Prepared for: The City of Pittsburgh
Department of Mobility & Infrastructure

NEVILLE STREET/ BOUNDARY STREET

ALTERNATIVES ANALYSIS & FEASIBLITY STUDY

Fifth Avenue to Junction Hollow Trail

City of Pittsburgh,
Allegheny County

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TPD PROJECT NO. COPI.0044
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FUNDING STATEMENT

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EXECUTIVE SUMMARY

Project Overview

South Neville Street / Boundary Street is a critical multimodal connection between Fifth Avenue in Oakland and the Junction Hollow Trail, a key segment of the Three Rivers Heritage Trail system. The corridor serves residents, students, commuters, pedestrians, cyclists, and motorists, but currently lacks adequate infrastructure to safely accommodate all users. The roadway is constrained by steep topography, limited right of way, adjacent institutional development, utilities, and a skewed at grade railroad crossing.

The City of Pittsburgh, Department of Mobility and Infrastructure (DOMI), completed this feasibility study to identify practical, cost effective improvements that enhance safety, connectivity, and comfort for pedestrians and cyclists while maintaining acceptable traffic operations.

Process and Engagement

The study was conducted through a phased planning process that included:

- Existing conditions and traffic analysis
- Community and stakeholder engagement
- Development and evaluation of design alternatives

Public outreach occurred throughout 2025 and included surveys, a corridor walkthrough, a public meeting, and a preferred alternative survey. Feedback from residents, institutions, advocacy groups, and corridor users directly informed the evaluation and recommendations.

Study Goals

Pittsburgh's mobility goals prioritize safety, access, affordability, and community values to support economic opportunity for every household. Consistent with Pittsburgh's goals, this study was specifically guided by the following objectives:

- Improve pedestrian safety and close gaps in the pedestrian network
- Provide comfortable, well connected bicycle and micromobility facilities
- Incorporate traffic calming to support appropriate vehicle speeds
- Balance multimodal needs within significant physical and right of way constraints

Existing Conditions and Constraints

Key challenges identified along the corridor include:

- Narrow and variable right of way (approximately 45–65 feet)
- Steep grades and retaining wall requirements
- Skewed CSX railroad crossing that presents safety risks for cyclists
- Limited or missing pedestrian and bicycle facilities
- Utility conflicts and adjacent institutional development
- Environmental justice census tracts between Fifth Avenue and Forbes Avenue

Traffic volumes are moderate, and speed data indicate that existing traffic calming is generally effective, though safety concerns for vulnerable users remain.

Alternatives Development

For evaluation purposes, the corridor was divided into three segments:

SEGMENT 1: FIFTH AVENUE TO CSX RAILROAD

- Recommended improvement: northbound uphill bicycle climbing lane
- Parking impacts addressed through modifications to Residential Permit Parking Area Q

SEGMENT 2: CSX RAILROAD TO JONCAIRE STREET

Two buildable alternatives were evaluated:

- Alternative 1 – Shared Use Path: Two way shared use path on the east side of the roadway, providing full separation from traffic in a compact footprint
- Alternative 2 – Climbing Lane: Uphill bicycle climbing lane with widened downhill sidewalk

A previously proposed off street alignment was determined to be infeasible due to physical constraints.

SEGMENT 3: JONCAIRE STREET TO JUNCTION HOLLOW TRAIL

- Recommended improvement: bicycle boulevard with traffic calming to maintain low vehicle speeds to allow safe multimodal accommodations

Community Feedback and Evaluation

Public input showed strong interest in both Segment 2 alternatives. The project team evaluated the options using five criteria: safety, intuitiveness, capacity, maintainability, and construction cost. While safety and user experience were closely matched, clear differences emerged in long term maintenance and cost.

Recommended Improvements

Based on technical analysis and community input, DOMI recommends:

- Modifying the lane arragement of Fifth Avenue and Neville Street to improve safety and multimodal connectivity by enhancing the bike connections and allowing for the extension of the PRT's Bus Rapid Transit route
- Advancing the northbound climbing lane in Segment 1 with parking mitigation measures
- Selecting Segment 2 – Alternative 1 (Shared Use Path) as the preferred alternative due to its narrower footprint, reduced utility and retaining wall impacts, lower construction cost, and improved maintainability
- Designating Segment 3 as a bicycle boulevard with targeted traffic calming

These recommendations advance a safe, people-centered, and cost-conscious mobility system

Implementation and Cost

To support phased funding and implementation, the corridor has been divided into three standalone projects:

- Junction Hollow Trailhead to CMU Crosswalk: approximately $3.7 to $5.4 million
- CMU Crosswalk to Fifth Avenue: approximately $1.5 - $2 million
- Fifth Avenue intersection improvements: approximately $1.2 million

Each project can be advanced independently while still providing meaningful safety and connectivity benefits.

INTRODUCTION

In this section:

Overview and Study Goals

Study Outcomes

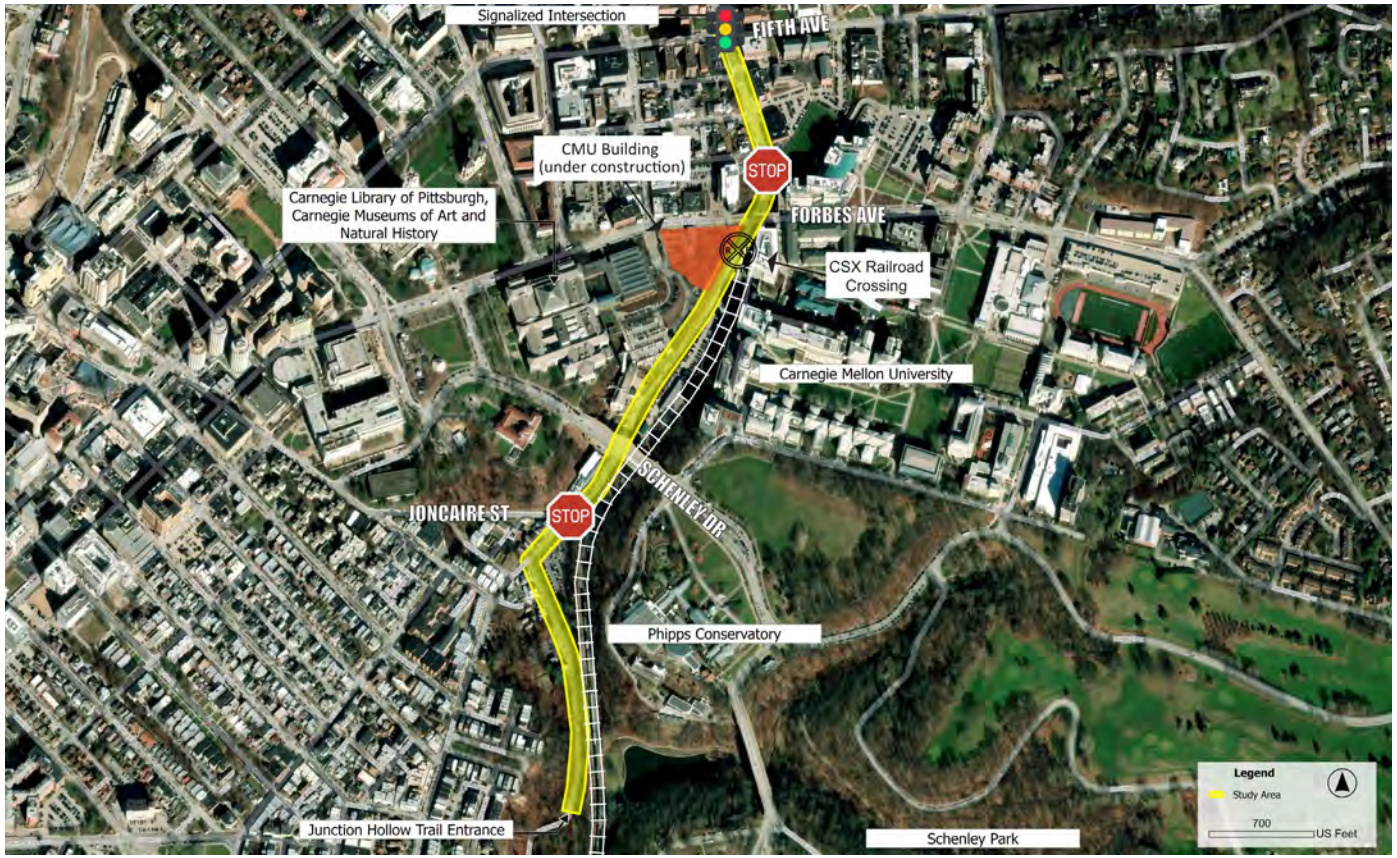
Process and Schedule

Overview and Study Goals

South Neville Street / Boundary Street is a vital connection in Pittsburgh's Oakland neighborhood. At its northern end, South Neville Street meets Fifth Avenue at a signalized intersection. Heading south from Fifth Avenue, the street descends into a ravine with a narrow cartway and steep slopes, eventually reaching the Panther Hollow community. It is one of the few streets providing access to this area. At the southern end, the corridor connects directly to the Junction Hollow Trail, which offers pedestrian and cycling routes to Schenley Park and the Four Mile Run neighborhood. The Junction Hollow Trail is part of the Three Rivers Heritage Trail system, and South Neville Street / Boundary Street serves as a main entrance for Oakland and much of Pittsburgh's East End. See Figure 1 – Location Map. Map 1 in the appendix provides a more detailed view.

The corridor is a unique, mixed-use route serving vehicles, pedestrians, and cyclists. It passes Central Catholic High School, Carnegie Mellon University (CMU), residences, parking lots, and utility facilities. As a direct connection to the Junction Hollow Trail and nearby points of interest, it carries significant pedestrian, cyclist, and motorist traffic.

Figure 1 - Project Location Map



Surrounding Neighborhoods

Vehicles travel this corridor to move between Central Oakland and North Oakland (Joncaire Street and Fifth Avenue). It is a popular walking route for high school and university students and an important bicycle corridor for those traveling from Shadyside and Squirrel Hill through Oakland to the riverfront trail via Junction Hollow Trail. The project area includes the neighborhoods of Shadyside, North Oakland, Squirrel Hill North, and Central Oakland.

In the South Neville Street/Boundary Street Corridor, there are significant challenges for all modes of transportation. See figure 2 for the changing context through the study limits.

- Lack of adequate sidewalk/bicycle facilities
- The CSX tracks cross at grade and on a skew
- The CMU Gates Garage/ Hamerschlag Drive intersects Neville Street at a severe angle with a significant grade change.
- The roadway is narrow without separate bike and pedestrian facilities.

Considering the many users of the street, the goals for South Neville Street/ Boundary Street are:

Enhance pedestrian safety by extending the pedestrian network through the South Neville Street / Boundary Street corridor to provide a safe and comfortable connection through the corridor.

Provide well connected infrastructure for mobility device users to safely access the destinations along and near the corridor. The corridor sees some of the highest volumes of bicycle trips for an on-street facility in the city, mainly for recreational and commuting purposes. An improved facility could encourage more users to use a bicycle for travel rather than a personal vehicle.

Incorporate traffic calming measures into the corridor to ensure appropriate vehicular speeds for a safe multimodal experience.

This project was identified in The Oakland Plan and is of great interest to local groups, including the Oakland Planning and Development Corporation (OPDC) and Bike Pittsburgh, which teamed up in 2017 to study this corridor on a volunteer basis.

Figure 2 - Project Context

Adjacent Land Use:

50' R/W, 30' Travel way with Parking, Sidewalks

60'+ R/W, 20-22' Travel way

Institutional, Residential, Recreational

50-60' R/W, 20' Travel way with Parking, Sidewalks

A previous project, the Mon-Oakland Connector Project, included both on-street and off-street alternatives for bicycle and pedestrian improvements in this area. CMU has provided a partial path behind its South Neville Parking Lot, which could become an off-street trail connection if they extend it further south towards the Panther Hollow Parking Lot.

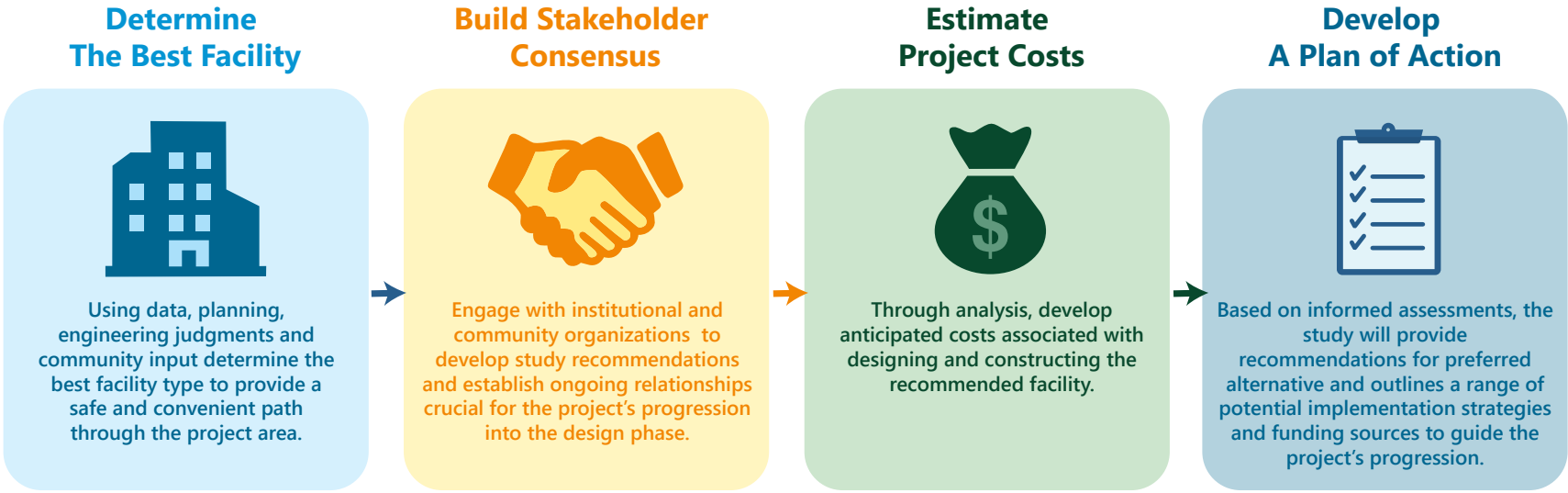
This feasibility study will evaluate the conditions as they currently are for the South Neville Street/ Boundary Street corridor from Fifth Avenue to the Junction Hollow Trail Head and develop recommendations for multimodal improvements for the length of the corridor.

There are significant challenges along this corridor in designing a safer bicycle/pedestrian facility, including:

- Limited ROW
- Topography
- CSX right-of-way and adjacent property ownership
- Drainage issues
- Competing stakeholder concerns
- On-street parking

Study Outcomes

This feasibility study will yield several specific outcomes, including:



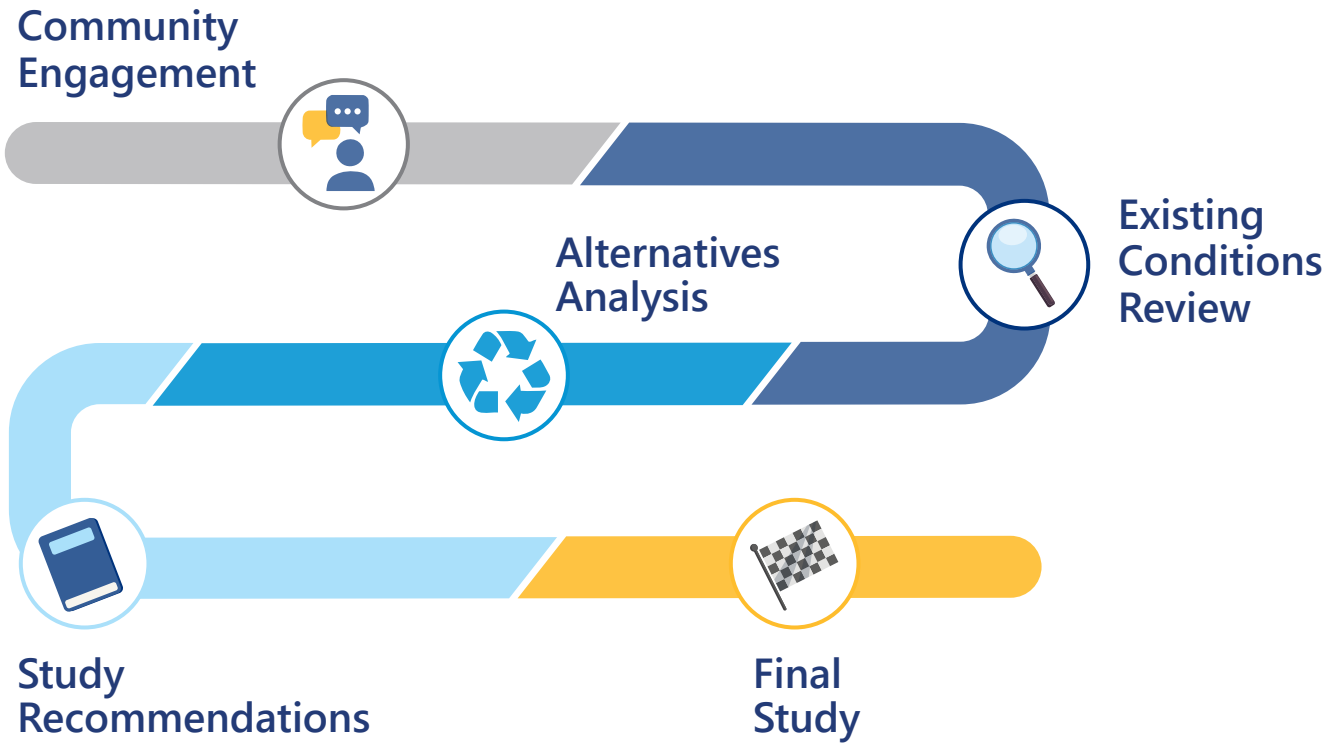
Process and Schedule

This project is built upon stakeholder engagement and an analysis of existing conditions, leading to the formulation of design alternatives and finally recommendations. The City began community engagement efforts in February of 2025 with the final plan recommendations projected for March 2026.

The process for conducting a multimodal feasibility study involves several key steps to assess the need and potential impact of implementing a transportation project.

Initially, the study began with the identification of a need through community and stakeholder input. An analysis of existing conditions occurred and the results identifying user characteristics and infrastructure deficiencies are shared with the stakeholders. Following this, an alternatives analysis took place which identified options and trade offs. The alternatives were again presented to the community to gather feedback and determine which alternative aligned with the community's needs and preferences within the constraints of the project. Study recommendations were formulated, and a final report, which includes project phasing, anticipated costs, right of way needs and potential avenues for implementation was developed.

This study process was divided into the following phases:



2 Study Considerations

In this section:

Planned and Programmed Projects

Natural Environment Considerations

Built Environment Considerations

Planned and Programmed Projects

The study area is within a dense urban neighborhood with a number of projects either underway or planned.

Currently under construction adjacent to the study area is the CMU Science Building. The Science Building will have a driveway and loading dock accessing Neville Street/ Boundary Street. The new building means new constraints for an improved Neville Street/ Boundary Street. The street elevation near the building will have to take into consideration the building elevation and the width of the roadway will need to fit between the existing CMU parking lot and the Science Building.

Pittsburgh Regional Transit is currently building the Oakland Phase of the BRT project. A future BRT phase includes extending the inbound bus lane to Neville Street for convenient access to the busway at North Neville Street. The future phase is not funded but is considered in the alternatives.

A Duquesne Light substation is located at the northwest corner of Boundary Street and Joncaire. Duquesne Light has been undertaking improvements to their facilities in the area including upgrades to the existing underground utility lines that began in 2025.

Natural Environment Considerations

PennDOT's One Map environmental screening map, DEP's eMapPA website, the PA Conservation Explorer website, the USFWS NWI Mapper, the PA-SHARE website, the NRCS Web Soil Survey were consulted to develop a list of potential environmental considerations.

FLOODPLAIN

Figure 3 shows the FEMA Flood Insurance Rate Maps (FIRM) Panels 354 and 362 of 558 Allegheny County, PA. The FIRM panels show the area is free of any mapped flood zones.

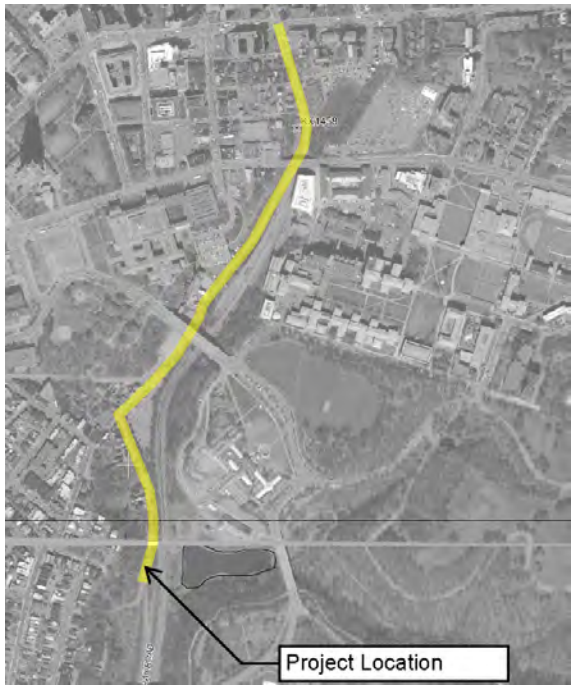
STREAMS AND RIVERS

No streams or scenic rivers are located within the project area.

WETLANDS

One wetland (PUBZ, pond feature) located in Schenley Park. The Pond is in Schenley Park beyond the limits of the project. There are no wetlands mapped on NWI mapper in area, and no hydric soils are present within the area.

Figure 3 - FEMA Flood Insurance Rate Map panels



TOPOGRAPHY

Neville Street/ Boundary Street occupies the hollow between residential and institutional land uses and the CSX railroad. Improvements in the corridor are likely to require retaining walls. Two bridges, Forbes Avenue Bridge & Schenley Park Bridge, cross over the hollow connecting the urban grid above. The Charles Anderson Bridge crosses the hollow south of the project limits and carries the Boulevard of the Allies over Panther Hollow.

THREATENED AND ENDANGERED SPECIES

Threatened and endangered species are reviewed using a buffer from the approximate Limits of Disturbance placed within the PNDI / IPAC system

Pennsylvania Game Commission notes that the area is a potential habitat for

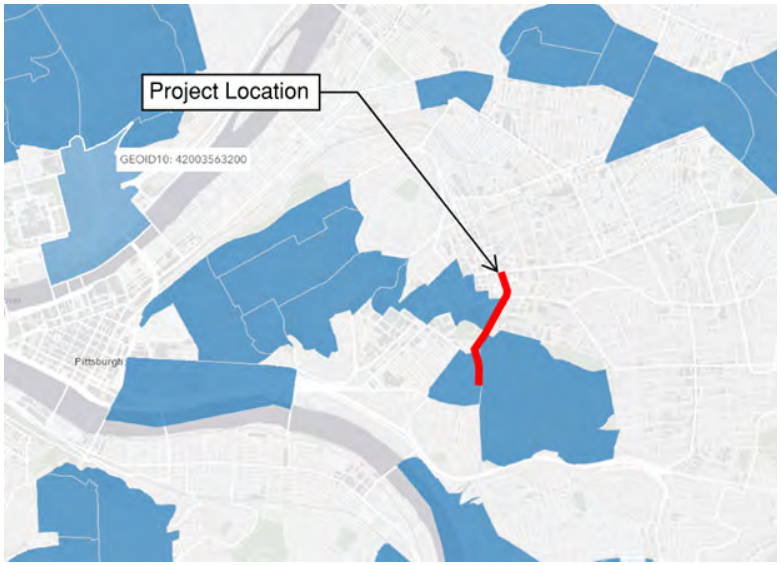
- PGC (Birds)
- Peregrine Falcon (Falco peregrinus)

United States Fish and Wildlife Service indicates

- USFWS (Bats) within Indiana Bat range
- IPAC result "No effect"

These resources will likely be cleared due to environmental conditions within the project area, but a formal assessment will be required during engineering.

Figure 4 - Justice 40 Census Tracts



ENVIRONMENTAL JUSTICE (EJ) AREAS

Between 5th Ave and Forbes Ave, along S Neville Street there is an environmental justice area for low-income populations at the 84th percentile. Figure 3 shows the limits of the EJ40 areas surrounding the project location.

Acknowledging and integrating EJ40 areas into the project directly advances the City's Mobility Principles by intentionally directing safety, access, and affordability benefits to communities that have experienced historic transportation inequities. By prioritizing investments such as traffic calming, multi-modal facilities, and safer street designs in EJ40 areas, where households are more likely to rely on walking, biking, and transit, the project reduces the risk of serious injury, improves access to daily needs without a private vehicle, and lowers household transportation cost burdens.

This approach ensures that short trips are safer and more comfortable to make without driving, that street design reflects community values of equity and inclusion, and that transportation investments most strongly support economic mobility for those who depend on them most, reinforcing the City's commitment to safe, people-centered mobility for all Pittsburghers.

Built Environment Considerations

The study area is in an urban area of Allegheny County. The built-up urban environment leads to the potential for numerous connections into the urban transportation network.

EXISTING TRANSPORTATION NETWORK

Figure 4 - City of Pittsburgh Bike Facilities, illustrates the existing and planned bike routes, both on and off street, in the study area and immediate vicinity.

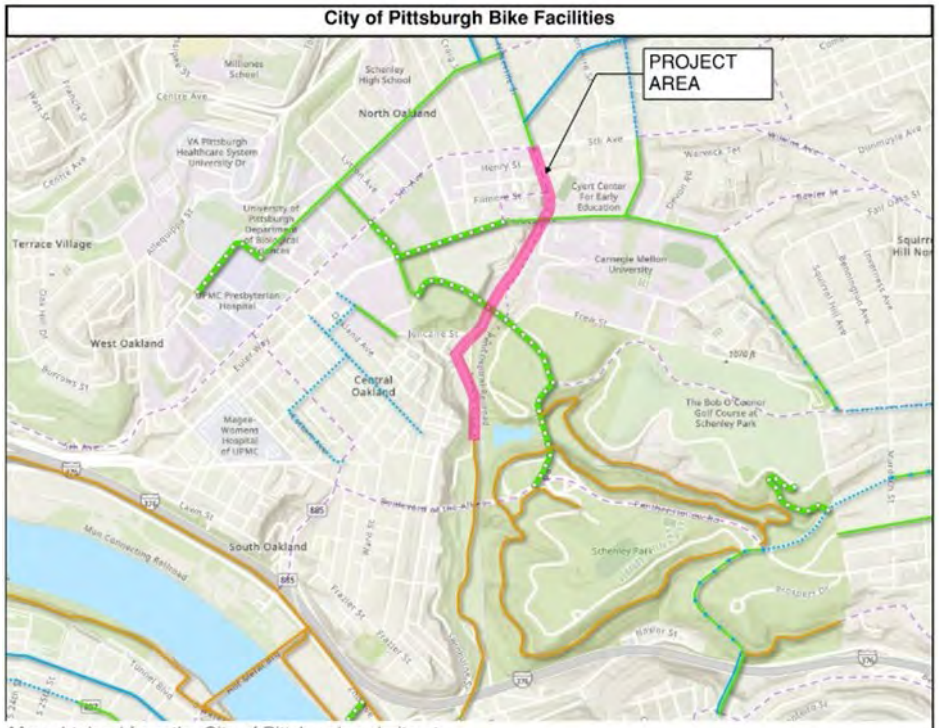
As shown on Figure 4, the proposed project will fill a gap in the existing bike network from Fifth Avenue to the Junction Hollow Trail.

UTILITIES

Electric

There are existing underground electrical lines on the east side of S. Neville Street / Boundary Street and cross over to the west side near the Shenley Park Bridge. Overhead lines run along the east side of S. Neville Street / Boundary Street on utility poles. At least 19 utility poles will need to be relocated as part of the proposed improvements.

Figure 5 - City of Pittsburgh Bike Facilities



Map obtained from the City of Pittsburgh website at: byhttps://pittsburghpa.maps.arcgis.com/apps/instant/interactivelegend/index.html?appid=b56a2a11f5a74f64948c3f214b207e50

Fiber Optic

According to records obtained from communications utilities, it appears that fiber is located along the railroad corridor and not the portion of Boundary Street from the railroad to Joncaire. Care must still be taken and further utility investigation will be required.

Electric lines along Neville Ave

Gas

Underground gas runs along the length of the project area on S. Neville Street / Boundary Street. It is mostly located under the roadway but deviates from the roadway near the Bellefield Boiler Plant.

Storm and Sanitary

Sewer / Storm manholes are present throughout the corridor. They will require adjustment or rebuilding to the final grade for the project. With the establishment of curb along S. Neville Street/ Boundary Street, it is anticipated that new inlets will be required for drainage.

Water

Water lines are in and along S. Neville Street / Boundary Street. Areas of significant grading will need to be further investigated during the project design phase to determine if relocating the utilities are necessary.

Steam

The Bellefield Boiler Plant serves nearby properties by providing steam for heat. Currently, an overhead steam line crosses S. Neville Street/ Boundary Street at the Bellefield Boiler Plant. The supports are adjacent to the roadway and will require relocation as part of the proposed project. It is anticipated that since they will need to be relocated, the steam line would be placed underground, which further protects it from damage from vehicle strikes or vandalism.

RIGHT OF WAY

Right of Way is variable along the roadway, between 45-65 feet. It is anticipated with any project through the corridor, that new Right of Way will be dedicated for the roadway and excess right of way will be vacated to the respective property owner.

RAILROAD

CSX Transportation owns a rail line that runs parallel to S. Neville Street/ Boundary Street. The line hosts the Amtrak routes from Pittsburgh to Washington DC. The railroad crosses the street at a shallow angle under the Forbes Avenue Bridge. Northbound from there, the railroad enters a tunnel and travels under the neighborhood. Potential improvements of the S. Neville/ Boundary Street corridor could result in impacts to the railroad, such as a relocation of the crossing equipment and widening of the railroad crossing.

The railroad creates unique challenges for bicyclists since the gap at the rail line can cause a tire to get stuck resulting in a crash. Additional guidance is recommended to encourage cyclists to cross the railroad at as close to 90 degrees as possible.

PARKS AND RECREATION LANDS

Park and recreational lands are in the immediate vicinity of the proposed corridor project. Schenley Park encompasses areas to the east of the railroad as well as the Carnegie Library and Schenley Plaza on the west side of Boundary Street. Also the Junction Hollow trail segment of the Three Rivers Heritage Trail is a recreational amenity. This project directly connects bicycle facilities to the Three Rivers Heritage Trail creating a more robust recreational opportunity.

Stormwater pooling near intersection

Overhead steam line

Bicycle path railroad crossing

Traffic Analysis Summary

A preliminary traffic analysis was completed to determine the feasibility of potential interventions along the corridor. One potential improvement under consideration is the reduction of travel lanes along Fifth Avenue. This would allow space for bus loading activities, extending the planned two way bike facility from Fifth Avenue at Craig to Fifth Avenue at S. Neville Street and shortening the pedestrian crossings across Fifth Avenue. The intersection of Neville Street / Boundary Street & Fifth Avenue was reviewed under both existing conditions and with a potential multi-modal improvement project on Fifth Avenue. The study assessed current performance, crash history, and the feasibility/effects of a multi-modal improvement project on Fifth Avenue.

Both volume and speed data were collected along the S. Neville Street/ Boundary Street Corridor to select the appropriate bicycle infrastructure for the corridor.

TRAFFIC DATA COLLECTION

Automatic Traffic Recorder (ATR) Counts were performed with results as shown in Table 1

Table 1: Count Data

Location	Data Collection	ADT (VPD)	Peak Hour	Timeframe	Peak Hour Volume
S Neville St between Henry St and Winthrop St	03/26/2025 12:00 AM to 03/29/2025 11:59 PM	3,628	AM	7:30 – 8:30 AM	343
			Midday	12:45 – 1:45 PM	258
			PM	4:15 – 5:15 PM	297
			SAT	1:00 – 2:00 PM	242
Boundary St near Bellefield Boiler Plant	03/26/2025 12:00 AM to 03/29/2025 5:00* PM	3,663	AM	7:30 – 8:30 AM	320
			Midday	1:00 – 2:00 PM	235
			PM	4:45 – 5:45 PM	399
			SAT	12:15 – 1:15 PM	258

**Counts only were collected until 5:00PM when an equipment failure occurred*

Speed data was also collected as shown in Table 2.

Table 2: Speed Data

Location	Data Collection	Speed Limit	Speed Percentile Data		
		MPH	50th	85th	95th
S Neville St between Henry St and Winthrop St	03/26/2025 12:00 AM to 03/29/2025 11:59 PM	25	21.0	25.4	27.9
Boundary St near Bellefield Boiler Plant	03/26/2025 12:00 AM to 03/29/2025 5:001 PM	25	17.3	21.6	24.8

Table 3 shows the proportion of each mode observed along the corridor. CMU deliveries are accepted at the Tepper Building loading docks and Hamerschlag Drive leading to truck deliveries. Notably a 3-4 percent bike mode share seeing 110-140 cyclists per day using the roadway indicates the route is a popular or necessary segment of the cycling network.

Table 3: ATR Vehicle Classification

Location	Data Collection	Percentage Vehicle Classification		ADT (VPD)
S Neville St between Henry St and Winthrop St	03/26/2025 12:00 AM to 03/29/2025 11:59 PM	Bikes	2.5%	91
		Passenger Car	94.2%	3,418
		Truck2 <40'	2.8%	102
		Truck >40'	0.5%	17
Boundary St near Bellefield Boiler Plant	03/26/2025 12:00 AM to 03/29/2025 5:00* PM	Bikes	3.2%	117
		Passenger Car	92.6%	3,372
		Truck** <40'	4.1%	150
		Truck >40'	0.1%	3

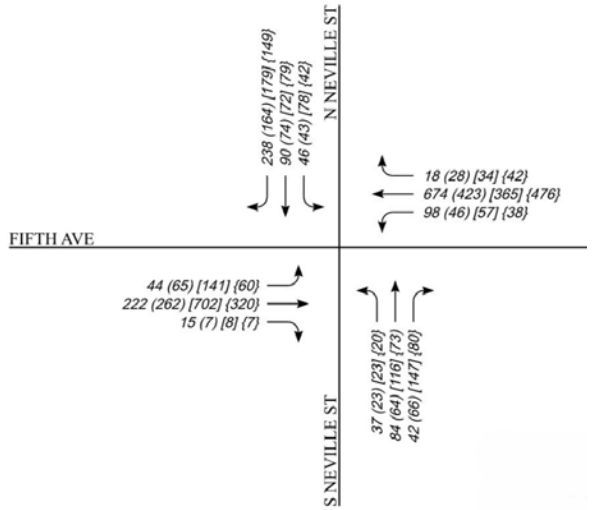
**Counts only were collected until 5:00PM when an equipment failure occurred*
*** Buses are also included in this category*

S. Neville Street/ Boundary Street currently includes traffic calming features such as speed humps along the portion of the roadway from the railroad to Joncaire Street. Although speeding remains a concern for vulnerable road users along Neville Street/ Boundary Street, the speed data shows that existing traffic calming interventions are working.

Turning movements were gathered in early 2025 and are presented in Figure 5 - Fifth Avenue at S. Neville Street Turning movement counts. In reviewing traffic operations under existing (2025) conditions, the intersection of Fifth Avenue at S. Neville Street was found to operate at an acceptable level of service across all studied periods.

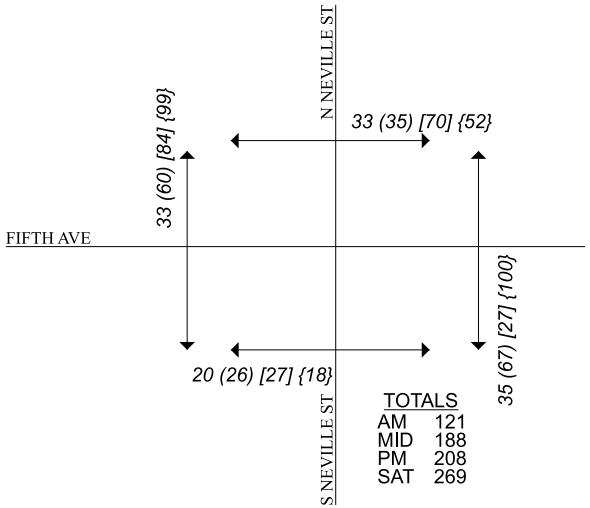
Under a Fifth Avenue multi-modal improvement project scenario, where Fifth Avenue is reduced to one through lane and one left turn lane in each direction, the intersection was again found

Figure 6 – Fifth Avenue at S. Neville Street Turning movement counts



2025 PEAK HOUR VOLUMES
AM (MID) [PM] {SAT}

Figure 7 – 2025 Pedestrian volumes



2025 PEAK HOUR PED VOLUMES
AM (MID) [PM] {SAT}

to operate at an acceptable level across all studied periods. However, the eastbound through/right movement experiences queue increases, with 95th percentile queues exceeding available storage during AM and PM peaks. As Pittsburgh Regional Transit (PRT) further develops their plans for the area, additional study will be needed to ensure traffic parameters including both LOS and queuing can maintain a safe and efficient network.

Based on the traffic study, a review of corridor crash patterns and community concerns, the corridor improvements should consider both operational performance and multimodal safety enhancements. The multi-modal improvement project allows for protected left turn movements and multi-modal enhancements including more sidewalk space at bus stop, a two way cycle track and shorter pedestrian crossings.

Further details of the traffic analysis can be found in the Traffic Memo dated January 2026.

A Summary of the delay and queuing analysis can be found in Tables 4-6

Table 4: Level of Service / Queue Summary AM Peak Hour

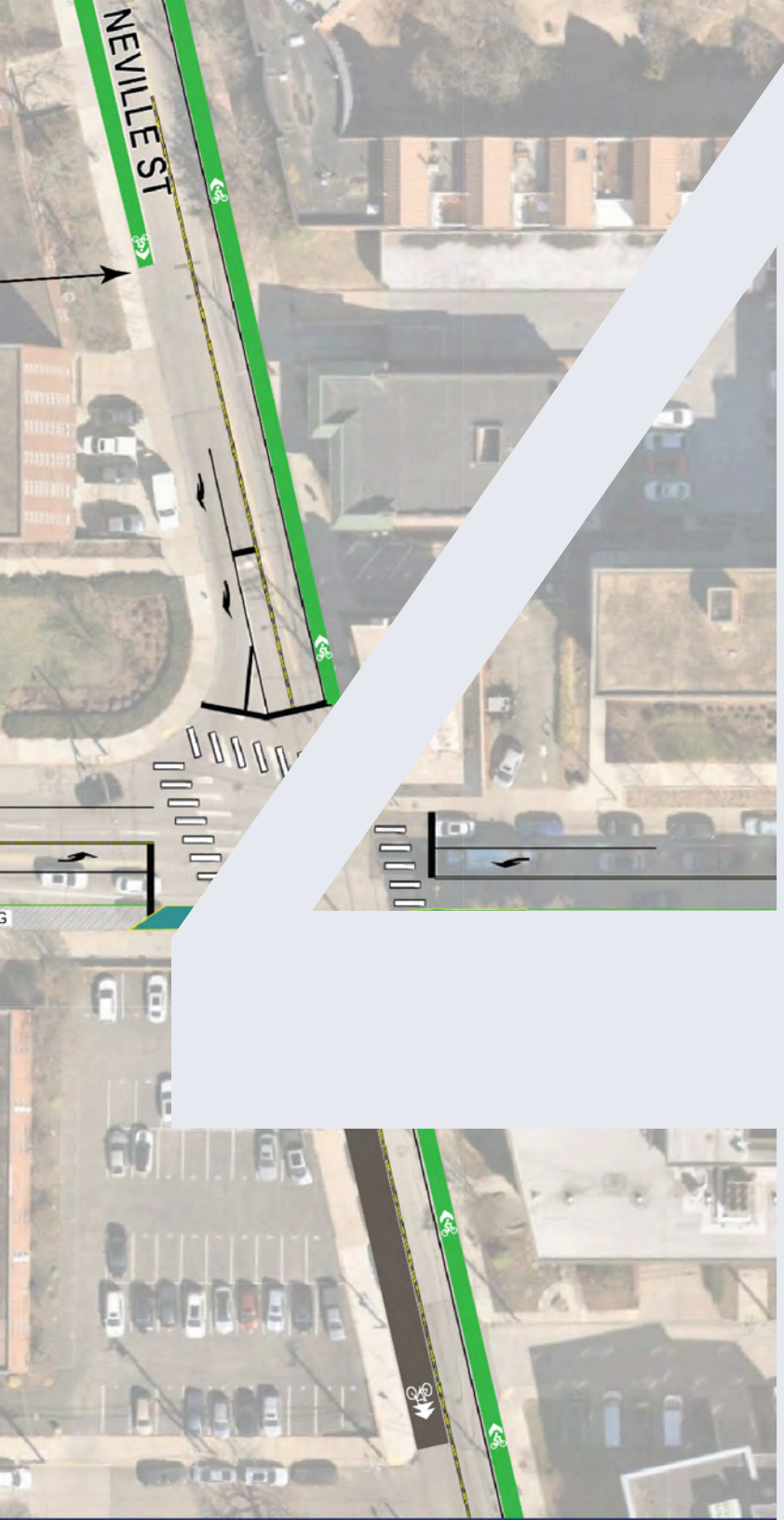
Intersection	Storage Length (ft)	Movement	2025 Existing Conditions			2025 Base w/Multi-Modal Improvement Project		
			Queue (ft)		Level of Service	Queue (ft)		Level of Service
			(Synchro 50th)	(Synchro 95th)		(Synchro 50th)	(Synchro 95th)	
Fifth Ave & Neville St	365	EB L	31	50	A	11	26	B
		EB T/R				66	109	
	465	WB L	169	274	C	35	71	C
		WB T/R				**391**	**642**	
	335	NB L/T/R	45	92	B	64	118	C
	280	SB L/T	45	90	B	61	111	B
	155	SB R	0	46		13	70	
	Intersection				C			C

Table 5: Level of Service / Queue Summary Midday Peak Hour

Intersection	Storage Length (ft)	Movement	2025 Existing Conditions			2025 Base w/Multi-Modal Improvement Project		
			Queue (ft)		Level of Service	Queue (ft)		Level of Service
			(Synchro 50th)	(Synchro 95th)		(Synchro 50th)	(Synchro 95th)	
Fifth Ave & Neville St	365	EB L	37	58	A	16	34	B
		EB T/R				75	121	
	465	WB L	87	131	B	15	37	C
		WB T/R				196	301	
	335	NB L/T/R	30	72	B	47	97	B
	280	SB L/T	37	76	B	50	95	B
	155	SB R	0	38		0	44	
	Intersection				B			B

Table 6: Level of Service / Queue Summary PM Peak Hour

Intersection	Storage Length (ft)	Movement	2025 Existing Conditions			2025 Base w/Multi-Modal Improvement Project		
			Queue (ft)		Level of Service	Queue (ft)		Level of Service
			(Synchro 50th)	(Synchro 95th)		(Synchro 50th)	(Synchro 95th)	
Fifth Ave & Neville St	365	EB L	127	171	B	39	70	B
		EB T/R				317	484	
	465	WB L	86	128	B	22	55	C
		WB T/R				180	279	
	335	NB L/T/R	105	191	C	116	203	C
	280	SB L/T	69	134	B	75	141	B
	155	SB R	0	46		0	46	
	Intersection				B			C



4 Alternatives Development

In this section:

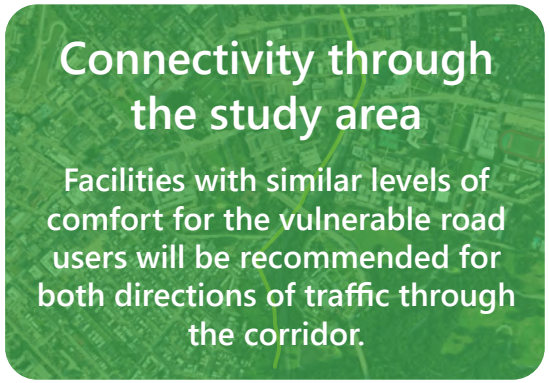
Design Contraints

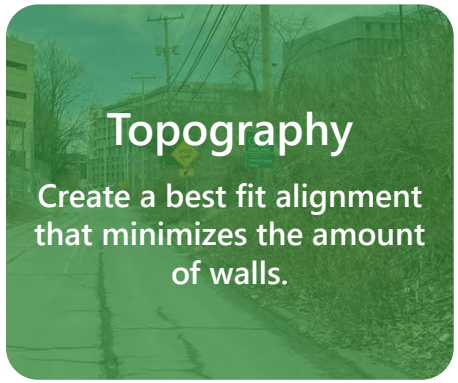
Alternatives Analysis

Design Constraints

Design criteria are the parameters that a project must operate to be successful; these shape the final recommendation. Based on project team and steering committee feedback, this project seeks to develop a multimodal design solution that connects Fifth Avenue to the Three Rivers Heritage Trail via the S. Neville Street/ Boundary Street Corridor.

To develop alternatives, the project team focused on the following design parameters:





Alternatives Analysis

FIFTH AVENUE / NEVILLE STREET INTERSECTION

Two alternatives were reviewed at the Fifth Avenue intersection with Neville Street:

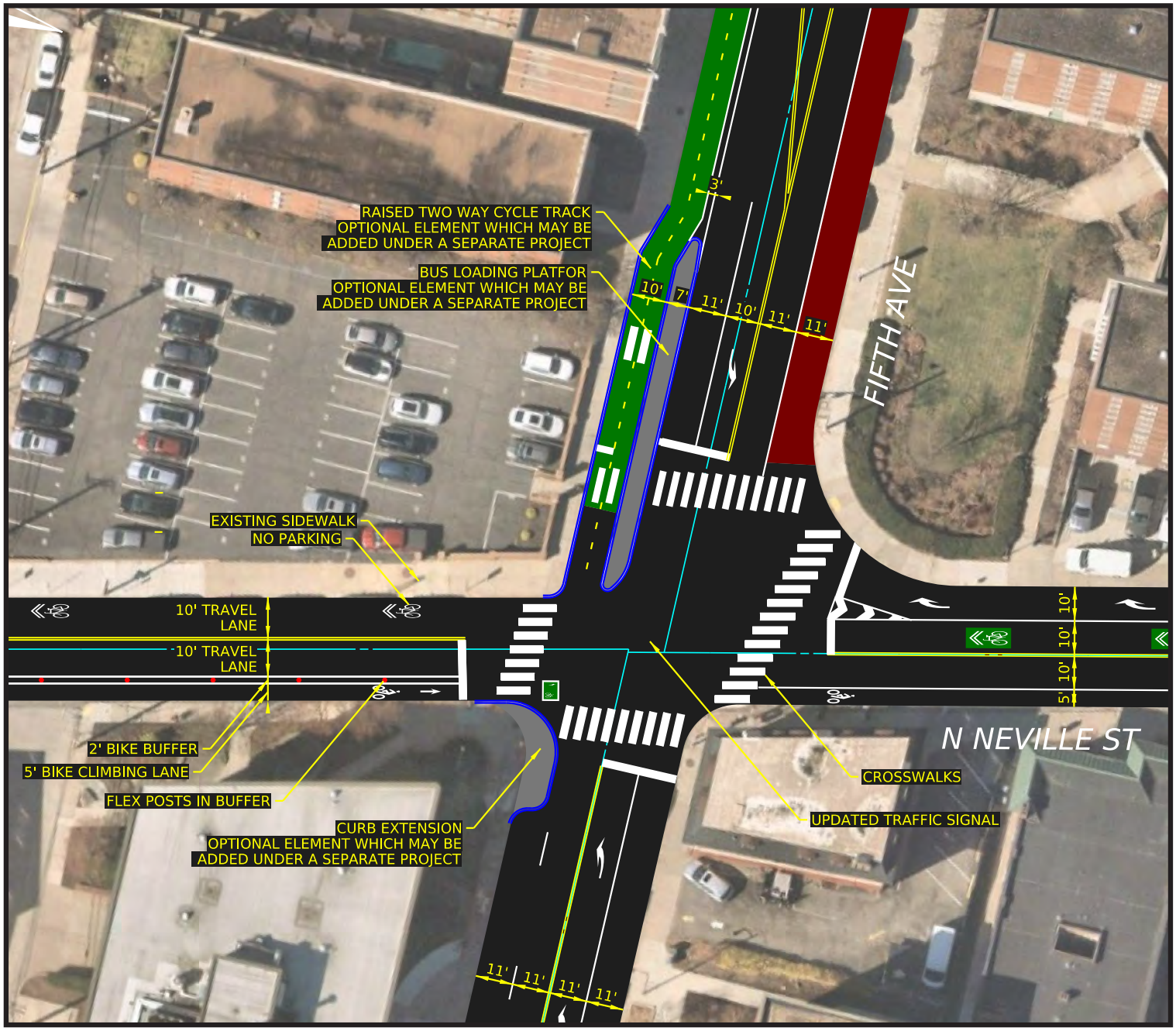
- Existing conditions
- Fifth Avenue multi-modal improvements

The existing conditions along Fifth Avenue include two travel lanes in each direction. The southern leg of S. Neville Street includes one 15-foot-wide travel lane in each direction. The northern leg of N. Neville Street includes two 11-foot-wide southbound lanes and one 14-foot-wide northbound lane. The intersection is signalized but lacks current amenities such as countdown and pedestrian signals, backplates on the signal heads and updated street lighting.

The Fifth Avenue multi-modal improvements, shown in Figure 8 on page 24, would be under a separate but complimentary project and would include the following:

- Upgrades to the traffic signal and the extension of the University Line from Dithridge Street to Neville Street. The BRT extension would include converting the existing parking along the north curb to a bus lane.
- Eastbound and westbound Fifth Avenue would include an exclusive left turn lane and a through/right travel lane.
- A two way cycle track from Oakland would terminate at the Neville Street intersection. The project vision for northbound Neville Street accommodates bicyclists in a climbing lane and turn box could be used to access the two way cycle track.
- Under future design phases of the project, additional analysis is needed to ensure the most appropriate bicycle connections are achieved for southbound cyclists.

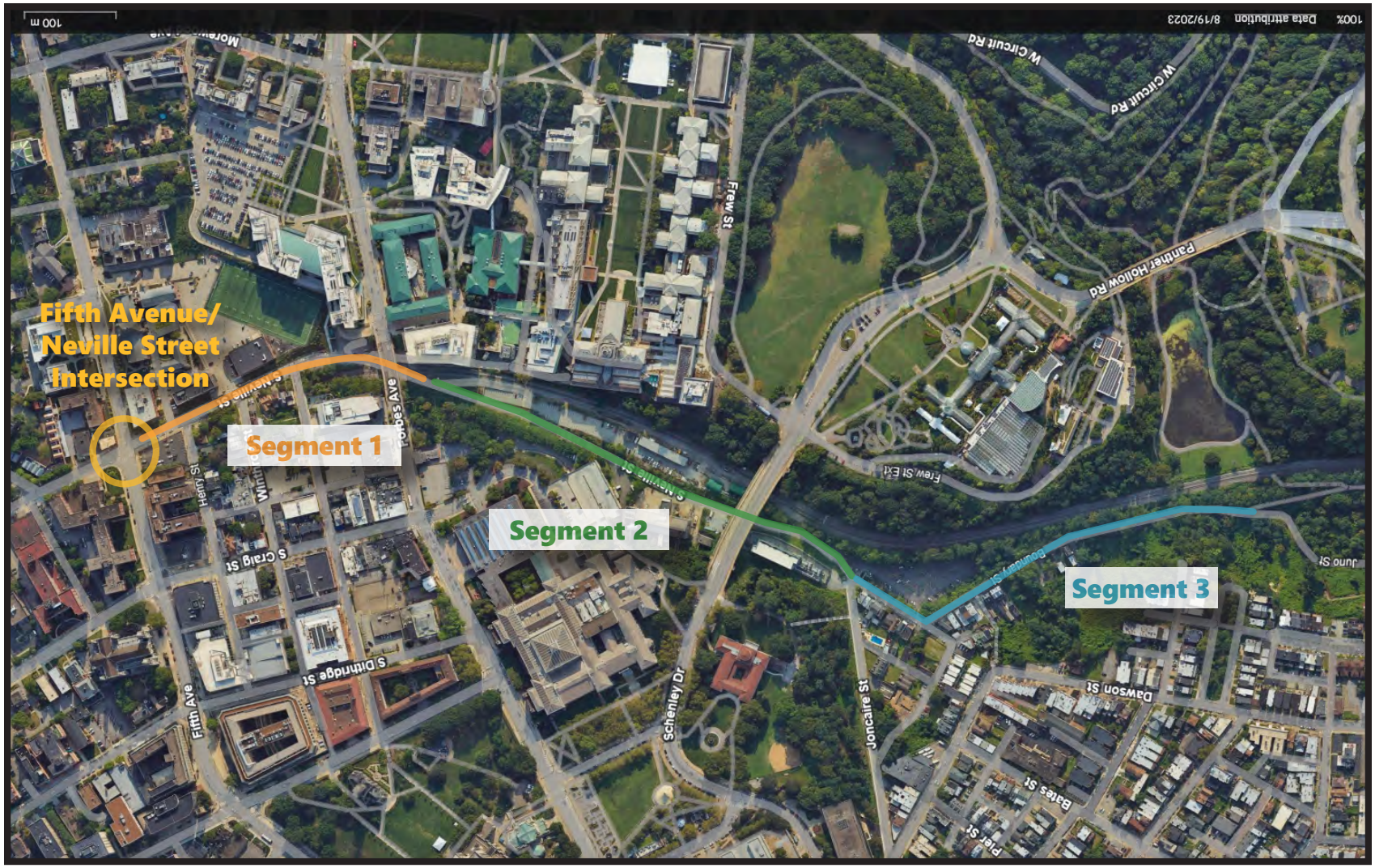
Figure 8 – Fifth Avenue at Neville Street



During development of the alternatives, the project area was divided into three segments that could have different treatments.

- Segment 1 extends from Fifth Avenue to the Carnegie Mellon University (CMU) RK Mellon Hall of Science raised crosswalk
- Segment 2 extends from Segment 1 south to Joncaire Street
- Segment 3 extends from Segment 2 south to Junction Hollow Trail

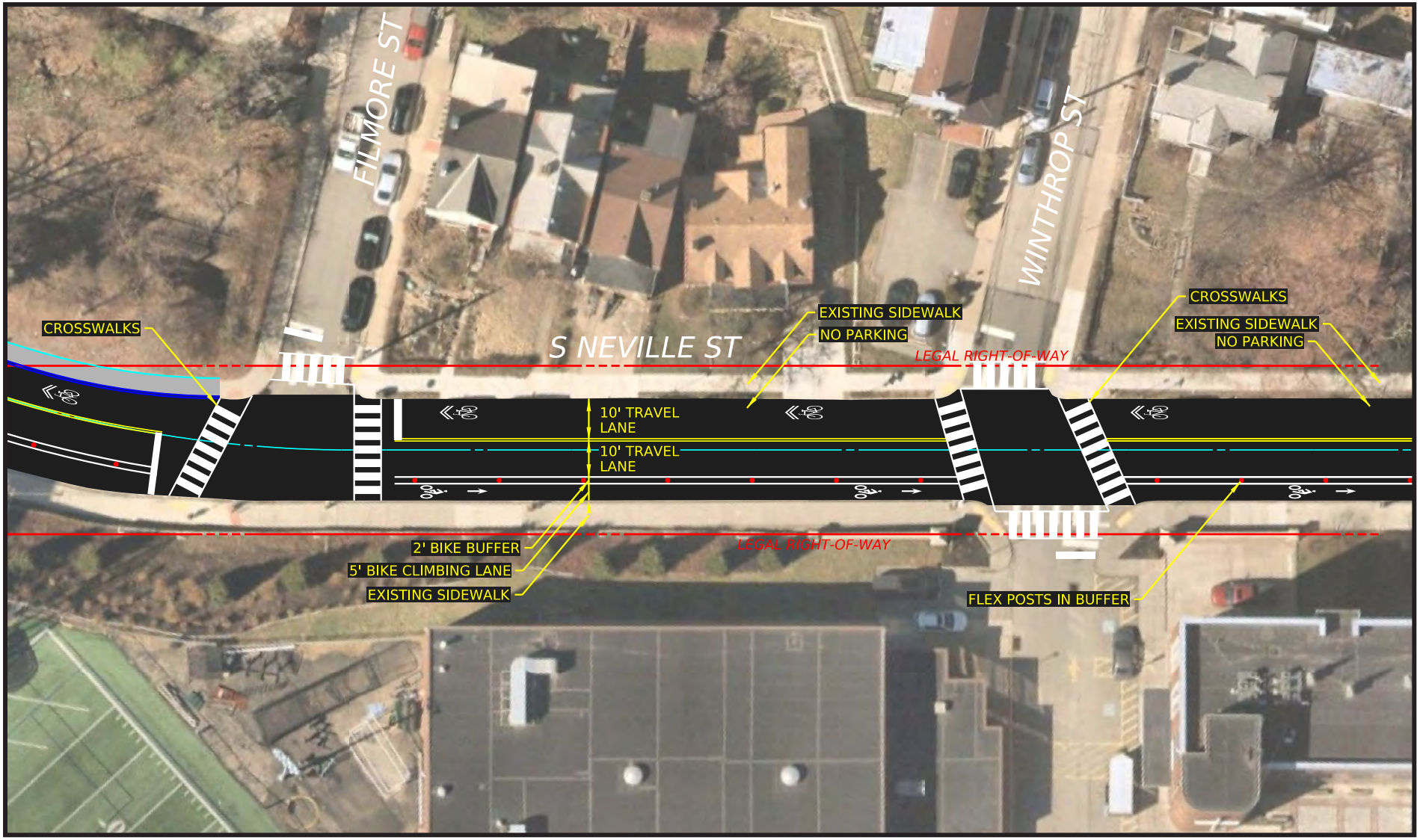
Figure 9 – Project Segments



SEGMENT 1

As noted, Segment 1 includes S. Neville Street/ Boundary Street from Fifth Avenue to the CSX railroad. One proposed alternative was developed for this segment. This segment of S. Neville Street/ Boundary Street is 30 feet wide. It currently includes one northbound lane, one southbound lane, and one southbound parking lane. The proposed alternative for this segment is to reallocate the parking space and create a northbound climbing lane while maintaining the existing cartway and right-of-way width. The proposed typical section is shown in Figure 11.

Figure 11 – Segment 1

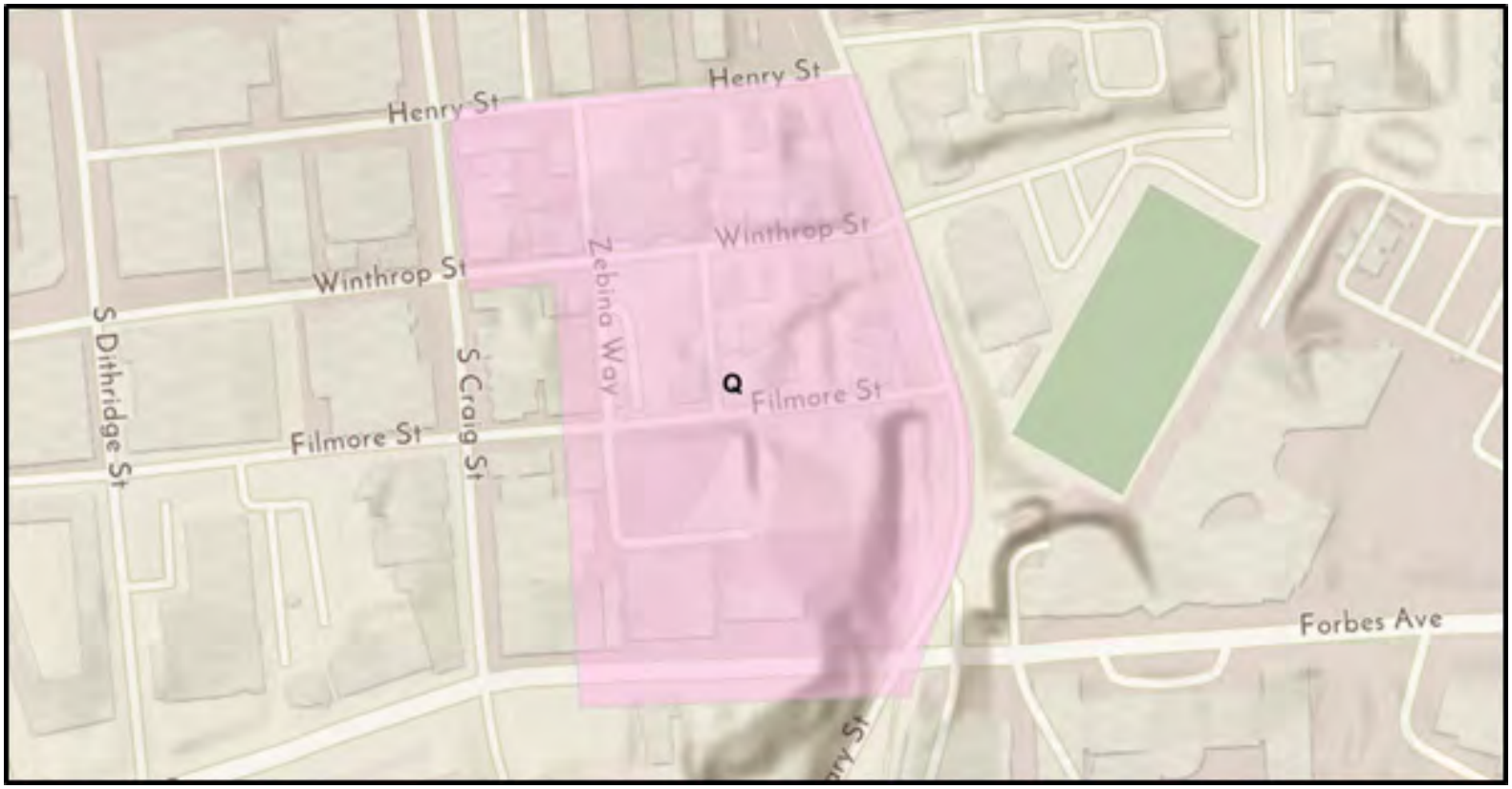


The parking spaces affected are included in the Residential Permit Parking (RPP) Zone Q. Area Q was established on September 19, 1989. The original designation was based on the lack of legal on street parking due to the impact of parkers destined for Carnegie Mellon University, the University of Pittsburgh, the Craig Street Business District, and various other nearby institutions. Area Q has a one-hour grace period and is in effect from 7:00 am to 7:00 pm, Monday through Saturday. Figure 8 shows the extents of RPP zone Q.

Due to the potential reduction in parking, the City of Pittsburgh completed a parking study to review Area Q utilization. The 2025 review of Area Q parking shows that there are currently 17 active permits, with 5 of those issued to residents on S. Neville Street. The neighborhood has 48 legal parking spaces available, yet the average parking space utilization is 101%, indicating frequent illegal parking such as vehicles being placed too close to intersections or obstructing fire hydrants. On average, 2 resident vehicles and 11 non-resident or commuter vehicles are parked in the area at any given time.

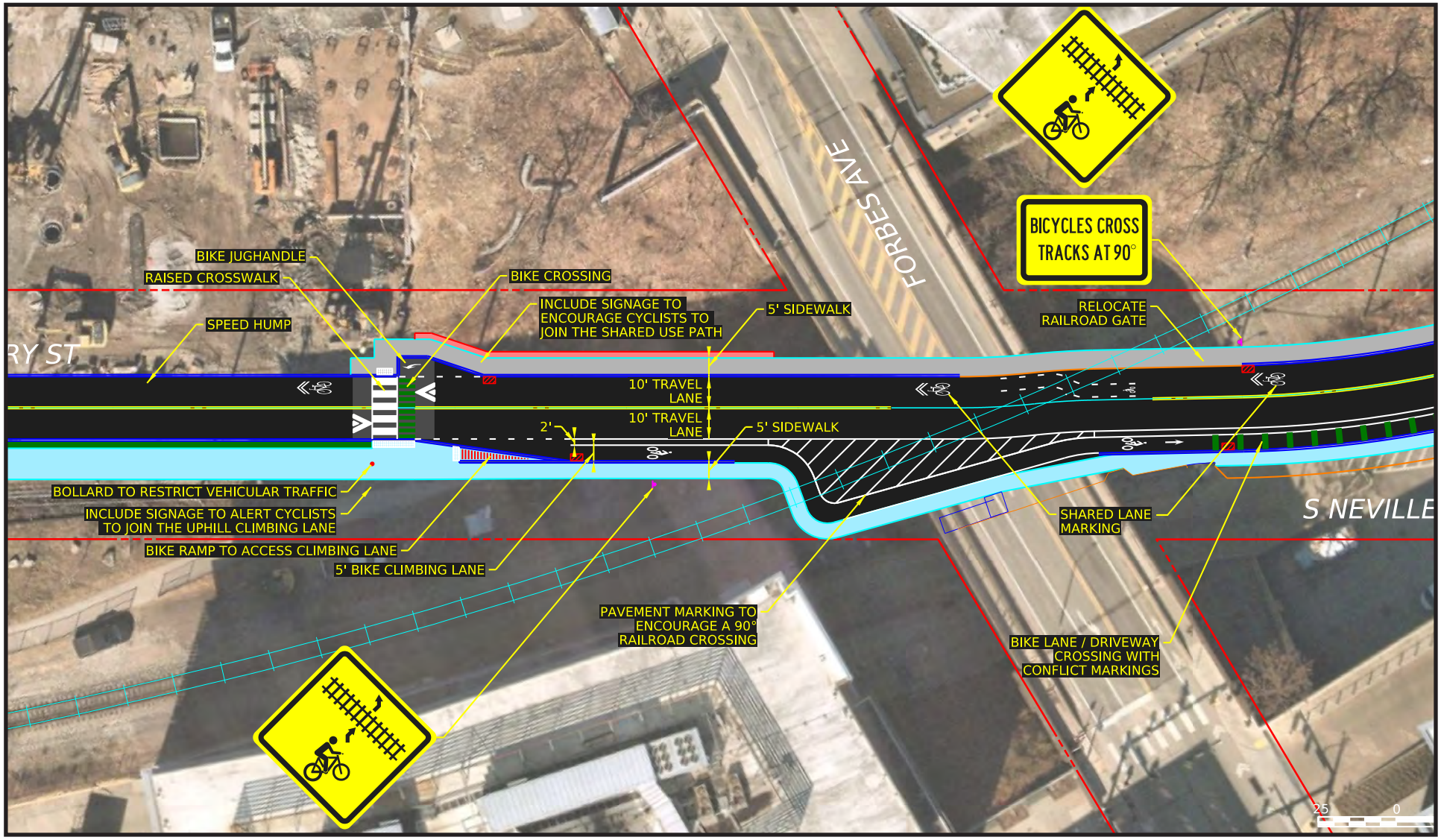
The potential removal of 8 parking spaces on S. Neville St. represents the removal of 16.6% of all available RPP Zone Q spaces. Based on a review of site conditions, there is no opportunity to create new parking spaces within the limits of RPP Zone Q. However, existing pay parking spaces on Winthrop St. (approximately 6 spaces) and Filmore St (approximately 6 spaces) could be designated as Hybrid RPP. The Hybrid RPP designation allows permit holders to park in these paid parking spaces for free using their permit, while visitors must pay the meter during enforcement hours.

Figure 10 – Residential Permit Parking Area Q



At the CSX railroad tracks mitigations measures are needed for cyclists safety. The uphill climbing lane will cross the railroad at 90 degrees to reduce the likelihood of a cyclist getting a trapped wheel. This will be accomplished by providing a striped area that directs cyclists to cross at 90 degrees. The downhill shared lane would be signed similarly as today with a warning sign to cross at 90 degrees and the cyclist can utilize the width of the lane to make that maneuver. Additionally, supplemental pavement markings will be included to encourage crossing the railroad at 90 degrees.

Figure 12 – Intersection with CSX Railroad



SEGMENT 2

Segment 2 extends along S. Neville Street/ Boundary Street from the CSX railroad crossing to Joncaire Street. Two alternatives were developed for this segment.

- Alternative 1 - includes the addition of a shared use path that runs along the east side of S. Neville Street/ Boundary Street. The shared use path would accommodate two-way bike and pedestrian traffic.
- Alternative 2 - includes a climbing lane for cyclists on the east side of the roadway, while the downhill side offers a wider sidewalk for pedestrians. The downhill travel lane would be marked with shared lane markings in both scenarios.

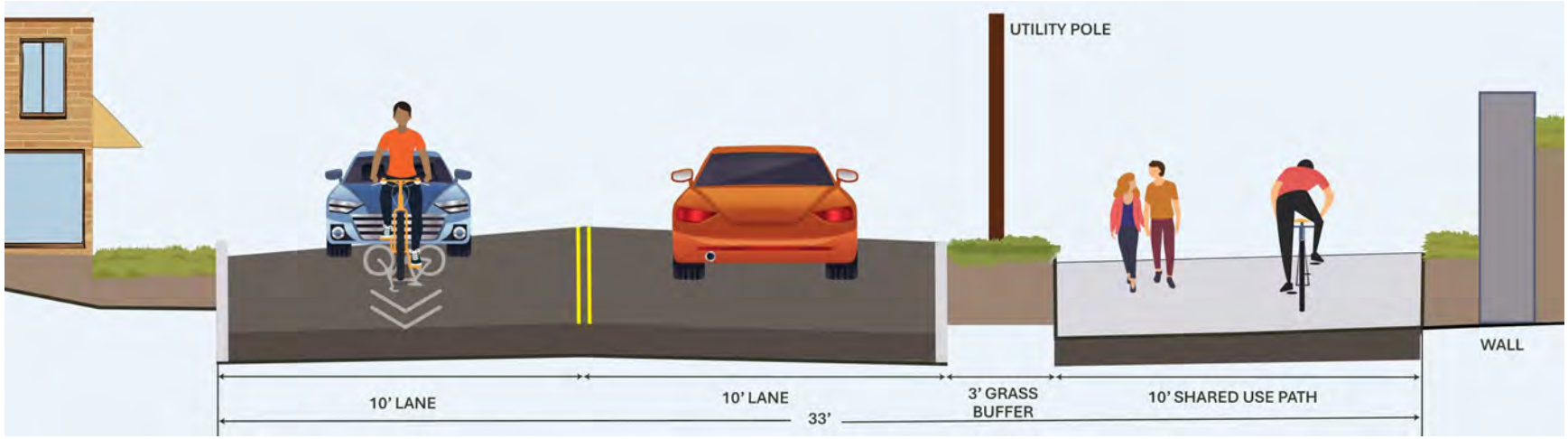
A previously developed alternative for an off-street facility on CMU and CSX railroad property was also evaluated, but it was determined to have a physical constraint that cannot be mitigated.

SEGMENT 2, ALTERNATIVE 1 – SHARED USE PATH

This alternative includes the installation of a 10-foot-wide shared-use path for bikes and pedestrians on the eastern side of S. Neville Street / Boundary Street from Joncaire Street to a raised midblock crosswalk near the CMU Science building. Between the crosswalk and the CSX railroad crossing, the shared-use path transitions to the climbing lane described in Segment 1. The shared-use path would be separated from the roadway with a 3-foot buffer. Vehicular traffic is conveyed over one 10-foot-wide travel lane in each direction. Because the shared-use path accommodates both cyclists and pedestrians a separate sidewalk is not required.

The shared-use path alternative includes accommodating all road users in the most space efficient manner. Combining the pedestrian and bike traffic saves on right-of-way usage compared to separating the bike lanes and pedestrian sidewalk. DPW confirmed that maintenance would also be more streamlined, a regular sized pickup truck could access the shared use path for maintenance activities.

Figure 13 – Segment 2, Alternative 1 – Shared-Use Path

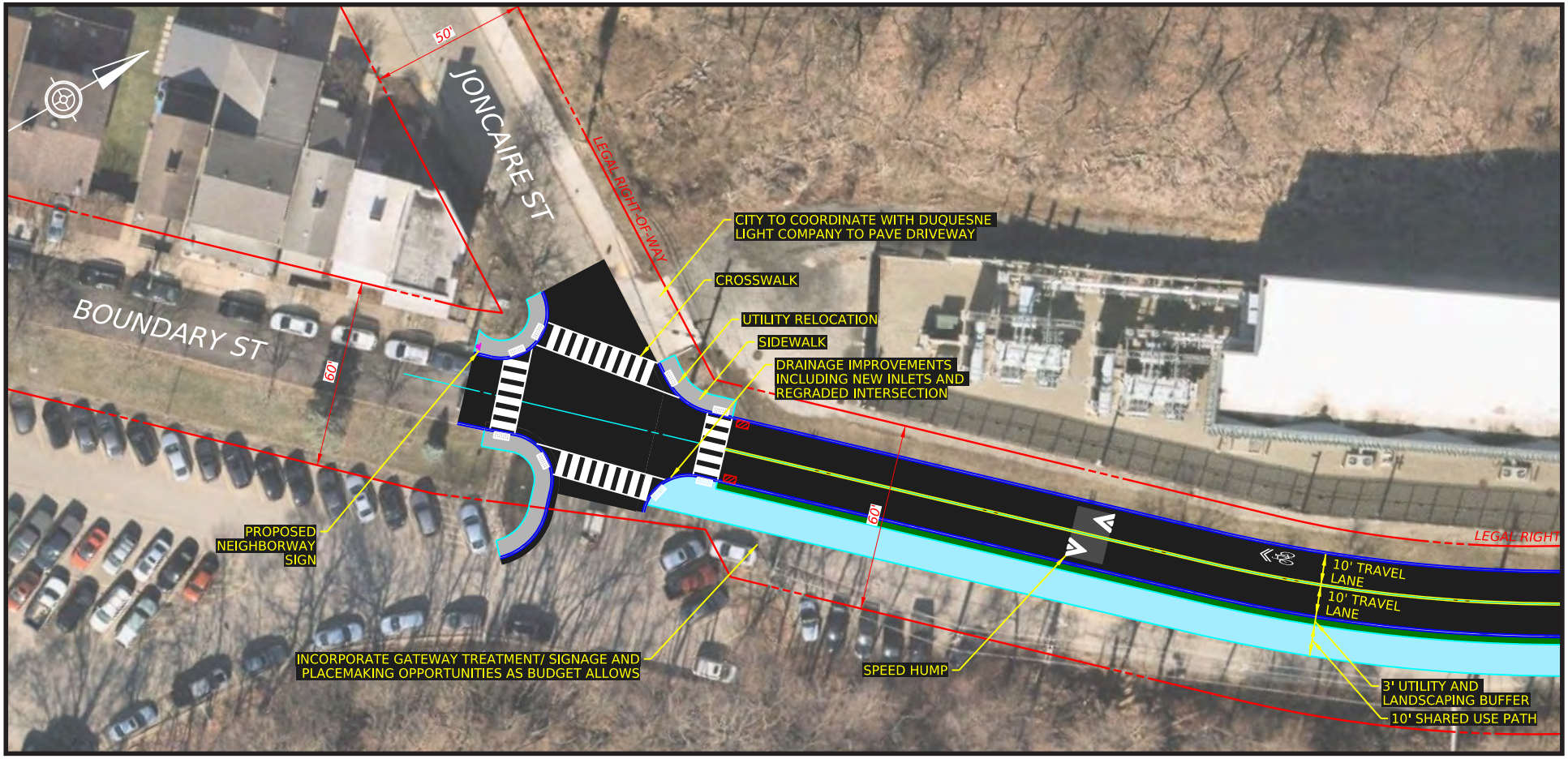


Drainage improvements will be completed throughout the corridor with properly placed inlets and bicycle safe grates. The intersection with Joncaire will be regraded to have more conventional drainage infrastructure. Coordination with Duquesne Light Company is recommended to encourage paving of their driveway which would direct drainage to the proper inlets and reduce debris migrating to the street.

The shared use path combines pedestrians and cyclists into one space which could result in more passing maneuvers and a differential of speed. In order to address this, pavement markings can be used to separate cyclists and pedestrians or at least provide guidance on proper positioning when conflicts occur. Additionally, the 10-foot-wide shared use path is the minimum recommended width. If design was to progress on this alternative, the 10-foot-wide path would be wider when possible.

This alternative would have the lowest anticipated construction cost because it has the narrowest footprint, 33 feet, the least amount of retaining walls and likely the least impact to utilities.

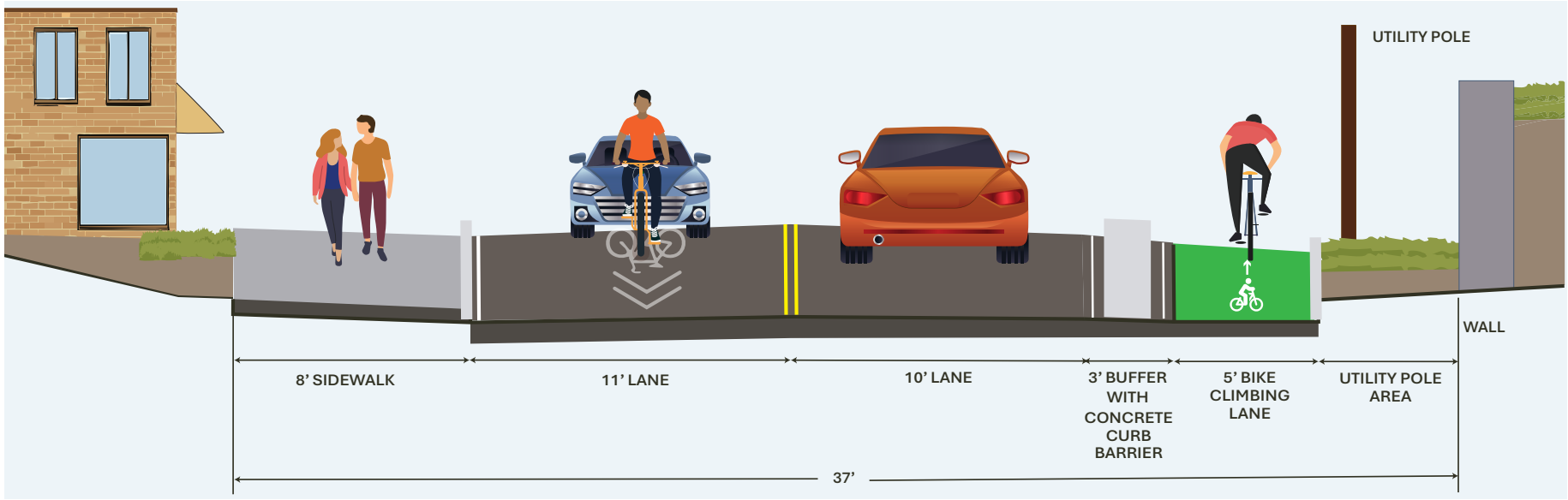
Figure 14 – Segment 2, Alternative 1 – Shared Use Path (Plan View)



SEGMENT 2, ALTERNATIVE 2 – CLIMBING LANE

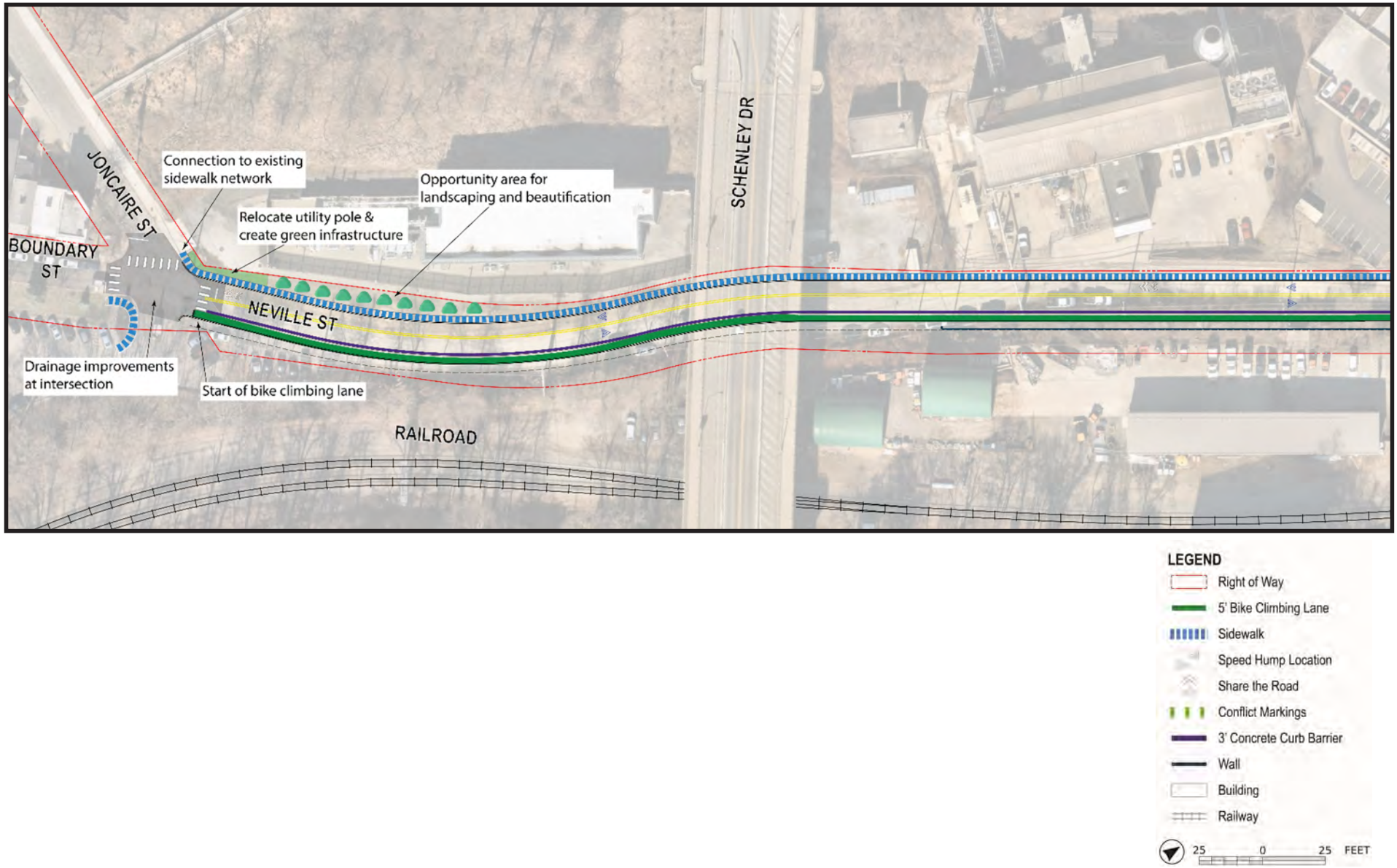
The climbing lane alternative includes a 5-foot-wide bike lane on the east side of S. Neville Street / Boundary Street, with a 3-foot barrier between the bike lane and the vehicular way. On the west side of the roadway, an 8-foot-wide sidewalk is recommended. The raised crosswalk at the new CMU building will be maintained, but no transition to Segment 1 is required since this is a similar cross section as recommended cross section in Segment 1.

Figure 15 – Segment 2, Alternative 2 – Shared Use Path



Alternative 2, the climbing lane, separates pedestrian traffic from bicycle traffic but does not provide separated facilities for both directions of bicyclists. This alternative is wider than Alternative 1, requiring 37 feet of space to fit the sidewalk, travel lanes, buffer, and climbing lane which will result in more retaining walls.

Figure 16 – Segment 2, Alternative 2 – Shared Use Path (Plan View)

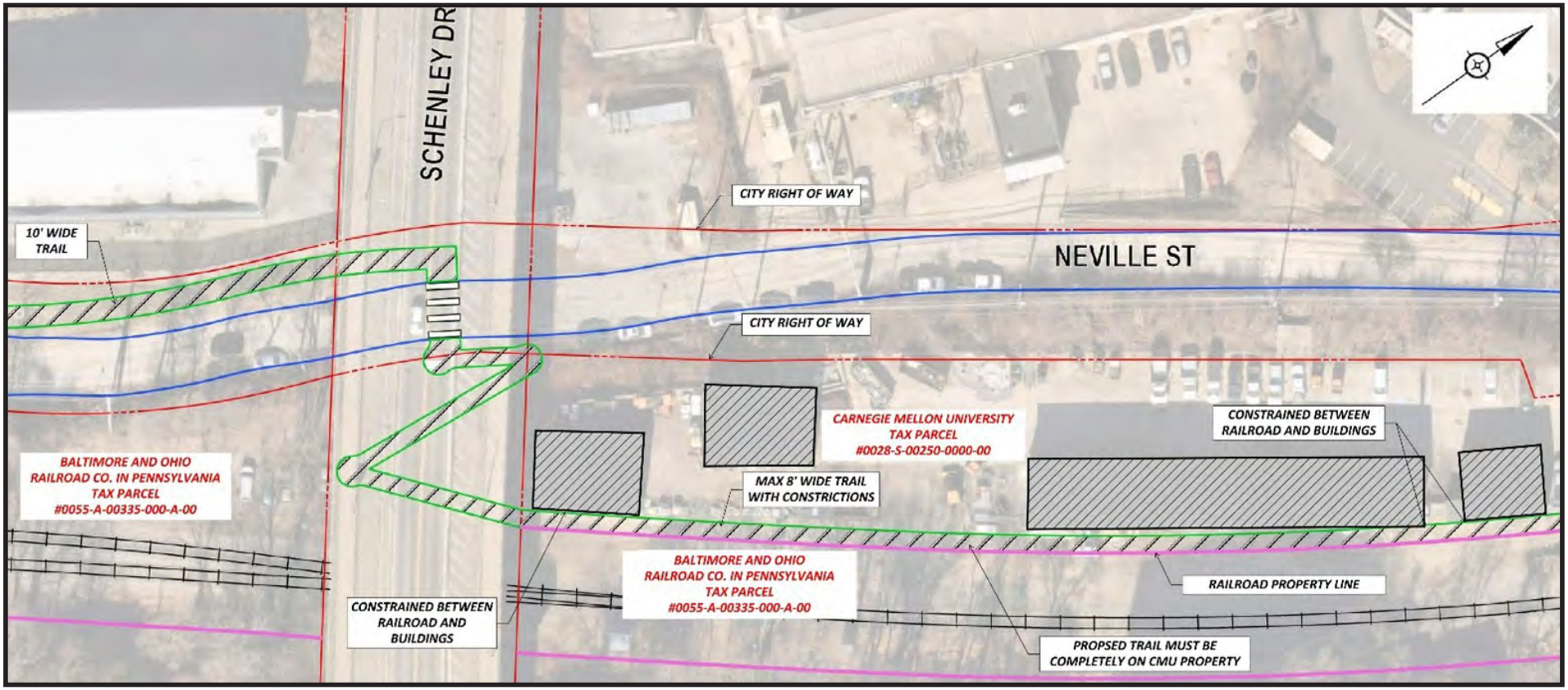


OFF STREET ALIGNMENT

The off-street alignment for a shared use trail that was previously developed by BikePGH, CMU and the City. The off-street alignment alternative uses an existing sidewalk on the Carnegie Mellon University property on the east side of S. Neville Street / Boundary Street along the railroad. The proposed trail runs adjacent to the railroad and then returns to S. Neville Street/ Boundary Street at the Schenley Park Bridge where the path would cross over to the western side of S. Neville Street / Boundary Street and continue to Joncaire Street.

An easement was preserved for an 8-foot-wide shared use path. Unfortunately, there is a pinch point that restricts the entire available space to 8 feet near the existing maintenance sheds. Any new trail along the railroad will require a fence and a shy distance from the building is necessary. CSX has rules restricting parallel shared use paths on CSX property and without an additional easement or property transfer with the railroad, the width is limited to 8-feet. With these restrictions, providing a path that meets the minimum required shared use trail width is not feasible.

Figure 17 – Segment 2, Off Street Alignment



If there is desire from CMU, it could be developed as a private path or sidewalk by CMU, the property owner. Also, removing people from the activity and visibility that the street provides, personal safety could be a concern which may discourage people from using the path.

SEGMENT 3

Segment 3 includes S. Neville Street/ Boundary Street from Joncaire Street to the Junction Hollow Trailhead. One proposed alternative was developed for this segment. In this segment, the roadway is 20-26 feet wide and includes on-street parking in the area of residential housing. The roadway has no outlet and very little traffic volume. This segment is proposed to be a bike boulevard. In order to designate it a bicycle boulevard, traffic calming measures are recommended such as updated crosswalks and potentially speed humps to ensure traffic speeds remain low for all users.

Community Engagement

In this section:

Figure 18 – Engagement Phases

Phase 1
UNDERSTANDING THE ISSUES
Feb 24 - May 5

Activities

- Online survey (613 responses)
- Community walkthrough (Apr 22)

Phase 2
PRESENTING THE ALTERNATIVES
Oct 10 - Nov 12

Activities

- Key stakeholder meeting (Oct 7)
- Public meeting (Oct 28)
- Online survey (248 responses)

Phase 3
FINALIZING THE PREFERRED CONCEPT
Mar 17 - Apr 8

Activities

- Key stakeholder meeting (Mar 17)
- Public meeting (Mar 25)

Phase 1: Understanding the Issues

Community Survey

The City offered an initial public survey on the project website, which was open from 02/24/2025 to 05/01/2025. The survey was designed to gather information on how people use the S. Neville Street/ Boundary Street corridor. **613 responses** were collected, and revealed the following critical issues faced by cyclists and pedestrians along the corridor:

- The lack of dedicated bike lanes or shoulders, especially on steep or narrow sections, poses a significant risk.
- Potholes and poor pavement conditions make riding hazardous, and the absence of climbing lanes on uphill stretches like S. Neville Street adds to the difficulty.
- The bike infrastructure is disconnected, and the railroad crossing is skewed with sharp angles and gaps can trap bike tires.
- The narrow roadway lacks a shoulder.
- Cyclists are forced to share the lane with traffic, while poor lighting and overgrown vegetation reduce visibility and safety for all users.
- The lack of sidewalks and bike lanes makes the corridor unsafe for non-drivers.
- Speeding and aggressive driving are common, and close passes and a lack of driver awareness increase the risk for cyclists.
- Drivers use the corridor as a short-cut between Central Oakland and Shadyside/North Oakland.
- Debris on the street is apparent after rains from Joncaire Street to the Junction Hollow trailhead and increases the risk of bike crashes.

Surey respondents also provided suggested improvements to address these issues, such as **installing protected bike lanes and climbing lanes, improving pavement quality, better lighting, improving the railroad crossing, implementing traffic calming measures, and extending the Junction Hollow Trail**. Particicpants were also asked how they use the roadway; responses are included on page 38.

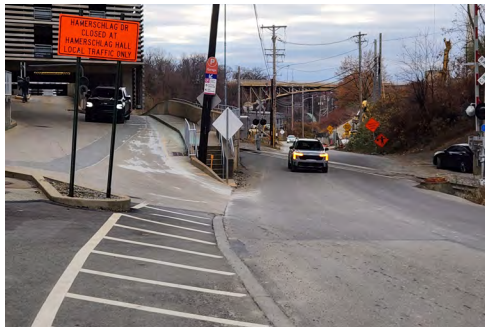


Figure 19 – Survey Question 1

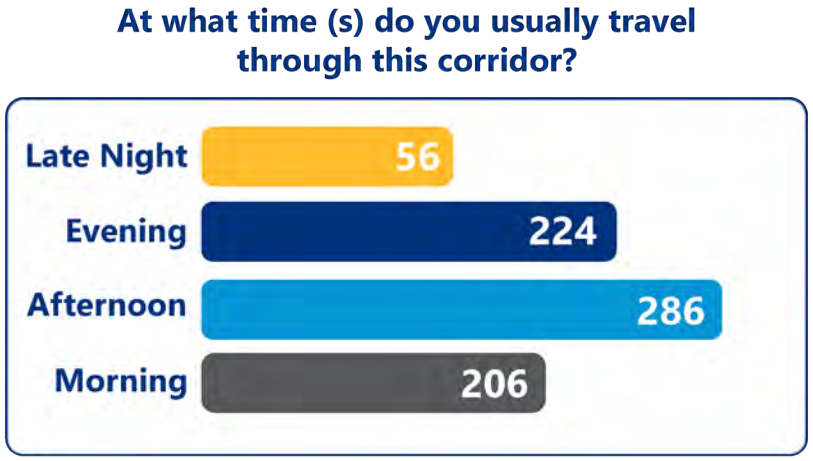


Figure 20 – Survey Question 2

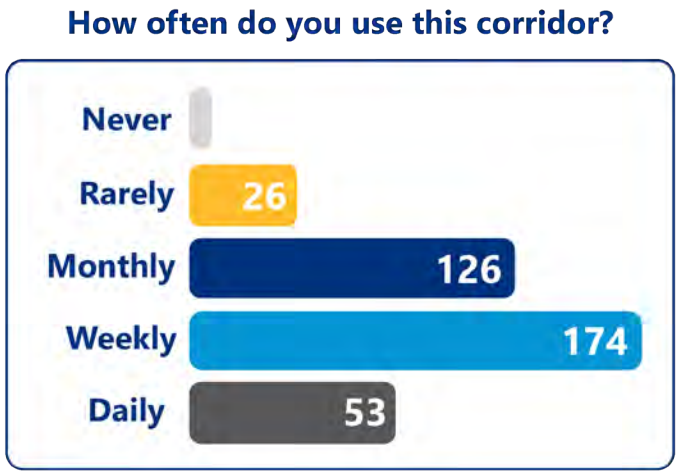


Figure 21 – Survey Question 3

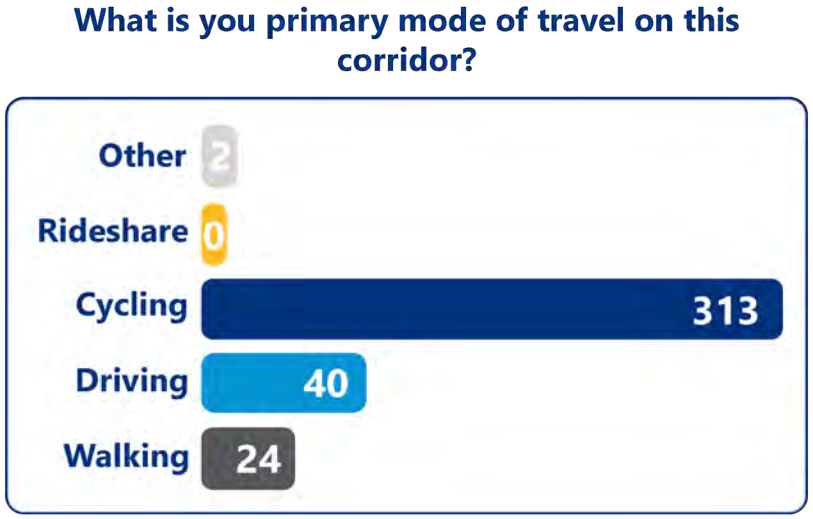
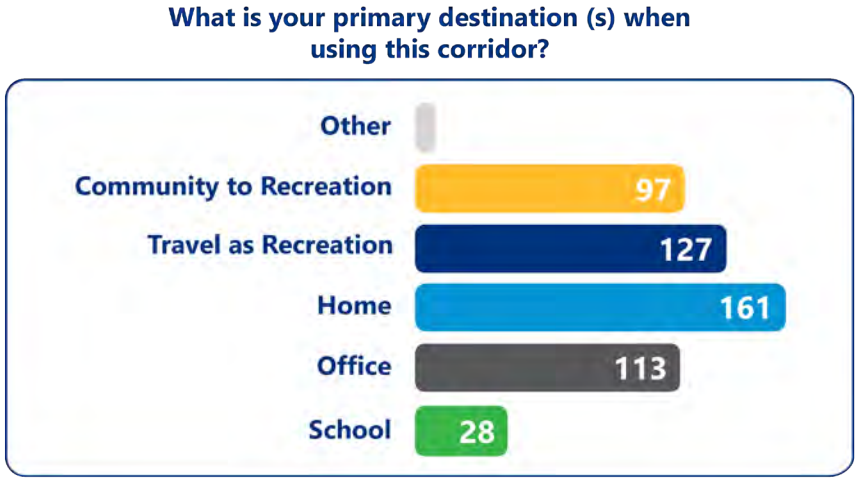


Figure 22 – Survey Question 4



Community Walkthrough

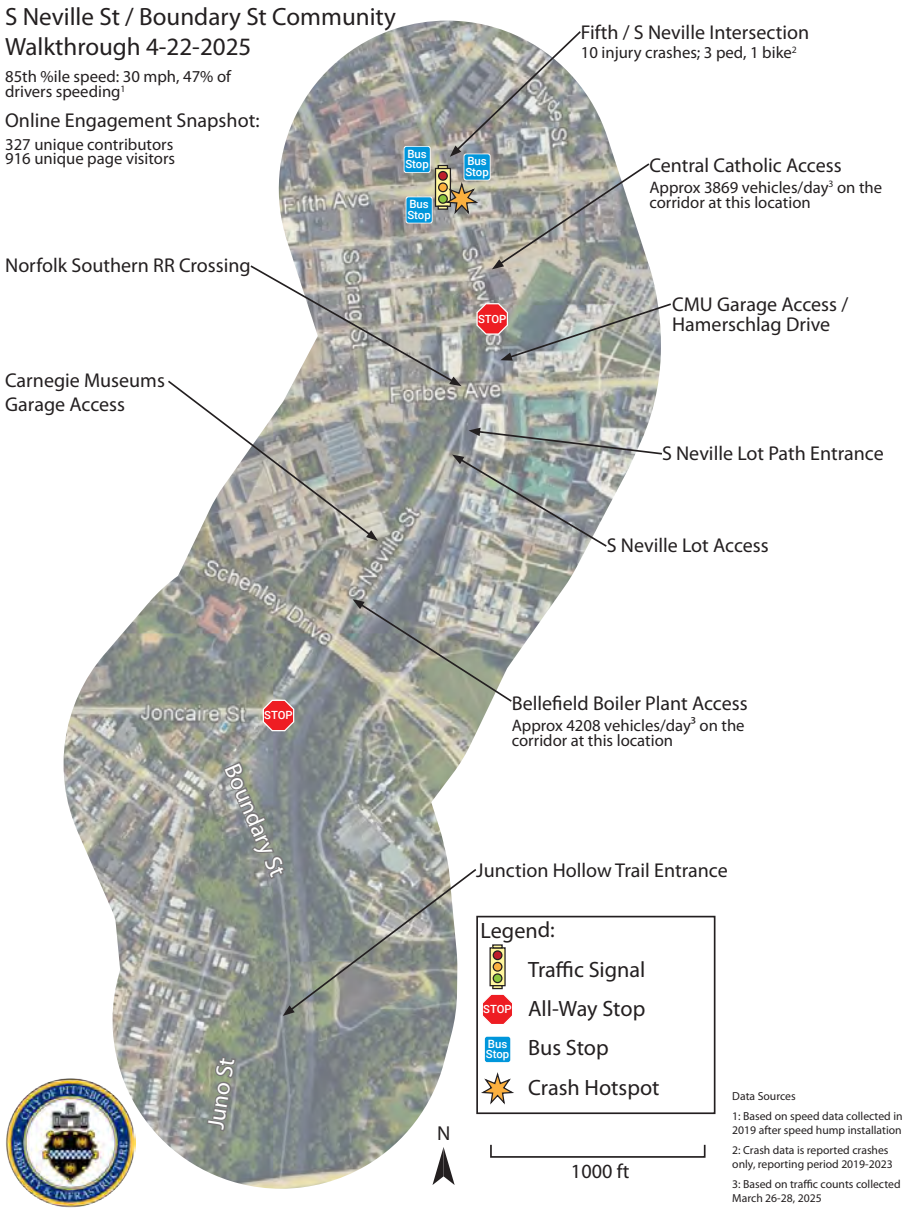
On April 22, 2025, the project team conducted a walkthrough of the corridor with representatives from community stakeholders.

In attendance were representatives from Central Catholic High School, University of Pittsburgh, Carnegie Mellon University, Carnegie Museums of Pittsburgh, the Bellefield Boiler Plant Consortium, Oakland Planning and Development Council (OPDC), the Oakland Transportation Management Association, BikePGH, City Council Districts 3, 5, and 8, as well as staff from DOMI and the Department of City Planning.

On the walkthrough, the project team noted and discussed the following concerns:

- Speeding
- Pedestrian and cyclist safety
- Loading and delivery operations
- Student pick-up and drop-off
- Current and upcoming institutional development plans adjacent to the corridor
- Right-of-way ownership
- Drainage concerns

Figure 23 – Map of Community Walkthrough



Phase 2: Presenting the Alternatives

Community Meeting

A community meeting was held on 10/28/2025 at CMU to present the alternatives and gather feedback from attendees on their preferred alternative. The project team discussed the history of the corridor, the safety issues reported by users of the corridor, and the proposed alternatives that have been developed. The alternatives were based on the feedback received from community input during community engagement that ran from February - May 2025 as well as the community walk-through that took place in April 2025.

Preferred Alternative Survey

Following the community meeting, the public was asked to provide feedback on their preferred alternative. The city received 148 responses from the alternatives survey.

From those who preferred Alternative 1, commenters consistently cited the following:

- **Enhanced safety,** comfort, and all ages accessibility due to full separation from vehicle traffic and the ability for cyclists to travel in both directions without interacting with cars.
- Many emphasized that the **shared use path** better accommodates the steep grade by allowing riders to pass, weave, and maintain comfortable speeds.
- Commenters also noted that **pedestrian volumes in this corridor are generally low**, minimizing potential conflicts and making shared space practical.
- The shared use path was frequently described as **easier to maintain**, particularly in winter, with greater potential for snow removal and debris clearing than a protected on-travel lane. The City's Department of Public Works concurred with this point.
- Respondents also appreciated the **lower cost** of Alternative 1 and suggested that savings could support other bike and pedestrian improvements citywide.
- Additional positive themes included the **trail-like experience**, better alignment with the existing Panther Hollow Trail, potential for **landscape improvements**, and **improved access for families**, inexperienced riders, and hesitant downhill cyclists.
- Some commenters raised **concerns related to parking or downhill speed differential.**

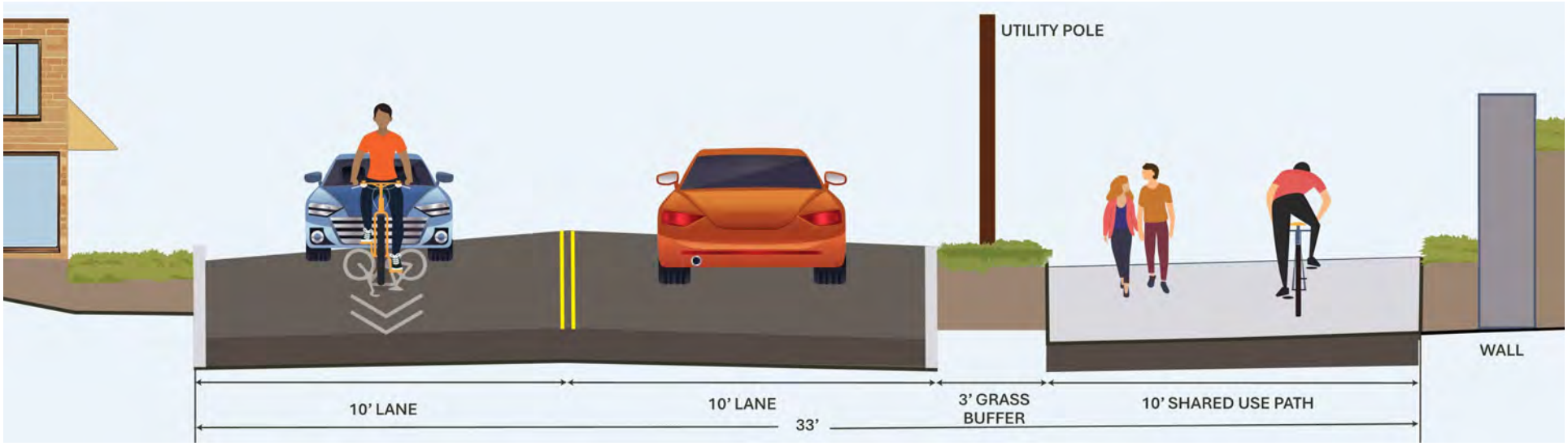


Figure 24 – Scenario 1 Typical Section

From those who preferred Alternative 2, commenters consistently cited the following:

- Commenters emphasized that **mixing pedestrians and cyclists, especially on a steep grade, is unsafe** for both groups. Many respondents noted that cyclists routinely travel at high speeds downhill and generate significant closing speeds relative to pedestrians, creating hazards for people walking, particularly those distracted by headphones, dogs, or children.
- Several referenced **negative experiences with existing shared-use paths** in Pittsburgh, citing conflicts, unpredictable pedestrian behavior, and inadequate sight distances.
- A **dedicated climbing lane** was seen as essential for uphill travel, where cyclists must maintain momentum, may need to weave, and should not be forced to slow or maneuver around pedestrians.
- Many commenters stated that they **feel more comfortable mixing with vehicle traffic** on the downhill portion where their speeds are similar to cars than sharing a trail with pedestrians.
- Respondents also highlighted that **full separation of modes is the safest** and most predictable configuration, aligning with best practices used in other cities and within Oakland's campus environment.
- Several noted that **shared use paths are better suited to off-street trail corridors,** not to constrained urban streets with university area pedestrian volumes.
- **Additional concerns included** the need for
  - » safer railroad crossing treatments
  - » better lighting
  - » maintenance concerns with sidewalks
  - » improved traffic calming

Within both sets of comments it was also noted that there is a need to continue developing the bike network for connections to Schenley Park and the river trails.

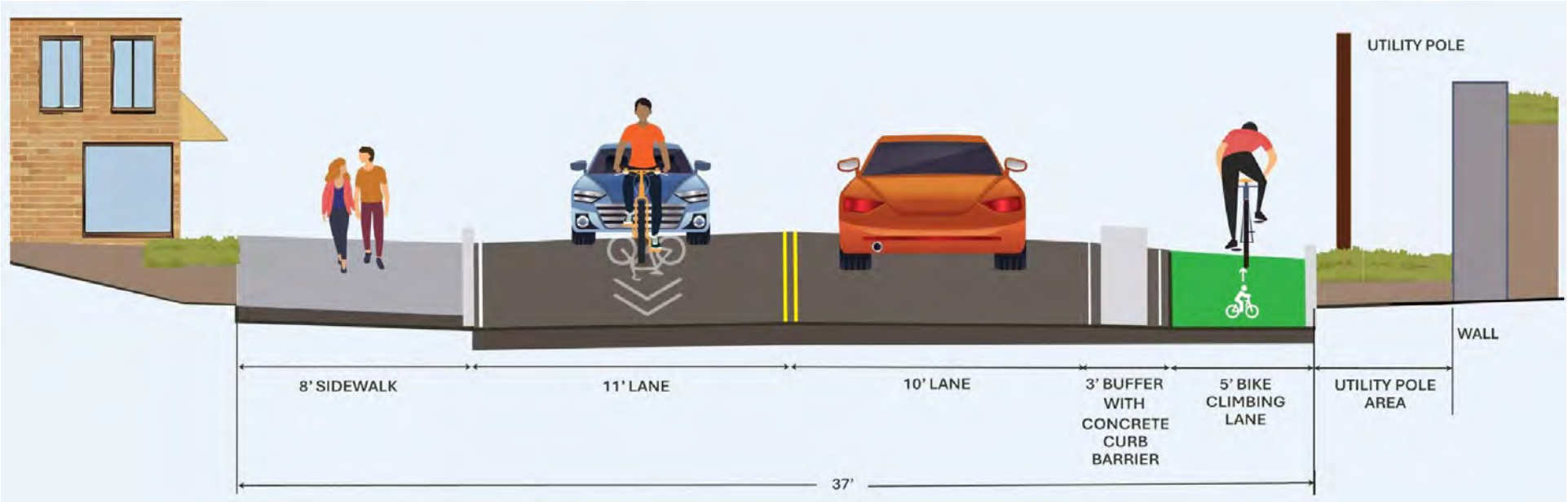
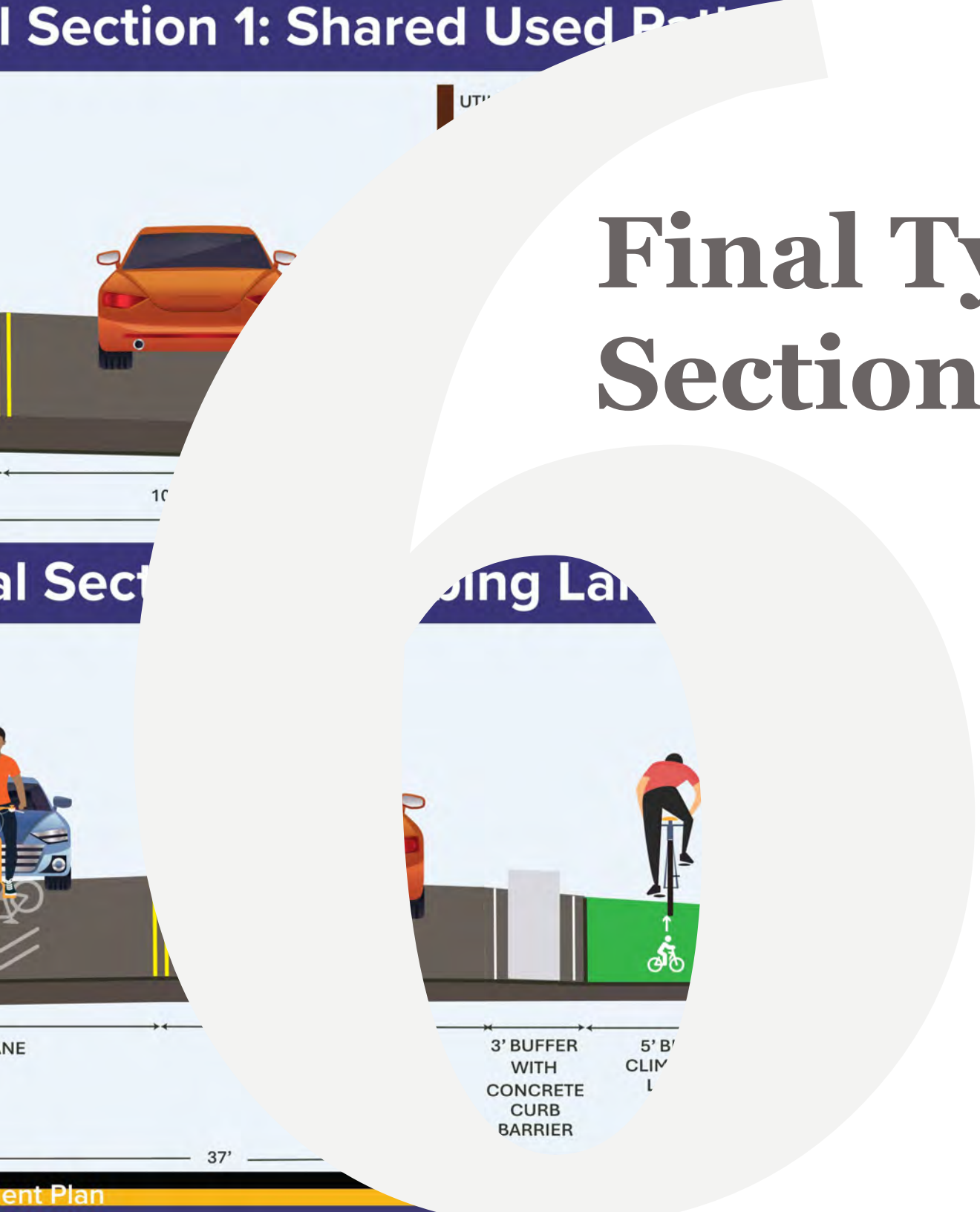


Figure 25 – Scenario 2 Typical Section

Phase 3: Finalizing the Preferred Concept

Community Meeting

The Department of Mobility & Infrastructure (DOMI) held a community meeting on March 25th, 2026 at Oakland Planning and Development Corporation's office to present the draft feasibility study for the Boundary Street and Neville Street Streetscape Enhancement Plan. DOMI shared design recommendations for the corridor and the 5th Avenue and Neville Street intersection. The meeting was an opportunity for neighbors and community members to ask questions and provide feedback. In-person and virtual attendance options were available.



Final Typical Section

Taking into consideration the previous community feedback, recommendations were finalized for all three segments of the project as well as the intersection at Fifth Avenue and Neville Street.

At Fifth Avenue/ Neville Street, the multi-modal improvement project is recommended. It will allow for additional multimodal connections and enhance safety for pedestrians at the intersection. This recommendation is also independent of South Neville Street / Boundary Street Segments and can be constructed either before or after a corridor project.

Segment 1 – The proposed climbing lane is recommended and the parking removals would be mitigated with modifications to the Area Q RPP regulations.

Segment 2 – Alternative 1, the shared-use path, has been selected as the preferred design alternative that will be recommended in the final stage of the plan. This plan provides the most separation between modes, in the most cost effective manner, while also being the preferred configuration for maintenance.

Segment 3 – The bike boulevard is recommended.

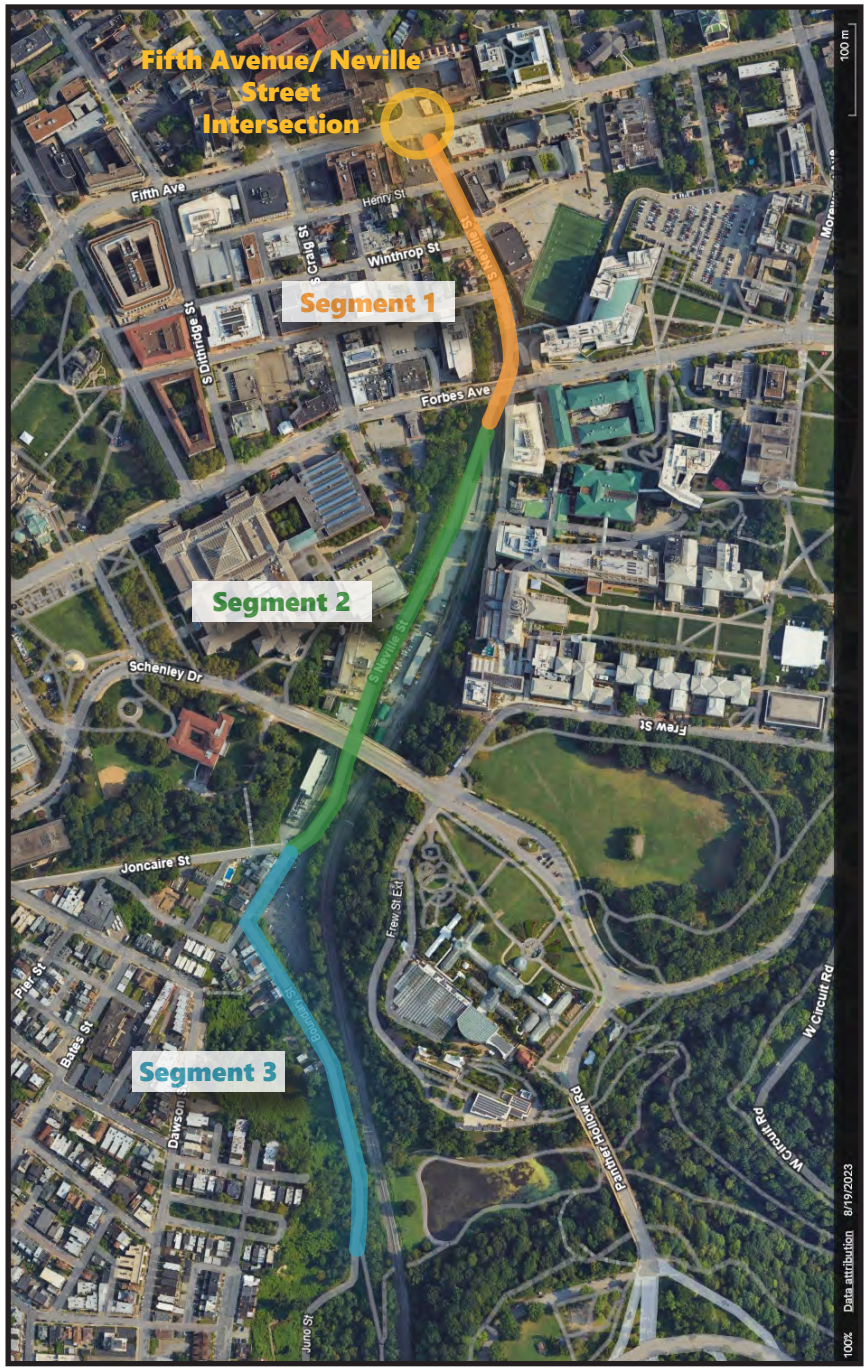


Figure 26 – Segment Map

Based on a comprehensive evaluation of design performance, feasibility, cost, and long-term operations, the project team determined that Segment 2, Alternative 1 (Shared Use Path) shall be advanced as the Preferred Alternative. Community engagement conducted through the October 28th public meeting and 148 online survey responses demonstrated interest in both Segment 2 alternatives and provided valuable insight into their respective benefits and concerns. In the absence of a clear consensus, the project team conducted a comparative assessment of both alternatives across five evaluation criteria: safety, intuitiveness, capacity, maintainability, and construction cost.

1. Safety

Alternative 1 was judged by the team to be slightly safer due to greater separation of pedestrians and cyclists from traffic, but the two alternatives were judged to be very closely matched.

2. Intuitiveness

Alternative 2 was judged to meet user expectations more due to its consistent cross-section and fewer required transitions. Alternative 1 is functional but requires additional markings and design cues to reinforce expected user behavior at key locations.

3. Capacity

Alternative 2 was noted to have a higher potential to accommodate high volumes of pedestrians and cyclists due to its greater overall space for those users, but the two alternatives were closely matched in this category as well.

4. Maintainability

Alternative 1 was judged to be more maintainable. Coordination with the Department of Public Works confirmed that the shared-use path in Alternative 1 is less likely to collect debris and can be more easily swept and plowed with standard city equipment than the protected bike lane in Alternative 2.

5. Construction Cost

Engineering analysis by the design consultant concluded that Alternative 1's narrower footprint reduces earthwork requirements, utility conflicts, and retaining wall construction, resulting in substantial anticipated cost savings.

The analysis determined that the two alternatives perform comparably in the areas of safety, intuitiveness, and user capacity. However, Alternative 1 demonstrated clear and decisive advantages in maintainability and construction cost. Accordingly, the project team finds that Alternative 1 provides the most balanced, cost-effective, and operationally sustainable solution for Segment 2 and best supports the project's safety, mobility, and fiscal responsibility objectives. The project team further acknowledges community feedback regarding features included in Alternative 2 and will continue to evaluate opportunities to incorporate select elements of Alternative 2 into the design of Alternative 1 where feasible and consistent with project goals.

Implementation

In this section:

Next Steps

Opinion of Probable Cost

Next Steps

The full conceptual plans for the entire corridor can be found in Appendix A. With the completion of the feasibility study, the City will begin to seek funding opportunities for the project. In order to create more appealing grant applications, the City has split the study area into four potential projects to advance.

- Project A is the intersection improvement project of Fifth Avenue at Neville Street, including the multi-modal improvements and a new traffic signal.
- Project B is S. Neville Street/ Boundary Street from the CMU raised crosswalk to Fifth Avenue, including the climbing lane to Fifth Avenue.
- Project C is the S. Neville Street/ Boundary Street reconstruction including the adjacent shared use path.
- Project D is the bike boulevard from Joncaire Street to the Junction Hollow Trailhead.

Although completing the suite of projects is ideal, each of the four project can be stand alone projects and be meaningful.

Opinion of Probable Cost

An estimate of probable costs was developed to aid the City in seeking funding. A summary of the project sections by cost is included in Table 7 below, while a detailed estimate is included in Appendix B. Alternatives are provided for projects B and C that show the cost comparison between the standard composite pavement and fully bituminous pavement structure.

Table 7: Estimate of Probable Costs

Project	Extents	Cost
A	Fifth Avenue Intersection	$1,227,127
B	CMU Crosswalk to Fifth Avenue	$2,004,295
B - alt	CMU Crosswalk to Fifth Avenue with modified pavement structure	$1,481,774
C	Joncaire to CMU Crosswalk	$5,432,712
C - alt	Joncaire to CMU Crosswalk with modified pavement structure	$3,658,160
D	Junction Hollow Trail Head to Joncaire Street	$64,112

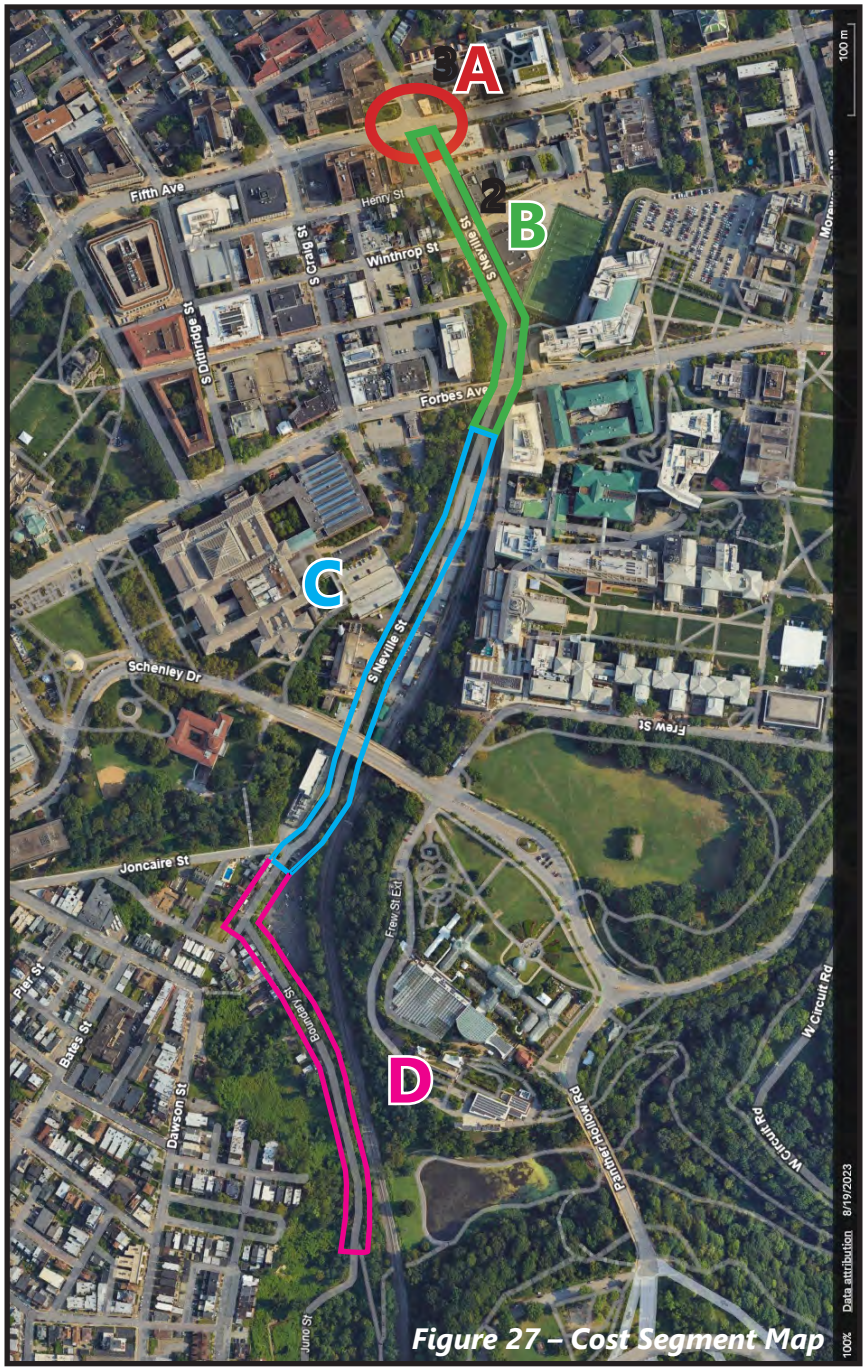
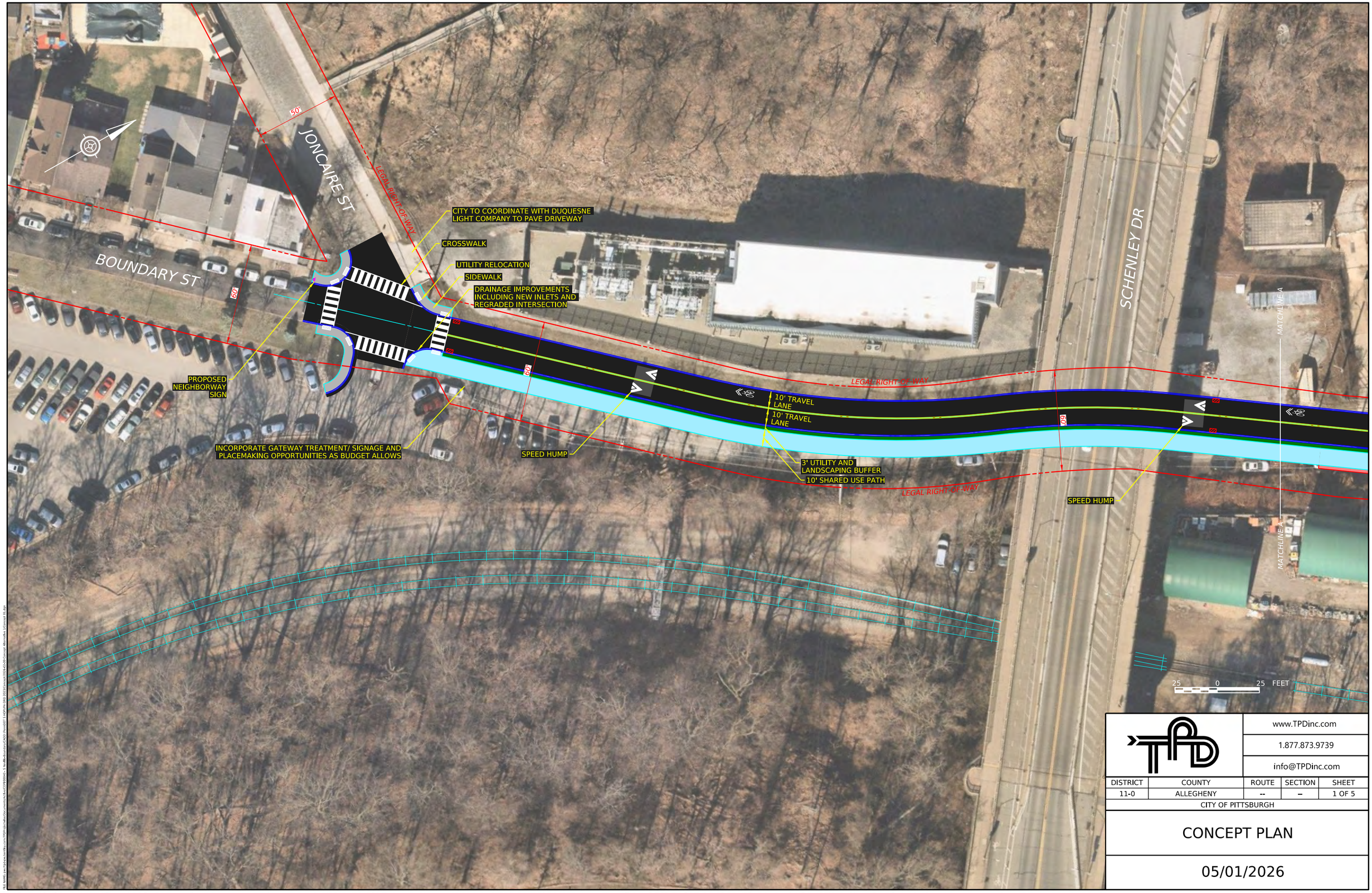


Figure 27 – Cost Segment Map

APPENDIX A: CONCEPT PLANS



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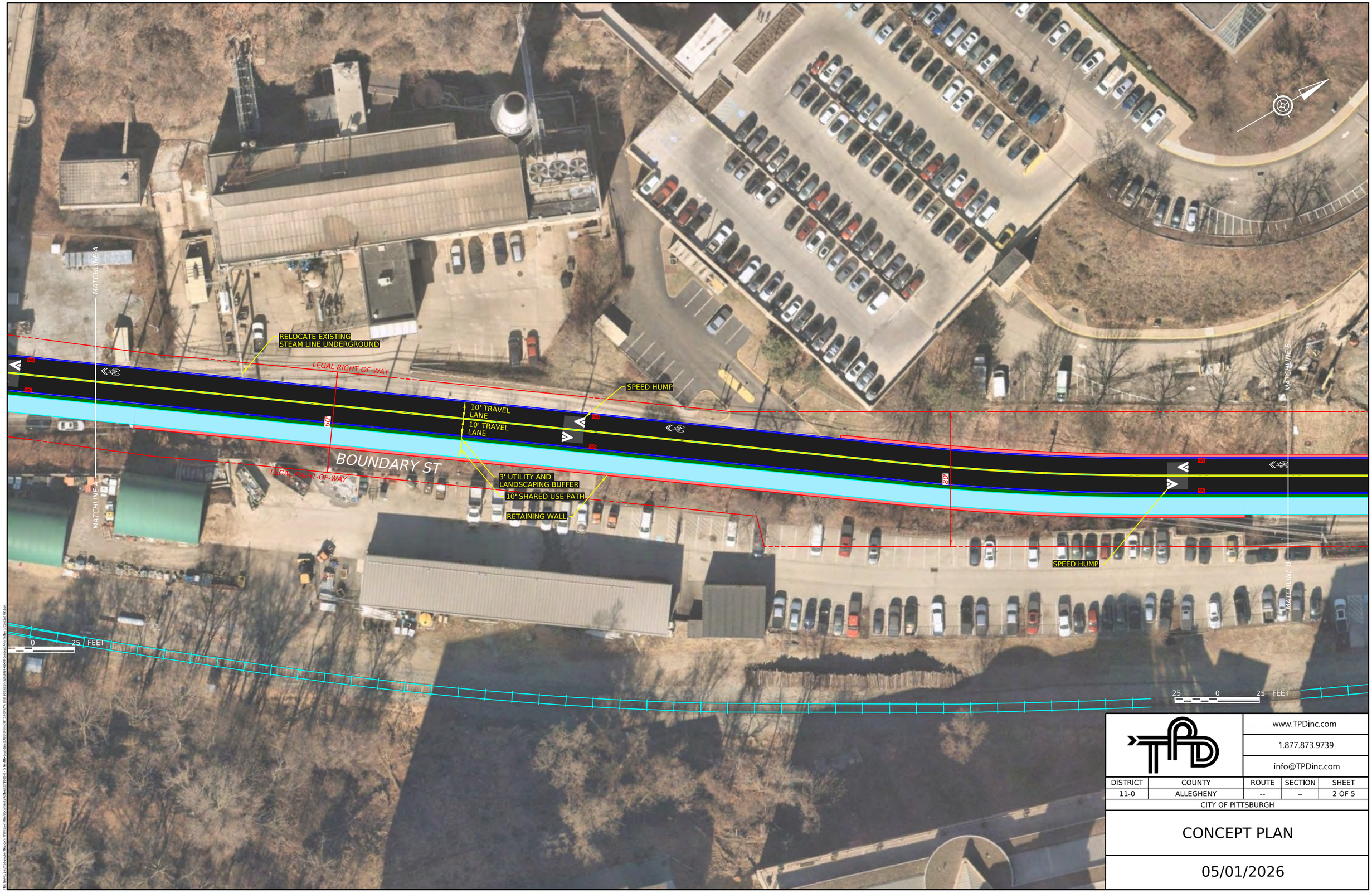
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	--	--	1 OF 5
CITY OF PITTSBURGH				

CONCEPT PLAN

05/01/2026



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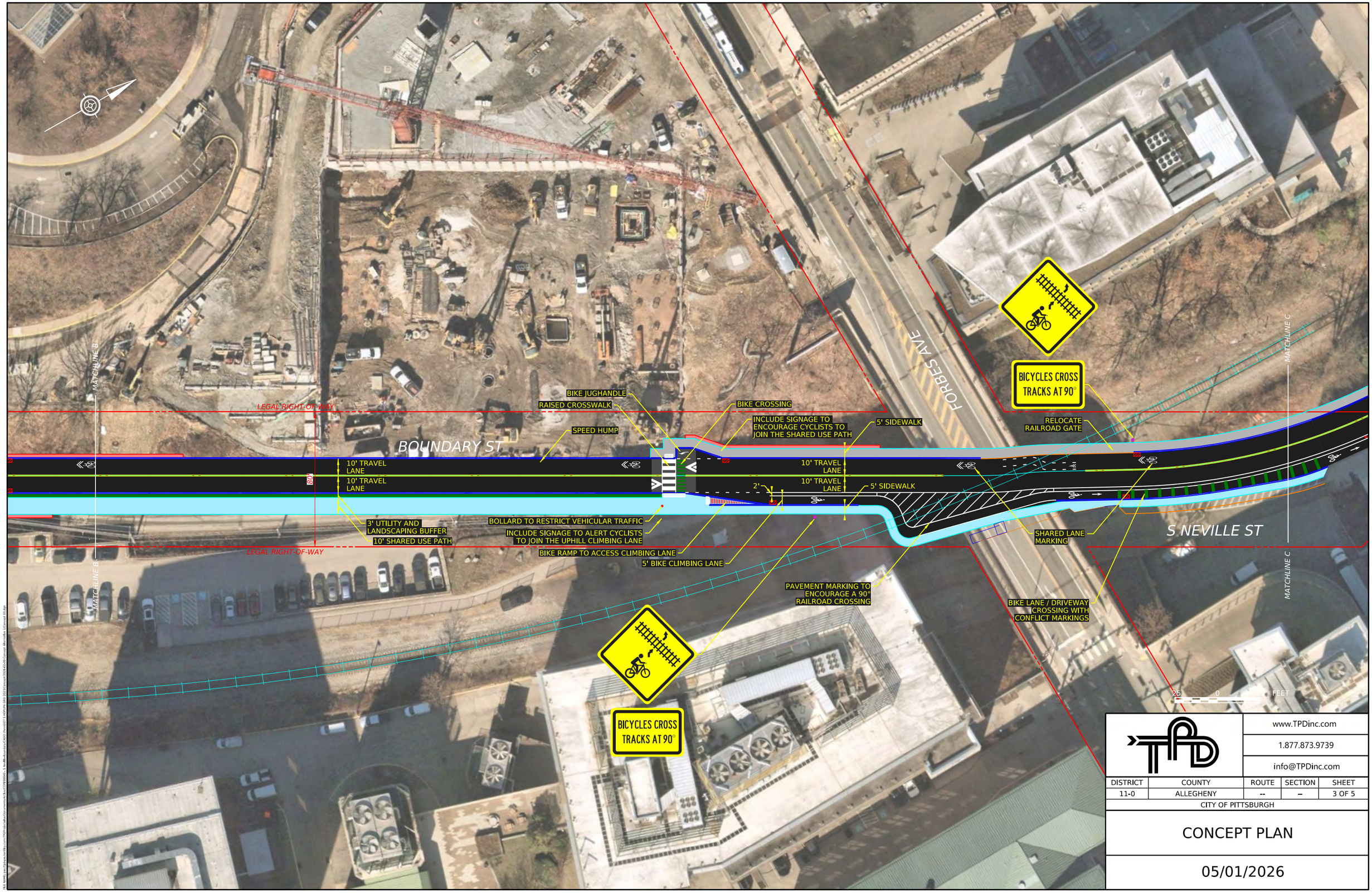
DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	--	--	2 OF 5

CITY OF PITTSBURGH

CONCEPT PLAN

05/01/2026



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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	--	--	3 OF 5
CITY OF PITTSBURGH				

CONCEPT PLAN

05/01/2026

FORBES AVE

FILMORE ST

WINTHROP ST

HENRY ST

S NEVILLE ST

MATCHLINE C

MATCHLINE C

MATCHLINE D

MATCHLINE D

CROSSWALKS

EXISTING SIDEWALK
NO PARKING

LEGAL RIGHT-OF-WAY

CROSSWALKS

EXISTING SIDEWALK
NO PARKING

10' TRAVEL LANE

10' TRAVEL LANE

2' BIKE BUFFER

5' BIKE CLIMBING LANE

EXISTING SIDEWALK

LEGAL RIGHT-OF-WAY

FLEX POSTS IN BUFFER

S NEVILLE ST

Central Catholic

25 0 25 FEET

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	--	--	4 OF 5
CITY OF PITTSBURGH				

CONCEPT PLAN

05/01/2026

RAISED TWO WAY CYCLE TRACK
OPTIONAL ELEMENT WHICH MAY BE ADDED UNDER A SEPARATE PROJECT

BUS LOADING PLATFOR
OPTIONAL ELEMENT WHICH MAY BE ADDED UNDER A SEPARATE PROJECT

3'
10'
7'
11'
10'
11'
11'

FIFTH AVE

HENRY ST

MATCHLINE D

EXISTING SIDEWALK
NO PARKING

10' TRAVEL LANE
10' TRAVEL LANE

S NEVILLE ST

2' BIKE BUFFER
5' BIKE CLIMBING LANE
FLEX POSTS IN BUFFER

CURB EXTENSION
OPTIONAL ELEMENT WHICH MAY BE ADDED UNDER A SEPARATE PROJECT

11' 11' 11' 11'

10'
10'
10'
5' 10'

N NEVILLE ST

CROSSWALKS

UPDATED TRAFFIC SIGNAL

25 0 25 FEET

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DISTRICT	COUNTY	ROUTE	SECTION	SHEET
11-0	ALLEGHENY	--	--	5 OF 5
CITY OF PITTSBURGH				

CONCEPT PLAN

05/01/2026

APPENDIX B: OPINION OF PROBABLE COST

A - Fifth Avenue Intersection

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE: CONCEPTUAL

PROJECT: **Boundary St/S Neville St Streetscape Enhancement**
MUNICIPALITY: City of Pittsburgh, Allegheny County, PA
TPD JOB #: COPI.00040

PLAN TITLE: Preferred alternative 1-Shared Use Path
PLAN DATE: **3/6/2026**
ROAD(S): Boundary St/S Neville St
DESCRIPTION OF WORK: Modified alignment of Boundary St/S Neville St and addition of a shared use path

ESTIMATE DATE: **3/10/2026**
PREPARED BY: RAK
CHECKED BY:
SOURCE FOR UNIT COSTS:
(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders
Bid tabs from city specific North Ave project was also reviewed for accuracy and city preference

DISCLAIMER: *TPD IS FURNISHING THIS COST ESTIMATE AS REQUESTED BY THE CLIENT. ESTIMATED COSTS ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS, LOCAL OR CHANGES TO THE PLANS, AND/ OR CHANGES IN UNIT COSTS. COST ESTIMATES ARE PROVIDED BUT IN NO WAY SHOULD THIS ESTIMATE BE CONSTRUED AS A FINAL COST FOR THE PROJECT. CONTINGENT ON ACTUAL BIDS FROM CONTRACTORS.*
TPD WILL NOT BE HELD RESPONSIBLE FOR DIFFERENCES BETWEEN THIS COST ESTIMATE AND BID COSTS.

Fifth Avenue Intersection

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
GRADING AND PREPARATION				
SAWCUT	LF	285	$5.10	$1,454
SUBTOTAL GRADING AND PREPARATION				**$1,454**
PAVEMENT ITEMS				
MILLING OF BITUMINOUS PAVEMENT SURFACE, 2.0" DEPTH (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,620	$2.50	$6,551
SUPERPAVE **WEARING COURSE**, 2.0" DEPTH, SRL-H (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,620	$20.00	$52,409
SUBTOTAL PAVEMENT ITEMS				**$58,960**

CURBING AND DRANAGE ITEMS				
REINFORCED CEMENT CONCRETE CURB, 7" HEIGHT	LF	388	$90.00	$34,920
CONCRETE SIDEWALK	SY	130	$200.00	$26,000
INLET (ESTIMATE)	EA	2	$2,000	$4,000
18" REINFORCED CONCRETE PIPE (TYPE A), 100 YR DESIGN LI	LF	40	$210	$8,400
SUBTOTAL CURBING AND DRANAGE ITEMS				**$73,320**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (25%)	LS	1	$33,433	$33,433
REPLACE TRAFFIC SIGNAL AT FIFTH AND NEVILLE	LS	1	$500,000	$500,000
MMA MARKINGS	SY	390	$250	$97,500
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$15,000.00	$15,000
CONSTRUCTION TRAILER	LS	1	$30,000	$30,000
EQUIPMENT PACKAGE	LS	1	$3,000	$3,000
SUBTOTAL MISCELLANEOUS ITEMS				**$678,933**
SUBTOTAL PAY ITEMS				**$812,667**
OTHER ITEMS				
MOBILIZATION (5%)	LS	1	$40,633	$40,633
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$48,760	$48,760
CONSTRUCTION SURVEY & STAKEOUT (2%)	LS	1	$16,253	$16,253
EROSION AND SEDIMENTATION CONTROL (3%)	LS	1	$24,380	$24,380
CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMEN	LS	1	$121,900	$121,900
CONTINGENCY (20%)	LS	1	$162,533	$162,533
SUBTOTAL OTHER ITEMS				**$414,460**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$1,227,127**

**** Does <u>not</u> include:***

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

B CMU Crosswalk to Fifth Avenue

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE:	CONCEPTUAL
PROJECT:	**Boundary St/S Neville St Streetscape Enhancement**
MUNICIPALITY:	City of Pittsburgh, Allegheny County, PA
TPD JOB #:	COPI.00040
PLAN TITLE:	Preferred alternative 1-Shared Use Path
PLAN DATE:	**3/6/2026**
ROAD(S):	Boundary St/S Neville St
DESCRIPTION OF WORK:	Modified alignment of Boundary St/S Neville St and addition of a shared use path
ESTIMATE DATE:	**3/10/2026**
PREPARED BY:	RAK
CHECKED BY:	
SOURCE FOR UNIT COSTS:	

(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders

Bid tabs from city specific North Ave project was also reviewed for accuracy and city preference

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CMU Crosswalk to Fifth Avenue

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
GRADING AND PREPARATION				
CLASS 1 EXCAVATION	CY	105	$41.00	$4,305
SAWCUT	LF	150	$5.10	$765
SUBTOTAL GRADING AND PREPARATION				**$5,070**
PAVEMENT ITEMS				

SUPERPAVE **WEARING COURSE**,2.0" DEPTH, SRL-H (ROADWAY)	SY	1,675	$20.00	$33,500
SUPERPAVE **BINDER COURSE**, 2.5" DEPTH (ROADWAY)	SY	1,675	$22.00	$36,850
REINFORCED CEMENT CONCRETE BASE COURSE, 10" DEPTH	SY	1,675	$200.00	$335,000
SUBBASE 8" DEPTH (NO. 2A)	SY	1,675	$30.00	$50,250
MILLING OF BITUMINOUS PAVEMENT SURFACE, 2.0" DEPTH (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,333	$2.50	$5,833
SUPERPAVE **WEARING COURSE**, 2.0" DEPTH, SRL-H (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,333	$20.00	$46,660
SUBTOTAL PAVEMENT ITEMS				**$508,093**
CURBING AND DRANAGE ITEMS				
REINFORCED CEMENT CONCRETE CURB, 7" HEIGHT	LF	1,004	$90.00	$90,360
CONCRETE SIDEWALK	SY	490	$200.00	$98,000
INLET (ESTIMATE)	EA	4	$8,000	$32,000
BICYLCE SAFE GRATE	EA	1	$400	$400
SUBTOTAL CURBING AND DRANAGE ITEMS				**$220,760**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (25%)	LS	1	$183,481	$183,481
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$25,000.00	$25,000
RETAINING WALL	SF	456	$190	$86,640
LANDSCAPING	LS	1	$30,000	$30,000
CONSTRUCTION TRAILER	LS	1	$30,000	$30,000
EQUIPMENT PACKAGE	LS	1	$3,000	$3,000
SUBTOTAL MISCELLANEOUS ITEMS				**$358,121**
SUBTOTAL PAY ITEMS				**$1,092,043**
OTHER ITEMS				
MOBILIZATION (5%)	LS	1	$54,602	$54,602
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$65,523	$65,523
CONSTRUCTION SURVEY & STAKEOUT (2%)	LS	1	$21,841	$21,841
EROSION AND SEDIMENTATION CONTROL (3%)	LS	1	$32,761	$32,761

CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMEN	LS	1	$163,806	$163,806
CONTINGENCY (20%)	LS	1	$218,409	$218,409
SUBTOTAL OTHER ITEMS				**$556,942**
UTILITIES				
UTILITY POLES	EA	3	$25,000	$75,000
GRADE ADJUSTMENT OF EXISTING MANHOLES	EA	3	$1,400	$4,200
GRADE ADJUSTMENT OF EXISTING WATER VALVES	EA	3	$370	$1,110
RELOCATE RAILROAD FLASHING EQUIPMENT	EA	1	$200,000	$200,000
RAILROAD FLAGGERS	DAY	30	$2,500	$75,000
TOTAL FOR UTILITIES				**$355,310**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$2,004,295**

**** Does <u>not</u> include:***

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

B ALT CMU Crosswalk to Fifth Avenue

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE:	CONCEPTUAL
PROJECT:	**Boundary St/S Neville St Streetscape Enhancement**
MUNICIPALITY:	City of Pittsburgh, Allegheny County, PA
TPD JOB #:	COPI.00040
PLAN TITLE:	Preferred alternative 1-Shared Use Path
PLAN DATE:	**3/6/2026**
ROAD(S):	Boundary St/S Neville St
DESCRIPTION OF WORK:	Modified alignment of Boundary St/S Neville St and addition of a shared use path
ESTIMATE DATE:	**3/10/2026**
PREPARED BY:	RAK
CHECKED BY:	
SOURCE FOR UNIT COSTS:	(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders Bid tabs from city specific North Ave project was also reviewed for accuracy and city preference

DISCLAIMER: *TPD IS FURNISHING THIS COST ESTIMATE AS REQUESTED BY THE CLIENT. ESTIMATED COSTS ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS, LOCAL OR CHANGES TO THE PLANS, AND/ OR CHANGES IN UNIT COSTS. COST ESTIMATES ARE PROVIDED BUT IN NO WAY SHOULD THIS ESTIMATE BE CONSTRUED AS A FINAL COST FOR THE PROJECT. CONTINGENT ON ACTUAL BIDS FROM CONTRACTORS.*
TPD WILL NOT BE HELD RESPONSIBLE FOR DIFFERENCES BETWEEN THIS COST ESTIMATE AND BID COSTS.

Alt 2 - CMU Crosswalk to Fifth Avenue - with modified pavement structure

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
GRADING AND PREPARATION				
CLASS 1 EXCAVATION	CY	105	$41.00	$4,305
SAWCUT	LF	150	$5.10	$765
SUBTOTAL GRADING AND PREPARATION				**$5,070**
PAVEMENT ITEMS				

SUPERPAVE WEARING COURSE,2.0" DEPTH, SRL-H (ROADWAY)	SY	1,675	$20.00	$33,500
SUPERPAVE BINDER COURSE, 2.5" DEPTH (ROADWAY)	SY	1,675	$22.00	$36,850
SUPERPAVE **BASE COURSE**, 10" DEPTH	SY	1675	$70.00	$117,250
SUBBASE 8" DEPTH (NO. 2A)	SY	1,675	$30.00	$50,250
MILLING OF BITUMINOUS PAVEMENT SURFACE, 2.0" DEPTH (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,333	$2.50	$5,833
SUPERPAVE WEARING COURSE, 2.0" DEPTH, SRL-H (NEVILLE STREET - FILMORE TO FIFTH)	SY	2,333	$20.00	$46,660
SUBTOTAL PAVEMENT ITEMS				**$290,343**
CURBING AND DRANAGE ITEMS				
ASPHALT WEDGE CURB	LF	1004	$15.00	$90,360
CONCRETE SIDEWALK	SY	490	$200.00	$98,000
INLET (ESTIMATE)	EA	4	$8,000	$32,000
BICYLCE SAFE GRATE	EA	1	$400	$400
SUBTOTAL CURBING AND DRANAGE ITEMS				**$220,760**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (25%)	LS	1	$55,190.00	$55,190
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$25,000.00	$25,000
RETAINING WALL	SF	456	$190	$86,640
LANDSCAPING	LS	1	$30,000	$30,000
CONSTRUCTION TRAILER	LS	1	$30,000	$30,000
EQUIPMENT PACKAGE	LS	1	$3,000	$3,000
SUBTOTAL MISCELLANEOUS ITEMS				**$229,830**
SUBTOTAL PAY ITEMS				**$746,003**
OTHER ITEMS				
MOBILIZATION (5%)	LS	1	$37,300.13	$37,300
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$44,760.15	$44,760
CONSTRUCTION SURVEY & STAKEOUT (2%)	LS	1	$14,920.05	$14,920
EROSION AND SEDIMENTATION CONTROL (3%)	LS	1	$22,380.08	$22,380

CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMEN	LS	1	$111,900.38	$111,900
CONTINGENCY (20%)	LS	1	$149,200.50	$149,201
SUBTOTAL OTHER ITEMS				**$380,461**
UTILITIES				
UTILITY POLES	EA	3	$25,000	$75,000
GRADE ADJUSTMENT OF EXISTING MANHOLES	EA	3	$1,400	$4,200
GRADE ADJUSTMENT OF EXISTING WATER VALVES	EA	3	$370	$1,110
RELOCATE RAILROAD FLASHING EQUIPMENT	EA	1	$200,000	$200,000
RAILROAD FLAGGERS	DAY	30	$2,500	$75,000
TOTAL FOR UTILITIES				**$355,310**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$1,481,774**

**** Does not include:***

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

C Joncaire to CMU Crosswalk

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE:	CONCEPTUAL
PROJECT:	**Boundary St/S Neville St Streetscape Enhancement**
MUNICIPALITY:	City of Pittsburgh, Allegheny County, PA
TPD JOB #:	COPI.00040
PLAN TITLE:	Preferred alternative 1-Shared Use Path
PLAN DATE:	3/6/2026
ROAD(S):	Boundary St/S Neville St
DESCRIPTION OF WORK:	Modified alignment of Boundary St/S Neville St and addition of a shared use path
ESTIMATE DATE:	**3/10/2026**
PREPARED BY:	RAK
CHECKED BY:	

SOURCE FOR UNIT COSTS:
(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders
Bid tabs from city's North Ave project was also reviewed for accuracy and city preference; adjustments to unit pricing were made to reflect City specific pricing.

DISCLAIMER: *TPD IS FURNISHING THIS COST ESTIMATE AS REQUESTED BY THE CLIENT. ESTIMATED COSTS ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS, LOCAL OR CHANGES TO THE PLANS, AND/ OR CHANGES IN UNIT COSTS. COST ESTIMATES ARE PROVIDED BUT IN NO WAY SHOULD THIS ESTIMATE BE CONSTRUED AS A FINAL COST FOR THE PROJECT. CONTINGENT ON ACTUAL BIDS FROM CONTRACTORS.*
TPD WILL NOT BE HELD RESPONSIBLE FOR DIFFERENCES BETWEEN THIS COST ESTIMATE AND BID COSTS.

Joncaire St to CMU Crosswalk

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
GRADING AND PREPARATION				
CLEARING AND GRUBBING	AC	1.0	$15,000.00	$15,000
CLASS 1 EXCAVATION	CY	3,510	$41.00	$143,910
SAWCUT	LF	100	$5.10	$510
SUBTOTAL GRADING AND PREPARATION				**$159,420**
PAVEMENT ITEMS				

SUPERPAVE **WEARING COURSE**, 2.0" DEPTH, SRL-H (TRAIL)	SY	1,700	$20.00	$34,000
SUPERPAVE **BINDER COURSE**, 2.5" DEPTH (TRAIL)	SY	1,700	$22.00	$37,400
SUPERPAVE **BASE COURSE**, 6" DEPTH (TRAIL)	SY	2,375	$44.00	$104,500
SUPERPAVE **WEARING COURSE**,2.0" DEPTH, SRL-H (ROADWAY)	SY	3,860	$20.00	$77,200
SUPERPAVE **BINDER COURSE**, 2.5" DEPTH (ROADWAY)	SY	3,860	$22.00	$84,920
REINFORCED CEMENT CONCRETE BASE COURSE, 10" DEPTH	SY	3,860	$200.00	$772,000
SUBBASE 8" DEPTH (NO. 2A)	SY	3,860	$30.00	$115,800
SPEED HUMP	LF	90	$257.00	$23,130
SUBTOTAL PAVEMENT ITEMS				**$1,248,950**
CURBING AND DRANAGE ITEMS				
REINFORCED CEMENT CONCRETE CURB, 7" HEIGHT	LF	3,192	$90.00	$287,280
SINGLE FACE BARRIER, 42" HEIGHT WITH FILL	LF	585	$150.00	$87,750
CONCRETE SIDEWALK	SY	40	$200.00	$8,000
INLET (ESTIMATE)	EA	8	$8,000	$64,000
18" REINFORCED CONCRETE PIPE (TYPE A), 100 YR DESIGN LI	LF	160	$210	$33,600
STREET LIGHT - LED LUMINAIRE	EA	15	$1,800	$27,000
SUBTOTAL CURBING AND DRANAGE ITEMS				**$507,630**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (25%)	LS	1	$479,000	$479,000
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$45,000.00	$45,000
RETAINING WALL	SF	4109	$190	$780,710
LANDSCAPING	LS	1	$75,000	$75,000
CONSTRUCTION TRAILER	LS	1	$120,000	$120,000
EQUIPMENT PACKAGE	LS	1	$10,000	$10,000
SUBTOTAL MISCELLANEOUS ITEMS				**$1,509,710**
SUBTOTAL PAY ITEMS				**$3,425,710**
OTHER ITEMS				

MOBILIZATION (5%)	LS	1	$171,286	$171,286
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$205,543	$205,543
CONSTRUCTION SURVEY & STAKEOUT (2%)	LS	1	$68,514	$68,514
EROSION AND SEDIMENTATION CONTROL (3%)	LS	1	$102,771	$102,771
CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMENT	LS	1	$513,857	$513,857
CONTINGENCY (20%)	LS	1	$685,142	$685,142
SUBTOTAL OTHER ITEMS				**$1,747,112**
UTILITIES				
UTILITY POLES	EA	7	$25,000	$175,000
GRADE ADJUSTMENT OF EXISTING MANHOLES	EA	8	$1,400	$11,200
GRADE ADJUSTMENT OF EXISTING WATER VALVES	EA	7	$370	$2,590
RELOCATE FIRE HYDRANT	EA	2	$2,500	$5,000
GRADE ADJUSTMENT OF EXISTING GAS VALVES	EA	10	$510	$5,100
GRADE ADJUSTMENT OF EXISTING UTILITY BOXES	EA	10	$1,100	$11,000
RELOCATE STEAM LINE UNDERGROUND	LS	1	$50,000	$50,000
TOTAL FOR UTILITIES				**$259,890**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$5,432,712**

** Does <u>not</u> include:*

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

C ALT Joncaire to CMU Crosswalk

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE: CONCEPTUAL

PROJECT: **Boundary St/S Neville St Streetscape Enhancement**
MUNICIPALITY: City of Pittsburgh, Allegheny County, PA
TPD JOB #: COPI.00040

PLAN TITLE: Preferred alternative 1-Shared Use Path
PLAN DATE: 3/6/2026
ROAD(S): Boundary St/S Neville St
DESCRIPTION OF WORK: Modified alignment of Boundary St/S Neville St and addition of a shared use path

ESTIMATE DATE: **3/1/2026**
PREPARED BY: RAK
CHECKED BY:
SOURCE FOR UNIT COSTS:
(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders

Bid tabs from city's North Ave project was also reviewed for accuracy and city preference; adjustments to unit pricing were made to reflect City specific pricing.

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TPD WILL NOT BE HELD RESPONSIBLE FOR DIFFERENCES BETWEEN THIS COST ESTIMATE AND BID COSTS.

Alt 2 - Joncaire to CMU Crosswalk with modified pavement structure

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
GRADING AND PREPARATION				
CLEARING AND GRUBBING	AC	1.0	$15,000.00	$15,000
CLASS 1 EXCAVATION	CY	3,510	$41.00	$143,910
SAWCUT	LF	100	$5.10	$510
SUBTOTAL GRADING AND PREPARATION				**$159,420**
PAVEMENT ITEMS				

SUPERPAVE WEARING COURSE, 2.0" DEPTH, SRL-H (TRAIL)	SY	1,700	$20.00	$34,000
SUPERPAVE BINDER COURSE, 2.5" DEPTH (TRAIL)	SY	1,700	$22.00	$37,400
SUPERPAVE BASE COURSE, 6" DEPTH (TRAIL)	SY	2,375	$44.00	$104,500
SUPERPAVE WEARING COURSE,2.0" DEPTH, SRL-H (ROADWAY)	SY	3,860	$20.00	$77,200
SUPERPAVE BINDER COURSE, 2.5" DEPTH (ROADWAY)	SY	3,860	$22.00	$84,920
SUPERPAVE **BASE COURSE**, 10" DEPTH	SY	3,860	$70.00	$270,200
SUBBASE 8" DEPTH (NO. 2A)	SY	3,860	$30.00	$115,800
SPEED HUMP	LF	90	$257.00	$23,130
SUBTOTAL PAVEMENT ITEMS				**$747,150**
CURBING AND DRANAGE ITEMS				
ASPHALT WEDGE CURB	LF	3,192	$15.00	$47,880
SINGLE FACE BARRIER, 42" HEIGHT WITH FILL	LF	585	$150.00	$87,750
CONCRETE SIDEWALK	SY	40	$200.00	$8,000
INLET (ESTIMATE)	EA	8	$8,000	$64,000
18" REINFORCED CONCRETE PIPE (TYPE A), 100 YR DESIGN LI	LF	160	$210	$33,600
STREET LIGHT - LED LUMINAIRE	EA	15	$1,800	$27,000
SUBTOTAL CURBING AND DRANAGE ITEMS				**$268,230**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (25%)	LS	1	$67,057.50	$45,000
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$45,000.00	$45,000
RETAINING WALL	SF	4109	$190	$780,710
LANDSCAPING	LS	1	$75,000	$75,000
CONSTRUCTION TRAILER	LS	1	$120,000	$120,000
EQUIPMENT PACKAGE	LS	1	$10,000	$10,000
SUBTOTAL MISCELLANEOUS ITEMS				**$1,075,710**
SUBTOTAL PAY ITEMS				**$2,250,510**
OTHER ITEMS				

MOBILIZATION (5%)	LS	1	$112,525.50	$112,526
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$135,030.60	$135,031
CONSTRUCTION SURVEY & STAKEOUT (2%)	LS	1	$45,010.20	$45,010
EROSION AND SEDIMENTATION CONTROL (3%)	LS	1	$67,515.30	$67,515
CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMEN	LS	1	$337,576.50	$337,577
CONTINGENCY (20%)	LS	1	$450,102.00	$450,102
SUBTOTAL OTHER ITEMS				**$1,147,760**
UTILITIES				
UTILITY POLES	EA	7	$25,000	$175,000
GRADE ADJUSTMENT OF EXISTING MANHOLES	EA	8	$1,400	$11,200
GRADE ADJUSTMENT OF EXISTING WATER VALVES	EA	7	$370	$2,590
RELOCATE FIRE HYDRANT	EA	2	$2,500	$5,000
GRADE ADJUSTMENT OF EXISTING GAS VALVES	EA	10	$510	$5,100
GRADE ADJUSTMENT OF EXISTING UTILITY BOXES	EA	10	$1,100	$11,000
RELOCATE STEAM LINE UNDERGROUND	LS	1	$50,000	$50,000
TOTAL FOR UTILITIES				**$259,890**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$3,658,160**

** Does not include:*

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

D Junction Hollow Trail Head to Joncaire

DESIGNERS OPINION OF PROBABLE COST

TYPE OF ESTIMATE:	CONCEPTUAL
PROJECT:	**Boundary St/S Neville St Streetscape**
MUNICIPALITY:	City of Pittsburgh, Allegheny County, PA
TPD JOB #:	COPI.00040
PLAN TITLE:	Preferred alternative 1-Shared Use Path
PLAN DATE:	3/6/2026
ROAD(S):	Boundary St/S Neville St
DESCRIPTION OF WORK:	Modified alignment of Boundary St/S Neville St and addition of a shared use path
ESTIMATE DATE:	3/10/2026
PREPARED BY:	RAK
CHECKED BY:	
SOURCE FOR UNIT COSTS:	Penn DOT Publication 287, Bulletin 50 Construction

(1/03/23 to 1/03/25) Costs are based on PennDOT Statewide Average for previous 2 years of data, low 3 bidders Bid tabs from city's North Ave project was also reviewed for accuracy and city preference; adjustments to unit pricing were made to reflect City specific pricing.

DISCLAIMER: *TPD IS FURNISHING THIS COST ESTIMATE AS REQUESTED BY THE CLIENT. PLEASE ESTIMATED COSTS ARE SUBJECT TO CHANGE BASED ON FIELD CONDITIONS, LOCAL OR REGIONAL CHANGES TO THE PLANS, AND/ OR CHANGES IN UNIT COSTS. COST ESTIMATES ARE PROVIDED FOR BUT IN NO WAY SHOULD THIS ESTIMATE BE CONSTRUED AS A FINAL COST FOR THE PROJECT. CONTINGENT ON ACTUAL BIDS FROM CONTRACTORS.*
TPD WILL NOT BE HELD RESPONSIBLE FOR DIFFERENCES BETWEEN THIS COST ESTIMATE AND BID COSTS.

Junction Hollow Trail Head to Joncaire Street

DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
SPEED HUMP	LF	90	$257.00	$23,130
SUBTOTAL PAVEMENT ITEMS				**$23,130**
MISCELLANEOUS CONSTRUCTION ITEMS				
NON-QUANTIFIED ITEMS (20%)	LS	1	$5,783	$5,783
LUMP SUM ESTIMATE FOR SIGNS AND LANE MARKINGS (INCLUDING NEIGHBORWAY DESIGNATION	LS	1	$15,000.00	$15,000

SUBTOTAL MISCELLANEOUS ITEMS				**$20,783**
SUBTOTAL PAY ITEMS				**$43,913**
OTHER ITEMS				
MOBILIZATION (5%)	LS	1	$2,196	$2,196
MAINTENANCE AND PROTECTION OF TRAFFIC (6%)	LS	1	$2,635	$2,635
CONSTRUCTION INSPECTION/ CONSTRUCTION MANAGEMENT (15%)	LS	1	$6,587	$6,587
CONTINGENCY (20%)	LS	1	$8,783	$8,783
SUBTOTAL OTHER ITEMS				**$20,200**
TOTAL ESTIMATE FOR CONSTRUCTION*				**$64,112**

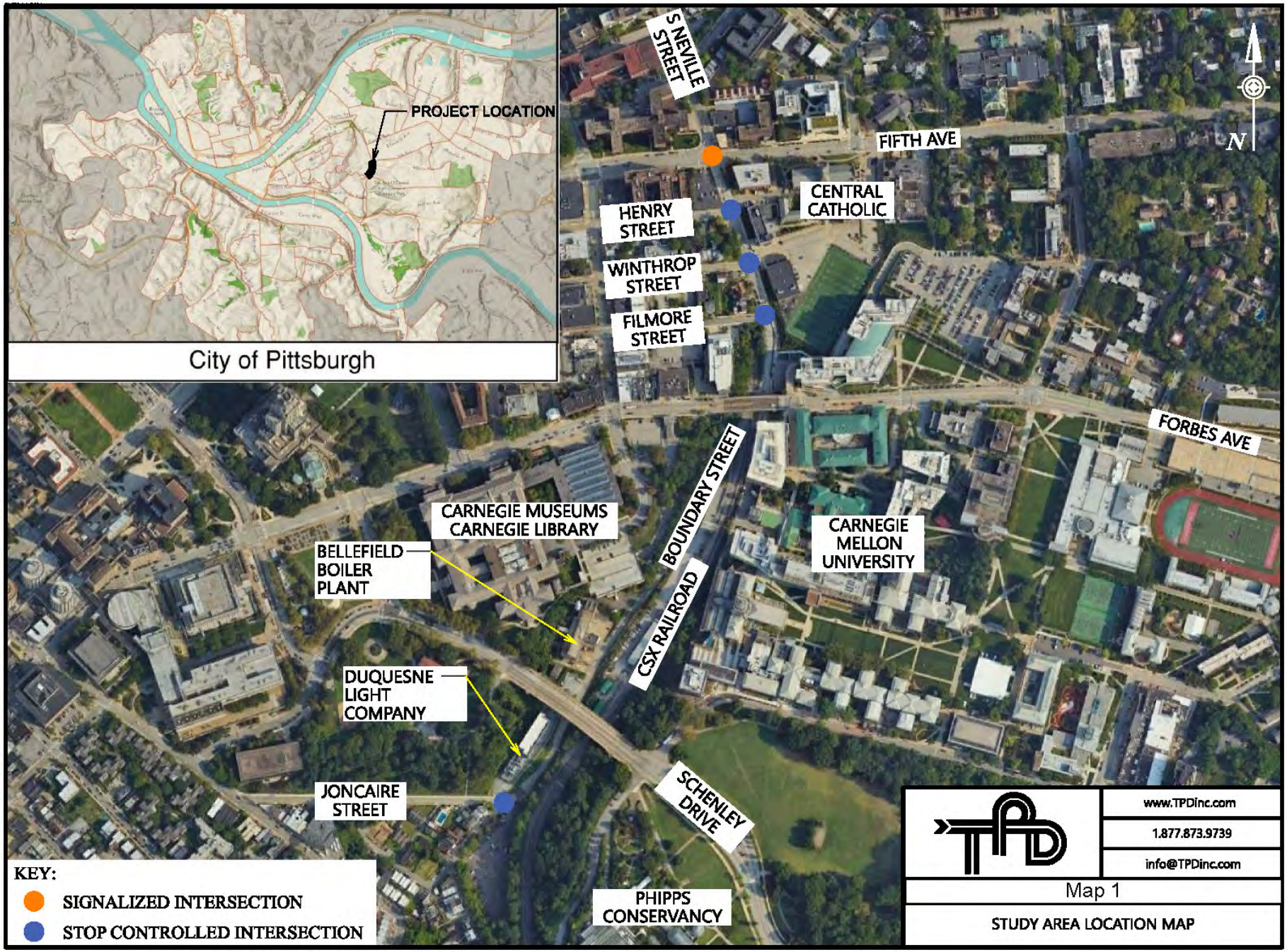
**** Does <u>not</u> include:***

Surveying/Engineering/Permitting/Legal Fees

Acquisition Costs for Right-of-Way/Easements/Releases

Additional items not specifically mentioned

APPENDIX C: PROJECT MAPS


PROJECT LOCATION
City of Pittsburgh
S NEVILLE STREET
FIFTH AVE
HENRY STREET
CENTRAL CATHOLIC
WINTHROP STREET
FILMORE STREET
FORBES AVE
BOUNDARY STREET
CARNEGIE MUSEUMS
CARNEGIE LIBRARY
CARNEGIE MELLON UNIVERSITY
BELLEFIELD BOILER PLANT
CSX RAILROAD
DUQUESNE LIGHT COMPANY
JONCAIRE STREET
SCHENLEY DRIVE
PHIPPS CONSERVANCY
N
KEY:
SIGNALIZED INTERSECTION
STOP CONTROLLED INTERSECTION
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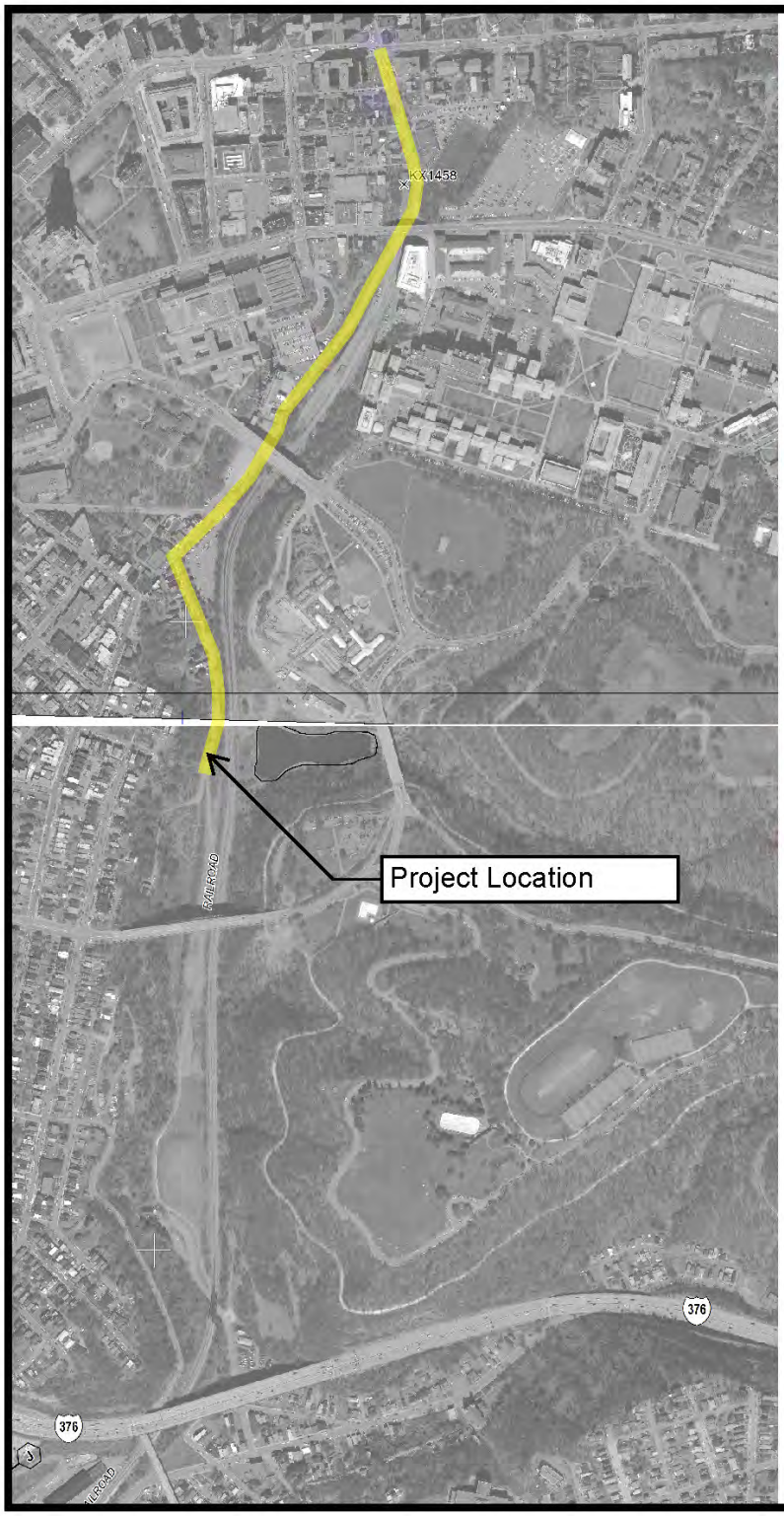
Map 1
STUDY AREA LOCATION MAP



LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% annual chance floodplain boundary
	0.2% annual chance floodplain boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
	Limit of Moderate Wave Action
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
87°07'45", 32°22'30"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
4276000mN	1000-meter Universal Transverse Mercator grid values, zone 17N
600000 FT	5000-foot grid values: Pennsylvania State Plane coordinate system, South zone (FIPSZONE 3702), Lambert Conformal Conic projection
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
● M1.5	River Mile

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
October 4, 1995

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

See Notice To Users page in FIS Report

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

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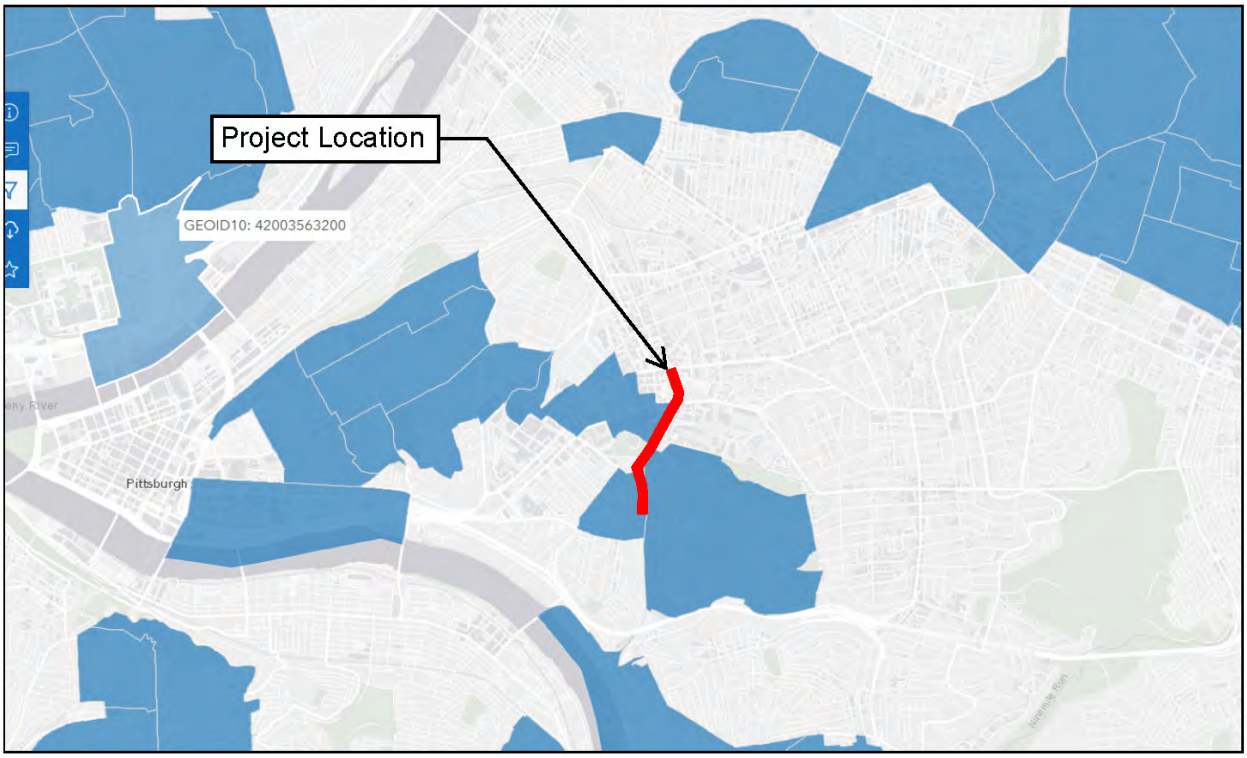
Map 2

Excerpts from
Flood Insurance Rate Map



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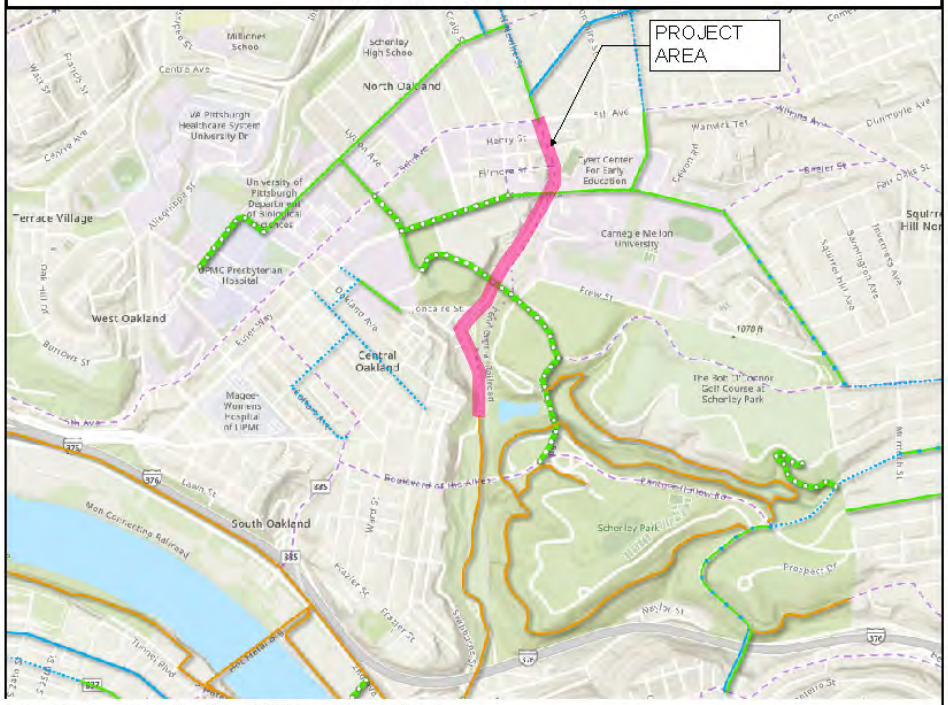
Map 3	
Justice 40 Census Blocks	

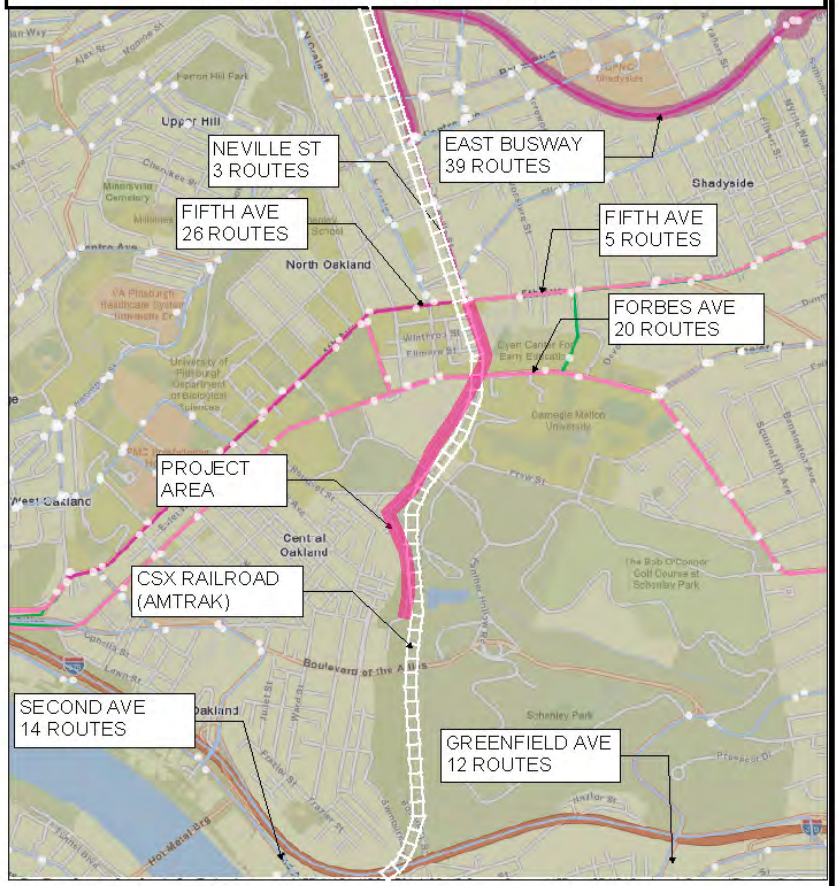
City of Pittsburgh Bike Facilities



Map obtained from the City of Pittsburgh website at:
byhttps://pittsburghpa.maps.arcgis.com/apps/instant/interactivelegend/index.html?appid=b56a2a11f5a74f64948c3f214b207e50

- Protected Bike Lane
- Buffered Bike Lane
- Bike Lane
- Bike Lane / Sharrow
- Neighborway
- Sharrow
- Shared Use Path
- Proposed On Street Facility
- Future Bike Corridor (Route TBD)
- Proposed Shared Use Path

Pittsburgh Regional Transit (PRT) Routes and Stops



Map obtained from the PRT system map website at
https://www.arcgis.com/apps/dashboards/4a9a2d3009bc4b068f33efe13ee2c5e0

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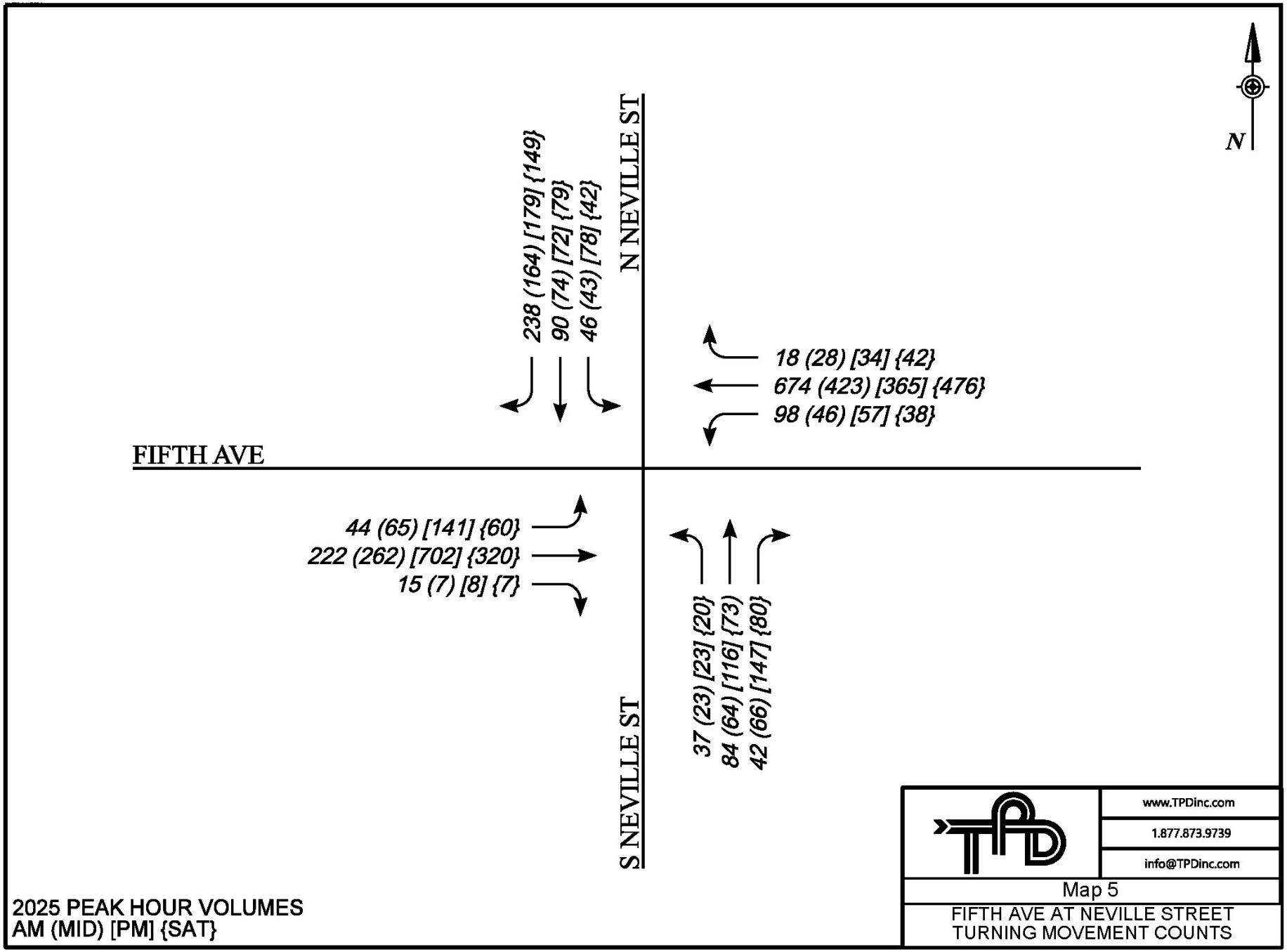
Map 4
Multi-Modal
Transportation Network


N
N NEVILLE ST
238 (164) [179] {149}
90 (74) [72] {79}
46 (43) [78] {42}
18 (28) [34] {42}
674 (423) [365] {476}
98 (46) [57] {38}
FIFTH AVE
44 (65) [141] {60}
222 (262) [702] {320}
15 (7) [8] {7}
37 (23) [23] {20}
84 (64) [116] {73}
42 (66) [147] {80}
S NEVILLE ST
2025 PEAK HOUR VOLUMES
AM (MID) [PM] {SAT}
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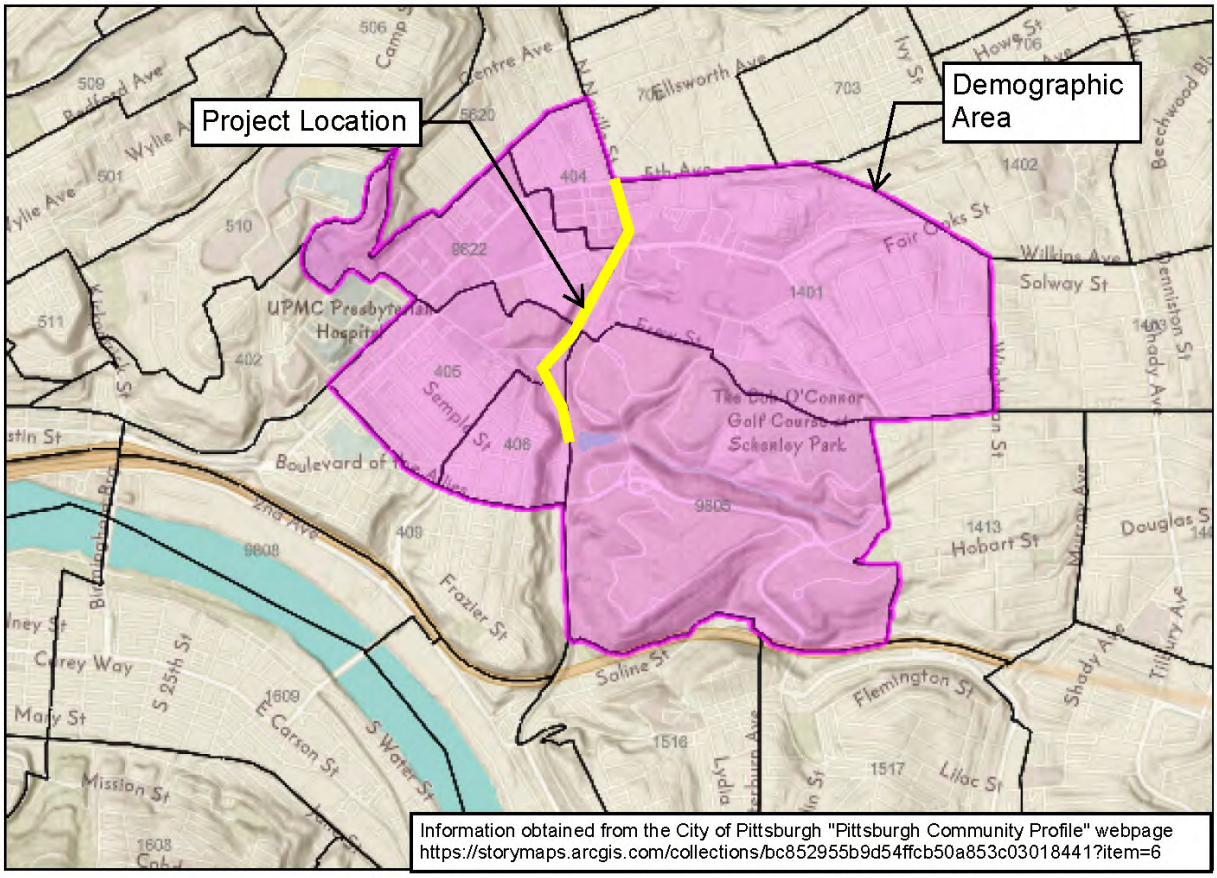
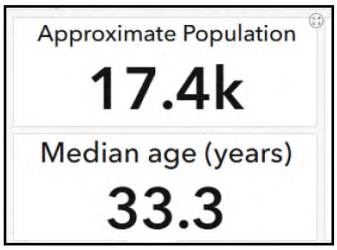
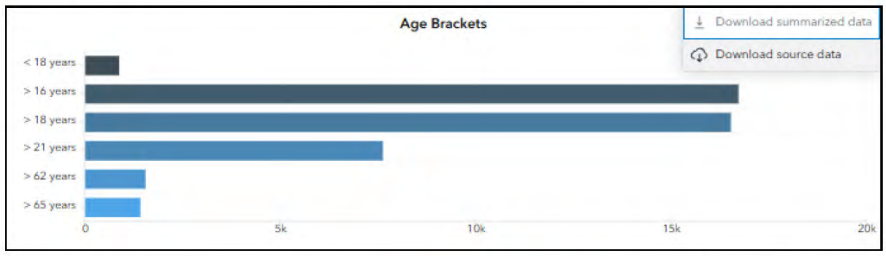
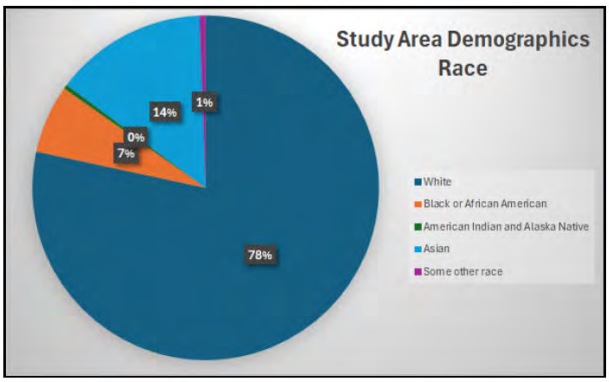
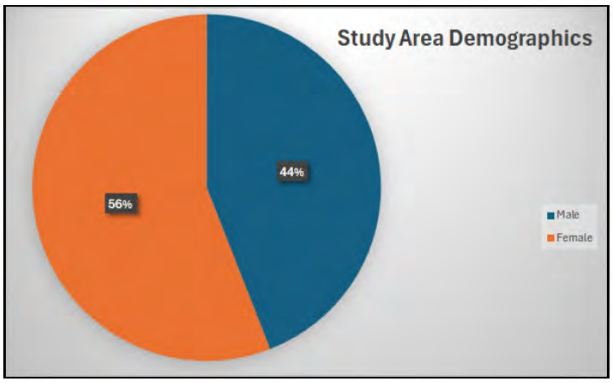
Map 5
FIFTH AVE AT NEVILLE STREET
TURNING MOVEMENT COUNTS











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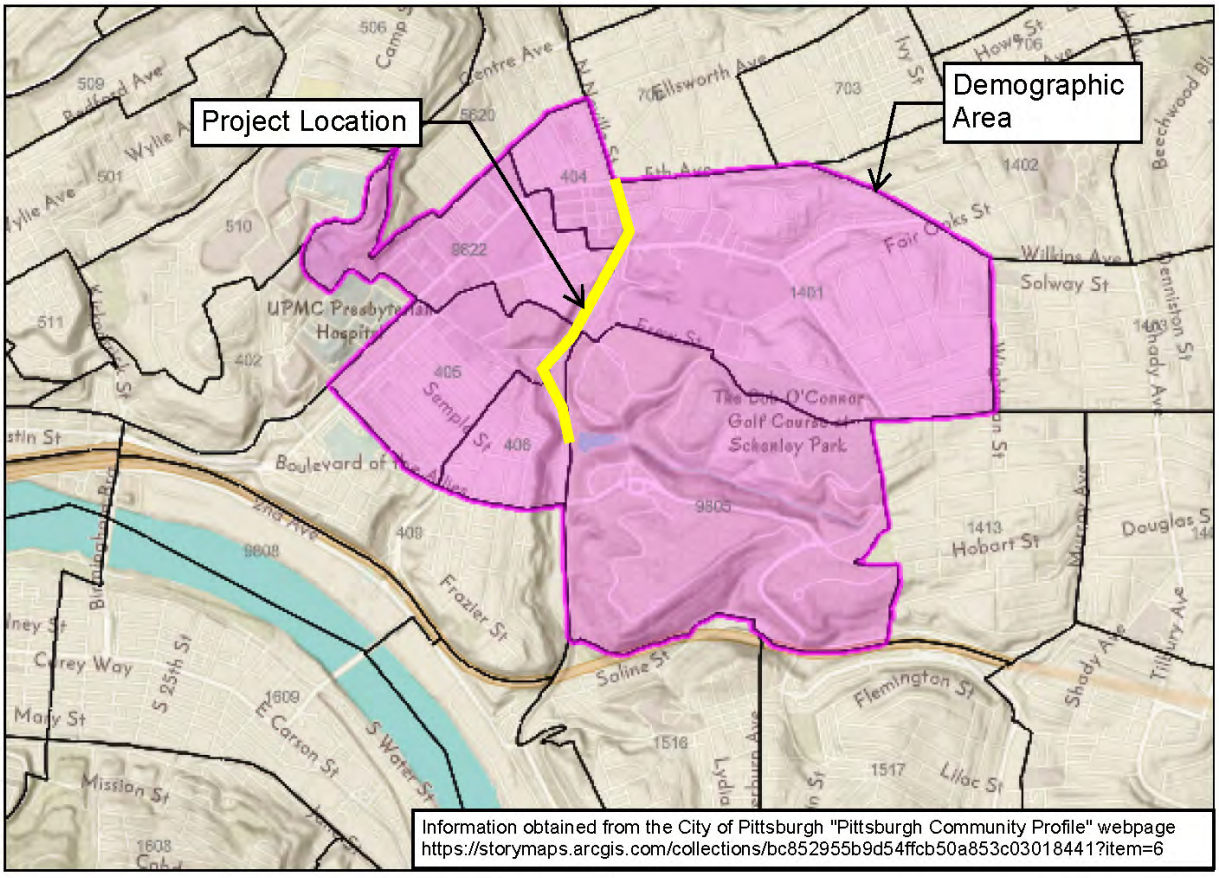
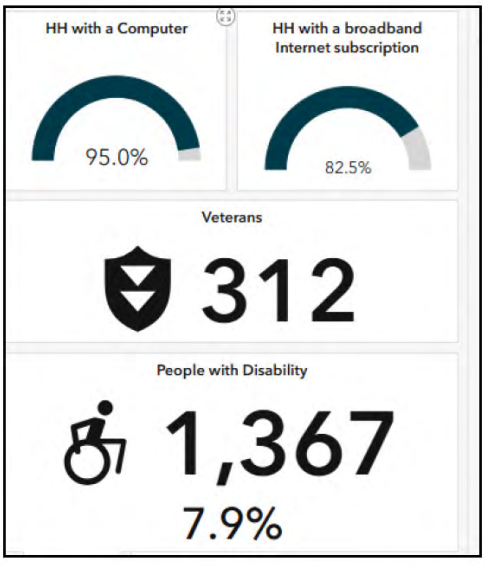
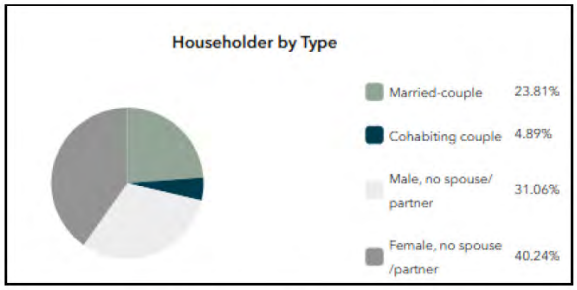
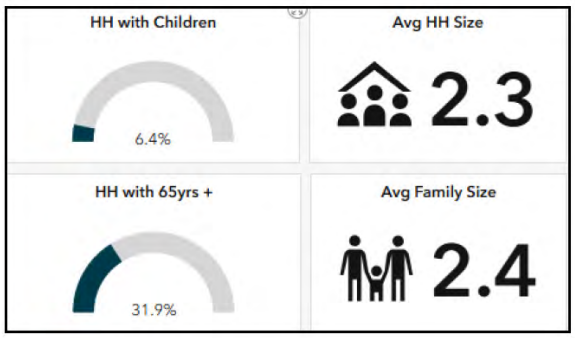
Map 6

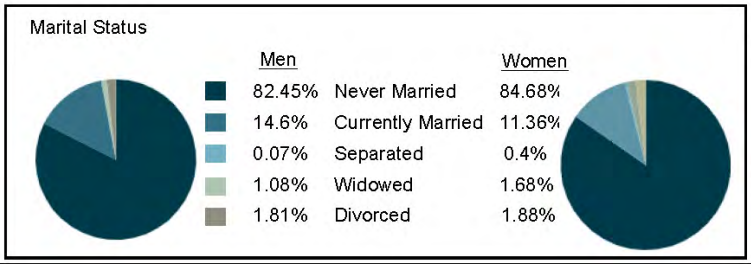
Community Demographics











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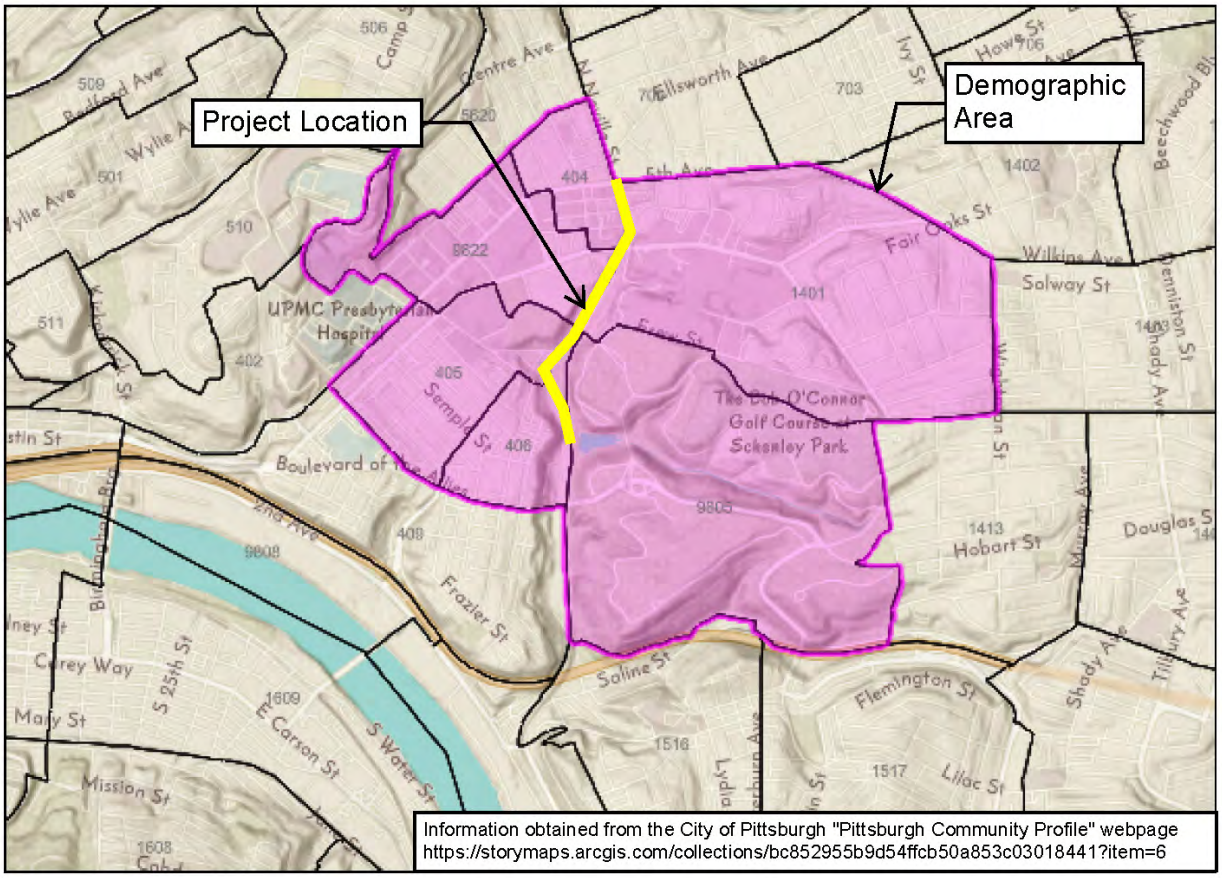
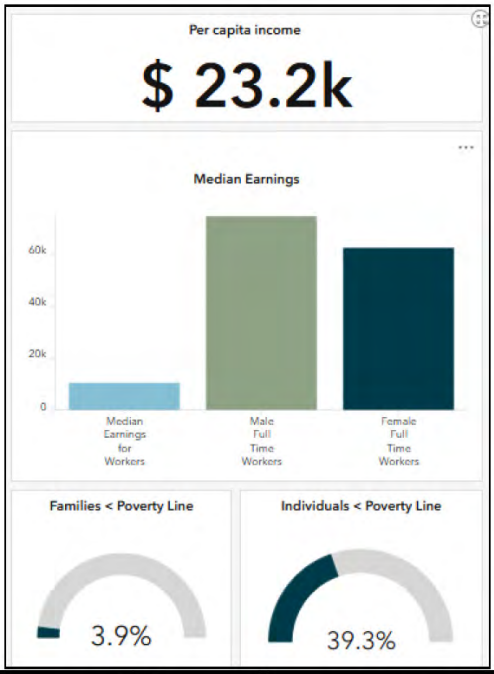
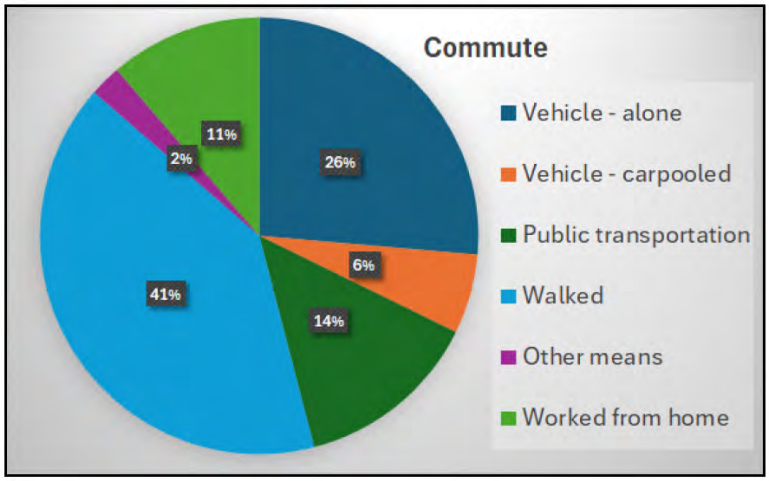
Map 7

Community Demographics







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Map 8

Community Demographics


THE SEAL OF THE CITY OF PITTSBURGH
1816
BENIGNO NUMINE