



# **MAPPING TREE EQUITY**

**PROVIDENCE, RI**

**AN INFORMATIONAL  
ZINE BY THE PVD  
TREE PLAN TEAM**

Environmental racism has woven white supremacy into the fabric of our city. The 8 maps in this zine illustrate the strong spatial correlations between whiteness, wealth, and environmental privilege in Providence. They testify to ongoing violence and harm done to Black, brown, and working class communities. The fact that these communities have fewer trees, hotter summers, higher asthma rates, and lower environmental privilege isn't a coincidence—it's the result of systemic disinvestment and racist policy, from "redlining" policies that denied loans to those in "high risk" neighborhoods to "urban renewal" projects that marked entire communities of color as "blighted" and in need of clearance. The movement for tree equity is part of a struggle to repair this harm.

# WHAT IS TREE EQUITY?

In Providence, as in most cities, our tree canopy and the benefits it provides are not distributed evenly across neighborhoods. We envision a city where this has changed—and all residents have equal access to trees where they live, work, and play. We call this vision “tree equity.”

## WHY DOES IT MATTER?

Tree equity is about people...not just trees. Trees in our neighborhoods provide us with countless benefits, including:



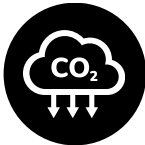
Improved Health



Flood Management



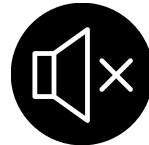
Better Air Quality



Carbon Sequestration



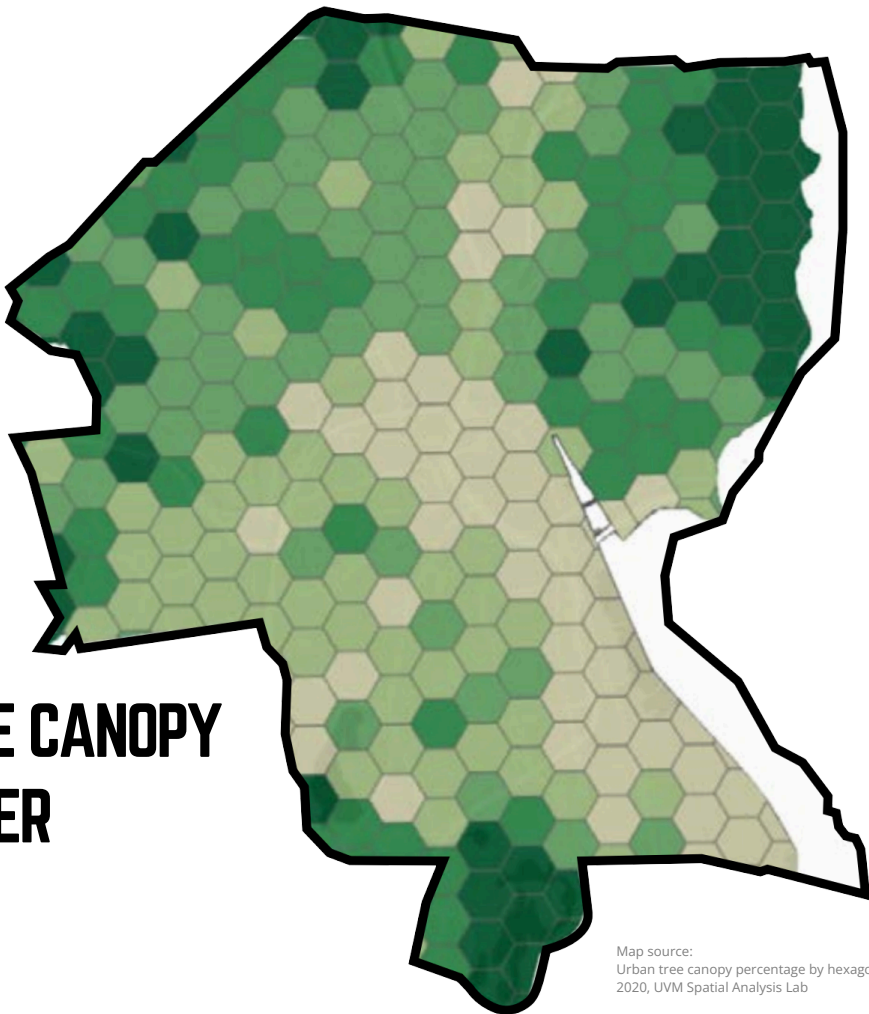
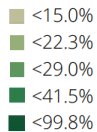
Temperature Control



Noise Reduction

The movement for tree equity is a movement for a city that prioritizes the health and wellbeing of Black, brown, and working-class bodies and communities.

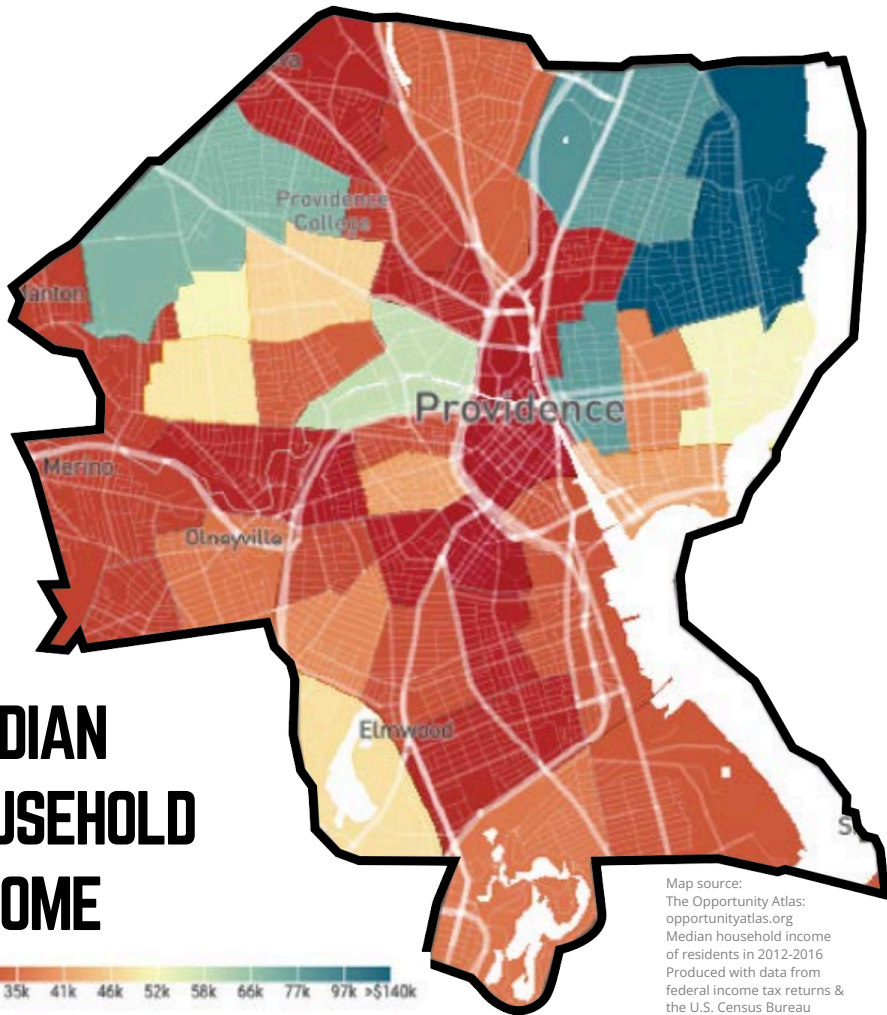
# TREE CANOPY COVER



Map source:  
Urban tree canopy percentage by hexagon  
2020, UVM Spatial Analysis Lab



# MEDIAN HOUSEHOLD INCOME



Map source:  
The Opportunity Atlas:  
[opportunityatlas.org](http://opportunityatlas.org)  
Median household income  
of residents in 2012-2016  
Produced with data from  
federal income tax returns &  
the U.S. Census Bureau

# ENVIRONMENTAL PRIVILEGE

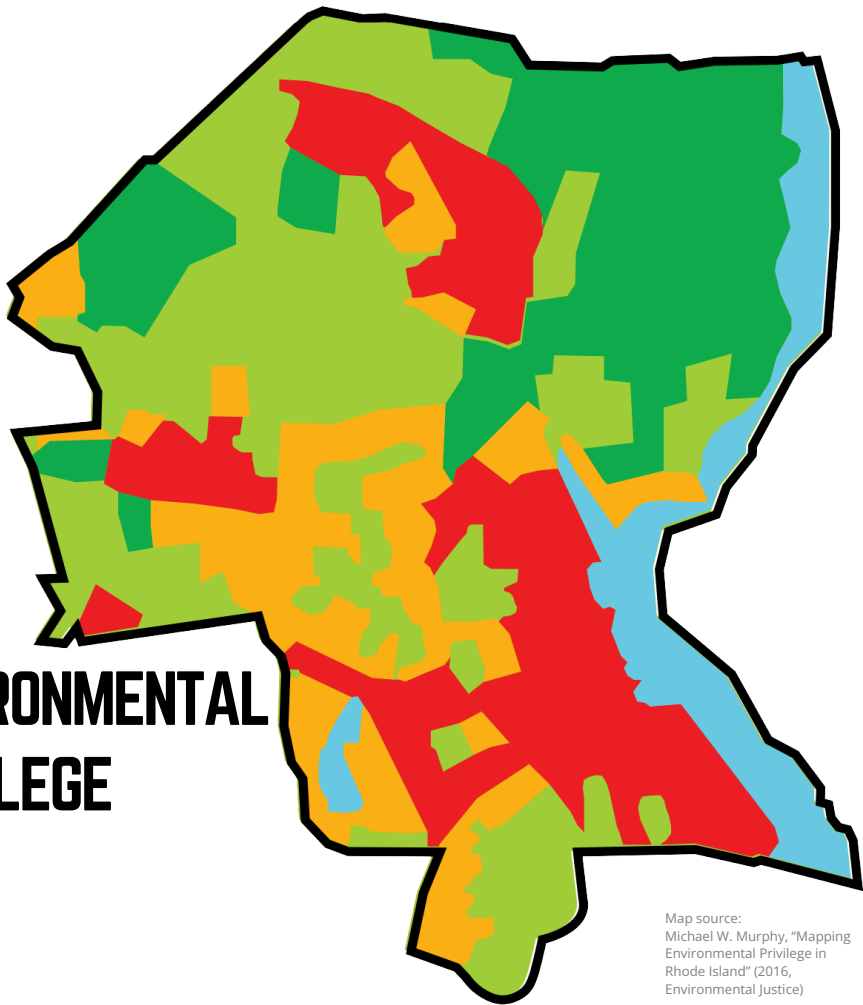
EPI Score

■ -1 to 5

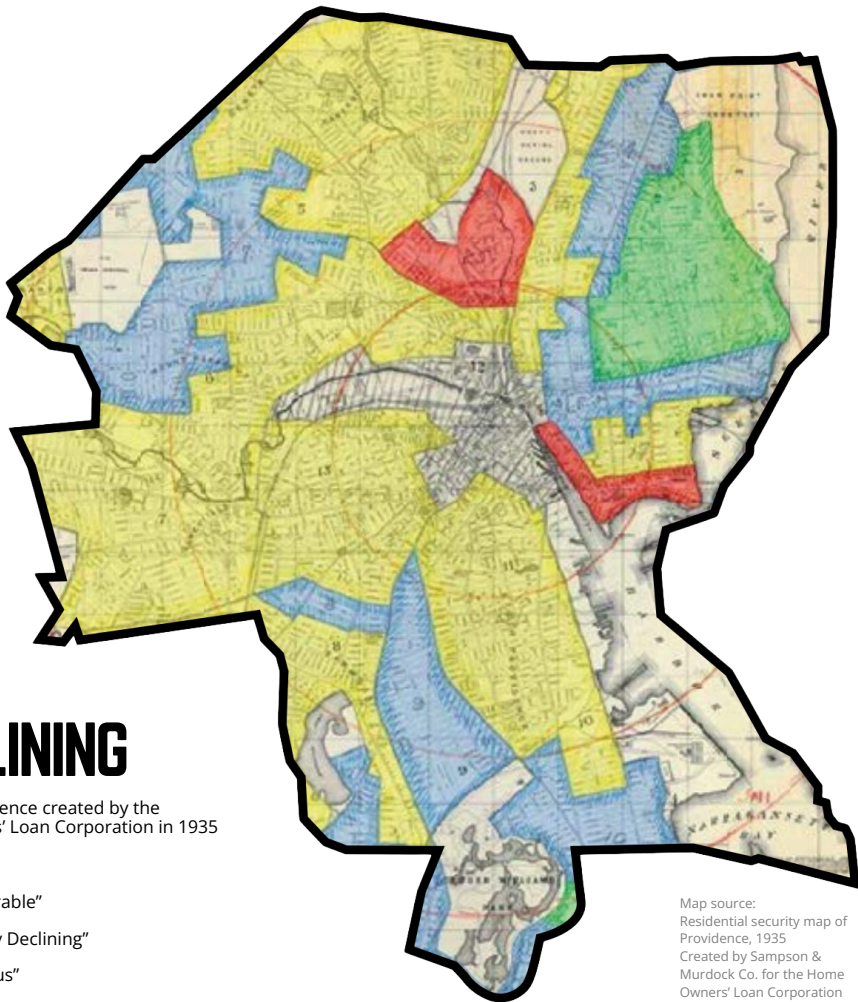
■ 6 to 9

■ 10 to 12

■ 13 to 17



Map source:  
Michael W. Murphy, "Mapping  
Environmental Privilege in  
Rhode Island" (2016,  
Environmental Justice)



# REDLINING

Map of Providence created by the Home Owners' Loan Corporation in 1935

- "Best"
- "Still Desirable"
- "Definitely Declining"
- "Hazardous"

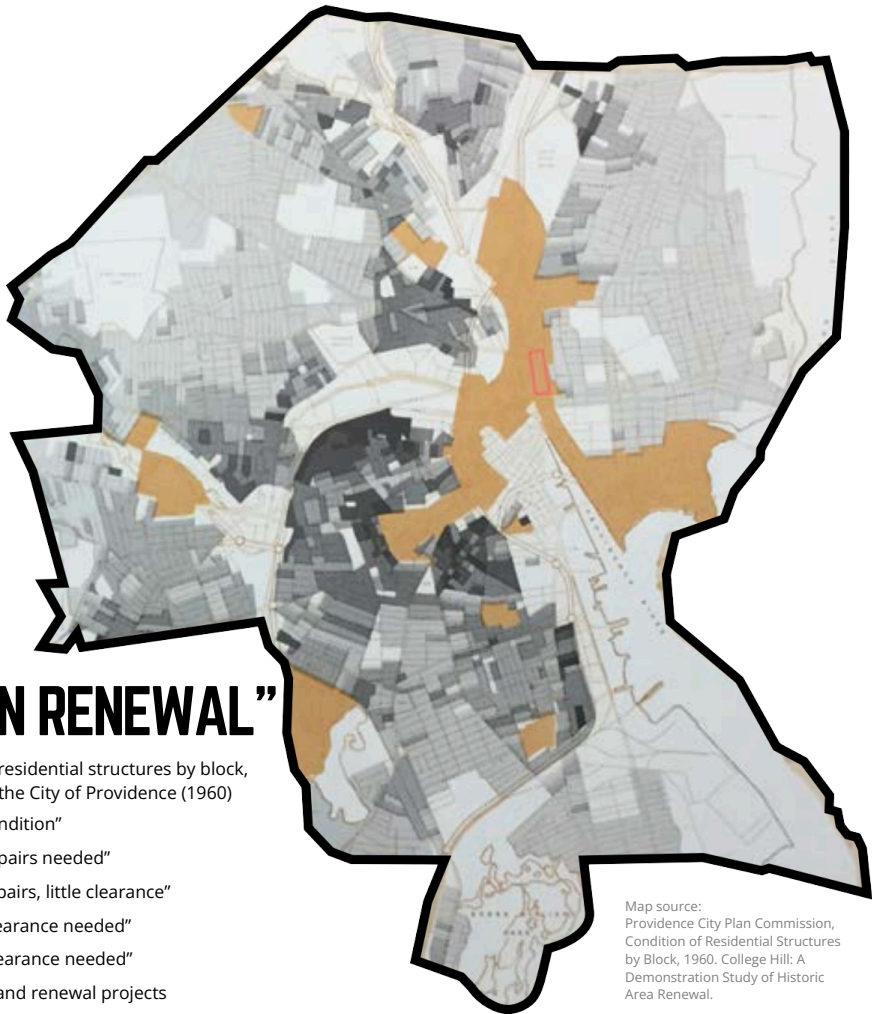
Map source:  
Residential security map of  
Providence, 1935  
Created by Sampson &  
Murdock Co. for the Home  
Owners' Loan Corporation



# “URBAN RENEWAL”

Condition of residential structures by block, according to the City of Providence (1960)

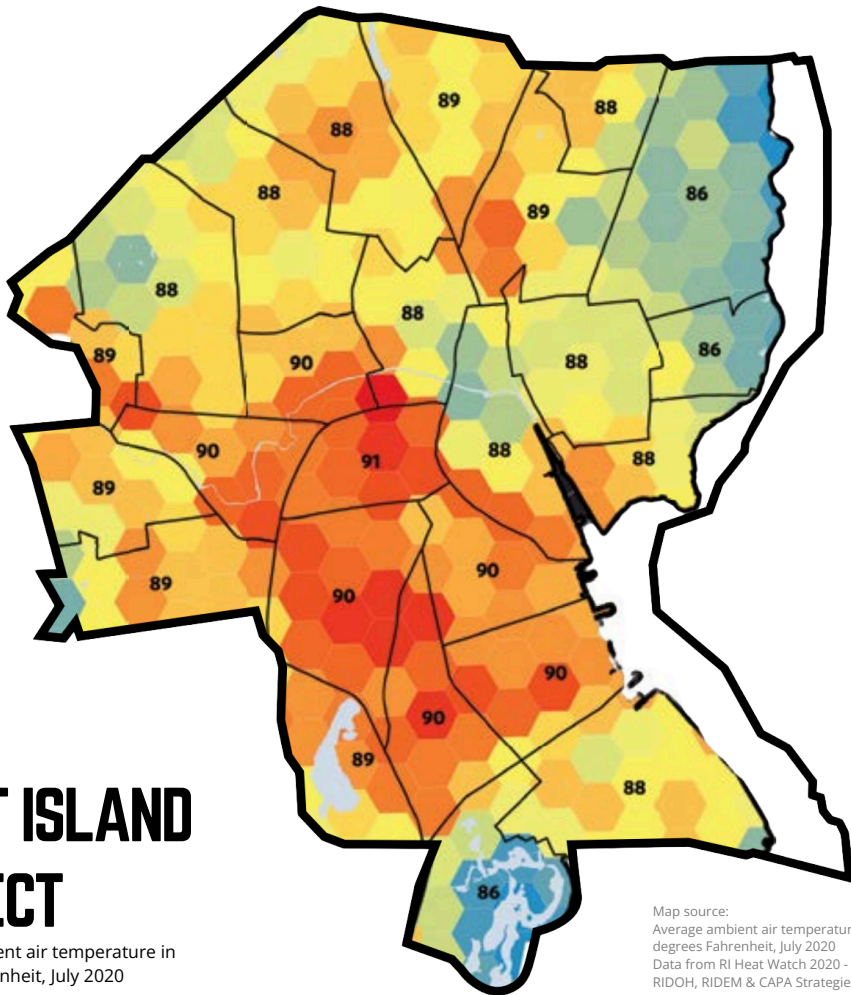
- “Good condition”
- “Some repairs needed”
- “Many repairs, little clearance”
- “Some clearance needed”
- “Major clearance needed”
- Housing and renewal projects



Map source:  
Providence City Plan Commission,  
Condition of Residential Structures  
by Block, 1960. College Hill: A  
Demonstration Study of Historic  
Area Renewal.

# HEAT ISLAND EFFECT

Average ambient air temperature in degrees Fahrenheit, July 2020

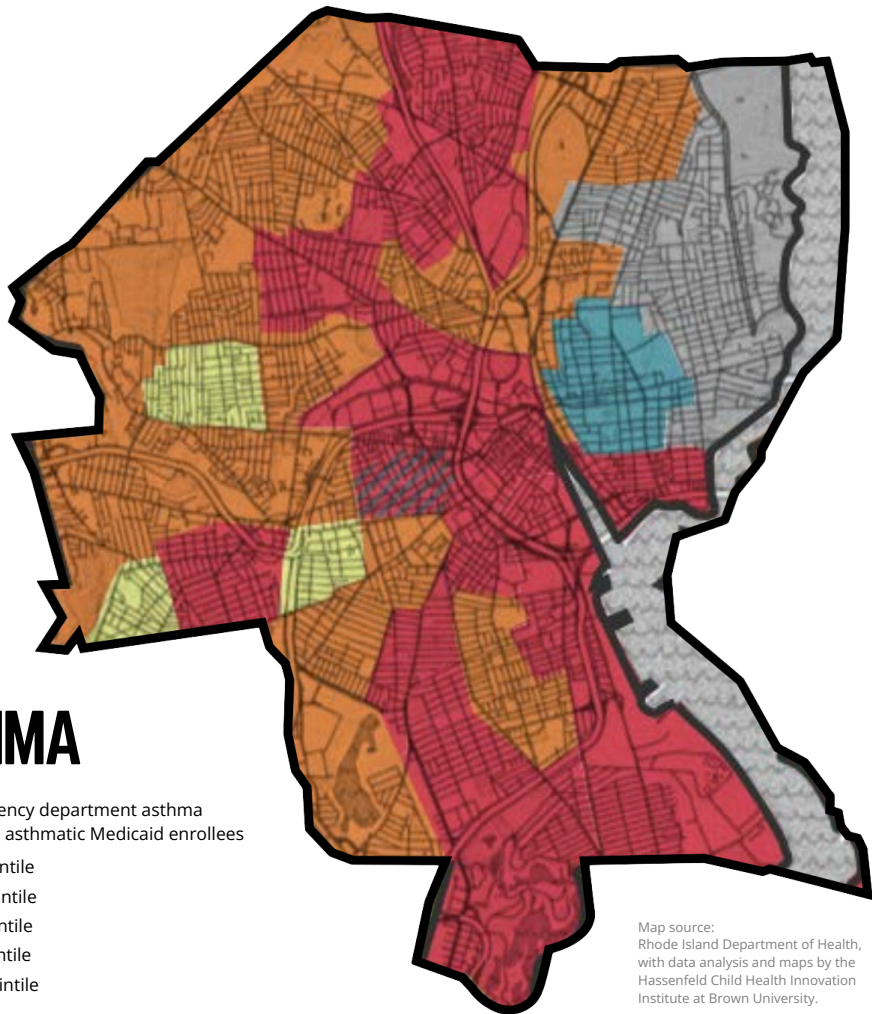


Map source:  
Average ambient air temperature in  
degrees Fahrenheit, July 2020  
Data from RI Heat Watch 2020 -  
RIDOH, RIDEM & CAPA Strategies

# ASTHMA

Rate of emergency department asthma claims per 100 asthmatic Medicaid enrollees

- Lowest quintile
- Second quintile
- Middle quintile
- Fourth quintile
- Highest quintile



Map source:  
Rhode Island Department of Health,  
with data analysis and maps by the  
Hassenfeld Child Health Innovation  
Institute at Brown University.

# WHAT IS THE PVD TREE PLAN?

The PVD Tree Plan is a comprehensive, citywide strategic plan that centers the needs, ideas, and priorities of the people most impacted by tree inequity. This initiative includes and is led by Black and brown folks living in neighborhoods with the fewest trees. It outlines a vision and action plan for creating a healthy and resilient urban forest that equitably distributes the critical infrastructure of trees to all residents!

**LEARN MORE:**



[pvdtreeplan.org](https://pvdtreeplan.org)

**GET INVOLVED:**



[pvdtreeplan.org/get-involved](https://pvdtreeplan.org/get-involved)