

THREE RIVERS HERITAGE TRAIL

TARENTUM BOROUGH AND EAST DEER TOWNSHIP

Feasibility Study

May 2023

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ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

OVERVIEW

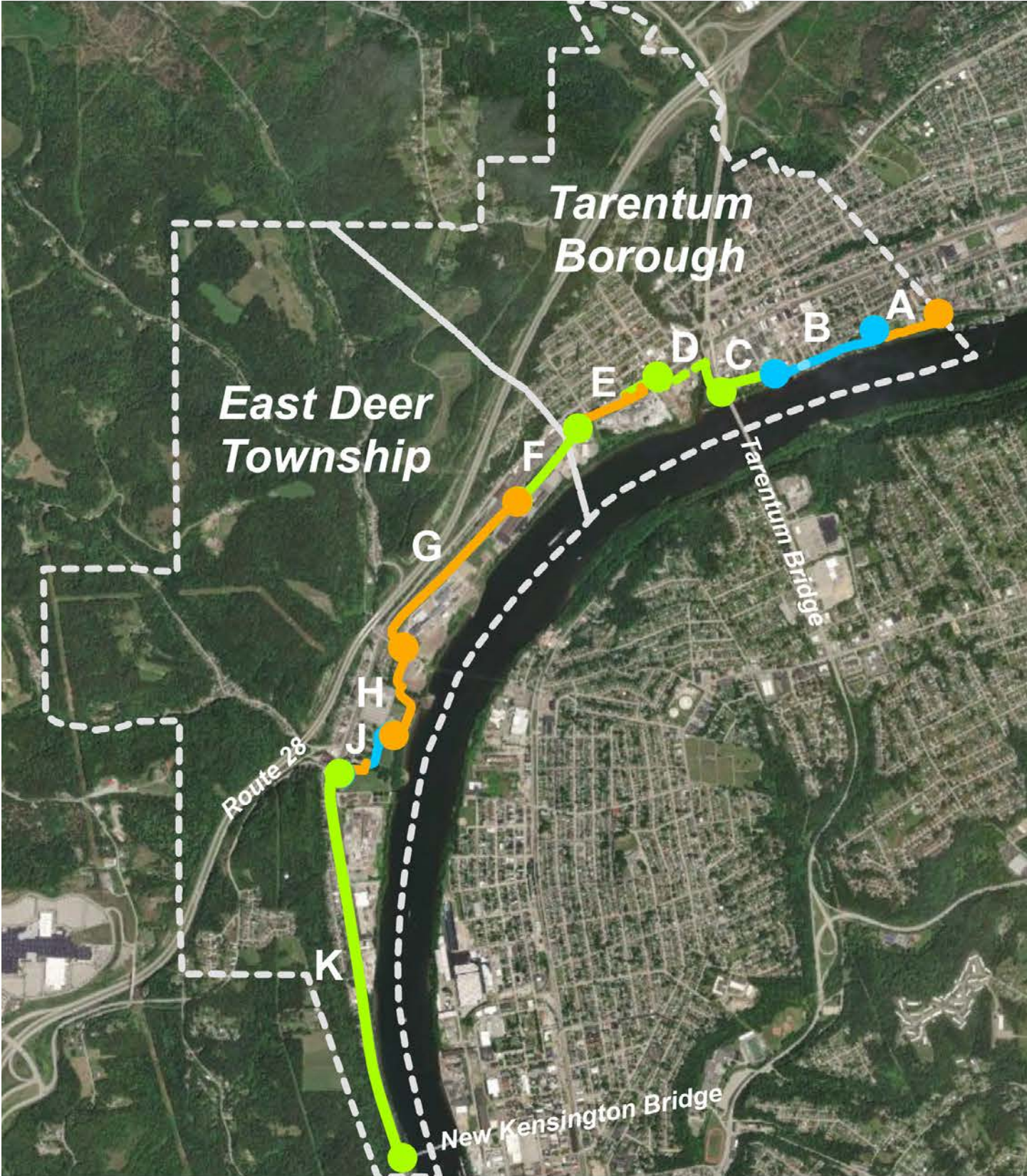
The Three Rivers Heritage Trail system is a nonlinear network of trails in the Pittsburgh region. The Tarentum-East Deer section of the Three Rivers Heritage Trail will provide a connection from the Brackenridge section of the trail system to the New Kensington (C.L. Schmitt) Bridge. In addition to expanding the Three Rivers Heritage Trail system, this section will also host the Erie to Pittsburgh Trail, providing connections to regional destinations in addition to the local destinations found in these two communities. This Feasibility Study identifies a proposed alignment, probable development costs, funding opportunities, and implementation strategies, to provide a path towards design development and construction of the Tarentum-East Deer Three Rivers Heritage Trail.

PROCESS

The development of the final alignment for the Tarentum-East Deer Three Rivers Heritage Trail was initially based on a 2011 study conducted by Friends of the Riverfront, the Pennsylvania Environmental Council (PEC), and Allegheny County. This Feasibility Study further expanded upon the preliminary alignment through additional analyses, site visits, community input, and conversations with the project's Steering Committee and other key stakeholders. Over the course of the project, the Planning Team gathered feedback by attending the Tarentum Fall Festival, collecting responses through an online survey, and hosting a public meeting. The proposed alignment has been refined to incorporate community input, existing site conditions, and future opportunities.

FINAL ALIGNMENT

The final alignment, shown in the graphic to the right, spans just over 4 miles through the two municipalities. In Tarentum, the trail is off-road through Dreshar Stadium and Tarentum Riverview Memorial Park, and on-road along East 1st Avenue, West 4th Avenue, and West 6th Avenue for a total of 1.3 miles. Continuing in East Deer, the trail is on-road along Treadway Lane, off-road through the sites of Pittsburgh Brewing Company, People's Gas, and the East Deer Recreational Facility, and on-road to follow Freeport Road to the trail's terminus at the New Kensington (C.L. Schmitt) Bridge. The East Deer segment is 2.7 miles in length. The total probable development cost of the long-term trail alignment is \$8.7 million.



- Existing path, improved; suggested dismount area
- New 8-10 ft wide paved trail
- On-road sharrows
- On-road cycletrack
- Municipal boundary



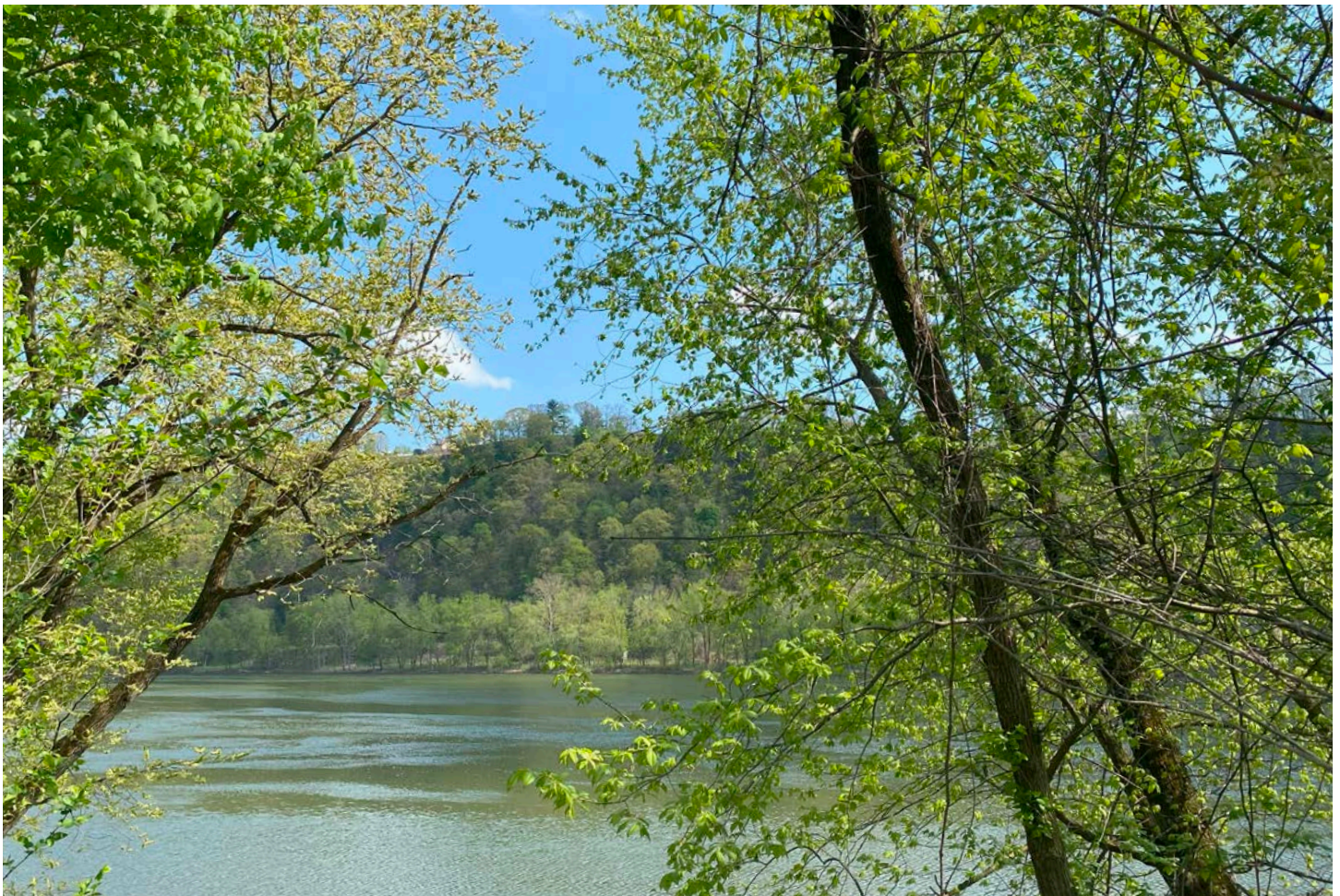
VISION AND GOALS

VISION

The Three Rivers Heritage Trail in Tarentum exists in a limited, on-road fashion. This Feasibility Study seeks to identify a complete route to connect from the Brackenridge Three Rivers Heritage Trail to the New Kensington (C.L. Schmitt) Bridge, traversing Tarentum Borough and East Deer Township along the way. The trail will provide opportunities for daily exercise and recreation, and it will ultimately connect to the Erie to Pittsburgh Trail, creating the potential for multi-day trips and drawing in visitors from throughout the region. The regional connections also position Tarentum and East Deer as important stopping points along the journey. The Tarentum-East Deer Trail has the potential to improve residents' daily lives, boost the local economy, and connect to important local and regional assets for years to come.

GOALS

1. Identify a safe, enjoyable, accessible, and feasible route to connect from the end of the Brackenridge Three Rivers Heritage Trail to the New Kensington (C.L. Schmitt) Bridge.
2. Encourage daily trail use to support healthy lifestyle choices for residents of the nearby communities.
3. Create opportunities for economic impacts from regional trail use to benefit Tarentum and East Deer.



The Allegheny River as seen from Tarentum Riverview Memorial Park

HISTORY AND BACKGROUND

TARENTUM BOROUGH

Tarentum Borough is a community along the northern bank of the Allegheny River, upstream from East Deer Township and approximately 22 miles northeast of the City of Pittsburgh in Allegheny County. Similar to many towns in the Pittsburgh region, the Borough is now known for its riverfront and its local businesses, but its history is closely tied to industry. The Borough was incorporated in 1842 following the construction of the Pennsylvania Canal through the area 13 years earlier. A railroad replaced the canal in 1866, bringing with it heavier industry including glass and paper mills. Although the Borough is no longer home to the same industry as in the past, it now hosts businesses and riverfront parks, which make it attractive to the residents who live within and around the community.

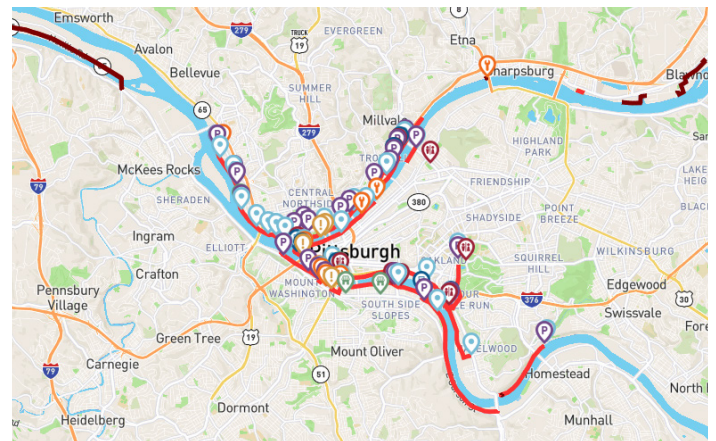
The Borough is now connected regionally by the Allegheny Valley Expressway (Route 28) and the Pennsylvania Turnpike (I-76). The Erie to Pittsburgh Trail will eventually pass through Tarentum, creating additional opportunities for connectivity and recreation locally and regionally.

EAST DEER TOWNSHIP

East Deer Township is located approximately 15 miles northeast of the City of Pittsburgh, downstream from Tarentum Borough along the Allegheny River in Allegheny County. The Township was organized in 1836. Similar to other communities in the region, the Township has a history of industry, evident in some of the facilities that remain today. Pittsburgh Glass Works (formerly PPG Industries) operated a glass plant in the community until recently, when the old glass warehouse was purchased by Pittsburgh Brewing Company. The facility presents a new and exciting opportunity for the Township among its other popular amenities such as parks and local businesses. Similar to Tarentum, East Deer is served by the Pennsylvania Turnpike (I-76) and the Allegheny Valley Expressway (Route 28). The development of the Three Rivers Heritage Trail will provide local recreation opportunities and form regional connections by hosting the Erie to Pittsburgh Trail.

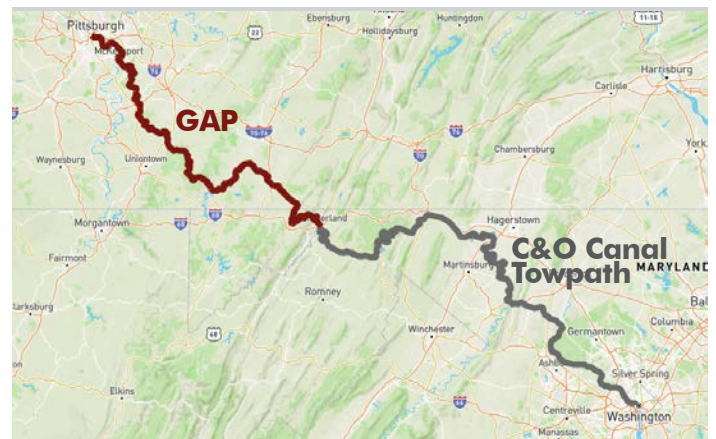
THREE RIVERS HERITAGE TRAIL

The Three Rivers Heritage Trail system is a nonlinear network of approximately 33 miles of trails throughout the Pittsburgh region. It provides local connections to historic areas, neighborhoods, and commercial and recreational areas, with connections to regional trail systems such as the Great Allegheny Passage (GAP), the Great American Rail-Trail, the Industrial Heartlands Trails, and the Erie to Pittsburgh Trail.



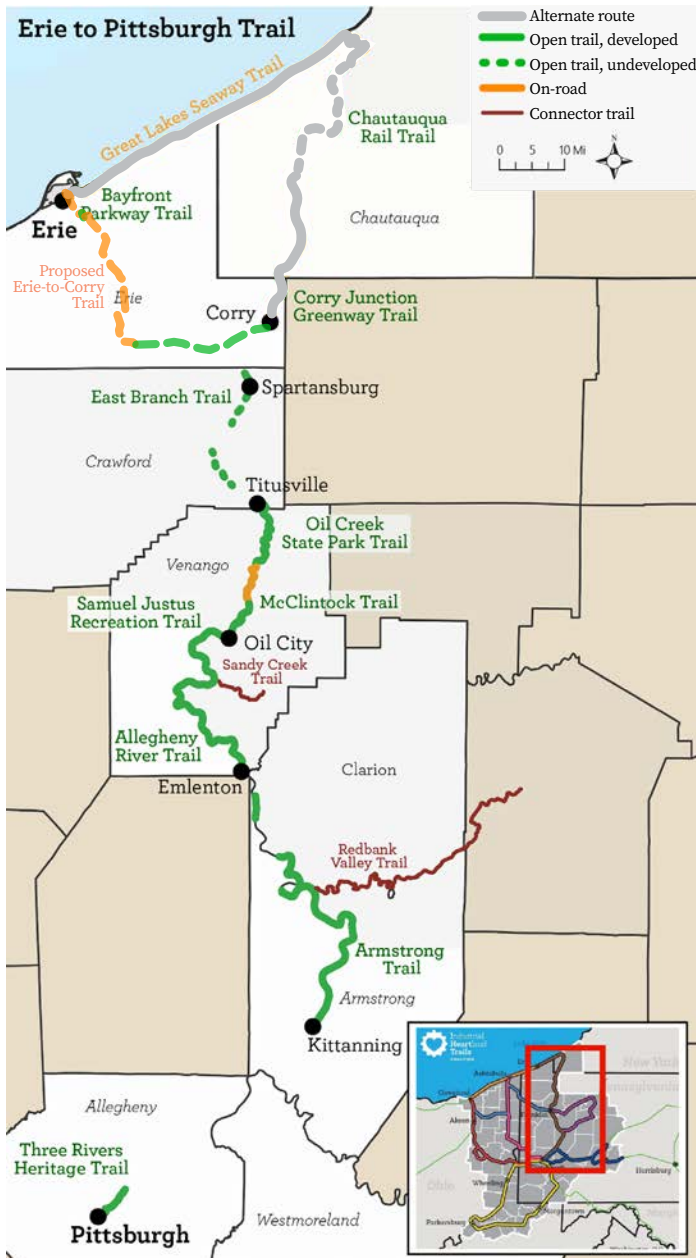
The Three Rivers Heritage Trail System; image credit to Friends of the Riverfront

Notably, the Three Rivers Heritage Trail provides connections to the GAP Trail, creating a link from Pittsburgh to Cumberland, Maryland. In Cumberland, the GAP Trail connects to the C&O Canal Towpath, serving as a route to Washington, D.C. Together, these routes provide over 335 miles of trail and connect two major east coast cities.



Trail connections from Pittsburgh to Washington, D.C.; image credit to the Great Allegheny Passage Conservancy

The Erie to Pittsburgh Trail is an approximately 270-mile long route planned to connect Point State Park in downtown Pittsburgh to the Bicentennial Tower on the lakefront in the City of Erie. At the time of report development, it was estimated to be 70% complete. While the current route crosses into New York State, a proposed route through the City of Corry, PA is being evaluated. The Three Rivers Heritage Trail through Tarentum and East Deer will contribute to the development of the Erie to Pittsburgh Trail. With the connection from Erie to Pittsburgh to Washington, D.C., communities along the Three Rivers Heritage Trail will be highlighted as key stopping points along this major regional route.



The Erie to Pittsburgh Trail; image credit to Erie to Pittsburgh Trail Alliance

EXISTING CONDITIONS

Tarentum Borough

Area: 1.4 sq miles (1.2 sq mi land/0.2 sq mi water)
(Census Reporter, 2020 ACS)

Elevation: 840'

Population: 4,352 (2020 Census)

Population Density: 3,574.7 people/sq mi
(Census Reporter, 2020 ACS)

Median Age: 48.9 (2020 ACS)

East Deer Township

Area: 2.3 sq mi land area, 0.4 sq mi water
(Census Reporter, 2020 ACS)

Elevation: 863'

Population: 1,490 (2020 Census)

Population Density: 637.8 people/sq mi
(Census Reporter, 2020 ACS)

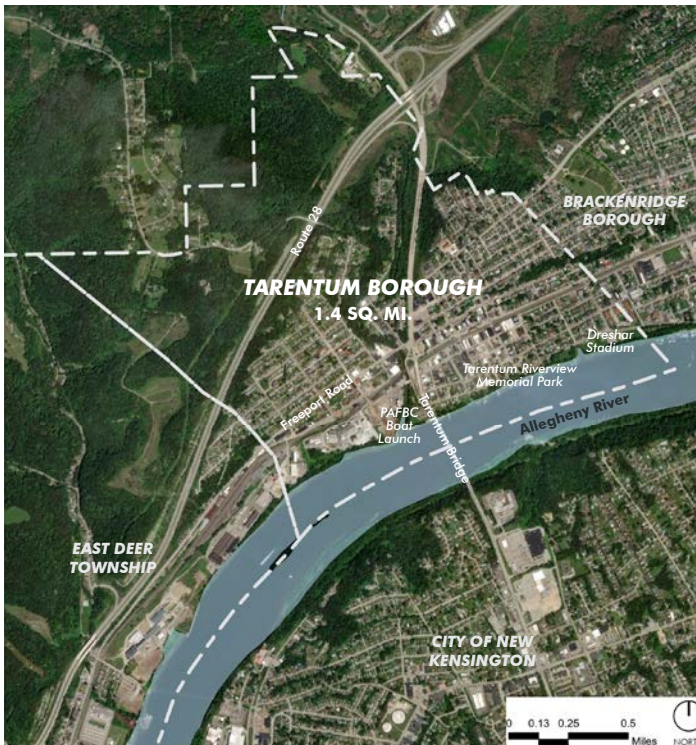
Median Age: 41.1 (2020 ACS)

Base mapping for each trail segment is available in the Appendix.

DEMOGRAPHICS AND STATISTICS

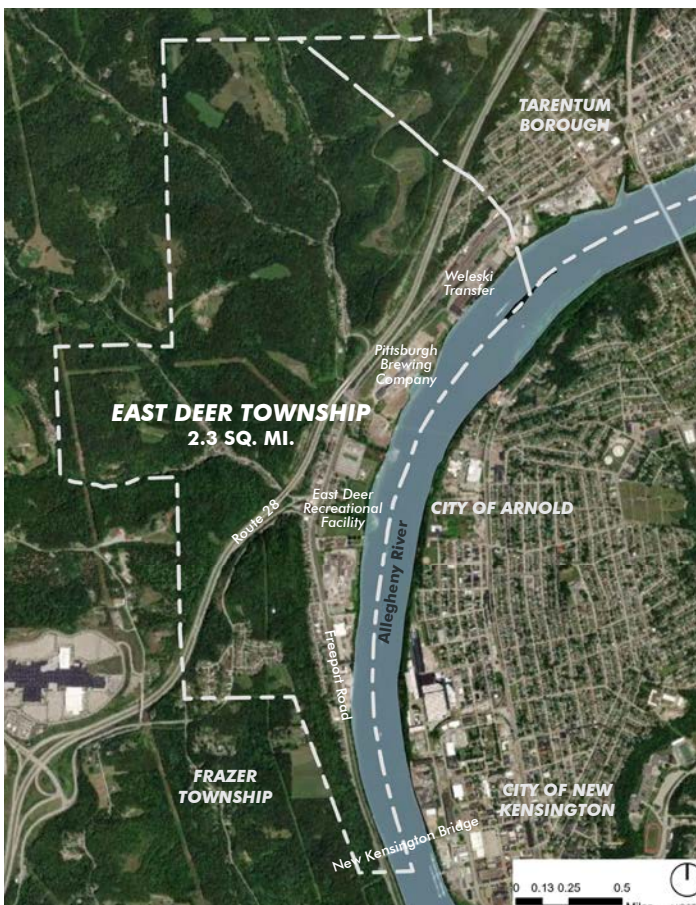
Tarentum Borough

Tarentum Borough marks the northern end of the Tarentum-East Deer Three Rivers Heritage Trail segment. As of 2020, its population was 4,352 with a median age of 48.9. The estimated median household income in Tarentum in 2020 was \$34,930. In 2020, it was estimated that educational services, health care, and social assistance is the primary industry for Tarentum's civilian workforce at 26.3%. Retail trade and manufacturing also contribute to employment in the Borough, at 16.0% and 12.4% respectively.



East Deer Township

East Deer Township is the southern terminus of the Tarentum-East Deer Three Rivers Heritage Trail segment. The 2020 Census reported a population of 1,490. In 2020, the estimated median household income in East Deer was \$60,360. Similar to Tarentum, the primary industry in East Deer is estimated to be educational services, health care, and social assistance, with 27.7% of the township's civilian employed population working in this type of industry. Other significant industries for East Deer's workforce include retail trade at 15.2% and manufacturing at 12.3%.



The demographic data used to develop this section comes from the US Census Bureau 2020 Decennial Census, when available, and was supplemented with estimates from the 2020 American Community Survey.

COMMUNITY ENGAGEMENT

The Three Rivers Heritage Trail in Tarentum exists in a limited, on-road fashion. This Feasibility Study seeks to identify a complete route to connect from the Brackenridge Three Rivers Heritage Trail to the New Kensington (C.L. Schmitt) Bridge, traversing Tarentum Borough and East Deer Township along the way. The trail will provide opportunities for daily exercise and recreation, and it will ultimately host the Erie to Pittsburgh Trail, creating the potential for multi-day trips and drawing in visitors from throughout the region. The regional connections also position Tarentum and East Deer as important stopping points along the journey. The Tarentum-East Deer Trail has the potential to improve residents' daily lives, boost the local economy, and connect to important local and regional assets for years to come.

STEERING COMMITTEE

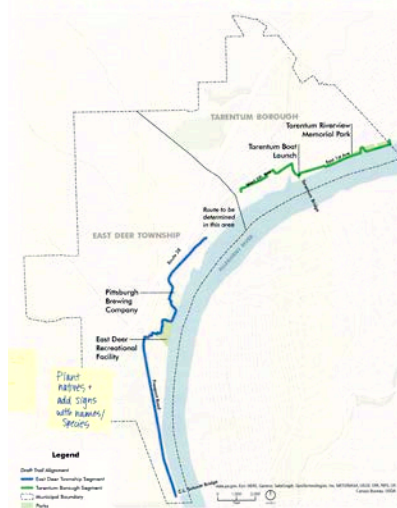
To guide the development of the trail alignment, a Steering Committee consisting of 14 members was created prior to the start of the project. The members represented both communities, local and regional organizations, and key stakeholders related to the trail's development. The Steering Committee provided local insight and helped to shape the final proposed alignment. The Steering Committee first met upon project initiation, and then met two additional times to review development of the plan. Observations for these meetings are available in the Appendix.

PUBLIC EVENTS

In addition to the Steering Committee's input, the Three Rivers Heritage Trail Plan was shaped by outreach at community events. Towards the middle of the project timeline, the Planning Team attended the September 2022 Tarentum Fall Festival to spread awareness of the plan and to gather public input. The pre-final trail alignment was presented to the East Deer Board of Commissioners and the Tarentum Borough Council in early April 2023. In late April 2023, the Planning Team held a public meeting to share the trail alignment with the communities.

At the Tarentum Fall Festival, attendees had the opportunity to review a map showing the preliminary trail alignment through both municipalities. Visitors to the table could also provide input about the features that should be celebrated along the trail. Members of the Planning Team handed out cards with QR codes to view the Virtual Tour and Online Survey, which was used to gather input regarding preferred trail amenities, desired uses, and other key features for the trail.

Three Rivers Heritage Trail TARENTUM AND EAST DEER



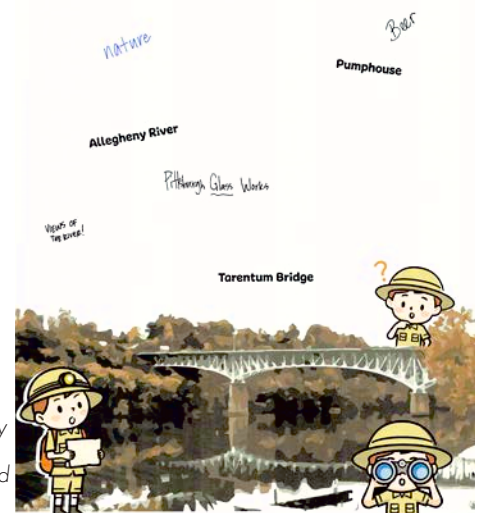
Together with Friends of the Riverfront, Tarentum Borough and East Deer Township are coordinating the designation of this five-mile segment of the Three Rivers Heritage Trail.

Scan the QR code or navigate to the link to view the Virtual Tour. At the end of the tour, share your thoughts with a short 10-minute survey.



This poster showed attendees the preliminary trail alignment and connected them to the Virtual Tour.

What would you like to CELEBRATE along the Three Rivers Heritage Trail?



This board provided attendees an opportunity to describe the features that should be celebrated along the trail route.

Near project completion, a public meeting was held jointly with community members from Tarentum and East Deer at the East Deer Township Building. During the open house session, visitors dropped in to review the trail alignment and provide feedback or ask questions. Following the open house, the Planning Team shared a formal presentation with the meeting attendees, followed by a question-and-answer session. Attendees frequently asked questions about the project timeline, funding, and maintenance.



Residents of Tarentum and East Deer attend the public presentation of the trail alignment; image credit to Friends of the Riverfront

**learn about the trail
and share your feedback**

Tuesday, April 25th
East Deer Township Municipal Building

Open House
4:00-6:00 pm

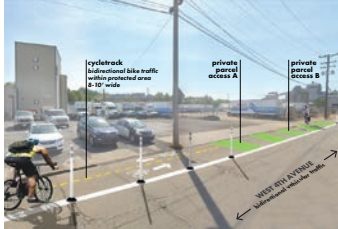
Presentation
6:00-7:00 pm

927 Freeport Road, Creighton, PA 15030
Accessible entrance available on Bellview Street

friends OF THE RIVERFRONT **Three Rivers Heritage Trail**
Tarentum and East Deer

The advertisement for the Public Meeting was distributed to both Municipalities, posted as flyers, and shared on social media to spread awareness of the event.

CYCLETRACK



SHARROWS



PAVEMENT GRAPHICS



CROSSING MARKINGS



TRAILHEAD



PEDESTRIAN BRIDGE

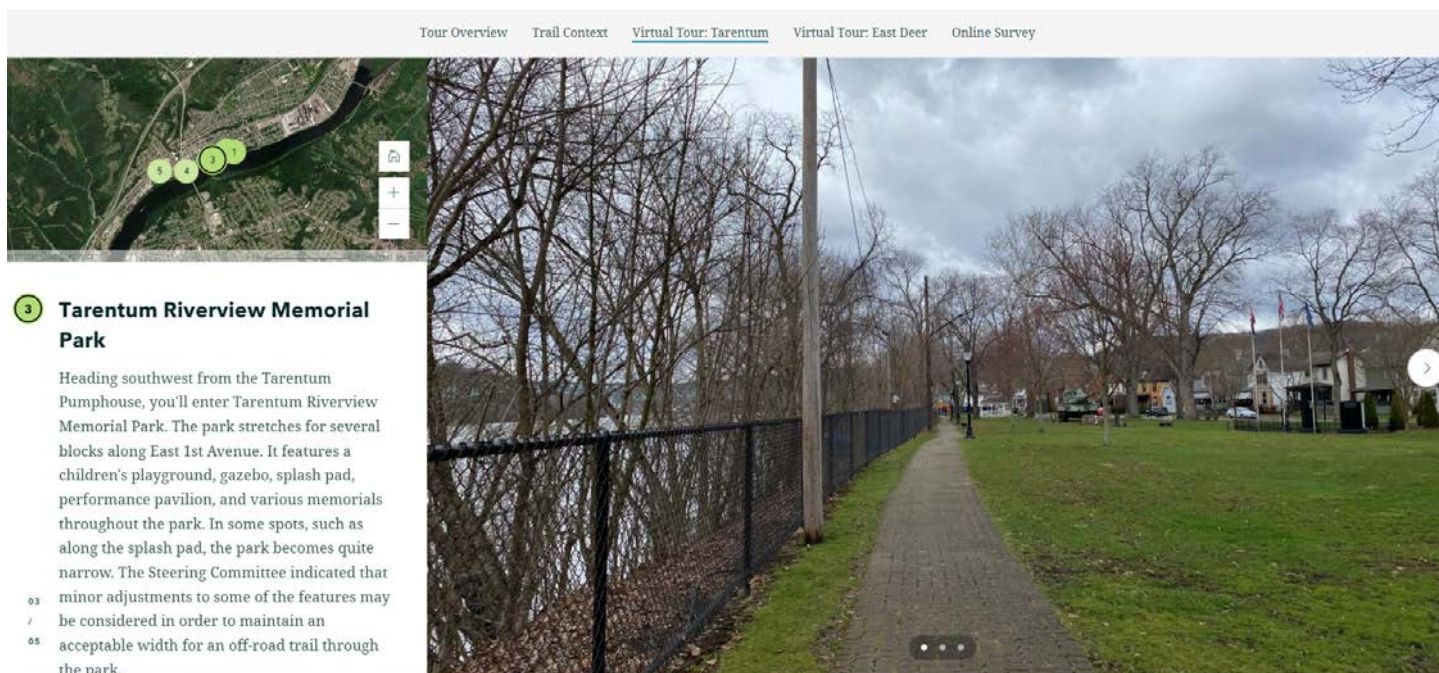


This board was used at the Public Meeting to help attendees visualize the types of improvements recommended for the trail.

VIRTUAL TOUR AND ONLINE SURVEY

The Virtual Tour and Online Survey were used to further extend the project's public outreach component. The Three Rivers Heritage Trail Virtual Tour led users through a series of 11 Points of Interest, with 5 in Tarentum and 6 in East Deer. At each Point of Interest, users could learn more through interactive maps, photos, and descriptions.

At the end of the Virtual Tour, users had the option to complete a short survey. The survey inquired about the use of other local and regional trail systems, transportation to and from the trails, the types of activities or amenities that should be available near or along the trail, and some demographic conditions. From June 2022 through February 2023, the survey received 98 responses. Because the survey was offered digitally, the sample is biased slightly towards people who feel comfortable using a digital interface.



The Virtual Tour guided users through several stops along the preliminary trail alignment.

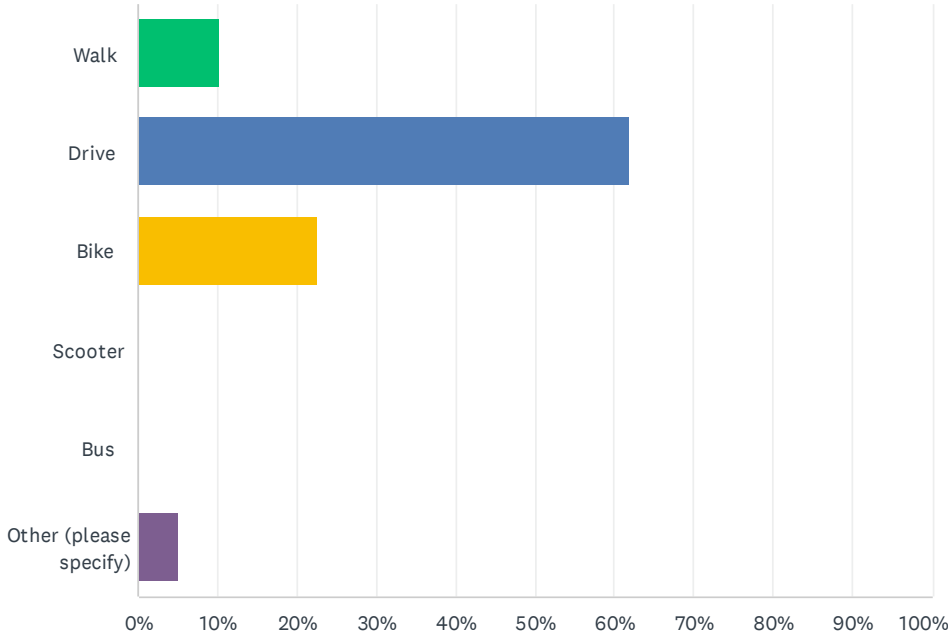
KEY SURVEY TAKEAWAYS

Of the 98 respondents, about 13% lived in Tarentum Borough and 14% lived in East Deer. The remainder of respondents were from surrounding communities. Age groups in respondents' households were distributed fairly evenly, ranging from 0-4 years old to over 70 years old. Based on this response, trail users will be diverse and may need a variety of amenities.

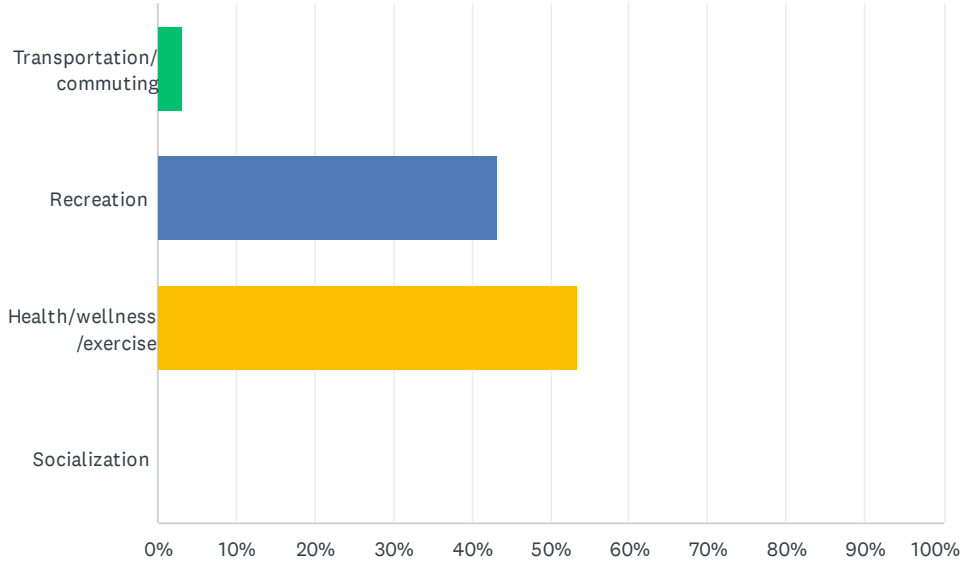
The respondents' rates of visitation to Butler-Freeport and Armstrong Trails were lower than anticipated, which suggests that people tend to visit local trails. The Tarentum-East Deer Three Rivers Heritage Trail will likely be used frequently by local residents.

Over 60% of respondents drive to trailheads, which indicates that parking is an important amenity.

Think about the times you or someone in your household visited the trails listed in Question 1. What was your primary method of transportation to the trailhead?



What would your primary use of the Three Rivers Heritage Trail be?



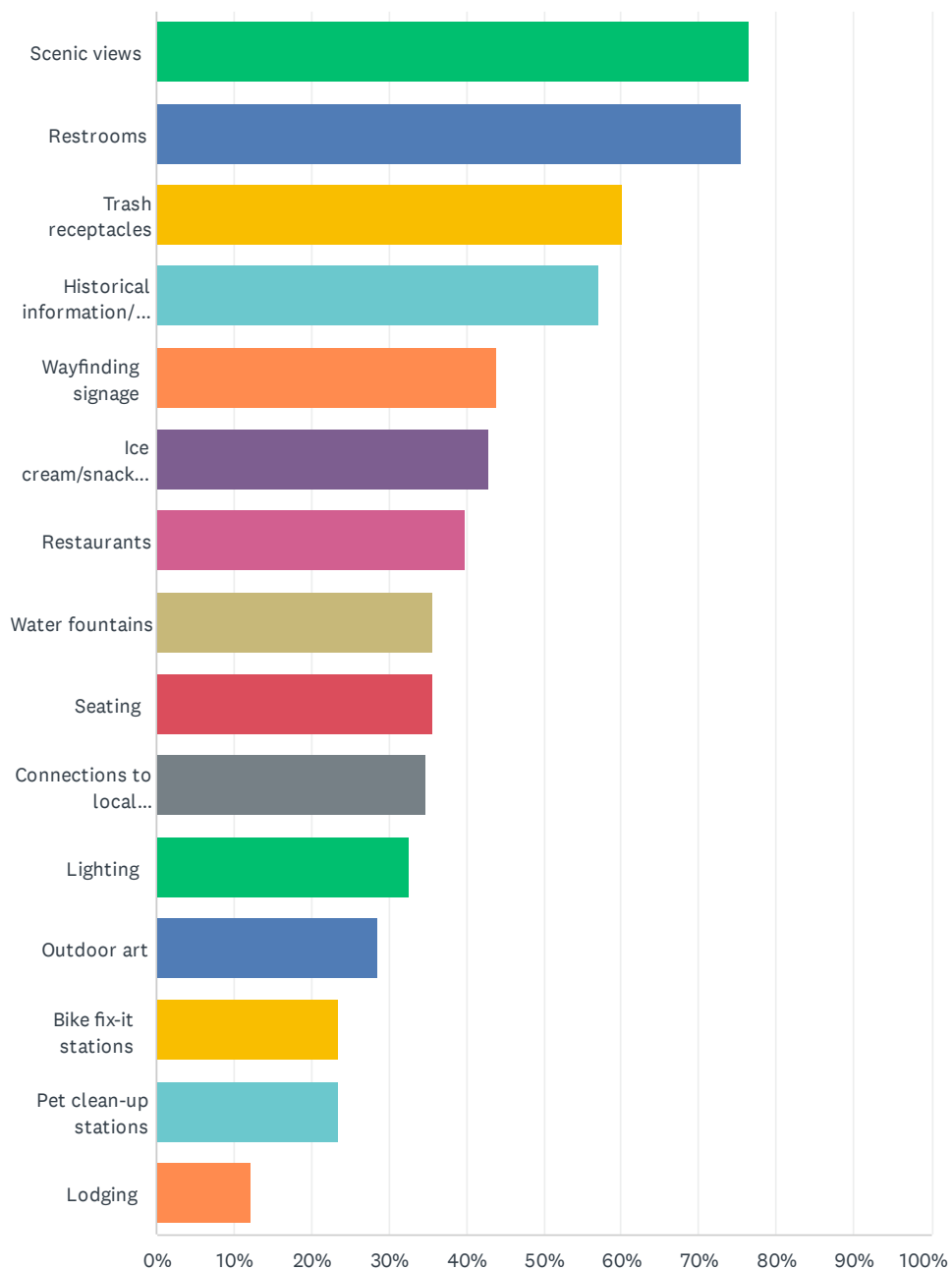
Before the COVID-19 pandemic, the primary use of trails was typically recreation. However, since the pandemic, users have begun to prioritize health, wellness, and exercise.

Respondents indicated that biking, walking/hiking, dog walking, sitting/socializing, and fishing were desired uses of the Tarentum-East Deer Three Rivers Heritage Trail. Frequent dog walking suggests a need for pet waste bag dispenser stations and trash receptacles. The desire for fishing highlights the important relationship between the communities and the Allegheny River.

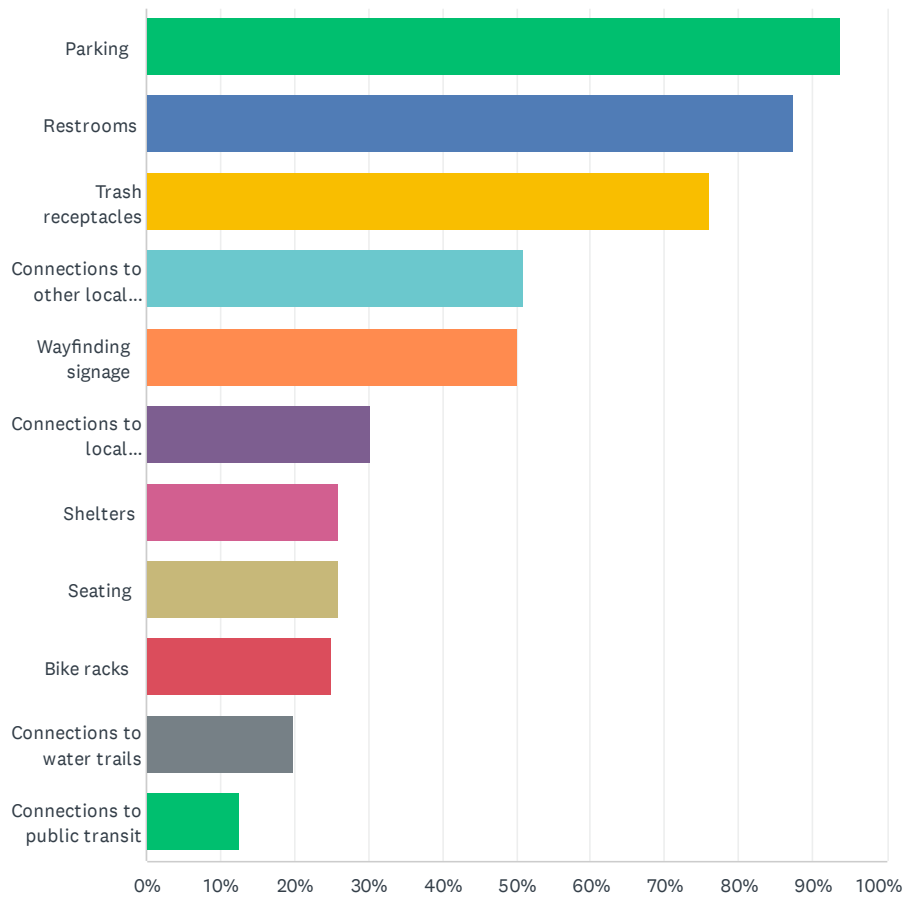
Of the respondents that would use the trail for biking, the majority identified that they would bike in groups, rather than solo or with children. 40% of the respondents also identified that they had not taken a multi-day trail trip but would like to. These responses suggest that, in the short-term, local use of the trail will be popular. As connections expand to other areas, regional use will become important as well.

Restrooms, trash receptacles, parking, and scenic views were identified as important amenities along the trail and at the trailhead. Trash receptacles and restrooms require frequent, routine maintenance to ensure they remain in an acceptable condition. Otherwise, these responses identify the fact that trailheads can be fairly simple and do not need a lot of amenities. Providing basic facilities can go a long way in ensuring the comfort and enjoyment of trail users.

What amenities or features would you like to see along the trail? Please select up to 5.

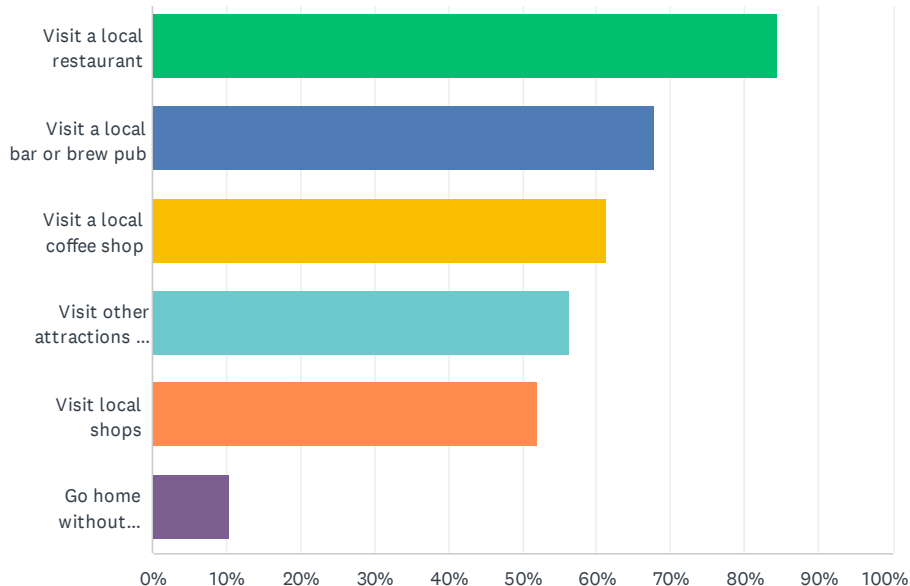


What connections, destinations, or features would you like to see at a trailhead? Please select up to 5.



A large majority of the respondents indicated that they would prefer to visit a local amenity, such as a restaurant, brew pub/bar, coffee shop, stores, or other attractions after finishing their trail trip. Only 10% of respondents would prefer to go directly home after completing their trip. These responses highlight the importance of signage and information at trailheads or other key access points along the trail, to ensure that users can enjoy the local amenities in Tarentum and East Deer.

What activities would you like to do after finishing a trip on a trail? Please select all that apply.

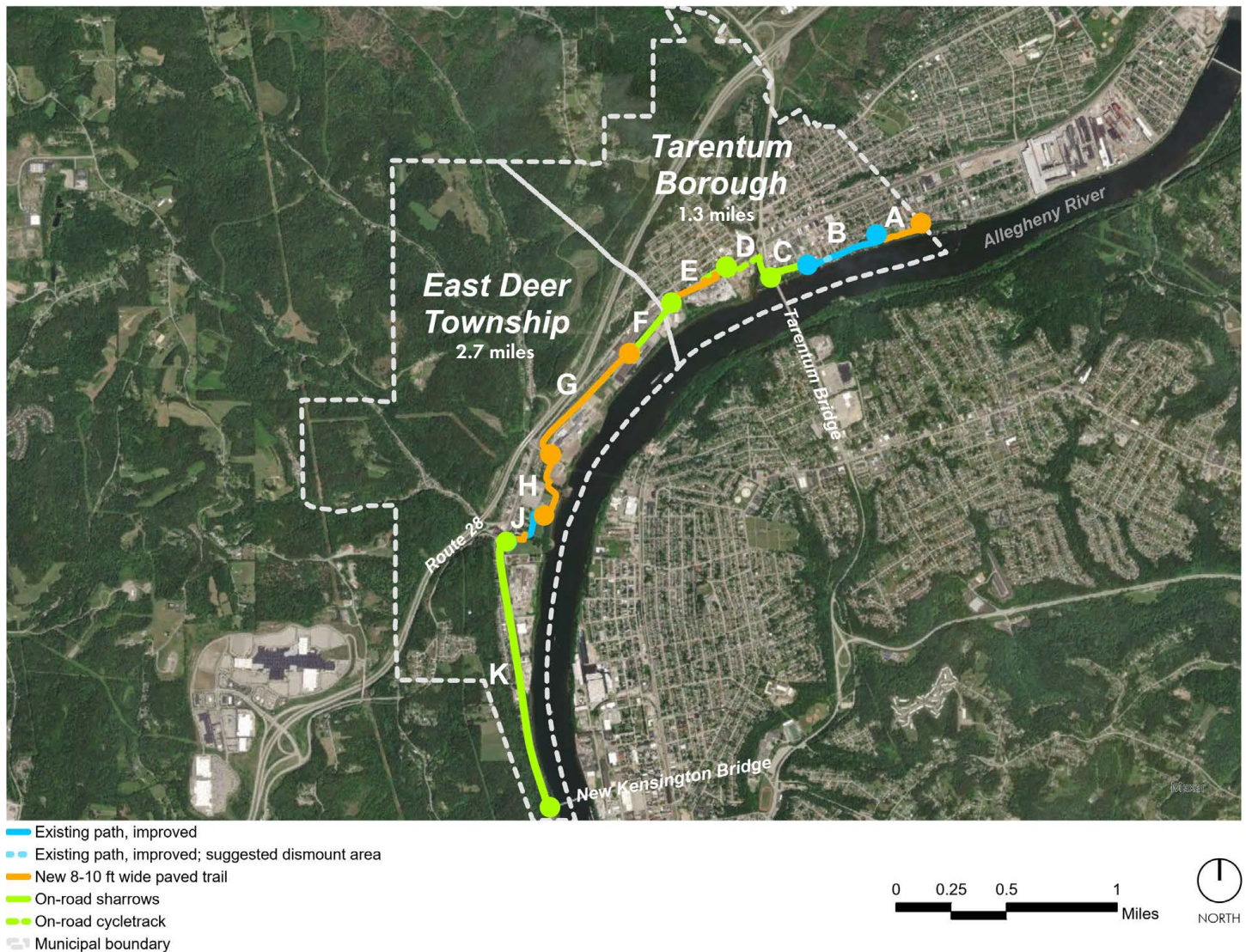


TRAIL ALIGNMENT

The proposed trail alignment was developed through site visits, analysis of existing conditions, and a series of conversations with the Steering Committee and key property owners. The Planning Team started with a draft alignment developed in a 2011 study conducted by Friends of the Riverfront, the Pennsylvania Environmental Council (PEC), and Allegheny County. This initial alignment was then further refined, and additional considerations were explored to create the route proposed in this Feasibility Study.

The proposed route spans just over 4 miles, with 1.3 miles in Tarentum Borough and 2.7 miles in East Deer Township. Of this length, 52% is off-road, while the rest is comprised of sharrows and cycletrack. Once complete, the Tarentum-East Deer Three Rivers Heritage Trail will connect the Brackenridge segment of the system to the New Kensington (C.L. Schmitt) Bridge, and will ultimately host the 270-mile Erie to Pittsburgh Trail.

Final Overall Trail Alignment

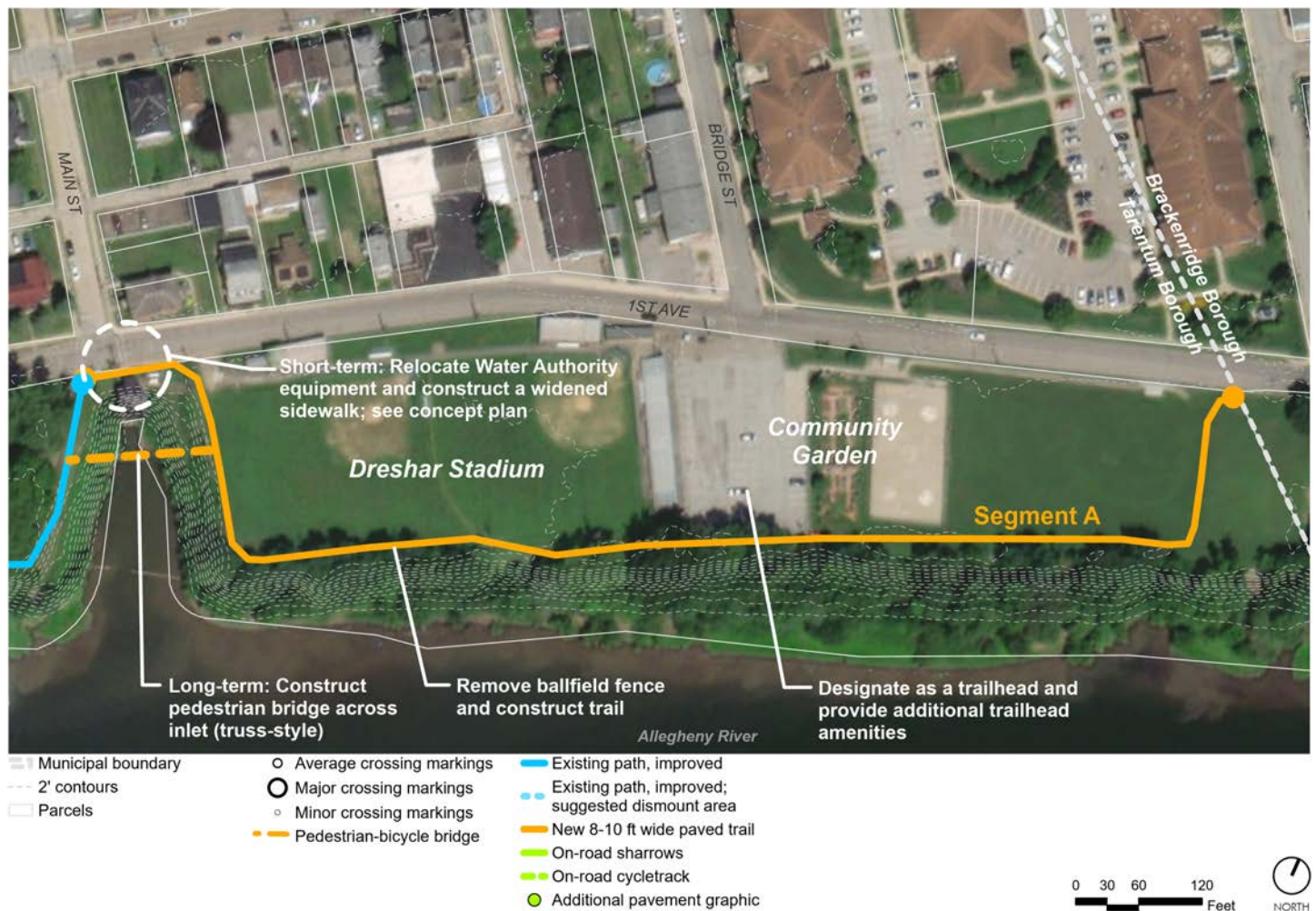


TARENTUM BOROUGH

SEGMENT A: DRESHAR STADIUM

The northeastern end of the Tarentum portion of the trail begins at Dreshar Stadium, located between East 1st Avenue and the Allegheny River. The redevelopment plans for the stadium have not been determined at the time of the Feasibility Study completion, but conversations with the Borough indicated that it will no longer be used for ballfields. The proposed alignment begins at the border of Brackenridge Memorial Park, where the Brackenridge segment of the Three Rivers Heritage Trail ends, and then passes along the river side of the existing fields. The existing fence should be removed prior to installing the trail. The Borough indicated that the existing parking lot is underutilized and could be used as a trailhead. Considerations for trailhead amenities have been included in the Design Considerations section.

Segment A Trail Alignment



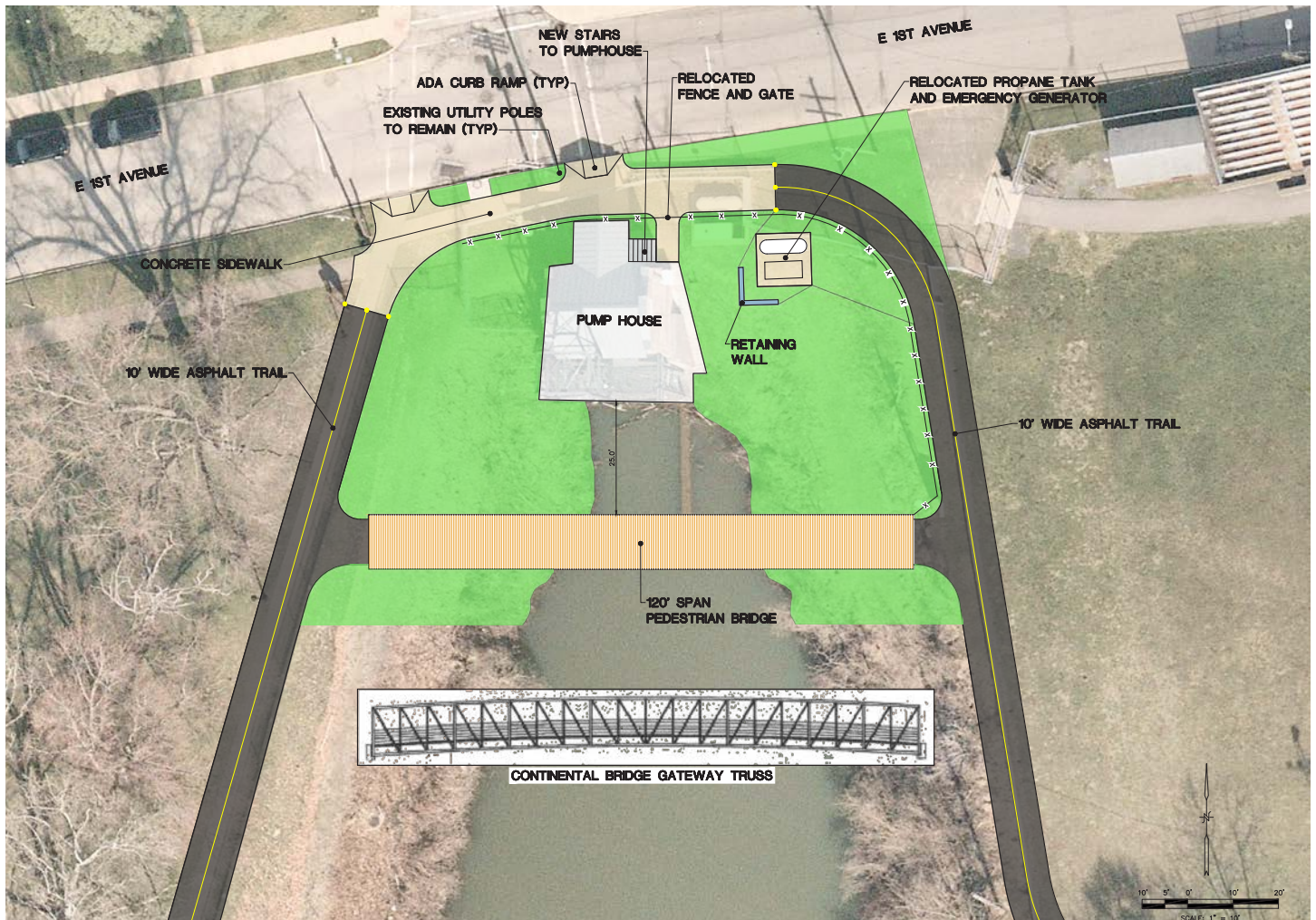
At the Tarentum Pumphouse, the existing sidewalk and fence configuration is too narrow to accommodate a trail of sufficient width.



The existing sidewalk and Pumphouse equipment configuration

There are two options for providing a trail connection through this space. Conversations with the Borough and the Steering Committee indicated that a bridge over the intake channel would be desirable in the long term. It could provide scenic views of the Allegheny River and become a destination along the trail. Due to the cost associated with this improvement, short-term options have been evaluated.

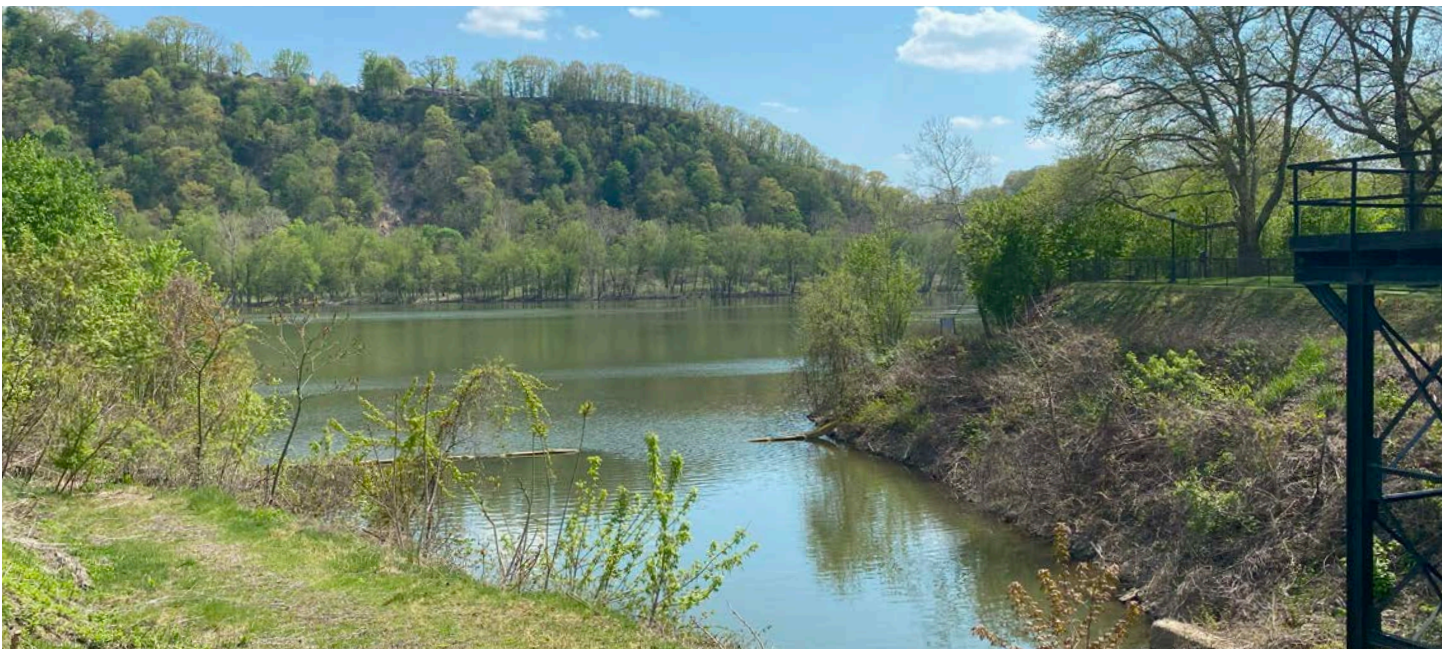
To provide an off-road trail in front of the Pumphouse, equipment for the facility needs to be relocated, which requires coordination with the Borough and with the appropriate utility companies. The concept plan below shows the relocation of the fence and gate, propane tank, emergency generator, and stairs to access the Pumphouse interior. The existing utility pole remains in its current location. The asphalt trail at Dreshar Stadium connects to a reconstructed 8 to 10-ft wide concrete sidewalk, including new ADA curb ramps. The new sidewalk connects to the trail in Tarentum Riverview Memorial Park.



The truss bridge over the intake channel is proposed to be 10 ft wide and approximately 120 ft in length. The bridge should be located roughly 25 ft from the back of the Pumphouse building to allow access to the channel for dredging.



The Tarentum Pumphouse



The intake channel for the Pumphouse

A short-term option was evaluated to explore routing the trail to the first crosswalk along East 1st Avenue, across Main Street, and then back across East 1st Avenue. However, conversations with the Steering Committee indicated that this option should not be pursued because it requires users to cross a busy truck route, and it is unlikely that trail users would truly follow the crossing. The bridge over the intake channel is the most desirable solution and should be pursued in the long term, with the Pumphouse equipment relocation providing access in the short term.

Segment A ends at Tarentum Riverview Memorial Park.

SEGMENT B: TARENTUM RIVERVIEW MEMORIAL PARK

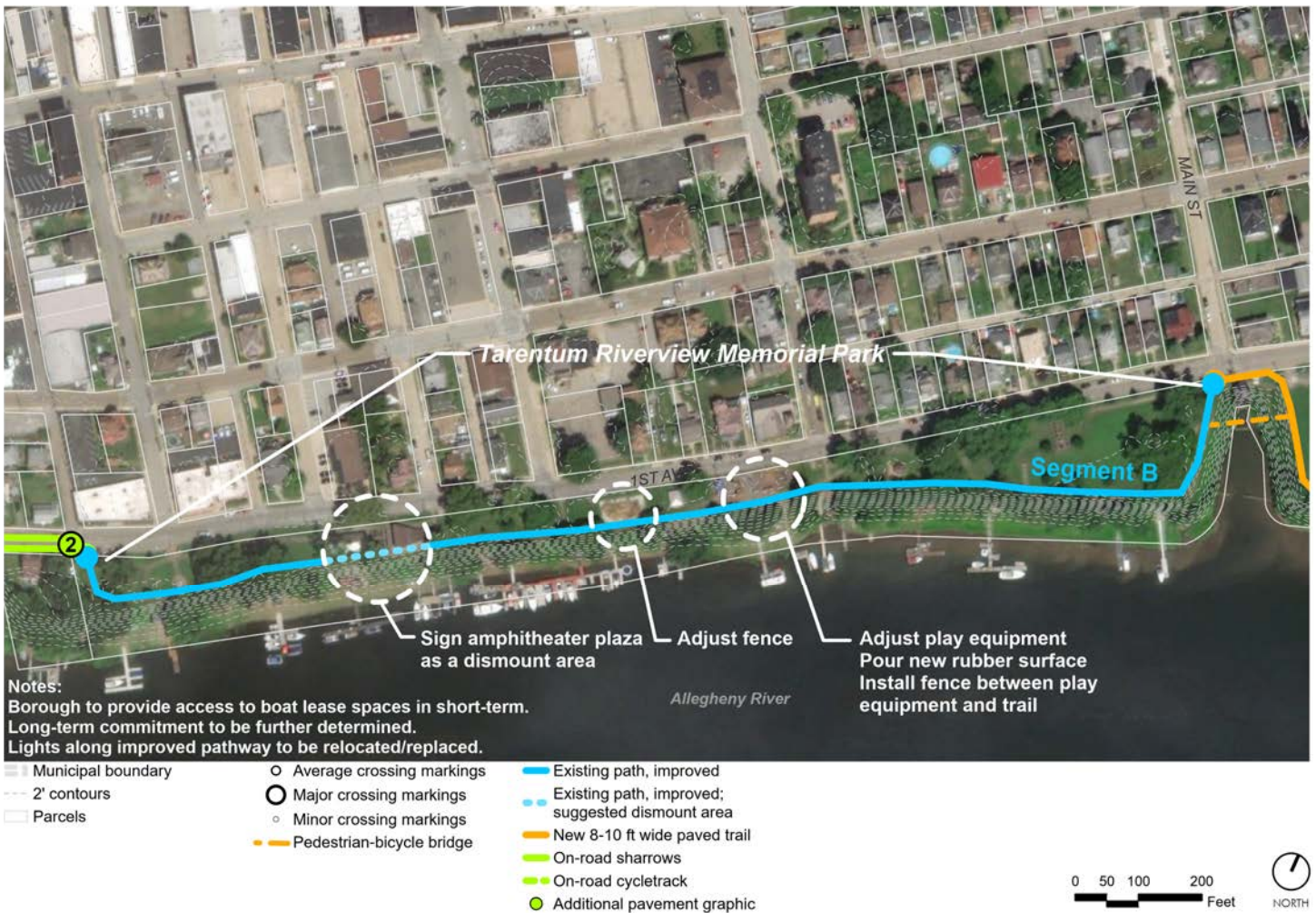
Segment B follows the existing walkway along the river side of Tarentum Riverview Memorial Park. This alignment requires the widening of the trail to a width of 8 to 10 ft, including the relocation or replacement in-kind of the existing light poles along the trail. The selective removal of other park amenities, such as the tree in the photo at right, will also be necessary. A site survey should be used for determining the exact relocation of park amenities.

At the time of the completion of the Feasibility Study, the Borough offers one-year leases to the docks along the park's riverbanks. The Borough should evaluate the long-term plan for the dock leases in the context of trail development.



The existing sidewalk in Tarentum Riverview Memorial Park

Segment B Trail Alignment



Playground Modifications

At the play area, the existing rubber safety surface needs to be reconfigured to accommodate the width of the trail. Bollards should be installed at 6 ft on-center between the play area and the trail to separate the different uses. At the time of other improvements, concrete edging should be installed to protect the edge of the safety surface. The safety surface must extend a minimum of 6 ft from the edge of the equipment. The outer panel of the fence at the entrance to the play area will need to be removed to provide enough width for the trail. Benches and trash receptacles along the edge of the play area also need to be relocated nearby. The edge of the existing fence along the splash pad, shown at right, must be adjusted to accommodate the trail width.



The sidewalk passes between the fence along the river and the fence surrounding the splash pad



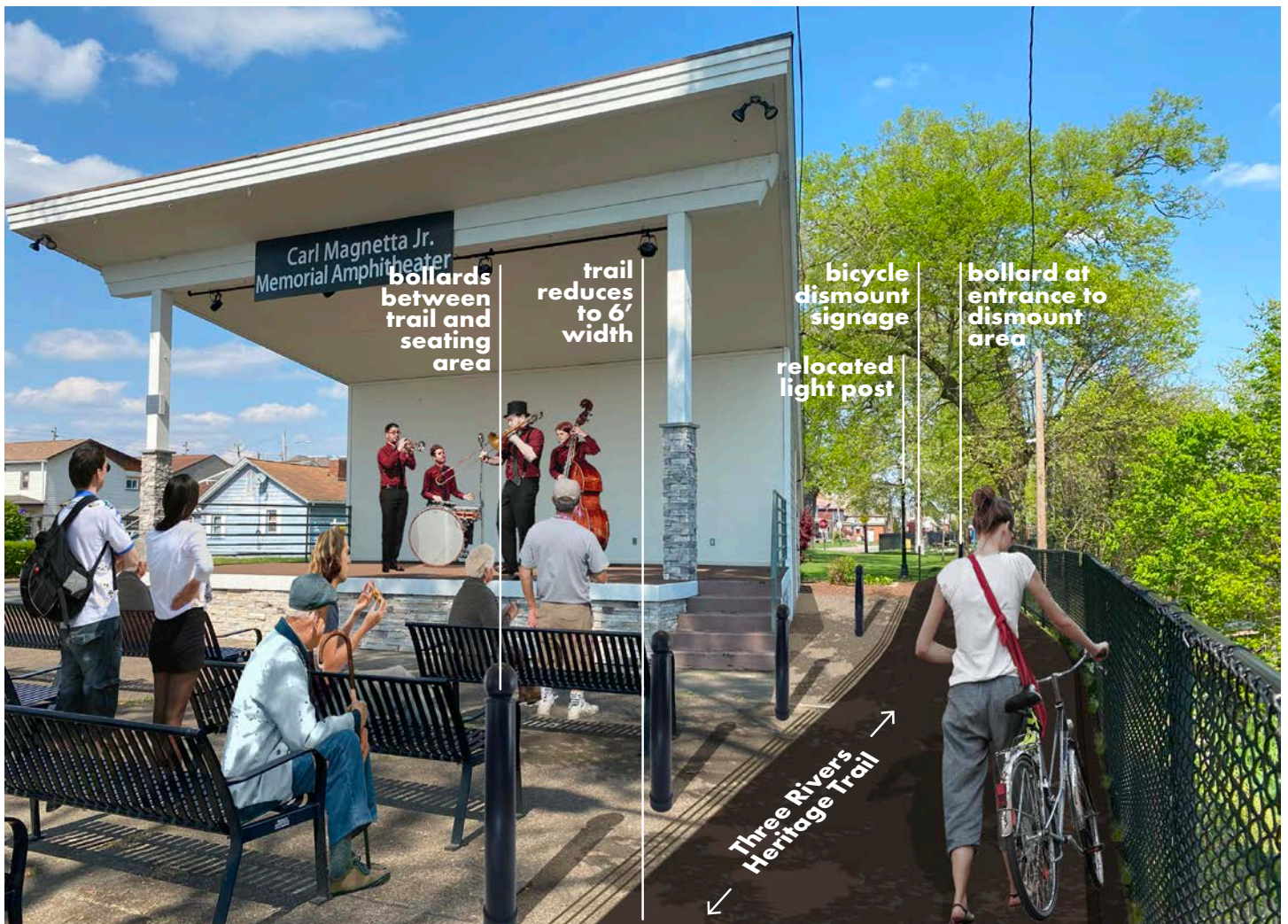
Amphitheater Modifications

At the amphitheater, bollards should be installed along the back of the plaza to separate visitors from the trail. Because this area is not wide enough to provide an 8 to 10 ft wide trail, it is recommended that the trail should be signed as a dismount area past the amphitheater to ensure the safety of event attendees and trail users.

Through the rest of Tarentum Riverview Memorial Park, the trail follows the existing walkway along the river side of the site. The trail connects to the crosswalk at East 1st Avenue, leading to Segment C.



The amphitheater space has mounted benches and a covered concession stand area with picnic tables.



SEGMENT C: EAST 1ST AVENUE SHARROWS

On-road sharrows connect Tarentum Riverview Memorial Park to the PA Fish and Boat Commission (PAFBC) launch area at the intersection of East 1st Avenue and Ross Street. The sharrows indicate that bicycle traffic should travel in the same direction as vehicular traffic in each lane. At both ends of the route along West 6th Avenue, signage should be installed to indicate that the sidewalks on the southern side of the road are discontinuous between the boat launch and the park. Pedestrians should cross to the northern side of the road to use the sidewalks. Pavement graphics, such as arrows, should be applied at both ends of the sharrows to indicate that the route makes a sharp turn into the boat launch and the park.

At the entrance to the boat launch parking lot, traffic control features should be installed to safely direct vehicular and bike traffic into and out of the parking lot. These may include crosswalk improvements, parking islands, and signage to separate pedestrian, bike, and vehicular traffic. The sharrows continue into the parking lot to connect to Segment D.



East 1st Avenue is a low-speed road with street parking, which make sharrows an effective solution for this segment; image credit to Google Street View



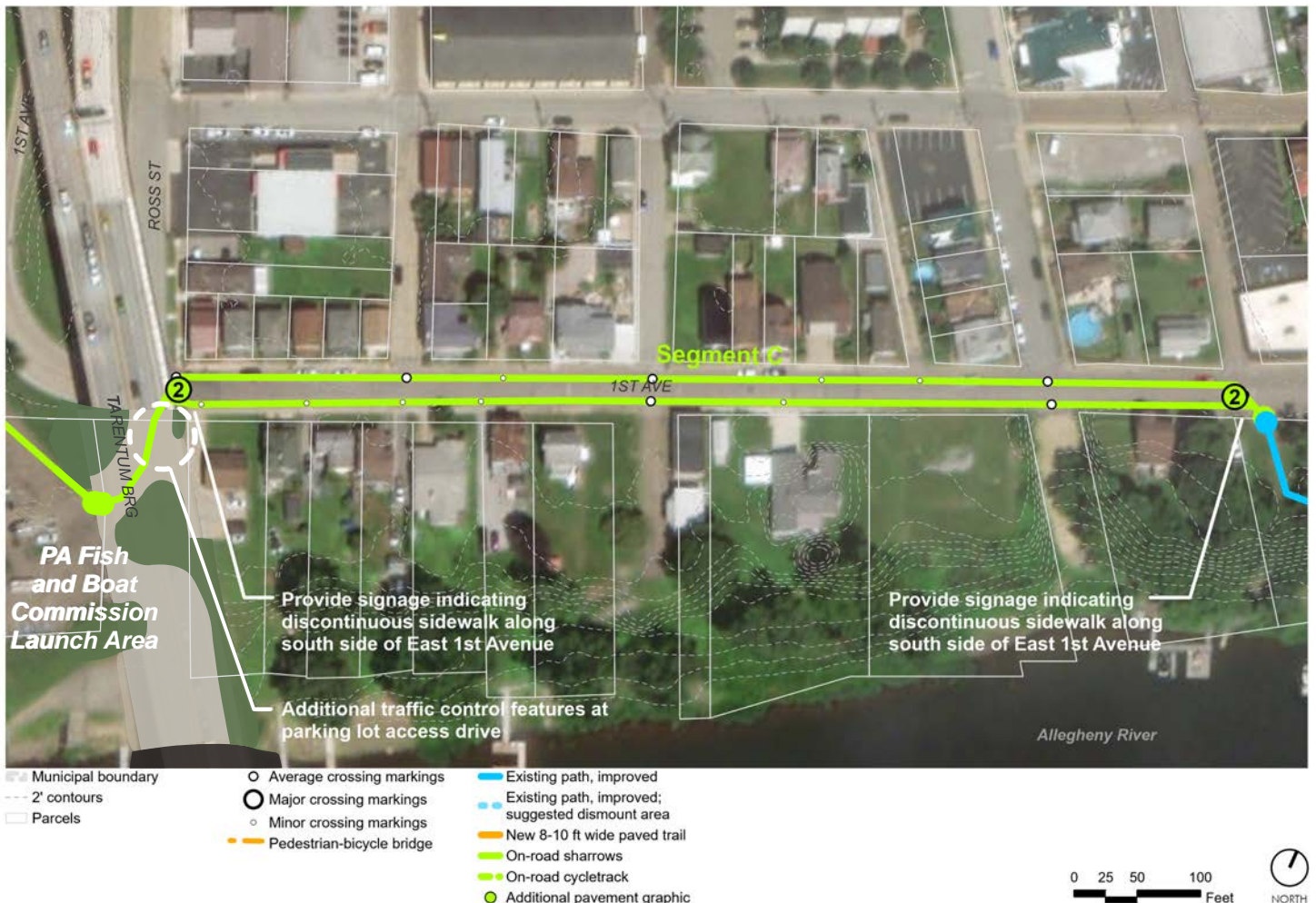
The PAFBC Boat Launch is located under the Tarentum Bridge; image credit to Google Street View

During the development of the proposed alignment, the Project Team evaluated the feasibility of an alignment along the Allegheny River in this area. Due to the existing property lines, the floodplain, and an easement along the bank of the river, a riverside alignment is not recommended. The limited width along the sidewalk also reduces the possibility of an off-road alignment through this section. As a result, an on-road alignment with sharrows is recommended along West 6th Avenue to connect Tarentum Riverview Memorial Park to the PA Fish and Boat Commission (PAFBC) Boat Launch.



Sharrows are used to identify where bicycles and vehicles should share the road.

Segment C Trail Alignment



SEGMENT D: WEST 4TH AVENUE

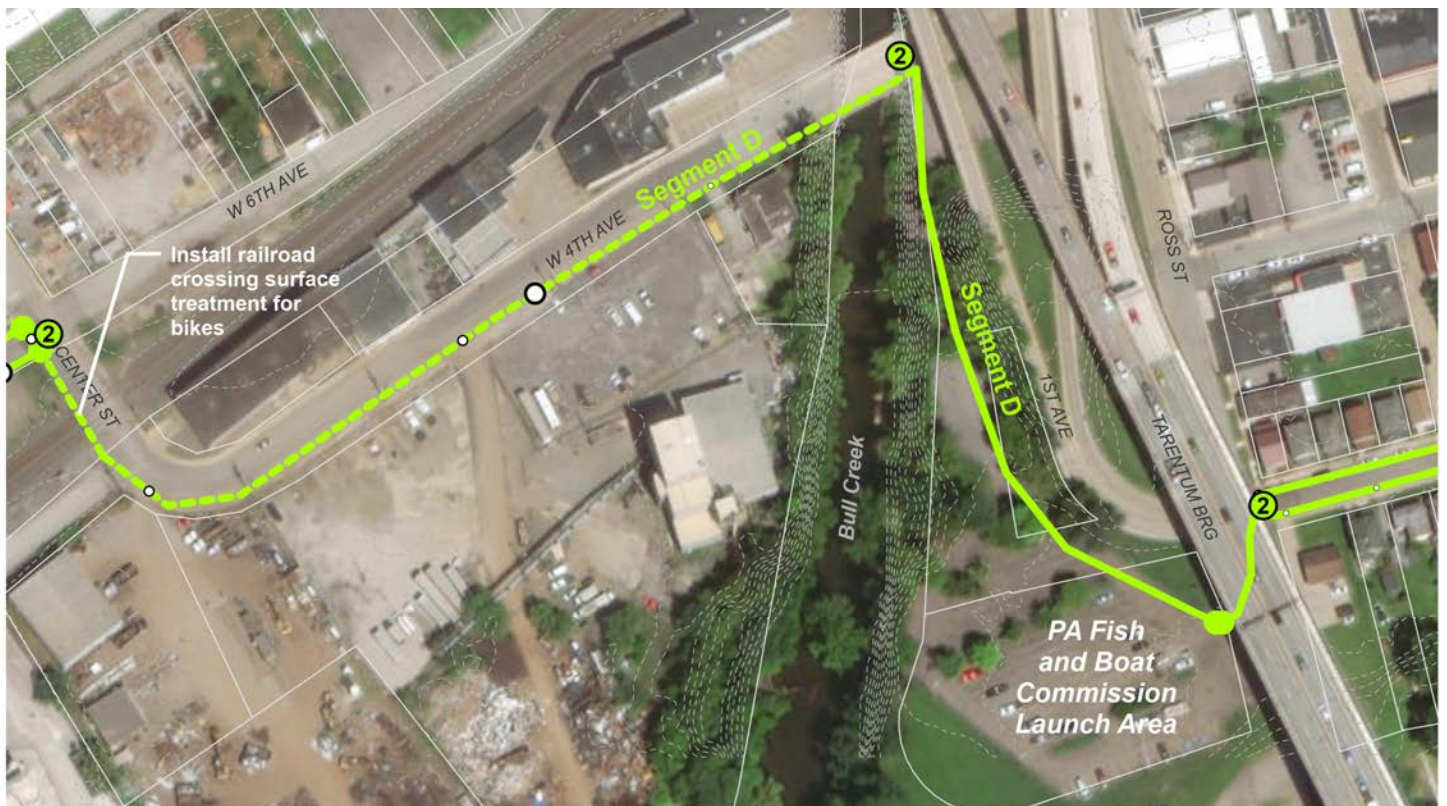
At the boat launch, the sharrows continue through the parking lot and turn north to follow the access road to West 4th Avenue. The Steering Committee identified that the boat launch parking lot is less suitable to serve as a trailhead because the existing lot is heavily used during the summer months. Coordination with PAFBC should be sought prior to pursuing development of this segment.

Once the trail meets West 4th Avenue, it turns west. Pavement graphics should be applied at the intersection of the access road and West 4th avenue to indicate that the route turns sharply. The on-road route includes an 8 to 10-ft wide cycletrack for bidirectional bicycle traffic along the outer edge of the southern travel lane. The cycletrack should be separated from the travel lane with reflective pylons. At access points/driveways into adjacent parcels, the route should be striped to indicate the potential presence of cyclists, as illustrated on the following page.



Pavement graphics direct trail users to turns or other transitions in the trail.

Segment D Trail Alignment



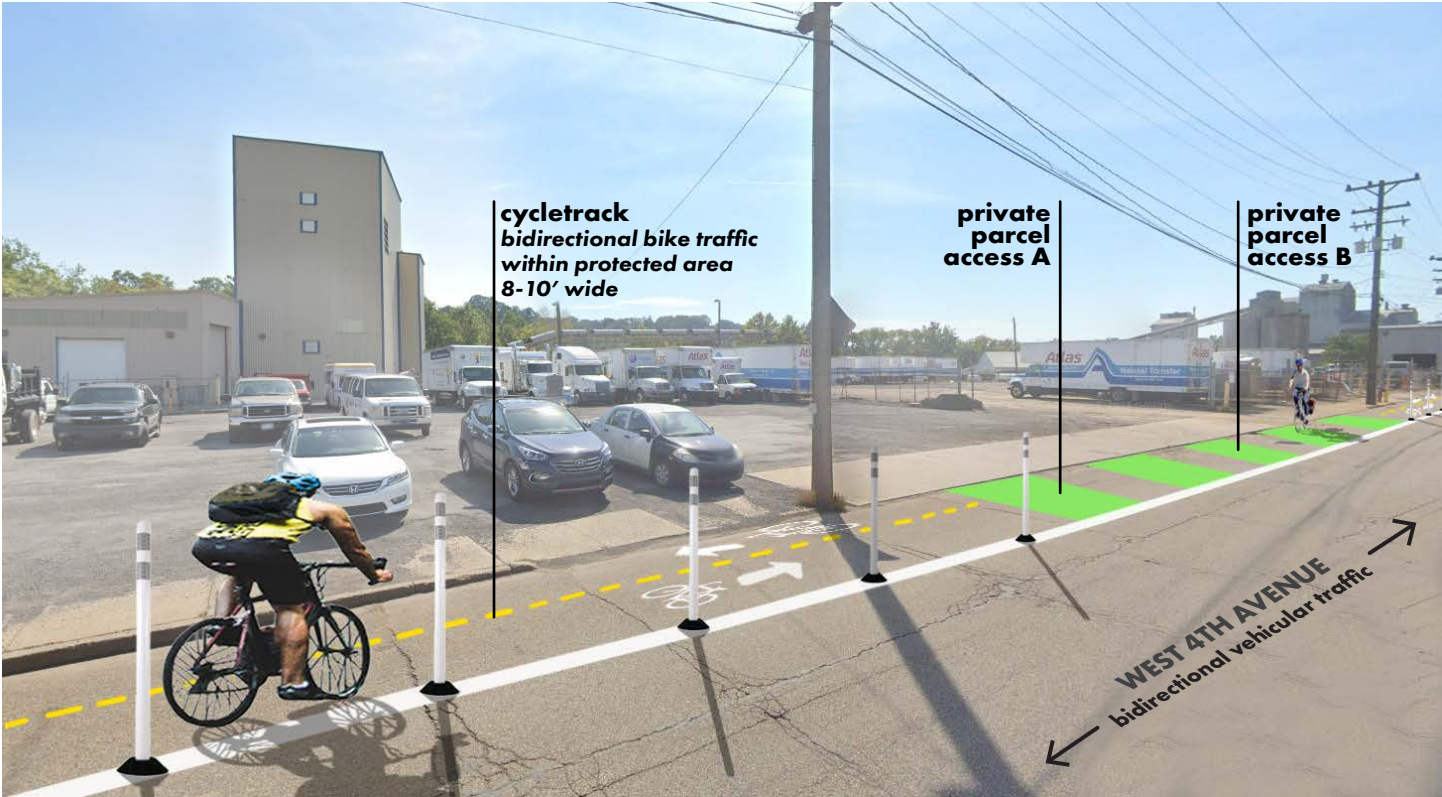
- Municipal boundary
- 2' contours
- Parcels
- Average crossing markings
- ⊙ Major crossing markings
- Minor crossing markings
- Pedestrian-bicycle bridge
- Existing path, improved
- Existing path, improved; suggested dismount area
- New 8-10 ft wide paved trail
- On-road sharrows
- On-road cycletrack
- Additional pavement graphic





The PAFBC Boat Launch access road connects to West 4th Avenue.

West 4th Avenue Cycletrack



The route crosses the existing railroad and proceeds towards West 6th Avenue. Surface treatments should be installed at the railroad crossing to make it easier for bicyclists to ride over. Pavement graphics should be applied where the trail turns onto West 6th Avenue, joining with Segment E.

SEGMENT E: WEST 6TH AVENUE

Segment E follows West 6th Avenue for about one block and then turns into the parklet next to the railroad. Bicyclists traveling towards Pittsburgh follow sharrows along the northern travel lane in the same direction as vehicular traffic. They cross Western Street and then cross West 6th Avenue into the parklet. Bicyclists traveling towards Brackenridge take the route through the parklet and then turn east to follow the sharrows on the northern half of West 6th Avenue. Pavement graphics should be applied at both turning points.

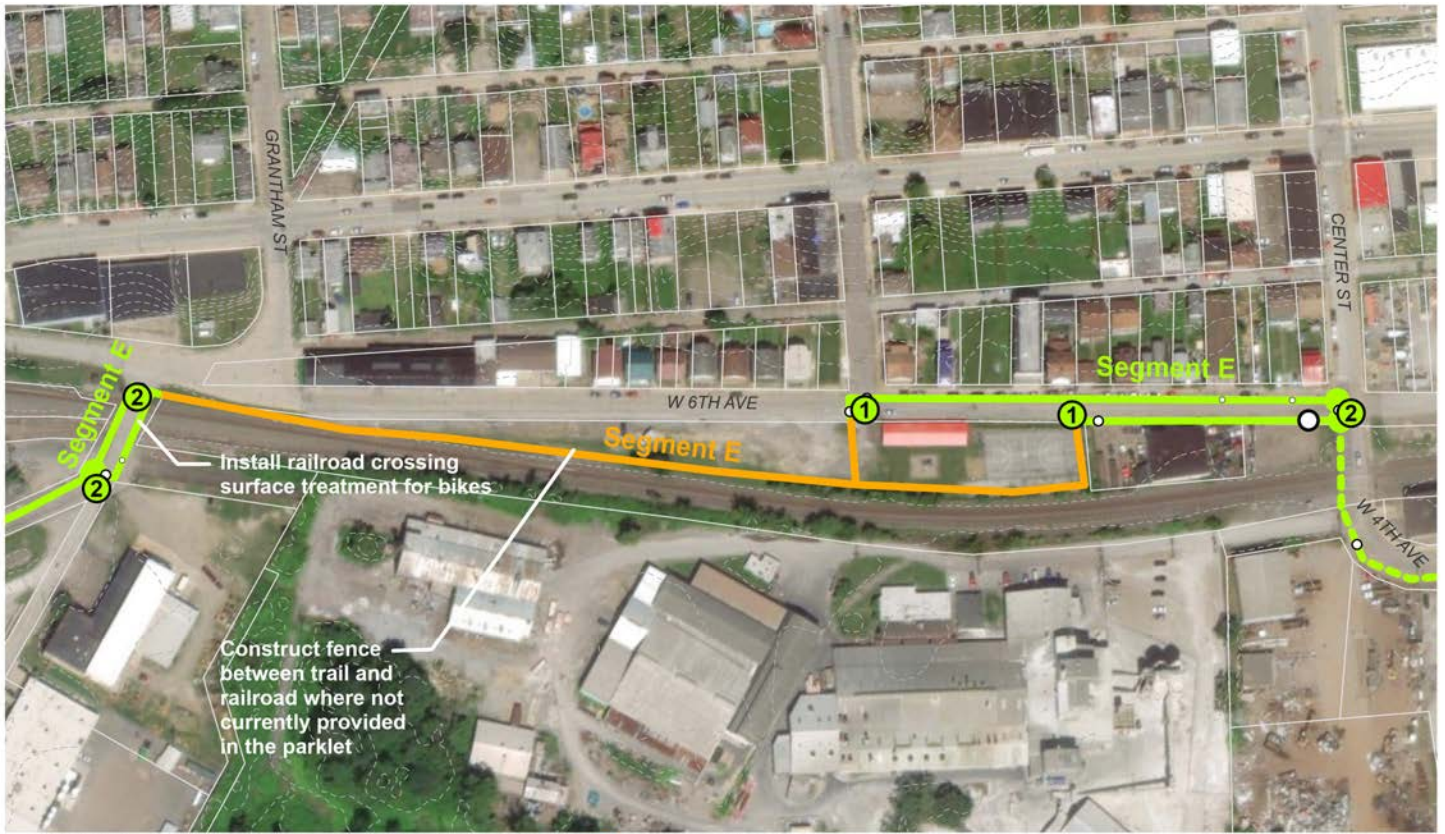
The route through the park parallels the railroad line. A fence should be installed between the trail and the rail line. Tarentum Borough leases the parklet property from the railroad, and the Borough should coordinate with the railroad prior to pursuing development of the trail segment through the parklet.

At the western end of the parklet, the route turns onto Grantham Street to cross the railroad tracks. Surface treatments should be installed to improve the crossing for bicyclists. Pavement graphics should also be applied at the turn onto Grantham Street and onto Treadway Lane.



The parklet is situated between West 6th Avenue and the Norfolk Southern rail line and contains a basketball court, a children's playground, and a pavilion with picnic tables; image credit to Google Street View

Segment E Trail Alignment



- Municipal boundary
- 2' contours
- Parcels
- Average crossing markings
- Major crossing markings
- Minor crossing markings
- Pedestrian-bicycle bridge
- Existing path, improved
- Existing path, improved; suggested dismount area
- New 8-10 ft wide paved trail
- On-road sharrows
- On-road cycletrack
- Additional pavement graphic

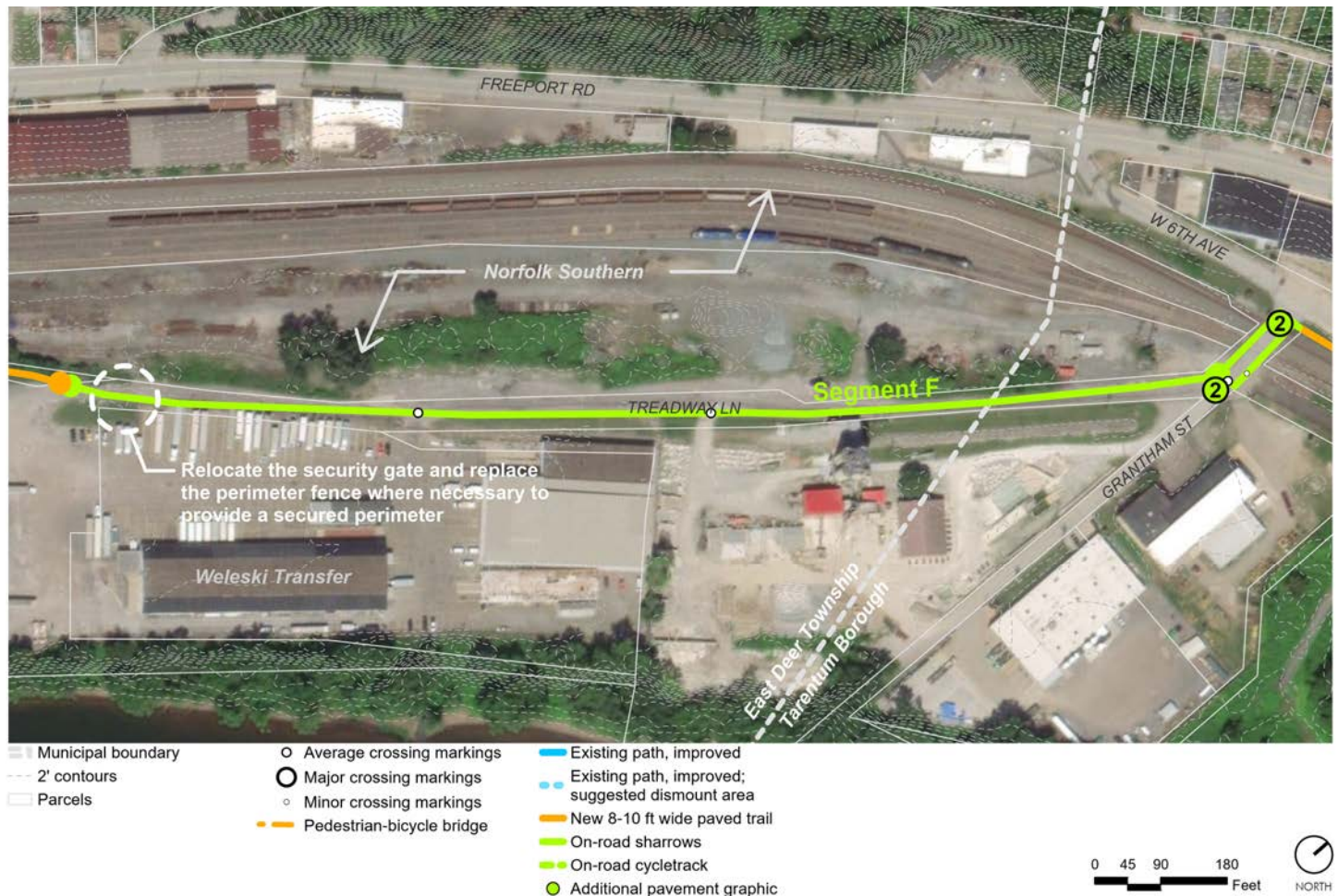


TARENTUM BOROUGH (cont.)

SEGMENT F: TREADWAY LANE

Segment F follows Treadway Lane, from its intersection with Grantham Street to the narrow corner of property owned by Pittsburgh Brewing Company at the opposite end. Of the 1,577 linear feet in Segment F, 309 ft of this length is located in Tarentum. The route consists of bidirectional sharrows. See the East Deer section ahead for additional information on this trail segment.

Segment F Trail Alignment



EAST DEER TOWNSHIP

SEGMENT F: TREADWAY LANE

The remaining 1,267 linear feet of Segment F is located in East Deer Township. The bidirectional sharrows continue to the end of this segment. The existing fence and gate at the Weleski property requires reconfiguration to maintain a secure perimeter while allowing the trail to pass by. Conversations with the property owner have indicated that they are open to accommodating the trail as long as the site of the Weleski Transfer facility remains secure. At the western end of the segment, the trail crosses onto a sliver of property owned by Pittsburgh Brewing Company and becomes off-road as Segment G. Continued coordination with the property owners is essential for implementing the trail in this area.

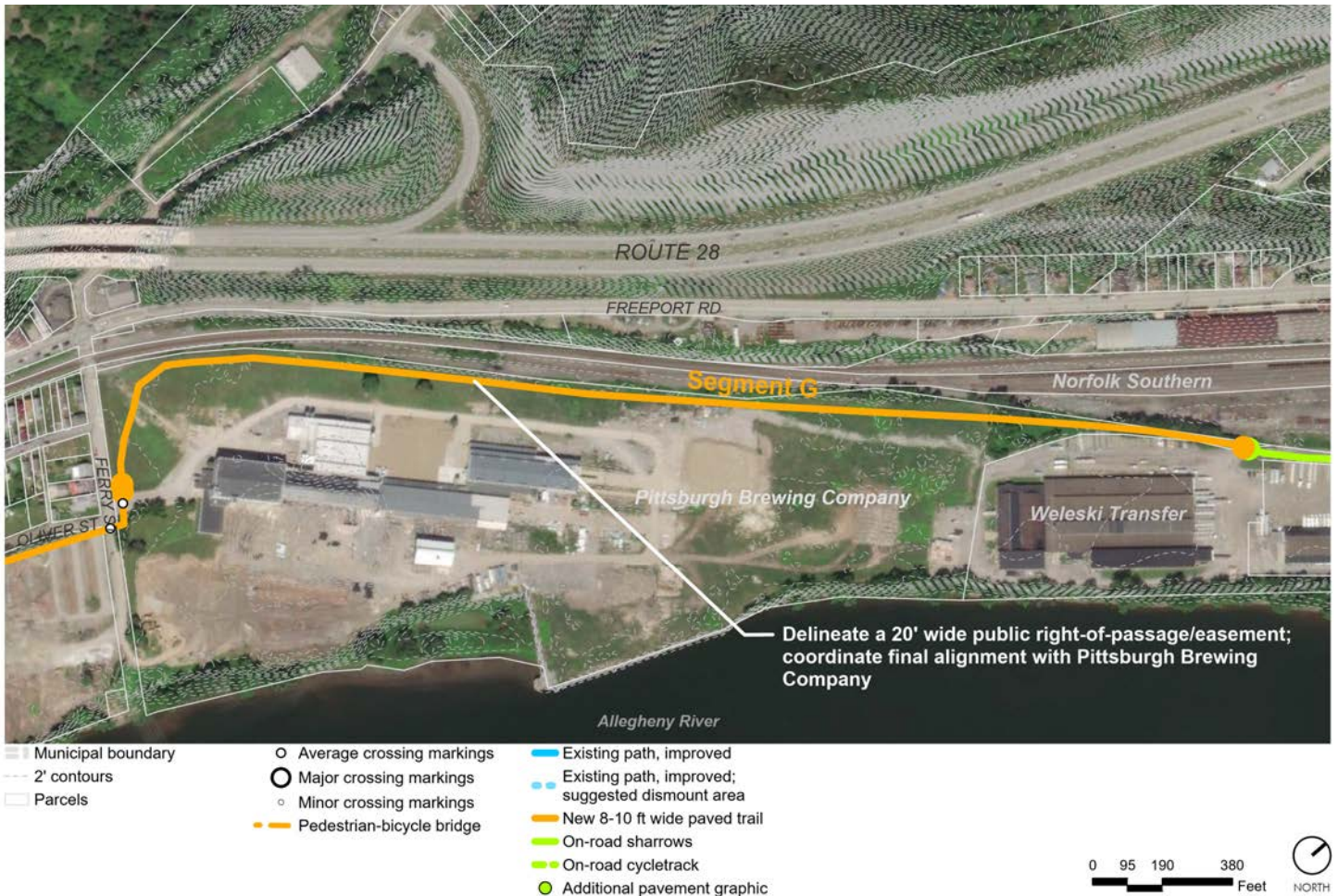
SEGMENT G: PITTSBURGH BREWING COMPANY

The Pittsburgh Brewing Company (PBC) site provides some unique opportunities for the Three Rivers Heritage Trail. PBC has indicated interest in incorporating the trail into their overall site design in some fashion. However, at the time of report development, the PBC site plans had not been finalized. The Feasibility Study recommends delineating a 20 ft wide easement or right-of-passage through the site, but further coordination with Pittsburgh Brewing Company is needed to finalize the alignment in this area in the context of the overall site plan.



Although the PBC facility is used for production, it also offers exciting opportunities for visitors, such as tours.

Segment G Trail Alignment



SEGMENT H: FERRY STREET TO EAST DEER RECREATIONAL FACILITY

As the trail alignment exits the main Pittsburgh Brewing Company site, it crosses Ferry Street to enter the additional Pittsburgh Brewing Company parcel south of the main site. The trail follows along the outer edge of the parking area to approach Bailey Run. A 10 ft wide truss bridge, similar to the bridge at the Tarentum Pumphouse, is needed to cross the stream. Additional permit and design considerations are necessary to construct a bridge in this area.



The existing Pittsburgh Brewing Company parking area and access drive



Bailey Run flows between banks vegetated with trees, shrubs, and invasive species such as knotweed before joining the Allegheny River.

Bailey Run Pedestrian-Bicycle Bridge



After crossing Bailey Run, the trail follows the southern edge of the PBC parcel, passing by the existing utility tower. Fence should be installed to secure the base of the tower. The trail then enters property owned by People's Gas. The alignment assumes that there is enough space between the fence around the gas facility and the top of slope towards the river, based on mapping data and site visits. However, a more detailed study of this area is necessary to verify the conditions. Coordination with People's Gas should be sought prior to pursuing development of this trail segment.

The route passes behind the existing gazebo before joining the walking loop, which marks the beginning of Segment J.



An example of the recommended style of bridge to cross Bailey Run

Segment H Trail Alignment

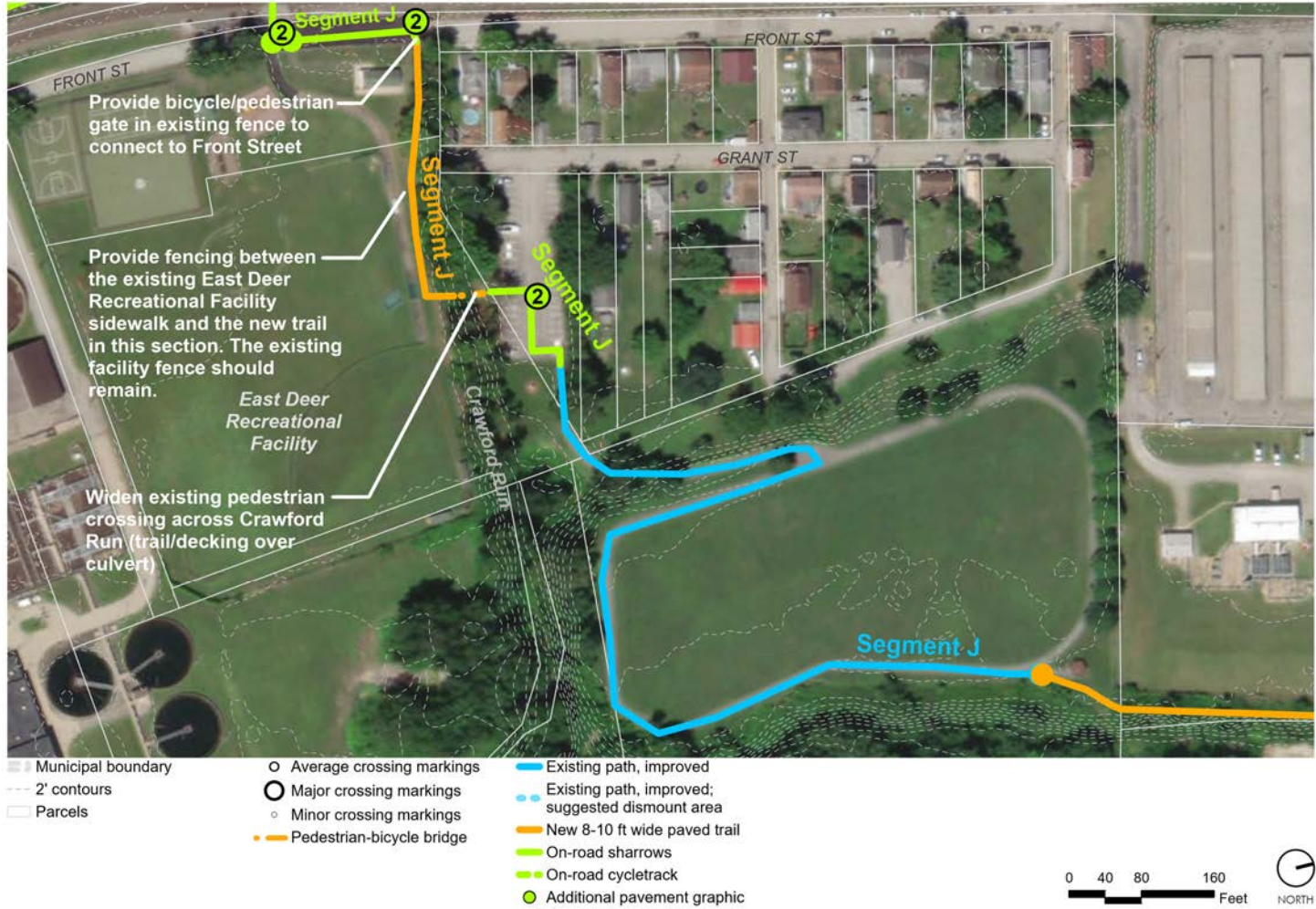


SEGMENT J: EAST DEER RECREATIONAL FACILITY

At the East Deer Recreational Facility, the trail proceeds around the walking loop in a clockwise direction (when heading towards Pittsburgh). Following the walking loop in this direction allows for views of the Allegheny River. Signage and/or pavement markings should be considered in this area to alert Three Rivers Heritage Trail users and the walking loop users to each other's presence.

The trail exits the walking loop at the existing connector path to the parking lot. To avoid disturbing the memorial near the parking lot, the route proceeds through the parking lot and exits near the mid-point at the existing crossing over Crawford Run. The existing crossing should be modified to accommodate the 8 to 10 ft wide trail.

Segment J Trail Alignment

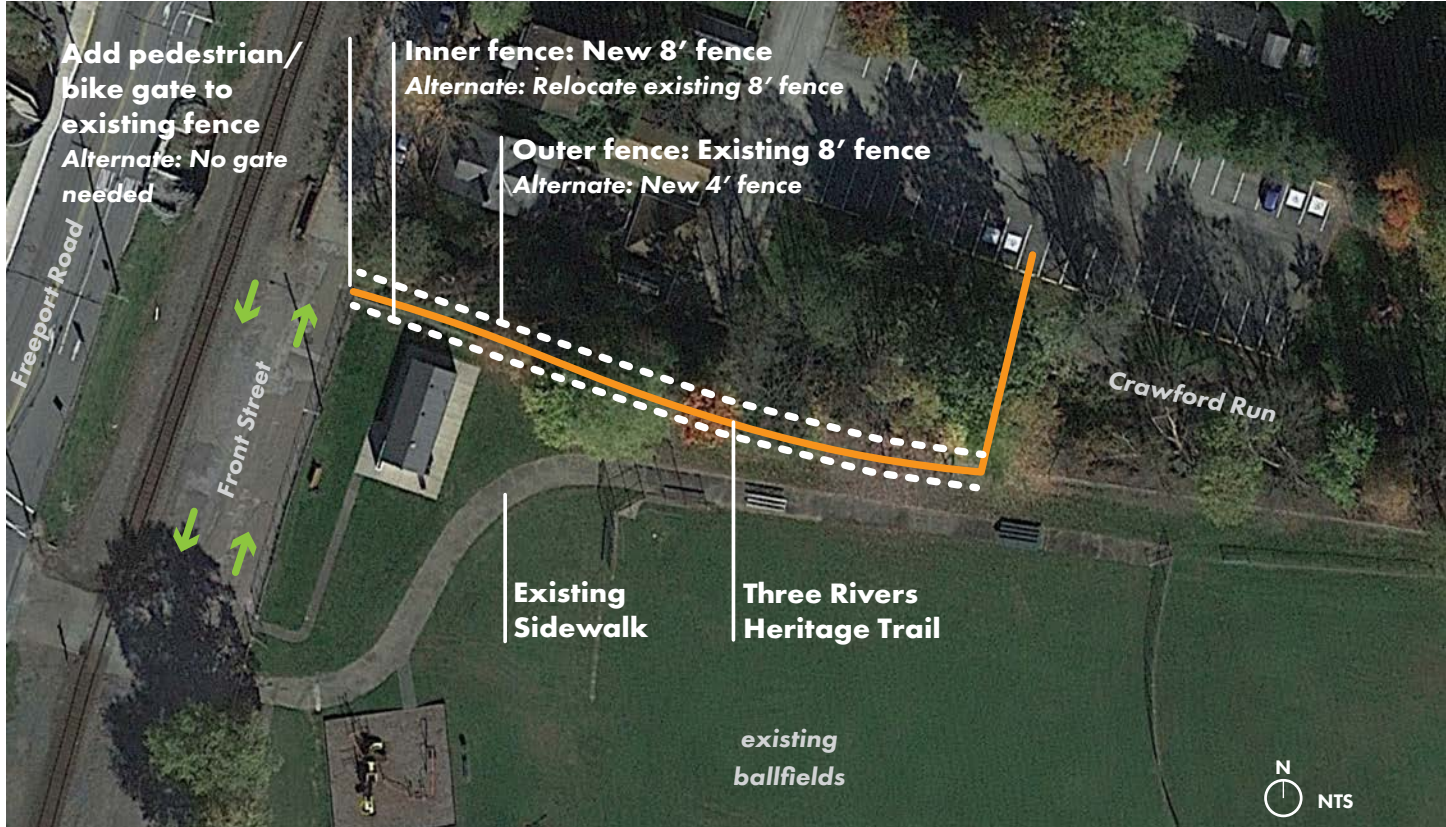


Once the trail crosses Crawford Run, additional considerations take effect. Public input has identified concerns regarding the security of the Recreational Facility, including vandalism. It is preferable for this area of the park to remain separate from the Three Rivers Heritage Trail, to ensure that the park can be properly closed at night. The most cost-effective option makes use of the existing facility fence and requires installation of a second 8 ft tall fence on the interior side (described in the bold text on the enlargement). In this case, the trail should enter through the existing fence and then be separated from the rest of the facility with a new fence. The trail exits the Recreational Facility through a new bicycle/pedestrian gate added to the existing fence in the northwest corner of the park. The route then proceeds towards Segment K using sharrows on Front Street.



The East Deer Recreational Facility offers ballfields, a children's playground, and a walking loop; image credit to Google Street View

However, if sufficient funds can be generated, it may be more desirable to pursue a slightly different configuration through the southern portion of the East Deer Recreational Facility property (in the italic text on the enlargement). The previously described configuration routes the trail between two, 8 ft tall fences, which can feel constricting for the trail users. Instead, the existing 8 ft fence around the Recreational Facility could be relocated to be closer to the existing sidewalk, providing space for the Three Rivers Heritage Trail along the outside of the facility. In this case, a 4 ft height fence should be added between the trail and Crawford Run to ensure the safety of trail users. This configuration would feel less constricting and more friendly for trail users, but the relocation of the existing 8 ft fence and installation of new fence is likely to be more costly than the first option. In either case, the location of the fences remains the same, but their heights change as noted in the enlargement below.



SEGMENT K: FREEPORT ROAD

The last segment in the Tarentum-East Deer Three Rivers Heritage Trail is Freeport Road, from the East Deer Recreational Facility entrance at Front Street to the New Kensington Bridge. The short-term alignment in this section includes bidirectional sharrows, with bicyclists traveling with the flow of traffic in either lane. The feasibility of a cycletrack was evaluated for this segment, but it was found that there is insufficient lane width in this area. This is compounded by the presence of the railroad along the eastern side of Freeport Road, which limits the width of the right-of-way and would pose challenges for an off-road trail. In the long-term, a detailed traffic analysis should be conducted on this section of Freeport Road to assess the potential for dedicated bike lanes.



Freeport Road consists of two lanes, a parking lane, and a turning lane in some areas; image credit to Google Street View

The Steering Committee identified that there are drainage concerns along Freeport Road. Coordination with PennDOT should include considerations for lane width, drainage improvements, and the long-term bike lane option.

The Tarentum-East Deer section of the Three Rivers Heritage Trail ends at the New Kensington (C.L. Schmitt) Bridge. If the trail is extended in the future, it could be routed across the bridge, or it could be routed under the bridge to join Pittsburgh Street and continue south.

Segment K Trail Alignment



- ▬ Municipal boundary
- 2' contours
- ▭ Parcels
- Average crossing markings
- ⊙ Major crossing markings
- Minor crossing markings
- Pedestrian-bicycle bridge
- Existing path, improved
- Existing path, improved; suggested dismount area
- New 8-10 ft wide paved trail
- On-road sharrows
- On-road cycletrack
- Additional pavement graphic



GENERAL RECOMMENDATIONS

DESIGN CONSIDERATIONS

Trailheads | The parking lot at Dreshar Stadium in Tarentum has been identified as a potential trailhead location. Survey responses indicated that the top three trailhead features include parking, restrooms, and trash receptacles. This indicates that trailheads do not need many amenities, but should provide some basic features to ensure visitors' comfort. Restrooms and trash receptacles require frequent, routine upkeep to ensure they are maintained to a suitable level. Additionally, survey respondents showed that they would have interests in visiting local restaurants, brew pubs, coffee shops, or other local attractions after finishing a trail trip. Information about local amenities and wayfinding signage should be provided at trailheads to benefit the communities and extend the duration of trail users' stays.

Signage | As aforementioned, signage about local amenities is important to inform trail users about the opportunities for additional experiences in the communities. Signage may also include information about distances to key points along the trail, relevant information at decision points, or information about connections to other trails. Specific signage needs have been described with the trail segments. Signage should be coordinated with Friends of the Riverfront to create consistent standards across the Three Rivers Heritage Trail Network. At the time of report development, Friends of the Riverfront was pursuing funding to develop signage and branding for the trail.

In addition to signage, the diagrams for each trail segment identify locations where pavement graphics should be applied to signal that the trail takes a sharp



Pavement graphics inform trail users when the trail changes direction.



Existing Three Rivers Heritage Trail signage on East 1st Avenue in Tarentum



Signage can be used to create an identity for the trail.

turn. The graphics should consist of a highly visible color that matches other striping along the route and should indicate the direction of travel, such as chevrons or arrows, as shown on the bottom left of the previous page.

Branding | Signage and other trail features, such as the color and style of striping, should be consistent with the Three Rivers Heritage Trail Network branding standards. The branding should also be considered in the context of the Tarentum-East Deer section becoming part of the Erie-to-Pittsburgh Trail. The route should be legible as part of both systems. Seek coordination with Friends of the Riverfront to strategize branding in the context of the overall trail systems.

Driveway Crossings | Along each trail alignment, symbols have been used to indicate where on-road routes cross a driveway or other parcel access point. These locations occur frequently and should include additional striping to alert the driver and the bicyclist to their intersecting routes. The style of striping should be uniform along the trail and, if applicable, should match the style used in other locations within the Three Rivers Heritage Trail and/or Erie-to-Pittsburgh Trail systems. See the image below for an example of this type of striping.



Striping draws attention to the potential presence of trail users on the road.

Sustainable Design Practices | There are several opportunities to incorporate sustainable design strategies along the trail. In off-road locations with ample space, such as Dreshar Stadium, Tarentum Riverview Memorial Park, the West 6th Avenue Parklet, the southern parking area of the Pittsburgh Brewing Company site, and the East Deer Recreational Facility, rain gardens or bioswales could be used to manage the runoff generated by the trail surface. Rain gardens or bioswales should include amended soil and native plantings that are adaptable to wet and dry conditions. Plantings may include grasses, perennials, shrubs, or trees. A few recommended species are Serviceberry (*Amelanchier* sp.), Red-Twig Dogwood (*Cornus sericea*), and Beebalm (*Monarda didyma*), although many others exist. The plant palette should be determined during the design development phase and the upkeep of the vegetation should be included in any maintenance agreements. Routine maintenance will depend on the locations of the facilities and the types of species installed.



Native plantings provide habitat and can be used to infiltrate stormwater runoff when planted in rain gardens.

Depending on the redevelopment plans for Dreshar Stadium, there may be opportunities to convert some lawn area to meadow. Meadows decrease stormwater runoff and reduce the amount of mowing compared to traditional turf grass. They also provide year-round habitat for wildlife, creating viewing opportunities. When in bloom, a meadow could provide a vibrant scene along the trail.

Planting trees and revegetating the space alongside the trail, where possible, provides shade and may help reduce the temperature for trail users during hot summer months.

In the online survey, restrooms were identified as a desired amenity along the trail and at trailheads. If electricity is to be provided, consider using photovoltaic (PV) panels to generate solar power. Similarly, if the municipalities seek to provide lighting along any of the trail segments, solar light posts could be used. This also could eliminate the need for potentially costly connections to existing electric lines, which may not be near the site. The relocation or replacement of the trail lights at Tarentum Riverview Memorial Park could incorporate solar power if desired.

DESIGN STANDARDS

PennDOT | PennDOT Publication 13M (DM-2), Chapter 16 contains guidelines relating to bicycle facilities, including development and design of the facilities and the procedures for construction after the Planning, Programming, and Budgeting phase is complete. These procedures are applicable through the Final Design Phase. The publication also includes the guidelines for Bikeway Occupancy Permits, which are needed when bikeways are to be located in PennDOT’s right-of-way. PennDOT also provides the Bicycle and Pedestrian Checklist in Publication 10X (DM-1X), Appendix S. The checklist should be used to guide the design of projects using State or Federal Funding.

AASHTO | The Association of State Highway and Transportation Officials (AASHTO) provides the Guide for the Development of Bicycle Facilities. When State or Federal funds are used for a project, the design should meet the guidelines provided in this publication.

MUTCD | The Manual on Uniform Traffic Control Devices (MUTCD) includes Chapter 9, Traffic Control for Bicycle Facilities. The content includes design standards and regulations for signage content, style, location, sizing, and installation; pavement markings; and signals.



Lighting can improve the perception of safety and extend the hours of trail use during shorter days in the spring and fall.

NACTO | The National Association of City Transportation Officials (NACTO) publishes the Urban Bikeway Design Guide. At the time of report development, the design guide was being updated. The guide and the associated online webpages include descriptions of various bicycle facilities, information about typical applications, and required, recommended, and optional features for each type of facility.



The Urban Bikeway Design Guide provides photos and diagrams of recommended applications of bike facilities.

COSTS AND FUNDING

OPINION OF PROBABLE DEVELOPMENT COST

The Opinion of Probable Development Cost (OPDC) reflects the capital costs associated with the development of the proposed alignment. An OPDC is based on the quantity of materials or improvements proposed in the plan. These quantities are then multiplied by actual construction costs for similar materials in construction projects recent to 2023. These exhibits are suitable for use as part of future grant requests or cost documentation for potential funders. The OPDC includes line items for contingencies, engineering, permitting, and construction administration. The percentages vary depending upon the nature of the segment. For example, a segment with a bridge requires additional permitting compared to a segment without a bridge.

OVERVIEW

TARENTUM BOROUGH SECTION

Short-Term Total \$2,027,428

Long-Term Total \$4,491,159

EAST DEER TOWNSHIP SECTION

Total \$4,210,484

TARENTUM-EAST DEER THREE RIVERS HERITAGE TRAIL

Short-Term Total \$6.2 million

Long-Term Total \$8.7 million

The short-term OPDC reflects the cost of developing the trail by reconfiguring the Pumphouse equipment. The long-term OPDC includes the cost of the truss bridge over the inlet.

COSTS BY SEGMENT

TARENTUM BOROUGH COST ESTIMATE SUMMARY

SEGMENT A - Tarentum Borough

Trail

Construction Cost:	\$344,750.00
Contingency (15%):	\$51,712.50
Engineering (6%):	\$23,787.75
Permitting (2%):	\$7,929.25
Construction Administration (6%):	\$23,787.75
Total:	\$451,967.25

Short Term (Trail + Modifications)

Construction Cost:	\$579,250.00
Contingency (15%):	\$86,887.50
Engineering (6%):	\$39,968.25
Permitting (2%):	\$13,322.75
Construction Administration (6%):	\$39,968.25
Total:	\$759,396.75

SEGMENT B - Tarentum Borough

Construction Cost:	\$292,500.00
Contingency (15%):	\$43,875.00
Engineering (6%):	\$20,182.50
Permitting (2%):	\$6,727.50
Construction Administration (6%):	\$20,182.50
Total:	\$383,467.50

SEGMENT C - Tarentum Borough

Construction Cost:	\$129,000.00
Contingency (15%):	\$19,350.00
Engineering (6%):	\$8,901.00
Permitting (2%):	\$2,967.00
Construction Administration (6%):	\$8,901.00
Total:	\$169,119.00

SEGMENT D - Tarentum Borough

Construction Cost:	\$248,450.00
Contingency (15%):	\$37,267.50
Engineering (6%):	\$17,143.05
Permitting (2%):	\$5,714.35
Construction Administration (6%):	\$17,143.05
Total:	\$325,717.95

SEGMENT E - Tarentum Borough

Construction Cost:	\$283,275.00
Contingency (15%):	\$42,491.25
Engineering (6%):	\$19,545.98
Permitting (2%):	\$6,515.33
Construction Administration (6%):	\$19,545.98
Total:	\$371,373.53

Modifications at Pump House

Construction Cost:	\$234,500.00
Contingency (15%):	\$35,175.00
Engineering (6%):	\$16,180.50
Permitting (2%):	\$5,393.50
Construction Administration (6%):	\$16,180.50
Total:	\$307,429.50

Long Term (Trail + Modifications + Bridge)

Construction Cost:	\$2,416,137.50
Contingency (15%):	\$362,420.63
Engineering (6%):	\$166,713.49
Permitting (4%):	\$111,142.33
Construction Administration (6%):	\$166,713.49
Total:	\$3,223,127.43

SEGMENT F - Tarentum Borough

Construction Cost:	\$14,000.00
Contingency (15%):	\$2,100.00
Engineering (6%):	\$966.00
Permitting (2%):	\$322.00
Construction Administration (6%):	\$966.00
Total:	\$18,354.00

TOTAL **SHORT-TERM**
\$2,027,428.73

LONG-TERM
\$4,491,159.41

Estimate inflation %

EAST DEER TOWNSHIP COST ESTIMATE SUMMARY

SEGMENT F - East Deer Township

Construction Cost:	\$46,500.00
Contingency (15%):	\$6,975.00
Engineering (6%):	\$3,208.50
Permitting (2%):	\$1,069.50
Construction Administration (6%):	\$3,208.50
Total:	\$60,961.50

SEGMENT G - East Deer Township

Construction Cost:	\$378,175.00
Contingency (15%):	\$56,726.25
Engineering (6%):	\$26,094.08
Permitting (2%):	\$8,698.03
Construction Administration (6%):	\$26,094.08
Total:	\$495,787.43

SEGMENT H - East Deer Township

Construction Cost:	\$1,958,675.00
Contingency (15%):	\$293,801.25
Engineering (6%):	\$135,148.58
Permitting (4%):	\$90,099.05
Construction Administration (6%):	\$135,148.58
Total:	\$2,612,872.45

SEGMENT J - East Deer Township

Construction Cost:	\$478,550.00
Contingency (15%):	\$71,782.50
Engineering (6%):	\$33,019.95
Permitting (4%):	\$22,013.30
Construction Administration (6%):	\$33,019.95
Total:	\$638,385.70

SEGMENT K - East Deer Township

Construction Cost:	\$307,000.00
Contingency (15%):	\$46,050.00
Engineering (6%):	\$21,183.00
Permitting (2%):	\$7,061.00
Construction Administration (6%):	\$21,183.00
Total:	\$402,477.00

TOTAL

\$4,210,484.08

The detailed OPDC tables for each segment are available in the Appendix.

COST DISCUSSION

The OPDC has been broken down into portions for each segment described in the previous chapter of the report, allowing each segment to be bid separately. However, some costs (such as mobilization) become duplicative. Cost savings could be realized by constructing multiple segments at once.

The OPDC assumes that lighting will be included in all trail segments. However, the respective municipalities should decide which trail segments will be illuminated, if any.

to add per CM comment?

FUNDING

The list on the right provides a summary of Pennsylvania-based and national grant programs applicable to the Tarentum-East Deer Three Rivers Heritage Trail. The tables on the following pages provide more detailed descriptions and information about the listed grant programs, including general conditions and requirements.

Please note that these lists are not exhaustive. Over the span of time needed to implement a project, sometimes 10 to 15 years, additional funding sources may become available. Staying informed about the listed sources and seeking new opportunities could provide great benefits to the implementation of this segment of the Three Rivers Heritage Trail.

KEY POINTS REGARDING GRANT MATCHING

When a project utilizes federal money, the project may not be funded entirely with federal money. The rest of the project is funded with either state or local money. Also, state to state funds may be used to match each other. For example, a project could have \$1 million verified in funding. This funding could be broken down into the following:

PennDOT \$500,000

CFA \$250,000

DCNR \$250,000

In this case, the CFA and DCNR grants may be used to match the PennDOT grant. Typically, there is a logical order in which grants are applied for so that other grants can be used as leverage. This is dependent upon the match requirement. For example, PennDOT and CFA grants have lower local match levels, so they are at the top.

RELATED FUNDING OPPORTUNITIES

- Allegheny County Economic Development Active Allegheny Grant Program
- DCED (CFA) Greenways, Trails, and Recreation Program
- DCED (CFA) Multimodal Transportation Fund
- DCNR Community Conservation Partnership Program (C2P2)
- PennDOT Safe Routes to School Fund
- PennDOT Transportation Alternatives Program
- PennDOT Multimodal Transportation Fund
- SPC Multimodal Transportation Fund
- HUD Community Development Block Grant (CDBG)
- FHWA Surface Transportation Program
- FHWA Recreational Trails Program
- People For Bikes Community Grants Program
- AARP Community Challenge Grant
- LWCF Outdoor Recreation Legacy Partnership (ORLP)
- SPC and PennDOT Transportation Alternatives (TA) Set-Aside Program
- USDOT Community Multiscale Air Quality Modeling System (CMAQ) Program
- EPA Recreation Economy for Rural Communities
- Redevelopment Authority of Allegheny County (RAAC) Community Infrastructure and Tourism Fund (CITF)
- ARCTERYX Community Grant Program
- USDOT Reconnecting Communities
- PennDOT Automated Red-Light Enforcement (ARLE) Program
- DCED Municipal Assistance Program (MAP)
- DCED and CFA Local Share Account

Legend:

- M – Municipal
- N – Non-profit
- A – Authority
- F – For-profit

Footnotes/Comments:

1. CFA is administered through the PA DCED.
2. As per past experience with the developing PA DCNR, PA DEP and PA DCED grant applications, it is suggested that the owner groups contribute 10-20% from capital resources or general operating expenses to the overall project as a means of demonstrating support for the project.

Grant and Funding Source Details

Grant/Funding Source	Grant/Funding Source	General Scope/Improvement Work	Realistic Grant Ceiling	Grant/Funding		Application Timeframe	Who Can Be The Grantee
				State	Required Local		
Allegheny County Economic Development	Active Allegheny Grant Program	Develop community plans and design transportation projects that will, when implemented, provide bicycle and pedestrian connections to important local destinations and transportation systems and increase residents' opportunities for physical activity.	\$50,000			Varies	
DCED (CFA) ¹	Greenways, Trails and Recreation Program	Projects involving development, rehabilitation and improvements to public parks, recreation areas, greenways, trails, and river conservation	\$250,000	85%	15%	February 1 - May 31	M N A
DCED (CFA)	Multimodal Transportation Fund	Projects involving development, rehabilitation and enhancement of transportation assets to existing communities, streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets and transit-oriented development	\$100,000 - \$3,000,000	70%	30%	March 1 - July 31	M N A
DCNR	Community Conservation Partnership Program (C2P2)	Projects involving planning, acquisition and development of public parks, recreation areas, motorized/non-motorized trails, river conservation and access, and conservation of open space	\$200,000 - \$300,000	50%	50%	Annually, January to April	M N A
PennDOT	Safe Routes to School Fund	Projects involving pedestrian and cycling routes in communities	\$1,000,000	80%	20%	Rolling	M N A
PennDOT	Transportation Alternatives Program	Projects involving transportation alternatives (on-and-off road pedestrian and bicycle facilities, community improvement activities, trails that serve a transportation purpose, safe routes to school, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, and environmental mitigation)	\$1,000,000	80%	20%	Rolling	M N A
PennDOT	Multimodal Transportation Fund	Projects involving development, rehabilitation, and enhancement of transportation assets to existing communities, streetscape, lighting, sidewalk enhancement, pedestrian safety, connectivity of transportation assets and transit-oriented development	\$3,000,000	70%	30%	Rolling	M N A
SPC	Multimodal Transportation Fund	Projects involving economic growth, enhance livability and connectivity in communities throughout the region, and provide residents with sustainable and resilient transportation choices	\$1,000,000	80%	20%	Rolling	M N A
Community Development Block Grant (CDBG)	Planning	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. https://www.hud.gov/program_offices/spm/gmomgmt/grantsinfo	Request Amount varies State program max \$750,000 Loan \$500,000-\$140 million	Unknown	Unknown	Unknown	

Grant/Funding Source	Grant/Funding Source	General Scope/Improvement Work	Realistic Grant Ceiling	Grant/Funding		Application Timeframe	Who Can Be The Grantee
				State	Required Local		
Surface Transportation Program (STP)	Development/ Construction	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. https://www.fhwa.dot.gov/fastact/factsheets/stbgfs.cfm	Unknown	Unknown	Unknown	Unknown	
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.	Unknown	Unknown	Unknown	Unknown	
Recreational Trails Program (RTP)	Development	The Recreational Trails Program (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles. https://www.fhwa.dot.gov/environment/recreational_trails/	Up to 50 percent of the total project cost.	Unknown	Unknown	Unknown	Unknown
People for Bikes Community Grants Program	Development	People for Bikes is a national organization working to make bicycling better throughout the United States through programs and advocacy work. The PeopleForBikes Industry Community Grant Program provides funding for projects that make bicycling better in communities across the U.S. Since 1999, PeopleForBikes has awarded more than 400 grants to nonprofit organizations and local governments in all 50 states, the District of Columbia and Puerto Rico. Their investments total more than \$3.5 million and have leveraged \$775 million in public and private funding for bike-related projects nationwide. They accept funding requests up to \$10,000. https://www.peopleforbikes.org/grant-guidelines	\$10,000	Unknown	Unknown	Unknown	

Grant/Funding Source	Grant/Funding Source	General Scope/Improvement Work	Realistic Grant Ceiling	Grant/Funding		Application Timeframe	Who Can Be The Grantee
				State	Required Local		
2023 AARP Community Challenge Grant		<p>Examples given on the call: Benches, murals, transportation access training, bike fix it stations, bike racks, crosswalk improvements, bike lanes, garden beds, sculpture/art installed.</p> <p>Selected projects are able to create vibrant public space, provide a range of transportation and mobility options, support a range of housing options, focus on diversity, equity, and inclusion, increase civic engagement, and support other community improvements</p> <p>No match requirement</p> <p>https://www.aarp.org/livable-communities/community-challenge/</p>	\$10,000	Unknown	Unknown	Unknown	
Outdoor Recreation Legacy Partnership (ORLP)	Land and Water Conservation Fund (LWCF)	Projects funded through the LWCF Program must be identified in or further a specific goal of the PA Statewide Comprehensive Outdoor Recreation Plan. Eligible project types include land acquisition or development.	\$500,000 - \$5,000,000	0.5	0.5	Varies	Municipalities, municipal agencies, counties, state agencies and school districts.
SPC and PennDOT Transportation Alternatives Set-Aside Program	Development/ Construction	The Transportation Alternatives Set-Aside (TA) Program provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities; infrastructure projects for improving nondriver access to public transportation and enhanced mobility; environmental mitigation; recreational trail program projects; and, safe routes to school projects. Key criterion in the review of applications will be readiness for implementation and delivery, safety, consistency with local or regional plans; collaboration with stakeholders; and, statewide or regional significance.	There is no match requirement; however, local sponsors pay all costs for pre-construction activities (design, environmental clearance, right of way, utilities, etc.) and PennDOT provides 100% cost reimbursement for the construction phase (including construction inspection).	0%	0%	Aug 16, 2021	Local governments; Regional transportation authorities; Transit agencies; Natural resource or public land agencies, including federal agencies; School districts, local education agencies, or schools; Tribal governments; A nonprofit entity responsible for the administration of local transportation safety programs; Any other governmental entity with responsibility for oversight of transportation or recreational trails
Community Multiscale Air Quality Modeling System (CMAQ) Program	US Dept of Transportation	Traffic flow and signal improvements, transportation demand management, transit improvements and programs, commuter bicycle and pedestrian improvements, and diesel emission reductions.	20% match of total project cost (by phase) from local, state, or other non-federal sources	0	0	Open Aug 23, 2021 and closes Sept 24, 2021	Any qualified government entity, including local governments, regional transit agencies, port authorities, and state agencies, is eligible to apply for CMAQ funding. Non-profits and private sector entities may partner with an eligible applicant to apply for CMAQ funding.
Recreation Economy for Rural Communities	EPA, USDA, Northern Border Regional Commission	<p>Connections opportunities related to outdoor opportunities, develop or expand trail networks, in-town amenities like electric vehicle charging, community consensus of management of outdoor assets.</p> <p>https://www.epa.gov/smartgrowth/recreation-economy-rural-communities#Apply</p>	Unknown	Unknown	Unknown	Late 2021/Early 2022	M

Grant/Funding Source	Grant/Funding Source	General Scope/Improvement Work	Realistic Grant Ceiling	Grant/Funding		Application Timeframe	Who Can Be The Grantee
				State	Required Local		
Redevelopment Authority of Allegheny County (RAAC)	Community Infrastructure and Tourism Fund (CITF)	Planning, design, and construction of infrastructure improvements and facilities. (Economic development, Infrastructure development, Job training, Community improvement, public safety, and/or public interest) https://www.alleghenycounty.us/economic-development/authorities/citf-grant.aspx	No match is required: \$100,000 - \$250,000	Unknown	Unknown	Annually, February	M N A F
ARCTERYX	Community Grant Program	The Arc'teryx Community Grant Program will be open to local, grassroots individuals & organizations actively working to increase access for people who have traditionally been excluded from the outdoors. To support this work we will provide grants of up to 5,000 AUD, CAD, GBP, or USD, dependent on your location.	Unknown	Unknown	Unknown		
USDOT	Reconnecting Communities	Funding supports planning grants and capital construction grants, as well as technical assistance, to restore community connectivity through the removal, retrofit, mitigation, or replacement of eligible transportation infrastructure facilities. Preference will be given to applications from economically disadvantaged communities, especially those with projects that are focused on equity and environmental justice, have strong community engagement and stewardship, and a commitment to shared prosperity and equitable development. https://www.transportation.gov/grants/reconnecting-communities	Planning Grants: \$100,000 - \$2 million Capital Construction Grants: \$5 - \$100 million	20% - may include state, local, philanthropic, or private sources		Applications due Oct 13, 2022 and awards announced in early 2023	States Local and Tribal governments Metropolitan planning organizations Nonprofit organizations Other transportation facility owners
PennDOT	Automated Red-Light Enforcement (ARLE) Program	Funded by revenue from automated red light enforcement. Grant funding through the ARLE Funding Program may be utilized for a range of safety and mobility projects located in Pennsylvania. It is the intent of the ARLE Funding Program to fund worthwhile projects that can be completed at a relatively low cost. Projects improving multiple transportation modes are encouraged. (Roadway upgrades, Bicycle and Ped. improvements, traffic signal improvements) https://www.dot.state.pa.us/public/Bureaus/BOMO/Portal/ARLE_Info.pdf	"Worthwhile projects that can be completed at a relatively low cost."	0%	0	Application period is typically in June	M A?
DCED	Municipal Assistance Program (MAP)	Provides funding to assist local governments to plan for and efficiently implement a variety of services and improvements, and soundly manage development with an emphasis on intergovernmental approaches. Funding is available for two groups of activities: shared services, and community planning. https://dced.pa.gov/programs/municipal-assistance-program-map/	Up to 50 percent of the total project cost	25%	At least 25% from non-state sources	Applications can be submitted at any time	M
DCED and CFA	Local Share Account	The PA Race Horse Development and Gaming Act (Act 2004-71), as amended, provides for the distribution of gaming revenues through the Commonwealth Financing Authority (CFA) to support projects in the public interest within the Commonwealth of Pennsylvania. Projects in the public interest. Projects that improve the quality of life of citizens in the community. Eligible projects must be owned and maintained by an eligible applicant or a nonprofit organization. https://dced.pa.gov/programs/local-share-account-lsa-statewide/	\$25,000 - \$1,000,000	0%	0	Applications typically received from January to March	M A?

IMPLEMENTATION

OVERVIEW

The Tarentum-East Deer Three Rivers Heritage Trail will likely be implemented using a combination of public and philanthropic grants, other public monies, and potentially private contributions. Because funding is generated through multiple sources, it is expected that it will take several years to complete. As such, the trail is likely to be constructed in phases, each made up of one or more segments. The following Implementation Summary identifies the necessary steps towards implementation and suggests an anticipated time frame for completion of each step, based on four factors that impact development: property ownership, the scale of investment and associated fundraising efforts, the complexity of the proposed improvements, and the potential for immediate implementation. Through the consideration of these factors, the Anticipated Timeframe suggests when each task should be targeted for completion, with the assumption that Year 1 is 2023.

PROPERTY OWNERSHIP

Property ownership has a major influence on trail implementation. For example, trail segments on properties owned by the Borough or Township do not involve the same coordination and access agreements as segments on private property. Coordination with quasi-public or private entities, such as the Fish and Boat Commission, Norfolk Southern Railroad, Pittsburgh Brewing Company, and others requires involvement and official agreements from all involved parties.

SCALE OF INVESTMENT

The scale of investment also affects the implementation timeline for each segment because a simpler segment, such as painted sharrows, requires less significant fundraising efforts than segments that include new paving or a pedestrian bridge. Grant and budgeting cycles also influence the implementation timeline, particularly when several grants or significant budgeting efforts are necessary.

COMPLEXITY OF PROPOSED IMPROVEMENTS

Similarly, more complex trail segments are likely to require additional coordination and be more costly, thus increasing the time needed for each of these actions to be completed. More complex projects may include permits, additional design and engineering work, coordination with property owners or other stakeholders, and similar considerations.

POTENTIAL FOR IMMEDIATE IMPLEMENTATION

Finally, some segments, such as those with on-road sharrows, are identified for short-term improvements because they present an opportunity to be completed quickly and with relatively small investments or capital outlays. Such segments could be implemented almost immediately and advance the completion of the Three Rivers Heritage Trail while other, more complex segments are being pursued.

TAKEAWAYS

The evaluation of the four factors shapes the time frames shown in the Implementation Summary. The recommended trail alignment is divided into segments that reflect similar considerations for property ownership and trail type and complexity. However, as noted in the Costs and Funding Section, there may be cost savings associated with constructing multiple segments at one time.

Several trail segments, such as Segments G, H, and J, are relatively simple to develop but have been identified for mid-term implementation due to their needs for additional funding or coordination. Others, such as Segments C and D, present opportunities to be implemented nearly immediately due to the lower levels of funding and coordination required. Generally, the East Deer portion of the trail will likely take longer to complete because the property ownership for this portion is more complex than the Tarentum portion. However, continued coordination and pursuit of funding opportunities will ensure that the Three Rivers Heritage Trail becomes a community asset for Tarentum and East Deer over the next several years.

Tarentum Borough

	Tasks	Anticipated Time Frame
Tarentum Borough	Segment A	
	1 Coordinate with Tarentum Borough Water Department for the relocation of the Tarentum Pumphouse equipment	Years 1-2
	2 Secure funding sources for short-term improvements; all funding should be fully accrued by this time	Years 1-3
	3 Relocate the Tarentum Pumphouse equipment	Years 3-5
	4 Construct trail through the Dreshar Stadium site (Segment A)	Years 4-5
	5 Secure additional funding for the pedestrian bridge; all funding should be fully accrued by this time	Years 5-10
	6 Obtain permits for constructing the pedestrian bridge over the Tarentum Pumphouse inlet	Years 7-10
	7 Construct pedestrian bridge across the Tarentum Pumphouse inlet	Years 7-10
	Segment B	
	1 Coordinate with Tarentum Borough Public Works Department regarding relocation of play equipment and adjustments to fences, light poles, and other site amenities for proposed trail alignment	Years 1-2
	2 Determine long-term conditions of boat dock access leases at Tarentum Riverview Memorial Park	Years 1-3
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Construct trail through Tarentum Riverview Memorial Park (Segment B)	Years 4-5
	Segment C	
	1 Coordinate with Tarentum Borough for needed permits or approvals for East 1st Avenue sharrows	Year 1
	2 Coordinate with PA Fish and Boat Commission for parking lot entrance traffic control improvements	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Construct trail along East 1st Avenue (Segment C)	Year 3
	Segment D	
	1 Coordinate with Tarentum Borough for needed permits or approvals for the West 4th Avenue cycletrack	Year 1
	2 Coordinate with PA Fish and Boat Commission for the route through the boat launch parking lot and access road	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Construct trail along West 4th Avenue (Segment D)	Year 3
	Segment E	
	1 Coordinate with Tarentum Borough for needed permits or approvals for West 6th Avenue sharrows	Year 1
	2 Develop agreement with Norfolk Southern for the construction of trail on the Borough-leased property at the West 6th Avenue parklet	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Construct trail along West 6th Avenue (Segment E)	Years 4-5

Tarentum Borough and East Deer Township

	Tasks	Anticipated Time Frame
Tarentum Borough & East Deer Township	Segment F	
	1 Coordinate with Tarentum Borough and East Deer Township for needed permits or approvals for Grantham Street sharrows	Year 1
	2 Coordinate with property owners at Weleski Transfer facility for Treadway Lane trail connection	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Construct trail along Treadway Lane (Segment F)	Years 4-5

East Deer Township

East Deer Township	Segment G	
	1 Coordinate with Pittsburgh Brewing Company regarding trail alignment integrated into final site design	Years 1-2
	2 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	3 Construct trail through northern Pittsburgh Brewing Company site (Segment G)	Years 4-5
	Segment H	
	1 Coordinate with Pittsburgh Brewing Company for trail alignment integrated into final site design for the southern parking lot area	Years 1-2
	2 Coordinate with Peoples Gas for the trail connection at the back of the site	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-4
	4 Obtain permits for constructing pedestrian bridge over Bailey Run	Years 3-5
	5 Construct trail from Ferry Street to East Deer Recreational Facility (Segment H)	Years 4-5
	Segment J	
	1 Coordinate with East Deer Township Public Works for trail alignment through East Deer Recreational Facility	Year 1
	2 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-4
	3 Obtain permits for improving pedestrian crossing over Crawford Run	Years 3-5
	4 Construct trail through East Deer Recreational Facility (Segment J)	Years 4-5
	Segment K	
	1 Complete Freeport Road Traffic Study (currently in progress)	Years 1-2
	2 Coordinate with PennDOT regarding method of trail connection along Freeport Road	Years 1-2
	3 Secure funding sources for trail construction; all funding should be fully accrued by this time	Years 1-3
	4 Obtain permits or approvals from PennDOT for trail installation on Freeport Road	Years 3-5
5 Construct trail along Freeport Road (Segment K)	Years 4-5	



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