Watsontown Towpath Trail  
(courtesy Montour Area Recreation Commission)

Lewisburg Borough  
(Samantha Pearson)

3rd Street, Williamsport  
(courtesy Lycoming County Department of Planning)

Lewisburg and Kelly Township, River Road Holiday  
(Charlie Guttendorf Photography)

# Acknowledgements



Bald Eagle Valley Trail near Lock Haven

Courtesy of Clinton County

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## Plan Adoptions

- The SEDA-COG MPO adopted this plan on May 17, 2019.
- The Williamsport MPO endorsed this plan on May 20, 2019.
- The Susquehanna Greenway Partnership adopted this plan on June 13, 2019.



Susquehanna Sojourn

Jeremy Quant (courtesy Susquehanna Greenway Partnership)

# Contents

**SECTION 1**  
**Introduction**  
*Why and how this plan was developed and what region it serves*  
**page 4**

**SECTION 2**  
**Vision**  
*Big picture—what we want life to be like, in terms of walking and bicycling*  
**page 6**

**SECTION 3**  
**Goals & Strategies**  
*Making the vision tangible and focusing our efforts*  
**page 8**

**SECTION 4**  
**Current Conditions**  
*Where we stand today—progress to date and major areas for improvement*  
**page 10**

**SECTION 5**  
**Action Plan**  
*First steps—what needs to happen to achieve our vision*  
**page 31**

**SECTION 6**  
**Implementation**  
*Tips and tools for jump-starting plan implementation*  
**page 35**

**Related Documents**

*Additional resources to document the planning effort and track implementation provided on the SEDA-COG bike+ped web page:  
<http://www.seda-cog.org/transportation/Pages/Bike-Ped-Planning.aspx>*

- Safety Report
- Public Outreach Report
- Municipal Survey Report
- Public Survey Report
- Level of Traffic Stress on Bicyclists on State Roads
- Matrix of Bicycle and Pedestrian Needs
- Action Planner/Progress Tracker
- Local Bicycle and Pedestrian Audits – Jersey Shore, Northumberland, and Lewisburg
- Initial Toolbox:
  - Benefits of Bicycle- and Pedestrian-Friendly Communities
  - Visual Dictionary of Bicycle and Pedestrian Facilities
  - Funding and Technical Assistance Sources

## SECTION 1

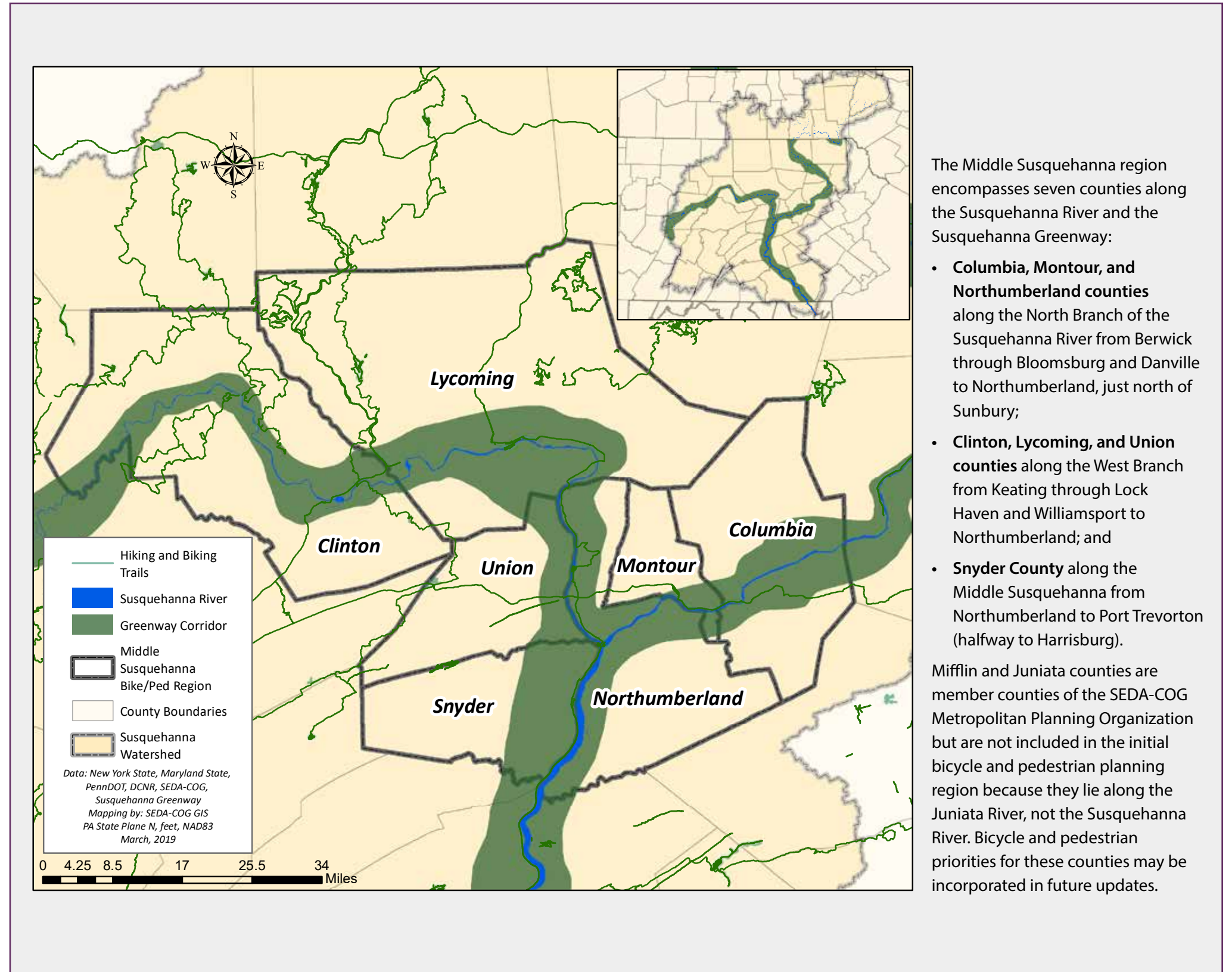
# Introduction

There are great places to walk and bike in the Middle Susquehanna Region today. Places like the Susquehanna Riverwalk in Williamsport, the Buffalo Valley Rail Trail between Lewisburg and Mifflinburg, and Danville's Riverfront Trail are popular with local residents and add value to an already good quality of life.

However, the region's transportation plans have not fully addressed bicycle and pedestrian mobility. Regional and local plans treat walking and bicycling as primarily recreational activities, when in fact many of the region's residents rely on walking and biking for day-to-day transportation. Further, land use patterns (what is built, where) in many areas essentially preclude people from safely walking and bicycling, and thereby limit their job, learning, and leisure opportunities.

While many plans consider "accommodations" for non-motorized modes, it is time for a plan that gives walking and bicycling center stage.

It's time for a plan that gives walking and bicycling center stage.



The Middle Susquehanna region encompasses seven counties along the Susquehanna River and the Susquehanna Greenway:

- **Columbia, Montour, and Northumberland counties** along the North Branch of the Susquehanna River from Berwick through Bloomsburg and Danville to Northumberland, just north of Sunbury;
- **Clinton, Lycoming, and Union counties** along the West Branch from Keating through Lock Haven and Williamsport to Northumberland; and
- **Snyder County** along the Middle Susquehanna from Northumberland to Port Trevorton (halfway to Harrisburg).

Mifflin and Juniata counties are member counties of the SEDA-COG Metropolitan Planning Organization but are not included in the initial bicycle and pedestrian planning region because they lie along the Juniata River, not the Susquehanna River. Bicycle and pedestrian priorities for these counties may be incorporated in future updates.



Walk It! Bike it! Lewisburg  
Route 15 crossing tour

Samantha Pearson

### Who Was Involved in Plan Development

The guiding force behind the plan's development and implementation was the Middle Susquehanna Regional Bicycle and Pedestrian Advisory Committee, which came together informally for this project. Committee members represented a broad range of stakeholders in the arena of bicycle and pedestrian transportation: county

planners, bicycle advocates, pedestrian advocates, and recreation managers. The perspectives of committee members helped ensure the study considered the full range of bicycle and pedestrian issues and opportunities in the seven-county region.

This plan was sponsored by SEDA-

COG and the Susquehanna Greenway Partnership. Gannett Fleming, Inc., a Harrisburg-based transportation planning and engineering firm, led a multi-disciplinary team to inform the plan's development and implementation framework.

## Benefits of Pedestrian and Bicycle Transportation



The public health benefits of regular walking and biking activity are substantial. The Centers for Disease Control and Prevention promotes active communities as a major focus for the policy, systems, and environmental approaches to chronic disease prevention. Heart disease, high blood pressure, diabetes, and obesity—all risk factors for more serious health conditions—are positively impacted by regular physical activity. Prevention of chronic disease benefits individuals, communities and larger groups with overall lower health care and insurance costs.



The environmental benefits of our vision are both direct and indirect. Greater use of walking and biking contributes less pollution than motorized travel and protects air quality by avoiding vehicle emissions. Walking and bicycling also require far less impervious surface (pavement for roads and parking), requiring less-intensive construction and producing less stormwater runoff. Indirectly the greater connection with the surrounding environment afforded by bike+ped travel fosters a greater appreciation for and stewardship of the natural environment.



The economic benefits of walkable and bikeable communities have been well-documented. For communities, there is a strong correlation between bike and ped access/mobility with a quality of life that retains and attracts population and business. When promoted among tourist attractions and activities, a bike+ped network can attract visitors who support restaurants, hotels, and stores. Walking and biking help people connect with people and places in their community in ways that cars don't allow. Choosing to walk or bike allows people to observe their surroundings in greater detail—taking in the sights, sounds, and smells that one doesn't experience when traveling in a car. For individuals, walkable and bikeable communities support low-cost transportation options.

## SECTION 2

# Vision



courtesy Montour Area Recreation Commission



Samantha Pearson



Samantha Pearson



David Stone



Samantha Pearson

This plan envisions a regional bicycle and pedestrian network, where walkable and bikeable communities are connected to each other, to the river, and to the Middle Susquehanna region and where walking and bicycling are accepted, expected, and welcome ways to travel and recreate as part of daily life and the visitor experience in the region.

### Three Major Elements

The envisioned network has three major elements, seamlessly connected:

- **Walkable and bikeable communities** where walking and biking are convenient and practical travel choices for daily life.
- **Communities that are connected to each other** and to protected open spaces by on-road biking routes and off-road bicycle and pedestrian trails.
- Communities, routes, and trails that **connect people to the river** and that celebrate the natural and cultural qualities of the Susquehanna Greenway and the larger Middle Susquehanna region.

### What Life Could be Like

All ages, all abilities, and all walks of life can use and enjoy this bicycle and pedestrian network.

For **youth**, walking and biking to school, to the park, or just for fun incorporates physical activity into the day, building healthy habits. As youth become older and their range of travel increases, walking and biking builds independence from parents as well as social connection to the community.

For **parents of young children**, a bicycle and pedestrian network provides the option of walking with a stroller or wagon to the park or to the library, encouraging healthy family time.

For those who choose to live car-lite or **car-free**, who can't afford car ownership, or

do not have a driver's license, a bicycle and pedestrian network makes short trips for work, shopping, and social life convenient, maintaining and strengthening independence and community ties.

**Adults** with busy schedules benefit from the ability to conveniently combine exercise with errands in communities geared toward walking and bicycling.

For **people with disabilities**, a bicycle and pedestrian network provides seamless access to community-based services and to public transportation for longer trips, supporting their independence.

**Active retirees** choose communities in which they can walk or bike to volunteer, shop, and access healthcare, while remaining independent longer as they age.

For the **Plain Sect communities** following a religious lifestyle emphasizing simplicity in all areas, including transportation, safe walking and biking routes are essential.

### A Vision for Connectivity Within and Beyond

This plan focuses on bike+ped connectivity in the Middle Susquehanna region, particularly along the Susquehanna River via the Susquehanna Greenway.

Several communities have embraced the river and the greenway as valuable assets for recreation and tourism and are actively working to extend and create new trails and open spaces along the waterway. For example, The Bull Run Greenway Master Plan envisions a public park that can receive floodwater, carry the Buffalo Valley Rail Trail, and integrate recreation, education, and nature

play opportunities along this small river tributary as it passes through Lewisburg Borough.

On the east side of town, the railroad bridge has been reimagined as a river crossing for bicyclists and pedestrians.

In Clinton County, the Bald Eagle Valley Trail will cross the West Branch of the Susquehanna over an 860-foot abandoned railroad bridge, ultimately connecting Lock Haven to Jersey Shore and the Pine Creek Rail Trail.

The Susquehanna Greenway is the connecting feature of the Middle Susquehanna region and the connecting feature into other Pennsylvania-designated regions, such as the Pennsylvania Wilds, the Endless Mountains Heritage Region, and the Susquehanna Riverlands.

At this time, the Susquehanna Greenway is designated only in Pennsylvania. The envisioned Susquehanna Greenway is a continuous trail connection along the river from the New York State line through Pennsylvania to the Maryland border. Future inter-state connections to the Susquehanna Greenway will open up opportunities for multi-state bicycle and pedestrian travel. These future connections include a link to New York from the Pine Creek/Triple Divide Trail and connections to Maryland from the Lower Susquehanna Heritage Greenway Trail. When completed, these interconnected trail systems will create a continuous trail corridor from New York to the Chesapeake Bay to be known as the Genesee-Susquehanna Greenway.



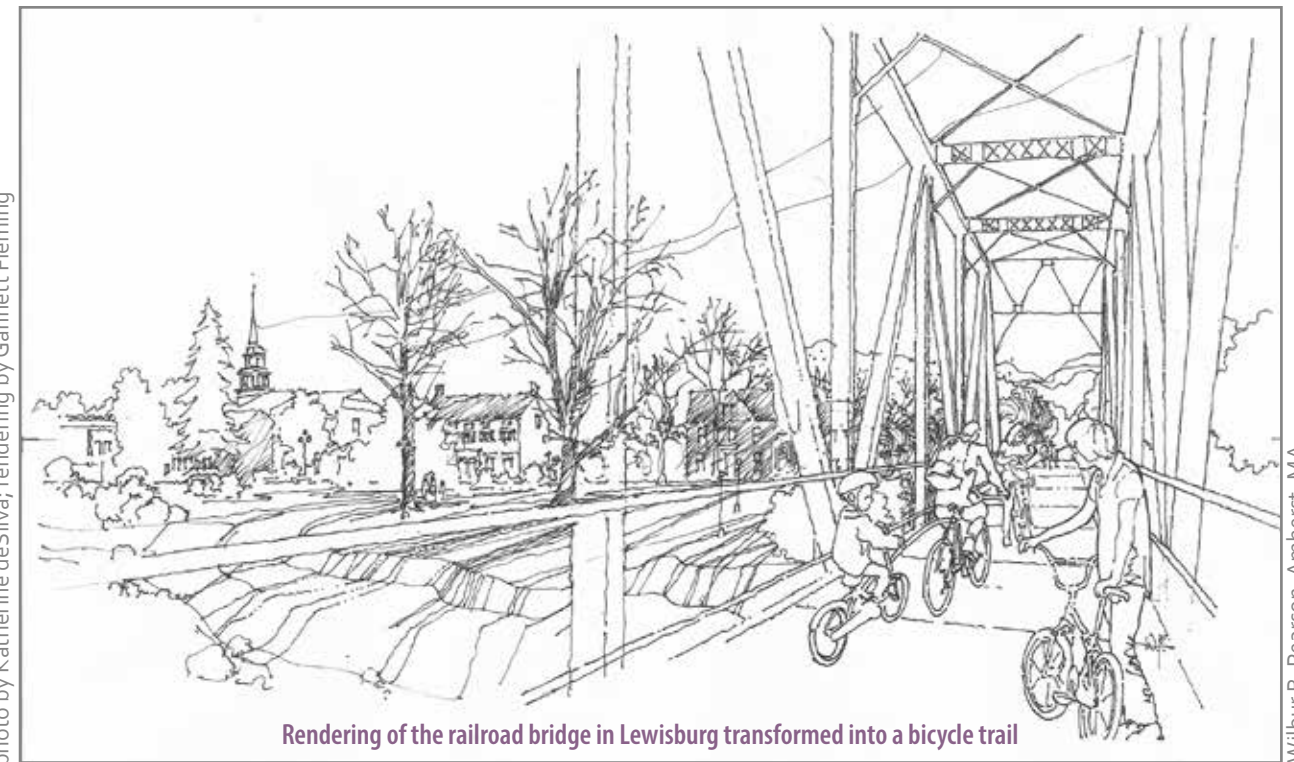
Rendering of the Bull Run Greenway, Lewisburg  
Bull Run Greenway Master Plan

Brian S. Auman / Landscape Architecture



Rendering of the Bald Eagle Valley Trail crossing of the West Branch of the Susquehanna River  
via an abandoned railroad bridge

photo by Katherine deSilva; rendering by Gannett Fleming



Rendering of the railroad bridge in Lewisburg transformed into a bicycle trail

Wilbur B. Pearson, Amherst, MA

## SECTION 3

# Goals & Strategies



Vision-driven goals provide the focus for improvement and network development:

1. Improve safety for those already walking and biking among other travelers.
2. Improve and extend connections among the places people go every day—jobs, school, parks/recreation sites—to support low-cost and no-cost travel and active lifestyles.
3. Increase the numbers of people walking and biking regularly.
4. Enhance bicycle and pedestrian routes and trails with information about the region's history, ecology, and heritage, defining travel and recreational experiences that could only occur in the Middle Susquehanna Region.
5. Support community and economic development through bicycle and pedestrian transportation, recognizing that a portion of prospective residents and employers are looking for walk-friendly and bike-friendly communities as places to live, to establish business, and to visit.



## Principles of Pedestrian-Friendly and Bicyclist-Friendly Places

### 4E's

- **Engineer** safe places to walk and bike
- **Educate** all travelers on safety and responsibility
- **Enforce** policies that ensure safe routes for all travelers
- **Encourage** a culture that welcomes and serves bicyclists and pedestrians

## Methods to Educate and Encourage

### For Bicyclists and Pedestrians

- Public campaigns promoting local and regional opportunities and benefits of walking and bicycling, e.g., media coverage and signage
- Introductory walking and biking programs/events, e.g., bike rodeo, signed walking routes, in-school bike+ped curriculum
- Peer walking and bicycling groups/clubs, e.g., WalkWorks
- Local tourism walking/bicycling routes, e.g., garden tours, historic district tours, rural landscape routes, etc.
- Challenge events in town, on roads, or on trails, e.g., 5K, 10K, half-marathon and marathon running events, and 10-mile to 100-mile bicycle rides

### For Municipal Officials, School Administrators

- Complete Streets Workshops through PennDOT's Local Technical Assistance Program and the PA Department of Health
- SEDA-COG and Williamsport Metropolitan Planning Organizations and County Outreach to share problem areas and feature successful solutions, e.g., sidewalk development using Community Development Block Grants or the Multimodal Transportation Fund
- Community bicycle and pedestrian audits, Safe Routes to Schools audits

### For Motorists and Other Travelers

- Media reporting on state traffic laws, local sidewalk and trail use regulations, and crashes involving bicycles and/or pedestrians
- Temporary variable message signs for bike+ped events

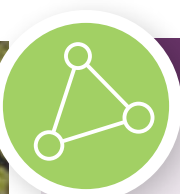


## Strategies to achieve our goals need to address bicycle and pedestrian facilities, use, and culture

A well-known, well-used bike+ped network is an asset to local communities and the region as a whole. A culture that welcomes walking and biking offers not only equitable everyday travel and recreational options for its residents, workers, and visitors, but also maximizes the health, environmental, and economic benefits of these modes. A bike+ped network and friendly culture require thoughtful attention to safety, functional and leisure connections, and regular and responsible use, as well as unique natural and cultural features and a supportive business community.



Runners on the Danville levee during the River Towns Marathon



### Goal 2 Strategies

To improve connectivity among daily destinations both in towns and between towns, we can:

- |   |   |
|---|---|
| <p>A. Evaluate and address connectivity gaps for walking and biking in towns and biking between towns:</p> <ul style="list-style-type: none"> <li>Review physical conditions of existing walking and biking routes that discourage use.</li> <li>Ask for and compile public input on gaps and additional connections to be made bikeable and walkable.</li> <li>Encourage study of existing routes, gaps and desired</li> </ul> | <p>connections for potential improvement.</p> <p>B. Encourage the integrated design of bike+ped features into new facilities, primarily on the local system via local development policy and compliance.</p> <p>C. Encourage intercommunity biking in safe places, e.g., for commuters.</p> <p>D. Encourage consistent enforcement of traffic laws.</p> |
|---|---|



### Goal 1 Strategies

To improve safety for bicyclists and pedestrians, we can:

- |   |  |
|---|--|
| <p>A. Evaluate and address safety needs for walking and biking in towns and biking between towns:</p> <ul style="list-style-type: none"> <li>Review safety data to prioritize study locations.</li> <li>Ask for and compile public input as information for future planning.</li> <li>Review and refer input to appropriate entities for potential improvement of existing physical conditions.</li> <li>Improve existing on-street/on-road facilities and operations (signals, signage, pavement widths and markings, etc.)</li> </ul> | <p>B. Encourage walking and biking in safe places for those who can choose their walk/bike location.</p> <p>C. Promote responsible travel to current travelers:</p> <ul style="list-style-type: none"> <li>For all travelers about shared road responsibilities and traffic laws.</li> <li>For walkers and bicyclists about walking and biking around town, on-road biking, and multi-use trail etiquette.</li> </ul> <p>D. Encourage consistent enforcement of traffic laws.</p> <p>E. Engage media outlets in informing a safe bike+ped culture.</p> |
|---|--|



### Goal 3 Strategies

To increase bicycle and pedestrian activity and help more people become regular users of the network, we can:

- |  |   |
|--|---|
| <p>A. Estimate or measure bicycle and pedestrian activity; relate trends to conditions where feasible.</p> <p>B. Create more safe places to walk and bike.</p> <p>C. Encourage walking and biking in safe places as individuals or in social groups.</p> <p>D. Promote responsible walking and biking to the public:</p> | <ul style="list-style-type: none"> <li>For all travelers about shared road responsibilities.</li> <li>For pedestrians and bicyclists about walking and biking around town, on-road biking, and multi-use trail etiquette.</li> <li>Engage media outlets in promoting walking and biking in safe places for health, environmental, and economic benefits.</li> </ul> |
|--|---|



### Goal 4 Strategies

To enhance the walking and biking experience in our communities and across the region, we can:

- |  |   |
|--|---|
| <p>A. Build relationships among partners in transportation, recreation, public health, history and heritage, environmental conservation, law enforcement, and tourism to inform the planning and development</p> | <p>of new connections and the interpretation of natural and cultural resources along routes; seek sponsorship of projects and initiatives where missions align.</p> |
|--|---|



### Goal 5 Strategies

To promote desirable community and economic development, we can:

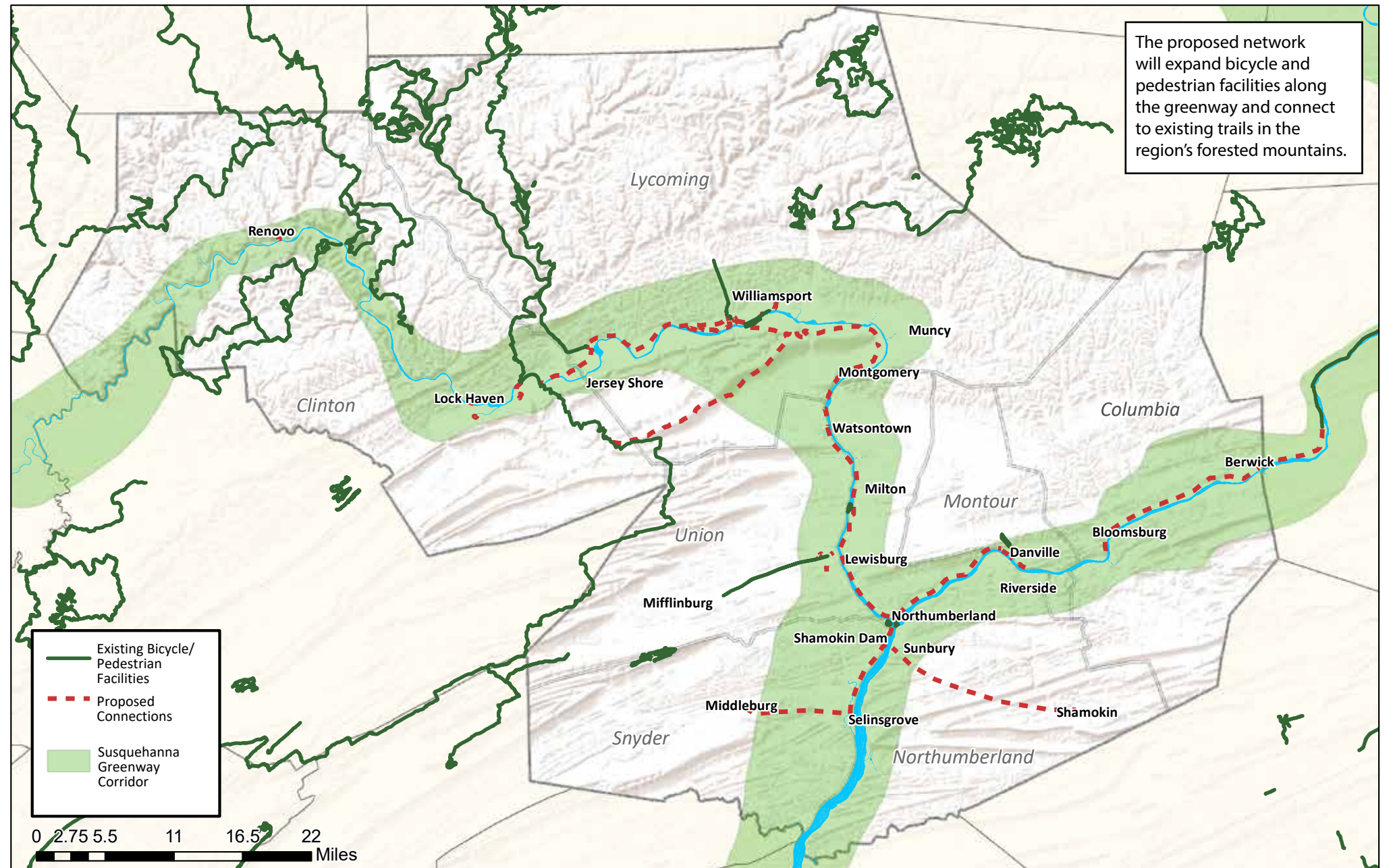
- |   |  |
|---|--|
| <p>A. Share best practices for development policy, complete streets policy, and their implementation with municipalities.</p> <p>B. Promote the principles of walk-friendly and bike-friendly</p> | <p>communities, businesses, and universities.</p> <p>C. Promote the benefits of bike+ped infrastructure paired with a bike+ped-friendly culture.</p> |
|---|--|

## SECTION 4

# Current Conditions

This plan's vision is big and bold, but we're not starting from scratch. There are communities with many bicycle- and pedestrian-friendly features, on-road routes rated for bicycling comfort, and existing off-road trails that provide the building blocks for a regional bike+ped network. Many more ideas for making connections and enhancing a bike-friendly and pedestrian-friendly culture have been inventoried. By evaluating current conditions in the region against our vision and goals, we can chart a course for action.

Proposed Middle Susquehanna Bicycle and Pedestrian Network



Mapping by: SEDA-COG, April 2019

Data: ESRI, PennDOT, SEDA-COG, DCNR

The ultimate goal is for more people to feel comfortable and confident walking and bicycling for their everyday purposes. The handful of trails and river walks in the region today are prime places for residents of all ages and abilities to step into healthy behaviors for travel, fitness, and fun.

How does one guide people to places? With a map.

This map prepared by SEDA-COG shows the existing off-road trails and river walks—and many more miles of trails on public lands—in the Middle Susquehanna region. With varied project suggestions and actions to support walk- and bike-friendly communities, this map will evolve dramatically over coming years to reflect a more connected region.

## Community Walkability and Bikeability – Current Conditions

Walking is such a fundamental way of moving that we may not think about it as a transportation mode to be formally designed. Similarly, riding a bicycle is so uncomplicated we may think bicyclists can travel any road or trail without considering other vehicles using the space. But walking and bicycling are not the ubiquitous choices they once were. The dominance of personal vehicle use, along with factors such as increasingly larger commercial vehicles, changing land use patterns, and other factors, have introduced a new scale of travel and the safety and convenience of walking and biking in town cannot be assumed. Communities interested in revitalization of their economies and quality of life to attract new business and new residents will need to pay greater attention to these modes.



### Safety

Statistics from PennDOT draw attention to safety needs in towns, i.e., within a city, town, or borough. According to PennDOT, nearly two-thirds of crashes in the region from 2007 to 2016 involving a bicyclist or pedestrian occurred in towns; one-third of crashes resulting in a bicyclist or pedestrian fatality occurred in town.

#### In-Town Bicycle and Pedestrian Crashes in the Middle Susquehanna Region, 2007-2016

Counties	Pedestrian Crashes			Bicycle Crashes		
	In-Town/ Total	In-Town Crashes as % of Total	In-Town Fatality	In-Town/ Total	In-Town Crashes as % of Total	In-Town Fatality
Clinton	31/49	63.27%	1/5	16/26	61.54%	0/0
Columbia	98/130	75.38%	3/4	44/56	78.57%	0/3
Lycoming	186/249	74.70%	5/13	77/94	81.91%	2/3
Montour	24/37	64.86%	0/2	15/22	68.18%	0/0
Northumberland	68/137	49.64%	4/8	42/75	56.00%	0/1
Snyder	20/42	47.62%	1/5	13/33	39.39%	0/1
Union	17/43	39.53%	0/2	15/36	41.67%	0/1
<b>Total</b>	<b>444/687</b>	<b>64.63%</b>	<b>14/39</b>	<b>222/342</b>	<b>64.91%</b>	<b>2/9</b>

Source: PennDOT Crash Information Tool

Recent bike+ped audits in Jersey Shore, Northumberland, and Lewisburg identified safety concerns based on community perspectives, i.e., firsthand observations of near-miss and high-risk locations, along with potential improvements to address these concerns.

Three-quarters of respondents to the bike+ped survey identified at least one on-road or roadside safety concern. Poor quality or non-existent sidewalks, busy streets and intersections that are difficult to cross, and poor driver behavior/law compliance were among the most common safety issues listed.

### Best Practice: Local Bike + Ped Committee

The City of Williamsport established a Bicycle and Pedestrian Advisory Committee in 2016 to help update the official city bike map prepared in the 1970s. The committee focused on the best connections between residential areas, destinations such as schools and business districts, and the River Walk. In 2017, the City by resolution adopted the updated Williamsport Bicycle Routes Map and ordinances that update various codes applicable to bicycles. Among the changes, the codes now require all streets projects to integrate bicycle markings per specified engineering design manuals. In parallel, Lycoming County transportation planners established a Bicycle and Pedestrian Advisory Committee to provide technical guidance for integrating bicycling and walking in transportation projects and programs throughout the county.

The preceding data confirms that safety for bicyclists and pedestrians in towns should be a focus. Engaging community members in bike+ped audits and local surveys can help to identify and prioritize high-risk locations for improvements that will help prevent crashes and injuries. Local voices can also inform policy changes that better integrate safety for bicyclists and pedestrians.

By municipality, bicycle and pedestrian crashes are relatively few and past crashes haven't occurred in repeated locations. With most bicycle and pedestrian crashes occurring in towns, the data suggests that the most valuable efforts would assess both facility design for non-motorized modes and strategies to improve "cultural" factors that help communities embrace bicycle and pedestrian travel.



### Connectivity within Communities

Bloomsburg, Lock Haven, Sunbury, Williamsport, and other communities in the region were established in the era before automobiles, when a walkable downtown was essential. Their downtown districts still feature a mix of daily destinations within walkable and bikeable proximity, allowing many trips to be made on bike or on foot. Most newer retail and residential development is car-centric, with distances and infrastructure making walking and bicycling less feasible for many trips.

Nationwide, the real estate industry took notice of consumers' interest in walkable neighborhoods and developed Walk Score, a measure that reflects the density of retail, restaurant, and leisure destinations as well as the population density and road metrics such as block length and intersection density that make walking comfortable for neighborhoods residents. A similar scoring formula was developed for bicycling, reflecting the availability of bicycle infrastructure (lanes and trails), road connectivity, topographical challenge, and destinations. Both formulas yield a numeric score based on 100.

### Measuring Walkability and Bikeability

Municipality	Walk Score		Bike Score	
<b>North Branch</b>				
Berwick	70	Very Walkable	34	Somewhat Bikeable
Bloomsburg	73	Very Walkable	56	Bikeable
Danville	82	Very Walkable	59	Bikeable
Riverside	31	Car-Dependent	37	Somewhat Bikeable
Northumberland	62	Somewhat Walkable	53	Bikeable
Sunbury	90	Walker's Paradise	61	Bikeable
Shamokin Dam	32	Car-Dependent	47	Somewhat Bikeable
Selinsgrove	62	Somewhat Walkable		n/a
<b>West Branch</b>				
Renovo	44	Car-Dependent	48	Somewhat Bikeable
Lock Haven	75	Very Walkable	57	Bikeable
Jersey Shore	62	Somewhat Walkable	67	Bikeable
Williamsport	53	Somewhat Walkable (citywide average); higher in downtown	55	Bikeable
Muncy	47	Car-Dependent	59	Bikeable
Montgomery	40	Car-Dependent		n/a
Watsonstown	33	Car-Dependent		n/a
Milton	54	Somewhat Walkable	43	Somewhat Bikeable
Lewisburg	75	Very Walkable	68	Bikeable
<b>Inland Towns</b>				
Middleburg	35	Car-Dependent	41	Somewhat Bikeable
Mifflinburg	57	Somewhat Walkable	50	Bikeable
Shamokin	71	Very Walkable		n/a
Mount Carmel	63	Somewhat Walkable	54	Bikeable

Source: www.walkscore.com (March 2019)

#### Walk Score Key

- 90-100 Walker's Paradise - Daily errands do not require a car
- 70-89 Very Walkable - Most errands can be accomplished on foot
- 50-69 Somewhat Walkable - Some errands can be accomplished on foot
- 25-49 Car-Dependent - Most errands require a car
- 0-24 Car-Dependent - Almost all errands require a car

#### Bike Score Key

- 90-100 Biker's Paradise - Daily errands can be accomplished on a bike
- 70-89 Very Bikeable - Biking is convenient for most trips
- 50-69 Bikeable - Some bike infrastructure
- 0-49 Somewhat Bikeable - Minimal bike infrastructure

Walk Scores for towns in the Middle Susquehanna region range from 90 (Walker's Paradise) in Williamsport to the low 30s for several smaller towns where destinations are relatively few and require a vehicle. Bike Scores range from 67 in Jersey Shore to 34 in Berwick.

It's important to note that the Walk Score and Bike Score represent the presence of bike and ped infrastructure (streets, sidewalks) as well as land use and development patterns (destinations and reasonable distances). This plan primarily addresses the infrastructure aspect and emphasizes another key aspect—the importance of a community culture accepting and welcoming to non-motorized travelers. Communities with a Walk Score and/or Bike Score below 70 would benefit from a bike-ped audit to identify how infrastructure could be improved near existing destinations.



### Number of In-Town Bicyclists and Pedestrians

The number of people who currently walk and bike within the region's communities is not easily defined, but survey data help to estimate the magnitude of use.

Nearly 8,000 (7,908) people in the region walk or bicycle to work, according to the American Community Survey, 2013-2017 conducted by the US Census Bureau. With the addition of those who ride the bus and walk or bike the last segment of their commute, the figure rises to nearly 9,000 (8,863). While not all of these commutes are within towns, it's likely that most are because many of the region's employment hubs (downtown, colleges/universities, and health care centers) are located in urban areas.

Commuting Without a Car				
County	Total number of workers 16 years and over	Means of Transportation to Work		
		Public transportation (excluding taxicab)	Walk	Bicycle
Clinton	17,277	0	933	35
		0.00%	5.40%	0.20%
Columbia	29,717	89	1,040	59
		0.30%	3.50%	0.20%
Lycoming	52,999	689	1,696	212
		1.30%	3.20%	0.40%
Montour	8,545	60	521	34
		0.70%	6.10%	0.40%
Northumberland	40,748	41	1,141	81
		0.10%	2.80%	0.20%
Snyder	19,516	59	664	215
		0.30%	3.40%	1.10%
Union	17,980	18	1,043	234
		0.10%	5.80%	1.30%
Middle Susquehanna Region	186,782	955	7,038	870
		0.51%	3.77%	0.47%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

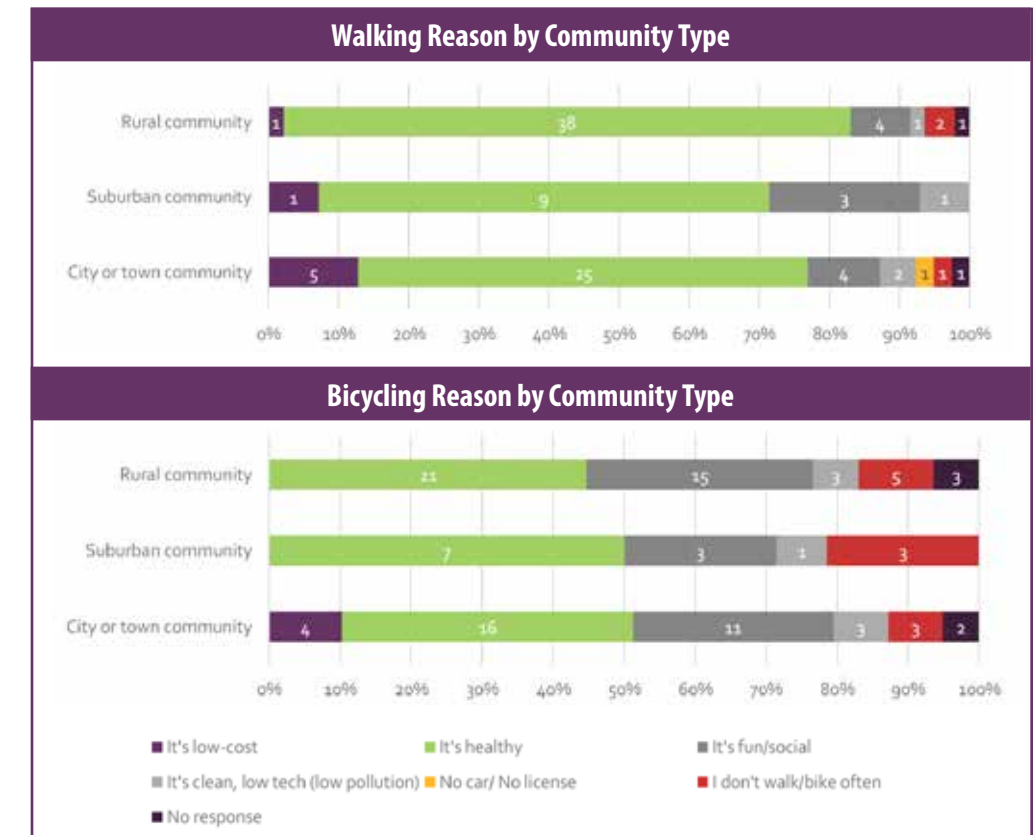
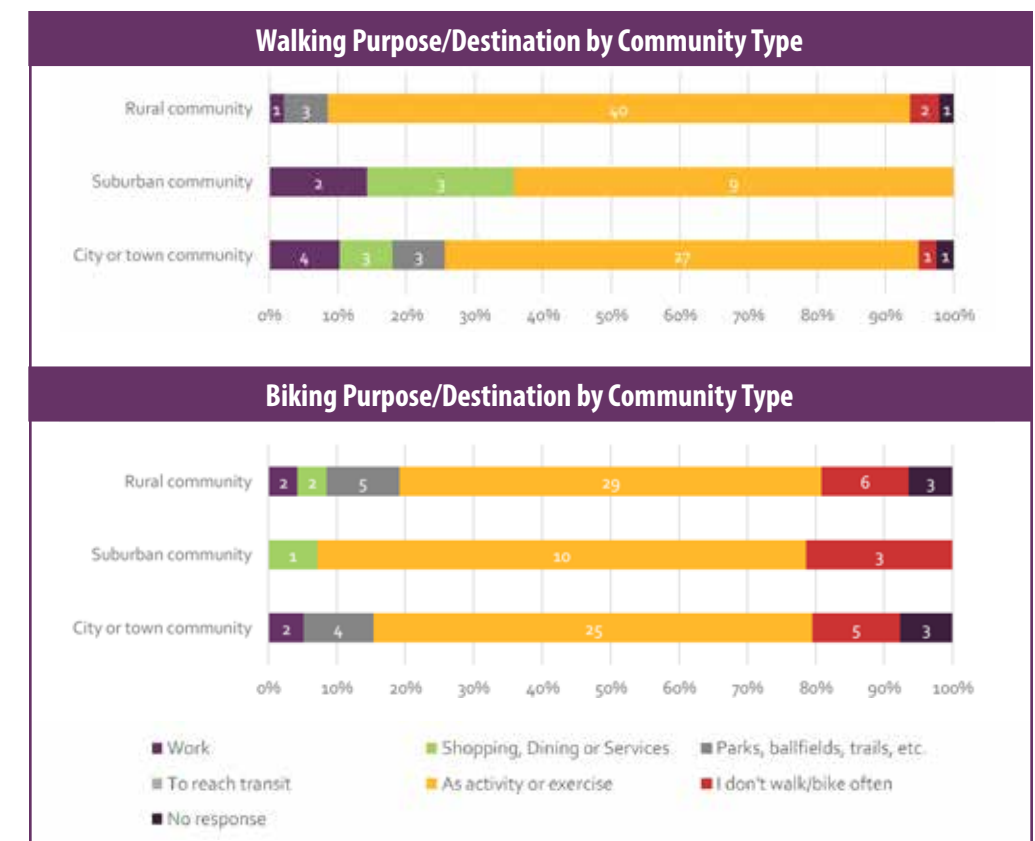
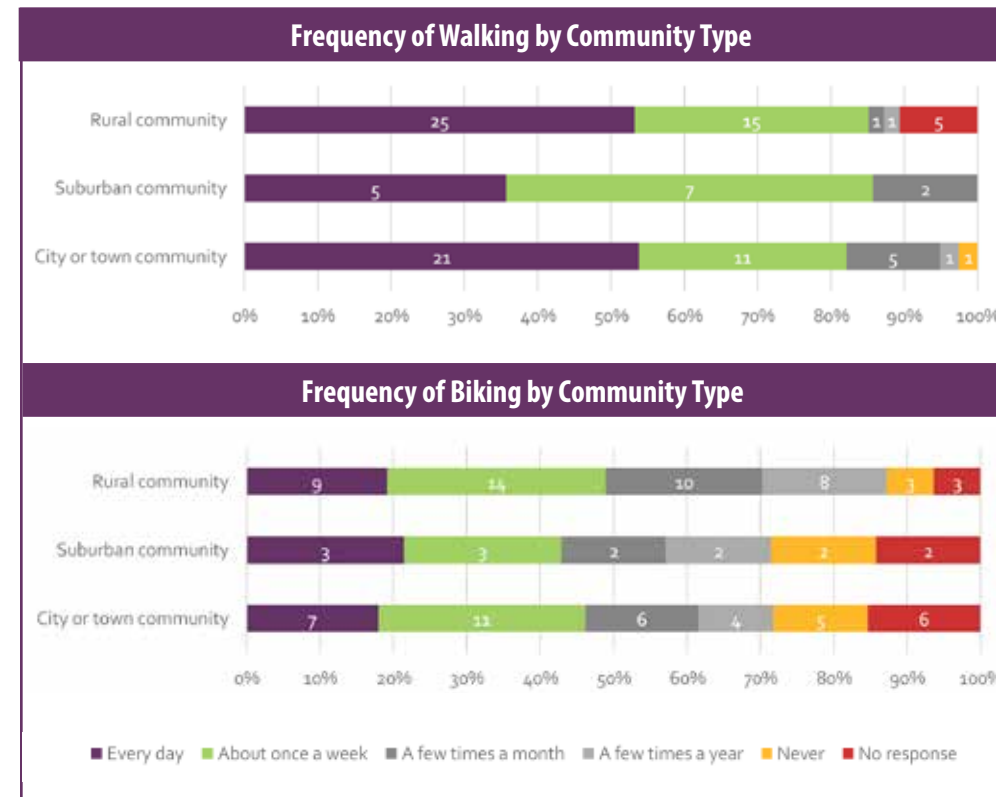
A public survey conducted in 2018 for this plan reveals more information about people who walk and bike in the region. Of the respondents who live in a city or town, more than half walk at least 10 minutes every day and the total of those who walk daily and about once a week totaled more than 80 percent. Smaller percentages of respondents reported daily and weekly bicycling—18 percent and 28 percent, respectively.

This survey also shows that more city and town residents walk and bike as a leisure activity or for exercise than for any other purpose, including commuting to work. Nearly 70 percent walk for leisure or exercise and 64 percent bike for similar reasons.

In addition, residents with limited incomes and limited access to a vehicle often choose to live in town where jobs, shopping, and services are available without reliance on a personal vehicle or driver's license.

People walk and bike for a variety of reasons and to a variety of destinations—much like the motoring public. For this reason, communities with dense urban populations should integrate bike+ped infrastructure into their transportation network—both existing facilities and standards for the development of new ones. A “complete streets” approach should be considered throughout urban communities.

### Public Survey Results



Bicycle and pedestrian audits are effective at identifying specific obstacles to making a trip on foot or by bicycle—such as a difficult intersection or a stretch with no sidewalks, or a lack of bicycle racks at a destination. These small studies help to identify relatively minor improvements that can quickly open up walking and bicycling possibilities for a great many new pedestrians and bicyclists. Audits can also reveal how community regulations perpetuate problem conditions and recommend alternative standards that create better walking and bicycling conditions in future development.

Jersey Shore, Northumberland, and Lewisburg have each recently completed a bicycle and pedestrian audit and are exploring ways to make improvements through their public works departments and in collaboration with PennDOT. Other communities, such as Bloomsburg and Berwick, have conducted audits in downtown and as Safe Routes to Schools audits.



### Access to Local Flavor

Walking or bicycling puts people in touch with the places that give identity to their local communities. It draws people to approach and explore a unique shop or legendary restaurant. It leads them to local landmarks and monuments to learn about famous founders and milestone events. The sidewalk system in Bloomsburg connects the downtown along Main Street to the Town Park at the end of Market Street, pivoting at the historic fountain in the square. The William Clinger Riverwalk on the levee in Lock Haven leads to Memorial Park and the Corman Amphitheatre and floating stage where Sunday night summer concerts are prime entertainment. Bicycle and pedestrian audits and community surveys can ask where connections are needed to help people reach special destinations within their communities.

En route, bicyclists and pedestrians appreciate a visually interesting and informative travel experience. In towns along streets and sidewalks, the scenery includes building facades (historic and modern) as well as streetscapes and downtown parks where history is commemorated in monuments. The intersection of 3rd and Market Streets in Williamsport features a Little League game in bronze statutes at the four corners. The statutes are visible to all travelers but more relatable/touchable to those on bike or on foot. These kinds of elements make the journey interesting and unique to the specific community and can be featured in themed walking or bicycling tours led by local historians and other subject matter experts.



Lewisburg



Selinsgrove

Samantha Pearson

Cara Lane



### Community & Economic Development

Urban communities, large and small, have marketed themselves to prospective residents as hubs in which to “live, work, play, shop, and dine.” More people in the region are choosing to live in towns, in close proximity to a range of daily destinations. This is especially true for Millennials, who are known for seeking a place where owning a car is not essential for daily life. Walkable, bikeable communities are increasingly sought after by home buyers and renters.

As residential growth concentrates in urban areas, commercial interest follows. Businesses that cater to bicyclists and pedestrians—such as sidewalk cafés, food trucks, and artisan shops—are seeking to locate in areas where their customers and employees have the infrastructure to reach them. For some communities, these businesses represent new models and require new approaches to street and sidewalk operations. For some, these changes in resident lifestyle and business are an opportunity to revitalize a struggling downtown.

Communities that embrace bicycle and pedestrian travel as part of their vision, through planning and marketing, can invite new residents and new business types to spur growth and development.

### Candidate Communities for Bike+Ped Audits

These communities have some history or initial interest in bike+ped planning and should be encouraged to undertake a bike+ped audit: **Berwick, Bloomsburg, Danville, Selinsgrove, Renovo, Lock Haven, Williamsport, Muncy, and Montgomery.** For some of these communities, the audit could be a first phase of a community’s bike+ped plan. For others, it might be used primarily to inform maintenance efforts that address concerns.

### Example High Priority In-Town Bike+Ped Projects

- Pedestrian Crossings at five select intersections, Lock Haven (CL-8 through CL-12)
- Berwick Area Safe Routes to Schools (CO-27)
- Millers Run Greenway, Loyalsock Township, Lycoming County (L-2)
- Route 45 Corridor, Mifflinburg area (U-2b)

Project locations are illustrated by county on the bike+ped planning maps at the end of this section. See the Matrix of Bicycle and Pedestrian Needs on the SEDA-COG web page for a complete listing.

## On-Road Connectors – Current Conditions

State highways have become the backbone for a 21st century way of life, where the need to travel between communities is common. Many people live in one town, work in another, and may travel to others for recreation, health care, shopping, or entertainment. Local roads also connect communities. They may lack wide shoulders and provide a less direct route, but they generally have lower traffic volumes, making them reasonable candidates for bicycling between communities. Together, the state and local road network establishes on-road connections for bicyclists.



### Safety

Both bicyclists and pedestrians use roads to travel between communities and are involved in crashes reported to PennDOT. Data from 2007-2016 shows that crashes involving pedestrians are twice as common as crashes involving bicyclists, where townships represent the “outside of town” geography.

Crashes involving bicyclists and pedestrians on roads between towns are less frequent but more severe than crashes in town. These crashes make up about one-third of all bicycle and pedestrian crashes but about two-thirds of fatalities—presumably, the non-motorist.

On-Road Connector Bicycle and Pedestrian Crashes, 2007-2016						
Counties	Pedestrian Crashes			Bicycle Crashes		
	On-Road Connector Crashes/ Total Crashes	On-Road Connector Crashes as % of Total	On-Road Connector Fatality	On-Road Connector/ Total	On-Road Connector Crashes as % of Total	On-Road Connector Fatality
Clinton	18/49	36.73%	4/5	10/26	38.46%	0/0
Columbia	32/130	24.62%	1/4	12/56	21.43%	3/3
Lycoming	63/249	25.30%	8/13	17/94	18.09%	1/3
Montour	13/37	35.14%	2/2	7/22	31.82%	0/0
Northumberland	69/137	50.36%	4/8	33/75	44.00%	1/1
Snyder	22/42	52.38%	4/5	20/33	60.61%	1/2
Union	26/43	60.47%	2/2	21/36	58.33%	1/3
<b>Total</b>	<b>243/687</b>	<b>35.37%</b>	<b>25/39</b>	<b>120/342</b>	<b>35.09%</b>	<b>7/9</b>

Source: PennDOT Crash Information Tool

While the numbers of crashes and fatalities between towns are few, any crash or fatality is an unacceptable loss that should be examined for cause and preventable factors. PennDOT’s Crash Information Tool can be explored for information on individual incidents and broader trends, where there is interest in doing so.



“Sharrow” shared-lane marking



Michelle Brummer  
Dan Hyde (courtesy Susquehanna Greenway Partnership)

To enhance on-road connections, transportation planners and engineers can consider road diets, wider shoulders on roads and bridges, sharrows and shared road signage, and rumble strips along the edge of the travel lane as they scope maintenance efforts or improvements for a connecting corridor.

Local and state police have many laws to enforce; traffic laws are just one aspect. However, awareness would be raised and compliance with the four-foot passing law increased with intensive, short-term enforcement, e.g., during National Bike to Work Week in May. This would also be a prime time for public service announcements and local media coverage of shared road use and relevant traffic laws for all travelers, along with tips for high-visibility dressing and riding.



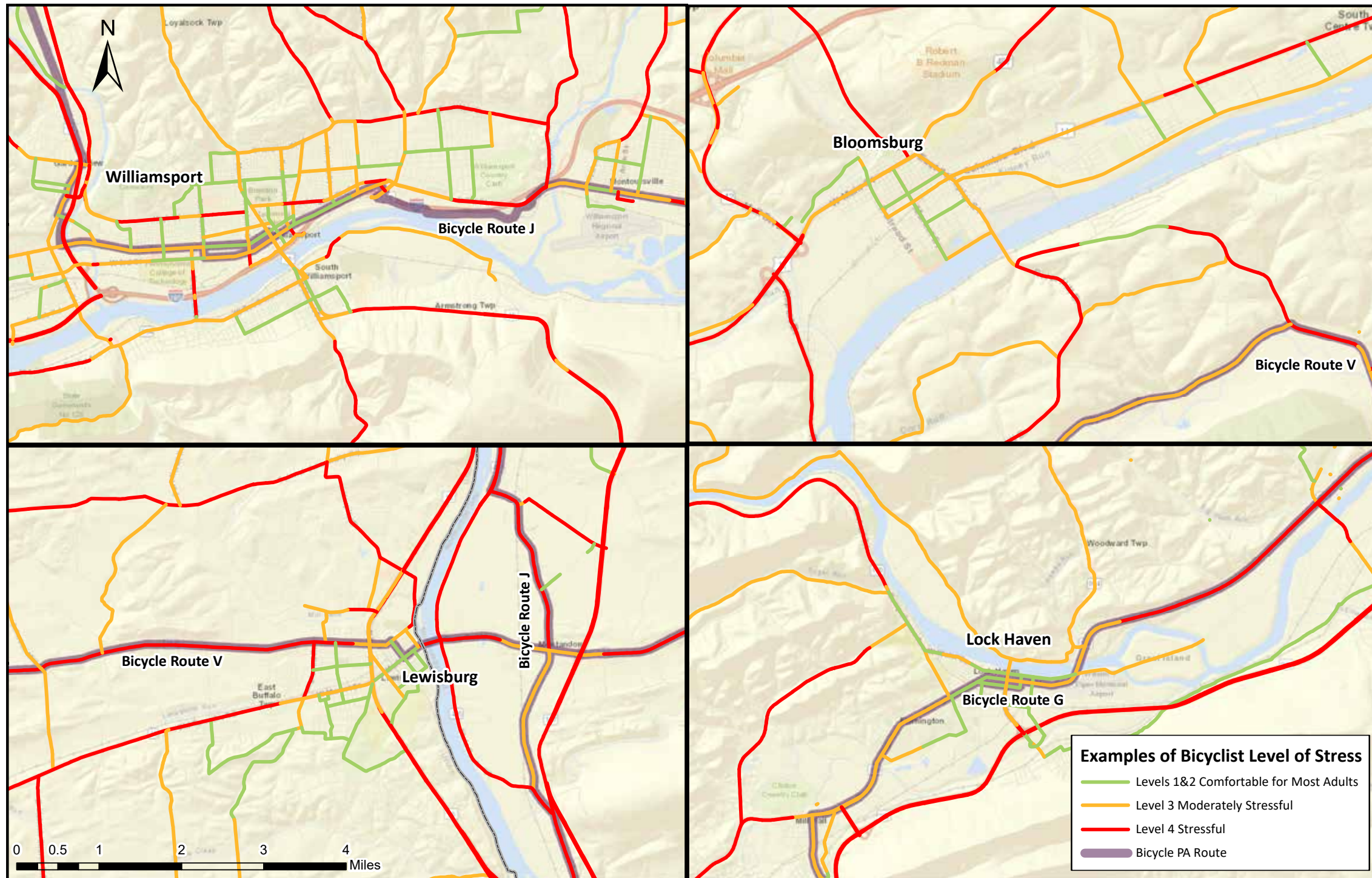
### Connectivity between Communities

On-road connectivity between communities is established by the highway system. However, many other factors need to be considered before these on-road connections are deemed bikeable and promoted to the public.

Favorably, the distance between many neighboring communities, particularly in the valley flatlands of the Middle Susquehanna, is bikeable—less than 10 miles, and in some cases, less than 7 miles.

However, for most bicyclists, riding on state highways feels unsafe and unpleasant. A lack of shoulder or other separation from high-speed and/or high-volume traffic, including commercial vehicles, makes bicycling stressful and more dangerous. The vast majority of state highway segments analyzed in the 2018 Bicycle Level of Traffic Stress analysis were classified at the highest stress level, where only experienced and confident bicyclists would be comfortable riding.

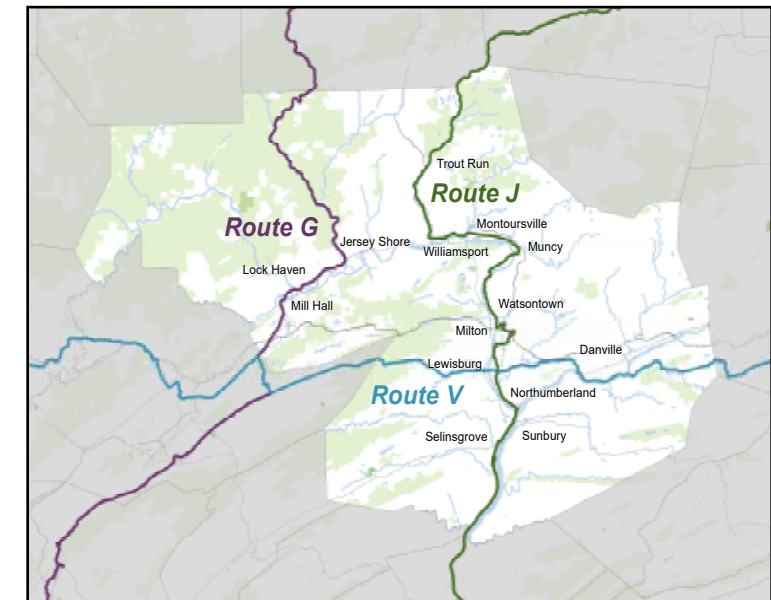
Intercommunity Distances		
North Branch		Miles
Berwick	Bloomsburg	13.2
Bloomsburg	Danville	9.4
Danville	Riverside	1.3
Riverside	Northumberland	11.6
Northumberland	Sunbury	2.7
Sunbury	Shamokin Dam	2.4
Shamokin Dam	Selinsgrove	5.0
<b>Total</b>		<b>44.3</b>
West Branch		
Renovo	Lock Haven	27.7
Lock Haven	Jersey Shore	12.5
Jersey Shore	Williamsport	15.6
Williamsport	Muncy	15.3
Muncy	Montgomery	5.6
Montgomery	Watsontown	6.6
Watsontown	Milton	5.5
Milton	Lewisburg	4.6
<b>Total</b>		<b>93.4</b>
Inland		
Middleburg	Selinsgrove	10.2
Mifflinburg	Lewisburg	9.2
Shamokin	Sunbury	16.3
Mount Carmel	Shamokin	8.9
<b>Total</b>		<b>44.6</b>



Data: ESRI, PennDOT, SEDA-COG; April 2019

Mapping by: SEDA-COG

Improvements to make roads more bike-friendly can be integrated with resurfacing or other major construction projects.



PA Bicycle Routes in the Region

Three state-designated bicycle routes traverse the region. These routes were designated to promote on-road cycling to experienced and confident riders who want to travel the Pennsylvania landscape. They were not designed for casual riders. To date, the designation serves only to identify the route alignment. PennDOT has not integrated bicycle facilities (lanes, detection, etc.), limiting their value to the communities through which they pass.

With local interest and support, the designation can be leveraged to identify and advance improvements that will bring designation and design into alignment over time.

Communities in the region will need to prioritize which connectors are worthy of improvement, since bicycling on many connectors is hindered by more than one factor (shoulder, travel lanes, traffic volume, and speed). Where physical conditions and operational controls are lacking,

improvements to make roads more bike-friendly can be integrated with resurfacing or other major construction projects. Alternatively, where these conditions cannot be adequately addressed to provide a safe and reasonably

stress-free bicycle corridor, communities may want to direct bicyclists to an alternative local route or explore transit service with bike racks to aid bicyclists in traveling between communities.



### Number of Between-Communities Bicyclists and Pedestrians

On-road bicyclists traveling longer distances between communities include everyday commuters, local and visiting bicycle clubs, and participants in occasional road-based events. They are likely everyday riders though their riding locations may change frequently, making them harder to count or estimate.

Commuters who bicycle include those who pedal by choice as well as those who bike for lack of a vehicle or a driver's license. The not-by-choice riders are mix of experienced and inexperienced riders using a bicycle as a short-term solution while their travel choices are limited.

Local bicycle clubs, visiting cycling clubs, and elite cyclists are experienced bicyclists who ride for exercise and enjoyment. These groups and individuals generally look for longer rides, sometimes including topographic challenges. They prefer roughly circular routes that bring them back to their starting point, rather than linear out-and-back routes, viewing the same scenery twice. They often share the routes they ride online at sites like <https://ridewithgps.com/> and <https://www.strava.com/>. These sites can be reviewed by municipal and transportation planners to check for patterns of use and identify potential group and individual stakeholders. This information can shape plans as road segments are identified for maintenance and improvement.

Special events, such as themed rides, awareness events, and charitable fundraisers, also use state and local connectors. These events help to promote on-road bicycling and are often accompanied by traffic control or traffic awareness. These events are also an opportunity to show off the best sights the region has to offer. In Chester County, the French Creek Iron Tour offers courses ranging from 11 to 100 miles through the preserved scenic landscape of the county's historic iron furnaces.



### Access to Regional Destinations

In addition to providing commuting and recreational routes, state and local roadway connectors help bicyclists access a variety of destinations unique to the Middle Susquehanna region.

The Tiadaghton State Forest Resource Management Center in Waterville, about 13 miles north of Jersey Shore, features topographical map displays of the entire Pine Creek Valley—a great place to launch a trip through the PA Grand Canyon. Amish and Old Order Mennonite communities near Lock Haven, in the Buffalo Valley in Union County, and in Mount Pleasant Mills and Port Trevorton in Snyder County live with far less technology than most of us; their general stores and country markets offer a peek into their way of life. Located a distant 19 miles north of Danville along PA 54, the Montour Preserve is a unique conservation area of fields, woodlands, and water surrounding the 165-acre, man-made Lake Chillisquaque. The Preserve's on-site trails are for pedestrians only but the surrounding agricultural landscape is quite bikeable.

State roads with adequate shoulders and moderate traffic volumes can also help residents reach community destinations beyond the reach of their sidewalk systems. Milton State Park encompasses Montgomery Island in the West Branch Susquehanna River between Milton in Northumberland County and West Milton in Union County. Using PA 642 and local streets, nearly all of Milton's residents can reach the park in under two miles and all of West Milton's residents can do the same in under one mile. The East Snyder Park sports complex is located along University Avenue one-half mile from the edge of the community's sidewalk system. The Middleburg Community Swimming Pool is located on Golf Course Road at its intersection with PA 104—one-half-mile from the nearest residential streets and one mile from Main Street.

In addition to commuting and recreational routes, state and local connectors can provide equitable travel choices to help bicyclists reach a variety of destinations. The commercial strips from Selinsgrove to Shamokin Dam and from Lewisburg toward West Milton both have a number of retailers and hospitality centers, where employment includes lower-wage positions that might not be enough to cover car ownership and insurance.

These types of destinations should be considered when prioritizing on-road connections for improvement.



### Community & Economic Development

On-road bicycling between communities in the Middle Susquehanna region may only seem important to a small portion of residents today. However, it has the potential for a significant impact to the local economy and tourism.

With 13 bicycle shops across the region (see map next page), there is clearly demand for bike products and repair. With more roads suitable for riding and encouraging events helping occasional riders feel more comfortable on the roads, this retail demand will increase.

With roads to ride and bike shops to support unexpected repair, the region can invite bicycle clubs from outside the region to come and experience the Middle Susquehanna region. Bicyclists are enthusiastically devoted to see places from their bikes. Great bicycling attracts interest from as close as the next county and as far as overseas.

#### Priority Corridors for Study and Potential Improvement as On-Road Connectors

1. PA 147 Corridor from Route 11 in Northumberland to Market Street in Sunbury.
2. US 11 Corridor from 16th Street in Northumberland to Sand Hill Road in Selinsgrove.
3. PA 61 Corridor from Shamokin to Ashland.
4. Old Berwick Road Corridor from Bloomsburg to Berwick.
5. Watsontown to Milton to Lewisburg Corridor on PA 405, and to 16th Street in Northumberland on PA 147.
6. PA 150 from Mill Hall to Lock Haven (CL-7).
7. Recreational corridors in the Lock Haven area.
8. Recreational corridors in the Lewisburg area.
9. Other portions of Bicycle PA Route J, as well as Route G and Route V.

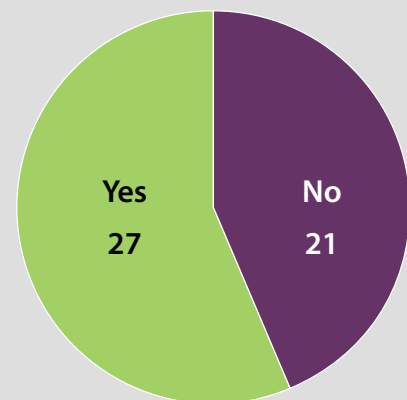
#### Example High Priority On-Road Connector Projects

- Berwick Area Safe Routes to School (CO-27)
- River Road to North Branch Canal Trail Connector (M-16)

Project locations are illustrated by county on the bike+ped planning maps at the end of this section. See Section 4 and the Matrix of Project Needs for a complete listing.

#### From the Municipal Survey:

Does your community see frequent use of roads by non-motorized traffic including scooters, horse-drawn buggies, or other non-motorized traffic?





## Off-Road Connectors – Current Conditions

Today, most of the region's off-road trails are separate experiences of one small site in the region. Trails and service roads in the 13 state parks, five state forests, and numerous state game lands, as well as in community parks and local preserves, offer hundreds of miles of walking and biking opportunities in natural settings.

There are a handful of trails that connect multiple communities and provide access to other destinations along a waterway, historic rail line, or canal. These trails provide a functional connection for walking to work, biking to a park, or traveling on foot to events downtown or on the river's edge and enable people to take in the sights and sounds of the journey. These kinds of experiences, available throughout the region, will enhance recreational and transportation options.



### Safety

There is no comprehensive safety data set for off-road trails. Most off-road trail use is permitted down to dusk only. But even during daylight, users need to be aware of isolated trail locations and wildlife and be advised to take precautions.

Even without motorized traffic, physical bumps and "crashes" can still occur between inattentive trail-goers. Mile markers are useful in helping the injured identify their location to emergency responders.

Storms and flooding can impact the trail, downing trees and washing out the trail surface. Maintenance efforts need to be available within a reasonable amount of time to attend to barriers and safety risks such as these.

Education, design features to enable emergency response, and capacity for trail maintenance are all topics to address early in planning.

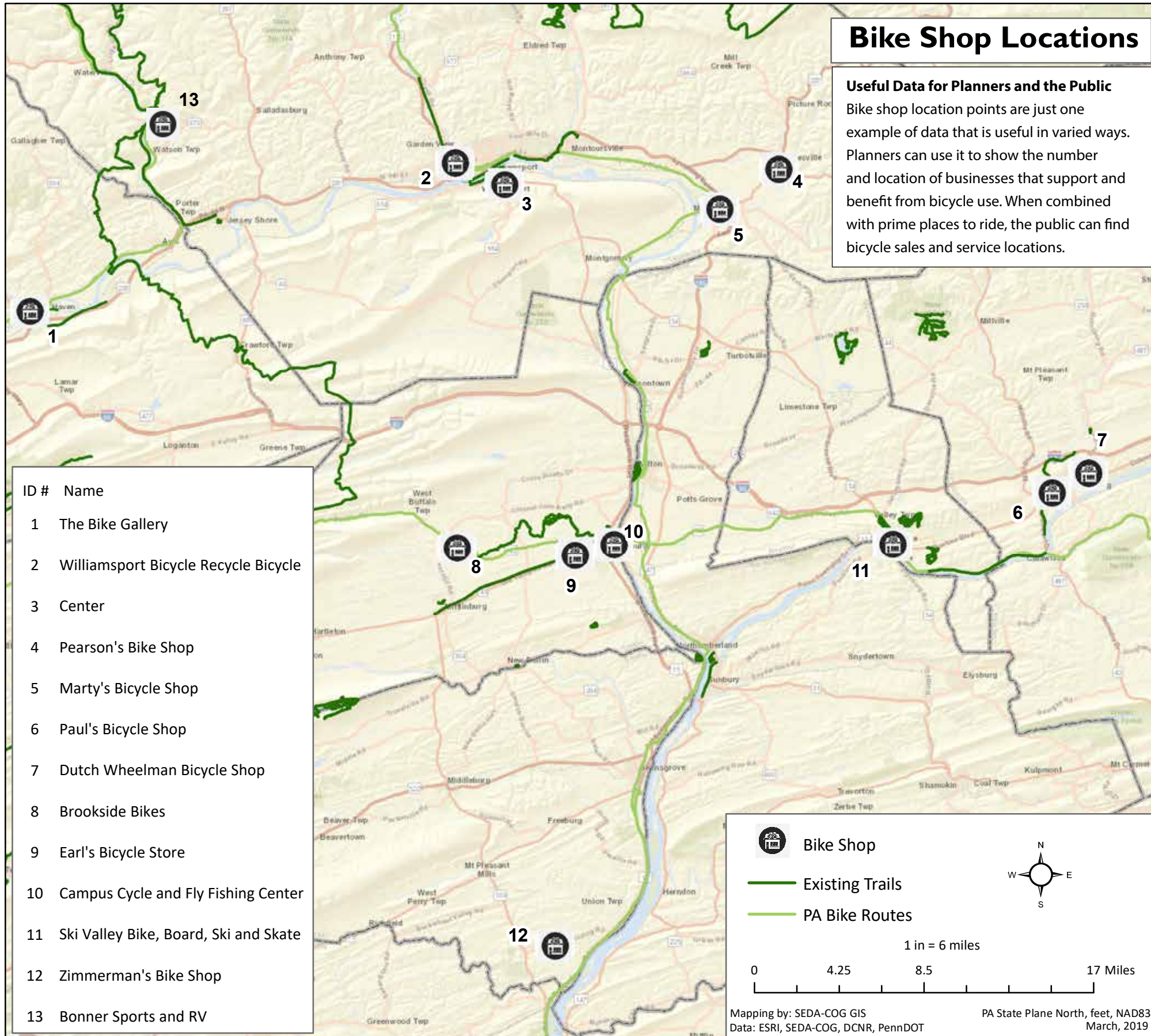


### Off-Road Connectivity

Since the early 1990s, communities in the region have been planning and building off-road connectors. Today, six trails are open, covering a total of 90 miles but with many miles in between. Future extension of all of these trails has been suggested.

Open off-road connectors include:

- The Pine Creek Rail Trail connects Ansonia in Tioga County with Jersey Shore in Lycoming County – 62.7 miles
- The Buffalo Valley Rail Trail, connecting Mifflinburg, Vicksburg, and Lewisburg – 9.3 miles, with a critical gap at US 15



- The North Branch Canal Trail, connects Danville with Catawissa; extension to Bloomsburg is planned – 3.9 miles open; total 6.2 miles
- The Susquehanna River Walk and Timber Trail, a loop from Williamsport to South Williamsport – 4.2-mile loop
- The Lycoming Creek Bikeway, former Penn Central Railroad corridor, connecting Hepburnville to Williamsport – 5.2 miles
- The Bald Eagle Valley Trail connects the Castanea Train Station south of Lock Haven to the Wayne Township Community Park; another 2.1-mile segment lies to the east; extension to Jersey Shore will cover the remaining 4.9 miles; extension to Lock Haven will add one more mile

Many more connectors have been suggested in county and local plans—even suggested in multiple plans at varying levels of specificity with very limited mapping. Some trail concepts have found local leadership and support, while others simply remain documented ideas.

The Mid State Trail, Pennsylvania’s 2019 Trail of the Year, is noted as a long-distance hiking trail traversing the western reaches of the region. While it connects many public lands, its contact with communities and the Susquehanna Greenway is limited to the Woolrich area of eastern Clinton County and rural portions of Lycoming County.

The map on page 10 shows just how far apart the open trails are from one another and how much ground there is cover to achieve a fully interconnected system. But that is part of this vision. Tallying completed off-road connectors with those that are in active development stages yields an estimated gap of 131 miles along the Susquehanna Greenway and 35 additional miles to connect in land towns with the Greenway in the Middle Susquehanna region.

Additional connectors link inland communities with the Greenway. Tributary greenways with trails, like the Lycoming Creek Bikeway, are being developed along Miller’s Run in Lycoming County and Bull Run in Union County. Rail trail and rail-with-trail opportunities have been suggested in Columbia, Lycoming, Montour, Snyder, and Union counties.

Greenway-based trails are also developing beyond the borders of the Middle Susquehanna region. The most promising connection would be to the Susquehanna Warrior Trail, which begins about 4 miles east of Berwick at the Susquehanna Riverlands and is planned to reach into the Scranton area.

With such a large region to cover, the most practical approach to achieving a fully interconnected system is to focus on extending existing trails, developing trails on publicly-owned lands, and improving on-road connectors along heavily developed areas of the riverfront.

This would include priority projects such as the completion and/or extension of the North Branch Canal Trail, Bald Eagle Valley Trail, and the Buffalo Valley Rail Trail; planning and development of the Montgomery to Allenwood Rail Trail across county-owned riverfront lands; and complementary improvement of on-road connectors from Northumberland to Selinsgrove.



Crossing the Susquehanna River at Lewisburg at low water

Samantha Pearson

Off-Road Connectivity along the Susquehanna Greenway		
Greenway Segment	Off-Road Connectivity Status	Gap Miles
<b>North Branch</b>		
		38.1
Berwick to Bloomsburg	Gap; identified as future extensions in the North Branch Canal Trail Feasibility Study	13.2
Bloomsburg to Danville	North Branch Canal Trail – 3.9 miles open; 6.2 miles planned	3.2
Danville to Northumberland	Gap; identified as future extensions in the North Branch Canal Trail Feasibility Study	11.6
<b>West Branch</b>		
		75.0
Renovo to Lock Haven	Gap throughout mountainous territory	27.7
Lock Haven to Jersey Shore	Bald Eagle Valley Trail – 5.5 miles open	10.0
Jersey Shore to Williamsport	Gap – Jersey Shore to Williamsport Connector (proposed)	15.6
Williamsport to Muncy	Susquehanna River Walk + Timber Trail – 4.2-mile loop	13.2
Muncy to Montgomery	Gap	5.6
Montgomery to Allenwood	Montgomery to Allenwood Rail Trail – 5 miles planned	0
Allenwood to Watsonstown	Gap, which requires an on-road connector to cross the river	2.8
Watsonstown to Milton	Gap	5.5
Milton to Lewisburg	Gap, which requires an on-road connector to cross the river	4.6
<b>Main Stem</b>		
		13.1
Northumberland to Sunbury	Connected sidewalk systems between contiguous towns	0
Sunbury to Shamokin Dam	Connected sidewalk systems between contiguous towns	0
Shamokin Dam to Selinsgrove	Gap	5.0
Selinsgrove to Port Trevorton	Gap	8.1
<b>Inland Trails</b>		
		35.4
Middleburg to Selinsgrove	Gap	10.2
Mifflinburg to Lewisburg	Buffalo Valley Rail Trail	0
Shamokin to Sunbury	Gap	16.3
Mount Carmel to Shamokin	Gap	8.9

### Best Practice: Measure Use and Estimate Economic Impact

The 2006 Pine Creek Rail Trail User Survey and Economic Impact Analysis estimated an annual economic impact ranging from \$1.3 to \$1.9 million for the 60-mile	trail. The 2012 Buffalo Valley Rail Trail User Survey and Economic Impact Analysis estimated an annual \$280,635 in direct economic impact just one year after its opening.
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### Number of Off-Road Bicyclists and Pedestrians

People who walk and bike the region’s off-road trails are looking for a nature-based experience. Some are seeking outdoor recreation and exercise. Others are traveling the trails specifically to move from point A to point B safely. Special events can also draw people to a trail in support of issue awareness, as noted above. Publishing a map that shows trail locations and listing trails among “things to see and do” online and in print helps individuals, as families, as groups of friends, and as clubs find trails and the experiences they offer. Trailhead parking and comfort facilities make trails even more convenient.

Promoting walking and bicycling clubs in tandem with maps and activity listings encourages people to “buddy up” to learn from and support one another in taking part in healthy behaviors in their community and region.

Numbers of trail users in the region have only been counted in a few locations. While both studies are more than five years old, they reflect the magnitude of use and economic impact (discussed below). A 2006 User Survey of the Pine Creek Rail Trail estimated 125,000 unique user visits. A 2012 User Survey of the Buffalo Valley Rail Trail estimated over 100,000 annual trips or visits.

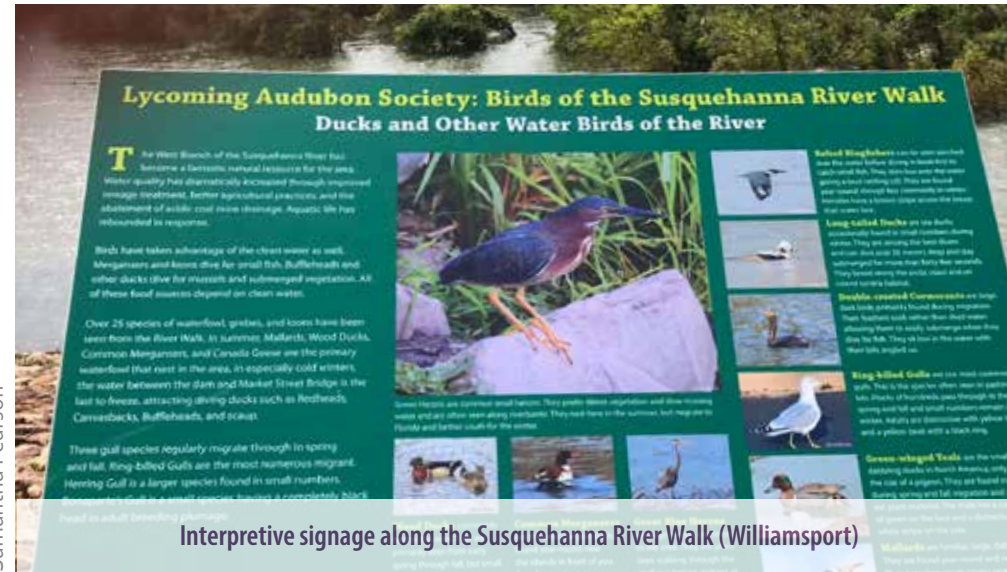
This kind of user data is extremely useful in characterizing trail use over time. It can bolster requests for trail maintenance, enhancement, or extension and demonstrate the potential impact of visible sponsorship from a variety of potential partners. For example, interpretative signage sponsored by a local historical society or wildlife organization builds local knowledge in the trail-going public. Health information might be well-placed along a trail where the “audience” includes many who choose to walk or bike for health benefits.

At one time, trail user surveys and trail counts were very labor intensive. With the availability of online surveys and automated trail counters, trail managers and community leaders can get a snapshot of trail use much more efficiently. A program of regularly (e.g., on a two- or five-year interval) estimating trail use on all open trails should be initiated.

The Susquehanna Greenway Partnership conducts an annual photo contest of images along the Greenway. These and other photos can encourage the use of existing trails and capture ideas for new trail locations.



Shikellamy State Park along the Susquehanna in Northumberland



Interpretive signage along the Susquehanna River Walk (Williamsport)



Buffalo Valley Rail-Trail



### Access to the Region's Unique Natural Resources

Moving through the landscape helps people to see natural resources firsthand for their beauty and function and fosters appreciation and stewardship. Walking and bicycling facilities are made more interesting—even educational—with interpretive signage about the history and ecology of the area. The Buffalo Valley Rail Trail is enhanced by a series of interpretive signs about the railroad history in Mifflinburg, Vicksburg, and Lewisburg. Trailhead signage at the North Branch Canal Trail tells of the modifications made to the riverbanks to aid in moving goods upstream against the river's strong, steady flow. Signage along the Susquehanna Riverwalk and Timber Trail in Williamsport features the lumber history and river wildlife and ecology through interpretative signage. While history seems static, the landscape is ever-changing. One visit is never enough. People return again and again to see, hear, and smell the seasonal change of the landscape. And a variety of trails can show the diversity of mountain and valley ecosystems.

The Susquehanna River is the region's most defining natural resource, and off-road trails should focus on river access and appreciation. In fact, the Susquehanna Greenway is a vision that communities that were established along the river and its tributaries should continue to be connected to the river, to each other, and to public recreation lands and other open space lands. Those connections were envisioned to include equitable access for all residents and visitors to experience firsthand and up-close the scenery and natural and cultural heritage of the region. Because walking and biking are the most equitable forms of travel and best support the intimate/multi-sensory experience of place, focused attention on bicycle and pedestrian facilities and their interconnection through the region is needed.



### Community & Economic Development

Off-road connectors, like their on-road counterparts, can have a significant and measurable impact on the local economy. They spur hard goods purchases (bicycles, bike accessories, clothing, etc.), soft goods purchases (water, snacks, meals, etc.), and services, such as overnight lodging, guides, and outfitters. Some of this spending comes naturally with local trail use and some can be increased with targeted marketing efforts.

Developing and then marketing Middle Susquehanna trails to other regions of Pennsylvania helps to attract day-trippers and weekenders. Promoting trails through tourism avenues, including local hotels and bed-and-breakfasts, gives visitors a reason to enrich or extend their stay. Trail-supporting retailers and restaurants can be visible as vendors or sponsors at special events, drawing customers to their venues.

Economic impact analyses estimate dollars spent locally as a result of a particular project or effort on hard goods purchases (bikes, bike accessories, clothing, etc.), soft goods purchases (water, snacks, meals, etc.), and overnight lodging. They provide useful findings that can inform decision-making about that specific trail and more generally about trails in the region. In parallel with trail use counts, economic impact analyses should be conducted periodically on open trails, after opening and after any significant extension. Criteria for prioritizing trails for study will need to be determined.

### Candidate Gaps for Detailed Study and Off-Road Trail Planning

Muncy to Montgomery. This connection was explored years ago and warrants a current analysis when resources can be dedicated.

Allenwood to Lewisburg. Potential connection of these riverside communities hasn't been considered. The distances between any two towns is relatively small. The Allenwood to Watsonstown segment would extend the Montgomery to Allenwood Rail Trail (proposed). The Milton to Lewisburg segment would connect Milton-area residents with destinations in Lewisburg and eventually to the Buffalo Valley Rail Trail.

Berwick to Bloomsburg and Danville to Northumberland as extensions of the North Branch Canal Trail were identified in the trail's initial feasibility study but have not been analyzed in detail.

### Example High Priority Off-Road Trail Projects

- Development of the Bald Eagle Valley Trail – all phases – from Castanea to Jersey Shore and to Lock Haven, Clinton County (CL-1d through CL-1e)
- Extension of the Susquehanna River Walk west to Jersey Shore and east to Muncy, Lycoming County (L-1, L-6, L-7) (The connection to Muncy is a low priority for the county but is essential for a complete greenway trail system)
- Bald Eagle and White Deer Ridge Trail from Lock Haven to Muncy over Bald Eagle and White Deer Mountains, connecting public lands service roads (60 miles) (L-3)
- Montgomery to Allenwood Rail Trail, including installation of Union County Riparian Forest Buffers and protection of the Great Stream Commons Riverfront (<5 miles)(L-4, U-9, and U-10)

## Matrix of Bicycle and Pedestrian Needs



Samantha Pearson

Counties and communities have documented hundreds of needs for bicycle and pedestrian facilities and safety improvements, as well as needs for park and recreation facilities that are bike+ped accessible or include pathways in local plans. A few of these needs have been addressed by the facilities available today. Other needs have been overtaken by more pressing priorities in community, economic, and transportation planning.



Samantha Pearson

In preparation for the Middle Susquehanna Bicycle and Pedestrian Plan, county planners and bike+ped leaders compiled a matrix of 165 bicycle and pedestrian related needs. The matrix includes a wide variety of project ideas from countywide networks to trail extensions and new trails to corridor and intersection improvements to new parkland.

The matrix is intended as a tool to help monitor project priority and development from a regional perspective and to provide a reference to transportation planners seeking to coordinate medium- to long-range improvements.

The matrix includes the following fields, as described below:

1. Project ID – an alpha-numeric code using the source county first one or two letters and a project number; project phases are indicated as 1a, 1b, etc.
2. SC Project Name – project name as known to SEDA-COG
3. Priority (high, medium, low) – high priority projects are actively

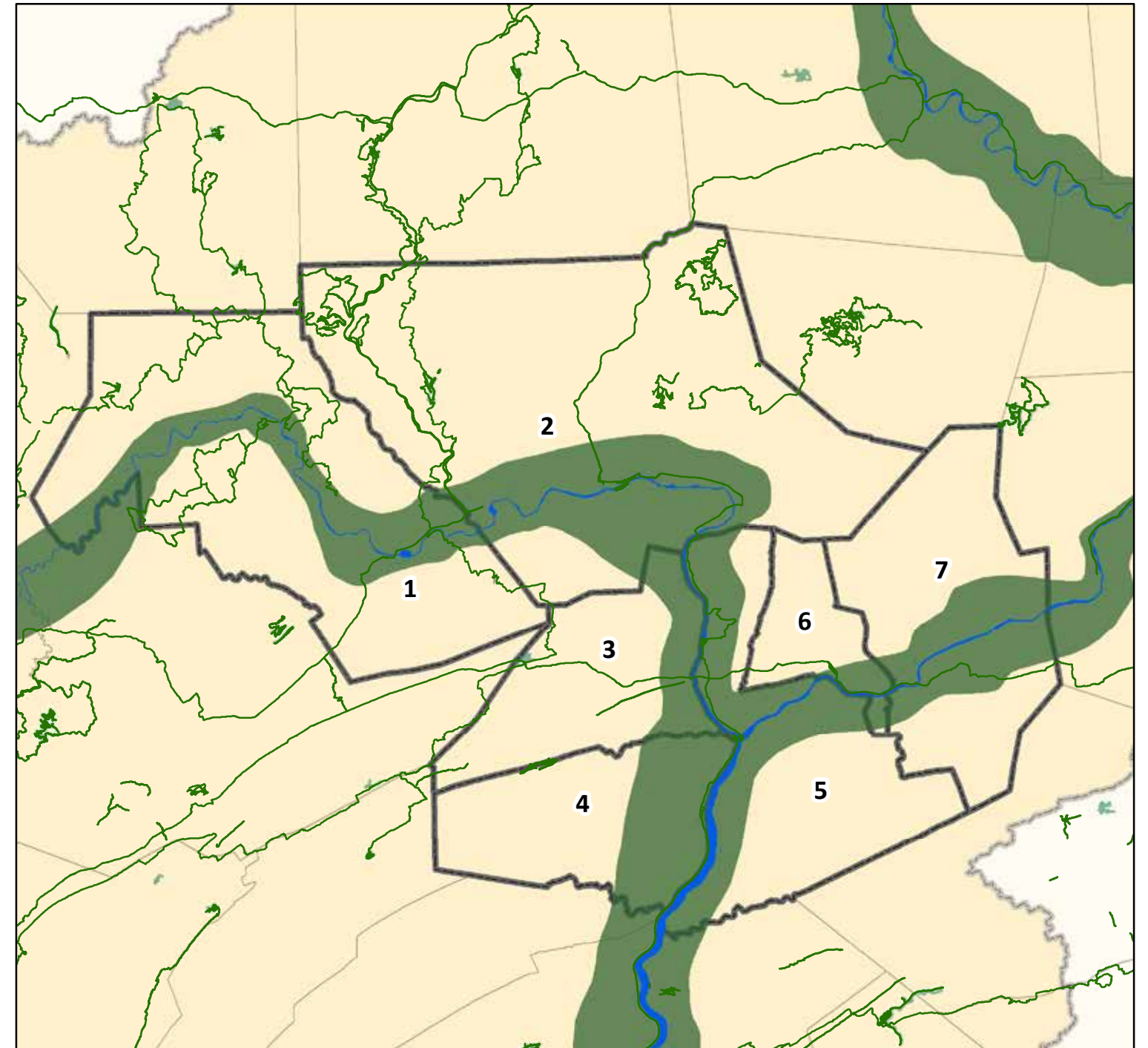
Michelle Brummer



being addressed at some stage of planning or design; medium priority projects have active leadership and are awaiting resources; and low priority projects are concepts awaiting leadership and resources

4. Project Type – the type of need, i.e. Bike+Ped facility, Safety, Parks & Rec, and Other
5. Project Description - the nature of the project or connection desired, community-level location, mileage, etc.
6. County – the county contributing the need
7. Location – the municipality or municipalities impacted by the project
8. Comments – coordination efforts, funding sources planned/sought, challenges/concerns
9. Stage – stage of study or development, i.e., concept, planning, design, shovel/ implementation ready
10. Source, Potential Partner – plan in which the project was originally identified; potential partners for project development, generally as listed in the source plan
11. Status – description of current activity or next steps

The summary list of needs/projects begins on the next page. These needs are illustrated on a series of county-level maps that follow. The full Matrix of Bicycle and Pedestrian Needs is provided on the SEDA-COG bike+ped web page.



County Maps of Bicycle and Pedestrian Needs on the Following Pages:

- |                    |                          |
|--------------------|--------------------------|
| 1. Clinton County  | 5. Northumberland County |
| 2. Lycoming County | 6. Montour County        |
| 3. Union County    | 7. Columbia County       |
| 4. Snyder County   |                          |

**Summary List of Needs/Projects**

See the SEDA-COG bike+ped web page for the full Matrix of Bicycle and Pedestrian Needs.

**KEY**

Project Type	Priority		
	High	Medium	Low
Safety	▲	▲	▲
Bicycle/Pedestrian	●	●	●
Parks & Recreation	■	■	■
Other	⊙	⊙	⊙

**Needs in Clinton County (see Map 1)**

CL-1a	Bald Eagle Valley Trail	●
CL-1b	Bald Eagle Valley Trail, Phase 3: Wayne Township	●
CL-1d	Bald Eagle Valley Trail, Phase 5: WE Susq River bridge to Pine Creek Trailhead	●
CL-1c	Bald Eagle Valley Trail, Phase 4: Bridge over WB Susq River	●
CL-1e	Bald Eagle Valley Trail, Phase 6: Lock Haven Connector	●
CL-2	Renovo Riverwalk Restoration	●
CL-7	Hogan Boulevard Safe Bike Route	▲
CL-8	Pedestrian Crossings, Jay Street @ Main Street	▲
CL-9	Pedestrian Crossings, Water Street @ Grove Street	▲
CL-10	Pedestrian Crossings, Mill Street @ E. Main Street	▲
CL-11	Pedestrian Crossings, 4th Street @ W. Church Street	▲
CL-12	Pedestrian Crossings, Fairview Street Corridor	▲
CL-13	Pedestrian/Bicycle Trail along Norfolk Southern ROW	●
CL-14	Bald Eagle and White Deer Ridge Trail	●
CL-15	Lock Haven Citywide Trail/Bicycle Network	■
CL-16	Woodward Twp Riverview Park Connector	●
CL-17	East/West Renovo Walking Connector	●
CL-18	Hogan Blvd Safety project near Bald Eagle Creek Bridge	▲
CL-19	Pine Loganton Rd Improvement	⊙

**Needs in Lycoming County (see Map 2)**

L-1	Susquehanna River Walk Extension and Connectors	●
L-2	Millers Run Greenway	●
L-3	Bald Eagle Mountain Ridge Trail (AKA Ridge Trail)	●
L-4	Montgomery to Allenwood Rail Trail	●
L-5	Extend Lycoming Creek Bikeway	●
L-6	Connect Susquehanna River Walk to Muncy Borough	●
L-7	Connect Susquehanna River Walk west to Jersey Shore	●
L-8a	Sylvan Dell Conservation Project	■
L-8b	Sylvan Dell Conservation Ridge Trail Connector Project	●
L-9	Jersey Shore to Lock Haven connector trail (AKA Pine Creek Connector, Clinton County Rail Trail)	●
L-10	Montoursville to Muncy Trail	●
L-11	Muncy to Montgomery Trail	●
L-12	Basin St. River Walk Connector	●

**Needs in Union County (see Map 3)**

U-1	Countywide comprehensive pedestrian and bicycle transportation network	●
U-2a	Route 15 Corridor, Lewisburg Area	▲
U-2b	Route 45 Corridor, Mifflinburg Area	▲
U-3	Union County Town and Village Sidewalk Network	●
U-4	Union County Rural Commercial Corridors	▲
U-5	Countywide pedestrian and bicycle transportation network	●
U-6	Provide multi-use trails to accomodate off-road non-motorized travel	●
U-7	Union County Safe Routes to School	▲
U-9	Union County Riparian Forest Buffers	⊙
U-10	Great Stream Commons Riverfront	■
U-11	Bull Run Greenway	⊙
U-12	Buffalo Valley Rail Trail (BVRT) US 15 crossing	●
U-13	Allenwood Village to Montgomery Borough multi-use riverfront trail	●
U-14	BVRT Western Extension- Mifflinburg to Swengle	●
U-15	BVRT railroad bridge over the Susquehanna	●
U-16	West Branch Susquehanna Greenway, Lewisburg to Winfield Village Trail	●
U-17	St. Anthony St./River Road Bridge	▲
U-18	West Branch Susquehanna Water Trail Infrastructure Improvements throughout county - St George St demonstration project	⊙
U-19	Great Stream Commons River Access	⊙
U-20	Urban Stream restoration and greenway (demonstration project Bull Run Greenway, currently at Kidsburg)	⊙
U-21	West Branch Susquehanna Greenway	●

**Needs in Union County, cont'd.**

U-22	Extend BVRT west to Cherry Run	●
U-23	Extend BVRT 5th Street to River	●
U-24	West Branch Susquehanna Greenway, Winfield to Northumberland Trail	●
U-25	Lewisburg Highschool to Linntown Connection	●
U-26	Allenwood Community Park	■
U-28	New Berlin Community Park	■
U-29	Union County Parks	■
U-30	BVRT North/South Connections	●
U-31	Penns Creek Water Trail & access	⊙
U-32	Reopen Shamonkin Mountain Trail	●
U-33	Develop George Long Trail	●
U-34	Route 15 Corridor Safety Improvements	▲
U-35	Kidsburg Park Rehabilitation	■
U-36	Bull Run Greenway, Rail-Trail extension to Bucknell	●
U-37	6th Street Streetscape	⊙
U-38	East Buffalo Township Community Parks	■
U-39	Lewisburg Borough Community Parks	■
U-40	Kelly Township Community Parks	■
U-41	West Branch Susquehanna Greenway - Trail Bucknell Landing to Limestone Run	●
U-42	Safe Routes to School Rt 1: Washington and 15th Streets	▲
U-43	Safe Routes to School Rt 2: 19th Street, Adams Ave, Verna Rd, Jean Blvd	▲
U-44	Connect BVRT to the Library	●
U-45	Connection to Northumberland County	●
U-46	Former south end of Water St.	●
U-47	Paths across the Bucknell fields- from Linntown and along golf course	●
U-48	Airport Rd Bridge	▲
U-49	Connections beyond the Borough north on Union County side of river	●
U-50	Traffic calming at bridge, Rt. 45	▲
U-52	Stein Lane Corridor	▲

U-53a	Safety Improvements	▲
U-54	15 and 45 Intersection Safety Improvements	▲
U-55	Rail Trail and Fairground Rd Intersection Safety Improvements	▲
U-56	15 and St Mary Street Intersection Safety Improvements	▲
U-57	Market St and Water St Intersection Safety Improvements	▲
U-58a	Intersection Safety Improvements Involving PennDOT	▲
U-59a	Intersection Safety Improvements not Involving PennDOT	▲
U-60	Stein Lane and Jefferson Intersection Safety Improvements	▲
U-61	Stein Lane and Monroe Intersection Safety Improvements	▲
U-58b	Intersection Safety Improvements Involving PennDOT	▲
U-58c	Intersection Safety Improvements Involving PennDOT	▲
U-58d	Intersection Safety Improvements Involving PennDOT	▲
U-58e	Intersection Safety Improvements Involving PennDOT	▲
U-58f	Intersection Safety Improvements Involving PennDOT	▲
U-58g	Intersection Safety Improvements Involving PennDOT	▲
U-58h	Intersection Safety Improvements Involving PennDOT	▲
U-58i	Intersection Safety Improvements Involving PennDOT	▲
N-11	Intersection Safety Improvements Involving PennDOT	▲
U-58k	Intersection Safety Improvements Involving PennDOT	▲
U-59b	Intersection Safety Improvements not Involving PennDOT	▲
U-59c	Intersection Safety Improvements not Involving PennDOT	▲
U-59d	Intersection Safety Improvements not Involving PennDOT	▲
U-59e	Intersection Safety Improvements not Involving PennDOT	▲
U-53b	Safety Improvements	▲
U-53c	Safety Improvements	▲
U-53d	Safety Improvements	▲
U-53e	Safety Improvements	▲
U-53f	Safety Improvements	▲
U-53g	Safety Improvements	▲

U-53h	Safety Improvements	▲
U-53i	Safety Improvements	▲
U-53j	Safety Improvements	▲
U-53k	Safety Improvements	▲

**Needs in Snyder County (see Map 4)**

S-1	Middlecreek Nature Park Rehabilitation	■
S-2	Middlecreek Nature Park further development	■
S-3a	Lake Augusta West Shore Greenway Trail - Steam Electric Station to Fabridam	●
S-3b	Snyder County Rail Trails - Kreamer to McClure	●
S-4	Lake Augusta West Shore Greenway Trail - Shamokin Dam to Union County line	●
S-5	Canal Heritage Park	■
S-6	Susquehanna River Sports Park, Boathouse and Rowing Venue	■

**Needs in Northumberland County (see Map 5)**

N-1	Liberty Hollow Rail Trail	●
N-2	Point Twp 80-acre Recreation Park	■
N-3	Pineknottter Park Expansion and Trails	■
N-4	West Chillisquaque Trailhead and River Access	⊙
N-5	Acorn Little League Fields	■
N-6	Joint Park Landbank	■
N-7	Kapp Heights Park	■
N-8	Develop Plan for on-road Bicycle Routes in Northumberland & Point Township	⊙
N-9	Sunbury to Paxinos Trail	●
N-10	Point Township to Montour County Trail	●

**KEY**

Project Type	Priority		
	High	Medium	Low
Safety	▲	▲	▲
Bicycle/Pedestrian	●	●	●
Parks & Recreation	■	■	■
Other	⊙	⊙	⊙

**Needs in Montour County (see Map 6)**

M-1	Montour County Greenway System	●
M-2	linkage & trail development	●
M-3	Susquehanna Riverfront Park	●
included with M-4	Montour County Greenway System - Old Iron Ore	⊙
included with M-4	Montour County Greenway System - Reading Rail	●
included with M-4	Montour County Greenway System - Montour Ridge	⊙
included with M-4	Montour County Greenway System - Rail with Trail	●
included with M-4	Montour County Greenway System - Chillisquaque Creek	⊙
M-4	Greenway Corridors	⊙
M-5	Countywide pedestrian, buggy and bicycle transportation network	⊙
M-6	Develop local recreation parks in municipalities	■
M-7	North Branch Canal Trail Connector, Catawissa to Bloomsburg	●
M-8	North Branch Canal Trail, Danville Connection	●
M-9	Danville Riverfront Trail - Main Levee Segment	●
M-10	Danville Riverfront Trail - Levee to Soccer park	●
M-11	Monkey Drift Trail	●
M-12	Monkey Drift Trail to Hess Loop connector	●
M-13	River Front Trail	●
M-14	Hospital Run Levee Trail	●
M-16	River Road to North Branch Canal Trail Connector	●

**Needs in Columbia County (see Map 7)**

CO-1	Extend Columbia County Susquehanna Trail, Iron Street to Kocher Park (Lightstreet village)	●
CO-2	Trail to link Hoffman Natural Area to Steve Shannon Path (Columbia Co Susquehanna Trail)	●
CO-3	Grove-Rishel Natural Area COMPLETED	■
CO-4	Briar Creek Lake County Park trail loop/enhancements	■
CO-5	Bloomsburg Town Park enhancements	■
CO-6	Millville Community Park walkways	■
CO-7	B&S and SB & B Railroads Rail Trail	●
CO-8	Reading and Pennsylvania Railroads Rail Trail, in both north and south directions	●
CO-9	Lehigh Valley Railroad Rail Trail	●
CO-10	Conrail Railroad Rail Trail	●
CO-11	Maintain and expand Bloomsburg Bicycle and Pedestrian Infrastructure	●
CO-12	Country Club Drive and Lightstreet Road Bicycle/Pedestrian Accessibility	●
CO-13	Bloomsburg Trail Connections	●
CO-14	Fort McClure Boulevard Walk/Bike Paths	●
CO-15	Walking path from Bloomsburg to Central Road	●
CO-16	5th Street/Hollow Road Bicycle/Pedestrian Accessibility	●
CO-17	7th Street Extension Bicycle/Pedestrian Accessibility and link to rest of town	●
CO-18	Iron Street Bicycle/Pedestrian Accessibility	●
CO-19	Children's Museum Bicycle/Pedestrian Accessibility	●
CO-20	Main Street & Lightstreet Road pedestrian safety	▲
CO-21	Lightstreet Road corridor pedestrian safety	▲
CO-22	East Street & Fifth Street pedestrian safety	▲
CO-23	Market Street Mid-block Crossing	▲
CO-24	Fort McClure Boulevard Riverfront Trail	●
CO-25	Bloomsburg Town Park Loop Trail	●
CO-26	Berwick River Landing and trailhead at old RR station	■
CO-27	Berwick Area Safe Routes to School	▲
CO-28	Elm Street and Main Street Streetscapes	⊙

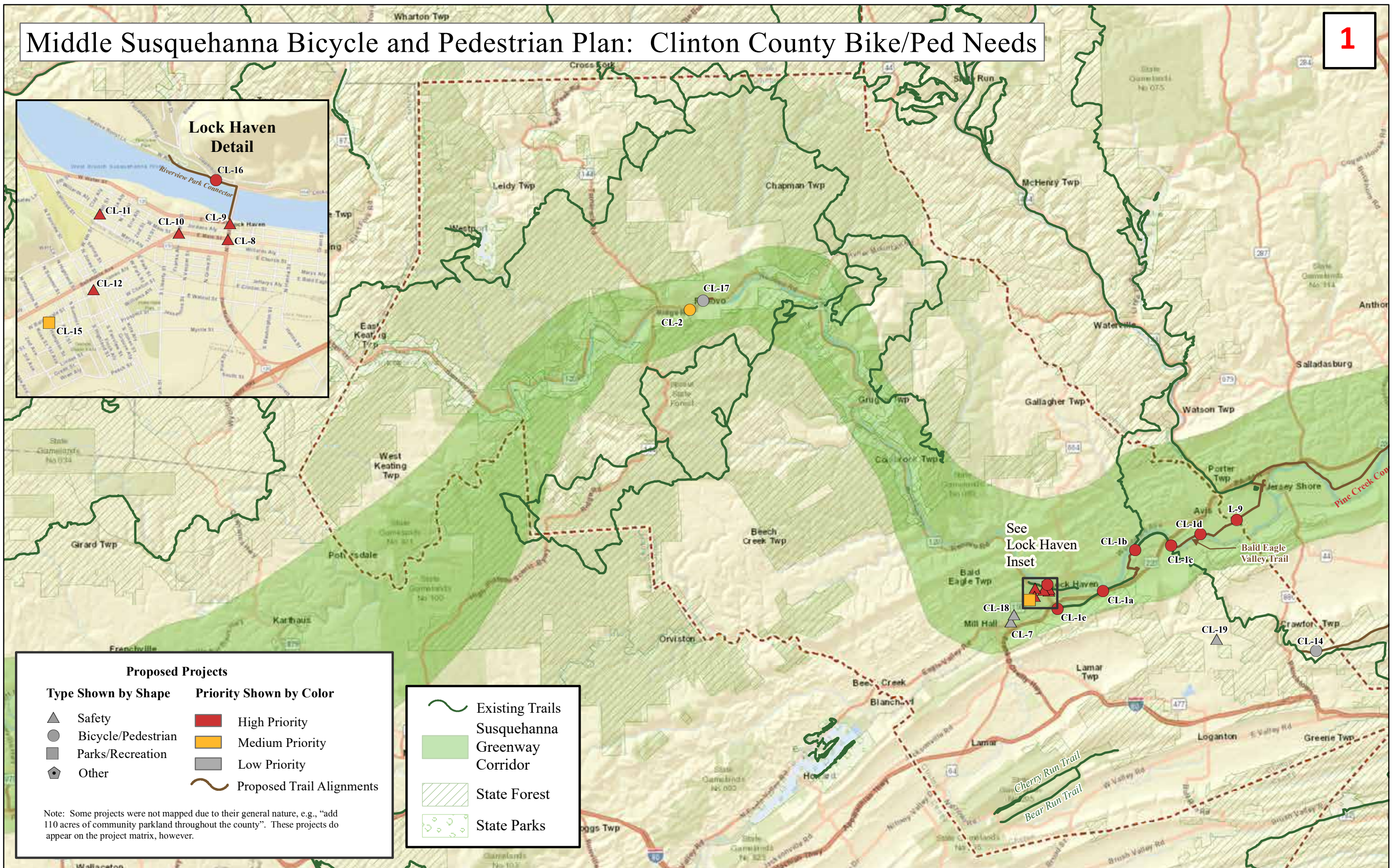
CO-29	Test Track Park Playground	■
CO-30	Railroad Riverfront Corridor & Riverwalk	●
CO-31	Nescopeck Connect Trail and Tribute Park	■
CO-32	Network of neighborhood Berwick Parks	■
CO-33	Berwick Running Routes	⊙
CO-34	Ber-Vaughn Park Connections	■
CO-35	Promote Destination Trails around Berwick	⊙
CO-36	Briar Creek Lake/Bloomsburg Connection Trail	●
CO-37	Extend Susquehanna Warrior Trail from Berwick to Susquehanna Riverlands	●
CO-38	Ped safety around Berwick Town Park at Market Street & Fort McClure Blvd.	▲
CO-39	Identify Berwick Biking Routes	⊙
CO-40	NBCT, Catawissa to Bloomsburg	●
CO-41	NBCT, Bloomsburg to Berwick and Warrior Run Trail	●

**KEY**

Project Type	Priority		
	High	Medium	Low
Safety	▲	▲	▲
Bicycle/Pedestrian	●	●	●
Parks & Recreation	■	■	■
Other	⊙	⊙	⊙

# Middle Susquehanna Bicycle and Pedestrian Plan: Clinton County Bike/Ped Needs

1



**Proposed Projects**

Type Shown by Shape	Priority Shown by Color
▲ Safety	High Priority
● Bicycle/Pedestrian	Medium Priority
■ Parks/Recreation	Low Priority
⬠ Other	Proposed Trail Alignments

Note: Some projects were not mapped due to their general nature, e.g., "add 110 acres of community parkland throughout the county". These projects do appear on the project matrix, however.

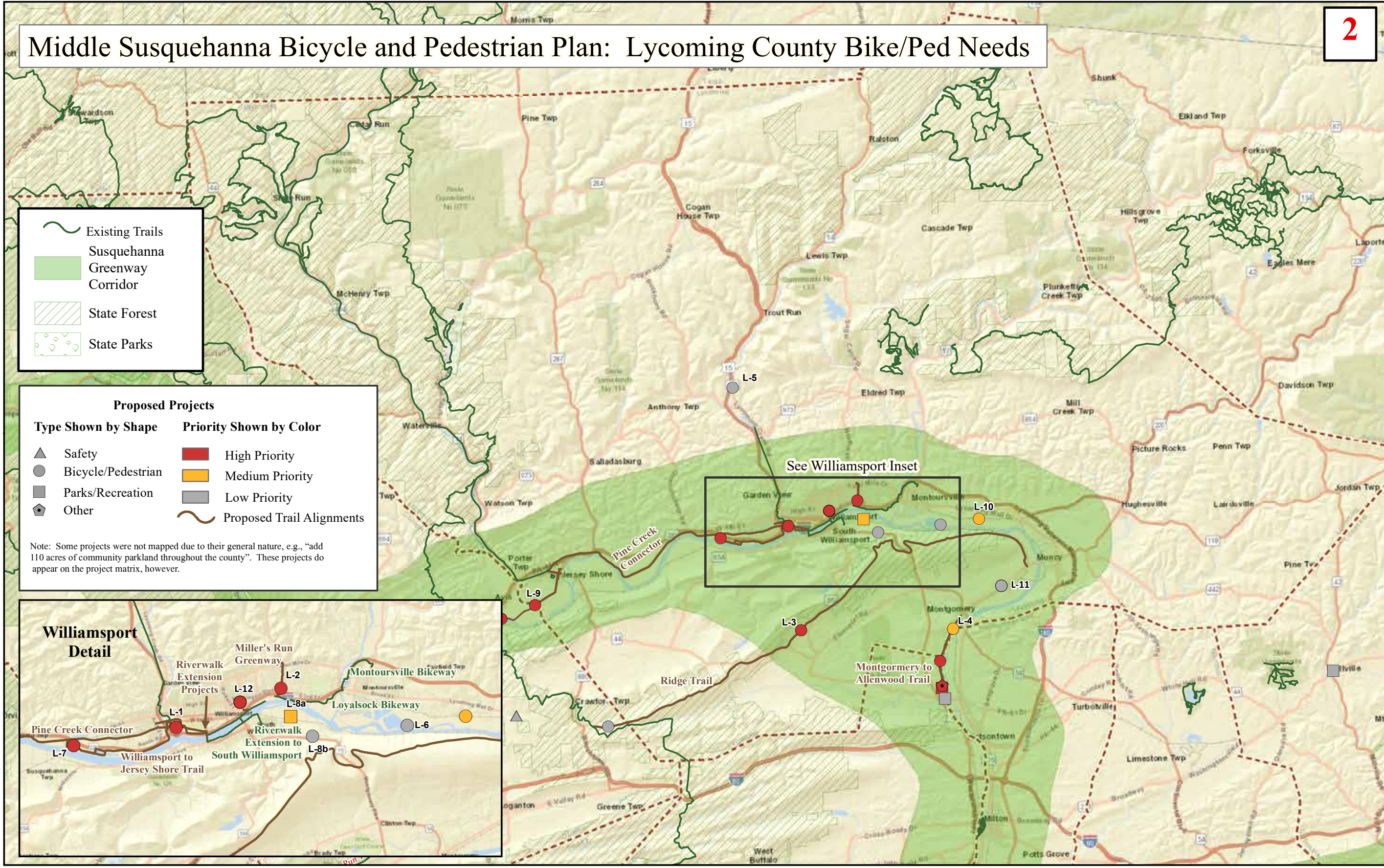
	Existing Trails
	Susquehanna Greenway Corridor
	State Forest
	State Parks

Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan



# Middle Susquehanna Bicycle and Pedestrian Plan: Lycoming County Bike/Ped Needs



**Proposed Projects**

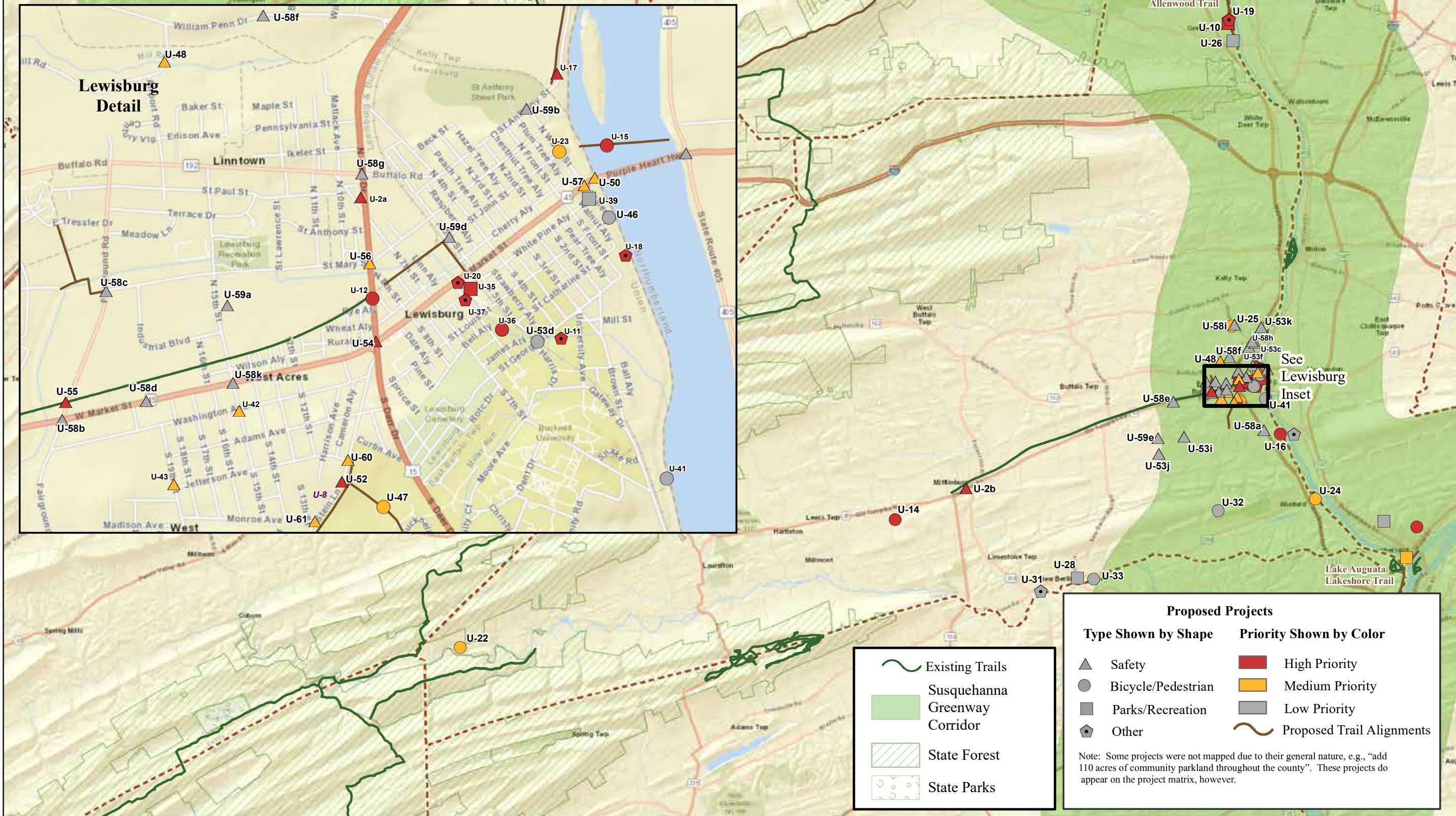
Type Shown by Shape	Priority Shown by Color
▲ Safety	■ High Priority
● Bicycle/Pedestrian	■ Medium Priority
■ Parks/Recreation	■ Low Priority
⬠ Other	— Proposed Trail Alignments

Note: Some projects were not mapped due to their general nature, e.g., "add 110 acres of community parkland throughout the county". These projects do appear on the project matrix, however.

Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

# Middle Susquehanna Bicycle and Pedestrian Plan: Union County Bike/Ped Needs

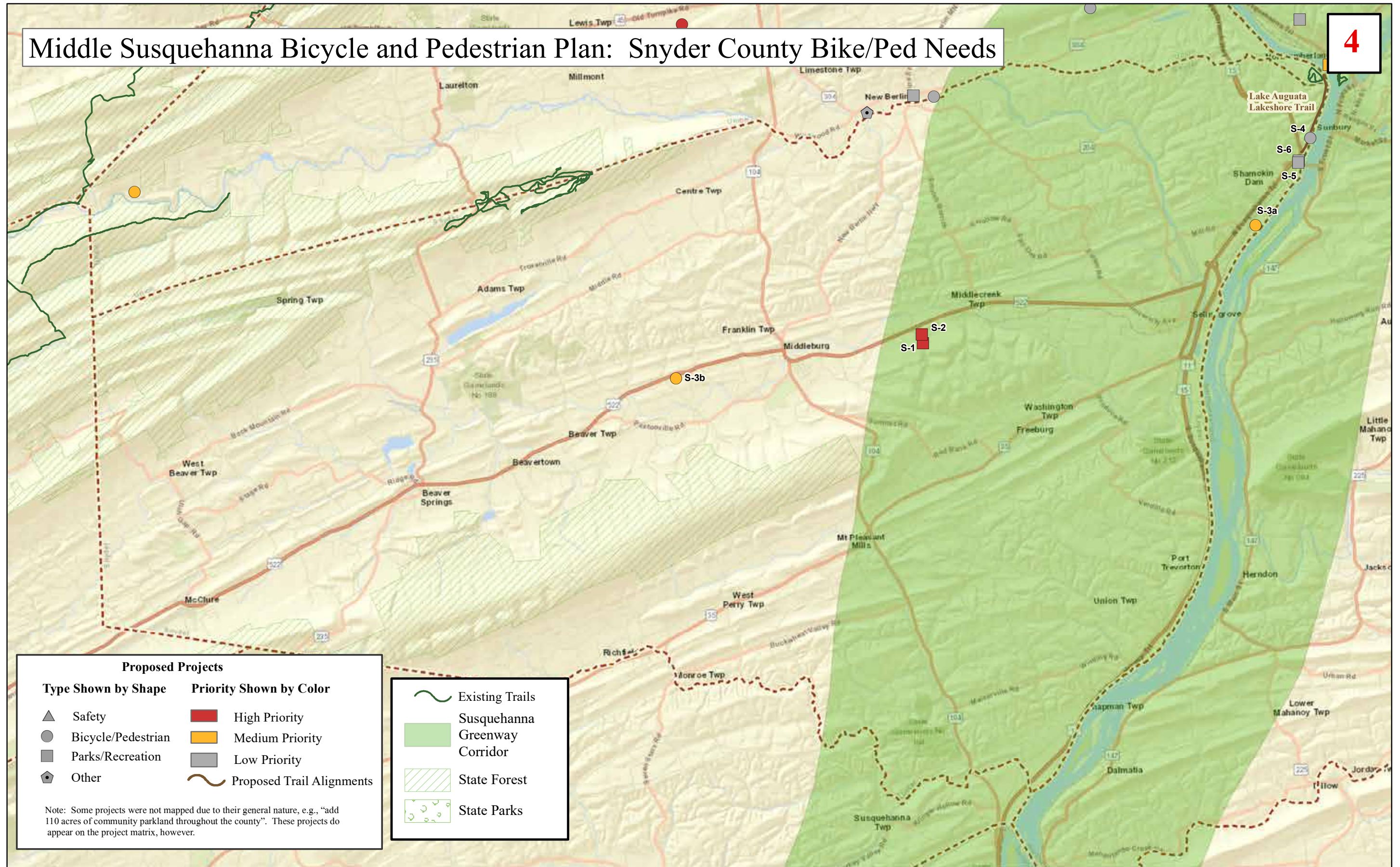


Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

# Middle Susquehanna Bicycle and Pedestrian Plan: Snyder County Bike/Ped Needs

4



**Proposed Projects**

Type Shown by Shape	Priority Shown by Color
▲ Safety	High Priority
● Bicycle/Pedestrian	Medium Priority
■ Parks/Recreation	Low Priority
⬠ Other	Proposed Trail Alignments

Note: Some projects were not mapped due to their general nature, e.g., "add 110 acres of community parkland throughout the county". These projects do appear on the project matrix, however.

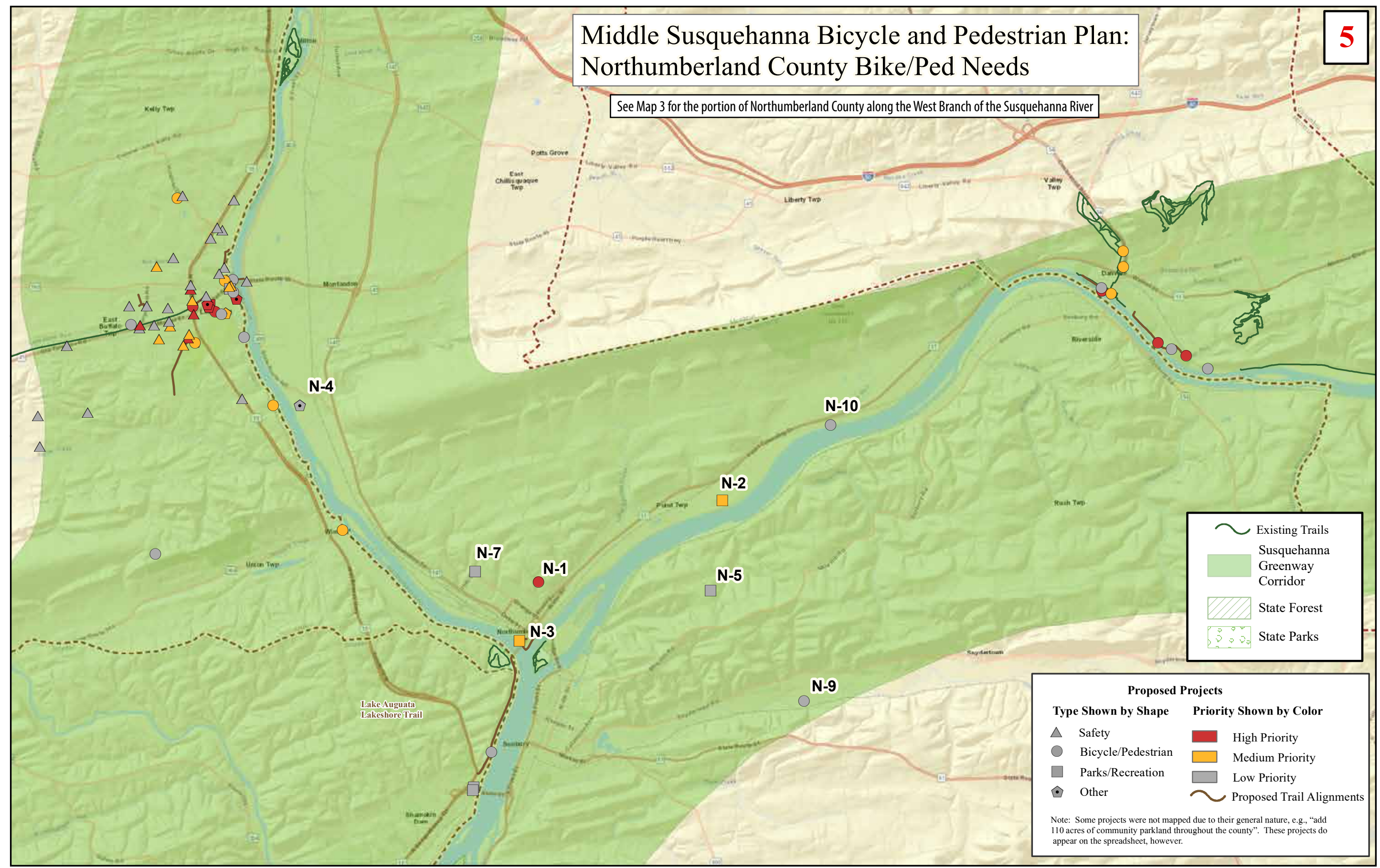
	Existing Trails
	Susquehanna Greenway Corridor
	State Forest
	State Parks

Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

# Middle Susquehanna Bicycle and Pedestrian Plan: Northumberland County Bike/Ped Needs

See Map 3 for the portion of Northumberland County along the West Branch of the Susquehanna River



Existing Trails  
 Susquehanna Greenway Corridor  
 State Forest  
 State Parks

**Proposed Projects**

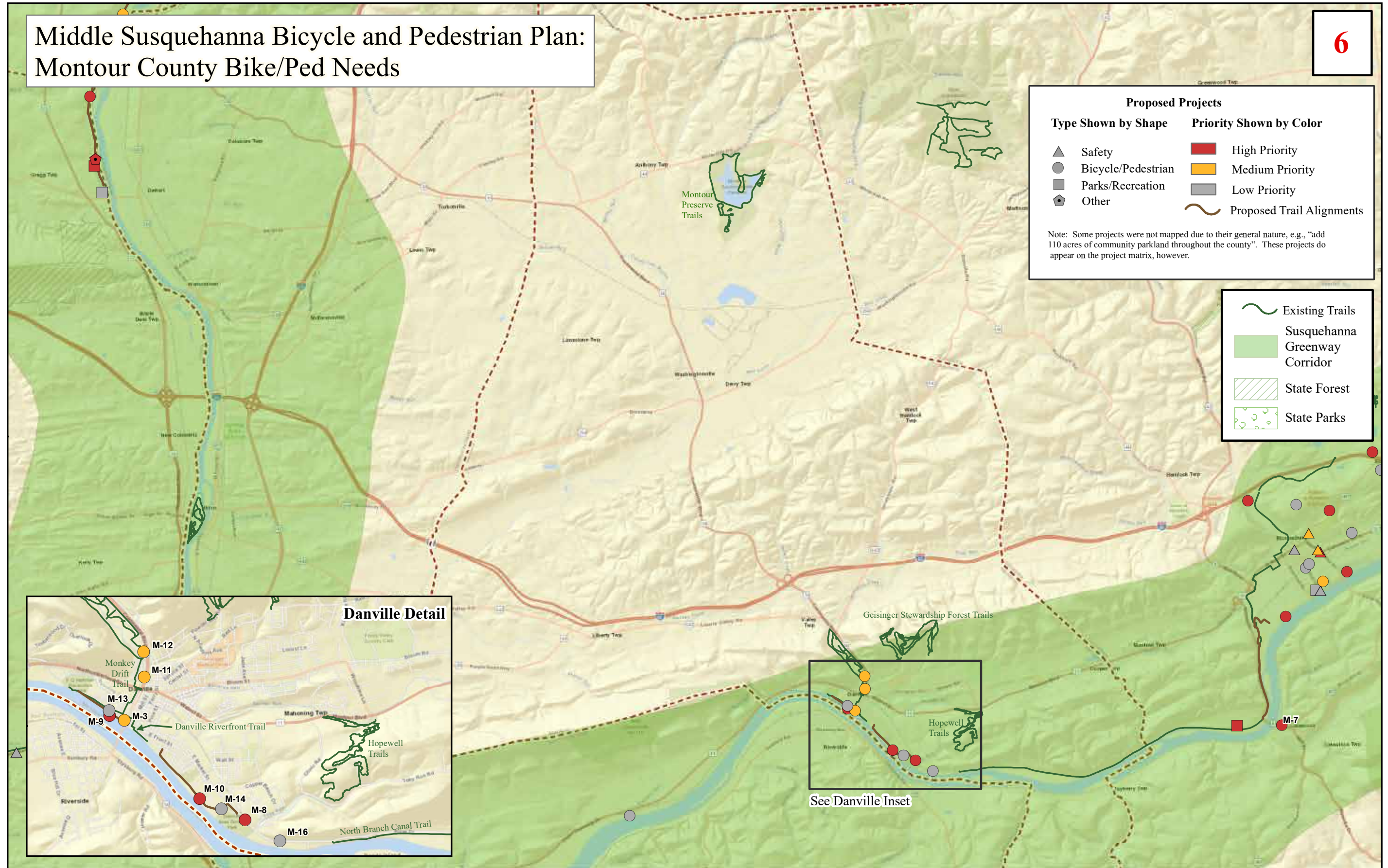
Type Shown by Shape	Priority Shown by Color
Safety	High Priority
Bicycle/Pedestrian	Medium Priority
Parks/Recreation	Low Priority
Other	Proposed Trail Alignments

Note: Some projects were not mapped due to their general nature, e.g., "add 110 acres of community parkland throughout the county". These projects do appear on the spreadsheet, however.

Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

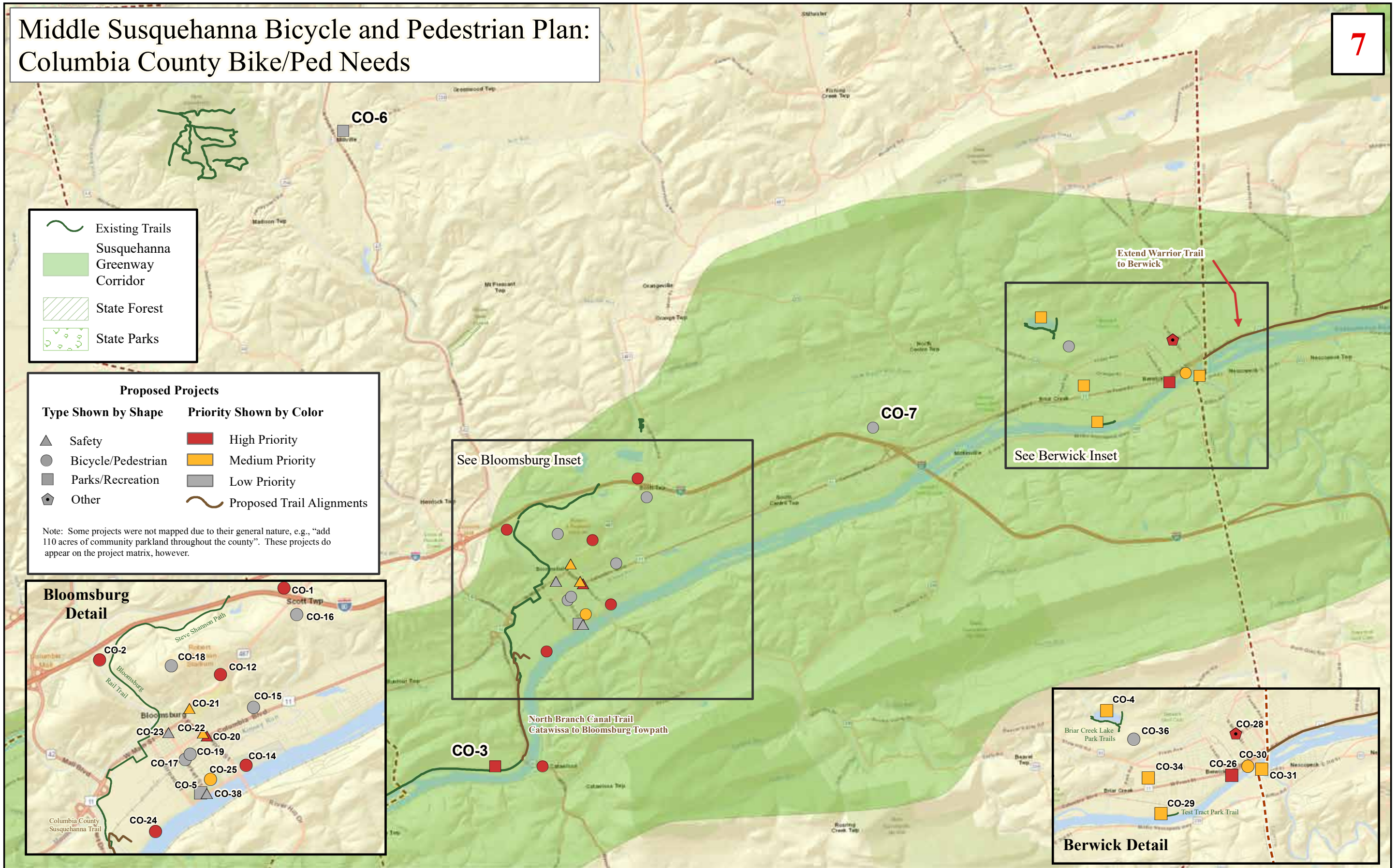
# Middle Susquehanna Bicycle and Pedestrian Plan: Montour County Bike/Ped Needs



Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

# Middle Susquehanna Bicycle and Pedestrian Plan: Columbia County Bike/Ped Needs



Mapping by SEDA-COG GIS, March 2019

PA State Plane N, NAD83, feet Data: SGP Bike/Ped Plan

## SECTION 5

# Action Plan

Infrastructure projects—what we need to **build** to improve safety, connectivity, and other conditions—are listed on the Matrix of Bicycle and Pedestrian Needs.

This section is about what we need to **do** to achieve cohesive, steady progress toward our vision and goals.

**Action 2** **Update the SEDA-COG bike+ped web page.**

**What:** Provide an online source of regional bike+ped planning and development information where county and local governments, trail development organizations, and bike+ped advocates can find current information on actively developing projects, priorities for future resources, and other known needs. Make the toolkit available online as individual tools and references. Update quarterly.

**Who:** SEDA-COG MPO

**Timeframe:** Ongoing, Near-term, Mid-term, Long-Term

**Supports Which Goals?** Safety, Community and Economic Development

**Action 4** **Develop partnerships** for bike+ped connectivity and safety projects, project enhancements, and initiatives to strengthen bike+ped culture.

**What:** Present the vision for a regional bicycle and pedestrian network and culture to potential partner organizations; seek partnerships for upcoming projects/initiatives.

**Who:** Vision and Partnerships Work Group

**How:** See Section 6, Implementation Tips and Tools

**Timeframe:** Ongoing, Near-term, Mid-term, Long-Term

**Supports Which Goals?** Safety, Connectivity, More People Biking and Walking, Experiences Unique to Region, Community and Economic Development

**Action 1** **Establish the Middle Susquehanna Bicycle and Pedestrian Advisory Committee**

**What:** Champion development of a regional network of walkable and bikeable communities and promote a bike- and pedestrian-friendly culture by advising the SEDA-COG Metropolitan Planning Organization (MPO) and the Susquehanna Greenway Partnership, encouraging local bike+ped projects and initiatives, and advocating for funding.

**Who:** SEDA-COG MPO to establish committee

**How:** See Section 6, Implementation Tips and Tools

**Timeframe:** Ongoing, Near-term, Mid-term, Long-Term

**Supports Which Goals?** Safety, Connectivity, More People Biking and Walking, Experiences Unique to Region, Community and Economic Development

**Action 3** **Publish and maintain an online map of prime places to walk and bike.**

**What:** Encourage residents to walk and bike in safe places that are available now and let them know where new connections will be ready soon; update map quarterly. Also, encourage them to share locations of safety concerns and desired connections and improvements with the regional advisory committee.

**Who:** SEDA-COG MPO and/or Susquehanna Greenway Partnership

**Timeframe:** Ongoing, Near-term, Mid-term, Long-Term

**Supports Which Goals?** Safety, Community and Economic Development

**Action 5** **Promote successful projects** of all sizes as well as testimonials from elected officials and community leaders.

**What:** Share valuable project development activities, tools, testimonials, etc., via e-news and social media to create a steady stream of educational soundbites and encourage networking with leaders of completed projects.

**Who:** Vision and Partnerships Work Group

**Timeframe:** Ongoing, Near-term, Mid-term, Long-Term

**Supports Which Goals?** Safety, Connectivity, More People Biking and Walking, Experiences Unique to Region, Community and Economic Development

**KEY**

- Safety
- Connectivity
- More People Biking and Walking
- Experiences Unique to Region
- Community and Economic Development

**Action 6**

Encourage communities, businesses, and universities to pursue the **“Bike Friendly Community”** program and designations.

**What:** Provide information about the program, benefits, and application process. Coordinate informal presentations by the Pajama Factory in Williamsport (and other designated bike-friendly communities beyond the Middle Susquehanna region) to interested government entities, chambers of commerce, and educational institutions.

**Who:** Vision and Partnerships Work Group

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

**Action 8**

**Report major activities and impacts annually.**

**What:** Demonstrate progress toward goals through a variety of quantitative and qualitative measures

**Who:** Vision and Partnerships Work Group with support from SEDA-COG MPO

**How:** See Section 6, Implementation Tips and Tools

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

**Action 10**

**Compile public comments** from primary and secondary sources as a resource for local bike+ped planning and improvement.

**What:** Establish a mechanism for the public to submit locations in need of bike+ped improvements to the regional bike+ped advisory committee. Distill bike+ped public comments from State Transportation Commission public outreach data.

**Who:** Safety Work Group with support from SEDA-COG MPO

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

**Action 7**

**Engage local media** in promoting bicycling and walking and their benefits.

**What:** Engage media outlets in promoting walking and biking in safe places for health, environmental, and economic benefits and informing a safe bike+ped culture. This begins with the social media accounts of SEDA-COG and the Susquehanna Greenway Partnership and includes traditional community-based news organizations publishing in print and online.

**Who:** Vision and Partnerships Work Group

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

**Action 9**

**Encourage bike+ped audits in additional towns.**

**What:** Share completed audits and completed improvement projects with candidate communities for bike+ped audits to show the end product of the audit and examples of the range of improvements (type, scale, cost) that can be implemented locally. Share funding sources for audits and potential future improvements.

**Who:** Safety Work Group, with support from Connectivity Work Group

**How:** See Section 6, Implementation Tips and Tools

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

**Action 11**

**Assess on-road bicycling conditions along candidate corridors** and potential intercommunity improvement, including transit service (bikes on bus).

**What:** Conduct analysis of on-road conditions where intercommunity bicycle travel is evident or desired. Evaluate alternatives to improve on-road connections and reduce stressors on bicyclists both in town and between towns, thereby making bicycling more comfortable and convenient for adult bicyclists at minimum. Eight candidate corridors have been identified.

**Who:** Connectivity Work Group, supported by SEDA-COG MPO with participation from municipalities and PennDOT District 3-0

**How:** See Section 6, Implementation Tips and Tools

Timeframe	Supports Which Goals?
Ongoing Near-term Mid-term Long-Term	

KEY

Safety	Connectivity	More People Biking and Walking	Experiences Unique to Region	Community and Economic Development



**Action 12** Support the extension of existing trails along the Susquehanna Greenway.

**What:** Extend, then interconnect trails, then close gaps. Ensure long-term maintenance is considered for each trail or segment. Include interpretive signage of natural and cultural heritage and present-day features.

**Who:** Connectivity Work Group

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



**Action 13** Encourage municipalities to address identified bike+ped needs associated with local streets and roads.

**What:** Share with municipalities the public comments associated with local roads. Support municipal action with technical assistance and funding source options.

**Who:** Connectivity Work Group

**How:** See Section 6, Implementation Tips and Tools

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



**Action 15** Promote biking and walking to daily destinations and community events.

**What:** Encourage organizers of events held in communities to provide bike storage on-site.

**Who:** Participation Work Group with support by Susquehanna Greenway Partnership

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



Increasing awareness of bicycle- and pedestrian-friendly principles helps build a supportive community culture.

**Action 14** Work with state and local police departments to encourage consistent enforcement of traffic laws pertaining to safe bike+ped travel.

**What:** Explore the potential for an annual, short-term, intensive traffic law enforcement period, e.g., during National Bike to Work Week in May. Collaborate on safety awareness campaigns (or public service announcements) regarding bike+ped safety.

**Who:** Safety Work Group

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



**Action 16** Encourage development of and resident participation in bicycling and walking clubs for a variety of ages and abilities.

**What:** Provide resources such as links to existing clubs online and to the PA WalkWorks program.

**Who:** Participation Work Group with support by Susquehanna Greenway Partnership

**How:** See Section 6, Implementation Tips and Tools






**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



**KEY**

 Safety
  Connectivity
  More People Biking and Walking
  Experiences Unique to Region
  Community and Economic Development



Bicycling on old Route 15 near Port Trevorton, Snyder County

Cara Lane



Riverwalk at Lock Haven

courtesy Clinton County Planning Department



Walk It! Bike It! Lewisburg Family Trail Ride  
as part of unPAved of the Susquehanna River Valley weekend

Samantha Pearson

**Action 17**

**Promote responsible shared use of streets by all travelers.**

**What:** Partner to provide driver training that includes bicycle and pedestrian awareness elements and to conduct bicycle safety events for children and adults.

**Who:** Safety Work Group and Participation Work Group, with support by SEDA-COG MPO

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**

**Action 18**

**Estimate biking and walking activity.**

**What:** Establish a program of regular estimates of trail user counts, biking and walking club participation, and bikes on buses; monitor trends where consistent data is available.

**Who:** Participation Work Group

**How:** See Section 6, Implementation Tips and Tools

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



**Action 19**

**Develop bicycle and pedestrian safety awareness campaigns for all travelers.**

**What:** Raise awareness of bicyclists and pedestrians, and traffic laws pertaining to shared use of the road by all. Coordinate with Safety Press Officers in PennDOT Districts 2-0 and 3-0.

**Who:** Safety Work Group

**Timeframe**

Ongoing  
Near-term  
Mid-term  
Long-Term

**Supports Which Goals?**



KEY



Safety



Connectivity



More People  
Biking and Walking



Experiences  
Unique to Region



Community and  
Economic Development

## SECTION 6

# Implementation Tips & Tools

**A plan's real value is realized when it is translated into strategic action.**

This section presents practical tips and a systematic approach to:

- Organizing a formal Bicycle and Pedestrian Advisory Committee, delegating tasks, tracking implementation progress, and adjusting the plan as conditions warrant – this page
- Pursuing partnerships – page 38
- Reporting annual progress – page 38
- Encouraging community bike+ped audits – page 38
- Studying intercommunity on-road connectors – page 39
- Encouraging municipalities to address identified local needs – page 40
- Encouraging people to walk and bike – page 40
- Estimating bike+ped usage – page 40

### Guidance for Select Actions

#### Guidance on Action 1: Establish the Middle Susquehanna Bicycle and Pedestrian Advisory Committee

Effecting change across a large region is a challenge. The region's bicycle and pedestrian advocates can be most effective by organizing as interested stakeholders and meeting regularly, working in partnership with state and regional entities already undertaking transportation and recreation/conservation projects.

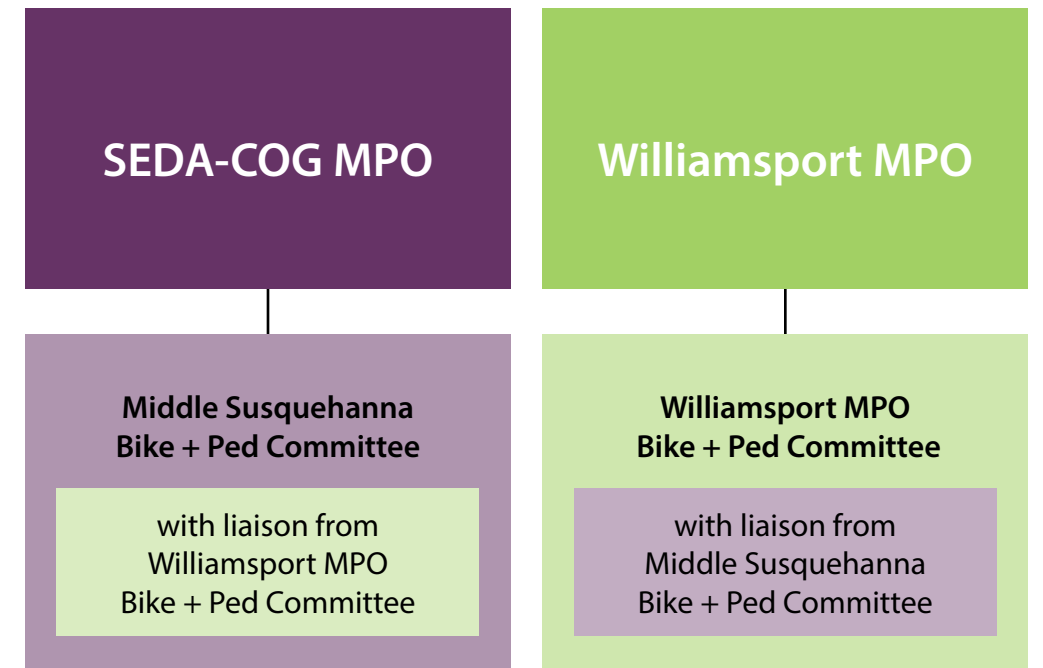
Upon adoption of the Middle Susquehanna Bicycle and Pedestrian Plan, the SEDA-COG MPO would establish this Advisory Committee, assign staff support for its work, and invite member organizations and request the appointment of their representatives. The Susquehanna Greenway Partnership may also need to authorize the establishment of this advisory committee to accept its work and provide defined staff support.

Since the Williamsport MPO has its own bylaws and its own bicycle and pedestrian advisory committee, it is recommended that the SEDA-COG MPO and the Williamsport MPO each designate a bicycle and pedestrian committee member as liaison to the other committee as depicted to the right. This approach avoids the need for formal organizational adjustment and bylaws amendments and retains strong coordination among all counties along the Middle Susquehanna region.

#### Principles for Consideration

The process for establishing the Advisory Committee would be pursued in accordance with SEDA-COG MPO bylaws, which state that the MPO may establish committees as needed and the committee chairperson makes subcommittee appointments. The bylaws do not indicate the need for subcommittee bylaws, however similar principles should be agreed upon for the advisory committee to operate effectively. These principles should include the following and are further described below:

1. Purpose or Mission Statement
2. Functions
3. Membership Composition and Provisions
4. Organizational Leader
5. Organizational Structure
6. Meetings
7. Relationship to the MPO and other Regional Organizations (formal and informal)
8. Procedures
9. Process for Amendment of Principles



#### Purpose or Mission Statement

The Advisory Committee that prepared this plan endorsed this mission statement:

To enhance quality of life in the Middle Susquehanna Valley through the development of a regional network of walkable and bikeable communities and the promotion of a bike-friendly and pedestrian-friendly culture.

Whether this statement remains or is revised, the Advisory Committee should use a mission statement to guide, evaluate, and prioritize its activities to sustain focused progress.

#### Functions

Like the mission statement, the informal Advisory Committee that prepared this plan outlined the core implementation functions of the formal Advisory Committee, which would be carried out by its members:

1. Champion the vision and benefits of a bike+ped friendly Middle Susquehanna Valley to rally support; this may include formal presentations and informal discussions with potential partner organizations.
2. Promote the strategies and examples of bike+ped projects/initiatives as a call to action, sharing best practices and successful projects and initiatives in the region as models.
3. Assist in project/initiative development and implementation, advising on problem definition, project description, funding strategy, grant administration, agency coordination, etc.
4. Provide input on the accommodation of bicycle and pedestrian modes in other modal projects in the planning process and recommend positions and policies to the MPO.



Tanya Hampton (Happy Valley Women's Cycling) rides against the flow of Cherry Run.

Firespire Photography

5. Promote bike+ped use and culture, provide interviews with media, and participate in bike+ped events.
6. Stay informed of bike+ped trends, promising practices, and innovations in other places as part of a commitment to continuous learning and development. Attend conferences and workshops as a representative of the Advisory Committee and share lessons learned with the committee upon return.
7. Report progress, celebrate achievement, and recognize partners.

The Advisory Committee should conduct periodic informal assessments to ensure that all functions are being addressed as conditions warrant.

### Membership

At minimum, the Advisory Committee members should include representatives of each member county as well as the MPO and the Susquehanna Greenway Partnership (these organizations should appoint representatives). The Advisory Committee should also include the PennDOT District 2-0 and District 3-0 bike+ped coordinators and representatives of allied industries and organizations, such as health care, education, environmental conservation, economic development, and tourism. These entities will help to bring a comprehensive view of community and regionwide benefits to Advisory Committee decisions. At one appointed representative per organization, this membership would total 16 people. These members would cast official votes in making Advisory Committee decisions.

The Advisory Committee should also invite interested municipal officials, planning commission members and staff, bicycle shop owners, and local bike+ped stakeholders (e.g., local walking and cycling clubs and local bike+ped advisory committees), either as volunteer members or voting members. Volunteer

members could be given a path to voting member status through consistent participation in meetings or other criteria.

It may also be appropriate for the SEDA-COG MPO and the Susquehanna Greenway Partnership to be allowed to appoint additional members who bring relevant expertise or perspectives to the committee, or to invite staff, board members, or other special guests with expertise to a particular meeting or discussion.

As the Committee will offer opinions on behalf of the MPO and its members, membership provisions should specify criteria for participation and procedures for requesting alternative (substitute) representatives or eliminating an organization's membership due to lack of participation.

### Organization

The Advisory Committee is not foreseen to need officers; however, naming a chairperson or co-chairs and a secretary is valuable for meeting preparation, management, and follow-up. The chairperson could be responsible for scheduling meetings, preparing agendas, and facilitating meetings. A vice-chairperson or secretary could be responsible for taking meeting notes and tracking attendance. Other duties may be assigned. For continuity from planning to implementation, the SEDA-COG MPO representative could serve as chair and the Susquehanna Greenway Partnership could serve as vice-chair position for at least one to two years. Thereafter, the Advisory Committee could evaluate the leadership structure and adjust it accordingly.

Subcommittees or work groups are recommended to advance actions outlined in Section 5 and to prepare information and materials for full committee decisions. The work groups could be organized as follows:

1. **Vision and Partnerships** – This work group could focus on sharing the vision of the plan and building a network of partners to support local and regionwide projects and initiatives.
2. **Safety and Enforcement** – This work group could periodically review safety data and public safety concerns from PennDOT, the State Transportation Commission, and local and state police and encourage community bike+ped audits. It may also deal with trail organizations and walking and bicycling clubs, where such needs arise.
3. **Connections** – This work group could focus on defining and prioritizing gaps in on-road and off-road (trail) connectivity; encouraging local governments, bike+ped organizations, or other organizations to address gaps with new or improved facilities; and supporting the development and funding/programming of projects. When a project extends the network or when a new connection is made, the work group could collaborate with the sponsor and the Communications work group to celebrate the opening and update maps.
4. **Community Engagement** – This work group could advocate for local policies and programs that support a bike- and pedestrian-friendly community culture. This work group could promote bike+ped policy workshops for municipal officials and representatives, e.g., walkability and complete streets policies.

It could network with the membership and others to promote and sponsor public campaigns, programs, and events that encourage people to walk and bicycle, such as Walkworks walking clubs and routes, bicycling clubs, a bicycle rodeo (bicycle skills clinic), walking and/or bicycling events (introductory or challenge, awareness-raiser or fundraiser), bicycle maintenance workshops, etc.

5. **Public Relations** – This work group could be responsible for documenting projects and initiatives to mark progress, encourage further development efforts, and promote new places to walk and bike in the region. These members might be the points of contact for municipal government and the public.

These work groups are suggested, but the number and focus of work groups should be refined by the Advisory Committee.

Each work group should have three to seven members and should communicate quarterly, or as needed to make steady progress. Each work group should have a spokesperson or lead responsible for reporting. At times, two or more work groups may need to collaborate. Progress could also be made by work group members teaming with non-members to advance local projects.

The Advisory Committee should discuss work groups as part of its organizational meeting.

### Meetings

The Advisory Committee should convene on a regular basis that meets the needs of committee, the MPO, and the Susquehanna Greenway Partnership. A calendar of meetings should be determined and shared with members. Alignment with the MPO suggests that the Advisory Committee would meet six times per year and follow a fiscal calendar of July 1 to June 30. Meetings could continue in parallel with the MPO's meeting schedule, streamlining travel for some members, or could



Alison Tetric (Specialized) separated herself from the rest of the women's field early, on her way to victory at the 2018 unPAved of the Susquehanna River Valley.

Firespire Photography

be moved. The meeting schedule should also be discussed at the organizational meeting and be informed by the advance or follow-up input of members whose schedules may conflict.

Meetings can occur in person or via conference call or online meeting. These alternatives to in-person meetings provide flexibility and enable responsiveness to issues and opportunities that may require or deserve quick decision-making or response.

**Guidance for Progress Review**

Meetings should primarily be used to review progress and strategize approaches to challenges in implementing the plan. An Action Planner/Progress Tracker is provided as a separate file. It can be used to identify those few actions that should occur over a single activity period, e.g., quarter or bi-monthly period. At the end of that period, the same table can be used to report progress or issues on those activities. (See example Action Planner / Progress Tracker below).

Progress reporting should be concise to be sustainable. In fact, it should generally be on a highlight and exception basis (focused on achievements worth sharing and reporting problems so they can be solved). Progress reports may address:

- a. **What actions are going forward and what progress is being made?**
- b. **What upcoming activity is expected? Where is help needed?**
- c. **What kinds of problems are being encountered and what can we do about it?**
- d. **Are we lacking leadership for any present actions? How can the leadership gap be closed?**

This level of reporting should easily lead into the action planning for the next period. Some completed activities or steps will have logical next steps for the following period. Some will have concluded. New activities or steps can be added as capacity (people and other resources) allows.

It is recommended that each work group report progress via an Action Planner / Progress

Tracker submitted in advance of Advisory Committee meetings for awareness and coordination, where needed.

It is not necessary or practical to have an activity or step for every action in each period. Therefore, progress reporting will not necessarily address every action. Progress across actions will proceed at different rates.

Once a year, the Advisory Committee should review progress in a more comprehensive and formal way. This annual effort could entail review of the completed progress trackers and documentation of significant accomplishments and milestone progress, as well as discussion of priorities for the year ahead and adjustments to the written plan where warranted. The results of the annual review can be summarized in a report—one or two pages at most. The report should be presented to the SEDA-COG and Williamsport MPO Boards and the Susquehanna Greenway Partnership Board.

**Relationship to Other Regional Organizations**

The Advisory Committee should participate in MPO meetings. The level of participation should be invited and defined by the MPO: as an authorized voting member (preferred) or as a non-voting member (at minimum). The Advisory



Quiet farm country between the Buffalo Valley Rail Trail and the Bald Eagle State Forest roads

Firespire Photography

Committee should not necessarily rely on the SEDA-COG staff involved in both the MPO and the Advisory Committee to represent its decisions, perspectives, and opinions at MPO meetings.

It may also benefit the Advisory Committee to participate in Susquehanna Greenway Partnership meetings (or its trails subcommittee meetings) at the Partnership’s invitation. This participation could lead to collaborative working relationships with Partnership members and affiliates.

The Advisory Committee should explore representation at other regional organization meetings where there is value. This can be accomplished without formal membership, such as through annual presentations or other updates. For this reason, a speaker’s kit may be a useful and efficient tool for the Vision and Partnerships Work Group and others. See Action 4 below.

**Procedures and Amendment of Principles**

During its organizational meeting and annual review meetings, the Advisory Committee should consider the need for any other formal procedures (e.g., for meeting management, membership management, committee communications) as well a basic process to amend its adopted principles as the committee evolves. Further duties/responsibilities of members could also be defined during organization.

<b>Action Planner / Progress Tracker</b>				
		For period: _____	Notes by: _____	
This document can be used to record recently completed actions and planned activity for specified activity periods. Notes could be prepared in advance of or during Advisory Committee meetings and distributed as appropriate. Completed actions would be documented in one period, then evolved into a new action or removed. Notes from multiple meetings could be compiled as an annual report or summary of progress.				
<b>Action #</b> <i>from Section 5</i>	<b>Planned Activity or Step</b> <i>briefly defined</i>	<b>Milestone Date</b> <i>e.g., initiate by or complete by date</i>	<b>Lead (L) and Support (S) Persons, Orgs</b> <i>work group or individual(s)</i>	<b>Status/Notes</b> <i>e.g., barriers, issues, re-directs, etc.</i>
EXAMPLE 9: Municipal Outreach	Request meeting with mayors/managers of Danville, Muncy and Renovo to encourage walk and bike audits in 2020	Due by October 31	L: Community Engagement work group S: Bob Stout, Scott Williams, and Katie de Silva respectively	

#### Guidance on Action 4: Partner for Projects and Initiatives

The Advisory Committee, and specifically the Vision and Partnerships Work Group, should present the bike+ped vision to potential partners. Work Group members would be spokespersons for the Middle Susquehanna Bicycle and Pedestrian Network in their counties and communities, regularly engaging local officials, private and non-profit boards of directors, and other community leadership with a message of the vision and its progress. At times, additional committee members may be asked to present to an organization based on existing relationships or partner familiarity.

As noted above, development of a speaker's kit should be considered to help deliver a consistent message regardless of who makes the presentation. It could contain a brief, scripted PowerPoint presentation (or PDF handout of the same), a one-page FAQ document with contact information, an annual progress report of key projects and initiatives, and/or an overview of upcoming projects. These items could effectively be supplemented with a handout to characterize the organizational partnership sought for a particular project, initiative, task, or effort.

The Advisory Committee, or Vision and Partnerships Work Group, might pursue outreach to groups including but not limited to:

- State and local police, with the Safety and Enforcement Work Group, to request recurring data about traffic law enforcement and to request participation in public safety campaigns, e.g., raising awareness for the 4-foot bicycle passing law and laws regarding pedestrians in crosswalks.
- Health systems, health insurers, and community service agencies, for sponsorship of preventive safety education, such as bike rodeos, and promotions of safe places to walk and bike that encourage safe physical activity that reduces rates of chronic disease and injury and associated health care costs.
- Municipalities, school districts, and institutions of higher learning, for policy reviews regarding sidewalks and bicycle facilities (both on- and off-road), community bike+ped audits, and sidewalk variance records.
- Employers and chambers of commerce, to explore their involvement and support in providing a bike- and pedestrian-friendly environment for customers and employees.

#### Guidance on Action 8: Reporting Progress and Achievement

The Advisory Committee should formally issue an annual progress report and publish the report on the SEDA-COG MPO and Susquehanna Greenway Partnership websites. This annual report should highlight completed projects, established programs, key partners for these efforts, and new partnerships for future efforts. The annual report is also an opportunity to re-introduce the vision, announce priorities for the coming year, and identify needed partners for their successful completion.

The annual progress report need not be elaborate. It should concisely reflect the value and impact of the Advisory Committee.

The Advisory Committee should present this annual report to the MPO Board and the Susquehanna Greenway Partnership, as well as to other partners who were instrumental in annual achievements, including county commissioners and other member-appointing bodies. The Communications Work Group should disseminate it as widely as beneficial, issuing a press release to invite media coverage and making social media posts.



The 2018 unPAved men's champion, Matt Curbeau (Velocio Northeast), starts to apply pressure to Michael Sencecenbaugh (Panaracer/ Stan's NoTubes) on one of the final climbs—of ten—on the 120-mile course.

#### Guidance on Action 9: Encourage community, neighborhood, and institutional bike+ped audits

Bike+ped audits are a basic tool for evaluating existing safety hazards and connectivity gaps. They can be conducted community-wide, at the neighborhood scale, or across institutional campuses. Methodologies range from checklists with ratings to small contracted studies conducted by community and/or transportation specialists.

The Safety & Enforcement Work Group should advocate for more communities to undertake these assessments and share the findings. This advocacy would entail:

- Promoting training programs and workshops that explain the audit process and effort
- Sharing completed audits as examples of the product
- Sharing completed improvement projects resulting from audits as examples of the range of improvements (type, scale, cost) that can be implemented locally or requested through PennDOT Connects coordination in conjunction with state road and bridge projects.
- Sharing funding sources for audits and potential future improvements.

The following communities have some history or initial interest in bike+ped planning and should be encouraged to undertake a bike+ped audit:

- Berwick
- Bloomsburg
- Danville
- Selinsgrove
- Renovo
- Lock Haven
- Williamsport
- Muncy
- Montgomery

For some of these communities, the audit could be a first phase of a community's bike+ped plan. For others, it might be used primarily to inform maintenance efforts that address bike+ped concerns or to develop a priority project.



The Buffalo Valley Rail Trail is a “Gateway to Great Gravel”—and will also bring you back to the finish.

Pete Bakken

**Guidance on Action 11: Assess on-road bicycling conditions along candidate corridors and potential intercommunity improvement, including transit service (bikes on bus).**

The Connectivity Work Group should encourage the MPO and municipalities to conduct analysis of on-road conditions where intercommunity bicycle travel is evident or desired. The analysis should evaluate alternatives to improve on-road connections and reduce stressors on bicyclists both in town and between towns, thereby making bicycling more comfortable and convenient for adult bicyclists at minimum. This analysis could inform the development and scoping of state road maintenance and improvement projects, thereby helping to create a more multimodal transportation network.

Eight intercommunity corridors were selected as candidates based on the Level of Traffic Stress ratings for state roads (prepared as a related document and available on the SEDA-COG MPO bike+ped web page), Bicycle PA Routes, intercommunity travel distances, and anecdotal information or employment patterns. Study of these eight corridors should assess the potential for corridor-wide conditions that would warrant an LTS 3 rating (suitable for experienced adult cyclists) or in some cases an LTS 2 rating that would enable less experienced adult bicyclists to feel comfortable taking intercommunity trips by bike. Studies of potential improvements should include municipal and PennDOT District stakeholders. Where corridor studies indicate the feasible potential for conditions to be modified to accommodate bicyclists, the MPO and District should work to integrate bicycle facilities with highway and bridge maintenance and improvement projects.

The eight candidate corridors are:

- **PA 147 Corridor from Route 11 in Northumberland to Market Street in Sunbury.** Alternatively, PA 147 to Shikellamy Avenue to North 4th Street south or to Memorial Drive and south to Market Street. The corridor is approximately 2.5 to 3 miles long.

- **US 11 Corridor from 16th Street in Northumberland to Sand Hill Road in Selinsgrove.** This portion of Bicycle PA Route J corridor includes the Water Street Bridge and could possibly follow the riverfront to reach North Old Trail or 7th Avenue near the Fabridam Park (avoiding the US 11/PA 61 interchange). Traffic conditions on this corridor may change significantly when the Central Susquehanna Valley Thruway is complete. Study of this corridor would benefit from actual traffic volumes, but some near-term road-diet-style planning, especially for the Golden Mile, would inform decisions to be made about the corridor around 2030. The corridor is approximately 6 miles long.
- **PA 61 Corridor from Shamokin to Ashland.** This corridor links the communities of the Shamokin area, Kulpmont, Mount Carmel, and Ashland with Wal-Mart, including its pharmacy, and other retail stores. This cluster of mountain communities likely functions as a “small urban area” in an otherwise very rural and remote part of the Northumberland County. The corridor is approximately 3 miles long.
- **Old Berwick Road Corridor from Bloomsburg to Berwick.** This corridor connects small communities and residential areas with these larger towns at each end, joining US 11 at Market Street into Berwick. The corridor is approximately 8 to 9 miles long.
- **Watsontown to Milton to Lewisburg Corridor on PA 405, and to 16th Street in Northumberland on PA 147.** This corridor includes portions of the Bicycle PA Route J corridor and connects communities along the riverfront where distances for bicycle commuting to work or to Bucknell, for example, are feasible. These communities are spread fairly evenly along this 20-mile-long corridor.
- **PA 150 from Mill Hall to Lock Haven, known as the Hogan Boulevard Safe Bike Route (CL-7 in the Matrix of Bicycle and Pedestrian Needs).** This corridor includes portions of Bicycle PA Route G and connects Mill Hall Borough and

Bald Eagle Township and specifically the Central Mountain High School Campus along Hogan Boulevard through Flemington Borough into the City of Lock Haven. The route should at minimum accommodate adult bicyclists but consideration should also be given for youth bicyclists. The route was suggested by Mill Hall residents in 2017.

- **Recreational Corridors in the Lock Haven area.** Cyclists in Clinton County have identified various informal cycling routes that they use on a regular basis. Most are state highways with an LTS 3 rating, suggesting conditions are suitable for cyclists experienced in riding amid urban and rural traffic. There are a few road segments with an LTS 4 rating. Addressing these few locations, if feasible, could yield more than 90 miles of scenic LTS 3 or better cycling in southern Clinton County.
- **Recreational Corridors in the Lewisburg area.** West of Lewisburg and north of PA 45, the state roads are better for bicyclists (LTS 3) north-south and worse (LTS 4) east-west. South of 45, conditions are reversed. Discussions with the Bucknell Cycling Team and the university’s cycling club could prioritize which of the state roads or loop routes should be reviewed at a corridor level with the potential for improvement to an LTS 3 rating throughout the ride.
- **Other portions of Bicycle PA Route J, as well as Route G and Route V,** should be reviewed for their LTS rating and specific stressors as segments of these highways are identified for maintenance.

Similarly, the LTS ratings and stressors in Williamsport should be compared to the city’s bicycling routes. In Jersey Shore, Lewisburg, and Northumberland, where bike+ped audits have been completed, the development process for improvements should verify that bicycling stress factors identified in the LTS analysis have also been considered. LTS analyses could also be prepared for local roads where data is available. See the Bicycle Level of Traffic Stress report for the methodology.

A generally uniform approach to corridor studies should include but not be limited to:

- Engaging corridor stakeholders in the study process.
- Defining the corridor limits, which may be adjusted from the candidate description with the input of stakeholders.
- Defining stress conditions on bicyclists, including those in the LTS analysis and others as indicated by stakeholders.
- Prioritizing improvement needs.
- Identifying and evaluating alternative improvement approaches to meet prioritized needs.
- Selecting the most feasible improvement approach(es).
- Coordinating improvements with PennDOT and local communities.
- Assessing progress and corridor performance over time.

**Guidance on Action 12: Encourage municipalities to review identified needs and address them with projects**

To encourage the development of local projects to address safety hazards and connectivity gaps, county and MPO representatives of the Advisory Committee should share the relevant portions of the Matrix of Bicycle and Pedestrian Needs with municipalities and determine the municipal level of interest in addressing these needs. Representatives should overview the municipality's portion of the Matrix of Bicycle and Pedestrian Needs, noting the following:

- Location, indicating the municipality's role in leading a project, coordinating with PennDOT on a state project, or requesting that PennDOT address the need through a state project (via PennDOT Connects) where applicable.
- Estimated Scale of Municipal Development Effort, characterizing the potential for municipal in-kind public works or highway/roads department services to address the need or to be credited as local match toward grants; potential availability of external technical or funding assistance from county, state, federal, or private sources.
- Estimated Scale of Municipal Maintenance Effort, recognizing that maintenance should be considered in tandem with any development effort.

This outreach should be accompanied by reference to the list of potential funding and technical assistance sources on the MPO's web page. Representatives may also share examples of similar locally-led projects, where available, and offer to make peer-to-peer introductions where this could encourage municipal consideration. Where there is municipal interest in developing a sizeable safety or connectivity project, the Advisory Committee should encourage the municipality to plan for both development and maintenance.

This data sharing could be integrated with the MPO's bi-annual TIP outreach to streamline efforts for all participants. An Advisory Committee member could attend to lead this portion of the outreach.

**Guidance on Action 17: Encourage participation in walking and biking clubs.**

The Community Engagement Work Group and Public Relations Work Group should work together to encourage citizens to walk and bike regularly, such as by joining walking and biking clubs or by establishing new ones in communities across the region. By encouraging walking and biking activity, existing facilities experience greater use and demand increases for more places to walk and bike safely.

The Community Engagement Work Group should:

- Maintain a list of known clubs and contacts.
- Make the list available through the various networks of Advisory Committee members.
- Share the list for posting on community websites, in bike shops, etc.



Getting to the top of a climb is victory!

Firespire Photography

**Guidance on Action 19: Estimate Users**

Usage remains the most common transportation performance measure because it conveys travel demand, mode choice, and related trends. The bike+ped planning team found a lack of credible methodologies for estimating bike+ped demand in large rural regions. Approaches for estimating usage in urban areas do exist but are data-intensive. A Work Group should review this research and determine whether such intensive estimates have real value for urban areas of the region.

Studies of the Pine Creek Rail Trail and Buffalo Valley Rail Trail demonstrate that facility-based user estimates are feasible. Intercept surveys and electronic counters are effective in capturing trail usage counts that can be extrapolated to annual estimates. If conducted consistently, these estimates could track change in estimated use over time, particularly before and after extensions and improvements. For the estimates to have any formal standing, the MPO would have to vouch for the reliability of the estimation process wherever it is used.