



THE CITY OF SAN DIEGO

## What is an Urban Heat Island?

The term "heat island" refers to urban air and surface temperatures that are higher than nearby rural areas. Many U.S. cities and suburbs have air temperatures up to 20°F (11°C) warmer than the surrounding natural land cover. Heat islands form as cities replace natural land cover with pavement, buildings, and other infrastructure, which all absorb the sun's heat and radiate it out, increasing surface and ambient air temperatures.

## Why does it matter?

Heat islands negatively impact human health and the environment. Cities experience higher rates of heat related illness and death than rural areas. In addition the higher temperatures cause an increased use of air conditioners, which results in additional power plant emissions of heat-trapping greenhouse gases. Strategies to reduce heat islands, therefore, can also reduce the emissions that contribute to global climate change. Finally, "extreme heat" can increase the rate of ground-level ozone formation, or smog, presenting an additional threat to health and ecosystems within and downwind of cities.

## What is the City of San Diego doing to mitigate the heat islands?

Currently the City is working to develop an Urban Heat Island Mitigation policy and program. In September, forums were held with the public and with employees from the City of San Diego and other city governments in the region in order to increase knowledge about this issue and to share ideas with individuals who are already involved with activities that alleviate the heat island effect. The policy under development will seek to provide mitigation measures that San Diego can adopt along with funding options.

## Additional Information

- Lawrence Berkeley National Laboratory Urban Heat Island (UHI) Group website: <http://eetd.lbl.gov/HeatIsland/>
- EPA UHI website: <http://www.epa.gov/heatisland/>

