



Center for Sustainable
Communities at Temple
University

CLIMATE RESILIENCE: VOICES IN PHILADELPHIA

2024



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INTRODUCTION

In response to the pressing need for enhanced climate resilience, the Center for Sustainable Communities (CSC) at Temple University held a series of conversations with community organizations in Fall 2023. These conversations represent a snapshot of the barriers and opportunities communities are facing in coping with the impacts of climate change which are compounded by socio-economic inequality.

The greater Philadelphia area faces an array of climate challenges, from extreme weather events to rising temperatures, and flooding. In the Greater Philadelphia region, race and class disparities significantly influence resilience challenges and climate vulnerabilities. Understanding how communities perceive and respond to these challenges is crucial for developing effective and inclusive strategies for climate adaptation and mitigation. To address this need, the CSC team held conversations with community organizations to receive direct input from local residents and stakeholders.

In this report we spotlight esteemed local organizations, on-the-ground practitioners, and activists as the experts. We acknowledge their role at the center of this work, given the diverse perspectives that can foreground the localized issues and challenges facing vulnerable communities and residents. By highlighting community voices, this report provides a ground-up view of climate resilience within the Philadelphia region. It calls attention to the innovative and practical measures communities are adopting to enhance their resilience, while also identifying gaps and opportunities for further action. Through this approach, the CSC seeks to elevate the actionable solutions that these communities highlight which are grounded in their lived experiences. This ensures that climate resilience efforts are deeply connected to the needs and aspirations of the people they aim to serve.

This project received funding from the William Penn Foundation. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of the William Penn Foundation.

THANK YOU!

Dear Organizations:

On behalf of the Center for Sustainable Communities at Temple University, we thank you all for participating in our conversations. Your valuable insights and contributions have greatly increased our understanding of the work many organizations, like you, are doing in the climate solutions space.



“There is no power for change greater than a community discovering what it cares about.”

–Margaret J. Wheatley

We are grateful for your willingness to share your experiences and expertise with us. We are confident that the information and insights gained from your participation will be instrumental in developing effective strategies to aid in future climate resiliency work.

Once again, thank you for your time, effort, and commitment to the work you are doing, and for taking the time to share with us.

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Asociación Puertorriqueños en Marcha

Organization Overview

APM's mission is to help families achieve their greatest potential and envision a community where every resident is engaged, encouraged to lead, and given opportunities to become self-reliant. APM offers an umbrella of services, including Community Economic Development, mental health counseling, early childhood development, violence intervention, and a series of other services.

APM works with community members to build dynamic neighborhoods by advocating for much-needed social, economic, and environmental changes. APM's housing counselors identify homeownership opportunities for first-time, low-income homebuyers and provide foreclosure counseling.

Service Area(s)

APM's Community and Economic Development (CED) Division has targeted housing and economic development activities in Eastern North Philadelphia, specifically in zip codes 19122 and 19133. This area was chosen because it is the birthplace of APM as the community members were facing challenges due to language and cultural barriers, complicated property ownership issues, predatory lending practices, and limited access to health, human, social, and housing counseling services.

Defining Climate Resilience

Climate resilience work involves the consideration of programs, initiatives, and emergency planning management to really understand how the changes in climate will impact the way of life of people, land, well-being, productivity, food, nourishment, and economic health.

Looking at a neighborhood's longevity, understanding whether we are in a flood plain, if in the summers we would have dry spells, if we are in a heat dome, and the effects. We need to understand the type of environment that we are in and how we adapt our folks to maintain their livelihoods. Building generational capacity to be in the same space that they have always been in.

Consider Environmental Sustainability, bringing nature and our natural environment back into our everyday urban environment in a way that is accessible and within walking distance for residents. Also, culture, health, and quality of life should be considered.

Climate, Environment, Sustainability Work

APM is involved in various greening efforts, including the Soak it Up Adoption program. They collaborate with local community gardeners, playground directors, and block captains, support block clean-ups, and engage with the CLIP program.

APM has also worked to develop affordable housing and energy-efficient homes with sustainable materials in addition to partnering with other organizations to do home repairs in the neighborhood. During housing counseling sessions, we provide valuable guidance on how to maximize energy savings, reduce expenses, and create a safe and healthy living environment. Eco-friendly practices are a way for consumers to effectively manage their finances and ensure secure homeownership. We educate clients on various ways to save money by adopting green behaviors and utilizing environmentally friendly products, thereby lowering expenses, and promoting a sustainable and healthy home.

Needs, Barriers, Opportunities

Much of APM's work has focused on housing, neighborhood development, and stabilization. Climate change has a significant impact on housing. It can lead to the settling of the ground, causing cracks in the walls, which can result in water seeping through. Additionally, natural disasters associated with climate change can pose a threat to the structural integrity of homes, potentially causing extensive damage.

As an organization, it is important for us to prioritize climate resilience by implementing strategies that effectively address the impacts of climate change. By educating communities about the realities of climate change, advocating for supportive policies, and promoting innovation in climate resilience technologies, we can make significant progress in building a more resilient future.

Additionally, a current challenge faced in this community includes gentrification, which has resulted in the loss of affordable housing, amenities, community fabric, culture, and history. Additionally, there has been a conflict and loss of power and control. Furthermore, there are vacant lands and an increase in housing prices, with 50% of homes sold between 2015-2019 priced above \$200,000, compared to 50% of homes sold prior to 2015 being priced between \$80,000-\$100,000.

Key & Notable Insights

URGENCY: JOBS & EMPLOYMENT

A lot of the community is asking for employment opportunities. One of the biggest barriers, as it stands now, is that some of the block clean-ups or those cleaning initiatives that are small-scale but doable and really create community morale are volunteer-based. Right now, there is a changing narrative that when we get our community involved, it's not very fair to take on their free labor. They put in a lot of time in the community, and they also put in a lot of time in their basic day-to-day survival, so being able to create these climate strategies and programming while also creating a financial incentive and employment path for folks is the biggest barrier.

Once we start creating the path where these green, sustainable, or environmental initiatives can create employment opportunities for folks in our community, then I think there is going to be a lot more rallying, organizationally to start tapping into that.

Consider the city, federal, and policy levels as well as associated funds that can support projects like urban farm initiatives. This could be a huge asset for our city and our neighborhoods. Funds could be out there and available, but we are not tapping into that which organizations could do if there was a pathway to get there.

"I think, the green field is a way to create, like to mimic, the same growth that we had in the industrial period here in Philadelphia... That can still happen in a new way, and it's not white-collar. It's like, it can be blue-collar. And yeah, I think employment and sustainability, those two can go completely hand in hand... That can happen again if people can think about the history and re-inventing it in a new way now" (Kiana Gonzalez).

Considering the Possibilities:

There could be hiring of staff and creating an entire branch within the organization that focuses on sustainability work that would include things such as Tree Tender Coordinators and community block-captain clean-up Program Managers. Expanding some of the positions that have already been created through other city programs and creating solid positions within the organization's internal operations. Focusing on being able to create an entire staff where some have the technical and professional skills and a good chunk of community members employed under that.

THE DREAM: CREATING GREEN EDUCATION PROGRAMMING.

Have an entire trade building (departmental section of APM) focusing on Green Initiative jobs and renewable energy opportunities. "Arming our community members with the tools, the technical expertise, the certifications, the trades to be able to go into that." I can imagine multiple sites at major hubs, major organizations having entire trade schools focused on that work and making Philadelphia itself a hub for those training opportunities. "Our people here becoming experts so that they can become teachers themselves down the line with experience" (Kiana Gonzalez).

Contributors: Diane Rios & Kiana Gonzalez

Clean Air Council

Organization Overview

Clean Air Council's mission is to protect everyone's right to a healthy environment. Their work has expanded in recent years to consider other environmental issues, such as water pollution, climate change, local flooding concerns, and gas extraction issues, including petrochemicals, in addition to clean air advocacy. Their public education efforts include sharing information about policies, the effects of pollution, legal developments, and permitting, as well as taking complex legal matters such as state and federal laws related to air pollution and disseminating them to the public in a way that is understandable and interesting. The Council's grassroots advocacy also includes participation at local events, presenting at local community meetings about environmental issues, commenting on strategic planning efforts, collaborating with various non-profits and institutions, and providing support to residents calling about climate concerns and environmental complaints.

Service Area(s)

Project Areas Include Philadelphia, Southeast Pennsylvania, Delaware, and Western Pennsylvania

Defining Climate Resilience

Climate resiliency is mostly an infrastructure problem. A big part of it involves considering the mistakes of the past (ex., The combined sewer system, which is now of concern because of increased precipitation). It is essentially readapting or newly adapting, asking the question, how do you adapt to prior planning or the lack thereof?

In Philadelphia, the climate is changing; it's getting hotter and wetter, causing serious flooding concerns. Because of sea level rise, there will be flooding from the South, from the Delaware River. In Philadelphia, we also have big drainage problems and housing issues (roofs, heating, cooling, old and poor housing stock). Consider a century of your house getting rained on and getting a little moldy every year... Uniquely, in Philadelphia, we have a common situation of low-income homeownership. The vast majority of people's wealth is in their homes, and there is the possibility that with "the next storm, it's just like gone".

There are other concerns, such as previous industries all having to be by water and the entire Delaware River waterfront in Delaware County is still one big line of industry.

Climate, Environment, Sustainability Work

Sustainability work for the Council involves bringing environmental information and education to local communities and people reaching out for assistance. Local community engagement includes trying to convince people to use fewer chemicals in their homes, finding ways to cool indoor spaces, and ways to improve one's personal air quality. Other work has involved addressing resident concerns with mold, during wildfire incidents, and working on grant-based projects.

Needs, Barriers, Opportunities

We need to start building more parks in the city, and not just at a civic level. Lots can be turned into parks with programming. Parks also help with drainage and “preventing someone from building a three-story market-rate infill housing.” Real estate is getting so contentious in the city that by occupying the space, you can create more opportunities for things like community gardening. In addition to that, because of people's history, they're literally afraid of trees and the impact that they might have or are afraid of open space for many valid reasons. Even with 311 and all the city complaints, no one wants to help residents deal with trees because it is very expensive, and the City sort of turns away the tree issues as “that's your problem.” (There is funding to plant trees but not funding to remove trees that are destroying the infrastructure of people's homes.)

Warehousing complexes that are being proposed involve tons of asphalt which is bad for flooding and most of them are on old industrial sites which brings up concern for underground pollution controls, for example, at the former Philadelphia refinery, including large parking areas. Building a larger parking lot in the hundred-year flood plain is a bad idea, and the functioning of the warehouses will involve an infinite amount of heavy diesel and other car trips. There is a risk of replacing the impact of the refinery with the impact of an infinite amount of truck trips. Clean Air Council is filing comments related to stormwater permits proposed as a part of warehouse and other industrial expansion in coastal areas of Philadelphia and Delaware County.

There is also an opportunity to address legislation established in the late 70's, which would regulate every parking lot in the city, called the Complex Air Permit. This involves a permit that would apply to all parking garages in the City of Philadelphia, but it is not currently being enforced; there are only a few parking garages being regulated. Part of the reason is that air permitting as we know it now basically started in 1990. There was a big update to the Clean Air Act in 1990 that created the modern air permitting system at the federal level and new regulating guidelines. In some ways, this caused cities and states to ignore policies from a previous era. Since this previous regulation was passed in 1978, it has been overlooked, but “it's still on the books”.

Key & Notable Insights

“Industry will always find whatever is not being regulated.”

Considering the Possibilities:

The biggest issue in Philly right now is land occupation. Who owns what? We should be more influenced by the non-profits and local CDCs, which have the driving structure of owning land and building stuff. Then, having that be a natural hub of your activities. The non-profit sector should work more closely with CDCs as there is also a need to get land and create parks.

The Clean Air Council could contribute by attending programming at these green spaces and talking about issues that neighbors need help with. “There is such a need to have analog, non-digital ways to reach people... I talk to people all the time. They just miss it so much, of like being able to not really have to check online so much, but you know that on a Saturday, you can walk by this area, and something will be happening, someone will talk to you.”

Contributors: Russell Zerbo

Climate Dads

Organization Overview

Climate Dads is an international parent-driven climate advocacy organization. The organization was founded in Philadelphia, Pennsylvania, and started with just a couple of dads meeting up at a playground and chatting about concerns they had around sustainability and climate change. At the time of our initial conversations, “it wasn’t looking very good nationally or federally for supportive climate policy or legislation; there was a real lack of funding in that regard.” The dads wondered how they could be better parents raising children during the climate crisis. Since then, Climate Dads have continued to engage in climate discussions and programming in South Philadelphia and grew an online international presence via an online platform, collaborative events, and policy/advocacy work, and programming.

Climate Dads is essentially a social work organization that helps parents think through climate issues using their technological capacity and limited resources to help people understand climate jargon, and take action at a scale and level that aligns with unique needs. Their work aims to take relevant information and translate it into something meaningful in a way that people can grasp, hold on to, and want to ultimately take action from in order to lead by example.

Service Area(s)

Bella Vista, South Philadelphia, International platform (previously)

Defining Climate Resilience

When thinking about resiliency in the climate space, it is helpful to look through two lenses: the science lens and the historical lens. The geological history of the United States would show that there have been arguably 5 or 6 major climate changes in the history of our planet. During major climate impacts, the planet has documented and illustrated what resiliency looks like. What survives? What thrives? What ultimately does not?

What is not always resilient, what doesn’t make it out or thrive, are living creatures and beings on planet Earth. The focus should be on what’s living right now on our planet, creatures, and beings and how we can help them mitigate and adapt to what we are seeing and what we are struggling with as living creatures on this planet.

When talking about resiliency, we want to consider “who or what can really, not just survive, but thrive when it gets a lot hotter and a lot wetter with greater frequency. Ultimately, The planet will survive.” What else will? Climate resiliency is essentially also about uplifting people as they seek to thrive and adapt to the incredibly rapid changes.

“Human lives matter. When you’re talking about climate resiliency, you’re talking about humans adapting. You’re not talking about planet Earth. Planet Earth is gonna be fine. It’s gonna adapt. It’s gonna look different and you might not love the way it looks but you’re talking about humans adapting. It’s what you’re really talking about... and humans are gonna die from this, and they don’t have to.”

Climate, Environment, Sustainability Work

“A rather harmless but meaningful conversation at a playground led to more conversations, maybe a beer or two, and we decided to take what was an existing blog of just some thoughts and notes; turned that into a website and then started chatting with other parents. Not just dads, but other parents, and learned that trying to raise a family and children during the climate crisis presented some problems and maybe we can turn that into an opportunity. So we learned that not just dads but a lot of parents were very concerned and we thought maybe we could put our efforts together to form something rather organized to harness what we saw as kind of a disenfranchised fragmented global population and maybe we can coalesce them into using what we saw as a sense of urgency and kind of nourish that a little bit through events, or programming, or education to empower parents and to kind of meet them where they were at.”

Discussions engage parents by asking questions such as “This is bothering you, in what way, how do you see a solution being implemented? Could we convene a couple dads together and talk about how at home we could make it more climate-positive or climate-friendly?” Climate Dads is about taking action as parents. Could Climate Dads nourish a collective sense of personal agency and empowerment? Is that the basis for taking action in a way that makes sense to individuals and populations?

Climate Dads have served as “middleman” for parents and guardians who are interested in simply staying informed, receiving climate education, and others who are interested in things such as solar panels and clean energy in their houses. The group has also formed campaigns called “Lead by example,” showcasing dads taking charge in climate work, nourishing their sense that they could and should be leaders at the house and that the climate burden should not just fall on women. The goal has been to empower, uplift, and help parents navigate that global burden and turn it into an opportunity to meet parents where they are, creating change in a positive, healthy way.

Needs, Barriers, Opportunities

Once the online platform was created, dads and other concerned parents began reaching out from other states and internationally, asking to join and form Climate Dads chapters. Sometime after, the organization had to retire the online platform as they did not have the capacity to grow and maintain it at the time.

Parenting individuals, parental guardians with climate interests and concerns, is a population that Climate Dads seek to serve internationally and throughout the world. The group also wants to collaborate and support Climate Moms groups, while also helping men to lead in the climate efforts with the goal of relieving the unequal burden of climate advocacy and activism that in various ways seems to have fallen on women, matriarchs, and elders.

There is a possibility for creating chapters across the state, regionally, nationally, and the world, creating a model for real human-based adaptation to a rapidly changing world. It starts by having a conversation and meeting people where they are, listening to the diversity of needs and wants, the changes people want to adapt to for themselves and their families, and developing opportunities for them to get involved. For parents who would like to be on the policy side and just advocate for legislation that is going to impact them, Climate Dads would love to support them through that.

Key & Notable Insights

“Most neighborhoods are flood prone... The Delaware River and the Schuylkill are going to rise up. We know there’s going to be flooding. We need to plant more trees to soak up stormwater. We know strategies that work but no one is really talking about what’s gonna thrive in Philadelphia. What’s gonna be resilient? It’s gonna be mosquitos and ticks and that’s gonna be a big, big problem. I don’t really hear that conversation happening and maybe it is. Perhaps I’m not privy to it. I am just not in that circle and I’d love to be in that circle and talk about it.”

Considering the Possibilities:

To address climate resiliency during a hotter weather disruptive time, dedicated funds could go towards helping parents understand and then get resources to make well-informed choices. Foundations like the William Penn Foundation could start with listening to families and what matters to them and then figuring out a template that organizations could design with them; then moving to the next steps once that conversation happens. “It’s time to implement solutions.”

There is a need for collaboration in climate resiliency work to address the potential increase of mosquitos and ticks as a result of it getting hotter and wetter in Philadelphia. If ticks come around in abundance and thrive here, they are going to bring unpreferred impacts, and one of the outcomes is vector-borne diseases. We could think about the issue systemically. Honestly, it is a public health nightmare and I'm not sure in a post-pandemic world many of us have the capacity to consider how relevant and unpreferred this is going to be on all of us.

An app could be created, much like how you open your phone's weather app and also see the mosquito or tick index for the day. The Office of Emergency Management, the Philadelphia Public Health Department, and the Mayor's Office of Sustainability could also come together with entities like the William Penn Foundation and the private sector and put together some sort of strategy to help citizens, vulnerable populations, young and old, adapt to what that would look like. The app could indicate how the weather may be hotter, wetter, and humid so that citizens could make adaptive choices such as wearing taller socks, or a long sleeve shirt to prevent bites and illness. The prevention piece of this collaborative strategy would be great.

"The Office of Emergency Management, Public Health Department, and Mayor's Office of Sustainability... three stakeholders that would want to be involved in that conversation."

Contributors: Jason Sandman

Ayanna Moore, Livable Communities Coordinator Division of Chronic Disease and Injury Prevention Philadelphia Department of Public Health

Stakeholder Overview

Newly hired Philadelphia Department of Public Health (PDPH) Division of Chronic Disease and Injury Prevention Livable Communities Coordinator Ayanna Moore participated in our stakeholder conversations around climate change. Ms. Moore's role at PDPH includes initiatives around walkable built environments, drinking water access, physical activity, and enhancing green space and neighborhood conditions.

PDPH's mission is to protect and promote the health of all Philadelphians and to provide a safety net for people who are disproportionately impacted by societal factors that limit their access to healthcare and other resources necessary for optimal health. Within PDPH, the Division of Chronic Disease and Injury Prevention (CDIP) works to cultivate safe, healthy, and livable communities in Philadelphia by reducing the burden of chronic disease (heart disease, stroke, asthma, etc.) and injury (gun violence) for Philadelphians across the life course. CDIP is one of 13 PDPH programmatic divisions, several of which work more directly than CDIP on environmental health and climate-related public health preparedness. PDPH, in turn, is part of the City of Philadelphia, where the Office of Sustainability plays a leading role in improving quality of life through addressing environmental justice, reducing the city's carbon emissions, and preparing Philadelphia for a hotter and wetter future.

Ms. Moore shared her insights as a native Philadelphian with decades of experience in community outreach and engagement; the views expressed are her own.

Defining Climate Resilience

Broadly defined, climate resilience considers adaptation to changes in climate, colder or hotter weather, and taking care of the world for current and future generations.

Climate, Environment, Sustainability Work

Green spaces have been a priority in terms of partnering with community gardens, seeing how they function, supporting the sustaining of community green spaces, and ensuring that residents can access and enjoy these physical spaces. In particular, green spaces are important in areas where there is a lot of gun violence due to a correlation between active garden spaces and the reduction of violence in those areas.

It is important to deepen work related to housing, water, and energy poverty with the goal of making sure that houses are livable and safe. For example, PDPH has collaborated with the Philadelphia Corporation for Aging (PCA) on a cooling pilot project, focused on adaptation, addressing certain areas in Philadelphia that typically get hotter than other parts of the city. Through the pilot, PCA gives out air conditioners and provides education about reducing energy bills. The program also provides subsidies to pay for high bills related to air conditioning usage.

A current priority area of interest is water security, which ensures people have access to clean running water. There are Philadelphians currently living without water in their homes for various reasons that disproportionately impact low income black and brown residents.

Needs, Barriers, Opportunities

There is a need and opportunity to increase knowledge on how local climate issues are affecting Philadelphians in order to enhance our understanding of climate adaptation and resilience initiatives could be improved. Additional training to effectively carry out climate resiliency work is a need.

There is also a need to gain more information on what works and what doesn't to continue advocating for certain policies that need to move forward in order for climate resiliency to be effective. For example, advocating for solar energy as a sustainable alternative to the use of fossil fuels would reduce energy costs for residents in the long run. Currently, residents continue to pay more for their energy bills, and housing conditions are still not safe.

Philadelphia has a variety of different issues that concern public health. Working on every issue simultaneously is not possible nor sustainable. I am always interested to see more and deeper place-based, on-the-groundwork.

Moore shares that while being from Philadelphia, and understanding structural racism, knowing why gentrification is happening, why communities of color are being divested in, and how community gardens can thrive, there is still a need for learning how specifically to implement climate resiliency work with the knowledge of Philadelphia's history and environmental landscape. More training to build capacity in climate resilience work and how to advocate for the implementation of climate resilience efforts is needed.

Key & Notable Insights

Speaking on the topic of resource allocation, Ms. Moore shares, “One issue just opens up a can of worms for another issue... You can give out a million air conditioners, but if someone is getting evicted or if the electricity isn’t good and you have a slumlord, those air conditioners aren’t going to work. Then what?... You might solve one issue. It’s like with medication... You might take a medication, but it can give you mental health issues. Now, it might keep you alive but then you have these other issues. Now, it might keep you alive but then you have these other issues.” Funding or government subsidies could meet the basic needs of individuals. However, those who hold power (corporations, big government, foundations) and those who do not have as much power but are equally important need to get on the same page. All stakeholders are equally necessary to address the “big picture” issues.

Considering the Possibilities:

A key priority area for climate resilience in Philadelphia is housing and for people to have safe homes to live in. Not only must housing be sustainable and safe, we need to make sure that people are not getting pushed out of their homes. Considering the hierarchy of needs, sustainable, safe, and affordable housing is a basic necessity and should be a priority for Philadelphians. Essentially, a dedicated staff with expertise in this field could focus on affordable housing and anti-gentrification policies within the department that are in alignment with climate resilience efforts.

Dedicated staffing with really deep knowledge about climate change and resiliency would benefit the work of the PDPH. This work would also involve people who live in Philadelphia communities and have seen the changes. Funding could provide opportunities for education and workshops around climate resiliency and its vastness as an opportunity as we look at different aspects of the issues in the city. Funding for staff that are experts in climate work, as well as funding for training, conference opportunities, and workshops for the PDPH team and partners, would be valuable.

Contributors: Ayanna Moore

Green Building United

Organization Overview

Green Building United is a small non-profit that is focused on addressing climate change through the built environment. The organization shapes its work based on three pillars: membership, programming, advocacy, and policy work. Its membership is comprised generally of people within the building trades (architects, landscape architects, construction workers, etc.) who have joined for continuing education and networking. Some of GBU's grant-funded work includes managing the City of Philadelphia's benchmarking program along with a number of other programs. Its advocacy and policy work is done at the state and local level around sustainability and the built environment. GBU currently helps to run the Here 4 Climate Justice coalition initiative.

Service Area(s)

Philadelphia, Collar Counties (Bucks, Chester, Delaware, and Montgomery), Lehigh Valley, and Delaware

Defining Climate Resilience

For Green Building United, thinking about climate resilience work considers buildings, infrastructure, and the effects that they have on the environment.

Sustainability is not just about the environment but also about financial sustainability for the community. Resilience then measures how susceptible residents are to the impacts of major storms or major climate events, especially associated with the relative conditions of buildings such as people's housing structures. Looking at the work holistically is important.

Equity in Green Building United's work aims to ensure "that there is access for everyone to safe and sustainable buildings."

Climate, Environment, Sustainability Work

Green Building United not only hosts several events a year but has also pushed for statewide advocacy around energy efficiency, including alongside the Keystone Energy Efficiency Alliance.

GBU helps to manage Philadelphia's benchmarking program, which requires buildings over 50,000 sqft to report their energy and water use. GBU is expanding its benchmarking efforts beyond Philadelphia and is working alongside Delaware Valley Regional Planning Commission to implement a regional benchmarking program.

Green Building United has also been involved in advocacy for the Whole Home Repair program, as that initiative benefits low-income Pennsylvanians. GBU's priority is to make sure that future projects can also support working with underserved communities. The Whole Home Repairs program is a huge area of opportunity for energy efficiency because if a home is in disrepair, it is probably leading to greater energy usage and higher energy cost.

Through the William Penn Foundation's Climate Ready Capital Projects program, Green Building United is working with the William Penn Foundation's existing and new grantees to provide guidance and support to embed principles of sustainable and resilient design into all aspects and stages of building and landscape projects, including new construction, renovation, and retrofit projects. WPF grantees include non-profits that support and uplift arts, culture, and public spaces and represent a diverse cross-section of Philadelphia.

Needs, Barriers, Opportunities

To expand Green Building United's climate resilience work, GBU is continuing to work to make connections with other groups doing this work, and enhancing connections to the Philadelphia School District for future advocacy efforts. A priority is to gather a variety of relevant voices working in the climate and sustainability space and make sure that the diversity of stakeholders is represented in future work.

Through funding from the William Penn Foundation, Green Building United is leading a discovery process with the goal of creating a Building Energy Hub for green building information and resource sharing. GBU is currently convening stakeholders to look into the feasibility and need for a hub that would ultimately be a place to share resources and answer questions about green building and energy efficiency, with a focus on linking organizations to available funding opportunities.

There is a need for funding specifically for convener sights that are willing to lead communications on the ground to support advocacy efforts around building conditions, energy efficiency, and renovations of schools and early childhood education centers. There is a need for conveners to serve as backbone organizations with staff that have the role of helping organizations apply for funding.

There is urgency around available federal dollars. “There is so much money at stake, and it feels like such a huge opportunity, and it also feels like, quite frankly, like they’ve made it very confusing and cumbersome to apply for and get the funds. I just don’t want our region to lose out on the opportunity.” There are a lot of dollars that could transform the region and make it a lot more resilient. In Philadelphia, our infrastructure is old, there are a lot of risks, “so how do we capitalize on getting that funding out into our communities” and making sure that the region is taking full advantage of the available money.

Key & Notable Insights

There is much advocacy work being done currently for climate justice and home repairs, such as with the Here 4 Climate Justice Coalition. Much of the conceptualization of justice to structural conditions applies to the schools as well. Many children oftentimes spend more time in school than they do at home during the day. They are in school buildings, and these spaces are unacceptable.

Considering the Possibilities:

GBU is exploring possibilities for increasing Public School Advocacy related to Philadelphia School District Buildings. Currently, the organization is considering ways to help the School District reach its facilities and climate goals to mitigate the impacts on the children in Philadelphia. Several school facilities are in such bad disrepair, which raises concerns related to the health and learning impacts associated with deteriorated conditions. GBU would like to advocate further and support the district by providing information on grant opportunities and helping to navigate the complicated process of trying to get funds through the Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA).

Some of the barriers to such work include the district’s staffing and staff capacity, internal capabilities to get funds, and the need to explore ways to help expedite fixing larger facilities problems. GBU could explore ways to utilize its member network efficiently in a way that would have the most impact. Currently, advocacy with the school district at a higher level, such as getting connected with the superintendent, is necessary.

Green Building United could potentially serve as a convener of groups and members who are architects or those in the industry who want to get involved and serve as resources to the District. There are many parent groups, environmental groups doing advocacy work, home and school associations, and PTA's concerned about this issue as well. There may be an opportunity to form a coalition, come together to be more productive in advocacy work, and garner a better understanding of the barriers the District has. Engaging in meaningful conversations with the District could help to figure out a plan moving forward.

Expanding Climate Ready Capital Projects programs to create a specific program for early childhood education centers receiving William Penn Foundation funds could also have a great impact through the integration of enhanced sustainability measures in their plans. Making sure that childcare centers are looking from a lens of sustainability and resiliency throughout their building renovation projects is key, as there is an education gap concerning how to make buildings energy-efficient and sustainable during construction. Many of the childcare centers are small organizations whose staff have other jobs and whose role is not to manage a construction project. The bandwidth is not there for them to learn about the most sustainable materials on their own, which would be better for the environment but could also help them save money in the long run. GBU could provide free consultancy services to these childcare centers as part of their grant application with the William Penn Foundation if an expanded model of the current Climate Ready Capital Projects program were implemented.

Contributors: Emily Pugliese

Organization Overview

Building and providing affordable housing is a core of the work that HACE does in the North Philadelphia community. HACE leads a variety of affordable housing development initiatives, managing affordable housing rental units and senior living facilities, and developing housing for purchase. HACE also provides small business support, and technical assistance to 3 commercial corridors, Front Street, 5th Street, and American Street, roughly between Lehigh and a little bit North of Allegheny.

Resident engagement initiatives include efforts led by the Neighborhood Advisory Committee (NAC) program and the Livability Academy and include activities such as monthly community meetings and neighborhood outreach events.

Service Area(s)

The core focus area for much of HACE's work is in the Fairhill section of North Philadelphia from Lehigh to Glenwood Avenue and between B Street to 6th Street. The commercial corridors that HACE supports are roughly between those parameters.

Defining Climate Resilience

"Some of the things that make people most vulnerable are things that are barriers for them even outside of climate change." Conditions to homes, access to food, and networks of support are critical barriers to equity for people. Climate resilience has to consider competing priorities and all the ways people are in survival mode, making just too much to qualify for assistance that they very much need, according to the guidelines that exist.

There are disparities in terms of what people have and how resilient their infrastructure is to potential floods, storms, and extreme heat. People have different levels of vulnerability to that. We need to be aware of those disparities and do something to mitigate them so that we are more on an equal playing field.

Climate, Environment, Sustainability Work

HACE has adapted building projects with green stormwater infrastructure, adhering to the City's standards for building new properties. It has also been working with Philadelphia Parks & Recreation to plant more street trees around the Front Street business corridor. The goal is to increase shade in the area, provide relief from extreme heat, and absorption of more water as we continue to get more storms. HACE also offers weatherization services through the Neighborhood Energy Center (NEC) to help weatherize homes. The organization has led efforts to cool homes, including the distribution of fans and weatherization kits.

HACE's community engagement around climate includes community education and advocating for policy changes that would improve conditions in terms of housing, jobs, and a greater sense of sustainability against the forecast of climate change. There is room for those efforts to grow in terms of the volume of people involved and focused efforts.

Needs, Barriers, Opportunities

More people need to be aware of what the climate change projections in our region are looking like. Having awareness of not only what the forecast is but also what you would do in an emergency is important. There is also a need for preparedness, considering the infrastructure, your home, and whether it is ready for that forecast. It's also important for residents to know what to do and have networks of support if something were to go wrong and flooding were to occur. For example, if someone's home is unlivable after a flood, what do you do then? Having people and systems that you can trust in the event that there is an emergency is important.

Expanding engagement within the HACE community has several barriers, including language, as it is a large Hispanic Spanish-speaking community. Having more bilingual resources and information sessions related to climate would be super helpful. Several programmatic departments at HACE are fully bilingual, but other available resource divisions do not have full bilingual capacity.

Key & Notable Insights

When it comes to climate change engagement, sometimes there is a barrier for some folks to invest in thinking about it when there are other immediate needs that they are struggling to meet. If their home or food is insecure, if other things are posing a lot of stress in the immediate moment, thinking about the future of climate change is, understandably, not the first priority. Improving the impact of education concerning climate issues could be paired with investing in the things that people need right now in order to be okay and resilient against what is also to come.

Considering the Possibilities:

Funding to enhance community engagement efforts is needed. Providing climate-related education, having points of contact that would make it easier to share the information, and connecting with people who already have the data that we can share would be helpful for expanding climate-related community education efforts. Having engaging spaces for people to come together to learn and to feel empowered to actively do something could help in the building of relationships and spaces of support with people so that they have a better sense of what to do in case of a climate emergency. Funders could help support collaboration between environmental education organizations and local organizations.

Many residents are making just enough to survive or are barely getting by, but they do not qualify for programs that could help them save on bills, get repairs, or get resources. “What if some of this grant funding could create a fund for those people that are like, I need help, but the system says that I don’t qualify, but I need the help.” That could be administered through a Housing Counseling Neighborhood Energy Center, where a lot of people come for those services. A Climate-Resilience Hub could be created but would require more staff support. There could be a new role created for a coordinator for that particular program.

Contributors: Stasia Monteiro

H.A.C.E. Livability Academy

Organization Overview

The Livability Academy is an 8-week educational program where community residents come together to learn from one another and to receive guidance through the Livability Academy Coordinator, other staff at HACE, and other community partners about project areas that could be focused on to make the community more livable as a whole. Each cohort chooses an area of focus depending on their interests, passion, and expertise so each academy looks different every time in terms of what people choose to focus on. Throughout the 8-weeks, participants learn planning skills and project management skills and then collaborate with each other to produce a project that they want to focus on to improve livability in the neighborhood. At the end of that time period, participants present their final project, and HACE provides implementation funding for the participants in the Livability Academy to implement their project idea. Participants also receive a certificate of recognition and a gift card for their time and efforts.

Service Area(s)

The Fairhill section of North Philadelphia between Lehigh to Glenwood and between B Street to 6th Street.

Defining Climate Resilience

In order to move towards climate resilience, from a community engagement perspective, there is a need to begin building trust, getting people to move beyond their fears, and getting them engaged. Yet, resilience also recognizes the present needs and limitations that residents currently have, such as struggling to pay utility bills, food, medication, balancing finances, and all the ways that people are trying to survive.

Climate, Environment, Sustainability Work

Local residents have been working on the ground to support environmental and climate related efforts in addition to sharing information about programs and services available to residents.

Marilyn Rodriguez notes that weatherization opportunities are available, and the gas company offers many incentives as they do come to homes and work on enhancements, but it's not as well known in the community. A lot of houses in the community are really old and not insulated correctly. People are paying major gas bills. They are also dealing with flooding now because of a lack of proper insulation in the home. If the pipes burst, people's basements will also be flooded with water. "I don't even know if people are entitled to FEMA," she states.

Needs, Barriers, Opportunities

There is a need to educate residents about things happening in the community, especially concerning the trash issue. Also creating that “kinship with them to create that trust and to get them to go out there and do what they need to do.” That’s a big fear for a lot of the community residents; they are afraid to speak up on their own behalf. While there are concerns with street corners and people involved in illicit activity, people “are afraid to speak; they want to stay behind closed doors.”

A variety of workshops could help the community, and more workshops need to be put in place through the gas company, as they should be leading more outreach efforts to create awareness about program services. Creating awareness of what’s happening and available for the community, especially with HACE and other non-profits, is critical because a lot of people in the community don’t even know what’s going on (Marilyn Rodriguez).

Speaking from a senior perspective, Roxanne Bell notes that seniors and people who live in facilities with disabilities are unaware of different things happening around them and of organizations that could help them with certain things they need to sustain themselves. There are a variety of different classes, but why not have more classes about how to sustain yourselves throughout periods of climate change in addition to beautifying the neighborhood and creating more general awareness?

Ms. Bell has shared about her own experience of flooding in her home and losing a lot of things. Since her involvement in HACE, team NAS, and Livability, she states, “it has opened my eyes to a whole new world, and it’s like all of my friends and people that I know that had been in the same boat or has been experiencing this, I’ve been opening up to them and letting them know, hey we got people out here that would really help us.”

Participating in a program such as the Livability Academy “also helps you to realize that there are other people out there in the community that want to make your community more livable for you and as well as for themselves and it helps to teach you the safety around your parameters too.” Roxanne notes that she gained a sense of value and a greater understanding about the quality of life in the neighborhood such as “how the security should be within your parameter”, the need for lighting in “dark and dreary” areas, along with “trees and flowers”, and making it habitable for everyone (Roxanne Bell).

Key & Notable Insights

Marilyn shared how a few years back, prior to COVID, there was major flooding in the city, and several streets were closed down close to Center City as the city itself was unprepared. She states, “We as a city need to get prepared better, not just the City people, officials, but the community at large. Like if you have to stop television, freeze it, educate everybody in one station, let's do that.” She noted that in the past, alerts were posted about alarm drills that would go off in preparation for a potential emergency at large but it never happened (Marilyn Rodriguez).

“Sometimes we have to learn to reach out to those who are more enclosed and don't get the opportunity to see what's out there for them... To really get involved and be more proficient in what the community offers and how it works, it was really an eye-opening experience for me” (Roxanne Bell)

Considering the Possibilities:

Roxanne and Marilyn have been involved in a local collective group called Die Dumping Die (D3), where they perform and talk about trash, dumping, how to clean up, and why it's important to clean up the environment. They lead local clean-up days and suggest that this sort of activity of active involvement and creative advocacy could be done across the city.

Funding opportunities could be used to expand workshops led by a collective of community residents who have been using arts-based educational methods such as theater performances to educate on what changes need to happen in the community. This would be an effort to support more creative advocacy coming from residents and expanding the work to other parts of the city while opening up opportunities for residents to discuss climate change and what they understand it to be. For residents like seniors who may not have as much means to get around, these creative environmental advocacy performances could be done locally throughout different facilities and involve food as part of a community event.

Organizations such as HACE that have the capacity for grant management of project funds for local groups doing community engagement work on the ground are critical. Small working groups, collectives, or arts-based groups do not always have the experience or capacity to apply for grants. Expanding opportunities to hyper-localized groups working with or under the organizational umbrella of a larger non-profit or community development corporation could open up new avenues to financially support grass-roots groups led by residents.

Because climate education is critical in this community, funding a climate educator to share information in the neighborhood, either internally within the organization or externally through a partnership, would be very useful. Specifically, training local residents to educate other neighbors and residents on climate issues could have an expanding impact on meeting climate education needs. A sort of “train the trainers” model of expanding education could be fruitful as there would also be an opportunity to include story-sharing and creative advocacy.

A Climate Resilience Hub could provide opportunities for youth employment as well as work for seniors. Seniors could be employed in a way that would not affect their Social Security income. It will promote getting people involved, providing them a way to contribute and not feel left out, and allowing them to feel as though they also have something to offer. Potentially having a role like “Climate Connectors.”

Contributors: Marilyn Rodriguez & Roxanne Bell

HERE 4 Climate Justice Coalition

Organization Overview

HERE 4 Climate Justice (which stands for Housing, Equity, Repair, Electrification for Climate Justice) is a coalition that brings together community organizations, home repair providers, workforce and community development partners, and climate justice groups across Philadelphia to fight for safe, healthy, affordable, fossil-free housing for all. The climate and the housing crises are interconnected, and we need solutions that address both at the same time. HERE 4 Climate Justice seeks to overcome racial and economic exclusion by prioritizing the communities most burdened by air and water pollution, severe weather, home disrepair, and the affordable housing shortage. We demand large-scale public investment in programs to repair, weatherize, and electrify hundreds of thousands of homes across Philly, along with policies to ensure affordability for working class tenants and homeowners.

Emily Abendroth is the program manager for Philly Climate Works (PCW), a project of Sierra Club PA focused on advancing equity, justice, and resilience as the foundation of a safe climate future for Philadelphia. PCW is a co-convenor and active participant in the HERE 4 Climate Justice coalition. In addition to its work in the HERE 4 Climate Justice coalition, PCW also regularly supports other clean energy, sustainability, and just transition efforts here in the city.

To that end, PCW works in collaboration with other grassroots organizations throughout the city to achieve its mission of helping to develop and implement a platform of achievable, enactable, local policies that will reduce carbon emissions while creating high quality jobs and tangible social benefits to a diverse and growing number of Philadelphians.

In her current role, Emily Abendroth works to support the mission and the expansion of the Here 4 Climate Justice Coalition by providing administrative and logistical support, alongside staff at Green Building United, to further capacitate and facilitate the work of the coalition. In participating in this interview, Emily was speaking from the space of her experiences with both PCW and HERE 4 Climate Justice, but she did not directly consult with other members prior to giving her answers, and therefore her answers do not necessarily represent a consensus of the coalition.

Service Area(s)

The City of Philadelphia

Defining Climate Resilience

As noted above, the HERE 4 Climate Justice Coalition recognizes that housing justice is and will continue to be a climate justice issue and we work to intentionally draw out that connection to both legislators and the broader public in a way that is relatable and tangible to Philly residents.

Resilience is defined as people's ability to withstand, survive, and thrive in the context of what we are all already in the midst of in terms of climate change and what we know will be forthcoming, even if we meet every climate goal that has been set across the next decade. There is an understanding that we are already in a cycle in which we are experiencing the effects of climate change and will continue to experience the effects of our shifting climate in ever-amplified ways into the foreseeable future.

Climate, Environment, Sustainability Work

As a coalition, HERE 4 Climate Justice focuses on advocacy, education, and connecting people to information and resources. It does not currently do any direct service work, although several of the member organizations that are involved do. The coalition's goal is to leverage its collective power to push for expanded funding for comprehensive home repair; reducing existing barriers that prevent people from accessing resources/support in both utilities and housing; and wide-ranging city and state-level policy changes.

Utility assistance has become an important area of focus within the coalition, recognizing that as the climate changes, air conditioning is no longer a luxury item and is, in fact, an essential public health need/issue. Advocacy for year-round LIHEAP assistance is critical, especially for vulnerable populations, as not having access to cooling can be a life-threatening condition for many people.

Needs, Barriers, Opportunities

There is a significant need overall for more acknowledgement of the barriers to participation in advocacy and self-advocacy experienced by those who are most directly impacted by the conditions we are seeking to address. This includes a distinct need to be able to pay (and more consistently pay) people for their time, contributions, and expertise. Too often, there are more people in the room for organizing/advocacy meetings who are able to be there because they are attending those meetings as part of their paid workday. The presence of these "professional" organizers/advocates is much more consistent due to the economic and institutional infrastructure present in their life that allows them to be so. In contrast, others cannot participate with the same frequency as they do not have that existing work-based infrastructure of support in order to do so, and this dynamic frequently changes the nature of the conversations and strategizing we are able to do, based on who is and who is not in the room.

Unfortunately, all too often, those who are not able to be in the room in large numbers – despite the fact that their input is absolutely essential to these efforts’ success – is those most directly impacted.

Concerning the new waves of federal funding that have recently become available for clean energy and sustainability/resilience work across the country, it is a positive feature that most of the applications for that funding require a community engagement component of some kind. However, not much is said about what that component needs to look like and little is offered to make it easier for the community to actually engage and participate in that community engagement process. More often than not, organizations must include an engagement component in their proposal to get the funding, but staffers are the only ones who are slated to get paid. As Emily notes, “They’re not necessarily in any way compensating community members for their work/input or those who are doing essential outreach to the community, and those programs would look infinitely better if they actually included that part.” She adds, “There is rarely capacitation or compensation for the engagement that’s being asked of community members, and many of the requests for input surrounding these applications come too late in the planning stages to truly determine its direction and/or objectives and are relatively surface level.”

“Part of what we need is access to city and state decision-makers who are genuinely receptive to feedback on how to make these programs as equitable and accessible as possible.” With IRA federal funds, there are relatively short federal deadlines, which limits the time for government-affiliated applicants to do more robust community engagement.

There needs to be a way for community and local groups to genuinely and meaningfully be part of those conversations. Emily describes how receiving “last minute, limited invitations on very tight timelines that we’re scrambling to meet” makes it feel like the spaces that are being opened out are actually not being opened out at a point when the entities involved are still genuinely in the midst of deciding anything. Robust community engagement should involve engaging groups from the beginning and compensating individuals to do that work

Key & Notable Insights

As residents here in the city, in the future we are likely to going to be experiencing increased flooding and higher temperatures/heat in a range of ways that require us to reimagine public transportation, to build on the sustainability and the safe stability of our homes, and to consider a variety of other solutions that are integrally connected to peoples’ day-to-day and hour-to-hour living experiences.

Considering the Possibilities:

It should be noted that Emily's suggestions below do not represent the full set of efforts/possibilities that HERE 4 Climate Justice is currently considering and working toward, but rather are a few specific thoughts regarding how the William Penn Foundation could potentially and additionally support grassroots sustainability/resilience work taking place here in the city.

One possibility is that a funding organization like the William Penn Foundation or other funding sources could financially support the formation of a paid community advisory body set up specifically to offer grounded, grassroots input and recommend projects and initiatives when needed. A community advisory body/board of this kind would be better able to respond to the varying (and frequently tight) timelines that many of the institutions, both governmental and large-scale non-profits, operate on. Such a board would be representative of a larger community network and could provide “robust consultation” as well as direct outreach to other community members when there is a need for input from the broader community – and would make such “community engagements” efforts more meaningful, transparent, and robust. Compensation would be an integral part of ensuring the success of this effort.

Using the example of Comprehensive Home Repairs, neighbors and other community members who have participated in these programs have proven to be far and away the best spokespersons for spreading word and lifting up the availability of such programs with their friends and neighbors. They are trusted third-party advocates for raising awareness and providing encouragement and instruction to facilitate the application of others. Having more outreach-based community workshops that include people who themselves have been recipients of services and could speak to the experience would be ideal.

The HERE 4 Climate Justice coalition has frequently discussed how much room and need there is for story-telling and narrative building that puts folks' daily experiences in the context of climate change and climate crisis so that those don't feel like too distant and/or wildly different things. The ways that recipients of home repairs (which often include electrification and/or solar in the context of Built to Last) discussed their prior challenges and experiences have really helped to highlight the impact of those changes on their health and well-being. When speaking of climate-readiness the individual story “lands it more and makes it feel more relevant as opposed to feeling like a large, abstract, opaque concept.” Funding could help support more ways to document those stories, better ensuring high quality images and editing in the production of those narrative stories and a wider, more effective distribution.

When it comes to monitoring the accessibility and accountability of existing programs, there could be an online “public dashboard” created that tracks progress and not only talks about the repair stories but also about people’s struggle to access these resources.

Funders could also consider a “language justice” component to their funding as there is a need for a dedicated pool of money for translation of materials into multiple languages, as organizations like HERE 4 Climate Justice and many other grassroots organizations would benefit from help/support in this realm. This could be included as part of project funds or even as a sort of “flash fund” that folks could apply to if they need translation services and do not have the in-house capacity or financial resources to otherwise do it.

The Here 4 Climate Justice coalition has continuously advocated for increased funding to home repair programs here in Philadelphia. Built to Last, a comprehensive home repair program offered through the Philadelphia Energy Authority, will continue to need more funding each year as they attempt to continue scaling up to meet the huge need for their services. As of Summer 2024, there were at least 1600 households on a waitlist for their program.

In the Philadelphia Energy Authority’s own words: “PEA created the Built to Last program, a “one-stop shop” whole home repair program, to serve Philadelphia homeowners. Built to Last brings together Philadelphia’s home repair, energy conservation, and healthy homes programs into a coordinated service package to make homes more affordable, healthier, and safer places to live. Built to Last delivers critical home repairs, health and safety improvements, and energy efficiency and clean energy improvements. Built to Last is funded in part by the PA Whole Homes Repair Program” (philaenergy.org).

Combining home repairs with electrification and pre-electrification will help our city to meet its goal of becoming more energy efficient as a city and will also improve people’s quality of life and safety. While doing home repairs, programs like Built to Last are uniquely positioned to pursue opportunities to directly electrify things in the home that already need to be replaced or are near/at an end-of-life stage; or, in other cases, they can simply lay the groundwork for pre-electrification (for example by making sure the household’s service panels are electrification-ready so that homes have the capacity to transition when possible).

Contributors: Emily Abendroth

Kensington Corridor Trust

Organization Overview

“The Kensington Corridor Trust (KCT) fosters the equitable economic revitalization of a commercial corridor and its surrounding neighborhood through local partnerships, strategic programming, and an innovative approach to moving real estate assets out of the speculative private market. Leveraging patient, flexible capital, and a long-term trust vehicle, the KCT de-commodifies real estate assets and transitions them to neighborhood control. This pioneering model of neighborhood ownership, governance, and local economic development has the potential to keep control within the neighborhood and ensure long-term affordability. The KCT introduces neighborhood-based property control for long-term, equitable revitalization of a key commercial corridor.”

KCT is a non-profit organization focused on preserving affordability through affordable housing development, supporting community-based business development on the Kensington corridor, and reducing vacancies in the area. As part of KCT’s work, the organization acquires properties on Kensington Avenue and places them into a “perpetual purpose trust.” While similar to a land trust model, the perpetual purpose trust is its own separate entity tethered to the 501c3 with a governance of community members that are democratically elected and have decision making power about how profits get reinvested back into the neighborhood. They also decide what sorts of business could be held within the Trust’s properties along the corridor, centering on collective ownership and community wealth building.

Service Area(s)

KCT works in the Kensington neighborhood, along the Kensington Avenue corridor between Lehigh Avenue and Glenwood Avenue in the 19134 zip-code. (Between the Frankford Line Train Stops: North of Somerset station and South of Tioga Station).

Defining Climate Resilience

The Trust’s programming is underpinned by strategic property acquisition, development, and activation. When defining climate resilience specific to KCT’s work, the organization considers the people that are renting the residential and commercial spaces; exploring solar initiatives, green roofs, and ways that will offset cost to folks who are actively utilizing those spaces while recognizing how expensive it is to now live in Kensington based on the average household median income for the neighborhood. The cost of living and utilities continue to rise so ways to reduce cost for neighbors and community members to help them with savings and quality of life issues is necessary.

Climate, Environment, Sustainability Work

KCT stewards a community garden space that is comprised of 11 vacant lots. It is used as a third space in the neighborhood for greening with native pollinator plants and for community neighbors, residents, partners, and stakeholders to utilize for community events and gatherings.

KCT's activities focus on restoring cleanliness and safety while attracting and accelerating businesses to provide goods and services that meet local needs and increasing job opportunities.

Significant to local environmentally focused work, the garden space has been cultivated with all PA native plants helping the natural ecosystem in the area where bees, monarchs, caterpillars, and butterflies have been emerging in this small hub. Ms. Velez notes, we are losing a lot of our pollinators in the nation, so KCT is also working to incorporate more greening initiatives into the model.

KCT is also discussing ways to help with stormwater runoff, having green stormwater infrastructure in front of garden spaces and partnering with more organizations that do this sort of environmental work. Ms. Velez notes, there are a lot of people doing environment and climate work on a micro-level which does add up.

Needs, Barriers, Opportunities

KCT is working to support business development for the community while reinvesting back into the neighborhood. Over 600 properties have been vacant in the service area, many of which are unmaintained and dilapidated. By acquiring property densely there is an opportunity to strategize ways to preserve affordability in the area, support new business, and hyper-localize work in the small area to allow for a concentration of business development and community building.

Part of the challenge of the work as Velez notes is steering away from the private developer for-profit sector model. She reflects on the question; how can the community own the real estate and the land collectively to preserve affordability as gentrification starts to seep into the neighborhood and displace people? The median income has increased which necessitates also acknowledging how much displacement has already been happening with half a million-dollar condos less than a mile away. The goal is to put real estate in the hands of community members and have them own it. Moving forward, the goal would be to support replication of the model but initiating from within the community members, rather than institutions, as a community-led initiative.

As a non-profit, funding is always a barrier. KCT's funding has been put towards the acquisition of properties. While the organization is open to expanding and moving towards building sustainably, it is very expensive to build an energy efficient building. The team is constantly seeking subsidies and trying to find ways to offset costs for the construction team who works on their buildings. KCT is prioritizing solar and greening integration into the primary work as it seeks to fulfill the mission.

Key & Notable Insights

Traditional community engagement involves a lot of volunteer work from community members. Ms. Velez notes that volunteering is great, but people should be paid for their time. KCT believes that "time is a justice issue" and prioritizes compensation for community members who are spending their time supporting the KCT – acknowledging that there are competing interests for their time (e.g., work, family, education, etc.). Compensating people for their efforts when they are supporting and advancing KCT's work is critical. Lastly, the KCT has established a consistent and paid seasonal steward for the community garden to ensure it remains cared for. While many residents have expressed a love for gardening, they often express difficulty with finding time, space, and learning opportunities. KCT hopes that with the garden and staff's continued growth, community members will be better fit to steward the space over time while expanding their gardening skills.

Considering the Possibilities:

Garden losses across the city are vast. KCT owns its garden to ensure the preservation of the green space and its long-term environmental impact. However, the acquisition of land for greening is a city-wide concern, and maintenance of garden spaces requires a lot of work. Additionally, having green spaces with adequate water sources is also a substantial issue. To ensure long-term stewardship and success of the gardens, having a reliable and a consistent water source is essential. .

Having a financial stream of support for establishing water sources and monetary incentives for the long-term maintenance of green spaces would be helpful to KCT's work and other community groups across the city.

Contributors: Jasmin Velez

Pennsylvania Department of Environmental Protection

Organization Overview

The Office of Environmental Justice at the Pennsylvania Department of Environmental Protection was established to support residents in low-income and minority communities as a point of contact while also increasing environmental awareness. This also includes redefining environmental justice by incorporating environmental considerations (such as flooding) into their EJ Screening model that only had two factors (race and income).

Service Area(s)

State-wide and in communities throughout Pennsylvania

Defining Climate Resilience

Developing and contributing new ways to detect communities at risk of environmental harm. For environmental justice it is including more environmental factors into the PennEnviroScreen, particularly flooding

Climate, Environment, Sustainability Work

The Office of Environmental Justice is broadening the scope of environmental justice by expanding their EJ Screening model. Previously focused solely on race and income, the model, now known as PennEnviroScreen, incorporates 32 indicators covering environmental and demographic factors. Recent enhancements include the integration of climate, climate change, and resiliency considerations, particularly concerning flooding issues in environmental justice communities.

The aim is to utilize PennEnviroScreen to complement and reinforce new environmental justice policies and enforce existing environmental laws. Additionally, the tool is designed for public use, aiding in identifying communities vulnerable to environmental hazards. By analyzing the 32 indicators along with climate resiliency factors like flooding, the tool provides valuable insights into areas requiring attention and support.

Needs, Barriers, Opportunities

The PADEP needs to be more culturally aware when responding to the needs of vulnerable communities. Additionally, the department should foster engagement with environmental justice communities to increase awareness and create opportunities. Another barrier is the PADEP's limited ability to enact policies and regulations.

Key & Notable Insights

The modification of the old definition of Environmental Justice from race and income, to include more than 30 criteria which reaches more rural areas than the previous definition of 2 criteria.

Contributors: Tom McKeon

Philadelphia Energy Authority

Organization Overview

The Philadelphia Energy Authority is an independent municipal authority that serves the city of Philadelphia. The services they provide are towards building a robust and equitable, clean energy economy through developing long-term contracts for energy projects, on behalf of the City of Philadelphia. PEA also runs its own consumer-facing and workforce development programs focused on clean energy.

Service Area(s)

The City of Philadelphia.

Defining Climate Resilience

For PEA, climate resilience is the ability to safely, comfortably, and affordably withstand climate impacts that are already underway, while also lessening the impacts of climate change in the future. PEA's clean energy projects and programs improve quality of life in Philadelphia and hasten the transition to clean, non-polluting energy.

PEA supports municipal, institutional, residential, commercial, and industrial sectors in the transition to clean energy with an emphasis on equity and job creation. PEA's goal is to ensure that those who are impacted most by the negative impacts of climate change are at the forefront of benefits from the transition to clean energy. PEA seeks to lessen the high energy burden (percent of household income spent on monthly utility bills) faced by many low-income Philadelphians and to ensure that Philadelphians are trained and connected to well-paying clean energy work locally.

Climate, Environment, Sustainability Work

PEA is actively engaged in numerous initiatives in collaboration with the City of Philadelphia. One such project is the Philly Streetlight Improvement Project, aimed at transitioning 130,000 streetlights in Philadelphia to energy-efficient and reliable LED lighting. Additionally, PEA oversees its own programs, including Solarize Philly, one of the largest solarization programs in the region. This initiative facilitates the adoption of rooftop solar panels by making them affordable and easy to install, benefiting thousands of homeowners, including those with limited financial means. Another significant endeavor is the Built to Last program, designed to assist low-income homeowners with comprehensive home repairs and enhancements. This initiative includes crucial repairs, energy-efficient upgrades such as heat pump installations for heating and cooling, and improvements to health and safety standards within homes.

Needs, Barriers, Opportunities

Equitable access to programs like Built to Last is essential for income-qualified residents. However, there are barriers to entry, particularly for those who require support, such as the installation of heat pumps in communities with low or no tree canopy coverage, where summer heat exacerbates conditions.

To address these challenges, there is a pressing need to expand capacity for running programs, fundraising, and refining processes. Currently, PEA faces difficulties in outreach, as the program is already over-subscribed just from word-of-mouth sign-ups. With a waitlist of more than 1,000 households, securing funds to fund construction and to hire additional staff support is crucial, as it would expedite the process and ensure more efficient program implementation.

Key & Notable Insights

Several of their programs, notably Built to Last, are founded on climate resilience principles. This involves weatherizing low-income households that may struggle to afford window replacements or roof repairs. Homeownership, particularly within communities of color, is an asset that is often lacking, contributing to the widening generational wealth gap. These programs and initiatives offer vital support for income-qualified residents, enabling them to maintain their homes and offering long-term solutions to housing stability.

Considering the Possibilities:

Leveraging homes to combat climate change helps reduce energy and carbon emissions, improves comfort and affordability for energy burdened households, and preserves homes as a critical asset for building generational wealth. In the future, PEA seeks to explore opportunities to level-up climate resilience in existing programs by installing battery storage alongside rooftop solar to provide power even in the event of a grid outage.

Contributors: Katie Bartolotta

Physicians for Social Responsibility, PA

Organization Overview

Physicians for Social Responsibility PA works organizationally to oppose fossil fuels and support building electrification as well as supporting communities that are being negatively affected by the detrimental environmental impacts of the fossil fuel industry. More generally, PSR PA's work also focuses on climate change, environmental health, violence prevention, and other health-related areas, such as the health effects of local housing conditions, mold in homes, energy burden, and documenting where emissions are coming out of heavy infrastructure.

PSR PA is a state-wide organization that works towards transitioning to a better energy system that improves the environment and doesn't harm people's health.

Service Area(s)

State-wide and in communities throughout Pennsylvania

Defining Climate Resilience

Physicians for Social Responsibility Pennsylvania (PSR PA) believes that frontline and fence-line communities experience the worst consequences of unconventional gas development and climate change. There is a need to move towards green and cleaner energy sources to protect the health of affected residents and environmental justice communities as well as to move towards sustainable energy.

"We have to all be participating in that transition," and all be able to participate in that transition.

Climate, Environment, Sustainability Work

With the leadership of a staff chemist, PSR PA has been collecting data on toxic emissions from heavy industry across Pennsylvania and supporting local watchdogs and community members in gathering data. PSR PA has done a lot of advocacy work around fracking across the West and North of Pennsylvania, where communities are experiencing health issues such as leukemia at higher rates. Pennsylvania is the #2 gas-producing state and #2 coal-producing state. Environmental concerns include efforts to put a liquified natural gas plant in Chester to ship internationally and a hydrogen hub that will extend throughout Philadelphia, as well as harms from our waste systems, including Chester's garbage incinerator and Lackawanna County's Keystone Sanitary Landfill. PSR PA has been looking at infrastructure in urban areas like the Nicetown gas plant, stating that this work affects every one of us as we all rely on these energy sources, and transitioning energy procurement from PGW and PECO from fossil fuels to renewable and sustainable sources.

PSR PA has led Community Voices interviews, which interviewed people who are experiencing harm related to their neighborhoods. The initiative not only gathers stories but also works to educate and create awareness for residents as they have found that some are unaware that they do live in environmental justice neighborhoods.

In Philadelphia, PSR PA is working with Built to Last and Drexel University to track indoor air quality in old homes pre and post-restoration. The goal is to create healthier homes and understand how the old unsafe housing stock is affecting the health of city residents.

PSR PA released a documentary interviewing 6 women who benefitted from the Built to Last program led by the Philadelphia Energy Authority. The program received funding from different sources and works to repair homes, including working to electrify when they can. This could include installing heat pumps, installing an induction stove, and installing solar panels in houses when possible (considering roof conditions). This effort highlights the need to think intersectionally about intervention efforts to solve local problems. “We have aging homes, we have energy problems, and we have, the kind of energy we are using is harming people and totally destroying our climate. So how can we have solutions to all of these problems together.” Scaling up the work and reach of the Built to Last program is a priority to continue improving the health and well-being of communities as well as reducing energy burden.

Needs, Barriers, Opportunities

Black and Brown communities have an increased likelihood of being extracted from and are targets of harmful infrastructure being put in their communities. Covanta, the largest incinerator in the Northeast, is located in Chester, where the community experiences between 3 and 4 times the national childhood asthma average. PSR PA considers the correlation of housing and neighborhood environments to children with asthma and the impact on low-income residents as well as the communities also impacted by heavy infrastructure.

Philadelphia is becoming more of an industrial hub. Some of our leaders want it to be. While we are talking about solutions, some of the proposed solutions are not helping to move us towards a sustainable energy economy. Hydrogen is being proposed for everything, which is not a helpful solution because it should be used for very specific situations, such as in agriculture and steel. We should not be moving towards putting hydrogen into our gas pipes to extend the life of natural gas when we should be moving towards cleaner energy.

Key & Notable Insights

More support is needed to get bigger audiences to advocate for some of this work. PSR PA just did a screening of the Built to Last documentary at Esperanza. Spanish translation was available, three childcare workers were present, there was food, and outreach was done beforehand. Only a few community members came. A current challenge is trying to figure out how to enable people to learn, or to figure out how people learn about things, how we can, in a culturally positive, humble, vulnerable way, make connections to enable people to show up and learn about things.

There are vulnerabilities in some communities that are not experienced to the same degree as others. Getting people to show up to learn about things is challenging, even when it's relevant to them. Everyone has a lot on them, and we are in a flurry of information. Currently, the video on the Built to Last work is available to share with the community. PSR PA welcomes opportunities to continue sharing the message.

We must consider the “time, energy, and emotion” involved in this work, the most effective ways of reaching people, learn about the issues that affect them and opportunities to access useful resources, as well as supporting local leaders who are already carrying environmental justice work forward.

Considering the Possibilities:

Education is needed to share more about climate and environmental work and the ways we can move towards cleaner energy. An opportunity to go into schools with a robust curriculum on energy and the infrastructure in our lives could be one way to expand advocacy and awareness. Figuring out how to talk about environmental change, climate change, degradation, and transitioning to better energy with children in a way that excites and empowers is important because there is some grief involved in those conversations. Several of these topics were not taught to some of the older generations. Therefore, having as many conversations as possible, thinking system-wide, and scaling discussions in and out of neighborhood, individual, and community challenges are also important.

Hiring ambassadors for schools and tooling them so that outreach would not be as difficult could be helpful. It is possible that working through schools would allow opportunities to host large parties that would essentially be integrated outreach for climate education. Events could involve engaging activities such as cupcake competitions with a climate component, climate trivia, and reading time. In general, school-based efforts would be aimed at trying to address the challenge of increasing attendance at events and understanding the limitations of asking people to take time out of their schedules to come to community meetings. Other environmental and community organizations can attend events with resources.

Funding arts-based environmental programming in schools could also be effective. Using theater as a catalyst for education, going into schools with a small curriculum about energy and health could expand conversations. Using theater-based practices, local children can write plays and explore their own experiences talking about these topics. Then, they can “activate,” having youth become leaders in these conversations. Everyone could join and lead conversations.

In Philadelphia, we can use theater to communicate with people in every sector, in local events and artistic venues, empowering Philadelphians to advocate for cleaner energy. There is a great opportunity for advocacy in Philadelphia, which is very distinct from the rest of the state. The gas commission has hearings every month, during which they are supposed to accept public comments. Individuals can advocate at these meetings and tell our gas commissioners that PGW needs to transition to network geothermal or stop existing. Part of the citywide climate advocacy would be raising concerns that PGW is not currently following or moving toward the city’s climate goals. In the city, we have the power to do that.

Contributors: Linnea Bond

Powelton Village Civic Association

Organization Overview

Powelton Village Civic Association (PVCA) is dedicated to addressing public safety and traffic concerns within its community. Through advocacy efforts, the organization tackles various issues related to development, preservation, cleanliness, greening, and maintenance. Specifically, the Quality of Life Committee prioritizes initiatives aimed at enhancing cleanliness and green spaces, such as tree planting projects.

Service Area(s)

The neighborhood of Powelton Village in West Philadelphia which also includes sections of Drexel University and the University of Pennsylvania.

Defining Climate Resilience

Resiliency is the ability to continue functioning amid changing conditions. Climate resiliency is the capability to adapt to the challenges posed by increasing temperatures, and more extreme weather conditions.

PVCA is actively involved in tree planting initiatives within their community. This effort is tied to climate resilience work because trees offer shade, which helps cool down the surrounding area.

Climate, Environment, Sustainability Work

In 2023, PVCA revised their master plan, "Connections," aiming to provide a comprehensive roadmap for community development, encompassing goals, values, and initiatives. A notable component of this plan is the "Trees and Greening" section, which underscores community priorities such as strategizing the planting and upkeep of street trees and advocating for the implementation of Green Stormwater Infrastructure (GSI) across the neighborhood.

The organization also has raised consciousness around radon and provided radon detectors for their community members.

Needs, Barriers, Opportunities

During the summer months, when temperatures soar, there's a pressing issue for residents who cannot afford air conditioning. It is crucial to prioritize the distribution of air conditioners to those in need. Another concern is the accessibility of street trees, which is hindered by the requirement of property ownership. Currently, only property owners can request a street tree and are responsible for its upkeep. This excludes long-term renters who may desire street trees but lack the authority to request them. However, a potential solution proposed in PVCA's master plan is the adoption of an "opt-out" system. Under this system, street trees would be automatically planted unless property owners choose to opt out, thereby increasing tree coverage in the community.

Key & Notable Insights

The organization helps homeowners by sharing information with the wider community. This includes details about home repairs, like weatherization, and knowing the costs and reliability of contractors. PVCA acts as a clearinghouse of information, making it easier for residents to make decisions about their homes and find trustworthy help.

Considering the Possibilities:

Tree planting initiatives in Powelton Village have the potential to significantly improve residents' quality of life. By increasing tree canopy coverage, these efforts not only reduce temperatures but also contribute to the neighborhood's visual appeal. Additionally, the implementation of Green Stormwater Infrastructure (GSI) can mitigate flooding risks, enhancing the community's resilience to climate change impacts. Furthermore, ensuring residents have access to information is essential for addressing their needs effectively.

Contributors: Dan Safer

Temple Office of Sustainability

Organization Overview

The Temple Office of Sustainability carries out the goals and initiatives presented in their climate action plan (2019) in five categories: operations, design, energy, culture, academics, and research to achieve Carbon Neutrality by 2050. Working to develop policies that promote and support environmental best practices, working with different departments and organization partners in the institution and outside. Create and implement “peer education leadership development program, primarily for undergraduates that teaches about some of these issues and also kind of trains and prepares them to be what we might call like future climate leaders.”

Service Area(s)

Temple University but intention is direct impact on the immediate surrounding community.

Defining Climate Resilience

The Office of Sustainability uses Second Nature's—a nonprofit organization that partners with higher education to accelerate climate action—definition of climate resilience.

The ability of a system or community to survive disruption and to anticipate, adapt, and flourish in the face of change.” –Second Nature

Climate, Environment, Sustainability Work

Temple's Office of Sustainability is actively engaged in implementing the 2019 Climate Action Plan. Across these areas, the office is working towards multiple goals, some of which have already been achieved while others are ongoing.

Collaborating with external community organizations such as the Clean Air Council, the Office of Sustainability is conducting a Walk Audit to evaluate the pedestrian experience and address issues of traffic violence. Additionally, they are educating Temple students about stormwater management and green stormwater infrastructure. Temple has made significant strides in reducing energy consumption in existing buildings since 2017.

To support student-led sustainability initiatives, the office has established the Green Grant, providing funding for projects that align with the university's sustainability goals and benefit the local community and environment. The Office of Sustainability works with Student Affairs to create collaborative sustainability-focused initiatives such as the Barnett Irvine Cherry Pantry, launched in 2018 to tackle food insecurity on campus.

Needs, Barriers, Opportunities

Temple's Office of Sustainability faces several challenges, including dependence on third-party utilities like PECO and PGW, which brings about cost and procedural constraints due to limitations stemming from city-wide infrastructure. Additionally, navigating the interdependencies with the city, including regulatory hurdles and funding constraints, poses significant obstacles.

Insufficient funding from the PA Commonwealth further exacerbates the situation, leading to a reactive rather than proactive approach to sustainability initiatives. To overcome these challenges, it is essential to foster collaboration and engagement among stakeholders, creating a cohesive coalition dedicated to achieving shared sustainability goals.

Key & Notable Insights

"We do teach a lot about Green Stormwater Infrastructure, and making sure that students are aware of the parts of our physical plant and campus that are dedicated or put in place because of resiliency needs." (Caroline Burkholder)

"We are really committed to working collaboratively with all different types of individuals, departments within the university itself, but then also looking at external partners." (Rebecca Collins)

Considering the Possibilities:

The organization aims to explore initiatives such as rooftop solar panel installations and community solar projects as alternative means to natural gas, fostering community asset development and energy generation. However, current legislation in the Commonwealth of Pennsylvania hinders these efforts. Addressing policy barriers that obstruct the adoption of tools like community solar is crucial for enhancing future climate resilience.

Contributors: Rebecca Collins and Caroline Burkholder

Temple University: The Gateway Center

Organization Overview

Temple University's Gateway Center is an initiative intended to help residents and people in the North Philadelphia area surrounding Temple University to better access and utilize programs and services at the University and connect to city services as well as non-profit services.

Service Area(s)

North Philadelphia area residents within the 8 zip codes surrounding Temple University. (19121, 19122, 19123, 19125, 19130, 19132, 19133, and 19140).

Defining Climate Resilience

As it relates to community development and education, enhancing energy efficiency in people's homes and weatherizing people's houses would both build climate resiliency and improve the environment.

Climate, Environment, Sustainability Work

The goal of the initiative is to promote different services and programs that people can utilize to improve their lives.

Currently, the primary focus of The Gateway Center is not sustainability or environmental work, but there is room for growth in those areas as the program is relatively new. There could be an opportunity for partnerships to connect participating residents to climate preparedness programs and services. Sustainability initiatives would be welcomed for the expansion of the program as issues related to sustainability can contribute to a person's household in certain ways.

Needs, Barriers, Opportunities

The current barrier is that the initiative is still evolving its primary scope of work. That primary needs to be much more focused on immediate quality of life issues or things that can set people up for better economic opportunities in the future. There is a need to prioritize initiatives such as workforce development and educational pathways.

More needs to be done to keep growing connections in the area, to find out what the community desires and wants, who the key players would be, whom to organize an initiative with, and the timeline of when a project can be done.

Key & Notable Insights

While sustainability is incredibly necessary, there are competing priorities. Based on previous experiences in community-based work, we can conceptualize ways of using sustainability initiatives to enhance people's interest in the primary focus of the program... For example, if residents are interested in greening, we can help them make those connections so they can get their own greening space or greening club together. That would then potentially make them more interested in other programs or classes that The Gateway Center offers.

Considering the Possibilities:

Sustainability or climate resilience work could be a gateway to connect residents to programs that Temple could offer while providing a tangible way for residents to get involved in the now. There may also be ways of partnering with the ECA to try to get people to use energy-efficient materials in their houses, like light bulbs and weatherization supplies. Other partnerships could involve CLIP, cleaning and greening the area, weatherizing people's homes, and then signing them up for The Gateway Center's core programs of workforce development and training.

In other words, climate and sustainability-related projects could be a "gateway to the Gateway."

Contributors: Antonio Romero

The Nature Conservancy Pennsylvania & Delaware Chapter

Organization Overview

“The Nature Conservancy, TNC, is a global conservation organization dedicated to conserving the lands and waters on which all life depends. TNC’s urban conservation initiative in Philadelphia promotes solutions to help absorb stormwater, planting trees to help cool cities and reduce air pollution and engaging and inspiring the next generation of environmental stewards to tackle the challenge of making cities more sustainable places to live.”

Service Area(s)

TNC works globally for the benefit of people and nature, with local chapters such as Pennsylvania and Delaware.

Defining Climate Resilience

The urban team in Philadelphia focuses on climate adaptation and resilience, which is defined as “using the power of nature to support climate-vulnerable populations to reduce the risks they experience because of climate change impacts and, in doing so, contribute to equity, justice, and well-being and foster long-term resilience.”

Climate, Environment, Sustainability Work

TNC’s urban conservation efforts include greening and nature-based solutions as a way to adapt to climate change and increase resilience. The Resilient Communities Stormwater Initiative (RCSI), funded by a William Penn Foundation Grant, looks at ways to address the multiple aspects of combined sewer overflow and the lack of green space in historically underserved and overburdened communities through green stormwater infrastructure in a way that also advances community goals. TNC has completed the first community-driven planning process in Kingessing and desires to scale this work to other places.

Through this model, TNC and the partners working on the initiative worked with the community to create a Green Vision Plan, which is a roadmap for increasing the impact of neighborhood greening by coordinating active community leaders, city agencies, and resource providers to improve quality of life, support residents in place, restore natural systems, and provide access to nature for all Kingessing residents. As part of this process, TNC and partners identified parcels with the community that would have some of the largest impacts on stormwater management and are priorities to resource and advance for the further implementation of the plan for the community.

From 2019–2021, The Academy of Natural Sciences of Drexel University, in collaboration with Drexel University College of Engineering, The Nature Conservancy, and the Tyler School of Art and Architecture at Temple University, developed a mapping methodology to identify RCSI Focus Areas for GSI implementation in Philadelphia. These focus areas were selected based on an environmental justice index (see EJ Index upload) that was developed to identify areas of the city facing the impacts of both chronic disinvestment and cumulative environmental hazards. The index included data on 21 different variables sourced from the 2016–2020 American Community Survey 5-Year Estimates, the EPA EJScreen, Open Data Philly, the Philadelphia Department of Parks and Recreation, the Philadelphia Department of Public Health, and the Philadelphia Water Department.

This index was considered alongside a hydrologic analysis of rainfall and landcover sensitivity to identify focus areas that include underserved communities and contain land parcels where GSI investments would have the largest expected impact on CSO overflow frequency, volume and, ultimately, water quality.

TNC has also released the Philadelphia Urban Heat Map to show the hottest, most heat-vulnerable areas of the city with the least amount of tree canopy. The map allows communities and city officials to make more informed decisions about where to plant and care for trees, as well as advocate for trees where they are needed most.

Currently, the majority of the funding TNC uses to implement stormwater management projects in Philadelphia comes from PWD Stormwater Grants. TNC prioritizes green stormwater infrastructure, like rain gardens (versus only gray solutions like underground storage tanks), because of the greening's additional benefits to people and nature, such as beautification, cooling, and pollinator habitat.

Needs, Barriers, Opportunities

The Nature Conservancy has been collaborating with various partners involved in hyperlocal community engagement to improve water quality and manage stormwater. More work can be done with outreach to private property owners as these properties primarily are the locations in the city where the Philadelphia Water Department is currently having the most challenges putting in green stormwater infrastructure.

There is also a need for more resources for communities related to the maintenance of green stormwater infrastructure and ongoing maintenance activities. There are a lot of risks in ensuring that the infrastructure will be maintained, looks pretty, and is not overgrown so that the community does not turn against it.

Once projects are in the ground, maintenance for trees and the stormwater infrastructure is necessary, but it is equally important to think about doing that in a way that creates viable workforce and stewardship opportunities for the community members living in those areas.

As for funding needs, TNC has a need for financial incentives for smaller projects. While there is existing funding for initiatives such as a larger PWD Stormwater Grants, there is not as much money if a community says, “We want to green this smaller space.” It is hard to do that and work with engineering firms or partners with technical expertise as the return on investment that they need to make it viable from a business sense is not currently there. Figuring out a way to bundle smaller projects or create a financing system for smaller projects in communities (in community gardens, individual lots, or smaller spaces) could be very helpful.

Key & Notable Insights

TNC’s urban conservation team desires to continue moving towards a holistic approach to the work as there is an opportunity to look beyond singular interventions to include addressing both stormwater and urban heat at the same time and getting everything under the climate resilience umbrella. Interventions for addressing heat, flooding, climate preparedness, mitigation, and prevention could be addressed together all at once.

Funded projects like the Resilient Communities Stormwater Initiative can be leveraged alongside other partner programs and funding organizations working on climate-related initiatives. For example, one initiative addresses stormwater, but there are also initiatives that are helping to support the Philly Tree Plan, heat mitigation, access to green space, and recreation. There is an opportunity to combine those and look at them as complementary so the initiatives are not siloed.

Considering the Possibilities:

Johnson would like to integrate multiple efforts to think about how greening can prepare communities for a hotter, wetter climate. Johnson recommends that funders intentionally look at multiple issues at once, as it’s okay to move beyond just one focus in terms of funding projects. He suggests, we take it all under the umbrella of climate resilience and sort of say, how could we reduce the urban heat island in these neighborhoods, manage stormwater, manage flooding, improve air quality; all of those things, and advance community goals at one time so that we are maximizing the impact that we are having and addressing multiple climate impacts, not just one at a time.

Funding that provides flexibility to The Nature Conservancy and some of its partners to serve as support, bridging that gap for those groups that feel a grant might not be accessible could be helpful to local groups that need the support and help to make sense of the grant application process. Dollars can be provided around the initial planning so that groups can get assistance preparing and submitting applications. Assuming that because a grant application exists, a community could take advantage of it without a little assistance along the way is not necessarily the case. Flexible funds could be used to provide resources needed in the community, which is not always identified on paper as what's needed.

Ensuring that community members can be equal partners in the projects, providing designated formalized compensation, and building their capacity to advocate for these initiatives on their own is necessary. Resources and grants are available through the William Penn Foundation, the City, and other foundations, but navigating through the application process is hard, even for established community groups, as they have limited time and resources to be competitive in the process.

“Flexible dollars” can also be used to fill the gaps for getting the project plans implemented and to provide technical assistance for folks on the ground so that they can access some of these resources. Some ideas include allowing funds that will be used to compensate community members working in their neighborhoods. It is important to give them the time, space, and compensation that they need (considering everything else going on in their lives) to help make those connections with different landowners and to focus on these efforts.

“There’s just so much that goes into community work that is intangible.” Having more staff capacity, more money to do more holistic climate work, and flexible dollars to help organizations become a “backbone” or “hub” for smaller groups to gain access to more resources would be helpful for community-based climate work.

Contributors: Richard Johnson

West Kensington Ministry

Organization Overview

The West Kensington Ministry (WKM) is a faith-based ministry looking to move “faith into action” in the Norris Square neighborhood in North Philadelphia. The WKM hosts a variety of activities, including ongoing food distribution, youth programming, art workshops, and ceramics classes, and has a small recording studio. The ministry also supports advocacy work and other community-led initiatives, such as efforts focused on voting, anti-violence, immigration reform, and reform of the criminal justice system, and has opened its space for local concerts, rehearsals, plays, and community meetings.

The West Kensington Ministry also collaborates with partner churches from the surrounding suburban areas (Bryn Mawr, Abington, Ardmore, Chestnut Hill, Neshaminy, and Gladwyne) as they seek to support local activities and engage with the local community through special events.

Service Area(s)

The West Kensington Ministry services the residents of the Norris Square community (predominately 19122 & 19133 zip codes) as well as residents from Kensington and around North Philadelphia.

The community the WKM serves is intergenerational, focusing on youth programming and serving other groups such as middle-aged single moms taking care of their children and grandchildren, single middle-aged men (many of whom are justice-impacted individuals), individuals with mental health conditions, residents with disabilities and the senior citizen population who primarily comes during food distribution days.

Defining Climate Resilience

“Last summer was really hot, and we had to cancel a few days because we don’t have air conditioning in our church.” Small spaces have window units, but the larger space used for larger community gatherings can’t be used as you can only do so much with fans to cool the space. Although the location will be getting air conditioning units, the reality of increased heat and global warming really hit. “It really dawned on us how it’s getting hot, and we need to address that.”

Climate, Environment, Sustainability Work

The West Kensington Ministry serves as part of the Friends of Norris Square Park group, participates in planting trees and monthly clean-up of the park, and has been supporting the preservation of green spaces and gardens in the area in collaboration with partners and local organizations.

The Norris Square Park group has planted about 80 trees in the park and around the neighborhood since 2023 with the support of the Tree Tenders.

The WKM is also interested in supporting more air quality advocacy work and recently welcomed the installation of a purple air monitor as part of local air quality awareness efforts.

The WKM has also been a part of advocacy work to report and draw attention to the issue of dumping in the area. A lot of development is also happening in the area, which has led to the short dumping of construction debris in empty lots. Pastor Mairena has actively worked alongside neighbors to report dumping and clean up lots, consequently leading to them being fenced and maintained.

Needs, Barriers, Opportunities

A barrier to local environmentally conscious work is “not even knowing where to begin. Do resources exist?” Is there a resource that provides insight on “the state of air in Philadelphia neighborhood by neighborhood?” Something similar to reports provided by foundations on the state of the city. Awareness and education are needed in addition to providing resources.

“There is a high concentration of children with asthma in our community... A barrier is a lack of knowledge. Where are we in terms of climate quality in our neighborhood?”

“The first barrier is awareness and education. We don’t know what we don’t know. We don’t know what the quality of our air is in our neighborhood compared to other neighborhoods.” Because the area used to be an avenue for industrialization on American Street, there is a need for knowledge concerning present environmental conditions.

Once projects are in the ground, maintenance for trees and the stormwater infrastructure is necessary, but it is equally important to think about doing that in a way that creates viable workforce and stewardship opportunities for the community members living in those areas.

As for funding needs, TNC has a need for financial incentives for smaller projects. While there is existing funding for initiatives such as a larger PWD Stormwater Grants, there is not as much money if a community says, “We want to green this smaller space.” It is hard to do that and work with engineering firms or partners with technical expertise as the return on investment that they need to make it viable from a business sense is not currently there. Figuring out a way to bundle smaller projects or create a financing system for smaller projects in communities (in community gardens, individual lots, or smaller spaces) could be very helpful.

Key & Notable Insights

“Once you know what you don’t know, then... how do we address it in terms of something culturally appropriate? And not just culturally in terms of ethnicity but culturally in terms of, ...how do you even break down something this complex and confusing to like a middle schooler? What would a middle schooler care about planting a tree when we are competing with TikTok?”

There is an intersectionality between climate work, economy, safe green spaces, and preservation. Programs could focus on best using green space not solely to enjoy it but to improve quality of life.

Considering the Possibilities:

In discussing the intersectionality of climate and neighborhood conditions, Pastor Mairena suggests that a possible project in the area could involve educating our youngsters about the value of a tree and connecting it to the importance of green canopy in the summer. He suggests going beyond taking youth to merely plant a tree but showing them how a tree canopy could make the area cooler, which could lead to more time to play outside.

For the West Kensington Ministry, the church and organization are made up of community residents. Knowing what questions to ask and having a go-to expert on-site or accessible as needed who knows about climate issues, urban heat, the history of development in the area, environmental injustice, and best practices of healthy communities could be very helpful.

Once the community members know what they need and understand what affects them most in terms of climate resiliency, a staff person or expert could help tailor a program fitting to the local context. This could be based on gathering resident feedback through the gathering of stories, interviews, or surveys.

A dream for pastor Adan would be to have after-school programs in the park. For example, he states, imagine having tables and chairs, art supplies, easels, and leading activities outdoors. The program could have a professional artist, children painting outdoors around the tree with easels with a professional artist teaching them how to paint the tree, and at the same time, they're learning what kind of tree it is. Integrating the use of technology in programming could also be beneficial to youth-based climate work in the area. Using technology to take inventory of local trees could be useful with the support of an intern.

Contributors: Pastor Adan A. Mairena

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HACE

HACE Livability Academy

Here 4 CJ

Kensington Corridor Trust

Pennsylvania Department of Environmental Protection

Philadelphia Energy Authority

Physicians for Social Responsibility, PA

Powelton Village Civic Association

Temple Office of Sustainability

Temple University: The Gateway Center

Then Nature Conservancy

West Kensington Ministry

ABOUT CSC

The Center for Sustainable Communities (CSC) at Temple University conducts integrated research on social, environmental, and technological systems to address sustainability challenges. It aims to develop equitable, innovative, and practical solutions that protect the environment while meeting local and global needs. The CSC leverages the expertise of Temple faculty to conduct solutions-oriented, transdisciplinary research that bridges society and policy. The CSC focuses on understanding and addressing pressing sustainability challenges and facilitating academic contributions to societal transitions toward sustainability. This research enhances Temple's environmental capabilities and supports high-impact, transdisciplinary initiatives.

CSC contributes to transdisciplinary initiatives in areas such as:

Sustainable Cities and Communities: Planning for climate adaptation, smart city technologies, green infrastructure benefits, and inclusive community partnerships.

Health and Well-being: Reducing vulnerabilities to extreme heat, exploring the effects of green spaces on mental health, and addressing environmental racism.

Inequality and Economic Growth: Examining how land tenure policies impact land access, environmental degradation, and income inequality.

Responsible Consumption and Production: Enhancing benefits from nature while ensuring sustainable food, fiber, and fuel production.

Geospatial Analysis: Utilizing GIS, remote sensing, and spatial data for sustainability solutions, supported by the Spatial Analytics Lab (SALT).

Community-based Research and Policy Analysis: Linking human-environment research with society and policy through participatory approaches and collaboration with decision-makers.

AUTHOR BIOS



Naida Elena Montes is a Ph.D. graduate from the Department of Geography and Urban Studies (GUS) at Temple University. She is a Philadelphia native with experience working in the field of Community Development and with Out of School Time (OST) youth programs. Her years working at the Community Economic Development office at the Asociación de Puertorriqueños en Marcha motivated her to seek more expertise and advance her knowledge as it relates to a wide range of housing, environmental, economic, and social issues resulting from social and political challenges in the urban landscape. She has led outreach initiatives addressing issues of neighborhood stability, zoning, greening, nutrition and health, resident engagement, education and employment access, housing development, and community revitalization. Teaching English with ESL of America and working as a Youth Mentor at Xiente (formerly the Norris Square Community Alliance) has also been a highlight for Naida in recent years.

Naida's academic research examined the theoretical and historical connections between urban landscapes, health, and socially constructed environmental inequities. She is particularly interested in how the varying elements of our urban landscapes are influenced and informed by histories of marginalization and discrimination, and in improving the methodologies that can be used to pursue community-engaged research. Her work seeks to amplify residents' voices, keeping the residents' human experience at the center of knowledge production while establishing the home as a critical scale of analysis within the discourse of the Environmental Justice Movement. Naida has also worked as a research assistant and consultant with Temple University's Center for Sustainable Communities and has taught as an adjunct professor at Temple University and Esperanza College.

While Naida holds a master's degree in International Development from Eastern University and has dedicated time serving abroad in places such as Equatorial Guinea and Costa Rica, she is proud to call Philadelphia home and has continued to focus her efforts serving the communities of North Philadelphia.

AUTHOR BIOS



Alisa G. Shockley is a Provost Postdoctoral Fellow in the Department of Family and Community Health at the University of Pennsylvania's School of Nursing. She holds a Ph. D. in Geography and Urban Studies from Temple University located in Philadelphia. She researches the intersections of environmental justice, firearm violence, trauma and place. She is currently working on journal publications based on her doctoral dissertation, *Co-victims of Gun Violence: How Black Women Navigate Spaces of Trauma*, and two separate research projects on urban greening initiatives and youth participation.

Sarah Heck is a scholar and educator specializing in the interdisciplinary field of human and environmental geography. Currently affiliated with the Center for Sustainable Communities within the Department of Geography and Urban Studies at Temple University, she serves as a postdoctoral fellow, fostering critical inquiries into critical social infrastructures and their implications for human and environmental well-being. Dr. Heck received her Ph.D. from Temple University where her dissertation titled



"Sustainable Futures, Water Infrastructure Legacies, and Racial Capitalism: A Case Study of the Mid-Mississippi River Region" explored the complex interplay between geographical landscapes, socio-ecological systems, and the uneven socio-political dynamics that shape them. Currently, Dr. Heck is working on an interdisciplinary project envisioning public schools as critical social infrastructure for sustaining community well-being during and beyond the COVID-19 pandemic.