

***Creating and Mapping an  
Urban Heat Island Index for California***

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# Background

- Urban Heat Island - the phenomenon whereby urban regions experience warmer temperatures than their rural surroundings
- Cool Communities strategies increase albedo and vegetation
- How to evaluate these strategies?

# **Assembly Bill 296**

**(Skinner, Chapter 667, Statutes of 2012)**

- The California Environmental Protection Agency shall develop a definition for the urban heat island effect. The definition shall include the extent and severity of an urban heat island effect index for California cities such that the cities can have a quantifiable goal for heat reduction.

# PREPARING FOR EXTREME HEAT IN CALIFORNIA

- Develop a definition for the urban heat island effect
- Provide an urban heat island effect index for California cities that would allow the cities to set quantifiable goals for heat reduction,
- include means to measure heat and GHG reduction benefits of various cool strategies.

# State-supported Research on Urban Heat Island

- Air Resources Board
- Caltrans

# Inter-agency Workgroup on Urban Heat Island Research

- Eight State agencies
  - ARB, CEC, Cal/EPA, Calfire, Caltrans, CDPH, OEHHA, OPR
- Locals
  - Environmental Resource Manager, Chula Vista
  - Two consultants

# Request for Proposals

- To provide the State agencies with quantitative estimates of an Urban Heat Island Index for California cities.
- The work involves atmospheric modeling at the scale of census tract.
- Status: almost ready to go out.