



Shade Phoenix

- **Introduction to the Office of Heat Response & Mitigation**
- **Overview of Shade in Phoenix**

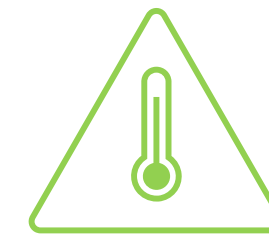
Mary Wright
Office of Heat Response & Mitigation
Arizona Weather Webinar
July 18, 2024

The Office of Heat Response and Mitigation

- Director 

- Heat Response Program Manager

- Heat Resilience Project Management Assistant ½ time



Response

- Urban Tree Program Manager

- Tree Equity Project Coordinator



- Built Environment Specialist

- Heat Resilience Project Management Assistant ½ time



Mitigation

- Administrative Assistant



Tree and Built Shade Projects

\$1.5 million

Shade Structures for Schools
"Grant Program"

\$2 million

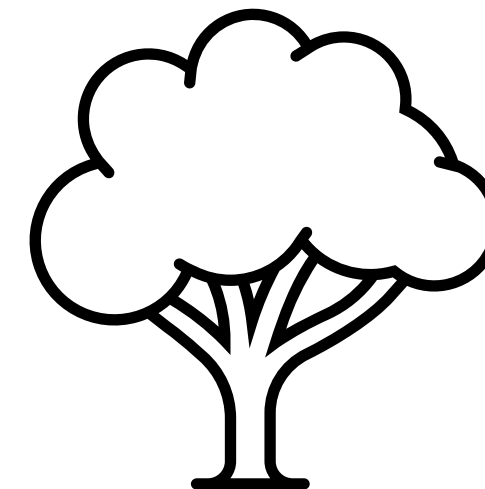
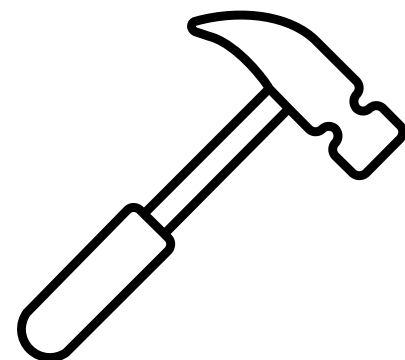
Canopy for Kids "Grant
Program"

\$3 million

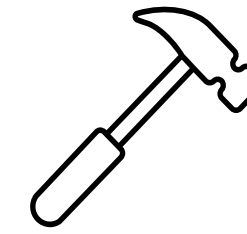
Shade Structures in the public
right of way

\$2 million

Community Canopy "Grant
Program"



Recent Shade for Students Projects



- 23 grant applications received
- 20 grant applications awarded
- 42 shade structure projects
- 2 repairs
- Program has closed



14
Public
Schools

4 Non-
Profit
Schools

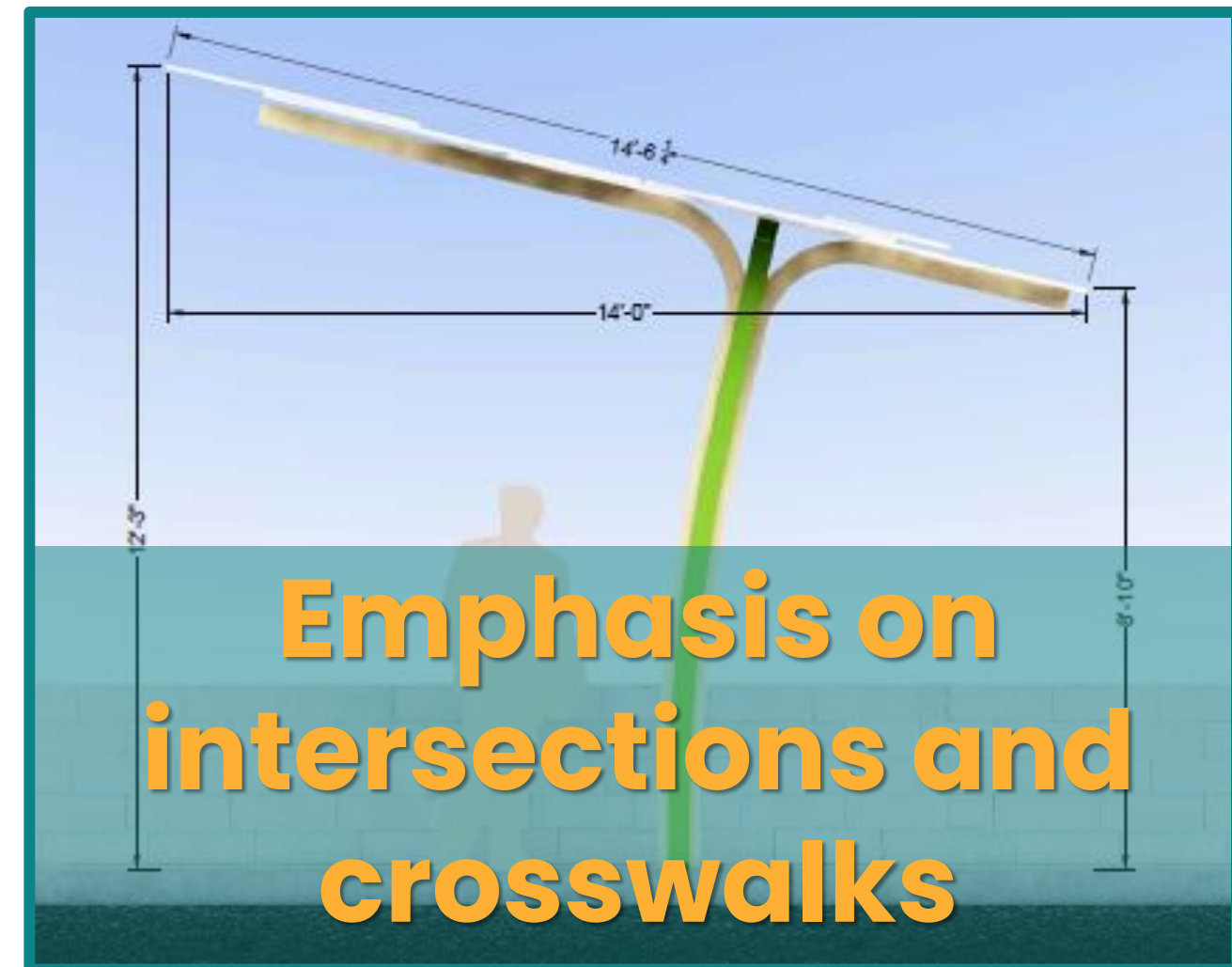
8 Non-
Profits



Phoenix Sidewalk Shade Program (ARPA)

- Currently working with a design firm to develop designs for 25 structures at intersections and crosswalks
- Working with 3 local artists to contribute 2D artwork to shade panels
- 90% design complete, will go to bid for construction in September

Shade Structure Program



Recent Canopy for Kids Projects

- 200 trees planted
- 7 schools served
- 3,148 students impacted
- Dozens more schools to be planted in the fall
- 18 grant applications received
- 11 grant applications awarded

Program will continue with additional \$2 mil IRA Funding



Recent Community Canopy Projects

- 836 trees planted since October
 - 716 of those planted between February and May
- 436 homes served
- 2 churches served
- 158 grant applications received
- 104 grant applications awarded



Program will continue with additional \$2.5 mil IRA Funding

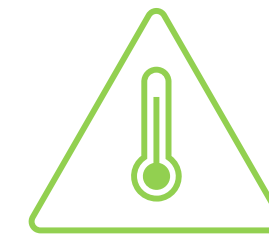


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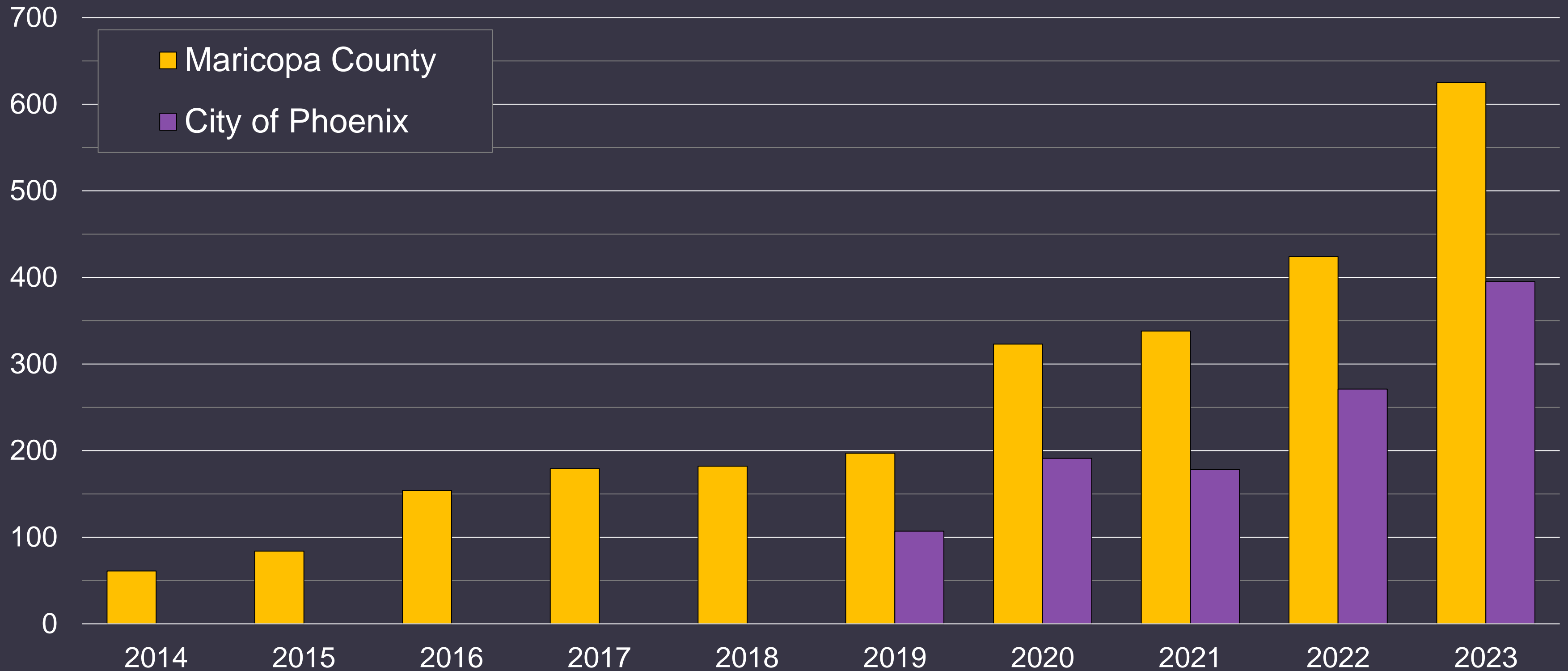
Mitigation

- Administrative Assistant



Heat-Related Deaths in Maricopa County, AZ

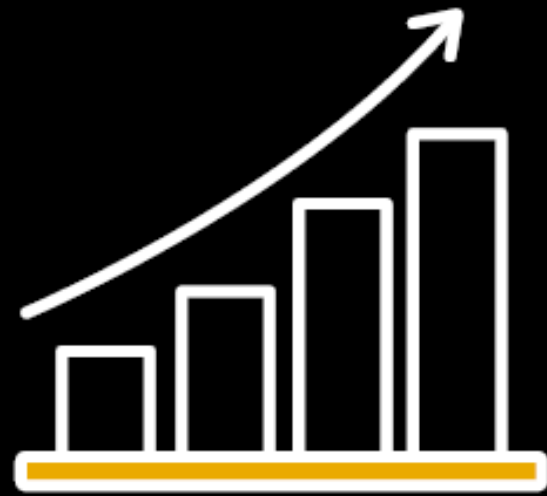
Source: Maricopa County Department of Public Health



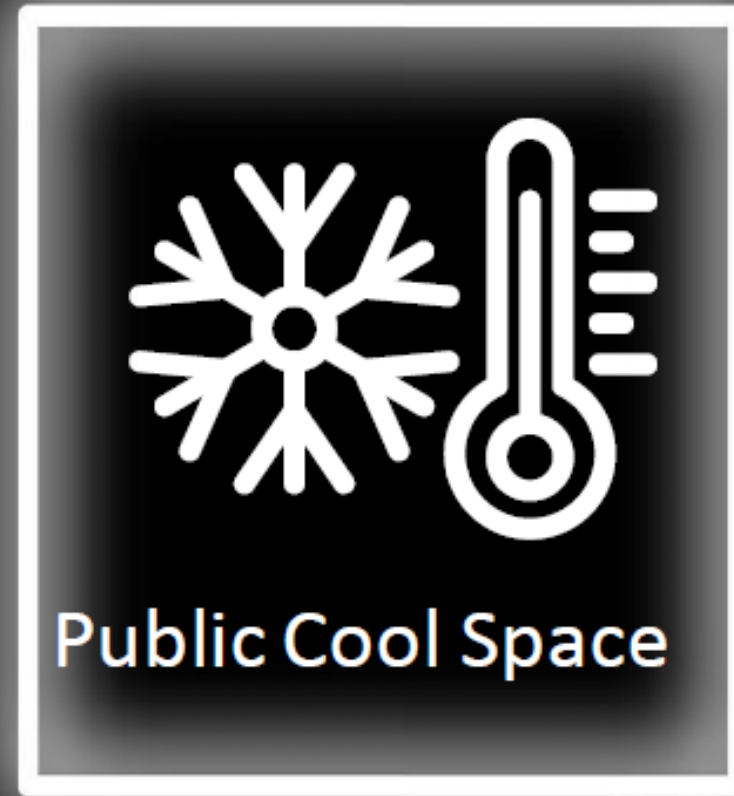
Heat Response Plan Strategies



First Responders



Leverage Data



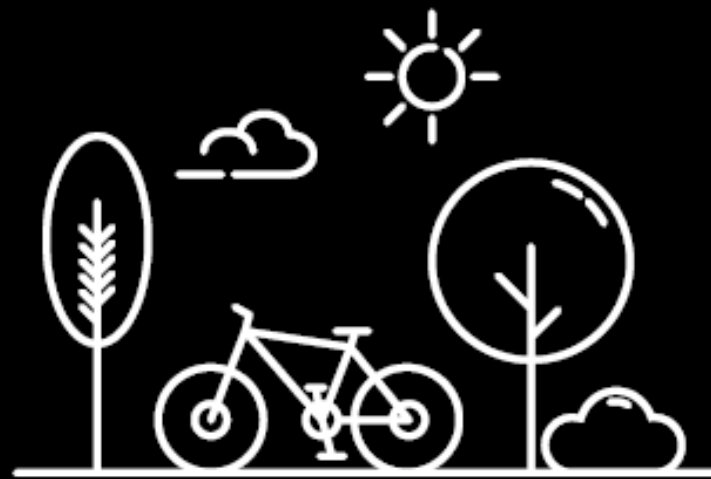
Public Cool Space



Public Drinking Water



Cool and Safe
Homes



Cool and Safe
Mobility &
Recreation



Heat Safety for
Workers



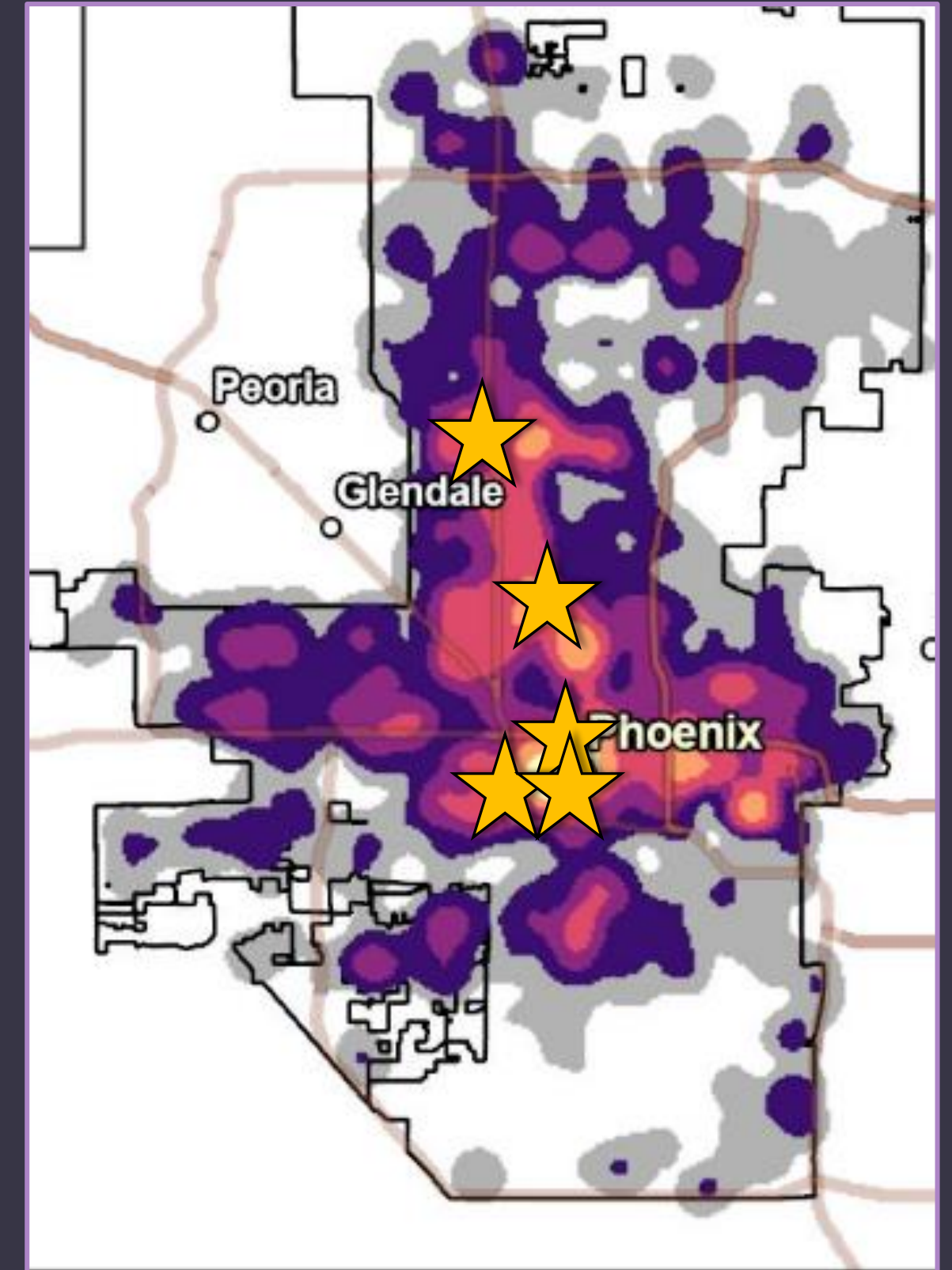
Community
Engagement &
Outreach



Collaborate
Across
Departments

Overnight Respite and Navigation Centers & Extended Hours Cooling Centers

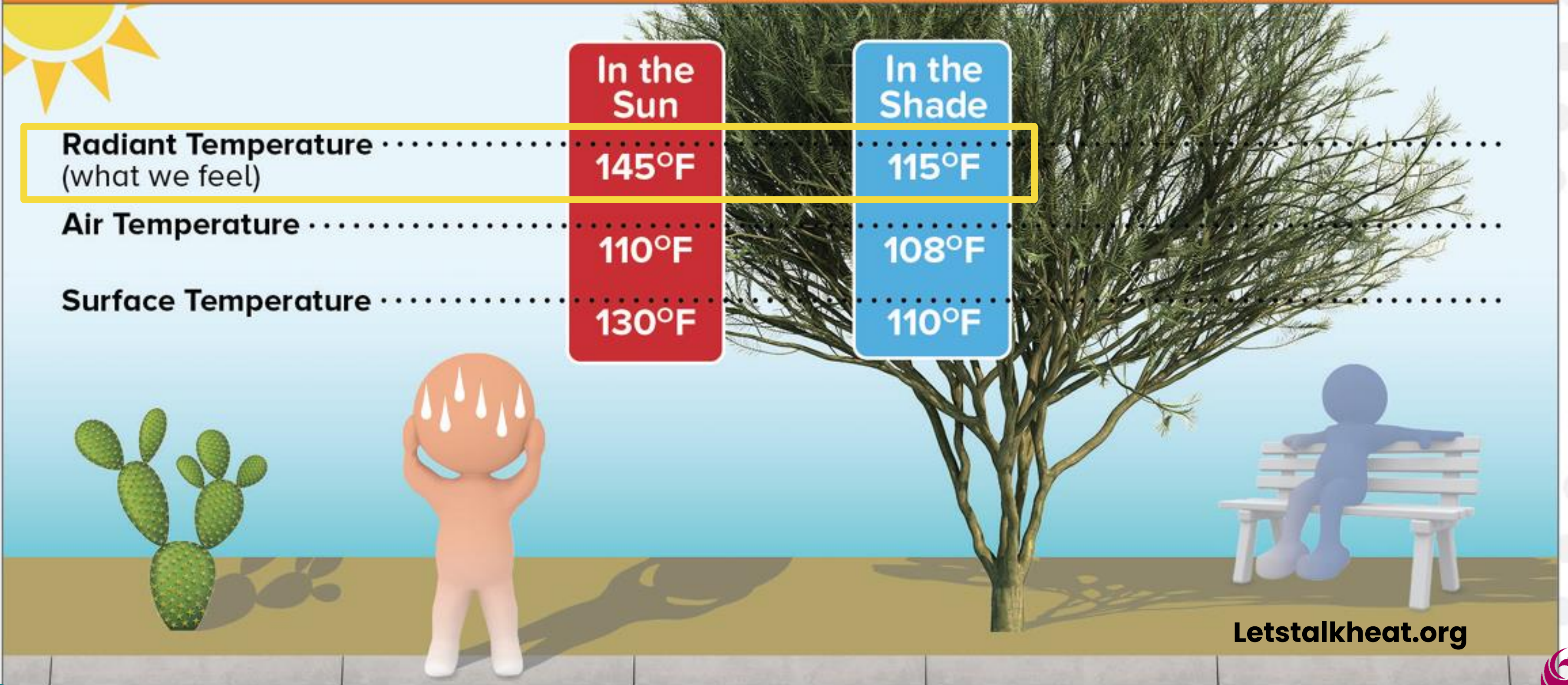
- One 24/7 and one overnight respite center (uninterrupted rest allowed)
- Extended cooling center hours at three Library locations (until 10pm)
- All locations with professional navigation and dedicated security
- Unified command structure





The case for shade

Shade Reduces Air, Surface, and Radiant Temperatures



The case for shade

**Shade is an
essential solution
for hotter cities**

Nature 2023

**Shade is largely
absent from
municipal heat plans**

*Environmental Research
Letters 2022*

**Policy and
infrastructure
changes are urgently
needed to protect
mental health from
heat**

*American Psychological
Association 2024*



Community Questionnaire

90%

**of residents say there is not enough
built shade or trees in Phoenix**

59%

**say there is a severe
lack of trees**

39%

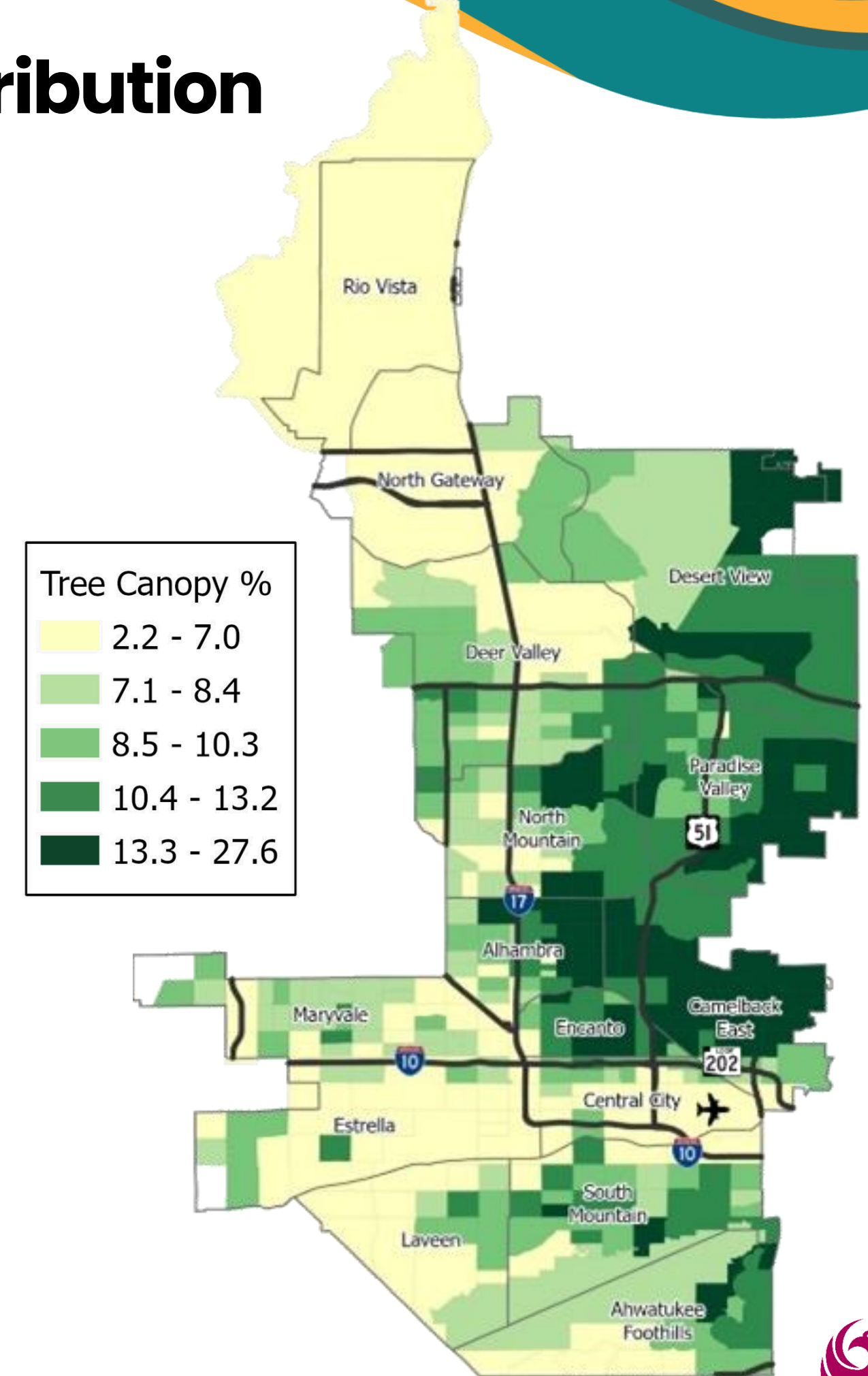
**say there is a severe
lack of built shade**



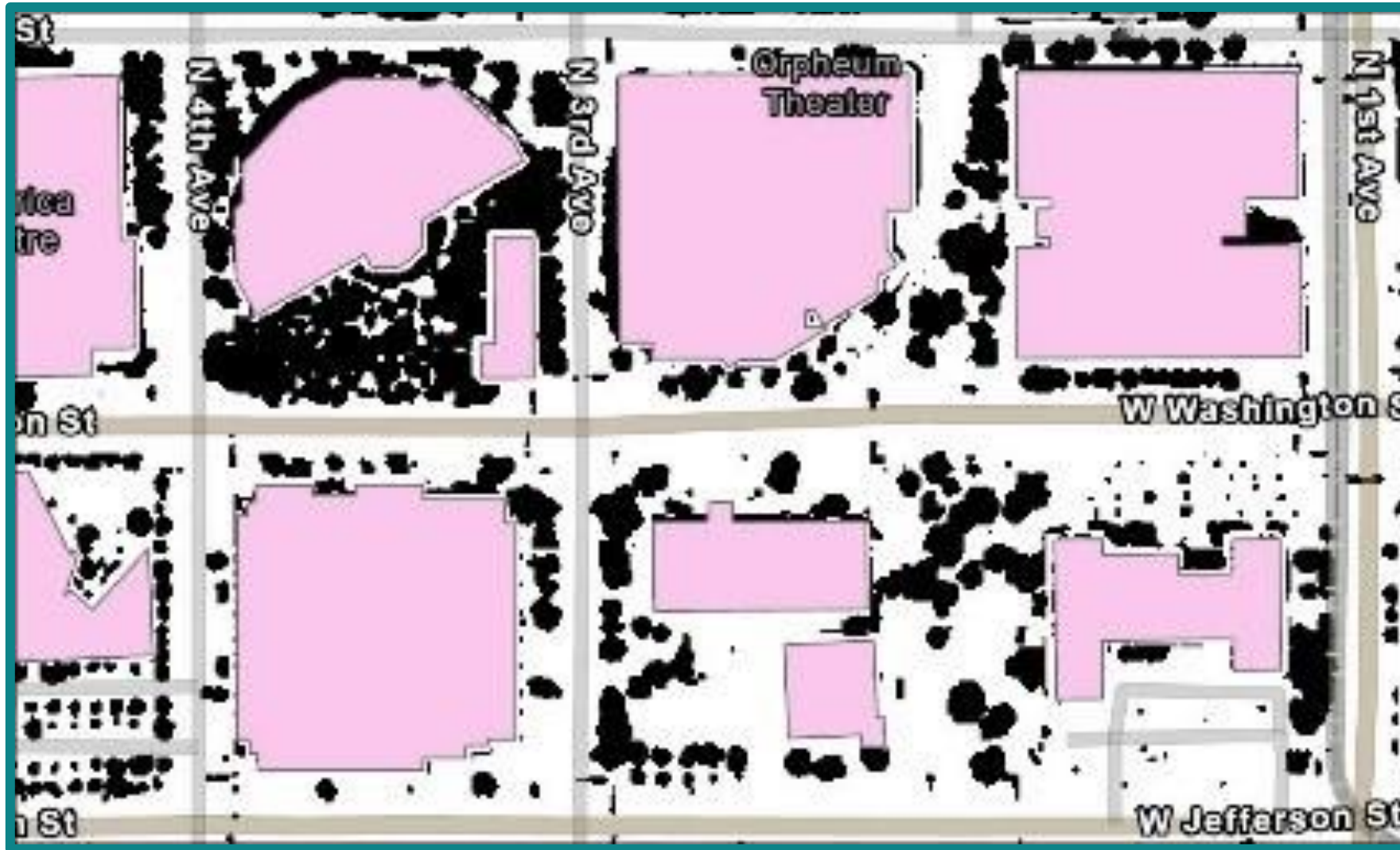
Analysis – Tree Canopy Distribution

- Median tree canopy: 10.9%
- Lowest census tracts: 2-3%
(includes desert + agricultural areas)
- Highest census tracts: 25-27%

- **75% of residents live in a tract with less than 15% tree canopy**



Analysis – Citywide Shade



Noon early summer shade coverage on sidewalks:

17%



6pm early summer shade coverage on sidewalks:

31%

MAG Active Transportation Plan Toolbox Guidelines

Minimum 20%

Good 30%

Excellent 60%

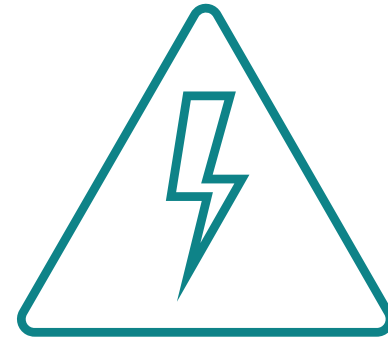


Shade Phoenix - Vision and Values

A future where all residents and visitors to Phoenix experience the benefits of trees and built shade throughout the city.



Focus on people first



Shade is a critical infrastructure and a service



Lead with an environmental justice and equity lens



Respect our desert landscape and heritage



Collaboration is essential



Go beyond the status quo



Strategic Priorities and Actions

37 actions planned over the next five years
Total investment exceeding \$50,000,000

**Educate &
Empower**



**Preserve & Maintain
Existing Shade**



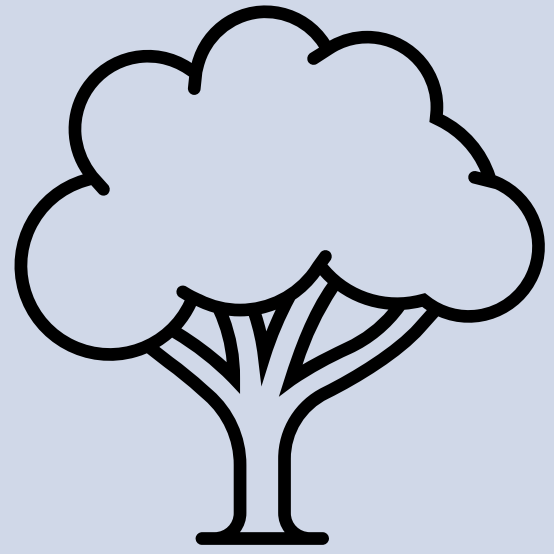
Expand Shade



**Evaluate &
Institutionalize**

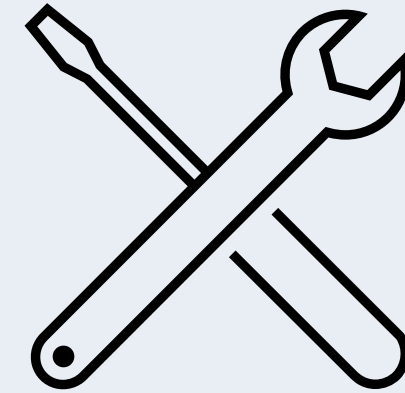


Tree and Shade Investments



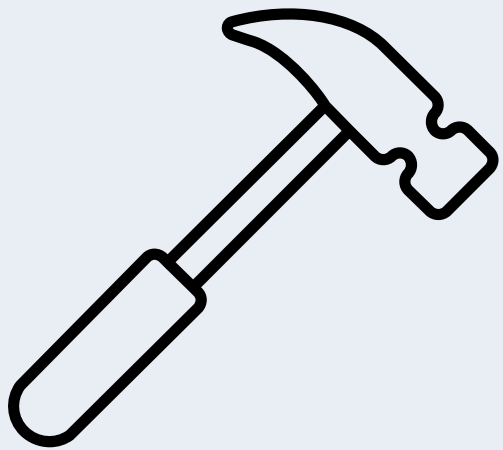
New trees

\$17M



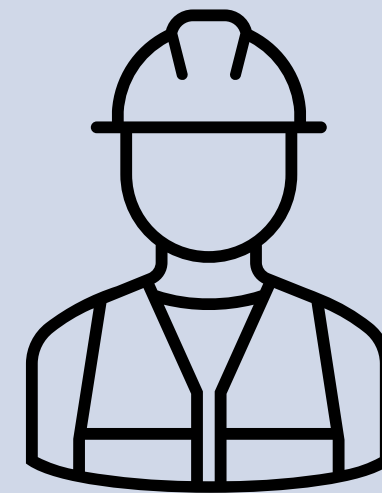
Maintenance

\$15M



New built shade

\$18M



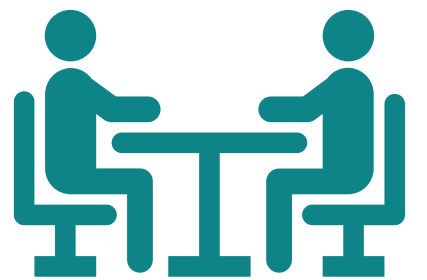
Workforce and programming

\$2M



Next steps

- Create performance indicators and timelines
- Develop site specific shade targets
- Review Budget & Research study results
- Community and stakeholder engagement
- Council feedback
- Final plan in fall 2024



Thank you!

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