

Houston is one of the worst cities for urban heat islands

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Houston is among the worst cities in the country for intense heat islands because of a lack of tree canopies, [Axios' Ayurella Horn-Muller and Simran Parwani report](#).

Driving the news: A new Climate Central analysis reveals which localities nationwide benefit most from the boons of urban forests.

Why it matters: Urban tree coverage helps reduce the impacts of extreme heat, prevents stormwater runoff, mitigates air pollution exposure, and can even sequester carbon, per the [analysis](#).

- Urban heat islands are created when developers replace natural landscapes with "dense concentrations of pavement, buildings, and other surfaces that absorb and retain heat," per the [U.S. Environmental Protection Agency](#).
- A tree's leaves can absorb [pollutants](#) like ozone and nitrogen dioxide, the report noted.

What they found: The U.S. cities with the most air pollution absorbed by trees are Presque Isle, Maine; Eugene, Ore.; Eureka, Calif.; Bangor, Maine; and Duluth, Minn., according to Climate Central data shared with Axios.

- By contrast, the cities with the most intense urban heat islands are Houston, New Orleans, Newark, New York City and San Francisco.

Zoom in: Only about [18%](#) of Houston is currently covered by tree canopy, with a roughly 14% "tree cover discrepancy" between high- and low-income neighborhoods, the Houston Chronicle [reports](#).

What they're saying: The City of Houston is working to meet an "ambitious" goal of 4.6 million trees [planted by 2030](#), Jaime González, Community and Equitable Conservation Programs director for the Nature Conservancy's Texas chapter, tells Axios.

- González's team in April partnered with the Texas A&M Forest Service to map available planting zones in Gulfton — a "nature-deprived" neighborhood in southwest Houston that's home to a largely immigrant and lower-income community. They estimated 804 trees should be placed there to increase tree canopy cover.
- "You just walk around the neighborhood, there are long, long stretches where there are no trees and it's just hot pavement," says González. (In 2020, parts of Gulfton were [17 degrees hotter in the afternoon](#) than the city's coolest neighborhood, per the Washington Post.)

Meanwhile, Houston's Alief neighborhood — where there's only 11% tree canopy — will get [1,200 new trees in the coming years](#).

Yes, but: "Tree for tree, [urban] trees are potentially doing a lot. But it's not going to offset the fossil fuels which are also concentrated in cities," says Lucy Hutyra, professor of earth and environment at Boston University.

- From planting to maintenance, she notes the [costliness of urban trees](#), as well as cities' different growing environments, which produces varying ecosystem services and benefits.

The bottom line: "Trees are part of the solution," Hutyra tells Axios. "But they are not the whole solution."