Next stage of Phoenix cool pavement programme underway

News  21 Oct 2021  by SmartCitiesWorld news team

This next round of the programme and study will analyse two new asphalt coatings that have higher reflective values than the material applied to select citywide sites last year.
Asphalt collects and retains heat during the day and releases it at night.

The City of Phoenix, Arizona, has announced the next phase and demonstration of its Cool Pavement programme which began last year.

The City's Street Transportation Department launched the pilot programme in partnership with the Urban Climate Research Centre at Arizona State University (ASU).

**Pavement rehabilitation**

Pavement rehabilitation crews have applied a cool pavement seal coat to neighbourhood streets within the boundary of 19th and 15th avenues between Broadway and Roeser roads in South Phoenix.

This next round of the ongoing programme and study will analyse two new asphalt coatings that have higher reflective values than the material applied to nine select citywide sites last year.
The city partnered with ASU researchers to conduct scientific tests of the cool paved areas, studying how it performed and how it might be used to mitigate the urban heat island effect.

In 2020, the city selected portions of eight neighbourhoods, one in each city council district and part of the parking lot in Esteban Park, to receive the cool pavement treatment. The asphalt coating was applied to areas already in need of a pavement seal coat.

The city then partnered with ASU researchers to conduct scientific tests of the cool paved areas, studying how it performed and how it might be used to mitigate the urban heat island effect.
Asphalt collects and retains heat during the day and releases it at night. Phoenix is among several cities that are experiencing the urban heat island effect, particularly overnight, due to the retention of heat within the built environment. Higher night-time temperatures lead to more energy consumption, more greenhouse gas emissions, air pollution and other harmful effects.

The City of Phoenix Street Transportation Department partnered with the Rob and Melani Walton Sustainability Solutions Service at Arizona State University (ASU) and researchers from various ASU schools to evaluate the effectiveness, performance, and community perception of the new pavement coating.

The data collection and analysis occurred across multiple neighbourhoods and at varying times across days and/or months over the course of one year (15 July 2020 to 14 July 2021), allowing the team to study the impacts of the surface treatment under various weather conditions.
San Diego launches comprehensive resiliency plan to tackle climate change hazards
Next stage of Phoenix cool pavement programme underway

NEWS
Sunderland progresses smart city ambitions with next-gen network

NEWS
Dubai sets data-based mobility programme in motion

NEWS
Bloomberg and Johns Hopkins University establish innovation centre for cities

NEWS
Bridging “urban services divide” can create more equal, sustainable cities

NEWS
Seoul boosts EV charging and smartens security lighting

NEWS
Basel to electrify entire bus operation by 2027

NEWS
Boston mayor announces community clean air recipient grants

NEWS
Dubai nears completion of its paperless strategy objectives

Previous Article
San Diego launches comprehensive resiliency plan to tackle climate change hazards

Next Article
Sunderland progresses smart city ambitions with next-gen network
Glasgow launches interactive sustainability map ahead of Cop26

Bloomberg names 50 finalist cities for 2021 Global Mayors’ Challenge

Study reveals the most intelligent and future-proof cities in the world

UK start-up unveils autonomous mass transit system

Smart city innovation district to bring 9,000 jobs to Ontario

E-scooter company introduces sidewalk detection technology

THE MUST-ATTEND EVENT ON CITIES
8-12 Nov | FREE ENTRY | ONLINE

Previous Article
San Diego launches comprehensive resiliency plan to tackle climate change hazards

Next Article
Sunderland progresses smart city ambitions with next-gen network
San Diego launches comprehensive resiliency plan to tackle climate change hazards

Dubai sets data-based mobility programme in motion

Bridging “urban services divide” can create more equal, sustainable cities

Seoul boosts EV charging and smartens security lighting

You may also like these related articles...
San Diego launches comprehensive resiliency plan to tackle climate change hazards

Sunderland progresses smart city ambitions with next-gen network