

New Pathways to Equity

**An Equitable and Just Approach to Rebuilding Infrastructure
in a Historically Black Neighborhood**



Application Information

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Project Information

Location: Pittsburgh, PA

Project Type: Capital Improvement

Eligible Applicant: Local Government

Funds Requested: \$11.32 million



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Appendix A Benefit Cost Analysis

Appendix B Letters of Support

Mayor Ed Gainey, City of Pittsburgh

Kevin Acklin, COO and General Counsel of the Pittsburgh Penguins

Mary K. Conturo, Executive Director of the Sports and Exhibition Authority

Honorable Jay Costa, Jr., Pennsylvania State Senator, 43th District

Honorable Mike Doyle, United States Representative, 10th District, Pennsylvania

Donald Evans, President & CEO of the Pittsburgh Gateways Corporation

Rich Fitzgerald, Allegheny County Executive

Greg Flisram, Executive Director of the Urban Redevelopment Authority of Pittsburgh

Honorable Wayne D. Fontana, State Senator, 42nd Senatorial District

William J. Gatti, President & CEO of TREK Development Group

Katherine E. Kelleman, Chief Executive Officer of the Port Authority of Allegheny County

Marimba Millions, President and CEO of the Hill Community Development Corporation

William J. Pickering, CEO of Pittsburgh Water & Sewer Authority

Matt Smith, President of the Greater Pittsburgh Chamber of Commerce

Vincent Valdes, Executive Director of the Southwestern Pennsylvania Commission



1 | Project Description



Center Avenue circa 1940s in the Middle Hill (University of Pittsburgh)

Once the vibrant center of Black cultural, civic, and economic life in Pittsburgh, the Hill District was deliberately cleaved from the city center by highway infrastructure and systematically decimated by redlining and urban renewal. Situated between downtown Pittsburgh and the Oakland area (the second and third largest economic centers in Pennsylvania), the Hill District remains isolated from opportunities for economic and social mobility due in large part to limited transportation mobility and neglected infrastructure. For the Hill District to rise to its former vibrancy and to leverage today's opportunities, we must address land use and transportation decisions from the past.

The Hill District consistently ranks towards the top of a range of indicators used to measure equity and mobility needs, such as low-income individuals, minority individuals, female-headed households, and zero-car households. Over the past generation, the once vibrant commercial core is boarded up and struggling; population is declining. The neighborhood is once again

a food desert because the only grocery store shuttered in 2019.

The City of Pittsburgh (hereafter referred to as "the City") and several other local, state, and federal partners are committed to the community's restoration. There is much work to be done to modernize the public right-of-way (ROW) so that it is safe, accessible, sustainable, and supportive of revitalization efforts in a long marginalized and disenfranchised community.

Funding through 'New Pathways to Equity' will implement the safety and place-making improvements articulated in the numerous community-led plans. Improvements include pedestrian accessibility and crossing improvements, restoration of critical city steps, smart city infrastructure for enhanced and reliable transit service and connectivity, intersection redesign, and streetscape improvements on the critical Centre Avenue corridor.

1.1 Project History

The Hill District began in the early 1800's with the arrival of Black individuals and families who escaped slavery and gained independence at the end of the Haitian Revolution. The thriving middle-class community continued to grow with the addition of immigrants from Eastern European and the continued influx of Black individuals and families fleeing racism and segregation in the South during the Great Migration. The Hill District was a melting pot rich with culture, music, and acceptance.

Over the years, European immigrants moved to other parts of the city and the Black population remained, grew, and pushed further up into the Hill District. This was in part to the now-demolished Penn Avenue Incline which provided easy access to jobs at the steel mills along the Allegheny River. The neighborhood became known for the sounds of jazz, and poet Claude McKay called it 'Crossroads of the World.' The still-standing childhood home of award-winning playwright August Wilson is featured as the backdrop in many of his storylines.

However, urban renewal of the late 1950's razed almost 100 acres of the Lower Hill and displaced approximately 8,000 residents and 400 businesses to make way for the Crosstown Boulevard (I-579) and Civic Arena, which itself was demolished in 2012. The 28-acre site, which



The New Granada Theater Circa 1950 along Centre Avenue (Charles "Teenie" Harris/Heniz Family Fund/Carnegie Museum of Art)

currently sits almost exclusively as surface parking, has long been a painful reminder of a vibrant, tight knit community that served as a gateway for the neighborhood.

The physical isolation that this infrastructure and development created for the remaining Hill District residents in combination with



*Top: The Lower Hill in the 1950s (Brent Bellamy/Hill CDC)
Bottom: The Lower Hill after it was razed with the Civic Arena was under construction (Pittsburgh Post Gazette)*



The Crawford Grill in the Hill District was a center of jazz music from the 1930s to the 1950s (Charles "Teenie" Harris/Heniz Family Fund/Carnegie Museum of Art)

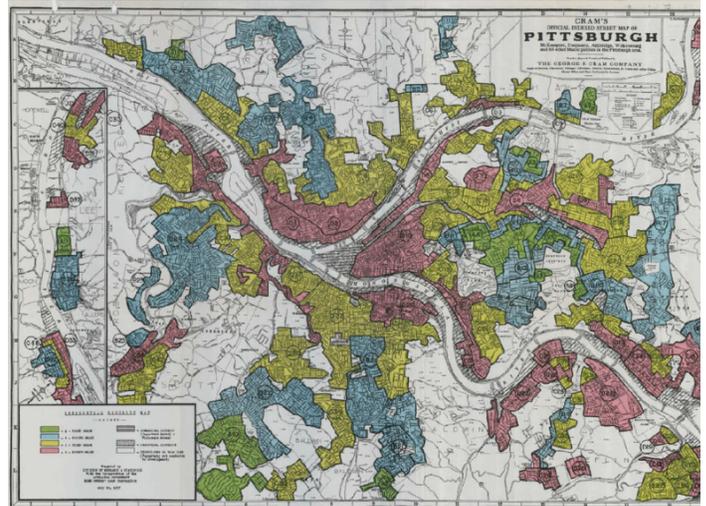
redlining practices had devastating effects on the neighborhood. Over the decades, homes and businesses were abandoned, shuttered, and foreclosed on and the transportation network deteriorated. Currently, the neighborhood is littered with condemned buildings and vacant land. Once home to nearly 60,000 individuals, today fewer than 10,000 Hill District residents remain.

Despite the harm done to them, the Hill District community remains strong and confident in their future. Led by the Hill Community Development Corporation (CDC) and the Hill District Community Collaborative, the community has crafted a clear vision for its revitalization. Numerous planning efforts have been completed over the past decade that clearly articulate these goals. These plans are linked below:

- [Greater Hill District Master Plan \(2011\)](#)
- [Centre Avenue Corridor Redevelopment and Design Plan \(2015\)](#)
- [Bedford Connects Transformation Plan \(2018\)](#)
- [Avenues of Hope \(ongoing\)](#)
- [Update to the Greater Hill District Master Plan \(ongoing\) \(<https://engage.pittsburghpa.gov/ghdmp/>\)](#)

Now is the time for implementation. The U.S. Department of Housing and Urban Development (HUD) and the City's Housing Authority have committed to helping transform the neighborhood's public housing. The City's Urban Redevelopment Authority (URA) is investing in small business support and facade improvements through the Mayor's Avenues of Hope initiative. Private investment from the Pittsburgh Penguins enterprise is finally redeveloping the razed 28 acres of the Lower Hill.

The missing piece to hold these distributed investments together is restoration of the central spine of Centre Avenue and safe and accessible travel throughout the neighborhood. Pedestrian improvements connecting Centre Avenue to the forthcoming Bus Rapid Transit (BRT) underway on a parallel corridor on the outer edge of the Hill District is crucial to revitalization of the neighborhood.



Home Owner's Loan Corporation (HOLC) redlining map of Pittsburgh targeted the Hill District as a "high risk" area for mortgage loans and investments effectively limiting economic growth opportunities (LaDale Winling/ University of Richmond)

Improvements proposed as part of 'New Pathways to Equity' would increase safety, access, and mobility for existing residents and support long awaited redevelopment activities that will bring new residents, jobs, and opportunity to the neighborhood. They will also restore the connection between downtown and the rest of the Hill District that was severed decades ago. These improvements were identified and reiterated as neighborhood priorities during community-led planning processes and reconfirmed through recent and regular conversations with stakeholders and the community.



Centre Avenue Corridor Plan from 2015

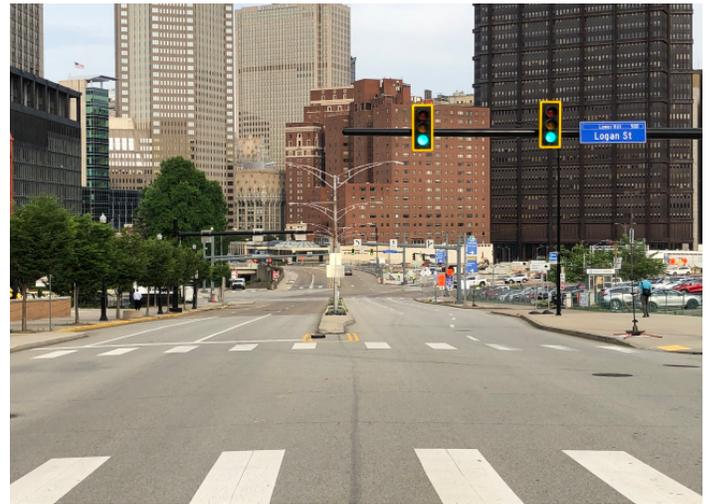
1.2 Transportation Challenges & Proposed Solutions

Centre Avenue is one of the longest continuous corridors in the City. For decades, it was the lifblood of the Hill District - the artery for movement, commerce, and community. Its trolley line brought workers to jobs and patrons to businesses, offering the lowest slope route through the hilly district. The crash of the steel industry led to a citywide exodus of population and economic decimation of city and regional budgets. Incline service ceased and was removed. Transit service was slashed and infrastructure fell into disrepair. The remaining Hill District residents were cut off from jobs and opportunity and isolated from the rest of the City. I-579 severed the neighborhood to the west while literal walls went up on the east separating the Hill District from Oakland and the University of Pittsburgh.

While the Lower Hill was razed to facilitate



Historic photos of Centre Avenue (Pittsburgh City Photographer Collection, University of Pittsburgh)



Centre Avenue today in the Lower Hill

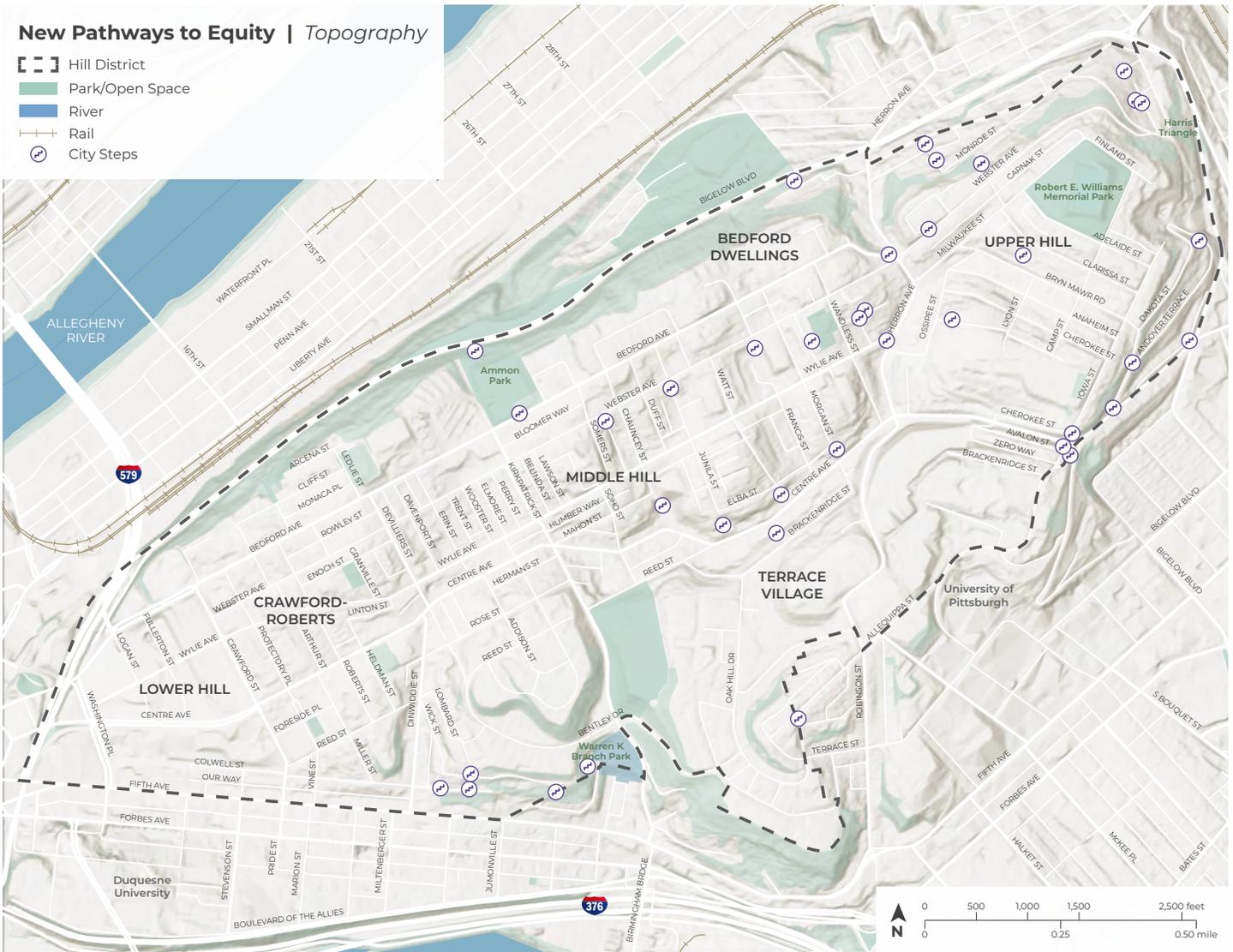
auto mobility, the critical sidewalks, city steps, and streetscapes in remaining parts of the Hill District fell into disrepair. Since the 1950's, this low-income, transit-dependent community has long suffered from urban renewal and other ill-advised policies of the time. Continued disinvestment has led to deteriorated pedestrian infrastructure, creating even more challenges for residents, many of whom do not have private vehicles, to gain connection to jobs, schools, social activities, economic opportunities, and community resources. While transit runs frequently, the poor condition of the sidewalk and public space makes the Centre Ave corridor inhospitable. The lack of investment in the public ROW casts an overall pallor of neglect over remaining residents and businesses.

The City's Department of Mobility and Infrastructure (DOMI) is an active partner in efforts to reconnect, redevelop, and revitalize Centre Avenue and the entire Hill District. The proposed improvements are drawn from a series of community-led planning processes that all include recommendations for transportation infrastructure investment that supports better connectivity, safer mobility, and improved placemaking and environmental stewardship that will help breathe new life back into this historic neighborhood. Specifically, these improvements will:

- Introduce considerable human-focused infrastructure investment in one of the most marginalized and transit-dependent neighborhoods in the City.

New Pathways to Equity | Topography

-  Hill District
-  Park/Open Space
-  River
-  Rail
-  City Steps



- Complement higher-density infill development along the Avenue of Hope corridor with capital investment in the ROW that will support multimodal trips.
- Reconstruct major intersections, sidewalks, and curbs and install other streetscape betterments (street trees, furnishings, transit shelters, and trash cans) on Centre Avenue to improve the safety and quality of the public space and roadway.
- Close gaps throughout the sidewalk network to improve safety and accessibility.
- Reconnect the Lower Hill to the rest of the Hill District.
- Reconstruct the Chauncey Street Steps and install sidewalks and other treatments on Chauncey Street to improve the connection from the Bedford Dwellings public housing complex to the Centre Avenue business



Deteriorating sidewalk conditions in the Hill District

district and the transit service provided on the corridor.

- Upgrade transit stops to include bus shelters, lighting, benches, and other pedestrian amenities as well as ADA-accessible pads and improved sidewalks leading to transit stops.
- Work with local artists to introduce a high quality public realm that reflects the dignity and pride of this historic neighborhood.
- Leverage the expertise and ingenuity of the Energy Innovation Center partners to make Bedford Avenue a pioneering corridor of transportation electrification.
- Promote electrification of transportation options for cleaner, quieter transport.
- Install street trees to increase tree canopy and reduce heat island effect.
- Improve water quality through the incorporation of low-impact design (LID) with green infrastructure and stormwater management.

1.3 Project Scope

The proposed improvements have been identified through extensive stakeholder and community engagement conducted as part of previous community-led planning processes. This combination of improvements has been selected for 'New Pathways to Equity' because they individually and collectively will help improve safety, access, mobility, and opportunity for some

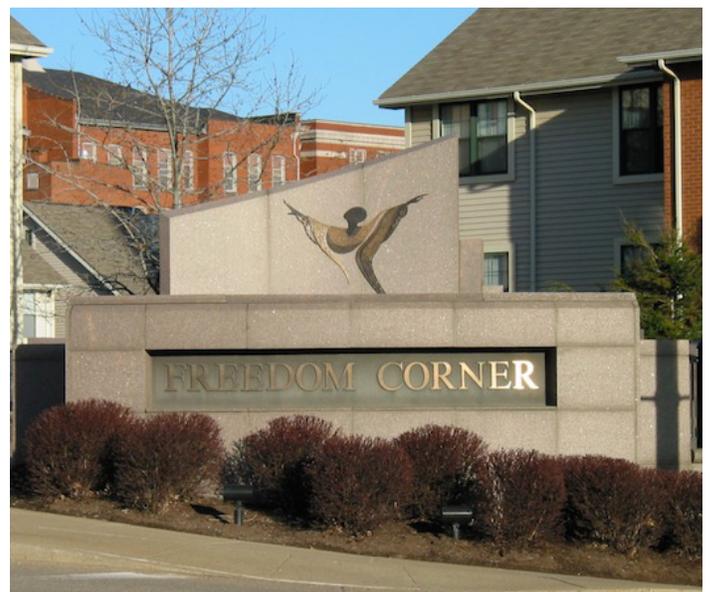


Pedestrian improvements and green infrastructure at Fullerton Street & Wylie Avenue in the Lower Hill

of the most marginalized and disenfranchised populations in the City. The anticipated cost and benefit of each improvement is summarized in Section VI and presented in greater detail in the Benefit Cost Analysis (BCA) attachment to this application. Additionally, 'New Pathways to Equity' will support existing community-driven revitalization efforts being undertaken by the Hill CDC and multiple City entities with the intent to support new or existing minority and local business owners and developers, bring jobs to the neighborhood and residents back to the community, restore part of the Hill District's lost theatrical legacy, and celebrate Black art and culture.

Centre Avenue is the main transportation artery of the Hill District. Proposed improvements would focus on using the street to enhance the commercial district and support infill development. Priority would be given to managing the curb for street parking and loading through commercial areas. Calming traffic, safety and accessibility improvements, and transit and pedestrian amenities would transform Centre Avenue from an auto-dominated roadway to a multimodal boulevard that would meet the demand for new trips with transit and other non single-occupancy vehicle (SOV) modes.

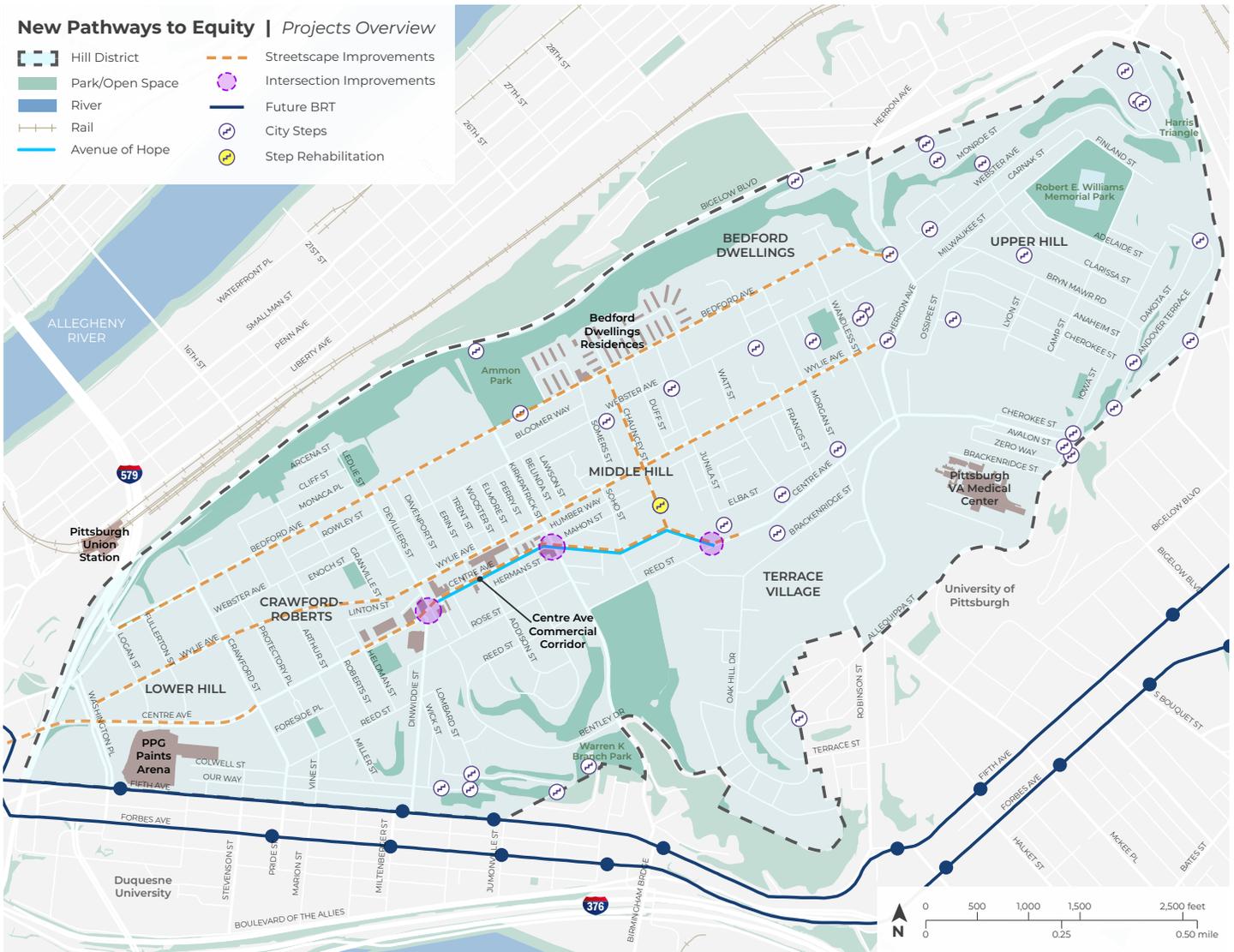
Centre Avenue - Lower Hill. Centre Avenue between Sixth Avenue and Crawford Street is



Freedom Corner at Centre Avenue & Crawford Street (Louise Sturgess/Pittsburgh History and Landmarks Foundation)

New Pathways to Equity | Projects Overview

- Hill District
- Park/Open Space
- River
- Rail
- Avenue of Hope
- Streetscape Improvements
- Intersection Improvements
- Future BRT
- City Steps
- Step Rehabilitation



approximately 2,300 feet in length and 74 feet wide. This portion of Centre Avenue connects the Hill District to downtown and is adjacent to the southern boundary of the Lower Hill redevelopment site. Its current configuration is two travel lanes in either direction with loading, on-street parking, and block long painted curb extensions as well as a narrow and deteriorated center island median with lighting. Proposed improvements would create a true boulevard that will not only slow traffic and support increased pedestrian activity but also serve as a gateway to other parts of the Hill District and help reconnect the Hill District to downtown. A 16-foot wide center island median with trees and other vegetation, pedestrian-scale LED lighting, and green infrastructure would improve the streetscape. Transit improvements will be evaluated with our partners at the Port Authority of Allegheny County (PAAC).

There are several key community landmarks along this section of Centre Avenue which would be celebrated and made more accessible as part of these improvements. The Freedom Corner Memorial at Crawford Street is a local landmark as it is the location where residents and activists in the 1960's peacefully protested urban renewal in essence saying 'you will not demolish past this point.' It still serves as a place where people congregate to stand for social and racial justice. Bedford Avenue at Crawford Street is the location of the Energy Innovation Center, a non-profit organization that serves as a 'living laboratory' for community leaders and businesses whose mission is to support a clean and sustainable future. Proposed improvements to and between these locations would include high-visibility crosswalks, ADA-compliant curb ramps, and sidewalk reconstruction.

Intersection improvements through this section would leverage existing plans for Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) 'Smart Spines' signal upgrades, which will replace aging traffic signals with state-of-the-art smart signal technology that will include automated detection of pedestrians, bicycles, and vehicles, and automated optimization of signal timings to improve efficiency for all users. By coordinating these improvements, the smart signals can be installed in coordination with other 'New Pathways to Equity' improvements to minimize disruption associated with construction activities and recognize some cost savings of installing new signal poles in tandem with sidewalk improvements.

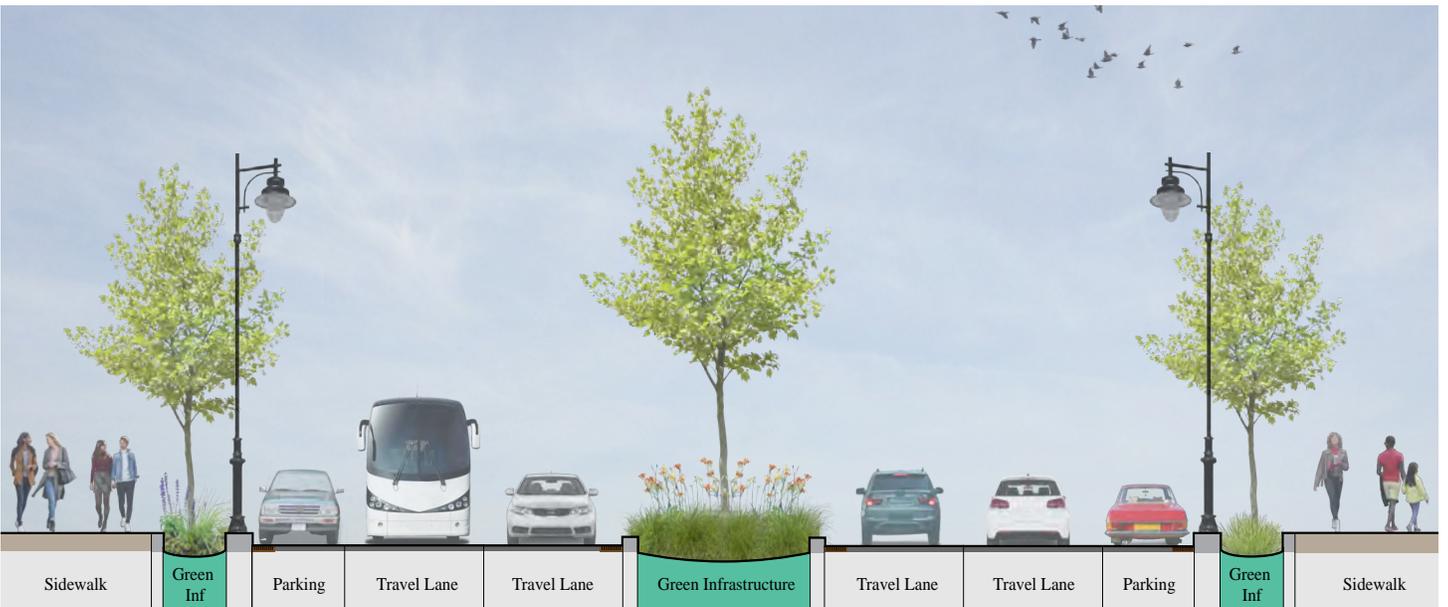
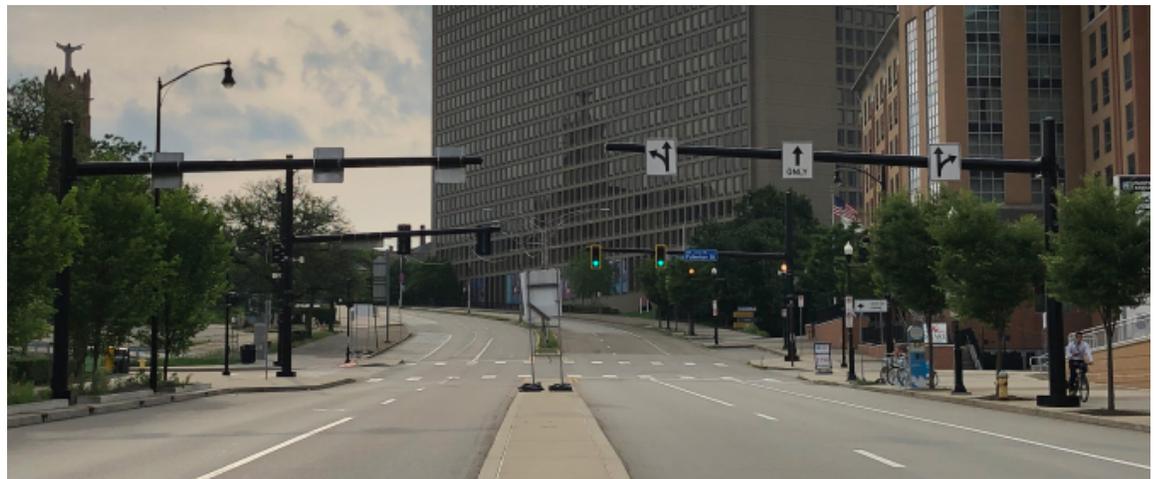
Centre Avenue - Middle Hill. Centre Avenue between Dinwiddie and Reed streets are the

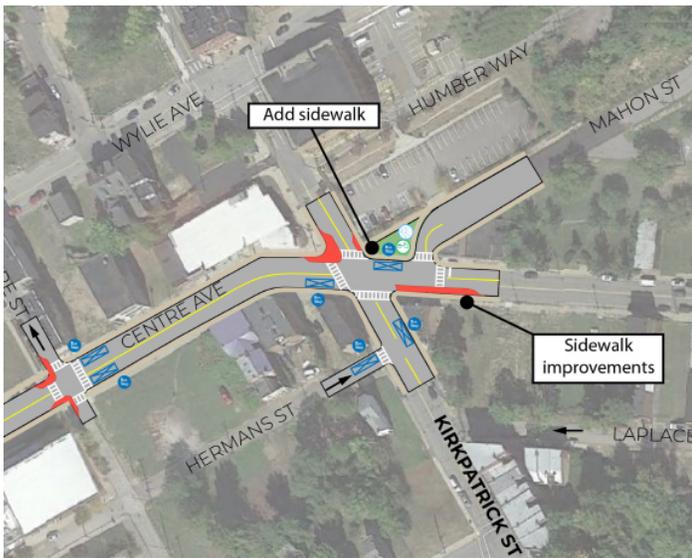
extents of the Avenue of Hope designation, a distance of approximately 3,000 feet. The cartway is approximately 40 feet wide. The street has one travel lane and one parking lane in each direction. There are three primary intersections within this area - Dinwiddie, Kirkpatrick, and Reed streets. Each of the three bus routes that service the neighborhood touch at least one of these intersections with one providing service the length of Centre Avenue from downtown to the eastern edge of the city limits. The sidewalks vary in both condition and width.

These three intersections are the same ones identified for redesign in the Centre Avenue Corridor Redevelopment and Design Plan. The plan identifies design concepts for the Centre of Culture (Dinwiddie Street), Centre of Opportunity (Kirkpatrick Street), and Centre of Cultivation (Reed Street). Along or adjacent to this portion of

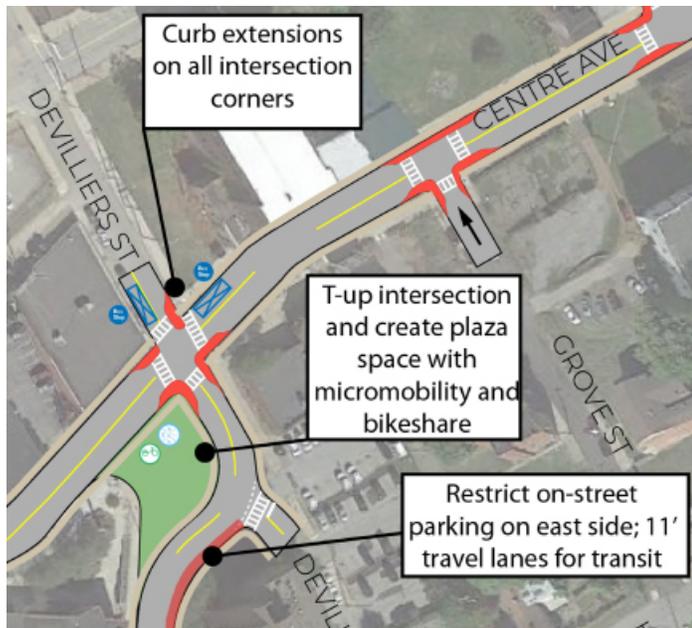
Right: Existing conditions at Centre Avenue & Fullerton Street

Below: Rendering of potential changes on Centre Avenue from Sixth Avenue to Crawford Street (CHPlanning, Ltd.)

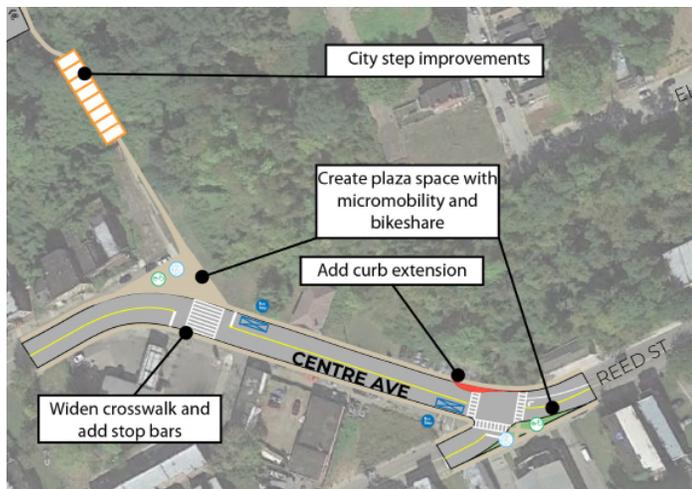




Concept for Kirkpatrick Street & Centre Avenue (Kittelson & Associates, Inc.)



Concept for Dinwiddie Street & Centre Avenue (Kittelson & Associates, Inc.)



Concept for Reed Street & Centre Avenue (Kittelson & Associates, Inc.)

Centre Avenue is where the URA is working with the community to sell 170 parcels to minority and local business owners and developers to revitalize the corridor and retell the story of the neighborhood’s rich history.

Improvements proposed as part of ‘New Pathways to Equity’ would include a complete street rehabilitation of the Avenue of Hope corridor and just beyond its extents. It would also include reconstruction of the abovementioned intersections to improve site lines, pedestrian safety, and transit access. Other improvements will include street paving and markings, new or replacement sidewalks, curbs, ADA-compliant curb ramps and bus loading areas, high visibility crosswalks, pedestrian-scale LED lighting, signage and street furniture, trees, public art, bus stop enhancements, and 5G broadband internet installation while the street is open. ‘Smart Spine’ signal upgrades would also be made in tandem with ‘New Pathways to Equity’ improvements.

East-West Pedestrian and Streetscape Improvements.

In addition to Centre Avenue, the other east-west streets in the Hill District - Bedford, Wylie, and Webster avenues - would also receive treatments to improve pedestrian safety and access. Improvements would include new or rehabilitated sidewalks, ADA-compliant curb ramps, curb extensions, high visibility crosswalks, transit stop enhancements, lighting, streetscaping, and green infrastructure.

Improvements will be made to critical corridor ‘connectors’ that provide linkages between the Centre Avenue business district and the densest collections of residential housing. Improved connections will be made to transit stops, schools, community resources, and neighborhood parks, which are primarily located just north of Bedford Avenue and offer stunning views of the Strip District, Allegheny River, and beyond. Treatments and locations for siting were identified in the Bedford Connects Transformation Plan.

Chauncey Street Pedestrian and Steps Improvements.

The Hill District is home to more than a handful of the city’s approximately 800 sets of city steps. These publicly available

resources are generally considered an extension of the sidewalk network. City steps are an integral component of the city street grid, albeit only for non-motorized users.

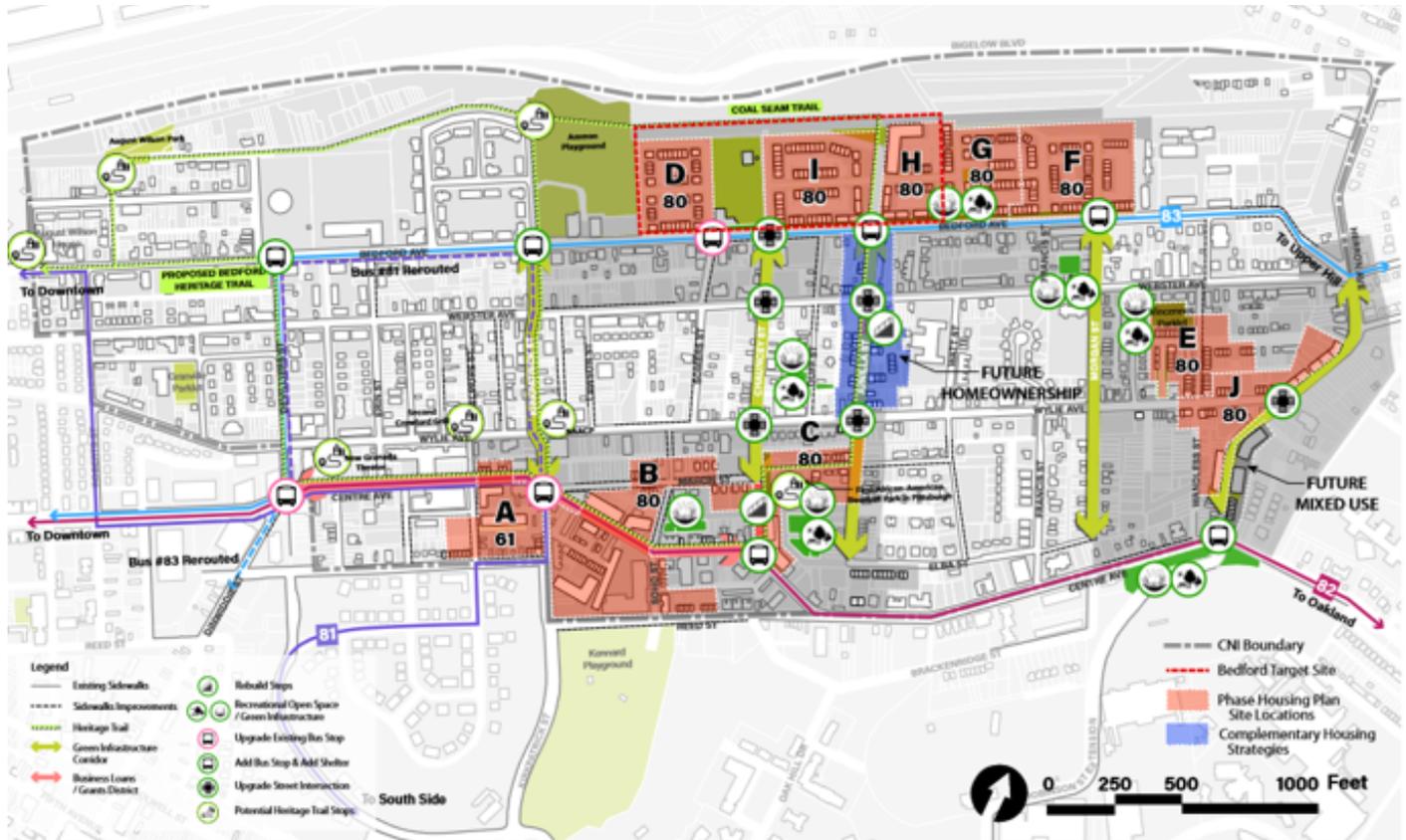
Chauncey Street, including a set of city steps, is one of the primary pedestrian connections from Bedford Dwellings (neighborhood and also public housing) to Centre Avenue and the frequent transit service that runs along the corridor. However, the connection as it exists is neither comfortable nor safe for many users. Between Bedford Avenue and Mahon Street, where the street meets the steps, Chauncey Street lacks a continuous sidewalk connection, ADA-compliant curb ramps, sufficient lighting, and crosswalks; all of which would be implemented as part of the proposed improvements.

The Chauncey Street Steps, which were identified as one of the top five priorities in the City’s 2019 Steps Plan, will be reconstructed. New steps will include a bike tunnel but would not be accessible for those with limited mobility. Improvements to

Chauncey Street and the steps were identified in the above mentioned plans. These improvements are essential to support increased mobility and access to opportunity for the residents of Bedford Dwellings

Sidewalk Improvements. After decades of significant population loss and subsequently a declining tax base, the pedestrian environment in Pittsburgh has struggled to be adequately maintained. This is even more acute in communities such as the Hill District that have borne some of the greatest long-term impacts of urban renewal and subsequent community disinvestment. The Hill District’s sidewalk network ranges from good to poor condition. In some locations, the sidewalk is simply not present or ends midblock forcing users onto the street. Many existing sidewalks and curb ramps are not ADA-compliant. Critical gaps in the network exist.

Previous planning efforts clearly articulate where sidewalk investment is most needed. Many of these connections are between residential



Map of proposed improvements from the Bedford Connects Plan



areas and Centre Avenue as well as community resources, such as Kennard Playground, which is an incredible community resource but not easily accessible on foot. As part of 'New Pathways to Equity,' DOMI will work to close these critical gaps through the installation of new sidewalks, ADA-compliant curb ramps, high visibility crosswalks, and curb extensions. In some locations, green infrastructure may be installed to address flooding and stormwater issues. Street trees and improved lighting will also be incorporated, as appropriate.

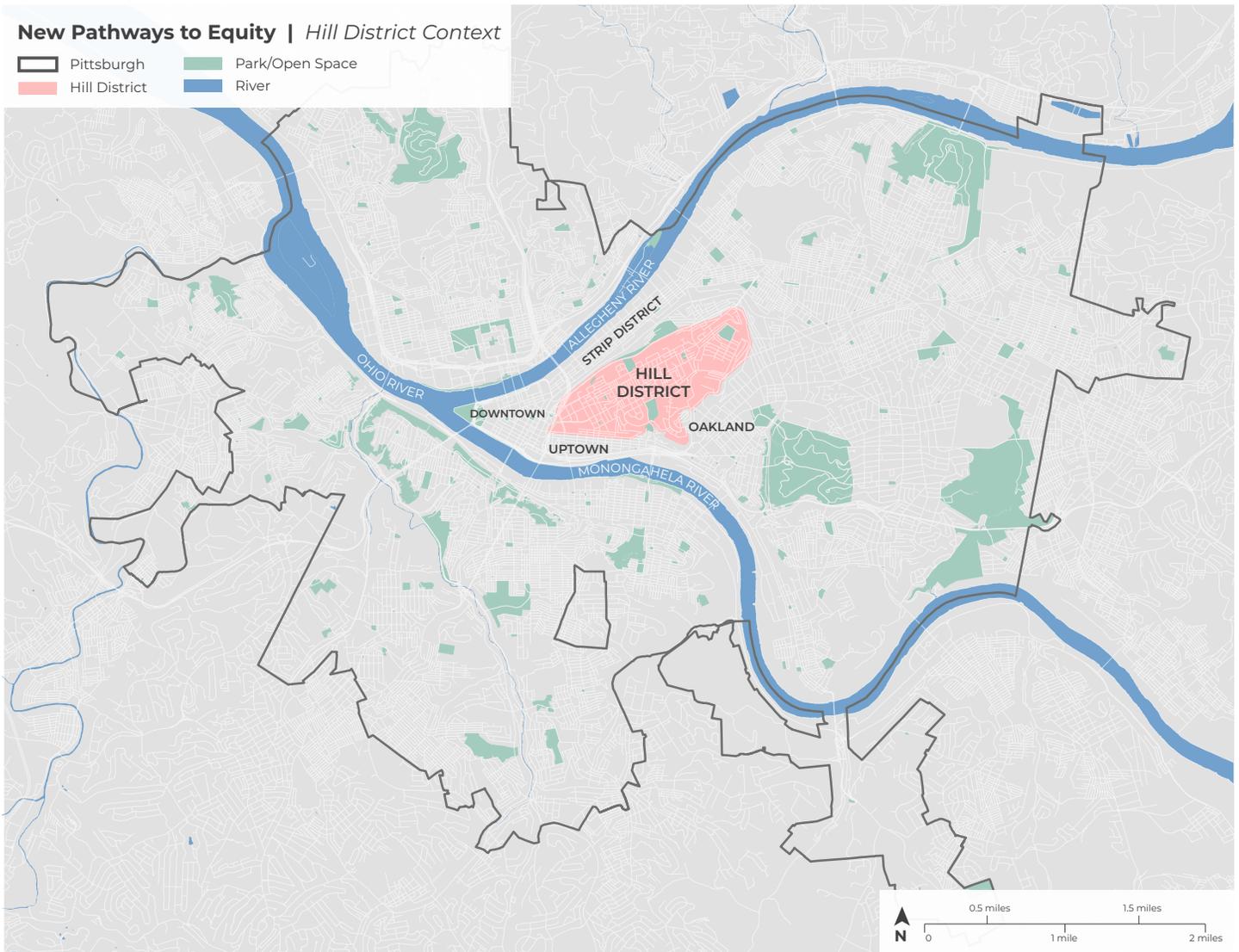


Existing conditions (above) and concept rendering (below) for improvements along Bedford Avenue (Bedford Connects Plan)



Existing conditions of the Chauncey Street Steps

2 | Project Location



The Hill District is comprised of six distinct neighborhoods - the Lower Hill, Middle Hill, Upper Hill, Crawford-Roberts, Bedford Dwellings, and Terrace Village. Aptly named, the topography of the Hill District ranges from flat terrain to rolling hills and steep slopes. By nature, it creates an isolating effect and makes using an already inadequate sidewalk network have less appeal.

It is situated between Downtown and Oakland (the second and third largest economic centers in Pennsylvania) and up the escarpment from the Strip District and Allegheny River. The four approximately two-mile east-west streets that connect within the neighborhood and to

Downtown and Oakland increase in elevation from west to east. Centre Avenue has the most gradual elevation change of the east-west streets and is, in essence, the valley of the Hill District as the streets to both the north and south are at a higher elevation.

Three bus routes serve the Hill District. The Fifth and Forbes corridor, which provides existing frequent and soon BRT service, is at the southern edge of the Hill District but is not easily accessed by Hill District residents and visitors due to challenging topography and a gap in connecting transit routes.

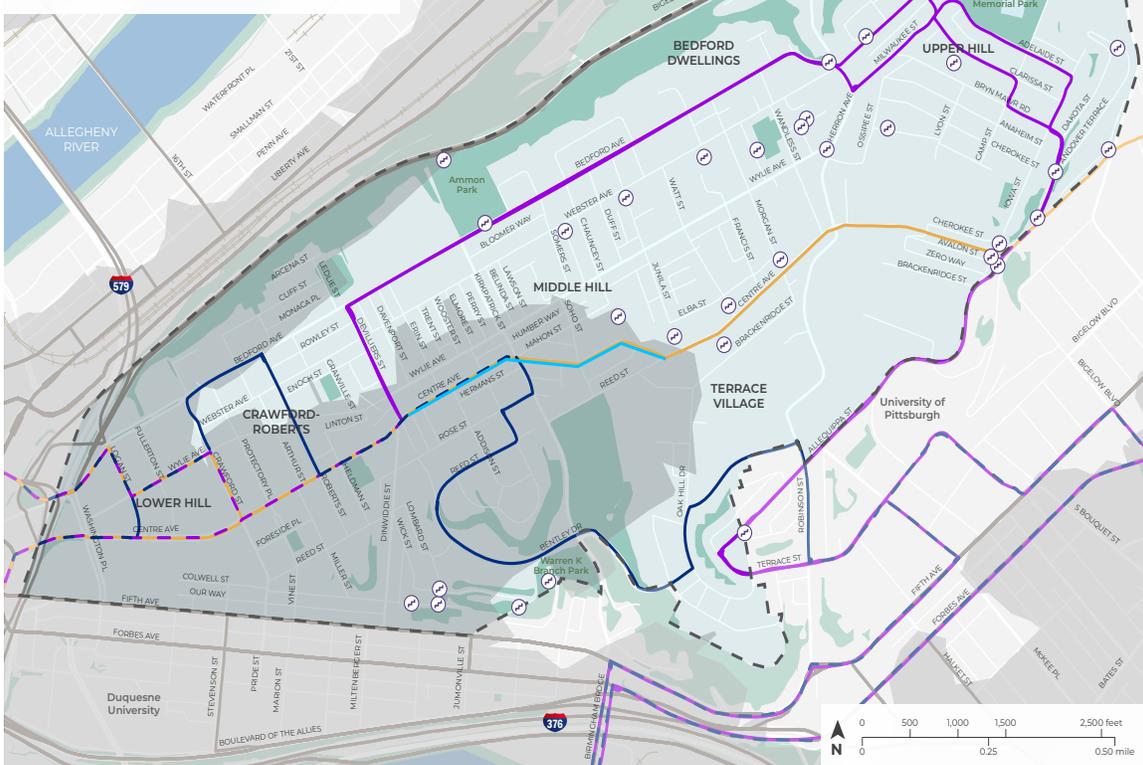
New Pathways to Equity | Neighborhoods

- Hill District
- Park/Open Space
- River
- Rail
- City Steps



New Pathways to Equity | Existing Transit

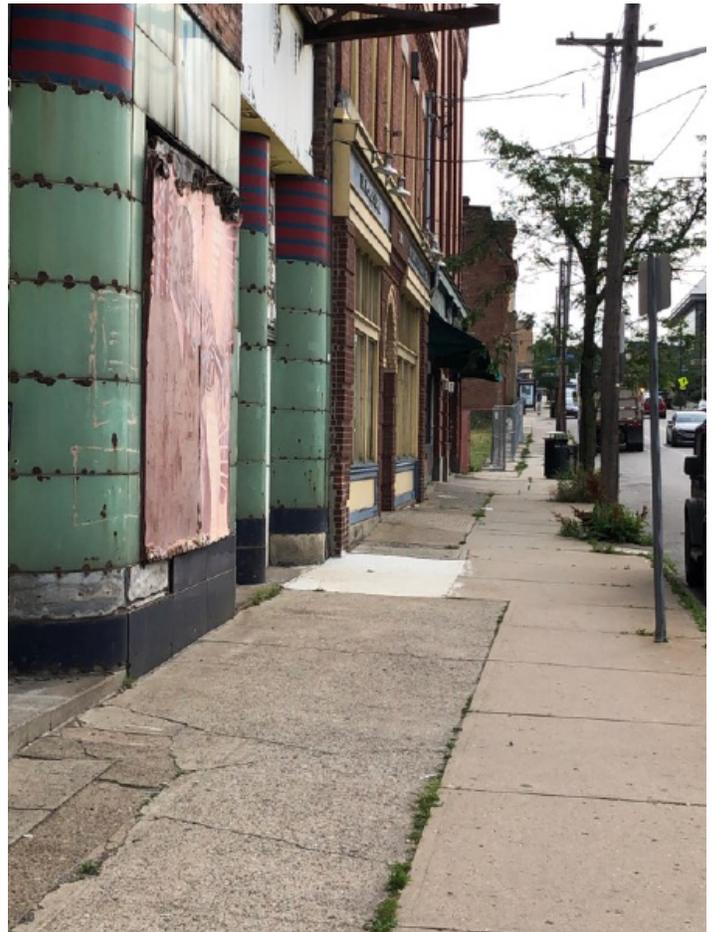
- Hill District
- Park/Open Space
- River
- Rail
- City Steps
- Route 81
- Route 82
- Route 83
- Other Transit Route
- Avenue of Hope
- Walkshed from Frequent Transit Service



The Hill District's sidewalk network ranges from good to poor condition. In some locations, the sidewalk is simply missing or ends abruptly forcing users into the street. Many existing sidewalks and curb ramps are not ADA-compliant. Critical gaps in the network exist.

The Hill District is home to more than a handful of the city's approximately 800 sets of city steps. These publicly available resources are generally considered an extension of the sidewalk network. They have and will continue to play an integral part in our pedestrian network and provide vital and faster connections between higher and lower elevations than following the street network. Prior to step construction, the Penn Avenue Incline brought hilltop residents to the banks of the Allegheny River to work in the steel mills starting in 1884.

The entirety of the Hill District with the exception of the Lower Hill is classified an Area of Persistent Poverty. These same census tracts are also reported as having some of the highest mobility need in the city as reported in the PAAC's 2019 Equity Index of Mobility Need report. Bedford Dwellings consistently demonstrates some of the highest need for the eight indicators for which data is included in the report. These indicators include people with disabilities, people in poverty, minority race and ethnicity persons, households without vehicles, older adults, persons under the age of 18, persons with limited English proficiency, and female-led households.



Above: Current streetscape conditions on Centre Avenue at the New Granada Theater

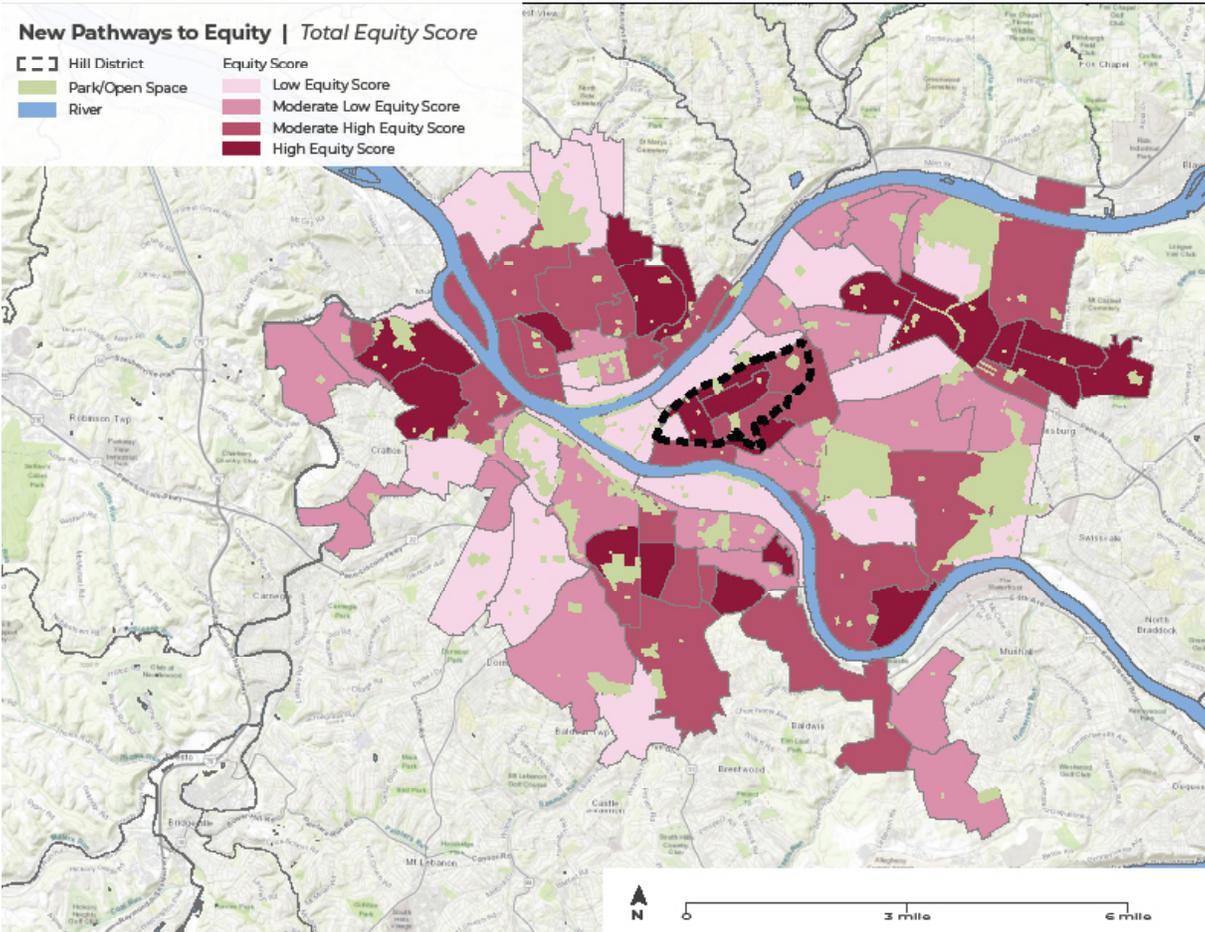
Lower Left: Current streetscape conditions at Centre Avenue and Dinwiddie Street in the Middle Hill

Lower Right: New mobility opportunities with electric scooter rentals are making their way into the Hill District



New Pathways to Equity | Total Equity Score

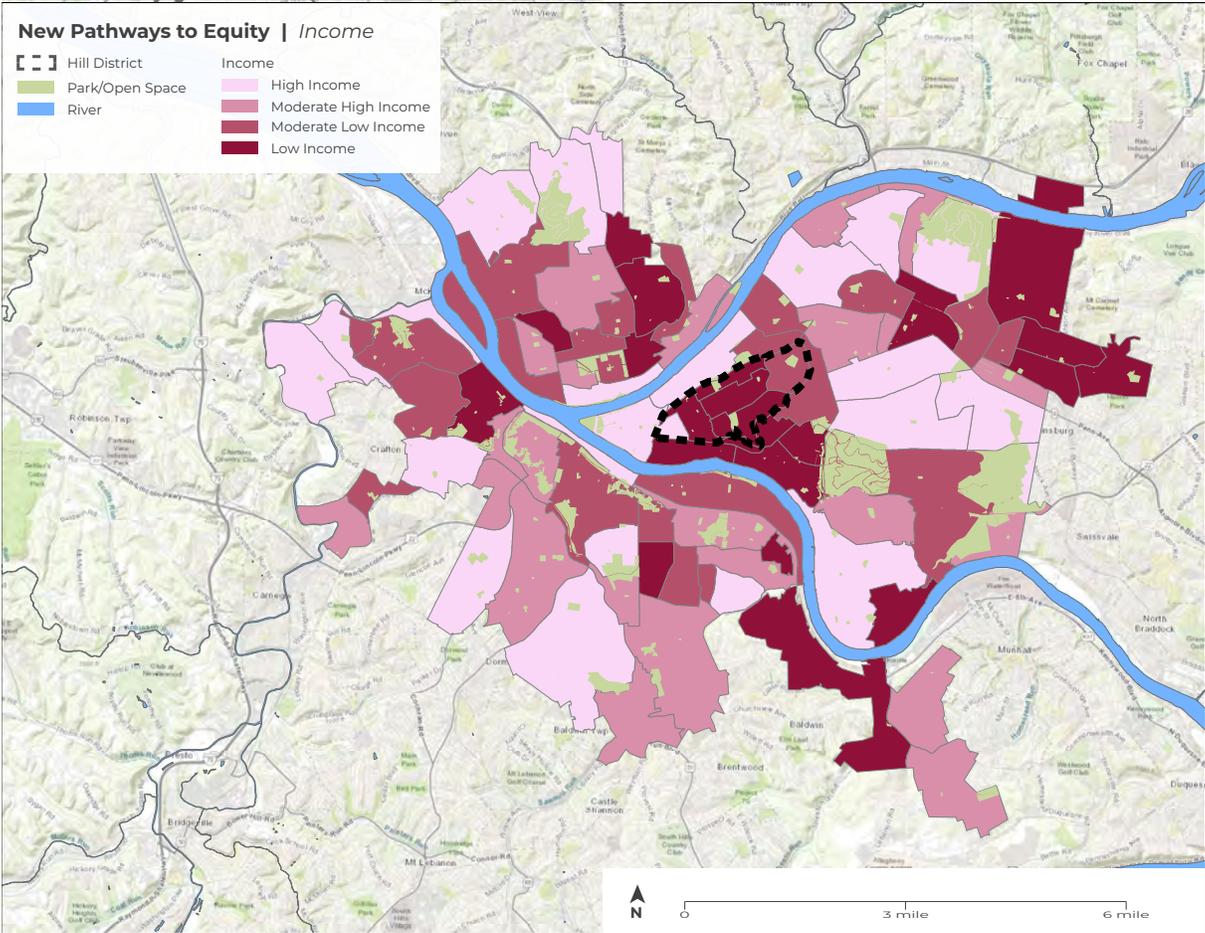
-  Hill District
 -  Park/Open Space
 -  River
-  Low Equity Score
 -  Moderate Low Equity Score
 -  Moderate High Equity Score
 -  High Equity Score



The Equity Index of Mobility Need shows that the Hill District has some of the highest equity need scores in the City of Pittsburgh.

New Pathways to Equity | Income

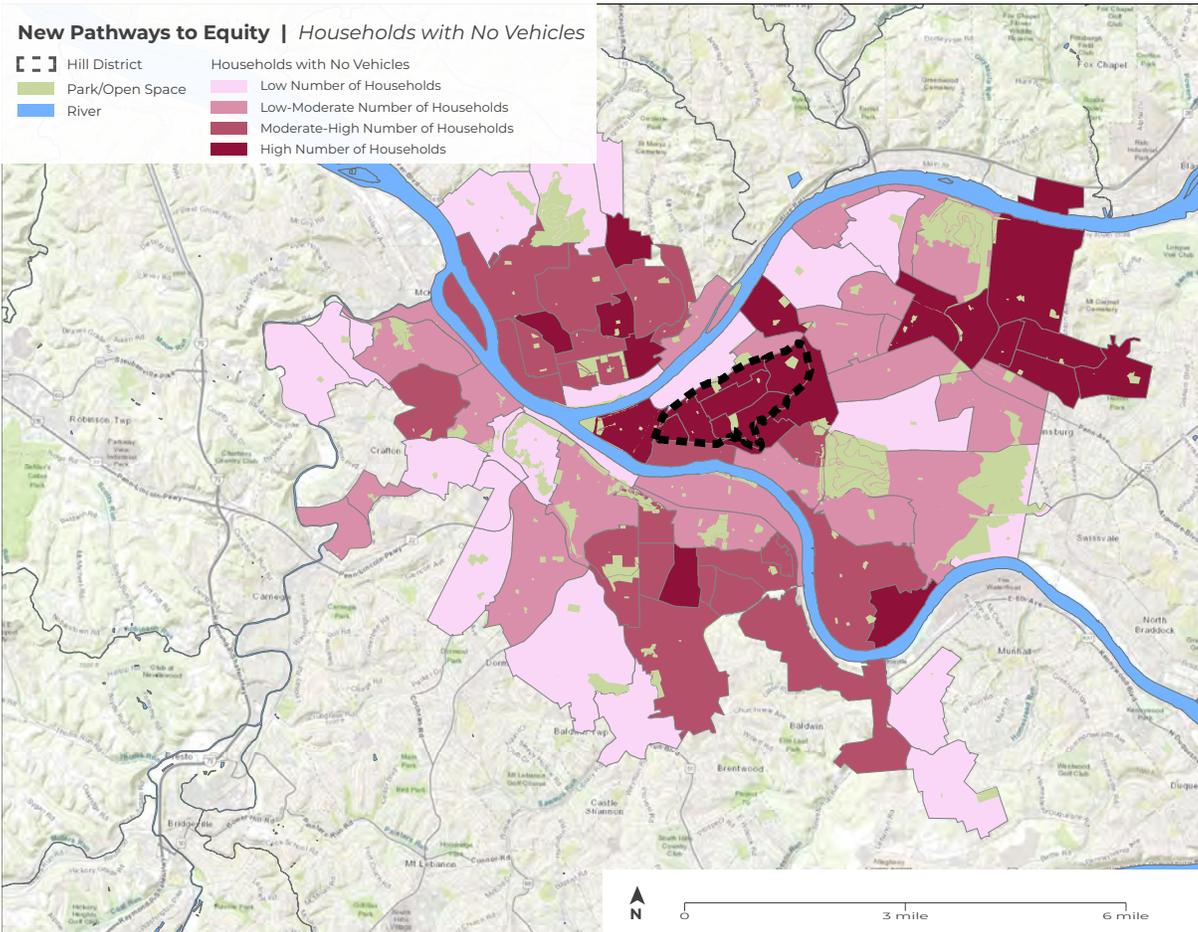
-  Hill District
 -  Park/Open Space
 -  River
-  High Income
 -  Moderate High Income
 -  Moderate Low Income
 -  Low Income



The Equity Index of Mobility Need shows that the Hill District is largely classified as low-income.

New Pathways to Equity | Households with No Vehicles

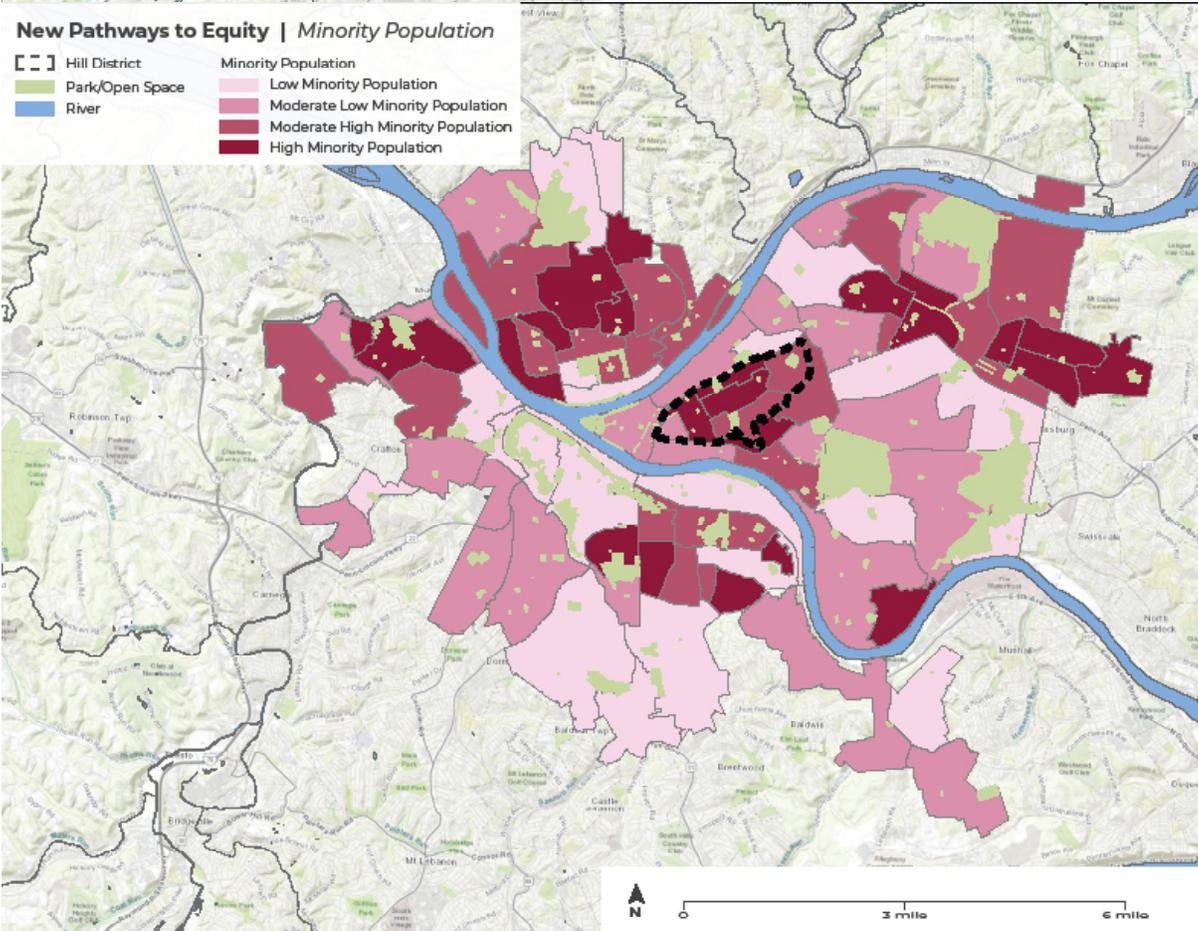
-  Hill District
-  Park/Open Space
-  River
-  Households with No Vehicles - Low Number of Households
-  Low-Moderate Number of Households
-  Moderate-High Number of Households
-  High Number of Households



The Equity Index of Mobility Need shows some of the greatest mobility need in Bedford Dwellings, Crawford-Roberts, and the Middle Hill because a large part of the population does not have access to a vehicle.

New Pathways to Equity | Minority Population

-  Hill District
-  Park/Open Space
-  River
-  Minority Population - Low Minority Population
-  Moderate Low Minority Population
-  Moderate High Minority Population
-  High Minority Population



The Equity Index of Mobility Need shows that the Hill District is mostly minority residents.

3 | Grant Funds, Sources, and Uses of all Project Funding

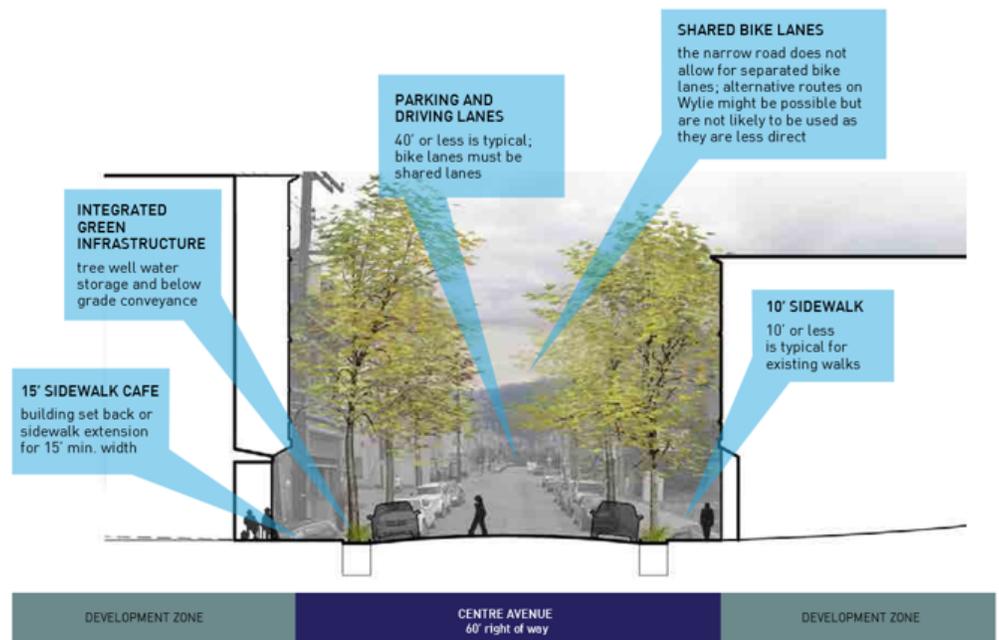
'New Pathways to Equity' consists of seven segment parts. While each segment has independent utility, it is necessary to complete all components to realize the full benefits of the overall project. DOMI estimates the overall project at \$14.15 million of which \$11.32 million in RAISE funding is sought for project delivery. The individual costs of the seven segments are presented in the following tables:

RAISE Project Cost Overview | Sources and Uses of RAISE Project Funds

Funding Source	Construction	Percent of Total
RAISE FY2022 Funds Requested	\$11,320,000	80%
Non-Federal: City of Pittsburgh Capital	\$2,830,000	20%
Total	\$14,150,000	100%

RAISE Project Cost Overview | Work Plan Cost Breakdown

Segment	Total Segment Costs
Lower Hill - Centre Avenue	\$1,500,000
Middle Hill - Centre Avenue	\$5,750,000
Wylie - Bedford - Webster avenues	\$1,000,000
Chauncey Street and Steps	\$1,000,000
Sidewalks/ADA Ramps	\$1,850,000
SmartSpine Signals (9)	\$2,700,000
Placemaking (signage, art, public realm)	\$350,000
Total	\$14,150,000



Community-driven streetscape concept design from the Greater Hill District Master Plan

4 | Merit Criteria



Bedford Dwellings Public Housing, Bedford Avenue at Chauncey Street

The proposed improvements would improve safety for all users, multimodal accessibility, and condition and quality of streetscapes, increase green infrastructure and sustainable design, serve as a catalyst for economic growth and private investment, and bring outdated infrastructure up to modern day standards. The following describes how the proposed community-identified improvements meet the merit criteria.

Safety

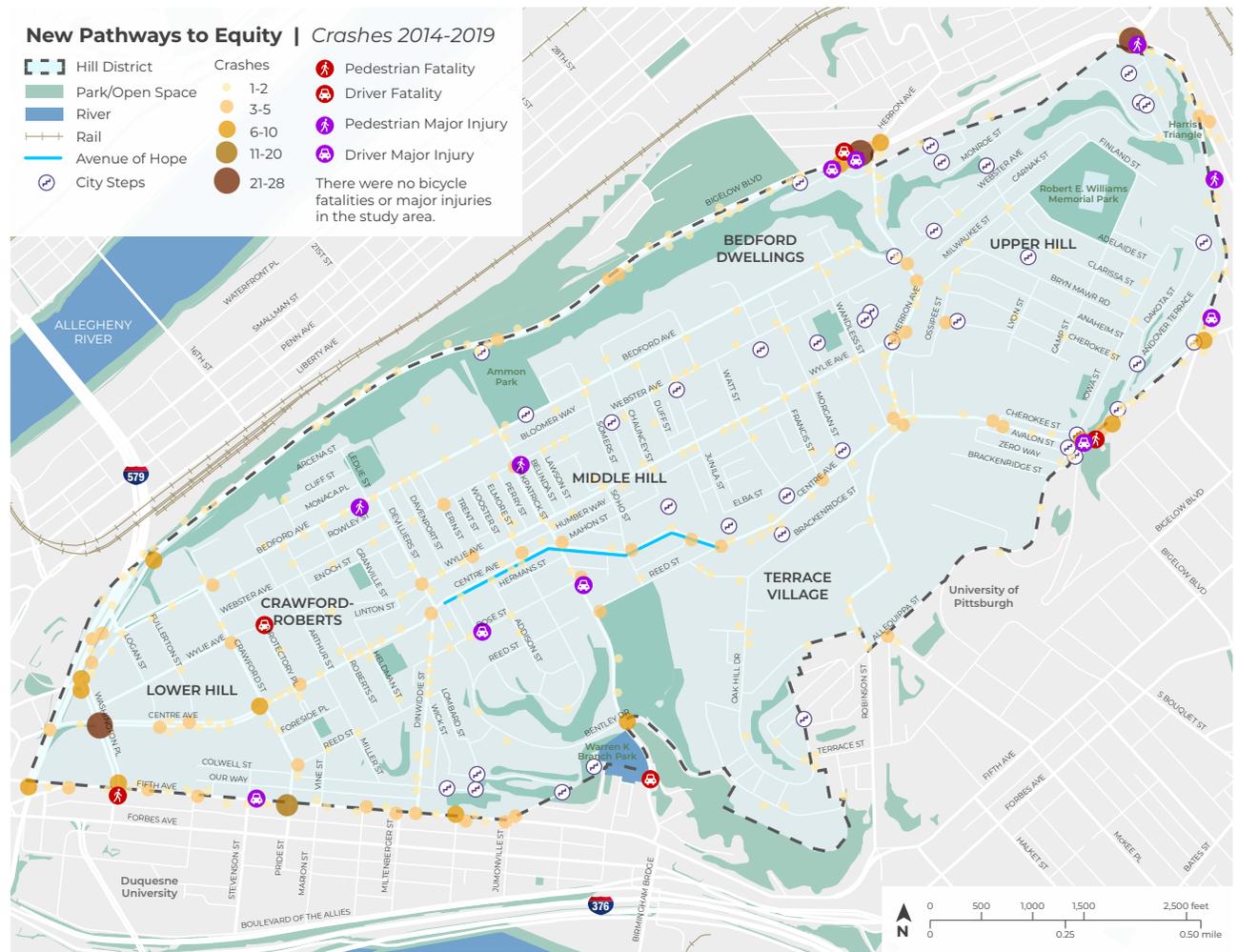
Pedestrian Safety and Transit Access

The City's 2020 Pedestrian Safety Action Plan (PSAP) reports that pedestrian infrastructure is distributed unequally across the City. Data shows that people from lower-income neighborhoods are disproportionately represented among traffic fatalities. Across Pittsburgh, census tracts that had rates of poverty greater than 25% saw nearly twice the rate of pedestrian crashes (fatalities per 100,000 persons) compared to census tracts with a poverty rate below 15%. A concerning trend reveals that nearly 90% of all pedestrian crashes in the City occur within 500 feet of a transit stop and nearly 85% of all transit stops have at least one pedestrian crash within 500 feet of the stop.

Additional analysis conducted as part of the PSAP identified high-risk and network-need corridors where pedestrian-focused Road Safety Audits should be conducted to identify specific treatments for implementation. High-risk corridors are defined as those that may be more likely to have crashes, based on a combination of physical and demographic traits. Network-need corridors are defined as high-volume, high-speed streets that may lack sufficient infrastructure for pedestrians to navigate safely. Crawford Street and Centre Avenue in the Middle Hill have been identified as network-need corridors while other portions of Centre Avenue in and extending beyond the Hill District have been identified as high-risk.

As a highly transit-dependent population, the Hill District community is particularly vulnerable to pedestrian incidents because of deteriorated or missing sidewalks and non ADA-compliant crosswalks. 'New Pathways to Equity' will install new sidewalks, ADA-compliant curb ramps, high visibility crosswalks, and curb extensions along Centre Avenue, Crawford Street, and various other key corridors. These will connect residential areas to the Centre Avenue business district, neighborhood amenities, and transit stops as well as reconstruct the Chauncey Street Steps to close critical gaps in the pedestrian network, reduce crossing distances, and improve visibility and awareness of and for pedestrians. The treatments and locations thereof are identified in the previous community-led planning processes. The desired outcome is to reduce or eliminate crashes and reduce the severity of injuries when they do occur.

The center island median on Centre Avenue in the Lower Hill will serve as a pedestrian refuge while crossing and also introduce a more boulevard feel to the street, which will naturally slow traffic. Additional safety measures will be included with redesign of the three Centre Avenue intersections to eliminate acute corners, improve sight lines, reduce crossing distances, reduce travel speeds, and minimize vehicular /



pedestrian conflict points. Traffic signal upgrades will include leading pedestrian intervals (LPIs), new ped heads, push button actuators and programming to give waiting pedestrians, bicyclists, and transit vehicles priority.

Traffic Calming

DOMI is actively working to incorporate engineering and equity metrics along with the location of past investment into project prioritization. This process is intended to ensure that limited resources are equitably dispersed across the City. Since our Neighborhood Traffic Calming Program launched in 2020 as a resident-driven, application-based program, there have been over 200 requests. This is well in excess of any feasible amount the program can be funded by the City alone.

Notably, only one request has come from the Hill District in spite of observed vehicle speeds well in excess of the speed limit. This speaks

to a community that has been disenfranchised to the point of losing trust in the institutions that serve them. Street design that induces appropriate behavior from all users is critical in order to achieve safer streets without requiring policing efforts that breed distrust in minority communities and strain municipal budgets.

DOMI has utilized before and after data on safety and calming projects undertaken over the past three years in order to refine designs and determine the most appropriate treatments for a given location. Projects have focused on either horizontal or vertical deflections supported by vertical elements that produce self-enforcing streets.

Improved or new sidewalks and curbs will encourage drivers to park on the street and not the sidewalk (a persistent problem across the City because of our narrow streets), which will provide more space for pedestrians and naturally slow vehicles with narrower travel lanes. Other



The 2015 Centre Avenue Redevelopment and Design Plan noted that pedestrian safety could be improved in multiple locations with the addition of traffic calming measures and appropriately widened sidewalks for a more pedestrian-friendly streetscape.

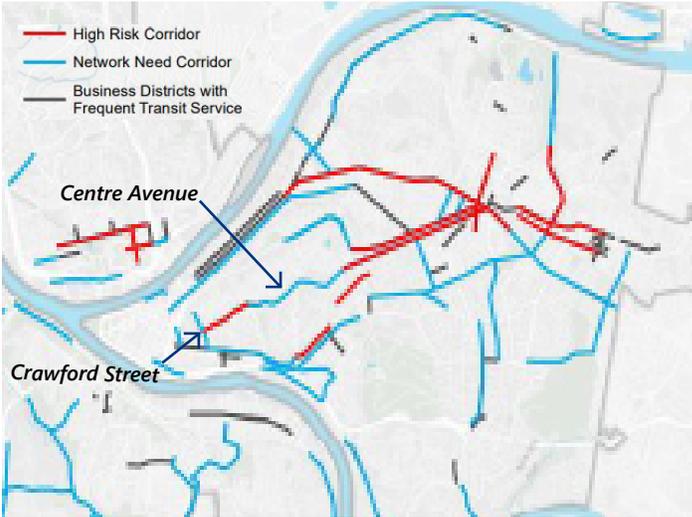
Top: Existing conditions at Centre Avenue & Soho Street
Bottom: Concept for Centre Avenue & Soho Street from the Centre Avenue Redevelopment and Design Plan

traffic calming features will include extensions, medians and lane narrowing, intersection realignment with tighter turning radii, and speed humps. Improvements would primarily be located on the east-west streets, including Bedford, Wylie, and Webster avenues. In 2019, speed humps were installed on Webster Avenue in the Hill District, which resulted in the 85th percent speed being reduced from 32 mph to 25 mph.

Environmental Sustainability

'New Pathways to Equity' identifies improvements that will move both the Hill District and City towards our sustainability goals.

Through neighborhood planning efforts, the Hill District community has identified goals of improved equity, a more robust economy, better air quality, and healthier residents. Improved walkability, safety, and mobility that would result from 'New Pathways to Equity' improvements



Pittsburgh Pedestrian Safety Action Plan identifies several corridors in the Hill District as High Risk and Network Need corridors.

can directly contribute to these sustainability goals. An improved pedestrian environment with enhanced transit amenities can help further reduce auto-dependency, especially as new development comes online, which can reduce greenhouse gas (GHG) emissions, lower carbon use, and improve air quality. Sustainability efforts will be further advanced by Move PGH, a first of its kind Mobility-as-a-Service (MaaS) system that integrates transit and shared mobility in both physical and digital 'mobility hubs' making multimodal travel in the city easy and convenient.

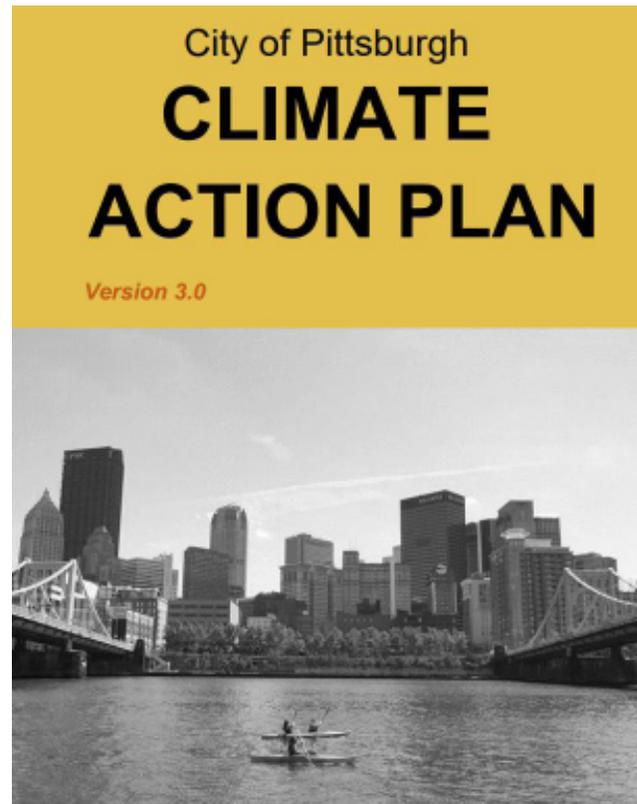
Stormwater and green infrastructure will help clean and divert water away from the City's combined storm sewers. New stormwater management facilities will reduce impervious pavement while increasing infiltration and retention capacity. This helps reduce flash flood risks, reduce combined sewer overflows, and improve water quality, which is aligned with the Pittsburgh Water and Sewer Authority's (PWSA) "green first" initiative of first looking to green infrastructure to address stormwater issues. The Centre Avenue median in the Lower Hill would have sufficient width to be able to accommodate stormwater runoff to improve water quality through biofiltration and have sufficient width for street trees. Curb extensions at other intersections will perform similar functions as well as potentially tie into underground systems to manage the flow of stormwater.

The City's 2021 Equitable Street Tree Investment Strategy, the first of its kind, developed a methodology to identify a priority list of neighborhoods to invest in tree planting. Neighborhoods were selected based upon their existing street tree resources, access to parks, greenways, forest cover, and a suite of demographic data collected from the U.S. Census and Area Deprivation Index. Portions of the Hill District were identified for inclusion on the initial list. DOMI will coordinate with other City departments and the public to ensure that new street trees are incorporated into proposed improvements wherever feasible. With time, the introduction of more street trees will increase the neighborhood's tree canopy providing shade, reducing heat island effect, and improving air quality.

'New Pathways to Equity' also introduces an opportunity to modernize the transportation network with more energy efficient infrastructure. DOMI will work with our partners at the Energy Innovation Center - a 200,000 square foot building housing learning spaces, demonstration space, and offices promoting workforce development, education, and



Example of green infrastructure with bioretention stormwater management integrated into the streetscape design

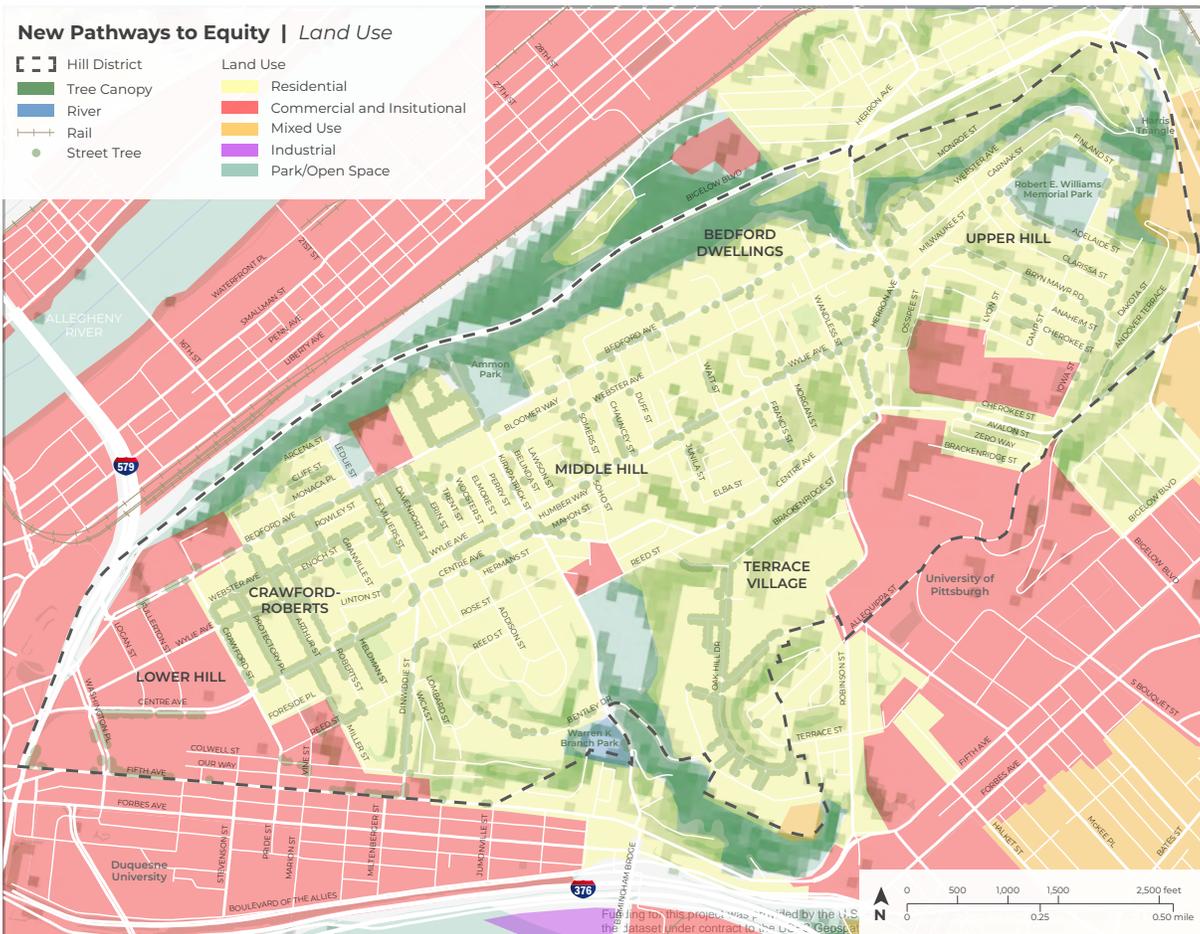


The City's Climate Action Plan 3.0 prioritizes actions that will reduce emissions as well as those that act collectively to make Pittsburgh a resilient city in accordance with our p4 framework (People, Place, Planet, and Performance). The plan calls for a 50% GHG reduction by 2030 (from 2003 levels), 50% transportation emission reduction, reduced vehicle miles traveled per capita, and increased vehicle electrification. It identifies synchronized traffic signals, increased walking, biking, and transit trips, and expansion of transit hubs to support multimodal opportunities to help advance plan goals.

innovation to support emerging clean and sustainable energy markets - on Bedford Avenue in the Lower Hill to leverage their expertise and innovation so select streets in the Hill District can serve as a proving ground for the new economy of mobility electrification. Electric vehicle charging stations, LED lighting (the City will be doing a full conversion of our 35,000 overhead streetlights to recognize long-term savings and reduced energy usage and light pollution), and other energy efficient components will also be integrated into the streetscape improvements.

Quality of Life

The broad extent of streetscape improvements will dramatically improve the quality of the Centre Avenue business district and the entire neighborhood. New and improved sidewalks,



pedestrian-scaled LED lighting, curb ramps, crosswalks, and ADA-accessible transit stops, better walkability, enhanced connections via the Chauncey Street Steps, and new landscaping and green infrastructure will enhance the image, character, and comfort for residents and visitors. Well-designed streetscapes will encourage more physical and social activity by connecting residents to nearby economic opportunities, parks, schools, and other neighborhood amenities.

As is often seen, public investment in the improved streetscape of Centre Avenue will support and encourage private investment and redevelopment of vacant and underutilized properties. 'New Pathways to Equity' demonstrates a commitment to the Hill District and also would help remove the cost burden of these improvements from the private sector, which in accordance with the Avenues of Hope initiative would be largely local and minority business owners and developers.

As part of the City's One Percent for Art Program, DOMI will work with stakeholders and the public to identify local artists who may wish to participate in the program. A community-driven process will be implemented to rank potential submissions and siting (in accordance with City requirements for public art). This is an optimal opportunity to honor the history and celebrate the future of the Hill District and further advance the goals of the Avenues of Hope initiative as co-benefits of transportation investment.

The City's LED Streetlight Upgrade effort seeks to upgrade streetlights to upgrade LED fixtures to increase energy efficiency and meet lighting equity goals. All of the Hill District's street lights will be converted from High-Pressure Sodium (HSD) to LED lighting fixtures. The current RFP for street light replacement calls for an equity analysis to inform the priority and phasing of street light replacement from HSP to LED by prioritizing disadvantaged communities and high-usage areas with the first upgrades. The Hill

District is a leading candidate for the first round of upgrades to LED street lighting. Streetscape enhancements on Centre Avenue and its parallel streets (Wylie, Webster, and Bedford Avenues) will meet many of the program goals.

Mobility improvements in the Hill District will also create direct job opportunities described further in the Economic Competitiveness and Opportunity section below.

Mobility and Community Connectivity

The cornerstone of 'New Pathways to Equity' is to increase mobility options and connectivity to economic and community resources. Restoring functional pedestrian, bicycle, and transit connections underpins the community's equity goals for revitalizing this historically Black neighborhood.

As emphasized above, the Hill District consistently ranks towards the top of a range of indicators used to measure equity and mobility needs, such as low-income individuals, minority individuals, female-headed households, and zero-car households. A revitalized Centre Avenue will form the backbone of a revived business and community center. Access to local and Black-owned businesses along Centre Avenue by neighborhood residents is critical to maintaining and growing neighborhood business and keeping locally-earned dollars within the neighborhood. For people with disabilities or limited transportation options, access to Move PGH e-bike mobility hubs, ADA-accessible sidewalks and bus stops, and safe crossings will



*Left: Public art by MOKA Gallery in the Hill District
Right: Example of public art: Harriet Tubman Mural*

remove countless barriers to supportive services, jobs, and education opportunities.

All points within the Hill District are within one mile of Downtown and/or Oakland, two of Pennsylvania's three-largest employment centers. This proximity means active transportation and transit can easily provide robust access to education, employment, and other critical economic opportunities. Transit service amenities and improvements, especially uninterrupted sidewalks and safe bicycle infrastructure create opportunities to reach nearby employment that don't require the expense of owning and insuring a private automobile to access a job just a few minutes away. Opportunities abound nearby for entrepreneurs who can tap the potential in these vital business and innovation cores. Hill District mobility improvements will also benefit Hill District-based employers and regional workforce, as more than 3,400 people commute into the neighborhood daily, most to the medical centers at its edges (LEHD data, 2018).

Economic Competitiveness and Opportunity

Investment and revitalization of the Hill District is being led and supported by the URA, Hill CDC, and numerous City departments and other entities. Various parts of the Hill District are slated for transformational large-scale redevelopment in the near term; one site literally broke ground during the writing of this application. Other proposed development, primarily on and adjacent to Centre Avenue, is either in or advancing towards exclusive negotiations with construction anticipated to begin before the end of 2022. Overall, 170 vacant or idle URA-controlled properties have been targeted for transformation through sale and redevelopment.

However, most streets in the Hill District are lacking in both adequate infrastructure and place making appeal, presenting barriers to this reinvestment. Past planning efforts have all identified the need to enhance streetscapes and introduce beautification treatments in tandem with infrastructure improvements along primary



Proposed development along Centre Avenue

corridors as a way to support and encourage new and planned development.

As described throughout this application, the objective of 'New Pathways to Equity' is to reduce decades of disinvestment, to increase safety, access, and mobility for existing residents, to support long awaited redevelopment activities that will bring new residents, jobs, and opportunity to the neighborhood, and to restore the connection between downtown and the Hill District that was severed decades ago. Targeted community supported investment will help reinforce the City's commitment to playing an active role in revitalizing the neighborhood. This investment will remove some of the financial burden from local and minority business owners and developers of upgrading public infrastructure at their own cost, further allowing them to contribute resources to the long-term viability of their businesses.

Additionally, our partners at the Energy Innovation Center are committed to being active community members through both the piloting of electric mobility innovation in the neighborhood as well as through the employment and training of Hill District residents

in the field.

By closing the gaps in critical infrastructure and improving the character and condition of streetscapes, the Hill District will be more attractive for private investment. The proximity of the Hill District to the economic centers in downtown and Oakland make it ideally suited to become its own economic center in alignment with community goals and honoring the neighborhood's rich history.

City purchasing and hiring policies also will generate direct opportunities for employment through 'New Pathways to Equity' project implementation. City contracts commonly require that at least 20% of project budget be dedicated to minority-owned businesses, presenting special opportunity to the Hill District. This and other equitable employment policies are developed and enforced by the City's Equal Opportunity Review Commission, a commission of citizens that reviews all applicable construction contracts and professional service contracts for compliance with city policies regarding minority and women business enterprises. In recent years the City has established guidelines for Certified LGBT Business Enterprises, inclusive of Lesbian, Gay,

Bisexual, Transgender, Queer or Questioning, Intersex, Asexual or Ally organizations. These too have emphasis or priority in City contracting. Thus, 'New Pathways to Equity' investments will be proactively targeted to workers who have historically faced greater barriers to fair employment.

State of Good Repair

Years of disinvestment in the Hill District have left the neighborhood's infrastructure in a state of disrepair. Broken and deteriorated sidewalks result in unsafe pedestrian paths. Non-accessible and deteriorated sidewalks force residents with limited mobility to travel in vehicular lanes where it is less safe. Deteriorated curbs do not direct stormwater properly to catch basins, causing ponding and erosion that impede mobility. Deteriorated curbs and narrow ROW mean that cars park on sidewalks, further hampering accessibility. Street pavement is broken and potholed, which contributes to increased vehicle maintenance costs and adds noise and vibration nuisances to the community.

Improvements proposed as part of 'New Pathways to Equity' will help return critical infrastructure back to a state of good repair. Thousands of linear feet of sidewalk, curbs, and street paving will be repaired or replaced, renewing the street infrastructure for decades of continued use. Sidewalks and crosswalks will be accessible, ensuring that all residents can safely navigate the neighborhood. New LED street lights will beautify the business district, save energy by using efficient LED technology, and contribute to safety by providing consistent lighting levels across the neighborhood. New traffic signal infrastructure will deploy modern technologies such as audible pedestrian indicators, LPIs where appropriate, lagging left turns, automated pedestrian detection, transit signal priority where appropriate, and variable signal timing to expedite the safe flow of all transportation modes.

In particular, the rehabilitation of the Chauncey Street Steps will restore an important pedestrian connection between Bedford Dwellings and

Centre Avenue. This is an extremely important connection for one of the most transit-dependent communities in the City to access transit service and economic opportunity. While the current steps are open, their deterioration makes them less-attractive as a transportation alternative and caused their designation as one of the top five priorities in the City's 2019 Steps Plan and also in the previous community-led planning processes. The new steps will be functional, showcase the neighborhood's history through artistic elements, and have lighting for safe use at night.

Partnership and Collaboration

DOMI is actively working with the Department of City Planning (DCP), URA, Hill CDC, and other partners to comprehensively revitalize the Hill District. Improvements will be sited in locations where Hill CDC and URA-led development is planned to come online first, and from residential areas to support access to the Centre Avenue corridor. Streetscape improvements will include new trees. Plantings will be aligned with the Pittsburgh Shade Tree Commission's Equitable Street Tree Investment Strategy to increase tree canopy and DCP's upcoming Hill District Parks Master Plan to create safe and pleasant corridors to neighborhood parks.

DOMI regularly works with our partners at PWSA to incorporate green infrastructure into our projects to the extent feasible and appropriate. We will also work with PWSA and other utility providers to determine if upgrades to their infrastructure should be made while other improvements are ongoing to minimize disruptions and share some upfront capital costs. DOMI also regularly works with the PAAC to identify high priority transit stops where pedestrian improvements can improve transit rider safety and accessibility. DOMI will also continue to work with the Move PGH consortium and Hill District community to appropriately site new mobility hubs, including the newly-announced PoGoH electrical bicycle fleet, being deployed in May 2022, which will have an e-bike station at the YMCA on Centre Avenue. The e-bike fleet will greatly assist riders with climbing

the many steep streets in the Hill District and surrounding neighborhoods.

The Hill District community and Sports and Exhibition Authority (SEA) of Pittsburgh / Pittsburgh Penguins have requested improvements to Centre Avenue in the Lower Hill. Improvements would support and complement the three-acre park under construction as part of the I-579 cap project as well as mixed-use development planned for the remainder of the Lower Hill redevelopment site.

DOMI regularly works with philanthropic, state, and federal partners to receive and administer outside funding sources. Receipt of 'New Pathways to Equity' funds would follow a similar practice. Over the past decade, the City has successfully implemented major federal discretionary grants, including:

- In 2016, SEA partnered with Allegheny County to win \$19 million in TIGER funding toward the nearly \$30 million I-579 highway deckover project now led by the DOMI.
- That same year, the City was awarded a nearly \$11 million ATCMTD 'Smart Spines' grant for a three-fold expansion of the city's innovative adaptive traffic signals.
- Today, the City is a leading member of a partnership led by PennDOT to drive an \$8.7 million research initiative testing connected and autonomous vehicles.

Innovation

Pittsburgh has always been a city on the cutting edge of innovation. Our innovation legacy continues with the welcoming of the robotics, autonomous vehicle testing, and technology companies that now call Pittsburgh home. DOMI is pleased to be part of this legacy through our efforts to expand low-cost, shared mobility services that support increased opportunity and access for those who need to most, to modernize the transportation network, and to coordinate disruptions and share upfront capital costs with our utility partners.



Planned redevelopment in the Lower Hill (JLL)

Move PGH. In July 2021, DOMI and our partners launched Move PGH – a first of its kind MaaS system that integrates transit and shared mobility in both physical and digital 'mobility hubs' making multimodal travel in the city easy and convenient. This new system of integrated services enables the second program, a 'Universal Basic Mobility' pilot, which will provide up to 100 local low-income residents with monthly transit subscriptions and shared mobility services to address mobility insecurity.

Both programs support the City's equity principles that all Pittsburghers can easily access fresh food, afford basic transportation, and safe travel without reliance on a vehicle. Move PGH is working with the Hill CDC and larger Hill District community to introduce the program to ensure that the opportunities the program offers are recognized to the greatest extent feasible and to identify locations for mobility hubs.

Move PGH is the first integrated MaaS project in the United States to connect traditional and emerging low-cost, shared transportation options into a single, easy to use system. The Move PGH Universal Basic Mobility demonstration will specifically test if reliable access to transit and a range of shared mobility options improves employment and health outcomes for low-income workers and their households. Spin, one of the Move PGH partners, will be working with Urban Institute to evaluate the demonstration to potentially serve as a national model.

Traffic Signal Upgrades. The 2016 U.S. DOT ATCMTD 'Smart Spines' grant to create an



Smart Spine traffic signal improvements in the Hill District

advanced signal system along eight priority corridors, including Centre Avenue through the Hill District, seeks to leverage existing and emerging technologies to create a multimodal advanced signal system which will be able to detect several different roadway users and prioritize their movements based on corridor context and real-time traffic patterns.

There are nine traffic signals along Centre Avenue in or bordering the Hill District. Six of these signals will be fully replaced with new poles, signals, pedestrian actuators, ped head indicators, and sensors. The other three are newer and will receive controller upgrades and smart sensors. ‘Smart Spines’ will provide for prioritization of pedestrians, bicyclists, emergency vehicles, and transit vehicles for improved mobility and access in the Hill District as well as environmental quality gains. ‘Smart Spine’ corridors will be managed by the City’s Traffic Management Center.

Coordinated Utility Betterments. The Hill District was first developed well over a century ago. Combined sewers, lead water lines, and clay pipes were the standard at that time but 100+ years later they are failing. PWSA is mandated to replace lead service lines, and also undertake valve, catch basin, and manhole repairs / installations when working in the neighborhood. Water and gas main replacements, electric duct

banks, and other underground betterments are also contemplated. The City will economize on street and sidewalk restoration by coordinating with PWSA and other utilities to undertake underground utility betterments and repairs at the same time as the ‘New Pathways to Equity’ construction so that restoration is conducted during the same time. Such coordination is ongoing along portions of Bedford Avenue in Bedford Dwellings.



Hill District pop up engagement event on Centre Avenue in July 2021

5 | Environmental Risk Review

Project Schedule

Projects	Year 1				Year 2				Year 3			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Centre Ave - Lower Hill												
Public Engagement							■		■		■	
Bidding						■	■					
Construction												
Centre Ave - Middle Hill												
Public Engagement						■		■		■		■
Bidding												
Construction												
Chauncey Street Steps and Streetscape Improvements												
Public Engagement						■		■		■		■
Bidding												
Construction												
Sidewalk Improvements												
Public Engagement						■		■				
Bidding												
Construction												
East-West Pedestrian and Streetscape Improvements												
Public Engagement						■		■				
Bidding												
Construction												

Required Approvals

All work will occur within the existing public ROW. Given the scope, scale, and anticipated impacts associated with the proposed improvements, the project is a Categorical Exclusion (CE) under National Environmental Protection Act (NEPA) guidelines. No significant environmental impacts are anticipated, the project redresses the impact of previous projects on protected populations, and all work is the result of multiple and robust public processes. No ROW acquisition, aside from Temporary Construction Easements (TCEs), is required by current designs. There are no impacts to parks or natural resources. Public city steps have been

deemed to be historically significant by the State Historic Preservation Office (SHPO). The City has improved and reconstructed several sets of steps in recent years and does not anticipate any issues or delays to be encountered through consultation with the SHPO. It is not anticipated that the preparation or approval of the CE would delay or otherwise affect implementation of the proposed improvements.

While this is a project of regional significance, all improvements will occur in city-owned ROW. Smart spine signal improvements are a federally funded (ATCMTD) project subject to PennDOT oversight which is ongoing.

Assessment of Project Risks and Mitigation Strategies

Public support and understanding. This project originated from a community-authored plan and community-driven process, therefore the risk of public opposition is quite low. There is high resident and stakeholder enthusiasm for this project. We have found that as projects are implemented, public questions and concerns can arise regarding preferences around furnishing selection, public art components, specific construction details or community impacts during construction. We mitigate these risks by having a core stakeholder committee work with us throughout not only the design phase – where material choices and review of artistic elements occur – but also during construction. We have project control meetings routinely throughout the course of construction that review upcoming work and can expeditiously resolve any concerns raised during the process.

Cost controls. The supply chain and production disruptions occurring as a consequence of the pandemic have resulted in some unanticipated cost escalations and delay in material procurement. While we expect that most of these disruptions will have worked through the system by the time of RAISE grant award, we now have a better understanding as to how to plan for and work around delays in material delivery. The escalated unit costs are likely to be a lasting impact that has been factored into the cost estimation. The City has a well-established budget and invoice management system that will provide detailed oversight on project costs. The project budget includes an appropriate contingency and the City has adequate local resources (if necessary) to cover cost overages and deliver the project as designed. All invoices are reviewed by the City Controller as a second review of cost compliance.

Utility Coordination. Utility coordination and utility relocation introduce the greatest potential schedule risks. There are no significant utility relocations required for this project, but routine relocations or betterments are expected. As the city routinely works in the public ROW. We have a well-established system for utility

coordination with our public and private utility partners. We have had occasions where utilities did not move certain assets in a timely manner thus threatening project delays. In these cases, we have an escalation chain that generally addresses the need and gets the project back on track.

Unexpected conflicts. As an old industrial city, it is not uncommon that, upon opening up a street or sidewalk, to encounter assets or conditions that were not anticipated in the construction drawings. This may include old streetcar tracks, collapsed storm sewers, or unmarked utility lines. Generally speaking, these are minor risks that can usually be addressed with field adjustments. Should any more significant issues arise, the City will convene a meeting with the utility owner or relevant parties to expeditiously determine how to mitigate and determine the appropriate assignment of cost.

Maintenance and Protection of Traffic (MPT). The project is occurring in an area that also includes planned or ongoing private development projects. Uncoordinated detours and traffic disruptions would be a significant risk to this project and the private developments. We will mitigate this risk by having a consolidated MPT plan for the infrastructure improvement and private developments in the project area. As the City's hockey arena is also in the project area, we have structures in place to manage the hockey games, concerts and other special events.



Public engagement during the development of the Greater Hill District Master Plan

6 | Summary of Benefit Cost Analysis

Methodological foundation of the BCA

The analysis was conducted in accordance with the benefit-cost methodology and associated guidelines set forth in the Notice of Funding Opportunity (DTOS59-21-RA-RAISE) and U.S. DOT formula guidelines for the development of a Benefit Cost Analysis. The BCA assesses the incremental difference between the Base Case and the Build Case, which represents the net change in benefits over a 30-year project life-cycle after operations begin in 2025. The importance of future benefit changes are determined through discounting, which is meant to reflect both the opportunity cost of capital as well as societal preferences.

'New Pathways to Equity' is consistent with the guidelines of RAISE 2022 and goals for National Infrastructure Investment as the proposed improvements are in or adjacent to census tracts defined as in 'persistent poverty' and would improve mobility and restore connections for the Hill District community, which has long suffered from urban renewal, redlining, and general infrastructure deterioration. 'New Pathways to Equity' will result in considerable, long-term public benefit to the Hill District community and City at large.

The BCA analysis predicts that 'New Pathways to Equity,' when implemented in full, will result in the following:

- Approximately 140 new permanent jobs, with the majority of these within the Hill District.
- The total labor market generation during the build out will exceed \$30 million.
- A significant drop in the risk of fatality and injury will result in a substantial \$12 million in safety benefits.
- Increased safety improvements for bicyclists and pedestrians are expected to be realized in a considerable increase in property value, as measured through in walk score or bike score, up to \$735,000 in property value.
- The reconstruction of Centre Avenue assuming the proposed safety and other pedestrian improvements and traffic calming treatments are implemented would decrease speeds and provide ample opportunity for safe pedestrian crossing.
- ADA-accessible pedestrian corridors connecting users to the Centre Avenue business district will increase the economic viability of local businesses.
- Construction phase impacts will generate over \$2.4 million in federal tax revenue and nearly \$400,000 in combined local tax revenue.



Hill District "Speak & Treat" Public Engagement, Summer 2021.