Office of Heat Response and Mitigation

Climate Action Plan Workshops - 2025

HeatReady PHX

About OHRM

- City Manager's Office function
- Created in 2021 by City Council
- 6.5 staff positions
- Heat Response Plan
- Shade Phoenix Plan

HeatReady PHX

Guiding questions

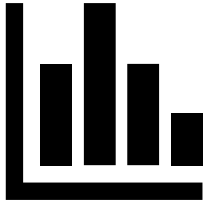
1. What would be most helpful to ensure you and your neighbors avoid heat-related illnesses in the summer?
2. Where is it most important to add more tree and shade coverage in Phoenix to improve your quality of life?

HeatReady PHX

Heat Response Plan Overview

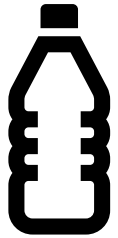
Goal: *To enhance public health and community resilience by alleviating adverse effects of heat*

First Responders



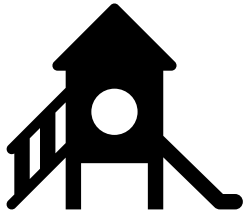
Leverage Data

Public Cool Space



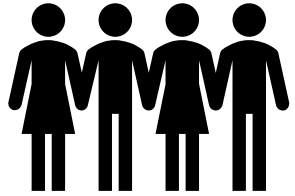
Public Drinking Water

Cool and Safe Homes



Cool and Safe Mobility & Recreation

Heat Safety for Workers



Community Engagement & Outreach

Collaborate Across Departments

Heat Response Plan Highlight

Regional Water & Heat Relief Supply Distribution

2024 Impact

- **1,200,000+ bottles distributed to ~120 sites and partners**
- **36,000 heat relief supply kits distributed to the community**
- **$330,000 in grants to local orgs.**

HeatReady PHX

Shade Phoenix Plan Overview

Vision: *A future in which all community members and visitors experience the benefits of trees and built shade throughout Phoenix.*

Focus on people first

Respect the unique landscape and heritage

Recognize shade as a critical community resource

Collaborate to accelerate collective action

Lead with an environmental justice and equity lens

Go beyond the status quo

HeatReady PHX

Shade Phoenix Plan Highlight

Tree & Shade Grant Programs

2024 Impact

- **47 shade structures at local schools and youth centers**
- **1,200+ trees at 56 schools**
- **1,900+ trees in neighborhoods**
- **1,000 tree care supply bags distributed to residents**

HeatReady PHX

Thank you

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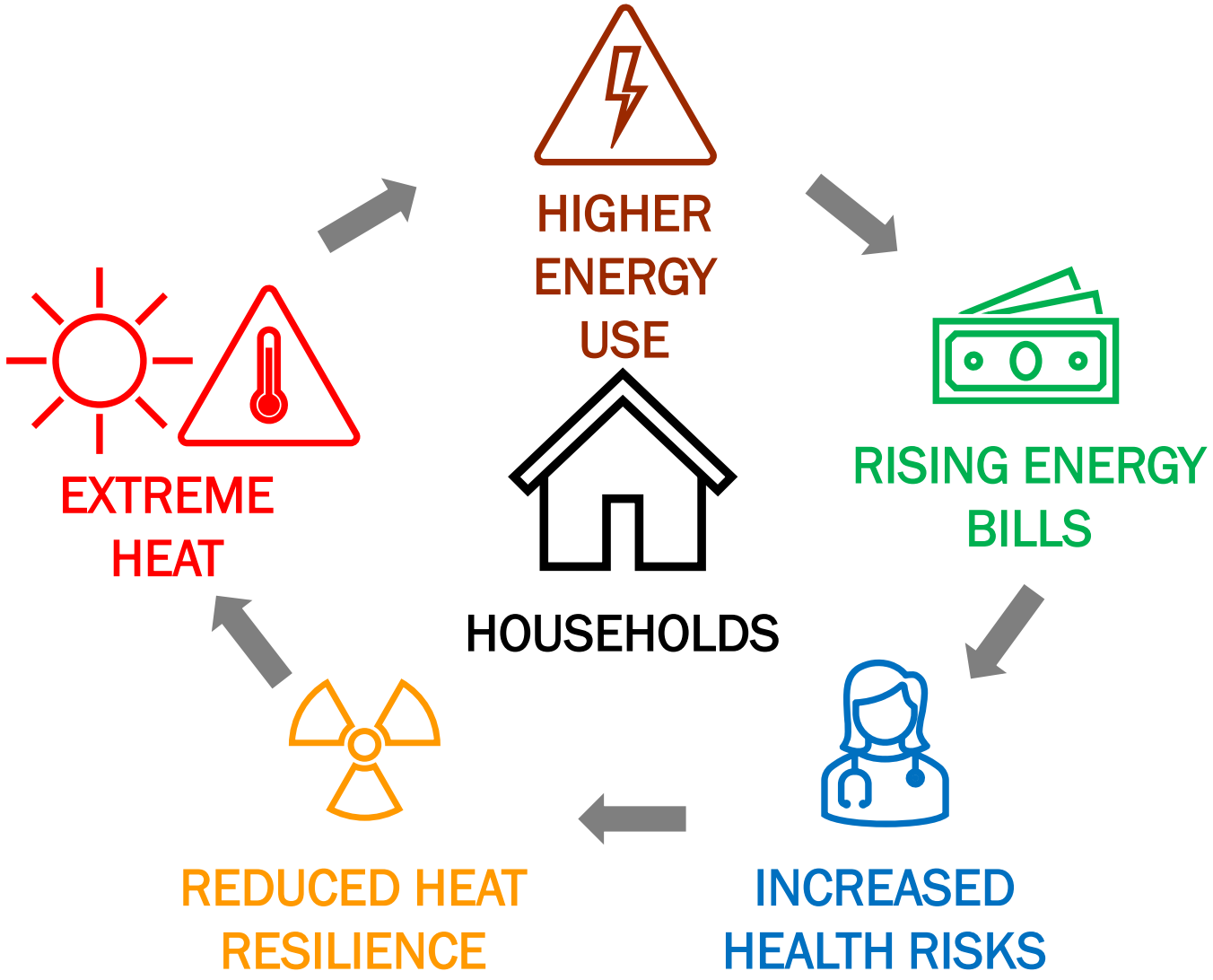
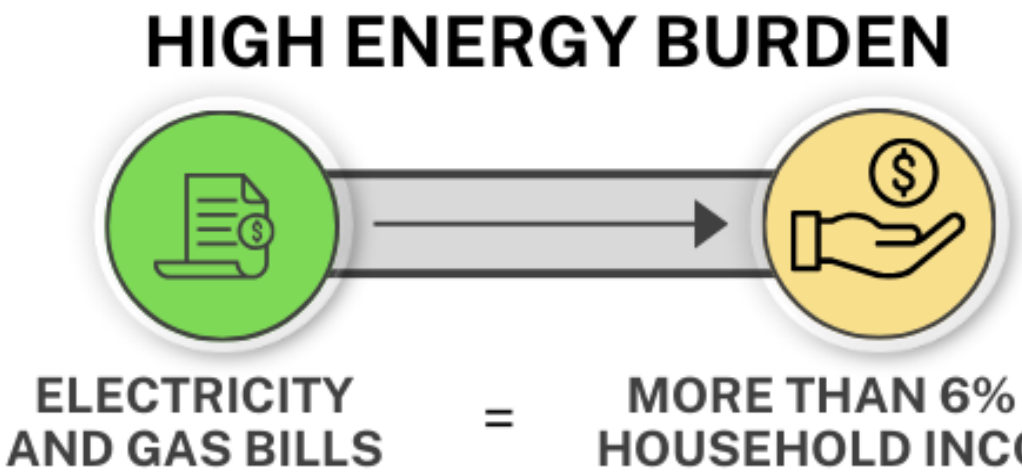
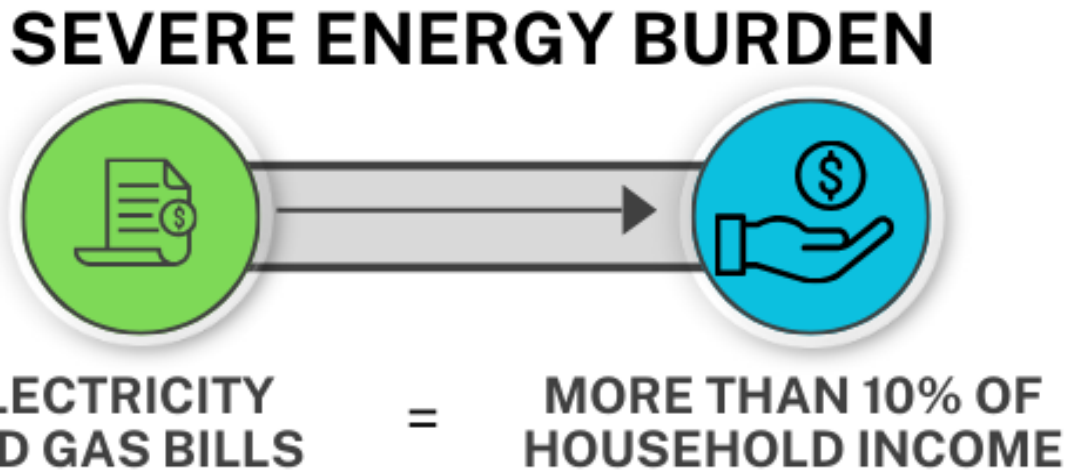
phoenix.gov/heat

Heat – Energy Connection

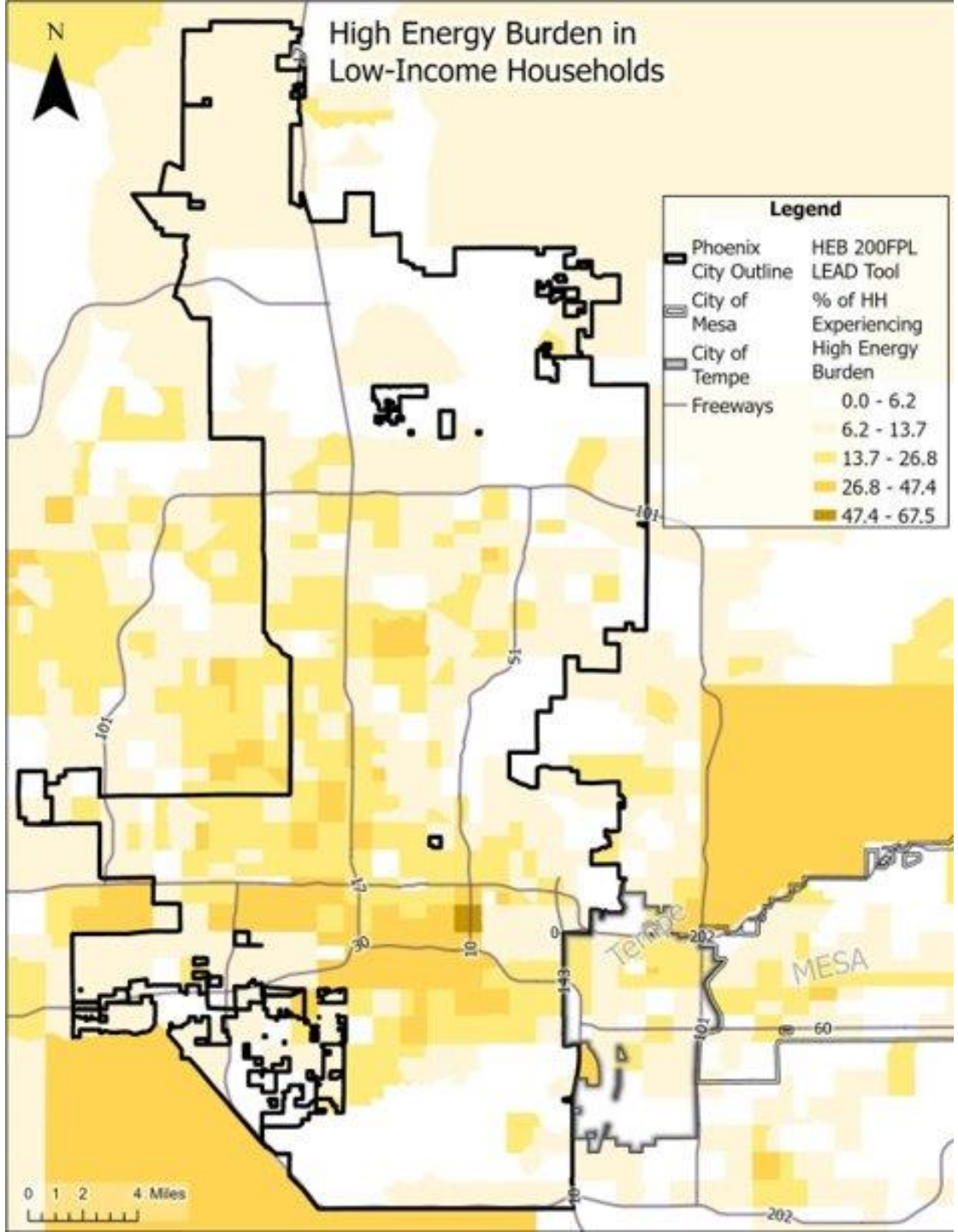


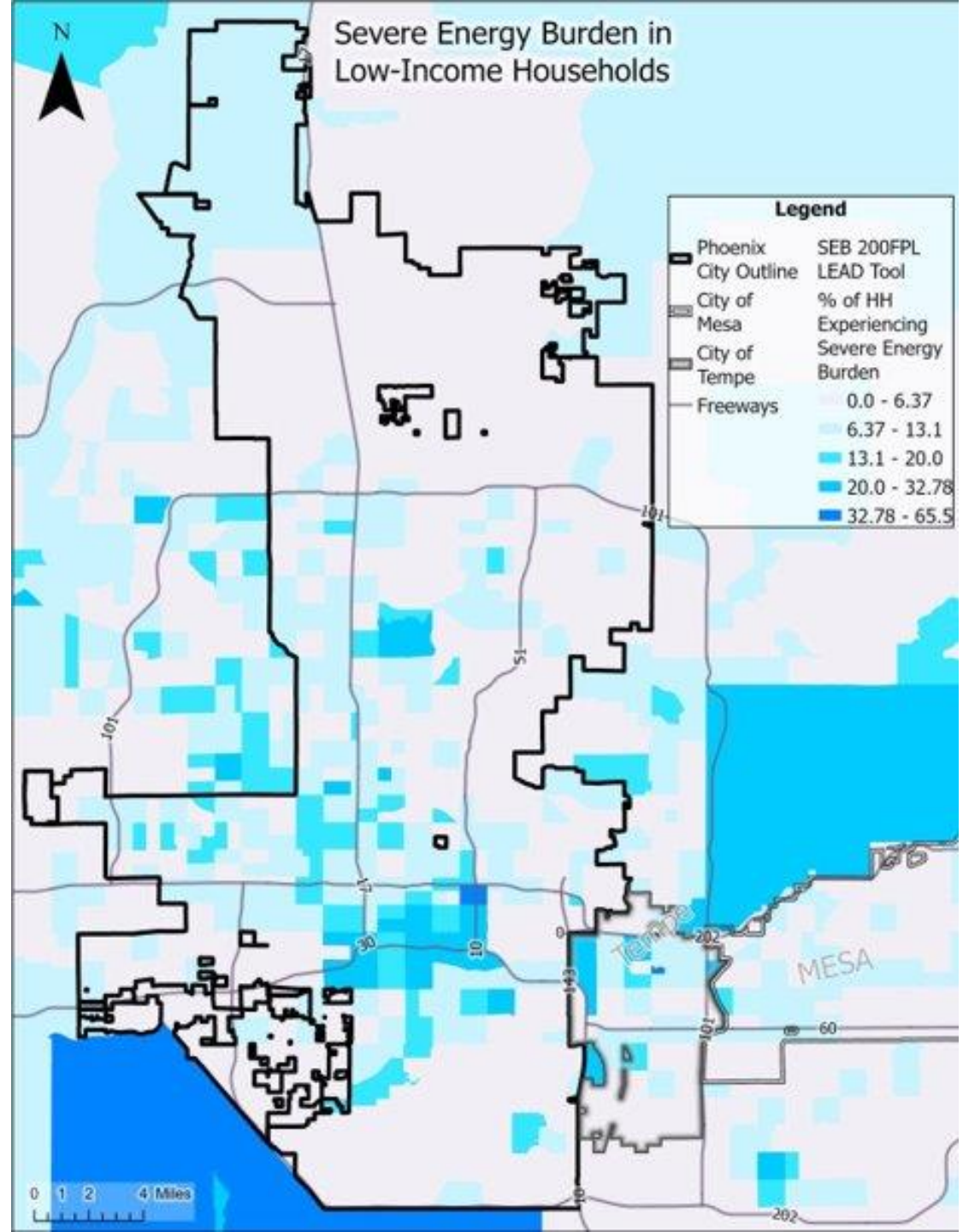
Energy Burden



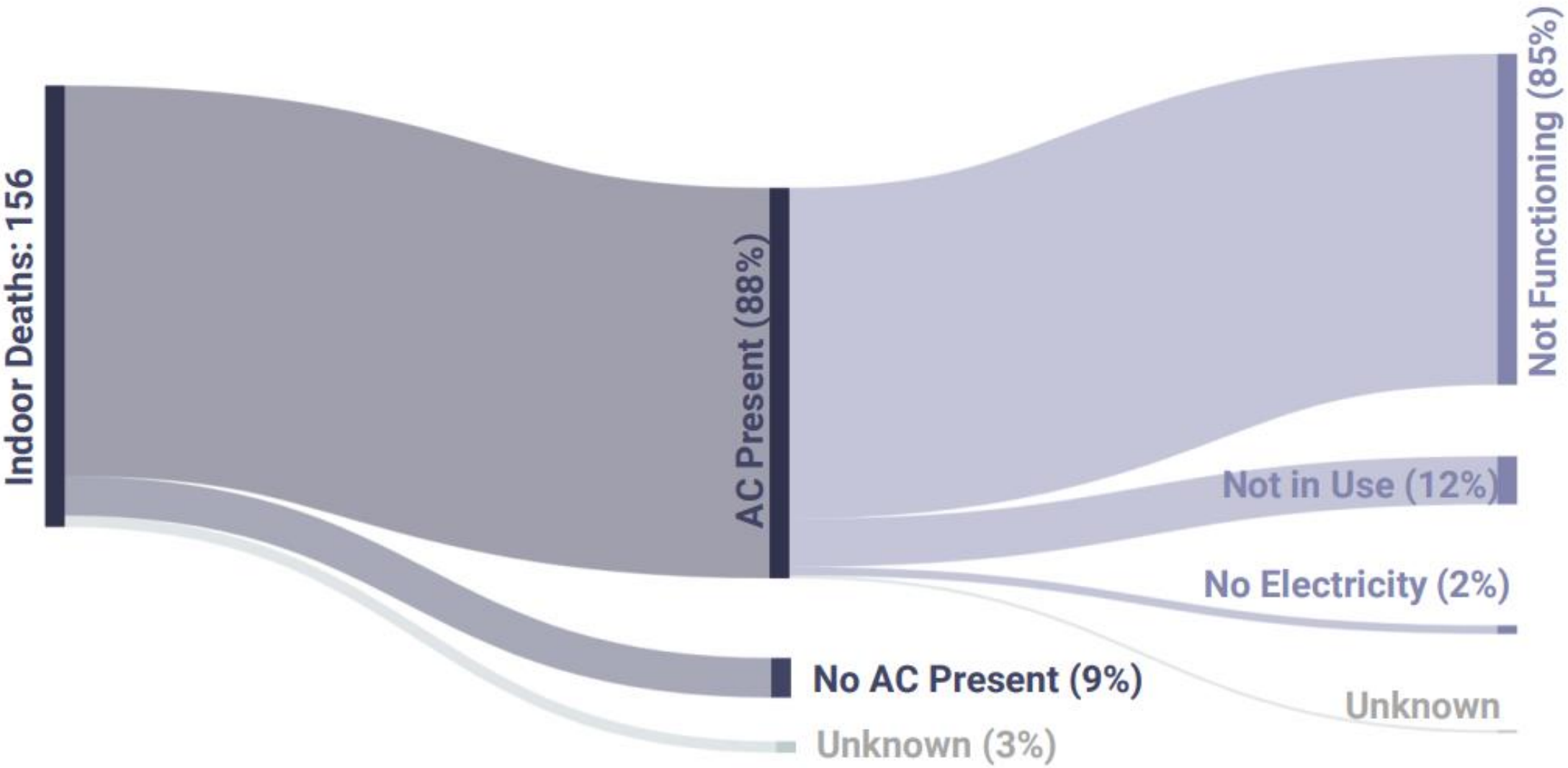


Total Households	Total low-income households in Phoenix	Low-income households in Phoenix experiencing high energy burden	Low-income households in Phoenix experiencing severe energy burden
584,114	150,783	Total: 79,079 Owners: 34,671 Renters: 44,408	Total: 42,289 Renters: 23,895 Owners: 18,394


N
High Energy Burden in
Low-Income Households
Legend
Phoenix City Outline
City of Mesa
City of Tempe
Freeways
HEB 200FPL LEAD Tool
% of HH Experiencing High Energy Burden
0.0 - 6.2
6.2 - 13.7
13.7 - 26.8
26.8 - 47.4
47.4 - 67.5
Tempe
MESA
0 1 2 4 Miles


N
Severe Energy Burden in
Low-Income Households
Legend
Phoenix City Outline
City of Mesa
City of Tempe
Freeways
SEB 200FPL LEAD Tool
% of HH Experiencing Severe Energy Burden
0.0 - 6.37
6.37 - 13.1
13.1 - 20.0
20.0 - 32.78
32.78 - 65.5
Tempe
MESA
0 1 2 4 Miles

Phoenix Heat and Energy Burden



How are we addressing this issue?

The **Energy Access Plan** contributes to increasing **energy access**, reducing **energy poverty** within the City of Phoenix, and tracking progress toward these objectives.

Energy Access Plan **Proposed Goal**:

- Increase household participation in low-income energy programs by 25% to reduce energy burden within the City of Phoenix by 2030.

Call to Action!

- Keep an eye for future workshops at https://www.phoenix.gov/EAP
- If you are interested in joining our Community Energy Advisory Board or if you have any additional comments, email us at energy@phoenix.gov

THANK YOU!

Cool Pavement And Cool Corridors

Ryan Stevens P.E. – Engineering Manager

City of Phoenix Street Transportation Department

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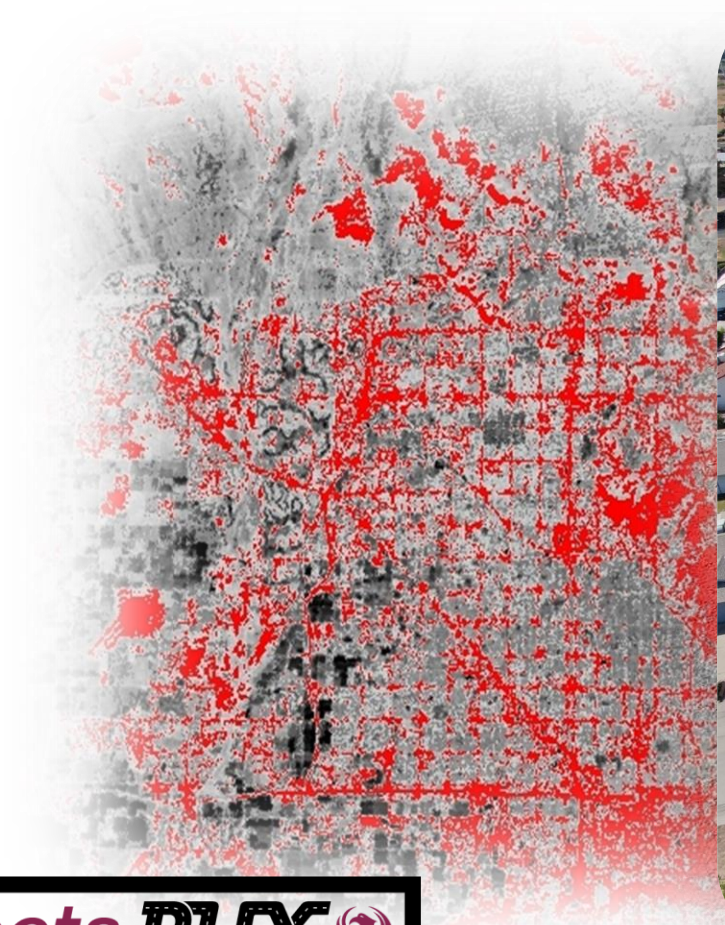
Streets Response to Extreme Heat Overview
Cool Pavement and Cool Corridors



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STREET TRANSPORTATION DEPARTMENT

Cool Pavement Program

Cool Pavement Evaluation By ASU

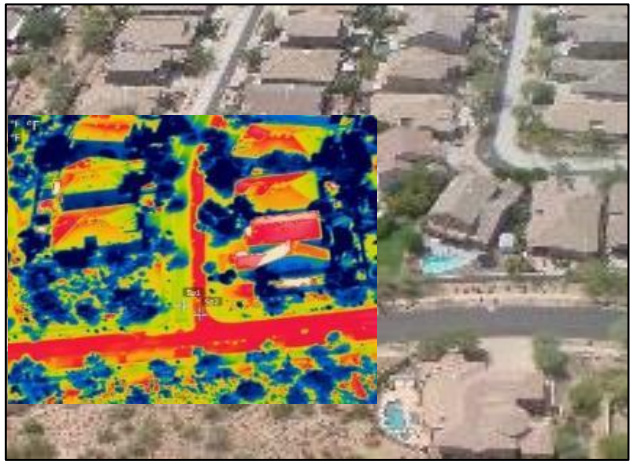
What is the impact of cool (highly reflective) pavement on urban heat?

Holistic assessment of “Cool Seal” in City of Phoenix residential neighborhoods

1. Air temperature & Surface Temperature:
Thermocouples / vehicle traverse

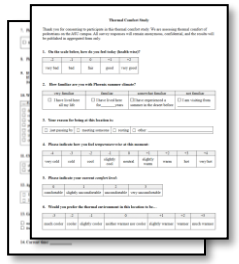
2. Mean Radiant Temperature:
MaRTy

3. Surface Temperature:
Helicopter overflight/thermal photography



4. Subsurface Temperature:
iButtons

5. Reflectivity:
Spectrometer



6. Neighborhood Survey:
Residents’ perceptions

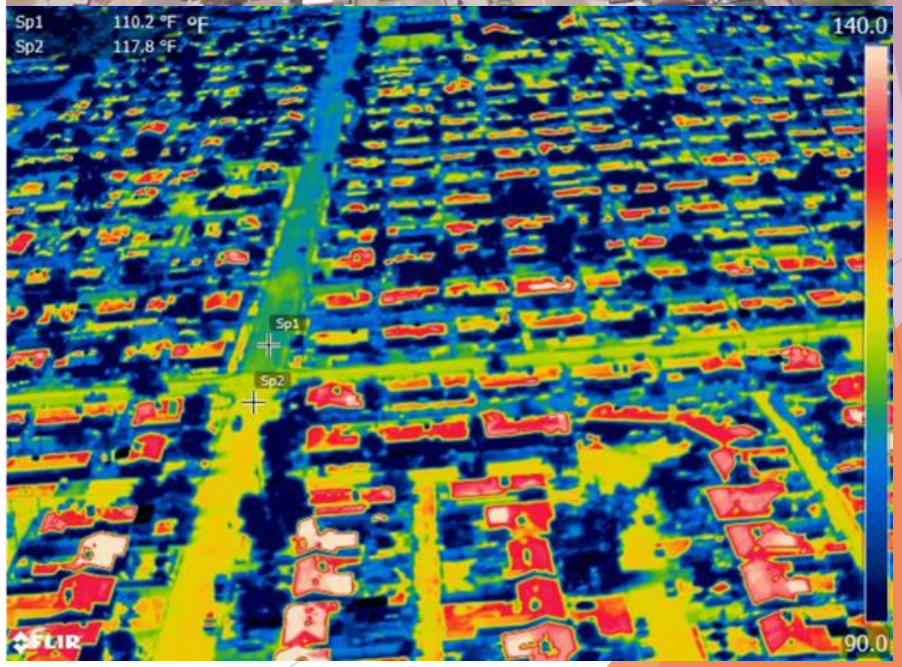
Phoenix neighborhood, half-coated with CoolSeal
September 10, 2020, 13:08 h
Air temperature: 32°C
Difference in surface temperature: ~7.5°C

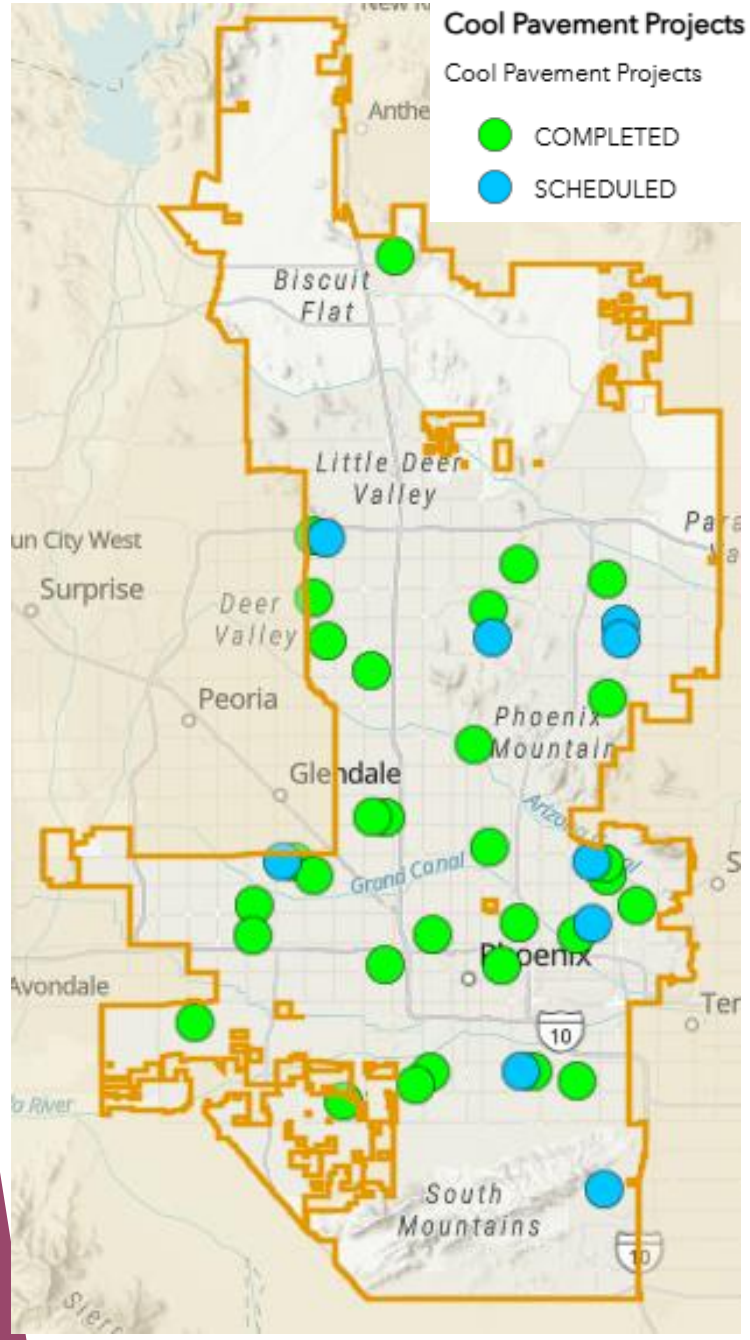
Urban Climate Research Center
Arizona State University

Results: Surface Temperature

Surface Temperature
On average, CP was **cooler** than asphalt concrete by:

- **12.0°F** and **10.5°F** at noon and afternoon hours
- **2.4°F** lower at sunrise
- **4.8°F** lower after sunset





Fiscal Year (FY)	Completed	Planned	Total Miles	Total Square Feet	Total Lane Miles
2019 - 2020 (FY 2020)	0.51	0	0.51	129,555	2.20
2020 - 2021 (FY 2021)	36.41	0	36.41	5,679,342	97.80
2021 - 2022 (FY 2022)	30.42	7.93	38.35	6,230,529	103.55
2022 - 2023 (FY 2023)	17.53	27.09	44.62	7,137,279	120.50
2023 - 2024 (FY 2024)	8.68	39.79	48.47	7,663,122	130.90
Total	**93.55**	**74.81**	**168.36**	**26,839,827**	**454.95**

As of December 2024

https://www.phoenix.gov/streets/coolpavement

Cool Corridors Program

$1,482,600 in ongoing funding

Part of City of Phoenix Shade Plan

- Reducing the City's overall carbon footprint
- Reducing climate impacts through the cooling effects of shade trees
- Improving pedestrian comfort

55th Ave Cool Corridor


3,300 Trees Planted in 3 Years

Questions

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