# Urban Heat Island Reduction for Los Angeles County



LOS ANGELES COUNTY DEPARTMENT OF PUBLIC HEALTH

Elizabeth Rhoades, PhD Health Protection Bureau April 19, 2016



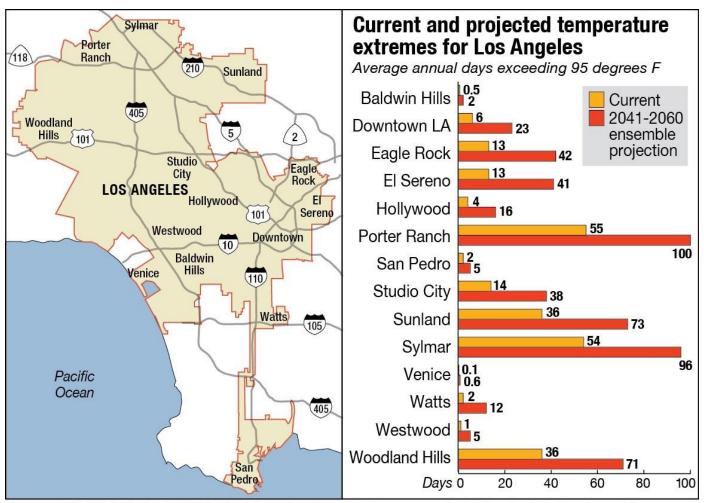
#### Heat predictions for Los Angeles

- Higher average temperatures
- More episodes of extreme heat
  - Inland and mountain areas most affected





#### Heat predictions for Los Angeles



Source: UCLA LARC study, 2012; chart based on the mean/average projected by the 18 climate models



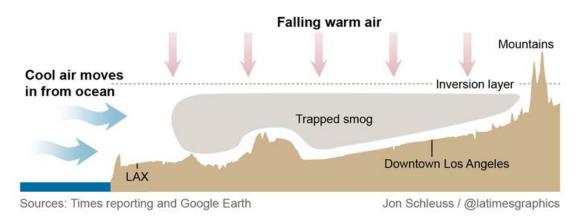


# Public health impacts of heat

- Heat worsens air quality
  - More creation of ground-level ozone
  - More temperature inversions
  - Wildfires

#### Smog sticks around

Pollution can get trapped in a basin when high pressure prevents air from moving.







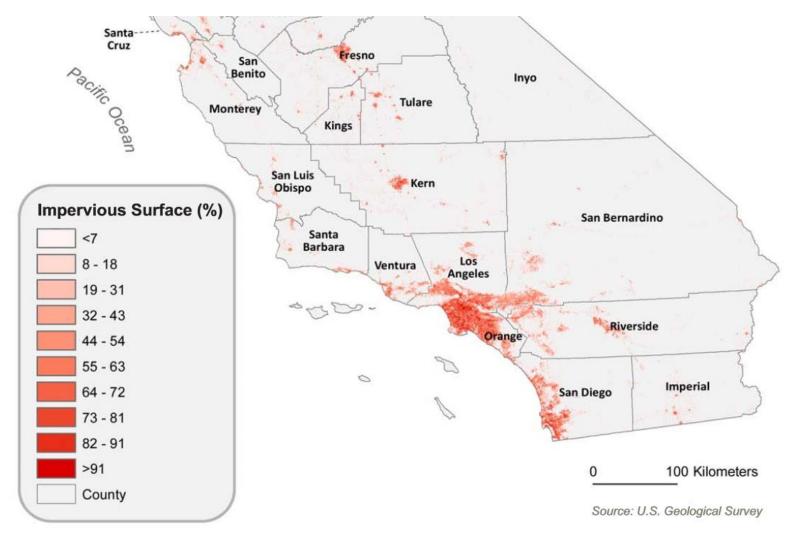
#### Extreme Heat — Possible Interventions

- Urban heat island reduction
- Cooling centers + other emergency response
- Air conditioning + energy efficiency





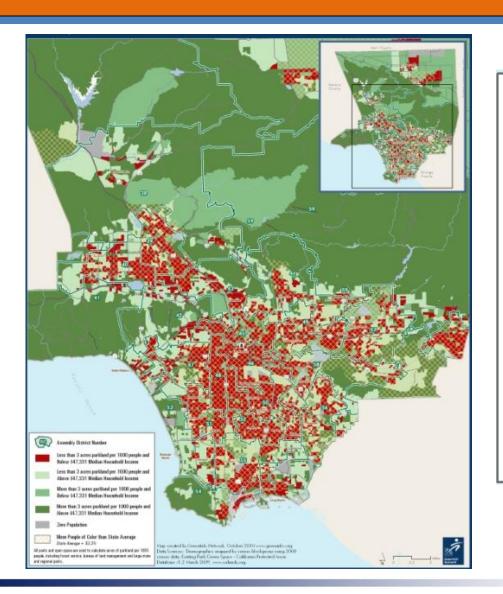
## Impervious surfaces

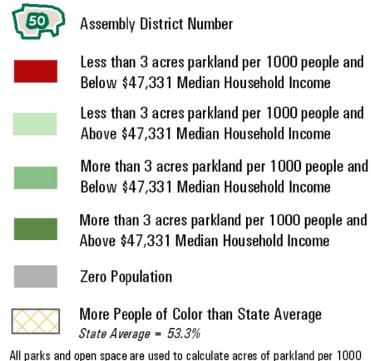






#### Park-poor areas with low income







people, including forest service, bureau of land management and large state

and regional parks.



#### Why work on the Urban Heat Island?

- Saves lives
- Improves air quality
- Lowers energy consumption
- Creates comfortable environments for exercise and play outside





#### Why work on the Urban Heat Island?

- Addresses equity issues
- Features long-term solutions
- Benefits whole communities and future generations





#### Urban Heat Island Plan

- County of Los Angeles developing an Urban Heat Island Reduction Plan
  - County Climate Committee comprised of Public Health, Public Works, Regional Planning, Parks and Recreation, Fire, Beaches and Harbors, Internal Services





#### **UHI Plan Components**

- Trees
- Cool roofs
- Cool and permeable pavements





## Thank you!

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