



# Lower Price Hill: Ohio's First Climate Safe Neighborhood

Ensuring equity and inclusion in city-wide climate change adaptation planning

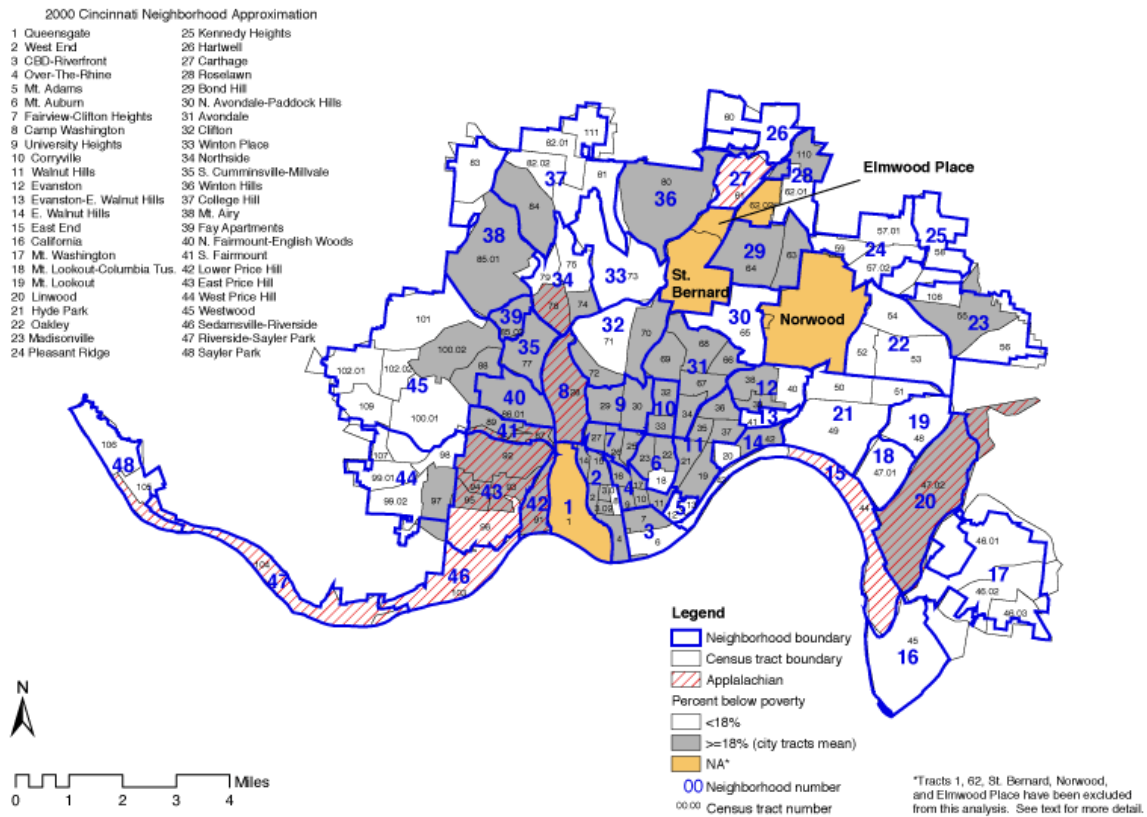
Groundwork Ohio River Valley  
September 14, 2021

## Neighborhood Profile: Lower Price Hill

Lower Price Hill is a small neighborhood west of downtown Cincinnati. Bordered by the Ohio River to the south and Mill Creek to the east, Lower Price Hill has always been a tight knit community that has persevered through myriad challenges. During WWII, increased manufacturing resulted in large populations of Appalachians and African Americans migrating to Lower Price Hill and the Mill Creek Valley to fill job vacancies.

Figure 6

2000 Cincinnati City Appalachians and Areas of Poverty



## Urban Appalachia

Cincinnati is not included in the ARC’s geographic definition of Appalachia. Despite this lack of federal designation, studies indicate Cincinnati is home to thousands of Appalachian migrants and descendants who slowly migrated to the city from the mountains of Kentucky and Tennessee in search of employment. The migration of Appalachians was primarily driven by the mechanization of extractive industries, such as mining, that pushed them away from their homes and pulled them towards urban centers where there were employment opportunities for low-wage workers. The 1930s and 1940s saw the greatest increase in the Appalachian population in Cincinnati. Increased manufacturing during and post-WWII resulted in large populations of Appalachians and African Americans settling into the Mill Creek Valley, including Lower Price Hill, to fill job vacancies.

The 2000 Greater Cincinnati Survey found that first and second generation Appalachians make up 20% of Cincinnati’s

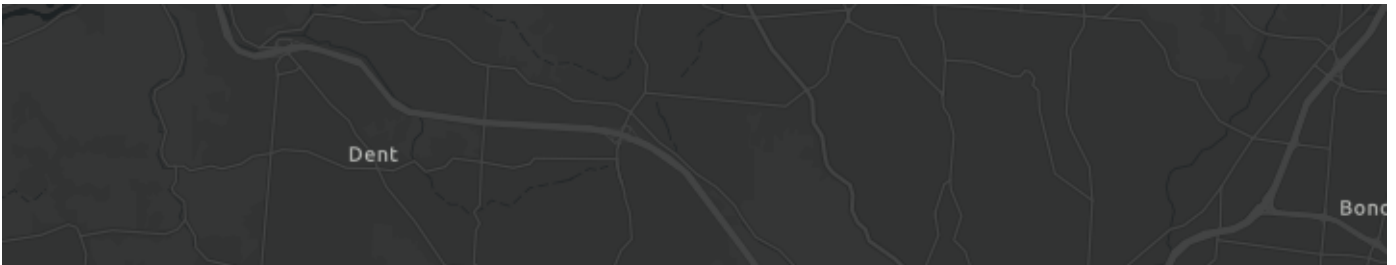
population. Lower Price Hill, Camp Washington and other Mill Creek Valley neighborhoods remain Appalachian enclaves. Today, the Lower Price Hill neighborhood is 60% White, 33% Black/African American, and 5% Hispanic or Latino.

**Table 5c**  
**Cincinnati Appalachian Neighborhood Populations, 1970-2000**

Neighborhoods	Population			Change 1970-1990	Change 1990-2000
	1970	1990	2000		
Camp Washington	3,117	1,847	1,611	-41%	-13%
Carthage	3,291	2,496	2,412	-24%	-3%
East End	4,878	2,424	1,663	-50%	-31%
East Price Hill	20,665	19,492	18,091	-6%	-7%
Linwood	--	1,200	1,089	--	-9%
Lower Price Hill	3,167	1,576	1,182	-51%	-25%
Northside	12,301	10,527	9,415	-14%	-21%
Riverside - Saylor Park	--	1,407	1,530	--	+9%
Sedamsville - Riverside	3,922	2,614	2,144	-33%	-18%
South Fairmount	6,123	3,879	3,360	-37%	-13%

*(Source: Shaw, Thomas. 2001. "The Greater Cincinnati Survey, Project Report for the Urban Appalachian Council," Institute for Policy Research, University of Cincinnati).*

Background: Appalachian populations and areas of poverty by Cincinnati neighborhoods. Note that Lower Price Hill (#42) is indicated as Appalachian and  $\geq 18\%$  below poverty (*Source: Maloney, Michael and Christopher Auffrey. 2013. "The Social Areas of Cincinnati: an Analysis of Social Needs," fifth edition*).



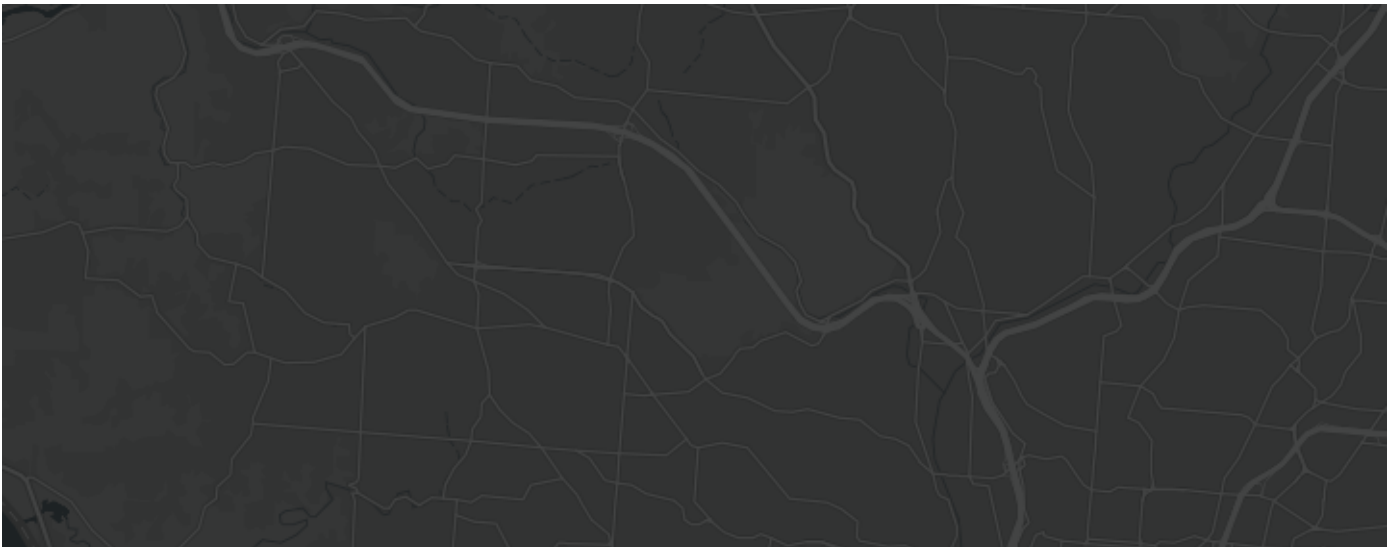
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## **Economic Challenges and Industrial Legacy**

Since WWII, Lower Price Hill has consistently seen a low median income, high unemployment rates, as well as low education attainment. The relationship between industrial neighborhoods and education achievement has been studied by several researchers, many concluding that “in industrial urban areas where most jobs require technical skills, this lack of formal education may effectively close the door to higher occupational achievement” (*Philliber, William W., Clude B. McCoy, and Harry C. Dillingham. 1981. "The Invisible Minority: Urban Appalachians," University Press of Kentucky, p. 155*).





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## **Industrial Legacy & Community Health**

The industrial legacy of the Mill Creek Valley has had a deep impact on Lower Price Hill and its residents. In 2004, Queen City Barrel, a 77-year-old industrial recycling company in Lower Price Hill caught on fire. The fire led to soil contamination in the community and exacerbated the existing severe air pollution, which has caused major health issues for residents.



*The Queen City Barrel fire of 2004 (Source: Doug Baker via [www.cfdhistory.com](http://www.cfdhistory.com)).*



## **Respiratory Hazards**

Residents in Lower Price Hill face higher risks to their respiratory health from outdoor air pollution, with the neighborhood having a higher rate of harmful air toxins and emissions, (54%) when compared to the city as a whole (47%). The neighborhood is among the highest in the city for lifetime

cancer risk caused by the inhalation of cancer-causing air toxins. Lower Price Hill also has of the highest rates in diesel particulate matter in the air. These issues can be attributed to the neighborhood's industrial legacy. Lower Price Hill is directly adjacent to the Queensgate Hump Yard, one of North America's largest rail classification facilities. It is also surrounded by several industrial neighbors, including the nearby foundry, concrete production facilities, steel fabricators, and chemical manufacturers.



*The CSX Queensgate Railyard, one of North America's largest, lies directly to the east of Lower Price Hill Contributing to air contamination (Source: Travis Estell, [CC BY-NC-SA 2.0](#), via [flickr.com](#)).*





## **Building from Previous City & Neighborhood Plans**

The *LPH Resurgency Plan* was foundational to the climate engagement in LPH. The *Plan*, approved by city council in 2019, is a comprehensive plan to create an LPH that serves its residents- focusing on housing, local shops and services, clean and green, recreation, and safety. This allowed for a detailed understanding of resident priorities and the opportunity for in-depth environmental and climate engagement.





*Houses and apartments in Lower Price Hill (Source: Scott Gafvert, 2020)*

## **Lower Price Hill's Equity Advisory Group**

The Equity Advisory Group was created in partnership by the City of Cincinnati Office of Environment and Sustainability, Green Umbrella, & Groundwork Ohio River Valley. The EAG was designed as a focus group to execute Climate Safe Neighborhood's three goals:

1. Engage residents in conversations about climate change concerns and adaptation methods unique to their neighborhoods, arming them with the knowledge to advocate for resources.
2. Raise awareness of the relationship between a neighborhood's history and current climate-related issues.
3. Strengthen the City of Cincinnati's climate planning process by creating neighborhood-level climate resiliency plans that prioritize community voices and needs.



*Screenshot from one of the six EAG Zoom Meetings, 2020*

## **Recruitment & Outreach**

Due to Covid, recruitment and outreach were limited to mainly online networks and some flyering in the community.

Groundwork sent flyers and position descriptions to numerous organizations that are anchored in the community, who sent them out to their resident networks. There were 11 members of the Lower Price Hill community that joined the EAG, all from a variety of different races, ages, and economic backgrounds.



## **Planning for Climate Resiliency**

There were 6 bi-weekly meetings consisting of facilitators, note-takers, and participants, each meeting building on the information from before. In between meetings, the participants completed a variety of work, including surveying their neighbors, finding resources to complete mitigation projects, and readings. There were three steps in the process of planning for Climate Resiliency: establishing a vision for neighborhood resiliency, identifying community concerns, and mapping adaptation strategies.



*A group of residents meeting in one of Lower Price Hill's existing community gardens (2020)*



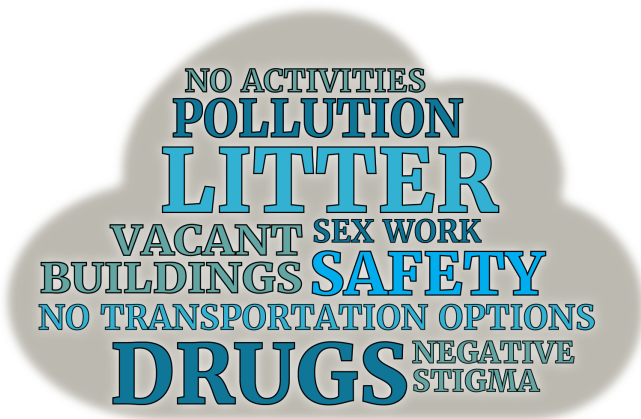
## **Establishing a Vision for Climate Resiliency**

At the first meeting, the facilitators and the participants came to a common understanding of resilience, vulnerability, inclusion, and equity that served as the foundation for the rest of the meetings. The EAG created a Resiliency Statement as a guiding vision for the group and its work. EAG members edited the statement over the course of the meetings as new information became available:

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“A Lower Price Hill that rises together to overcome climate change, oppression, inequalities and adversity by promoting resilience, empowering and uplifting each other, being counted in the choices and resources for the well being of our neighborhood, and being seen and heard as valued citizens of the city.”

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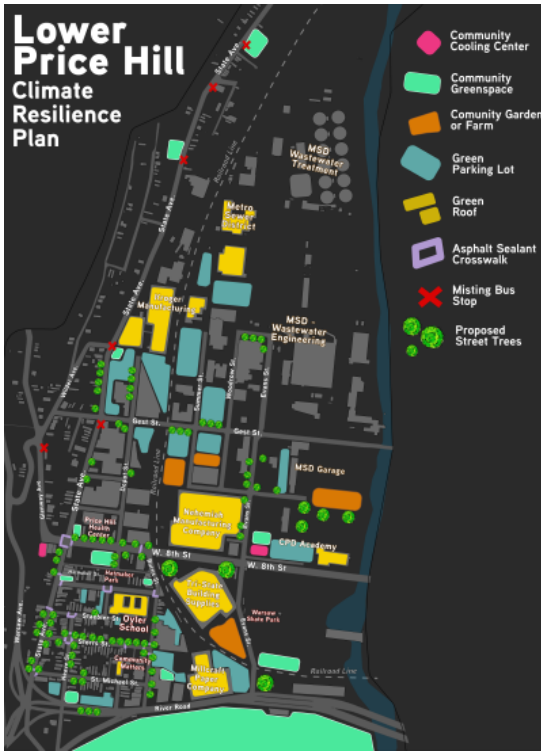


## Identifying Community Concerns

Residents were asked what the biggest issues in their community were, as well as what they wanted to change about their neighborhood. After a group discussion with the EAG, residents were tasked to ask their neighbors the same questions and record their answers. Their responses were used to form a word cloud. The bigger and bolder the word appears, the more often it was mentioned during this exercise. Though some of the concerns people had were not immediately aligned directly with environmental issues, many could be associated with the environmental justice movement.

## Mapping Adaptation Recommendations

Throughout the process, members discussed the history of Lower Price Hill, residents' contemporary priorities, as well as how climate change disproportionately impacts the neighborhood. Community members were introduced to a variety of nature-based and infrastructural solutions that would



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adapt LPH to the threats of climate change. During the fifth meeting, partners from the NAACP, Keep Cincinnati Beautiful, Community Council, and Ohio River Trail West were invited to see how their work aligned with the EAG's climate plan. Community members were introduced to a variety of nature-based and infrastructural solutions that would adapt LPH to the threats of climate change.

After a discussion on what can be done to reduce heat, flooding, and air pollution, residents were asked what environmental improvements they would like to see be made to the North

and Northwestern parts of Lower Price Hill through a mapping exercise. They mapped the rest of the neighborhood at home. Vacant and underutilized lots were highlighted as areas to focus on.

## Climate Change Adaptation Strategies

## **Increasing the Neighborhood Tree Canopy**

LPH has a tree canopy of 6%, one of the lowest in the city. Trees and plants are one of the most popular solutions because they provide so many benefits and can be used creatively in different places. They filter the air naturally by breathing, reduce temperatures by providing shade, and absorb water through their roots. When they provide shade, they reduce energy costs caused by cooling. Trees are also known to increase property values, improve mental health, and also reduce noise pollution. Additionally, trees provide habitat for birds and flowers to pollinate and help the environment that way.

EAG Members recommended trees planted throughout Lower Price Hill, primarily along State Street as well as in the southern residential core of the neighborhood. By planting trees along major thoroughfares, shade would be provided to pedestrians and cool down pavement. Additionally, LPH residents spend 7.5-10% of their yearly income on energy costs- anything above 6% is considered energy poverty. By shading these buildings, energy costs will be reduced.



## **Misting Bus Stops and Cooling Centers**

Much like the mist that keeps produce cool in supermarkets, this concept is used in China for overheated commuters waiting at train and bus stations. Using mist or water vapor to spray overhead for passengers helps prevent overheating and sickness from high heat.

Community Cooling Centers are pre-existing, air-conditioned public spaces that are temporarily set up to deal with high heat and heat waves. EAG members identified two locations that are in need of cooling in both the east and west sides of the neighborhood..

## **Asphalt Sealant Crosswalk or Intersection**

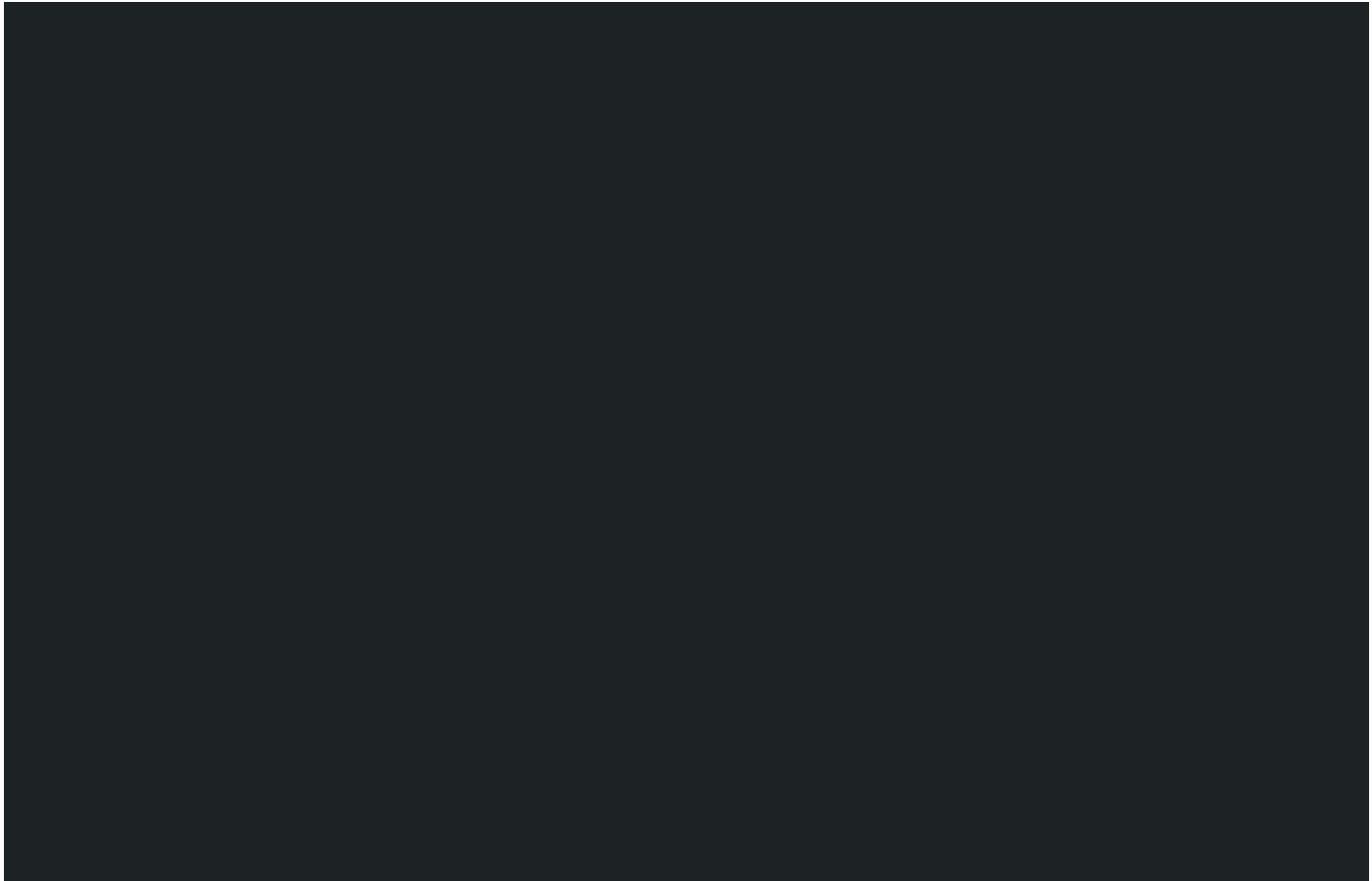
Asphalt sealant is a special layer on top of pavement on the road or on a roof that can reduce heat by 11-13 degrees. Crosswalks were identified as places to lay asphalt sealant so that pedestrians would walk on cooler surfaces.

## Community Greenspaces

Currently, Lower Price Hill has four public green spaces, including two community gardens. Residents would like to see an increase in public green spaces, including: community gardens, forests, pollinator sanctuaries, and more. While adding public green spaces would decrease Cincinnati's carbon footprint, it would also preserve land surface in Lower Price Hill, preventing more developments that would increase the urban heat island effect in the neighborhood. Rain gardens are mainly used for reducing stormwater, and are best utilized in areas where stormwater typically pools, allowing plants to absorb water before it enters the sewer system. These were used in the mapping activity but should be considered in green spaces where stormwater issues occur.

Community Gardens and Urban Farms bring fresh fruits and vegetables to residents who may be living with food insecurity, with 48% of residents on SNAP benefits. Lower Price Hill is considered a food desert due to geographical and transportation barriers to access to healthy foods. There are no fast food chains, large grocery stores, or franchise convenience stores located in Lower Price Hill. However, residents have taken the initiative to change these conditions with the opening of Meiser's Fresh Grocery & Deli, a farmer's market that offers fresh fruits and vegetables, meats, and basic cooking supplies. Currently, there is a community-centered grocery store opening in LPH, by Your Store Queen City. There is also Community Matters' Price Hill Community Garden. Residents would like to see more urban farms added to the neighborhood. Adding more community gardens and the creation of an urban farm

will have numerous positive benefits, including: provide more access to fresh food; increase the green space percentage in the neighborhood; connect residents and youth to volunteer opportunities, to the soil but opportunities, and with each other.



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### **Green Parking Lots**

While green parking lots are mostly used as stormwater mitigation solutions, they also reduce the urban heat island effect by adding even more greenery to the neighborhood. Lower Price Hill has over a dozen parking lots. EAG members identified almost every single parking lot as a space they would like to see green parking lots.

### **Green Roofs**

The roofs on top of houses, business and apartments are opportunities to have gardens and solar panels installed to reduce heat, air pollution, and energy bills. Wherever possible,

green roofs or solar panels should be installed. EAG members identified Oyler's Roof, Kroger Manufacturing, Nehemiah Manufacturing, Cincinnati Police Department Academy, Millcraft Paper Company, and the Municipal Sewer District campus has rooftops to install green roofs or solar panels.



## Implementation

Groundwork has been working to implement the additional trees and green spaces recommended by the residents. As of September 2021, Groundwork has assisted the Community Council in receiving a Community Budget Request for Street Trees in LPH, which will add 40 trees to the neighborhood. Groundwork has also started work on transforming the Burns Street lot, thanks to the generosity of property owners Albert & Carla Lang. This space will include fruit trees, native trees, native pollinator beds, benches, and artwork. To install the solutions, Groundwork hires youth and young adults from underserved neighborhoods in the [Green Team](#) and [Green Corps](#) programs.

Recently, Groundwork started working with the Cincinnati Children's Hospital to install a particulate matter sensor throughout the neighborhood. This will allow for a better understanding of air pollution in the neighborhood, in turn, allowing for targeted mitigation strategies. While Groundwork will continue to seek funding and work with property owners to make LPH a climate-resilient community, they will also continue to work with OES to develop new engagement methods for the Green Cincinnati Plan that ensure equity is the focus in coming years.



*Groundwork Ohio River Valley employees during a community tree planting (2020)*

