



MEMORANDUM

DATE: November 18, 2022

TO: Marty Hohenberger, Director, Center for Economic Development & Community Resilience,

Ohio University Voinovich School of Public Affairs

FROM: Kate Perani, Special Projects Manager RISE Ohio, Buckeye Hills Regional Council

Matt O'Rourke, RISE Ohio Project Manager, *American Structurepoint, Inc.* Phillip Roth, Planning Projects Manager, *American Structurepoint, Inc.*

CC: Samantha Miller, Development Director, Buckeye Hills Regional Council

RE: RISE Ohio Project Proposal: Monroe County Trails Scoping Study

Overview

Located on the Ohio River between the City of Marietta, Ohio to the south and the City of Wheeling, West Virginia to the North, Monroe County is one of the five oldest and longest settled counties in the State of Ohio. Blessed with river access and abundant natural resources, historically the timber, coal, and oil industries (including both extraction and processing related activities) have driven Monroe County's economy. However, as the presence of these industries has declined in recent decades as a result of global economic changes, Monroe County's leaders and residents have looked for ways to leverage the area's natural beauty for tourism and outdoor recreation. From the waterfalls that flow through the recess caves of Piatt Park to the grand view of the Ohio River at Kiedaisch Point, Monroe County offers many opportunities to explore the backwoods charm of rural Appalachia. The county is also home to the 1,325-acre Monroe Lake State Wildlife Area and over 25,000 acres of Wayne National Forest.

In the early 2010s, a group of Monroe County leaders and residents formed a working group to articulate a long term vision for improving the area's existing outdoor recreation infrastructure, promoting additional tourism in Monroe County, and providing links (e.g.: trails, drive-by signage, waterway, etc.) between key outdoor recreation points-of-interest. The goal is to provide greater access to recreational resources that will support and encourage the physical health of residents while creating new opportunities for non-residents to visit Monroe County. The vision has four key components:

- 1. Identify and Develop Monroe County's recreational assets to reach their potential
- 2. Foster collaborative projects between Federal/State entities with shared stewardship
- 3. Enhance physical and behavioral health by providing better opportunities for people to restore themselves
- 4. Promote tourism and economic development through investing in recreational assets

Much work has already been accomplished, including the creation of a comprehensive tourism website (Discovery Monroe County: https://www.discovermonroecounty.org/), which features information about and directions to outdoor recreational opportunities within the County, the GIS mapping of the County's existing trail networks and roadway connections (GIS Hub: https://gishub-monroegis.hub.arcgis.com/search?tags=nature), as well as work to

cost out infrastructure improvements, including trails, restroom facilities, signage, parking, and shelters), at key points-of-interest throughout the county. After the State of Ohio released information on its Appalachia Community Grant Program in the summer of 2022, the working group compiled a list that describes \$1,535,000 of improvement requests at four points-of-interest for the Monroe County Board of Commissioners to consider as they discuss potential 2023 Development Grant applications with Buckeye Hills Regional Council and other Counties in the region. Work on forming partnerships with other entities to support a State ACDG application is ongoing.

While this momentum is palpable, the Commissioners and community leaders have described several challenges they could use assistance with as they continue their efforts to improve Monroe County's outdoor recreation assets. One of these challenges is the need for a greater sense of how each of Monroe County's key outdoor recreation assets (points-of-interest including Kiedaisch Point, Piatt Park, private campgrounds/lodges, etc.) could be linked by trail. There is a general sense that linking each of key point-of-interest in Monroe County by trail would encourage additional use of each asset, and spur tourism as visitors could travel between each asset without needed a car. Thus, after consultation with the Monroe County Board of Commissioners and the members of the Discover Monroe County working group, the technical assistance Buckeye Hills Regional Council proposes for American Structurepoint to provide for Monroe County a "trails scoping study" that will produce a GIS database of Monroe County's key points-of-interest and show existing trail connections (if any), assess the extent to which a "trail network" currently exists, identify the major connectivity gaps within that network, and identify potential alignments for new trails to fill these gaps, including cost estimates. American Structurepoint will also draft a report that details their findings, provides rough cost estimates for various build out scenarios, and provides some analysis of the projected social and economic benefits of making these connections.

The assistance described herein will allow Monroe County to better position developable sites located within Opportunity Zone #9666 to investors/developers. Increased investment into Monroe County's recreational assets will result in entrepreneurial development in short-term lodging and economic development in peripheral industries such as restaurants, stores, and outdoor experience providers; and increase associated employment opportunities. Increased investment into Monroe County's recreational assets would increase access to outdoor recreation, improving health outcomes and regional pride, while having the potential to diversify and strengthen Southeast Ohio's economy. Thus, this project achieves the goal of the RISE Ohio program by increasing Opportunity Zone investment opportunities within the Buckeye Hills Region.

Project Description

American Structurepoint will deliver the following:

- A GIS Database of Monroe County's key outdoor recreation points-of-interest and existing trail network;
- A review of external documents outlining initiatives pertinent to the efforts of Discover Monroe County.
 At a minimum, this is intended to include the trails plan and its components, as well as data describing the current economic activity generated by outdoor recreation in Monroe County;
- An identification of the "gaps" between Monroe County's key points-of-interest within in its existing trail network:
- A high-level evaluation of potentially topographically feasible alignments for filling trail network gaps, along with design types and costs

American Structurepoint and Buckeye Hills Regional Council anticipate this project will require 6 to 8 weeks to complete from an authorization date of December 1, 2022. Ultimate project length will primarily depend upon the

availability of existing data, the timeliness/availability of key community stakeholders to provide necessary feedback during the project period, and the ultimate extent of stakeholder outreach effort desired by the Monroe County Commissioners.

Scope of Work

To complete the project, the American Structurepoint project team will perform the following activities, in roughly the following order (some steps may be combined):

- 1. Collect and review planning-level documents. The project team will review and digitize all documents and plans produced by the Discover Monroe County working group, including the "Monroe County Asset List" and the "Ohio Builds Small Communities, Big Impact: A Plan for Appalachia."
- 2. **Develop a GIS Database.** The project team will gather data on Monroe County's current trail networks from its own GIS database (Monroe County GIS Hub), the State of Ohio's databases (ODNR, etc.), and develop a database of existing assets, such as abandoned rail rights-of-way, utility corridors, stream corridors, parks assets and other publicly owned property, etc.
- 3. **Identify activity centers in the County.** The project team will gather and map key economic data in Monroe County, including population centers, employment areas, and recreational and tourist destinations.
- 4. Identify major gaps in the network.
- 5. For each major gap, **identify no more than three (3) potential alignments for filling the gap**, along with a high-level design type and cost (no ROW acquisition assumed).
- 6. For each set of alternatives, **perform a high-level evaluation**.

Budget

It is anticipated that the services described above will be approximately \$5,000.00. Justification of this amount is based on American Structurepoint's projection of the hours necessary to complete this work for a building of this size. All time spent on the project will be billed using the standard hourly rates indicated in our master service agreement. Reimbursable expenses will be invoiced at cost.

Once project activities begin and should it arise that project costs may exceed \$5,000, Buckeye Hills Regional Council and American Structurepoint will justify the need for additional resources in writing.

Monroe County Trails Study

June 2023

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Regional Context

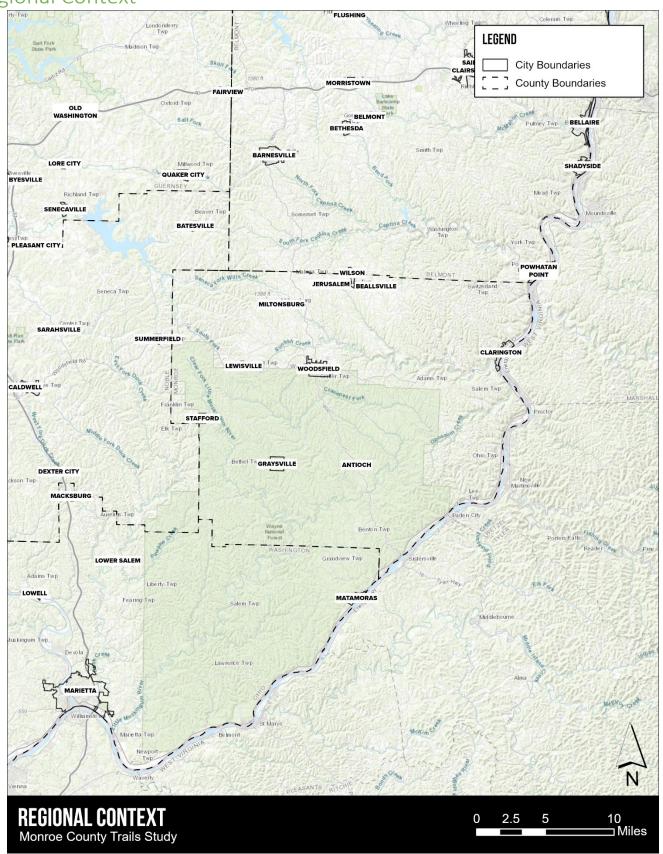




Figure 1: A map showing the southeastern region of Ohio. Source: ASI, ESRI.



Often referred to as the Switzerland of Ohio, Monroe County is located in southeastern Ohio in the foothills of the Appalachian Mountains. Most of the county comprises Wayne National Forest, which is 178,000 acres in total. 25,000 acres of county land reside in Wayne National Forest, making it a substantial recreational asset for the county and surrounding communities. The forest contains campgrounds and many streams and lakes, providing hunting, fishing, camping, and hiking opportunities.¹

Aside from Wayne National Forest, the county has many other recreational assets, including parks, trails, campgrounds, and wildlife areas, with a cluster on the eastern side of the county near Clarington. The Regional Context Map shows the county's location relative to other counties in the area and West Virginia.

The county borders Noble County to the west, Belmont County to the north, Washington County to the south, and West Virginia to the east. Woodsfield, located centrally within the county, is the county seat. Other major urban areas nearby include Marietta to the southwest and Wheeling, West Virginia, to the north.

¹ Monroe County, Ohio: Parks and Recreation.



Population Centers

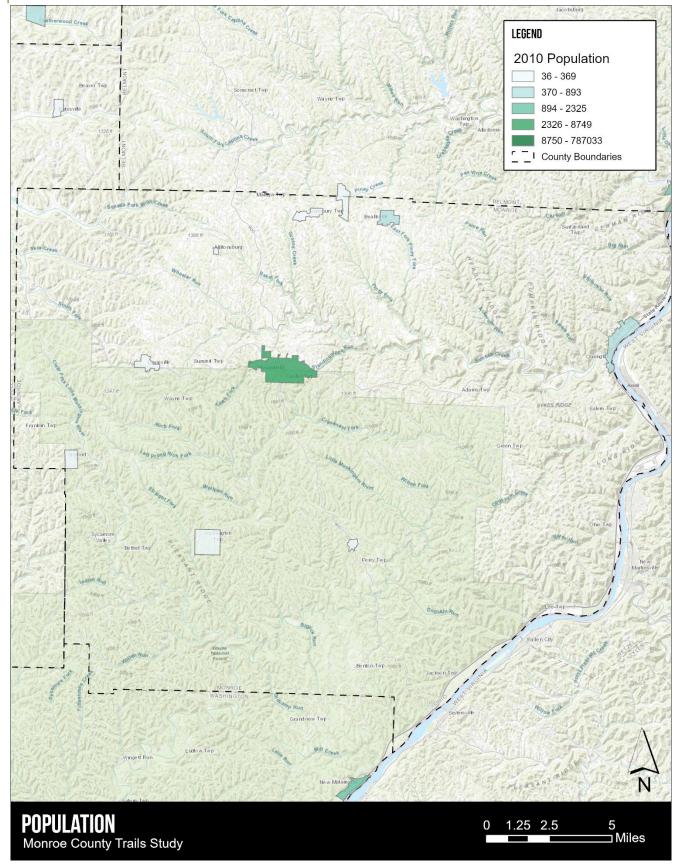




Figure 2: A map showing population centers in Monroe County cities and towns. Source: ASI, US Census Bureau, ESRI.

Southeastern Ohio is a very rural region. Most of the area has a small population, with the county having a population of only 13,329 in 2021. Woodsfield was the most populated city in the county, with a population of 2,211 in 2021.² The 2010 Population map shows the surrounding cities' populations.

² <u>US Census Bureau: 2021 ACS 5-Year Estimates</u>.



Recreational Assets

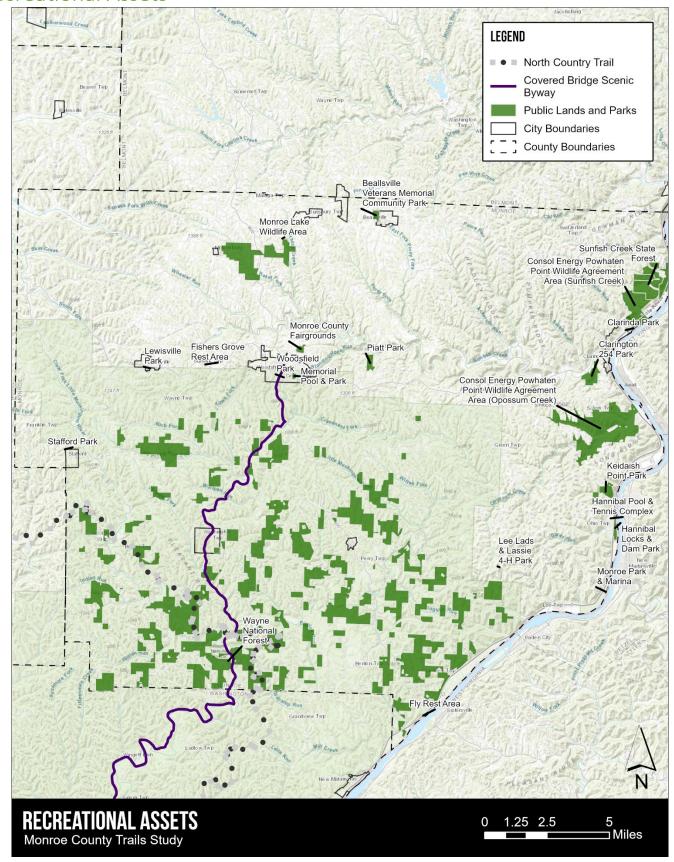


Figure 3: Recreational assets, including local, county, and state parks and wildlife areas. Source: ASI, Monroe County, ESRI.

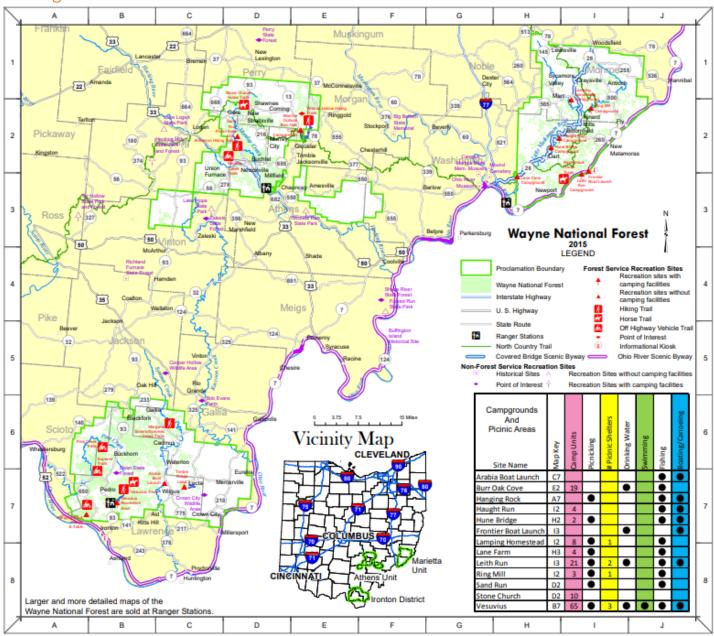


Due to its location in the foothills of Appalachia, Monroe and the surrounding area have access to many recreational activities. However, many local parks and recreation facilities also exist throughout the region. Several of the county's parks and wildlife areas are to the east, near the Ohio River. Additionally, Woodsfield has several county recreational assets, such as the Monroe County Fairgrounds.

National Forest

The largest of these recreational assets is the Wayne National Forest, which spans several counties to create 178,000 acres of forest. The Wayne National Forest is a recreational asset for southeastern Ohio. It is only a few hours' drive from several regional metropolitan areas such as Columbus, Akron, Cleveland, Dayton, Cincinnati, Louisville, and Pittsburgh. The forest includes over 400 miles of trails for hiking, off-highway vehicle riding, mountain biking, and horseback riding.³

Existing Trails



³ USDA Forest Service: Wayne National Forest.



Figure 4: A map showing trails, campgrounds, and picnic areas in Wayne National Forest. Source: Wayne National Forest Service.

Several trails from Wayne National Forest travel through Monroe County, including the Archers Fork Trail and Scenic River Trail. Those trails converge in Monroe County with the North County Trail. A connection to the Covered Bridge Bypass is also available along the North County Trail.

Outside of Wayne National Forest, many of the county parks also have trails within them. Those county parks include Piatt Park, Raven Rocks, Lamping Homestead, and Kiedaisch Point.⁴

Parks

Monroe County is home to 20 parks, including Wayne National Forest. The county's owned parks and attractions include Piatt Park, Beallsville Memorial Park, Kiedaisch Point Park, Hannibal Pool, Stafford Park, Lamping Homestead, Monroe Park and Marina, Lee Lads and Lassie 4-H Park, Monroe Memorial Park, Monroe County Fairgrounds, Monroe Lake, Clarington 254 Park, Ohio Valley River Museum, and Ringmill. Piatt Park includes 119 acres of recreation with hiking, camping, a picnic shelter, a playground, and an accessible shower house/restroom. The hiking trails feature scenic views of a natural gorge and wildlife. Beallsville Veterans Memorial Community Park is located near Beallsville and consists of 66 acres with two athletic fields, a picnic shelter, a playground, and a small pond for fishing. Kiedaisch Point Park consists of 213 acres, including hiking trails, a picnic area overlooking the Ohio River, and a view of New Martinsville, West Virginia. Hannibal Pool includes one large pool, a kiddy pool, and tennis courts. Stafford Park consists of 2.6 acres and includes a picnic shelter and restrooms. Lamping Homestead showcases an early homestead, including hunting, fishing, camping, and a picnic area. Ringmill features an 1800s house listed in the National Register of Historic Places. The Ringmill includes a picnic shelter, tables, restrooms, and camping. A canoe access point on the Little Muskingum River is also available at the park.5

Other

Other recreational assets include the Parry Museum, historic schoolhouse, and dairy barn. Located in Woodsfield, the Parry Museum features a five-acre property containing a house built and furnished in the 1800s. The museum showcases the way of life at the turn of the century and contains priceless heirlooms relevant to the county's history. The Parry Museum property includes historic dairy machinery, such as a dog-powered cheese factory and containment. The Parry property also includes The Byers stone block Schoolhouse, which was moved from Graysville. The schoolhouse features a heated wood stove and a multi-grade, one-room classroom.⁶

Although the National Forest Covered Bridge Scenic Byway is not a true recreational asset, it provides access to five campgrounds and surveys some of Ohio's most beautiful countryside, with places for visitors to stop along the route at historic covered bridges. The scenic byway follows SR 26 from Marietta to Woodsfield and parallels the Little Muskingum River. The scenic byway is a self-guided tour with 35 miles of scenery and history throughout ten stops.⁷

⁴ Discover Monroe County: Hiking.

⁵ Monroe County, Ohio: Parks and Recreation.

⁶ Monroe County, Ohio: Parry Museum, One Room Schoolhouse, Dairy Barn.

⁷ Monroe County, Ohio: Covered Bridge Byway.



Peaks

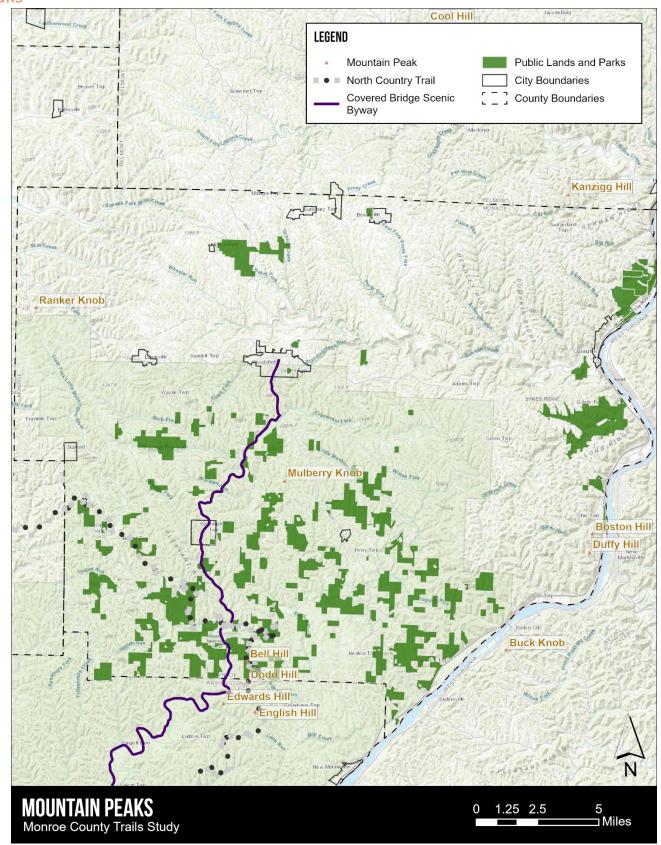


Figure 5: Mountain peaks in Monroe County and surrounding areas. Source: ASI, ESRI, United States Geological Survey, U.S. Geographic Names Information System.



Several existing trails in Monroe County follow mountain peaks, such as Dodd Hill and Bell Hill. Additional mountain peaks were identified as potential trail connection opportunities. Mulberry Knob would provide a location for a centralized trail connection from the North Country Trail to Woodsfield. Similarly, Boston Hill and Duffy Hill are located along the edge of the Ohio River and West Virginia border, providing another opportunity for potential trail connections.



Wildlife Areas

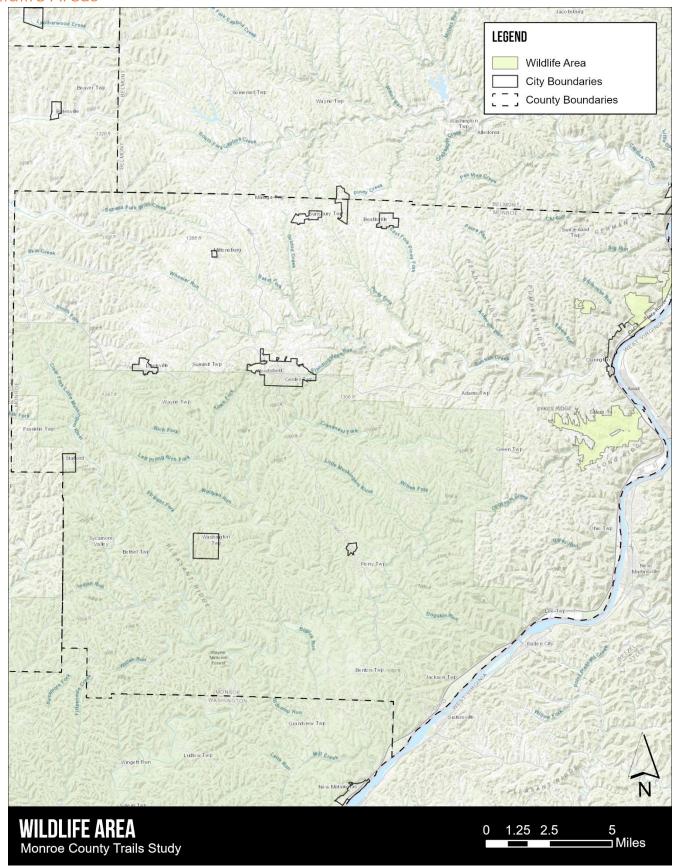




Figure 6: Wildlife areas in Monroe County. Source: ASI, ESRI, Monroe County, Ohio Department of Natural Resources.

Wildlife areas provide another opportunity for potential trail connections. The Consol Energy Powhatan Point Wildlife Area is split into several areas along the Ohio River. The wildlife area consists of a heavily forested area totaling 4,000 acres—portions of the area border Sunfish Creek State Forest, which is 637 acres open for public hunting. Hunting is the primary recreational use in this area, with wildlife consisting of white-tailed deer, ruffed grouse, wild turkey, squirrel, and cottontail rabbit. However, other uses include fishing, hiking, nature study, bird watching, and foraging.⁸

Methodology

Trails are a win-win for a community because they do not require vehicles to access them and are a low-cost transportation method. Removing cars from the equation also leads to more physically active transportation choices, such as walking or cycling. When determining the locations for trails, two factors are the most critical considerations: connections to points of interest and routing through favorable terrain.

Using trails to connect points of interest, also called "nodes" or community assets, supports the existence of the trails because the trails become a way to get from one node to another. The ease of access to those connections encourages even more visitors to patronize the nodes, and a positive feedback loop is born. Ideally, trails link community assets such as schools, playgrounds, tourist attractions, recreation areas, scenic views, downtowns or shopping areas, and neighborhoods or subdivisions. This study aims to connect as many of those nodes to each other as possible after considering the topography constraints.

To make the trails accessible to as many users as possible, this study designates routes along level terrain where feasible. The routes also need to be wide enough to install the trails. Typically, that means trails are cited along roadways, waterways, ridgetops, and abandoned rail corridors. Eight feet of right-of-way width (ROW) is the minimum width to consider when evaluating areas for trails.

Goals and objectives were utilized during the study to determine and evaluate potential areas for trails. The following goals and objectives may also be considered during further efforts, such as plans, studies, or determining feasibility.

- 1. Expand the community's alternative transportation infrastructure, as appropriate, to provide safe, fun, and convenient travel options.
 - a. Focus on desired connections.
 - b. Accommodate all levels of skill and physical ability as much as possible.
 - c. Prioritize investments that enhance options and safety for users with a higher dependency on alternative transportation.
- 2. Encourage and educate existing and potential bicyclists, walkers, and motorists to understand safe methods of travel and crossing.
 - a. Cultivate relationships with existing organizations to promote walking and bicycling education.
 - b. Use signage and promotional materials to communicate proper behavior to motorists.
- 3. Support healthy lifestyles and improve individual health by targeting a reduction of chronic disease rates by county, bike, and pedestrian crashes and fatalities.
 - a. Monitor trend data regarding chronic disease, traffic injuries, and deaths to document broad public health benefits across Monroe County.
 - b. Establish programs that increase and facilitate the usage of active transportation and attract a broad range of ages and trail users.
- 4. Provide residents and visitors access to local parks, regional destinations of cultural and historical significance, and all of their daily connections to work, school, shopping, etc.
 - a. Implement connectivity to existing trails, bike lanes, and walking paths to increase physical activity.
 - b. Expand the trail network and complete network sidewalks to increase safe and convenient opportunities for residents and visitors to walk and bike.

⁸ Ohio Department of Natural Resources: Consol Energy Powhatan Point Wildlife Area.



- c. Establish a reliable online source for up-to-date information on the locations of trails and bike lanes in the county.
- 5. Create a comprehensive network that connects biking and walking routes across boundaries, has community support, and strengthens public and private partnerships.
 - a. Encourage businesses and jobs to support bicycling and provide end-of-trip facilities.
 - b. Increase cooperation among agencies in implementing bicycle and pedestrian facilities.

Opportunities **LEGEND** ■ • ■ North Country Trail Inactive Rail Covered Bridge Scenic Byway City Boundaries **County Boundaries** Public Lands and Parks Power Lines Active Rail Streams **OPPORTUNITIES**Monroe County Trails Study 5 ⊐Miles 1.25 2.5



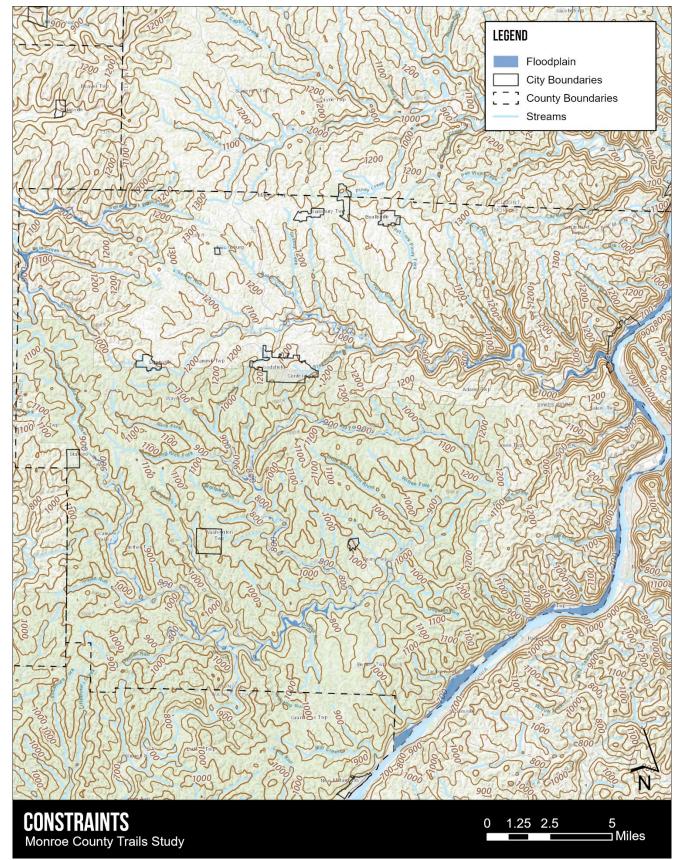
Caption: A map showing opportunities for trails such as scenic byways, inactive rail, powerlines, streams, and existing parks and trails. Source: ASI, ESRI, ODOT, Monroe County, ODNR.

When looking for potential trail connections, taking note of abandoned rail corridors, utility corridors, and streams is an excellent place to start, as these areas are usually off-limits for any development. The map shows an abandoned rail line traveling through Woodsfield at the county's northern end. The Rails-to-Trails program offers information and funding for projects involving retrofitting rail corridors for trail use. However, in-person analysis and aerial imagery did not show any available ROW where an inactive rail corridor was previously located. Utility easements often have space for parallel trail infrastructure, which can be an asset when no remaining ROW is next to the roadway. The power lines shown on the opportunities map provide valuable connections from Wayne National Forest to Bellaire and Woodsfield. However, the inperson analysis determined that many utility corridors pose too steep slopes for trail development. Due to Monroe County's hilly topography and location on the Ohio River, many streams flow through the county. Space is often available along stream corridors to add trails and provides scenic value to trail users.

⁹ Rails-to-Trails Conservancy: Build Trails.



Constraints

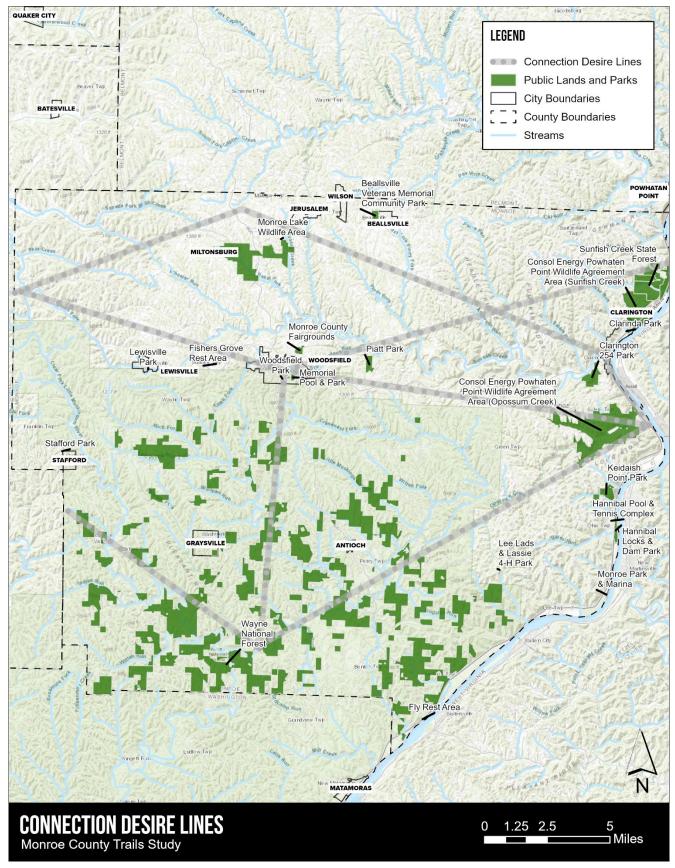




Along with opportunities, the area also poses several constraints to developing new trails. The biggest constraint is the varying topography and slope of the area. That type of topography can pose constraints to access and the development of building trails. Secondly, the Ohio River's floodplain limits some of the ability to implement trails along portions of the riverway.



Connection Desire Lines





Caption: A map showing conceptual connections between points of interest and population centers. Source: ASI, ESRI, Monroe County, USGS.

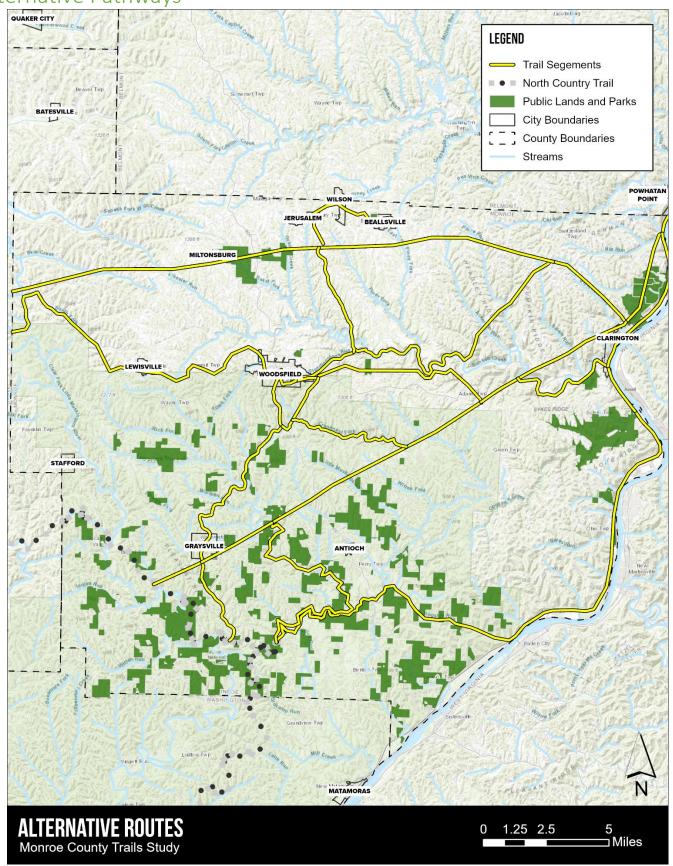
In many communities, walking and biking are not safe or convenient for most trips. However, research shows moderate physical activity, such as walking and biking, is associated with many positive health benefits. These benefits include reduced risks of heart disease, obesity, high blood pressure, diabetes, and depression. Walking and biking is also an alternative to travel by private vehicle, which contributes to air pollution and can cause congestion on roadways. Biking and walking also provide economic benefits as they are much cheaper than trips by private vehicle and cause less wear and tear on streets. By examining potential points of interest within the county and linking them by trail, active recreation via biking or walking will be more encouraged and increase the number of visitors to existing recreational assets.¹⁰

Several conceptual corridors were compiled by analyzing the existing recreational features, opportunities, and constrained. The corridors show desired connections between existing trails, parks, peaks, utility or rail corridors, and streams. The desired connection lines also link several Monroe County cities to each other and recreational assets.

¹⁰ American Planning Association: Active Transportation.



Alternative Pathways





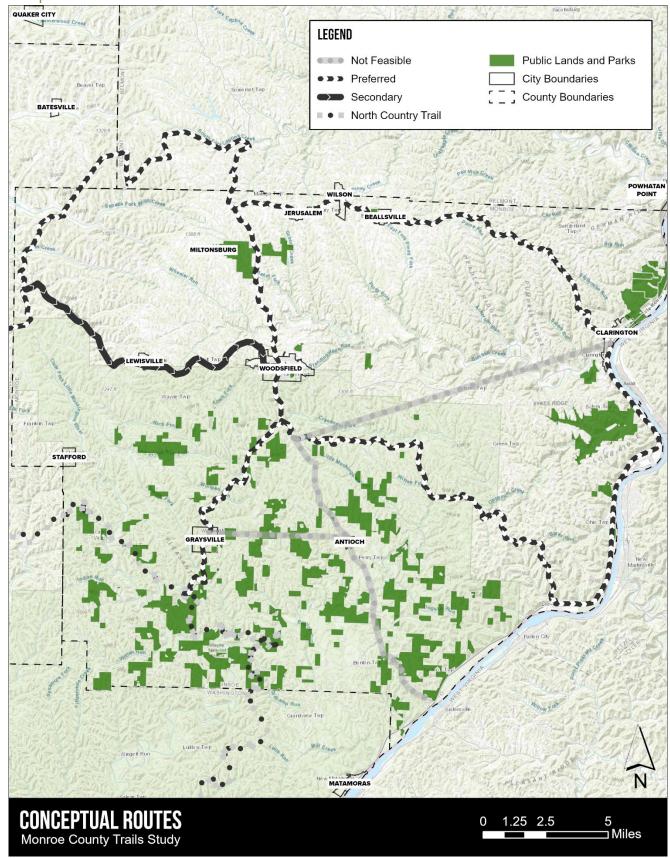
Caption: A map showing potential trail segments that complete the connection desire line paths. Source: ASI, ESRI, Monroe County.

Before identifying constraints, several routes were proposed for each connection desire line to ensure alternatives were available if a route was unfeasible due to identified constraints. The alternative routes were designed by examining existing opportunities, population centers, potential constraints, and points of interest.

Each segment was then evaluated for potential constraints such as steep slope, road crossing, water crossing, and floodplain—the preliminary evaluation utilized aerial photography, topographic contours, GoogleEarth imagery, and Google Streetview.



Conceptual Routes

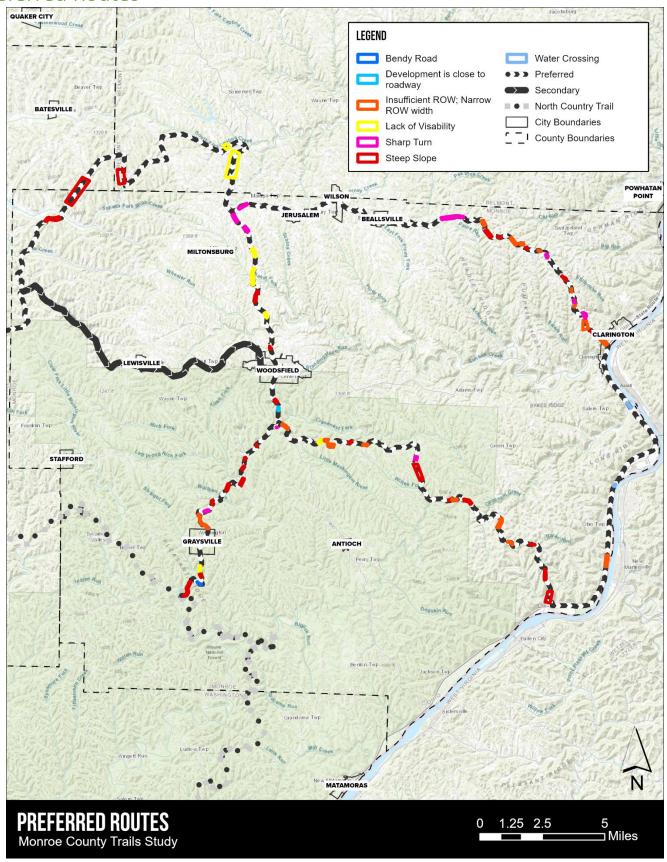




The Conceptual Routes map shows the county's final iteration of conceptual trail routes. Field analysis identified potential routes with too many constraints to be considered feasible. Routes determined to be unfeasible are shown in gray on the map.



Preferred Routes



Caption: A map highlighting potential constraints on preferred conceptual routes requiring unique design treatments. Source: ASI, ESRI.



An in-person evaluation of constraints allowed for a second set of potential trails to be examined. That identified additional constraints such as insufficient ROW, low visibility, steep slopes, poor roadway conditions, and other concerns that could limit trail development and risk the safety of users.

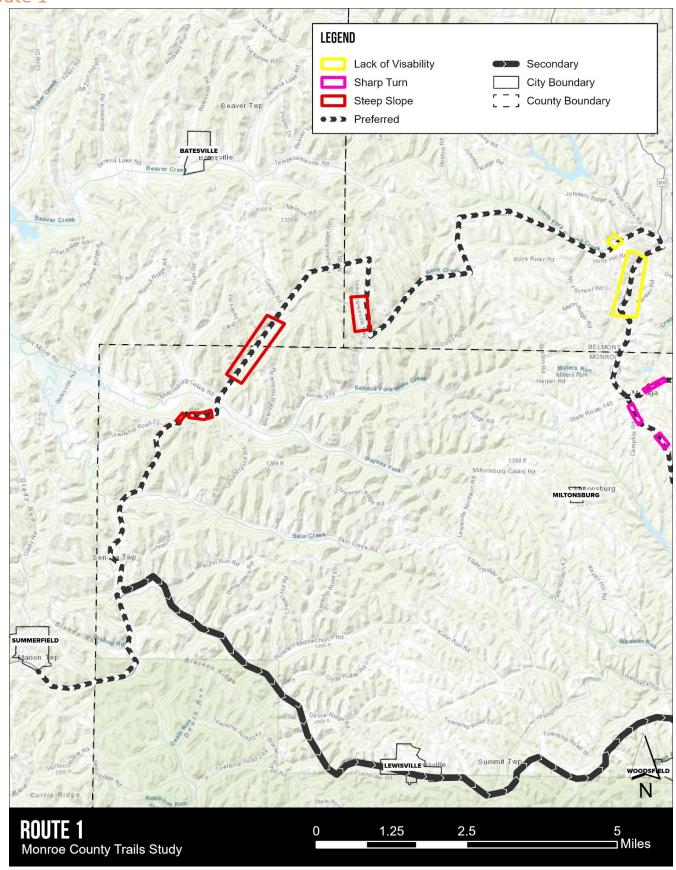
The final conceptual routes included connections to Summerfield, Woodsfield, Graysville, Sardis, Clarington, Beallsville, and the North Country Trail. Initially, GIS data from the Ohio Department of Transportation (ODOT) showed an inactive railroad along SR 78, making it ideal for a trail connection. However, the in-person analysis determined that the rail corridor no longer exists along this route, eliminating the possibility of repurposing the ROW for trail use. Due to this, that route (Route 2) was chosen as an alternative route, if needed. Also, the in-person analysis identified preferred routes and highlighted segments needing special design treatment. The most common constraint noted throughout the county was the steep slopes that not only would cause safety concerns but also offered limited ROW for a trail to be inserted on the side of the road. In these cases, unique design treatments may need to be considered and further evaluated for feasibility or rerouting of potential segments.

Design Treatment

The in-person analysis and aerial imagery identified potential constraints for trail development where a unique design treatment might need to be evaluated to further determine the identified segments' feasibility. Additional design treatment would consider slope, visibility, scenic locations, and alternative routes for the identified segments. The following maps indicate areas where additional design treatment may be needed along each route segment. <u>American Trails</u> provides resources detailing basic trail design and layout elements that may assist with additional design treatments for these areas.



Route 1



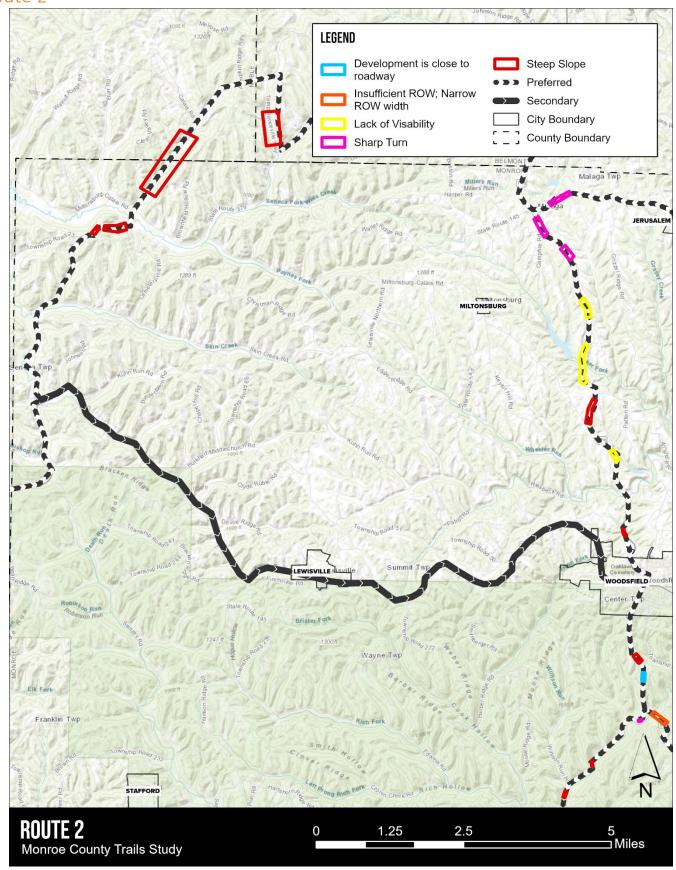


Caption: A detailed view of areas on Route 1 that may require further design treatment due to identified constraints. Source: ASI, ESRI.

Route 1 travels from Summerfield in Noble County through the southwestern corner of Belmont County until it again reaches Monroe County and connects with Routes 3 and 7. Several identified constraints requiring special design treatment included steep slope areas and limited visibility. The proposed route alignment through bordering counties could also pose constraints as it would require coordination between Noble and Belmont counties for ROW acquisition and maintenance. However, a route traveling through these areas could increase access to trails, points of interest, and population centers in Monroe County for these portions of Noble and Belmont counties. The connection may also provide widespread regional access to the area while connecting to Wayne National Forest if Noble or Belmont County were to develop their trails in the future.



Route 2



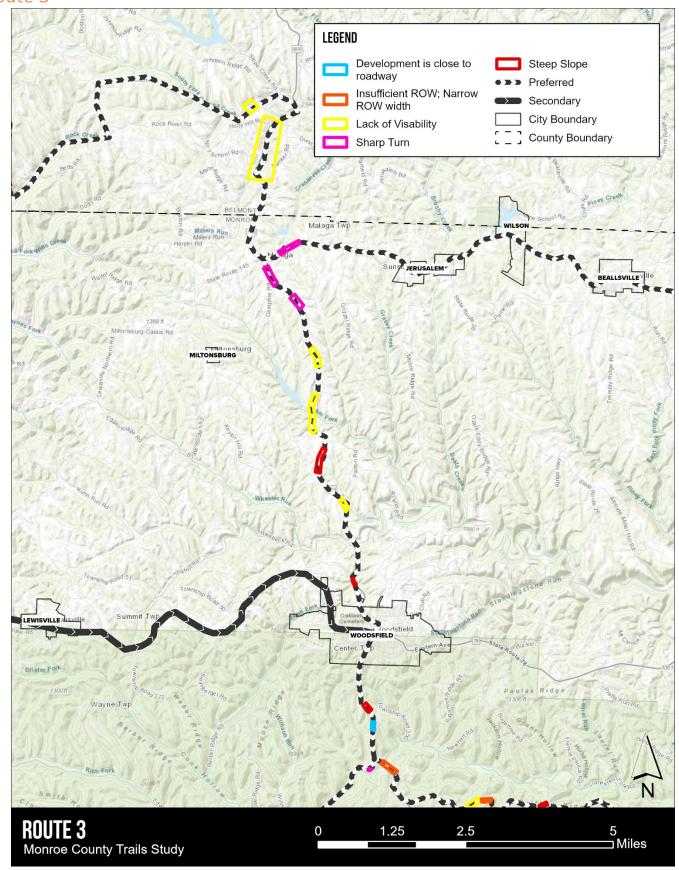


Caption: A detailed view of areas on the secondary route that may require further design treatment due to identified constraints. Source: ASI, ESRI.

While no constraints were identified along the secondary route, this route was identified as an alternative should Route 1 prove unfeasible. Data from ODOT had identified an inactive rail corridor along the secondary route. However, in-person analysis and aerial imagery concluded that the ROW from the inactive railroad had most likely already been relinquished, which would pose the constraint of obtaining ROW along SR 78. Further analysis may need to be completed to outway the pros and cons of establishing a trail along SR 78, connecting Summerfield to Woodsfield.



Route 3



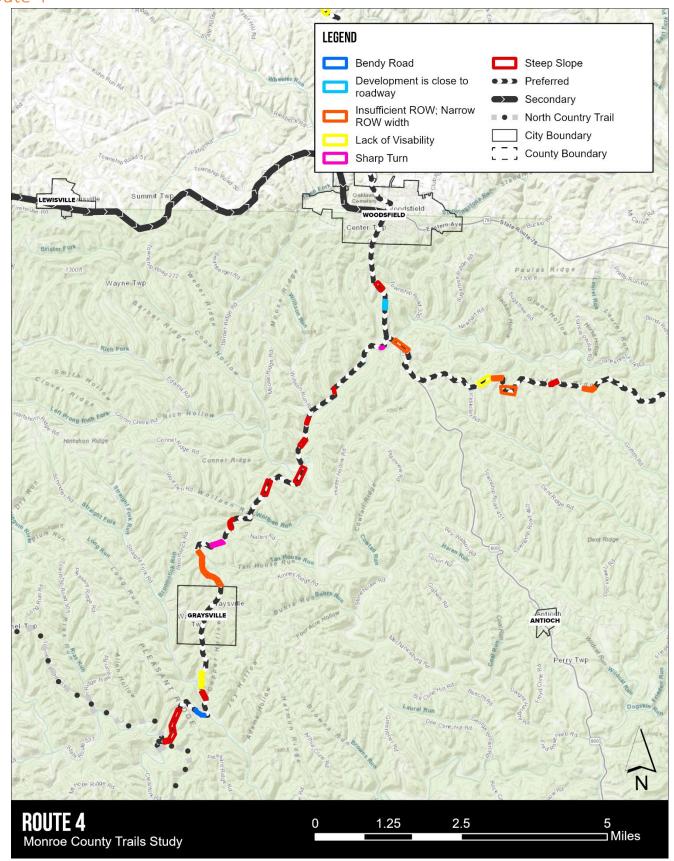


Caption: A detailed view of areas on Route 3 that may require further design treatment due to identified constraints. Source: ASI, ESRI.

Route 3 was proposed along SR 800, connecting northern Monroe County to Woodsfield. Route 3 would also connect to Monroe Lake Wildlife Area and Route 7. The identified constraints along Route 3 included sharp turns, steep slopes, and areas of poor visibility.



Route 4



Caption: A detailed view of areas on Route 4 that may require further design treatment due to identified constraints. Source: ASI, ESRI.



Route 4 travels from Woodsfield to meet with the North Country Trail in Wayne National Forest at the county's Southern end. The proposed alignment for Route 4 is along SR 26, the Covered Bridge Scenic Byway. By incorporating a trail along the Covered Bridge Scenic Byway, this existing feature, along with the campgrounds, peaks, and historic sites on this route, will serve as significant points of interest for visitors. Route 4 would also provide a significant connection from the existing regional North Country Trail to Woodsfield, serving as a hub for the county's local trail system. However, Route 4 posed constraints such as steep slopes, sharp turns, bendy roads, areas of insufficient ROW, and poor visibility.

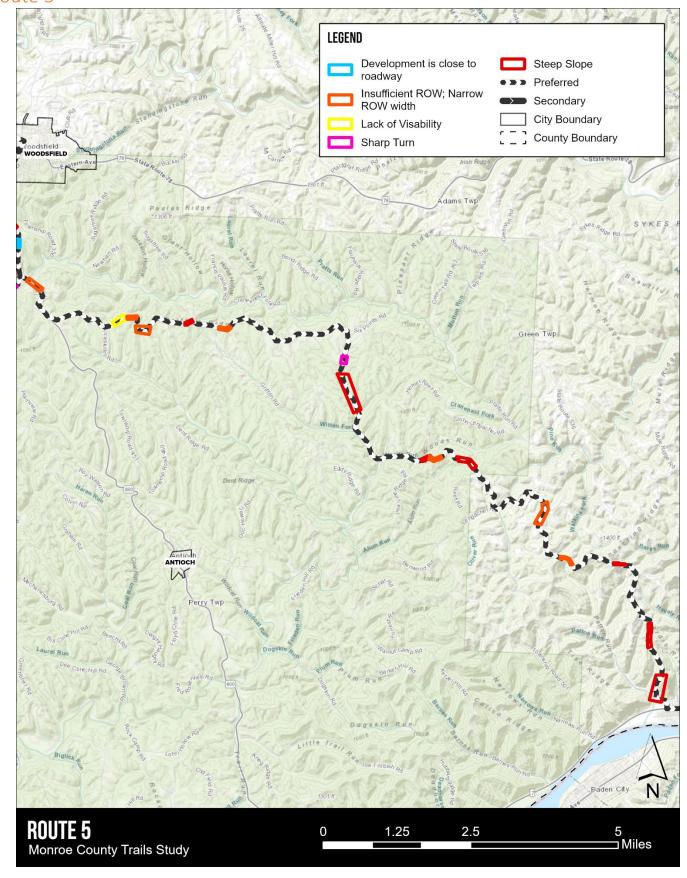
Another recommendation for Route 4 and the Covered Bridge Scenic Byway is to increase wayfinding and call out points of interest. Wayfinding aims to guide safe passage for pedestrians, bicyclists, and motorists by letting them know where they are. Cities and counties often use wayfinding as an additional means to highlight potential destinations to travelers and tourists and promote the community brand. Proper wayfinding can differentiate a community from competitors and contribute to an area's desired look or feel.¹¹

While completing the in-person analysis of this route, only several signs were seen along SR 26 that alerted drivers that this was the Covered Bridge Scenic Byway, and no wayfinding was seen to direct visitors to the covered bridges or other existing points of interest, which were located on local roads just off SR 26. That area is very rural, and access to internet navigation was limited during travel along this route, eliminating the ability to look up where the location of covered bridges along the route. Increasing wayfinding signage calling out these significant pieces of history and points of interest would increase brand recognition and assist in navigation, advertising, and attracting visitors.

¹¹ American Planning Association: Wayfinding: The Design of Getting Lost and Found.



Route 5



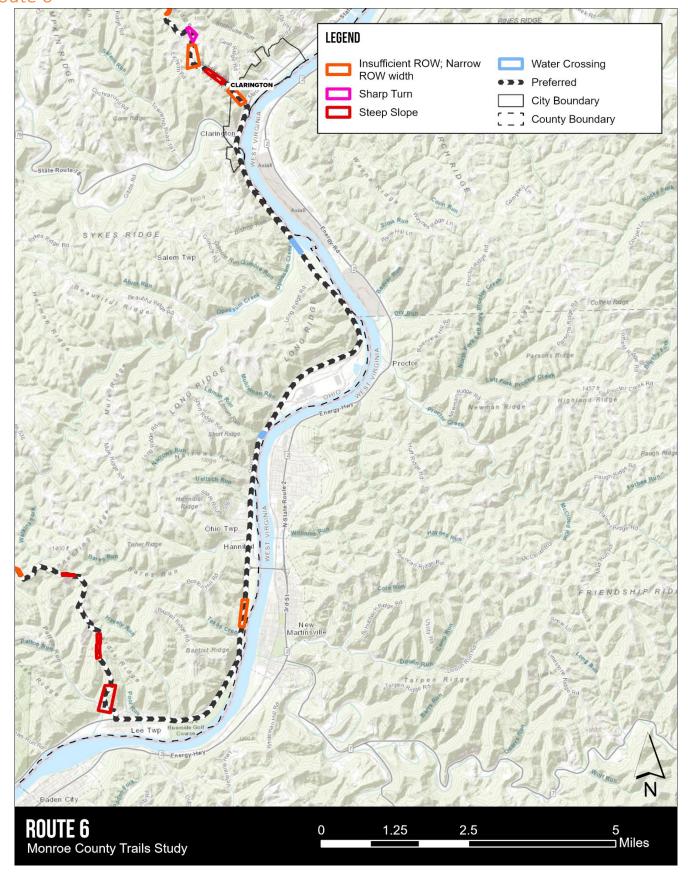


Caption: A detailed view of areas on Route 5 that may require further design treatment due to identified constraints. Source: ASI, ESRI.

Route 5 provides access to Route 4 to the west and travels along SR 255 to reach Sardis and the Ohio River to the southeast. A significant portion of Route 4 travels through Wayne National Forest, which has many scenic views and natural features. Several identified constraints included steep slopes, insufficient ROW, poor visibility, and sharp turns.



Route 6





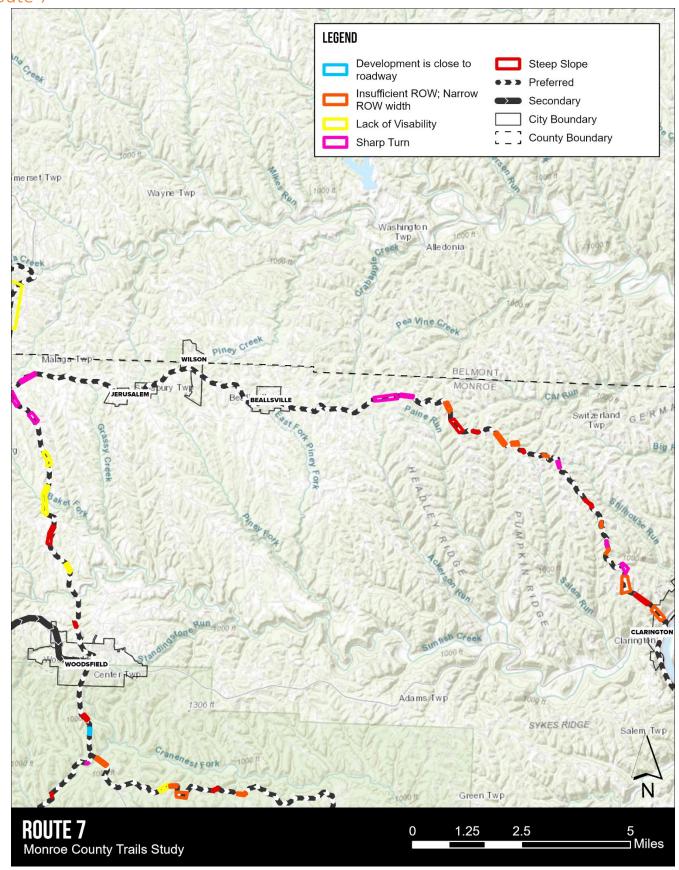
Caption: A detailed view of areas on Route 6 that may require further design treatment due to identified constraints. Source: ASI, ESRI.

Route 6 connects Route 5 in Sardis to Route 7 in Clarington, another population center of Monroe County. Route 6 travels along SR 7, which follows the Ohio River, providing many opportunities for scenic vistas. The map notes several large areas of constraints involving water crossings. Many streams travel through the county to empty into the Ohio River. Because of this, floodplains and bridges for trails would need to be evaluated in these segments.

Additionally, an active railroad also follows this route along the Ohio River. While railroads can provide ROW for trails, they can also pose safety concerns and limitations to trail design when ROW is unavailable. The active railroad must be considered when evaluating cost estimates or design treatments along this route. Additionally, Route 6 connects several of the county's parks and wildlife areas, including Consol Energy Powhatan Point Wildlife Agreement Area, Keidaish Point Park, and Clarington 254 Park.



Route 7





Caption: A detailed view of areas on Route 7 that may require further design treatment due to identified constraints. Source: ASI, ESRI.

Route 7 connects Route 6 in Clarington to Route 3. Route 7 travels along SR 556 through Beallsville, Wilson, and Jerusalem. A connection would also be provided to Beallsville Veterans Memorial Community Park. Constraints noted along this route included sharp turns, steep slopes, and areas of insufficient ROW. If Route 5 proves unfeasible due to constraints, Route 7 could be considered an alternative to connect the county's eastern portion to the rest of the system and vice versa.

Conclusion

Trails are not only great resources for recreation but also can provide non-vehicular options for travel. Monroe County is rich in parks and recreation assets, notably Wayne National Forest. The proposed conceptual routes (including the secondary route) would add approximately 110 miles of trail to the County's trail system. By implementing a county-wide trail system, the county can expand upon its existing parks and recreation assets by adding connections between them and connecting to the more extensive regional system via North Country Trail and Wayne National Forest. The Monroe County Trails Study provides conceptual routes that connect population centers with points of interest and existing parks and recreation facilities. Further analysis might need to be completed to determine exact trail alignment, construction, feasibility, and cost estimates.