



# Beat the Heat Hunting Park

A COMMUNITY HEAT  
RELIEF PLAN

**BEAT THE HEAT**  
HUNTING PARK  
**VENZAE L CALOR**

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# Executive Summary

## Project Overview

As the City's lead agency on efforts to reduce the city's carbon footprint and to prepare the city for a changing climate, the Philadelphia Office of Sustainability (OOS) has identified the main risks that climate change poses to Philadelphia are increased precipitation and flooding and increased heat. However, not all neighborhoods will experience these impacts equally, and lower income communities and communities of color are more likely to be harmed by the changing climate.

Average surface temperature data for Philadelphia show that some neighborhoods can be as much as 22°F hotter than others. The Philadelphia Heat Vulnerability Index combines this heat data with information on population, age, income, language, educational attainment, race and ethnicity, social isolation, and health to show neighborhoods that are both among the hottest and where residents may be most vulnerable. Census data show that low-income residents and residents of color are more likely to live in these hotter neighborhoods. This pattern of unequal exposure to risk tells us that climate change is not only a public health issue, but also an issue of racial and social equity.

Neighborhoods like Cobbs Creek, Point Breeze, Strawberry Mansion, and Hunting Park are among the hottest and most heat vulnerable neighborhoods in Philadelphia. Common reasons why some neighborhoods are hotter than others include lower tree canopy and fewer green spaces, more exposed asphalt and dark surfaces (including black roofs), and a history of red-lining and disinvestment that have contributed to an aging housing stock.

OOS launched a community-driven, equity focused approach to community climate planning in 2018 with the Beat the Heat Hunting Park Initiative. The goal of this first effort was to work in one of Philadelphia's hottest and most heat vulnerable neighborhoods—Hunting Park—to identify and acknowledge causes for heat disparities while also supporting community-driven decision-making about how to reduce these inequities. Through funding from the Knight Foundation and Partners for Places, OOS worked with more than 30 government departments, community organizations, and stakeholders to convene Philadelphia's first Heat Team.

Through this heat resiliency pilot project, the Heat Team engaged over 600 residents in an eight month community engagement process, including hosting two large kick-off parties and participating in dozens of other community events; recruiting and investing in two Beat the Heat Team leaders and a team of four Beat the Heat Ambassadors; conducting a neighborhood heat survey that received 530 responses; collaborating with over 40 residents in a community design workshop to identify where cooling assets and resources could be incorporated into the neighborhood; and organizing meetings

with faith leaders to begin the creation of a neighborhood heat relief network. This plan is a result of the feedback the Heat Team heard through these efforts. This plan is a result of the feedback we heard through these efforts.

### **Beat the Heat Hunting Park Survey Results**

From July 2018 to January 2019 the Beat the Heat Team heard from more than 600 residents and community leaders in Hunting Park about their experiences with heat and their vision for a cooler and more climate resilient neighborhood.

**Respondents overwhelmingly reported that high heat is a very important community issue, both inside and outside of their homes.** Even though 84% of survey respondents have access to air conditioning (A/C), 77% of survey respondents still reported feeling too hot inside their homes and that better access to A/C and fans would help them stay cool.

**Awareness of utility assistance programs was relatively low.** Only 40% of respondents had heard of programs to help cut energy costs and pay utility bills. Additionally, only 4% of respondents who said they didn't use A/C because of the cost had heard of utility assistance programs. Those who took the survey in Spanish were less likely to know about these programs than those who took the survey in English.

**Interest in home cooling is high.** 76% of respondents said that better access to A/C and fans would help them stay cool in their homes. Additionally, 40% of survey respondents said that they would like to see more cool roofs on their blocks to bring temperatures down both inside and outside of their homes.

**Residents stay home during high heat events.** When it is very hot outside, only 24% of respondents said that they prefer to leave their homes to go somewhere to stay cool, even though 77% of respondents said they often or always feel too hot in their homes.

**Access to cooling resources is limited.** Only 40% of respondents reported having heard about cooling centers. Awareness of cooling centers was even lower (27%) for those who took the survey in Spanish. Many residents voiced concerns with Hunting Park pool's limited hours and overcrowded conditions. However, over 56% of respondents said they would be willing to go somewhere to stay cool if they knew others who were going, if there were easy transportation, and if there were activities available.

**Local relationships are critical.** 80% of respondents reported primarily obtaining information about their community from neighbors, block captains, or community leaders (as opposed to from the news, social media, or other sources).

**Respondents overwhelmingly reported that high heat is a very important community issue, both inside and outside of their homes. Even though 84% of survey respondents have access to air conditioning (A/C), 77% of survey respondents still reported feeling too hot inside their homes and that better access to A/C and fans would help them stay cool.**

**Residents expressed the desire for more greening and trees throughout the neighborhood.** 60% of survey respondents wanted to see more trees—of the appropriate type and size—as a cooling strategy in their neighborhood.

### Next Steps

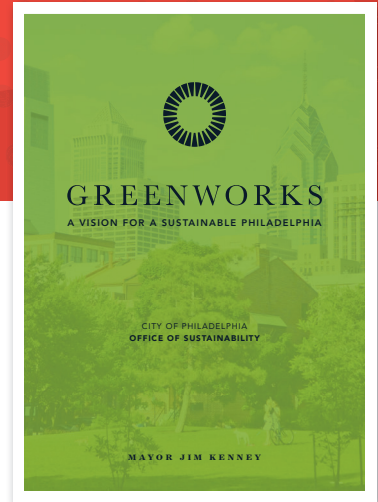
Hunting Park community organizations and residents identified a number of recommendations that support their vision for a cooler and more climate-resilient neighborhood, outlined on pages 33-43. The Office of Sustainability and the City Heat Team are committed to continuing to address high heat and heat disparities both in Hunting Park and citywide. The Heat Team's next steps include:

- Continuing to implement projects that support cooling in Hunting Park, including additional tree plantings and the installation of green stormwater infrastructure
- Reviewing city policies related to land use, green infrastructure, transportation, and outreach to consider how they might address heat
- Launching a Hunting Park Heat Relief Network in the summer of 2019
- Sharing the Beat the Heat Toolkit with other heat vulnerable communities
- Undertaking a Citywide Climate Adaptation Plan to understand how climate change will impact different areas of the city and to begin planning how to mitigate those impacts
- Identifying better ways to communicate about heat and cooling resources, including establishing a City Heat website to make it easier for residents to find cooling resources

Young residents make hand fans at the Beat the Heat mobile station at the 2018 Allegheny Avenue Arts Festival.



# Background



The Philadelphia Office of Sustainability (OOS) partners with residents, community groups and non-profits, local businesses and institutions, and other departments within city government to work towards Greenworks: Philadelphia’s plan for achieving a healthier, more equitable, environmentally friendly, and economically viable city for all Philadelphians.

## Greenworks: A Vision for a Sustainable Philadelphia

The Greenworks plan presents eight visions for Philadelphia to be a city where all people:



Have access to healthy, affordable, and sustainable food and drinking water.



Breathe healthy air inside and outside.



Use clean, efficient, affordable energy.



Prepare for climate change and reduce carbon pollution.



Benefit from parks, trees, stormwater management, and healthy waterways.



Have access to safe, affordable, and low-carbon transportation.



Waste less and keep our neighborhoods clean.



Benefit from sustainability education, employment, and business opportunities.



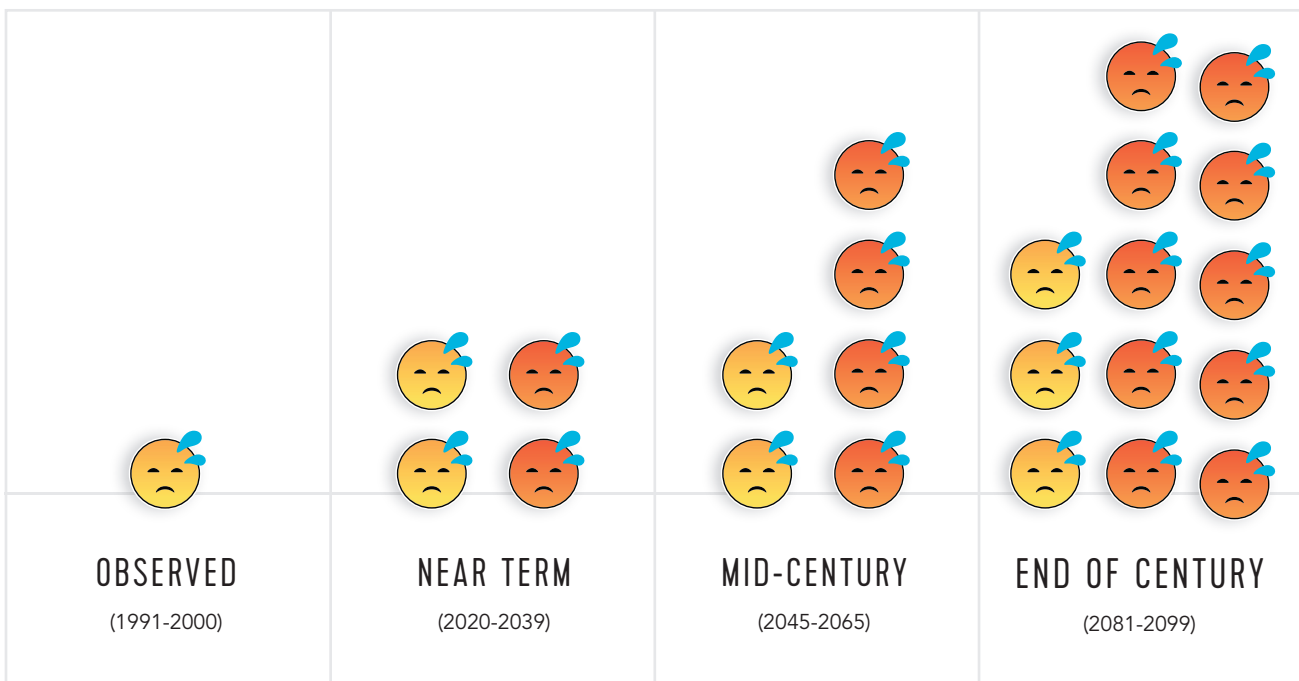
To learn more about Greenworks and read the annual Greenworks Review, visit [www.phila.gov/green](http://www.phila.gov/green).

## Climate Change, Extreme Heat, & Community Health

Several of the Greenworks sustainability visions address the reality of climate change, which is currently impacting Philadelphians and will continue to affect residents and visitors in the years to come. Climate change is both a local and global issue. Though low income people and people of color contribute the least to the causes of climate change, these communities are often affected the most.

Since 2010, the city has had the three hottest summers on record. In an average summer during the 1900s, Philadelphians experienced four days above 95°F. As reported in *Growing Stronger: Toward a Climate-Ready Philadelphia*, by 2100, we could face as many as 52 days over 95°F and as many as 16 days a year above 100°F.

FIG. 1 IMPACT OF CLIMATE CHANGE ON DAYS PER YEAR OVER 95°



5 days above 95°F (if climate emissions decrease)      5 days above 95°F (if climate emissions increase)

## The Urban Heat Island Effect

Like other cities, Philadelphia is especially sensitive to extreme heat. Due to what is called the “urban heat island effect,” cities are hotter than suburban areas. Due to what is called the “urban heat island effect,” cities are hotter than suburban areas. Cities often have fewer trees and less green space, which can increase shade and decrease the temperature. Though Philadelphians are already accustomed to hot and humid summers, climate change is a risk to community health because it makes the worst of these hotter days more frequent.

## **The Impact of Heat on Public Health**

Extreme heat is a top public health issue in Philadelphia. Heatwaves have exposed Philadelphians to such extreme temperatures that there have been more deaths from heat than from all other natural disasters combined. In 1993, one heatwave was so intense that at least 118 people died. Between 2006 and 2018 there were 137 heat-related deaths in the City of Philadelphia. In addition, emergency room visits for heat-related illnesses typically increase, sometimes substantially, during extreme heat events. Extreme heat events can increase risk of dehydration, heat exhaustion, and heat stroke for all people, but particularly for older Philadelphians, children, and other sensitive populations. Excessive heat can also worsen pre-existing health conditions, including diabetes, cardiovascular disease, and asthma.

## **What is a Heat Health Emergency?**

In Philadelphia, a Heat Health Emergency is declared when conditions will be hazardous to the health of Philadelphians and residents may need to take extra precautions to stay healthy and safe. A Heat Health Emergency is declared from May through June when the heat index is forecasted to reach 101°F or higher for two consecutive days, or 98°F or higher for three or more consecutive days. After June 30, the heat index must reach or exceed 106°F for two consecutive days for a Heat Health Emergency to be declared.

During a declaration of a Heat Health Emergency, the City will immediately stop utility shutoffs for residential non-payment, work with the Philadelphia Corporation for Aging to activate the Heatline and Philadelphia Department of Public Health (PDPH) mobile teams, and activate cooling centers. Persons calling the Heatline with medical questions may be referred to a PDPH nurse, who may recommend sending out a PDPH mobile team depending on the caller's medical concerns. These teams go to individuals' homes to conduct environmental assessments and discuss precautions for extreme heat events. Cooling Centers are libraries, recreation centers, and older adult centers that operate with extended hours. During Heat Health Emergencies, the City also operates spraygrounds and pools where residents can cool off.

## **Heat Vulnerability and Inequity**

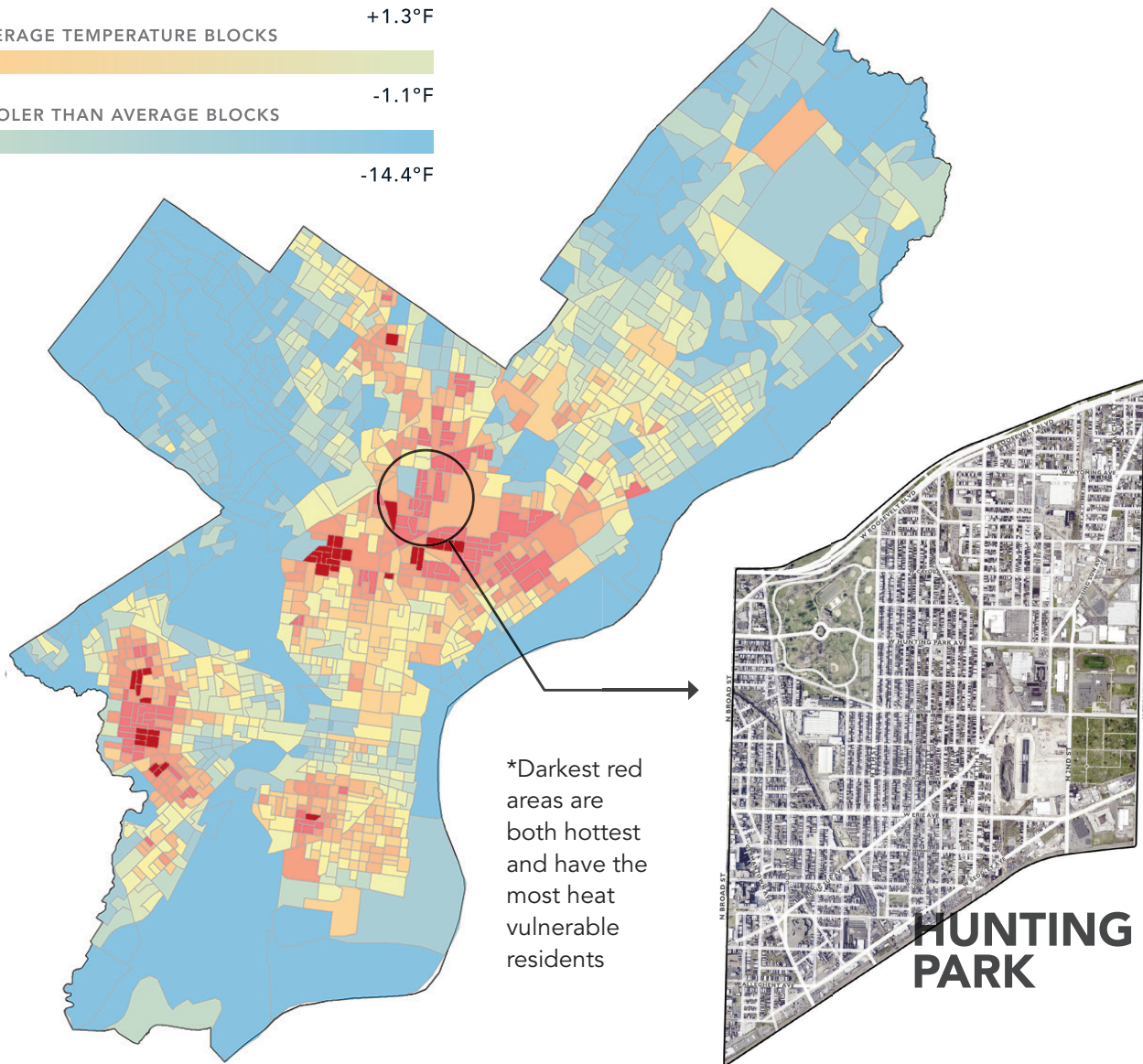
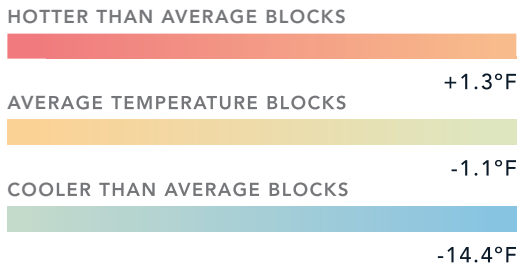
While many Philadelphians know how hot the city can get every summer, not every resident or neighborhood is exposed to the same level and impact of heat. These disparities may get worse with climate change. Average surface temperature data collected by the Office of Sustainability in 2015 showed that temperatures in some Philadelphia neighborhoods can be as much as 22°F higher than in others. The Office of Sustainability and Philadelphia Department of Public Health paired this surface temperature data with information on population, age, educational attainment, language, income, race and ethnicity, social isolation (i.e. percent of population over 65 years old and living alone), and health to create the Philadelphia Heat Vulnerability Index. This index shows the neighborhoods in Philadelphia that are both among the hottest and where residents may be least able to manage extreme heat. Neighborhoods like Cobbs Creek, Point Breeze, Strawberry Mansion, and Hunting Park emerged as among the hottest and most heat vulnerable neighborhoods in Philadelphia.



Census data shows that low-income residents and residents of color are more likely to live in these hotter neighborhoods. This pattern of unequal exposure to risk tells us that climate change is not only a public health issue, but also an issue of racial and social equity. As climate projections show hotter days and nights to come, it is important to work with residents to address the causes of these disparities and work towards sustainable solutions to support heat resiliency.

**FIG. 2 MAP OF HEAT EXPOSURE AND MOST HEAT VULNERABLE CENSUS BLOCKS IN PHILADELPHIA**

**TEMPERATURE DIFFERENCE FROM AVERAGE**



SOURCE: David Hondula, Arizona State University, 2013-2015

# Practicing Equity

## A Community-Driven Approach to Tackling Heat

In spring 2016 the Office of Sustainability solicited feedback from Philadelphia residents and stakeholders as it updated the Greenworks plan. One theme residents consistently mentioned was that despite significant progress, not every neighborhood in Philadelphia enjoys the benefits of sustainability such as well-maintained parks and sidewalks, tree canopy, or access to healthy food.

To address residents' concerns, *Greenworks: A Vision for a Sustainable Philadelphia* explicitly centers equity as an approach to work towards the eight Greenworks visions. As a companion effort to the report, OOS committed to use its data to identify disparities and to directly engage with communities not currently benefiting from sustainability work. Using equity as an approach means:

- Acknowledging that environmental inequalities, like exposure to heat, often exist in majority low-income neighborhoods and neighborhoods of color in Philadelphia;
- Working to understand how the City's systems, policies, and procedures might create barriers that maintain these inequalities; and
- Redirecting our resources towards dismantling these barriers.

Members of the community attending the Beat the Heat Neighborhood Design Workshop



OOS launched its community-driven, equity focused approach in 2018 with the Beat the Heat Initiative. Beat the Heat focuses on communities of color disproportionately exposed to environmental stressors, particularly extreme heat. The goal of this first effort was to work in one of Philadelphia’s hottest and most heat vulnerable neighborhoods—Hunting Park—to identify and acknowledge causes for heat disparities while also supporting community-driven decision-making about how to reduce these inequities.

Through funding from the Knight Foundation and Partners for Places, OOS worked with more than 30 government departments, community organizations, and stakeholders to convene Philadelphia’s first Heat Team. The Heat Team worked with residents and community leaders to launch the Beat the Heat pilot in Hunting Park in spring 2018.

## Inclusive Climate Planning

Equity can be embodied in community climate planning through inclusive practices that value, uplift, and amplify the voices and experiences of marginalized communities. Marginalized communities are groups of people who face systemic barriers to opportunities, resources, and power based on their identities—such as people of color, immigrants, and poor and/or low income communities to name a few. Practicing inclusion requires regular self and group reflection regarding engagement across differences.



**Voicing Needs:** How are you creating space for all participants to express their needs? How are different communication and learning styles acknowledged and encouraged?



**Acknowledging Community History & Identity:** In the process of understanding the changes that community members would like to see, how are you also respecting the existing neighborhood history, identity, and strengths?



**Shifting Power:** How does power show-up in the spaces that you hold? How are you acknowledging your own privilege and power as an individual—based on your organizational position as well as your social identities—and working to shift this power so that community members and people with marginalized identities are able to lead? How are those with marginalized identities within the community already showing up and how are you backing their leadership?



**Storytelling as Data:** Are there places and opportunities for people to share their stories and experiences and are these stories valued as data?



**Relationship Building:** How does the planning process strengthen connections, relationships, and trust? This is especially important in community climate planning, because during climate emergencies it is the relationships immediately around folks that will be the most important in terms of how quickly they are able to organize and respond.

# Hunting Park

## Hunting Park Facts

### SQUARE MILES

1.69

### RESIDENTS

29,842

(2010 US Census)

### BOUNDARIES

North: Roosevelt Blvd

South: Train tracks adjacent to Sedgley Ave

East: Front St.

West: Broad St.

### ZIP CODES

19140 & 19120

### DISTRICTS

- 25th Police District
- 5th and 7th Council Districts
- North Philadelphia Planning District

## A Jewel in the City

Hunting Park is both a park and a neighborhood in North Philadelphia. The boundaries of the neighborhood are different depending on who you ask. The area of Hunting Park that we focused on for the Beat the Heat pilot is south of Roosevelt Boulevard, east of Broad Street, north of the train tracks that run parallel to Sedgley Avenue, and west of Front Street. Some of the notable landmarks include

- Hunting Park—the 87 acre greenspace (and neighborhood namesake)
- Hunting Park Pool & Recreation Center
- Cousin's Supermarket
- Esperanza
- Esperanza Health Center
- Lenfest Center
- Hunting Park NAC
- Restaurants like Maria's, Max's, & Porky's Point
- Neighborhood schools, including—McClure, Taylor, Cayuga, Pantoja, Nueva Esperanza, Little Flower, Bethune, and Edison.

These amenities serve Hunting Park's racially and culturally diverse population (29,842) that is largely Hispanic (56%), African American (46%), bilingual (47% Spanish speaking), and young (39% of the population under the age of 18).

**"Hunting Park is a jewel in the city, a great place to live. It is full of hardworking people and great organizations coming together to improve the quality of life for community members."**

—LEROY FISHER, President, Hunting Park United



"Tree of Life". Photo by Tony Juliano

**“In Hunting Park there are a lot of very loving people who would give you the shirts off their backs if they had to.”**

—VERNETTA SANTOS, Block Captain & Beat the Heat Ambassador, N 9th St.

A defining quality of Hunting Park is the energy, spirit, and commitment of families, schools, non-profits, faith institutions, block leaders, and residents in the neighborhood who tirelessly work towards their vision for a healthier, more connected, and more resilient community. From preventing the expansion of toxic industry, to revitalizing an 87-acre park, to planting more than 800 trees, Hunting Park residents have been on the forefront of environmental justice advocacy in their neighborhood and in Philadelphia for well over a decade. The timeline of environmental justice advocacy in Hunting Park (see pages 14-15) shows some of the environmental initiatives that have taken place in the neighborhood since 2010. Many community leaders attribute the success of these efforts to the strong relationships and sense of solidarity that exist in the neighborhood.



**“I love that there are so many passionate folks determined to help our community continue to grow in a positive manner—and I’m not talking about ‘turning over the neighborhood’ or gentrification—but rather to put resources towards the existing staples in the community so that they can continue to develop in order to better meet the needs of our residents.”**

—SHARON MARINO, Principal, Alexander K. McClure Elementary School

FIG. 4 MAP OF NEIGHBORHOOD LANDMARKS IN HUNTING PARK

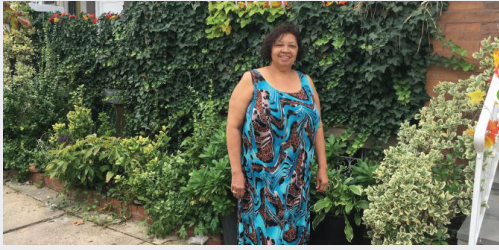


HUNTING PARK HEAT PLAN

FIG. 5 TIMELINE: A RECENT HISTORY OF ENVIRONMENTAL JUSTICE ADVOCACY IN HUNTING PARK

HUNTING PARK HEAT PLAN

# TIMELINE



**2009** Long-term Hunting Park residents Catalina Hunter, Mayra Pabon, and the Hunting Park Stakeholders organize a campaign against the expansion of Burns Recycling Company and the Mt. Cayuga trash heap—and win!



**2009** Leroy Fisher and other residents form Hunting Park United work with the Fairmount Park Conservancy to launch a multi-million dollar revitalization of the Park.



**2011** The Hunting Park Community Garden is designed, built, and dedicated by Hunting Park residents like Michael Wilcox, in partnership with Fairmount Park Conservancy and Pennsylvania Horticultural Society (PHS). The first growing season takes place in the spring of 2012 and the Philadelphia Orchard Project adds an orchard in 2014.



The Hunting Park Farmers Market is established as a partnership between Hunting Park United, the Food Trust, and Hunting Park residents.

**2012** Esperanza completes the Hunting Park Neighborhood Strategic Plan and launches the NeighborCare grants program, which has given away \$124,000 to more than 2000 residents to beautify 112 unique blocks.

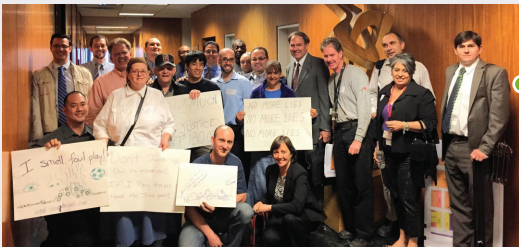


**2013** Catalina Hunter, and other residents (including Elsa Roig and Gabriella Paez, pictured with Ciara Williams of the Office of Sustainability) establish the North 5th Street Community Garden on a previously vacant lot with the support of Esperanza.





**2014** Gabriella Paez and Esperanza work with TreePhilly to organize the first yard tree giveaway in Hunting Park—and have given away more than 800 trees since.



**2015** Ryan Kellermeyer and other community leaders organize El Campo Verde Coalition to transform industrial sites along the abandoned rail corridor from Roosevelt Blvd to Hunting Park Ave into a neighborhood greenspace that could connect eight different educational and service institutions.



**2017** 4400 Block of N Marshall Street participates in the Energy Coordinating Agency's Energy Fit Block Contest and receives healthy, safe, and energy efficient home repairs and improvements.



**2018** Jose Ferran works with residents, block leaders, Hunting Park United, and the City's CLIP program to organize regular block clean-ups across the neighborhood.

Gabriella Paez, Esperanza, and PHS launch Philadelphia's first bilingual Tree Tenders training in Hunting Park and plant over 50 street trees.



## Why is Hunting Park So Hot?

### Hot by Design

Extreme heat is concentrated in neighborhoods like Hunting Park where there is more pavement and exposed asphalt, older and less reflective building surfaces, and limited vegetation. In Hunting Park, the significant presence of industry, an aging housing stock (and coinciding dark roof tops), and a lack of trees and green space all contribute to higher temperatures. More than 75% of land cover in Hunting Park is buildings, roads, and paved surfaces compared to 52% in Philadelphia overall. In contrast, tree canopy is only 9%, compared to 19% in Philadelphia and 48% in neighborhoods like Chestnut Hill.

**“I went outside to get some air one day last summer and I did not last more than 5 minutes. My body temperature started rising and I got overheated. Before I went back inside, I decided to check on my plants and give them some water. I was shocked to find that they were completely burnt. It was like someone had put a lighter to them, like they were torched by the sun.”**

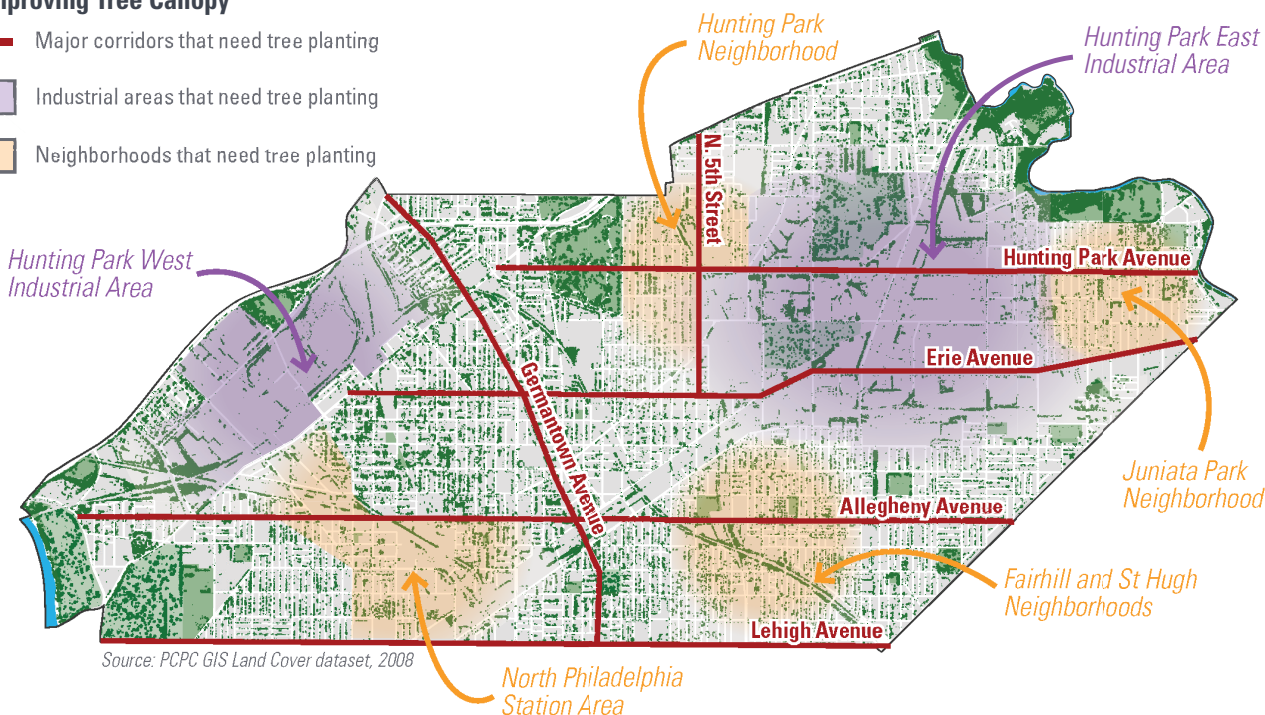
—CINDY RODRIGUEZ, Block Captain, N 3rd Street

HUNTING PARK HEAT PLAN

FIG. 6 LAND COVER MAP FROM THE PHILADELPHIA NORTH DISTRICT PLAN

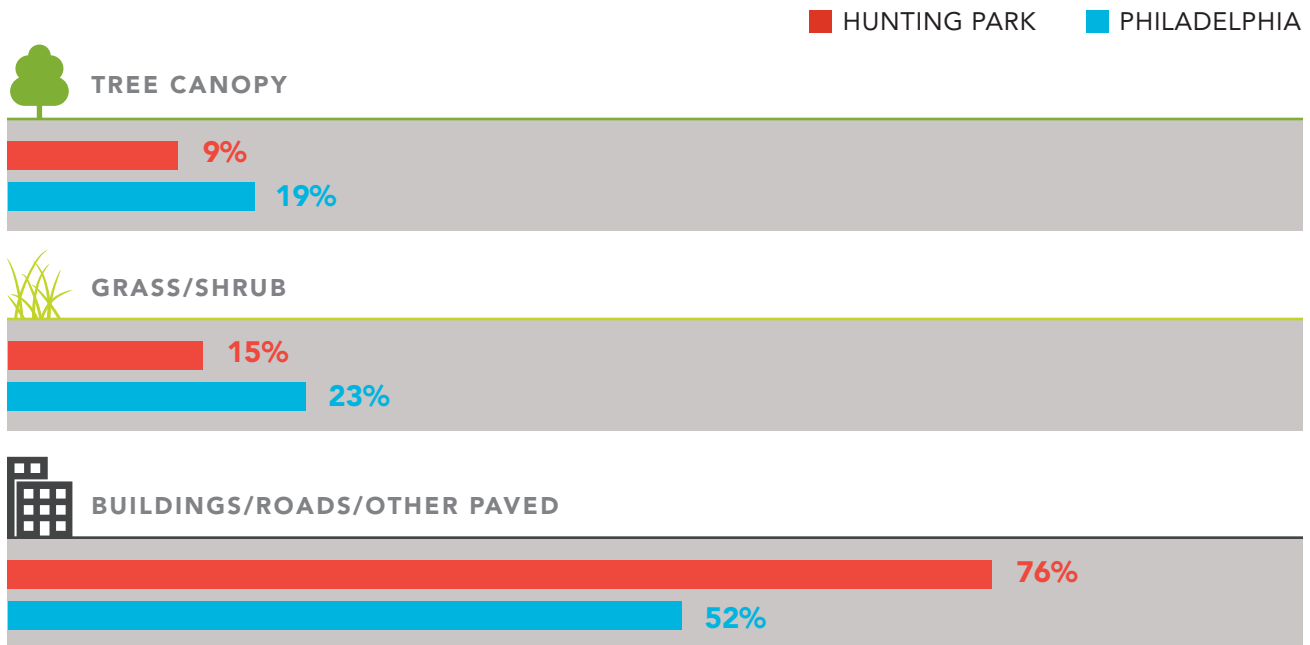
#### Improving Tree Canopy

- Major corridors that need tree planting
- Industrial areas that need tree planting
- Neighborhoods that need tree planting



SOURCE: Philadelphia City Planning Commission, North District Plan, 2018

**FIG. 7 LAND COVER IN HUNTING PARK AND PHILADELPHIA (APPROXIMATE PERCENTAGE OF LAND COVER)**



SOURCE: Philadelphia City Planning Commission, GIS Land Cover dataset, 2008

### Redlining and Heat Inequity in Hunting Park

The heat vulnerability index shows that across the city, Black, Hispanic, and other residents of color are more likely to live in the hottest neighborhoods. Racial inequity in heat exposure is in part a result of exclusionary policies like redlining, which have played a major role in shaping where people live in Philadelphia.

Starting in the 1930s, redlining was a discriminatory practice of the federal government and the Home Owners Loan Corporation (HOLC) that discouraged lenders from providing home loans and other investments in urban neighborhoods—like Hunting Park—where there was a high presence of recent immigrants and people of color. These neighborhoods—which were often densely populated, industrial, and further from the city’s urban forests—were shaded in red and yellow on residential security maps and classified as “high risk” for lending.

This systematic disinvestment carried out by the government and private sector in redlined neighborhoods has had long-term impacts on the environmental health of neighborhoods of color. Today, Black and Hispanic residents in Philadelphia are still more likely to live near large industrial areas that can be hotter, less green, and have poorer air quality. A comparison of the 1940 HOLC redlining map with the 2018 heat vulnerability map shows that many heat vulnerable neighborhoods—including Hunting Park—are located in areas that were red or yellow lined (see fig. 9).

Residents in historically red and yellow lined neighborhoods were also more likely to be denied access to loans or other investments that would help them to maintain their aging homes. In Hunting Park, nearly 70% of homes were built before 1950 and this aging housing stock can be costly to repair. While the homeownership rate in Hunting Park is relatively high at around 51%, a majority of households (59%) have

an annual income of less than \$25,000 (compared to 34% of households in Philadelphia). As a result, many Hunting Park residents are housing cost-burdened, which means that they spend more than 30% of their income on housing. Therefore, being able to afford home updates to help with weatherization, energy efficiency, and cooling may not be an option for many homeowners.

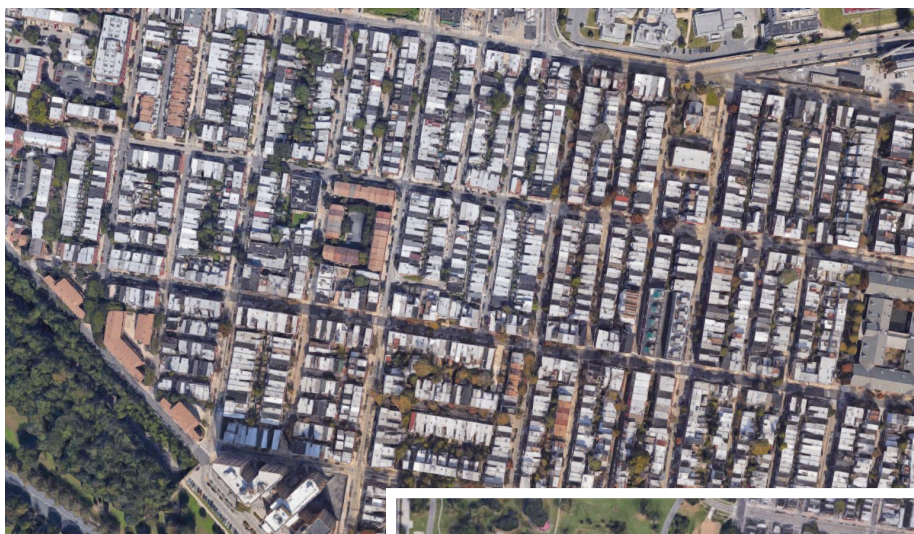
**“Heat is a particular challenge in my immediate neighborhood. In my two to three block radius the lack of tree coverage for shade makes it very stressful being outdoors during the day when the temperature is high. I find it less likely that neighbors have interactions due to being indoors. Fortunately, we have air conditioning units but many of my neighbors do not.”**

—MICHAEL WILCOX, Coordinator, Hunting Park Community Garden

FIG. 8 DARK AND LIGHT ROOFTOPS IN PHILADELPHIA NEIGHBORHOODS

HUNTING PARK HEAT PLAN

**FAIRMOUNT ▼**



**HUNTING PARK ►**

Hunting Park has a higher presence of dark rooftops compared to neighborhoods like Fairmount, which have a newer housing stock

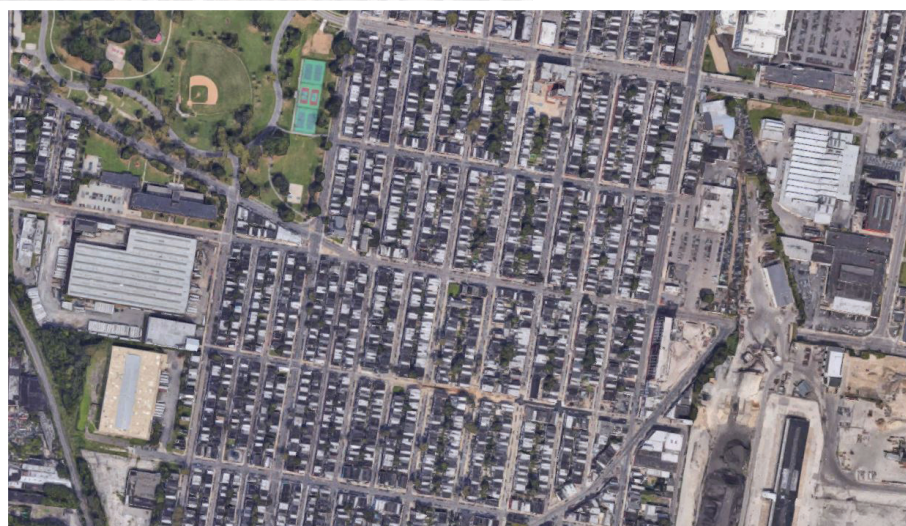
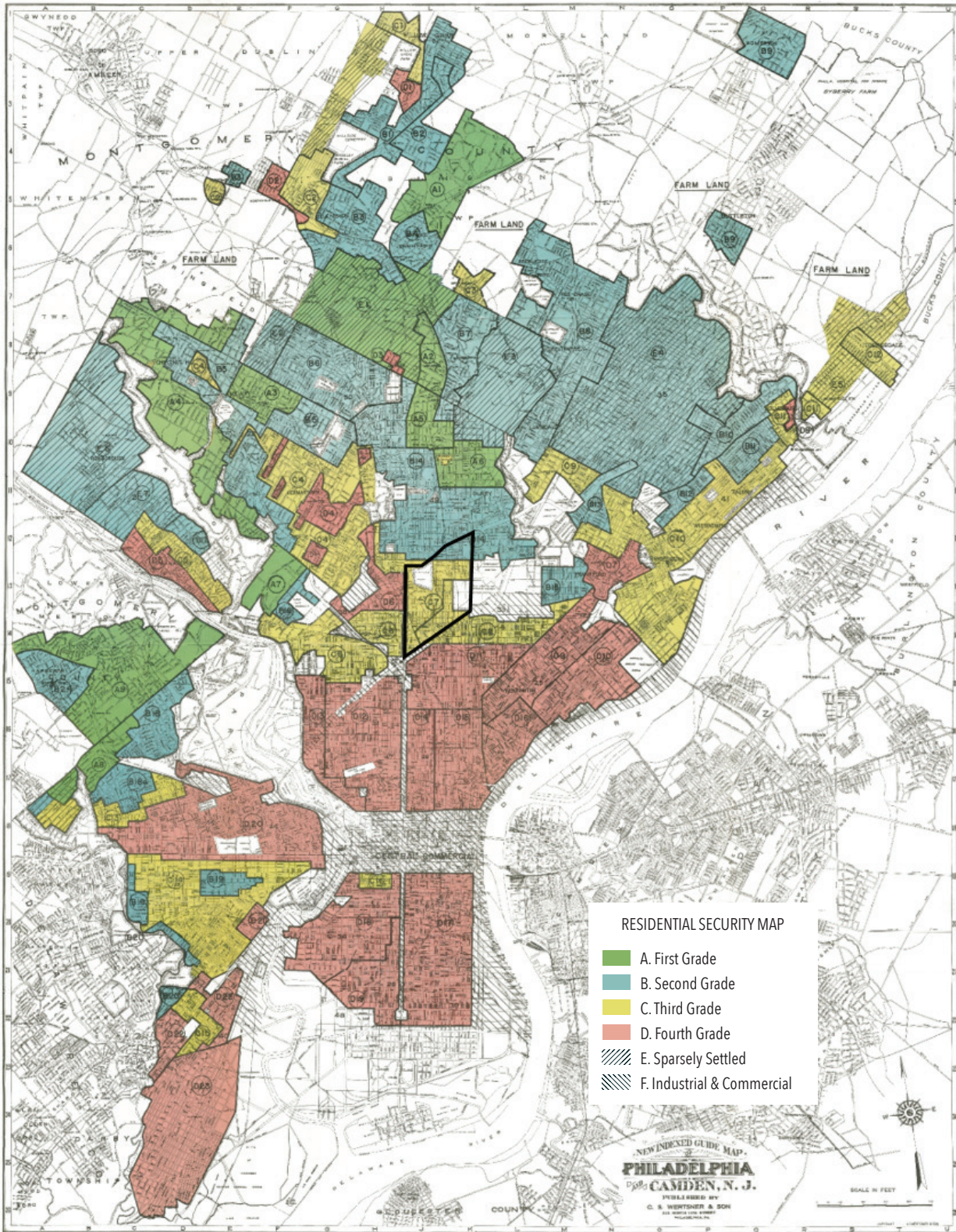


FIG. 9 REDLINING MAP OF PHILADELPHIA WITH HUNTING PARK OUTLINED



HUNTING PARK HEAT PLAN

SOURCE: University of Richmond, Mapping Inequality

### The Impact of Heat on Community Life and Health

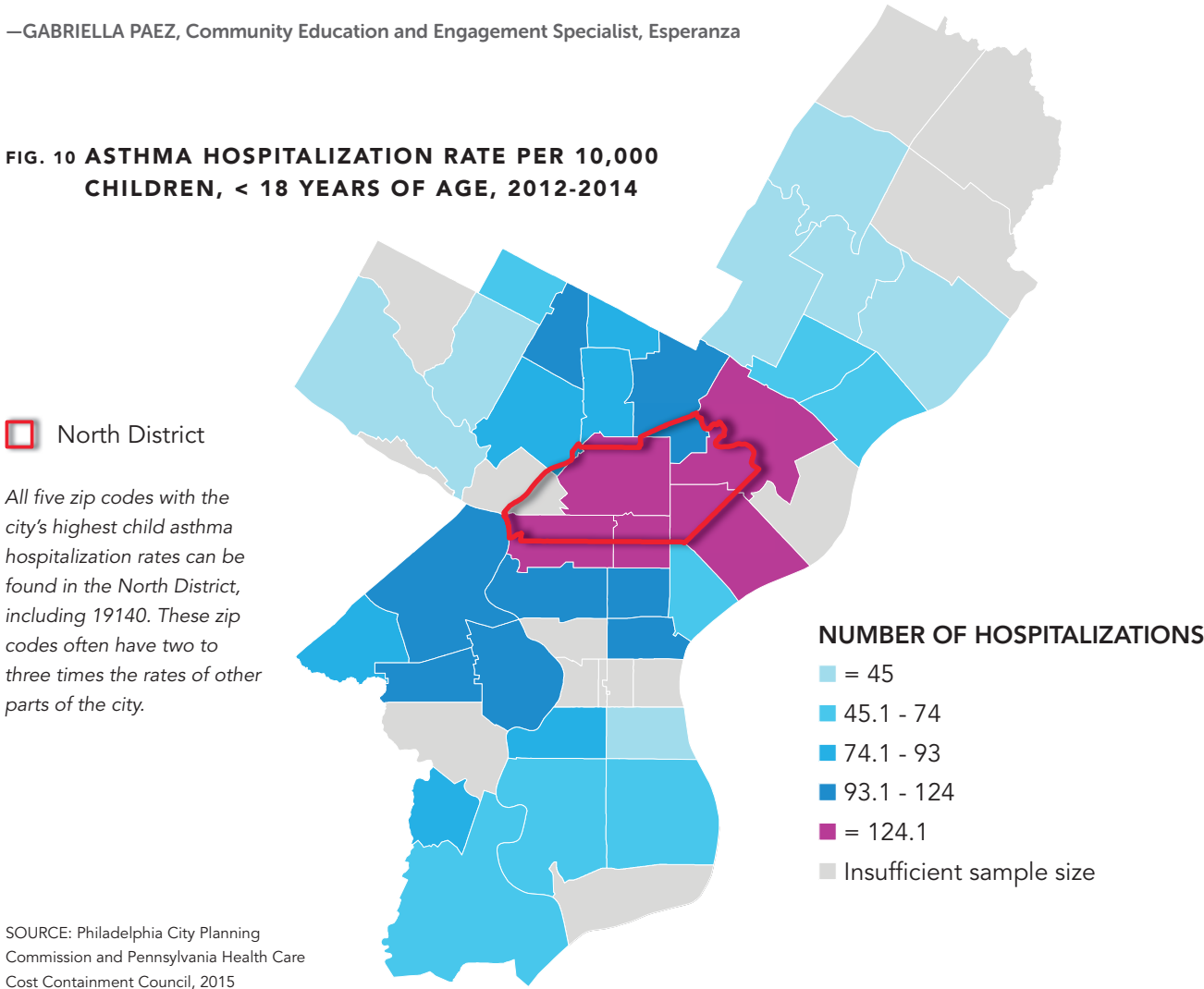
The physical conditions of mixed industrial and residential neighborhoods like Hunting Park can have a huge impact on community life and health. Higher temperatures in the summer can make it harder for residents to leave their homes, interact with one another, and enjoy neighborhood amenities. Additionally, the combination of higher temperatures and poor air quality in Hunting Park are extremely challenging for residents who suffer from chronic illnesses like asthma. According to the Pennsylvania Health Care Cost Containment Council (2016), the 19140 zip code has one of the highest rates of childhood asthma hospitalizations in the city. These rates can be two to three times higher than in other zip codes in Philadelphia.

**“High temperatures in the summer tend to keep our residents indoors, which decreases the sense of community among neighbors. The heat is also an important trigger for many residents who suffer from asthma and other respiratory problems. Overall, high temperatures do not only affect how it feels outside of people’s homes but it also plays a role in the overall safety of the community.”**

—GABRIELLA PAEZ, Community Education and Engagement Specialist, Esperanza

HUNTING PARK HEAT PLAN

**FIG. 10 ASTHMA HOSPITALIZATION RATE PER 10,000 CHILDREN, < 18 YEARS OF AGE, 2012-2014**



“The heat has a huge impact on our students with chronic illnesses like asthma. I have had to call 911 for asthma at least 8-10 times since I became principal.”

—SHARON MARINO, Principal, Alexander K. McClure Elementary School

# What You Can Do To Stay Cool In Philly



## STAY COOL

Avoid direct sunlight

---

Stay in air-conditioned buildings

---

Wear light, loose-fitting clothing



## STAY HYDRATED

Drink plenty of water- don't wait until you're thirsty

---

Avoid alcohol, caffeine and sugary drinks (they can dehydrate you)



## STAY INFORMED

Stay updated on local weather

---

Know the signs of heat-related illness



## LOOK OUT FOR OTHERS

Check on elderly and homebound neighbors

---

NEVER leave people or pets in a parked car on a hot day

---

If you see someone experiencing homelessness who needs help, call 215-232-1984

---

If you think someone is having a medical emergency, call 911

# Heat Resiliency Pilot

## Beat the Heat Hunting Park

To begin to address heat inequity in Philadelphia, the Office of Sustainability partnered with residents, community organizations, and city departments to kick off the Beat the Heat initiative in Hunting Park in the summer of 2018. The main goals of the project were to:

- Understand and hear from Hunting Park residents about how they currently experience heat and the barriers they face to accessing resources that could help them stay cool in their homes and neighborhoods;
- Increase access to information about the potential health impacts of extreme heat and climate change, what to do in case of a heat emergency, and the existing resources that can help Philadelphians cope with heat; and
- Work together with residents and key stakeholders in Hunting Park to design neighborhood-specific solutions to reduce the impacts of extreme heat in their community.



**“The Beat the Heat project focused on approaching a problem with multiple solutions and multiple partners. From clean-ups to cooling centers, I have learned how important a multitiered strategy and system is to support this rich ecosystem.”**

—LATESHA SIMS, Director of Operations, Lenfest Center

Young resident dancing at the Beat the Heat Kick-Off in June 2018



Through an eight-month community engagement process, the Hunting Park Heat Team supported Hunting Park residents and community leaders—many of whom have been on the frontlines of environmental advocacy in their neighborhood for decades—to identify and implement strategies to help them cope with high heat. The Heat Team engaged over 600 residents and 30 partners through the activities described below and on the pages that follow.



Sophie Sarkar, the Office of Sustainability's Equity Fellow, presents information about heat in Hunting Park at a Heat Team meeting

**1. Background Research:** Analyzed heat vulnerability and heat exposure by race, surveyed the physical conditions and land use practices in Hunting Park, researched the historical causes of heat inequity in Hunting Park and Philadelphia, mapped community organizations and stakeholders in Hunting Park, and documented community leadership around environmental advocacy. Some questions that guided the research, include:

- Why do environmental inequalities like exposure to heat exist in low-income neighborhoods and neighborhoods of color in Philadelphia?
- What are the historic policies that have and continue to determine where people live in Philadelphia?
- What is the specific history of land-use in Hunting Park that has led to unequal exposure to heat and environmental risk?
- What is the history of environmental advocacy in Hunting Park and how are residents already organizing themselves and leading?



2

**2. Hunting Park Heat Team:** Organized a Heat Team with more than 30 City and community partners—including Esperanza, Lenfest Center, North10 Philadelphia, Hunting Park NAC, and Hunting Park United—and met bi-weekly throughout the summer.



3

**3. Beat the Heat Kick Off:** Launched the project in the community with two Beat the Heat block parties at the Lenfest Center and Esperanza that engaged over 250 residents in music, dancing, art activities, cooling resources, and water ice.



4

**4. Resident Beat the Heat Ambassadors:** Recruited and invested in a resident Beat the Heat Team Leader to train and organize a team of four resident Beat the Heat ambassadors.



5

**5. Hunting Park Heat Survey:** Collaborated with the Hunting Park Heat Team and the University of Pennsylvania to develop a neighborhood heat survey. The Beat the Heat ambassadors administered the survey through block clean-ups, cold water distribution, community events, mailings to local Block Captains, and public workshops. Over 530 survey responses were collected in just over three months.



6

**6. Beat the Heat Mobile Station:** Developed a mobile Beat the Heat station that included heat-related resources and information, the Hunting Park heat survey, hand-fan making, and giveaways, and brought the station to nearly 20 community events and locations.



7

**7. Beat the Heat Design Workshop:** Collaborated with 40 residents to identify and map where they would like to see specific cooling interventions—such as tree plantings, cool roofs, cooling spaces, and bus shelters—in their neighborhood.



8

**8. Environmental Wellness Fair & Tree Giveaway:** Coordinated an environmental wellness fair and yard tree give away in partnership with the Sierra Club, McClure Elementary, Esperanza, and TreePhilly in which over 70 yard trees were given to families in Hunting Park.



9

**9. Heat Relief Network:** Organized two meetings of faith leaders and community organizations in Hunting Park to map existing neighborhood cooling assets and resources that could be incorporated into a neighborhood heat relief network.



10

**10. Stakeholder Interviews:** Interviewed ten key stakeholders and residents about their experiences with heat in Hunting Park, what they learned through the Beat the Heat initiative, and the cooling solutions they would like to see in their neighborhood.

# List of Beat the Heat Partners

## CORE PARTNERS

Esperanza  
 Hunting Park United  
 Hunting Park Neighborhood Advisory Committee  
 North10 Philadelphia  
 Lenfest Center  
 Jose Ferran and Beat the Heat Ambassadors  
 Alexander McClure Elementary School  
 Philadelphia Office of Sustainability  
 Philadelphia Water Department  
 Philadelphia Department of Public Health  
 Philadelphia Parks and Recreation—TreePhilly  
 Philadelphia Mayor's Office of Policy  
 Philadelphia City Planning Commission  
 Philadelphia Office of Emergency Management  
 Pennsylvania Interfaith Power and Light

## OTHER PARTNERS

SEPTA  
 PECO  
 ASPIRA, Inc & Hunting Park Stakeholders  
 School District of Philadelphia  
 Philadelphia Corporation for Aging  
 Energy Coordinating Agency  
 University of Pennsylvania  
 Temple University Hospital  
 Esperanza Health Center  
 Spirit and Truth Fellowship  
 Zion Baptist Church  
 Hunting Park Christian Academy  
 Majid Al-Hidayah  
 In the Light Ministries  
 Called to Serve CDC  
 La Iglesia Episcopal de Cristo y San Ambrosio  
 Iglesia Evangelica Bautista  
 Sierra Club

## LIST OF COMMUNITY MEETINGS AND EVENTS

Beat-the-Heat Kick-Off Block Party (Lenfest + North10)  
 Beat-the-Heat Kick-Off Block Party(Esperanza)  
 Super Friday for Senior Services  
 1st Annual Path to Greatness Community Day  
 Allegheny Avenue Arts Fest  
 Hunting Park Neighborhood Clean-Up on N 5th St  
 Hunting Park Family Fun & Fitness Day  
 Esperanza Health Center Fresh Produce Market & Seniors Group  
 Tabling outside 5th St. Supermarket  
 Bethune School Back-to-School Fair  
 Cousins Supermarket Tree Planting  
 Hunting Park United Meeting  
 25th Police District Advisory Meeting  
 McClure Back-to-School Night  
 Hunting Park Community Collaborative General Meeting  
 Hunting Park Community Stakeholders Meeting  
 Lenfest Center Open House  
 Cayuga Elementary Back-to-School Night  
 Hunting Park Beat the Heat Design Workshop  
 McClure Elementary Environmental Wellness Fair  
 Hunting Park Heat Relief Network Meetings  
 McClure Elementary Partnerpalooza



Learn how to make your own paper hand fan on page 46!

# What We Heard

## Hunting Park Heat Survey Sample

### TOTAL SURVEY RESPONSES

531

**SURVEYED IN ENGLISH:**

74%

**SURVEYED IN SPANISH:**

26%

**MEDIAN AGE FOR RESPONDENTS:**

45

**RESIDE IN 19140:**

71%

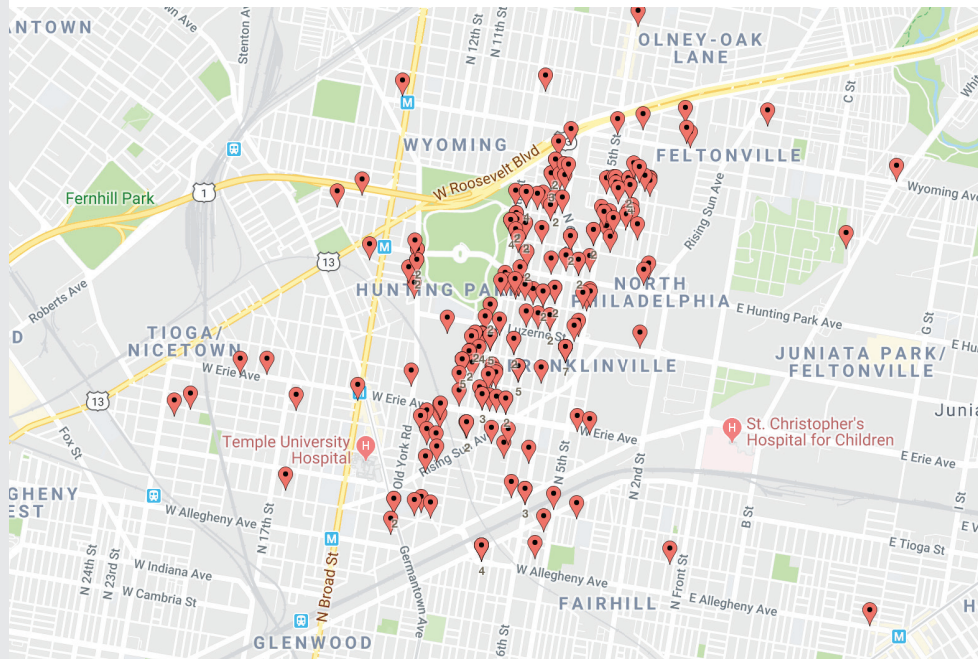
**RESIDE IN 19120:**

5%

**BLOCKS SURVEYED IN HUNTING PARK:**

~100

From July 2018 to January 2019 the Beat the Heat Team heard from more than 600 residents and community leaders in Hunting Park about their experiences with heat and their vision for a cooler and more climate resilient neighborhood. The feedback and solutions that were received through the Hunting Park heat survey, public workshops, stakeholder interviews, and outreach events are summarized in this section through descriptions, maps, and recommendations in three categories: home cooling, public space cooling, and trees and greening.



Map of blocks surveyed in Hunting Park

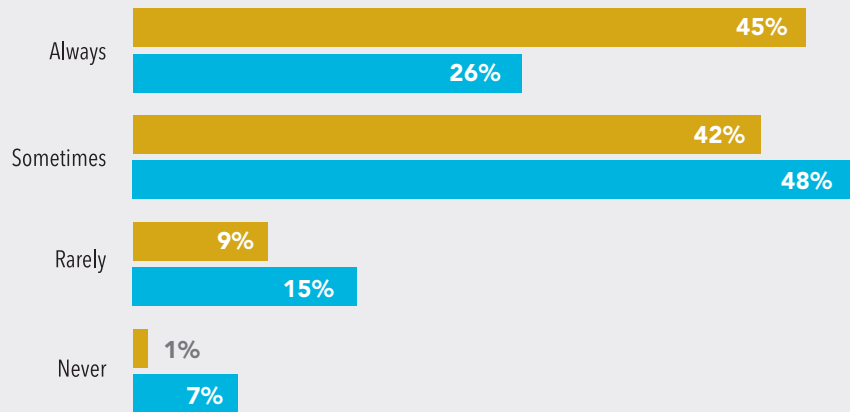
FIG. 19 HUNTING PARK NEIGHBORHOOD HEAT SURVEY RESULTS

How important of an issue do you think high heat is in your community?

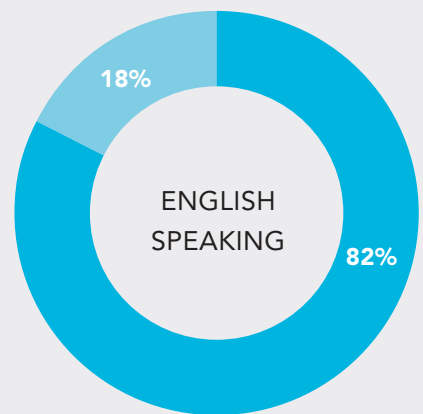
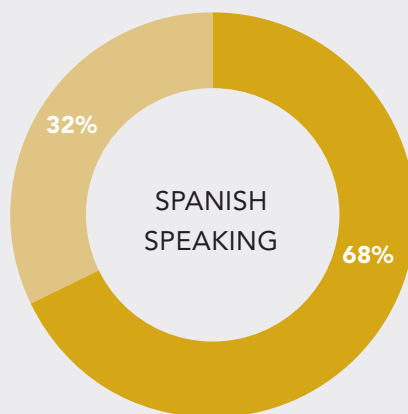


When it is very hot outside, how often do you feel too hot in your home?

● Spanish Speaking  
● English Speaking



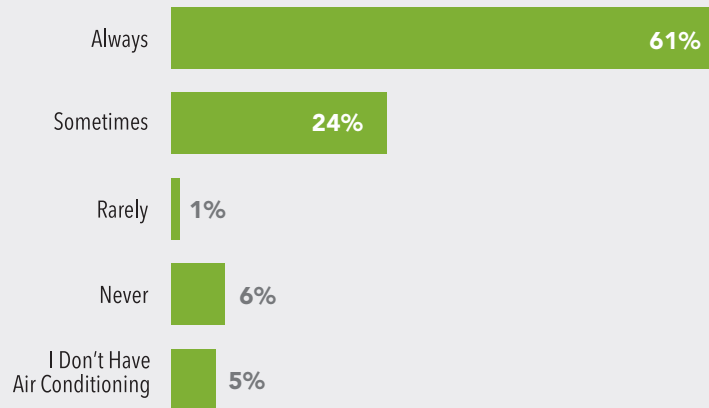
When it is very hot outside, are you more likely to:



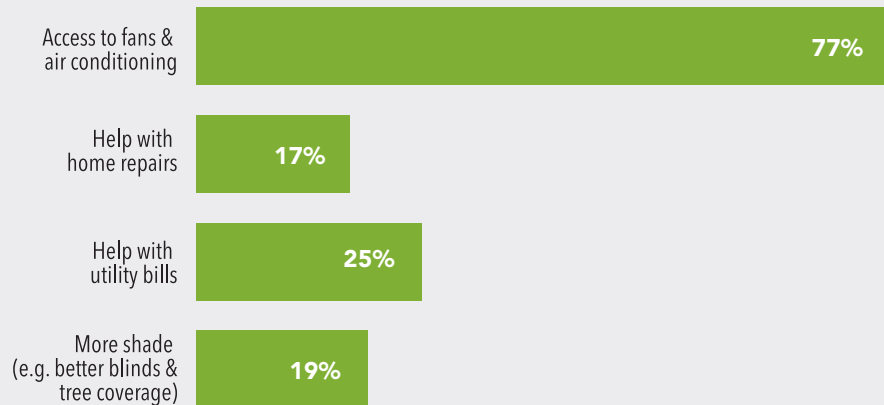
● Stay in your home  
● Leave your home

● Stay in your home  
● Leave your home

When it is very hot outside, how often do you use air conditioning in your home?



If you feel too hot in your home which of these things might help you stay cool?



Are you familiar with the following assistance programs?

- Spanish Speaking
- English Speaking

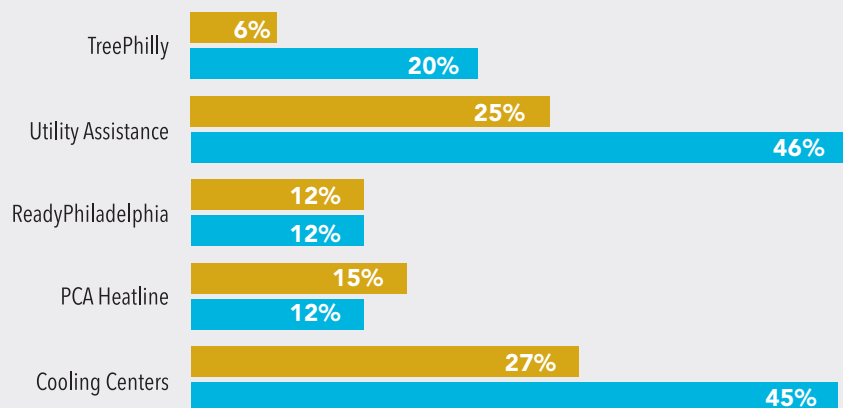


FIG. 19 HUNTING PARK NEIGHBORHOOD HEAT SURVEY RESULTS (CONTINUED)

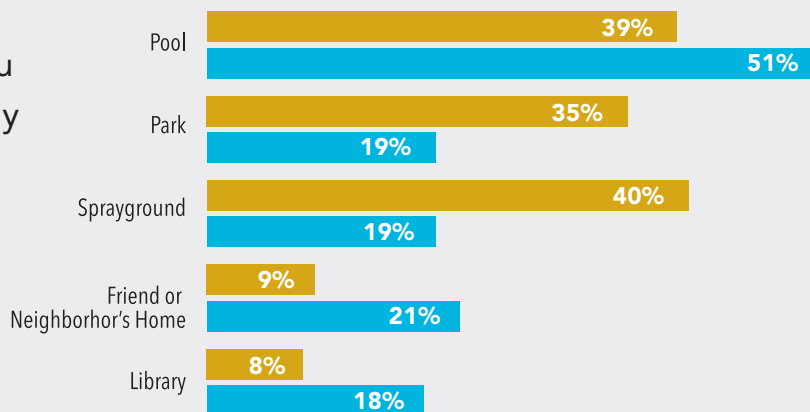
Which of these activities might convince you to leave your home to stay cool?

HUNTING PARK HEAT PLAN



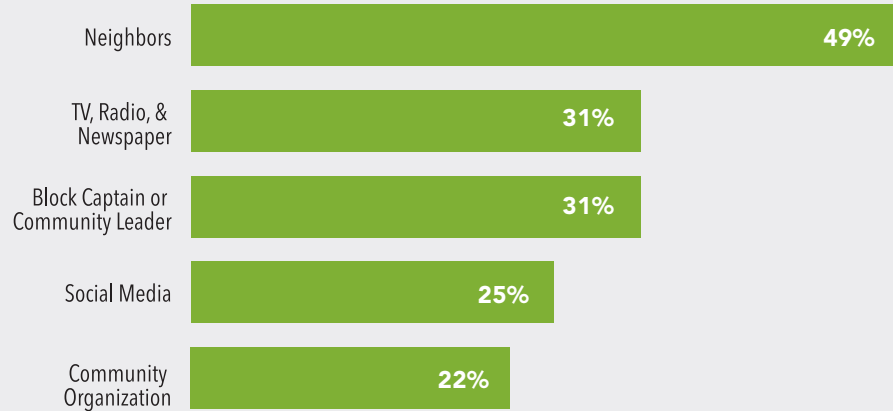
Where do you go if you leave your home to stay cool?

- Spanish Speaking
- English Speaking

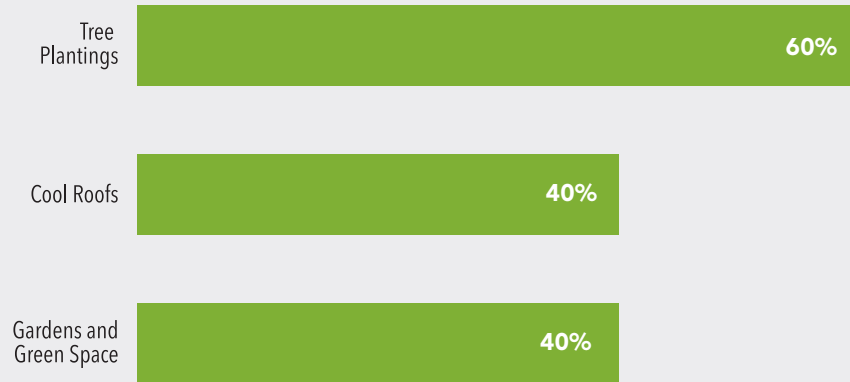




What are your main sources of information in your community?



Which of the following cooling interventions would you like to see more of in your neighborhood?



## Staying Cool and Safe at Home

**“We try to put the A/C on and stay cool in the house until the sun goes down, but sometimes in the summer at night it is still too hot to leave the house.”**

—CINDY RODRIGUEZ, Block Captain, N 3rd Street

Respondents of the Hunting Park heat survey overwhelmingly reported that high heat is a very important community issue, both inside and outside of their homes. Even though many (84%) survey respondents have access to some kind of home air conditioning (A/C), 77% of survey respondents still reported feeling too hot inside their homes and that better access to A/C and fans would help them stay cool during high heat days. This may be due to the fact that many residents may use inefficient

window units and face the resulting cost burden of high utility bills. In fact, more than 40% of respondents reported the cost of electricity as a key reason why they do not always use A/C when it is hot outside.

In addition to better access to A/C and fans, many residents voiced the need for support with home improvements and repairs that would make their homes cooler and more energy efficient. 40% of the survey respondents also said that they would like to see more cool roofs on their blocks to bring temperatures down both inside and outside of their homes. Participants of the Beat the Heat design workshop identified specific blocks and commercial sites where they would like to see cool roof tops (see fig. 21).

We also found that awareness of utility assistance programs was relatively low. Only 40% of survey respondents had heard of programs to help residents cut energy costs and pay their utility bills. Relatedly, only 4% of the respondents who answered that they do not use A/C because it is too expensive had heard of utility assistance programs—which points to a challenge of making these programs more accessible to those who need them most. Additionally, those who took the survey in Spanish were less likely to know about these programs than those who took the survey in English, signifying barriers to language access.

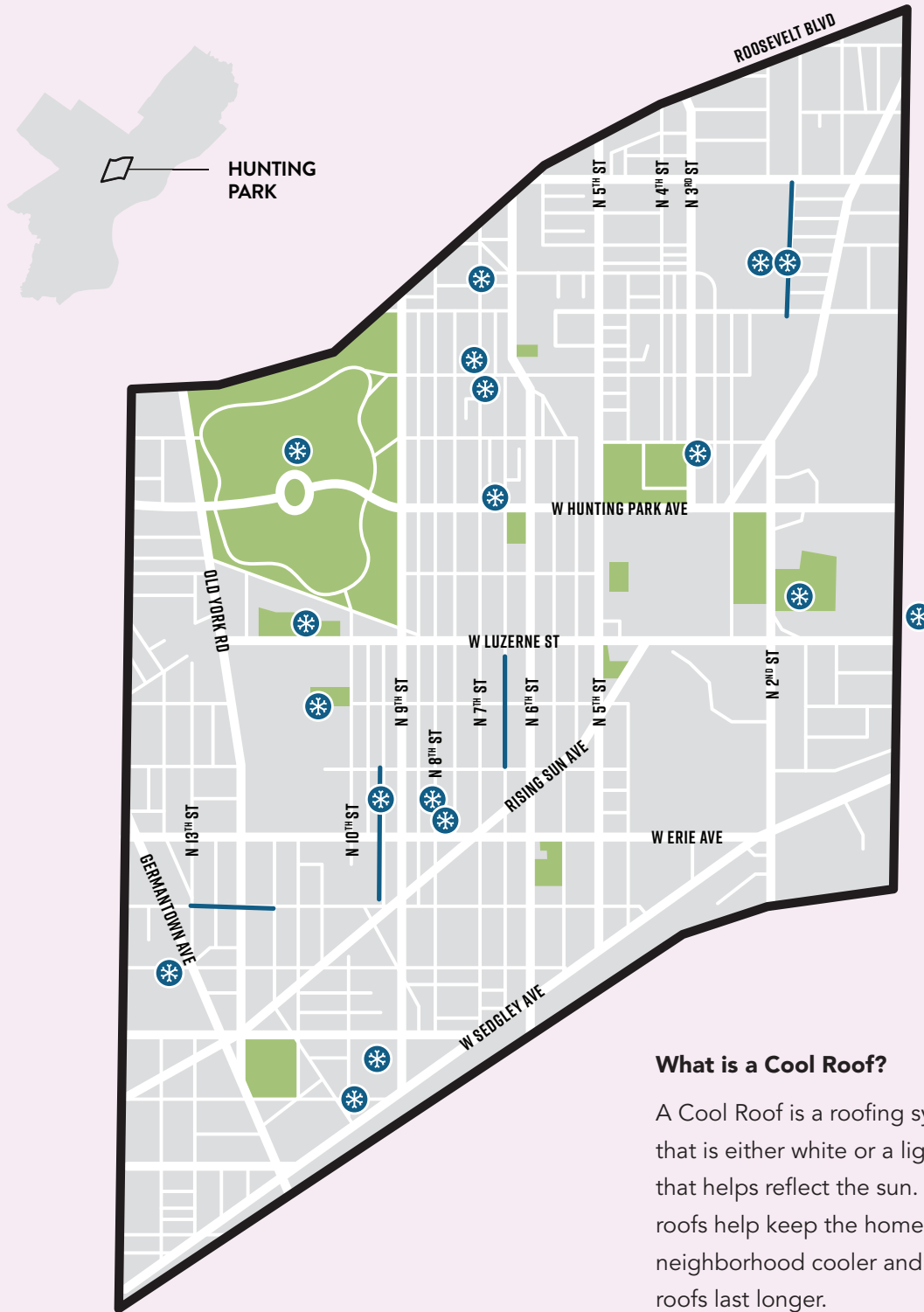
**“The heat can be very ridiculous sometimes. It is not good for me or my kids, especially because we have asthma. We can’t even sit outside for long periods of time because it gets too hot and there are not too many places where there is shade unless we go to the park. The heat has a bad impact because not everyone can afford to buy air conditioners or fans. I would like to see more help with air conditioning for people who desperately need it.”**

—VERNETTA SANTOS, Block Captain & Beat the Heat Ambassador, N 9th St

FIG. 20 STAYING COOL AND SAFE AT HOME: RECOMMENDATIONS

	RECOMMENDATIONS	EXISTING OPPORTUNITIES	IMPLEMENTATION PARTNERS
1	<p><b>ENERGY EFFICIENT APPLIANCES &amp; HOME REPAIRS</b></p> <ul style="list-style-type: none"> <li>• Improve access to efficient air conditioning units and appliances</li> <li>• Improve access to healthy home energy repairs and weatherization</li> <li>• Offer cool roof coatings and insulation to blocks in hottest and most heat vulnerable neighborhoods, including Hunting Park</li> </ul> <p>The Energy Coordinating Agency's EnergyFIT program completes energy upgrades and repairs to homes to prevent displacement and reduce energy burden in low income homes.</p>	<p><b>PECO:</b></p> <ul style="list-style-type: none"> <li>• Appliance Swaps</li> <li>• Low-Income Energy Efficiency Program</li> <li>• Home Rebates</li> <li>• Energy Assessment</li> <li>• Free Home Energy Check-up</li> </ul> <p><b>PHDC &amp; OHCD:</b></p> <ul style="list-style-type: none"> <li>• Basic Systems Repair Program (BSRP)</li> <li>• Adaptive Modifications Program (AMP)</li> <li>• Weatherization Assistance Program (WAP)</li> </ul> <p><b>ECA:</b></p> <ul style="list-style-type: none"> <li>• Identifying funding to expand EnergyFit to Hunting Park</li> </ul> <p><b>PCA:</b></p> <ul style="list-style-type: none"> <li>• In-Home Support Program for older adults</li> </ul>	<p>Phila. Housing Development Corp. Division of Housing and Community Development PECO Phila. Corp. for Aging Energy Coordinating Agency Lenfest Center North 10 Esperanza Hunting Park Neighborhood Advisory Committee Hunting Park United</p>
2	<p><b>STRATEGIC &amp; INCLUSIVE HEAT OUTREACH</b></p> <ul style="list-style-type: none"> <li>• Improve access to information about existing utility assistance programs and resources about how to stay cool and safe during extreme heat events, including information about City-operated cooling centers, PCA heatline, and heat health tips</li> <li>• Pilot system for alerting and checking-in on vulnerable residents during extreme heat events in Hunting Park</li> <li>• Create centralized City Heat website and a schedule of social media posts to send to community-based partners to post throughout the summer</li> <li>• Target outreach in hottest and most heat vulnerable neighborhoods, including Hunting Park, and ensure outreach is conducted in English and Spanish</li> </ul>	<ul style="list-style-type: none"> <li>• Advertising on SEPTA</li> <li>• PDPH outreach about heat health safety</li> <li>• OEM ReadyCommunity Neighborhood Preparedness Workshops</li> <li>• Integration of home temperature sensors with PECO Smart Meters</li> <li>• PECO, ECA, &amp; PCA outreach programs</li> <li>• Community-based social media accounts</li> <li>• Community-based events, markets, &amp; meetings</li> <li>• Public heat symposium in partnership with ecoWURD</li> </ul>	<p>Phila. Dept. of Public Health Office of Emergency Management Office of Sustainability Lenfest Center North 10 Esperanza Hunting Park Neighborhood Advisory Committee Hunting Park United PECO Energy Coordinating Agency Phila Corp. for Aging SEPTA University of Penn. EcoWURD</p>
3	<p><b>YEAR ROUND LIHEAP UTILITY ASSISTANCE</b></p> <ul style="list-style-type: none"> <li>• Work with the Pennsylvania Department of Human Services to enable LIHEAP Utility Assistance to be available for the full year (and not just the winter season) to those who qualify</li> </ul>		<p>PECO Office of Sustainability Phila. Dept. of Public Health PA Dept. of Human Services</p>

FIG. 21 MAP OF POTENTIAL BLOCKS/SITES FOR COOL ROOFS



**What is a Cool Roof?**

A Cool Roof is a roofing system that is either white or a light color that helps reflect the sun. Cool roofs help keep the home and neighborhood cooler and can help roofs last longer.

## Staying Cool and Safe in Public Spaces

Though many respondents reported feeling too hot inside their homes, only 24% said they prefer to leave their homes in order to stay cool. The preference of staying indoors even when conditions are uncomfortable likely points to the extremely hot outdoor conditions that characterize the neighborhood and the fact that there are not very many existing cooling spaces or resources that are open and accessible to the public. The few exceptions are the neighborhood park and pool, which are important cooling resources for the community. Nearly half of the survey respondents reported that if they leave their house to go somewhere to stay cool it is to go to the Hunting Park pool. However, many respondents also voiced concerns with the pool's limited hours and overcrowded conditions. Additionally, both the park and the pool can be a far and uncomfortably hot walk or inconvenient bus ride for many residents in the neighborhood.

**“There is an overcrowding of the few neighborhood cooling resources (such as the Hunting Park pool) that are available to area residents both young and old. Large numbers of residents in the area are looking for relief from the heat but may be unable to afford what can be costly membership fees to area gyms. This tends to put a strain on the free resources.”**

—MICHAEL WILCOX, Coordinator, Hunting Park Community Garden

While the City operates a number of cooling centers across Philadelphia during heat health emergencies, there is not currently one in Hunting Park. One reason is because many of the public facilities—libraries and recreation centers—in Hunting Park may not have working air conditioning or staff capacity to stay open for longer hours. The closest cooling centers to Hunting Park are Mann Older Adult Center/Rivera Recreation Center (Fairhill), Lillian Marrero Library (Fairhill), and Logan Library (Logan). Residents reported numerous factors that limit accessibility to these cooling centers and other cooling resources, including:

- Transportation time, costs, and other conditions associated with traveling to an out-of-neighborhood location;
- Poor outreach, communication, and language access. Only 40% of respondents reported having heard about cooling centers. Awareness of cooling centers was even lower (27%) for those who took the survey in Spanish; and
- Lack of social atmosphere. Many of those who had heard of cooling centers expressed that these facilities lack social elements, amenities, and engaging activities

When we asked respondents about what might convince them to leave their homes to go somewhere to stay cool, the most frequent responses were that they would be willing to leave their home if they knew others who were going, if there were easy transportation, and if there were activities available such as swimming, music, food, and movies. Residents also reported primarily obtaining information about their community from neighbors (as opposed to from the news, social media, or other sources). This suggests that local

**“I would like to see active cooling centers in the neighborhood offering programs for community members while also providing a cool space where they can stay during the hottest hours of the day. I would also like to see more home repair assistance for elders and low income residents so our people can feel comfortable in their homes.”**

—GABRIELLA PAEZ, Community Education and Engagement Specialist, Esperanza

public schools in Philadelphia have central air. These conditions and interruptions can have a huge impact on learning, teaching, concentration, and community health.

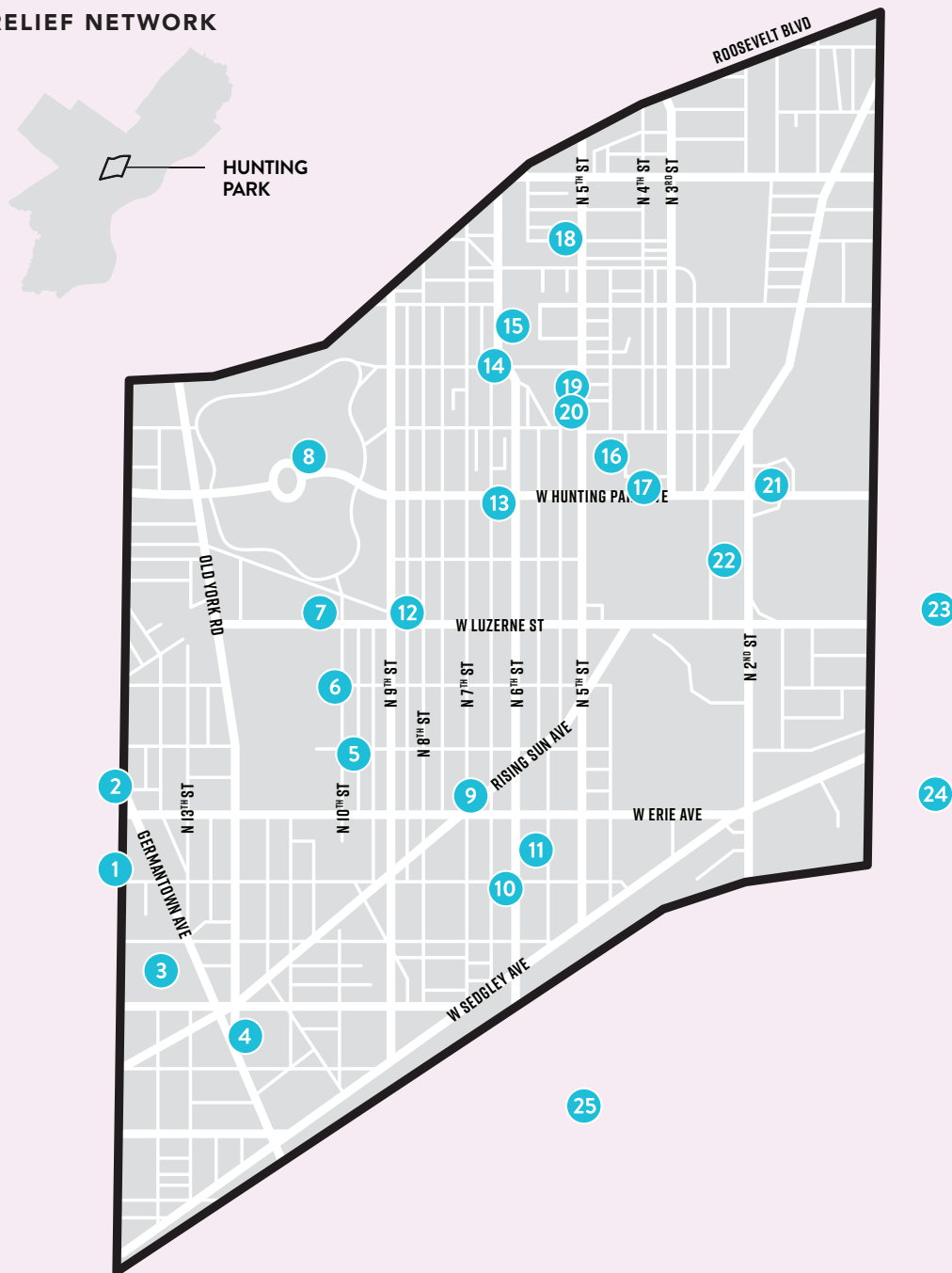
**“Within the classroom and school setting we do not have air conditioning. When there is extreme heat outside, our classrooms are very hot. It is sometimes unbearable. It affects learning in the long-run because students are too hot and exhausted to be able to focus and concentrate. Having air-conditioning or better ventilation is necessary. Students need to know that they will have a safe and cool place to go to in their neighborhood. This is about fairness and equity.”**

—SHARON MARINO, Principal, Alexander K. McClure Elementary School



The Energy Coordinating Agency's EnergyFIT Program completes a cool roof project

FIG. 22 MAP OF POTENTIAL SITES FOR COMMUNITY HEAT RELIEF NETWORK



HUNTING PARK HEAT PLAN

- |  |  |  |
|--|--|--|
| 1. Zion Baptist Church                 | 10. Christ & St. Ambrose Episcopal Church  | 18. Grace and Peace Community Fellowship |
| 2. Free Library: Nicetown-Tioga Branch | 11. Taylor Bayard School                   | 19. Cayuga School                        |
| 3. Temple University Hospital          | 12. Harvest Time Christian Fellowship      | 20. ASPIRA School                        |
| 4. Mary McLeod Bethune School          | 13. Alexander K. McClure Elementary School | 21. In the Light Ministries              |
| 5. Hunting Park NAC                    | 14. Spirit and Truth Fellowship            | 22. Antonia Pantoja Charter School       |
| 6. Lenfest Center                      | 15. Esperanza Health Center                | 23. Masjid Al-Hidayah                    |
| 7. Little Flower Elementary School     | 16. Esperanza Main Office                  | 24. St. Christopher's Hospital           |
| 8. Hunting Park Recreation Center      | 17. Esperanza Academy Charter School       | 25. Mann Older Adult Center              |
| 9. Iglesia Evangelica Bautista         |  |  |

FIG. 23 MAP OF POTENTIAL BUS SHELTERS



**Why Bus Shelters?**

Bus shelters can provide critical shade for people using public transportation on hot days.



FIG. 24 STAYING COOL AND SAFE IN PUBLIC SPACES: RECOMMENDATIONS

	RECOMMENDATIONS	EXISTING OPPORTUNITIES	IMPLEMENTATION PARTNERS
4	<p><b>HUNTING PARK COMMUNITY HEAT RELIEF NETWORK</b></p> <p>Organize and activate a network of faith-based institutions, businesses, and community organizations who can respond during extreme heat events by offering cooling spaces and resources to residents. Activities might include:</p> <ul style="list-style-type: none"> <li>• Organizing a steering committee of Hunting Park Heat Relief Network partners</li> <li>• Training heat-relief network partners on cooling strategies and best practices for inviting and hosting the public</li> <li>• Creating an organizational assessment tool for potential Heat Relief partners to identify, locate, and connect their cooling resources</li> <li>• Hosting engaging and informative programs and events at Heat Relief partner sites</li> <li>• Developing bilingual outreach and communication strategies—including a map, logo, &amp; wayfinding—to help residents access the community heat relief network</li> </ul>	<p>OOS Priority for Summer 2019</p> <p>Urban Sustainability Directors Network Equity Fellowship</p> <p>Learning from existing nearby City cooling centers such as Hunting Park are Mann Older Adult Center/ Rivera Recreation Center (Fairhill), Lillian Marrero Library (Fairhill), and Logan Library (Logan)</p>	<p>Phila. Dept. of Public Health</p> <p>Office of Emergency Management</p> <p>Office of Sustainability</p> <p>Esperanza</p> <p>Lenfest Center</p> <p>North 10</p> <p>Hunting Park Neighborhood Advisory Committee</p> <p>Hunting Park United</p> <p>PA Interfaith Power &amp; Light</p> <p>PECO</p> <p>Energy Coordinating Agency</p> <p>Phila Corp. for Aging</p> <p>SEPTA</p> <p>University of Penn</p>
5	<p><b>EFFICIENT AIR CONDITIONING IN PUBLIC SCHOOLS, LIBRARIES, AND RECREATION CENTERS</b></p> <p>Improve access to air conditioning and healthy energy repairs at public schools, libraries, and recreation centers in and near Hunting Park and other heat vulnerable neighborhoods</p>	<p>OOS Climate Resiliency Audits</p>	<p>School District of Phila.</p> <p>Phila. Parks &amp; Rec</p> <p>Office of Sustainability</p> <p>PECO</p>
6	<p><b>COOL &amp; SAFE TRANSPORTATION</b></p> <p>Improve access to cool, safe, and accessible routes for walking, biking or using public transit in extreme heat, including:</p> <ul style="list-style-type: none"> <li>• More bus shelters along popular routes in Hunting Park: 4, 53, 56, 47, 75, 56</li> <li>• Offering free bus transportation on certain routes during Heat Health Emergencies</li> <li>• Creating safer routes and traffic crossings to Hunting Park (the park)</li> <li>• Reducing idling and vehicle exhaust (which impacts air quality) by rerouting truck traffic out of residential areas and prioritizing electric bus routes in hottest and most heat vulnerable neighborhoods, including Hunting Park</li> </ul>	<p><b>OTIS:</b></p> <ul style="list-style-type: none"> <li>• Using heat as a factor when determining bus shelters</li> </ul> <p><b>SEPTA:</b></p> <ul style="list-style-type: none"> <li>• Bus network planning</li> <li>• Education for drivers around preferred routes to SEPTA Trackshop</li> <li>• Using heat as a factor when implementing new electric bus fleet routes</li> </ul> <p><b>PCA:</b></p> <ul style="list-style-type: none"> <li>• Shared Ride Program for Older Adults</li> </ul>	<p>Office of Transportation, Infrastructure, and Sustainability</p> <p>SEPTA</p> <p>Phila. Corp for Aging</p>

FIG. 24 STAYING COOL AND SAFE IN PUBLIC SPACES: RECOMMENDATIONS (CONTINUED)

	RECOMMENDATIONS	EXISTING OPPORTUNITIES	IMPLEMENTATION PARTNERS
7	<p><b>STAYING COOL OUTDOORS</b></p> <p>Improving access to resources that will help residents stay cool outside in Hunting Park:</p> <ul style="list-style-type: none"> <li>• Better lighting in Hunting Park (the park) to make it more accessible in the evening</li> <li>• Providing cold water, shade structures, and misting fans/tents for block clean-ups and other outdoor community events</li> <li>• Extending Hunting Park Pool hours</li> <li>• Adapting Pop-Up Pool strategies by Knight Foundation to be used at the Hunting Park pool</li> </ul>	<p>OOS Priority for Summer 2019</p> <p>Urban Sustainability Directors Network Equity Fellowship</p> <p>Learning from existing nearby City cooling centers such as Hunting Park are Mann Older Adult Center/ Rivera Recreation Center (Fairhill), Lillian Marrero Library (Fairhill), and Logan Library (Logan)</p>	<p>Office of Emergency Management</p> <p>Phila. Parks &amp; Rec</p> <p>Office of Sustainability</p> <p>Phila. Water Department</p> <p>PECO</p> <p>Esperanza</p> <p>Lenfest Center</p> <p>North 10</p> <p>Hunting Park Neighborhood Advisory Committee</p> <p>Hunting Park United</p> <p>Knight Foundation</p>

HUNTING PARK HEAT PLAN

**Greening and Trees**

If you look on the heat exposure map of Philadelphia (page 7), where the hottest census blocks are red and the coolest census blocks are blue, you can see Hunting Park (the park)—which is in its own census block—is the only spot of blue in a neighborhood with a lot of red. It can be 6-12 degrees cooler in the park than it is in other parts of the neighborhood. Still, only 23% of survey respondents said that they are likely to go to the park if they leave their house to go somewhere to stay cool. Some of the barriers that were expressed to accessing the park were inconvenient transportation, challenging traffic crossings, the walking time, and poor lighting in the park at night.

Beyond the park, many residents expressed their desires to see more greening and trees throughout the neighborhood. Folks shared ideas for greening vacant lots, transforming old industrial sites into parks, beautifying the perimeters of active industrial and commercial sites, and creating more shade on existing playgrounds and schoolyards. Participants of the Beat the Heat design workshop identified specific blocks where they would like to see tree plantings and specific sites for greening (see Fig. 26). Although some folks voiced concerns with tree maintenance, 60% of survey respondents expressed their desire to see more trees—of the appropriate type and size—as a cooling strategy in their neighborhood.

The level of existing support for trees is likely a result of the tremendous amount of bilingual tree advocacy and education that Gabriella Paez and Esperanza have conducted since 2014. Many residents and community leaders expressed the need for continued tree maintenance as well as education around tree care and the many benefits of trees, including their cooling effects. One idea to address tree and greenspace maintenance was to develop a Hunting Park Greencorps program that could provide job training to local residents in the neighborhood.

FIG. 25 TREE PLANTING



Tree Tenders and Volunteers Plant Street Trees in Hunting Park

“As a student attending Esperanza College I remember not being able to read or think comfortably about school due to the humidity and heat within my room. I remember trying to study out in front of my home, but I was uncomfortable with all my books spread out and I was sensitive to the drug activity on my block. This is one reason I enjoyed going to Hunting Park to study when I was motivated to walk there, because it was much more enjoyable and cooler, and much easier for me to reflect on the content. One solution I would like to see for Hunting Park residents to deal with the heat is more shade and covered areas on vacant lots in our residential blocks .”

—JOSE FERRAN, Resident Beat the Heat Leader, N 5th Street

FIG. 26 MAP OF POTENTIAL TREE PLANTINGS

HUNTING PARK HEAT PLAN



**How Do Trees Keep a Neighborhood Cool?**

Mature trees provide shade to our homes and streets, providing shelter from the sun on hot days. They also release water that can help reduce the urban heat island effect.

FIG. 27 GREENING AND TREES: RECOMMENDATIONS

	RECOMMENDATIONS	EXISTING OPPORTUNITIES	IMPLEMENTATION PARTNERS
8	<p><b>TREE PLANTINGS &amp; CARE</b></p> <p>Improving access to tree plantings and education about tree care and maintenance for residents in Hunting Park, including:</p> <ul style="list-style-type: none"> <li>• Recruiting additional host partners for TreePhilly yard tree giveaways in Hunting Park</li> <li>• Expanding bilingual TreeTenders Training and recruiting more resident volunteers for street tree plantings in Hunting Park</li> <li>• Targeting street tree plantings on the hottest blocks in Hunting Park</li> <li>• Increasing street trees and perimeter plantings around large industrial sites</li> <li>• Providing information about tree care and street tree applications in Spanish</li> </ul>	<p>Annual TreePhilly and Esperanza Yard Tree Giveaway</p> <p>Esperanza &amp; PHS Spring &amp; Fall Street Tree Plantings</p> <p>Esperanza &amp; PHS Annual TreeTenders Training</p>	<p>Esperanza</p> <p>Lenfest Center</p> <p>North 10</p> <p>Hunting Park United</p> <p>Penn. Horticultural Society</p> <p>Phila. Parks &amp; Rec/ Tree Philly</p> <p>Office of Sustainability</p> <p>Phila. Water Department</p>
9	<p><b>NEIGHBORHOOD GREENING</b></p> <p>Improving access to greening and open space throughout Hunting Park, including</p> <ul style="list-style-type: none"> <li>• Creating more gardens and parks on vacant lots that exist near residential blocks</li> <li>• Targeting green stormwater infrastructure projects—such as rain gardens and tree trenches—on the hottest blocks in Hunting Park</li> <li>• Targeting green stormwater infrastructure projects on and around industrial sites, commercial sites, and schoolyards, such as: <ul style="list-style-type: none"> <li>• SEPTA Track Shop</li> <li>• Cousin's Supermarket</li> <li>• McClure Elementary</li> </ul> </li> </ul>	<p>Esperanza NeighborCare Program</p> <p>El Campo Verde Coalition</p> <p><b>PWD Grants &amp; Programs:</b></p> <ul style="list-style-type: none"> <li>• Stormwater Management Incentives Program</li> <li>• Greened Acre Retrofit Program</li> <li>• Rain Check program</li> <li>• Soak It Up</li> </ul> <p>PWD required stormwater systems on new development</p>	<p>Phila. Parks &amp; Rec/ Tree Philly</p> <p>Office of Sustainability</p> <p>Phila. Water Dept.</p> <p>Esperanza</p> <p>Lenfest Center</p> <p>North 10</p> <p>Hunting Park United</p> <p>Penn. Horticultural Society</p>
10	<p><b>HUNTING PARK GREENCORPS</b></p> <p>Creating a local job training program for young adults in Hunting Park to engage in leadership development, community organizing, and environmental resilience projects, including:</p> <ul style="list-style-type: none"> <li>• Tree maintenance</li> <li>• Green space enhancement</li> <li>• Heat outreach</li> <li>• Neighborhood clean-ups</li> </ul>	<p>Annual TreePhilly and Esperanza Yard Tree Giveaway</p> <p>Esperanza &amp; PHS Spring &amp; Fall Street Tree Plantings</p> <p>Esperanza &amp; PHS Annual TreeTenders Training</p>	<p>Office of Sustainability</p> <p>Phila Parks &amp; Rec</p> <p>Office of Workforce Development</p> <p>PowerCorpsPHL</p> <p>Energy Coordinating Agency</p> <p>Esperanza</p> <p>Lenfest Center</p> <p>North 10</p> <p>Hunting Park United</p>

# What is Next

The Office of Sustainability, the City Heat Team, and Hunting Park community partners are committed to continuing to address high heat and heat disparities both in Hunting Park and citywide. The Heat Team's next steps include:

## **Implementing the Hunting Park Heat Plan**

- The City will begin to implement programs, policies or projects that were identified in the Heat Plan, such as the installation of green stormwater infrastructure.
- The City will continue to identify new sources of funding and other resources for implementation of key projects.
- Esperanza will continue their partnership with PHS and TreePhilly in 2019 to implement spring and fall street tree plantings, yard tree giveaways, and a third annual TreeTenders training.

## **Changing City Policies**

- The Office of Sustainability will build capacity among City Departments to use heat vulnerability as a lens by which to make policy decisions around key issue areas, including land use, tree planting, green stormwater infrastructure, public space investments, bus network planning, and outreach for residential and small business assistance programs.
- The Office of Sustainability will also commit to addressing barriers to language access by providing its future publications in both English and Spanish.

## **Launching a Hunting Park Heat Relief Network**

- Hunting Park faith institutions and community partners will work with Esperanza, Interfaith Power & Light, and the City to pilot a Heat Relief Network.
- Through support provided by the Urban Sustainability Directors Network, the Office of Sustainability will hire an equity fellow in the summer of 2019 to support the heat relief network.

### Sharing Beat the Heat Toolkit

- OOS will identify and build relationships with community leaders and organizations in other heat-vulnerable neighborhoods.
- OOS will provide briefings about the Beat the Heat Toolkit and provide support to communities looking to address heat disparities.
- OOS will look for funding to support additional heat projects in other neighborhoods.

### Undertaking a Citywide Climate Adaptation Plan

- Building off of the lessons learned in Hunting Park, OOS will work with the Philadelphia City Planning Commission and other City partners to start a citywide planning process to understand how climate change will impact different areas of the city and to make recommendations for how to mitigate those impacts.

### Hold a Heat Symposium in partnership with ecoWURD

- Working with ecoWURD, a multimedia journalism initiative aimed at reporting on how environmental issues uniquely impact Black communities, OOS will hold a large Heat Symposium at the beginning of summer to further the conversation around heat inequities, its causes, and solutions to address it.

### Establish a City Heat website

- The City Heat Team will work to establish a single landing page for heat-related information on the www.phila.gov website to make it easier for residents to find resources from various organizations.

## Acknowledgements

The Beat the Heat Hunting Park Community Heat Relief Plan is the result of the efforts of many dedicated individuals and organizations who care passionately about Hunting Park and about ensuring our most vulnerable residents are prepared for the changing climate. We would like to thank all the partners listed on page 26 for their enthusiasm, support, and hard work. Special thanks to Sophie Sarkar, the Equity Fellow for the Office of Sustainability, for her leadership on the project.

# How to Build a Hand Fan



## MATERIALS NEEDED

- ✓ 12" x 12" card stock
- ✓ Scissors
- ✓ Popsicle sticks
- ✓ A rubber band
- ✓ Glue gun
- ✓ Ruler (optional)

01



— Fold and cut card stock into 4 equal pieces

— Fold first piece in 1/2-inch accordion-style pleats

*Tip: Measure and score the card stock before folding for near-perfect pleats*

— Trim any uneven ends

02

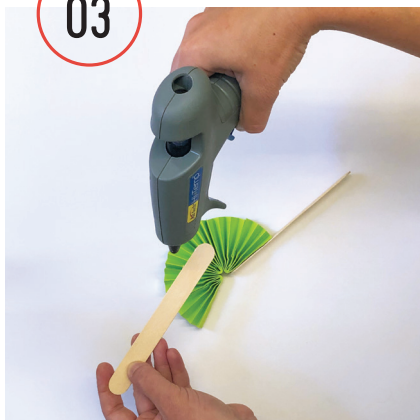


— Pinch the paper in the center and fold in half

— Glue ends together (Repeat x3)

— Glue folded pieces together

03



— Glue Popsicle sticks to the fan ends

04



— Tie popsicle sticks together with a rubber band



# Beat The Heat Toolkit

Many neighborhoods beyond Hunting Park also experience higher than average surface temperatures. Below find a guide for how your community organization can start the conversation about high heat and begin to work together to become more resilient.



## 1 Background Research

### A) CONSIDER PROJECT CAPACITY

Planning for extreme heat at the neighborhood level can take on many forms, each of which may require different resources. Equity can be embodied in community heat planning through inclusive practices that value, uplift, and center the voices and experiences of marginalized individuals and communities who face systemic barriers to opportunities and resources because of their identities. Before you begin, consider the following questions to help you design your neighborhood Beat the Heat program:

- Can this project be supported administratively and financially by a local organization or community group? Why or why not?
- Will someone be hired to lead this project, or will the work be done on a volunteer basis or in collaboration with a local organization?
- What is the duration of the project? 6 months? 1 year?
- How often will you meet to move the project forward? Weekly? Bi-weekly? Monthly?
- What resources will you need to complete the project?
- Why do environmental inequalities like exposure to heat exist in your neighborhood?
  - What is the specific history of land-use in your neighborhood that has led to unequal exposure to heat and environmental risk?
- What is the history of environmental advocacy in your neighborhood and how are residents already organizing themselves and leading?
- Who are they key stakeholders and what are the important community assets and landmarks in your neighborhood?

#### TOOLS

- ✓ Practicing Equity (p. 8-9 of Beat the Heat Hunting Park Plan)

### B) UNDERSTAND CLIMATE CHANGE

Over the past decade, Philadelphia has experienced a variety of extreme weather, including the snowiest winter, several of the warmest summers, as well as hurricanes and other storms. Scientists expect these trends to continue in the future at an accelerating path and with increasing severity. Understanding more about the changing climate can help you communicate with residents about what to expect and how to be prepared.

#### TOOLS

- ✓ Growing Stronger: Toward a Climate-Ready Philadelphia
- ✓ Climate Change in Philadelphia: A Guided Conversation

### C) CONDUCT BACKGROUND RESEARCH

Look at your neighborhood's heat vulnerability and heat exposure and research causes of heat disparity, such as land use and tree canopy.

#### TOOLS

- ✓ Heat Vulnerability Index
- ✓ Tree Canopy Data
- ✓ Philadelphia Neighborhood Stress Index
- ✓ Philadelphia City Planning Commission Community Plans
- ✓ Community Health Explorer
- ✓ EPA EJ Screen Tool
- ✓ Neighborhood Demographics
- ✓ Hot By Design: Neighborhood Mapping Exercise

## 2 Establish a Heat Team

Are there others working on similar issues in your community? Research which community development corporations, registered community organizations, block captains, colleges, university or schools, hospitals or health institutions, faith-based organizations, or other entities exist in your area. Make sure to include City agencies that can help create and implement your plan.

(provide small worksheet or link to sample one)

#### TOOLS

- ✓ Heat Team Work Plan
- ✓ List of Registered Community Organizations
- ✓ List of Community Development Corporations
- ✓ List of City Agencies & Other Potential Heat Relief Partners (p.26 of Beat the Heat Hunting Park Plan)
- ✓ Sample Community Asset Map

## 3 Hold Stakeholder Interviews

Interview key stakeholders and residents about their experiences with heat and the solutions they would like to see in their neighborhood.

#### TOOLS

- ✓ Potential Stakeholder Interview Questions

## 4 Conduct a Neighborhood Survey

Develop a neighborhood heat survey to learn about how people currently cope with heat, what tools they need to thrive, and what changes they would like to see in their community to make it cooler. Set a goal for how many surveys you want to collect. Administer the survey through block clean-ups and cold water distribution, community events, block captain mailings, and public workshops. Pay a few community



leaders to administer the survey and to organize events where people can fill them out. Don't forget to invest in plenty of clipboards and pens!

**TOOLS**

- ✓ Hunting Park Neighborhood Heat Survey (English)
- ✓ Hunting Park Neighborhood Heat Survey (Spanish)
- ✓ Sample Outreach Flyer to Block Captains
- ✓ Sample Outreach Letter to Block Captains

**5 Organize Community Events**

Hold a few events that include music, dancing, art activities, cooling resources, and water ice throughout the summer to get folks to take the survey and talk about available cooling resources.

**TIPS**

- ✓ Ask around to find a good local DJ and neighborhood caterers—both can go a long way in supporting the community and creating a fun event!
- ✓ Partner with other organizations to increase interest and
- ✓ Compile outreach materials, such as utility assistance programs, public health resources, and other useful information
- ✓ Engage residents to design a community heat logo
- ✓ Set up a station to show people how to build hand fans

**TOOLS**

- ✓ Sample Flyer
- ✓ How to Build a Hand Fan (see diagram on how to build one on page 46 of the Beat the Heat Hunting Park Plan)

**6 Appoint Beat the Heat Ambassadors**

Recruit a resident Beat the Heat Team Leader to train and organize a team of resident Beat the Heat ambassadors. Provide stipends or gift cards to support their efforts.

**TOOLS**

- ✓ Sample Beat the Heat Ambassadors Training Presentation

**7 Beat the Heat Mobile Station**

Develop a mobile Beat the Heat station that includes hand-fan making, giveaways like misting fans or thermometers, heat-related resources and information, and the heat survey. Identify neighborhood events or locations to bring the mobile station to and engage residents.

**TOOLS**

- ✓ How to Make an Activity Station

**8 Hold a Beat the Heat Design Workshop**

Facilitate a workshop with your heat team and residents to identify and map where residents would like to see specific cooling interventions—such as tree plantings, cool roofs, cooling spaces, and bus shelters—in their neighborhood.

**TOOLS**

- ✓ Facilitators Guide for a Heat Design Workshop

**9 Promote Trees and Neighborhood Greening**

Coordinate a yard tree give away in partnership with TreePhilly. Work with the Pennsylvania Horticultural Society to hold a Tree Tenders training program for your community and to organize street tree plantings. Develop localized messaging about the importance of trees and specific areas they could be most impactful.

**TOOLS**

- ✓ Tree Philly Website
- ✓ Yard Tree Planting and Care
- ✓ Street Tree Care
- ✓ Tree Tenders Video Library of Tree Planting and Care Tips
- ✓ Pennsylvania Horticultural Society Tree Tenders Website
- ✓ Philadelphia Water Department Community Input for Green Stormwater Infrastructure

**10 Build a Heat Relief Network**

Map existing neighborhood cooling assets and resources and identify additional spaces, such as faith institutions, shopping centers, movie theatres, stores, or other businesses that could be incorporated into a neighborhood heat relief network. Identify what resources each partner is able to contribute. For example, one church may have an air-conditioned basement, while another partner may have a screen and projector or board games to provide entertainment, while a restaurant may offer up free snacks.

**TOOLS**

- ✓ Asset Based Community Development presentation (by Interfaith Power & Light)

All tools available at [www.phila.gov/green](http://www.phila.gov/green).



[www.phila.gov/green](http://www.phila.gov/green)