

Urban heat island effect 'the silent killer' has major impact on Las Vegas

LAS VEGAS, Nev. (FOX5) - Evidence shows the Las Vegas Metro is the fastest-warming city in the entire US. A new heat map was just completed by volunteers working with the RTC to show which areas of the valley are the hottest. Dr. Steffen Lehmann, a professor of architecture and urbanism at UNLV, has researched how excessive heat impacts the city for decades and met with FOX5 to break down the impacts of the urban heat island effect.

"There is already 5.8 degrees Fahrenheit increase in temperature in Las Vegas over the last 30 years... but the urban heat island on top of that is adding easily another 6–10 degrees," explained Dr. Lehmann. Urban heat islands, developed areas like giant parking lots with no greenery, will be significantly hotter than undeveloped land outside the city.

"We see the impact of solar radiation getting absorbed, stored, trapped and the city is hotter," Dr. Lehmann added. Urban heat islands more often impact economically disadvantaged neighborhoods and people who have to be outside like outdoor workers, people taking the bus or those who are homeless.

"Those residents are suffering disproportionately more during heat waves and are at risk of overheating, dehydration, and of course heat stroke... They call the urban heat island the silent killer," Dr. Lehmann shared.

Professor Lehmann stated in 2022, 250 people died of heat-related illness in Las Vegas Metro and with the area seeing longer and hotter heat waves, without change it will get worse.

"Some scientists predict that by the end of the century, in 2100, that some areas of Southern Nevada will become uninhabitable due to the excessive heat," Dr. Lehmann reported.

What can be done to fight the urban heat island effect? Professor Lehmann outlined three major strategies. First, building materials. Avoiding things like black asphalt that retain heat and opting for reflective material for things like roofing. Second, how to change densely structures are built. Third, reintegrating greenery or plants helps bring temperatures down.

Copyright 2023 KVVU. All rights reserved.