

Climate Smart Cities

Linking climate justice, environmental performance, and community engagement

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The logo for The Trust for Public Land, featuring the text "THE TRUST FOR PUBLIC LAND" in white, stacked vertically, on a green rectangular background with a gradient from light to dark green.

THE
TRUST
FOR
PUBLIC
LAND

Climate-Smart = Low-Carbon + Resilient



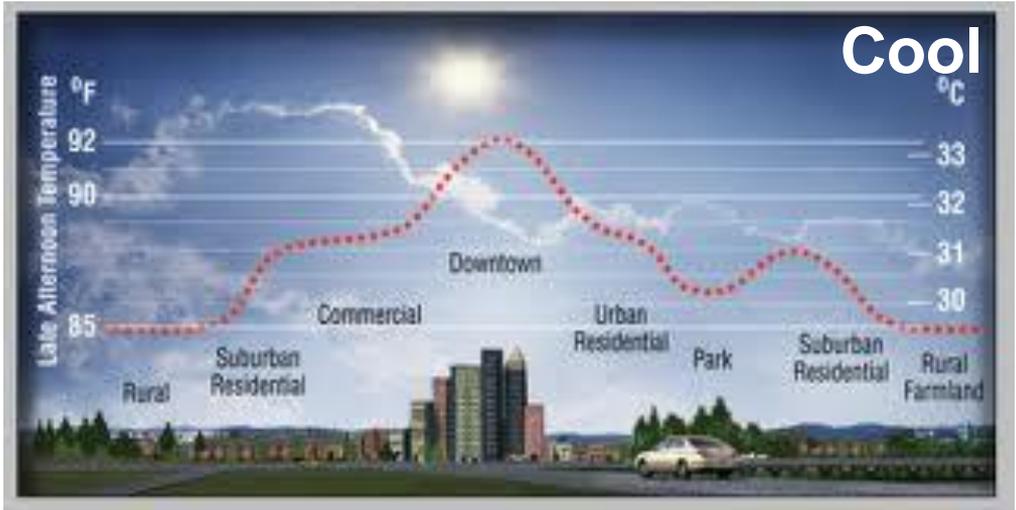
Climate Justice



10X Increase in Heat-Related Deaths by 2057

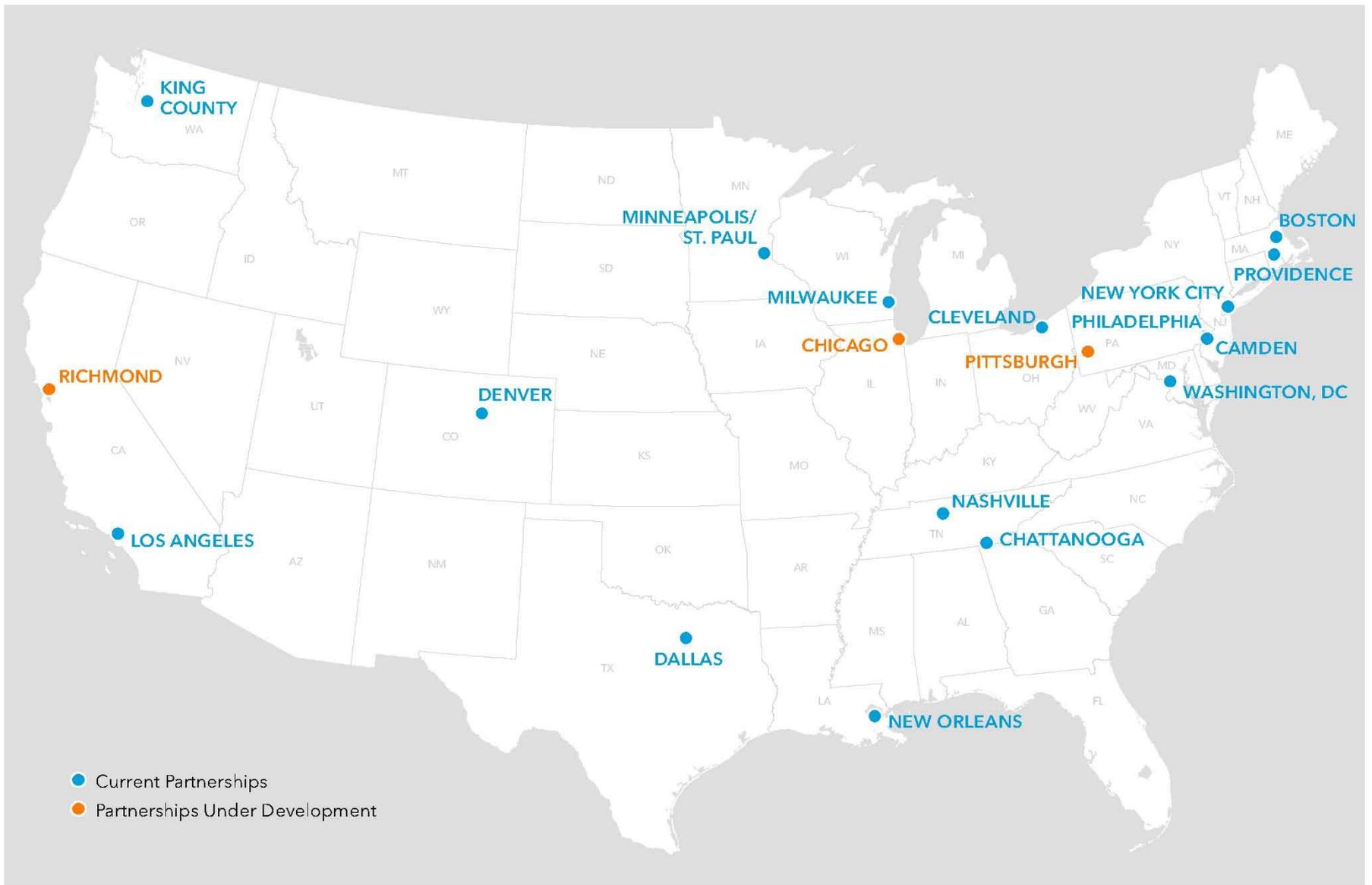


Heat Hits Hardest for Low Income and Elderly

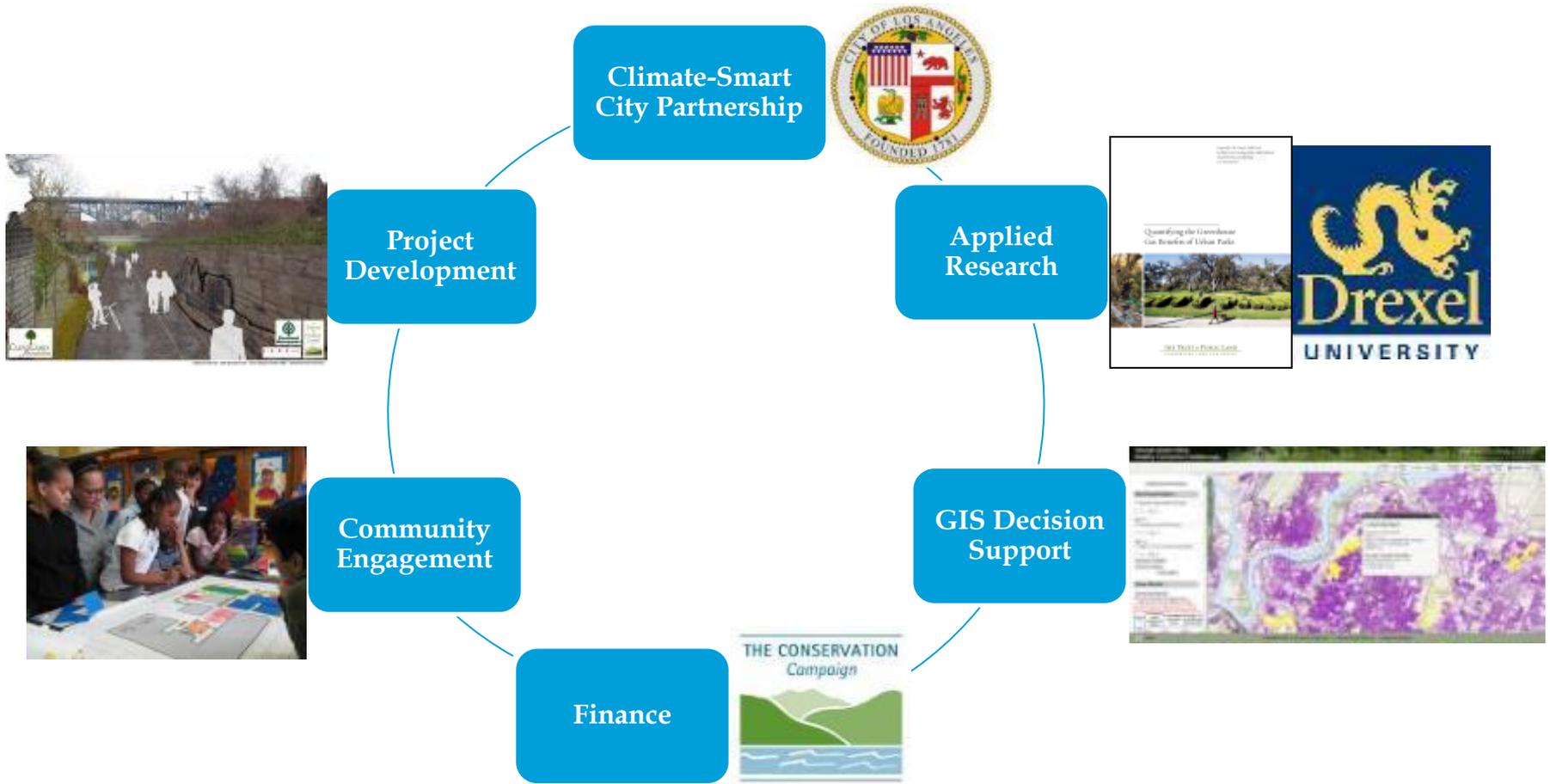


Program Objective: Help Cities Deploy Green Infrastructure within Climate-Smart Cities Framework



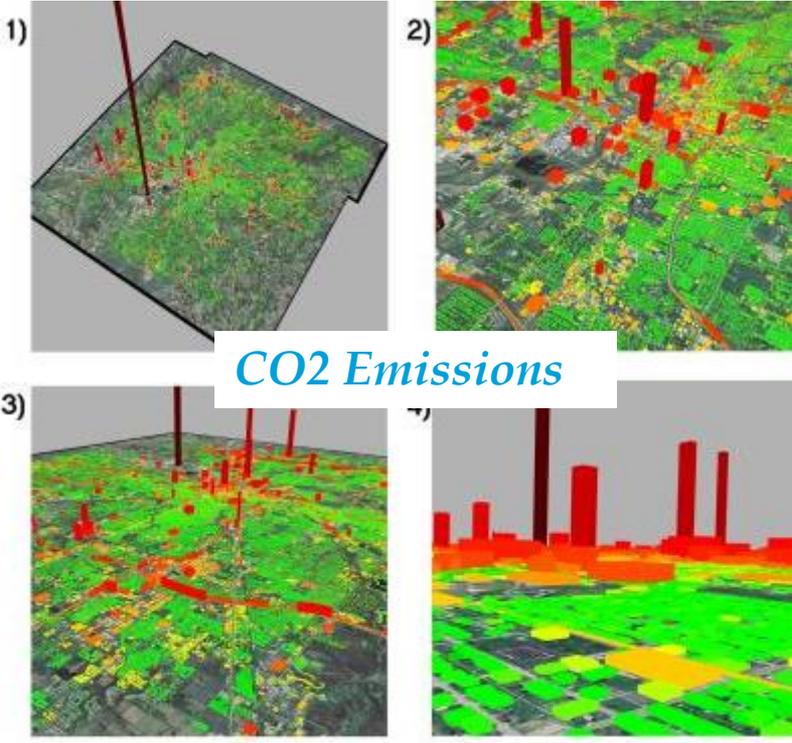


Climate-Smart Cities Partnerships

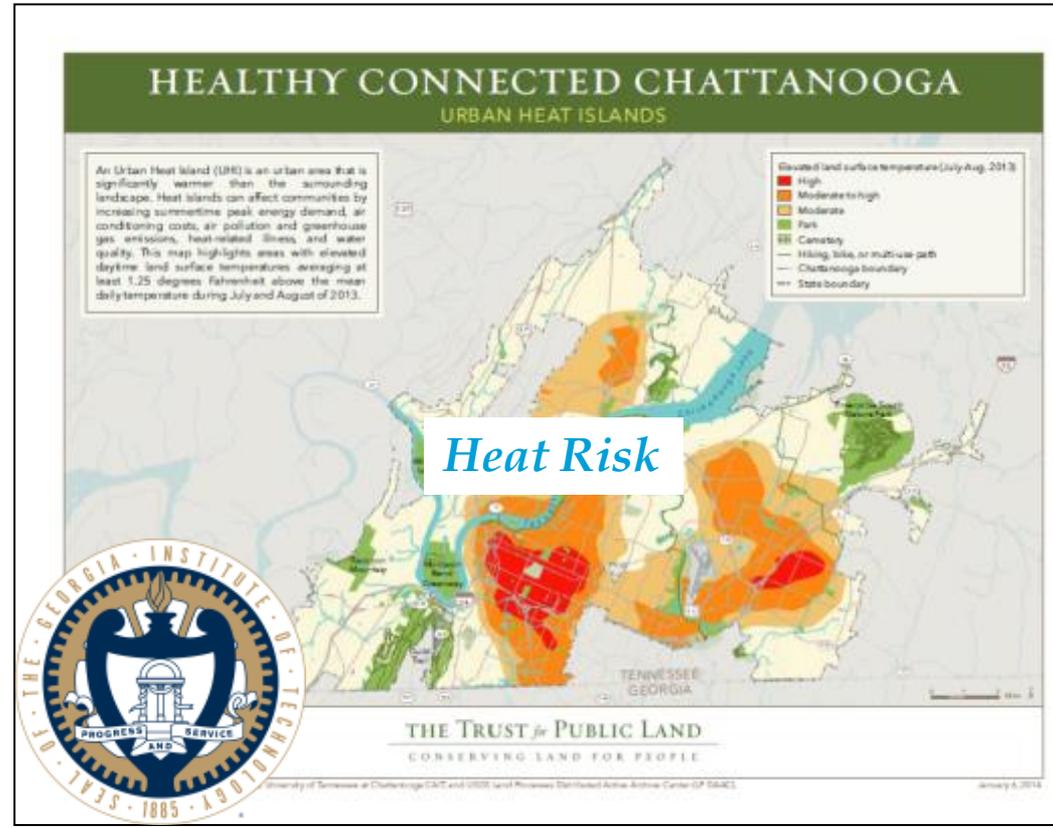


Our Climate-Smart Cities Model Integrates from Planning to Implementation

It All Starts with Data!



CO2 Emissions



Jet Propulsion Laboratory
California Institute of Technology



Decision Support Tool Integrates and Democratizes Data

Climate Smart Cities:
Healthy Connected Chattanooga

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CONSERVING LAND FOR PEOPLE

Map Background:
Street Map Terrain Map Aerial Imagery

Analysis Data: [Data Sources](#)

- Cool
- Connect
- Absorb and Protect
- Equitable Access and Health
- Green Infrastructure Assets and Opportunities
- Reference Layers

Data Transparency:

Analysis Results: [Data & Methodology](#)

- Turn off Analysis Results
- Overall Stacked Priorities
 - Stacked Priorities
 - Cool
 - Connect
 - Absorb and Protect
 - Equitable Access and Health

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Zoom In Zoom Out Pan Full Extent Previous Extent Measure Length Measure Area Identify Reset Map

Find Parcels Where ...

>>Vacant

= Yes

AND

>>Daytime Heat Island Hot Spots

= Yes

AND

Goal: Stormwater Vulnerability Mapping - ha

= Yes

AND

Goal: Priority Connections and Adjacent Pr

= Yes

AND

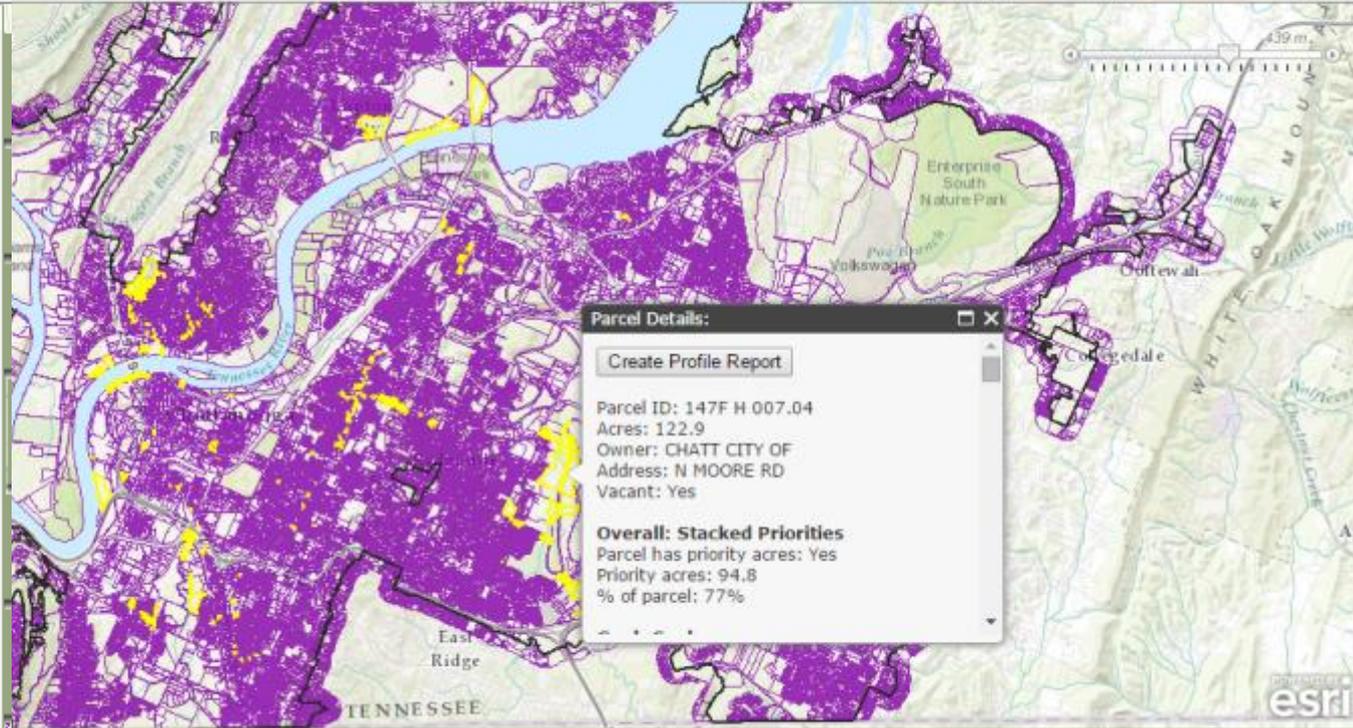
>>High % of Low Income Households

= Yes

Add Query Condition

Remove Condition

RUN QUERY

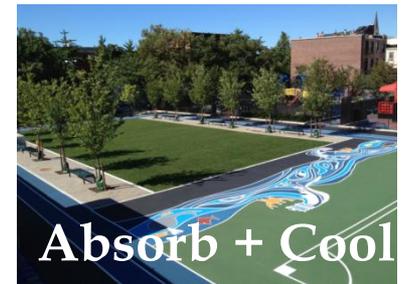
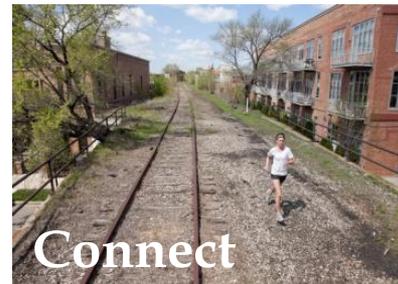


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Our Tool Works at the Parcel Level and Lets Users Ask Questions of the Data



Climate Smart Cities Implementation



From Absorb to Multiple Benefit Urban Greening



Green Infrastructure
Schoolyards



Green Alleys



Connective Corridors/
Linear Parks



Community Agriculture



Water-Smart Parks

TPL Green Infrastructure Project Typologies

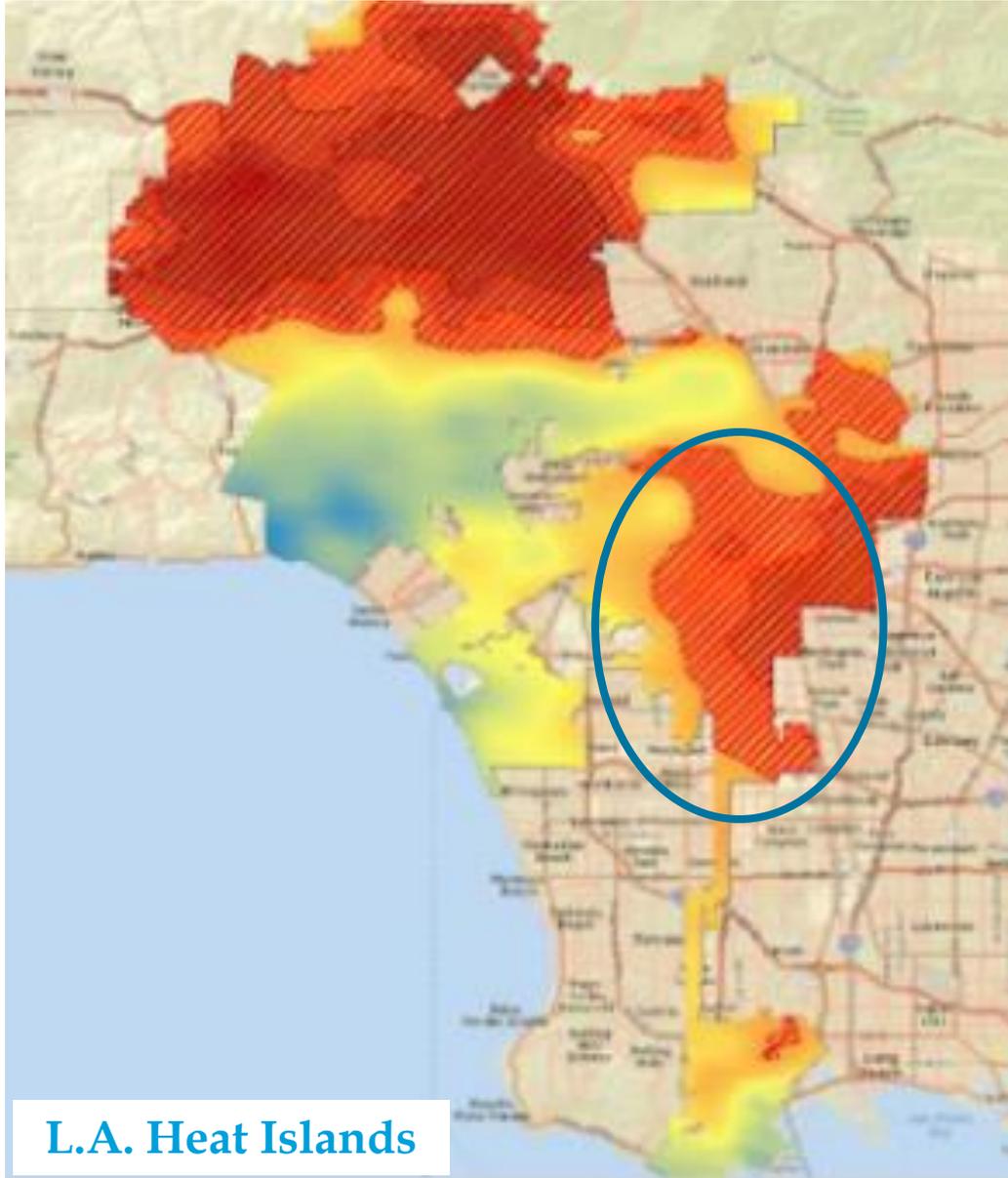


Green Alleys

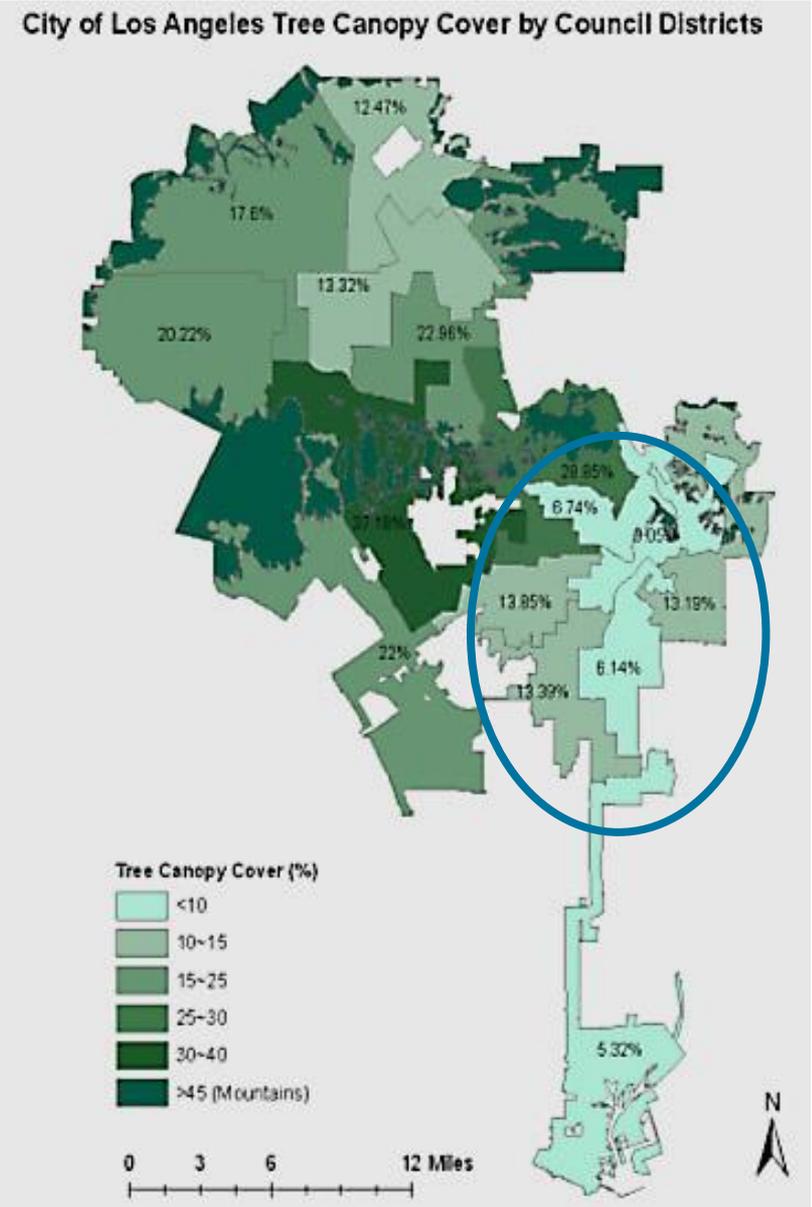
Los Angeles, California



Science & Planning Link to Climate-Smart Implementation



L.A. Heat Islands



Science & Planning Link to Climate-Smart Implementation



Science & Planning Link to Climate-Smart Implementation



Prepared for The Trust for Public Land
by Philip Greck, Penelope Miller, Mihai Nădăreț,
Marybeth Riley and Lily Shoop
ICF International

Quantifying the Greenhouse Gas Benefits of Urban Parks



THE TRUST FOR PUBLIC LAND
CONSERVING LAND FOR PEOPLE

THE AVALON GREEN ALLEY NETWORK DEMONSTRATION PROJECT

+ Lessons Learned from Previous Projects for Green Alley Development in Los Angeles & Beyond



Tributary Area

4.44 acres

Infiltration Rate

12 in/hr

Volume of Storage Provided

5,560 cf

~85%

impermeable surfaces and pavement in South LA

28%

of South LA residents live below the poverty line

expected to reduce up to

90%

bacterial loads for 20,000 people per square mile

Climate-Smart Implementation = Evaluate & Replicate

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Green School Yards

New York, New York





Before - M.S. 267

After - M.S. 267



BEFORE



J.H.S. 157

AFTER



J.H. 8 157

Thank You

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