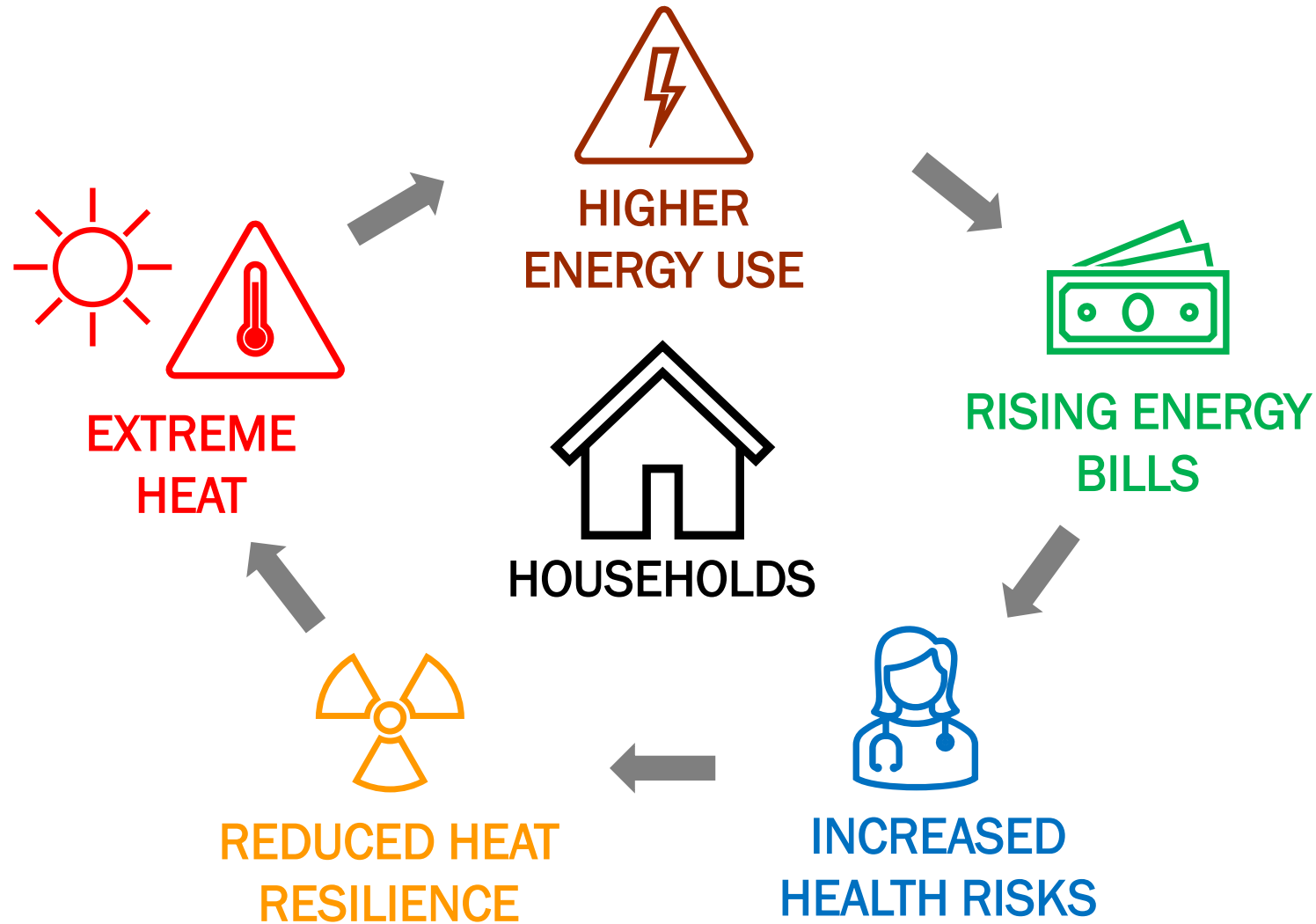




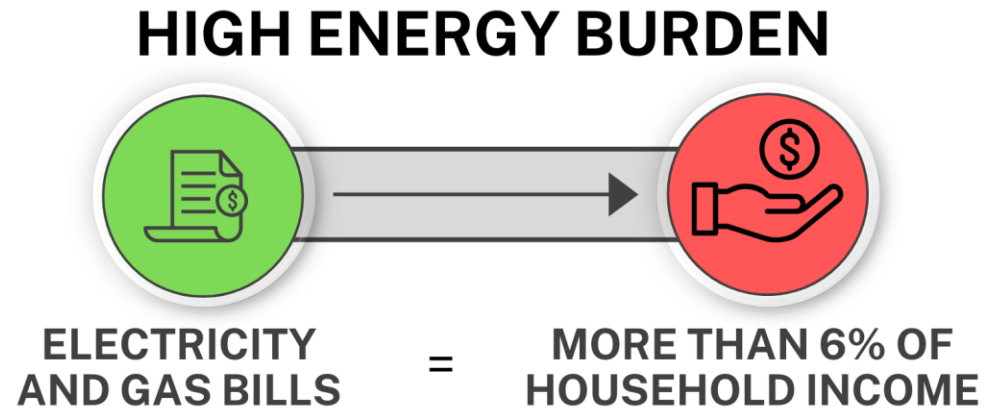
Energy Access Plan

Office of Sustainability
2025

Heat – Energy Connection



Energy Burden

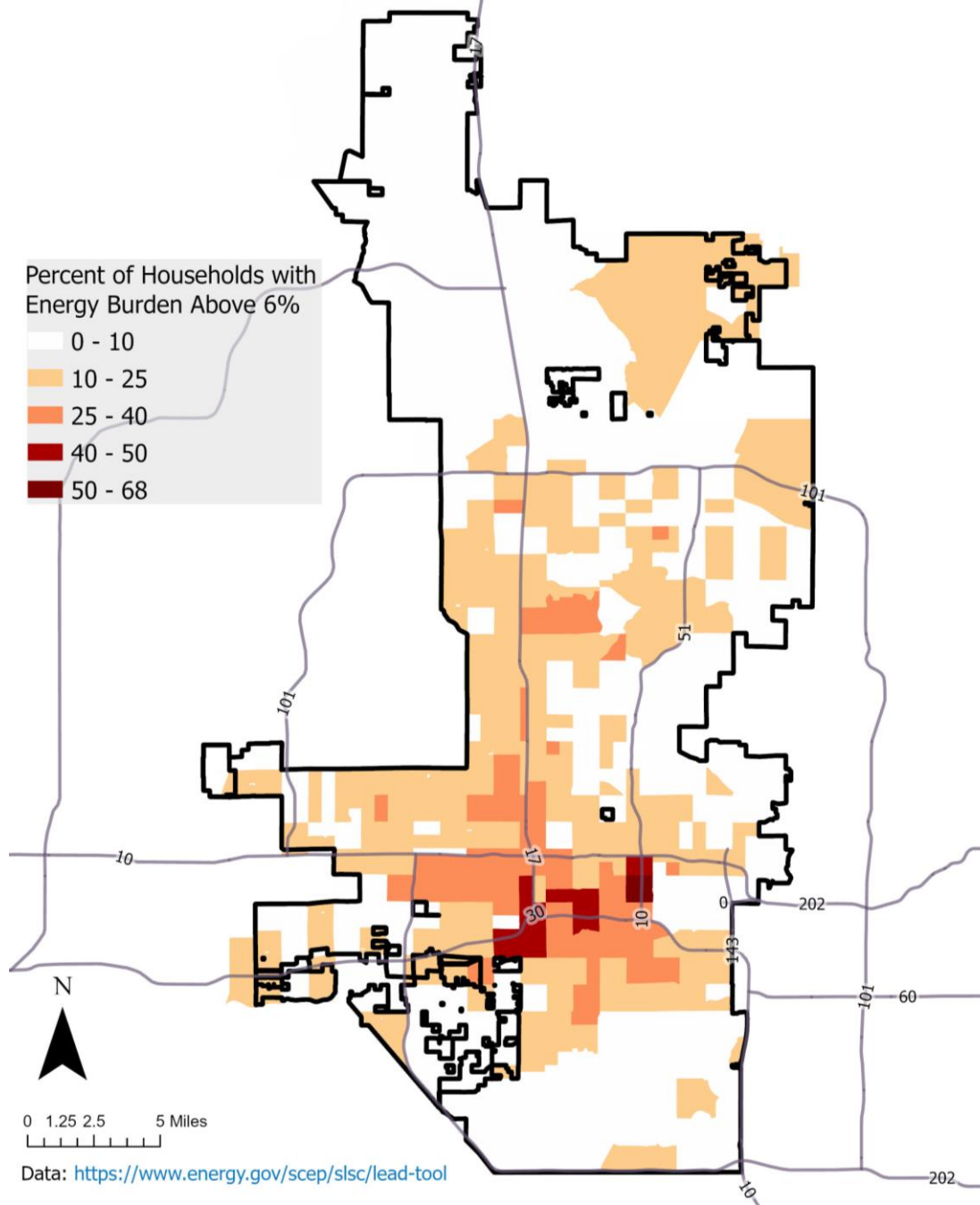
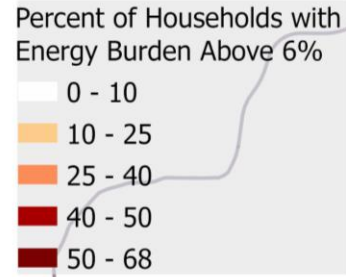


Total Households	Total Households Facing More Than 6% Energy Burden	
584,114	82,345	of which 96% are low-income



Energy Burden Across Phoenix

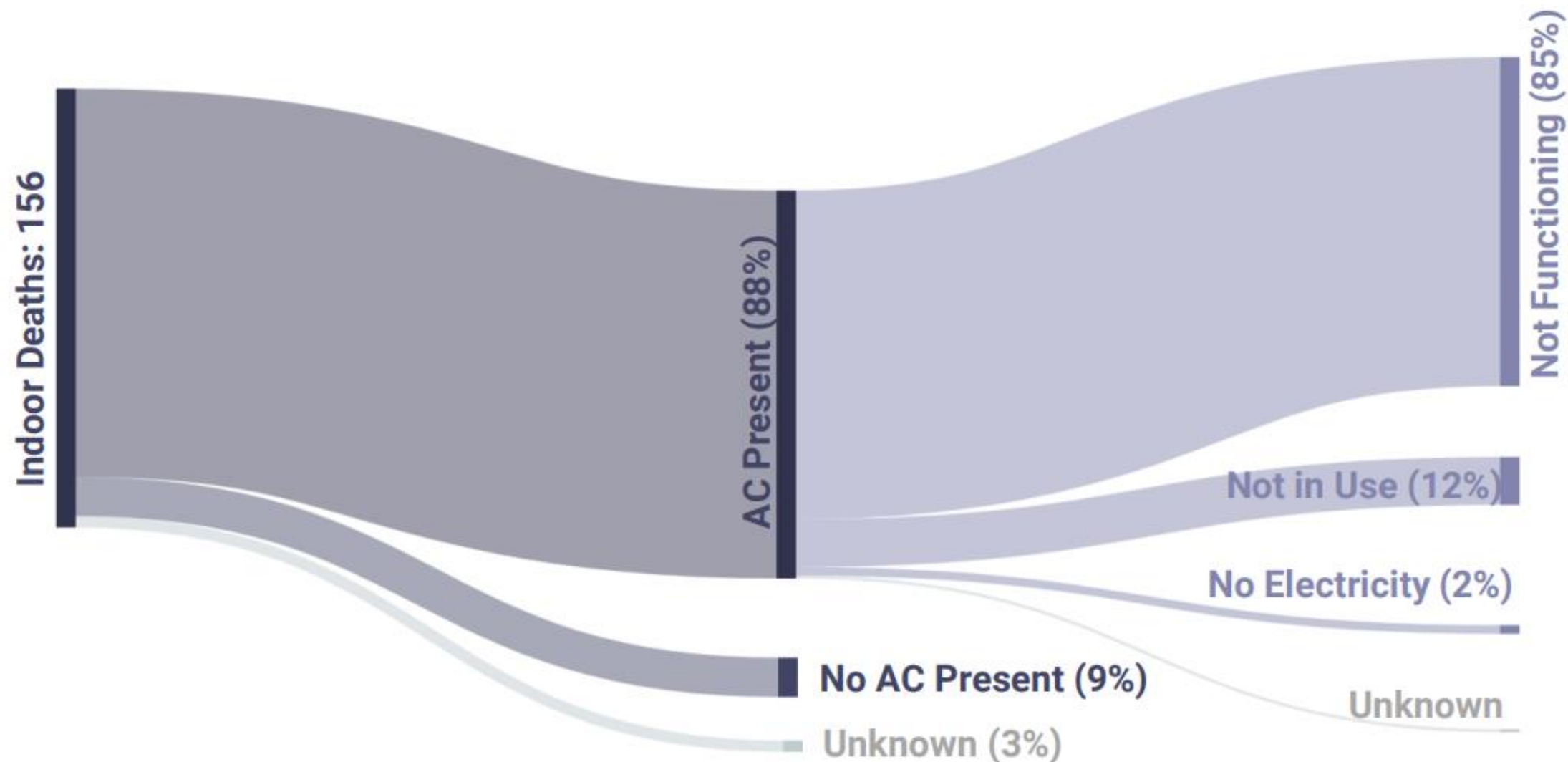
2018-2022 Data



Data: <https://www.energy.gov/scep/slsc/lead-tool>



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 Target:

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



Call to Action!

- Join us for upcoming workshops! Visit the link to register for one near you www.phoenix.gov/EAP
- Have any questions? Contact us at energy@phoenix.gov

THANK YOU!



Cool Pavement And Cool Corridors

Ryan Stevens P.E. - Engineering Manager

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Streets Response to Extreme Heat Overview

Cool Pavement and Cool Corridors



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

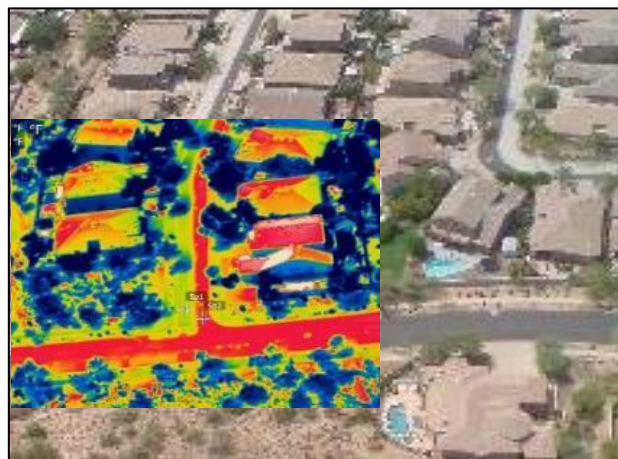


2. Mean Radiant Temperature:

MaRTy



3. Surface Temperature: Helicopter overflight/thermal photography



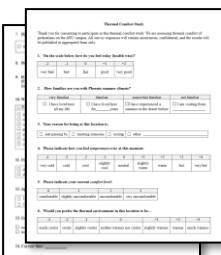
4. Subsurface Temperature: iButtons



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

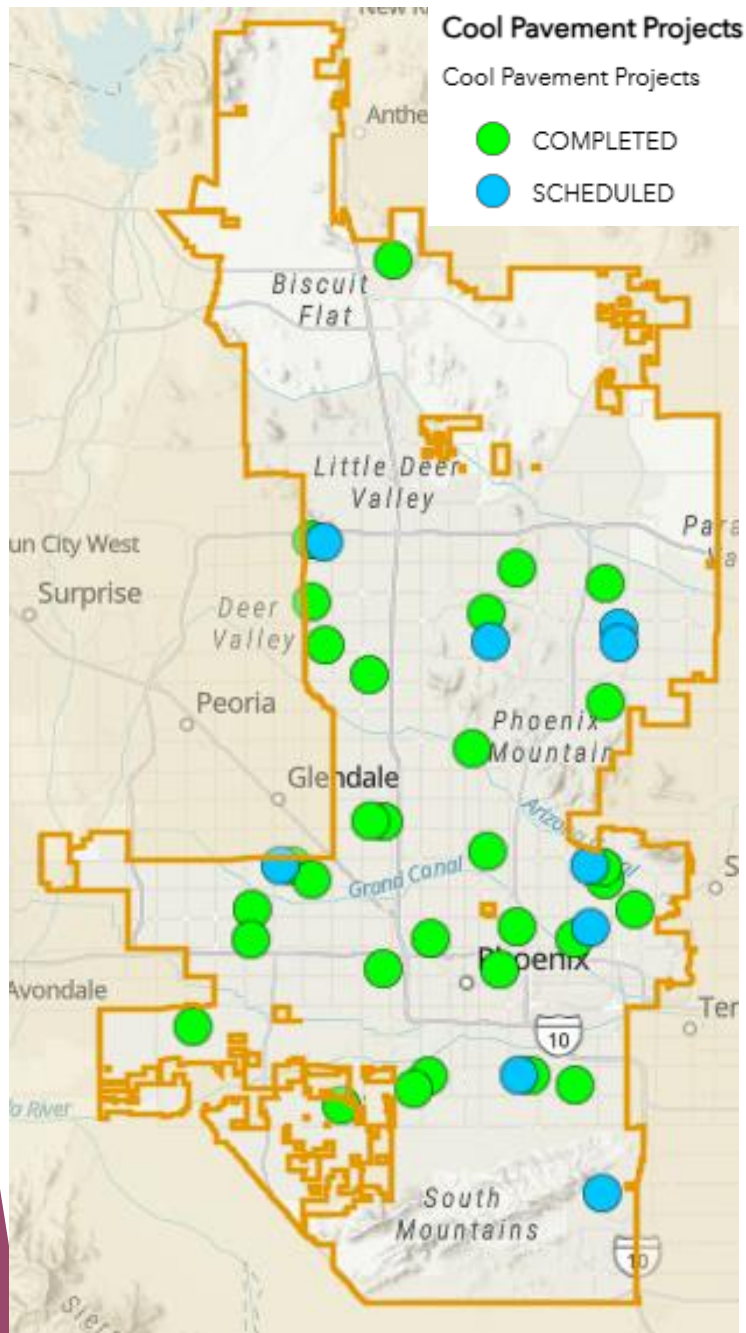
Results: Surface Temperature

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

Ryan Stevens P.E. - Engineering Manager

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Office of Heat Response and Mitigation

Climate Action Plan Workshops - 2025



About OHRM

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



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?

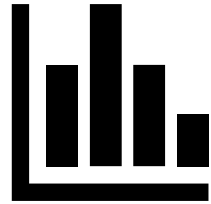


Heat Response Plan Overview

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



**First
Responders**



**Leverage
Data**



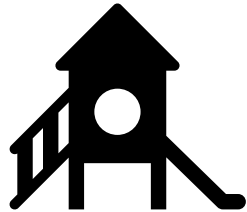
**Public Cool
Space**



**Public Drinking
Water**



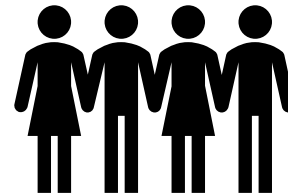
**Cool and Safe
Homes**



**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.



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

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





Thank you

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phoenix.gov/heat