
WILKES-BARRE & EASTERN SOUTHERN ROUTES REPORT



EXECUTIVE SUMMARY

The Wilkes-Barre and Eastern (WB&E) railroad once traversed Lackawanna and Monroe Counties from Wilkes-Barre past Stroudsburg, Pennsylvania to the New Jersey border. Interest in developing the former rail line as an off-road multi-use trail spurred the undertaking of a study to determine the feasibility of such an endeavor.

The former WB&E rail corridor is broken up into two sections – the Northern Section travels from Wilkes-Barre to Rt. 940 and the Southern Section picks up at Rt. 940 and heads southeast to Stroudsburg. The rail bed is intact and on public lands for much of the Northern Section, which was studied by McLane and Associates in 2020. However, on the Southern Section, the construction of Interstate 80 fragmented the corridor in a multitude of places, as did residential and commercial development in the region. Therefore, the focus of this assessment was on finding a suitable on-road connection that could be designated as the continuation of the WB&E “route” from Rt. 940 to Stroudsburg.

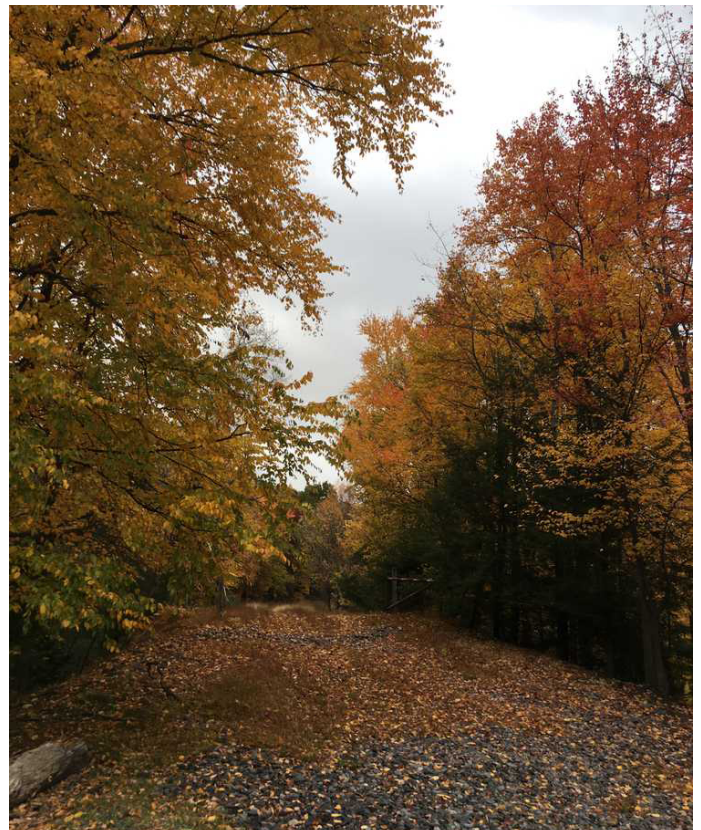
Some sections of the former rail grade through State Game Lands 38, Camelback Mountain Resort and Big Pocono State Park do hold promise for off-road trail development, as does the improvement of existing roads and trails through the game lands and Bethlehem Water Authority lands. The scope of this study did not investigate the possibility further than determining that it is physically feasible due to the condition of the corridor and ownership of land on which it is situated.

The most direct on-road routes from Rt. 940 to Stroudsburg were eliminated as options due to traffic volume paired with narrow shoulders, poor sight lines and other factors deeming them unsafe for cyclists, even with improvements. However, an option to the south of I-80 using predominantly low-volume back roads emerged as a potentially suitable route with signage and safety enhancements.

Figure 1: A rocky & washed-out section of the rail grade in Big Pocono State Park.



Figure 2: Rail corridor looking west from the condo development near Camelback Resort.

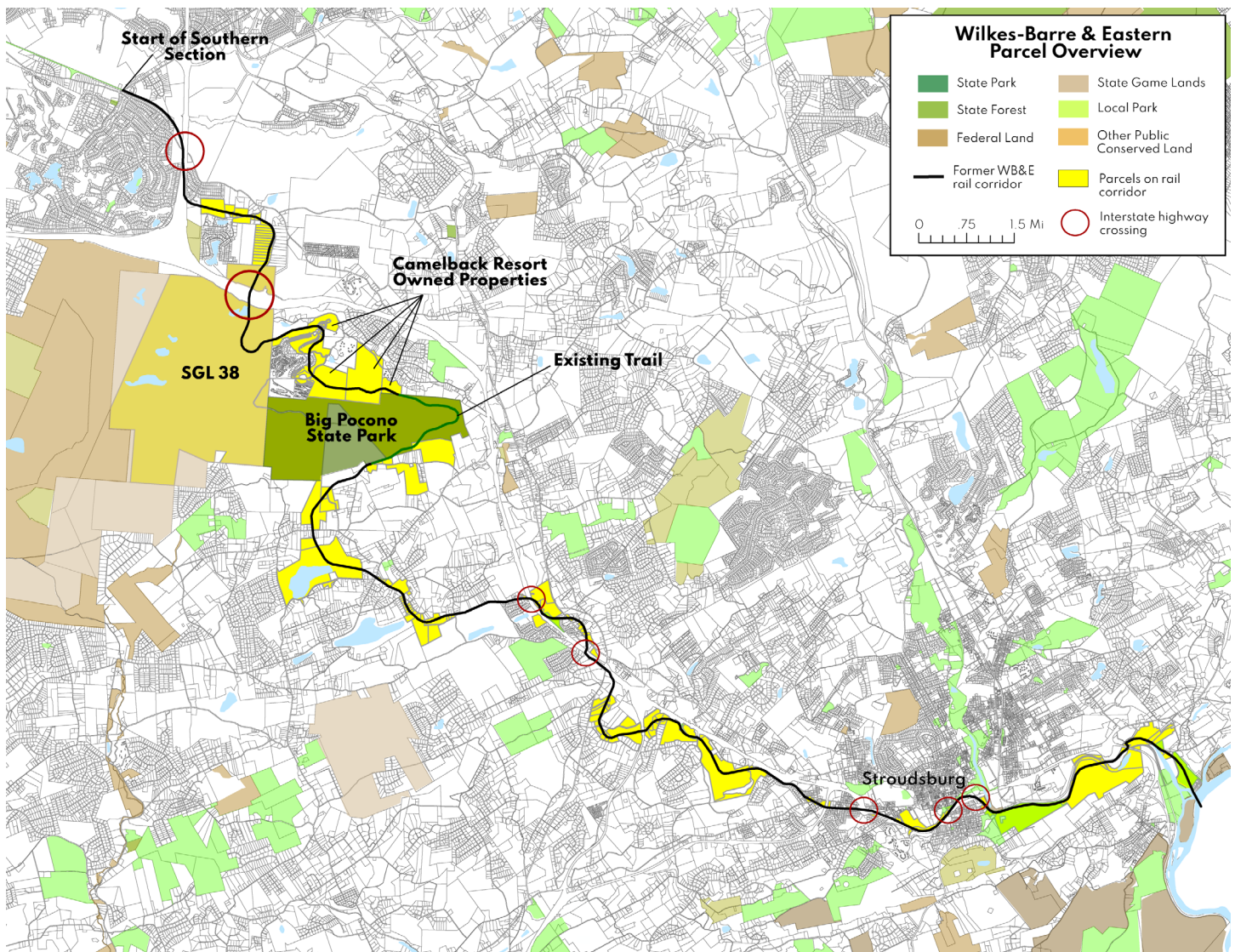


INTRODUCTION

The Wilkes-Barre & Eastern (WB&E) railroad was built in 1893 to carry coal, ice and people between Wilkes-Barre, PA and New York. While most rail corridors followed the river valleys in more north-south orientation, the WB&E climbs out of the Susquehanna River valley towards the east coast, offering an opportunity to connect trails in the Wilkes-Barre area and the D&L Trail with emerging projects in New York and New Jersey, as well as the McDade Trail along the Delaware River.

Major differences in the physical condition of the corridor and ownership rights between the northern and southern sections of the WB&E informed our study approach. The northern section, defined as

the connection to the Lackawanna River Heritage Trail near Scranton to Rt. 940 in Pocono Pines, is 22 miles and primarily crosses public lands or large swaths of private lands. The corridor is also mostly intact. This section was deemed to be much more viable for an off-road trail, so a full feasibility study by McLane and Associates was undertaken in 2020. The study concluded that much of the northern section can be developed into an off-road trail and based on its findings, an 11-mile section was identified as a potential Phase 1. This section begins at Rt. 940 in Tobyhanna Township, where bike lanes have recently been added, and heads north on Brady's Lake Road through State Game Lands 127. This section of trail would be substantial enough to



be an asset to the region and demonstrate the value of completing the rest of the WB&E.

Directly south of this first phase is where the southern section of the WB&E begins, which is the focus of this assessment. From Rt. 940, it heads southeast through the residential community of Pocono Pines, then heads under I-380 and I-80 into State Game Lands 38. It then passes through a condo development and ski area owned by Camelback Resort before reaching a section of existing trail in Big Pocono State Park. This 2-mile stretch is washed out and rocky in a few spots, but is open for public use. South of the park, the corridor travels along a low-volume township road before it disappears into private residential lots. From this point eastward, the original corridor is not intact except in small sections, and passes through over 100 different parcels, each with a separate property owner. The historic corridor has been obliterated by suburban development for most of its path from Big Pocono State Park to Stroudsburg, and additionally, has been bisected by I-80 seven different times.

Although the preferred option for any rail-trail development is to follow the historical rail corridor, that is not possible with the former WB&E southeast of Rt. 940 in Pocono Pines. Due to the physical geography, the creation of Interstate 80 and substantial suburban development of the area, the development of any off-road corridor for the entire distance is not realistic. There are a few sections where off-road trails could potentially be developed or expanded upon -- namely around Big Pocono State Park and Camelback Resort -- but for the most part, the WB&E corridor passes through many small lots of private residential land, making the potential to develop a trail nearly impossible.

For these reasons, we primarily focused on identifying potential on-road connections for this report. A suitable on-road route with safety improvements and signage could serve as a satisfactory alternative to connect the end of the planned WB&E Trail at Rt. 940 eastward to Stroudsburg.

Regional Connections & Potential Users

Northeastern Pennsylvania boasts an up-and-coming network of trails and the potential to connect the New York border with Philadelphia and beyond through the greater Wilkes-Barre/Scranton region. Beginning in Scranton, the Lackawanna River Heritage Trail heads north for 26 miles to connect to the 36-mile Delaware & Hudson (D&H) Rail Trail. The D&H connects to the New York border in Susquehanna County. To the south, the Delaware & Lehigh (D&L) Trail begins south of Wilkes-Barre and stretches for 160 miles southward to connect to the East Coast Greenway and Philadelphia. The McDade Trail, in eastern Monroe and Pike Counties, runs for 33 miles through the Delaware Water Gap National Recreation Area. In addition, Bicycle Route Y and the 9-11 National Memorial Trail travel through Stroudsburg as on-road bike routes. The Adventure Cycling Association's Chicago to New York City Route, as well as its Atlantic Coast Route, both pass through eastern Monroe County and the greater Stroudsburg area.

The WB&E corridor provides an east-west connection from trails and bike routes along the Delaware River to the Wilkes-Barre/Scranton area and the nearly-complete north-south corridor encompassing the D&L, D&H and Lackawanna River Heritage Trails. Pursuing a cyclist-friendly route to Stroudsburg and the Delaware Water Gap, whether it is on- or off-road, greatly enhances the connectivity options in Monroe County and the greater Poconos region.

The 2014 update to the Monroe County Open Space, Greenway, and Recreation Plan calls out the WB&E as a planning priority in the region. "Even if the entire line was not reconnected, the WB&E corridor offers good potential for the development of shorter trails. Certain on-road linkages could also be explored to create desired connections."

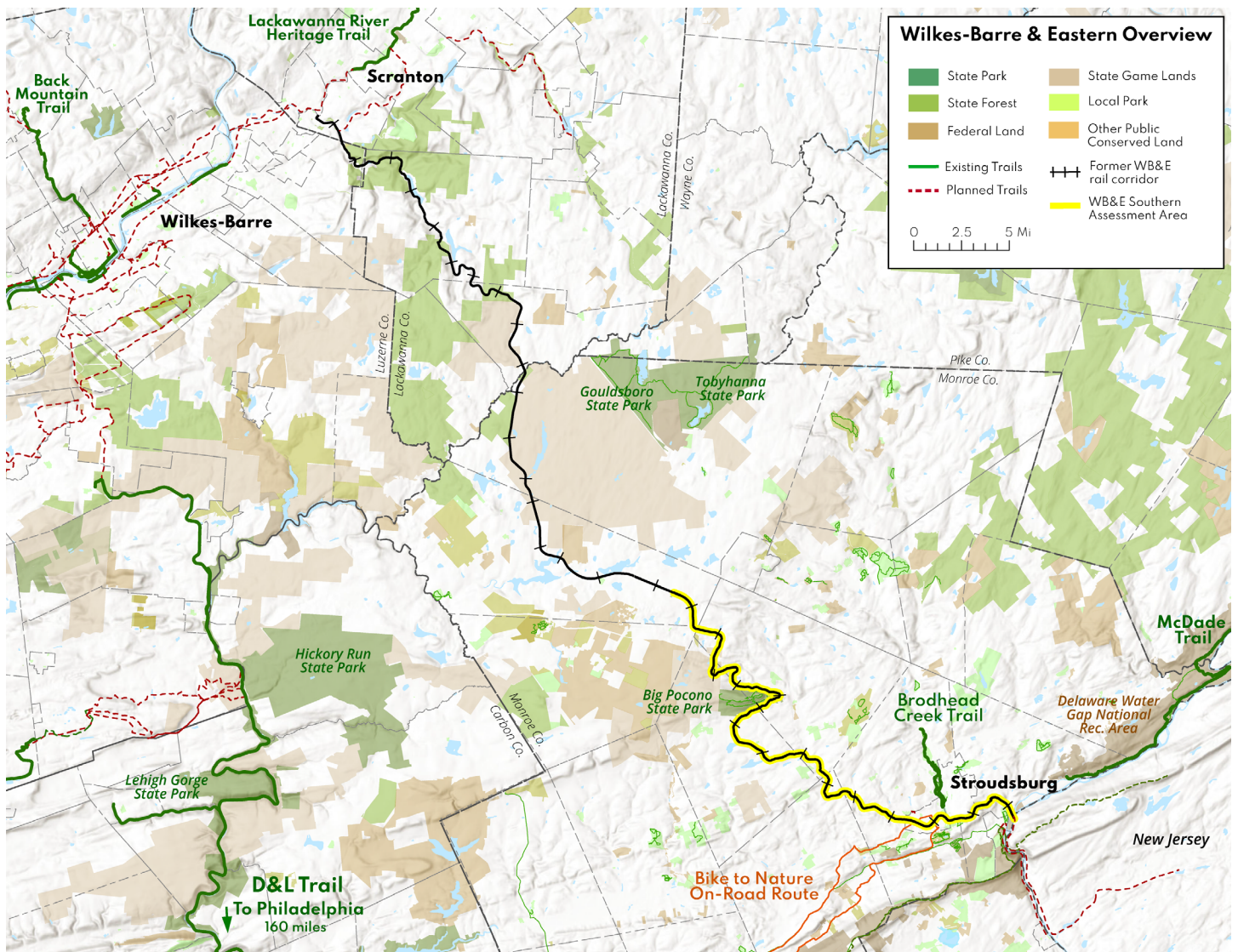
A greater level of connectivity, both on- and off-road, has the potential to bring in long-distance cycle tourists to the region. A 2017 Outdoor Industry Association study found that bicyclists spend \$83 billion annually on trip-related sales in the United States, a number that has likely increased since the Covid-19 pandemic has caused participation in cycling and other outdoor activities to skyrocket.

In Pennsylvania, there was a 17% increase in trail use across the entirety of the 2020 season, while individual trails saw up to a 150% increase, according to a 2020 Covid-19 Impact Report conducted by the Pennsylvania Environmental Council.

The sale of e-bikes has also increased dramatically over the past several years, surging 190% between June 2019 and June 2020. E-bikes (bikes with an electric motor attached, but still require the user to pedal) open up the opportunity for longer distance rides for more people and make elevation changes less of an obstacle. This trend not only has the potential to increase the number of people on bikes, but also broaden the scope of experiences those people are willing to seek out. The sport is only growing, and having welcoming spaces and

connections to attractions and amenities for cyclists is an asset to any community.

Figure 3: Rail corridor looking west from parking lot at Camelback Resort.



METHODOLOGY

Although the preferred option for any rail-trail development is to follow the historical rail corridor, that is not possible with the former Wilkes-Barre and Eastern southeast of Rt. 940 in Pocono Pines. The purpose of this assessment was to identify viable other options to connect the “northern” section of the WB&E to Stroudsburg. Due to the physical geography, the creation of Interstate 80 and substantial suburban development of the area, the development of any off-road corridor for the entire distance is not realistic. Therefore, we primarily focused on on-road connections for this report, but did investigate off-road options in a few areas of public lands where we thought development of new trail or improvement of existing trails might be feasible.

Please refer to the [Wilkes-Barre & Eastern Southern Section: Potential Alignments Overview](#) map on page 3.

Route Planning

A variety of sources were used to collect data that allowed us to determine potential routes. We used crowd-sourced data from Strava and RideWithGPS, two popular ride-tracking apps that show “heatmaps” of where the most people are riding, with the hopes that they would help us identify the best roads for cycling because people are already riding there. We also hoped those apps may help illuminate off-road connections that we may have missed in other mapping. We overlaid public and conserved lands layers to identify areas that may have potential for off-road trail development or that might offer a more pleasant on-road ride experience. PennDOT traffic volume and other roadway data helped us rule out roads with the most traffic, and a gravel roads layer was helpful to identify potential low-volume connections. Monroe County provided their existing, planned and potential trails GIS layers so that we could incorporate as much off-road as we could into the route planning. Monroe County also provided parcel boundary data, which was used to judge feasibility of future development of the former WB&E rail corridor.

Using a combination of these sources, we initially identified three potential mostly on-road routes from Pocono Pines to Stroudsburg. We took a number of factors into consideration when planning these routes:

- Current bicycle usage based on crowdsourced data
- Traffic volume
- Speed limit
- Shoulder width
- Elevation gain and loss
- Length
- Proximity to public lands

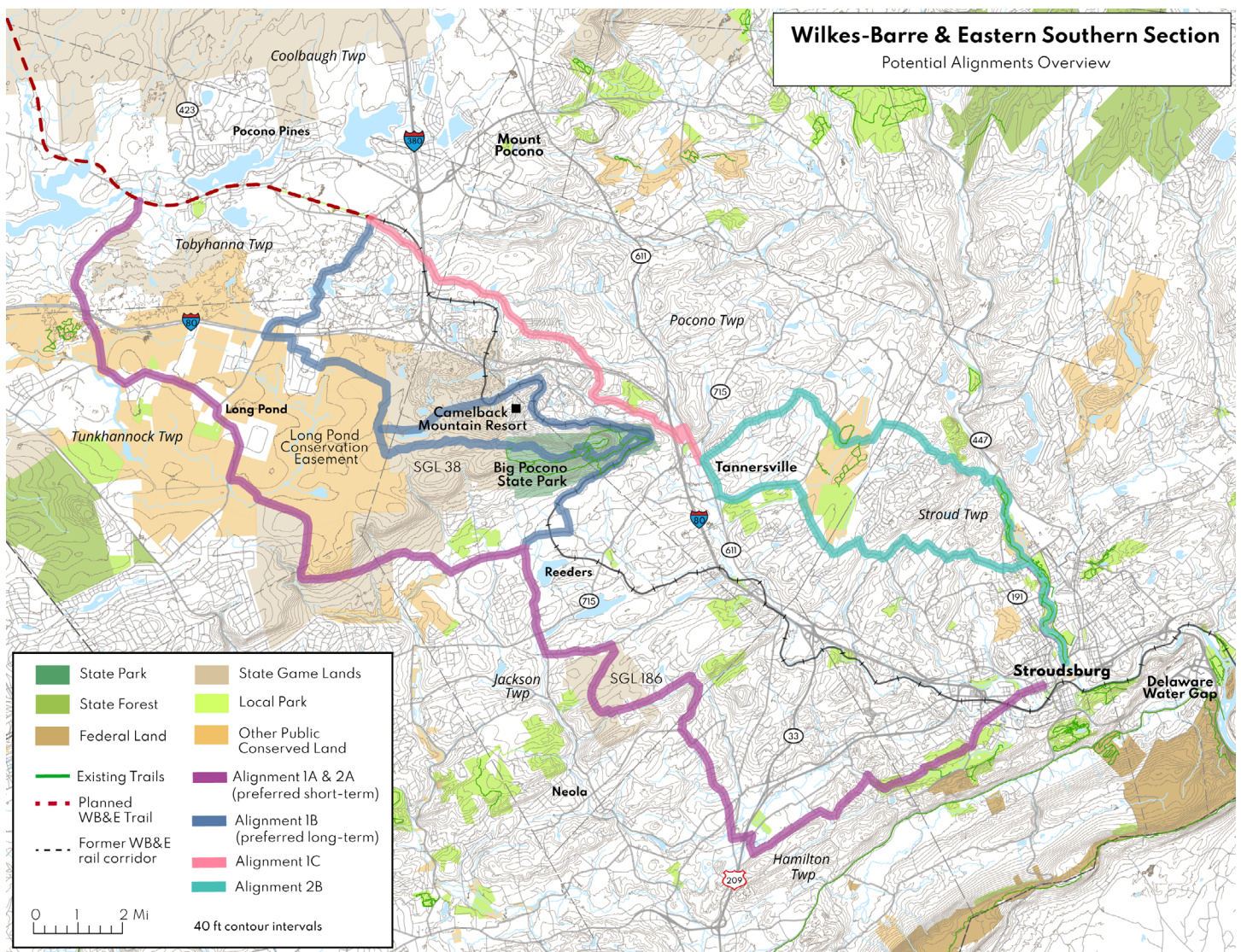
Methodology for Ground Truthing

We used a combination of driving and cycling to visually inspect each of the potential routes. For the sake of covering a larger amount of ground, we only drove most of the roads, but in critical areas and for off-road portions, we rode a bicycle to assess conditions and get a better sense of potential rider experience. Once on the ground, we took a variety of factors into consideration, such as:

- Actual shoulder width and condition
- Perceived traffic volume
- Sight lines and visibility
- Terrain (length and grade of hills)
- Roadway condition or trail surface
- Posted speed limit and observed adherence to that limit

General Findings

- Most roads have very little if any shoulder and the topography warrants frequent twists and turns, resulting in poor sight lines.
- Automobile traffic often seems to exceed the posted speed limits, especially on the roads from Tannersville to Stroudsburg north of I-80.
- A substantial portion of drivers encountered during the study did not give the proper (and legally-required) four feet when passing.
- The hills and valleys of the region make it almost impossible to avoid frequent elevation changes, especially heading westward from Stroudsburg.
- Unless bike/ped infrastructure is developed along Rt. 611, there are just two ways across the I-80 corridor that are more reasonable for cyclists than the others. One is via Tannersville, which would then require an entry into Stroudsburg from the north. The other is via Dreher Ave., coming into Stroudsburg from the south. These two options are discussed in Section 2.



POTENTIAL ROUTES

The nature of the physical terrain and man-made barriers (I-80) made it practical for us to divide the potential alignments into two main sections, and then investigate options in each of those sections that would end up converging to a limited number of pinch points to cross I-80 and eventually enter Stroudsburg.

Section 1

Section 1 is defined as the end of the northern portion of the proposed Wilkes-Barre and Eastern (WB&E) Trail at Rt. 940 in Pocono Pines to the bottom of Camelback Mountain either in Tannersville or Cays Rd. near Reeder's.

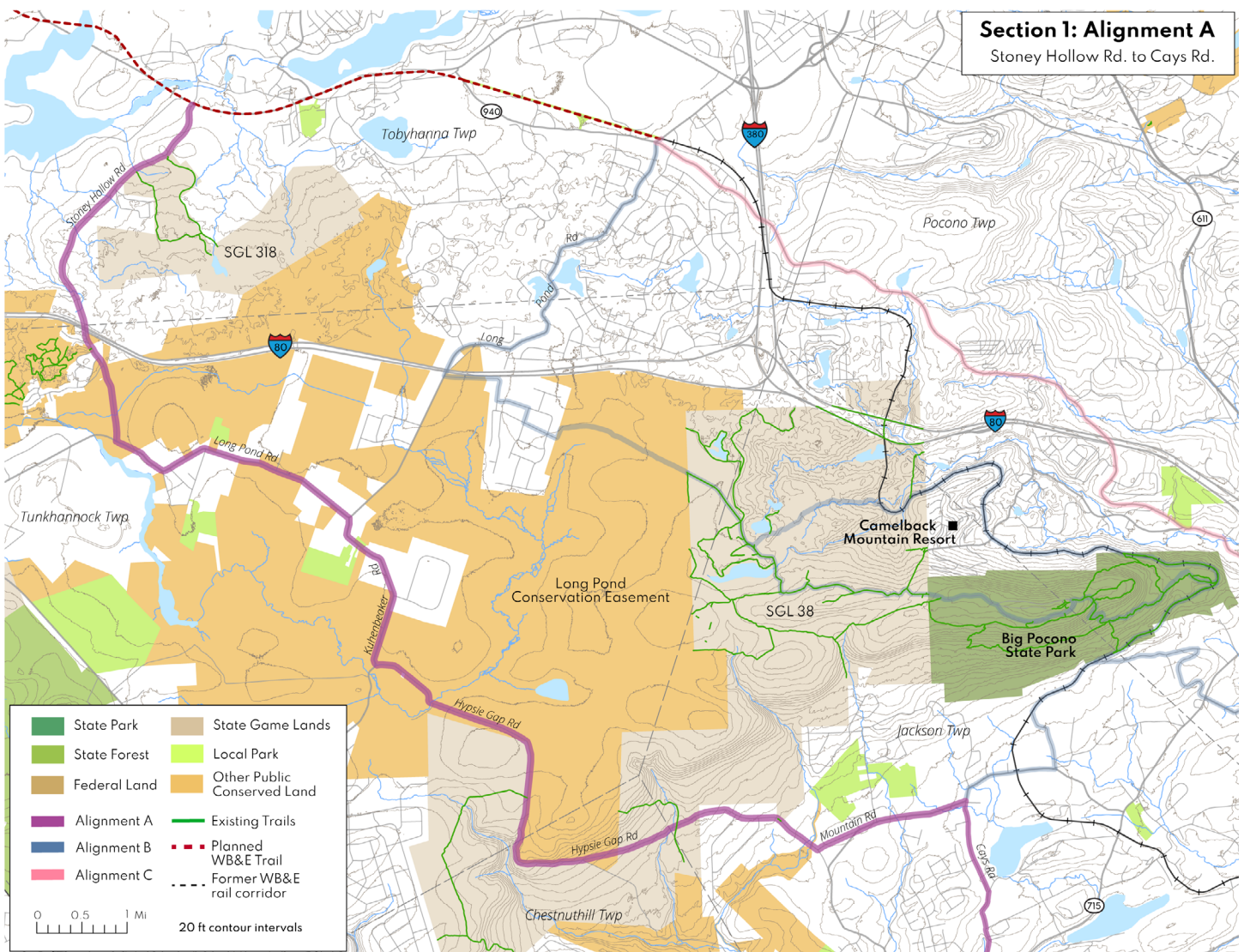
We investigated 3 potential routes through this area, each of which would offer a very different user experience.

ALIGNMENT 1A: STONEY HOLLOW RD. & HYSIE GAP RD.

► **Distance: 13.7 miles**

► **Reference Map: Section 1: Alignment A, page 4**

This option leaves the northern section of the WB&E on Stoney Hollow Rd. before the terminus of the proposed trail. Stoney Hollow has a 25 mph speed limit and a shoulder of 1-2 feet. The potential route follows Stoney Hollow for 3.5 miles until its



intersection with Long Pond Rd., where it begins to head eastward. This stretch of Long Pond Rd. has good sight lines and >1 foot shoulder in most places. The proposed route then stays right on another low-volume road, Kuhenbeaker Rd., before turning left onto the gravel Hypsie Gap Rd. The gravel is smooth and in good condition as it passes through Bethlehem Water Authority land and State Game Lands 38. The landscape is wooded and traffic volume is very low, making for a pleasant user experience. There is a significant 2-mile long hill, with an average of 5% grade, as the road descends eastward. About halfway down the hill, the road splits into a “Y” and Hypsie Gap Rd. heads right. The potential alignment stays left onto Jackson Rd. Near the bottom, the road becomes paved as it exits public land and into a rural residential area. The route turns left onto Price Dr. for about 0.3 miles, then stays straight onto Mountain Rd. for 1 mile to Cays Rd. This intersection marks the end of Section 1 (see Section 2 for potential connections into Stroudsburg).

While this alignment is not as desirable as developing a long stretch of off-road trail as discussed in Alignment 1B, it is the more easily-implemented option, and therefore our recommendation to pursue as a bike route in the short term.

Table 1: Roads utilized & ownership for Alignment 1A.

Road Name	Ownership
Stoney Hollow Road	Tobyhanna Township
Long Pond Road	PennDOT
Kuhenbeaker Road	PennDOT
Hypsie Gap Road	Tunkhannock Township
Jasckson Road	Jackson Township
Price Drive	Jackson Township
Mountain Road	PennDOT
Cays Road	Jackson Township

Figure 4: Gravel section of Hypsie Gap Road.



ALIGNMENT 1B: BETHLEHEM WATER AUTHORITY, GAME LANDS 38, & BIG POCONO STATE PARK

- ▶ **Distance: 15 miles**
- ▶ **Reference Map: Section 1: Alignment B, page 6**

This route begins at the end of the northern section of the Wilkes-Barre & Eastern and travels southward on Long Pond Rd. before cutting through Bethlehem Water Authority lands and State Game Lands 38 to Big Pocono State Park. We investigated the possibility of using trails in the state park or state game lands to connect to the rail grade at the base of Camelback Mountain, which is already developed as a 2-mile trail until it meets Railroad Ave.

Long Pond Rd. from the end of the proposed trail along Rt. 940 is twisty and has poor sight lines for about 5.5 miles until it crosses I-80. During ground truthing, traffic volume was observed to be fairly high, especially during rush hour as it is the main thoroughfare from a large residential area to the surrounding highways. The shoulder is less than a foot wide in most areas and the speed limit is 40 mph. Based on the mapping, there might be an opportunity to route through the Emerald Lakes residential area instead and take side roads to bypass most of Long Pond Rd. north of I-80. However, if this alignment is pursued, the routing through Emerald Lakes would require further investigation.

South of I-80, Long Pond Rd. straightens out and the shoulder widens to 1-2 feet. Alignment B turns left off Long Pond Rd. onto Hellers Ln. just past the I-80 underpass, then cuts through a small neighborhood to get to the back of the Long Pond Conservation Easement owned by Bethlehem Water Authority. There is a gated entrance to a dirt road off Deep Lake Rd., but there was a No Trespassing sign on the gate. However, Strava Heatmaps indicates that this access is well-used to get onto trails on the game lands. The dirt road continues through the Water Authority land to connect into State Game Land 38. There are a number of grass and dirt doubletrack trails through the game lands, with a main gravel road traveling all the way through to Camelback Rd. and Big Pocono State Park. There is a small amount of elevation gain and loss across the 9-mile distance through the Water Authority and Game Lands.

Figure 5: Paved section of Hyspie Gap Road near intersection with Mountain Road.

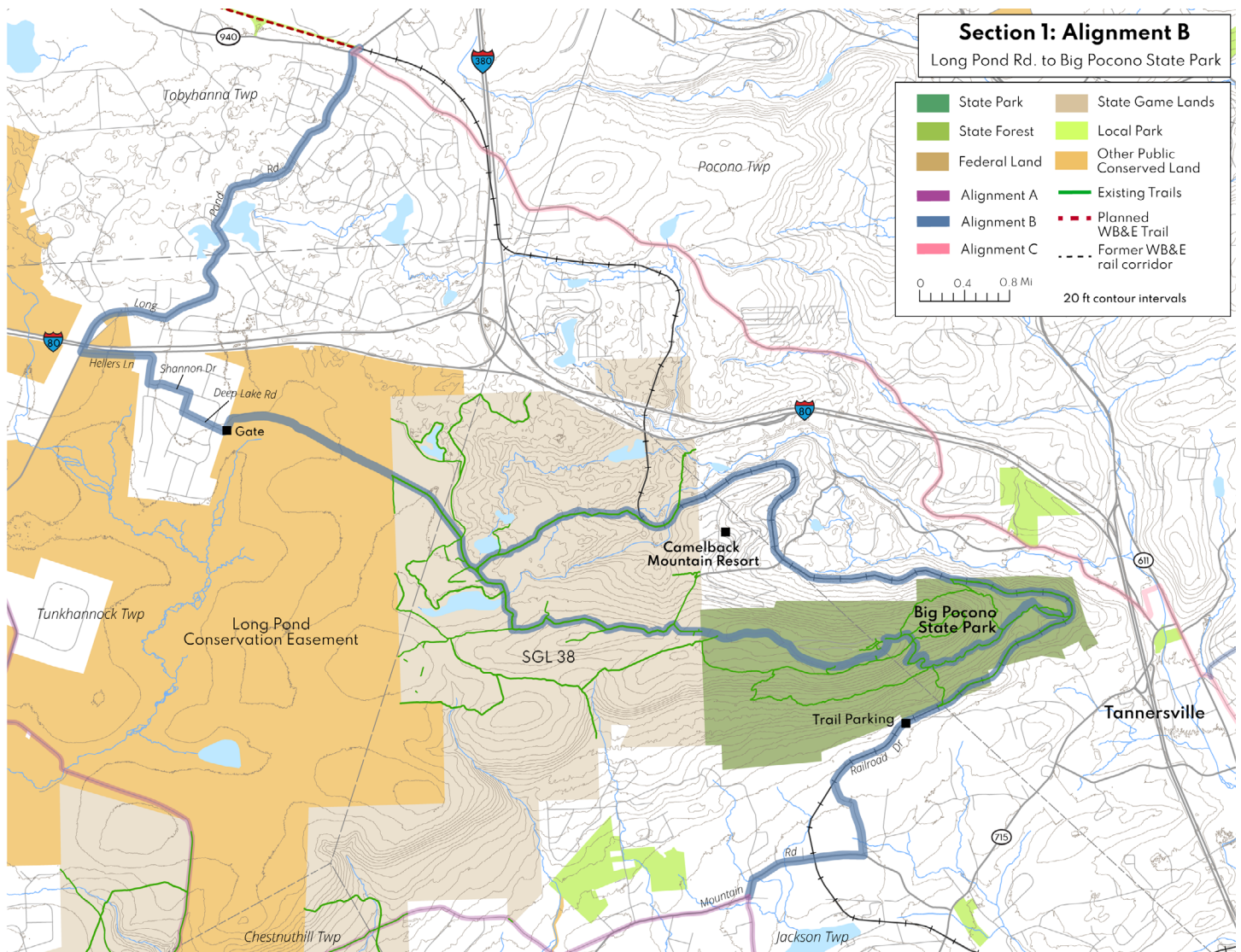


Figure 6: Rail Grade in Big Pocono.



There is a doubletrack trail that cuts down the mountain from the main gravel road and connects with the former WB&E rail corridor just west of Camelback Mountain Resort and south of I-80. This entire stretch is on game lands property. The trail is mostly grassy and a gradual grade (1-3%), but as it nears the bottom of the mountain it grows steeper (8-10%) and is very rocky in some sections. The rail grade through state game lands is intact but sunken and washed-out in some areas.

After the rail grade leaves the game lands headed eastward, it passes through a housing development and Camelback Mountain Resort before connecting into Big Pocono State Park. It is intact in some areas through the development and these sections could potentially be connected via the residential roads. The rail grade is bisected by the ski runs and alpine slide at Camelback Resort, but a connection could be made through other sections of the resort to the former rail corridor on the other side.

On the eastern side of Camelback Resort, the rail grade becomes an existing trail that is open for use at the beginning of the Big Pocono State Park boundary. This open stretch of trail travels for 2 miles along the base of Camelback Mountain to a trailhead on Railroad Ave. Its surface is improved and in decent shape in many spots, but there are a few sections where the trail is washed out and large rocks are exposed. The Railroad Ave. trailhead has space for up to 4 cars.

We also investigated the possibility of staying on top of Camelback Mountain into Big Pocono State Park and then dropping down to the former rail corridor within the state park boundary. However, the existing state park trails are steep and rocky, with about 600 feet of elevation change in under a mile. There could be potential to develop a new shared-use trail that would take a switchbacked approach to the descent to connect to the bottom of the mountain, but it's unclear whether the topography would allow such a trail without being cost-prohibitive.

From Railroad Dr., which turns into North Rd., Alignment 1B could either head south to connect with Alignment 2A or head northeast on Warner Rd. to cross I-80 into Tannersville to connect with Alignment 2B.

There are numerous roadblocks to developing this as a bicycle route, such as gaining official access through the Bethlehem Water Authority property and Game Lands 38, and either establishing a new trail at Big Pocono State Park that would be more suitable for bikes or developing the former WB&E rail corridor through the Camelback Resort and condo development. However, if these hurdles could be overcome, this could be an opportunity to work with multiple land-owning agencies to develop a bicycle-friendly route through already-established public lands. This would provide almost 9 miles of off-road connectivity over the 15 miles from the end of the proposed WB&E Trail to Stroudsburg.

Table 2: Roads utilized & ownership for Alignment 1B.

Road Name	Ownership
Long Pond Road	PennDOT
Gravel/Dirt Roads	Bethlehem Water Authority
Gravel/Dirt Roads	PA State Game Commission
Existing Trail in Big Pocono State Park	PA Department of Conservation & Natural Resources
Railroad Drive/North Road	Jackson Township

ALIGNMENT 1C: SULLIVAN TRAIL TO TANNERSVILLE

► **Distance: 8.25 miles**

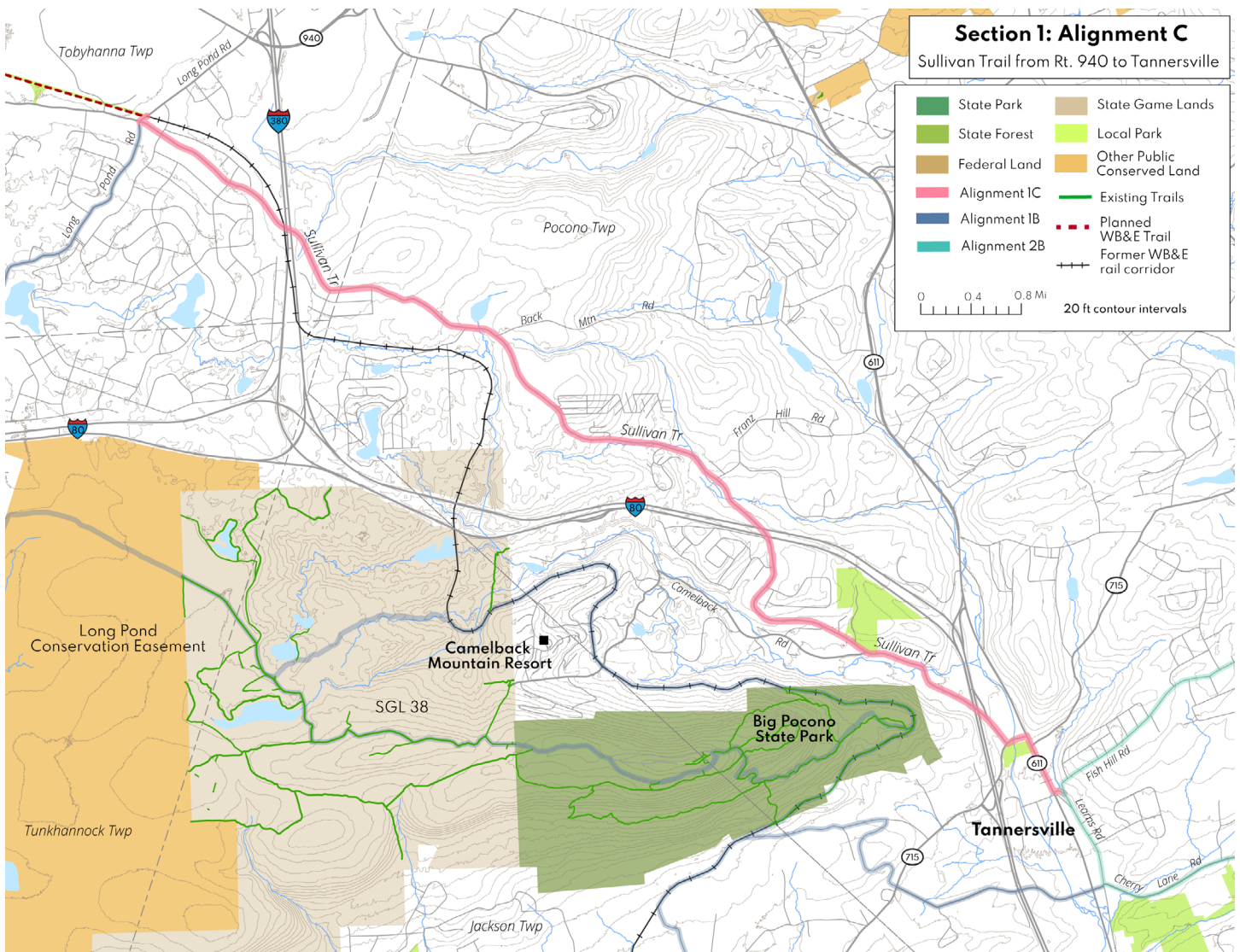
► **Reference Map: Section 1: Alignment C, page 8**

Following Sullivan Trail from the end of the northern WB&E section at Long Pond Road all the way into Tannersville is the most direct route, but it is also the least desirable from a bikeability standpoint. From Pocono Pines to the I-380 crossing, Sullivan Trail has decent sight lines and a shoulder width of about 1 foot. However, just west of the I-380 crossing, the road gets considerably more twisty and the shoulder diminishes to less than one foot. Significant traffic volume at various times of day was also noted. At the intersection with Rt. 715 in Tannersville, cyclists would need to make a left turn

at a stoplight. The route travels for 0.1 mile on Rt. 715 before turning right onto Rt. 611. Overall, based on the traffic volume, narrow shoulder and winding nature of Sullivan Trail, we would not recommend this as a potential on-road bike route as there are other suitable options.

Table 3: Roads utilized & ownership for Alignment 1C.

Road Name	Ownership
Sullivan Trail	PennDOT
Route 715	PennDOT
Route 611	PennDOT



Section 2

Section 2 is defined as the bottom of the ridge either at the intersection of Rt. 715 and Rt. 611 in Tannersville or the intersection of Mountain Rd. and Cays Rd. near Reeders. We investigated two main routes, either staying north of I-80 from Tannersville and entering Stroudsburg via the Brodhead Creek Trail, or staying south of I-80 and entering via the Bike to Nature Route. For each option, we investigated multiple on-road alignments to assess which would be best developed as a bike route.

ALIGNMENT 2A: HYPsie GAP ROAD TO BIKE TO NATURE ROUTE

► **Distance:** 16.31 miles

► **Reference Map:** Section 2: Alignment A, page 9

From Mountain Rd., Alignment 2A heads south on Cays Rd. Cays Rd. has low traffic volume and a 25 mph speed limit. It crosses straight over Rt. 715 to Neola Rd. Sight lines are good for the crossing. Neola Rd. is the most direct route from Hypsie Gap Rd. to the crossing of Rt. 209 but it also seemed to be the most heavily-trafficked with some areas of poor visibility and no shoulder. The edge of the road is crumbling in spots, which makes it difficult and potentially dangerous to get off the road as a cyclist, especially as Neola Rd. enters a narrow valley just past Akiba Rd. However, there are a few different options to get off of Neola Rd. quickly and onto lower volume back roads that are more conducive to bike traffic.

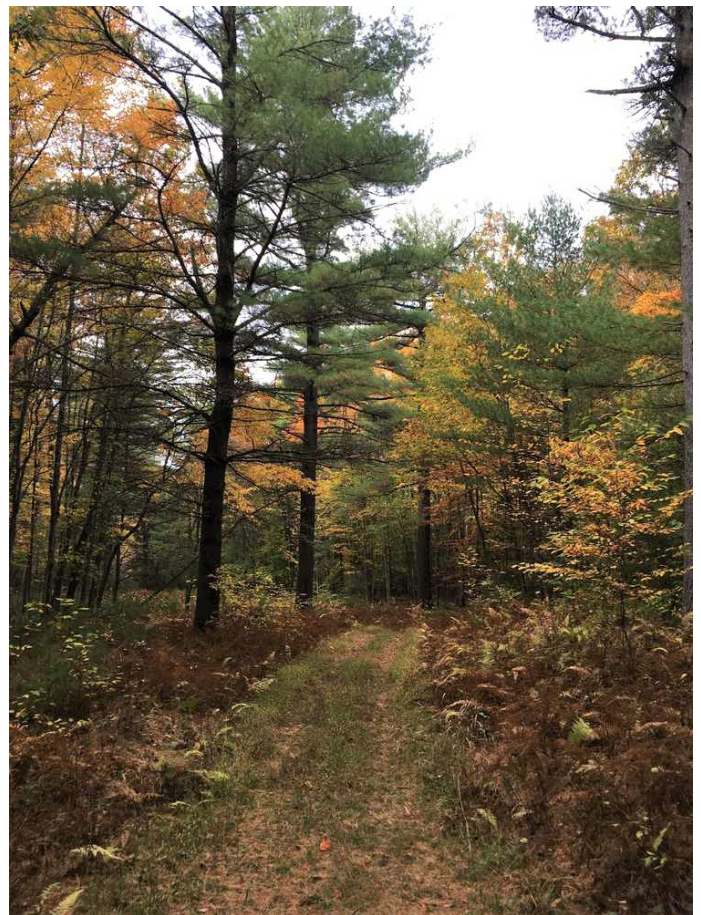
Figure 7: Haney Road typical conditions.



The preferred route takes the first left off of Neola Rd. onto Bartonsville Woods Rd. This avoids the twisty and narrow section of Neola Rd. There is a fairly short, gradual (2% average grade) climb with a few turns that obscure visibility but the shoulder is decent (2 feet in most spots). After about a mile, riders can turn right onto a 1.5-mile gated doubletrack path through State Game Lands 186 that could be used to connect to Running Gap Rd. The path is grassy with some short, rolling hills.

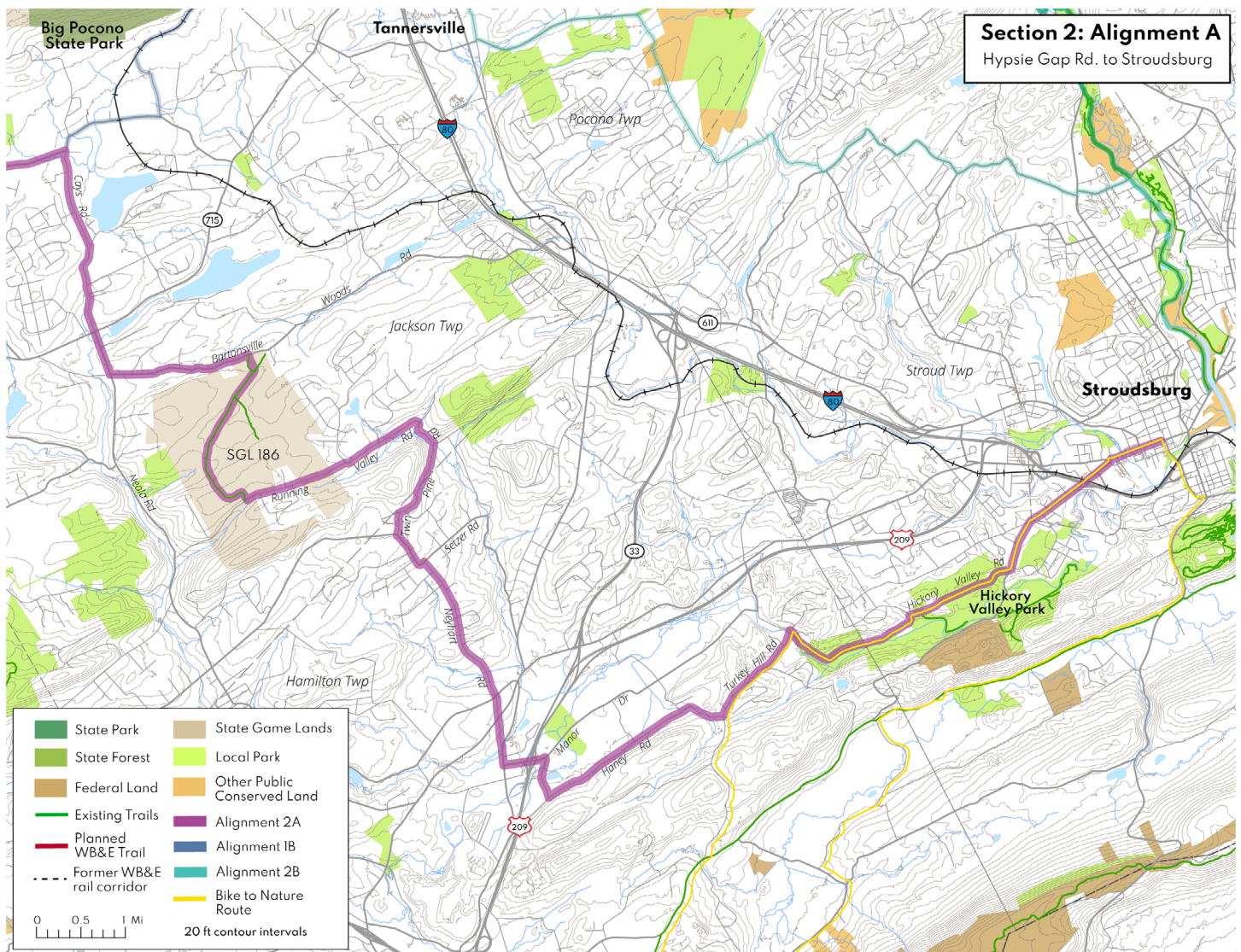
If use of the State Game Lands is not an option, cyclists could stay on Neola Rd. for another 1.7 miles before making a left on Running Valley Rd. The climb up Running Valley Rd. is considerably steeper than on Bartonsville Woods Rd. (reaching 11% at its steepest) and is overall about a mile long (average grade around 4-5%). The shoulder is about 1 foot and sight lines are good for most of the length of Running Valley Rd. The game lands path would dump cyclists out at the top of this climb, and they would then travel another 1.5 miles to make a right on Twin Pine Rd.

Figure 8: Doubletrack through PA Game Lands no. 138.



To get to the Rt. 209 crossing, several feasible options were investigated, but the most direct with fewest turns on busy roads is to take Twin Pine Rd. to Setzer Rd. to Neyhart Rd., then cross straight over Business Rt. 209 to Mid Easton Belmont Pike. Twin Pine Rd. and Neyhart Rd. both have 25 mph speed limits, while Setzer Rd. has a 40 mph speed limit. Cyclists would be on Setzer Rd. for less than half a mile. The shoulder ranges from <1-1.5 feet, but sight lines are pretty decent most of the way and the observed traffic volume was low. Neyhart Rd. crosses over Bus. Rt. 209 at an angle, but riders would not have to travel along Bus. Rt. 209 at all. Sight lines are good for the crossing. Neyhart Rd. then merges with Mid Easton Belmont Pike, then cyclists would turn left onto Manor Dr. to cross Rt. 209.

Manor Dr. crosses above Rt. 209 and riders would have to navigate on and off ramps for the highway. However, there is a wide shoulder, good visibility and there didn't seem to be a lot of traffic at this location. Just after the Rt. 209 crossing, the route turns right onto Morrissey Dr., a low-volume road that appeared to mainly be used as an access to a quarry. It connects to Haney Rd. after just under half a mile. Cyclists would then turn left on Haney Rd. and travel for 1.8 miles to Beaver Valley Rd., where the route links up with the already-established Bike to Nature route, which includes signage. Haney Rd. does not have road markings and appeared to be very low-volume. Once on Beaver Valley Rd., cyclists would travel for another 5 miles on the Bike to Nature route into Stroudsburg.



ALIGNMENT 2B: TANNERSVILLE TO STROUDSBURG VIA BRODHEAD CREEK TRAIL

► **Distance: 9.6-10.6 miles**

► **Reference Map: Section 2: Alignment B, page 11**

This alignment includes two different on-road options to get from Rt. 611 in Tannersville to the northern end of the Brodhead Creek Trail in Stroudsburg. Either of these routes are more direct than Alignment 2A, but as we discovered during ground truthing, are significantly less cyclist-friendly due to traffic volume, topography and road conditions.

In Tannersville, cyclists would need to ride along Rt. 611 for 0.7 mile, then turn left onto Learn Rd. Rt. 611 tends to see fairly high traffic as this portion of the corridor is heavily commercialized. There is a 2-2.5 foot shoulder for most of the way from Rt. 715 to Learn Rd., but in some instances that space is taken up by turning lanes and there is no shoulder. For the left turn onto Learn Rd. there is a center turning lane but no stoplight. Significant improvements such as a dedicated bike lane and signaling would need to be added to this intersection and Rt. 611 in Tannersville for it to be suitable as a bike route.

Once on Learn Rd., there are two options to head east to the Brodhead Creek Trail, both beginning with substantial climbs out of Tannersville. Fish Hill Rd. is steep (10-12% grade) for about a half mile, then about 5-7% for another half mile. It is relatively straight with good sight lines for most of its distance, but the shoulder is narrow (less than 1 foot in most spots). The speed limit is 25 mph and the observed traffic volume was low. After 2 miles on Fish Hill, this route turns right onto Abeel Rd., which crosses Cherry Lane Rd. to Bog Rd. Both Abeel and Bog Roads are low volume with speed limits of 25 mph. Abeel Rd. has pavement markings but Bog Rd. does not. Bog Rd. intersects with Hallet Rd., where the route turns right. Hallet Rd. descends for 2.5 miles headed east towards Rt. 191 with an average grade of 3-5%. The road is very twisty with poor visibility and barely any shoulder, and the roadway edge is crumbling with a drop into a culvert in spots that could pose a hazard for a cyclist trying to get off the road. The speed limit is 30-35 mph for the length of Hallet Rd. and the observed traffic

Based on our on-the-ground assessment, this is the best option to connect from the base of Camelback Mountain into Stroudsburg as developing an off-road trail for any substantial length in this area is not feasible. Most of the roads are fairly low-volume and in decent condition, and the connection to the already-established Bike to Nature Route is desirable.

Table 4: Roads utilized & ownership for Alignment 2A.

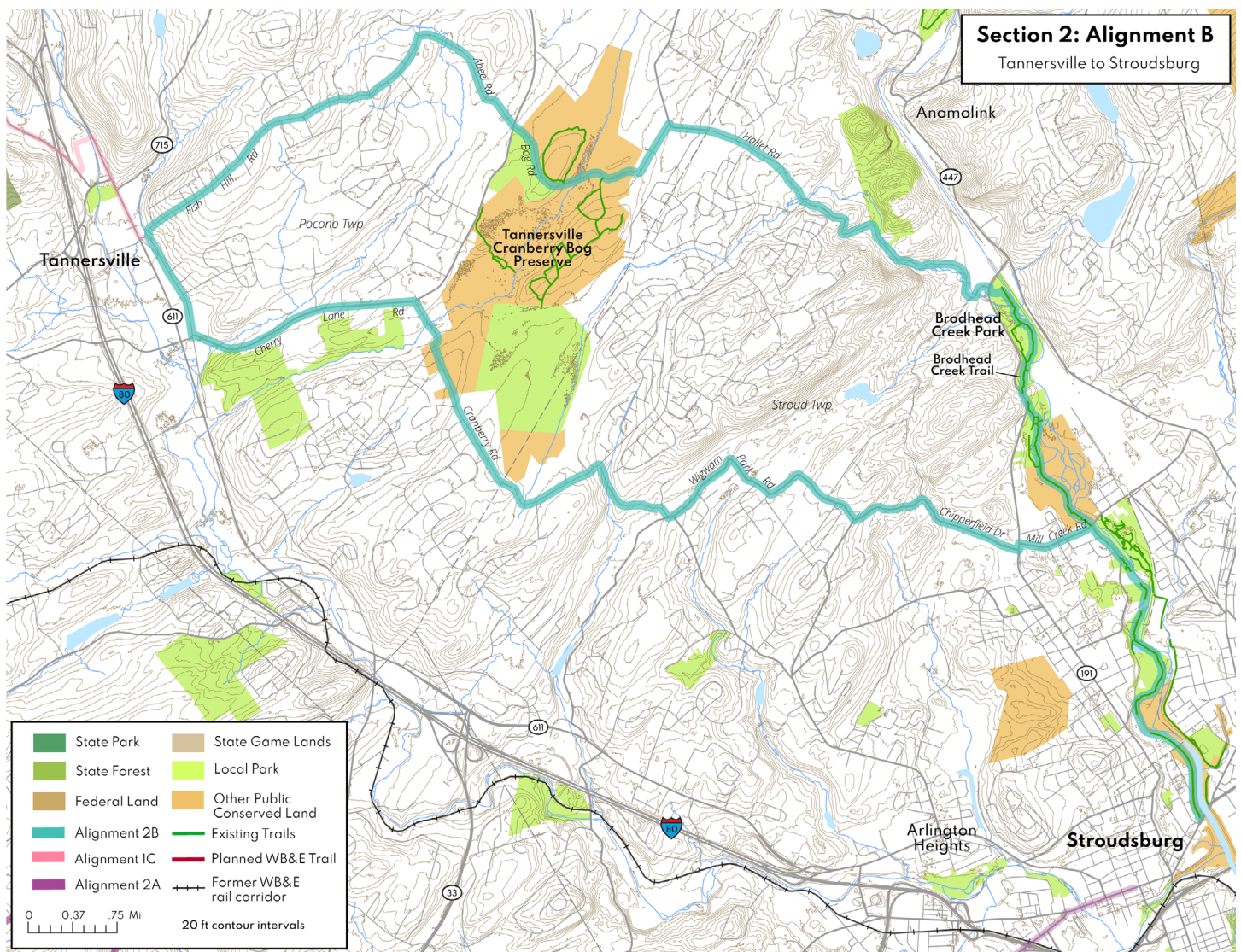
Road Name	Ownership
Neola Road	PennDOT
Golden Slipper Road	PennDOT
Doubletrack Path	PA State Game Commission
Running Valley Road	Jackson Township
Twin Pine Road	Jackson Township, Hamilton Township
Setzer Road	PennDOT
Neyhart Road	Hamilton Township
Middle Easton Belmont Pike	PennDOT
Manor Drive	PennDOT
Morrissey Drive	Hamilton Township
Haney Road	Hamilton Township
Beaver Valley Road	Hamilton Township
Turkey Hill Road	Hamilton Township
Hickory Valley Road	Hamilton Township, Stroud Township
Glenbrook Road	PennDOT
Dreher Avenue	PennDOT
West Main Street	PennDOT

volume was moderate. At Rt. 191, cyclists would need to turn left, travel 150 feet, and then make a quick right into Pinebrook Park. From the park, the Brodhead Creek Trail travels southward for 4 miles into Stroudsburg.

Another option from Learn Rd. in Tannersville is to take Cherry Lane Rd. to Wigwam Park Rd. Cherry Lane Rd. is a more gradual grade (average 2%) to get out of Tannersville than Fish Hill Road, but the shoulder is crumbling, littered with potholes and very narrow (<1 ft). It is also more twisty than Fish Hill Rd. with poor sight lines, and had a higher observed traffic volume. The speed limit is 40 mph. Cyclists would travel on Cherry Lane Rd. for 1.3 miles before making a right onto Laurel Lake Rd. and then quickly veering left onto Cranberry Rd. The condition of

Cranberry Rd. is similar to Cherry Lane, with a narrow shoulder and rough pavement, but sight lines are better and the speed limit is only 25 mph.

At the intersection with Wigwam Park Rd., the alignment turns left and travels along Wigwam Park Rd. for 1.5 miles to its intersection with Chipperfield Dr. The pavement on Wigwam Park Rd. is in better shape and the shoulder is wider (1-1.5 feet), but the roadway remains twisty with fast-moving traffic. Conditions on Chipperfield Dr. are similar. At Rt. 191, cyclists would need to make a left turn and then a quick right onto Mill Creek Rd. The shoulder on Rt. 191 is wide (4+ feet) and sight lines are adequate for the left turn. From Mill Creek Rd., cyclists can access the Brodhead Creek Trail.



Overall, we would not recommend either of the Alignment 2B options without significant roadway improvements such as repaving and widening to accommodate a wider shoulder, signage to alert motorists of bicycle traffic and potentially speed limit reductions on some roads. However, on most of these roads, there isn't much room for improvements without significant corridor widening. Connecting to the Brodhead Creek Trail is desirable, but based on our ground truthing observations, our assessment is that the benefits do not outweigh the risks.

Table 5: Roads utilized & ownership for Alignment 2B.

Road Name	Ownership
Route 611	PennDOT
Learn Road	Pocono Township
Fill Hill Road	Pocono Township
Abeel Road	Pocono Township
Bog Road	Pocono Township
Hallet Road	PennDOT (in Pocono Twp), Stroud Township
Route 191	PennDOT
Cherry Lane Road	PennDOT
Laurel Lake Road	Pocono Township
Cranberry Road	Pocono Township
Wigwam Park Road	PennDOT
Chipperfield Drive	PennDOT
Mill Creek Road	PennDOT

Figure 10: Main Road through PA Game Lands no. 38.

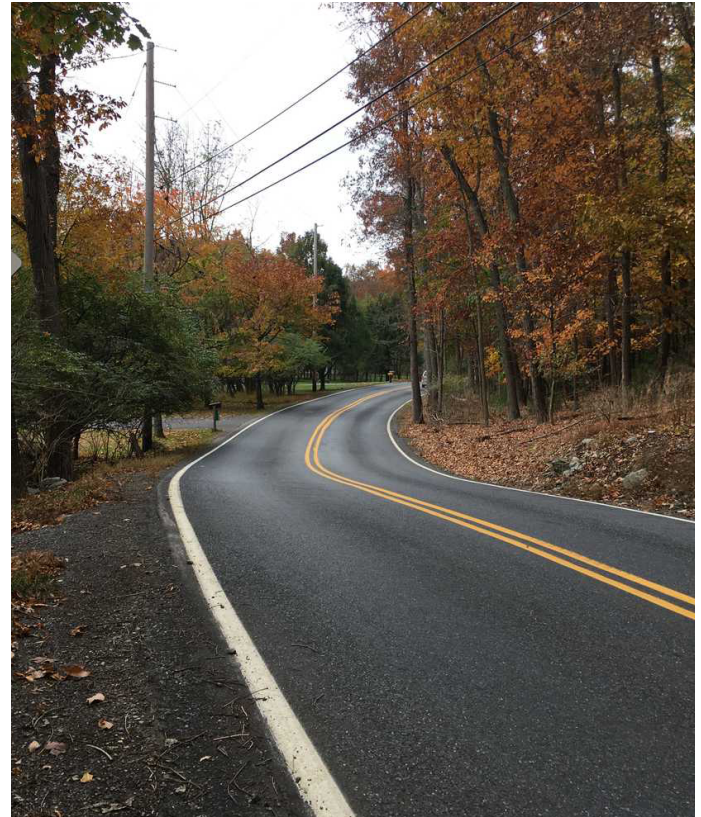
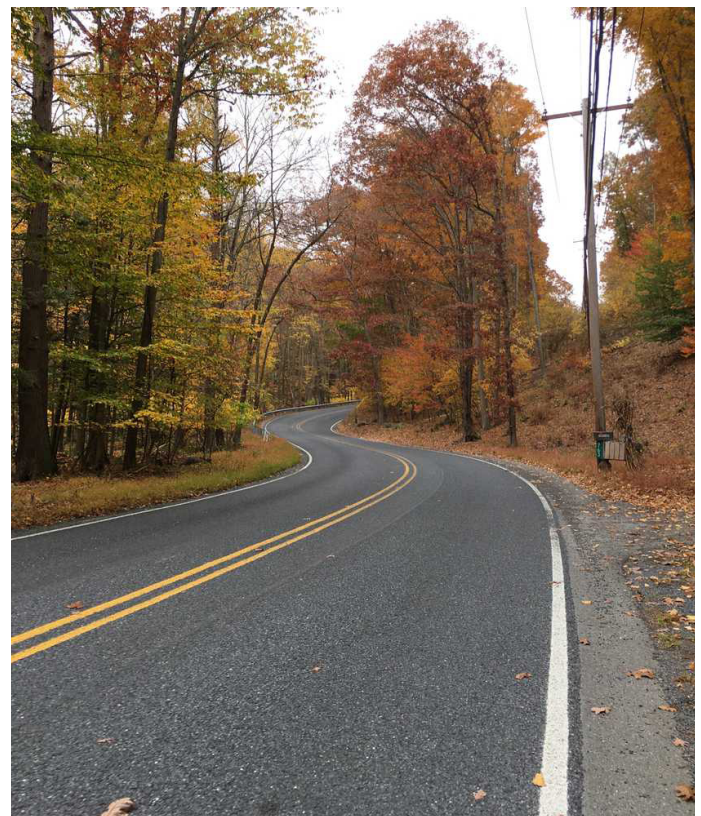


Figure 9: The trail on the former WB&E rail grade in Big Pocono State Park.



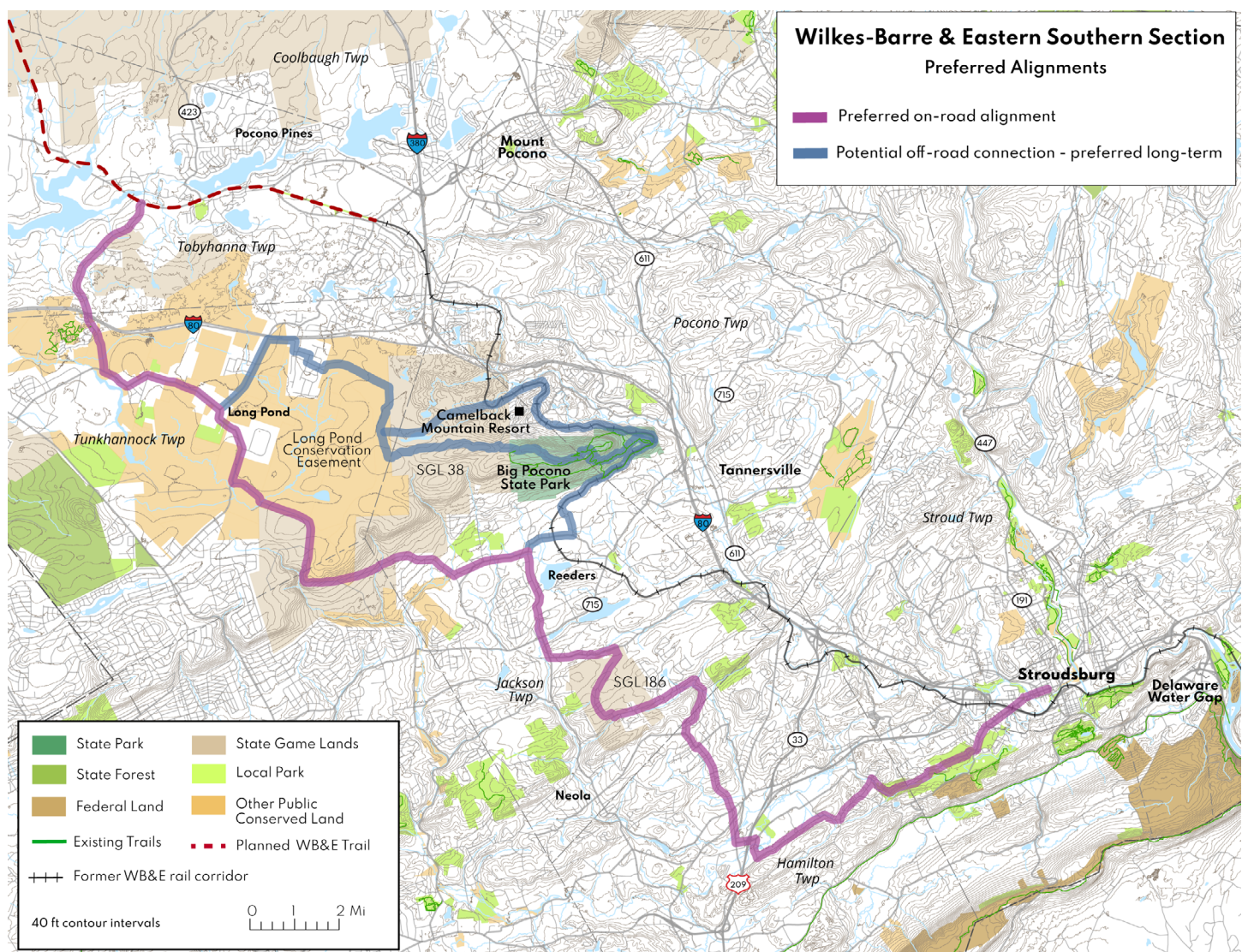
RESULTS & RECOMMENDATIONS

Before undertaking this assessment, we knew that the viability of connecting from Pocono Pines to Stroudsburg via an entirely off-road trail would be nearly impossible. Therefore, the purpose of our ground truthing efforts was mainly to identify potential on-road routes that would present the safest and most pleasant cyclist experience. Though each of the routes we originally identified and investigated on the ground have some merit, a couple of the options stood out as more desirable.

Alignments 1A and 2A (refer to **Wilkes-Barre & Eastern Southern Section: Preferred Alignments on page 13**) are the “low hanging fruit,” presenting the best user experience for the least amount of

new construction. Most of the back roads utilized for the route are already fairly suitable for cyclists, with the final 4 miles on the already-established Bike to Nature route. The installation of both wayfinding signage for riders and signage to alert motorists of bicycle presence is recommended to improve safety along the route. If there is an opportunity to widen any of the roads on the route to accommodate a wider shoulder or bike lane in conjunction with road resurfacing or improvements, that option should also be considered to increase the level of comfort for cyclists.

While Alignment 1A is the easiest-to-implement route, Alignment 1B should also be investigated



further to better determine its feasibility before ruling it out as an option. We recommend initiating conversations with the Bethlehem Water Authority, Pennsylvania Game Commission, Big Pocono State Park (DCNR) and Camelback Resort to gauge willingness to consider an off-road trail through their properties. If the landowners are amenable, the preferred off-road option would use the existing gravel and dirt roads through the Long Pond Conservation Easement and State Game Lands 38 to a path that drops down to the former WB&E rail grade in the game lands west of Camelback Resort. The former rail grade would then be developed as a trail from that junction through the condo development and resort to meet the existing trail in Big Pocono State Park. The trail on the rail grade in Big Pocono could use resurfacing in some spots to make it more desirable for less experienced cyclists. If an off-road trail cannot be developed through Camelback Resort, we recommend investigating the feasibility and costs of establishing a suitable multi-use trail that would get cyclists down the mountain in Big Pocono State Park to meet the rail grade. If one of these off-road options were to be developed, we recommend using Alignment 2A to continue into Stroudsburg.

As there is currently no champion for the WB&E, the formation of an entity to advocate for it should be developed and multi-municipal coordination is encouraged to implement the route.

Figure 11: Road through PA Game Lands no. 38.



Figure 12: Main Road through PA Game Lands no. 38.

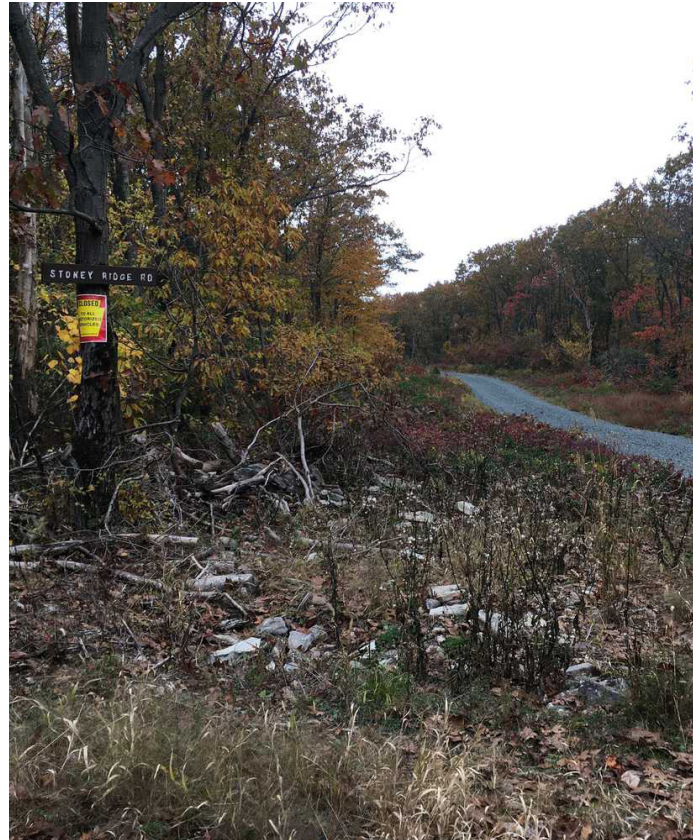
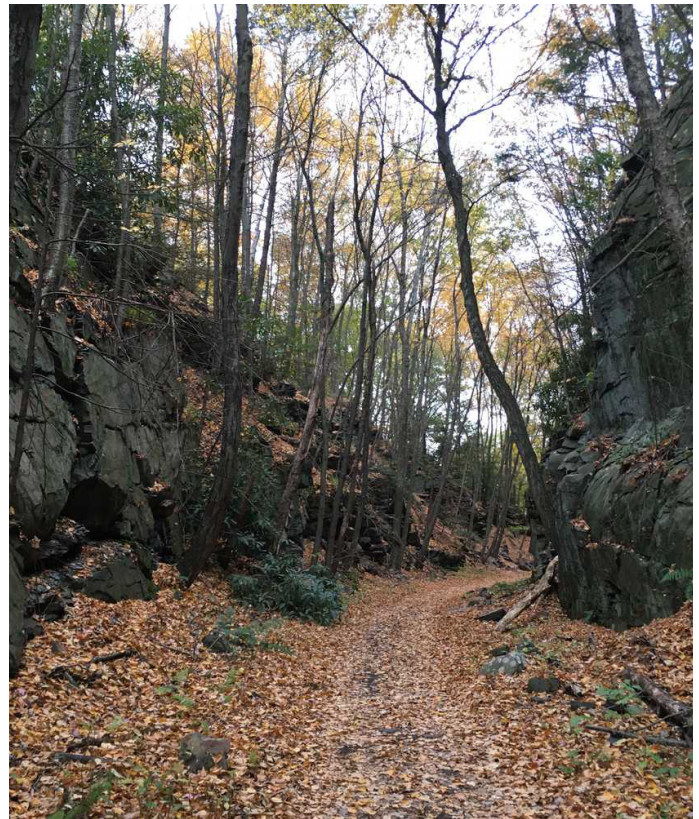


Figure 13: The trail on the former WB&E rail grade in Big Pocono State Park.



POTENTIAL MODELS OF OWNERSHIP, MAINTENANCE, & MANAGEMENT

There are many examples of potential entities or organizational structures that could fulfill the role for trail development, ownership, maintenance and/or management. However, the most appropriate structure for the WB&E may require some combination of the following:

Non-Profit Organization

A non-profit organization dedicated to trail development, ownership, maintenance and/or management could be formed that would have by-laws, officers, board members, etc. The Pennsylvania Association of Non-Profit Organizations (www.pano.org) and the corresponding Pennsylvania Nonprofit Handbook provide valuable advice if this option is to be explored. An advantage of a non-profit is that it is eligible to receive funding from federal and state funding sources, local, and regional foundations. A disadvantage to a non-profit is that the state, primarily, PA DCNR has more funding available for municipalities than for non-profits.

Authority

The Municipality Authority Act authorizes the creation of municipal authorities (termed joint authorities) by two or more local governments (Intergovernmental Cooperation Handbook, Pennsylvania Department of Community and Economic Development, 1997). Joint authorities are most used when major capital investments are necessary like sewage treatment, airports, transit systems and in some cases recreation.

Commission

Under Act 180, section 4, "A municipality may cooperate or agree in the exercise of any function, power or responsibility with one or more municipalities". Interested municipalities could form a commission. The creation of a commission would provide far more flexibility than an authority and allow the municipalities and other members to dictate their own terms.

Council of Governments

Act 180 also provides for the creation of a Council of Governments (COG). A COG has broad responsibility and may study and propose new joint programs and projects and coordinate other municipal activities rather than oversee one specific project. The creation of a COG could be the next step after the creation of a recreation commission. If the participating municipalities felt that other agreements under Act 180 might be useful and wanted to expand their partnering activities among the municipalities, then the creation of a COG might be beneficial.

Volunteer & "Friends" Groups

Often part of non-profits, but not always, groups of "trail friends" and volunteers often plan, build, and manage trails, particularly soft-surface and hiking trails. For multi-use trails, volunteers often work in collaboration with agencies for expensive items such as bridges and storm repair, while performing day-to-day maintenance and special improvement projects. Again, the mix of involvement will depend on the nature of any specific trail segment, and the strengths of any group or groups.

Ownership by Monroe County

Since the identified system of on and off-road trails are wholly within the county boundaries, the County may consider developing the trail on their own.

ROUTE IMPLEMENTATION

In 2020 Monroe County completed the Eastern Monroe Active Transportation Planning process, which encompassed the boroughs of Delaware Water Gap, Stroudsburg, and East Stroudsburg and the townships of Smithfield and Stroud. The report was prepared by the consulting firm of McMahon Associates with guidance from Monroe County Planning Commission staff and a steering committee with representatives from Eastern Monroe County municipalities, Stroud Region Open Space and Recreation Commission, Pocono Heritage Land Trust, Monroe County Transit Authority, NEPA MPO, PA DCNR, Lehigh Valley Health Network and Allied Services Integrated Health System. The final draft of the Eastern Monroe Active Transportation Plan, November 2020 provides several recommendations and insights valuable to the potential development of the southern section of the WB&E.

The consultants reviewed several municipal and county plans for the preparation of the report including, the Monroe County Comprehensive Plan Update, 2014; Monroe County Open Space and Recreation Plans from 2001 and the 2014 update; Multi-Municipal Comprehensive Plan for Hamilton Township, Stroud Township, Pocono Township and Stroudsburg Borough; Stroud Area Regional Open Space and Recreation Plan, 2002; Stroud Region Trail Gap Analysis; 2019; Borough of Delaware Water Gap, Middle Smithfield Township, Price Township, and Smithfield Township Regional Open Space and Recreation Plan; and several municipal comprehensive plans. A common theme amongst the plans was a Monroe County that is walkable and bikeable with access to safe walking and biking linkages, infrastructure that allows for transportation choice, and connection of urban streetscapes, scenic road corridors, abandoned rail lines, natural resources, and open space.

Of note, the Eastern Monroe Regional Open Space and Recreation Plan prepared in 2002 for the Borough of Delaware Water Gap, Middle Smithfield Township, Price Township, and Smithfield Township. established goals for passive recreation, active recreation, and recreation services. The plan noted

that a “combination of off-road trails and biking/ hiking lanes, established as wide smooth shoulders along low traffic roads, would be necessary to complete the envisioned system.”

The Active Transportation Plan identified various transportation infrastructure options pulled from an Active Transportation Plan Toolbox that can be applied to implement some of the recommendations from the WB&E Southern Section Report. These include the following on-road facilities:

- **Paved shoulder:** A portion of the roadway adjacent to the travel lane that can be enhanced with signage, striping, or coloring to serve as functional space for bicyclists and pedestrians. Dimensions: 4 feet wide (minimum); Provide greater width based on feasibility, traffic speeds, and traffic volumes
- **Shared Travel Lane (Sharrow):** A roadway with signage and pavement markings to indicate the use of a travel lane by both bicycles and motor vehicles. Pavement markings may include a “sharrow,” which is a bicycle symbol with two chevron arrows denoting the direction of travel.
- **Bicycle Lane:** A portion of the roadway that has been designated by striping, signage, and pavement markings for the preferential or exclusive public use by bicyclists. Bicycle lanes are located directly adjacent to motor vehicle travel lanes and operate in the same direction as motor vehicle traffic. Dimensions: 5–6 feet wide (5 feet minimum).
- **Buffered Bicycle Lane:** A bicycle lane with a striped buffer area that separates the vehicular travel lane and the shoulder used for the bicycle lane. Dimensions: 2–3 feet wide buffer (2 feet minimum) plus bicycle lane.
- **Bicycle Boulevard:** Design treatments to offer priority for bicyclists operating within a roadway shared with motor vehicle traffic. Pavement markings, such as sharrows, and signage make users aware of the priority for bicycle travel and provide wayfinding. Can include traffic calming,

access management, and other strategies to create a safe and low-stress environment for biking. Places to Use: Local residential roadways, typically in a small-town context.

- **Advisory Shoulder:** A delineated, but nonexclusive space available for walking and biking on a roadway that is otherwise too narrow for other dedicated facilities. Area for walking and biking is identified with signage and pavement markings, typically a dashed white line 5 feet from the edge of the pavement on both sides of the roadway. Note: This is a new treatment type in the United States. FHWA is accepting requests for experimentation to install advisory shoulders. Dimensions: 4–6 feet wide (6 feet preferred) Places to Use: Roadways with low to moderate traffic volumes and speeds
- **Yield Roadway:** A narrow roadway without pavement markings that is intended to support walking, biking, and driving in the low-speed travel way. These roads serve bi-directional traffic with no pavement markings, but their narrow design encourages lower speeds. Dimensions: 12–20 feet wide roadway Places to Use: Roadways with low volumes and low speeds
- **Bicycle Route:** Roadways designated with wayfinding signs for bicycle travel shared with motor vehicles. They may include one of the above facility types, but are not a facility type in themselves. Some bicycle routes are designated for long distance travel.

Figure 14: Long Pond Road between Stoney Hollow Road & Hysie Gap Road.



Many of the recommendations made in the plan for municipalities to develop and adopt to support an Active Transportation Network can be applied to the findings of the WB&E Southern Section Report. These include review of municipal ordinances, adopting consistent definitions for on-road active transportation infrastructure; reference specific plans (including the Active Transportation Plan) for where on-road facilities should be constructed; developing standards consistent with nationally accepted and statewide guidelines for on-road active transportation features; and include bicycle parking requirements, particularly for commercial uses.

Figure 16: The main gravel road through State Game Lands 38.



Figure 15: The main gravel road through State Game Lands 38.



POTENTIAL FUNDING OPPORTUNITIES

Bicycle projects are eligible for a broad array of funding at the Federal, state and local levels. Projects that improve and facilitate transportation via bicycle fall under multimodal transportation. Bicycle routes that fall under recreational use and enhance or restore open space have additional sources of funding through recreation funding programs.

US Department of Housing and Urban Development Community Development Block Grants

- The Community Development Block Grants (CDBG) Program is a U.S. Department of Housing and Urban Development (HUD) program intended for community development projects that primarily serve low to moderate income neighborhoods as defined by the latest Census Data. More than approximately 38% of the households in a Census block group must be of low to moderate income for the municipality to qualify for “area benefits” that will serve that neighborhood. The exceptions to the “area benefit” are for (a) demolition of blighted properties and (b) removal of architectural barriers. Cities receive money every year to use on projects within their municipal boundaries.

The Pennsylvania Department of Community and Economic Development (DCED) offers several grant programs for multimodal transportation, community improvements, and outdoor recreation. Each program has different criteria for eligible applicants, projects, and grant deadlines. Most of DCED’s programs are managed by the Commonwealth Financing Authority (CFA).

- **The DCED Multimodal Transportation Fund Program** - The Multimodal Transportation Fund provides grants to encourage economic development and ensure that a safe and reliable system of transportation is available to the residents of the commonwealth. The funding can be used for the development, rehabilitation, and enhancement of transportation assets to existing communities, streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets, and transit-oriented development. Eligible applicants

include Municipalities, Councils of Governments, Businesses, Economic Development Organizations, Public Transportation Agencies, and Ports-Rail/Freight. Minimum project costs are \$100,000 and the maximum grant request is \$3 million. The program requires a 30% match; however, in recent years, municipal applicants have been able to request a waiver to the match requirement. Applications are due between March 1st and July 31st.

- **DCED Keystone Communities Program** - The Keystone Communities Program (KCP) program is designed to encourage the creation of partnerships between the public and private sectors that jointly support local initiatives such as the growth and stability of neighborhoods and communities; social and economic diversity; and a strong and secure quality of life. The program allows communities to tailor the assistance to meet the needs of its specific revitalization effort. Although geared mostly towards planning, façade programs, and associated implementation of designated Keystone Communities, there is a “competitive grant” category to fund physical improvements that are geared towards community revitalization, economic development, or streetscape-type efforts. Eligible applicants include units of local government (counties, cities, boroughs, townships, towns, and home rule municipalities), redevelopment and/or housing authorities; nonprofit organizations to include economic development organizations, housing corporations, etc., community development corporations, business improvement districts, neighborhood improvement districts, downtown improvement districts, and similar organizations incorporated as authorities. Grants may not exceed \$500,000, or 30% of project costs. Competitive funding applications are accepted July 1st through August 31st.
- **The DCED Local Share Account (LSA) Program** - As required under Act 71 (the Gaming Act), DCED and the Commonwealth Financing Authority (CFA) have developed program

guidelines to distribute Local Share Account funds generated in Lehigh, Luzerne, Monroe, Montgomery, Northampton, and Washington counties. Monroe County and its five contiguous counties of Carbon, Lackawanna, Northampton, Pike, and Wayne are eligible for funding for projects concerning the public interest, community improvement, economic development, and roadway improvement. There is no match requirement.

- **The Act 13 Greenways, Trails, and Recreation Program (GTRP)** - Act 13 of 2012 establishes the Marcellus Legacy Fund and allocates funds to the Commonwealth Financing Authority (CFA) for planning, acquisition, development, rehabilitation and repair of greenways, recreational trails, open space, parks and beautification projects using the Greenways, Trails and Recreation Program. The funding can be used for projects which involve development, rehabilitation and improvements to public parks, recreation areas, greenways, trails, and river conservation. Eligible applicants include for-profit businesses, municipalities, councils of government, authorized organization, institution of higher education, or watershed organization. The maximum grant award is \$250,000 and there is a 15% match requirement.

The Pennsylvania Department of Transportation (PennDOT) also has several different funding programs for pedestrian and bicycle improvement projects. PennDOT's programs have specific project eligibility criteria and various application deadlines.

- **The Pennsylvania Department of Transportation (PennDOT) Multimodal Program** - Act 89 also established a dedicated Multimodal Transportation Fund that stabilizes funding for ports and rail freight, increases aviation investments, establishes dedicated funding for bicycle and pedestrian improvements, and allows targeted funding for priority investments in any mode. Like the DCED Multimodal Transportation Fund, PennDOT's multi-modal program funds the development, rehabilitation, and enhancement of transportation assets to enhance communities, pedestrian safety, and transit revitalization. Eligible applicants include municipalities, councils of government, business/non-profit, economic development

organization, public transportation agency, or ports or rail/freight entity. Eligible projects include streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets, and transit-oriented development. Minimum project cost is \$100,000, and the maximum grant request is \$3 million. There is a 30% grant match requirement that may be waived for municipal clients. However, the FY 2022-23 Multimodal Transportation Fund application window is now closed.

- **PennDOT's Transportation Alternatives Set-Aside Program (TASA)** - The Transportation Alternatives Set-Aside provides funding for projects and activities defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation, trails that serve a transportation purpose, and safe routes to school projects. The FAST Act, which has provided funding for the TA Set-Aside since December 2015, expired September 30, 2020, but was extended until September 30, 2021, with a continuing resolution. While it is possible that the FAST Act will be extended or a new bill will be enacted on October 1st, there's no assurance that the TA Set-Aside will continue or that more funding will be available after that date. Funds made available to PennDOT through the bill prior to that date will still be available for use after September 30, 2021. The federal guidance is available on the **Federal Highway Administration**.

The Transportation Alternatives Set-Aside is not a grant program, and no money is provided upfront. Projects are funded at 100% of the construction cost (including construction inspection). No applicant match is required. Project sponsors must pay for project design, pre-construction permits, clearances, etc. Eligible Projects may include the following: bicycle and pedestrian facilities; bicycle and pedestrian education (grades K-8 only); conversion of abandoned railway corridors to trails; construction of turnouts, overlooks, and viewing areas; outdoor advertising management; historic preservation and rehab

of historic transportation facilities; vegetation management; archaeological activities; stormwater management; and wildlife mortality mitigation. There is a minimum award of \$50,000 for construction projects. There is a maximum award of \$1,000,000, although higher awards can be justified for “exceptional” projects.

- **PennDOT Green Light Go Program** – Green Light Go is designed to reduce congestion and improve efficiency of existing traffic signals on state and local highways. Eligible applicants are municipalities and must provide a 20% match. Although, Green Light-Go Year 7 applications are being accepted through January 14, 2022, PennDOT is asking for the project scoping form to be submitted by December 3, 2021 to allow time for review by the PennDOT District Traffic Unit representatives. The scoping process helps to ensure the project meets eligibility requirements and includes all necessary work to meet current design standards. It is estimated there will be approximately \$40 million available in State Fiscal Year 2022-23 for the competitive application and reimbursement grant program for existing traffic signal improvements. Projects awarded in this round must be completed by spring 2025.
- **PennDOT Automated Red Light Enforcement Transportation Enhancements Grant Program (ARLE)** - The intent of ARLE is to fund relatively low-cost projects that improve the safety and mobility of the traveling public. Eligible projects vary widely from improvements to traffic signals, to roadway improvements at signalized intersections, and to school zones, guiderail, and roadside safety. Projects improving multiple transportation modes are encouraged. Improvements recommended by LTAP programs such as the Local Safe Roads Communities and Walkable Communities are also eligible. ARLE funding is a reimbursement grant program and there is no match requirement. Eligible sponsors include local governments, planning organizations, and Commonwealth Agencies.

- **The Pennsylvania Department of Conservation and Natural Resources (DCNR) Community Conservation Partnership Program (C2P2)** – C2P2 is an annual grant round that includes funding for trails, parks, recreation, and conservation projects. Funds are available for planning, acquisition, development, and equipment. Eligible trail grant projects include land acquisition, planning, construction, rehabilitation and maintenance, development and operation of trail education programs, and the purchase or lease of maintenance and construction equipment (only for facilities that support the use of all-terrain vehicles and snowmobiles. Depending on the funding source, match requirements are either 50/50 or 80/20. The grant round typically opens in early January and closes in early April.
- **The Pennsylvania Environmental Council Pocono Forests and Waters Conservation Landscape (PFW)** – PFW provides mini grants for projects that support and advance the Conservation, Community, and Connection goals of the Landscape in six counties, including Carbon, Lackawanna, Luzerne, Monroe, Pike, and Wayne counties. Eligible applicants include non-profit organizations with tax-exempt status 501(c)(3), municipalities, counties, and educational institutions. Project awards are between \$2,000 and \$10,000 and require a minimum dollar for dollar match. PFW Mini Grant Program is a reimbursement funding program and requires a one-to-one match.

In addition to the potential funding from multimodal transportation funding as delineated above, a multi-use trail would also be eligible for the following recreation-based funding sources:

Wilkes-Barre & Eastern Feasibility Study

SOUTHERN SECTION REPORT

A PRODUCT OF:

The Pennsylvania Environmental Council

DELIVERED ON:

December 16, 2021