

## Update on Shade • Phoenix Plan & Tree and Shade Grants

**Office of Heat Response & Mitigation** Synergy Conference September 7, 2024



## Why a new plan?

- Inform program and policy development
  - Solidify operational guidance
  - Catalyze stakeholder efforts
  - Enhance competitiveness for funding
  - Increase public accountability



## The case for shade

## Shade Reduces Air, Surface, and Radiant Temperatures

	In the Sun	In the Shade
Radiant Temperature · · · · · · · · · · · · · · · · · · ·	145°F	115°F
Air Temperature · · · · · · · · · · · · · · · · · · ·	110°F	108°F
Surface Temperature · · · · · · · · · · · ·	130°F	110°F

## Letstalkheat.org

## 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



## Shade Phoenix Plan Community Engagement

- Village Planning Committees
- Environmental Quality and
  Sustainability Commission
- Metro Phoenix Urban Forestry Roundtable
- Innovate PHX Shade Challenge
- Community workshops
- Online questionnaire with 1400+ responses





## **Community Questionnaire**

90%

## of residents say there is not enough built shade or trees in Phoenix 39% 59% say there is a severe lack of built shade lack of trees

# say there is a severe



## **City Staff Perspectives on Shade**



Varying management strategies across 12 departments



Inadequate funding to replace or add trees



High contract management needs and inconsistent performance 10

Unplanned costs difficult to absorb

## Need to expand internal and external skilled workforce



Need for more built shade structures



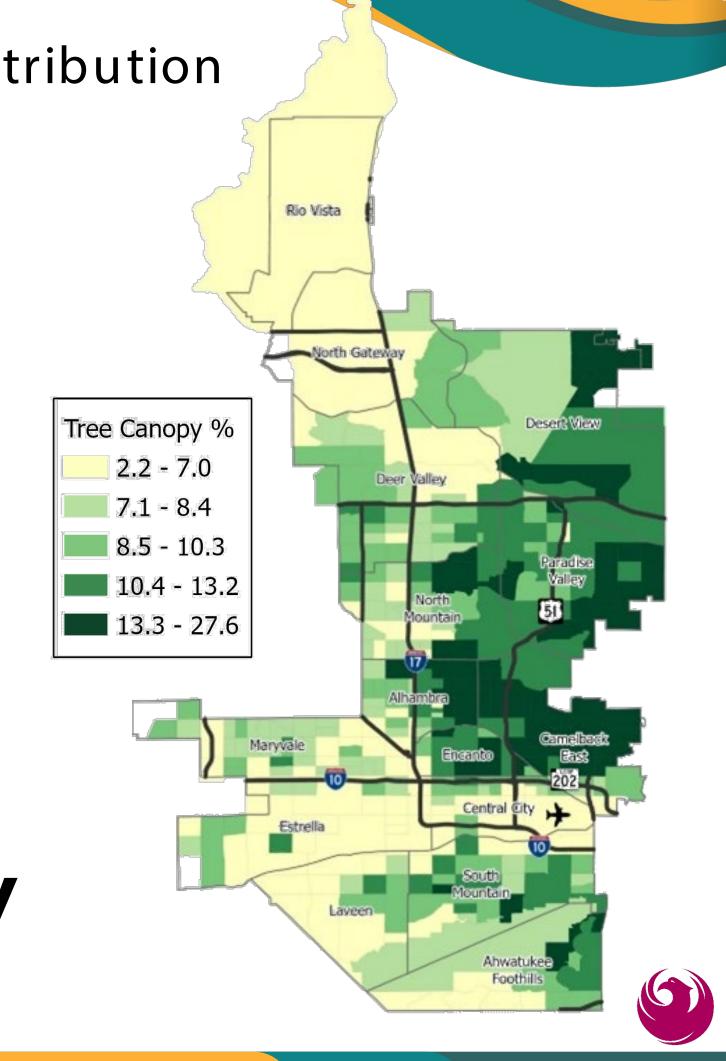
Analysis – Tree Canopy Distribution

- Median tree canopy: 10.9%
- Lowest census tracts: 2-3%

(includes desert + agricultural areas)

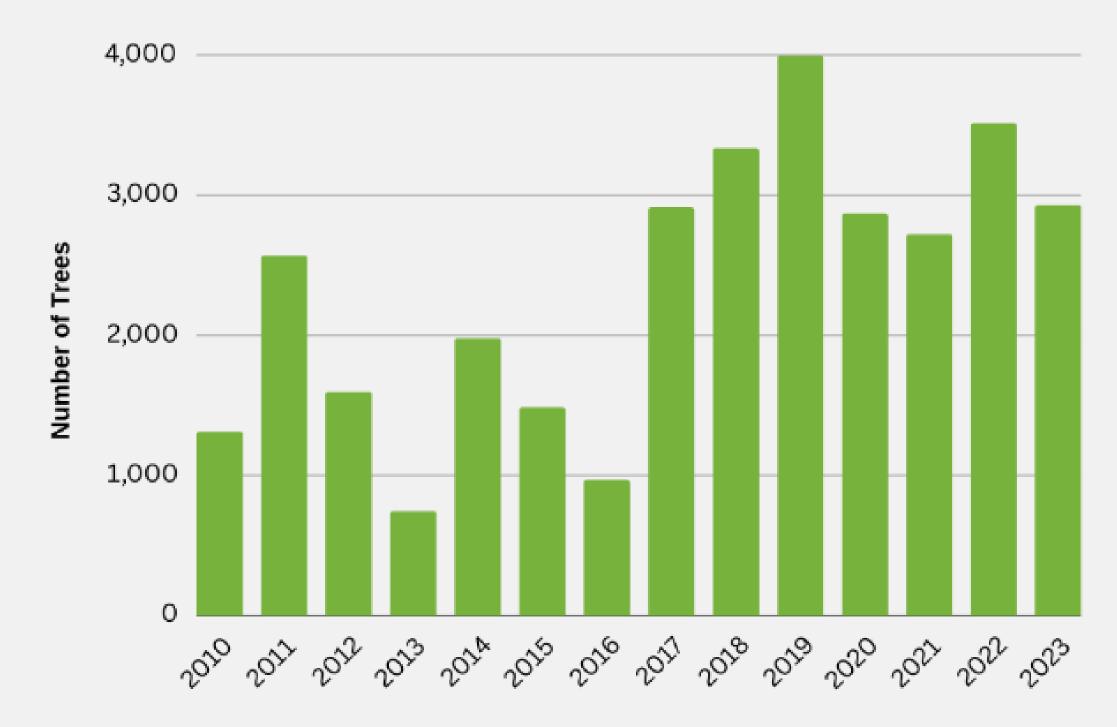
• Highest census tracts: 25-27%

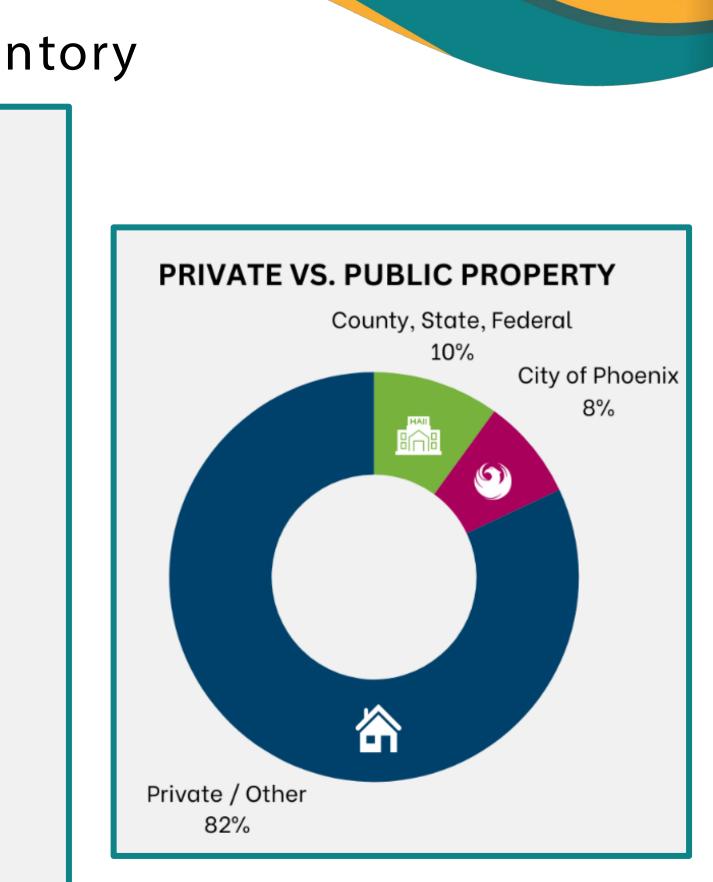
75% of residents live in a tract
 with less than 15% tree canopy



Analysis – City Tree Inventory

## **Number of Trees Planted**







## Analysis – Citywide Shade



## Noon early summer shade

## 6pm early summer shade

## **MAG Active Transportation Plan Toolbox Guidelines** Minimum 20% Good 30% Excellent 60%





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



15

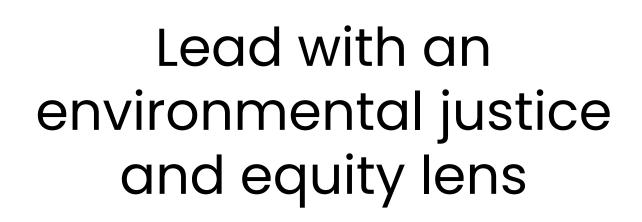
Respect our desert landscape and heritage



Shade is a critical infrastructure and a service



**Collaboration is** essential







Strategic Priorities and Actions

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

## Educate & Empower



## Expand Shade



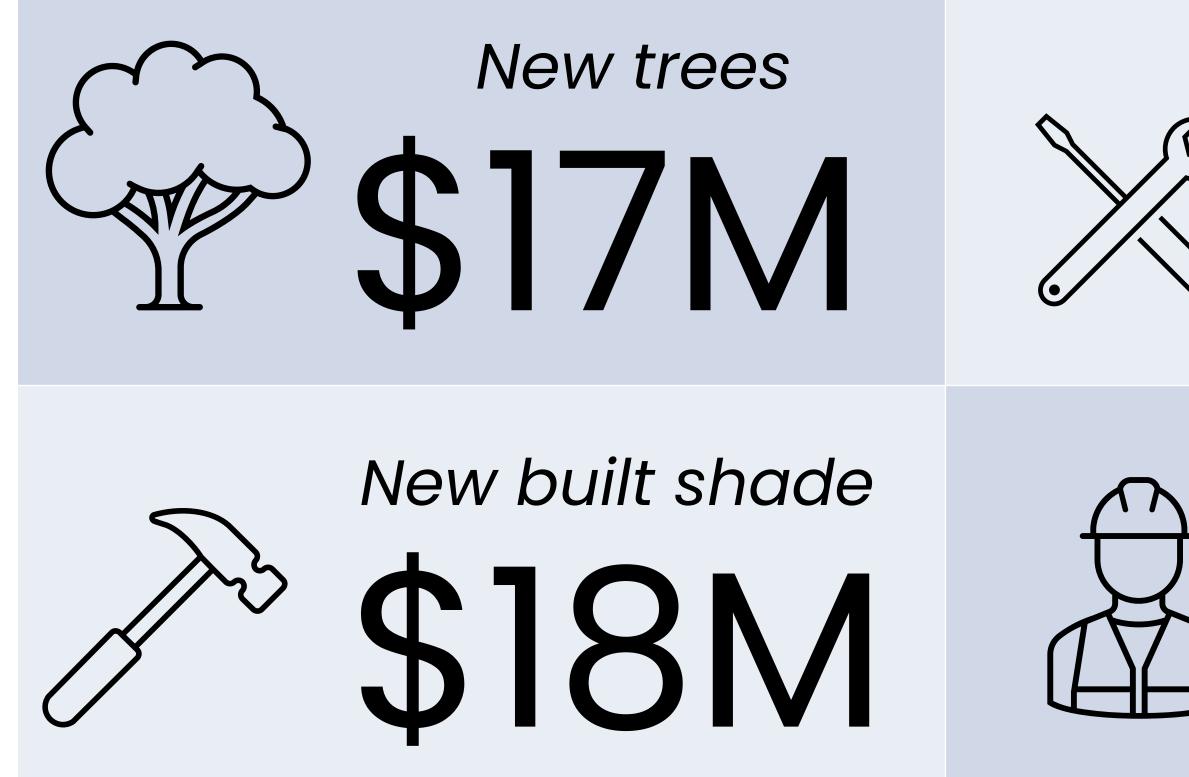


## Preserve & Maintain Existing Shade

## Evaluate & Institutionalize



Tree and Shade Investments



# Santenance Santa S

## 



## Funding Sources

## General Fund/CIP \$27M

## Grants & ARPA

## GO Bond

## \$17M

## \$8M



Parks and Recreation's Role in Shade Phoenix Plan

## **Tree Maintenance Tree Planting** in Parks Citywide



## **Certified Arborist** Training

**powerofparks** 



Street Transportation's Role in Shade Phoenix Plan

## Landscape Maintenance Citywide

## **Cool Corridors & Street Tree** Replacement





## **Shade Structure** Program



## Additional Actions in Shade Phoenix Plan **Public art Tree Steward Tree and** shade grants installations Program

## **Bus stop** shade











Bloomberg Philanthropies









## Nextsteps

- 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

## s and timeline gets dy results







Council Feedback – Policy Session 6/11/24

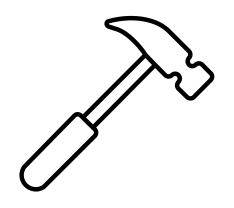
- Overall, very positive/supportive
- Emphasis on ensuring proper tree maintenance plans and desire to see less siloed maintenance
- Comments on the importance of equity
- Positive comments on bringing community together and neighborhood leadership
- Appreciative of partnership with other departments
- Reiterated concerns about continuing plan regardless of specific individuals/employee turnover



## **OHRM Tree and Built Shade Grant Program Update**

\$1.5 million Shade Structures for Schools **Grant Program** 

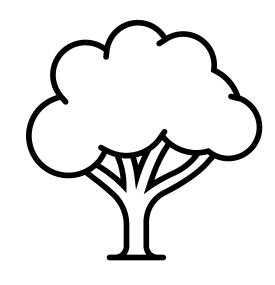
\$3 million Right of Way Shade Structures Capital Improvement





\$2 million Canopy for Kids **Grant Program** 

\$2 million **Community Canopy Grant 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 mil IRA Funding



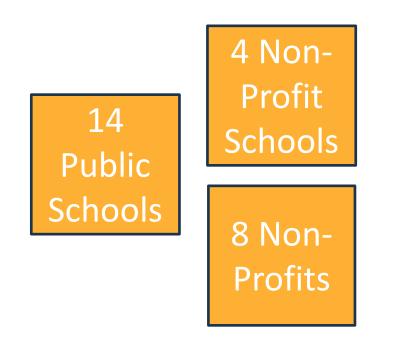




## **Recent Shade for Students Projects**

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











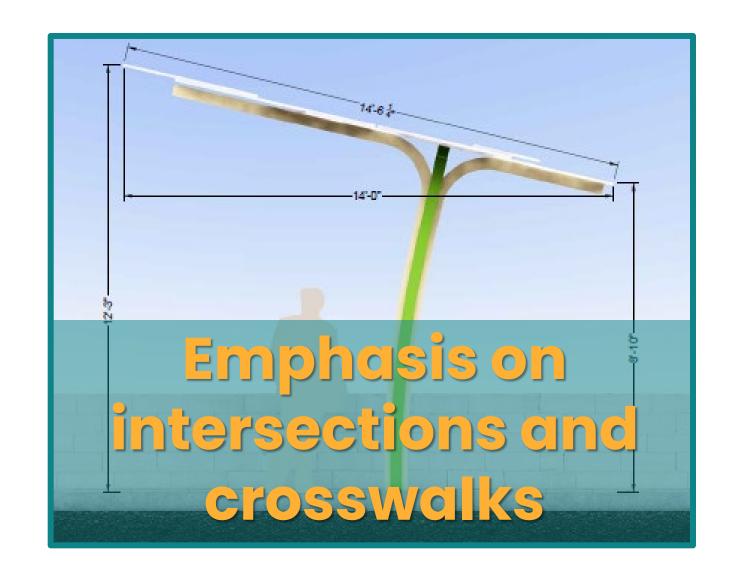






## Phoenix Sidewalk Shade Program (ARPA)

- Design and build ~20 structures at intersections and crosswalks
- Working with 3 local artists to contribute 2D artwork to shade panels
- 100% design received, will go to bid for construction soon
- Recent public meeting archived online



## Shade Structure Program





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