

# L.A.S.E.R.



Luskin School of Public Affairs  
Luskin Center for Innovation

[www.edf.org/LACleanEnergy](http://www.edf.org/LACleanEnergy)

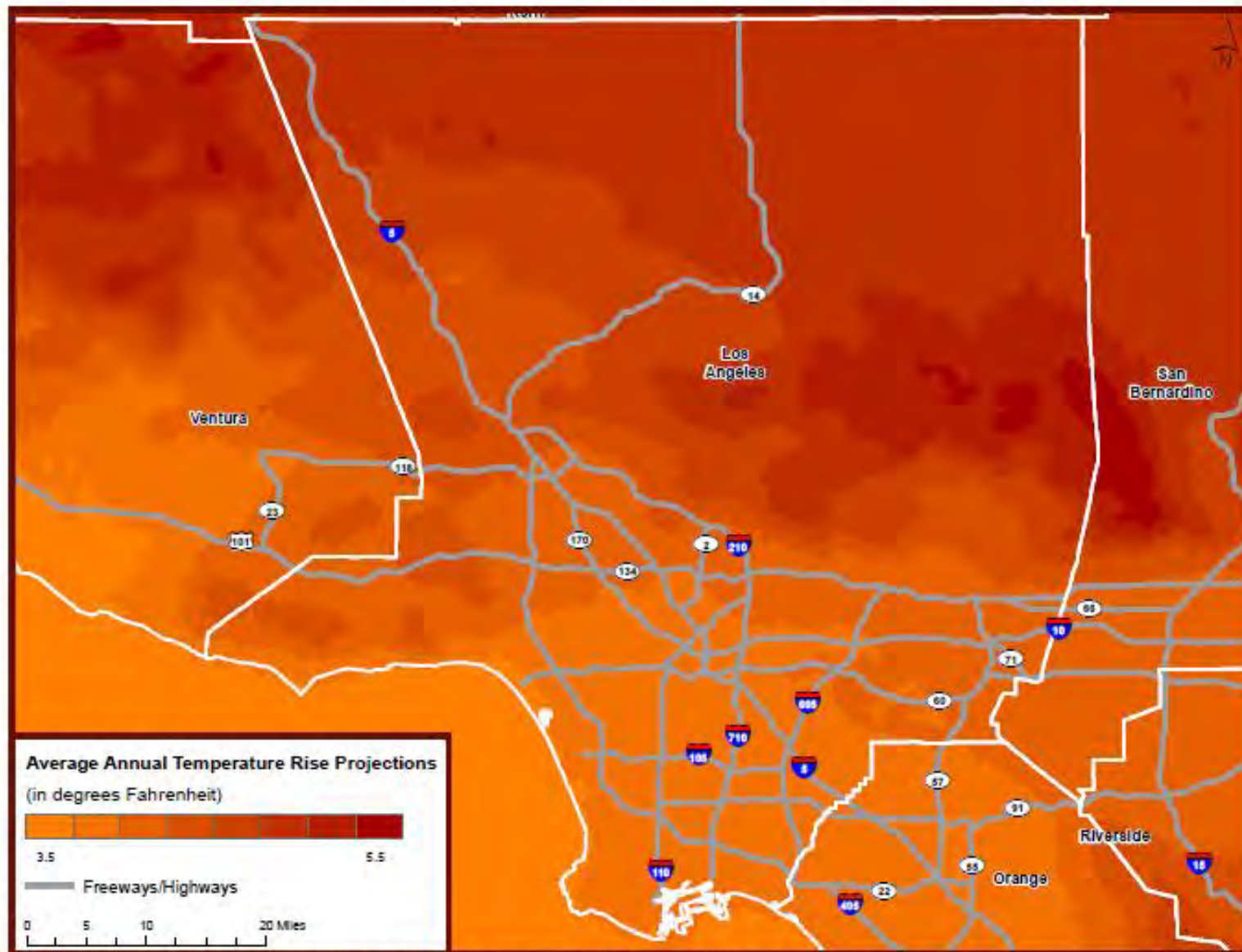
- Los Angeles Solar & Efficiency Report
- “Big Data” Mapping Project –
  - Localized Visual Narrative about Climate Threats and Opportunities
- Partnership with UCLA Luskin Center for Innovation, UCLA Institute for the Environment and Sustainability, LA Regional Collaborative
- Response to President’s “Climate Data Initiative”
- Visioning project for CA’s Cap & Trade fund
- Engage new stakeholder & constituencies

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“Big Data allows you to say simple, clear things...to tell people about their climate locally in ways they can understand.”

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## MID-CENTURY WARMING IN THE LOS ANGELES REGION

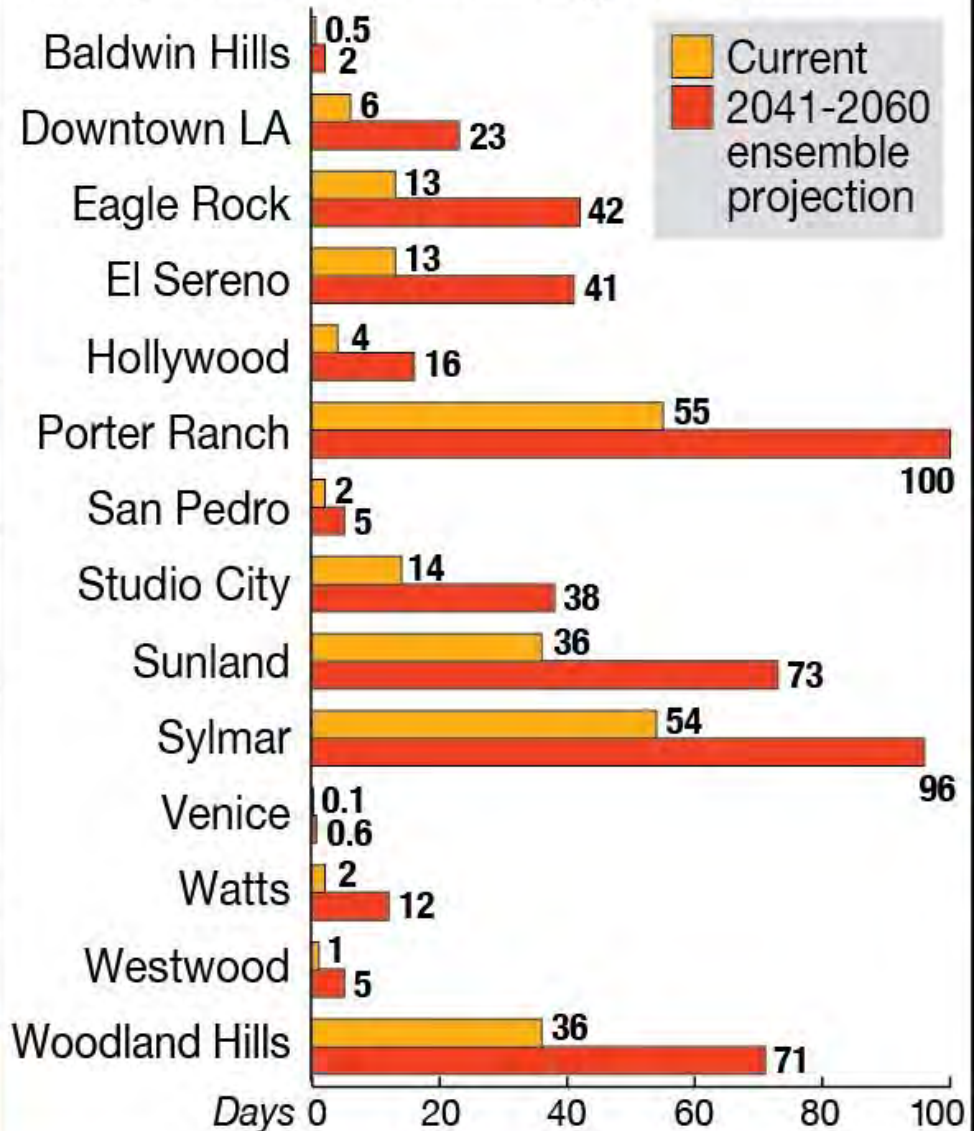


Source: Alex Hall, Fengpeng Sun, Daniel Walton, et al, 2012. "Mid-Century Warming in the Los Angeles Region." University of California, Los Angeles. Full report at <http://c-change.la/>. See footnote 2, on reference page, for information about the uncertainty ranges and other details.



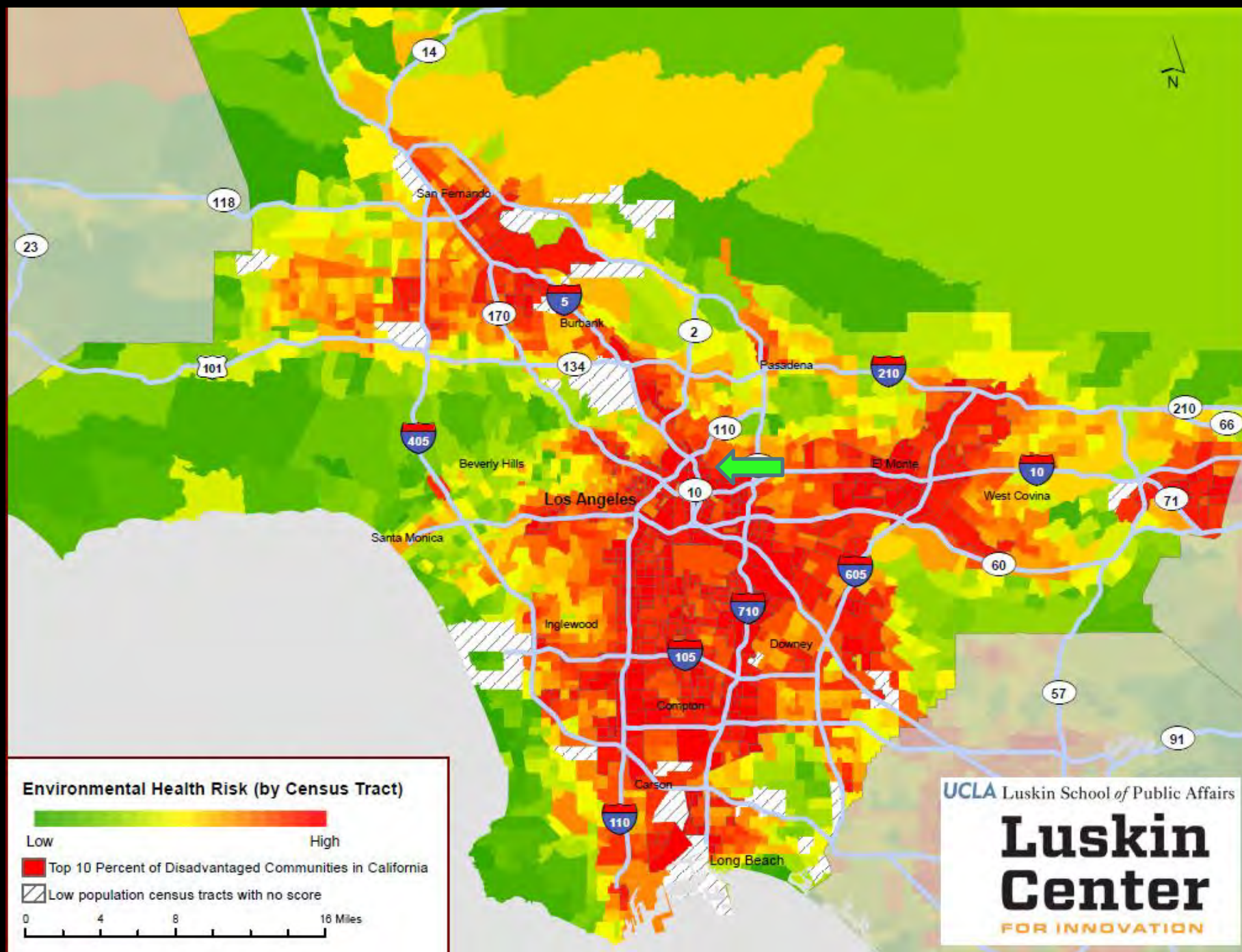
## Current and projected temperature extremes for Los Angeles

Average annual days exceeding 95 degrees F



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





## Pollution Burden

Ozone concentrations  
PM2.5 concentrations  
Diesel PM emissions  
Pesticide use  
Drinking water contaminants  
Toxic releases from facilities  
Traffic density  
Cleanup sites (1/2)  
Groundwater threats (1/2)  
Hazardous waste (1/2)  
Impaired water bodies (1/2)  
Solid waste sites and facilities (1/2)

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## Population Characteristics

Children and elderly  
Low birth-weight births  
Asthma emergency department visits  
Educational attainment  
Linguistic isolation  
Poverty  
Unemployment

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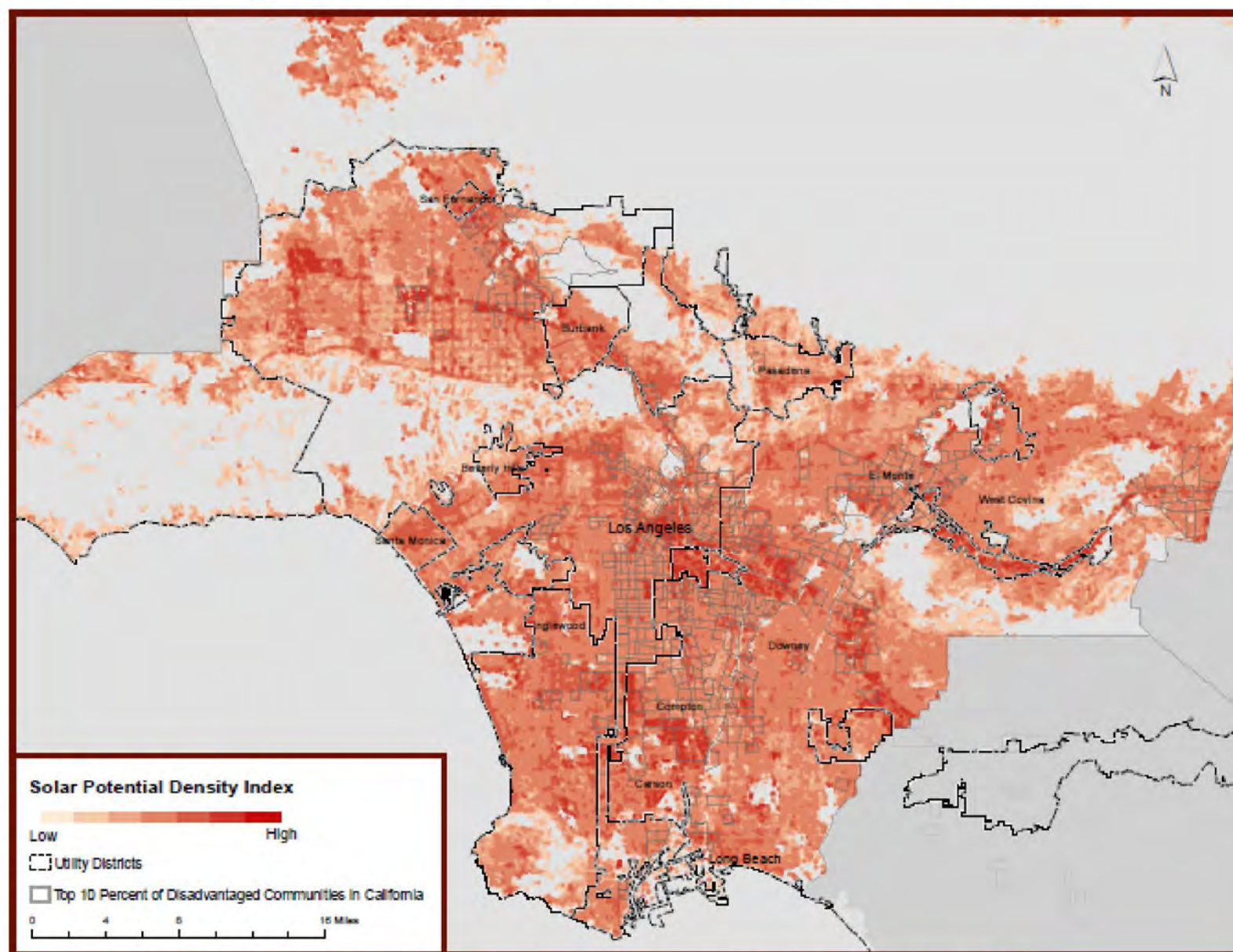
**CalEnviroScreen  
Score**

# CLIMATE THREAT

- **Climate Change** will cause a significant increase in the number of **Extreme Heat Days** (+95 degrees F) in Los Angeles
  - Triple in the Urban Core
  - Quadruple in the Valley and high elevations
- Los Angeles is home to 50% of the state's most vulnerable population
- Extreme heat will **exacerbate** the nation 's worst air quality

**OK, SO NOW WHAT?**

## SOLAR ROOFTOP POTENTIAL IN LOS ANGELES COUNTY

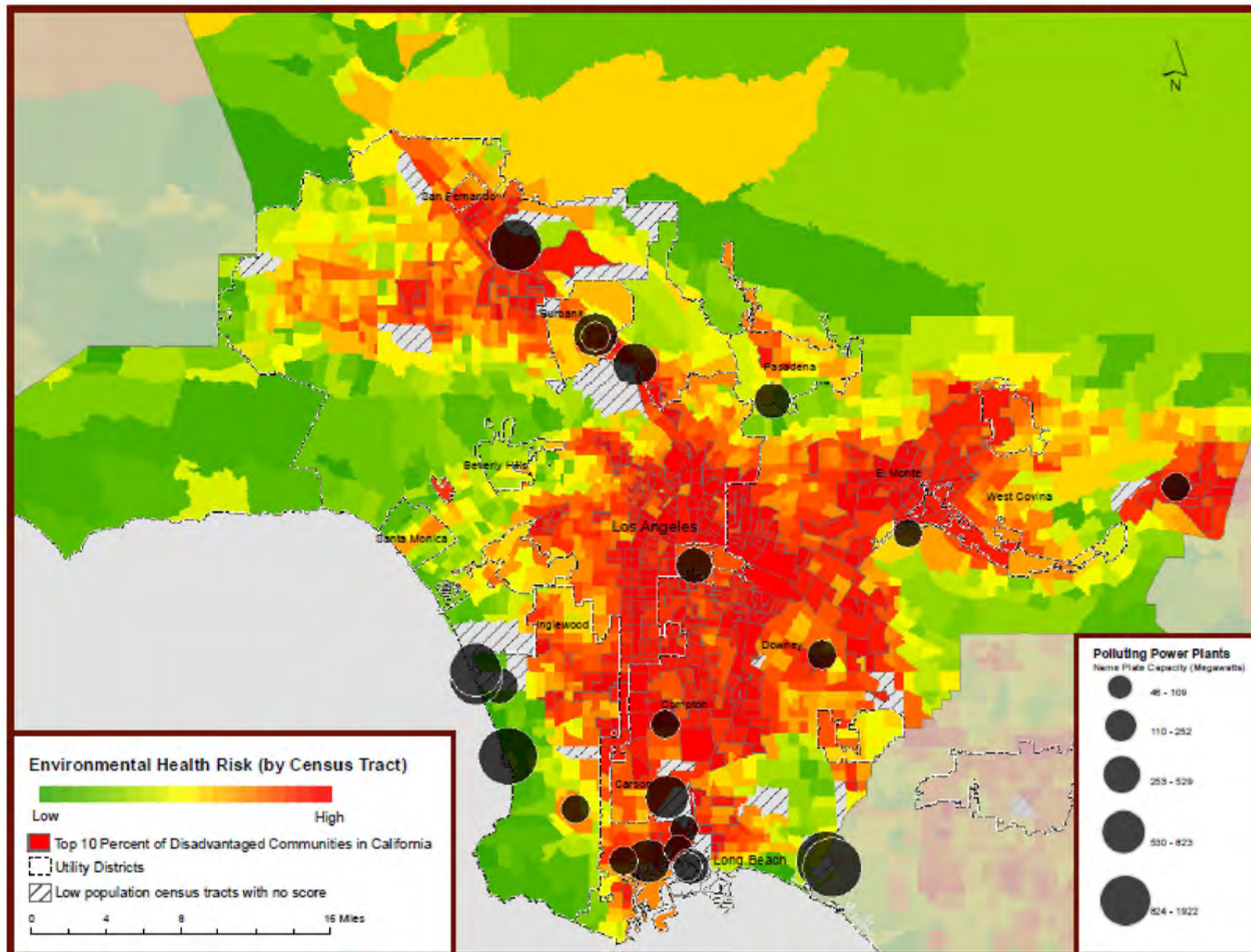


Source: UCLA Luskin Center, "Los Angeles County Solar Atlas" (2011). UCLA used and modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map. <http://solarmap.lacounty.gov>. Disadvantaged communities are outlined in grey lines and identified per California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment, "California Communities Environmental Health Screening Tool Version 2.0" (2014). <http://oehha.ca.gov/ej/ces2.html>.

# CLIMATE OPPORTUNITY

- The sun shines in Los Angeles 300 days a year
- 98 percent of its rooftop solar potential is untapped
  - Achieving just ten percent of that would drive the creation of 47,000 solar installation jobs
  - could reduce carbon pollution by nearly 2.5 million tons annually.
  - This is the equivalent of taking more than half a million cars off the road every year.
- 80 percent of all buildings in Los Angeles need energy efficiency upgrades
- Solar and EE can displace dirty fossil fuels

## POLLUTING POWER PLANTS IN LOS ANGELES COUNTY



Source: U.S. Environmental Protection Agency, "Emissions & Generation Resource Integrated Database" (2010), (accessed on February 25, 2014).

<http://www.epa.gov/cleanenergy/energy-resources/egrid/>.

# OVERHEARD AT BECC...

*Information is Power*

*Micro-scale modeling*

*Wonder-driven sociological and civic innovation*

*Give people the right tools, and they will envision a better future*

*Leverage social and built infrastructure*

*Connect emotionally with shared values and culture*









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