



Parks Reduce Urban Heat Islands

Parks and greenspaces reduce surface and ambient air temperatures as compared to urban environments.

When a natural landscape is replaced with paving and structures, it fundamentally changes how the earth disperses and reflects heat from the sun. These effects produce “urban heat islands.” Urban areas are significantly hotter than less developed areas.

The layout of a city, the shape, size, and density of buildings, and the loss of tree canopies all affect how urban landscapes absorb heat. With development, surfaces that were once permeable and able to absorb moisture are replaced with impermeable and dry surfaces. And these same surfaces release the heat absorbed during the day much more slowly in urban areas than in rural areas.

As the surfaces (mostly roadways, homes, and buildings) absorb more heat, more energy is needed for cooling. On hotter days, residences and businesses

run the air conditioner more frequently and more intensely. This energy demand also generates heat—exacerbating the urban heat island effect. Studies show that urban areas are between 9° and 15°F hotter than nearby rural areas. And this temperature difference is most dramatic during the hotter summer months.

There are many ways to combat urban heat islands. More shade can be created with tree canopies, by selecting light or reflective paint colors for buildings, and by creating “cool” or green roof tops. Another way is to have plenty of parks and green spaces scattered throughout a community. Parks, due to their natural state and vegetation, reflect rather than absorb the sun’s heat. In short, parks keep our cities cooler.

This factsheet was made possible due to generous grant from The Boeing Corporation.