



## FEASIBILITY STUDY

# Shippensburg–Chambersburg Cumberland Valley Rail Trail Extension



February 2025

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## EXECUTIVE SUMMARY

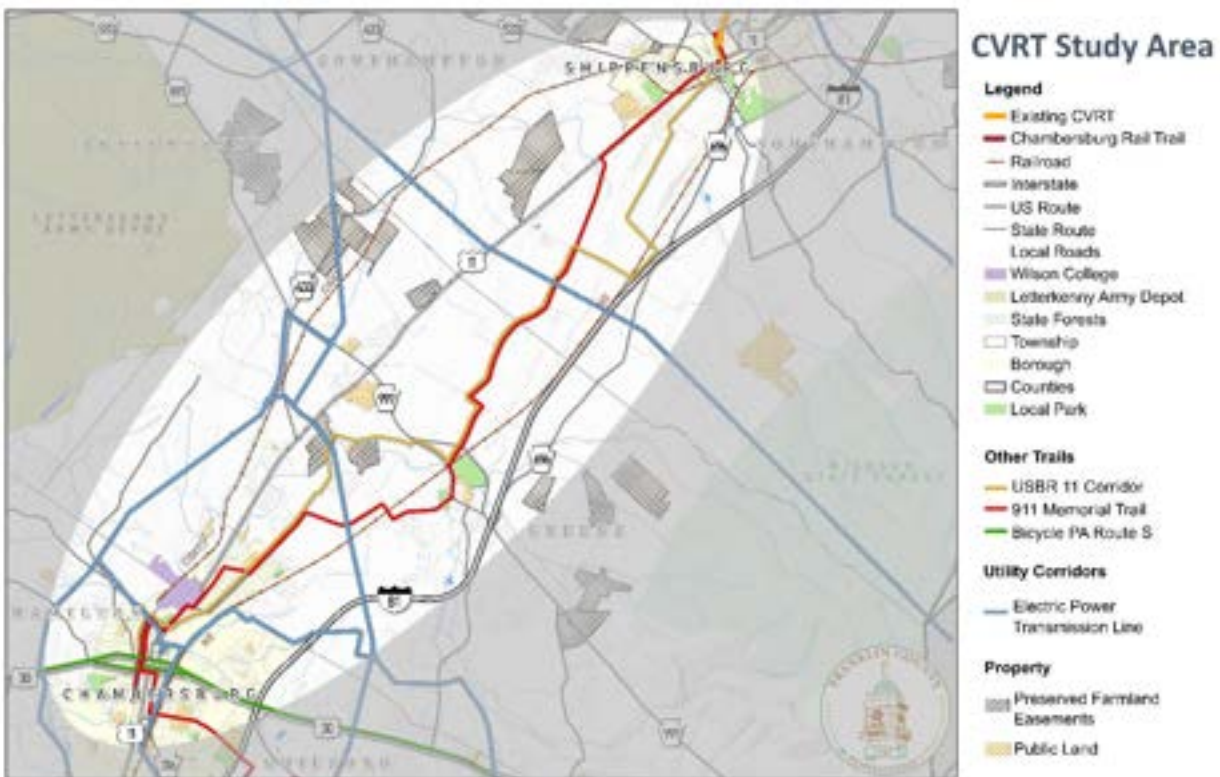
### Purpose

The Franklin County Metropolitan Planning Organization (FCMPO) undertook this project to determine (1) the feasibility of extending the existing Cumberland Valley Rail Trail (CVRT) from its current terminus on Orrstown Road south from Shippensburg to Chambersburg, and (2) the most desirable and feasible alignment for the potential CVRT trail extension.

Establishing a trail would not only benefit local residents but would also improve commuting options for faculty, staff, and students of Shippensburg University and Wilson College in Chambersburg. The area features several high-quality parks, and potential trail connections would enhance the livability of the surrounding communities. Additionally, there are existing trails nearby that would be improved by this new connection. However, there is currently no regional multi-use facility, leaving those who may not feel comfortable walking, running, or biking on public roadways with limited opportunities for recreation.

### Context

The project study area covers an approximately 11-mile stretch from Shippensburg to Chambersburg, PA, generally centered on US Route 11. Interstate 81 runs along the east side of the study area and an active CSX freight rail line runs along the west side.



## Public Input

Feedback collected during the study highlighted a significant need for improved and more interconnected active transportation facilities throughout the entire area, along with a strong demand for separated multi-use trails for recreational purposes.

The study gathered public input using several methods. The project team conducted more than a dozen stakeholder interviews with representatives of the railroad, local businesses, municipal staff, and local economic development organizations. Additionally, an online survey was conducted to assess the community's interest in a new trail and to determine public preferences for which features or amenities residents would like to see incorporated as part of any future trail project. The survey received more than 1,000 responses, demonstrating strong public interest in the initiative, and providing valuable insight on key considerations to be addressed through this study.

FCMPO hosted two public open houses. The first meeting aimed to share the study's initial findings and gather feedback from attendees regarding their overall support of a trail extension. The second meeting focused on gathering feedback on the alternative alignments. Approximately 20 people attended the first meeting, and roughly the same for the second. Feedback from participants included positive input on ideal trail destinations and important safety features. Additionally, the second meeting focused on proposed alternatives found through the study and draft recommendations. Attendees voiced feedback on these ideas and steps moving forward.

## Alternatives

Alignment alternatives were identified based on the following:

- Desktop analysis using GIS and Google Street View;
- Review of proposed trails within previous planning documents;
- Discussions at two public open house meetings that gathered input on potential alignments, destinations, and trail access points; and
- Interviews with various stakeholders.

Five potential alternatives were identified:

- Alternative 1 – Shared with CSX right-of-way (ROW)
- Alternative 2 – Parallel to CSX rail line on the west side of the right-of-way (railroad frontage)
- Alternative 3 - Parallel to CSX rail line on the east side of the right-of-way (railroad frontage)
- Alternative 4 – Hybrid, using a combination of CSX right-of-way frontage, utility easements, and Rowe Run Road
- Alternative 5 – Roadway-based alignment, using US Route 11

## Findings

The study determined that although there is a documented need for improved bicycle and pedestrian facilities along the roughly 11-mile-long study corridor in Franklin County, and the concept of extending the CVRT has public and stakeholder support, **developing a continuous multi-use trail between Shippensburg and Chambersburg is currently not feasible.**

The project would require coming to an agreement with CSX (which has no rail-with-trail policy), negotiating easement agreements with nearly 100 private landowners, or using US 11 as a roadway-

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based option, which would compromise user safety and comfort. Under any scenario, the trail would need to make numerous roadway crossings.

Based on the evaluation, the project team, stakeholders, and public see the railroad ROW (Alternative 1) as the preferred trail alignment. **Although it is not currently feasible, of the five alternatives, Alternative 1 would be the best choice in terms of safety, user experience, and property-owner negotiations.**

However, it would require either a policy change by CSX or a change in ownership of the rail corridor. Were CSX to sell the rail line to the Pennsylvania and Southern or another rail operator, the new owner may be willing to offer a “rail with trail” option with appropriate safeguards in place.

Even with such an agreement in place, the project would be a complex and expensive endeavor requiring a long-term financial commitment and widespread, sustained public support.

The study includes recommendations for the MPO and study-area municipalities to consider in long-range planning for an eventual CVRT extension.

## **INTRODUCTION**

### **Study Purpose**

The purpose of this project was to determine the feasibility of extending the Cumberland Valley Rail Trail (CVRT) from its current end point in Shippensburg to Chambersburg Borough, and to evaluate alternative alignments.

Currently, the CVRT stretches through part of Carlisle and also connects Newville to Shippensburg along the west side of US 11 in Cumberland and Franklin counties. The Franklin County Metropolitan Planning Organization (FCMPO) and Cumberland Valley Rail Trail Council (CVRTC) envision extending the multi-use trail to further serve users of all ages and abilities. An extension of the CVRT would improve recreation and transportation options for Franklin County visitors and residents. Trail enthusiasts can enjoy walking, jogging, bicycling, horseback riding, and other non-motorized recreational activities on the CVRT.

The CVRT is nationally significant because its 13-mile section is part of two major trails. The 9/11 National Memorial Trail spans 1,300 miles, linking key 9/11 memorials in New York City, Arlington, VA, and Shanksville, PA. Additionally, the CVRT is included as part of US Bicycle Route 11, which connects urban and rural areas through marked roads and trails.

The study examines the important factors related to a trail extension, such as potential barriers to the overall project and accommodations for potential users.

### **Study Area**

The FCMPO generally defined the project study area as being centered on US 11, between the two railroad corridors of Norfolk Southern and CSX, from Shippensburg to Chambersburg. The study area is located within Franklin County and includes portions of five townships and two boroughs (Figure 1). Approximately 40 percent of Franklin County’s population lies within 3 miles of the study area. Figure 2 shows the broader context and major transportation features within the study area.

Figure 1: Study Location



Figure 2: Study Area and Surrounding Context



## Study Methodology and Schedule

The study was conducted from April 2024 through February 2025. The general timeline of the project is summarized below.

### April – June 2024

- Kick-off Steering Committee meeting
- Evaluate existing conditions

### July – August 2024

- Facilitate Steering Committee Meeting #2
- Conduct stakeholder interviews

### September – November 2024

- Administer public survey
- Conduct Public Open House #1
- Facilitate Steering Committee Meeting #3



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### **December 2024 – January 2025**

- Develop conceptual designs and study recommendations
- Conduct Public Open House #2
- Facilitate Steering Committee Meeting #4
- Draft study report

### **February 2025**

- Finalize study report
- Approval of final study report by FCMPO
- Launch implementation



**EXISTING CONDITIONS**

**Regional Overview**

The study area encompasses seven municipalities in Franklin County, including the boroughs of Chambersburg and Shippensburg, as well as the townships of Greene, Guilford, Hamilton, Letterkenny, and Southampton.

Several major roadways traverse the study area, including I-81, US 11, and US 30. US 11 is a major north-south route serving the eastern United States, including Shippensburg and Chambersburg. Additionally, it extends northeast to Carlisle (approximately 20 miles from Shippensburg) and southwest through Chambersburg to Greencastle (also around 20 miles from Shippensburg). Interstate 81 runs parallel to and just east of US 11. US 30 runs east and west at the southern end of the study area in Chambersburg.

The study area is also served by a vast network of lower-order state and locally owned roadways.

There are three active railroads operating within the study area: Norfolk Southern, CSX, and the Pennsylvania and Southern Railroad, which branches off from CSX and serves the Letterkenny Army Depot.

The study corridor is approximately 11 miles long. The entire study area is just over 250 square miles and is home to nearly 100,000 people, or nearly two-thirds of Franklin County’s total population. Figure 3 provides more detail on the study area’s population density.

Figure 3: Study Area Demographics

Municipality	Population	Area (sq. mi.)	People/sq. mi.
<b>Chambersburg</b>	21,917	6.9	3,165
<b>Greene</b>	18,376	57.3	321
<b>Guilford</b>	14,693	51.2	287
<b>Hamilton</b>	11,374	35.5	320
<b>Letterkenny</b>	2,453	70.5	35
<b>Shippensburg</b>	11,099	5.8	1,906
<b>Southampton, Franklin</b>	8,878	38.3	232

Source: Census Bureau 2022 ACS 5-Year Estimates

**Communities**

The study corridor traverses through or near seven municipalities in Franklin County, including the two communities that would serve as the trail termini—Shippensburg and Chambersburg boroughs. Study area municipalities include:

- Chambersburg Borough
- Greene Township
- Guilford Township
- Hamilton Township
- Letterkenny Township
- Shippensburg Borough
- Southampton Township

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The study area includes several key locations, such as the hubs of Shippensburg, Chambersburg, and Green Village. Immediately outside of the study area, Orrstown and Scotland are minor hubs similar to Green Village.

Shippensburg and Chambersburg are important destinations, serving as population centers with major recreational facilities. Although Green Village has a smaller population, it remains a significant local destination with a need for connectivity to recreational assets.

### **History**

#### **Formation and Development:**

- CVRTC (Cumberland Valley Rails-to-Trails Council) was established in 1992. Over three decades, CVRTC transformed the former Cumberland Valley Railroad bed into a multi-use trail for all ages and abilities. The Cumberland Valley Rail Trail started as an 11-mile section from Shippensburg to Newville that was donated by Conrail in 1995. CVRTC purchased the corridor between Newville and Carlisle from PP&L Electric Utilities in 2011.

#### **Trail Expansion:**

- The first 10 miles opened between 2004 and 2006.
- Additional sections were completed, including bridges and underpasses.
- Partnerships with local groups led to the development of features such as the Shippensburg Station trailhead (Figure 4).

Figure 4: Shippensburg Station



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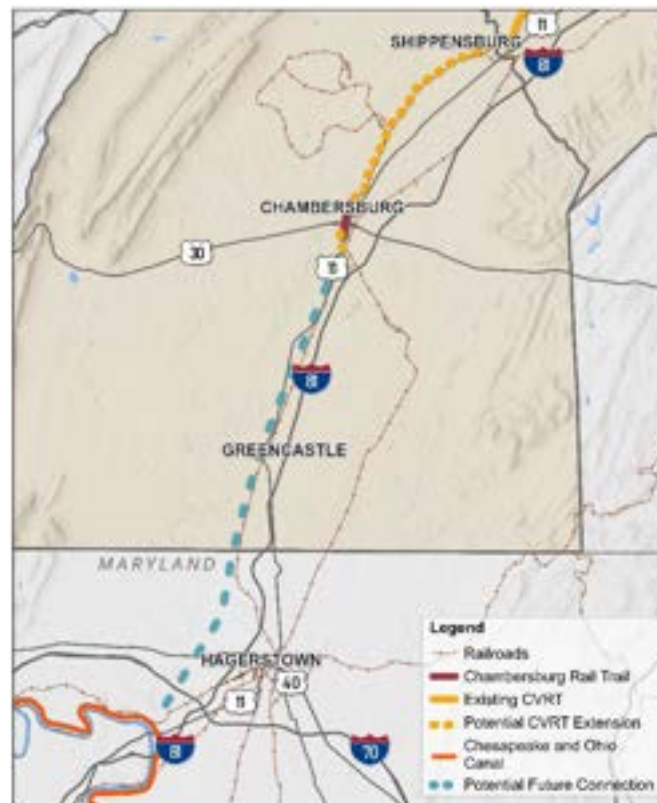
## Current Status:

- The trail extends approximately 13 miles from Greenhill Road near Newville to downtown Shippensburg.
- It accommodates walking, jogging, cycling, and horseback riding.
- Restrooms and parking facilities are available at key points along the trail.
- The trail surface is paved in Shippensburg and crushed stone for most of the remainder.

## Long-Term Plans:

- The proposed extension of the CVRT into Chambersburg that is the subject of this feasibility study, completed in 2025, has been a long-term goal of the Cumberland Valley Rail Trail Council (CVRTC). The extension would connect the trail from Orrstown Road in Shippensburg to Commerce Street in Chambersburg, bridging a gap of 10 miles. An economic impact study conducted for the proposed trail extension has outlined how the trail could boost local economies while also providing a continuous route for recreational activities.
- With the proposed extension, the trail would connect to other bicycle and pedestrian networks such as Bicycle PA Route S, the US Bicycle Route 11 corridor and the 9/11 Memorial Trail.
- Even longer-term, the CVRT is envisioned to connect to points beyond Franklin County, eventually terminating at Williamsport in neighboring Washington County, where it would connect to the Chesapeake and Ohio Canal (C&O Canal). The C&O trail is part of the even larger Great Allegheny Passage, a 150-mile off-road trail connecting Pittsburgh with Washington, D.C.

Figure 5: Envisioned C&O Canal Trail Connection





**Relevant Planning Documents**

The need for a high-quality recreational trail, along with improved bicycle and pedestrian pathways, is clear at both local and regional levels. FCMPO examined existing planning documents to determine how the proposed trail extension is mentioned, the level of support it receives in municipal and countywide planning documents, and how a trail extension would align with planning goals (Figure 6).

Figure 6: Trail Extension in Planning Documents

Plans Reviewed	Key Recommendations
<b>Chambersburg Borough Comprehensive Plan</b>	<ul style="list-style-type: none"> <li>• Prioritize pedestrian and bicycle connections to and around the downtown.</li> <li>• Enhance and expand waterside connections along the Conococheague Creek and Falling Spring Branch.</li> </ul>
<b>Greene Township Comprehensive Plan</b>	<ul style="list-style-type: none"> <li>• The Township will continue to promote the funding, the timely completion and the ongoing maintenance and operation of the Conococheague Trailway initiative.</li> <li>• CSX, Norfolk Southern, and the Franklin County General Authority all provide freight rail service within Greene Township. The upgrade of facilities and public safety issues at road crossings are important municipal concerns.</li> </ul>
<b>Shippensburg Borough Comprehensive Plan</b>	<ul style="list-style-type: none"> <li>• Support planning of trails to link historic sites and continue planning for greenways.</li> <li>• Consider a plan for the provision of benches along pathway and trail systems.</li> <li>• Promote trail and greenway planning and construction.</li> </ul>
<b>Southampton, (Cumberland), Comprehensive Plan</b>	<ul style="list-style-type: none"> <li>• Provide a safe and well-maintained multimodal transportation system for the movement of people and goods throughout the township by providing for a system of walkways/bikeways interconnecting township neighborhoods with services, recreation facilities, and natural areas.</li> <li>• Support the Cumberland County Rail-Trail’s initiatives and programs.</li> </ul>
<b>Southampton, (Franklin) Comprehensive Plan</b>	<ul style="list-style-type: none"> <li>• Recruit partners to implement the plan and incentivize realistic, citizen-focused, relevant efforts to grow the township's goals.</li> </ul>
<b>Borough of Chambersburg Pedestrian and Bicycle Improvements Plan</b>	<ul style="list-style-type: none"> <li>• Includes objectives for policy, pedestrian, bicycle, and public education. Identifies multiple potential trail connections and projects that directly line up with the CVRT recommended alignment.</li> </ul>
<b>CVRT Extension Economic Impact Assessment - Final Report</b>	<ul style="list-style-type: none"> <li>• The trail extension has great potential to create a positive impact for over half of the Franklin County population by providing expanded exercise and outdoor recreation opportunities in areas of high need for trail accessibility.</li> <li>• The economic benefits are estimated to be significant, with a median economic impact of \$753,410 for the 10-mile proposed extension in</li> </ul>



Plans Reviewed	Key Recommendations
	Franklin County, and a median estimate of \$1,958,866 for the whole 26-mile length in Franklin and Cumberland counties.
<b>Franklin County Comprehensive Plan (Imagine Franklin 2035)</b>	<ul style="list-style-type: none"> <li>• Provide incentives for communities to construct trails and bikeways connecting community assets, schools, parks.</li> </ul>
<b>Franklin County Greenways and Open Space Plan</b>	<ul style="list-style-type: none"> <li>• Present recreational opportunities for county residents through preservation and connection of existing open spaces.</li> </ul>
<b>Franklin County Long-Range Transportation Plan (LRTP)</b>	<ul style="list-style-type: none"> <li>• Support connections and access to tourism destinations, including parks, forests, historic/cultural attractions, and trails.</li> <li>• Improve signage and resources to better direct visitors to tourism destinations, parks/forests/trails, etc.</li> </ul>
<b>US Bicycle Route 11 System Study &amp; Route Evaluation</b>	<ul style="list-style-type: none"> <li>• Through stakeholder interviews and discussions with Franklin County staff, there is a desire to relocate the Shippensburg spur alignment to the eventual Cumberland Valley Rail Trail expansion, which would provide cyclists with a more direct, scenic, and safer route to the Shippensburg Rail Trail.</li> </ul>

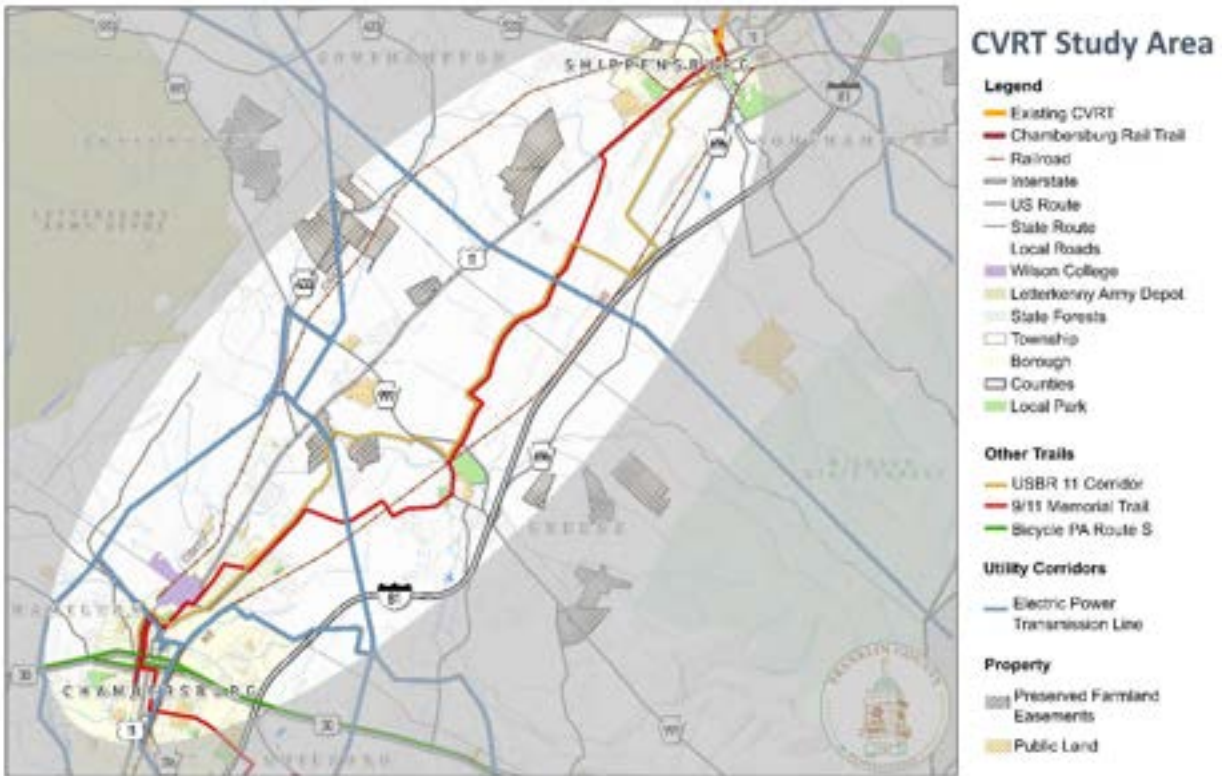
**Inventory**

A range of natural and man-made features significantly influence the feasibility of trail development and the type of trail facility that can be established within the study area. FCMPO used geographic information systems (GIS) to analyze critical features related to trail development (Figure 7). This section provides a general overview of these features and their impact on the development of multi-use trails.

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Figure 7: Study Area Features



## Topography

The topography between Shippensburg and Chambersburg is characterized by a mix of flat areas and gentle hills, reflecting the physiography of a region squarely within Pennsylvania’s Ridge and Valley Province of the Appalachian Highlands. The local terrain is not exceptionally rugged, making it accessible and navigable for bicyclists and pedestrians. Generations earlier, the area was surveyed by the railroad industry, which took advantage of the area’s favorable terrain for establishing rights-of-way through the Cumberland Valley.

## Hydrology

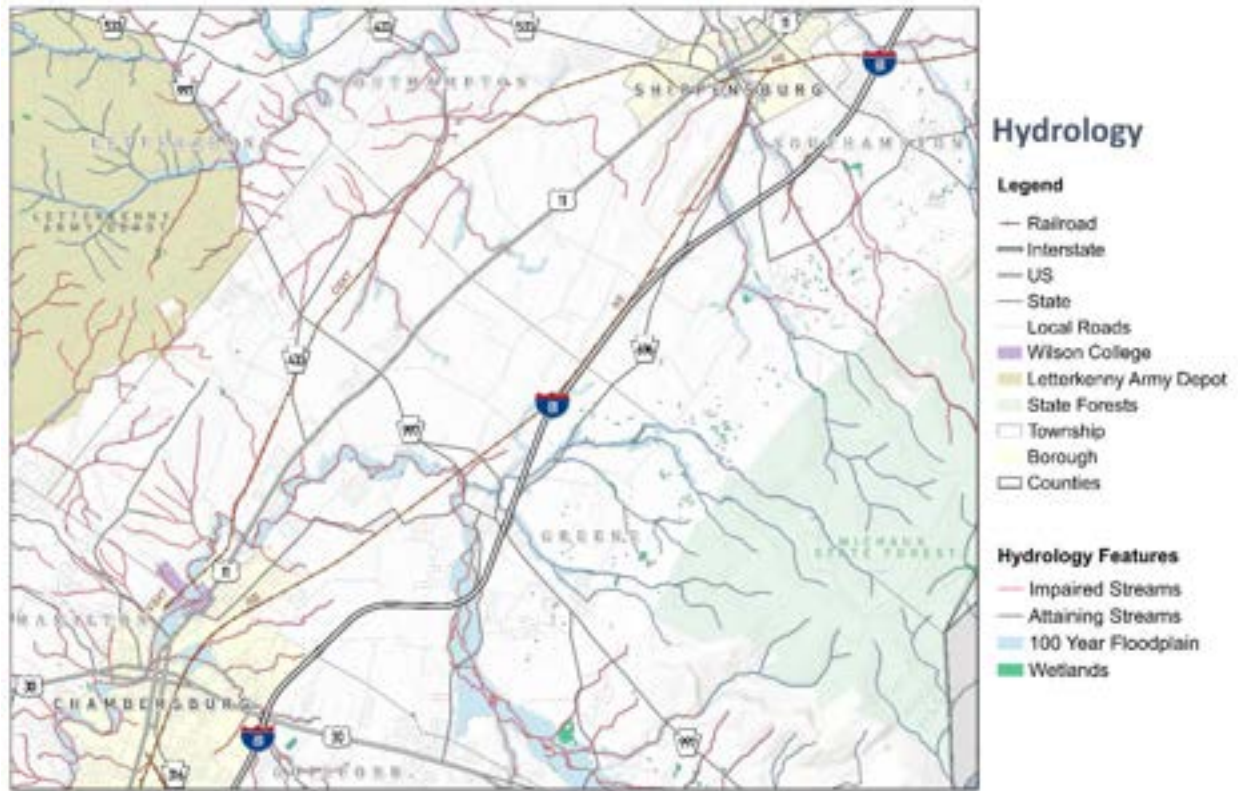
Stream-side trails make for a scenic trail experience, however, developing along a stream or its adjacent floodplain and/or wetlands can also present additional permitting challenges and can reduce stream health. Stream crossings require bridges, which increase project development costs. The main branches of the study area’s waterways include the Falling Spring Branch, Conococheague Creek, and Rowe Run. These waterways through the study area and most of their tributaries are classified as “impaired.”

Flood zones in the study area include Zone A and Zone AE. The proposed trail alignment intersects with or lies adjacent to these flood zones. Figure 8 displays water features such as impaired and attaining streams, 100-year floodplains, and wetlands.

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Figure 8: Hydrology Features



## Roadways

Roadways are important to assess when considering linear corridors and overall trail access. The width of the right-of-way, gradient, vehicular speeds, and traffic volume all change the way roadways are used by all modes, including vehicles, bicyclists, and pedestrians. Depending on the roadway, it may serve as a necessary path or just a connection to a shared-use off-road trail.

The primary roadway within the study area is US 11, a Principal Arterial and major north-south route serving the eastern United States, including Shippensburg and Chambersburg. It is a roadway of strategic importance both for national defense and emergency response. US 11 has daily traffic volumes ranging from 12,300 in Shippensburg at the intersection with Morris Street (PA 533), and 8,000 through Chambersburg at the US 30 intersection. Truck traffic represents approximately 6 percent of all traffic on US 11. The posted speed limits in the study area range from 25 to 55 miles per hour. The segment with a speed limit of 25 miles per hour intersects Morris Street (PA 533) and experiences the highest traffic volumes on US 11 in the study corridor. That section is 50 feet wide—one of the widest along the roadway. The highest speed limit (55 miles per hour) is on Molly Pitcher Highway, running from the outskirts of Shippensburg to just north of Wagner Road, passing through Mount Rock. As part of the federally designated National Highway System (NHS), the road is designed to handle high traffic volumes and higher speed limits, as it facilitates longer-distance trips.

Other state-owned roadways of note within the study area include PA 433, which begins in Orrstown Borough and intersects PA 533. On the southern end of the study area, PA 433 passes through Green Village and connects to US 11. Any north-south trail alignment would intersect with east-west routes.



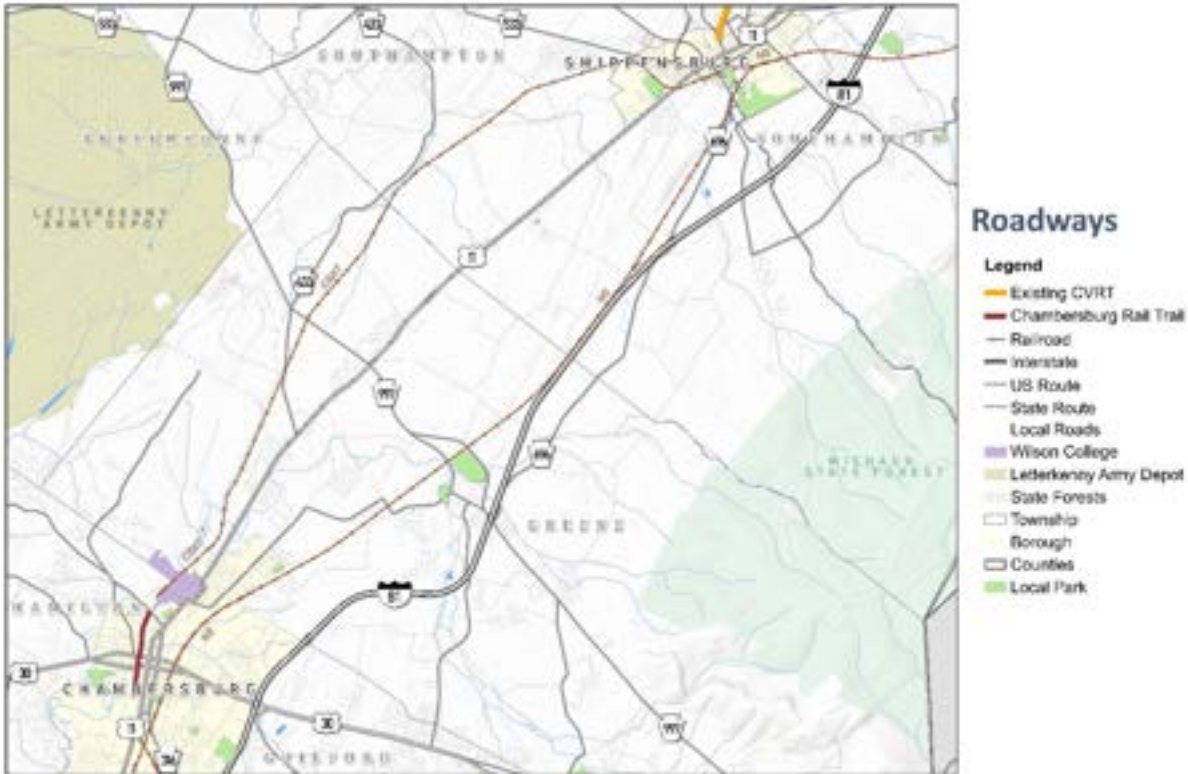
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These include several state-owned roads, including PA 433 in the study area. Any trail intersections with busy roadways would require safety countermeasures.

The study area has excellent road connectivity (Figure 9), and US 11 and I-81 would provide strategic access to the trail for residents and visitors.

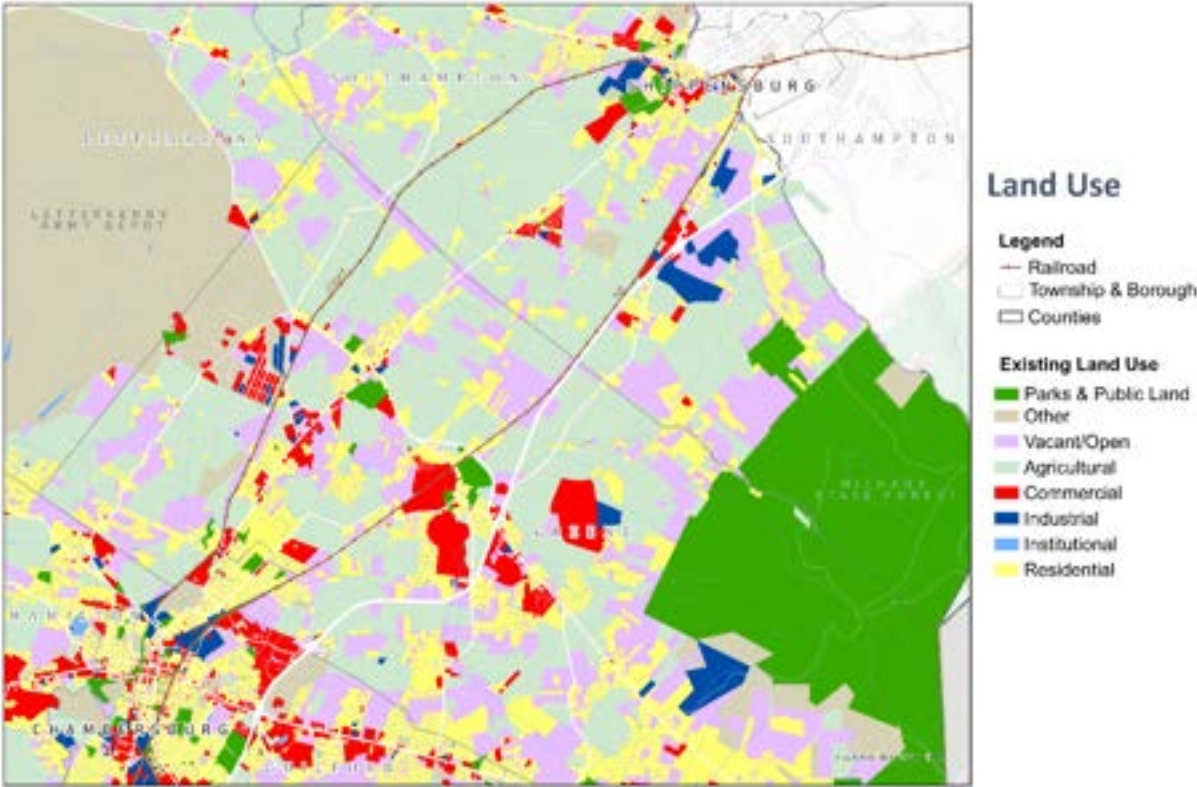
Figure 9: Study Area Roadway Network



### Land Use

Sensitive natural areas and water features serve as both assets and constraints in trail development. While they have the potential to be focal points within a trail system, their integration with trail development may cause adverse effects. Most of the study area is comprised of farmland and rural properties, with some limited industrial and suburban uses. Substantial portions of the study corridor remain underdeveloped. Figure 10 shows the land use within the study area.

Figure 10: Study Area Land Use



**Property Ownership**

Acquiring easements presents a significant challenge to trail development. This feasibility study examined the number and types of properties, both publicly and privately owned, that a hypothetical trail alignment would impact. Identifying a route that affects the fewest number of properties minimizes the number of easements required and the number of individuals impacted by any trail construction—thus increasing the feasibility of trail development.

Public agencies, land trusts, and utility companies are generally more receptive to granting trail access on their property than are private landowners. This study identified the locations of properties owned by various public entities, such as municipal, county, state, and federal government. These properties include public parks, government offices, and utilities operated by the government, such as sewer and water treatment plants. Land with easements, such as preserved farmland easements, was also identified.

Within the study area, there are many public and preserved lands (Figure 11) but none along potential alignments of any of the alternatives considered.

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Figure 11: Public and Private Property



## Existing and Planned Trails

Systematic development of a comprehensive off-road trail network is highly beneficial for both visitors and residents. Although there are two bicycle/pedestrian networks connecting Shippensburg and Chambersburg, they are on-road connections designed to serve different purposes and user groups. The development of an off-road trail would facilitate a connection to Bicycle PA Route S (along US 30), the US Bicycle Route 11 corridor, and the 9/11 Memorial Trail. Bicycle PA Route S also facilitates a connection to the Appalachian Trail and Michaux State Forest trails. Each link of the county’s bicycle/pedestrian network provides enhanced connectivity and offers a mix of experiences for various types of users.

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Figure 12: Existing Trails



## US Bicycle Route 11

The US Bicycle Route 11 report was finalized in November 2022 with a focus on addressing the specific requirements of US Bicycle Route users. The US Bicycle Route system has been designed to cater to long-distance, or “touring,” cyclists. These routes are on the road, therefore the user demographic generally has a higher level of confidence and riding proficiency compared to the general public.

### US Bicycle Route 11 Roadway Segments:

- Fort Street (existing CVRT trailhead)
- PA 696 (Earl Street)
- Orange Street
- Possum Hollow Rd
- Mount Rock Road
- Rice Road
- Pine Stump Road
- Byers Road
- Mickey Inn Road
- Scotland Avenue
- Broad Street
- US 11

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- Commerce Street
- Wolf Avenue
- West Commerce Street
- Chambersburg Rail Trail

### *Chambersburg Trail*

This 1.6-mile paved urban trail is a linear park through the center of Chambersburg. It offers opportunities for walking, jogging, biking, dog walking, skateboarding, and rollerblading. The trail was built in the early-2000s after the rail line was abandoned by CSX in the late 1990s. It is considered a state-of-the-art asphalt trail, lined with benches, trees, plaques, strips of grass, and landscaping.

The trail connects to a footbridge across the Conococheague Creek, providing access to Chambers Fort Park. The park is a revitalized area on the site of Fort Chambers, which now features a central plaza, veterans and civic memorials, and monuments. The footbridge also provides access to small shops and the government center located within the central business district.

The Chambersburg Trail has been enhanced with wayfinding and safety signage, as well as pedestrian crossing buttons that activate flashing beacons to alert vehicular traffic to the presence of pedestrians.

### *9/11 National Memorial Trail*

The September 11th National Memorial Trail (9/11 Trail) connects the three national memorials dedicated to the events of September 11, 2001, located in New York City; Washington, D.C.; and Shanksville, Pennsylvania (Figure 13). The network aims to establish a series of off-road multi-use trails, greenways, scenic roads, and byways, serving as a tribute to those who lost their lives in the 9/11 terrorist attacks. The project study area includes a portion of the 9/11 Trail that uses on-road segments.

#### **9/11 Trail Roadway Segments:**

- US Route 11 and PA 696 (Earl Street)
- Rice Road
- Pine Stump Road
- Byers Road
- Scotland Main Street
- Scotland Road
- Roland Avenue
- Edgar Avenue
- US Route 11 (Edgar Avenue/Philadelphia Avenue)
- Commerce Street
- Chambersburg Rail Trail
- US Route 30 (Queen Street)
- US Route 11 (Main Street)
- McKinley Street (west out of Chambersburg Borough)

The 9/11 Trail through Franklin County could potentially be moved to a future extension of the Cumberland Valley Rail Trail between Shippensburg and Chambersburg. Such an alignment would support the 9/11 Trail vision of creating an inviting off-road trail experience for all types of users.

Figure 13: 9/11 National Memorial Trail



### Key Destinations and Points of Interest

Trails that connect people to the places they want to go can attract visitors to the region, serve as a transportation route, and enhance the trail user experience. There are a variety of destinations and points of interest in the study area, most notably downtown Chambersburg and Shippensburg, Shippensburg University, and Wilson College.

### *Schools*

Wilson College has a 300-acre campus in the northern portion of Chambersburg Borough along US 11. Recognized as a historic district on the National Register of Historic Places, the campus includes a portion of Conococheague Creek. The proposed trail extension could link Wilson College and Shippensburg University, as well as various other destinations and establishments within the borough’s commercial district. The trail’s potential to enable students to access school, the park, or downtown without riding on major highways enhances its value.

### *Airport*

The Franklin County Regional Airport is a general aviation airport located in Greene Township, about three miles northeast of Chambersburg. It supports various general aviation operations, including recreational flying, agricultural spraying, corporate and business flying, and aerial inspections. The airport is also home to the Chambersburg Skydiving Center—the only full-service skydiving center in South Central Pennsylvania—which operates during the summer. With its wide range of facilities, prime location, and diverse general aviation activities, the airport is a vital part of the southern Pennsylvania region. Depending on the eventual trail alignment, a possibility exists to link the trail to airport property.

### *Letterkenny Army Depot (LEAD)*

Originally established as an ammunition depot, today Letterkenny Army Depot (LEAD) repairs and modernizes air and missile defense and precision fires systems to enable multi-domain operations. LEAD

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is headquartered in Chambersburg on an 18,000-acre site. As the second-largest employer in Franklin County, with over 1,600 employees, the depot fuels infuses more than \$250 million per year into the region both through payroll and contracts.

### *Penn Hall Menno Haven*

Menno Haven is the area's largest retirement community, situated on more than 200 acres in Chambersburg Borough just north of Wilson College. Additionally, this location is affiliated with the Chambers Pointe community along US 11.

Menno Haven offers all levels of care, including independent living, personal care, and skilled nursing. Menno Haven's campus directly borders the railroad right-of-way—a potential CVRT alignment—and therefore could be a traffic generator for the trail.

## **PUBLIC AND STAKEHOLDER ENGAGEMENT**

### **Stakeholder Interviews**

FCMPO engaged a wide range of stakeholders as part of the study process, including representatives of the following organizations:

- Chambersburg Borough
- Chambersburg Chamber of Commerce
- Cumberland Valley Rail Trail Council
- Franklin County Area Development Corporation (FCADC)
- Franklin County Cyclists
- Greene Township
- Healthy Franklin County
- Keystone Health
- Letterkenny Industrial Development Authority
- Menno Haven
- PA & Southern Railroad
- PA Department of Conservation and Natural Resources (DCNR)
- Pennsylvania Department of Transportation (PennDOT)
- Shippensburg Borough
- Shippensburg Chamber of Commerce
- Southampton Township
- Trail user groups
- Wilson College

The majority of interviewees expressed their support for a trail connection between Shippensburg and Chambersburg. Stakeholders were asked to articulate potential project opportunities, benefits of extending the trail, and any concerns about the project. The following summarizes their input.

### **Trail Users**

Understanding the needs of the end user of a proposed trail system is a vital part of a feasibility study. As with any trail project, there is an assumption that those who would benefit from and use the trail would be primarily walkers, joggers, and bicyclists.

### **Trail Uses**

Stakeholders were asked to provide feedback on desired trail uses. Responses included walking, jogging, running, biking, commuting, running errands, and horseback riding. Stakeholders did not identify any type of motorized transportation that is consistent with the northern extent of the trail, where motorized modes are prohibited. The desired uses identified by the stakeholders are consistent with current usage of the Cumberland Valley Rail Trail heading north from Shippensburg. The responses indicated that those same uses would be desired on an extension into Franklin County. Offering multiple mobility options on the trail would expand the potential user base and increase the trail's significance to the community.

### **Perception of Franklin County**

When asked about how they perceive Franklin County, responses were generally positive. The stakeholders acknowledged that the county has experienced steady population growth, especially being



situated in proximity to major metropolitan areas such as Philadelphia, Baltimore, and Washington, D.C. The area's small-town feel and agrarian community contribute to its rural character, which has been enhanced in large part by a successful Agricultural Preservation Program. Another aspect of the county's attractiveness as a place to live is the presence of three major higher-education establishments: Shippensburg University, Wilson College, and Penn State – Mont Alto. Another draw for the county, as discussed by stakeholders, is that it offers economic opportunities for those seeking employment in a variety of industry sectors.

### Challenges and Concerns

Inherent in every trail planning project are challenges and obstacles that must be acknowledged and addressed if the effort is to be successful. Stakeholders provided their perspectives on potential challenges. While stakeholders acknowledged that different personalities and opinions can be a challenge to a successful trail project, there was a high degree of consensus on several themes.

The first theme of concern was **safety and security**. Stakeholders shared concern for those using the trail and specifically stated that cyclists need to be aware and cautious of other users as well as vehicular traffic at crossings. Stakeholders recommended that the project team and eventual design incorporate safe design, particularly when it comes to trail crossings at roadways and railroads. During discussions about security, the issue of crime emerged. Countermeasures such as improved lighting and other strategies can help reduce this risk.

A second theme, and one that transcends regions and areas, is that of **financial support** for a successful project. Stakeholders noted that community support—not only agreement with the project but financial support—would be necessary for a successful extension of the trail. Stakeholders shared concern over the level of interest by local people and organizations in making donations to complete and maintain the trail. It was noted that the communities throughout the study area would need to sustain the trail extension initiative as a prominent goal for implementation.

Another recurring theme was **trail location and property ownership**. Stakeholders shared concern over the willingness of the railroad (CSX) to allow a trail on its property. Even if CSX were to allow trail development by means of a temporary easement, the railroad could rescind access at some future point. The ideal arrangement would be outright ownership of the rail trail corridor by CVRTC, a municipality, or other parties. However, it was noted that CSX would likely resist selling the property. Beyond CSX, acquiring right-of-way would generally be a challenge for the trail extension initiative—stakeholders noted that there are still gaps in the existing trail from Newville to Carlisle where negotiations with property owners are still ongoing.

As related to the **trail design** itself, the stakeholders noted that the current trail north of Shippensburg is not paved the entire way and that the crushed stone should be more compacted. US 11 was discussed as a possible trail alternative that may or may not mitigate design issues as related to maintenance, safety, right-of-way acquisition, utilities, and ownership responsibility. Though not directly related to

physical design, stakeholders noted that users may desire an alignment that offers sites, destinations and amenities as similar to other portions of the CVRT. See further discussion in the Amenities section.

### **Key Alignment Connections and Opportunities**

Part of planning a trail system is to understand possible connections and use opportunities as related to other proposed or existing trails and desired destinations. Through the stakeholder engagement, Shippensburg Area Senior High School and the Thaddeus Stevens Elementary School were identified as potential destinations for trail users. Co-aligning with the 9/11 Memorial Trail was also desired, which would boost the national recognition of the proposed trail. Other key opportunities stakeholders identified were to consider the trail as a possible commuting facility to Letterkenny Army Depot and to connect with other recreational uses in the area. Stakeholders also commented that they would like to see the proposed trail be developed as a multi-use facility, serving pedestrians, bicyclists, and equestrian users. A concern raised was to keep the trail separate from the active rail line if that alternative is ultimately selected.

### **Suggested Amenities**

In addition to the trail facility itself, trail users often seek or expect other features such as parking, restrooms, and signage. The stakeholders identified the following amenities as being the most desirable along the proposed corridor:

#### Health and Wellness

- Restrooms
- Hydration stations
- Access to a fitness circuit
- Picnic areas

#### Connectivity

- Parking
- Connections to parks and spur trails
- Access to local businesses such as bike shops, retail, and food / ice cream
- Water access – non-motorized boat launch
- Utility task vehicle (UTV) / golf cart rides

#### Safety and Security

- Fencing
- Signage (wayfinding, mile markers)

#### Cultural

- Public Art

- Signage (history and information – bilingual)

**Vision Statements**

A strong and concise vision statement is important for any project, initiative, organization, or entity. It guides how decisions are made and what path is followed to ensure that goals are achieved and the effort is successful. For this study, stakeholders were asked to articulate a Vision Statement in their own words (Figure 14).

Figure 14: Stakeholder Suggested Vision Statements



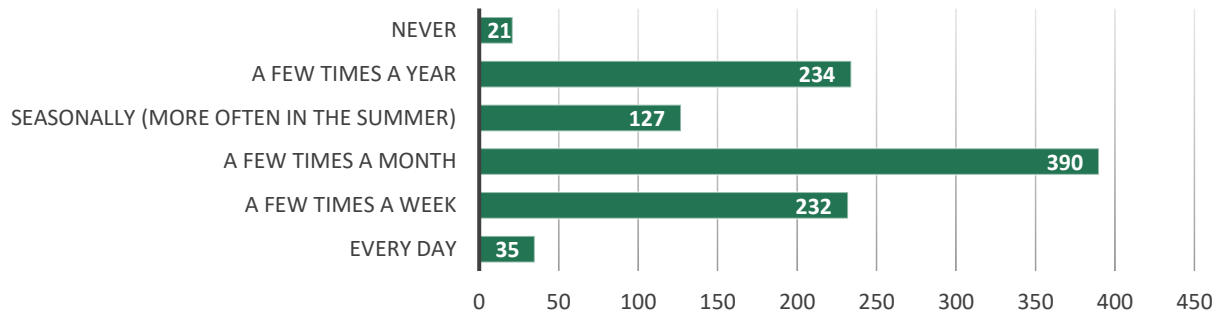
**Survey Summary**

The Franklin County MPO conducted an online public survey from early September to mid-October 2024. The survey received more than 1,000 responses. Nearly 50 percent of the responses came from individuals aged 35 to 54. Of the responses, one-quarter stated they live within Chambersburg Borough. That mirrors the borough’s actual population ratio within the study area, at 23 percent.

The survey results show a high level of interest in extending the trail; 95 percent of the responses express a desire for a multi-use trail connecting Shippensburg and Chambersburg. Community support and involvement would be crucial if a trail alternative were to advance into the design and easement acquisition phase. Community involvement would help ensure that any future trail project meets the needs and expectations of the area’s residents.

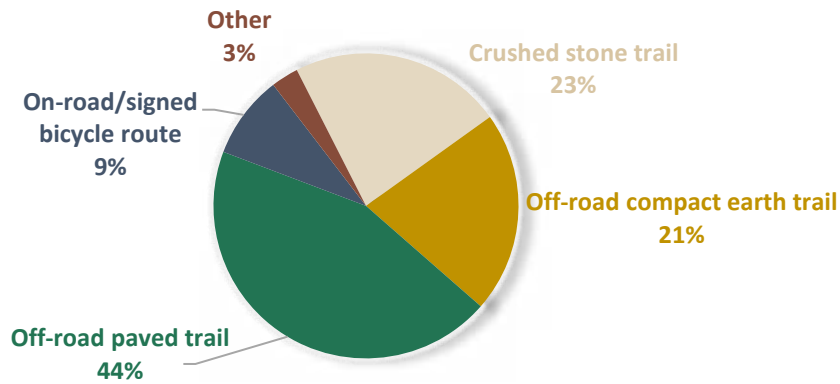
The level of interest in the trail extension and the overall usage of the trail are important indicators of its significance. A majority of people indicated that they would use the trail a few times per month or more, with more than 25 percent stating that they would use it at least a few times per week (Figure 15).

Figure 15: Potential Trail Use Frequency



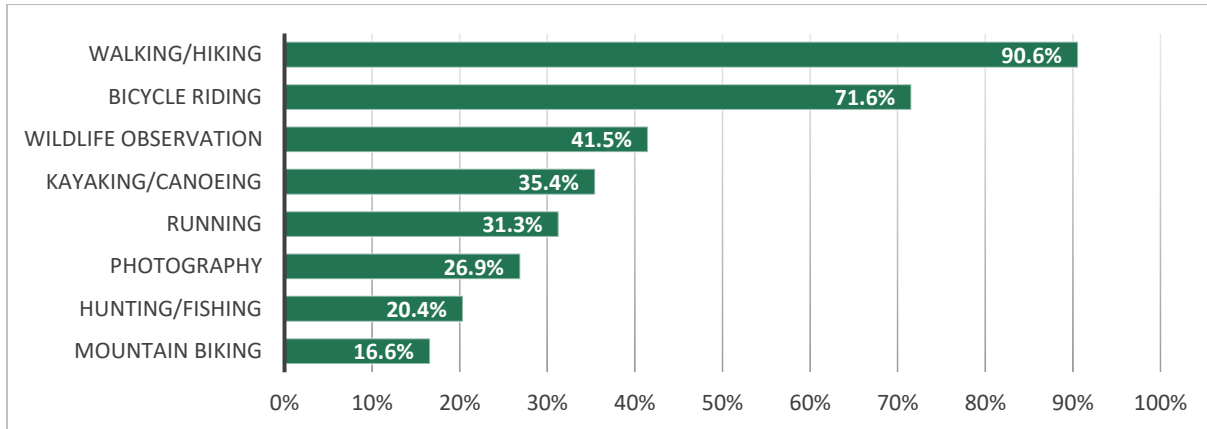
The current CVRT surface is mostly crushed limestone, though sections in Shippensburg and Newville are asphalt. Responses show that stakeholders prefer an off-road trail whether it is paved, compacted soil, or crushed stone (Figure 16). Only 9 percent of responses noted that they would prefer an on-road trail. This could be due to a desire for certain commuting paths, destinations, or types of use on trail.

Figure 16: Desired Surface



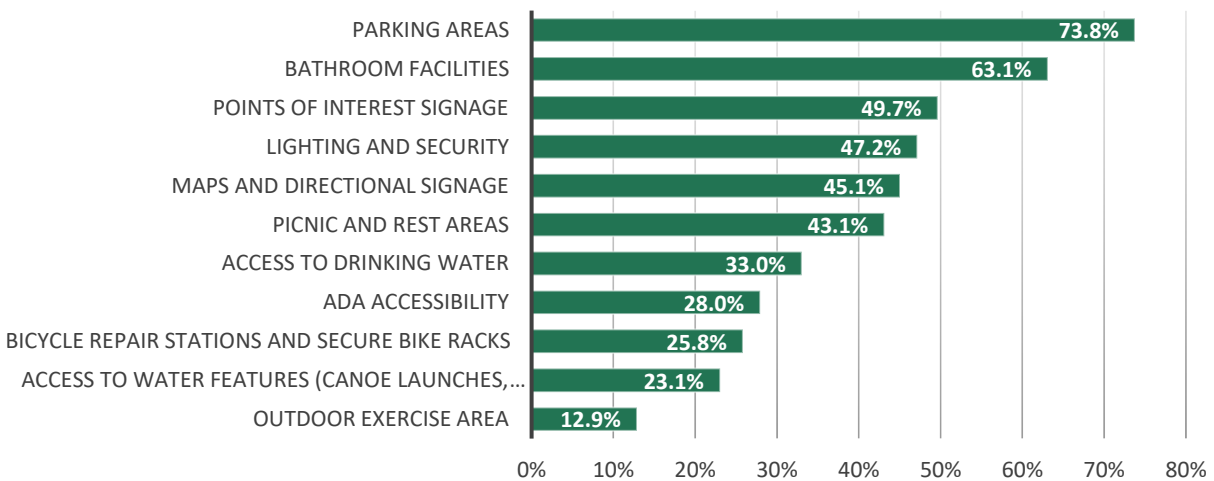
Survey participants were also asked about their types of outdoor activities (Figure 17). Walking and hiking topped the list, with 91 percent of respondents participating in these activities. Bicycle riding was the next most common, with 72 percent of participants, followed by wildlife observation, which was noted by 42 percent of respondents.

Figure 17: Frequently Engaged-in Outdoor Activities



The survey asked respondents to identify the most important features of a trail network to enhance its value (Figure 18). The top priority for respondents was parking areas, highlighting a strong preference for accessible and ample parking facilities, including space for horse trailers. Bathroom facilities were also noted as crucial, enhancing the overall user experience, especially for families and individuals planning longer visits. The third most important amenity identified was points-of-interest signage, such as historical markers and signs noting natural features. Such signage helps both regular users and tourists navigate the trail and discover points of interest.

Figure 18: Important Features



Respondents were invited to provide any other feedback on the trail initiative. The summarized comments follow:

- Security Concerns:** There are fears that extending the trail could lead to increased drug use and illegal activity. Ensuring safety for trail users and adjoining properties through regular patrols and security measures is crucial.

## *Cumberland Valley Rail Trail (CVRT) Extension Feasibility Study*



- **Potential Benefits:** The extension could be a fantastic venue for families and a great asset for the community, promoting health, fitness, and the local economy.
- **Trail Connectivity:** Many support connecting the current Chambersburg Borough rail trail to the north through Wilson College and ideally to Shippensburg. Extending the trail south and connecting to other trails would also be beneficial.
- **Trail Features:** Suggestions include having the trail pass through parks like Greene Township Park, and ensuring it is conducive to running and biking. The trail should be surrounded by nature with trees for temperature management and scenic views.
- **Convenience:** While the trail should be convenient to places like stores, restaurants, and bathrooms, these amenities should be slightly off the path to maintain the natural setting.
- **Safety Measures:** Conduct safety analyses of road crossings and improve signage.
- **Community Involvement:** There is a desire for community involvement in the project, with some willing to help with the trail's completion.
- **Additional Features:** Ideas include connecting to parks, providing access to ice cream shops and food, and ensuring the trail is suitable for horseback riding with adequate parking for horse trailers.
- **Economic Impact:** The trail extension is seen as a way to bring visitors to the area, boosting local revenue.
- **Personal Use:** Many residents express a desire to use the trail for commuting, running, biking, and family activities, highlighting the need for a safe and accessible path.

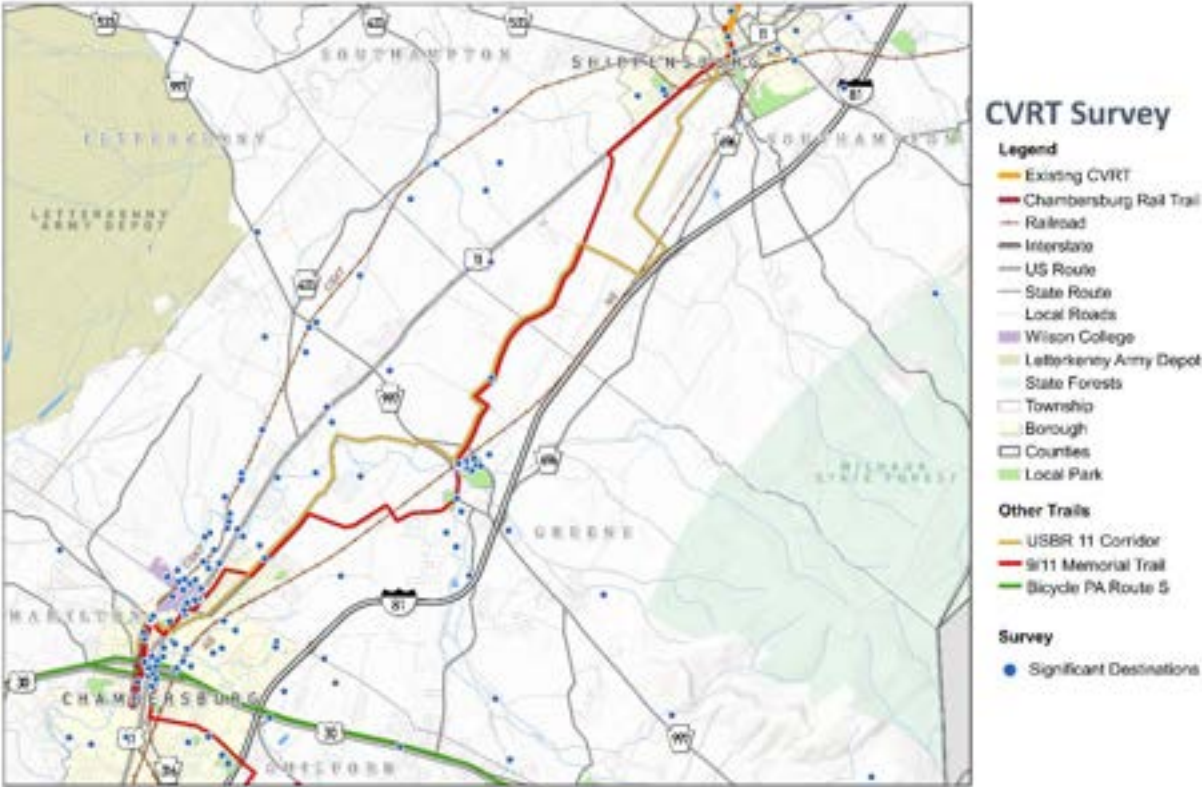
Overall, the feedback emphasizes the importance of safety, connectivity, and maintaining a natural environment while providing convenient access to amenities.

Survey respondents were also given the opportunity to identify locations on an interactive online map that would be significant area destinations that could be served by a trail extension. These are mapped and shown on Figure 19.

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Figure 19: Total Mapped Survey Points



## Public Open House

The first of two public open houses was held in the Franklin County Offices (272 N 2nd St, Chambersburg, PA 17201) on October 2, 2024, from 5:00 p.m. to 6:00 p.m. Approximately 20 people attended the meeting.

The purpose of the meeting was to engage study-area residents and businesses to solicit their insights and preferences regarding a possible extension of the Cumberland Valley Rail Trail.

The event included an overview of considerations, a study overview including an estimated schedule, a summary of stakeholder engagement, and preliminary survey results. Attendees were invited to mark up a map with any concerns they had about the project, consult with MPO staff, and take the online survey.

The second “open house” was held online on January 7, 2025, from 5:30 to 6:30 p.m. Similarly to the first meeting, the FC MPO had nearly 20 people log online to the meeting. The meeting began with an overview of the study area, followed by a discussion of the five proposed alternatives, draft recommendations, and the timeline for project completion. The latter half of the meeting was allocated for public comments and inquiries pertaining to the potential trail. Participants expressed a desire for a continuous connection between Carlisle and Chambersburg, voiced concerns regarding the trail's grade and width, and raised questions about the frequency of CSX railroad operations.

## ALTERNATIVE EVALUATIONS

### Methodology

The study goal was to determine whether a feasible alignment exists to extend the current Cumberland Valley Rail Trail (CVRT) from Shippensburg Borough to Chambersburg Borough. Alignment alternatives were identified using various sources and tools below:

- Desktop analysis using GIS and Google Street View.
- Review of proposed trails within previous planning documents.
- Discussions at two public open house meetings that gathered input on potential alignments, destinations, and trail access points.
- Interviews with various stakeholders.

Five alternatives were identified:

- Alternative 1 – Share with CSX right-of-way (baseline)
- Alternative 2 – Parallel to CSX (west)
- Alternative 3 – Parallel to CSX (east)
- Alternative 4 – Hybrid option, including a combination of CSX right-of-way frontage, utility easements, and Rowe Run Road
- Alternative 5 – US 11

The alternatives are not officially associated with a precise alignment or roadway. Alternatives 2 and 3 would require permission from numerous property owners. Additionally, the alternatives could theoretically use local roads to get from the Orrstown Road trailhead to the endpoint in Chambersburg. Estimates are used for comparing features of each alternative. For example, the number of parcels associated with each alternative could vary depending on precise alignment.

Alignment options developed through the planning process were evaluated and compared using the following criteria:

1. Private and Public Property Impacts
2. Safety
3. User Experience
4. Impacts from the Railroad
5. Environmental Impacts
6. Public Support

### Private and Public Property Impacts

Many of the proposed alternatives could potentially affect privately owned properties. The more private properties that are impacted, the less feasible an alignment becomes, due to the time-consuming, costly, and challenging nature of acquiring right-of-way.

While contacting individual property owners to gauge their support for the trail was not part of this project's scope, the trail alternatives and recommendations are significantly impacted by this challenge.



## Safety

Alternatives were evaluated for safety based on crashes along the potential route as well as Bicycle Level of Comfort (BLOC). Individual intersections are not thoroughly evaluated because exact alignments are not defined, although rail crossings are assessed. In addition to being less safe, alignments with more bicycle/pedestrian conflicts with vehicular traffic require the installation of more safety measures.

## *Bicycle Level of Comfort (BLOC)*

The USBR 11 Final Report evaluated Bicycle Level of Comfort (BLOC) countywide. The analysis included US 11 within the CVRT study area and other roadways throughout Franklin County. BLOC is used to assess the service, safety, and comfort of the network from a bicyclist's point of view.

Bicycle Level of Comfort is determined by how users perceive the qualitative aspects of the roadway. Through the use of GIS and available data for state roadways on PennDOT's One Map, each segment of roadway was assigned a value between -2 and +2 based on its physical characteristics such as cartway/shoulder width and condition, posted speed, traffic volume, share of truck volume, and surface pavement condition. These factors can influence how comfortable cyclists feel and their likelihood of using a particular route.

Although the Level of Comfort was used to estimate the relative quality of service that a "typical" cyclist might experience on different parts of the corridor, it is important to note that cyclists vary greatly in terms of their skill and comfort when riding in traffic, depending on age, fitness, experience, etc.

This planning-level exercise involved generating a total value for each segment. The lower the score, the less likely a bicyclist is to feel comfortable on that segment. The segments are color-coded by service level on Figure 20.

This analysis focused on assessing the level of comfort along state routes, which means that only certain intersections were included in the evaluation. For any segments of trail potentially along a state route, the comfort level is identified in the analysis. For example, Alternative 4 and Alternative 5 incorporate comfort levels along US 11 and PA 433. Figure 20 is used as a reference in the following evaluations.

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Figure 20: Study Area Bicycle Level of Comfort (BLOC)



## Reportable Crashes

PennDOT reportable crash data for a five-year period (2019-2023), obtained from PennDOT’s Pennsylvania Crash Information Tool (PCIT), was reviewed across the county network as well as along the potential alignments. Intersections or corridors with a greater number of crashes are important to note when evaluating alignments.

Franklin County overall had an average of 22 pedestrian crashes and 8 bicycle crashes per year during the five-year period (2019-2023), as graphed on Figure 21 and Figure 22. Of those, 45 percent of pedestrian crashes and 32 percent of bicycle crashes occurred in Chambersburg Borough.

Figure 21: Pedestrian Crashes, 5-Year Averages 2015–2023

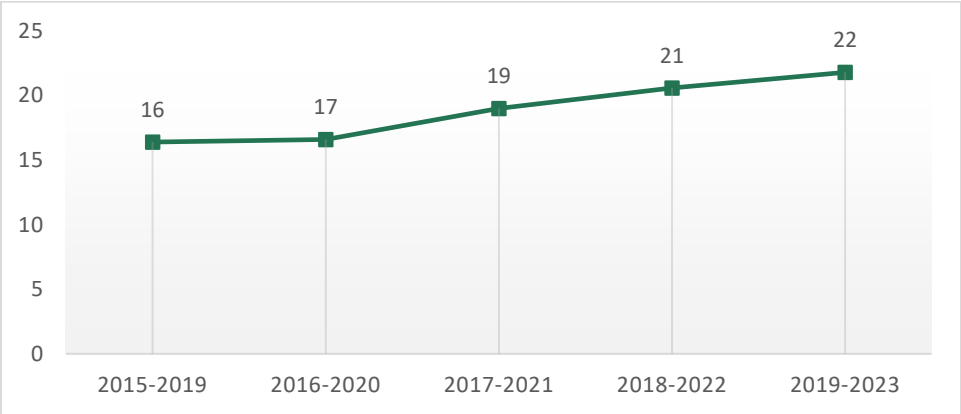
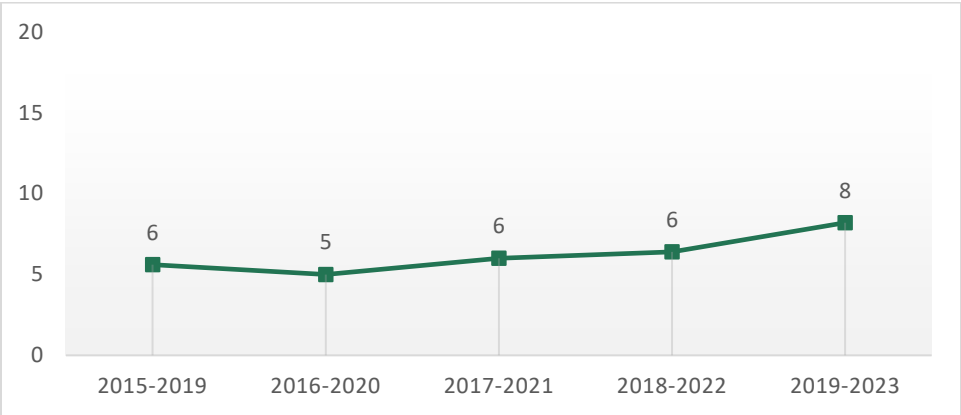


Figure 22: Bicycle Crashes, 5-Year Averages 2015–2023



### User Experience

The success of a trail is greatly influenced by several key factors: scenery, low stress, and thoughtful placemaking. These elements work together to create an enjoyable and memorable experience for trail users. In contrast, a trail characterized by excessive noise, unattractive views, or feelings of danger and stress can deter recreational users and families.

Alignments that offer efficient and safe connections to important destinations are particularly favored, especially when they traverse a scenic environment.

Input from the public survey and two open houses was considered with regard to user experience. Many respondents shared their thoughts on specific areas of concern, identified appealing destinations, and expressed their desire for specific amenities along the trail.

### Economic Impact

The [Economic Impact Assessment](#), conducted in July of 2023 for the proposed CVRT extension from Shippensburg to Chambersburg, indicates that the addition of longer trails can enhance economic

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benefits by attracting a greater number of tourists and outdoor enthusiasts. The proposed extension, which would add approximately 10 miles to the existing trail, is anticipated to generate an economic impact ranging from \$382,900 to \$1,162,120. The increase in trail length is expected to elevate visitor spending at local businesses, accommodations, and dining establishments, thereby promoting longer stays and encouraging repeat visits. Additionally, the complete 38-mile trail from Carlisle to Chambersburg is projected to produce an even greater economic impact, estimated to range from \$1,455,020 to \$4,416,056.

### **Railroad Impacts**

CSX provides rail freight access to Pennsylvania and Southern Railroad, which serves the Letterkenny Army Depot. The railroad's operation provides economic and traffic benefits as well as environmental and social impacts. The original construction and maintenance of the rail line led to significant alterations of the landscape, including deforestation and changes to natural waterways. The potential inclusion of a trail on the CSX alignment would be a shift toward more sustainable land use, promoting environmental conservation and recreational opportunities.

There are currently two operational railroad bridges in the study area. Both cross Conococheague Creek, one just north of Chambersburg Borough and the other near Wenger Lane at the borough boundary.

### **Environmental Impacts**

The potential CVRT extension offers several environmental benefits. Integrating a trail through communities helps preserve green spaces and habitat for local wildlife. Trails encourage non-motorized transportation, such as walking and cycling, which helps reduce air pollution and greenhouse gas emissions. Additionally, the trail's natural surroundings can serve as a buffer zone, protecting nearby ecosystems from urban sprawl and development.

However, construction and maintenance of a trail can also have some undesirable environmental impacts. The initial development may disrupt local wildlife and the increased human activity could lead to littering and habitat disturbance. Proper management and conservation efforts are essential to mitigate these impacts. By incorporating sustainable practices, such as using eco-friendly materials and implementing educational programs for trail users, the Cumberland Valley Rail Trail extension could be an environmentally beneficial community asset.

The team carefully considered these factors and considered the potential environmental impacts of alternatives. Within the study area, three water features—Falling Spring Branch, Conococheague Creek, and Rowe Run—could be particularly affected. The proposed trail would also cross various floodplains, especially in the Chambersburg area. Additionally, hydric (permanently or seasonally saturated) soils and prime farmland are present throughout the study area.

### **Public Support**

Large portions of the alternative corridors would traverse private property; substantial public support would be needed for plan development to move forward on any alignment.

The survey identified many locations that the public would like to access via a trail. Frequently mentioned locations include:

- Greene Township Park

# Cumberland Valley Rail Trail (CVRT) Extension Feasibility Study



- Wilson College
- Memorial Park
- Northwood Park
- Downtown Chambersburg

## Evaluation

The following section outlines evaluations of the five alternatives according to the above criteria and reflect stakeholder input. The alternatives are as follows:

- Alternative 1 – Shared with CSX right-of-way (ROW)
- Alternative 2 – Parallel to CSX (west)
- Alternative 3 – Parallel to CSX (east)
- Alternative 4 – Hybrid, using a combination of CSX right-of-way frontage, utility easements, and Rowe Run Road
- Alternative 5 – US 11

The evaluation is summarized in Figure 23 with detail following by alternative.

Figure 23: Alternative Evaluation Summary Matrix

Evaluation Factor	Alternative 1 (CSX ROW)	Alternative 2 (RR Frontage West)	Alternative 3 (RR Frontage East)	Alternative 4 (Hybrid)	Alternative 5 (US 11)
	Count	Count	Count	Count	Count
State or US Road Crossings	8	8	8	10	11
Water Crossings	2	2	2	2	N/A
Bicycle Crashes	1	1	1	1	3
Pedestrian Crashes	1	1	1	1	16
Number of Parcels	N/A	83	99	49	N/A
AADT Volumes (2021)	N/A	N/A	N/A	1,126	8,000 to 12,300
Total Width (Roadway)	N/A	N/A	N/A	20 ft	30 ft to 50 ft
Parking Lanes on Roadway	N/A	N/A	N/A	No parking lanes	No parking lanes
Lane Count	N/A	N/A	N/A	2	2 to 3
Posted Speeds	N/A	N/A	N/A	45 mph	25-55 mph
Farmland Easements	1	1	1	0	N/A
Roadway Crossings	13	13	13	13	74

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## Alternative 1 – CSX Right-of-Way

### Overview

The baseline alternative is the CSX right-of-way (ROW) from Orrstown Rd (PA 533) to a proposed terminus at a point near Commerce Street in Chambersburg. Although not presently feasible due to CSX restrictions that prohibit rail-with-trail, the baseline is provided as a reference for the other alternatives.

Figure 24: Alternative 1, CSX Right-of-Way



### Context Summary:

- State or US Road Crossings: 8
- Number of Roadway Crossings: 13
- Bridges on Rail Line: 2
- Bicycle Crashes: 1
- Pedestrian Crashes: 1

### Property:

Using the railroad right-of-way would obviate the need to obtain permission from dozens of landowners to use part of their property for a trail. Since this factor is one of the most significant challenges to trail development, avoiding the need for easements from private property owners would be a significant advantage of Alternative 1. However, CSX policy does not allow rail-with-trail, therefore this alternative would only be feasible if CSX policy or the railroad’s ownership changed.

### Safety:

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**Crashes** – Bicycle and pedestrian crashes on intersecting routes were identified. Within the five-year period, just one of each crash type occurred, with neither resulting in a fatality (Figure 25 and Figure 26).

Figure 25: Bicycle Crashes, 2019–2023

Bicycle	
Year	Location
2023	Intersection: Hood St & W Commerce St

Figure 26: Pedestrian Crashes, 2019–2023

Pedestrian	
Year	Location
2019	Intersection: W South St & C 324 (Rail intersect)

**Bicycle Level of Comfort (BLOC)** – Figure 27 lists the state-owned roads that intersect with the Alternative 1 alignment. Of these intersections, four are rated as comfortable, while the other four are rated as stressful. It is recommended to implement safety improvements at these intersections to enhance safety for bicyclists and pedestrians when crossing.

Figure 27: BLOC at State Road Intersections, Alternative 1

Roadway	BLOS at Intersection
PA 533 (Orrstown Rd/Morris St)	Moderately Stressful
PA 997 (Cumberland Valley Highway)	Moderately Comfortable
PA 433 (Sunset Pike)	Stressful
Salem Rd – SR C 496 or SR C 308	Very Comfortable
Siloam Rd – SR C 309	Very Comfortable
W Commerce St – SR 4010	Moderately Stressful
<i>Existing Trail</i>	N/A
W South St – C 324	Very Comfortable
US 11	Moderately Stressful

**Impacts from Rail:** There are two operational railroad bridges along Alternative 1, both of which are too narrow to safely accommodate bicycle and pedestrian traffic with adequate separation from train traffic. Both bridges cross Conococheague Creek, one just north of Chambersburg Borough and the other near Wenger Lane at the borough boundary.

Figure 28: Unprotected Railroad Crossing of PA 433



### Alternative 2 – Railroad Frontage (West)

#### *Overview*

The Alternative 2 alignment begins just outside Shippensburg on Orrstown Rd (PA 533). It travels south along the western side of the CSX right-of-way, stopping at a point near Commerce Street in Chambersburg Borough. The study process did not review or include any information or evaluation of the existing trail from Commerce Street to US 11 through Chambersburg.



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Figure 29: Alternative 2 – Parallel to CSX Right-of-Way (West)



### Context Summary:

- State or US Road Crossings: 8
- Number of Roadway Crossings: 13
- Bodies of Water to Cross: 2
- Bicycle Crashes: 1
- Pedestrian Crashes: 1
- Parcels: 83
- Farmland Easements: 1

### Property:

Private – Alternative 2 would traverse approximately 83 parcels between PA 533 and US 11 in Chambersburg.

Public – Depending on the alternative’s ultimate alignment, the trail could run through the Thaddeus Stevens Elementary School property in Chambersburg. Otherwise, there is no public land with access to Alternative 2. The alignment would run through property owned by Wilson College and the Franklin County Regional Airport.

# Cumberland Valley Rail Trail (CVRT) Extension Feasibility Study



**Safety:**

Crashes – Bicycle and pedestrian crashes on intersecting routes were identified. Within the five-year period, just one of each crash type occurred, with neither resulting in a fatality.

Figure 30: Bicycle Crashes, 2019–2023

Bicycle	
Year	Location
2023	Intersection: Hood St & W Commerce St

Figure 31: Pedestrian Crashes, 2019–2023

Pedestrian	
Year	Location
2019	Intersection: W South St & C 324 (Rail intersect)

Bicycle Level of Comfort (BLOC) – Figure 32 lists the state-owned roads that intersect Alternative 2. Four of the intersections are rated as comfortable for cyclists, while the other four are rated as stressful. Safety improvements would be recommended at these intersections to make the trail alignment safer for bicyclists and pedestrians crossing these intersections.

Figure 32: BLOC at State Road Intersections, Alternative 2

Roadway	BLOS at Intersection
PA 533 (Orrstown Rd/Morris St)	Stressful
PA 997 (Cumberland Valley Highway)	Moderately Comfortable
PA 433 (Sunset Pike)	Very Stressful
Salem Rd – SR C496 or SR C 308	Very Comfortable
Siloam Rd – SR C309	Very Comfortable
W Commerce St – SR 4010	Stressful
<i>Existing Trail</i>	N/A
W South St – C 324	Very Comfortable
US 11	Stressful

**Impacts from Rail:** There are two active railroad bridges along Alternative 2. To accommodate a trail, the existing bridges would have to be widened, or separate bridges would need to be constructed specifically for bicycle and pedestrian use. This would ensure a safe and efficient passage for both rail transport and non-motorized users.

# Cumberland Valley Rail Trail (CVRT) Extension Feasibility Study



## Alternative 3 – Railroad Frontage (East)

### Overview

Alternative 3 begins just outside Shippensburg on Orrstown Rd (PA 533). It travels south along the eastern side of the CSX railroad right-of-way, stopping at a point near Commerce Street in Chambersburg Borough. This review does not include any information or evaluation of the existing trail from Commerce Street to US 11 through Chambersburg.

Figure 33: Alternative 3 – Parallel to CSX Right-of-Way (East)



### Context Summary:

- State or US Road Crossings: 8
- Number of Roadway Crossings: 13
- Bodies of Water to Cross: 2
- Bicycle Crashes: 1
- Pedestrian Crashes: 1
- Parcels: 99
- Farmland Easements: 1

### Property:

Private – Alternative 3 would traverse approximately 99 parcels between PA 533 and US 11 in Chambersburg.

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**Public** – The proposed alignment includes only one parcel of public land, at the intersection of Norfolk Southern and CSX. The proposed alignment would also traverse a large portion of property owned by Wilson College.

**Safety:**

**Crashes** – Bicycle and pedestrian crashes on intersecting routes were identified. Within the five-year period, there was one incident of each crash type, although neither resulted in a fatality.

Figure 34: Bicycle Crashes, 2019–2023

Bicycle	
Year	Location
2023	Intersection: Hood St & W Commerce St

Figure 35: Pedestrian Crashes, 2019–2023

Pedestrian	
Year	Location
2019	Intersection: W South St & C 324 (Rail intersect)

**Bicycle Level of Comfort (BLOC)** – Figure 36 identifies the state-owned roads that intersect with Alternative 3. Four of these intersections are rated as comfortable, while the other four are considered stressful. To improve safety for cyclists, enhancements would be necessary at these intersections to make the trail alignment safer for bicycle use.

Figure 36: BLOC at State Road Intersections, Alternative 3

Roadway	BLOS at Intersection
PA 533 (Orrstown Rd/Morris St)	Stressful
PA 997 (Cumberland Valley Highway)	Moderately Comfortable
PA 433 (Sunset Pike)	Very Stressful
Salem Rd – SR C496 or SR C 308	Very Comfortable
Siloam Rd – SR C309	Very Comfortable
W Commerce St – SR 4010	Stressful
<i>Existing Trail</i>	N/A
W South St – C 324	Very Comfortable
US 11	Stressful

**Impacts from Rail:** There are two operational railroad bridges along Alternative 3. The bridges would need to be widened or new bridges would need to be constructed to safely carry bicycle and pedestrian traffic.

# Cumberland Valley Rail Trail (CVRT) Extension Feasibility Study



## Alternative 4 – Hybrid

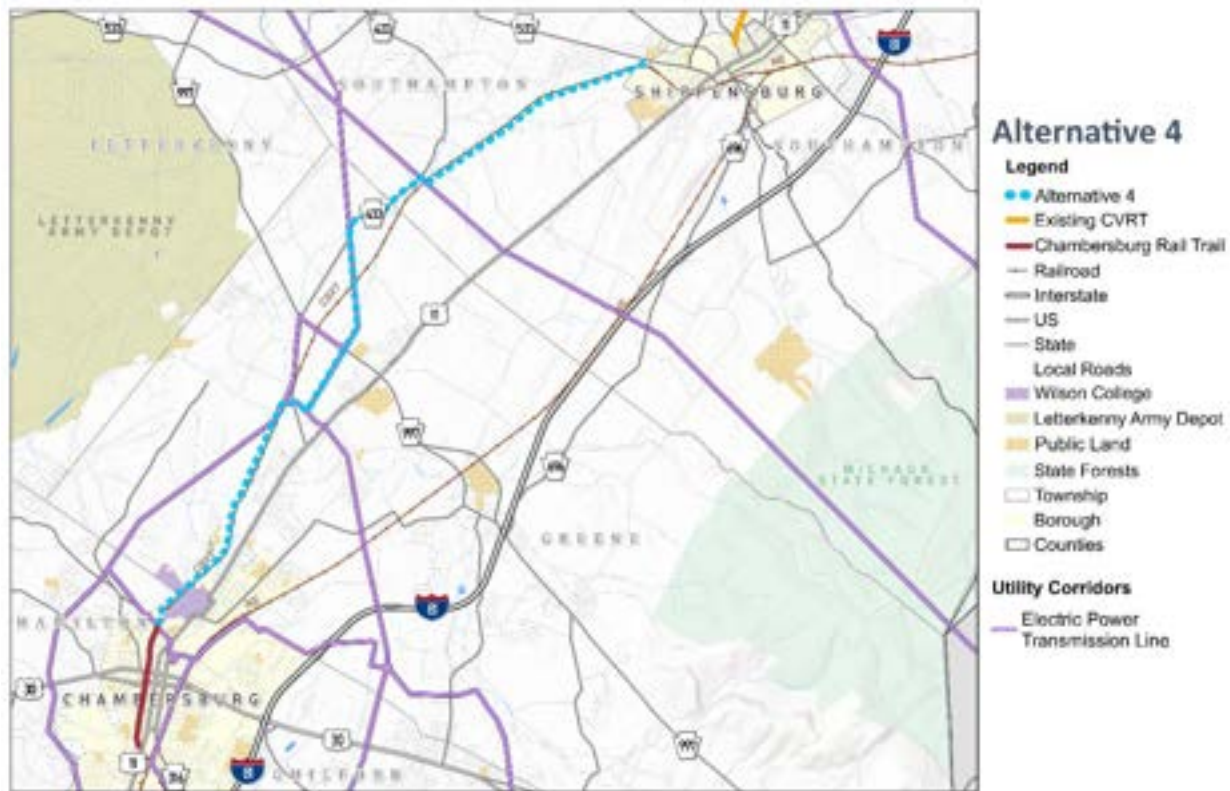
### Overview

Alternative 4 is a hybrid route that would incorporate segments along the railroad, a roadway-based section, and part of a utility easement. The starting point is similar to Alternatives 2 and 3, just outside Shippensburg on Orrstown Road (PA 533).

The trail would follow the eastern side of the railroad for approximately two miles before continuing along Rowe Run Road (PA 433). It would then proceed along Rowe Run Road to the West Penn Power Company line. The trail would follow the utility line route to just past the rail yard adjacent to the Letterkenny Army Depot, where the trail would return to railroad frontage for the remainder of the alignment, ending at a point near Commerce Street in Chambersburg Borough.

As with the other alignments, this review does not include any information or evaluation of the existing trail from Commerce Street to US 11 through Chambersburg.

Figure 37: Alternative 4 – Hybrid



### Context Summary:

- State or US Road Crossings: 10
- Number of Roadway Crossings: 13
- Bicycle Crashes: 1
- Pedestrian Crashes: 1
- Parcels: 49

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- AADT Volume: 1,126
- Total Roadway Width: 20 ft
- Parking Lanes on Roadway: No parking lanes
- Lane Count: 2
- Posted Speed: 45 mph

**Property:**

Private – The Alternative 4 alignment would reduce the number of easements required. Nevertheless, Alternative 4 would affect an estimated 49 properties and thus require negotiations with a significant number of private property owners.

Public – Similar to the other alternatives, there are no public properties along Alternative 4. The alignment would traverse a parcel owned by Wilson College and property owned by the Franklin County Regional Airport.

**Safety:**

Crashes – From 2019 to 2023, there was one reportable bicycle crash and one pedestrian crash in proximity to the Alternative 4 alignment (the same incidents identified for alternatives 2 and 3). Notably, there were no reported crashes involving bicyclists or pedestrians along the associated segment of PA 433 during this period.

Bicycle Level of Comfort (BLOC) – Alternative 4 presents a varied experience, characterized by both comfortable and stressful intersections. The most challenging sections are located along Rowe Run Road (PA 433), particularly when navigating the roadway itself and during the subsequent crossing. These areas can be particularly taxing and potentially hazardous for less experienced trail users due to traffic patterns, speed, and roadway width.

In addition to these critical points, the beginning of the route, located at the intersection with PA 533, also poses significant challenges. This location involves a main road linking Shippensburg with Orrstown and experiences a high volume of traffic. Similarly, the final crossing at US 11 in Chambersburg marks another high-stress location, where crossing poses safety concerns. Overall, while there are comfortable segments along the Alternative 4 alignment, certain higher-stress segments and intersections would demand extra caution and safety improvements for bicycle and pedestrian use.

Figure 38: BLOC at State Road Intersections and Roadways, Alternative 4

Alignment Section	Roadway/crossing	BLOS at Intersection
Railroad Frontage	PA 533 (Orrstown Rd/Morris St)	Stressful
On PA 433	On PA 433	Very Stressful
Utility Corridor	Crossing the rail line	N/A
Utility Corridor	Crossing PA 997	Comfortable
Utility Corridor	Crossing PA 433	Very Stressful
Railroad Frontage	Salem Rd – SR C496 or SR C 308	Very Comfortable
Railroad Frontage	Siloam Rd – SR C309	Very Comfortable
Railroad Frontage	W Commerce St – SR 4010	Stressful

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Alignment Section	Roadway/crossing	BLOS at Intersection
Railroad Frontage	Existing Trail	N/A
Railroad Frontage	W South St – C 324	Very Comfortable
Railroad Frontage	US 11	Stressful

**Volumes:** Alternative 4 would follow a segment of PA 433, which recorded annual average daily traffic (AADT) volumes of just over 1,000 in 2021. Over the past decade, traffic on this segment has steadily increased. For context, at the crossing point on Orrstown Road (PA 533), the AADT is just over 4,000, while at the endpoint crossing US 11, it approaches 9,000. Although an AADT of just over 1,000 is not considered extremely high, other factors, such as roadway width and posted speed, can present challenges when using a trail.

**Roadway Width:** The width of a roadway is an indicator of its suitability for bicyclists and pedestrians. The segment of PA 433 that would be part of Alternative 4 is 20 feet wide. This width may limit space for cyclists and pedestrians if proper lane widths or buffers are not provided, impacting the safety and comfort of non-motorized users.

**Posted Speed:** The posted speed limit on PA 433 in the study area is 45 miles per hour. Although the road is not heavily traveled, the speed of traffic is a factor in the safety of bicyclists and pedestrians.

## Alternative 5 – US 11

### Overview

US Route 11 is a major north–south roadway connecting Chambersburg, Shippensburg, and other locations along the eastern United States. An evaluation was conducted to assess its safety, accessibility, and overall usage with respect to serving as a potential alignment for a CVRT extension. The evaluation was conducted for the segment of US 11 between the intersection with Orrstown Road and the intersection with Industrial Drive in Chambersburg.

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Figure 39: Alternative 5, US 11



## Context Summary:

- State or US Road Crossings: 11
- Number of Roadway Crossings: 74
- Bicycle Crashes: 3
- Pedestrian Crashes: 16
- AADT Volume: 8,000 to 12,300
- Total Roadway Width: 30 ft to 50 ft
- Parking Lanes on Roadway: No parking lanes
- Lane Count: 2 to 3
- Posted Speed: 25 mph to 55 mph

## Safety:

Crashes: According to the data presented in the USBR 11 report, the number of bicycle-related crashes in the county has been gradually decreasing. The year 2020 recorded the lowest number of bicycle crashes in the past decade, with only four incidents. However, in subsequent years, the number of crashes began to rise again, surpassing figures from previous years. By 2023, the county reported a peak of 13 bicycle crashes.

Along US 11 from 2019 through 2023, there were 16 pedestrian crashes and 3 bicycle crashes, shown in Figure 40.





Figure 40: US 11, Bicycle Crashes, 2019–2023

Bicycle	
Year	Location
2023	Intersection: 2 <sup>nd</sup> St – Garfield St
2022	Intersection: 2 <sup>nd</sup> St – Lincoln Highway (US 30)
2021	Roadway: 2 <sup>nd</sup> St, between Rhodes Dr and King St

Figure 41: US 11, Pedestrian Crashes, 2019–2023

Pedestrian	
Year	Location
2023	Intersection: Garfield St – Main St
2023	Intersection: 2 <sup>nd</sup> St -McKinley St
2023	Roadway: 2 <sup>nd</sup> St, between McKinley St and Gilbert Ave
2023	Intersection: 2 <sup>nd</sup> St – South St
2023	Intersection: Main St – Washington St
2023	Intersection: Main St – Queen St
2023	Intersection: Main St – Lincoln Highway
2023	Roadway: Philadelphia Ave, between Rhodes Dr and Chambers St
2023	Roadway: Philadelphia Ave, between Brookmeadow Ln and Grand Ave
2023	Roadway: Molly Pitcher Highway, between Clearfield Rd and Rice Rd
2022	Intersection: 2 <sup>nd</sup> St – King St
2021	Roadway: Philadelphia Ave, between Grand Ave and North Ave
2020	Roadway: Main St, between Liberty St and Smith Ave
2020	Roadway: Main St, between Smith Ave and Washington St
2020	Roadway: Philadelphia Ave, between Rhodes Dr and Chambers St
2019	Roadway: 2 <sup>nd</sup> St, between Broad St and Philadelphia Ave

**Bicycle Level of Comfort (BLOC)** – In the study area, much of the US 11 corridor offers a low level of comfort for bicycling. The least comfortable section of the road is located in Chambersburg Borough, specifically from Hudson Avenue to Commerce Street and from Rhodes Drive to Washington Street. US 11 has a higher level of comfort from Shippensburg Borough in Franklin County just past Mount Rock, and from Salem Road to Hare Drive.

**Volumes:** US 11 experiences annual average daily traffic (AADT) volumes ranging from 12,300 vehicles in Shippensburg at the intersection with Morris Street (PA 533) to as low as 8,000 vehicles in Chambersburg at the US 30 intersection. Traffic volume significantly impacts safety, user experience, and comfort levels, as demonstrated by the BLOC analysis. US 11 serves as a principal arterial within Chambersburg to its intersection with PA 997 and is then classified as a minor arterial to the Shippensburg Borough boundary. Principal and minor arterial roadways connect major metropolitan areas and offer a high level of

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mobility. While they do not accommodate as much traffic as Interstates or freeways, they are often not suitable for non-motorized traffic.

**Roadway Width:** Roadway width is another characteristic with a significant bearing on a facility's suitability for bicycle and pedestrian traffic. Total roadway width on US 11 ranges from 30 feet to 50 feet along the Alternative 5 route. At its narrowest, the road measures 30 feet wide (between Shippensburg and Mount Rock), and at its widest, 50 feet (from PA 533 to Park Heights Avenue).

**Posted Speeds:** The posted speed limits along the corridor vary between 25 mph and 55 mph. Posted speeds are 25 mph when leaving Shippensburg Borough and when entering Chambersburg Borough. In most of Southampton Township, the speed limit is 55 mph, while it is 45 mph in Green Township.

## FEASIBILITY

### Near-Term Feasibility Determination

Although there is a documented need for improved bicycle and pedestrian facilities along the roughly 11-mile-long study corridor in Franklin County, and the concept of extending the CVRT has public and stakeholder support, **developing a continuous multi-use trail between Shippensburg and Chambersburg is currently not feasible.**

### Primary Challenges to Trail Development

As the analysis and evaluation determined, the project would require coming to an agreement with CSX (which has no rail-with-trail policy), negotiating easement agreements with nearly 100 private landowners, or using US 11 as a roadway-based option, which would compromise user safety and comfort. Under any scenario, the trail would need to make numerous roadway crossings. More detail follows.

- **CSX Railroad ROW:** Two main challenges make Alternative 1 not feasible at present: (1) The corridor is actively used for freight rail service to the Letterkenny Army Depot and there is insufficient right-of-way to adequately separate non-motorized uses from train traffic; and (2) CSX has a no rail-with-trail policy and is therefore not open to inviting bicycle and pedestrian traffic onto the right-of-way.
- **Railroad Frontage:** The primary obstacle to a railroad frontage option (Alternatives 2 or 3) is the high number of landowners along the railroad right-of-way. Obtaining easements from dozens of landowners would take many years of negotiation. Additionally, these alignments would need to cross a preserved farmland easement.
- **US 11 Corridor:** Including a trail as part of the US 11 corridor (Alternative 5) would introduce many different concerns than the railroad right-of-way or rail frontage options. Challenges such as user comfort, traffic speeds, roadway width, and safety are serious concerns that would limit the appeal and value of designating US 11 as the trail. Further, the trail would have to cross all roadways intersecting with US 11—more crossings than the other alternatives. The feasibility study determined that the US 11 alternative would be roughly as complex as the other options and provide poorer results in terms of connectivity, comfort, and safety.
- **Hybrid Alignment:** Alternative 4 would present a mix of challenges similar to those of Alternatives 2, 3, and 5. Because it would use a portion of the rail frontage, it would also require obtaining easements; however, Alternative 4 would require about half the number of easements as Alternatives 2 and 3. Additional challenges would include addressing the safety issues related to traveling on and crossing PA 433.

Given the significant challenges associated with each alternative, the study determined that there are currently no feasible alignments for a trail extension connecting Shippensburg Borough at Orrstown Road to Chambersburg.

### Preferred Alternative for Long-Term Consideration

Based on the evaluation, the project team, stakeholders, and public see the railroad ROW (Alternative 1) as the preferred trail alignment. Although it is not currently feasible, of the five alternatives, it would be the most optimal choice in terms of safety, user experience, and property-owner negotiations.

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However, it would require either a policy change by CSX or a change in ownership of the rail corridor. Were CSX to sell the rail line to the Pennsylvania and Southern or another rail operator, the new owner may be willing to offer a “rail with trail” option with appropriate safeguards in place.

Even with such an agreement in place, the project would be a complex and expensive endeavor requiring a long-term financial commitment and widespread, sustained public support.

## RECOMMENDATIONS

Although extending the CVRT is not immediately feasible, the following recommendations are offered for consideration by the MPO and the county's municipalities to support long-term planning for an eventual trail extension.

1. Franklin County, along with the MPO, area chambers of commerce, and the Cumberland Valley Rail Trail Council (CVRTC), should sustain communications with CSX regarding the future viability of the rail line, and any interest CSX may have in divesting the line to another owner. Further, all parties involved should follow the progress of the 9/11 National Memorial Trail development. The 1,500-mile multi-use trail currently incorporates various state and local roads through Franklin County, including US 11, Rice Road, and Scotland Road. However, there is a desire to expand the trail to include more non-roadway-based facilities as part of the overall network.
2. Franklin County and the municipalities within the trail corridor should consider updating or adopting an Official Map as a planning tool to guide future planning related to the trail extension.<sup>1</sup> Official Maps can identify future land or corridors desired for future public uses, and could provide for future linkages to the trail extension. Public survey results noted demand for linkages from any trail extension to other area destinations, such as the Letterkenny Army Depot or Scotland Park in Greene Township. The Governor's Center for Local Government Services within the state Department of Community and Economic Development (DCED) has resources or technical assistance available to guide the County through the process. [PennDOT Publication 703](#) would also be a valuable resource.
3. The MPO should continue to coordinate with the leadership of Wilson College in advancing the design and construction of a connection from the existing Chambersburg Rail Trail at Commerce Street to the Menno Haven property. The approximately one-mile segment could be designed to utilize the existing parking area near Commerce Street and traverse dedicated property from Wilson College along the existing railroad right-of-way and cross the bridge on Wilson College Lane. The connection would provide both students and residents of Menno Haven with recreational and commuting opportunities to downtown Chambersburg.
4. The MPO should continue to support the CVRTC in completion of the Orrstown Road Extension (1.4 miles – Figure 43) which is currently in design and slated for construction in 2026 / 2027 pending power line work by PPL and funding availability via an existing Transportation Set-Aside (TASA) Grant from PennDOT. Particular focus should be given to designing and establishing a connection from Orrstown Road heading southwest to Clearfield Road at a distance of approximately 1.3 miles. Additionally, the MPO should assist in pursuit of design of a multimodal bridge over the existing CSX line to connect the Orrstown Road Extension with Memorial Park via Park Place Road.

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<sup>1</sup> Area municipalities that have adopted an Official Map include Chambersburg Borough, Greene Township, Guilford Township, and Southampton Township.

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Figure 42: Chambersburg Segment Trail Extension



Figure 43: Shippensburg Segment Trail Extension



## APPENDICES

### Conceptual Designs

The conceptual designs for this trail study propose a theoretical design for each alternative considered. These designs take into account various factors, including environmental impacts, user needs, setbacks, and safety. By examining different models, stakeholders can gain insights into the potential benefits and challenges associated with each design option. This approach offers an understanding of how these designs might perform in real-world conditions.

Figure 44: Alternative 1

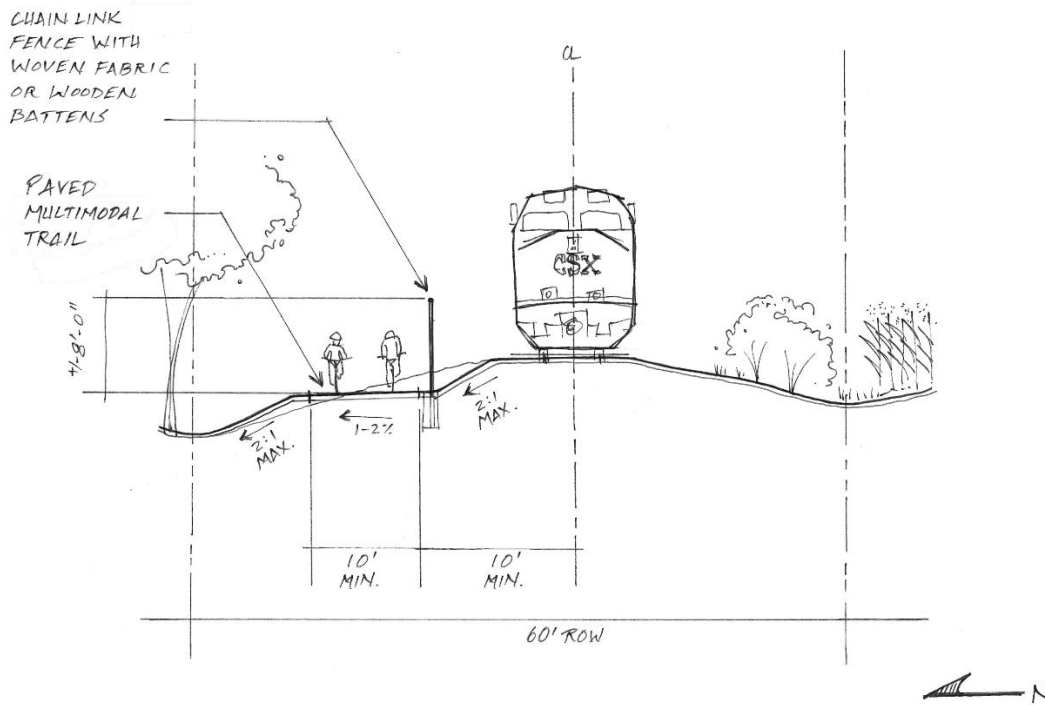
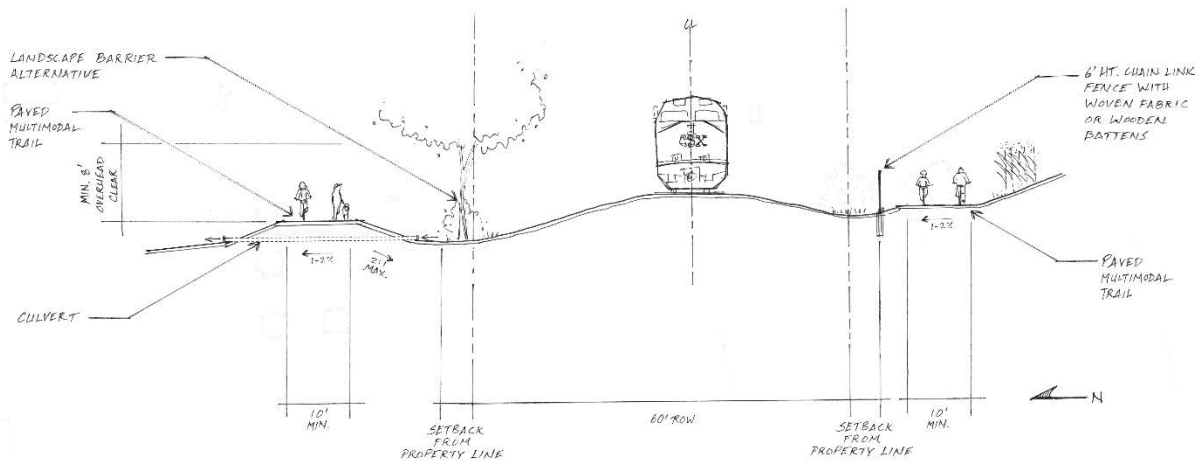


Figure 45: Alternative 2 (Right) and Alternative 3 (Left)



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Figure 46: Alternative 4

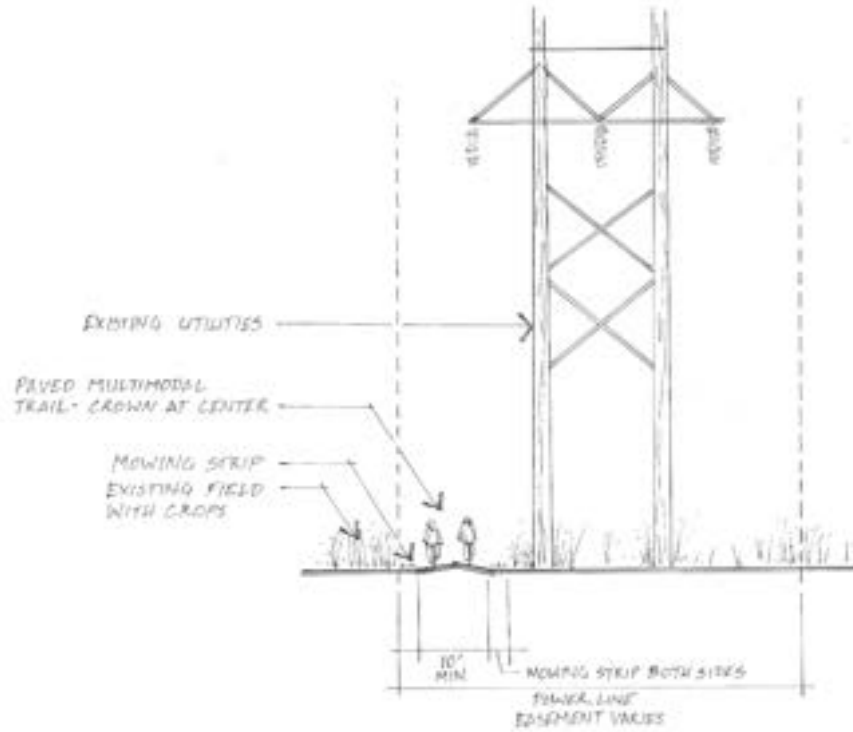
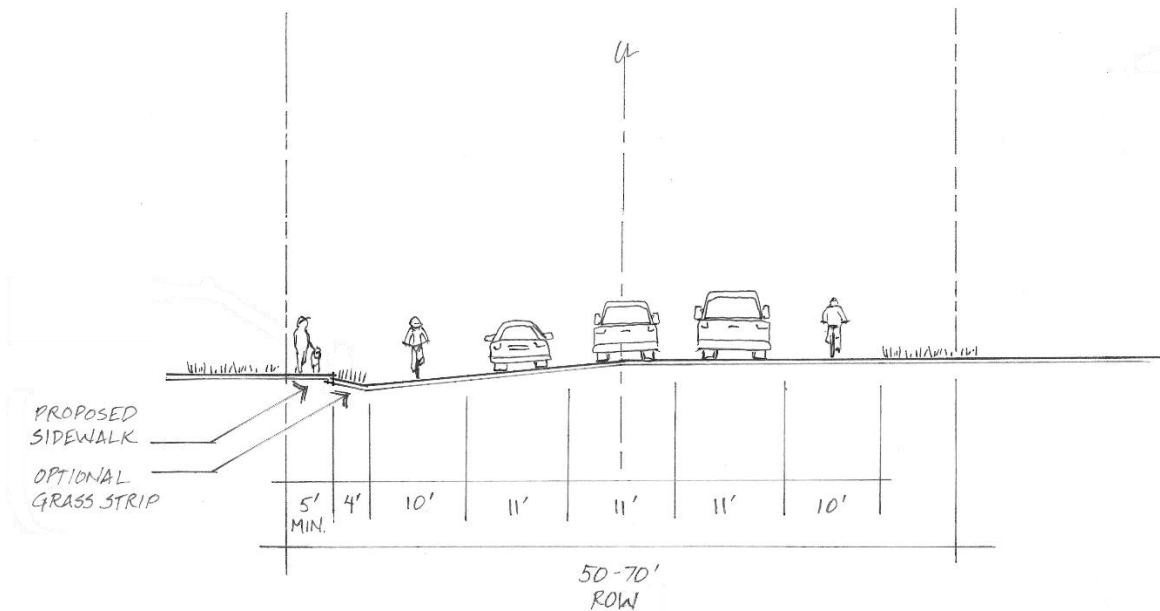


Figure 47: Alternative 5



**Design Source Links:**

[https://safety.fhwa.dot.gov/ped\\_bike/tools\\_solve/docs/fhwas18077.pdf](https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwas18077.pdf)

[https://www.fhwa.dot.gov/environment/recreational\\_trails/publications/rwt2021/](https://www.fhwa.dot.gov/environment/recreational_trails/publications/rwt2021/)