GIS and Urban Climate Modeling

By Trish Jackson
Department of Geography
University of Kansas

Image: Google Earth
Urban Climatology

Little vegetation or evaporation causes cities to remain warmer than the surrounding countryside.
Research question
Tool Kit

- Regional approach
- LandScan population density
- GIS and Google Earth
Methods - Spatial Extent

- Tall building district
- High density
- Low density/suburban

Urban Categories
- Tall Building District
- High Density
- Medium Density
- Low Density
Defining Urban Properties
Percent Urban Area: 1750-2000