

ETNA BOROUGH & SHALER TOWNSHIP
**LITTLE PINE CREEK
CONNECTOR TRAIL**
FEASIBILITY STUDY REPORT



PREPARED BY:
ENVIRONMENTAL PLANNING & DESIGN
HF LENZ COMPANY
DECEMBER 2019

Acknowledgments

During the process, a steering committee comprised of a broad representation of local interest groups, administrative bodies, and professional consultants was closely involved in navigating the entire study and providing insights. The committee included the following members:

Steering Committee

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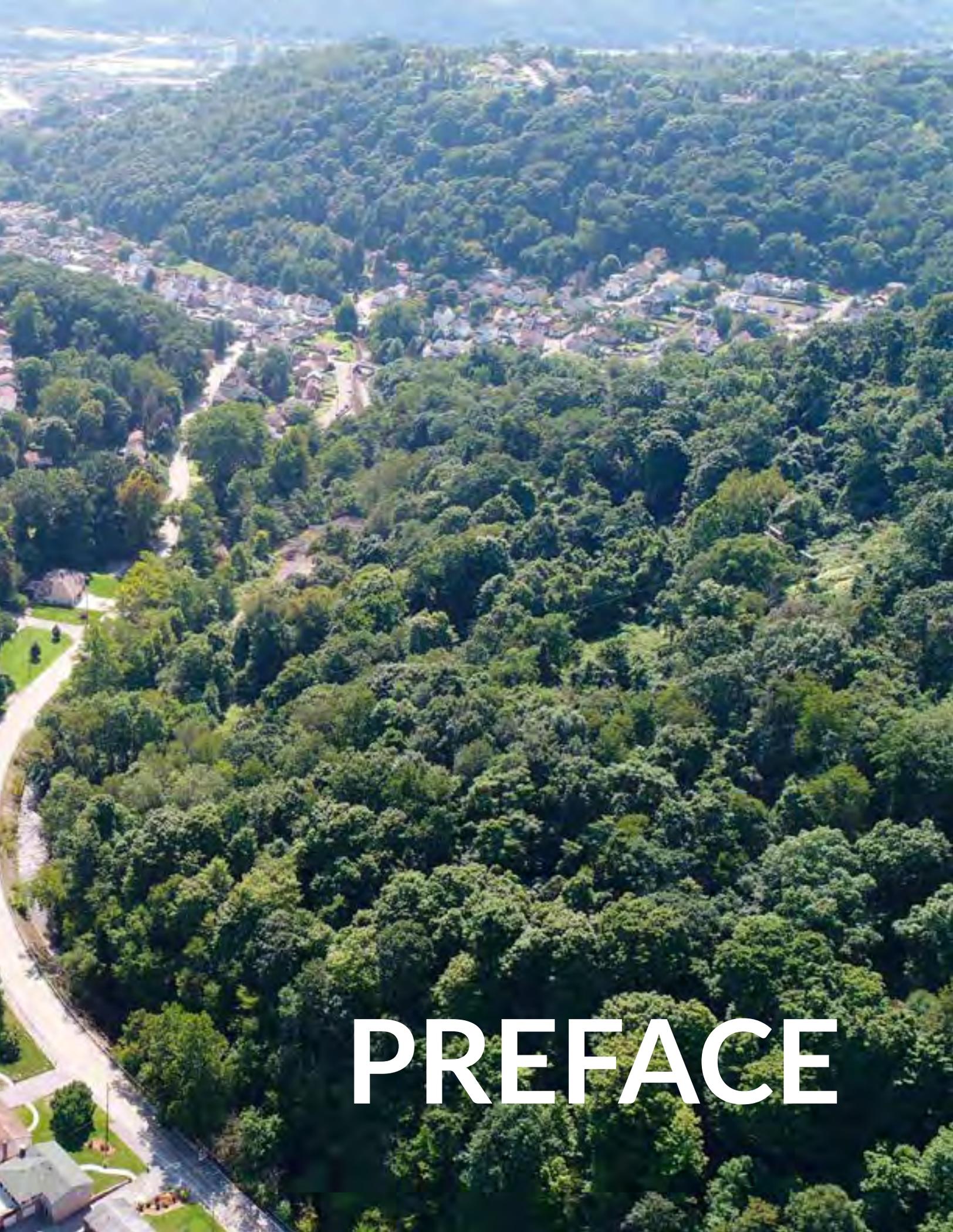
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PREFACE

Preface

The overarching goal of the Little Pine Creek Connector Trail Feasibility Study is to identify a potential alignment for a bicycle/pedestrian trail, extending from Kiwanis Park in Shaler Township along the west branch of the Little Pine Creek to Etna Borough's Riverfront Trail and Park. Some of the elements within this Study include, but are not limited to: an assessment of existing conditions, an exploration and comparison of potential route alignments, the development of concept plans to illustrate necessary improvements to existing roadway infrastructure for the route and necessary safety devices, landscaping, way-finding signage, lighting, and bicycle and pedestrian amenities. Consensus on the optimal route is based on the input of the general public, bicyclists, runners and walkers living in the area, the project steering committee, and elected officials from the two communities.

Most importantly, the Little Pine Trail Corridor will for the first time allow residents living in Etna Borough and Shaler Township access to a safe, marked (and sometimes separated) bicycle route to the Three Rivers Heritage Trail as a means for both accessing jobs and amenities and for engaging in healthy recreation.

As for the recreational value, one simple life style change is walking or biking for exercise. Both have great health benefits and are affordable activities that all families can do. New developments and consideration of open air activities are vital. This study will support how bicycle and walking trails are amenities which attract young families and diverse populations seeking such progressive places to live, play and invest.

The residents of both Etna Borough and Shaler Township, as well as residents of the surrounding communities will benefit from this amenity. This endeavor represents the first presence of a legitimate cycling infrastructure in their communities that not only serves travel and recreational needs within the communities and also connects the two communities to a larger potential regional trail network. The proposed route traverses Etna's business district, the residential neighborhoods of Etna, and the Little Pine Creek Road corridor in Shaler. The trail will not only provide a pedestrian/bicycle route that connects residents to local businesses and recreation, but will also allow for users of the regional trail system from other communities to access businesses and amenities in downtown Etna and Shaler.

(next spread)

Aerial view of Etna Borough Senior Center, PNC Bank and adjoining residential community.





C H A P T E R O N E

VISION & GOALS



1.1 - Vision

Connection.

That word, that concept will be a lasting theme throughout the duration of this Feasibility Study. The connection to places, to people and to each other. These two communities are connected by more than just geographical concepts. They are connected by history and by purpose.

The proposed Little Pine Creek Connector Trail aims to provide a very physical, very real connection between these two communities that have worked so successfully together in past endeavors. Such a trail will provide both residents and visitors of the area with an opportunity to connect and with their neighbors in a fashion that combines transit, health, and recreation.

And when the development of the Little Pine Creek Connector Trail reaches its completion, a wide network of both existing and proposed trails will then connect the two communities with the greater region for generations to come.

(Previous page)

Northwest bound view of the construction presently occurring on Bridge Street

[Image 1]

Intersection of Bridge Street and Freeport Street



[Image 2] Railroad trestle on Bridge Street



1.2 - Goals



[Image 3] Gateway Portal Park



[Image 4] Women's winner of 2017 Jane Neely 5K



[Image 5] Downtown Etna Borough

1. Connect Shaler and Etna to the Allegheny River and to the area's key recreational assets and open spaces.

The Little Pine Creek Connector Trail will allow residents living in Shaler Township and Etna Borough access to a safe, marked bicycle route to the Allegheny Riverfront trail network as a means for engaging in healthy recreation. While there are many recreational opportunities in both Etna and Shaler, these opportunities are largely self-contained and not connected to a larger recreational network. The proposed trail connector would provide a connection between the two communities and the Allegheny River that would allow for new recreational opportunities for residents.

2. Facilitate health, education, safety, recreational improvements, community gardens and promote simple lifestyle changes to encourage residents to become healthier.

Both Active Allegheny and Live Well Allegheny are initiatives dedicated to improving the health and, by extension, the quality of life of Allegheny County residents. This proposed trail represents a great opportunity to push those initiatives forward and to continue the legacy of being the first certified EcoDistrict in the country.

3. Connect and encourage regional trail network users to access and visit businesses in downtown Etna and amenities in Shaler.

Existing within Etna Borough is a thriving and inviting downtown business district. Within Shaler Township there are acres of recreational amenities, wooded hillsides, and Little Pine Creek. This proposed trail will allow pedestrian and bicycle access between these elements where there previously was none, encouraging health and engagement throughout the length of the trail and beyond.

The Benefits of Trails

National studies and surveys repeatedly rank trails and protected open space the #1 priority for retaining community character, improving the health of residents, connecting families and friends, increasing property values, and generating and promoting new business.

Some quick facts about trails...

- Walking 20 minutes a day can lower your blood pressure, and lower your risk of heart disease, diabetes, cancer, stroke, and depression. Walking increases your life expectancy.
- Spending time outdoors improves your cognitive reasoning by 50%
- Outdoor recreation accounts for \$427.2 billion of the U.S. economy and 7.6 million jobs
- Trails near your home can increase your property value.
- Trails improve community economics by attracting tourists, promoting local businesses, and improving property values.

Sources:

U.S. News and World Report American Trails.org U.S. Bureau of Economic Analysis
American Heart Association Cancer.org Outdoor Industry.org

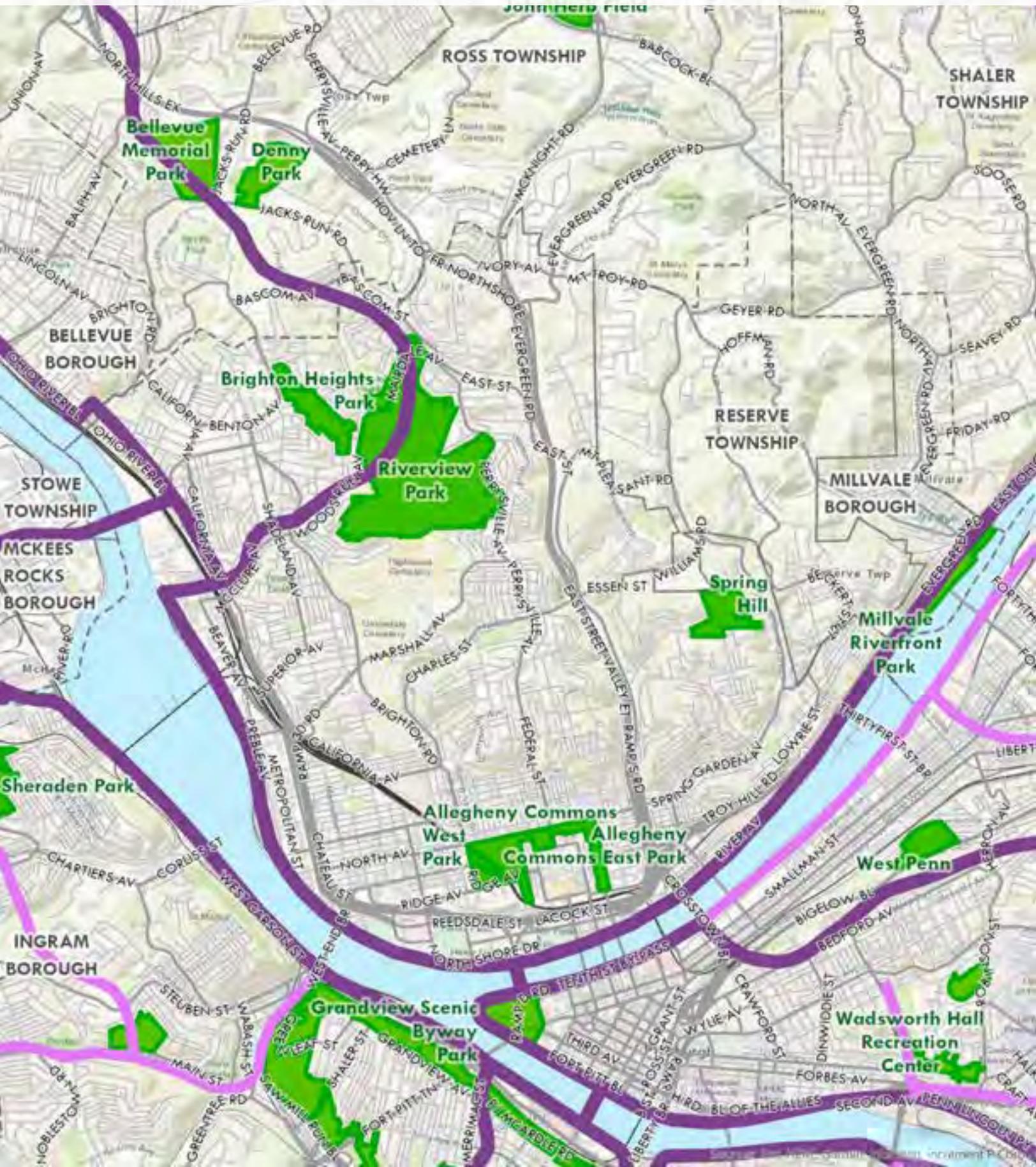


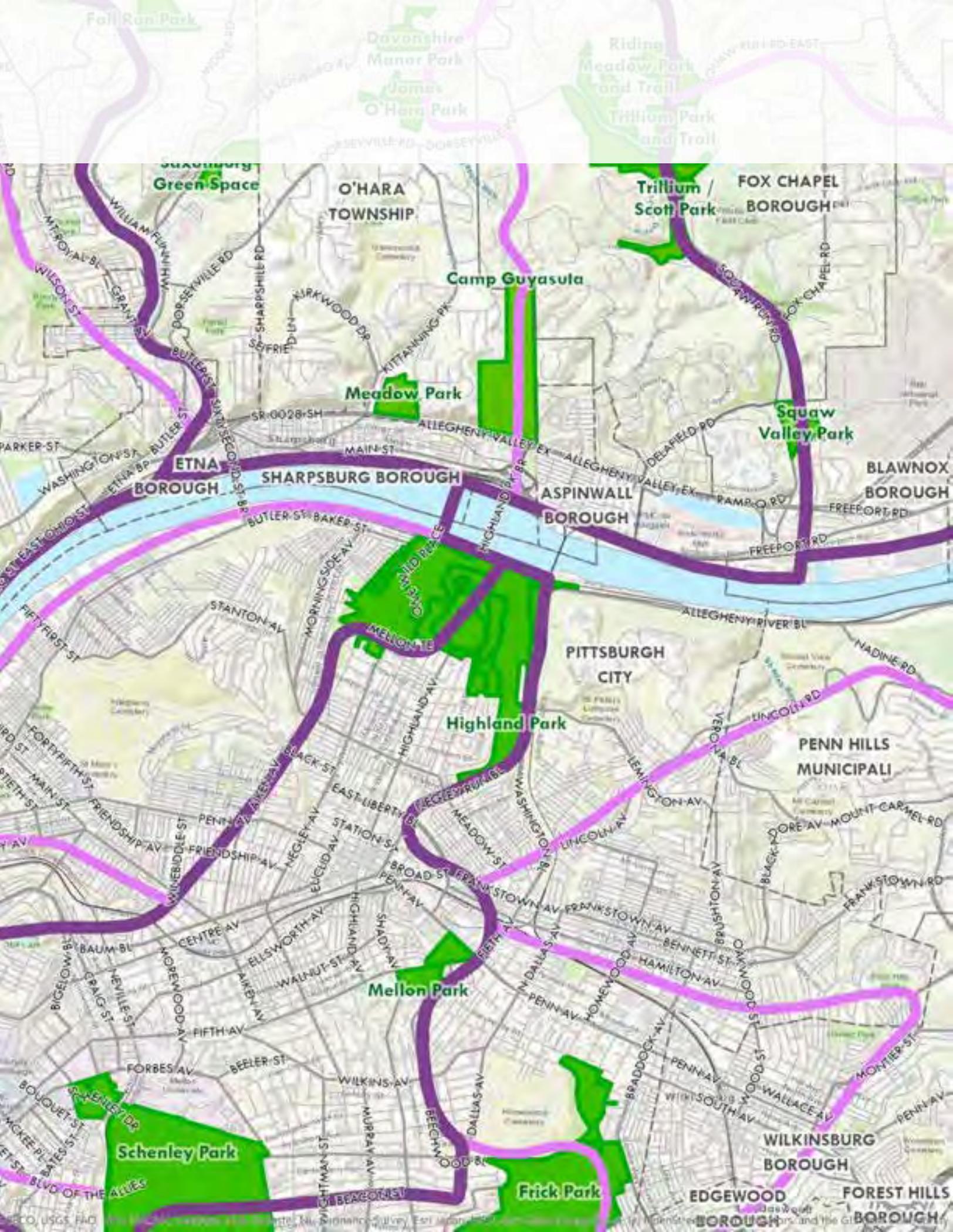
C H A P T E R T W O

HISTORY & BACKGROUND



As stated, the proposed connector trail represents an opportunity to connect the community to the larger regional trail network. The Little Pine Creek Connector Trail will intersect with the nearby Three Rivers Heritage Trail as part of the larger Erie to Pittsburgh Trail Network.





Fall Run Park

Donovshire Manor Park

Riding Meadow Park and Trail

James O'Hara Park

Trillium Park and Trail

Green Space

O'HARA TOWNSHIP

Trillium / Scott Park
FOX CHAPEL BOROUGH

Camp Guyasuta

Meadow Park

Squaw Valley Park

ETNA BOROUGH

SHARPSBURG BOROUGH

ASPINWALL BOROUGH

BLAWNOX BOROUGH

Highland Park

PITTSBURGH CITY

PENN HILLS MUNICIPALITY

Mellon Park

Schenley Park

Frick Park

WILKINSBURG BOROUGH

EDGEWOOD BOROUGH

FOREST HILLS BOROUGH

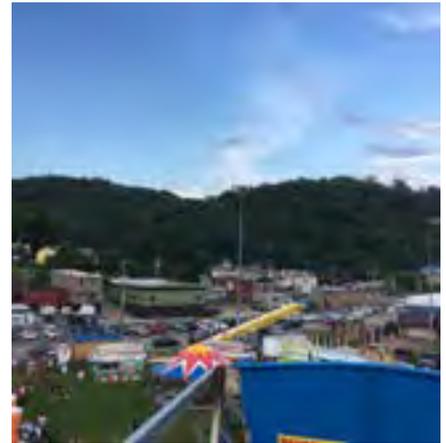
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2.1 – Partnerships Between Etna and Shaler

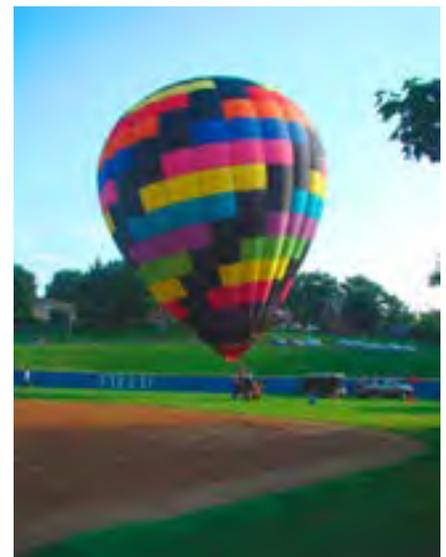
Etna Borough and Shaler Township collaborated to explore the feasibility of designing and developing the Little Pine Creek Connector Trail through both of their communities. The route will function as a major component of the N1 bike route (North Route 1) outlined in Active Allegheny and a major objective is to determine the feasibility of running the route along the flatter, less trafficked Little Pine Creek Road instead of Mount Royal Boulevard. Within the Borough of Etna, the route will run along Grant Avenue, Crescent Street, Wilson Street, Dewey Street and Butler Street, consistent with the bottom leg of the N1 route as outlined in Active Allegheny. The route will serve as an alternative to not only Mount Royal Boulevard but also State Route 8, which was identified through Active Allegheny surveys as one of the top five roadways needing bicycle facility improvements.

Establishing the trail in these communities aligns with the mission and vision of two significant healthy initiatives within Allegheny County communities: Live Well Allegheny and Active Allegheny. Each of these initiatives is committed to working with locally run organizations and communities to encourage community gardens, to facilitate health, education, safety and recreational improvements, and to promote simple lifestyle changes to make residents healthier.

[Image 6]
Etna Carnival



[Image 7] Shaler Community Day



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2.2 – Borough of Etna

In 2019, Etna Borough, which is one-third of a group of municipalities known as the TriBoro EcoDistrict, was recognized as having the country's first certified EcoDistrict. Since becoming the third borough of the TriBoro EcoDistrict, the community has unified and worked to make Etna Borough an innovative, sustainable, and diverse neighborhood.

The three imperatives of an EcoDistrict are: Equity, Resilience, and Climate Protection. After joining the EcoDistrict, the Borough identified six areas in which the goal was to effect positive change: Water, Air Quality, Mobility, Energy, Food, and Social Equity. The main area in which the Borough progressed was the implementation of innovative green infrastructure to help confront challenges that stormwater presents. Other efforts that have contributed to Etna receiving this honor have been organized tree plantings, the development of a plan of action to improve the environment, control runoff, provide locally sourced food, provide safe and versatile travel and engage all community members equally.

Etna is a Sustainable PA Silver Certified Community. The Sustainable Pennsylvania Community Certification, a project of the Pennsylvania Municipal League and Sustainable Pittsburgh, is a voluntary performance recognition program designed to help municipalities achieve sustainability goals, which in turn will allow them to save money, conserve resources, and encourage innovation. The program is intended to bring recognition to municipalities that are applying the policy and practice of sustainability; municipalities that incorporate sustainable practices into their operations also foster community prosperity. The program provides communities with an online structure and performance platform for recognition as they adopt sustainable policies and practices. As a part of this program, the Borough created the Garden of Etna, a vegetable garden for residents and businesses which also provides fresh vegetables to the local food bank.

The Borough, through funding from the Allegheny County Health Department, has partnered with the Garden of Etna to transform a vacant lot owned by the Borough on Elk Way and Locust Street into a vibrant and productive neighborhood vegetable garden. The garden currently has sixteen residential beds which people can sign up for at no cost to them. The garden also has four large 4' x 20' beds dedicated to a food bank located in our community, the Bread of Life Food Pantry. Last year, the Garden provided over 550 pounds of food to this food bank. This summer, the group was successful in acquiring berry plants from a grant from the Western Pennsylvania Conservancy, and beds were installed and now the food bank will receive these delicious berries in addition to the home



[Image 8] (left)
Rain garden in Etna



[Image 9] (right)
Decorative stormwater conveyance flows through the sidewalks of Downtown Etna.

grown delicious vegetables. The Garden annually partners with Shaler Area School District students, who grow “winter crops” (lettuce, green beans, etc.) from seeds at their greenhouse and plant them in the garden. These vegetables are also provided to the food bank in early spring. The Garden boasts a rain barrel on their storage shed as well as a composter.

The Borough of Etna has received multiple grants from ALCOSAN's GROW Program (Green Revitalization of Our Waterways). The Borough has utilized the GROW program, which began in 2016 and offers reimbursement grants to ALCOSAN's 83 partner municipalities and authorities for projects that reduce the amount of excess groundwater and stormwater that enters the sewer collection system and ultimately leads to the problem of illegal overflows during wet weather events. Annually, approximately 9 billion gallons of mixed stormwater, groundwater and sewage enter the region's rivers and streams during wet weather. ALCOSAN is under a federal consent decree to reduce these overflows throughout its system. A total of 43 municipalities and 14 City of Pittsburgh neighborhoods have taken part in the GROW program. Additionally, Etna Green Infrastructure Projects have received support from the Pennsylvania Department of Environmental Protection's "Growing Greener" Program, and the Borough also sponsors a Rain Barrel Initiative to reduce flooding by offering reduced pricing and free installation of a rain barrel in residents' yards.

The Etna Green Infrastructure Master Plan Project is an ongoing study which was financed by a grant administered by the Pennsylvania Environmental Council (PEC). The objective of the study is to assess the feasibility of reducing/eliminating proposed gray infrastructure alternatives by managing the 90% of Typical Year 2003 runoff through the implementation of green solutions within the Borough of Etna, a combined sewer system community. In addition, the project is intended to develop a methodology for communities to evaluate and select basin retrofit options using Shaler Township as a case study.

(next spread)
Birdseye view of Dewey Street in the foreground and the William Flynn Highway in the distance.



Various alignments were studied through the Borough of Etna and how trail users would enter into Etna Borough from Shaler and vice-versa.

2.3 – Township of Shaler

Shaler Township has nine parks, including Denny, Fall Run, Farrell Field, Duss, Ellen Hughes, Kiwanis, Richter, Stoneridge, and Galley, as well as Vienna Woods Parklet, and Fawcett Fields.

Kiwanis Park, which will be the northern-most end of the Little Pine Creek Connector Trail, contains Shaler's only public swimming pool - Crawford Pool, a playground, two tennis courts, street hockey, a pickleball court, two ballfields, two picnic shelters and two basketball courts. Although this park is not the largest in acreage at 30.6 acres, it does offer the most facilities to the community.

Shaler Township is among a select group of high performing municipalities to become certified through the Sustainable Pennsylvania Community Certification program. Shaler Township is recognized at the Silver level of certification for meeting the program's rigorous performance criteria which tracks 131 policies and practices that define a sustainable community.

The Sustainable Pennsylvania Community Certification, administered by the Pennsylvania Municipal League in partnership with Sustainable Pittsburgh, is designed for municipalities that are working to save money, conserve resources, and serve vibrant communities. Originally deployed in Southwestern Pennsylvania by Sustainable Pittsburgh, the certification has gone state-wide recognizing small, medium and large municipalities across the Commonwealth. The Pennsylvania Municipal League applaud municipalities for their demonstrated commitment and sustainability performance. In earning the silver certification, Shaler Township is acknowledged for its progress in addressing such areas as community design and land use, energy efficiency, health and wellness, mitigating blight, intergovernmental cooperation, recycling and waste reduction, fiscal controls and internal management and operations. The Certified Community by the Sustainable Pennsylvania Community Certification is intended to bring recognition to municipalities that are applying the policy and practice of sustainability as their way of operating in order to advance community prosperity. It also serves as a mechanism for sharing best practices for creating a more sustainable Pennsylvania.

Live Well Allegheny, an initiative of Allegheny County, is a county-wide campaign to improve the overall health and wellness of Allegheny County residents. The campaign aims to improve health and well-being

of residents through collaborative work with partners, stakeholders, and residents. Live Well Allegheny connects communities, schools, workplaces, restaurants, and community partners in collective action to achieve our goal of making Allegheny County the healthiest county in the nation.

In May 2017 the two municipalities applied for funds from the 2017 “Active Allegheny Grant Program” for a feasibility study for the development of a bicycle route through these communities. A \$23,259 grant was awarded in Aug. 2017 and finalized in Oct. 2017.

[Image 10] Denny Park



[Image 11] Kiwanis Park



2.4 – Study Area

The Steering Committee identified the study area in the project proposal and this was the foundation for the feasibility study. The following segments were developed throughout the planning process.

Segment A – Kiwanis Park Trailhead to the Little Pine Creek Road intersection with West Pennview Avenue

Segment B – The Little Pine Creek Road intersection with West Pennview Avenue to the intersection of Jones Street and Wilson Street

Segment C – The intersection of Jones Street and Wilson Street, southeast to the intersection of Dewey Street and Church Alley

Segment D – The intersection of Dewey Street and Crescent Street to the Dougherty Nature Trail Extension and Butler Street.

Segment E – The Etna Borough Building on Butler Street to the intersection of Butler Street and Bridge Street

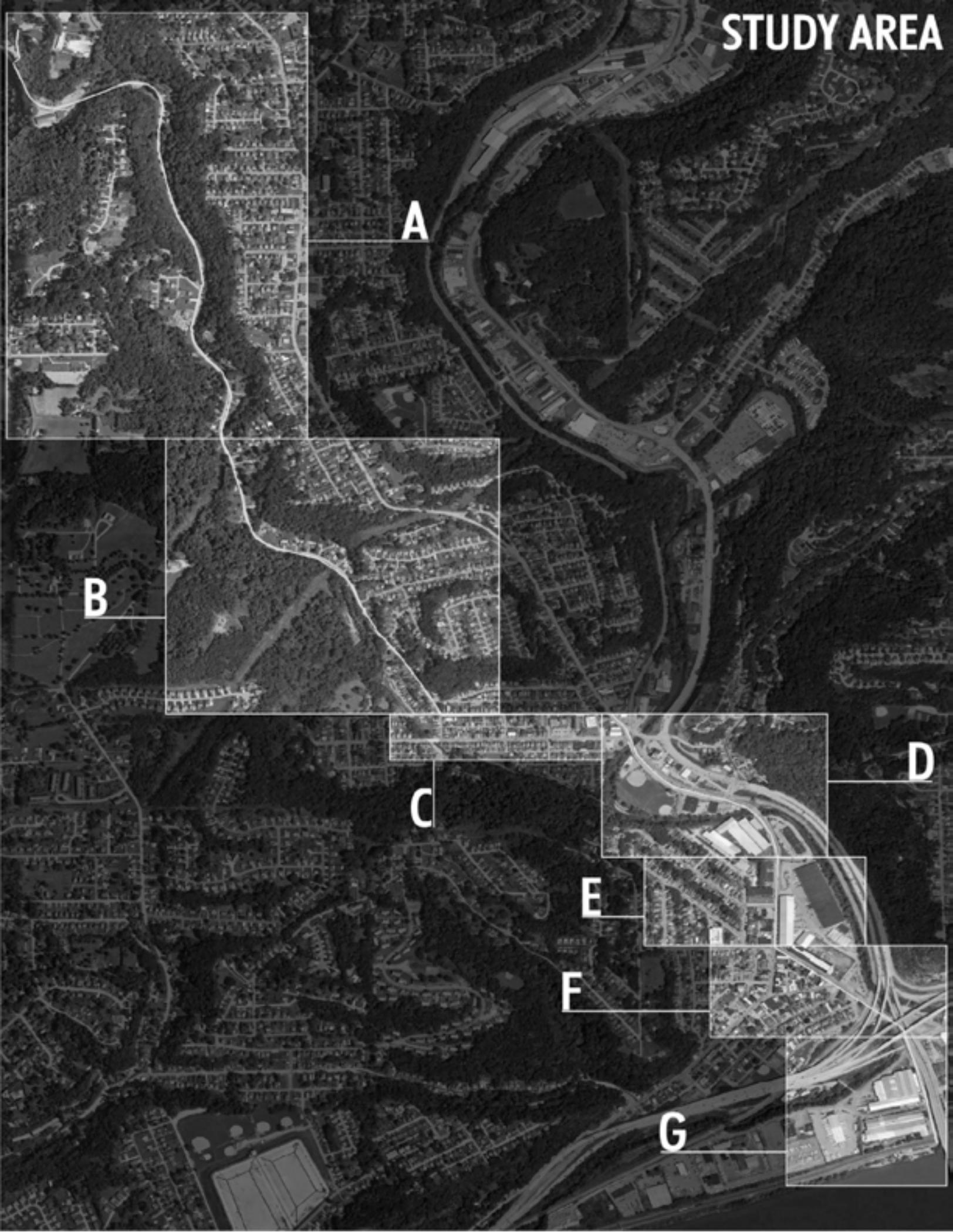
Segment F – The intersection of Butler Street and Bridge Street to Gateway Portal Park

Segment G – Gateway Portal Park to Etna Riverfront Park

[Opposite spread] →

The proposed trail study area was broken down into seven segments for analysis

STUDY AREA



A

B

C

D

E

F

G

2.5 – Existing Conditions

Shaler Township is a residential community located in the North Hills, minutes from downtown Pittsburgh. Covering 10.5 square miles of land, it is bordered by the communities of Hampton, Ross, Millvale, Indiana, Etna, Reserve Township, Sharpsburg and O'Hara.

Etna public school children, from kindergarten through twelfth grade, attend classes in the Shaler Area School District. Along with Etna, the district also serves the communities of Shaler Township, Millvale, and Reserve Township. In addition to general classes, Shaler also offers gifted and special education programs to meet the needs of all students.

Being at the bottom of the Pine Creek Watershed and Sewershed, Etna Borough faces many issues with storm water problems. Sewer capacity within the combined sewer system can be exceeded during heavy rain events, causing overflows to the streams is one of those issues. Localized flooding is another issue. Proper stormwater management regulations can help address these issues. As can a more proactive approach to storm water source control, which the Borough is actively pursuing where appropriate.

ETNA

Elevation: 743 feet

Land area: 0.75 square miles

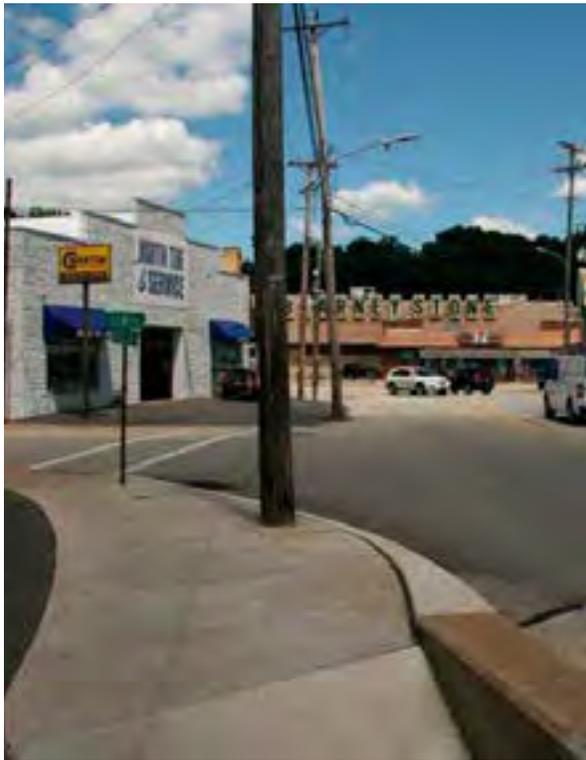
Population density: 4,501 people/square mile

SHALER

Land area: 11.0 square miles

Population density: 2,577 people/square mile

[Image 12, 13, 14, 15] →
Clockwise, from top left.
The intersection of Crescent Street and Dewey Street [12]; People's Natural Gas easement [13]; Intersection of Vilsack Street and Kraus Street [14]; Freeport Street [15]









2.6 – Demographics & Statistics

Etna

Etna has an estimated 2017 population of 3,451 and the median age is 36.4 years. The primary industries are educational services, health care, and social assistance, with 17.7% of the employed civilian population involved in these professions. Additionally, 17.4% of the employed civilian population work in the retail trade industry, and 16.4% work in the arts, entertainment, and recreation, and accommodation/food services industries.

Shaler

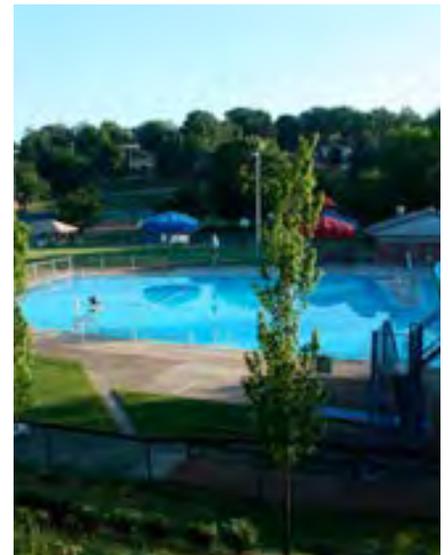
Shaler has an estimated 2017 population of 28,481 and the median age is 47.2 years. The primary industries are educational services, health care, and social assistance, with 29.3% of the employed civilian population involved in these professions.

(Previous page)
Aerial view of Little Pine Creek Road

[Image 16]
Residents of Shaler enjoying the annual "Community Day".



[Image 17] Crawford Pool at Kiwanis Park







C H A P T E R T H R E E

COMMUNITY ENGAGEMENT

(Previous page)

Bicyclists are already using this thoroughfare to commute between communities. We identified multiple bicyclists and pedestrians traveling along Bridge Street on and off of the sidewalks.



[Image 18] Public Meeting 7/31/19



[Image 19] Public Meeting 7/31/19

3.1 - Steering Committee

The Steering Committee was formed prior to the first project kick-off meeting and the committee has met a total of six (6) times throughout the planning process. The Committee is made up of local business owners, local officials, organization leaders and active residents.

3.2 –Public Meetings

First Public Meeting - 07/31/19

On July 31, 2019, the first public meeting was held. In addition to scores of members of the community, the meeting was also attended by members of the Steering Committee and the Design Team.

After introductions, the Design Team presented some of the site background relating to the proposed trail alignment options, the Etna Riverfront Park and Trail Master Plan, and the Active Allegheny grant. The presentation was followed by a Q & A with members of the public in which their valuable feedback was heard. Some of the concerns and opportunities cited by meeting attendees included issues related to the railroad, the potential impact of any development on property values, additional alternate alignment options, and a variety of traffic, accessibility, and safety-related suggestions.

Second Public Meeting - 09/18/19

The second public meeting took place on September 18, 2019 at the Shaler Township Building. After an “open house” in which attendees were able to view multiple on-going project developments, the final trail alignment was proposed.

In addition, there was discussion of parcel ownership, study goals and objectives, potential trailhead locations, and initial cost estimates.

[Image 20]

EEDC Carnival attendees viewed the proposed trail alignments and provided valuable feedback.



[Image 21] EEDC Carnival Activity.



3.3 - Community Engagement



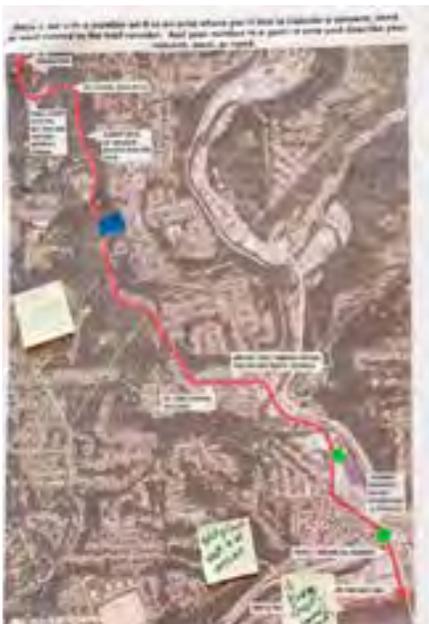
[Image 22] Public feedback on the alignments.

EEDC Carnival at the Field

June 24, 2019 - The 3rd Annual Etna Carnival took place Monday, June 25 through Saturday, June 30 at Dougherty Veterans' Field in Etna Borough. The Design Team attended in order to present the proposed trail concept to carnival-goers. People were asked for their feedback about what it would take to make this project a success for the two communities.

Shaler Township Community Day

July 4, 2019 - On the Fourth of July, Shaler Township held it's "Community Day" event at Kiwanis Park. The all-day festival had carnival games, food vendors, and closed the day out with a fireworks display. The Design Team took this opportunity to again present the proposed trail concept to members of the community and listen to their ideas and feedback.



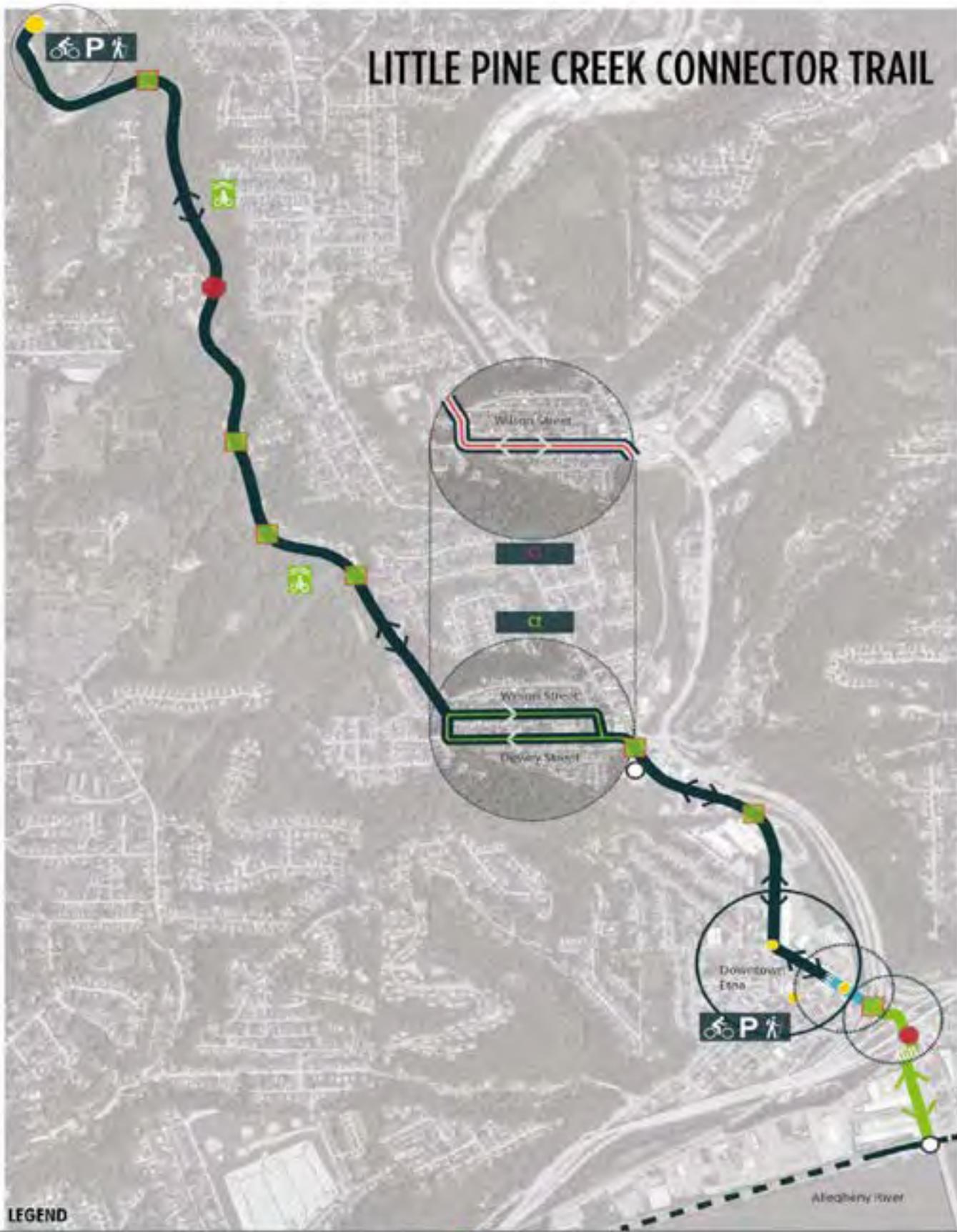
[Image 23] Community engagement.



C H A P T E R F O U R

TRAIL ALIGNMENT CONCEPTS

LITTLE PINE CREEK CONNECTOR TRAIL



LEGEND

- | | | |
|-------------------|------------|----------------|
| ON-ROAD FACILITY | TRAIL HEAD | BRIDGE |
| MULTI-USE TRAIL | CROSS WALK | SPECIAL PLACES |
| OFF-ROAD FACILITY | STOP SIGN | SHARROW |

0 500 ft



4.1 – Trail Alignment Concepts

Over the course of the project time-period, our Collaborative Team completed the Feasibility Study for the Connector Trail from the Township of Shaler to the Borough of Etna to be used in realistic pursuit of funding and development dollars. The following analysis was fed into the initial trail alignment concepts:

- a) Identified and evaluated potential linkages and connections
- b) Analyzed demographics
- c) Noted existing traffic and parking conditions
- d) Legal feasibility study of ownership, boundaries, etc.
- e) Identified destinations in both municipalities for users
- f) Evaluated locations for way-finding signage
- g) Infrastructure and utilities analysis
- h) Intersections and access points
- i) Appropriate design and engineering standards/permits
 - i. PennDOT
 - ii. Federal Highway Administration
 - iii. American Association of State Highway and Transportation Officials
 - iv. Manual on Uniform Traffic Control Devices
 - v. National Association of City Transportation Officials

As we delineated the alignment alternatives, we went through iterative reviews with civil and structural engineers for general conformity to federal, state and local jurisdictions and standards for bicycle and pedestrian facilities.

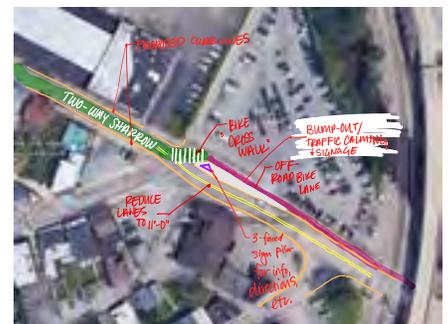
As part of the evaluation process, we established a priority ranking table for the alignment alternatives. The summary identified and evaluated the advantages/disadvantages of each concept and used various characteristics, advantages and disadvantages to rank them.

A Consumer Report Table/Evaluation Matrix was developed to assist in the comparison between the alternate trail alignments. This matrix took into consideration such factors as Accessibility, Connectivity, Trailhead quantities, and On-Road/Off-Road comparisons.

(Previous page)

Plan of early concept proposals for the Wilson Street/Dewey Street alignment

[Image 25] Early concept sketches



[Image 26] Early concept sketches



4.2 Trail Typologies

In order to remain sensitive to the constraints of both the physical and the built environments of the study area, a variety of trail typologies were considered throughout the planning process. Although many prefer a path separated from motor vehicles, the advantages of on-street facilities must be considered. On-street facilities can provide greater access to many destinations that cannot be reached by a shared-use path, are much more affordable than shared-use paths, and can be designed and constructed in less time. The following typologies were considered when designing the potential connector trail.

Shared-Use Paths

Shared-use paths are an ideal treatment for a wide variety of trail users. Typically asphalt, concrete, or firmly packed crushed aggregate, these hard-surface trails are a durable option. They are accessible to those with disabilities as long as they maintain grades of 5 percent or less. The trail tread of shared-use paths should be at least 10 feet wide in order to allow two-way traffic. Also, a 2-foot soft shoulder should be provided on either side of the trail tread. The path should maintain a minimum of 8 feet of vertical clearance from overhead objects. Where railings are necessary due to steep slopes adjacent to the trail, designers should install 42 inch railings. This trail typology is most appropriate in areas that will be highly used; the ideal placement is along gradually sloping, pre-existing linear rights-of-way, such as railroad bed or utility rights-of-way.

Signed On-Street Route

Signed shared roadways are facilities shared with motor vehicles. Typically used on roads with low speeds and traffic volumes, they can also be used on higher volume roads with wide outside lanes or shoulders. A motor vehicle driver will usually have to cross over into the adjacent travel lane to pass a bicyclist, unless a wide outside lane or shoulder is provided. To further identify a route as part of a Trail and to further alert motorists to expect bicycles on the roadway, shared lane markings can be added to a signed on-street route. These shared lane markings, or sharrows, can also assist bicyclists by indicating the preferred lateral positioning in the lane to avoid unexpected car door openings (also known as “dooring”) and to reduce close passing by motor vehicles.

Bike Lanes

Bike lanes designate an exclusive space for bicyclists through the use of pavement markings and signage. The bike lane is located adjacent to motor vehicle travel lanes. People riding bicycles in the bike lane travel the same direction as motor vehicles, and are typically on the right side of the street, between the adjacent travel lane and curb, road edge, or parking lane. Many bicyclists, particularly less experienced riders, are more comfortable riding on a busy street if it has a striped and signed bikeway than if they are expected to share a lane with vehicles. Appropriate signing and stenciling are important with wide bicycle lanes to ensure motorists do not mistake the lane for a vehicle lane or parking lane.

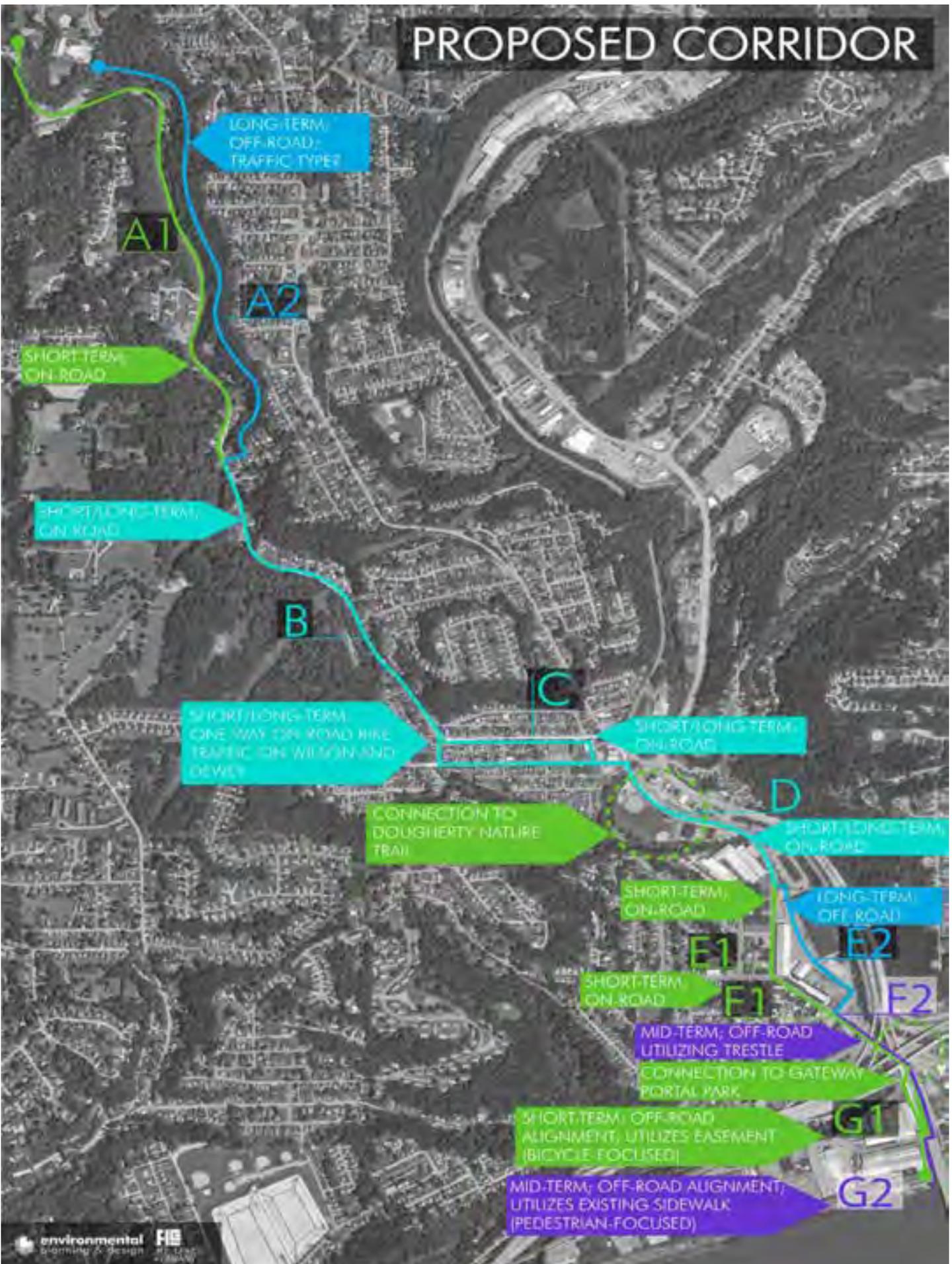
[Image 29]
Sign on Street example.



[Image 30] Shared-Use Path example.



PROPOSED CORRIDOR



4.3 - Final Alignment & Trail Overview

Upon completion of the trail alignment alternatives and public meetings, a combination of the alignment alternatives was developed into the preferred Final Alignment concept plan as per feedback from the first Public Meeting and the Steering Committee. The plan illustrates the general locations, extent and relationships for circulation patterns, access points, and potential parking areas. General grading, spatial, traffic and other land use conflicts are noted where necessary to present more strenuous portions of the trail.

The proposed Little Pine Creek Connector Trail will offer area residents and visitors unique and diverse recreational opportunities and a transportation experience from Kiwanis Park in Shaler Township to the Allegheny River at Etna Riverfront Park.

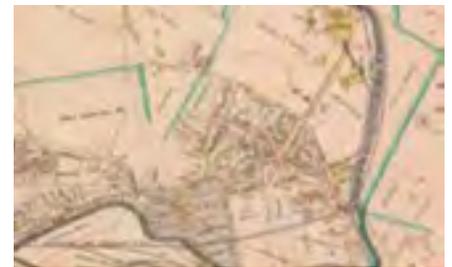
The recommended route connects to multiple economic and recreational destinations and amenities that have helped to define the character and culture of Allegheny County's communities.

Kiwanis Park serves as the starting point for the Little Pine Creek Connector Trail. Because of the specific geography of the Park, there are two viable options for the recommended route: either on-road or off-road. The proposed trail will pass through multiple Shaler and Etna recreational amenities and businesses as it makes its way to Downtown Etna.

From Downtown Etna to Gateway Portal Park, on-road, off-road, and multi-use paths are recommended to take advantage of rights-of-way along Bridge Street, the abandoned railway trestle under the William Flinn Highway, and other conditions that are suitable for off-road path development, including the People's Natural Gas easement. Off-road paths provide trail users ample opportunities to experience the historic character and local charm that both communities have to offer as the pedestrian or cycling enthusiast makes their way to Etna Riverfront Park, the Allegheny River, and future regional trail connections.



[Image 31] 1876



[Image 32] 1886



Segment A, the northern-most segment of the trail, originates at the Kiwanis Park Trailhead. This trailhead would be located in the parking area near the entrance at Little Pine Creek Road. Option A1 can be completed in the short-term and is completely on-road, on Little Pine Creek Road until the West Pennview Avenue intersection. In Option A2, the Trailhead would be developed at a different location within Kiwanis Park and would be entirely off-road, before merging with West Pennview Boulevard and merging onto Little Pine Creek Road. Option A2 is a long-term project.

Evaluation Matrix - Segment A

Factors	A1	A2
Typology	On-Road	Off-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment	Cyclists of all abilities will be able to travel segment
Accessibility to Pedestrians?	No	Yes
Sidewalk Access?	No	No
Road Conditions	Good	N/A
Level of Connectivity to Residential, Commercial, and Recreational Areas	Connects to trailhead @ Kiwanis Park	Connects to trailhead at Kiwanis Park; Runs through residential community
Water Crossings	2	0
Railroad Crossings	0	0
Level of PennDOT coordination required	High	Low
Parcels Impacted	0	40
Number of Trailheads	1	1
Total Length of segment (mi)	1.05	0.92
Total On-Road Length	1.05	0.04
Total Off-Road Length	--	0.88
Priority/Phase	Short-term	Long-term



Segment B begins at the intersection of Little Pine Creek Road and West Pennview Avenue and is completely on-road. After Little Pine Creek Road transitions into Jones Street, the segment terminates at the intersection of Jones Street and Wilson Street.

Evaluation Matrix - Segment B

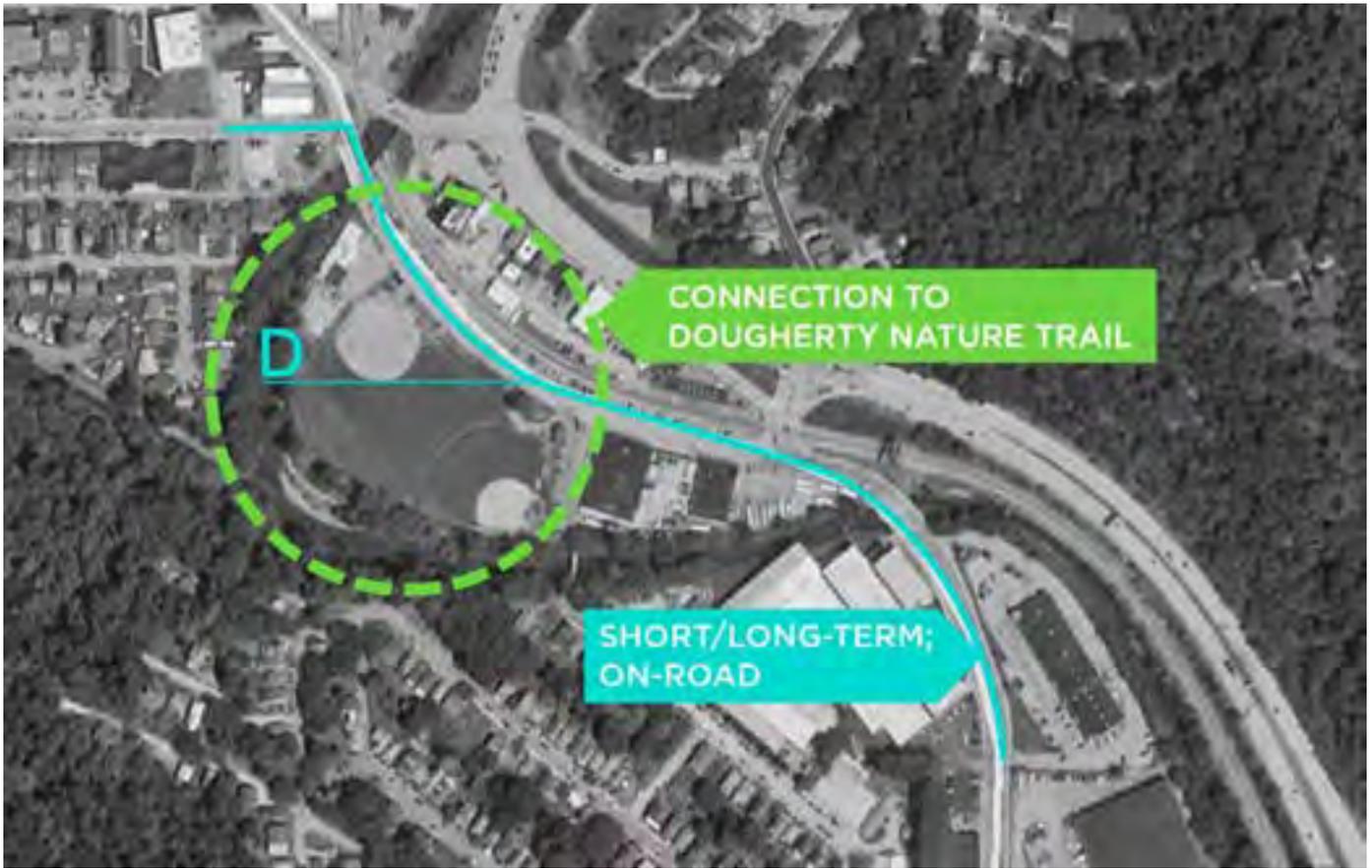
Factors	B
Typology	On-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment
Accessibility to Pedestrians?	No
Sidewalk Access?	No
Road Conditions	Good
Level of Connectivity to Residential, Commercial, and Recreational Areas	Connects 2 residential neighborhoods
Water Crossings	2
Railroad Crossings	0
Level of PennDOT coordination required	High
Parcels Impacted	0
Number of Trailheads	0
Total Length of segment (mi)	0.66
Total On-Road Length	0.66
Total Off-Road Length	0
Priority/Phase	Short-term



Segment C of the trail serves as the connection from Little Pine Creek Road with Crescent Street, is completely on-road, and traverses a residential community. The proposed alignment would be designated as "one-way", flowing clockwise, with northbound trail users traveling Dewey Street and Jones Street heading West and North, and southbound trail users utilizing Wilson Street and Church Alley.

Evaluation Matrix - Segment C

Factors	C
Typology	On-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment
Accessibility to Pedestrians?	No
Sidewalk Access?	Yes
Road Conditions	Adequate
Level of Connectivity to Residential, Commercial, and Recreational Areas	Entirely within residential community; connects to commercial
Water Crossings	0
Railroad Crossings	0
Level of PennDOT coordination required	High
Parcels Impacted	0
Number of Trailheads	0
Total Length of segment (mi)	0.61
Total On-Road Length	0.61
Total Off-Road Length	0
Priority/Phase	Short-term



Segment D begins at the intersection of Dewey Street and Church Alley, is completely on-road, and terminates at the Etna Borough Playground and Pool on Butler Street. Adjacent to Dougherty Veteran's Field is the Dougherty Nature Trail. Access to this trail is along Segment D.

Evaluation Matrix - Segment D

Factors	D
Typology	On-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment
Accessibility to Pedestrians?	No
Sidewalk Access?	Yes
Road Conditions	Good
Level of Connectivity to Residential, Commercial, and Recreational Areas	Entirety on commercial road
Water Crossings	2
Railroad Crossings	0
Level of PennDOT coordination required	High
Parcels Impacted	0
Number of Trailheads	3
Total Length of segment (mi)	0.4
Total On-Road Length	0.4
Total Off-Road Length	0
Priority/Phase	Short-term



Segment E originates at the Etna Borough Playground and Pool at Butler Street and extends to the intersection of Bridge Street and Freepoint Street. Option E1 heads south on Butler Street then shifts onto Bridge Street, and is entirely on-road. Option E2 is entirely off-road, and deviates from Butler Street into the Hite parking lot, and merges with Bridge Street at Freepoint Street.

[Image 33 (right)] The Etna Triangle represents the economic hub of the proposed trail.

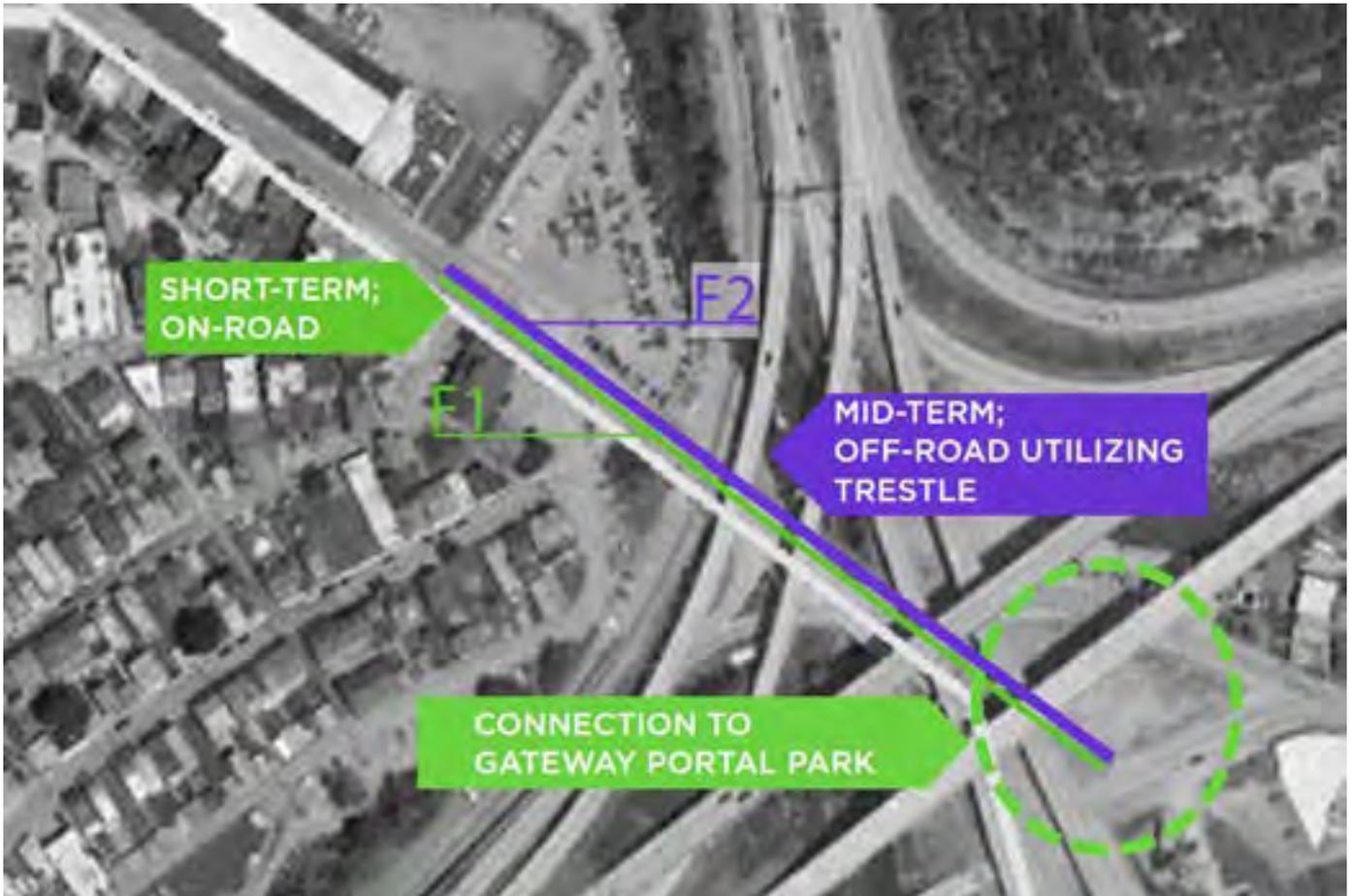
Traversing Etna Borough's central business district, the trail presents the opportunity for users to access myriad local businesses and amenities.

To that end, the design includes a "family friendly" zone, including two bicycle dismount areas, a bicycle corral, and a trail stop.



Evaluation Matrix - Segment E

Factors	E1	E2
Typology	On-Road	Off-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment	Cyclists of all abilities will be able to travel segment
Accessibility to Pedestrians?	No	Yes
Sidewalk Access?	Yes	No
Road Conditions	Poor	N/A
Level of Connectivity to Residential, Commercial, and Recreational Areas	Entirety on commercial/industrial roads	Connects one commercial/industrial area with another
Water Crossings	0	0
Railroad Crossings	0	0
Level of PennDOT coordination required	High	Low
Parcels Impacted	0	4
Number of Trailheads	0	0
Total Length of segment (mi)	0.3	0.3
Total On-Road Length	0.3	0
Total Off-Road Length	0	0.3
Priority/Phase	Short-term	Long-term



Segment F originates at the intersection of Bridge Street and Freeport Street, terminating at Gateway Portal Park. Option F1 is completely on-road, and can be completed in the short-term. Option F2 is entirely off-road and would utilize the out-of-service train trestle.



Evaluation Matrix - Segment F

Factors	F1	F2
Typology	On-Road	Off-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment	Excellent (off-road segment)
Accessibility to Pedestrians?	No	Yes
Sidewalk Access?	Yes	Yes
Road Conditions	Adequate	N/A
Level of Connectivity to Residential, Commercial, and Recreational Areas	Entirety on commercial/industrial roads	Entirety on commercial/industrial roads
Water Crossings	1	1
Railroad Crossings	1	1
Level of PennDOT coordination required	High	High
Parcels Impacted	0	0
Number of Trailheads	3	--
Total Length of segment (mi)	0.18	0.18
Total On-Road Length	0.18	0
Total Off-Road Length	0	0.18
Priority/Phase	short-term	Mid-term



Segment G is the seventh and final segment of the proposed connector trail. Option G1 crosses under the William Flinn Highway, then utilizes the People's Natural Gas easement. Continuing south, the proposed off-road route then reconnects with Bridge Street, terminating at Etna Riverfront Park. This option is bicycle-focused. Option G2 is more pedestrian-focused and utilizes the walkway to the east of the William Flinn Highway. This off-road option utilizes South Main Street to re-merge with Bridge Street and terminate at Etna Riverfront Park.

Evaluation Matrix - Segment G

Factors	G1	G2
Typology	On-Road	Off-Road/On-Road
Accessibility to Cyclists	Cyclists of medium to high ability will be able to travel segment	Cyclists of high ability will be able to travel segment; poor visibility
Accessibility to Pedestrians?	Yes	Yes
Sidewalk Access?	No	Yes
Road Conditions	Poor	Adequate
Level of Connectivity to Residential, Commercial, and Recreational Areas	Connects to trailhead at Etna Riverfront Park	Connects to trailhead at Etna Riverfront Park
Water Crossings	0	0
Railroad Crossings	0	0
Level of PennDOT coordination required	High	Low
Parcels Impacted	2	0
Number of Trailheads	1	1
Total Length of segment (mi)	0.2	0.2
Total On-Road Length	0.13	0.1
Total Off-Road Length	0.07	0.1
Priority/Phase	Short-term	Mid-term



C H A P T E R F I V E

RECOMMENDATIONS





5.1 – Recommendations and Findings

Railroad Trestle Ownership

As we reviewed acquired aerial photography from September 1956 and May 1967 in this vicinity, some facts are apparent. In the 1956 photograph, no four lane highways existed, nor did the trestle in question and before the 1967 photograph was taken, the four lanes were built, Pine Creek was relocated and this trestle appears, therefore the trestle was built between 1956 and 1967 in conjunction with the Pine Creek channel change.

This information inclines us to think that the 1876 Atlas map shows the location of the railroad over the trestle, but before Pine Creek was moved for the highways and the 1886 Atlas map identifies this railroad as the Spang, Chalfant & Co. R.R. which was connected to the Western Pennsylvania R.R. who merged into the Pennsylvania R.R. in 1903. The Pennsylvania R.R. was merged into the Penn Central who morphed into Conrail which was the grantor to Interstate Scrap And Salvage Co, according to the highway plans. It is likely that the Spang, Chalfant & Co. R.R. was acquired by Conrail or its predecessors.

Hillside Trail

Throughout the planning process, multiple stakeholders and local residents raised the issue of pedestrian usability along the proposed corridor. During the first public meeting, an attendee identified the possibilities of studying a completely off-road trail as an alternative to using Little Pine Creek Road from Kiwanis Park in Shaler Township. After broadly evaluating each hillside to the left and right of Little Pine Creek Road, the realistic areas/routes to connect back into Little Pine Creek Road and the topography, it was decided through the planning process to identify a possible long-term off-road trail on the hillside to the east of Little Pine Creek Road. The following maps indicate approximately 40 parcels which would need to be evaluated in further detail in order to determine the feasibility and next steps for this off-road route.

(Previous page)

The Freeport Street Trail Stop utilizes an empty lot which is centrally located to pedestrians and bicyclists. Based on public feedback, amenities such as drinking fountains, fix-it stations, seating and shade canopies were included.

Stop-sign Warrant Status

Based on a cursory review of the intersections and stop sign warning criteria it is likely that the Bridge/Freeport Street Intersection would satisfy the criteria for the addition of all way stop control. The criteria for warranting any all way stop are indicated below:

- Crash history of 5 or more per year
- Volume exceeding 300 vehicles per hour of 2,000 units per day for entire intersection (vehicles, bicycles, pedestrians)
- Approach speed
- Number and angle of approaches
- Minimize delay and improve intersection efficiency
- Engineering judgment

Traffic Speeds

During the planning process, the Steering Committee discussed the high traffic speeds on Little Pine Creek Road as a major concern in general and related to the safety of a proposed bike facility on the roadway. Senator Lindsey Williams noted that she would help work with the State and Shaler Township to lower the posted speed limit on Little Pine Creek Road to help increase safety for motorists, residents and trail users in the future.

Traffic Study on Bridge Street

After reviewing what is needed for the one-way designation based on PA Code/MUTCD criteria, here is what is expected to satisfy the requirements:

-Initial scoping meeting with project stakeholders to include PennDOT, Port Authority, EMS personnel

-Traffic counts at effected intersections to determine if there is a reduction in intersection delay.

-Prepare a map showing signage related to the one-way designation to ensure proper transitions.

- Run truck turning templates at effected intersections to determine sufficient turning area for trucks

-verify/justify if emergency vehicles would still be able to “reasonably” reach their destination.

The only portion of Bridge Street that is owned by the Borough is the section between Butler and Freeport Streets. Since Freeport Street is not weight posted, the road itself has no restrictions for trucks. Also, there is a bus route that runs along Bridge to/from Freeport St, so there will likely be needed coordination between the Port Authority as well. An estimated fee would be between \$10-15,000 but would be highly dependent on the initial scoping meeting with PADOT since District 11 may have additional expectations.

N. Main Street Turnback

The PennDOT Turnback Program transfers the ownership of functionally-local state-owned roads, which serve a local traffic purpose, from state government to local government.

Once a municipality shows the intent and interest to participate, PennDOT rehabilitates the road or provides funding to rehabilitate eligible roadways and bridges to a satisfactory condition. The municipality is then responsible for the road and receives \$4,000 per mile in annual maintenance payments.

The rehabilitation aspect and maintenance payments indicated in the above description will need to be discussed in further detail between Sharpsburg, Etna and PennDOT because of the nature of what N. Main Street would be used for in the future (in this case, additional park land). On page 70, the bottom plan graphic illustrates the proposed use of N. Main Street and the proposed trail route through Gateway Portal Park.



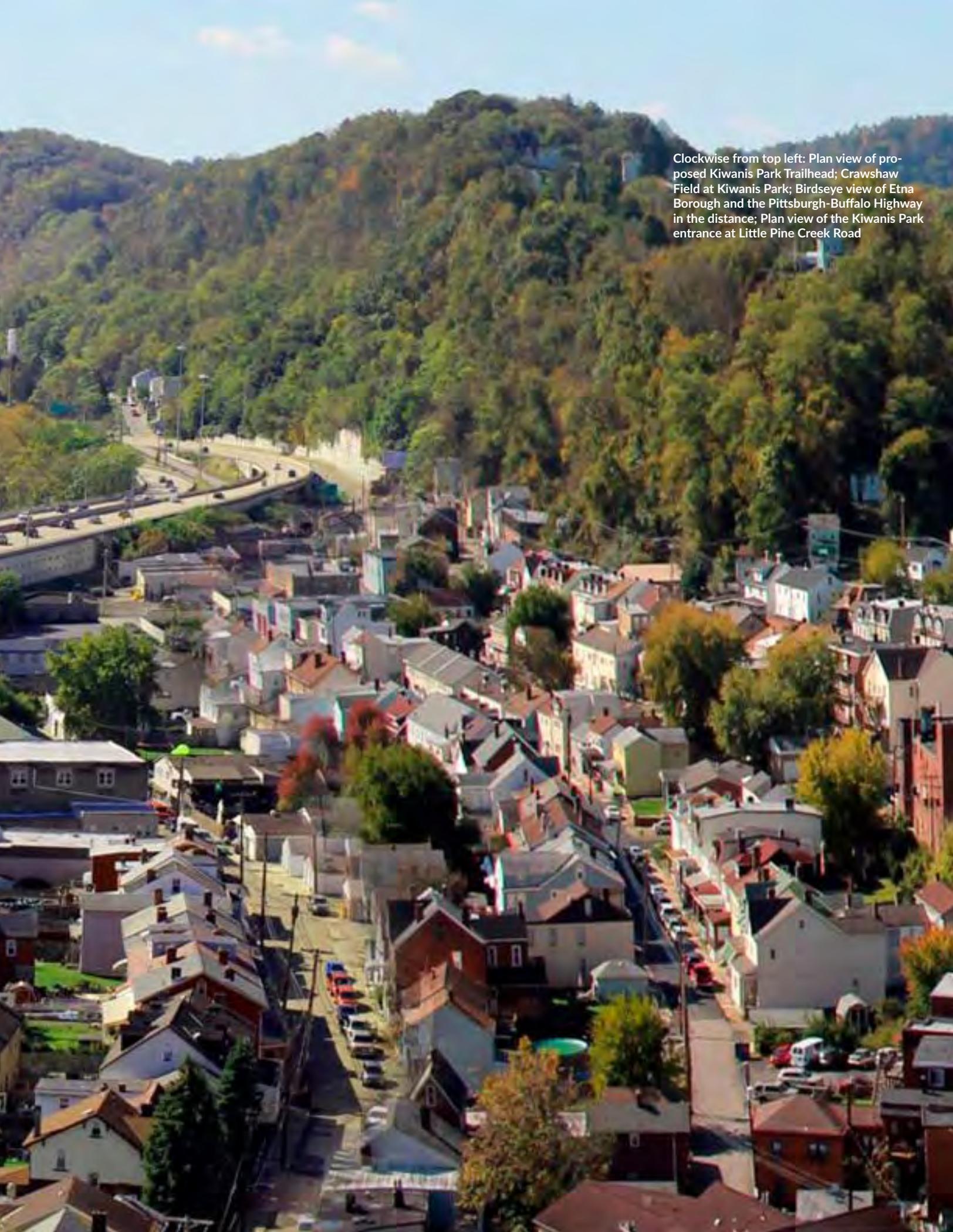
Clockwise from top left: Aerial view of Bridge Street segment of the proposed trail; Photo-simulation graphic of the proposed Bridge Street design; Birdseye view of the southern extent of the proposed trail.



[Image 34] (left)
Concept plan of the Kiwanis Park Trailhead.

[Image 35] (right)
Kiwanis Park.





Clockwise from top left: Plan view of proposed Kiwanis Park Trailhead; Crawshaw Field at Kiwanis Park; Birdseye view of Etna Borough and the Pittsburgh-Buffalo Highway in the distance; Plan view of the Kiwanis Park entrance at Little Pine Creek Road





C H A P T E R S I X

PHASING & FUNDING

6.1 - Phasing

This study identifies nearly 3.5 miles of trail path, in two types of alignments. Any of the seven (7) segments may begin closer analysis, engineering or construction, at any time in the near future. This statement is bound to the finances of the municipalities and County as primary partners but to the point that each alignment offers a connection between destinations and regional trail connections, there is a great likelihood the general public is already waiting for these pedestrian and cycle-friendly improvements.

Soon as Possible Acquisitions

Acquisitions of trail easements do not convert to trail paths until they are appraised, negotiated, acquired, and the engineering is complete. The acquisition of any portion of any segment can and should begin soon. Segment F has the stretch of the privately-owned abandoned rail trestle which would need to be negotiated.

Short-Term

Segments A, B, C, D and E have the potential to immediately install pavement markings, sharrow signage, a small trailhead (Kiwanis Park) as well as wayfinding signage.

Small Trailhead Costs – include the pricing for simple kiosks, site permitting and small landscaping

A signage plan can be prepared and shared jointly by municipalities.

Mid-Term

Segments A, B, C, D and E have the potential to immediately install pavement markings, sharrow signage, a small trailhead (Kiwanis Park) as well as wayfinding signage.

Small Trailhead Costs – include the pricing for simple kiosks, site permitting and small landscaping

A signage plan can be prepared and shared jointly by municipalities.

Long-Term

Research on the long term option for segment A can begin at any time. Potential trail easement acquisitions along the hillside adjacent to Little Pine Creek Road can be identified, investigated and if appropriate, negotiated.

The off-road option for Segment E (E2) is contingent upon the future land/business owner and negotiations with this entity to implement a bike facility through their property.

6.2 - Action Plan

Action	Priority	Estimated Project Duration	Responsible Party
Initiate and continue fundraising efforts and grant applications	1	Ongoing	Etna Borough Shaler Township
Develop "branding" for the Little Pine Creek Connector Trail that will help users identify the project corridor; inclusive of signage, trail markings, etc.	3	0-1 year	Etna Borough Shaler Township
Conduct title search research and due diligence related to privately-owned parcels related to long-term segment A2	5	1-3 years	Shaler Township
Conduct title search research and due diligence related to railroad trestle property	2	1-3 years	Etna Borough
Upon title search completion, begin to investigate/contact property owners to inquire about right-of-way and/or easement acquisitions	5	5-10 years	Shaler Township
Officially notify Sharpsburg of the N. Main Street concept and discuss further	1	0-1 year	Etna Borough
Follow up with speed limit reduction request made to the State on Little Pine Creek Road	1	0-1 year	Shaler Township
Request an initial scoping meeting with PennDOT related to a traffic study on Bridge Street	2	1-3 years	Etna Borough

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6.3 - Opinion of Probable Development Costs

As part of the planning-design effort, the capital costs related to the Feasibility Study's physically-oriented recommendations were projected. Capital costs are fixed, one-time expenses incurred on the purchase of land, buildings, equipment or the construction/ renovation of a building and subsequent improvement of the land the building sits upon. The capital cost projections, referred to as an Opinion of Probable Development Cost (OPDC), are often important decision-making tools when finalizing the details of a master plan. Additionally, they're essential to future fundraising and finance efforts as well as making decisions on priorities and next steps.

A set of OPDCs were generated during the planning-design process and were used by the Steering Committee to evaluate the financial feasibility of the various alignment concepts and to shape the final alignment. Finally, trail development projects that are of this scale and complexity sometimes need to be constructed in stages or phases that span a period of years. The OPDC was utilized by the Steering Committee to delineate potential implementation or construction phases and to determine a realistic time-frame for buildout of the Connector Trail.

An OPDC is based on the quantity of particular materials or improvements incorporated into the Connector Trail. For example, improvements such as utilities, earthwork, paving, lighting, etc... are tabulated and quantified. These quantities are then multiplied by actual development or construction costs for similar or comparable materials or trail improvements realized in recent (e.g. since 2014) trail construction projects. Where the actual development costs used as reference for the Feasibility Study predated 2017, the referenced cost was adjusted to account for the rate of inflation rate that occurred over that time period.

The following summary table outlines the anticipated development costs for Connector Trail, inclusive of trailhead amenities identified throughout the planning process. A detailed OPDC exhibit is included in the Appendix of this document. The exhibit, while organized by geographic area, does provide the quantity and referenced unit cost for the recommended improvements. This exhibit is suitable to use as part of future grant requests or cost documentation for potential funders.

(Previous page)

Walkway as an alternate path for trail alignment, connecting Gateway Portal Park and South Main Street.

[Image 36]

The proposed trail will cross the train tracks and terminate at Etna Riverfront Park and Trail



[Image 31] People's Gas Easement



Opinion of Probable Development Costs

SEGMENT	SHORT TERM	LONG TERM
A.	\$ 44,512	Unavailable ²
B.	\$ 23,965	N/A ³
C.	\$ 28,042	N/A ³
D.	\$ 19,420	N/A ³
E.	\$ 16,972	\$ 87,372
F.	\$ 63,300	\$ 309,244
G.	\$ 28,600	\$ 11,600
Estimated Total:	\$ 224,811	\$ 408,216

Notes:

1. These estimated costs do not include design and engineering or permitting costs.
2. An estimated cost associated with the long-term option for Segment A is unavailable due to the number of properties involved and the unique costs associated with acquiring property, easements, or right-of-way land.
3. An estimated cost associated with this segment is unavailable because a long-term option was not identified in the feasibility study.



Cyclists heading southeast along Bridge Street

6.4 - Potential Grant Funding

The funding strategy discussed by the Steering Committee as part of the Little Pine Creek Connector Trail planning effort is a strategy of 'proof of concept'. It is also important to note that a majority of this trail will not be constructed unless grant money is secured to supplement the cost. It is recommended that the Borough of Etna, Township of Shaler and its partners pursue federal and state grant opportunities with a goal of funding 80% to 85% of the trail's development through additional grant programs. This benchmark or goal is aggressive but achievable. The remaining 15% to 20% funding could be made up of commitments or sources borne from general funds, general obligation bonds, private fundraising efforts or private sponsorships.

On the following page is a summary of Pennsylvania-based grant programs applicable to a project such as the implementation of the Little Pine Creek Connector Trail. The Appendix contains additional information or descriptions of these grant programs as well as the general conditions or requirements associated with them. An important aspect of grant-writing is the strategic sequence or order of the actual grant requests, the permissibility of coupling or 'matching' funds from different grant programs and the appropriate means of using public monies versus private donations/grants in order to avoid cost escalations or overly restrictive bidding processes/requirements. The Borough of Etna and Township of Shaler should review the various grant programs to stay abreast of the specific conditions and requirements so that the project's overall funding strategy can be fully optimized.

6.5 - Funding Programs

Multimodal Transportation Funds Program

The Pennsylvania Department of Transportation and the Department of Community & Economic Development provides grants for projects that support safe and reliable transportation systems and encourage economic development. Supported projects develop or rehabilitate transportation assets for communities including but not limited to lighting, sidewalks, pedestrian safety, and streetscapes, as well as improving connectivity and/or utilization of existing assets.

- Request Amount: \$100,000 - \$3,000,000
- Match: 30% Cash

Automated Red Light Enforcement Program (ARLE)

The Pennsylvania Department of Transportation provides funds through ARLE revenues to improve highway safety and reduce congestion through a wide range of projects that aim to reduce the number of violations and crashes at implementation sites, as well as provide benefits to highway users. Funded projects upgrade, improve, or install traffic-control signs and other forms of roadway markings and structures to increase road capacity and/or further pedestrian safety and mobility, and projects that work to enhance visibility or drainage, etc.

- Request Amount: Dependent upon available yearly revenues
- Match: None required

Green Light Go

The Pennsylvania Department of Transportation administers state funds through competitive grants to improve safety and mobility through congestion reduction and improving the efficiency of existing traffic signals on state and local highways. Funded projects study, develop, and implement or remove traffic assets, technologies, and plans.

- Request Amount: N/A
- Match: 20%

Greenways, Trails, and Recreation Program (GTRP)

The Pennsylvania Department of Community & Economic Development administers funds from the Marcellus Legacy Fund for the planning, acquisition, development, rehabilitation, and repair of greenways, recreational trails, open space, park and beautification projects.

- Request Amount: Not to exceed \$250,000
- Match: 15% Cash/Equivalent
- \$100 application fee

Watershed Restoration and Protection Program (WRPP)

The Pennsylvania Department of Community & Economic Development administers funds from the Marcellus Legacy Fund for watershed restoration and protection projects, which involve the construction, expansion, improvement or repair, maintenance, or rehabilitation of a new or existing watershed protection Best Management Practices.

- Request Amount: Not to exceed \$300,000
- Match: 15% Cash/Equivalent

Flood Mitigation Program (FMP)

The Pennsylvania Department of Community & Economic Development administers funds through Act 13 from the Marcellus Legacy Fund to aid flood mitigation projects identified as eligible by a flood protection authority or local government. Request Amount: Not to exceed \$500,000; Project total cost \$50,000 or more

- Match: 15% Cash/Equivalent
- \$100 application fee

Municipal Assistance Program (MAP)

The Department of Community & Economic Development provides funds for local governments to the planning and implementation of multiple services including shared service activities, community planning, and floodplain management. Request Amount: Dependent upon available funds

- Match: 50%; 25% of which must be non-state funded

Community Conservation Partnership Program (C2P2) Trails

The Pennsylvania Department of Conservation & Natural Resources presently offers matching grants for the planning, acquisition, construction, enhancement, and maintenance of multi-use trails and trail-related facilities. This can include, but is not limited to, interpretive signs, trail amenities, access roads and parking areas, and equipment required to build and maintain trails.

- Request Amount: Reasonable requests
- Match: 50%

Community Conservation Partnership Program (C2P2)

Community Recreation and Conservation Planning. The Pennsylvania Department of Conservation & Natural Resources presently offers matching grants to prepare for future planning, acquisition, development, and management of parks, recreation facilities, critical habitat, open space, natural areas, greenways, and river/watershed passageways.

- Request Amount: Reasonable requests
- Match: 50%

Community Conservation Partnership Program (C2P2)

Park Rehabilitation and Development. The Pennsylvania Department of Conservation & Natural Resources presently offers matching grants for the rehabilitation and development of public parks, both indoor and outdoor recreation facilities, small communities, greenways, and river conservation and restoration projects.

- Request Amount: Reasonable requests
- Match: 50%

Community Development Block Grant (CDBG)

The Department of Housing and Urban Development provides grants for the benefit of low-income persons, aid in the prevention or elimination of slums and blights, and to meet urgent community needs. Funded projects include acquisition, demolition, rehabilitation of structures, construction of public facilities, provision of handicap access, historic preservation, community planning, and energy conservation.

- Request Amount: Varies. State program Max \$750,000; Loan \$500,000-\$140 Million
- Match: Varies

Community Conservation Partnership Program (C2P2)

Peer Circuit Rider Program. The Pennsylvania Department of Conservation & Natural Resources presently offers matching grants for expanding the local capacity for parks, recreation, and conservation through the partnership of municipalities, counties, and government councils and the hiring of a shared professional who is jointly funded by the formal partnership, commission, or authority.

- Request Amount: Reasonable requests
- Match: 10%

Congestion Mitigation and Air Quality Improvement (CMAQ)

CMAQ funds transportation projects to reduce ozone and carbon monoxide pollution and meet national ambient area air quality standards (NAAQS) in Clean Air Act non-attainment areas. The construction of pedestrian and bicycle facilities using CMAQ funding must explicitly provide a transportation function. CMAQ can provide funds for projects that bring sidewalks into compliance with the Americans with Disabilities Act (ADA). Non-construction projects such as printed materials related to safe walking are eligible for CMAQ funds as well. These projects must be geared towards walking primarily for transportation rather than recreation and must be included in a plan developed by the State and each Metropolitan Planning Organization.

Surface Transportation Program (STP)

The Surface Transportation Program (STP) provides funding that may be used by States and localities for projects to preserve and improve the conditions on any Federal-aid highway, bridge and tunnel projects, public road projects, pedestrian and bicycle infrastructure, and transit capital projects. Bicycle and pedestrian infrastructure projects include ADA sidewalk modification, recreational trails, bicycle transportation, on- and off-road trail facilities for non-motorized transportation, and infrastructure projects and systems that will provide safe routes for non-drivers, including children, older adults and individuals with disabilities to access daily needs.

Section 402 State and Community Highway Safety Grant Program

Section 402 funds can be used to develop education, enforcement and research programs designed to reduce traffic crashes, deaths, severity of crashes, and property damage. Eligible program areas include reducing impaired driving, reducing speeding, encouraging the use of occupant protection, improving motorcycle safety, and improving bicycle and pedestrian safety. Examples of bicycle and pedestrian safety programs funded by Section 402 are comprehensive school-based pedestrian and bike safety education programs, helmet distribution programs, pedestrian safety programs for older adults, and general community information and awareness programs.

TIGER Discretionary Grants Program

The Department of Transportation's Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants Program was created as part of the American Recovery and Reinvestment Act of 2009 with the purpose of funding road, rail, transit and port projects that achieve critical national objectives, including livability, economic competitiveness, environmental sustainability, and safety. Applicants can apply for planning or construction projects. Of the 39 projects awarded nearly \$500 million funding in 2015, sixteen of the projects explicitly incorporate bicycle and/or pedestrian facilities as either a key component of the project or the sole component of and singular purpose for the project. These diverse projects will take place in 34 states. Several of the awards incorporate multiple states. FHWA divides projects into three categories: safety projects, innovation projects, and opportunity projects.

Community Development Block Grant Program (CDBG)

While not traditionally viewed as a source of funding for bicycle and pedestrian projects, the Community Development Block Grant (CDBG) program provides money for streetscape revitalization and other improvements that can enhance walking and bicycling. Federal Community Development Block Grant grantees may “use Community Development Block Grants funds for activities that include, but are not limited to: acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grants funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs.”

Recreational Trails Program (RTP)

The federally administered Recreational Trails Program (RTP) uses federal gas excise taxes to fund recreational trails and their facilities. Eligible projects may receive up to 50 percent of the total project cost. RTP funds may be used to build new trails. Towns, villages, cities, counties, tribal governing bodies, school districts, state agencies, federal agencies or incorporated organizations may apply for project funds.

People for Bikes Community Grants Program

People for Bikes is a national organization working to make bicycling better throughout the United States through programs and advocacy work. People for Bikes has funded numerous infrastructure projects and education and encouragement programs. Since it first launched in 1999, the program has awarded 341 grants in 49 states. Seven of the projects focused on trail development or were related to trail access.

Community Foundations

Community and corporate foundations can play an important role in funding bicycle and pedestrian infrastructure and programs. With a growing evidence base highlighting the connection between the built environment and community health outcomes, health foundations throughout the country have joined environmental foundations to support infrastructure projects that increase opportunities for walking, bicycling and physical activity. National, state, and local foundations have funded initiatives to reduce obesity, increase physical activity, and achieve other positive health-related outcomes.

Local Business Community

Businesses large and small recognize the benefit of bicycling, walking, and related infrastructure as economic drivers and indicators of quality of life. Businesses and communities of all sizes have expressed interest in investing in bicycle and pedestrian infrastructure that fosters healthy and active communities, creates recreation and transportation choices, and improves quality of life. Support from the business community is often the result of strong relationship-building efforts and may come in a variety of forms, from the funding of capital projects or associated amenities to the provision of volunteers to assist in trail maintenance activities.

