

Nature's Cooling Systems Project



Project Lead

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Project Partners

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Maricopa Department of Public Health,
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& Jessica White

Mesa Community Partner:
RailMesa

Edison-Eastlake Community Partner:
Phoenix Revitalization Corporation /
Resident Leadership Council

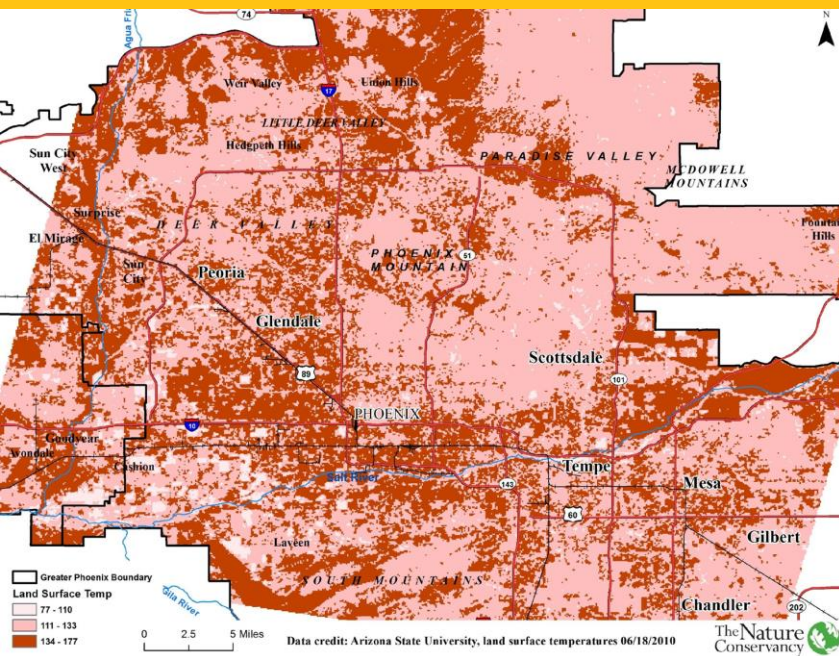
S. Phoenix Community Partner:
ChispaAZ



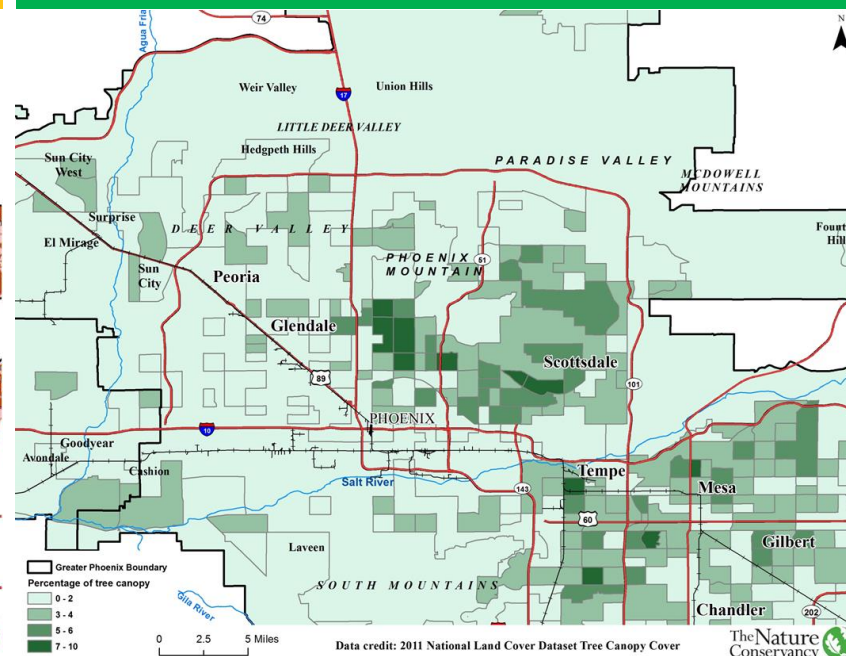
Greater Phoenix Equity Challenges

The **hottest** communities have the **lowest tree canopy cover** and the **highest child poverty**.

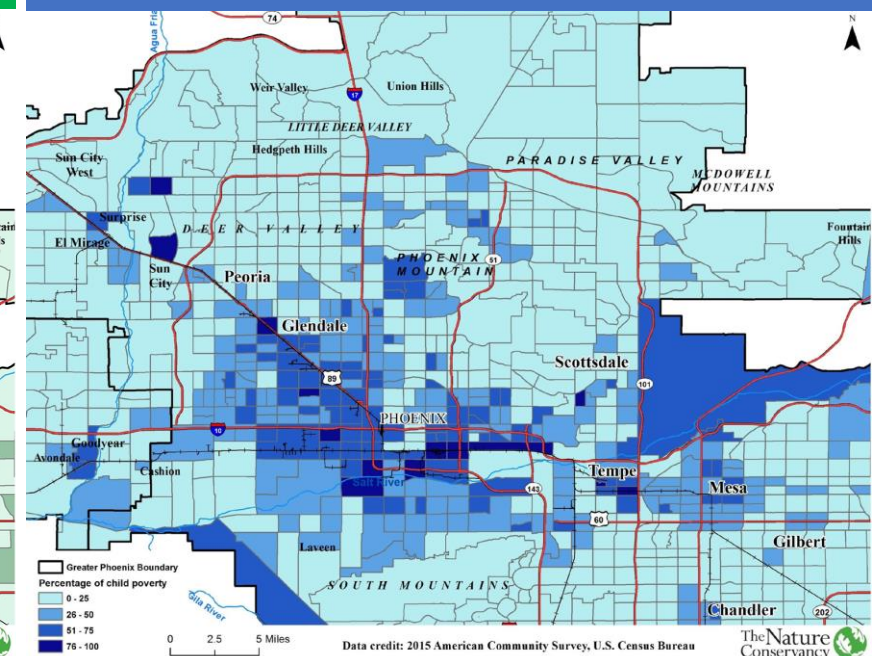
Urban Heat



Tree Canopy Cover



Child Poverty



What are Heat Action Plans?

- Guidance to the City and County in two parts:
 - 1) how make this neighborhood cooler
 - 2) how to keep people safe
- Learn from each other: community-based organizations, residents, planners, and the project team
- Show why neighborhood-level differences matter for City Planning
- Advocate for the plans
- Leverage opportunities, direct resources



ATTACHMENT 21: NEIGHBORHOOD INVESTMENT MAP



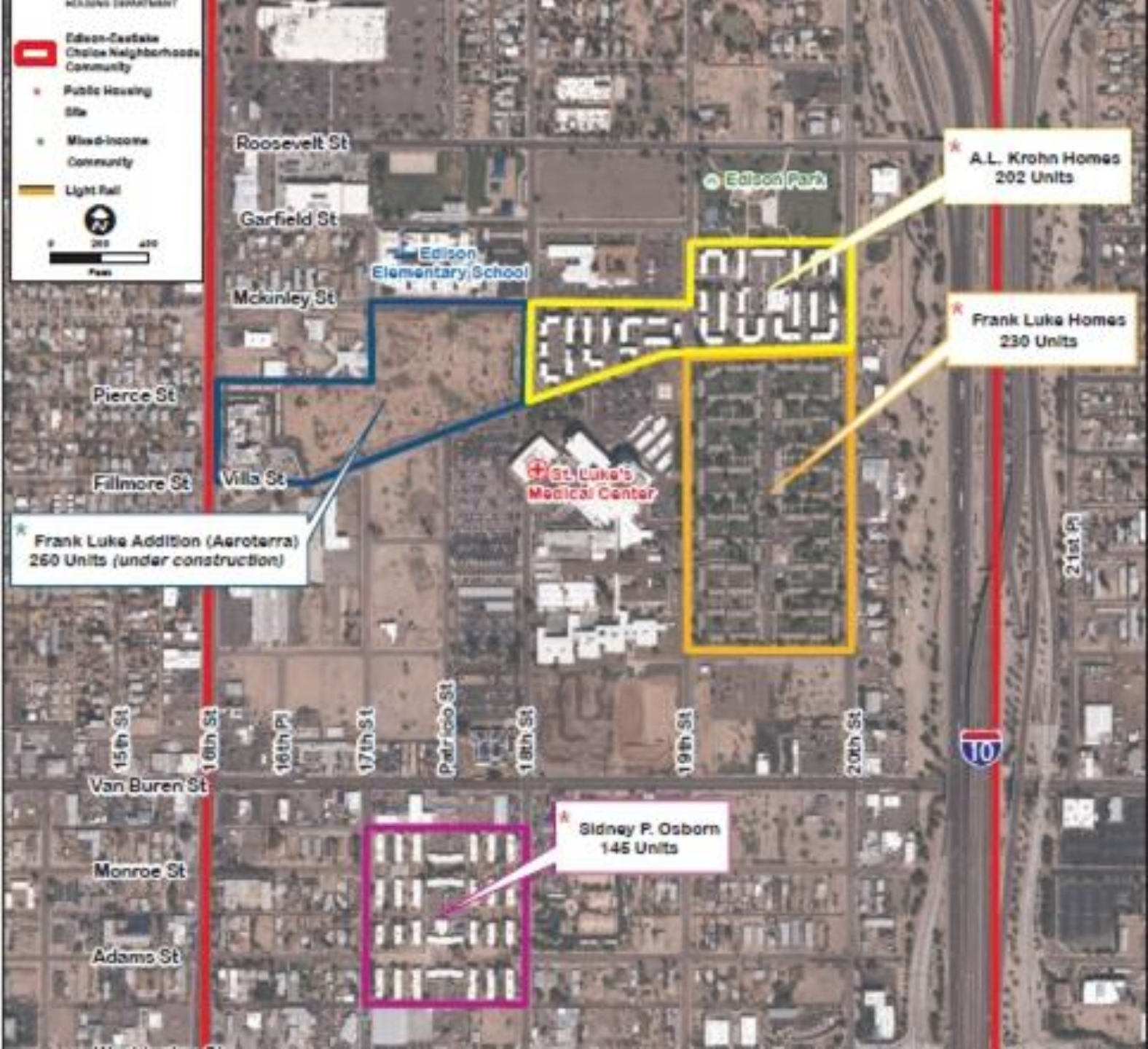
CN Neighborhood

- * Speed Cushion
 - Bus Shelter Improvements
 - New Bikeshare Station
 - 25 - 30 receptacles (and fill) dispersed among designate 3 containers (and fill) and re for Edison Park and Linear P
 - Bike Lane Improvements
 - |||| Pavement Preservation
 - LED Street Light Conversion
 - Proposed Housing Redevelo
 - Complete Street Improvem
 - Waterline Improvements
 - ① New Street Signal
 - ② New Workforce Housing
 - ③ Edison Elementary Facility I
 - ④ Edison Park Improvements (and proposed) including The Pilot Project and Recycling I
 - ⑤ Cultural Food Corridor
 - ⑥ Repavement of 18th Street, Street, and Jefferson Street
 - ⑦ 20th Street Complete Impr
 - ⑧ St. Luke's Medical Center Facilities Improvement
 - ⑨ St. Luke's Behavior Health C Facilities Improvement
 - ⑩ 19th Street Complete Impr
 - ⑪ Pedestrian Safety Improven / Street HAWK
 - ⑫ Van Buren Complete Street
 - ⑬ Q510-30, Substandard Wate
 - ⑭ Q510-31, Substandard Wate Replacement, valves, hydro
 - ⑮ CDBG Neighborhood Comm Rehabilitation / Operation F
 - ⑯ HAWK Pedestrian Crossing
 - ⑰ HAWK Pedestrian Crossing
 - Vacant lots to be used for u farming / farmer's market
 - ⑱ 18th St. Complete Street Im
 - ⑲ New Linear Park
 - ⑳ New Community Park
 - ㉑ Edison Park expansion impr public gathering space, ort playing field, additional ligh
- Action Activities**
- Gateway / Transit Node
 - Shaded Multi-Use Gathering Gateway / Medallions / Sign
- NOTES**
- The entire neighborhood fall the Neighborhood Revitaliz Strategy Area (NRSAs), Form Enterprise Community (EC)

Edison-Eastlake Choice Neighborhoods Community

- Public Housing Site
- Mixed-income Community
- Light Rail

0 200 400 Feet









- What are your candidate sites?
- Remember: Problem + High Impact



Community Greening in Edison Eastlake



Photo credit: Ivan Martinez



Photo credit: Ivan Martinez



Heat Action Planning Guide

FOR NEIGHBORHOODS OF GREATER PHOENIX

Creating Urban Heat Solutions in the Valley of the Sun

The Challenge of Urban Heat

In cities like Mesa or Phoenix, temperatures are often higher in the city center than at the edges of the city, and this is especially true at night. The difference in temperatures between the middle of the city and the edge depends on a lot of factors, like wind, but it can be more than 10°F or 5°C hotter in the city under certain conditions. We can also have some big temperature differences even across short distances, like a few city blocks. Areas without green space are about 5°F or 3°C warmer than areas like parks with lots of plants and trees.

Why do we see these patterns in temperature? Imagine that you were going to go for a walk outside barefoot on a hot day and that you are a giant - yes, a giant! You would probably try to step on neighborhoods where there are more trees and shade and fewer roads and

parking lots. It is not only a matter of what materials or surfaces exist in a neighborhood, but also important is how the buildings are arranged, how the landscape is arranged, and how much heat is given off by machines like air conditioning units and cars.

The choices we make as a community and as a city about the types of surfaces and materials we use can make a big difference in how we experience heat. We know that the city has changed a lot in the past few decades. Long-term records tell us that nighttime temperatures in the city are about 10°F (5°C) higher than they were 50-60 years ago, and that's mostly because of how much the cities have grown. Daytime temperatures have also increased by a couple of degrees and that's partially a result of the global-scale warming



Photo credit: Ivan Martinez



Photo credit: Ivan Martinez



Photo credit: Mark Skalny



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Virtual Urban Heat Leadership Academy



Equip community residents in Greater Phoenix with the knowledge, resources and skills to mobilize their communities and advocate for greener, cooler, and healthier neighborhoods.



City of Phoenix



Virtual Urban Heat Leadership Academy



- 5-month virtual program, offered in Spanish and English, launching in summer 2021
- Targets 30-40 participants from frontline communities disproportionately impacted by heat
- Covers major sustainability challenges related to urban heat, air quality and water
- Equips participants with the tools needed to mobilize communities
- Provides hands on experience with proven solutions for reducing heat and improving air quality



Photo credit: Mark Skalny



Virtual Urban Heat Leadership Academy



- Launch state of the art program that has been custom made for frontline communities and that is easy to understand and navigate
- Increase number of community residents in frontline communities that are advocating for heat solutions
- Participants implement heat-reducing nature-based solutions to equitably build cool, healthy and climate resilient communities



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