

Where Justice and the Environment Meet



GROUNDWORK

Ohio River Valley



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Ohio River Valley

Groundwork is where justice, equity, and the environment meet. We expand human connection to urban nature to communities left behind by the environmental movement through stewardship opportunities.



Green Team Program



- Paid high school green workforce program
 - Ages 14-18
 - 18+ Youth Leader
- Environmental education + career preparedness
 - Networking opportunities
 - Travel opportunities
- Hands on Environmental Justice
 - Natural habitat restoration
 - Plant identification
 - Gardening
 - Trail building

Green Team Outcomes



- General career preparedness, intro to many green careers
- Environmental education
- Provided opportunity for personal growth and development

Green Teamers community spaces at the Green Learning Center



In their own words...



Yellowstone Experience

Green Team Experience



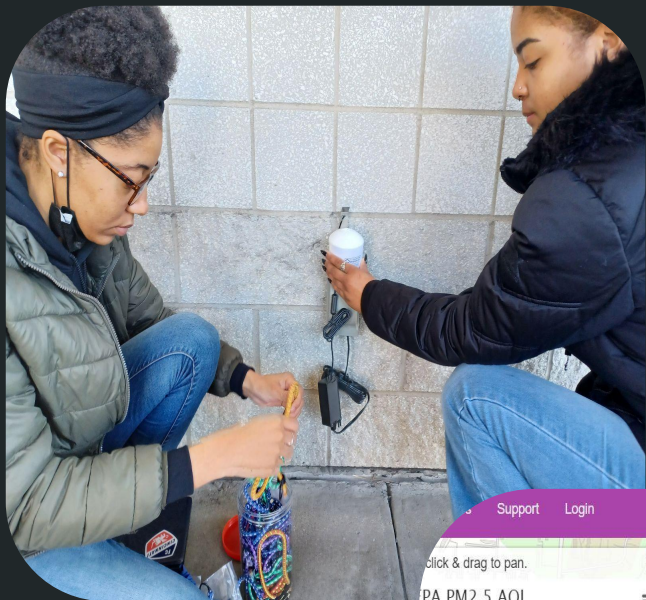
Green Corps Program

- Young adult green workforce program
 - Ages 18-28
- Higher skill, more intensive



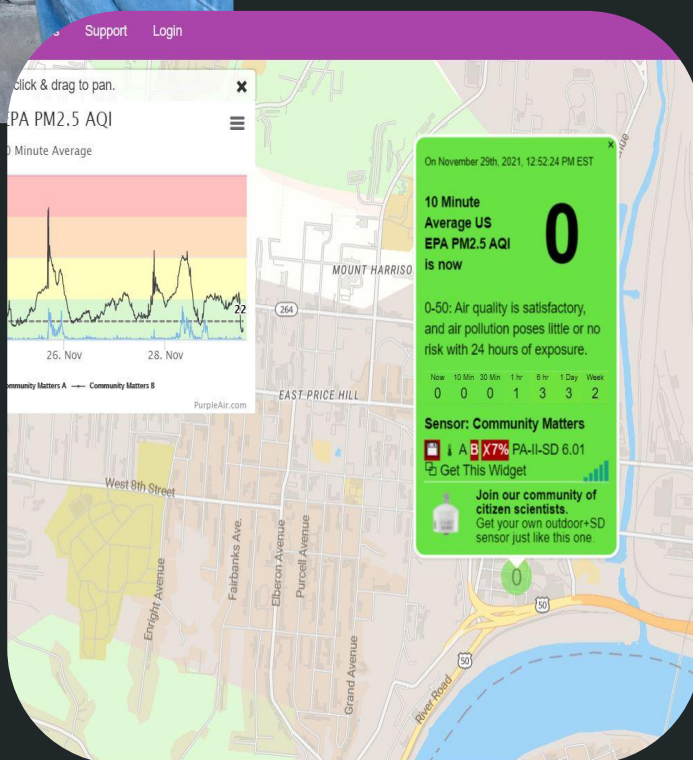
Anthony learns how to use a trencher in the building of an urban orchard

Air Quality Monitoring Project



Funding from the EPA to monitor air quality in Cincinnati

- Neighborhood Monitoring
- Resident Monitoring
- Green Team Monitoring



Project Description

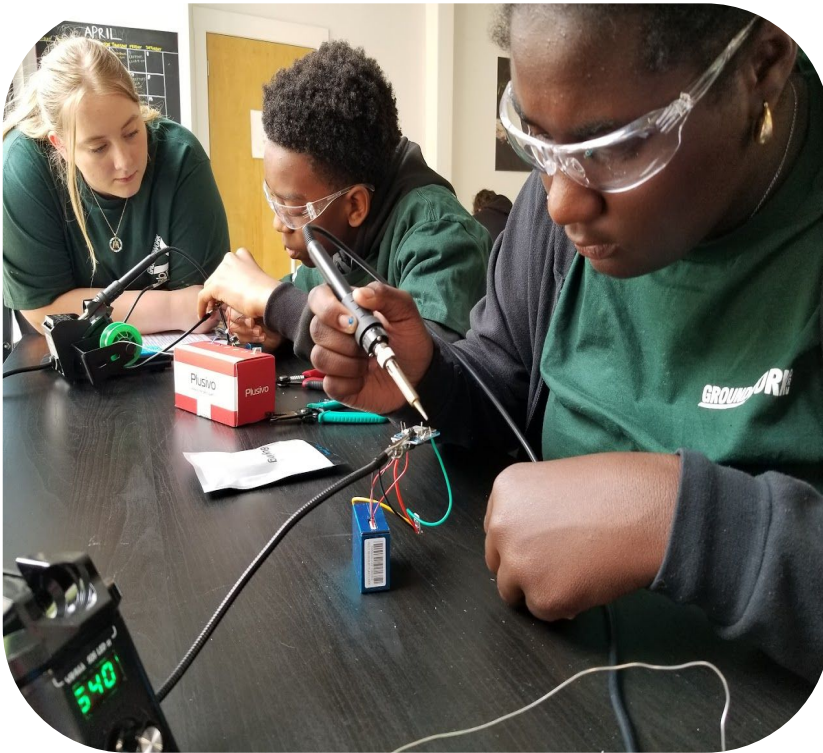
This community-driven monitoring project will compile neighborhood and individual-level air toxin exposure rates and use this data to advocate for mitigation efforts.

- Train 320 youth employees and 50 neighborhood residents on Air Quality Monitoring techniques and air pollution health education
- Data collected will be used to pursue funding for air quality mitigation efforts and other green infrastructure projects desired by residents



Youth Air Quality Programming

- Mobile Air Quality Routes
- Building Air Quality Monitors
- Health Education
 - PM2.5



Project Goals

- Establishment of programs that assist in residential air pollution mitigation
- Resident data collection
- 12 months of data evaluating
 - rates of exposure in residential areas will be compiled, analyzed, and made available for public use in a publicly available online dashboard
 - Data and monitoring efforts are adopted by city government as part of the Green Cincinnati Plan, helping to dictate policy



Water Quality Project

- Water quality monitoring team for college students and the Green Corps
- Collect data at 4 sampling sites on the Little Miami River

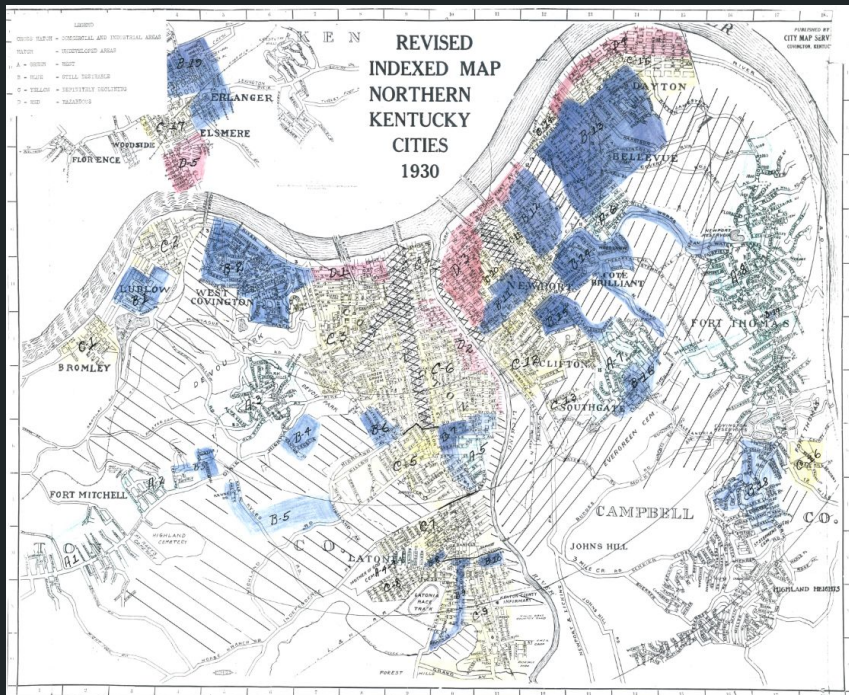


A map of Cincinnati, Ohio, showing various neighborhoods. The map is overlaid with a color-coded risk assessment, where red and orange areas indicate higher risk and blue areas indicate lower risk. The Ohio River is visible on the left and bottom right. Neighborhoods labeled include Groesbeck, North College Hill, White Oak, Reading, Kenwood, Madeira, Dent, Bond Hill, Norwood, Cheviot, Lafayette Terrace, Corryville, Cincinnati, Ludlow, Covington, Fort Thomas, Villa Hills, Cincinnati-Northern KY Int'l Arpt, and Fruit Hill. A white horizontal line is positioned below the main title.

Climate Safe Neighborhoods

Equity and Engagement in Climate Planning

Climate Safe Neighborhoods

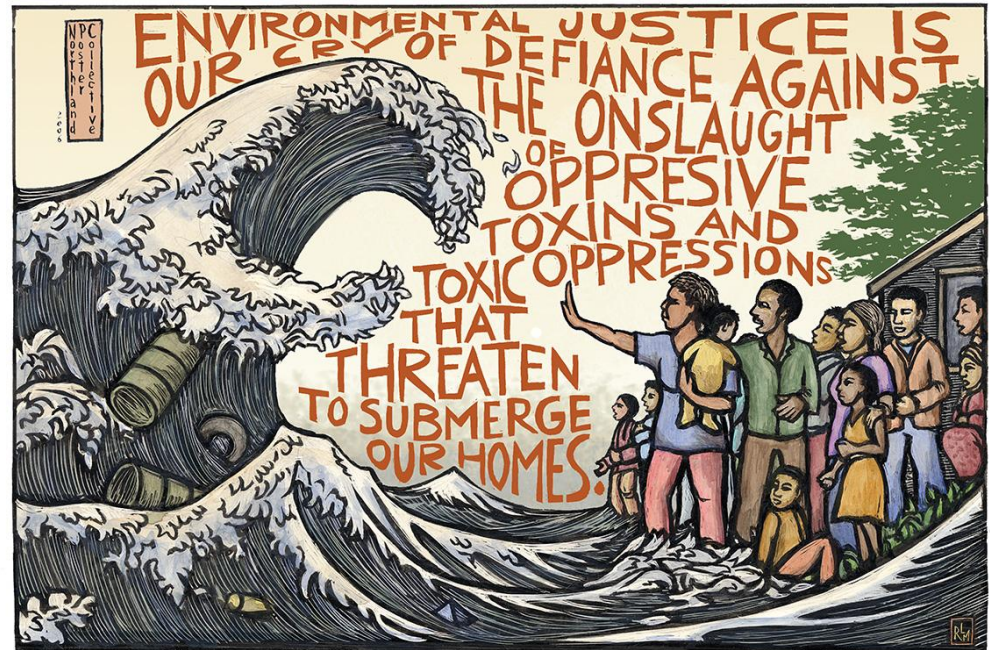


A national effort to identify neighborhoods that are more vulnerable to the effects of climate change because of racial and social injustices, spread awareness and educate residents in those neighborhoods, and ignite action towards climate resilience.

Redlining map for Northern Kentucky

What is Environmental Justice?

A social movement to address environmental injustices in which marginalized communities have been harmed by hazardous waste, air pollution, climate change impacts, resource extraction, and/or land uses from which they don't benefit.



How is GWORV addressing environmental injustice?

Climate Safe Neighborhood: Goals

1. Explore and communicate the relationship between the climate crisis and institutionalized racism.
2. Support the capacity of residents to self-advocate for more equitable distribution of resources.
3. Develop and implement short-term mitigation measures for extreme heat and flooding.
4. Impact policy to prioritize equitable climate resiliency.

Some things to know:

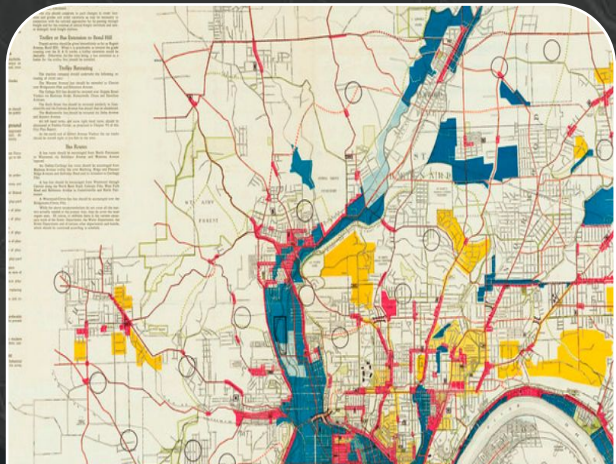
- Effects of climate change are not being felt equally
- Historic policies have targeted certain neighborhoods for disinvestment and fewer amenities
 - National studies on zoning and redlining show that neighborhoods were disinvested in because of their race and income
- Areas historically targeted for disinvestment are hotter and wetter
 - More impervious surfaces, fewer trees, less access to air conditioning
- Extreme heat causes more deaths in the U.S. than all other weather-related causes combined, according to National Oceanic and Atmospheric Administration (NOAA), with the effects more pronounced in urban areas



Roots of Environmental Injustice in Cincinnati


Segregation in Cincinnati's neighborhoods: A brief history

CSN Timeline



Identify Vulnerable Neighborhoods

- Gathering geospatial data
- Evaluating neighborhoods using EJ Screen online tool



Climate Advisory Group Meetings

- Climate change education
- Mapping activities
- Climate Resiliency Plan

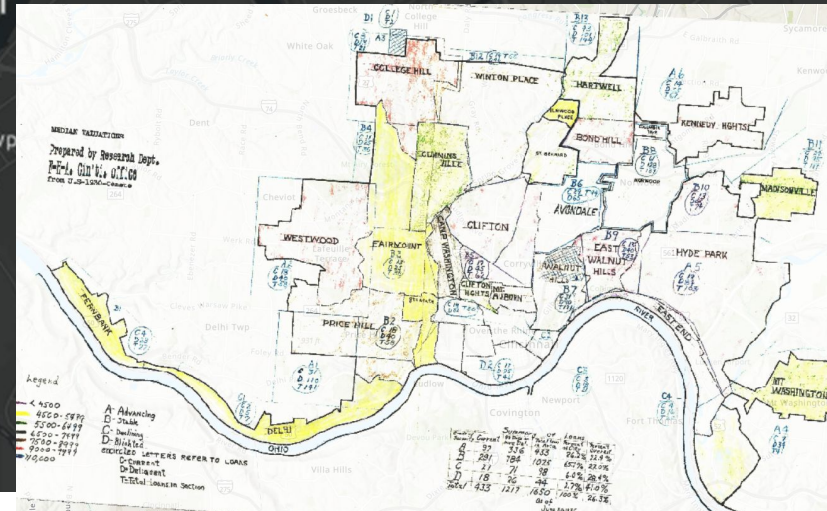
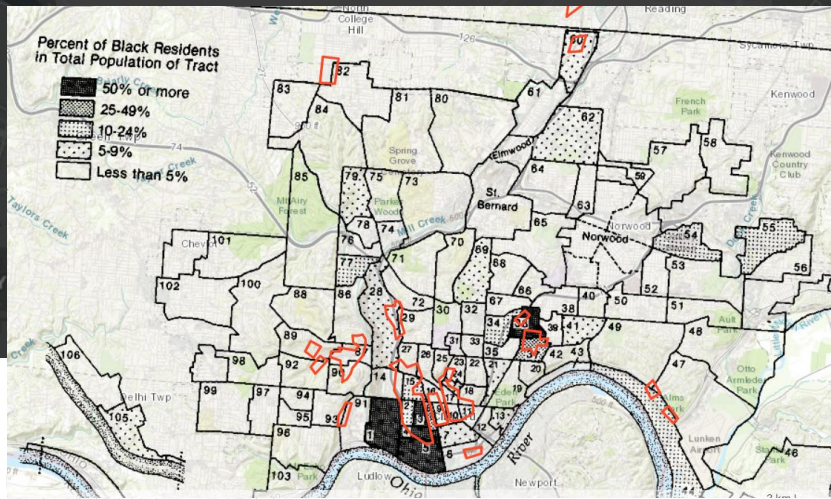
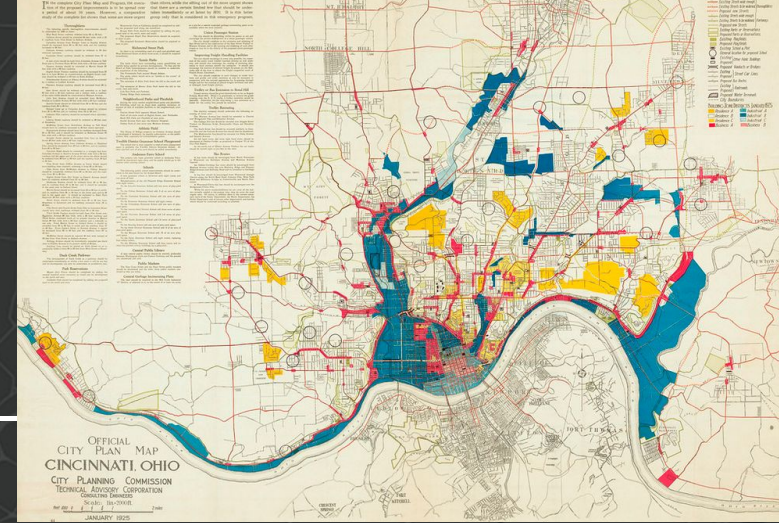


Implementation

- Neighborhood tree plantings
- Community gardens
- Green roofs

Using GIS to Identify Vulnerable Neighborhoods

- analysis of historical data
 - Zoning
 - Housing discrimination
 - Redlining

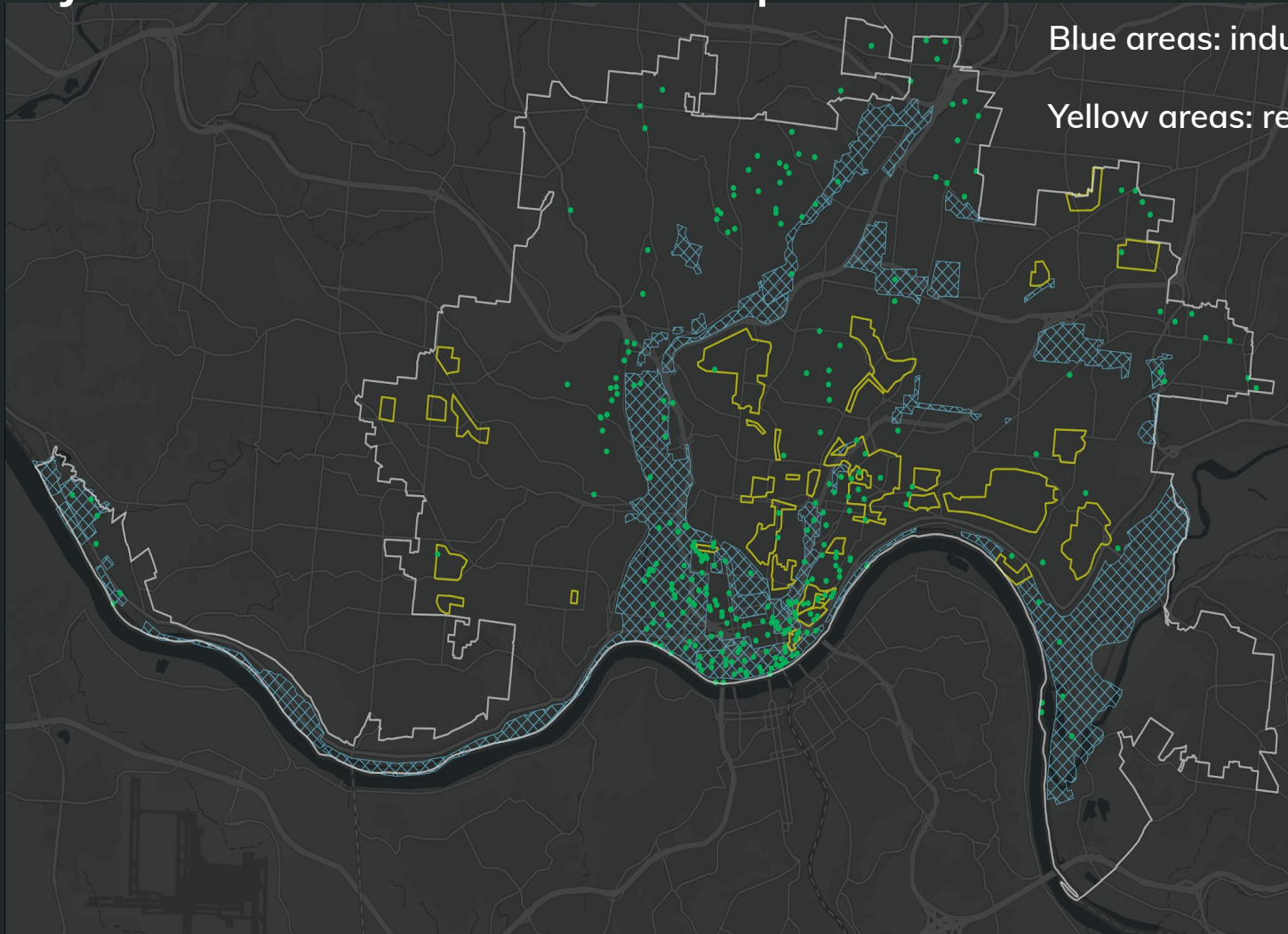


Injustice in Cincinnati: Example

Green dots: minority populations

Blue areas: industrial zoning

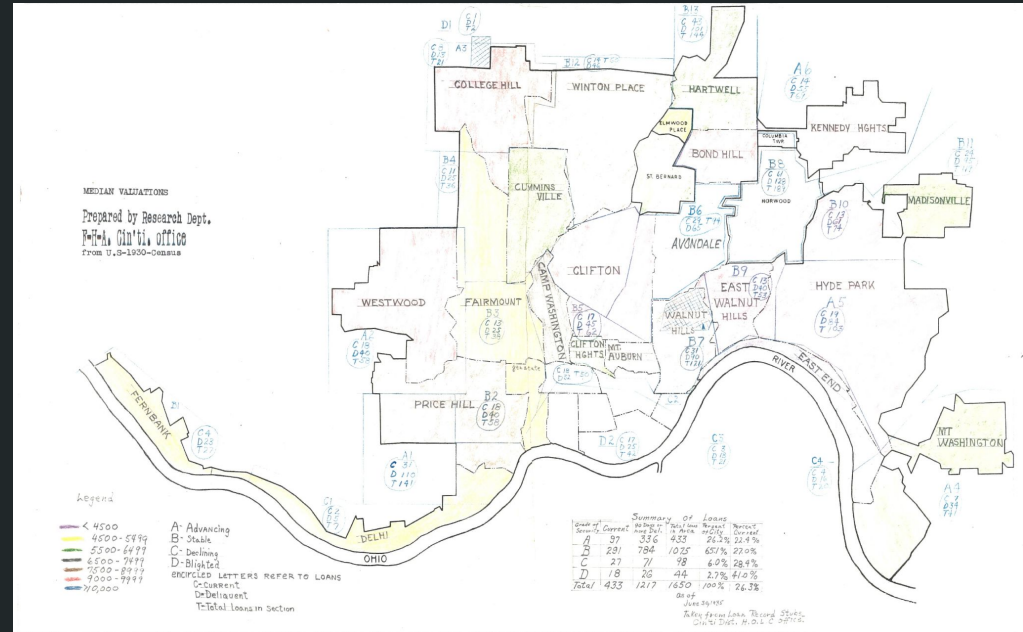
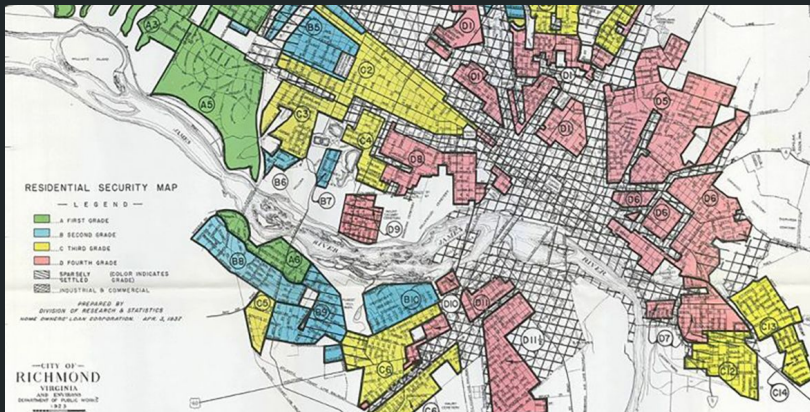
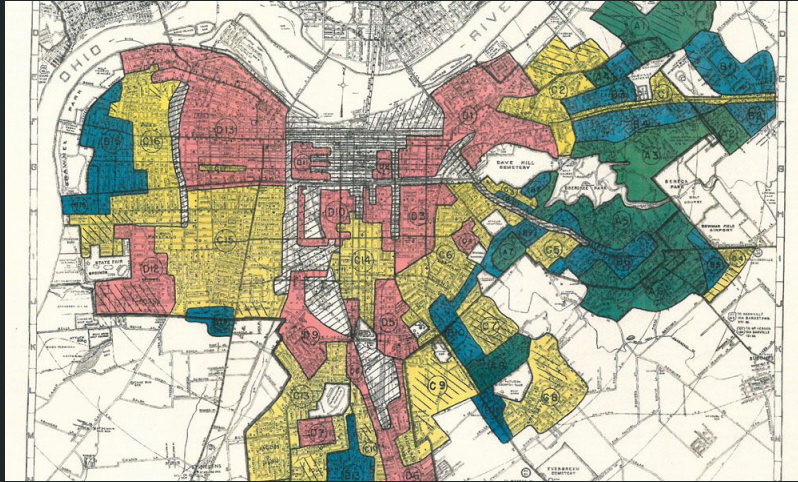
Yellow areas: residential zoning



1925 zoning designations & minority neighborhoods of 1930
Groundwork Ohio River Valley



Understanding Context



Mapping Inequality



Evaluation of environmental vulnerabilities

EJ Screen

Explore Reports

Tract 39061026300, OHIO, EPA Region 5 (Population: 1,132)

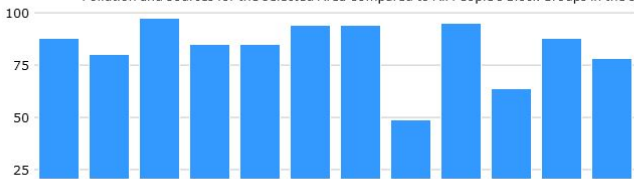
Environmental Justice Indexes **Pollution and Sources** Socioeconomic Indicators

[Unselect All]

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> Particulate Matter 2.5 | <input checked="" type="checkbox"/> Ozone | <input checked="" type="checkbox"/> Diesel Particulate Matter |
| <input checked="" type="checkbox"/> Air Toxics Cancer Risk | <input checked="" type="checkbox"/> Air Toxics Respiratory HI | <input checked="" type="checkbox"/> Traffic Proximity |
| <input checked="" type="checkbox"/> Lead Paint | <input checked="" type="checkbox"/> Superfund Proximity | <input checked="" type="checkbox"/> RMP Facility Proximity |
| <input checked="" type="checkbox"/> Hazardous Waste Proximity | <input checked="" type="checkbox"/> Underground Storage Tanks | <input checked="" type="checkbox"/> Wastewater Discharge |

State Percentile USA Percentile

Pollution and Sources for the Selected Area Compared to All People's Block Groups in the State/US



EJScreen Website | Mobile | Glossary | Help

Find address or place

Map Contents

- EJ Indexes
- Particulate Matter 2.5 (National Percentiles)
- 95 - 100 percentile
- 90 - 95 percentile
- 80 - 90 percentile
- 70 - 80 percentile
- 60 - 70 percentile
- 50 - 60 percentile
- Less than 50 percentile
- Data not available

Chart or Report

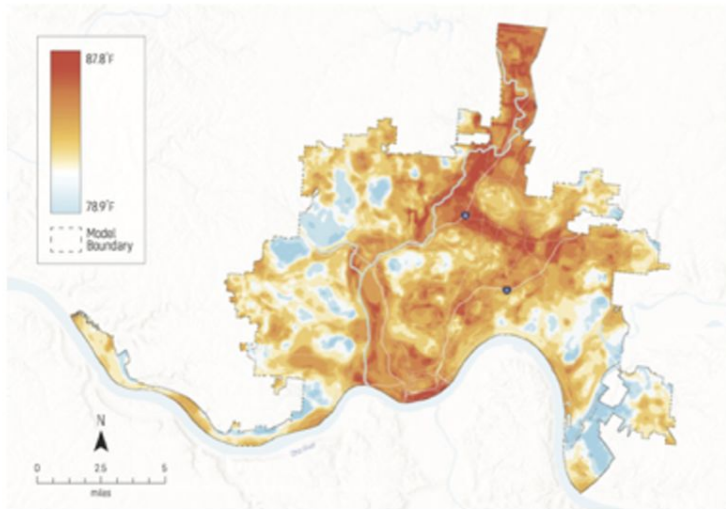
Name:

- [Explore Reports...](#)
- [Get Printable Standard Report...](#)
- [Get 2016-2020 ACS report...](#)
- [Get CDC report... EXIT EPA](#)
- [Delete this site](#)

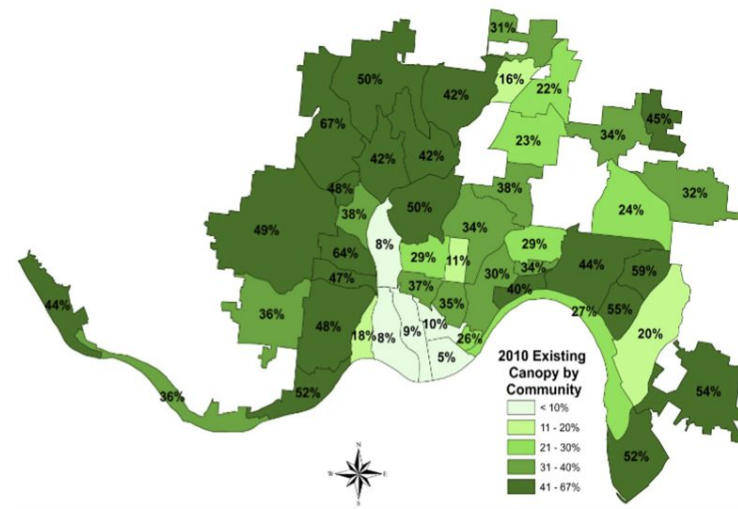
Climate Equity Indicators

Climate impacts do not hit everyone or every neighborhood equally

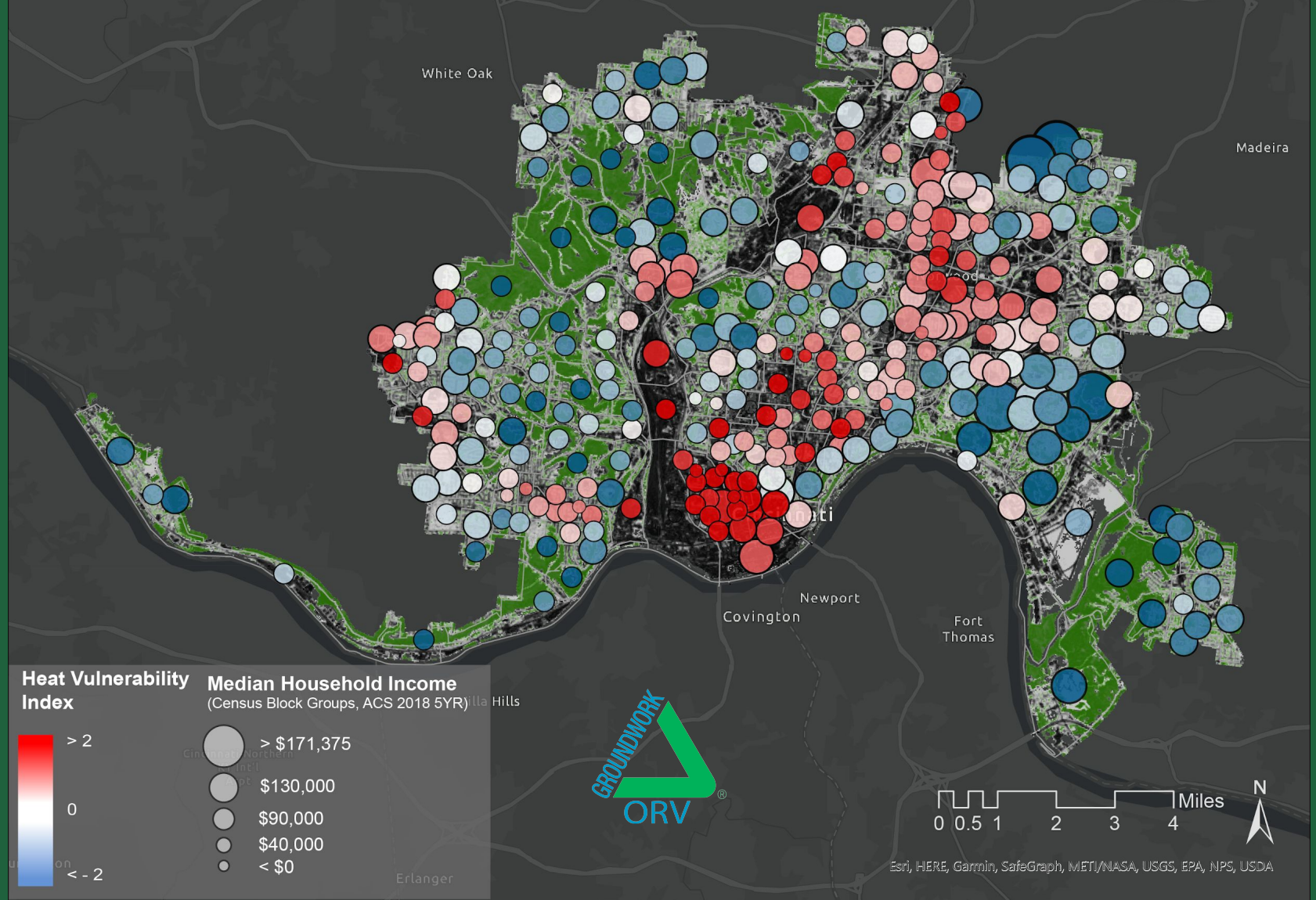
Urban Heat Islands



Urban Tree Canopy



Heat Vulnerability Index & Median Household Income



Ongoing CSN GIS

- Advocacy and education
 - [CSN Dashboard](#)- presenting easy to digest data related to climate change.
 - Combine EJ Screen data with community members' lived experiences

Climate Advisory Group

- An intensive climate cohort designed to elevate community voices in planning processes.
- CAG members are paid to participate in meetings.
- Goals
 1. Understand climate change and its impacts in their neighborhood.
 2. Create a Climate Resiliency Plan that meets the needs of their community.



Bond Hill + Roselawn Climate Advisory Group

Date	Topic
10/27	Roselawn + Bond Hill History & Current Priorities
11/3	Climate Change Intersectionality
11/10	Climate Change Adaptation
11/17	Local Climate Work
12/1	Resilience Map Review and Vote
12/8	Community Listening Session

Examples of homework:
neighborhood surveys, climate
impact mapping, climate
adaptation mapping

Mapping activities

Mapping Activity 1: Neighborhood Observations & Experiences










Instructions:

There are a wide variety of ways that climate change will impact Roselawn and Bond Hill; these will exacerbate already existing issues. For the next two weeks, mark on the map using the symbols where you notice issues listed in the legend to the right. If there is an issue that you think we should know about but isn't listed in the legend, please add it anyway.

Take pictures of your impact maps and send them to Kelsey at khawkins-johnson@groundworkorv.org or text them to 513.301.0310 by 5pm, Monday (11/8)

Additionally, there is a drop box at the Bond Hill Community Center for the physical copies at the front desk. You will have to tell the front desk staff that you are a part of the Climate Advisory Group.

LEGEND:

-  Landslide Occurrence
-  Flood Occurrence inside of building
-  Street Flooding occurs following rainfall
-  Area is noticeably hotter than the rest of the neighborhood
-  Ability to breathe worsens in this area due to air pollution
-  Illegal dumping occurrence
-  Pedestrian Hazard: Dangrous intersection
-  Pedestrian Hazard: No sidewalk, difficult to walk along the road
-  Retaining wall crumbling or in disrepair
- (if other):

Mapping Activity 2: Adaptation Recommendations

Instructions:

There are a wide variety of ways that climate change will impact Roselawn and Bond Hill; these will exacerbate already existing issues. For the next two weeks, mark on the map using the symbols where you notice issues listed in the legend to the right. If there is an issue that you think we should know about but isn't listed in the legend, please add it anyway.

When you get into the climate impacts surveys with your neighbors, make sure to add their observations to the map!

Take pictures of your impact maps and send them to Kelsey at khawkins-johnson@groundworkorv.org or texting them to 513.301.0310 by 5pm, Monday (11/8)

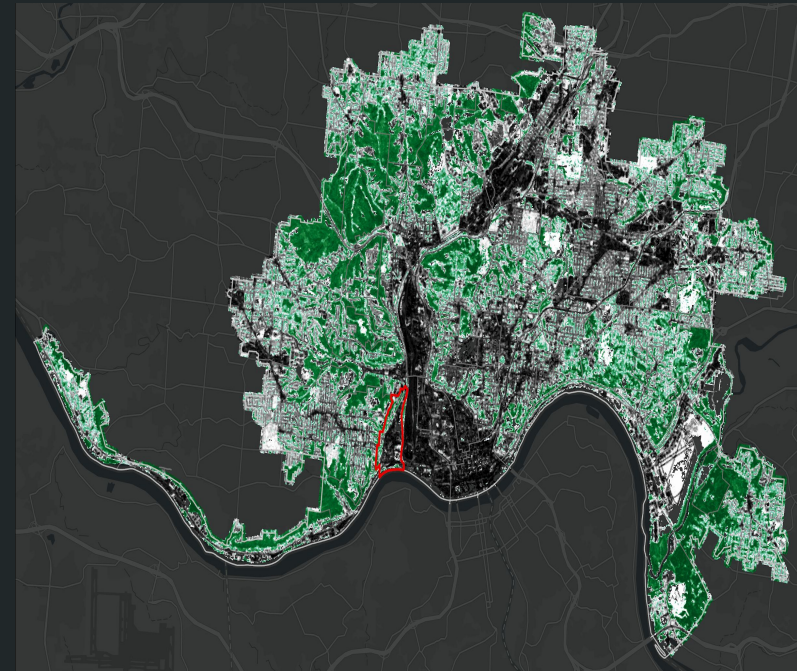
Additionally, there is a drop box at the Bond Hill Community Center for the physical copies at the front desk. You will have to tell the front desk staff that you are a part of the Climate Advisory Group.

LEGEND:

-  Street Trees
-  Rain Garden
-  Community Greenspace
-  Community Garden
-  Green Roof
-  Misting Bus Stop
-  Green Parking Lot
-  Asphalt Sealant

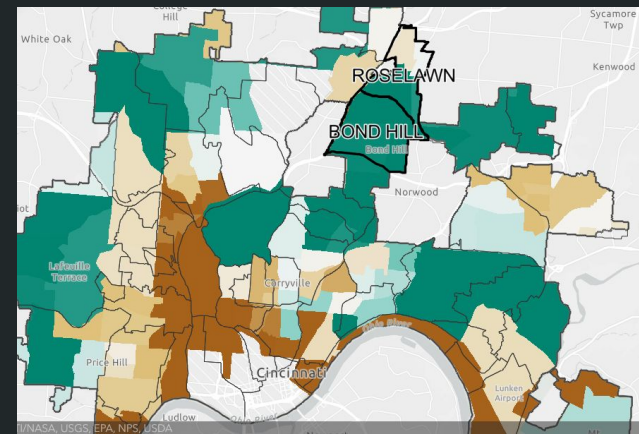
Climate Safe Neighborhood Profile: Lower Price Hill

- 93% live below poverty line
- Food desert
- One of the lowest life expectancies in the city
- Most racially diverse neighborhood in the city
- Queen City Barrel Fire



Climate Safe Neighborhood Profile: Roselawn & Bond Hill

- 40-60% live below poverty line
- Predominately Black American neighborhoods (85-96%)
- High traffic volume
- Low walkability
- Flooding
- Some of the lowest life expectancies in the city (72)
- Blockbusting and white flight
- Low green space (30th and 28th) and tree canopy (40th and 42nd) (Maketwah Country Club).
- Many brownfields
- Lead in soil

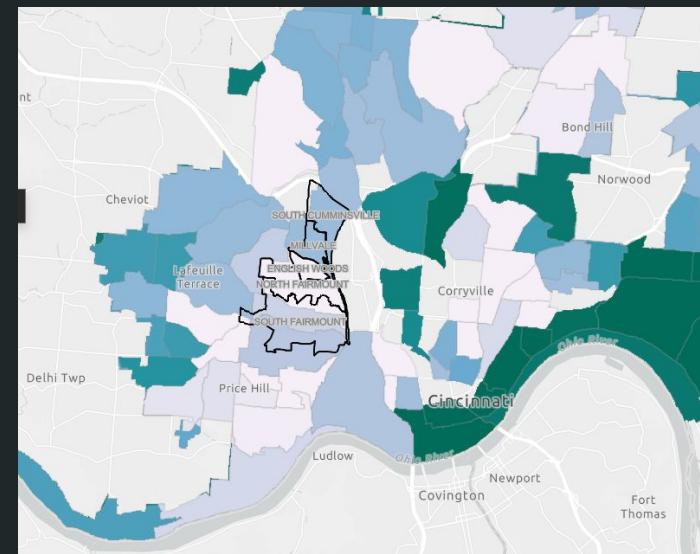


Bond Hill Climate Resilience Plan



Climate Safe Neighborhood Profile: Beekman Corridor

- 40-60% live below poverty line
- Predominately Black American neighborhoods (50-93%)
- High traffic volume
- Low walkability
- Flooding
- Some of the lowest life expectancies in the city (66-72)
- Lunkenheimer brownfield







Bond Hill Climate Resilience Plan

-  Community Greenspace
-  Proposed Street Trees
-  Community Garden or Farm
-  Green Parking Lot
-  Green Roof
-  Cooling Bus Stop



Roselawn Climate Resilience Plan

-  Community Greenspace
-  Community Garden or Farm
-  Green Roof
-  Green Parking Lot
-  Proposed Street Trees
-  Asphalt Sealant
-  Cooling Bus Stop



Bond Hill + Roselawn in Action

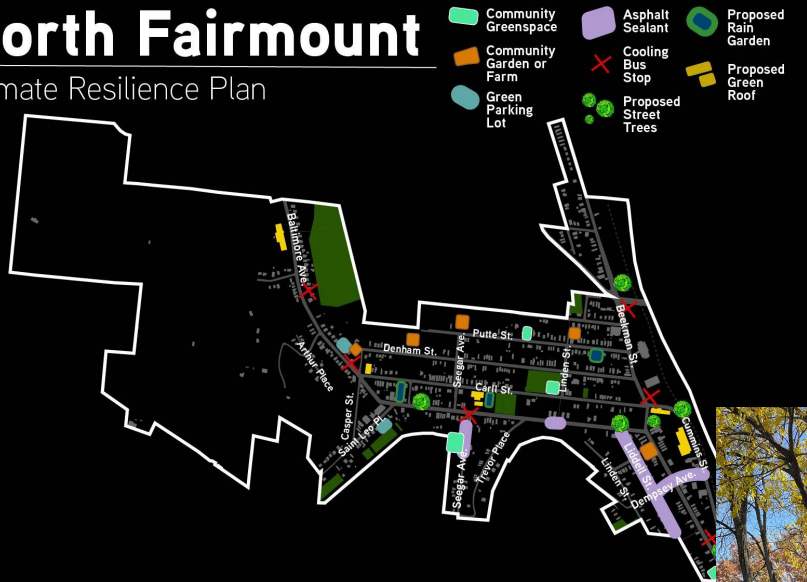
- Partnerships with community organizations
 - (Great Parks Summit Nature Center and Community Council)
- Spring Tree Giveaway
- Education & Outreach (Soil Testing with UC)
- Media Coverage from Spectrum News and Cincinnati Enquirer.



Margaux Roberts, pictured Thursday, June 30, 2022, in Bond Hill, is Groundwork Ohio River Valley's community organizer for the Bond Hill and Roselawn neighborhoods. *Stephanie Scarbrough/The Enquirer*

North Fairmount

Climate Resilience Plan



Millvale

Climate Resilience Plan



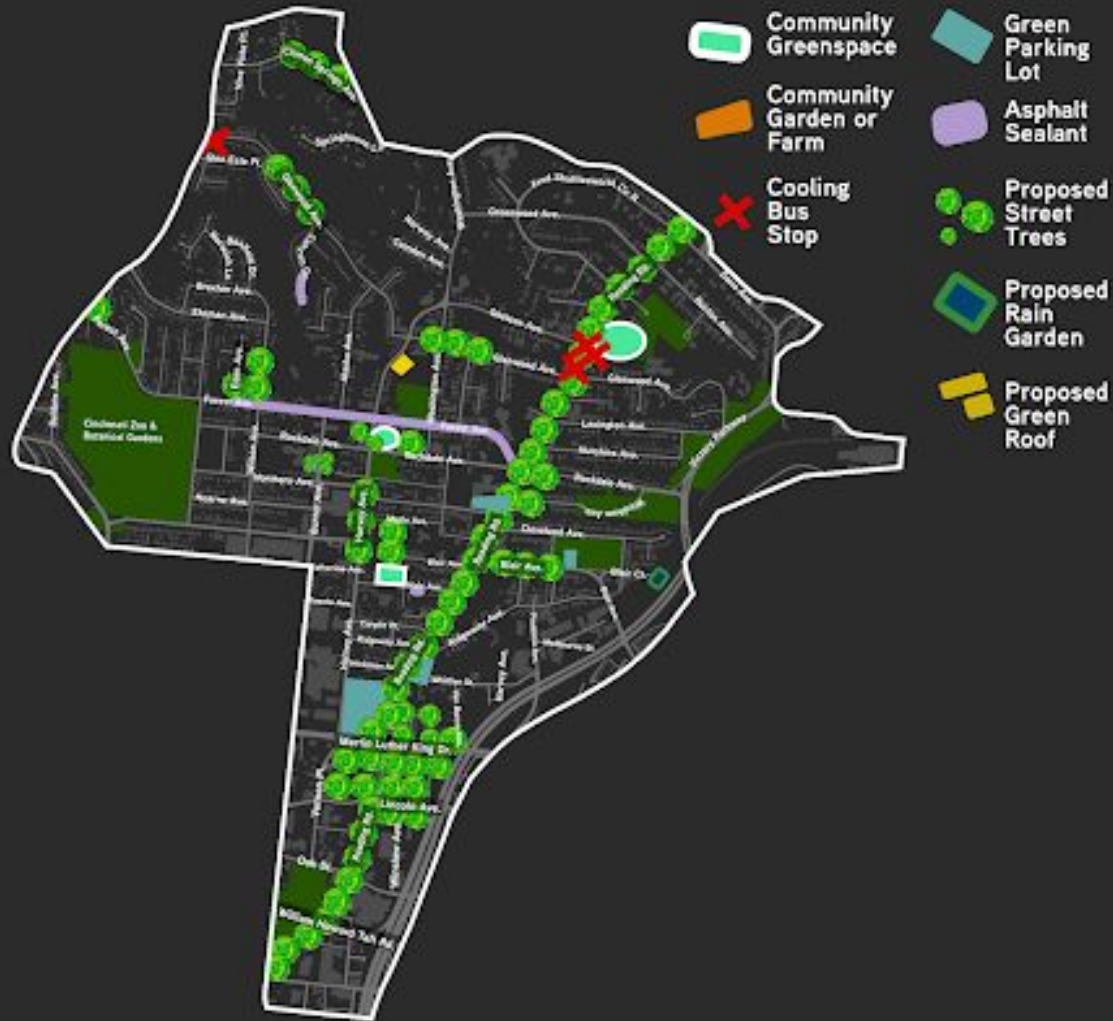
Avondale CAG



Resilience statement

“We believe that a sustainable community is one that is economically viable, socially equitable, and ecologically integrated. Our community can become what we deserve. We are committed to taking action to protect our environment, improve our quality of life, and create a better future for our residents and businesses. Awareness is key to empowering Avondale families for better health. We hope to achieve climate justice for all residents of Avondale.”

Avondale Neighborhood Climate Action Plan



Norwood CAG



Resilience Statement

“As citizens of the city of Norwood, this Climate Advisory Group seeks to create an actionable climate resilience plan that provides a system through which we are able to address the unique climate issues that our community faces both today and into the future. No matter your ward, age, sex, or creed, these issues impact us all. We understand that green infrastructure is an essential tool in enhancing our community's ability to adapt to the impacts of climate change. Specifically, West Norwood will encourage residents to utilize available resources like solar power, rain collection, composting, and fellow community members. We will work toward correcting past missteps in hopes of alleviating flooding issues, as well as creating a pleasant environment for all residents to enjoy.”



Norwood Ward 1 Climate Action Plan



Norwood Ward 4 Climate Action Plan



CSN & Policy

Pursuing Equity in Climate Planning



Green Cincinnati Plan  2023



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