Interesting WSJ [video](https://www.wsj.com/video/series/news-explainers/these-photos-show-how-urban-growth-fuels-extreme-heat/73DA72E0-DF39-4F23-973C-AEEBEF455473?mod=hp_lead_pos7). I transcribed it in case you don't have time to view the video. There is no paywall.

**How Urban Growth Fuels Extreme Heat**

**Heat Islands**

Imagine a city as an island with pavement, roads, surfaces, glass and steel buildings. All of these surfaces reflect sunlight and the heat energy from the sun back into the air around. These highly developed areas can see midday temperatures that are 15 to 20 degrees warmer than surrounding vegetative areas. We can see how these heat islands formed by looking back at Phoenix. Here it is 23 years ago. But after two decades of urban growth the city has ballooned. Back in 2000 Las Vegas looked like this and now its city limits have expanded. That expansion paralleled their economic growth but more infrastructure turned up the heat.

These are all places where heat gets trapped. So in many of these cities there are not a lot of breezes. There's not a lot of shade or trees, and so as a result heat can build up in these urban corridors. [Get off the T at Alewife and walked towards Cambridge Park Drive you will think you are in Phoenix. Another place where, thanks to our city council, developers were allowed to replace mature trees with saplings.]

It's sometimes hard to grow trees in the West, especially in very arid places. And the native trees that grow there may not be great at providing shade. So you have a lot of areas that get a lot of sun. The other important thing about plants and trees and vegetation and even grass is they cycle moisture from the ground into the air and help just a little bit keep things cooler. That's driven Tucson, Phoenix and Las Vegas temperatures even higher and drove the creation of these heat islands.

**Heat Domes**

But that's not the only thing fueling the hot weather. When you have a heat dome on top of this it really intensifies the temperatures for everyone living in this city. These domes are a natural weather phenomenon and for most of July one of them has been covering the Southwest. A heat dome is a large ridge of high pressure high in the atmosphere that traps a lot of hot air underneath it and it can last for a long time. Over time, the heat dome reinforces itself. Any moisture on the ground or in the soil that may come up into the atmosphere that could cause some rain or rainstorms in the afternoon that's going away. The soils are drying out, the land is drying out and so this hot air is making things worse and worse.

**Heat**