

CONNECTING ASHTABULA TO PITTSBURGH BY TRAIL: Unlocking the Economic Potential of 150 Miles of Trail

A FEASIBILITY STUDY OF THE INDUSTRIAL HEARTLAND TRAILS COALITION'S
ASHTABULA TO PITTSBURGH CORRIDOR

PUBLISHED DECEMBER 2021



LAKE ERIE

Ashtabula

A S H T A B U L A

GAP 1

GAP 2

GAP 3

GAP 4
See page 18

GAP 5
East Liverpool

GAP 6

GAP 7

GAP 8

T R U M B U L L

Warren

Youngstown

M A H O N I N G

C O L U M B I A N A

Lisbon

P E N N S Y L V A N I A

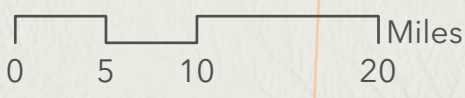
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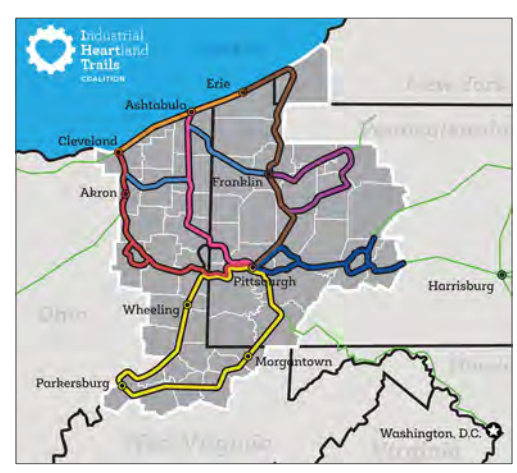


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ASHTABULA TO PITTSBURGH (A2P) CORRIDOR

The Industrial Heartland Trails Coalition's (IHTC's) 1,500-miles-plus network vision spans 51 counties across Western Pennsylvania, northern West Virginia, eastern Ohio and the southwestern corner of New York. When complete, the trail network will comprise the largest shared-use trail system in North America for tourism, physical activity and recreation. The plan to complete the network is organized into mega corridors that group trails by geography.

The Ashtabula to Pittsburgh (A2P) multiuse trail corridor will travel between Ashtabula, Ohio, and Pittsburgh, Pennsylvania. The A2P corridor will connect the visions of the Great Ohio Lake-to-River Greenway with the Ohio River Greenway Trail in Ohio and Pennsylvania. Learn more about the A2P corridor and the IHTC vision at iheartrails.org.



Acknowledgments

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About Rails-to-Trails Conservancy

Since 1986, Rails-to-Trails Conservancy (RTC) has served as the voice of the rail-trail movement, elevating the hard work of rail-trail supporters and advocates to Congress, public leaders and influencers from across America. We have set the precedent that rail-trails are vital community assets, and we have established policies that ensure these trails are built.

With nearly 2,300 rail-trails and over 40,000 miles of multiuse trails on the ground nationwide, our focus is on linking these corridors, creating trail networks that connect people and places and transform communities across the country.

RTC collaborates with its partners—the Pennsylvania Environmental Council and the National Park Service – Rivers, Trails and Conservation Assistance Program—to lead and staff the Industrial Heartland Trails Coalition (IHTC). The IHTC is one of eight RTC TrailNation™ projects, which—ranging in size from 35 miles to 2,500 miles—are designed to demonstrate the benefits that trail networks can deliver in every type of community. For more about the IHTC, go to ihearttrails.org.

Each project is unique, engaging hundreds of local partners and touching diverse communities throughout the project footprint. But each project shares two common goals: to prove the true potential of trails in delivering significant economic, social equity, health, transportation and environmental outcomes; and to serve as a replicable and inspirational model for trail networks nationwide. Learn more about RTC's trail network initiatives at trailnation.org.

Executive Summary

Two States, 150 Miles of Trail, Inviting Exploration

The Ashtabula to Cleveland (A2P) corridor travels from the shore of Lake Erie in Ashtabula, Ohio, to the confluence of the three rivers at Point State Park in Pittsburgh, Pennsylvania. The visionary project would offer transformational opportunities for outdoor recreation, transportation and economic development in both states. Finding a way to complete the development of trails to fill the gaps in the corridor could transform the economy of the region and the many communities along the corridor.

This feasibility study, produced by Rails-to-Trails Conservancy (RTC), highlights opportunities along the trail as well as challenges to close the gaps in the corridor. Work is already underway to close several of the gaps in Ohio, and the communities in Pennsylvania along the A2P corridor have the energy and momentum to complete their portions as well.

A contiguous trail connecting the region's biggest assets with the Great Allegheny Passage (GAP) (gaptrail.org) would transform the corridor into a premier destination sought out by people from across the country and around the world. The A2P trail will also connect to the larger, 1,500-miles-plus planned trail network that the Industrial Heartland Trails Coalition (IHTC) envisions spanning 51 counties through West Virginia, Pennsylvania, Ohio and New York—further expanding its tourism potential.

The goal of completing the A2P corridor is about more than building a trail. It is about leveraging the trail to build a sustainable regional economy and to rebuild many of the communities along the A2P corridor that have been buffeted and abandoned by cataclysmic changes in the manufacturing and energy industries over the years. Realizing that vision will require closing the remaining trail gaps across six counties, including a gap in Ohio where a viable route has not been identified. The task is difficult but rewarding, and officials, local leaders and trail advocates in both states will have a crucial role to play.

Trail networks have been proven to be effective tools in revitalizing communities, sparking new local business opportunities, and attracting and retaining residents. Connected trails are powerful assets that will make local cities and towns better places to live, work and do business.

For evidence, we need not look very far. The GAP through Southwestern Pennsylvania was largely responsible for reviving and reinventing many of the small rural communities through which it passes. Before the trail was created, many communities were skeptical that such amenities could have any impact on their economy. Today, the GAP sees more than 1 million users annually and is responsible for tens of millions of dollars in direct user spending annually to local economies. A study of the GAP corridor, published in November 2021, found that trail users had an overall regional economic impact of more than \$121 million. A similar opportunity is available along the A2P corridor.

This study by RTC, combined with the “Connecting Parkersburg to Pittsburgh by Rail-Trail” study and “Sheepskin Trail Feasibility Study,” both published in 2018, and the “Connecting Cleveland to Pittsburgh by Trail” study published in 2019, completes a series of comprehensive analyses of existing conditions and recommendations for closing the gaps within several corridors in the IHTC footprint. In addition, the Pennsylvania Environmental Council—a partner in the IHTC—along with many stakeholders, conducted a gap assessment of the Erie to Pittsburgh and Pennsylvania Wilds corridors in 2020. Together, this body of work has built a roadmap for the effort needed to reach the vision of the IHTC—to establish the Industrial Heartland as a premiere destination offering a 1,500-miles-plus multiuse trail network experience.

This study presents a strong blueprint, and highlights major challenges, to making a trail along the A2P corridor a reality—identifying funding sources, partnership opportunities, and the planning and municipal processes required to complete undeveloped gaps. This corridor has been envisioned since the 1980s, and many of the original champions are still actively engaged in realizing the dream. As this study details, considerable challenges continue to exist. With over 30 years of progress underway, and impressive existing trails on the ground, local support for completing the A2P continues to grow.

The publication of this study is a moment to reflect and congratulate those Ohio and Pennsylvania trail advocates and their allies across the region that have brought us so close to realizing the A2P connection. Simultaneously, it is important to recognize that the only way to adequately pay tribute to their efforts is to complete the job, and unlock the significant economic, community, health and social benefits that will come with finally making Ohio and Pennsylvania integral parts of a new, and truly world-class, trail system.



Introduction

Project Background

Imagine what's possible with a 1,500-miles-plus trail network that connects 51 counties in four states—person by person, town by town, community by community, state by state. This is the vision of the Industrial Heartland Trails Coalition (IHTC): establishing the Industrial Heartland as a premier destination offering a unique multiuse trail network experience that will stretch across New York, Ohio, Pennsylvania and West Virginia—from the shores of Lake Erie to the confluence of the three rivers in Pittsburgh (the Allegheny, the Monongahela and the Ohio) and on to the Ohio River and Appalachian foothills in West Virginia.

The IHTC builds upon past efforts to organize the trails community, connect regional trails to each other, leverage the cultural heritage of the region into a leading multiuse trail destination, and harness and amplify the benefits of the region's trail systems. Trail groups from the region joined together in the early 2000s, eventually forming a coalition in 2011 and branding themselves the “Industrial Heartland Trails Coalition” in 2015 in an effort to collectively advance the vision of a trail network across the region.

Grouped by geography, eight identified trail destination corridors make up the IHTC network. The Ashtabula to Pittsburgh (A2P) corridor extends from the shores of Lake Erie at Ashtabula, Ohio—utilizing existing well-loved trails such as the Western Reserve Greenway—and connects across the Ohio River into Pennsylvania. The corridor then connects to the Three Rivers Heritage Trail in Pittsburgh and beyond.

What's in a Name?

Most of the “destination” corridors within the IHTC footprint are currently named for their two termini and often abbreviated (e.g., Ashtabula to Pittsburgh becomes “A2P,” Cleveland to Pittsburgh becomes “C2P,” etc.). These names and abbreviations are intended to be used to reference the work during the current planning and gap-filling phase. As existing trails are extended and new trails built to fill in the gaps, a branding and naming process could occur to create more marketable names and unique brands for each corridor.

Project Scope

This study is the first and only comprehensive look at the A2P corridor within the IHTC. The corridor is anchored by Ashtabula, Ohio, a lakefront city along Lake Erie, and Pittsburgh, Pennsylvania. Many communities large and small are found along the corridor, including (but not limited to) Warren, Canfield, Leetonia, Lisbon and East Liverpool in Ohio and Beaver, Monaca and Coraopolis in Pennsylvania.

Study Purpose

Take It off the Shelf: Putting This Study to Work!

This study is intended to serve as a comprehensive vision for connecting the future A2P multiuse trail corridor, including recommendations on steps partners can take immediately and over time. This study can serve a multitude of purposes, including, but not limited to:

- **Fundraising**—Facts about the IHTC and the A2P corridor can be combined with information about trail benefits, case studies and cost estimation to produce well-positioned and accurate narratives about the project as a whole or in segments. Such narratives could aid the development of grant applications and proposals.
- **Forming an action plan**—The recommendations in the Getting There: Recommended Actions to Complete the A2P Corridor section can help partners develop an action plan to maintain progress in completing the A2P corridor.
- **Telling the story**—The information and case studies presented in this report can help partners engage elected officials, community leaders, grassroots organizations and community members by telling the whole story of the IHTC and the A2P corridor.



Little Beaver Creek Greenway | Photo by TrailLink user kovachio

Project Partners

The IHTC and the A2P corridor build on the previous and ongoing work of local trail organizations; conservation and community-based groups; and federal, state and local governments. More than 100 agencies and organizations are actively engaged in the IHTC effort. Currently, more than two dozen organizations and local governments in Ohio and Pennsylvania have engaged in meetings and other activities indicating their interest in connecting the A2P corridor. These organizations include, but are not limited to, the following:

Ohio

- Ashtabula County MetroParks
- Columbiana County Park District
- City of East Liverpool
- City of Lisbon
- Mill Creek MetroParks
- National Park Service—Rivers, Trails, and Conservation Assistance Program
- Trumbull County MetroParks

Pennsylvania

- Allegheny County Executive Office
- Beaver County Park District
- Friends of the Riverfront
- Riverlife
- RiverWise/Ohio River Trail

Regional Context

The A2P corridor spans a variety of landscapes as it leaves the shores of Lake Erie, passing through both metro areas and beautiful rural areas on its way to the Ohio River and Pittsburgh. The corridor traverses two states—Ohio and Pennsylvania—and six counties. In Ohio, it goes through Ashtabula, Trumbull, Mahoning and Columbiana counties. The corridor crosses into Pennsylvania just opposite the riverbank from West Virginia and traverses Beaver and Allegheny counties.

Local communities along the route have been working for years to make the trail happen in anticipation of the impact it can have on their long-term health, sustainability and wealth. More than 270,000 people live within a half-mile of the corridor. The strategic value of the corridor's geography extends far beyond the communities it touches, with nearly 10 million people living within 100 miles of the A2P corridor.

The tourism economy along the corridor is robust in some areas, such as Lake Erie and the Pittsburgh metropolitan area. The potential for growth throughout the corridor is massive, as the area's natural beauty and cultural assets create huge attractions. In 2019, tourism generated \$48 billion in impact for Ohio, supporting **431,000 jobs**, and \$46 billion in annual direct spending occurred in Pennsylvania, supporting more than **a half million jobs**. The impacts that both states are already seeing in this sector back up the notion that completing the A2P corridor should add significant economic opportunity for the communities along its route.

Economy

The history of the A2P region mirrors closely the history of the entire Industrial Heartland. Prime placement along waterfronts, whether lake or river, set up communities to be industrial powerhouses. Because of reliance on the fossil-fuel economy and manufacturing industry, the steady decline in both manufacturing and coal mining has created economic hardship throughout the region. The closing of mills, factories and mines has taken a toll on these communities.

Economically, places such as Youngstown, Ohio, and Pittsburgh, Pennsylvania, have seen some success in diversifying their employment base through a mixture of medical, education and advanced manufacturing sectors. Smaller communities along the corridor have been working to redefine and market themselves as attractive places to live, work and play. Entrepreneurial opportunities in smaller towns will certainly be increased through a completed regional trail system like the IHTC network, and the A2P in particular.

The “Trail Town” concept, originated by the Allegheny Trail Alliance, has proved effective in helping communities maximize the benefits that visitors can bring. Since 2007, this approach to community development has allowed established trail systems to attract many business opportunities, from lodging, bike shops and guided tour companies to food and drink establishments.

Health

Ohio and Pennsylvania have both seen declining health outcomes for their residents for years. The obesity rate in Ohio is nearly 30%, 11th highest in the nation, while Pennsylvania's is nearly 29%, putting it at 16th highest. There has, however, been increased awareness that proximity to walking and biking facilities can lead to an increase in physical activity.

The coronavirus pandemic and its subsequent activity lockdowns have underscored the importance of walking, biking and trails for people's physical and mental well-being. Rails-to-Trails Conservancy's (RTC) research showed a nationwide surge in trail use during the initial 12 months of the pandemic, as trails reported that the number of people out on trails increased anywhere from 40% to 200% in some cases. Access to these facilities appeared to be a crucial factor in people's well-being.

Existing and Connecting Trails

The Segment Analysis (beginning on page 10) describes the relationship of the A2P corridor to the communities it connects, details current conditions and recommended improvements for existing trails within the corridor, and indicates where existing and planned connecting trails could enhance community access to the corridor.

The existing trails within the A2P corridor—the North Shore Trail, Western Reserve Greenway, Garrett Wonders Bike Trail, Niles Greenway, Mill Creek MetroParks Bikeway and Little Beaver Creek Greenway Trail in Ohio; and Neville Island Bike Lanes and the Three Rivers Heritage Trail in Pennsylvania—are already connecting and serving many communities. These significant assets, however, are not unlocking their full potential. By completely connecting the A2P corridor, a full leveraging of economic, health and community impacts can finally be obtained.

There are several existing trails and others close to opening that connect to the A2P corridor, further extending its reach and impact. In Ohio, Ashtabula County is developing the Pymatuning Valley Greenway Trail, which will head east from near Austinburg all the way to the Pennsylvania border at Pymatuning Lake.

In Pennsylvania, the corridor is connected to the Montour Trail in Coraopolis. The Montour Trail heads west, where it connects to the Panhandle Trail, and continues to West Virginia and the Ohio River. At the southern terminus of the A2P corridor, it meets the 150-mile Great Allegheny Passage (gaptrail.org), an iconic rail-trail going all the way to Cumberland, Maryland, where it connects to the 184-mile Chesapeake and Ohio Canal Towpath that runs between Cumberland and Washington, D.C.



A2P Corridor Alignment and Segment Analysis Methodology

This section describes how the Ashtabula to Pittsburgh (A2P) corridor alignment was determined, summarizes the stakeholder and public engagement process that informed this study's content and recommendations, and concludes with a comprehensive review of existing plans that continue to inform and support trail development along the A2P corridor.

Development of Alignment

In the late 1980s, trail visionaries in Ashtabula County, Ohio, launched a concept that evolved into the Great Ohio Lake-to-River Greenway. This dedicated group took the initial steps in defining a corridor from Lake Erie in the city of Ashtabula to the Ohio River in Columbiana County, Ohio.

Pennsylvania trail activists in the late 1990s began looking at how to get a trail from Pittsburgh, Pennsylvania, along the Ohio River to the Ohio border near East Liverpool, Ohio. This multifaceted effort was championed for years by the Ohio River Trail Council.

The A2P corridor's development is the latest in a series of corridor projects that form the Industrial Heartland Trails Coalition (IHTC) network. In the early 2000s, trail-building groups in Pennsylvania, West Virginia and Ohio formed a Tri-State Trails Initiative to discuss many of the connections that now make up the bulk of the network of trails the IHTC is working to complete.

In 2010, the "Power of 32" regional visioning project engaged thousands of people across 32 counties in Maryland, Ohio, Pennsylvania and West Virginia to create a shared economic development and community revitalization vision for the future. The IHTC grew out of this project, formalizing in 2011 to define the trail corridors, identify gaps in the trail network and develop mapping technology to support the overall effort. These initial efforts relied on the input of trail advocates and local planning professionals, who produced a trail connectivity analysis in 2014. The connectivity analysis largely defined the alignment of major corridor "spines" of the trail network.

The A2P corridor links Pittsburgh to Lake Erie and the mouth of the Ashtabula River in Ohio. A network of existing trails has been expanding throughout the IHTC region since the 1980s. These existing trails serve as the backbone for the A2P corridor.

Stakeholder and Partner Engagement

An array of dedicated stakeholders and partners shaped the alignment of the A2P corridor and contributed to the development of this study through working group meetings, one-on-one meetings and site visits. Rails-to-Trails Conservancy (RTC) staff have held meetings across the A2P corridor, including in-person visits in February 2020 and virtual meetings during the pandemic-induced travel ban of 2020 and 2021. The A2P corridor working group works closely with the Ohio-specific Great Ohio Lake-to-River Greenway group, which meets quarterly.

Plan Review

Segments of the A2P trail corridor appear in various forms in several plans at the state, county/regional and local levels in Ohio and Pennsylvania. The following Plan Review analyzes the available regional and statewide comprehensive plans, long-range transportation plans, comprehensive economic development strategies, and miscellaneous plans and field surveys that mention relevant trails and trail networks.

The development of this Plan Review revealed that trails are generally referenced and often prioritized in local, regional and state plans relating to transportation, recreation, health and economic development. Moving forward, state and local plans can and should highlight the existence of the A2P corridor to further leverage support for trail development, accompanied by specific action items or recommendations that will advance gap-filling at the local level. Including this project in such plans will be important for future funding and construction priorities.

Statewide Plans

Two primary themes emerged from reviewing the statewide plans. First, there is a strong public demand for trails, bike lanes and sidewalks. Multiple statewide and local plans noted a significant demand for new and improved active transportation infrastructure. Plans noted respondents' requests for this infrastructure through public meetings, public comments and surveys.

Second, the plans demonstrated a call for increased strategic trail development planning and prioritization. Multiple plans drew attention to the importance of prioritizing trail projects based upon existing networks, community needs and political processes.

Ohio

The Ohio Department of Natural Resources' **2013 Ohio Statewide Comprehensive Outdoor Recreation Plan** used focus groups and online surveys to confirm that multiuse trails are the most important recreation facilities for Ohioans. Participants in the process called for more trails closer to home, improved trail signage and better trail connectivity.

The Ohio Trails Vision (2019) was created with strong support from the Ohio Legislative Trails Caucus, driven by a demand for increased trail development in the state. The overall goal of the trails vision is to provide a trail experience within 5 miles of every Ohioan, and to do so, the plan recommends that Ohio "continue to encourage trail managers to work with as many partners as possible, including all



Trailside amenities along the Mill Creek MetroParks Bikeway | Photo by TrailLink user vicky1960

levels of government, trail advocates, trail users, other trail managers, and private industry and businesses.” The trails vision also references the A2P corridor specifically as an important project in the state. Ohio’s dedication to trail development is mirrored in other state plans, including **Access Ohio 2045**—Ohio’s long-range transportation plan—as well as the Ohio Department of Transportation’s first-ever statewide walking and biking plan, **Walk.Bike.Ohio**.

Pennsylvania

The **2020–2024 Pennsylvania Statewide Outdoor Recreation Plan** lays out a convincing case for the importance of outdoor recreation to Pennsylvanians and, more specifically, the role of trails in everyday life. Nearly 79% of survey respondents during the plan completion process “listed community or regional trail systems as the highest priority for facility investment over the next five years.” The plan also shares with The Ohio Trails Vision the recommendation that building “strategic coalitions to maximize the economic impacts of outdoor recreation” is vital to long-term trail development.

In 2009, the Pennsylvania Department of Conservation and Natural Resources identified 107 trail gaps in Pennsylvania, with this number increasing to 208 trail gaps in 2014. As a result, the **Pennsylvania Land and Water Trail Network Strategic Plan 2020–2024** includes Pennsylvania’s top 10 trail gaps in an effort to establish priority trail projects in the state. While none of the trail gaps listed are located along the A2P corridor, there may be an opportunity to include gaps along the corridor in future top 10 lists.

County and Regional Plans

Many of the six counties along the A2P corridor in Ohio and Pennsylvania have regional or county plans that mention support for trail development.

Eastgate Regional Council of Governments’ Regional Bicycle Plan (2010) indicates a strong commitment to the completion of the Great Ohio Lake-to-River Greenway from the shores of Lake Erie in Ashtabula to the banks of the Ohio River in East Liverpool. Several of the segments identified in the plan have already been completed.

Ashtabula County updated its **MetroParks Master Plan** in October 2020, outlining the importance of trails and park systems across the county. The plan notes that the Western Reserve Greenway will tie into the future A2P trail network. **Ashtabula County’s 2003 Comprehensive Plan** provides significant detail about how trails and active transportation fit into the county’s goals, including developing trail standards that contribute to a network of fully interconnected trails. The plan also highlights the potential role former railroad rights-of-way can serve in completing a north–south trail connection through the county.

The park systems across the Ohio counties along the A2P corridor have strong master plans. Trumbull County, in its **2009 MetroParks Comprehensive Plan**, notes a high demand for trails from residents, leaders, health advocates and trail enthusiasts.



A half-marathon on the Little Beaver Creek Greenway in 2019 | Photo by TrailLink user Vicky1960

Mahoning County's **2013 Mill Creek MetroParks Comprehensive Parks and Recreation Strategic Master Plan** notes that more than 70% of survey respondents said that walking and biking trails are the highest recreational need in the county. The plan also noted the need to update the "existing trail system and continue to add trails throughout the county to connect with other county trail networks."

Trail development in Beaver County, Pennsylvania, is strongly represented in the county's **2007 Greenways and Trails Plan**, the **2010 Comprehensive Plan** and the **2018 Comprehensive Recreation, Park, and Open Space Plan**. The 2010 Comprehensive Plan highlights the need to link Beaver County into existing trail corridors outside the county and supports the Ohio River Trail Council's plans to develop a trail connecting to the A2P section of trail in Columbiana County, Ohio, and trails in Allegheny County, Pennsylvania. The county's 2007 Greenways and Trails Plan specifically calls for building "an interconnected network of diverse recreational trails connecting population centers." The 2018 Comprehensive Recreation, Park, and Open Space Plan recognizes the momentum from outside Beaver County to connect into the county, specifically mentioning the effort to connect a trail toward Ashtabula.

Allegheny Places: The Allegheny County Comprehensive Plan, published in 2008, includes a chapter on Parks, Open Space and Greenways. The chapter discusses the Three Rivers Heritage Trail and its role in allowing users to access the riverfront in Pittsburgh. The plan also mentions a lack of access to regional parks for people dependent on public transportation and the role that trails may play in creating equitable access to green space.

Including the Project in Future Plans

The IHTC, the A2P corridor and the individual projects these trail networks comprise should be included in future plans and plan updates. This approach was demonstrated in Ohio in partnership with the Ohio Department of Natural Resources, which incorporated the A2P corridor and the Great American Rail-Trail™, RTC's initiative to connect a multiuse trail across the country between Washington, D.C., and Washington State, as examples of priority corridor projects within its 2019 state trail plan, The Ohio Trails Vision.

Comprehensive economic development strategies are intended to be updated annually, while comprehensive plans and transportation plans are generally updated every 10 years. A2P corridor working group partners are ready to champion projects within the corridor moving forward to help each other fill corridor gaps.

Segment Analysis

The Ashtabula to Pittsburgh (A2P) corridor will include 146 miles of trail between Ashtabula, Ohio, and Pittsburgh, Pennsylvania (Table 1). Of the corridor length, more than 83 miles are already developed as multiuse trail, with about 62 miles yet to be developed (and a roughly 20-mile section where a viable trail alignment has not yet been identified). The following Segment Analysis describes the corridor segment-by-segment from north to south. The analysis is divided into two types of segments: existing trails (i.e., “open trails”) and gaps in the trail network (i.e., “trail gaps”).

For open trails, this study discusses the existing condition of the trail and any recommended improvements. For trail gaps, this study discusses trail characteristics and recommended alignment, trail and trailhead facilities, and proposed easements and property acquisition.

Table 1 – A2P Segment Mileage

Segment Name	Status	Segment Length (in Miles)
North Shore Trail	Open	4.1
Western Reserve Greenway	Open	42.1
Garrett Wonders Bike Trail	Open	4.0
TRAIL GAP 1 – Western Reserve Greenway Phase 4	Gap	4.1
Niles Greenway	Open	3.9
Mill Creek MetroParks Bikeway	Open	10.6
TRAIL GAP 2 – Mill Creek MetroParks Bikeway Phase 3	Gap	6.5
Little Beaver Creek Greenway	Open	12.6
TRAIL GAP 3 – East Lincoln Way Connector	Gap	2.5
TRAIL GAP 4 – Lisbon to East Liverpool	Gap	-
TRAIL GAP 5 – East Liverpool Riverfront Trail	Gap	4.2
TRAIL GAP 6 – Ohio River Greenway Trail, Beaver County	Gap	32.4
TRAIL GAP 7 – Three Rivers Heritage Trail, Beaver County Line to Coraopolis	Gap	7.1
Neville Island Bike Lanes – Three Rivers Heritage Trail	Open	4.4
TRAIL GAP 8 – Three Rivers Heritage Trail, Neville Island to Station Square	Gap	5.6
Three Rivers Heritage Trail	Open	2.0
	<i>Total Open Trail Miles</i>	<i>83.7</i>
	<i>Total Trail Gap Miles</i>	<i>62.4</i>
	TOTAL MILEAGE	146.1

SEGMENT ANALYSIS

North Shore Trail

The A2P corridor begins to the north in Walnut Beach Park on the shores of Lake Erie in Ashtabula, Ohio. The North Shore Trail starts in the park and heads south for roughly 4 miles to connect to the Western Reserve Greenway at the southern end of Ashtabula. Completed in fall 2020, the North Shore Trail also provides the northern terminus of the Great Ohio Lake-to-River Greenway.

Table 2 – North Shore Trail Profile

Total Length (in Miles)	4.1
Total Length Along the A2P Corridor (in Miles)	4.1
Trail Type	Greenway, On-road
Surface Type	Asphalt, Concrete
Trail Manager	Ashtabula County MetroParks

Existing Conditions

The North Shore Trail is primarily on-road, with a combination of bike lanes, share-the-road sections, a small portion of off-road trail and existing sidewalks. Due to conflicts with a potential rail-trail alternative, the combination of route options described above was determined to be the best compromise.

Trail Improvement Recommendations

The North Shore Trail was recently completed. Upgrades will not be needed for several years, though Ashtabula County MetroParks will be wise to incorporate eventual resurfacing costs and other long-term needs into the budgeting process.

The H.L. Morrison trailhead lies at the connection of the North Shore Trail and the Western Reserve Greenway. The nearby entrance to the trailhead is shared with an industrial site and should be repaired and repaved to fix the damage from industrial vehicles.

Likewise, if the rail-trail conflicts are removed in the future, an entirely off-street trail should be considered as the ideal solution for safety and increased usership.

Western Reserve Greenway

The Western Reserve Greenway connects to the southern endpoint of the North Shore Trail at the H.L. Morrison trailhead in southern Ashtabula and the northern endpoint of the Garrett Wonders Bike Trail in Warren, Ohio. Planning for the Western Reserve Greenway began in 1989, and the first section opened in 2002. The greenway travels almost 43 miles through a scenic, mostly rural area, cutting a north-south course from Ashtabula to Warren. The route follows much of the Pennsylvania Railroad's former branch line, with roughly 26 miles in Ashtabula County and roughly 17 miles in Trumbull County.

Table 3 – Western Reserve Greenway Trail Profile

Total Length (in Miles)	42.1
Total Length Along the A2P Corridor (in Miles)	42.1
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Managers	Ashtabula County MetroParks, Trumbull County MetroParks

Existing Conditions

The Western Reserve Greenway is the most popular of Ashtabula County's parks, and it is similarly popular in Trumbull County. The greenway is used year-round, with snowmobiling allowed only in Ashtabula County. The trail is mostly rural and has a thick tree canopy that provides shade on hot summer days. Trail managers have also added useful amenities over the years, including benches, road signs at intersection roadways and interpretive signs that detail the history of the Underground Railroad.

In 2017 and 2018, Ashtabula County MetroParks crack-sealed and seal-coated the entire length of the Western Reserve Greenway in Ashtabula County.

There is a small, quarter-mile gap in the Western Reserve Greenway in Ashtabula County near the village of Rock Creek. The current bypass takes users on-street to connect between the trailheads at Station Street and East Water Street. A bill in the Ohio Legislature in 2020 provided \$100,000 of the \$200,000 needed to complete this gap, which was completed in 2021. The route will roughly parallel Mill Street and will bypass the Real Alloy property to the east.

Trail Improvement Recommendations

Ashtabula County MetroParks plans to add a new trailhead at the former New Lyme Station location at the corner of Dodgeville and Price roads in Rome, Ohio. The county is in the beginning stages of planning a parking lot using existing funding as well as a pavilion and additional amenities, for which the county is currently seeking grant funding.

Garrett Wonders Bike Trail

The Garrett Wonders Bike Trail, formerly the Warren Bikeway, consists of a greenway portion coursing through a utility corridor and industrial properties in the northern part of Warren, as well as a rail-trail portion running southeast from the heart of Warren to its southern border.

The trail is named after Garrett Wonders, who was born and raised in Warren. Wonders served in the U.S. Navy and represented the Navy on the U.S. Armed Forces Cycling Team. In 2004, he was selected to represent the U.S. armed forces in the Olympic trials. Wonders was tragically struck and killed by a driver while on a solo training ride.

Table 4 – Garrett Wonders Bike Trail Profile

Total Length (in Miles)	4.0
Total Length Along the A2P Corridor (in Miles)	4.0
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Managers	Trumbull County MetroParks, Warren Parks and Recreation

Existing Conditions

The short northern section of the Garrett Wonders Bike Trail connects to the Western Reserve Greenway at North River Road Northwest and includes an on-road route for three blocks using the lightly traveled Fremont Avenue Northeast into North End Park.

The rail-trail segment begins at the intersection of Elm Road Northeast and Paige Avenue Northeast, just a couple blocks southwest of Warren G. Harding High School. The trail runs southeast through residential neighborhoods and features a dedicated bicycle and pedestrian bridge to cross busy U.S. 422. As the trail leaves downtown Warren, it enters a more industrial landscape before rejoining neighborhood streets at its southern endpoint.

Trail Improvement Recommendations

Aside from surface patching as needed, asphalt trails should be resurfaced approximately every 10 years. Sustainable ways to fund regularly scheduled resurfacing and other maintenance costs should continue to be identified and secured.

TRAIL GAP 1 – Western Reserve Greenway Phase 4

Trumbull County is working to complete a roughly 4-mile gap in the Western Reserve Greenway, called Phase 4. Completing Phase 4 will create a continuous trail from Lake Erie into Mahoning County, Ohio, which would cover almost 70 miles.

Trail Characteristics and Recommended Alignment

The exact alignment to complete Phase 4 of the Western Reserve Greenway has already been determined, and Trumbull County is working to complete this phase of the project. Two railroad bridges will be part of this roughly 4-mile trail extension. Trumbull County estimates the total cost of completing Phase 4 of the Western Reserve Greenway to be about \$4 million. Trumbull County received a \$500,000 grant from the Clean Ohio Trails Fund in 2020 to support Phase 4 construction, and the county has other funding sources in line to complete the trail gap.

Trail and Trailhead Facilities

The trail will connect to two existing trails, which already have their own trailheads.

Proposed Easements and Property Acquisition

Trumbull County is currently in the right-of-way acquisition phase of the project and has been negotiating with 17 property owners to gather permanent and temporary rights-of-way to construct the project. Negotiations are expected to be completed in 2021 in advance of a planned construction start in summer 2022.

Niles Greenway

The Niles Greenway is a paved, multiuse path running north-south between the city of Niles, Ohio, and the county line between Trumbull and Mahoning counties. The trail passes through a mix of wooded areas, scattered light industrial parcels and a few suburban neighborhoods.

The trail offers easy access to downtown Niles, Meander Creek Reservoir and an off-road route between Niles and towns south, including Austintown and Canfield. From the trail’s southern end at County Line Road in Mineral Ridge, trail users can continue south and connect to the Mill Creek MetroParks Bikeway in Mahoning County.

Table 5 – Niles Greenway Trail Profile

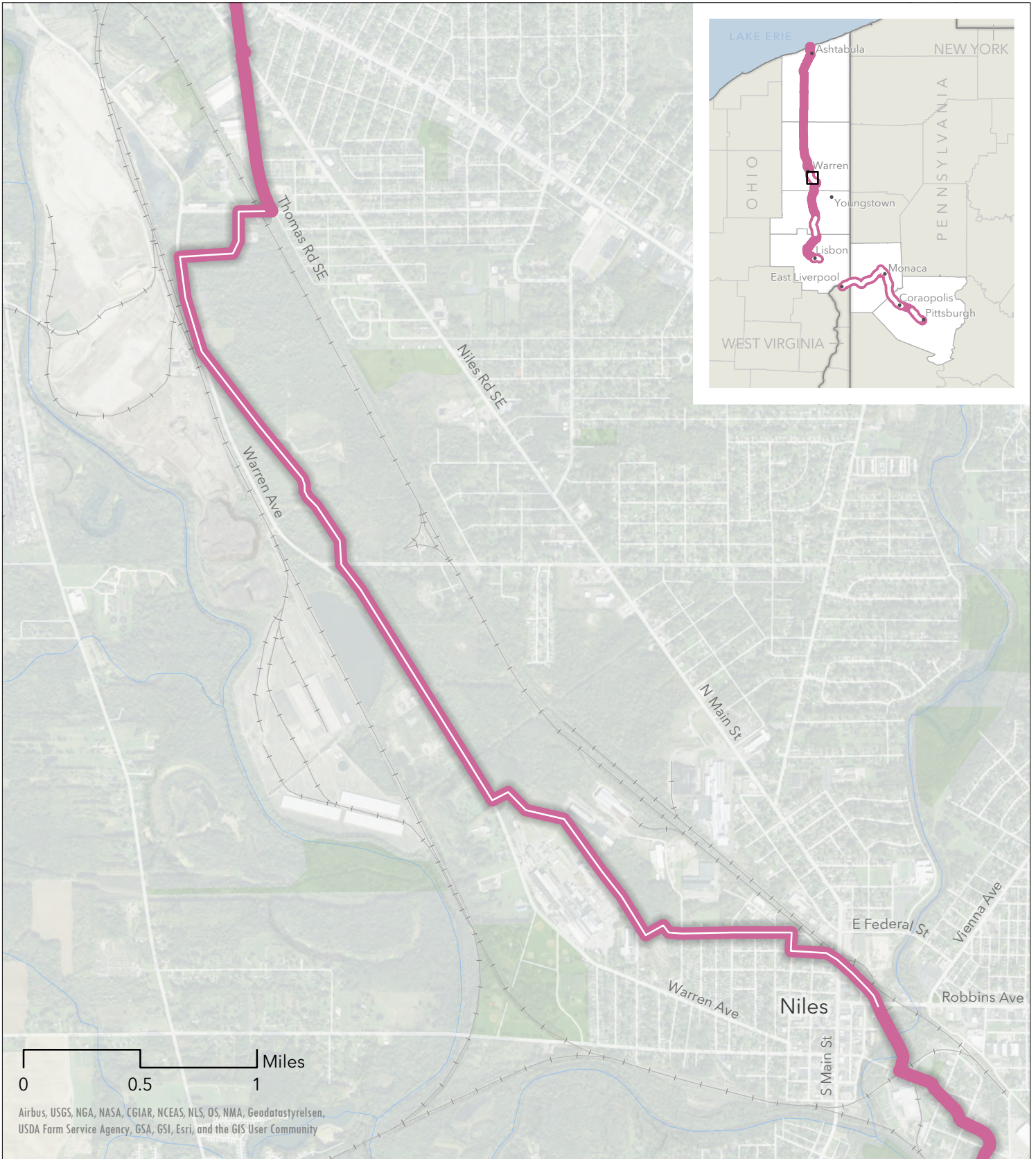
Total Length (in Miles)	3.9
Total Length Along the A2P Corridor (in Miles)	3.9
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Manager	Trumbull County MetroParks

Existing Conditions

Niles Greenway is a well-used trail and remains in good condition.

Trail Improvement Recommendations

Aside from surface patching as needed, asphalt trails should be resurfaced approximately every 10 years. Sustainable ways to fund regularly scheduled resurfacing and other maintenance costs should continue to be identified and secured.



Airbus, USGS, NGA, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodastystyrelsen, USDA Farm Service Agency, GSA, GSI, Esri, and the GIS User Community

Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 1
Western Reserve Greenway Phase 4

- A2P Open Trail
- A2P Planned Trail
- Active Railroad



Mill Creek MetroParks Bikeway

The nearly 11-mile Mill Creek MetroParks Bikeway provides a scenic and well-designed link to communities and natural sites in Mahoning County. Planning for the trail began in the mid-1990s, and the first phase was opened in 2001. The rail-trail follows a corridor between Canfield and Austintown townships that was originally built in the 1860s as the Niles & Lisbon Branch of the Erie Lackawanna Railway. The rail line provided an important link between Cleveland and Pittsburgh, while also offering passenger service to towns along the way.

The paved trail passes through both suburbs and countryside. The trail connects to the north at the county line between Trumbull and Mahoning counties at the Niles Greenway. The trail passes the Kirk Road trailhead, a depot-themed facility that provides trailside basics such as a picnic pavilion, drinking fountains and restrooms and also hosts educational and trailside activities.

The trail also passes by Sawmill Creek Preserve, a 154-acre forested area with trees and shrubs that prevent sediment from entering Sawmill Creek and the Meander Creek Reservoir, a drinking water source for 250,000 residents. Trail users pass by the Mill Creek MetroParks Farm, a 400-acre working farm that sprawls along both sides of the trail and presents educational programs, tours and agricultural displays seasonally. On the east side of the trail, the Canfield Fairgrounds holds one of Ohio’s largest fairs every year.

Table 6 – Mill Creek MetroParks Bikeway Trail Profile

Total Length (in Miles)	10.6
Total Length Along the A2P Corridor (in Miles)	10.6
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Manager	Mill Creek MetroParks

Existing Conditions

The Mill Creek MetroParks Bikeway is in strong shape with a gentle grade. The trail has trailheads in three locations: Mahoning Avenue in Youngstown, Kirk Road in Canfield and at the Mill Creek MetroParks Farm.

Trail Improvement Recommendations

Aside from surface patching as needed, asphalt trails should be resurfaced approximately every 10 years. Sustainable ways to fund regularly scheduled resurfacing and other maintenance costs should continue to be identified and secured.

TRAIL GAP 2 – Mill Creek MetroParks Bikeway Phase 3

Mill Creek MetroParks has planned and developed the Mill Creek MetroParks Bikeway in phases. Phases 1 and 2 are complete and form the 10.6 miles of existing trail discussed earlier. The alignment for the proposed 6.5-mile Phase 3 has been determined and final plans have been submitted to the Ohio Department of Transportation. The land acquisition, environmental work and construction of the project are also fully funded.

Currently, construction is anticipated to begin in late 2022 or spring 2023. Construction of Phase III will complete the 17-mile trail north-south through Mahoning County.

Trail Characteristics and Recommended Alignment

The alignment for Phase 3 of the Mill Creek MetroParks Bikeway has already been identified and approved and can be seen in the map on page 15. From the current terminus at West Western Reserve Road, Phase 3 of the Mill Creek MetroParks Bikeway will largely travel along the same inactive rail corridor as the previous two phases of the trail. At the village of Washingtonville, the trail will parallel County Road 95/ Washingtonville Road/East Street/Grafton Road as it enters into town to connect to the Little Beaver Creek Greenway at the Mahoning and Columbiana county line.

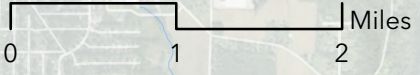
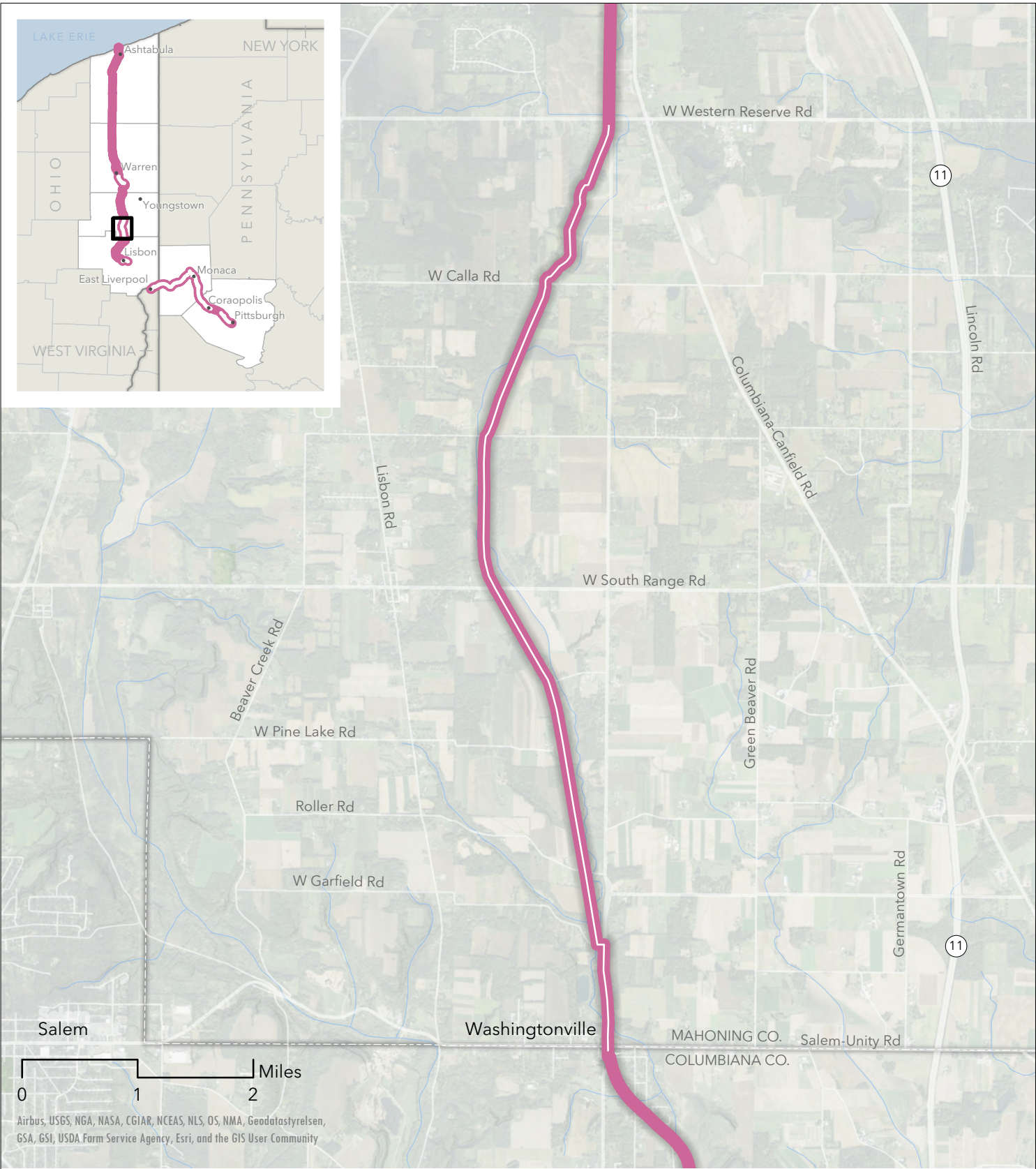
The known costs for this project, according to Mill Creek MetroParks, are approximately \$4.5 million. This includes stages that have been completed or are currently underway, including environmental review and property acquisition, as well as future construction.

Trail and Trailhead Facilities

There is already a trailhead at the Washingtonville entrance to the Little Beaver Creek Greenway, which can act as the southern trailhead for the Mill Creek MetroParks Bikeway, though Mill Creek MetroParks would be encouraged to work with Columbiana County to add new signage if it does not create its own trailhead. Mill Creek MetroParks has identified several locations for future trailhead development that may be considered in the future.

Proposed Easements and Property Acquisition

Mill Creek MetroParks is working with 14 property owners to acquire property through easements or fee simple acquisition to complete this section of trail. Six of those property owners have already closed on their easements/sales. The remaining easements/acquisitions are in various stages of negotiation and are expected to be wrapped up in 2022.



Airbus, USGS, NGA, NASA, CGIAR, NCEAS, NLS, OS, NMA, Geodatasystrelsen, GSA, GSI, USDA Farm Service Agency, Esri, and the GIS User Community

Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 2
Mill Creek MetroParks Bikeway Phase 3

- A2P Open Trail
- A2P Planned Trail



Little Beaver Creek Greenway

Little Beaver Creek Greenway is built on the right-of-way of the Pittsburgh, Lisbon & Western (PL&W) Railroad line. For most of the first half of the 20th century, the PL&W ran both freight and passengers throughout Pennsylvania and Ohio. When the PL&W encountered increasing financial difficulties in the late 1950s and early 1960s, it merged with the Erie Lackawanna Railway. After the railroad abandoned the track, much of it fell into the hands of local philanthropist Allen Dickey, who would later donate it to Columbiana County.

The first 10 miles of trail were built in 2000. The paved pathway parallels the Middle Fork of Little Beaver Creek and has many beautiful and interesting features, including glacial outwashes, upland fields, mature ravine woodlots and wetland wildlife habitats. A highlight is the Teegarden-Centennial Covered Bridge, on the National Register of Historic Places. The bridge is located in the community of Teegarden, about halfway along the trail.

Table 7 – Little Beaver Creek Greenway Trail Profile

Total Length (in Miles)	12.6
Total Length Along the A2P Corridor (in Miles)	12.6
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Manager	Columbiana County Park District

Existing Conditions

The trail runs north–south from Washingtonville to Lisbon, Ohio. The Lisbon trailhead is located in a former railroad depot and is about a quarter-mile from the actual start of the greenway. The trail is mostly flat and is paved along its entire length.

Trail Improvement Recommendations

Aside from surface patching as needed, asphalt trails should be resurfaced approximately every 10 years. Sustainable ways to fund regularly scheduled resurfacing and other maintenance costs should continue to be identified and secured.

TRAIL GAP 3 – East Lincoln Way Connector

Columbiana County is in the process of completing a trail through Lisbon along East Lincoln Way to connect to the Little Beaver Creek Greenway. The trail length will be about 2.5 miles, with 1.5 miles of new trail construction and about a mile of on-road travel through Lisbon. The county received two grants totaling \$797,770 to complete this work: \$117,447 from the Clean Ohio Trails Fund in 2019 and \$680,323 from the Transportation Alternatives Program in 2018. The trail is anticipated to be completed in 2022.

Trail Characteristics and Recommended Alignment

From the current terminus of the Little Beaver Creek Greenway at Morrison Street in Lisbon, the East Lincoln Way Connector will travel on-road through Lisbon for about a mile before connecting to a dedicated off-street trail adjacent to East Lincoln Way/state Route 154. The current eastern extent of the East Lincoln Way Connector is the Park and Ride roughly a quarter-mile from the state Route 11 interchange.

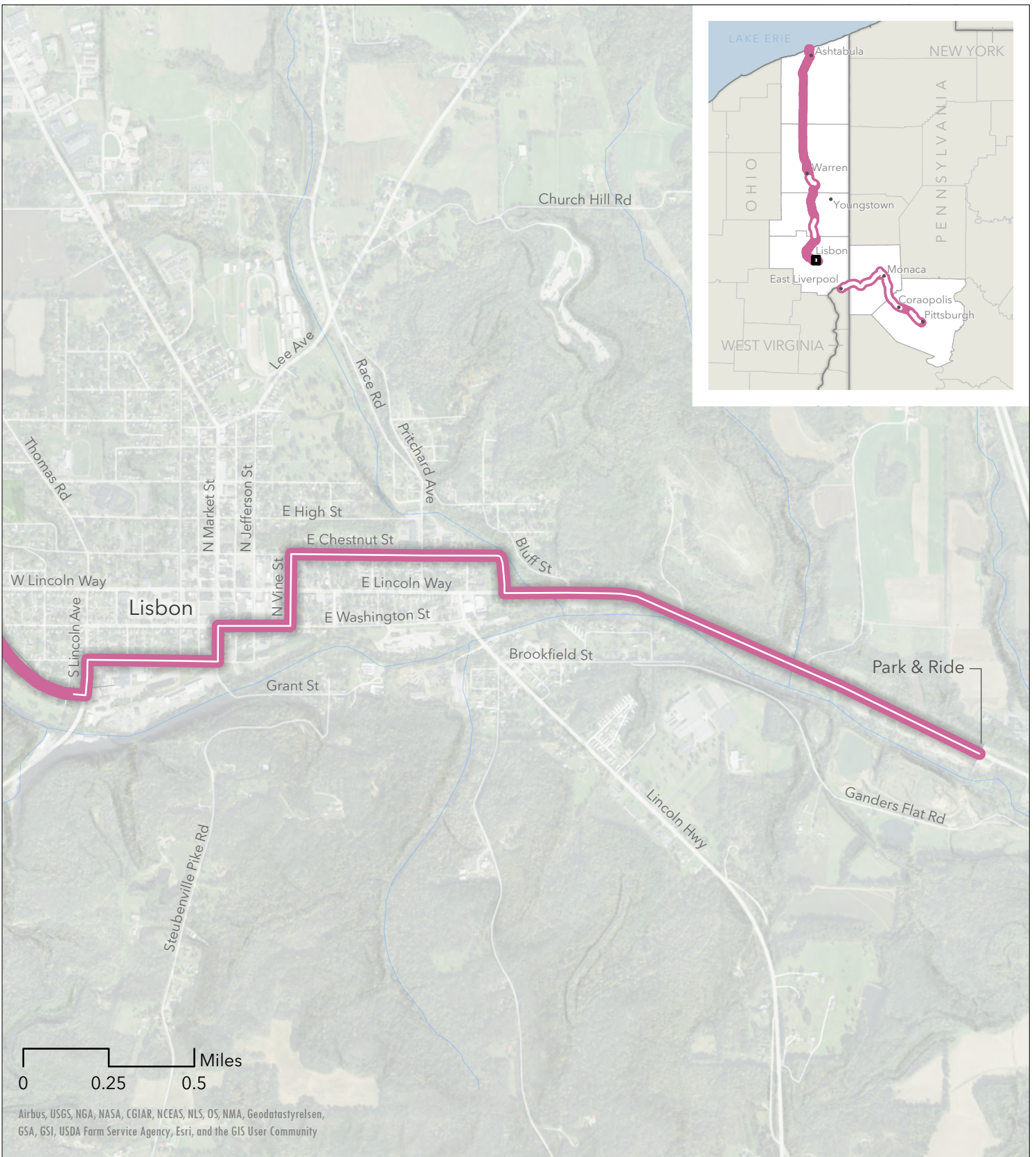
Trail and Trailhead Facilities

As the trail travels through Lisbon, it will share the road with automobiles. At Moore Street and East Lincoln Way, plans include markings on the road, signage and flashing lights to Bluff Street. From there, it will become a separated paved trail until it reaches the Park and Ride.

There is an existing trailhead at the current terminus of the Little Beaver Creek Greenway at Morrison Street in Lisbon. The Park and Ride at the eastern extent of the East Lincoln Way Connector will act as the eastern trailhead.



Proposed Easements and Property Acquisition

The property where the trail will be constructed is within the Lisbon village limits and is owned by the Ohio Department of Transportation (ODOT). The trail will be constructed on the right-of-way of state Route 154, and ODOT will issue a permit to the county for construction. No new easements or property acquisition will be required.



Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 3
East Lincoln Way Connector

-  A2P Open Trail
-  A2P Planned Trail



TRAIL GAP 4 – Lisbon to East Liverpool Conservation Easements

Between the East Lincoln Way Connector and the East Liverpool Riverfront Trail, two options have been explored that could complete the roughly 20-mile gap.

Little Beaver Creek

One option is to follow the towpath of a former canal along Little Beaver Creek through Beaver Creek State Forest. Known as the Sandy and Beaver Canal, it linked the Ohio River with the Ohio and Erie Canal and was completed in 1848. The canal once boasted 30 dams, 90 locks and two tunnels. The canal ceased operations in 1852, and the creek was allowed to return to its natural state of flow.

In 2008, the Columbiana County Park District initiated a study to determine the probable cost of completing a trail along Little Beaver Creek to connect a trail between Lisbon and East Liverpool. Prepared by a local engineer, the study identifies the necessary easements and land acquisitions to develop a trail. The study also estimates the probable costs for land acquisition, where needed, and construction for the entire 28.11-mile section of trail.

The Columbiana County Park District and the Ohio Department of Natural Resources (ODNR) Division of Forestry entered into a memorandum of understanding (MOU) in 2014 to complete a section of this trail through Beaver Creek State Forest for about 3.4 miles. The MOU states that the director of ODNR “has determined that the construction, operation and maintenance of said trail is in the public interest and deems the giving of [a] License advantageous to the State.” The license itself was established for 25 years and is set to expire in 2039. The license provides several clauses that the Columbiana County Park District would need to follow to ensure little to no long-term impacts to Little Beaver Creek.

Wild and Scenic River Status

Approximately 36 miles of Little Beaver Creek were designated an Ohio Wild and Scenic River in 1974, and 33 miles were classified as a federal Scenic River in 1975. Portions of the Middle Fork, the North Fork and the main stem are included in the National Wild and Scenic Rivers System and the Ohio Scenic Rivers System. Being designated a Wild and Scenic River comes with certain restrictions, including the number of miles of developed amenities that can be located within 300 feet of the river. Asphalt should be avoided within the 100-year floodplain of the river, and new river crossings would need thorough review.

Because of its federal designation, the National Park Service would also need to be involved in determinations of a trail project along the river. The creek’s “wild” designation comes with the most restrictive provisions concerning development near the river, including trails. As such, in recent conversations, representatives from ODNR and the National Park Service have questioned the current validity of the 2014 MOU between the Columbiana County Park District and ODNR, given Little Beaver Creek’s Wild and Scenic River status.

Many of the properties along Little Beaver Creek, especially in the Fredericktown, Ohio, area, have overlaying conservation easements. These easements are typically in perpetuity and are intended to limit development to permanently protect a property’s conservation value. The easements are managed by a multitude of organizations, including Western Reserve Land Conservancy and ODNR.

Conservation easements are developed in myriad ways between various parties. Multiuse trails are commonly constructed on properties with conservation easements, though the language to allow this construction is typically included in the easements at the time of their development. Many examples of this happening are within easement property that is in public ownership. For example, a public park district acquires land and works to create a conservation easement on the property with provisions carefully crafted to allow multiuse trail development on a corridor through the land. Amendments to existing conservation easements do happen, but if they do not already include trail access language, it is onerous to add them after the fact.

Following Existing County and State Roads

In order to understand if there are any alternatives to complete this gap besides building a trail adjacent to Little Beaver Creek, the Columbiana County Park District undertook an effort to review different alignments that would bypass the creek. The park district proposed several trail alignments that would utilize the rights-of-way of various state and county roads to complete a separated trail adjacent to the roadway. Rails-to-Trails Conservancy (RTC) staff met with park district staff several times to discuss these options and made an in-person visit to view them on the ground in May 2020 and provide technical analysis.

Since this gap is long, at more than 25 miles, routing a trail on-street with motor vehicle traffic is not an option. Brief stretches of active roadway could be considered as on-street trail connectors if they connected to existing trails on both ends and had sufficiently low volumes of motor vehicle traffic. That is not the case with this sizable gap.

To look at locations where a trail could be built within the right-of-way of existing county and state roads, all alternatives began to the north in Lisbon and ended in East Liverpool to the south, entering town on Dresden Avenue. Options reviewed include the right-of-way along Lincoln Highway, Middle Beaver Road, state Route 7, East Liverpool Road, County Road 1131/Bell School Road, County Road 424/Y and O Road, County Road 430/Calcutta-Smith Ferry Road and state Route 170.

Upon further analysis, each road presents its own challenges. Topography is a significant challenge in this part of Columbiana County. Many roads are winding and were built in narrow corridors with drop-offs or inclines on either side of the road. A separate trail adjacent to the road is physically impossible along long stretches of these roads, given the topographical constraints on both sides of the road.

SEGMENT ANALYSIS

In many locations, businesses and residential properties are constructed close to the existing roadway, presenting an additional challenge to developing a trail adjacent to the road. RTC staff were unable to find a single road in the list above where a trail could feasibly be developed on the same side of the road for significant stretches due to limitations including encroachment from built structures.

Given the speeds and sight lines along many of these roads, RTC would also recommend physical separation between the trail and the roadway. A widened shoulder could work in small stretches of these roads to accommodate trail users, but to build the type of trail that would accommodate the greatest number of users, additional width would be needed to separate fast-moving cars from the trail.

Constructing a safe and viable trail along any of these roads would be extremely expensive and especially difficult, given the insufficient local funding for new trail construction and sustained funding for the maintenance necessary to keep a trail in good working order.

Recommendation

At this moment, RTC is unable to recommend a feasible option to complete a multiuse trail between Lisbon and East Liverpool. A trail alignment along Little Beaver Creek remains the preferred option to create a safe and separated trail. When made a priority, trail projects have been developed on federally protected lands. Exceptions to rules in programs like the Wild and Scenic Rivers programs are difficult but possible when parties are aligned on goals and requirements. If there is a way to obtain the exceptions that would be needed to complete a trail along Little Beaver Creek in the future, this would be an ideal place to consider the opportunity. In the meantime, RTC remains available for support and technical assistance should the Columbiana County Park District find other options to consider.

TRAIL GAP 5 – East Liverpool Riverfront Trail

The East Liverpool Community Partnership for Revitalization has contracted with Environmental Design Group on a Riverfront Trail Alignment Study. The trail would connect along the Ohio River and provide a new transportation and recreational trail option through downtown East Liverpool.

Trail Characteristics and Recommended Alignment

The Riverfront Trail Alignment Study shows multiple alternatives to connect a trail along the Ohio River from downtown East Liverpool, Ohio, at Broadway and East 4th streets east for about 4.2 miles to Calcutta-Smith Ferry Road, near where Little Beaver Creek flows into the Ohio River. The trail will be a combination of side paths along roads and greenway trails through parks and open space.

Trail and Trailhead Facilities

More information on trail and trailhead facilities that will be constructed as part of completing Trail Gap 5 will come following the completion of the Riverfront Trail Alignment Study.

Proposed Easements and Property Acquisition

More information on proposed easements and any needed property acquisition will come following the completion of the Riverfront Trail Alignment Study.

TRAIL GAP 6 – Ohio River Greenway Trail, Beaver County

There is a roughly 30-mile gap in the A2P corridor across Beaver County, Pennsylvania. A corridor to complete this gap was largely identified in the Ohio River North Shore Trail Feasibility Study in 2012 and the Ohio River South Shore Trail Feasibility Study from 2011, and it connects through several larger Pennsylvania towns including Beaver, Monaca and Aliquippa. RTC met with representatives from Beaver County who confirmed the accuracy of the routes from these feasibility studies, which are still the preferred alternatives for filling these trail gaps.

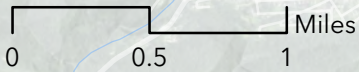
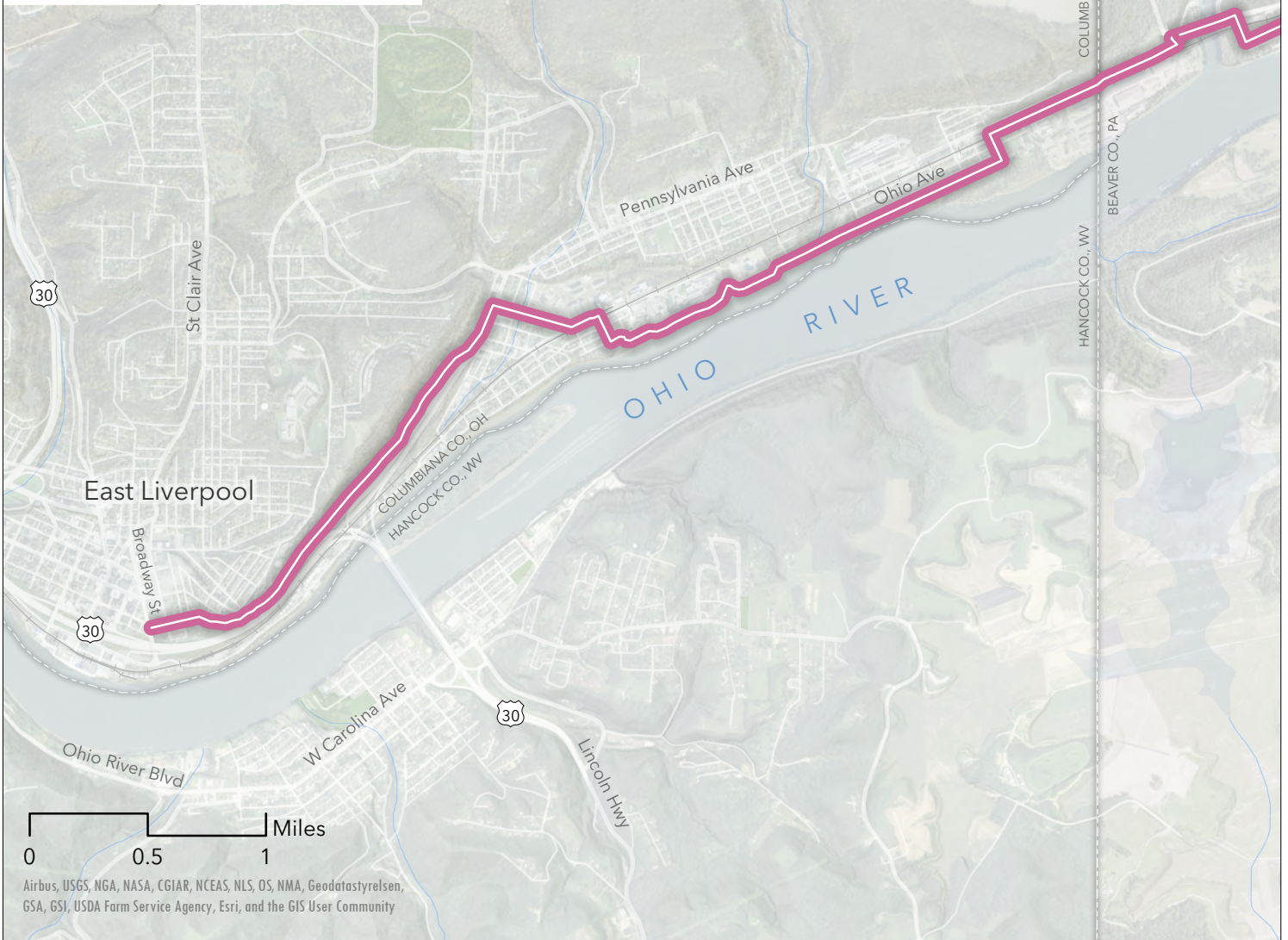
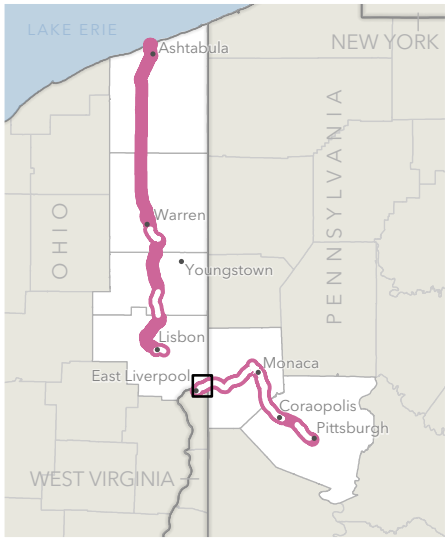
Trail Characteristics and Recommended Alignment

From the Ohio–Pennsylvania state line, the proposed corridor could travel along the north shore of the Ohio River, following state Route 68 through the borough of Midland, Pennsylvania. A trail could continue to follow state Route 68 until Ohioview, where the trail could diverge briefly through town before returning to follow the main road. At Beaver, the route could then diverge again to travel into town along Division Lane.

A thorough analysis needs to be completed to determine the availability of sufficient right-of-way along state Route 68 to complete a fully separated trail along its length between the state line and Beaver.

At Beaver, the route would make a brief jog up the Beaver River to the Veterans Memorial Bridge, which local officials have identified as the most likely place for a separated trail crossing. This option would allow trail users to take advantage of amenities on both sides of the Beaver River and would lower costs by eliminating the need to build an entirely new bridge at the confluence of the Beaver and Ohio rivers.



The corridor would then travel south on the east side of the Beaver River into Rochester and cross the Ohio River along the Monaca-Rochester Bridge into Monaca. The corridor would travel through Monaca on city streets and diverge at the Monaca-East Rochester Bridge, where it would then follow an existing set of active CSX-owned railroad tracks.



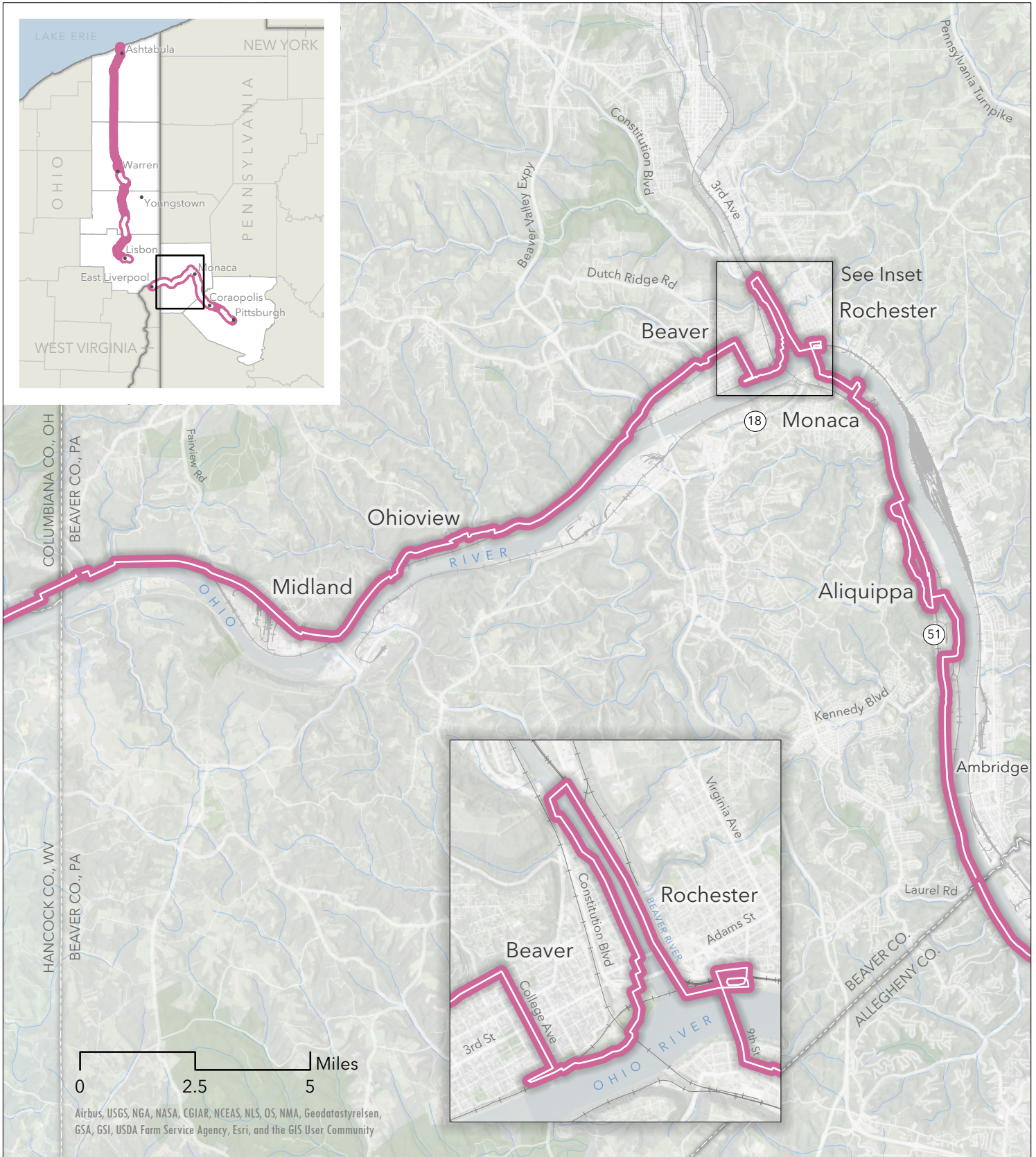
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Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 5
East Liverpool Riverfront Trail



-  A2P Planned Trail
-  Active Railroad





Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 6
Ohio River Greenway Trail, Beaver County

-  A2P Planned Trail
-  Active Railroad



SEGMENT ANALYSIS



Riders on the Mill Creek MetroParks Bikeway | Photo by TrailLink user vicky1960

About 2.5 miles south of Monaca, a bridge crosses the railroad tracks and Constitution Boulevard and Hopewell Avenue toward Precision Yard. The trail could use that bridge to cross over the railroad and the arterial road. Between there and the Henry Mancini Memorial Bridge, about 1.6 miles from the bridge over the railroad tracks, the trail could stay on top of the hill before coming back down to cross at the bridge, or it could remain on the side of the road itself. Both options are being explored to create this connection.

At the Henry Mancini Memorial Bridge, the trail then enters West Aliquippa and follows Woodlawn Road to the Beaver and Allegheny county line.

Trail and Trailhead Facilities

There are currently no formal trailheads along the proposed corridor. Trailheads should be considered in the major towns along the route in Beaver County, including Beaver, Rochester, Monaca and Aliquippa. Wayfinding signage will be vital to the trail's success in bringing people into the business districts of these communities as well.

Proposed Easements and Property Acquisition

A thorough analysis of the proposed trail should be completed to ensure that adequate right-of-way exists to complete the trail off-street as proposed. Some easements are likely necessary, including areas where the trail could parallel active rail lines and along other private properties whose owners may be willing parties.

TRAIL GAP 7 – Three Rivers Heritage Trail, Beaver County Line to Coraopolis

There is a roughly 7-mile gap between the Beaver and Allegheny county line and the Neville Island Bike Lanes near Coraopolis, Pennsylvania. A corridor to complete this gap was largely identified in the Ohio River South Shore Trail Feasibility Study from 2011, and it connects through Crescent Township and Coraopolis. RTC met with representatives from Allegheny County, who confirmed the accuracy of the route from this feasibility study, which is still the preferred alternative for filling this gap.

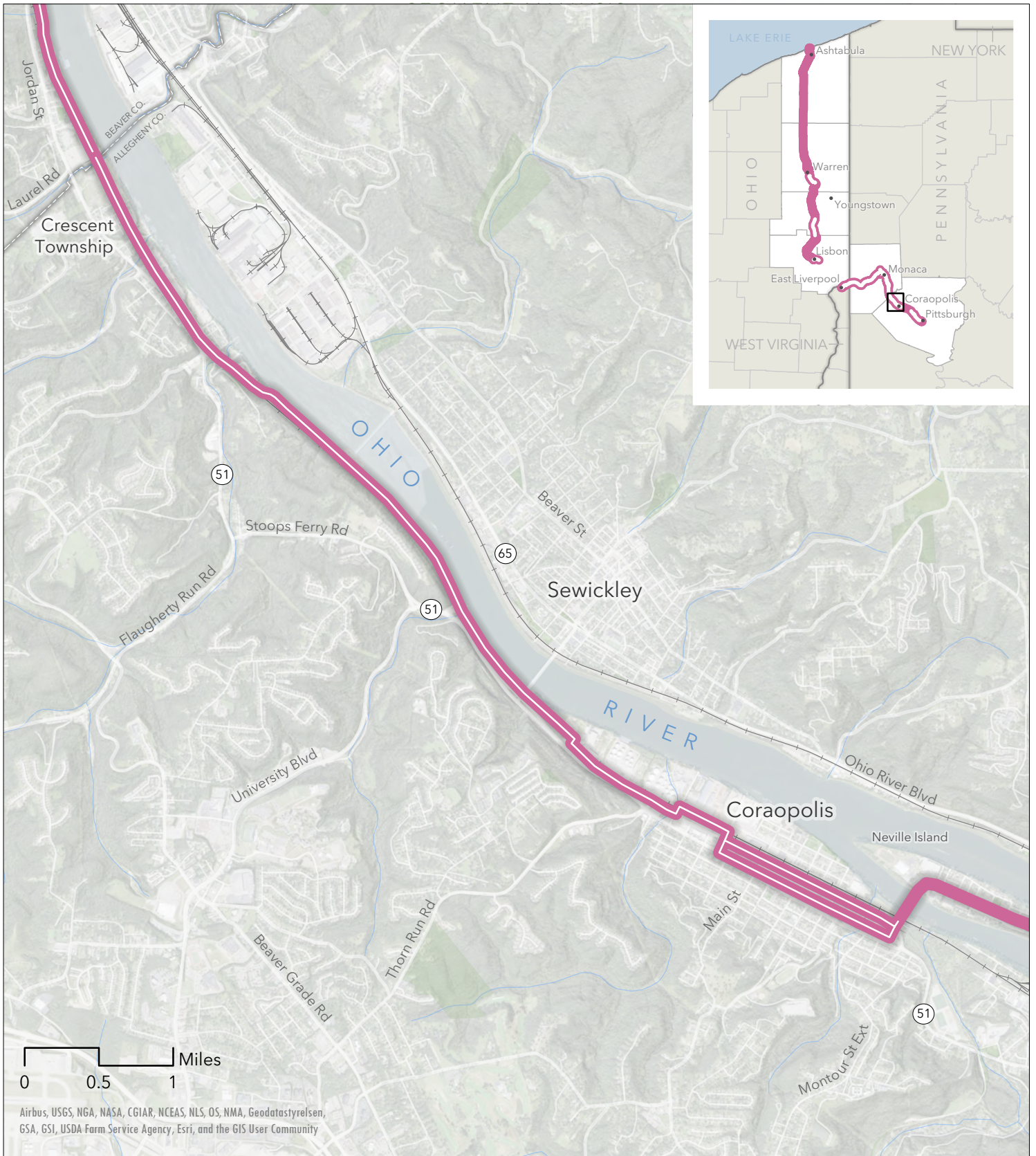
Trail Characteristics and Recommended Alignment

The trail is proposed to use a portion of the right-of-way between the active railroad tracks and the Ohio River. As the trail goes through Crescent Township, it would travel through the central corridor of the town, away from the river. At Shouse Park and McCutcheon Way, the trail would then follow Dashields Lock Road, which directly parallels the Ohio River until it ends roughly 2 miles north of Coraopolis.

In Coraopolis, the route would parallel state Route 51 through town and connect to the bridge crossing onto Neville Island along bike lanes that travel along a pair of one-way streets—Fourth and Fifth avenues.

Trail and Trailhead Facilities




There are currently no formal trailheads along the proposed corridor. Trailheads should be considered in Crescent and Coraopolis. Wayfinding signage will be vital to the trail's success in bringing people into the business districts of these communities as well.



Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 7

Three Rivers Heritage Trail, Beaver County Line to Coraopolis

-  A2P Open Trail
-  A2P Planned Trail
-  Active Railroad



Proposed Easements and Property Acquisition

A thorough analysis of the proposed trail should be undertaken to ensure that adequate right-of-way exists to complete the trail off-street as proposed. Some easements are likely necessary, including areas where the trail could parallel active rail lines and along other private properties whose owners may be willing parties.

Neville Island Bike Lanes – Three Rivers Heritage Trail

In 2016, Allegheny County added “sharrows,” pavement markers to denote shared lanes for bikes and automobiles, to Grand Avenue; adjusted the parking lanes to make more room for people on bikes; and added bike lanes to Neville Road on Neville Island, an island on the Ohio River. The bike lanes span the entire length of the island, just over 4 miles, and connect into Coraopolis.

Table 8 – Neville Island Bike Lanes Trail Profile

Total Length (in Miles)	4.4
Total Length Along the A2P Corridor (in Miles)	4.4
Trail Type	Bike Lanes
Surface Type	Asphalt
Trail Manager	Allegheny County

Existing Conditions

The island’s bike lanes allow for separation of road users, though the lanes are not physically protected from vehicle traffic. Neville Island is home to several industrial sites that bring with them large vehicles and trailers. The lanes are also known for being marked with debris and gravel kicked up from the industrial uses along the island. The lanes provide a convenient connection for those cyclists who are comfortable with being close to large vehicles, though some users are less likely to feel comfortable with them as they are currently designed. There are also sidewalks paralleling Neville Road and Grand Avenue for people on foot and those who use mobility-assistive devices.

Trail Improvement Recommendations

Providing safe, comfortable and convenient amenities for the widest range of trail users is a priority for the A2P corridor. If creating a grade-separated trail is not possible on Neville Island, it is recommended that Allegheny County consider physical separation between the bike lanes and the main vehicle thoroughfare. While Allegheny County and Neville Island sweep the bike lanes occasionally, it is recommended that the lanes be swept more frequently to ensure a clear zone for cyclists.

TRAIL GAP 8 – Three Rivers Heritage Trail, Neville Island to Station Square

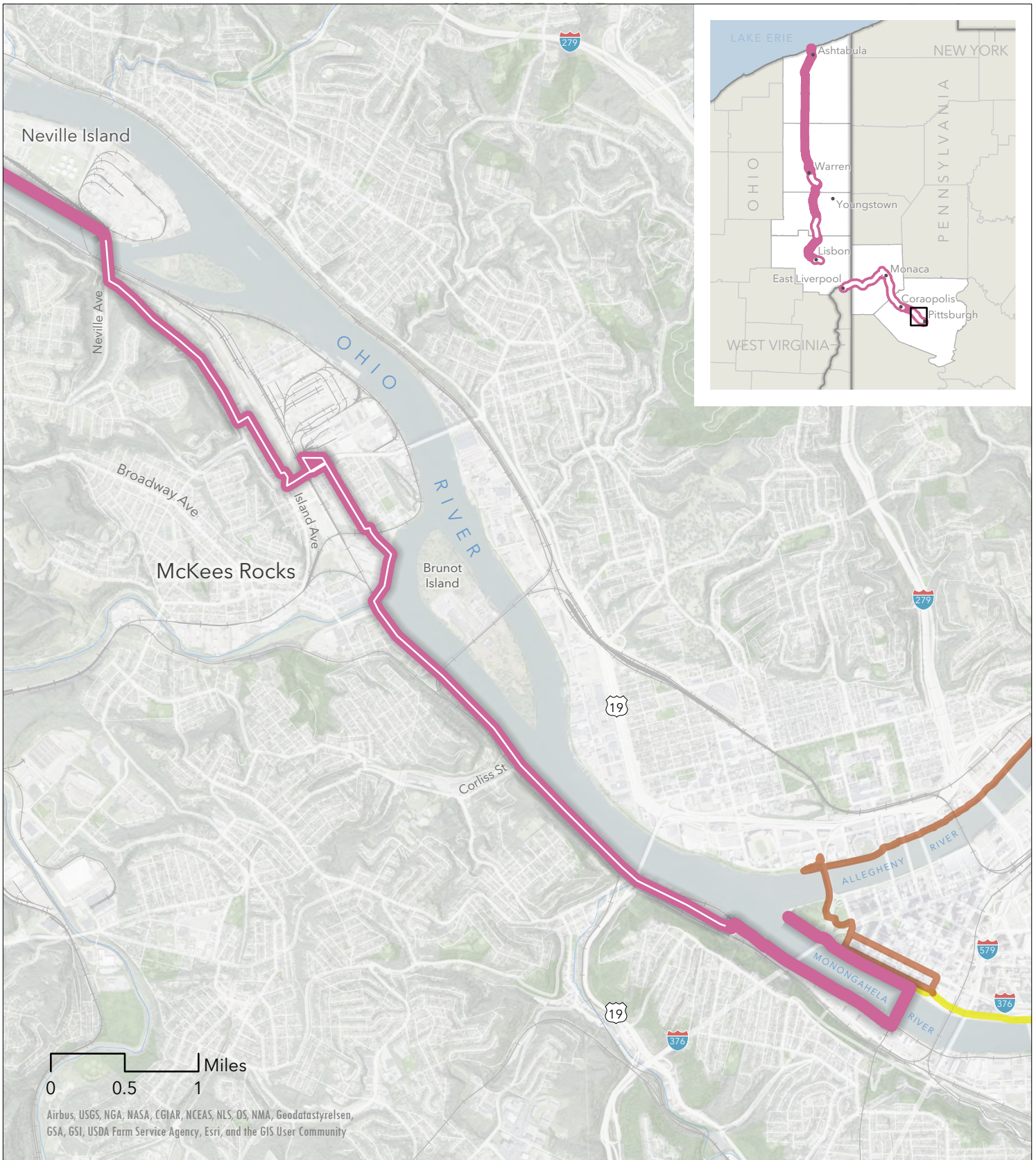
Between the eastern end of Neville Island at the Fleming Park Bridge and the western end of the Three Rivers Heritage Trail at Station Square is a 5.6-mile gap. The Friends of the Riverfront, the Pennsylvania Environmental Council and Allegheny County have studied this trail gap in depth over the last two decades.

In 2013, the Friends of the Riverfront, the Pennsylvania Environmental Council and Allegheny County published the Three Rivers Heritage Trail Connector: Pittsburgh to Coraopolis Feasibility Study, which provided recommendations to complete this trail gap as part of the Three Rivers Heritage Trail system. The proposed recommendations were not acceptable as the road conditions were not favorable, hence an additional, safer route was outlined. Partners continue to work with local agencies including the Pennsylvania Department of Transportation to identify safe connections along state Route 51.

Trail Characteristics and Recommended Alignment

The Friends of the Riverfront, the Pennsylvania Environmental Council and Allegheny County, along with their partner organizations, have explored various options to connect the Three Rivers Heritage Trail from Coraopolis to Pittsburgh. The preferred alignment leaves Neville Island at the Fleming Park Bridge and turns directly onto Glenn Way, a low-volume road in Stowe Township. From Glenn Way, it is recommended to follow a service road that currently is used by the Allegheny County Sanitary Authority into a CSX property. Following a segment of the CSX property, the alignment would then exit onto Intermodal Way, where it would travel under the McKees Rocks Bridge and connect to state Route 51 in Pittsburgh. The trail would follow state Route 51 and West Carson Street into Station Square in Pittsburgh, where it would pick up the existing segments of the Three Rivers Heritage Trail.

Note: RTC reviewed an additional option that would bypass a portion of state Route 51 by utilizing local roads through Pittsburgh’s Sheraden neighborhood. A plan is underway to connect a trail from Chartiers Creek, at the borough of McKees Rocks, toward Sheraden Park. However, further analysis shows that a trail along this route would not be feasible. The topography is very steep, and development is often directly adjacent to the road, which does not allow for sufficient right-of-way to complete a separated trail. On-street signage to connect to the Sheraden neighborhood may be a good option in the future, but RTC believes the only tenable option for a separated multiuse trail to complete this gap is along state Route 51 and West Carson Street.



Ashtabula to Pittsburgh (A2P)
Corridor Feasibility Study

Gap 8

Three Rivers Heritage Trail, Neville Island to Station Square

- A2P Open Trail
- A2P Planned Trail
- Erie to Pittsburgh Corridor
- Great Allegheny Passage/Parkersburg to Pittsburgh Corridor (gaptrail.org)
- Active Railroad





Three Rivers Heritage Trail | Photo by Renee Rosensteel

Trail and Trailhead Facilities

There are plans for a trailhead in McKees Rocks, but a location is not yet identified. Solutions will need to be creative to add a trail within or adjacent to the existing rights-of-way in this gap. There are currently no formal trailheads along this proposed corridor.

Proposed Easements and Property Acquisition

The trail could potentially fit within the existing road rights-of-way and may not require additional easements or property acquisition. Selecting a route closer to the Ohio River would likely require further easements along the CSX rail line on the southern shore. Allegheny County has been in discussions with CSX for an easement along its property, and negotiations are ongoing.



Three Rivers Heritage Trail | Photo by TrailLink user vicky1960

Three Rivers Heritage Trail

The A2P corridor ends in the heart of Pittsburgh, on the Three Rivers Heritage Trail. The 33-mile Three Rivers Heritage Trail is a multiuse riverfront trail system that travels along the banks of three rivers: the Allegheny, Monongahela and Ohio. The A2P corridor incorporates 2 completed miles of the Three Rivers Heritage Trail from Station Square to Point State Park (Table 9).

Table 9 – Three Rivers Heritage Trail Profile

Total Length (in Miles)	33.0
Total Length Along the A2P Corridor (in Miles)	2.0
Trail Type	Rail-trail
Surface Type	Asphalt
Trail Manager	Friends of the Riverfront

Existing Conditions

Since its inception in 1991, Friends of the Riverfront has been a pioneering organization working to protect and restore the Pittsburgh region’s rivers and riverfronts after decades of legacy pollution. The Three Rivers Heritage Trail now encompasses more than 33 miles of urban riverfront trails along both banks of the Allegheny, Monongahela and Ohio rivers in Allegheny County. Through broad and diverse collaborations, Friends of the Riverfront continues the work of providing environmental restoration, economic vitality and public health benefits to the region through the Three Rivers Heritage Trail. The trail features trail rules signage and more than 40 interpretive signs along the entirety of the trail.

Trail Improvement Recommendations

The trail surface of the Three Rivers Heritage Trail along the A2P corridor is asphalt and was last resurfaced in the mid-2000s. Large portions of the trail are due for resurfacing in the next few years to keep a quality trail experience and make routine maintenance more manageable.



Trails Transform Local Economies

Trails attract visitors from near and far. As trail systems grow, they generate opportunities for new investment in trailside businesses, recreation outfitters and tourism-related industry. In midsize cities and rural communities, trail systems support existing businesses and bring new dollars into the community. Trails increasingly demonstrate their significance in community transformation through economic activity by trail users, including visitors and locals.

Ohio & Erie Canal Towpath Trail: Trail User Spending Impact Study

Trails that are still in the visioning or project stage have much to learn from the experience of more mature trails, especially ones that share geographic and demographic characteristics and similar funding, management and operations structures. In 2017, Rails-to-Trails Conservancy (RTC) and the Ohio & Erie Canalway Coalition collaborated to highlight the impact of trail user spending along the Ohio & Erie Canal Towpath Trail. The trail is an integral part of the Cleveland to Pittsburgh (C2P) corridor, which runs parallel to the Ashtabula to Pittsburgh (A2P) corridor and intersects the A2P in Coraopolis, Pennsylvania. The 2017 Ohio & Erie Canal Towpath Trail: Trail User Spending Impact Study allowed the trail's users and nearby local businesses to better understand the economic impact of the trail and begin forecasting the potential economic impact of other trails within the C2P corridor. Given the C2P corridor's proximity, this study can provide useful comparisons through which potential user spending can be extrapolated for the A2P corridor.

The Ohio & Erie Canal Towpath Trail is a 101-mile trail in Ohio that is part of a historic corridor designated as a National Heritage Area by Congress in 1996. Development of the trail is spearheaded by the Ohio & Erie Canalway Coalition and Canalway Partners, both private nonprofit organizations working to develop the trail in Cuyahoga, Summit, Stark and Tuscarawas counties. The entirety of the Ohio & Erie Canal Towpath Trail is included along the C2P corridor.

The Ohio & Erie Canal Towpath Trail: Trail User Spending Impact Study identified the trail as an important economic asset in the region and a critical link in the C2P corridor, part of the Industrial Heartland Trails Coalition's (IHTC) 1,500-miles-plus regional trail network vision. The study looked at a snapshot of use and users along the trail at a single location within Cuyahoga Valley National Park in Peninsula, Ohio.

Highlights from the Trail User Spending Impact Study included an estimated 222,005 annual users spending:

- a) \$3.7 million on "hard goods" (including bikes, clothing, etc.);
- b) \$3 million on lodging; and
- c) \$159,000 on "soft goods" (including food, beverages, etc.).

Based on the Trail User Spending Impact Study, a cumulative \$6.9 million was spent by trail users annually along the Ohio & Erie Canal Towpath Trail—just one of many segments along the C2P corridor. As such, the Trail User Spending Impact Study highlights the impact and unlocked potential of direct trail user spending not only on the Ohio & Erie Canal Towpath Trail, but also along the entire C2P corridor.

Trail Towns: A Community Development Model That Leverages Trails

What is a "Trail Town"? The simplest answer is that it is a community located along a trail that seeks to connect to, serve and benefit from the trail. The benefits can range from a bolstered local economy to an increase in local employment attraction and retention, community pride, and improved health and wellness.

The term was first used in the context of community development along the 150-mile Great Allegheny Passage, where the Trail Town Program[®] was developed to maximize the potential of the long-distance path. The idea was to improve physical connections between trail and town and to position businesses to accommodate trail users, with the end goal of more vibrant, economically healthy places.

This approach to community development, introduced in 2007, has since spread to other trails around the United States. Typically, a regional or trailwide entity will build its own program and designation process according to local needs and capacity. Well-known programs exist in Kentucky, as well as along the Appalachian Trail and the North Country Trail.

Some Trail Towns take a programmatic approach, including having dedicated staffing and targeted strategies such as small business development opportunities for entrepreneurs. However, a formal program is not necessary for a community to adopt Trail Town principles and benefit from the community development lessons of the Trail Town Program. Simply doing a Trail Town readiness assessment can highlight tasks, both large and small, that can help a community benefit from the presence of trail visitors.

Opportunities at Home

Trail tourism professionals warn against viewing the Trail Town approach as a stand-alone solution to the myriad challenges communities face. However, making efforts to better connect communities with trails and improve business services can make a positive and lasting difference. Whether or not a formal program is in place, locals can begin cultivating a culture that celebrates trails and fosters better connections to them.



And while Trail Town initiatives focus on persuading trail users to visit and spend money, we should not lose sight of the longer-term goal: creating communities to which families and small businesses want to move. In turn, towns where residents and business owners thrive and have obvious pride in their community are more attractive and welcoming to trail users.

Municipalities along the A2P corridor are ideally positioned to benefit from the trail economy. Communities like Ashtabula, Warren, Lisbon and East Liverpool in Ohio and Monaca, Aliquippa and Coraopolis in Pennsylvania are located on or adjacent to the A2P corridor and have the building blocks to benefit from the economic development opportunities provided by trail tourism.

With existing amenities bringing in visitors—from the beaches of Lake Erie and emerging wineries around Ashtabula to the local restaurants and cafes and beautiful parklands of Lisbon and East Liverpool—A2P communities already understand the hospitality industry. Connecting the many trails along the A2P corridor will make it possible to both attract visitors and offer an important amenity to local residents: opportunities for physical activity and new connections to other places along the route. Whether that's walking a couple of miles pushing a stroller or doing a bike overnight, the trails along the A2P corridor hold countless possibilities.

The recently released Ohio Trails Vision, the first statewide trail plan in Ohio in more than 13 years, has among its recommendations the exploration of a statewide Trail Town program. 2022 will see a pilot Trail Town project launch in central Ohio. Ohio communities should engage with the Ohio Department of Natural Resources to maximize the potential impact of state support for this type of program.

Strategies for applying the Trail Town model to the A2P corridor are included in the Getting There: Recommended Actions to Complete the A2P Corridor section (page 33).

Case Studies

Great Allegheny Passage

The Great Allegheny Passage (GAP) (gaptrail.org) connects Pittsburgh, Pennsylvania, to Cumberland, Maryland—a distance of 150 miles. The first section of the GAP opened in 1986, with the full trail seeing completion in 2013. The GAP was created using abandoned rail corridors formerly owned and operated by the Baltimore and Ohio Railroad, Pittsburgh and Lake Erie Railroad, Union Railroad and the Western Maryland Railway. Sections were acquired over time as funding became available, segments were abandoned and railroads proved willing to participate in the process.

To maintain the trail at a common standard, the Allegheny Trail Alliance was created. In 1998, then-Gov. Tom Ridge included \$1.5 million in Pennsylvania's capital budget to create the Allegheny Trail Alliance, comprising seven member trail organizations:

1. Mountain Maryland Trails
2. Somerset County Rails-to-Trails Association
3. Ohiopyle State Park
4. Regional Trail Corporation
5. Steel Valley Trail Council
6. Friends of the Riverfront
7. Montour Trail Council



A business located along the Katy Trail in Missouri caters to trail users. | Photo by Flickr user N, CC by 2.0

Additional trails connect to the GAP to create an extended network, including the Montour Trail (a 61.5-mile branch that connects to Pittsburgh International Airport) and the Chesapeake and Ohio Canal Towpath (a 184-mile trail connecting Cumberland, Maryland, to Washington, D.C.).

Researchers from Saint Vincent College in Latrobe, Pennsylvania, conduct user counts along the GAP. Counts showed a mid-range estimate of more than 989,000 trips in 2019, a 12% increase in trail use compared to 2015, a potential indication of trail connectivity benefits.

Researchers also conduct studies on the economic impacts of the GAP on nearby areas. A 2013 study on hotel demand found that, among general demand generator user groups, GAP users were willing to pay the most for a hotel room (\$125 per night). Most of the GAP trail users indicated they “will visit during peak demand periods and are relatively insensitive to price.”

Likewise, the Trail Town Program surveyed 562 trail users near 11 towns along the GAP in 2014. Of trail users, 62% were planning an overnight stay with an overnight spending average of \$124.58, which was an increase of \$26 from a similar survey conducted in 2008. Business owners also responded to the survey and reported a sizable increase in trail user traffic to their businesses between 2013 (the year of the trail’s completion) and 2014.

Katy Trail

The Katy Trail connects 10 counties throughout Missouri, a distance of 240 miles. Built on the former Missouri–Kansas–Texas Railroad, the Katy Trail is one of the longest rail-to-trail conversions in the country. The trail segment between St. Charles and Boonville, Missouri, is part of the Lewis and Clark National Historic Trail. Missouri State Parks acquired the first section of the Katy Trail in 1986, opening it in 1990. Upon donating 33 miles of rail corridor, Union Pacific Railroad acquired the second section of the trail in 1991. Additional sections opened in 1996 and 1999. Philanthropists Edward and Pat Jones played a critical role in lobbying the Missouri Legislature to use the former rail corridor, and later helped fund the acquisition and construction of the trail.

In 2010, Dan and Connie Burkhardt founded the Katy Land Trust, which seeks to preserve the lands around the Katy Trail by working with local landowners. In 2012, Missouri State Parks produced the Katy Trail Economic Impact Report, which estimated the trail attracts around 400,000 visitors per year. Further analysis showed that these visitors have an economic impact of nearly \$18.5 million per year. More than 50% of visitor spending took place at restaurants or bars and overnight lodging near the Katy Trail. The trail continues to be studied by rail-trail advocates who wish to replicate its economic success.

Another effort is focused on connecting the Katy Trail to Missouri’s Rock Island Spur, which would create a 459-mile trail loop. Additional connections would include the Kansas City trail network.



Getting There: Recommended Actions to Complete the A2P Corridor

This section builds on specific recommendations included in the Segment Analysis, presenting high-level strategies to fully develop the Ashtabula to Pittsburgh (A2P) corridor. A county-level “closer look” identifies necessary steps and actions for gap-filling in the counties along the A2P corridor. Steps and actions may differ for each state along the corridor, reflecting each state’s unique strengths and challenges.

A Bird’s-Eye View of What It Will Take to Bring the Trail to Life

Rails-to-Trails Conservancy (RTC) and other partners in and outside of Ohio and Pennsylvania will continue providing guidance, technical assistance, strategic planning and other resources to local trail groups and government entities as they work to complete their respective sections of the A2P corridor.

The following recommendations apply across the entire A2P corridor and include actions that may be taken by municipal governments, local trail groups and trail advocates.

Recommended Actions to Complete the A2P Corridor

- Continue participation in the A2P corridor working group with representatives from both states and all six counties along the corridor.
- Enlarge the existing stakeholder network, engaging underrepresented sectors of the community as well as the business and industry sector, tourism and economic development organizations, and appropriate state agencies.
- Update state and local trail plans as needed to include the A2P corridor, including Statewide Comprehensive Outdoor Recreation Plans, trail plans, economic development plans, comprehensive plans, transportation plans and more.
- Continue advocating for trail funding, construction and maintenance at the local, regional and state level.
- Monitor the Trail Town activity within Ohio along the Ohio to Erie Trail for statewide opportunities that could be leveraged along the A2P corridor.
- Continue to engage the Ohio Legislative Trails Caucus and work to coalesce continued support in the Pennsylvania in the Pennsylvania General Assembly.

Steps to Successfully Completing the A2P Corridor

The following is a list of steps to help complete the A2P corridor. The steps are largely linear, but many will need to be revisited over time. These steps are universal across the states, counties and cities/towns along the corridor. Recommendations specific to certain geographies or municipalities are described below in Specific County-Level Recommendations (page 34). As the segment of the A2P through Ashtabula County is nearly complete, however, this report does not include recommendations specific to Ashtabula County.

Local Team Building

The first step with any trail project is to have a diverse, inclusive and committed team that works well together. The A2P corridor working group comprises public officials and trail advocates from across the entire corridor. The working group should continue to deepen its reach at the local level and broaden its network of supporters and stakeholders. Nonprofit partners can help energize municipalities and residents to raise the profile of trail segments and encourage each municipality to lead the project within its borders. Continued and increased collaboration between the Great Ohio Lake-to-River Greenway team and the Pennsylvania partners within the A2P is going to remain important.

Regional Connections

Coordinating among states, counties and other jurisdictions will be crucial to completing the A2P corridor. The corridor travels through two states, six counties, and many cities and towns. Encouraging communication and collaboration across jurisdictions, within the A2P corridor working group, and with landowners along the corridor and near county borders will ensure seamless trail connections across state and county lines.

Broad Community Engagement

Being intentional about informing and engaging the broader community is critical to recruiting volunteers; raising funds for planning, design, construction and maintenance; and developing strategic partnerships. A well-thought-out and skillfully implemented public relations plan, as well as a diverse, broad range of trail programming such as organized walks and rides, can enhance engagement and support. Partners should collaborate to include the A2P corridor in local mapping efforts. Where appropriate, partners also can consider an annual public meeting that updates residents on the trail work and provides the community with input and feedback opportunities.

GETTING THERE: RECOMMENDED ACTIONS TO COMPLETE THE A2P CORRIDOR

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

Understanding the status of the corridor and other needed parcels—and gaining control of this real estate—is obviously crucial, whether it is through acquisition, donation or establishment of an easement. Where there are gaps in the trail network, municipalities should conduct a thorough land ownership analysis, including where survey work is needed to further clarify land ownership. Local leadership should work with landowners to discuss easements and provide educational opportunities and community forums. Where appropriate, local leadership should also develop a packet for property owners that provides information on options and the benefits of rail-trail development.

Design and Cost Estimates for Trail Construction

A fully engineered trail design, complete with construction cost estimates, is required prior to construction and is often an eligibility requirement for federal and state funding programs. Design guidance for planned A2P trails is outlined in Appendix A (page 43). Actual trail costs for recent projects along the A2P corridor can be used to more accurately estimate costs for further trail development.

Construction of the Trail and Related Amenities

A properly designed and constructed trail will provide a better, safer experience for trail users, and will be easier and less expensive to maintain. As acquisitions along proposed corridors become possible and the design work is completed, each municipality will need to take ownership of the construction process, either in-house or by hiring outside expertise.

A Plan for Maintenance

Trails require maintenance, from mowing to surface repair and amenity and signage upgrades. It is critical to have a plan for maintenance, as well as an organization or entity committed to executing that plan. The Recreational Trails Program is a national source of funding that can be used for trail maintenance. Trail groups can also support state-level exploration of a trail maintenance funding program.

Specific County-Level Recommendations

Trumbull County, Ohio

Local Team Building

Trumbull County MetroParks continues to lead on the countywide trail development efforts. Support from the county commissioners, as well as the cities of Warren and Niles, has been crucial in connecting the A2P corridor.

Recommendation:

- Nurture further partnerships with townships as well as the business, nonprofit and economic development entities within the county.

Regional Connections

Trumbull County is connected to Ashtabula and Mahoning counties by the A2P corridor. The Western Reserve Greenway (WRG) Phase 4 project will create the final connection in the corridor within Trumbull County. A future IHTC corridor envisions a connection west into Portage County, Ohio.

Recommendations:

- Continue working with Mahoning and Ashtabula counties on WRG maintenance, programming and promotion.
- Build and maintain relationships with Portage County partners to ensure coordination and collaboration on the east–west corridor connection.

Broad Community Engagement

Generating local support and advocacy around the completion and promotion of the A2P corridor is critical to its long-term success. Targeted outreach by Trumbull County MetroParks and other partners can continue to identify local advocates and inform broader outreach strategies.

Recommendations:

- Identify a volunteer to spearhead outreach through digital platforms and social media in each city, town or village along the corridor.
- Increase public awareness by providing updates and action items through digital and print media.
- Identify and participate in existing public events such as county fairs, festivals and more to publicize trail work and how trails are benefiting the region.
- Consider an annual public meeting that updates residents on trail work and provides the community with input and feedback opportunities.
- Consider a public meeting that provides landowners with opportunities to learn about easements and land acquisitions associated with trail development.

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

Phase 4 of WRG has outstanding land acquisition issues to work out. Ensuring public access to the project corridor is essential to the completion and connectivity of the A2P corridor in Trumbull County.

GETTING THERE: RECOMMENDED ACTIONS TO COMPLETE THE A2P CORRIDOR

Recommendations:

- Continue working with CSX to finalize priority corridor acquisition for Phase 4 of WRG.
- Begin baseline corridor and land ownership research for possible connection into Portage County.

Design and Cost Estimates for Trail Construction

Trumbull MetroParks and others within the county have ample experience in developing trail on the ground, as well as templates to make accurate design and construction estimates for future trail needs.

Construction of the Trail and Related Amenities

Once land acquisition is finalized, movement to construct Phase 4 will take place. Continued discussions and collaboration within the county to develop amenities along the trail will be necessary.

A Plan for Maintenance

There are multiple entities with trail maintenance duties along the A2P corridor in the county.

Recommendations:

- Explore options for efficiency in maintenance activities among responsible parties to help keep costs down.
- Engage in the state advocacy effort to build maintenance funding into existing and perhaps new programs.
- Apply for maintenance needs through the Federal Highway Administration's Recreational Trails Program.

Mahoning County, Ohio

Local Team Building

Mill Creek MetroParks continues to lead on the countywide trail development efforts. Support from the county commissioners, as well as multiple cities, towns and villages, has been crucial in connecting the A2P corridor.

Recommendation:

- Nurture further partnerships with townships as well as the business, nonprofit and economic development entities within the county.

Regional Connections

The A2P corridor links Mahoning County to Trumbull and Columbiana counties. With Trumbull County close to fully finishing its final gap, Phase 3 of the Mill Creek MetroParks Bikeway in Mahoning County will finish the final gap in the northern three Ohio counties along the corridor (Ashtabula, Trumbull and Mahoning).

Recommendation:

- Continue working with Trumbull and Columbiana counties on A2P trail corridor maintenance, programming and promotion.

Broad Community Engagement

Generating local support and advocacy around the completion and promotion of the A2P corridor is critical to its long-term success. Targeted outreach by Mill Creek MetroParks and other partners can continue to identify local advocates and inform broader outreach strategies.

Recommendations:

- Increase public awareness by providing updates and action items through digital and print media.
- Consider an annual public meeting that updates residents on the trail work and provides the community with input and feedback opportunities.
- Consider a focused public meeting that provides landowners with opportunities to learn about easements and land acquisitions associated with trail development.
- Identify and participate in existing public events such as county fairs, festivals and more to publicize trail work and how trails are benefiting the region.

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

In order to complete the Mill Creek MetroParks Bikeway's final section, Phase 3, eight out of 14 land parcels still need to be acquired (six already have been acquired). Gaining ownership of these is paramount to the completion of the A2P corridor in Mahoning County.

Recommendation:

- Continue the process to secure the final eight parcels for Phase 3 construction.

Design and Cost Estimates for Trail Construction

Mill Creek MetroParks has secured the necessary \$4.5 million to finish the construction of Phase 3.

Construction of the Trail and Related Amenities

Construction resources are in place.

Recommendation:

- Continue to explore future space and resources for trailheads and other trailside amenities along the A2P corridor.

GETTING THERE: RECOMMENDED ACTIONS TO COMPLETE THE A2P CORRIDOR

A Plan for Maintenance

Recommendations:

- Engage in the state advocacy effort to build maintenance funding into existing and perhaps new programs.
- Apply for maintenance needs through the Recreational Trails Program.

Columbiana County, Ohio

Local Team Building

The Columbiana County Park District has been the driving force in development of the Little Beaver Creek Greenway and continues to work on expanding the A2P corridor to the Ohio River. City leadership from Lisbon and East Liverpool has given trail development a renewed boost.

Recommendations:

- Nurture further partnerships with townships as well as the business, nonprofit and economic development entities within the county.
- Support the city of East Liverpool's trail planning and development process.

Regional Connections

Columbiana County is the gateway into Ohio from the south and into Pennsylvania from the north. Heading north to Lake Erie, it borders Mahoning County; heading south to the Ohio River, it borders Beaver County in Pennsylvania. Finding a viable corridor through Columbiana County is a must for the A2P corridor's eventual success.

Recommendations:

- Build strong connections with Beaver County partners to help foster the best possible cross-state connection.
- Rally countywide support for the city of East Liverpool's trail development plan.
- Support Phase 3 of the Mill Creek MetroParks Bikeway project to facilitate the connection north.

Broad Community Engagement

Finding a suitable corridor from Lisbon to the Ohio River will be challenging, due to difficult terrain. Therefore, broad community engagement to build support will be vital. Generating local support and advocacy around the completion and promotion of the A2P corridor is critical to its long-term success.

Recommendations:

- Increase public awareness by providing updates and action items through digital and print media.
- Consider an annual public meeting that updates residents on the trail work and provides the community with input and feedback opportunities.
- Consider a focused public meeting that provides landowners with opportunities to learn about easements and land acquisitions associated with trail development.
- Identify and participate in existing public events such as county fairs, festivals and more to publicize trail work and how trails are benefiting the region.

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

Identification of a viable corridor—or finding an agreeable way to follow the Little Beaver Creek—will need to occur before land needs can be addressed specifically.

Recommendations:

- Continue to investigate how other trails along the National Wild and Scenic Rivers System were developed. Remain engaged with the National Park Service and Ohio Department of Natural Resources concerning possible ways to work within the waterway corridor.
- Continue to build relationships with local landowners, keeping them informed of the potential advantages of developing the A2P corridor.
- Keep informed of opportunities that programs may have for landowners to cooperate with trail development as an incentive for working to get a corridor developed.
- Continue to be creative in considering safe, separated and viable multiuse trail connection options between Lisbon and East Liverpool.

Design and Cost Estimates for Trail Construction

With a corridor yet to be identified, design and cost estimates for the trail gap in Columbiana County cannot be determined at this time.

Recommendation:

- Follow the recommendations of East Liverpool's consultant, Environmental Design Group, for next steps in determining cost estimates for a new transportation and recreational trail option through downtown East Liverpool.

GETTING THERE: RECOMMENDED ACTIONS TO COMPLETE THE A2P CORRIDOR

Construction of the Trail and Related Amenities

With a corridor yet to be identified, construction costs for the gap in Columbiana County are not able to be determined at this time.

Recommendation:

- Follow recommendations for next steps in determining cost estimates for a new transportation and recreational trail option through downtown East Liverpool.

A Plan for Maintenance

The Columbiana County Park District and the cities of Lisbon and East Liverpool should work together to create efficiencies in trail maintenance over time as the corridor grows.

Recommendations:

- Engage in the state advocacy effort to build maintenance funding into existing and perhaps new programs.
- Apply for maintenance funding for the Little Beaver Creek Greenway and future trails through the Recreational Trails Program.

Beaver County, Pennsylvania

Local Team Building

Beaver County has a history of trail advocacy, with the Ohio River Trail Council playing a leading role. RiverWise has stepped up since 2019 to play a key organizing and leadership role. The county needs a cohesive and collaborative group of residents and organizations to shepherd the A2P corridor to fruition.

Recommendations:

- Build stronger support at the county commission for trail development.
- Bring the Beaver County Park District to a leadership position in this effort.
- Nurture further partnerships with townships as well as the business, nonprofit and economic development entities within the county.

Regional Connections

Beaver County is the gateway into Ohio from the south and into Pennsylvania from the north. Heading north to Lake Erie, it borders Columbiana County, Ohio; heading south along the Ohio River, it borders Allegheny County in Pennsylvania. Developing a viable corridor through Beaver County is a must for the A2P corridor's eventual success.

Recommendations:

- Build strong connections with Columbiana County partners to help foster the best possible cross-state connection.
- Provide strong support for the city of East Liverpool's trail development plan and help develop it into Beaver County to the mouth of Little Beaver Creek.

Broad Community Engagement

Because the Ohio River corridor is constrained with existing and legacy uses as well as terrain challenges, the corridor through Beaver County is difficult to develop. Finding ways to build a strong base of support for this project is essential. Informing the community from grassroots to leadership of the huge opportunity that the A2P corridor brings will be necessary to make it happen.

Recommendations:

- Increase public awareness by providing updates and action items through digital and print media.
- Consider an annual public meeting that updates residents on the trail work and provides the community with input and feedback opportunities.
- Consider a focused public meeting that provides landowners—individual, commercial and industrial—with opportunities to learn about easements and land acquisitions associated with trail development.
- Identify and participate in existing public events such as county fairs, festivals and more to publicize trail work and how trails are benefiting the region.

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

With major industries as well as state transportation agencies being important stakeholders in the identified corridor within Beaver County, the land access issue is unique and challenging. Exploring incentives for landholders and cooperating with public agencies will be necessary to open up needed space for the trail.

Recommendations:

- Monitor opportunities to work with the railroads within the corridor for rail-with-trail opportunities.
- Continue the discussion with the Pennsylvania Department of Transportation about the right-of-way along public roads and highways for trail development.
- Keep informed of opportunities that programs may have for landowners to cooperate with trail development as an incentive for working to get a corridor developed.

GETTING THERE: RECOMMENDED ACTIONS TO COMPLETE THE A2P CORRIDOR

Design and Cost Estimates for Trail Construction

Until final corridor alignment and land access issues are resolved, accurate design and cost estimates are not possible.

Construction of the Trail and Related Amenities

Until final corridor alignment and land access issues are resolved, accurate construction costs are not possible.

Recommendation:

- Monitor opportunities along the corridor for trailside amenity development such as trailheads, pocket parks and more.

A Plan for Maintenance

The Beaver County Park District, along with local municipalities, RiverWise and other stakeholders, should work together to create efficiencies in trail maintenance over time as the corridor grows.

Recommendation:

- Engage in the state advocacy effort to build maintenance funding into existing and perhaps new programs.

Allegheny County, Pennsylvania

Local Team Building

Allegheny County has a strong and very successful team of public agency and nonprofit partners who work to make trail development happen. Public agencies including the Pennsylvania Department of Conservation and Natural Resources, Allegheny County, the city of Pittsburgh, and many other cities, towns and township trustees are engaged. Nonprofit organizations have been instrumental in trail development and management from the very beginning, including Friends of the Riverfront, Riverlife, the Pennsylvania Environmental Council, Montour Trail Council and more.

Recommendation:

- Continue building partnerships with A2P corridor communities, economic development entities and the business community to strengthen the coalition pushing to make the connection happen.

Regional Connections

Allegheny County is the epicenter of many regional trail connections and network connectivity visions. As the hub of the IHTC network, it is the place that the A2P, Cleveland to Pittsburgh, Parkersburg to Pittsburgh and Erie to Pittsburgh corridors all converge at Point State Park. Pittsburgh is also the western terminus of the Great Allegheny Passage, which connects to the Chesapeake and Ohio Canal Towpath in Cumberland, Maryland, creating a fully connected trail corridor from Point State Park to Washington, D.C.

Broad Community Engagement

Friends of the Riverfront and Riverlife already connect with residents through programming and social media. Much of this programming focuses on trail stewardship—engaging individuals specifically around community service.

Recommendations:

- Bring attention to the A2P corridor within the county as well as the work being done outside of Allegheny County through media platforms and events.
- Continue to host a diverse, broad range of trail programming to invite new users to trails in the county.

Acquisition of—or a Permanent Easement Through—Gap Corridor Parcels

While the exact location of a trail to complete the gap through Pittsburgh cannot be determined along the A2P corridor, the state Route 51/West Carson Street corridor continues to be the most viable option. Diligence in working to find space and access along the road and/or railroad right-of-way will be necessary.

Design and Cost Estimates for Trail Construction

Allegheny County's multiple trail development stakeholders continue to work at finding a viable space for the trail to develop along the state Route 51/West Carson Street corridor. Upon securing access to the necessary right-of-way, design and cost estimates can be determined.

Construction of the Trail and Related Amenities

Options to complete trail connections along the Ohio River corridor are in the planning stages. Responsibility for building trail as it progresses past the planning stages will be determined by local jurisdictions.

A Plan for Maintenance

Friends of the Riverfront maintains the existing trail along the A2P corridor in Allegheny County.

Recommendations:

- Secure continued trail maintenance through the creation of a formal trail maintenance plan for the county.
- Consider applying for trail maintenance funding through the Recreational Trails Program.



Conclusion

No matter what the subject, feasibility studies pose an inherent question: Is this project realistic and possible? In this instance, the question becomes: Is it possible to develop the Ashtabula to Pittsburgh (A2P) corridor as a seamlessly connected trail? It is difficult not to give an unequivocal “yes” to that question, but the A2P corridor presents a few logistical challenges in filling some of the trail gaps. Rails-to-Trails Conservancy (RTC), backed by decades of rail-trail experience, firmly believes that it is possible to create a safe, separated and viable multiuse trail from Ashtabula to Pittsburgh. Fully identifying a feasible corridor in some places, acquiring gap segments, designing and constructing the trail, then maintaining, promoting and connecting the trail to nearby communities will not come without challenges. Continued coordination among strong partners, along with support from state agencies, local elected officials, decision-makers and—most importantly—community members from along the corridor, will be at the core of this project’s success. In reflecting on the totality of the A2P corridor’s feasibility, several observations present themselves.

What Will We Have?

A trail over 140 miles in length connecting two of the largest assets in the Industrial Heartland region—Lake Erie and the confluence of the three rivers in Pittsburgh—will emerge from a fully developed rail-trail on the A2P corridor. This will make the A2P corridor a tourism destination for cyclists and a major piece of outdoor recreation infrastructure in Ohio and Pennsylvania.

Why Does It Matter?

Completion of the A2P corridor will present opportunities to develop Trail Towns and fuel local economic and community development in Ohio and Pennsylvania. It will make these communities better places to live and do business.

What Will It Take?

Closing the trail gaps will require a coordinated effort among community organizations; trail advocates; and local, county and state government. Difficult decisions will have to be made through extensive conversation. This work must involve volunteers, professionals, trail cheerleaders and decision-makers. Collaboration will be critical.

When Will It Happen?

Upon agreeing to a feasible route in critical areas, the timeline for closing the trail gaps could range from five to 30 years. This work requires patience and persistence. Focused efforts and investment could help shorten the development timeline and expedite economic and community benefits.

What Is the Purpose of This Feasibility Study?

This study serves as a road map and toolbox for getting it done. It provides information on the opportunities and challenges related to the push to adopt feasible corridor options, close trail gaps and develop the A2P corridor in Ohio and Pennsylvania. The study identifies short-term and long-term actions that will be required for success and provides how-to guidance for achieving those actions.

What Can You Do?

No matter who you are or what your skills and interests are, there is a role for you. Whether you are a trail builder, trail user or trail advocate; an economic developer, community developer, tourism professional or volunteer; an elected official, organizational leader, landowner or just someone with time and energy, the A2P corridor needs your help to make this rail-trail happen.



Appendix A – Design Guidance

Not all trails are alike. Some trails take travelers through quiet, forested areas without population centers for miles, while others navigate urban and commercial areas and require occasional interactions with automobiles. Therefore, trails need to be designed accordingly. This section highlights some of the design guidance for trails along the Ashtabula to Pittsburgh (A2P) corridor. Rails-to-Trails Conservancy (RTC) encourages individual jurisdictions and trail managers to work with local trail users to design a trail that best suits their needs, pulling from the suggested guidance below.

Additional guidance is available in a variety of documents, including (listed by most recent):

- “Small Town and Rural Multimodal Networks”—Federal Highway Administration (FHWA), 2016
- “Urban Bikeway Design Guide”—National Association of City Transportation Officials (NACTO), 2014
- “Guide for the Development of Bicycle Facilities”—American Association of State Highway and Transportation Officials (AASHTO), 2012
- “Public Rights-of-Way Accessibility Guidelines”—United States Access Board, 2007
- “Guide for the Planning, Design, and Operation of Pedestrian Facilities”—AASHTO, 2004
- “Trails for the Twenty-First Century: Planning, Design, and Management Manual for Multi-Use Trails”—RTC, 2001

Trail Construction

A trail should be a minimum width of 10 to 12 feet in urban areas and places with heavy bicycle traffic. A width of 8 feet is allowable only in short, physically constrained segments. There should also be a 2-foot shoulder on each side of the path that allows for clearance of signposts and other vertical elements.

Choosing a trail surface depends on several factors, including accessibility, desired character (urban or rural), available funding and stormwater management. Table 10, below, is adapted from RTC’s “Trails for the Twenty-First Century” and provides the life span, advantages and disadvantages of each surface material type.

Table 10 – Life Span and Characteristics of Trail Surface Types

Surface Material	Life Span	Advantages	Disadvantages
Asphalt	7–15 years	Hard, smooth surface; supports most types of use; all-weather; smooth surface to comply with the Americans with Disabilities Act (ADA) access guidelines; low maintenance	High installation and repair costs; not a natural surface; access needed for heavy construction vehicles; requires stormwater management consideration
Concrete	20+ years	Hard, smooth surface; supports most types of use; all-weather; smooth surface to comply with ADA access guidelines; low maintenance	High installation and repair costs; not a natural surface; access needed for heavy construction vehicles; requires stormwater management consideration
Granular/ Crushed Stone	7–10 years	Soft but firm surface; natural material; moderate cost; supports most types of use	Surface can rut and erode with heavy rainfall; regular maintenance needed to keep a consistent surface; replenishing stone may be a long-term expense
Native Soil	Depends on local conditions and use	Natural material; lowest cost; low maintenance; easiest for volunteers to build and maintain	Dusty; ruts when wet; not an all-weather surface; can be uneven and bumpy; possibly noncompliant with ADA access guidelines

Additional surface types (wood chips, recycled materials, etc.) are not explored in Table 10 as they do not meet the goal of maintaining an open trail for walking and biking in all but the worst conditions at a reasonable price.

For more details on surface types and subsurface requirements, see Chapter 3 - Designing Your Trail in “Trails for the Twenty-First Century.”

Bridges

Railroads were often built in the most direct line possible, frequently spanning rivers, creeks and other bodies of water. If a trail manager is lucky, the railroad will have left old bridges intact after abandoning the line. Such bridges are often in some state of disrepair but only need moderate upgrades to be made usable for non-motorized trail use. A certified structural engineer will be able to determine what, if any, upgrades are needed to ensure bridge stability for years to come.

Retrofitting a former rail bridge requires additional precautions for trail users. If the railroad is officially abandoned, the railroad ties and any ballast should be removed and a new surface added to the bridge. If the railroad is railbanked, a wooden structure can be created to fit on top of the existing rail lines to save the step of potentially reinstalling rail in the future. Trail bridges also require adding some type of railing or low walls, if they do not exist already, to prevent users from slipping off the bridge.

If a trail needs to cross a body of water where a bridge has been removed or never existed, several options exist. A new bridge could be constructed, depending on access, available funds and environmental constraints. If the crossing is small, an older bridge or similar structure no longer in service may possibly be repurposed as a bridge at a fraction of the price of a new bridge. A certified structural engineer should be consulted to ensure the integrity of bridges old and new.

Trailheads

Trail users need to be able to access the trail from a variety of locations. Successful trails make these access points convenient and attractive. Parking lots should be provided at major trail access points, featuring clearly defined entrances, exits and parking spaces. For planning purposes, parking lots should be planned for 300 to 350 square feet per parking space, with at least one larger, accessible space for users with disabilities.

Public restrooms are another important component of trailheads. Major access points would benefit from the development of full-service restrooms with running water and flushing toilets where possible. At smaller trailheads or places where plumbing is not practicable, portable toilets are a convenient option. Water fountains are also encouraged at locations with access to plumbing. Where plumbing is not a possibility, trails can use signs pointing users to nearby parks or businesses that have agreed to provide water to trail users.

Where possible, benches and shelters should be provided as resting and gathering areas for trail users. Benches are ideally placed in the shade. Shelters should be at least 3 to 5 feet from the trail’s edge and should include picnic tables. Bike racks are advised at trailheads, particularly those with shelters and restrooms. Secure bike racks that allow users to lock the frame of their bicycle are inexpensive. Such racks include the popular “u”-shaped racks. Artistic racks bearing the shapes of a local feature are a great way to incorporate public art to the trail experience.

Other important trailhead elements include signage indicating that the trailhead exists and outlining rules and etiquette for trail users. Maps let trail users know where they are in the system and where they can find amenities like bike shops, restaurants and lodging. Maps can take the form of paper maps held in some type of box or a laminated/protected map on a kiosk. Landscaping is also important to make the trailhead an attractive and desirable place to spend time.

Street Crossings

Trails occasionally must cross public streets with various speeds and traffic volumes. Ensuring that these crossings are well marked and visible is important to maintaining safety and a positive experience for trail users.

Except in areas with extremely low traffic volumes, crosswalks are highly encouraged at locations where the trail crosses a public street. Crosswalks should be of the ladder variety, rather than two parallel lines, to be visible from a standard approaching vehicle. Signs W11-2, W11-15, W11-15P and W16-7P of the FHWA’s Manual on Uniform Traffic Control Devices should be used to warn approaching vehicles of the crossing location. W11-15P signs should also be used on the trail to warn trail users of the upcoming crossing.

In locations with a combination of particularly high speeds (35 to 40 mph or above) and high traffic volumes, median-enhanced crosswalks should be used. The median should be at least 8 feet wide to allow for a person on a bicycle to queue. Rectangular rapid flashing beacons should also be considered where sight lines make the crossing less visible. Medians and flashing beacons are what the FHWA calls “proven safety countermeasures” and should be seriously considered, particularly at crossings in urban areas like Ashtabula and Warren, Ohio; and Coraopolis and Pittsburgh, Pennsylvania.

The FHWA also provides guidance on visual obstructions at trail crossings, stating that: “Landscaping, barriers or other visual obstructions should be low to provide unobstructed sight of the crossings from [a] major street. Both motorists and path users should have a clear and unobstructed view of each other at intersections and driveways.”

At locations where the trail crosses over or under public streets, signage should be provided to indicate the name of the road being crossed. Small location signs can provide trail users helpful clues as to where they are and make the experience more user-friendly.

On-Street Sections

At certain points along the A2P corridor, the trail will need to either briefly share the road with or run directly alongside vehicles. Sharing the road on a trail like this is an option only for very brief stretches where off-street connections are unavailable. In those cases, sidewalks, bike lanes and/or shared-lane markings (“sharrows”) should be provided to accommodate all users.

Sidewalks should maintain a minimum of 5 feet of clearance, free from obstructions such as signs and utility poles, to ensure safe passage by wheelchair users. Sidewalks should also be at a level grade and of a smooth surface.

Bike lanes should be provided where possible to encourage people to ride their bicycles on the street rather than the sidewalk, where bicyclists experience conflicts with pedestrians, are less visible and are more likely to get into a crash with turning motor vehicle traffic. Bike lanes are separated lanes within the roadway, often designated by paint, and should be a minimum of 5 feet wide. Where possible, bike lanes should also be protected from moving traffic, creating a protected or buffered bike lane. Protection can be provided through measures including parked vehicles, flexible delineator posts, hard bollards or raised curbs. Physical protection can continue the trail-like experience for a bicyclist using on-street sections.

Where bike lanes are not possible, sharrows should be utilized. These shared-lane markings provide visual placement cues to both bicyclists and drivers to prevent conflicts on the roadway. Additional signage indicating the trail or corridor name should also be used to indicate shared-use bike routes.

Guidance on the design and placement of bike lanes and sharrows can be found in AASHTO’s “Guide for the Development of Bicycle Facilities” or NACTO’s “Urban Bikeway Design Guide.”

Resurfacing

Trails need to be resurfaced after the useful life of the original surface has passed. Natural surface trails (crushed stone, native soil, etc.) should be resurfaced every 20 years, while asphalt and concrete trails should be resurfaced every 10 years. Trails experiencing greater use or suffering the effects of significant weather or natural events should be resurfaced more frequently. The cost of resurfacing should be factored into the cost of trail construction and planned for by the trail’s managing entity.



Appendix B – Funding Sources

Federal and State Funding

Transportation Alternatives Program

The Federal Highway Administration (FHWA), through respective state departments of transportation, administers the Transportation Alternatives Program (TAP). The program awards funding for nontraditional transportation projects, including design and construction of trails.

Transportation Alternatives are federally funded, community-based projects that expand travel choices and enhance the transportation experience by integrating modes and improving the cultural, historical and environmental aspects of transportation infrastructure. TAP projects must be one of 10 eligible activities and must relate to surface transportation.

Projects can include, for example, the creation of bicycle and pedestrian facilities; streetscape improvements; refurbishment of historical transportation facilities; and other investments that enhance communities, connections and access. The federal government provides funding for TAP projects through federal aid highway transportation legislation.

Details on this program can differ by state and are described in more detail below.

Recreational Trails Program

The Recreational Trails Program (RTP) is also administered through FHWA. RTP provides funding opportunities for states to build and maintain trails and trail-related facilities. An advisory board appointed by the governor typically reviews applications, then recommends awards to the state secretary of transportation.

Eligible entities include nonprofit organizations, local governments, regional transportation authorities, transit authorities, natural resource or public land agencies, school districts, local education agencies or schools, tribal governments, or any other local or regional governmental entity with responsibility for transportation or recreational trails (other than a metropolitan planning organization [MPO] or state agency) that the state determines as eligible.

Land and Water Conservation Fund

The Land and Water Conservation Fund (LWCF) federal program supports the protection of federal public lands and waters—including national parks, forests, wildlife refuges and recreation areas—and voluntary conservation on private land. LWCF investments secure public access, improve recreational opportunities and preserve ecosystem benefits for local communities.

LWCF State Grants Program

LWCF provides matching grants to state and tribal governments for the acquisition and development of public parks and other outdoor recreation sites. Grants totaling \$3.9 billion have funded projects in every county in the country—over 40,000 projects since 1965.

Congestion Mitigation and Air Quality Improvement Program

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program supports surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief. CMAQ provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. CMAQ funding is available to reduce congestion and improve air quality for areas that do not meet the Environmental Protection Agency's National Ambient Air Quality Standards for ozone, carbon monoxide or particulate matter ("nonattainment areas") and for former nonattainment areas that are now in compliance ("maintenance areas"). This program is run through state MPOs.

Economic Development Administration

Among the various programs administered by the U.S. Department of Commerce's Economic Development Administration (EDA) is the Public Works program. The investment program provides funding with the goal of empowering distressed communities to revitalize, expand and upgrade their physical infrastructure. Among other uses, EDA Public Works funds can help redevelop brownfield sites and increase eco-industrial development. The EDA also offers limited local technical assistance to distressed areas in times of need. Learn more at: eda.gov.

RAISE Program

The U.S. Department of Transportation administers the Rebuilding American Infrastructure with Sustainability and Equity (RAISE) program. RAISE, formerly known as TIGER and BUILD, has awarded over \$8.9 billion in grant projects across the United States since 2009. Projects for RAISE funding are evaluated on merit criteria that include safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation and partnership.

The program is highly competitive, with 680 projects funded since 2009 out of more than 9,700 applications. It is one of the few U.S. Department of Transportation discretionary programs allowing regional and local governments to directly compete for multimodal transportation funding.

Learn more at: transportation.gov/RAISEgrants.

Ohio

Transportation Alternatives Program

The Ohio Transportation Alternatives Program (TAP) provides funds for projects that advance non-motorized transportation facilities, historical transportation preservation, and environmental mitigation and vegetation management activities. The Ohio Department of Transportation (ODOT) encourages adding alternatives to planned transportation projects rather than stand-alone projects. TAP-funded activities must be accessible to the public or targeted to a broad segment of the public. ODOT's TAP funds are for those projects sponsored by local governments outside the county boundaries of MPOs, unless the locale is within a small MPO (population less than 200,000) that has opted to join the ODOT program. Learn more about ODOT's TAP guidance at: transportation.ohio.gov/wps/portal/gov/odot/programs/local-funding-opportunities/resources/transportation-alternatives-program.

The Eastgate Regional Council of Governments is the only MPO along the Ashtabula to Pittsburgh (A2P) corridor in Ohio, representing Ashtabula, Mahoning and Trumbull counties.

Recreational Trails Program

The Ohio Department of Natural Resources (ODNR) administers the RTP for the state. Eligible entities include cities and villages, counties, townships, special districts, state and federal agencies, and nonprofit organizations.

Funding is an 80/20 reimbursement in which up to 80% of matching federal funds is reimbursed, while 20% needs to be procured locally. The local match can be either cash or “soft” match activities including using local labor, material donations, land donations and more.

Eligible projects include development of urban trail linkages and trailhead and trailside facilities, maintenance of existing trails, restoration of trail areas damaged by usage, improvement of access for people with disabilities, acquisition of easements and property, development and construction of new trails, purchase and lease of recreational trail construction and maintenance equipment, and implementation of environment and safety education programs related to trails.

Applications are due in the winter/spring of each year. Learn more about the Recreational Trails Program with ODNR at: ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/apply-for-grants/grants/recreational-trails-program.

Clean Ohio Fund

The Clean Ohio Fund restores, protects and connects Ohio's natural and urban places by preserving green space and farmland and improving outdoor recreation. Formerly, the Clean Ohio Fund also cleaned up brownfields to encourage redevelopment and revitalize communities. The program provides \$6.25 million funding annually for recreational trails (described in more detail at right), \$37.5 million for green space conservation (described in more detail at right) and \$6.25 million for farmland preservation.

Clean Ohio Trails Fund

The Clean Ohio Trails Fund, a state-funded reimbursement grant program administered by ODNR, provides up to 75% of project funding. The recipient must provide at least 25% of the project cost. Items of value, such as contributions of land; easements; or other interests in land, eligible labor or eligible materials, may be considered as contributing toward the percentage of the cost of a recreational trail project that must be provided by the grant recipient.

The following types of projects are eligible for Clean Ohio Trails Fund grants:

- New recreational trail construction (emphasis is on linear trails).
- Acquisition of property and easements for recreational trails or trail corridors.
- Trailhead facilities (if a relatively small component of a trail construction project).

In addition, planning, appraisals, title work, surveys, engineering design costs, environmental research and archaeological surveys associated with a specific recreational trail project may be eligible (these costs are not eligible as a stand-alone project).

Clean Ohio Trails funding is available to cities; villages; counties; townships; special districts such as park districts, joint recreation boards or conservancy districts; jointly sponsored projects between political subdivisions; and nonprofit organizations. All projects must be completed within 15 months from the date they are signed into contract.

Applications are due in winter/spring each year, and grant decisions are announced in the fall. Learn more at: development.ohio.gov/cleanohio/recreationaltrails.

Clean Ohio Green Space Conservation Program

The Ohio Public Works Commission (OPWC) administers this program to fund preservation of open spaces, sensitive ecological areas and stream corridors. Special emphasis is given to projects that:

- Protect habitats for rare, threatened or endangered species.
- Preserve high-quality wetlands and other scarce natural resources.
- Preserve streamside forests, natural stream channels, functioning floodplains and other natural features of Ohio's waterways.
- Support comprehensive open space planning.
- Secure easements to protect stream corridors, which may be planted with trees or vegetation to reduce erosion and fertilizer/pesticide runoff.

APPENDIX B – FUNDING SOURCES

- Enhance ecotourism and economic development related to outdoor recreation in economically challenged areas.
- Provide pedestrian or bicycle passageways between natural areas and preserves.
- Reduce or eliminate nonnative, invasive plant and animal species.
- Provide safe areas for fishing, hunting and trapping in a manner that supports a balanced ecosystem.

The program provides grants for up to 75% of the estimated costs for projects. Applicants must apply to the Natural Resource Assistance Council (NRAC) with geographical jurisdiction over the proposed project area and must contact that NRAC for any specific requirements, including its application schedule. For information on the current NRAC chair, NRAC liaison or OPWC's program representative for a project location, call OPWC at 614.466.0880 or visit pwc.ohio.gov/Programs/Clean-Ohio-Application.

NatureWorks

NatureWorks projects are funded through the Ohio Parks and Natural Resources Bond Issue, which was approved by Ohio voters in 1993. This grant program provides up to 75% reimbursement assistance for local government subdivisions (townships, villages, cities, counties, park districts, joint recreation districts and conservancy districts) for the acquisition, development and rehabilitation of recreational areas. Each county is allocated up to \$150,000 annually. There is a required 25% match, which includes in-kind donations such as land and labor. Applications are due June 1. Other grant specifications include:

- All local subdivisions of government are eligible (local school boards are ineligible).
- Local governments can apply for up to 75% reimbursement grants (state funding) for acquisition, development or rehabilitation of public park and recreation areas.
- The agency must have proper control (title or at least a 15-year non-revocable lease) to be eligible for a development or rehabilitation grant.

Learn more at: ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/apply-for-grants/grants/natureworks.

Land and Water Conservation Fund

The LWCF grant program in Ohio provides up to 50% reimbursement assistance for state and local government subdivisions (townships, villages, cities, counties, park districts, joint recreation districts and conservancy districts) for the acquisition, development and rehabilitation of recreational areas. The maximum project award is \$500,000, and the minimum award is \$50,000.

Funding is issued to the state, and it is at the state's discretion how much of that funding will be made available for local government. Since the LWCF grant program became effective, the state of Ohio has received over \$150 million. Over half of this funding has been used for local parks projects.

To be eligible for federal LWCF grant assistance, Ohio prepares and updates the Ohio Statewide Comprehensive Outdoor Recreation Plan (SCORP). Ohio reviews LWCF grant applications and submits recommended projects to the National Park Service for final approval. All recommended projects must be in accord with Ohio's SCORP priorities.

Applications are due annually in November. Learn more at: ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/apply-for-grants/grants/land-water-conservation-fund.

Private Foundations

Many foundations provide grants for trail and greenway projects, open-space preservation, community development and community health. To obtain larger contributions from foundations, a full-fledged funding proposal is usually required. The proposal should illustrate the communitywide value of the trail and describe how it will be developed and maintained.

Foundations that serve Ohio communities along the A2P corridor include:

Akron Community Foundation
akroncf.org

Cleveland Foundation
clevelandfoundation.org

The George Gund Foundation
gundfoundation.org

Knight Foundation
knightfoundation.org

Pennsylvania

Community Conservation Partnerships Program

The Pennsylvania Department of Conservation and Natural Resources' Bureau of Recreation and Conservation assists local governments and recreation and conservation organizations with funding for projects related to parks, recreation and conservation. The Community Conservation Partnerships Program also includes federal funding sources, such as the TAP, LWCF and RTP programs.

Transportation Alternatives Set-Aside

Pennsylvania's Transportation Alternatives Set-Aside program, administered by the Pennsylvania Department of Transportation (PennDOT), provides funding for projects and activities including on- and off-road pedestrian and bicycle facilities; infrastructure projects for improving non-driver access to public transportation and enhancing mobility; community improvement activities; environmental mitigation; trails that serve a transportation purpose; and Safe Routes to School projects.

Multimodal Transportation Fund

PennDOT's dedicated Multimodal Transportation Fund stabilizes funding for ports and rail freight, increases aviation investments, establishes dedicated funding for bicycle and pedestrian improvements, and allows targeted funding for priority investments in any mode of transportation.

Learn more about the above grant opportunities at: pennidot.gov/ProjectAndPrograms/MultimodalProgram/Pages/default.aspx.

Greenways, Trails and Recreation Program

The Greenways, Trails and Recreation Program, administered by the Pennsylvania Department of Community & Economic Development, can be used for projects that involve the development, rehabilitation and improvement of public parks, recreation areas, greenways, trails and river conservation.

Learn more at: dced.pa.gov/programs/greenways-trails-and-recreation-program-gtrp.

Neighborhood Assistance Program

The Neighborhood Assistance Program (NAP), also administered by the Pennsylvania Department of Community & Economic Development, is a tax credit program designed to encourage businesses to invest in projects benefiting distressed neighborhoods and low-income individuals. Categories of projects include community economic development, community services, neighborhood assistance for physical improvements, neighborhood conservation and crime prevention.

Contributing businesses may receive a tax credit of up to 55%. Nonprofit community organizations are eligible to receive the funds and must commit to the program for one year. NAP has

multiple components, including the Special Program Priorities and Neighborhood Partnership Program, outlined below.

- **Special Program Priorities:** For distressed areas and low-income populations, this program can be used for a variety of activities, including blight elimination. Contributing businesses may receive a tax credit of up to 75%. Nonprofit community organizations are also eligible to receive the funds and must commit to the program for one year.
- **Neighborhood Partnership Program:** This program is designed to address specific development needs as identified by a preexisting community strategic plan in a distressed, low-income area. A five-year commitment is eligible for a tax credit of up to 75% for participating businesses. A six-year or longer commitment of a minimum of \$50,000 per year is eligible for a tax credit of up to 80%.

Learn more at: dced.pa.gov/programs/neighborhood-assistance-program-nap.

Redevelopment Assistance Capital Program

The Redevelopment Assistance Capital Program (RACP), administered by the Pennsylvania Office of the Budget, is a commonwealth grant program administered for the acquisition and construction of regional economic, cultural, civic, recreational and historical improvement projects. Program projects are authorized in the Redevelopment Assistance section of the Capital Budget Itemization Act; have a regional or multijurisdictional impact; and generate substantial increases or maintain current levels of employment, tax revenues or other measures of economic activity. RACP projects are state-funded projects that cannot obtain primary funding under other state programs.

Learn more at: budget.pa.gov/Programs/RACP/Pages/Main%20Page.aspx.

Private Foundations

Many foundations provide grants for trail and greenway projects, open-space preservation, community development and community health. To obtain larger contributions from foundations, a full-fledged funding proposal is usually required. The proposal should illustrate the communitywide value of the trail and describe how it will be developed and maintained.

Foundations that serve Pennsylvania communities along the A2P corridor include:

Claude Worthington Benedum Foundation: benedum.org

The Heinz Endowments: heinz.org

Hillman Family Foundations: hillmanfamilyfoundations.org

The Pittsburgh Foundation: pittsburghfoundation.org

Richard King Mellon Foundation: rkmf.org



Duquesne Light

THE BRIDGE WAS BUILT BY THE DUQUESNE LIGHT COMPANY IN 1904. IT WAS THE FIRST SUSPENSION BRIDGE TO BE BUILT IN PITTSBURGH. THE BRIDGE IS A NATIONAL HISTORIC LANDMARK AND IS A PART OF THE PITTSBURGH HISTORIC DISTRICT. THE BRIDGE IS A GREAT EXAMPLE OF THE CITY'S INDUSTRIAL HERITAGE AND IS A MUST-SEE FOR VISITORS TO THE CITY.

Appendix C – Resolution Template

Appendix C provides an example of a resolution that counties and towns/cities can adopt to support the Industrial Heartland Trails Coalition (IHTC) and the Ashtabula to Pittsburgh (A2P) corridor. Counties and towns/cities along other IHTC corridors have passed similar resolutions and could provide support in crafting and adopting such a resolution. Rails-to-Trails Conservancy staff can share more information upon request.

Industrial Heartland Trails Coalition Regional Trail Network A Resolution

Whereas, the Industrial Heartland Trails Coalition (IHTC) Regional Trail System is a planned, multi-county, multi-state trail system in a 51-county, four-state area including New York, Ohio, Pennsylvania and West Virginia; and

Whereas, “trails” refers to shared-use paths (also known as rail-trails, greenways, pathways), defined as non-motorized, multiple-use transportation and recreation corridors typically allowing hiking, biking and other non-motorized uses to form active transportation networks; and

Whereas, the IHTC Regional Trail System includes over 1,500 miles of mapped trails, with 53% of the system complete; and

Whereas, the emerging Ashtabula to Pittsburgh trail corridor is key to this regional vision; and

Whereas, many communities, agencies and trail advocates in the region have taken a lead in planning and/or building local trails and greenways, and those efforts can be greatly enhanced by being connected to a larger regional network of shared use paths; and

Whereas, the Great Allegheny Passage trail has demonstrated that trails are significant economic generators, hosting over 800,000 riders per year and generating over \$40 million in direct annual spending by trail users; and

Whereas, property values of land parcels adjacent to and near regional, shared-use paths have increased; and

Whereas, regional, shared-use paths serve as a critical transportation corridor for residents, commuters and visitors; and

Whereas, regional, shared-use paths contribute to active, healthy lifestyles for people of all ages and abilities; and

Whereas, shared-use paths foster the conversion of degraded, unproductive land to more productive land uses; and

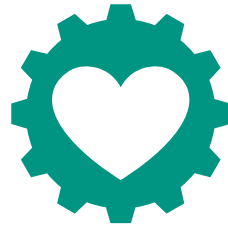
Whereas, shared-use paths allow communities to celebrate and share their rich cultural heritage; and

Whereas, regional, shared-use paths have become an important source of community and regional pride;

Now, Therefore, Be It Resolved, that the [CITY/COUNTY OF _____], acting by its Mayor/Commissioner and Council/Commission] will work collaboratively to support the vision of a shared-use trail system between Ashtabula, Ohio, and Pittsburgh, Pennsylvania, closing the gaps and helping create the longest connected system of multiuse trails in the United States.

Adopted the _____ day of _____ in the year _____.

Attest: _____



Industrial
Heartland
Trails
COALITION