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South Phoenix streets get reflective coating to fight excessive heat

Megan Taros Arizona Republic

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In one quick pass, the lumbering truck covered a half-block of street with reflective coating to kick off the second phase of Phoenix's Cool Pavement Program on Wednesday morning in south Phoenix.

This is the second year of the program, which pledges to take a "data-driven" approach to target neighborhoods in need of cooling infrastructure and cover existing asphalt with the water-based asphalt treatment.

Neighborhoods in south Phoenix have long called on the city to increase cooling infrastructure, especially through trees and shade infrastructure, said the newly appointed director of the Office of Heat Response and Mitigation, David Hondula.

"When we look at the maps ... there are clear patterns that emerge," he said. "There are certain neighborhoods where the streets are hotter. Many are located here in south Phoenix, so it's very appropriate that we are here today."

A push for innovation

The pavement program is part of a push to focus on climate issues in Phoenix. The city wants to continue evolving its approach to implement new, and even untested, plans to manage heat and bring resources to prevent and handle emergencies.

The Office of Heat Response and Mitigation is part of this effort, with \$2.8 million allocated for its creation. The city also plans to continue to budget for its Tree and Shade Master Plan, which will bring 30 "cool corridors" to underserved communities by 2050. Cool corridors are mile-long stretches of up to 200 trees or shade structures.

"Great cities take on global problems and find solutions," Mayor Kate Gallego said. "Our Cool Pavement Program is one of the most innovative in the country."

According to early findings of the pilot program, released Sept. 14, the treatment – which has both light and darker versions – showed temperatures 10 to 12 degrees cooler than traditional asphalt without the treatment.

It's also shown signs of increasing the life span of existing asphalt.

Hondula said the early results are "promising," but the long-term picture will be made clear after a few more years of data collecting.

Data and collaboration

South Phoenix, which can get up to 13 degrees hotter than other parts of the city, has faced decades of climate disinvestment.

Neighborhoods like south Phoenix that are disproportionately harmed by excessive heat and poor air quality are usually communities of color and low-income communities. South Phoenix is 62% Latino and nearly 17% Black, according to 2019 census figures.

A 2018 study from the American Public Health Association says a lack of political power and representation makes it difficult for communities of color to build defenses against climate change.

City officials said that Phoenix will use data to determine which areas have the greatest need for cool pavements and will collaborate with the community to find locations for climate initiatives such as cool corridors.

"This is a part of the city where we can make the biggest impact," Gallego said. "We want to have an equity lens."

Phoenix City Council adopted the city's Climate Action Plan last week, but delays in its Spanish translation resulted in criticism during the comment period from climate groups and residents that the city did not engage enough with communities in south Phoenix.

The Office of Heat Response and Mitigation is adopting the Nature's Cooling Systems Heat Action Guide to structure its outreach in a way that is valuable to the community, Hondula said.

He also said that the offices acknowledged the "critical role" community-based groups play in creating trust, noting they are experts in the community in a way city officials aren't.

"We want to be building health equity, centering community voices and avoid extractive practices," he said. "We need to come here, talk to people who live here and at times that work for the people who are living here."

What's next?

The Cool Pavement Program will take place between 19th and 15th avenues and between Roeser and Broadway roads. When the project is completed, nine other areas will receive cool pavement treatment.

Megan Taros covers south Phoenix for The Arizona Republic. Have a tip? Reach her at mtaros@gannett.com or on Twitter @megataros. Her coverage is supported by Report for America and a grant from the Vitalyst Health Foundation.

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