

Phoenix, Arizona.

With little vegetation to begin with, the city is even hotter than the desert that surrounds it.

So, they must find a way to cool the city.

- Almost every summer, we have 100 days or more over 100 degrees.

And regularly each summer, we're exceeding 110 degrees.

Anytime we can find hot ground and make it less hot, that will produce a cooling benefit with respect to the air temperature.

The idea is simple.

Recoat the roads with a special sealant that will reflect about 35% of the sun's energy, which means less energy is absorbed by the asphalt and re-radiated as heat.

In 2020, the city launched a pilot program to cover 36 miles of roads in eight neighborhoods.

- So, we're going to take a reading here with our infrared thermometer and we've got...

But does it work?

Heat-sensitive images taken from a helicopter reveal a striking difference.

The more reflective surface is as much as 16 degrees cooler.

And an MIT study projects that it could lower the average temperature of some cities by two and a half degrees.

- Now we are seeing new approaches, which are really exciting for cities all across the country.

We could wind up with a city of the future that's cooler than the one we have today.

- We can substantially cool down cities.

In a relatively quick period of time without major expenditures.

And so that's really good news.