



The Smart Surfaces Coalition is made up of more than 40 leading national and international organizations with a shared commitment to creating **cooler**, **healthier**, and **more resilient** cities by cost-effectively working to reduce the impacts of extreme urban heat and flooding.

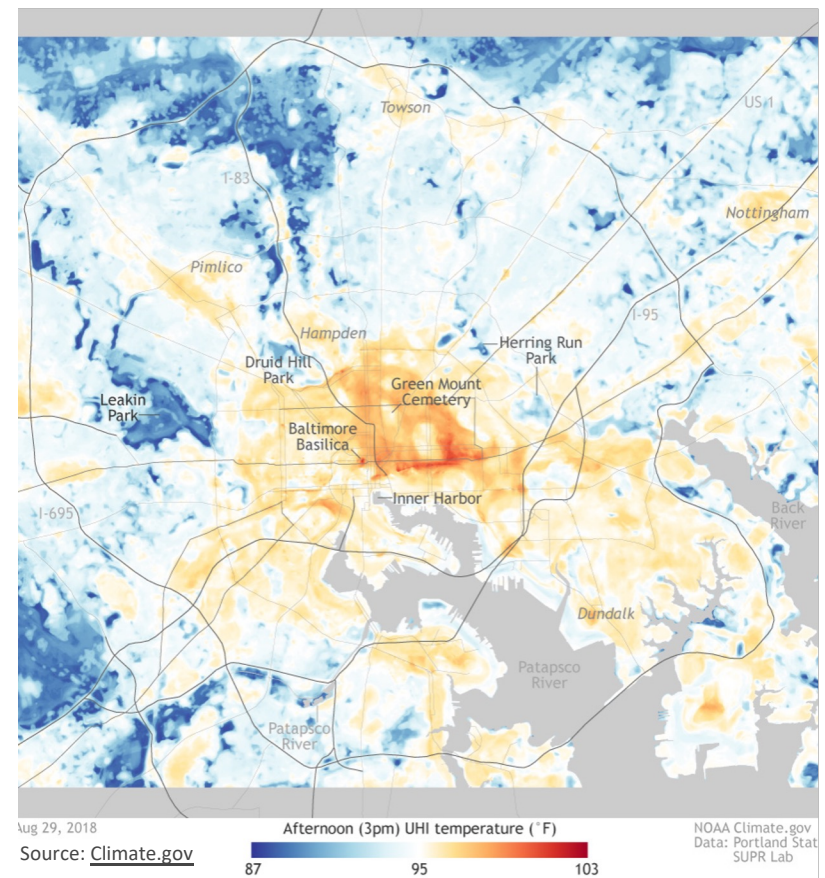
# Urban Heat Islands

On average, urban heat islands are **5 to 7 degrees Fahrenheit hotter** during the day and can increase temperatures by as much as **22 degrees** at night.<sup>1</sup>

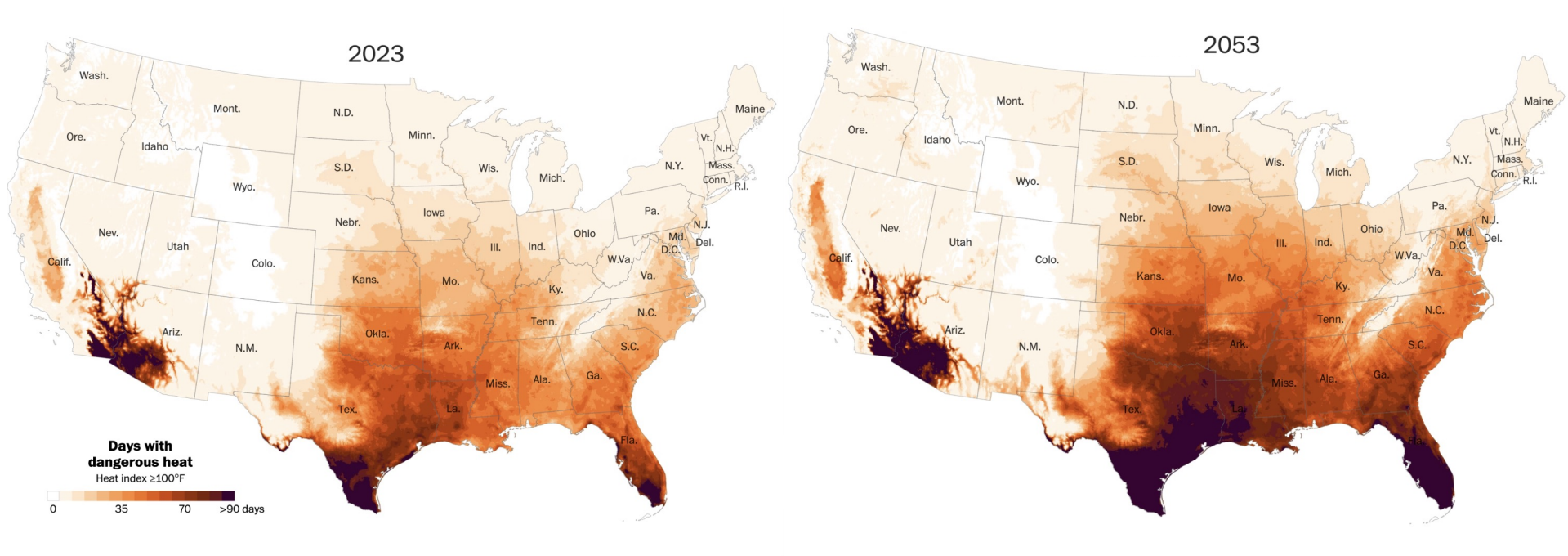
**Some neighborhoods** in cities, often in low-income areas, can be as much as **15-20 degrees F hotter**.

<sup>1</sup>[American Forests, 2021](#)

Heat Map of Baltimore, MD



By mid-century, nearly two-thirds of Americans will experience perilous heat waves, with some regions in the South expected to endure **more than 70 consecutive days over 100 degrees.**<sup>1</sup>

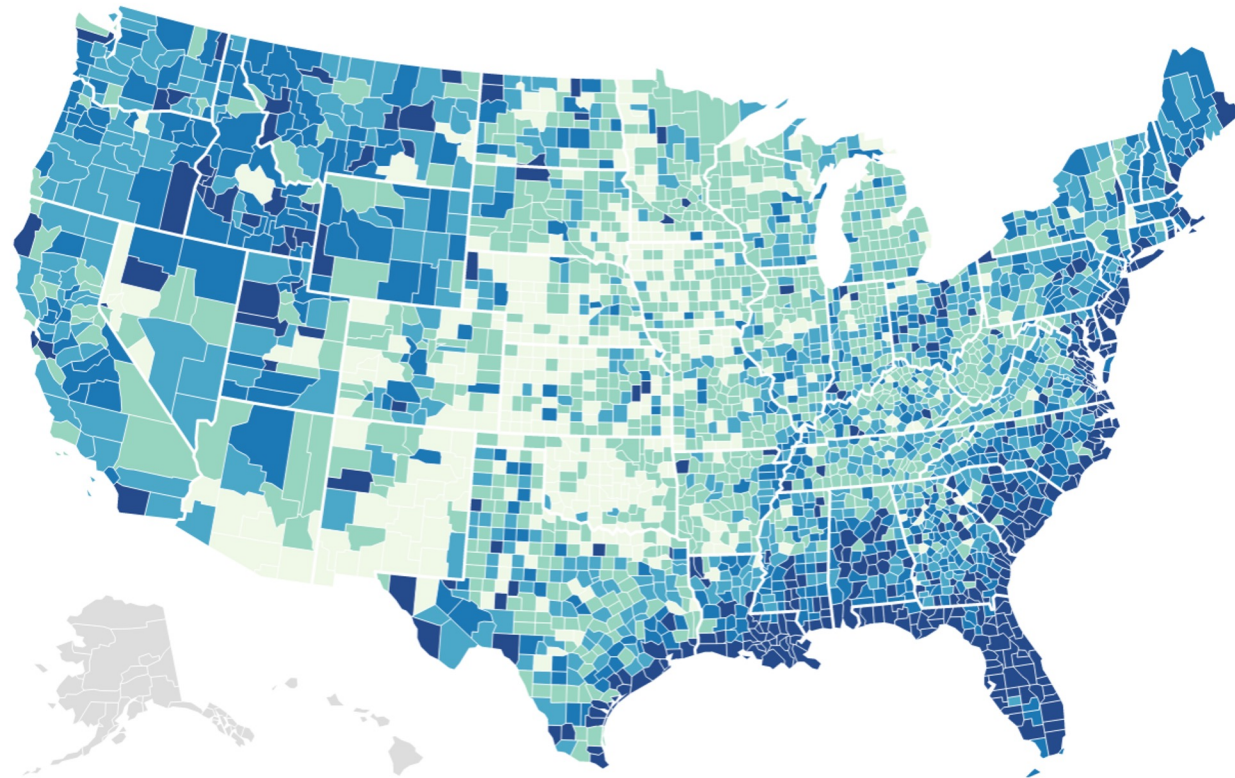
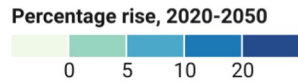


<sup>1</sup>Washington Post, 2023

Source: [Washington Post](#)

## Where flood risk is projected to rise fastest in the US

A new analysis projects changes in flood risk between 2020 and 2050 by zooming in on every neighborhood across the U.S.



*Flood damage measured in 2020 U.S. dollars.*

Map: The Conversation/CC-BY-ND • Source: Wing, et al. 2022 • Created with Datawrapper



# What Are Smart Surfaces?

Infrastructure strategies that cost-effectively manage urban heat and stormwater while maximizing health, climate, and equity co-benefits

Cool Roofs



Green Roofs



Porous + Permeable Pavements



Solar Photovoltaics



Cool Pavements



Trees and Rain Gardens



Low- and Zero-Carbon Concrete



Combined Surfaces



Source: [Smart Surfaces Coalition & Carnegie Mellon University](#)

# City-wide Deployment of Smart Surfaces Can:

- Reduce peak summer temperatures by 5°F or more
- Provide up to \$10 in benefits and cost savings for every \$1 spent
- Cut energy bills by reducing summertime energy demands for indoor cooling
- Lower city GHG emissions 10-12%
- Deliver large reductions in flooding and resulting mold
- Improve public health and air quality

with the greatest  
impact in lower income  
communities and  
communities of color

# Cities for Smart Surfaces

SSC is partnering with 10 cities across the US to facilitate the adoption of Smart Surfaces at the metropolitan level and working with communities in those regions to support community-led, local Smart Surface implementation projects.



# Leveraging EPA Programs

## Federal Funding Working Group

### EPA Community Change Grant

- Worked with 6 CBOs and Cities
- Projects related to school yard retrofits, tree planting, solar canopies, etc.

### Greenhouse Gas Reduction Fund

- Utilizing funds for resilience projects

### Climate Pollution Reduction Grant

- \$8.7 million for Central Midlands COG, South Carolina
- For municipal solar and smart surface projects. Will also support a matching fund





**SMART  
SURFACES  
COALITION**