

Video Title:	Making Eastwick Whole
Student Names:	Aminah McNulty, Allison Nkwocha, Jackson Plumlee, Nina Valentine
Community Organization Name(s):	Eastwick United Community Development Corporation

A. Strategy Proposal

We define capacity building as **leveraging resources to expand and deepen a community’s self-sustained impact, agency, and power over time**. Our proposal builds upon the existing programs and demands of Eastwick United Community Development Corporation, a Philadelphia, Pennsylvania, community organization committed to improving quality of life for residents of Eastwick through economic development, access to social services, and environmental conservation. This highly motivated, passionate, and organized collective provides training programs for residents to become Community Ambassadors for environmental justice. Specifically, these ambassadors learn about the overlapping environmental risks, health crises, and legacies of disinvestment that impact Eastwick today. They grow their experience as advocates and organizers to facilitate dialogue between stakeholders, including residents, business owners, and state and local politicians.

The Eastwick residents identify three priorities to direct future investment: (1) ensure resident safety, (2) avoid displacement, and (3) make the community whole. The Community Ambassadors are working to offer residents training to understand and implement household flood mitigation strategies. Additionally, Eastwick United is cultivating partnerships with other organizations and institutions to understand long-term impacts and potential solutions for the future of Eastwick.

Building upon this momentum, we propose a holistic, place-based education model, to grow connections and capacity between youth, residents, and elected officials. We then imagine how and where a pilot project would emerge from this curriculum to build a climate justice community hub. Intergenerational learning and stakeholder engagement offer a roadmap and platform for genuine interaction and community action.

Education Model

This curriculum centers environmental justice as a lived experience and practice. Community action and capacity grow from a process of collective observation, storytelling, advocacy, implementation, and stewardship. Feedback loops inform and refine this model to adapt as the needs and vision of the Eastwick community evolve (*see appendix Figure 1*).

Observation - Eastwick Neighborhood Tours

The first phase centers intergenerational tours of major neighborhood amenities and legacy environmental sites to build a collective meaning of place. These include the John Heinz National Wildlife Refuge— a 1,000-acre wildlife refuge adjacent to the Philadelphia International Airport, the Clearview landfill— the country’s fifth largest EPA superfund site, and the routinely flooded “Planet Streets”, a quiet area that abuts the Clearview landfill and is prone to flooding from Darby Creek (*see appendix Figure 2*). Collective observation creates opportunities for discussion, sharing, and learning between residents that will ignite action around the important places, experiences, and opportunities in the neighborhood.

Eastwick United Community Ambassadors will organize, lead, and facilitate the tours alongside local officials or institutional partners to further develop the connection and exchange between residents’ lived experiences and

institutional knowledge. Eventually, the program will be primarily led by youth from the Ambassador program to carry the impact in Eastwick for generations to come.

Storytelling - Memory Keeping and Creative Archiving

Through these observation walks, we envision a collaborative history to emerge via storytelling, memory keeping, and creative archiving. Young community members will play a vital role in capturing the wisdom of community elders who know the legacy of the neighborhood firsthand. The community will collaborate with design, planning, building, and other creative industry professionals to produce temporary and permanent installations that make the neighborhood legacy visible.

Examples include a neighborhood *PhotoVoice* project, where resident photography of Eastwick is celebrated in a gallery exhibition sponsored by former famous Eastwick residents Michael Elliot, a renowned film producer, and Patti LaBelle. A collaborative mural project will highlight residents' experiences with environmental justice issues. Through this process, cultural organizing builds a shared sense of place among residents, who develop their skills as the interpreters, designers, and builders of their own environments.

Advocacy - Grassroots Movement Building and Policy Influence

As these installations and collective memories continue to be made visible, Community Ambassadors can organize and mobilize more residents through neighborhood canvassing and hosting events to support and facilitate youth leadership of the local environmental justice movement in Eastwick.

Grassroots outreach about environmental justice issues provides ambassadors an opportunity to practice and hone their communication to a broad audience. They will then employ these skills and their lived experience to advocate for environmental justice policies to legislators and public officials during public hearings for legislation or proposed projects. In time, these Eastwick residents will run for city, state, and federal public office.

Implementation - Building Environmental Justice

As momentum builds, residents will partner with and engage local trade unions, workforce development organizations, and youth to build prototypes and test plots for community-based climate adaptation strategies. These projects include air monitoring stations, groundwater monitoring, green stormwater management, regenerative agriculture, soil remediation, or resilient housing construction, repair, and retrofitting.

Stewardship - Environmental Justice as a Practice

As pilot projects mature into permanent community projects, local institutions and community hubs will create long term capacity for maintaining and operating these neighborhood ties and assets.

Environmental Justice Community Action Center

As this education model iterates and matures, we envision new neighborhood institutions throughout Eastwick. These community-led, participatory designed spaces act as demonstration projects for replicable resilient climate adaptation strategies (*see appendix Figure 3*).

One potential site to test the community institution model is Eastwick’s George Wharton Pepper School. Built in the 1970s, the middle school operated at low capacity, lacking the resources and students to support its success. The school officially closed in 2013, where it still sits vacant as layers of informal occupation, graffiti, illegal dumping, and repeated flooding accumulate. The school is located in a flood zone, two feet below sea level. Hurricanes and even heavy rains result in severe flood damage. The 1999 catastrophic Hurricane Floyd left up to 18 feet of standing water, completely submerging the basement and leaving the first floor with two feet of standing water, causing over \$1 million of damage. The school closed for a month after the hurricane, earning the nickname “The Pepper Bowl” because of the sunken topography¹ (see appendix Figure 4).

The topography and subsequent flooding, along with the other environmental stressors including soil contamination, air pollution make the Pepper School a ripe opportunity to test and experiment with community-led, participatory demonstration projects for climate adaptation strategies. The building, which remains structurally sound, will be adapted to accommodate flexible retail and entertainment opportunities, along with community gathering and education spaces. Integrating cultural, educational, recreational and retail programming will elevate the site’s history, and transform the Pepper School into a vibrant community hub and climate justice proving ground.

B. Description of Community Partner Collaboration

Building on the relationship cultivated in Phase 1 of this competition, our student team collaborated with Eastwick United Community Development Corporation in Philadelphia, Pennsylvania.

Interviews with community representatives identified by Eastwick United helped shape our proposal to build off the existing momentum and high levels of organization and advocacy already in place. Eastwick United, with the support of Eastwick community leaders, has proposed a land swap to move residents living in routinely flooded homes to city-owned properties outside of the flood zone. This exchange offers agency and safety to the residents, who demand safe and dignified living conditions, but wish to remain connected, active participants in the close-knit community.

Eastwick United is also training Community Ambassadors, self-selected agents to advocate for the investment and future development of Eastwick. Ambassadors learn about the environmental assets and hazards present in Eastwick, the community’s history as an urban renewal neighborhood of the 1960s, and key policy issues to advocate to local politicians for the future for Eastwick.

Our student team had the opportunity to attend a Community Ambassador training, which led to the development of our place-based education proposal to build community capacity in Eastwick.

C. Description of the Use of Publicly Available Data/Tools

Existing data confirms the reality long known and lived by Eastwick residents—this local lived experience is what Eastwick United’s work directly addresses, and what our proposed strategy aims to improve. Relevant data exists in three primary layers: 1) historical and socioeconomic data; 2) environmental risk data; and 3) health disparities data. These layers speak to the past and present injustices and conditions that make the area’s population

¹ <https://www.abandonedamerica.us/george-r-pepper-middle-school>

vulnerable, the environmental conditions exacerbating said vulnerability, and ensuing disparities that will continue to worsen without action.

Mapping Inequality shows that Eastwick was historically redlined (at Grade D) by the HOLC, laying the foundation for its destruction by urban renewal. The EPA's EJScreen tool for Environmental Justice Screening and Mapping provides a comprehensive collection of several indexes by which the ongoing and overlapping injustices faced by Eastwick residents can be measured and correlated: Environmental Justice Indexes, Pollution and Sources, Socioeconomic Indicators, Health Disparities, and Climate Change Data. In terms of Climate Change Data, Sea Level Rise rates, Coastal Flood Hazard, and Flood Risk clearly demonstrate the increasingly high level of environmental risk faced in Eastwick. Climate Central's Surging Seas Coastal Risk Screening Tool on affordable housing shows that within Eastwick's 19153 ZIP code, in 2030, 85 affordable housing units will be threatened by sea level rise and by 2050, that number will grow to 174. EJScreen's Health Disparities show lower life expectancy and higher rates of asthma. On the CDC/ATSDR Social Vulnerability Index (SVI), Eastwick has a medium-high to high SVI score.

Publicly available data on environmental risks, health crises, and legacies of disinvestment is already being utilized by Eastwick United's Community Ambassador program as key evidence outlining the need for action in Eastwick. While we don't believe that successes at all meaningful scales can be captured by data alone, indicators of long term success of this strategy include higher rates of affordable housing, higher rates of Black residential property ownership, and changing land use designations in Eastwick.

D. Resource Needs for Strategy Implementation

Eastwick United requires three types of resources to implement this strategy: 1) reliable funding sources, 2) sustained partnerships with local organizations, and 3) physical infrastructure.

We envision a baseline necessity of sustainable and reliable funding for 10 years as the program matures. To begin, Eastwick United needs long-term funding to support salaried positions within the organization. More trained staff members would mean, crucially, greater capacity for resident organizing, training, and advocating. This funding would also facilitate regular maintenance of built projects and ongoing community programming.

Partnerships with local community and youth organizations offer potential for co-creating knowledge, building coalitions, and deepening capacity. In addition, continued conversations with local trade specialists and consultants including architects, designers, builders, consultants, community leaders, and residents would build trust, cohesion, and power.

Finally, physical investment in key community demonstration projects around the neighborhood is needed. This investment includes updating existing buildings for a changing climate, installing pilot and permanent climate adaptation infrastructure including water, air, and soil remediation projects, and technical equipment to monitor the projects (air quality monitors; equipment for surface and groundwater monitoring, bio and phytoremediation monitoring equipment). Tools and supplies to support youth and resident education are also needed.

E. Barriers to Strategy Implementation

Still, sea levels continue to rise at accelerating rates, the soils in Eastwick remain contaminated, and air contamination remains a health hazard to residents (See appendix, Figure 6).

Despite the endurance and resilience of the residents who have lived in Eastwick for decades, people are exhausted and entering a survival mode mentality amidst accelerating threats of climate change. Eastwick residents deal with a profound stress of being flooded out at any time—something that is not stressful or relatable to most Philadelphians. As a result, neighbors have difficulty dreaming of the future when present traumas are right at their doorstep each day—or above it. This trauma also includes decades of broken promises from city and state officials who claimed they would act but, in the end, did not. Ultimately, Eastwick residents are tired, aging, and have extreme difficulty pursuing long-term change due to exacerbating present-day circumstances.

In addition to fatigue and trauma, there is little participation amongst the youth in actively supporting the change on the grounds and in community. In fact, community knowledge of Eastwick's history of urban renewal and connection to environmental injustice is decreasing in younger generations, which places the true story and the mission of Eastwick United at stake. Without a generational pipeline of community leaders, who will see the mission through?

F. Measures of Successful Strategy Implementation

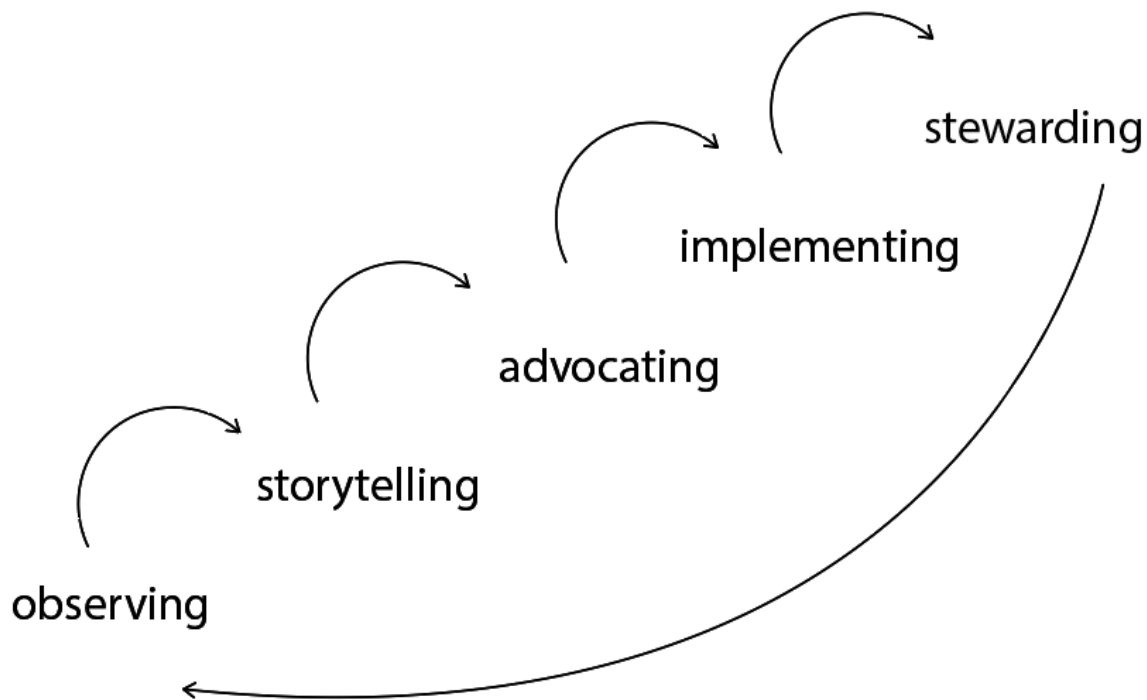
To ensure the long-term sustainability of this project, we will use metrics to monitor the increase in community participation, environmental knowledge, and the comprehensiveness of this project. We will also measure the impact pilot climate adaptation strategies have on key demonstration projects throughout the neighborhood. Currently Eastwick United serves 14,000 residents and over 2400 households, with many of these residents over the age of 65. The project aims to expand Eastwick United's outreach to younger and non-Eastwick residents, dilating the organization's mission to support future generations in Eastwick and beyond. We will measure our progress by tracking change in age, households served, and total number of participants in community events, programs, and voter participation. In addition, we will use the number of graduates from Pepper School educational programs to measure the increase in local environmental knowledge and awareness. Finally, we will use scientific data to track and monitor progress of climate interventions such as phytoremediation, constructed wetlands, green stormwater infrastructure, and increased tree canopy.

- Community participation
 - Number of Community Ambassadors
 - Number of youth/younger people involved in community meetings, events, etc. in Eastwick
 - Number of attendees/guests to the Pepper School
 - Number of people participating in programs at Pepper School
- Increase in city voter participation of 18-30 year-olds in Eastwick
- Increased foot traffic to Eastwick by non-Eastwick residents
- Increased number of Black-owned businesses
- Increased number of Black homeownership
- Reduced environmental hazards and pollutants
 - Improved air quality
 - Increased tree canopy
 - Improved soil health
 - Reduction in stormwater runoff volume
 - Improvement in stormwater runoff contaminant levels
 - Improved groundwater quality
 - Reduced temperatures (lower heat island)

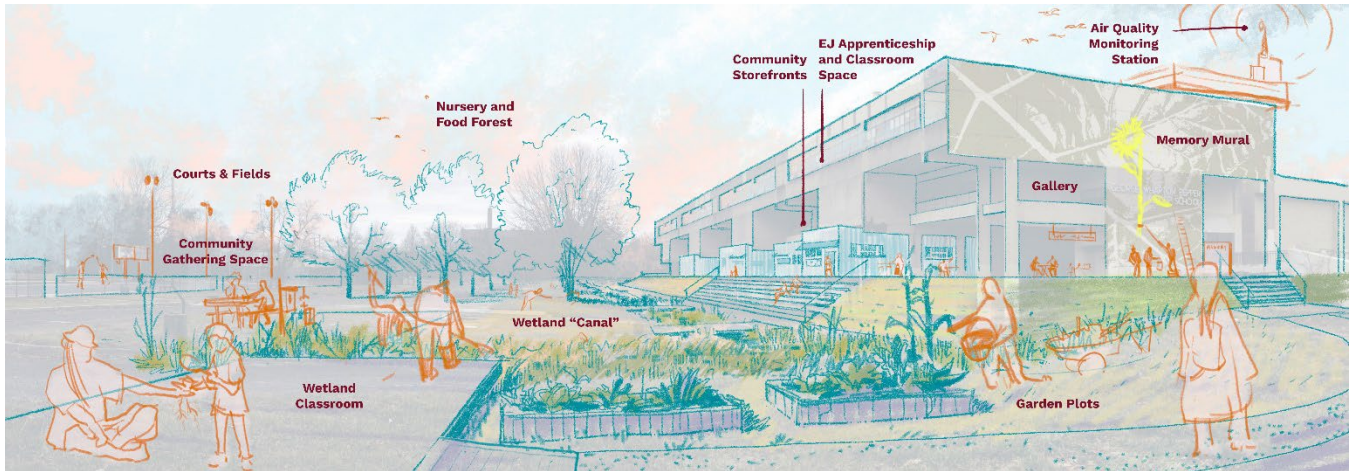
APPENDIX:

1. Education Model Diagram
2. Pepper School Community Hub
3. Pepper School Topographic Plan
4. Eastwick Asset Map
5. Eastwick demographic data
6. Environmental hazard and health impact maps

1. Education Model Diagram



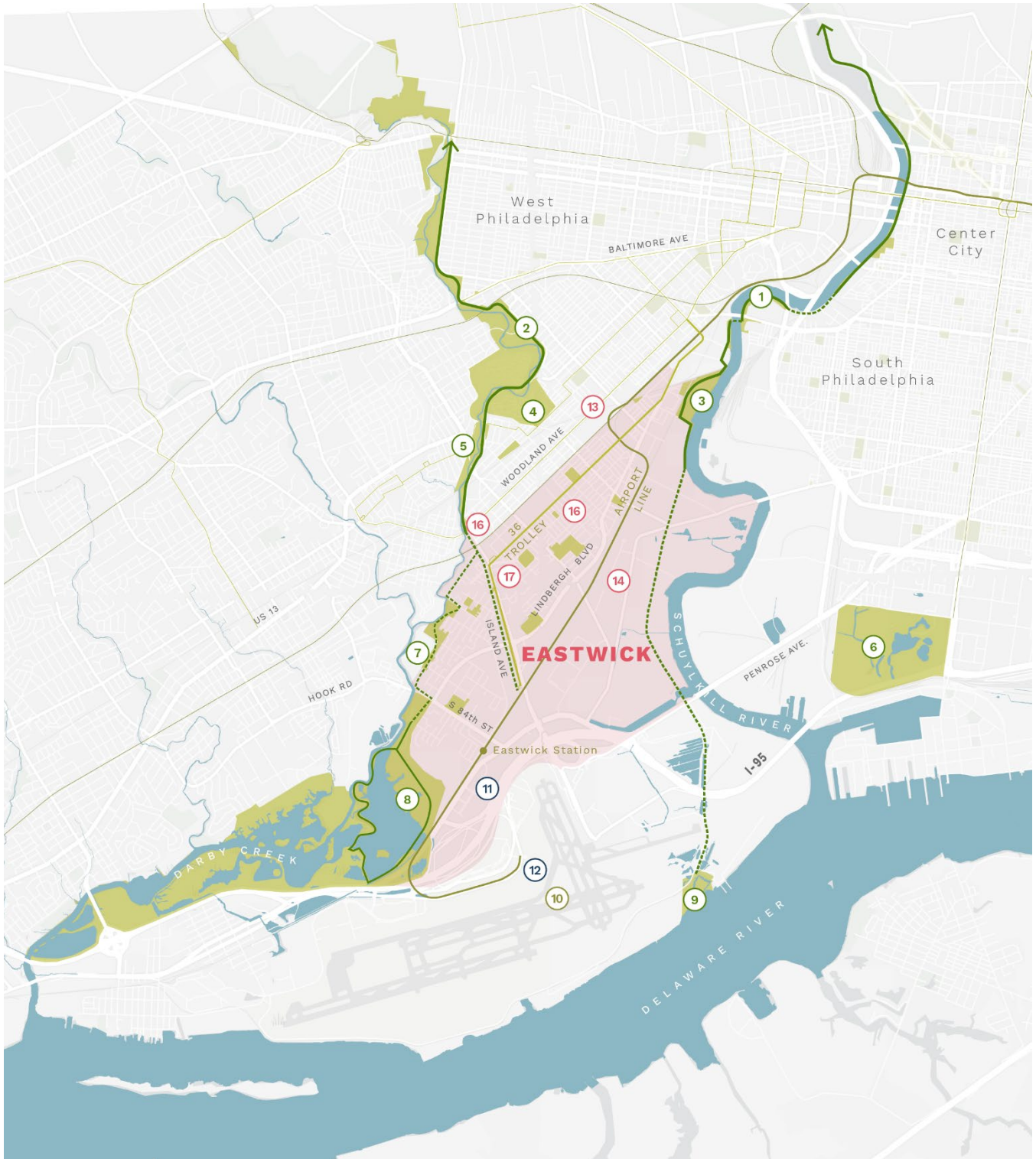
2. Pepper School Community Hub (imagined)



3. Pepper School Topographic Plan



4. Eastwick Asset Map



Scale:



Eastwick Assets

Environmental

- 1 Schuylkill River Trail
- 2 Cobbs Creek Trail
- Existing Trails
- Future Trails
- 3 Bartram's Garden
- 4 Mt. Moriah Cemetery
- 5 Cobbs Creek Park
- 6 FDR Park
- 7 Clearview Landfill Reforestation
- 8 John Heinz National Wildlife Refuge
- 9 Fort Mifflin

Transportation

- 10 PHL International Airport
- SEPTA Trolley Lines
- SEPTA Regional Rail

Hospitality

- 11 Airport Hotel Cluster
- 12 Airport Car Rentals

History, Culture, & Commerce

- 13 Africatown Commercial Corridor
- 14 Simeone Foundation Auto Museum
- 15 Pepper Middle School Building
- 16 Blue Bell Inn
- 17 Former site of Robert Buist's Rosedale Nursery

5. Eastwick Demographic Data

EASTWICK DEMOGRAPHIC DATA

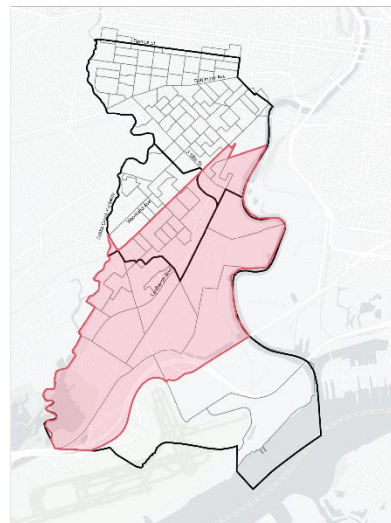
10.5.2022 [DRAFT]

Prepared by a collective of designers and planners including Celine Apollon, Yasmine McBride, Ally Nkwocha, Jackson Plumlee, Jamaica Reese-Julien, Marc Schultz and Jacobie Smith.

EASTWICK DEMOGRAPHIC DATA

The following demographic report was prepared for Eastwick United. It includes Decennial Census and American Community Survey Data for the follow block groups:

[Block Group - Census Tract] 1-54, 1-55, 2-55, 3-55, 4-55, 1-56, 1-60, 2-60, 3-60, 4-60, 5-60, 1-61, 2-61, 1-62, 2-62, 3-62, 4-62, 1-67, 2-67, 3-67, 4-67, 2-391, 3-391, 4-391, 1-9809.01, 2-9809.01, 4-9809.01, 5-9809.01, 6-9809.01, 8-9809.01.



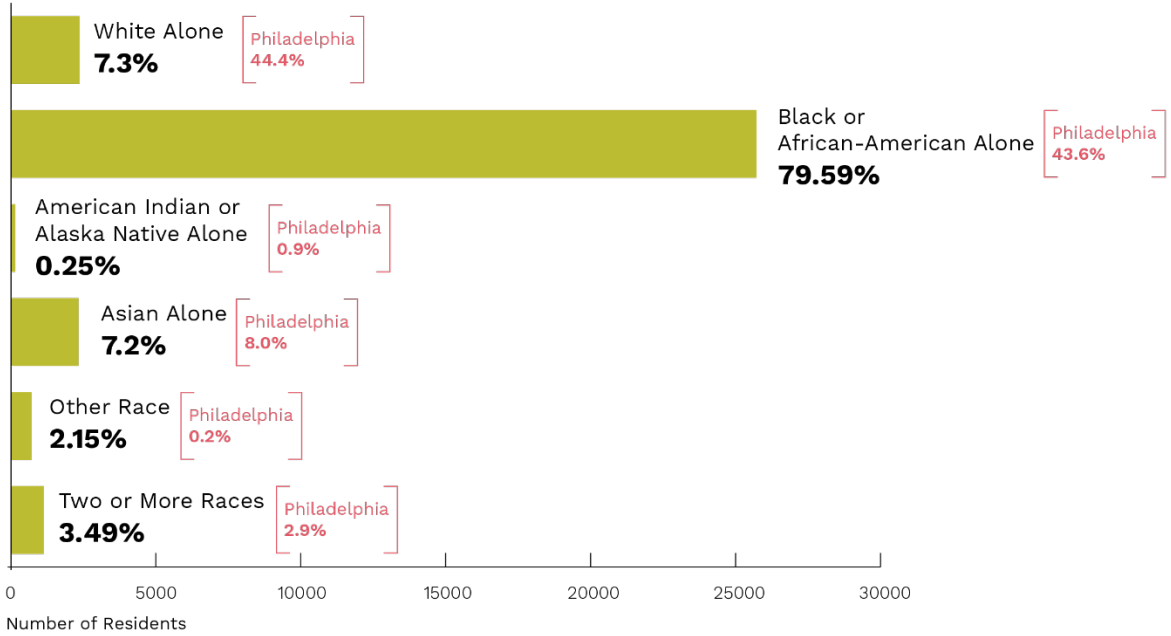
Eastwick's Total
2020 Population:
33,576

- Selected Eastwick Block Groups
- Census Block Groups
- Zip codes 19153, 19143, 19142

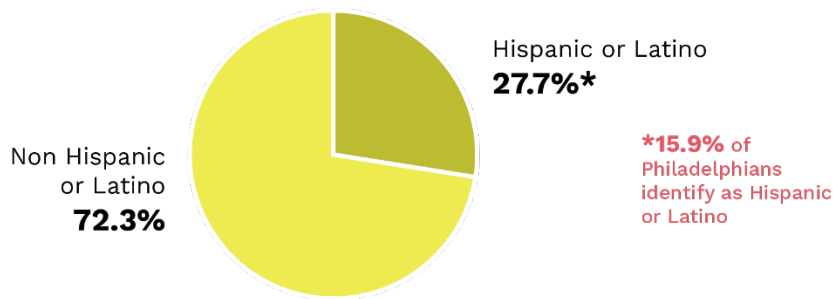
2020 CENSUS DATA

The following data was sourced from the 2020 Census for the Eastwick boundary represented on page 2.

Race + Ethnicity

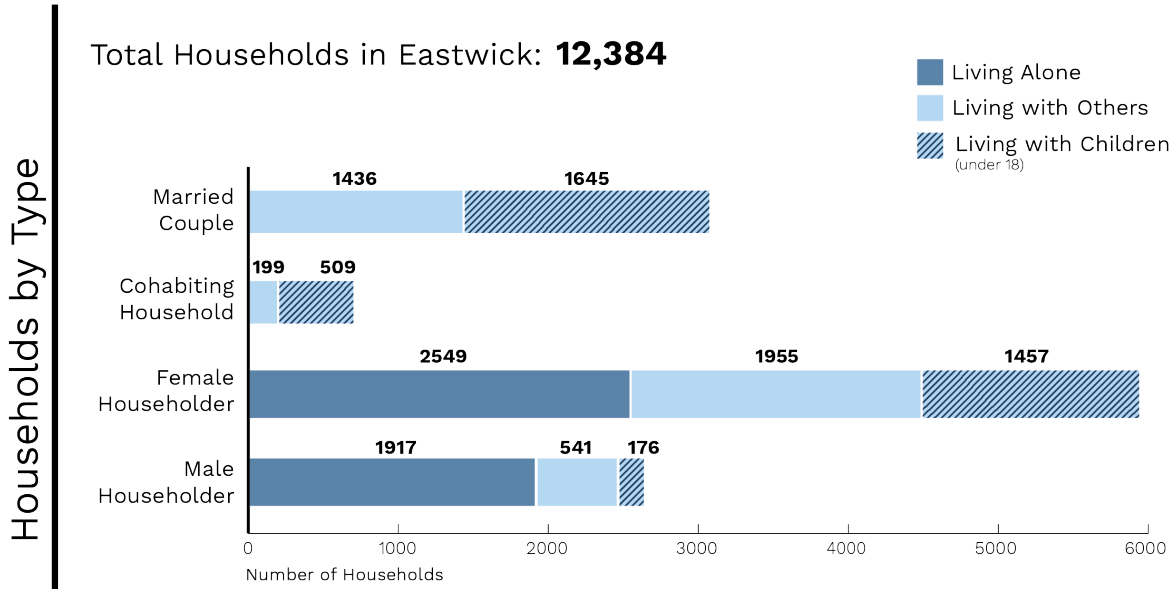
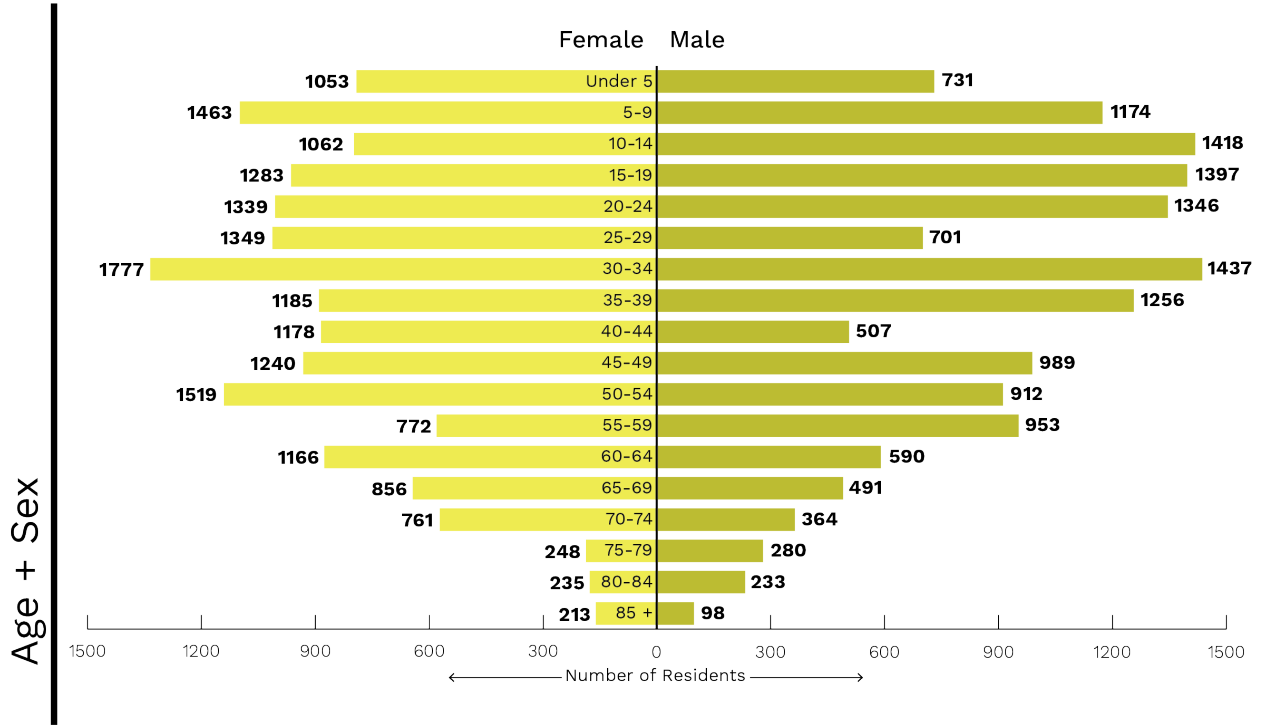


Hispanic or Latino

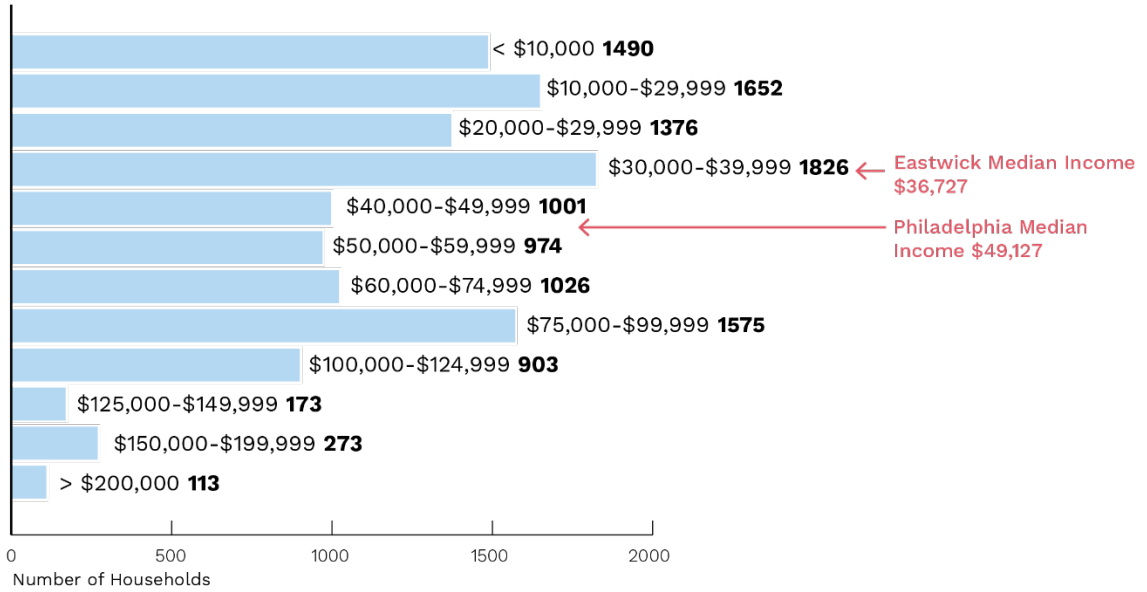


2020 ACS DATA (5 YEAR)

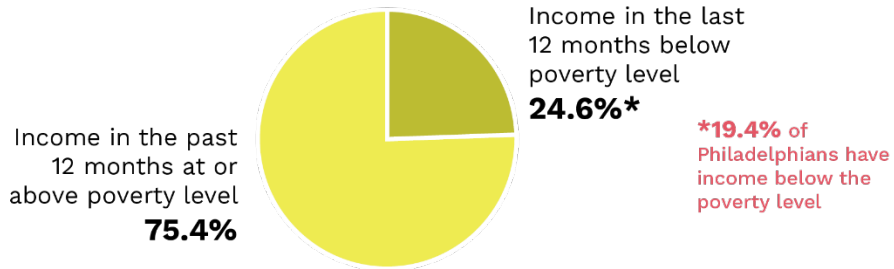
The following data was sourced from the 2020 American Community Survey for the Eastwick boundary represented on page 2.



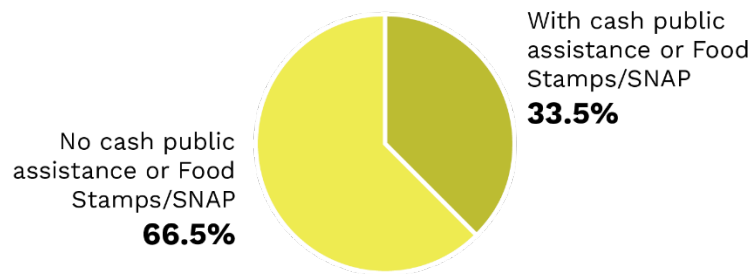
Household Income



Poverty Status

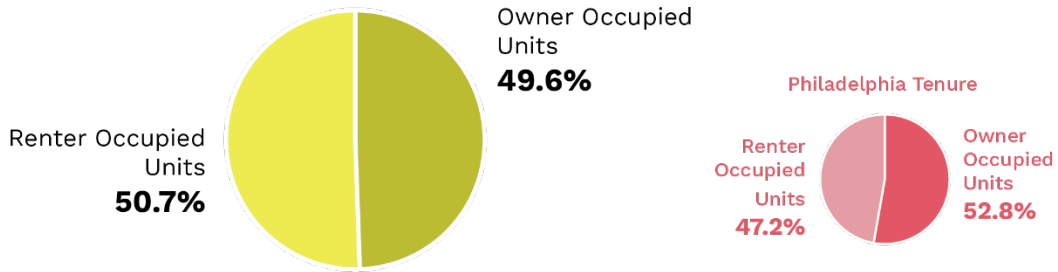


Public Assistance

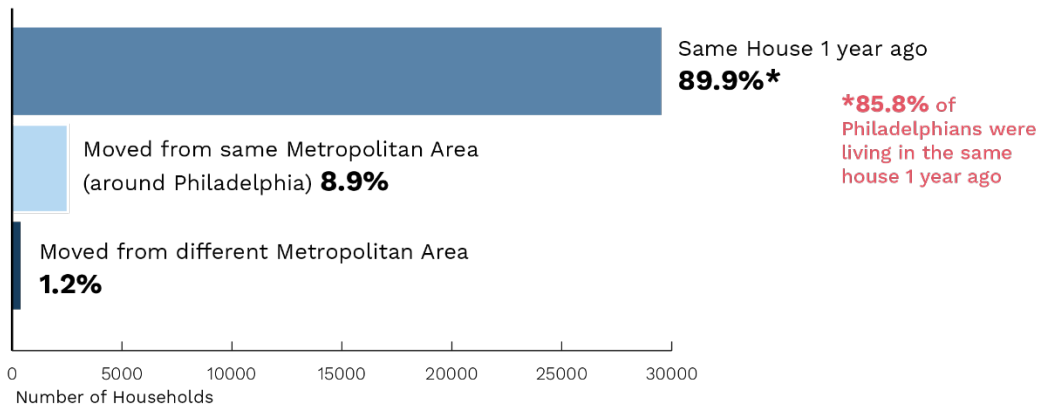


Tenure + Rent

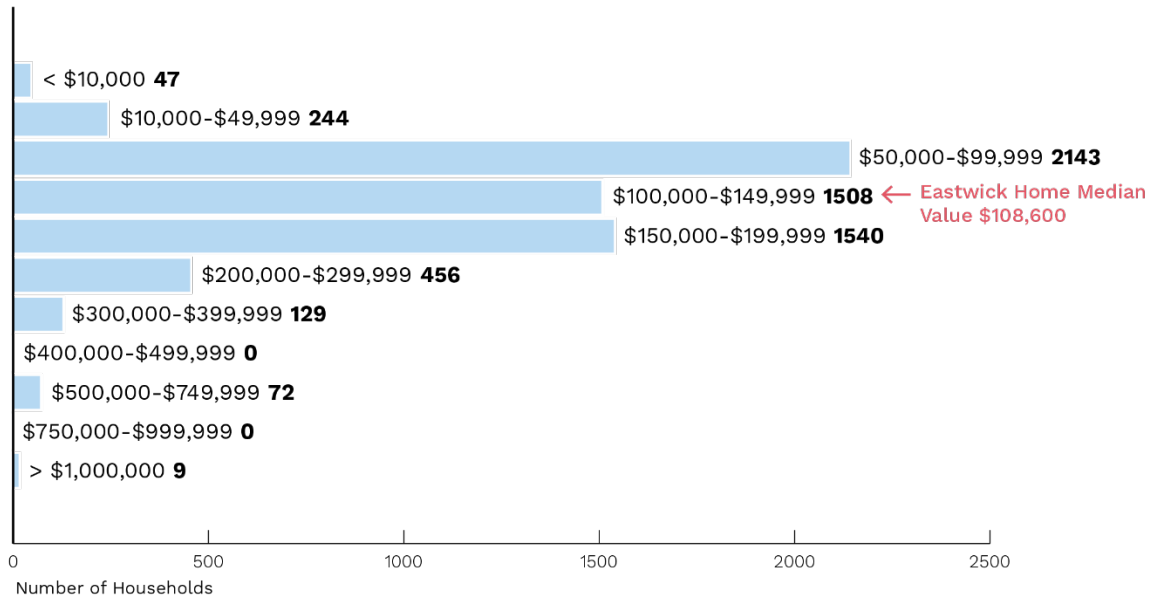
Median Gross Rent in Eastwick: **\$1095*** *Median Gross Rent in Philadelphia: **\$1084**



Mobility

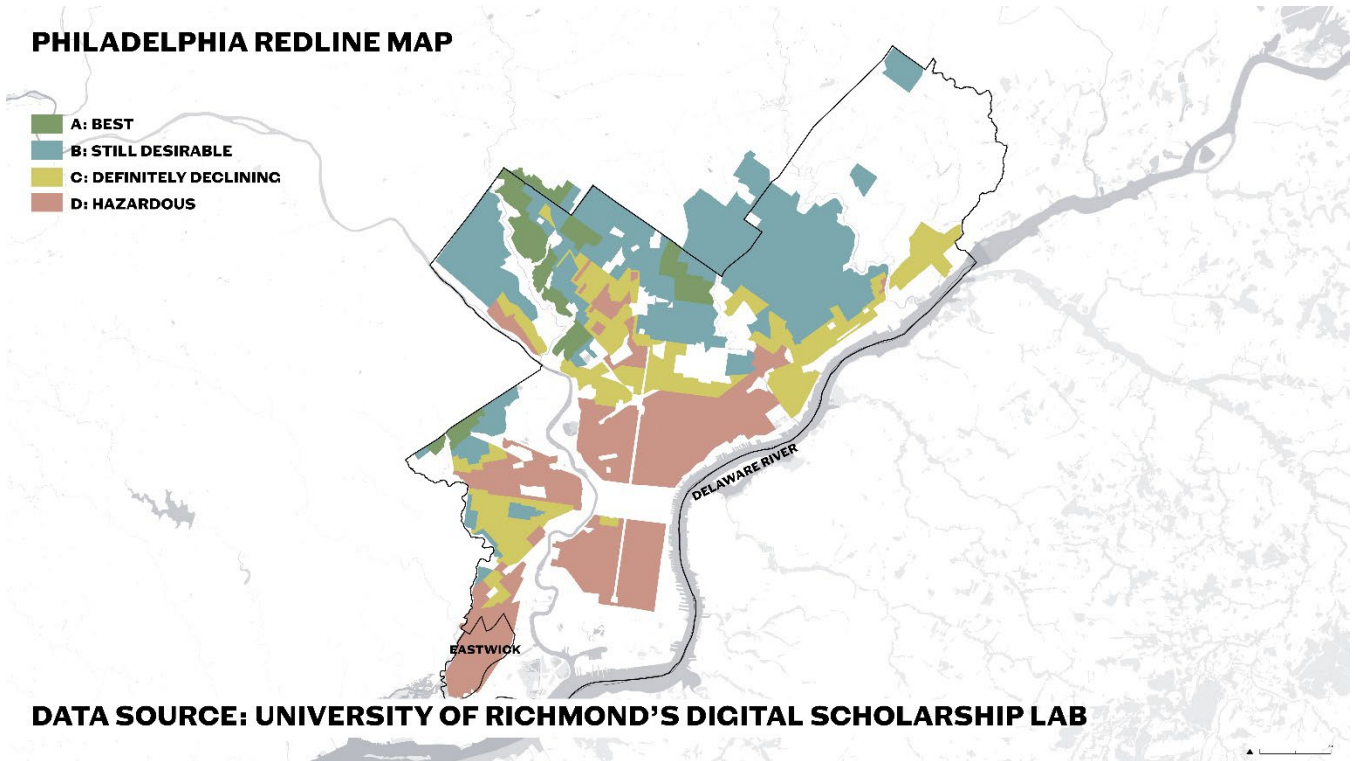


Value of Owner-Occupied Units

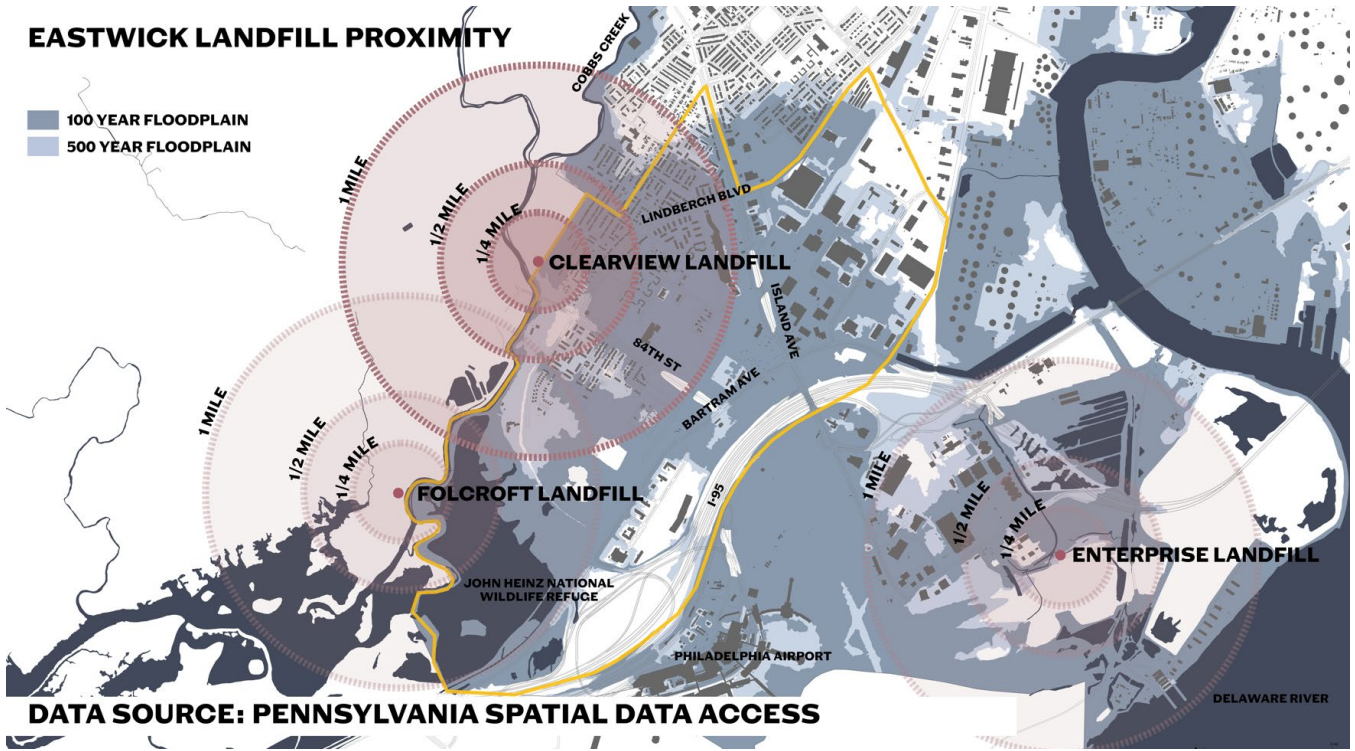


6. Environmental hazard and health impact maps

PHILADELPHIA REDLINE MAP

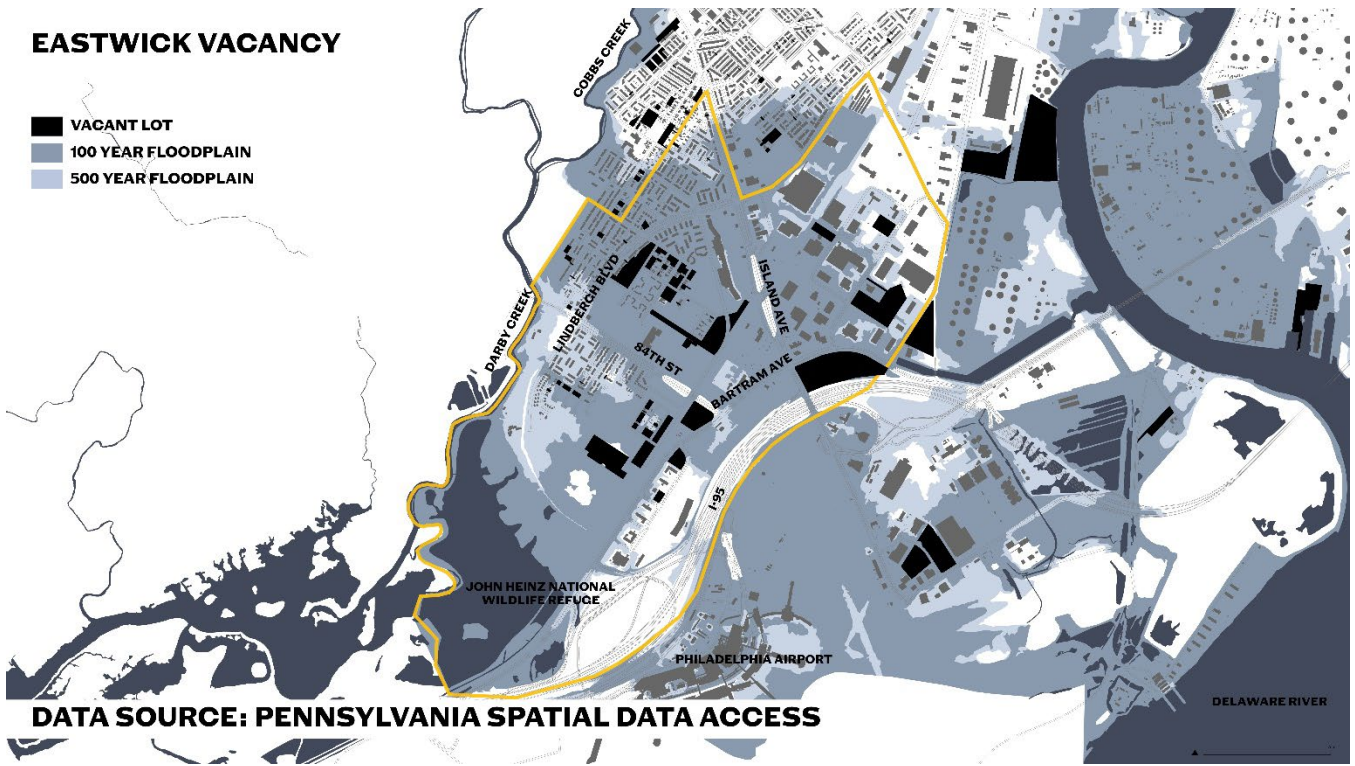


EASTWICK LANDFILL PROXIMITY



EASTWICK VACANCY

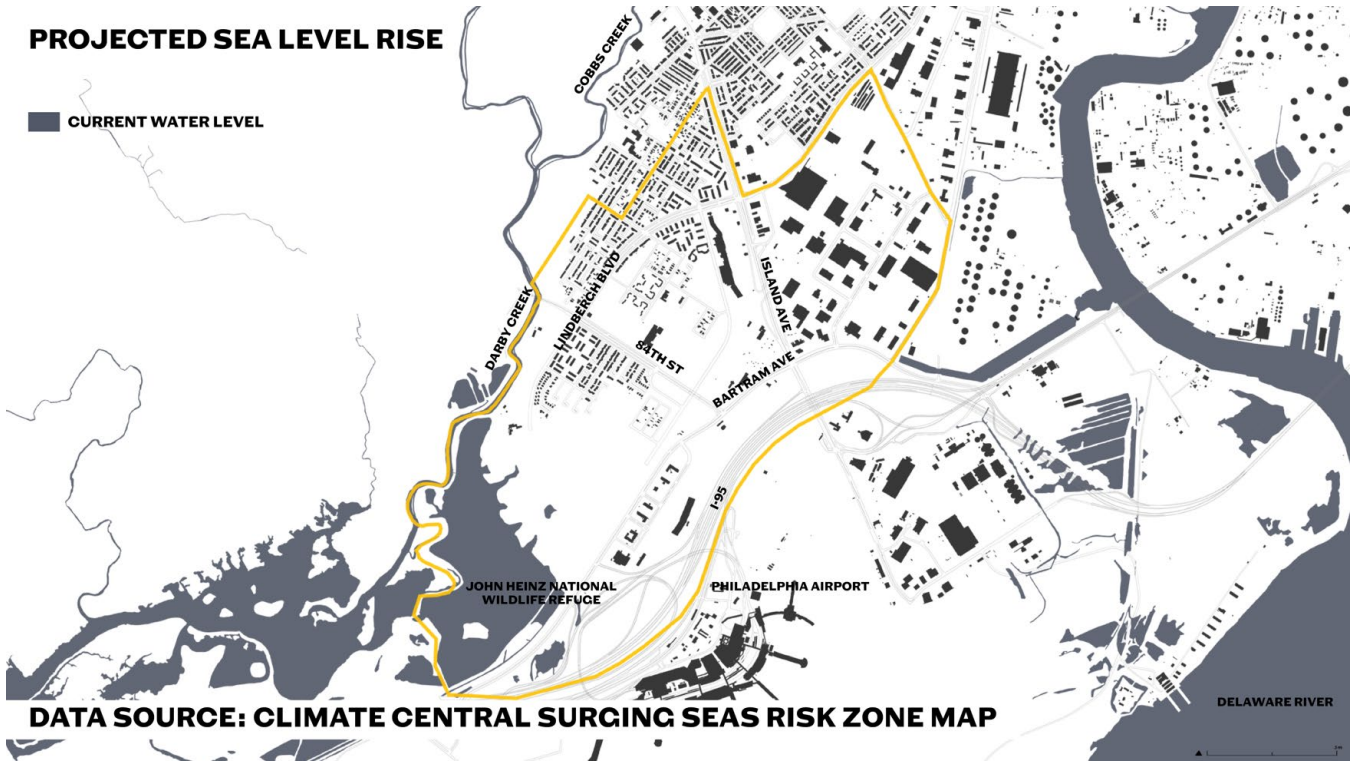
-  VACANT LOT
-  100 YEAR FLOODPLAIN
-  500 YEAR FLOODPLAIN



DATA SOURCE: PENNSYLVANIA SPATIAL DATA ACCESS

PROJECTED SEA LEVEL RISE

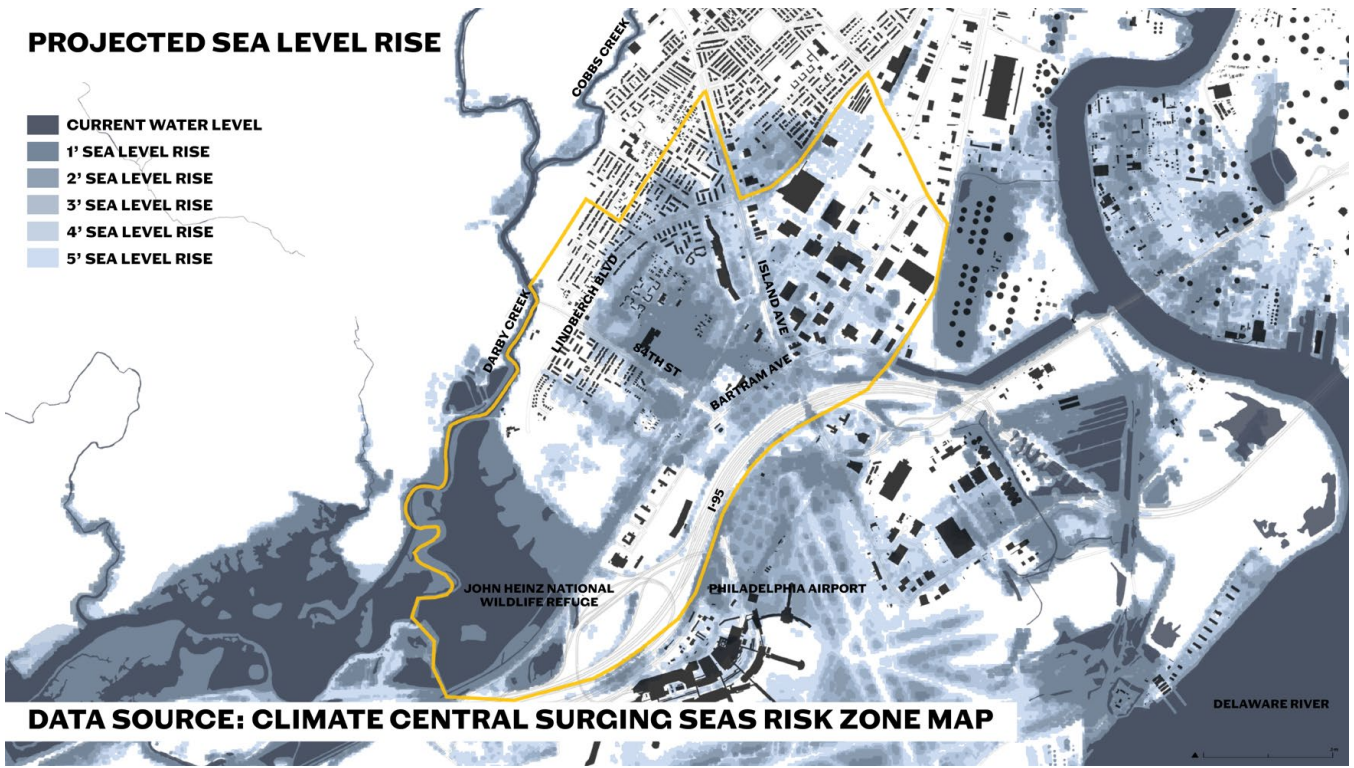
-  CURRENT WATER LEVEL



DATA SOURCE: CLIMATE CENTRAL SURGING SEAS RISK ZONE MAP

PROJECTED SEA LEVEL RISE

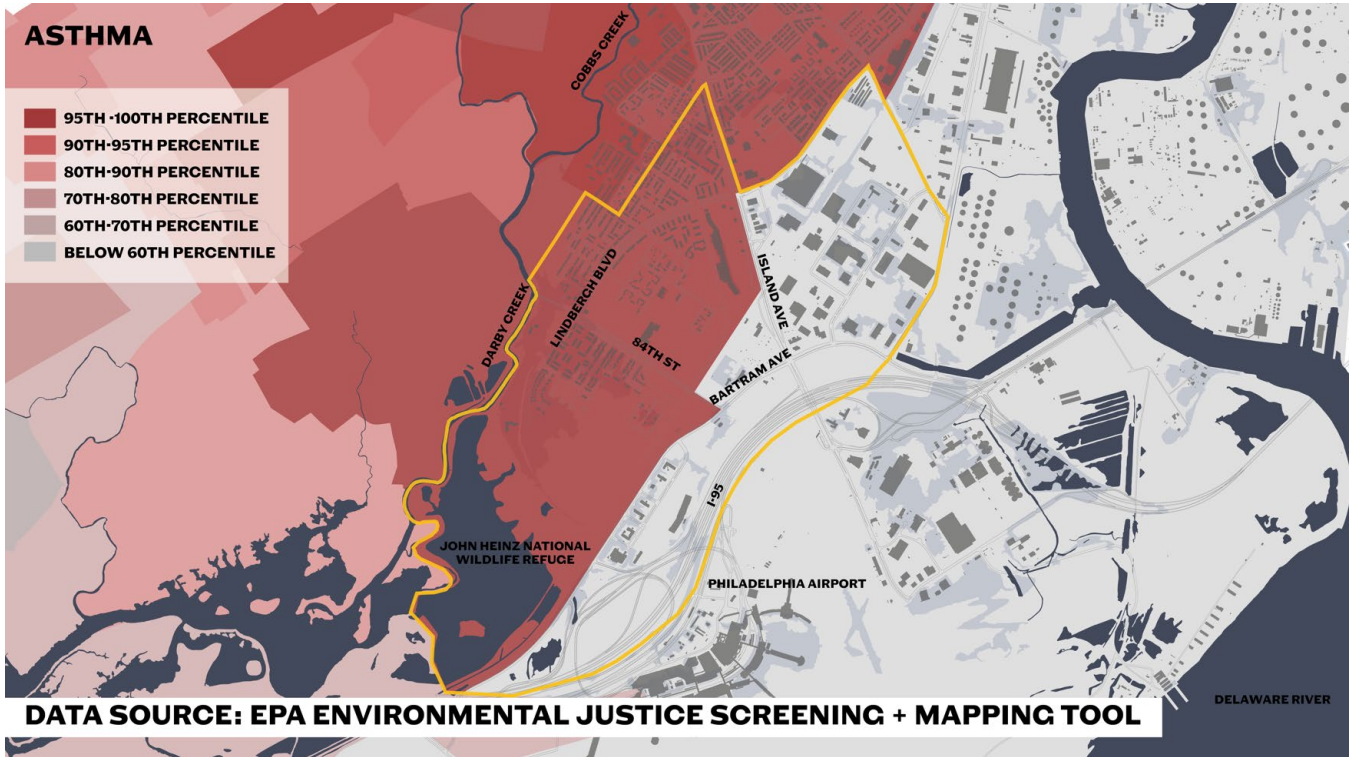
- CURRENT WATER LEVEL
- 1' SEA LEVEL RISE
- 2' SEA LEVEL RISE
- 3' SEA LEVEL RISE
- 4' SEA LEVEL RISE
- 5' SEA LEVEL RISE



DATA SOURCE: CLIMATE CENTRAL SURGING SEAS RISK ZONE MAP

ASTHMA

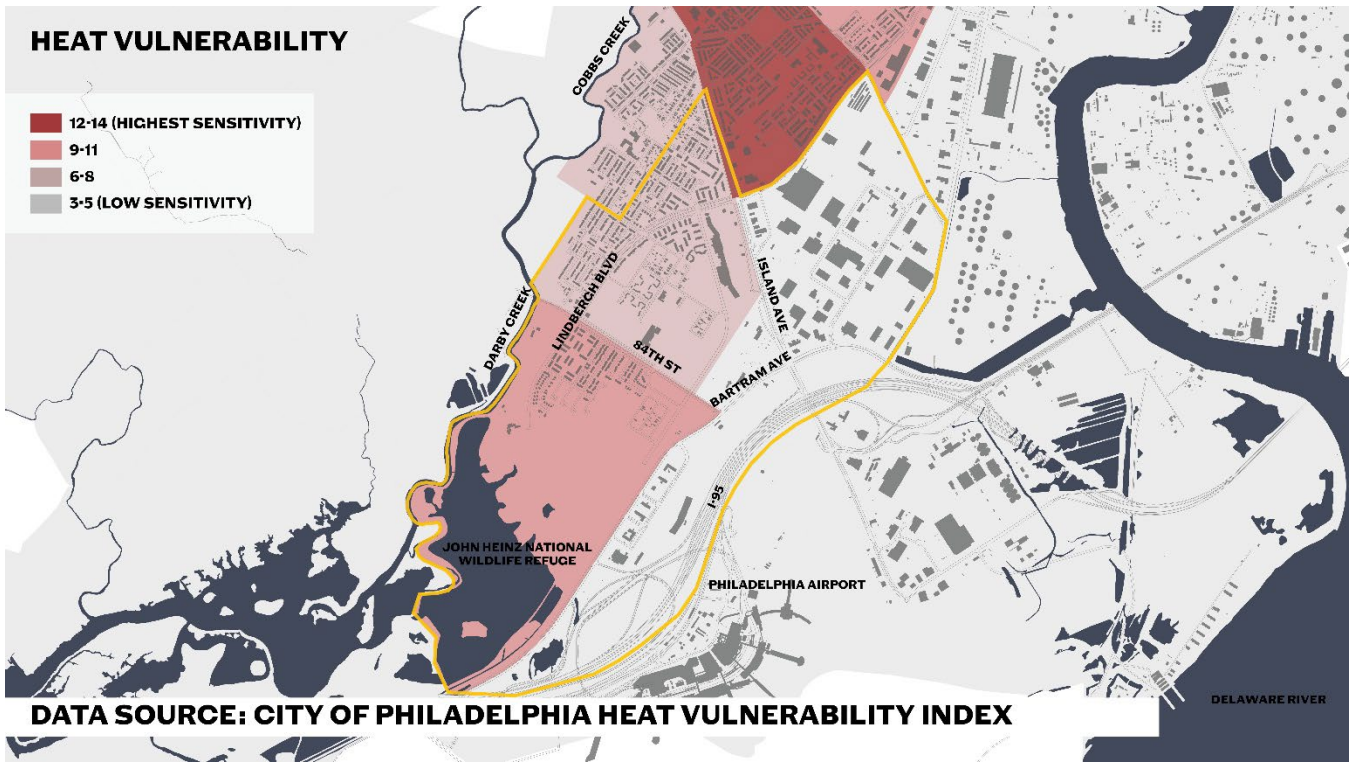
- 95TH -100TH PERCENTILE
- 90TH-95TH PERCENTILE
- 80TH-90TH PERCENTILE
- 70TH-80TH PERCENTILE
- 60TH-70TH PERCENTILE
- BELOW 60TH PERCENTILE



DATA SOURCE: EPA ENVIRONMENTAL JUSTICE SCREENING + MAPPING TOOL

HEAT VULNERABILITY

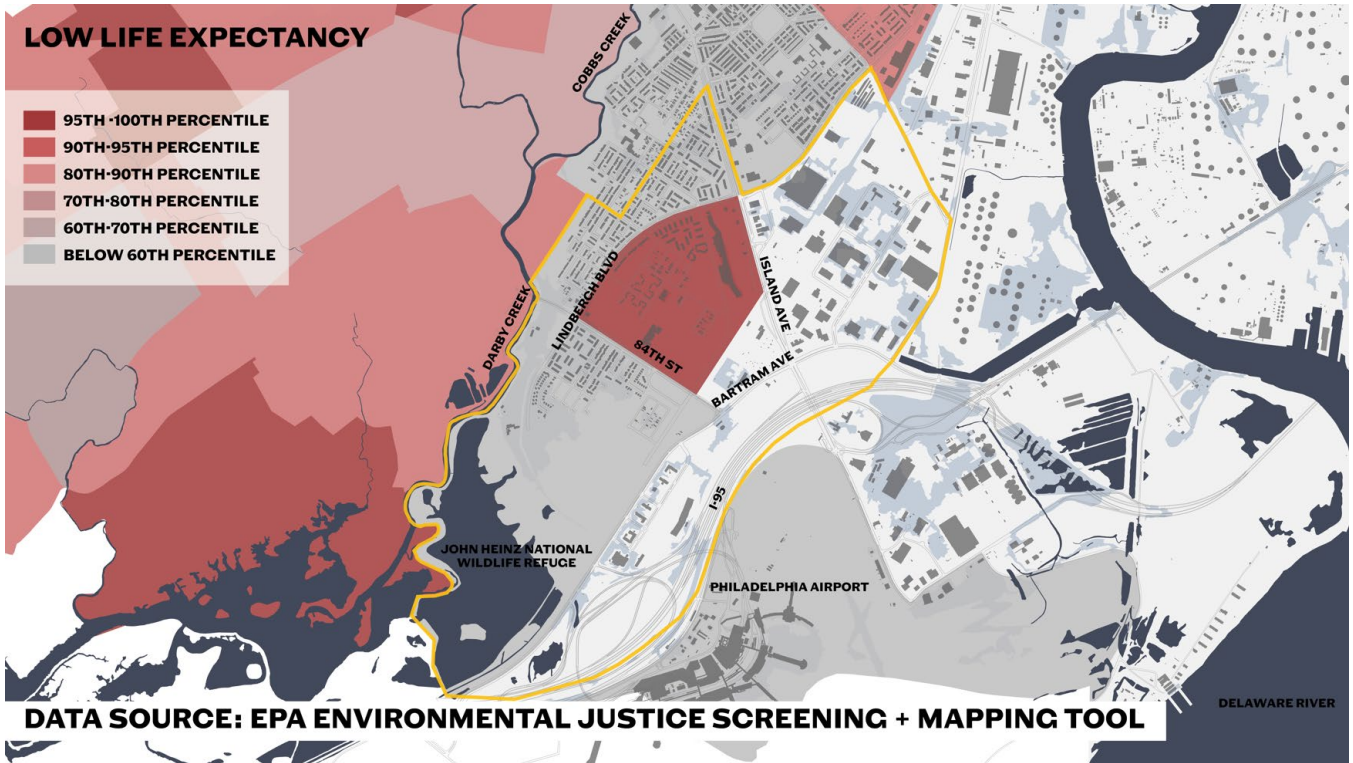
- 12-14 (HIGHEST SENSITIVITY)
- 9-11
- 6-8
- 3-5 (LOW SENSITIVITY)



DATA SOURCE: CITY OF PHILADELPHIA HEAT VULNERABILITY INDEX

LOW LIFE EXPECTANCY

- 95TH -100TH PERCENTILE
- 90TH-95TH PERCENTILE
- 80TH-90TH PERCENTILE
- 70TH-80TH PERCENTILE
- 60TH-70TH PERCENTILE
- BELOW 60TH PERCENTILE



DATA SOURCE: EPA ENVIRONMENTAL JUSTICE SCREENING + MAPPING TOOL

