

The U.S. Environmental Protection Agency's Heat Island Reduction Initiative (HIRI) Status and Future Directions



HEAT ISLAND REDUCTION

I N I T I A T I V E

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Table 1: “Under the Canopy” Percentages of Various Land Cover Types in Chicago, Sacramento, and Salt Lake City

	Vegetation %	Roofs %	Pavements %	Other %
Metropolitan Chicago	27	25	37	11
Metropolitan Sacramento	20	20	45	15
Metropolitan Salt Lake City	33	22	36	9
Residential Chicago (53%)	36	27	29	8
Residential Sacramento (49%)	33	20	31	17
Residential Salt Lake City (59%)	39	24	32	6

Source: LBNL fabric analysis reports, figures are rounded.

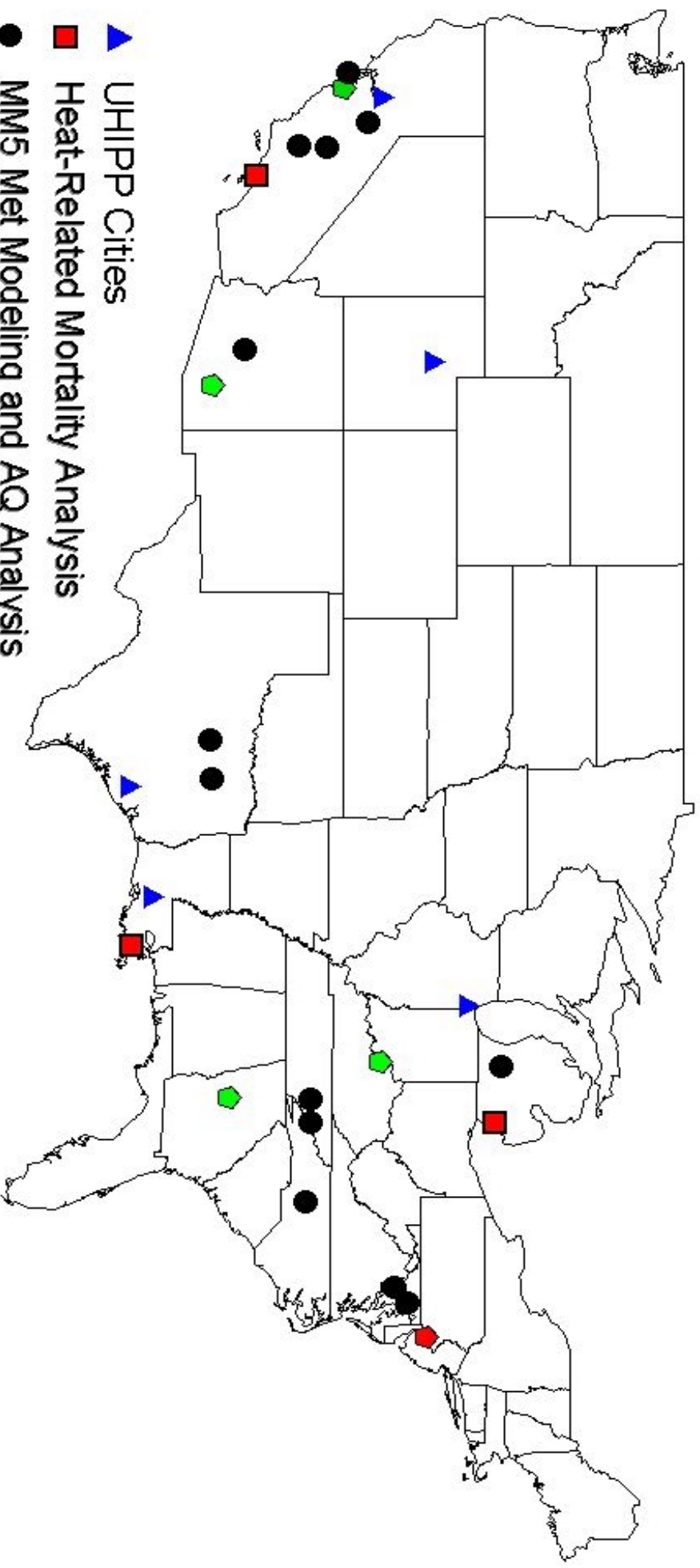
**Table 2: Urban Heat Island Pilot Project (UHIPP) Metropolitan Areas
Energy Savings (Direct and Indirect)**

Metropolitan Area	Population (x 1,000)	Annual Energy Savings M\$	Peak Power Avoided MW	Annual Carbon Reduction Kt
Baton Rouge	500	15	129	34
Chicago	8,000	29	386	53
Houston	4,000	79	700	159
Sacramento	1,500	29	423	49
Salt Lake City	1,100	4	80	7

Source: LBNL energy savings reports, figures are rounded.

Local average 1999 electricity prices and 2000 natural gas prices were used for Chicago and Houston. Local average 1997 electricity and natural gas prices were used for Baton Rouge, Sacramento, and Salt Lake City.

Heat Island Reduction Initiative (HIRI) Cities



*** Philadelphia = Heat-related mortality analysis and Policy Adoption



Resources

EPA's Heat Island Website (Summer 2002)

www.epa.gov/heatisland

EPA's Global Warming Website

www.epa.gov/globalwarming

Lawrence Berkeley National Laboratory's Urban Heat Island Group

<http://eetd.lbl.gov/heatisland>

International Council for Local Environmental Initiatives (ICLEI)

www.hotcities.org

NASA's Global Hydrology and Climate Center

http://www.ghcc.msfc.nasa.gov/uhipp/urban_uhipp.html

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