

STORIES IN ARIZONA

Addressing Heat and Air Quality in Phoenix

Equitably building cool, healthy and climate-resilient cities.

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StoryMap: Changing the Story of Heat in Metro Phx

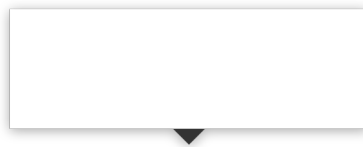
As temperatures continue to rise in our country's hottest large metro area, this web tool



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discover tangible ways you can reduce urban heat at a personal, neighborhood and city level. [English](#), [Spanish](#).

In Phoenix, urban heat is impacting health, safety, comfort and economic development, and this is projected to worsen over time. The number of days above 110°F are expected to more than double by 2060. In 2023, the American Lung Association rated Phoenix the fifth most ozone-polluted metropolitan area in the country. With 60% of Arizona's population concentrated around Phoenix, this constitutes a major public health concern—but one with solutions.



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Empowering Communities: Urban Heat Leadership Academy

The first-of-its-kind Urban Heat Leadership Academy equips residents from the Phoenix Metro Area with the knowledge, resources and skills to advocate for more trees, cool walkable corridors and the use of rainwater for trees and vegetation in their communities.

Phoenix is the hottest metropolitan area in the country. Rising urban heat affects us all, but underserved communities are impacted the most. **On some days, there are neighborhoods that are as much as 13 degrees Fahrenheit hotter than others.** The hottest neighborhoods also have the least number of trees and the highest child poverty. Often residents in these neighborhoods may not be aware of the role that nature can play in reducing heat and improving quality of life. They may not have access to the resources needed to advocate for solutions or may not feel empowered to bring about change.

[Listen to Phoenix residents' observations about the day-to-day impact of heat in the city.](#)

In this program, participants work with renowned experts to learn about sustainability



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communities and make Phoenix cooler, greener and healthier.

Hear from Academy graduates

Heat Impacts



ACADEMY PLAYLIST (1:54) Learn more about how graduates applied lessons from the Urban Heat Leadership Academy through hands-on projects with a TNC-funded small grant, which participants are eligible for after completing the Academy.



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GREENING PHOENIX TigerMountain Foundation and other community partners participated in a community greening at Spaces of Opportunity in South Phoenix. © Ivan Martinez/TNC



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THE RIGHT TREES Through heat action plans, coupled with TNC research, some of the hardest hit communities are planting the right trees, in the right places, to alleviate urban heat. © Ivan Martinez/TNC

ECONOMIC ASSESSMENT OF HEAT IN THE PHOENIX METRO AREA

[Fact Sheet \(.pdf\)](#)

[Full Report \(.pdf\)](#)

First-of-Its-Kind Study in Phoenix

The goal of this study is to estimate the economic consequences to the Phoenix Metro Area from failing to take action against extreme heat and to evaluate the costs and benefits of solutions designed to address these consequences.



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The complete [Heat Action Planning Guide](#), as well as the neighborhood-specific reports can be downloaded below.

TNC and partners led the Nature's Cooling Systems Project, which included a participatory [Heat Action Planning process](#) in three metro-Phoenix neighborhoods disproportionately impacted by heat. The goals were to identify both mitigation and adaptation strategies to reduce heat and improve thermal comfort and quality of life for residents.

This collaborative effort was in partnership with Maricopa County Department of Public Health, Arizona State University's Urban Climate Research Center and Urban Resilience to Extremes Sustainability Research Network, Central Arizona Conservation Alliance, Center for Whole Communities, Phoenix Revitalization Corporation, RAILMesa and Puente Movement.

Collectively the group launched a two-year participatory Heat Action Planning process in the Edison-Eastlake Community, Mesa Care Neighborhood and Lindo Park-Roesley Park Neighborhood.

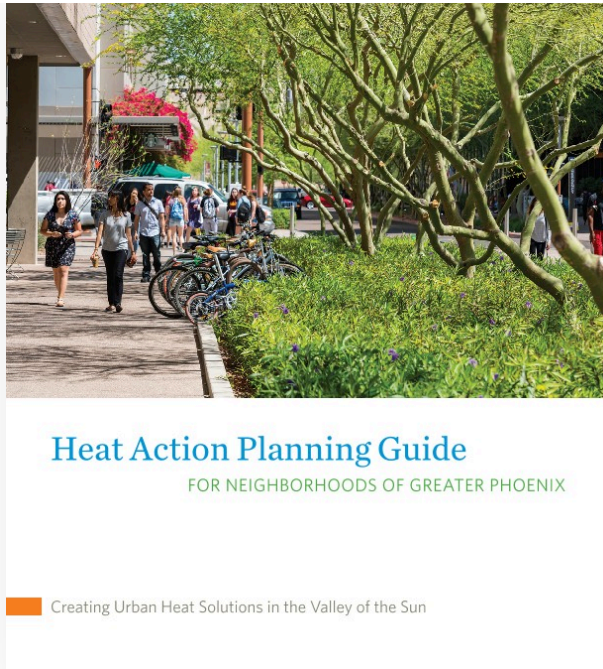
Residents identified hot spots in their neighborhoods, areas where residents have experienced particular difficulty with the heat. They also brought forth ideas to increase their thermal comfort and safety during extreme heat days: adding shade to pedestrian corridors, redesigning bus stops to include relief from heat, and using water sustainably for cooling purposes.

But the effort is not just to identify ideas, but to help communities implement solutions.

The complete Heat Action Planning Guide in [Spanish](#) and [English](#), the [Executive Summary](#), as well as the neighborhood-specific reports can be downloaded below.



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Heat Action Planning Guide

Download the full Heat Action Planning Guide for Neighborhoods of Greater Phoenix.

[DOWNLOAD](#)

[EN ESPAÑOL](#)

EXECUTIVE SUMMARY

[Heat Action Plan Executive Summary \(.pdf\)](#)



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[Heat Action Plan for Edison-Eastlake Community \(.pdf\)](#)

[Heat Action Plan for Lindo Park-Roesley Park Neighborhood \(.pdf\)](#)

[Heat Action Plan for Mesa Care Neighborhood \(.pdf\)](#)

Making Phoenix Cooler, Greener and Healthier

Increasing tree and shade canopy cover by planting the right tree, in the right place and with the right water can reduce temperatures substantially. Not only are trees a cost-effective solution in mitigating heat, they provide valuable benefits including improving air quality, sequestering carbon, reducing storm water runoff, providing habitats for wildlife and promoting greater physical activity.

Here are some of the green interventions that The Nature Conservancy has worked with partners on over the past few years:



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EDISON-EASTLAKE TNC, Trueform Architects and Smiling Dog Landscapes collaborated to plant trees, vegetation and install an irrigation system for maximum rainwater results. © TNC



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LINDO PARK-ROESLEY PARK TNC and partners planted desert-adapted trees and vegetation to transform the landscape and use rainwater more effectively in a 16,000-square-foot area of an urban garden. © TNC



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RIO SALADO Volunteers from American Express in Phoenix helped with a planned tree planting along the Rio Salado Preserve. © TNC

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