

Cool Pavement Program

Cool Pavement

100 miles of roads in the City of Phoenix

10-15% Lower temperatures during the day

4-8% Lower energy costs for air conditioning

Cooler at all times of the day vs. traditional asphalt

Learn more about cool pavement in the City of Phoenix

Pictures from your site of the study include:

The Phoenix Street Transportation Department and Office of Sustainability announced during a virtual presentation and panel discussion on September 14, 2021 the results of the first year of its Cool Pavement Pilot Program. The program and analysis of the cool pavement process is being conducted in partnership with Arizona State University (ASU).

Year one of the study done by scientists at ASU's Global Institute of Sustainability and Innovation, Healthy Urban Environments, and the Urban Climate Research Center revealed that reflective pavement surface temperatures are considerably lower than traditional roadway pavement.

Cool pavement reflects a higher portion of the sunlight that hits it, hence absorbing less heat. Because of this higher reflection, the coating has the potential to offset rising nighttime temperatures in the region.

The pilot ended in 2021 and cool pavement is now a permanent part of the Street Transportation Department's street maintenance program.

Cool Pavement Demonstration October 2021



Joint Phoenix Presentation & Scientific Study



Background



Cool Pavements

USA

Using paving materials on sidewalks, parking lots and streets that remain cooler than conventional pavements, by reflecting more solar energy and enhancing water evaporation, not only cools the pavement surface and surrounding air but can also reduce stormwater runoff and Reflective pavements can enhance visibility at night this could reduce lighting requirements.

Cooling Materials

Improvement of air q

Design Innovation

