Tree Prescription:
Recent Research on Urban Forests & Human Health

Climate Action Team Public Health Workgroup
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Cindy Blain
Executive Director

CALIFORNIA ReLEAF

Rx: Health Inequities

Rx: Two Research Projects

GreenRx

SACRAMENTO TREE FOUNDATION

FOREST SERVICE US DEPARTMENT OF AGRICULTURE

CALIFORNIA DEPARTMENT OF FORESTRY & FIRE PROTECTION CAL FIRE SINCE 1885

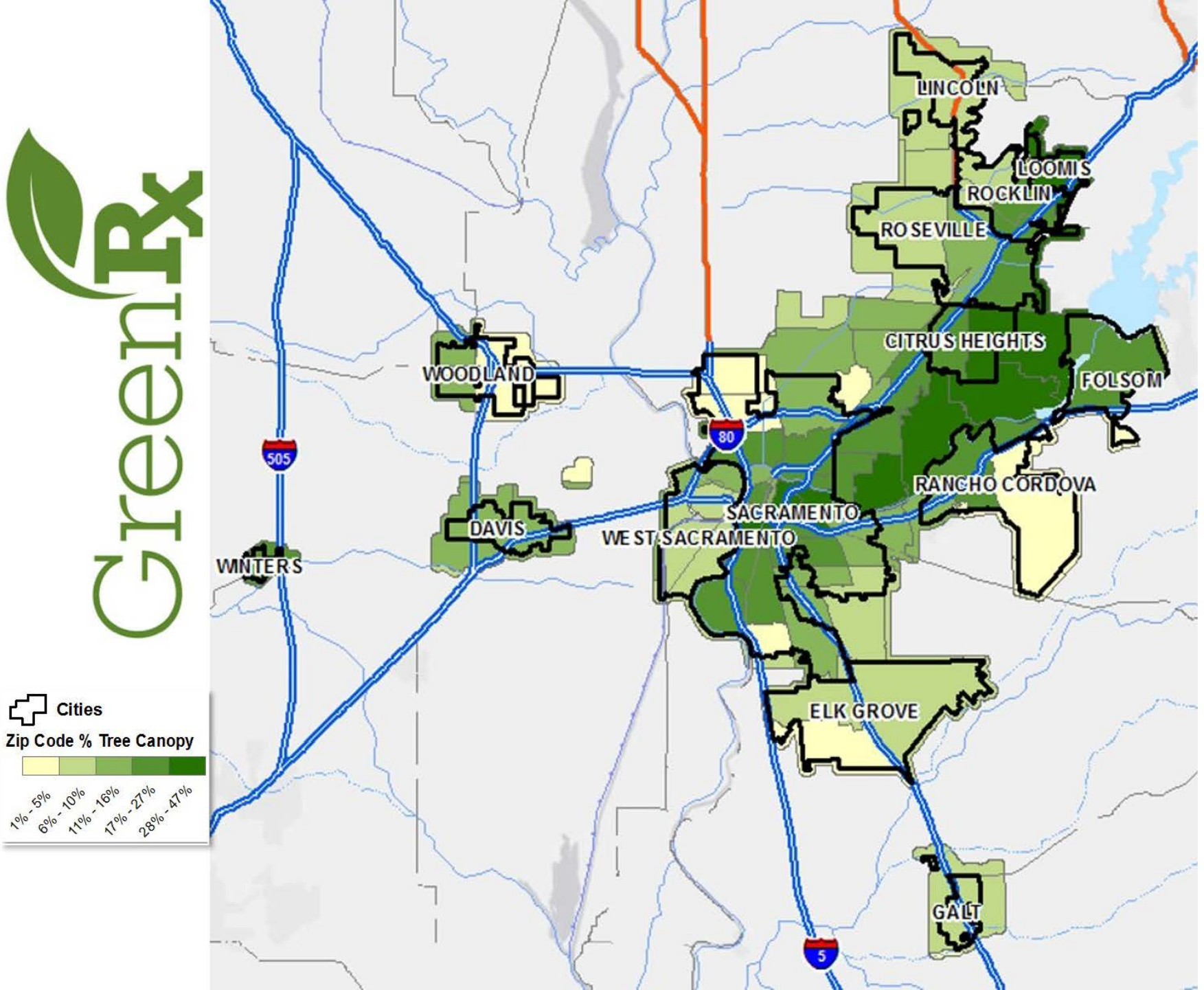
UD4H URBAN DESIGN 4 HEALTH

Tree$ ROI

ILLINOIS UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

KAISER PERMANENTE® DIVISION OF RESEARCH | Northern California

FOREST SERVICE US DEPARTMENT OF AGRICULTURE


GreenRx
Cities
Zip Code % Tree Canopy
1% - 5%
6% - 10%
11% - 16%
17% - 27%
28% - 47%
LINCOLN
LOOMIS
ROCKLIN
ROSEVILLE
CITRUS HEIGHTS
FOLSOM
WOODLAND
80
505
RANCHO CORDOVA
SACRAMENTO
DAVIS
WEST SACRAMENTO
WINTERS
ELK GROVE
GALT
5

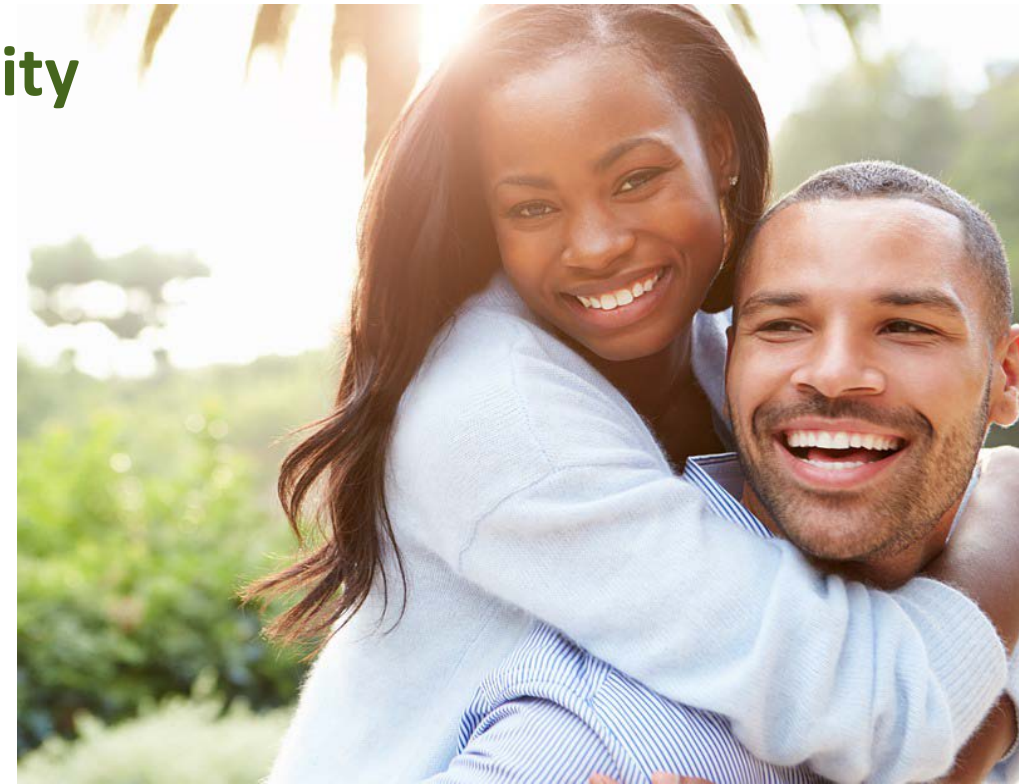
Multiple Measures

- Asthma
- Attention Deficit Disorder
- Cardiovascular disease
- General health
- Mental / Emotional health
- Overweight / Obesity
- Physical activity
- Social cohesion
- Type 2 diabetes

The Findings

More neighborhood tree canopy cover was **significantly associated** with:

- **Better General Health Score**
- **Less Overweight / Obesity**
- **Higher Social Cohesion**



GreenRx 10% More Tree Cover

What health differences do we see?

Adult Health Measure	Improvement
Overweight/obese	-19%
Type 2 diabetes	-19%
Current asthma	-10%
High blood pressure	-7%
General Health	+3%
Social Cohesion	+1%

Source:J Ulmer et al, Multiple health benefits of urban tree canopy, Health & Place

More Info on GreenRx: http://www.sactree.com/greenrx

Thinking outside the....

Dr. Backman connects CHIS to Canopy data

Big picture: Multiple Health Measures

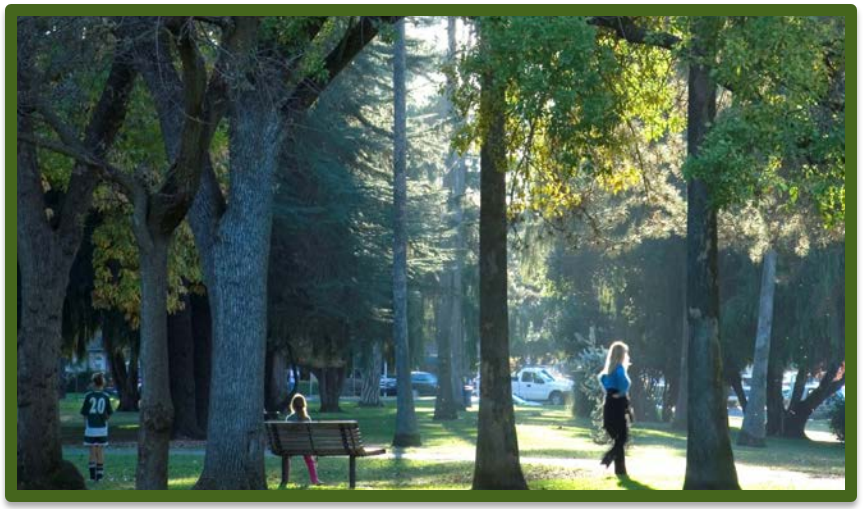
Big picture: Advisory Committee

Hi Res Data: CHIS & LIDAR

Not just p-values: Predictive Modeling

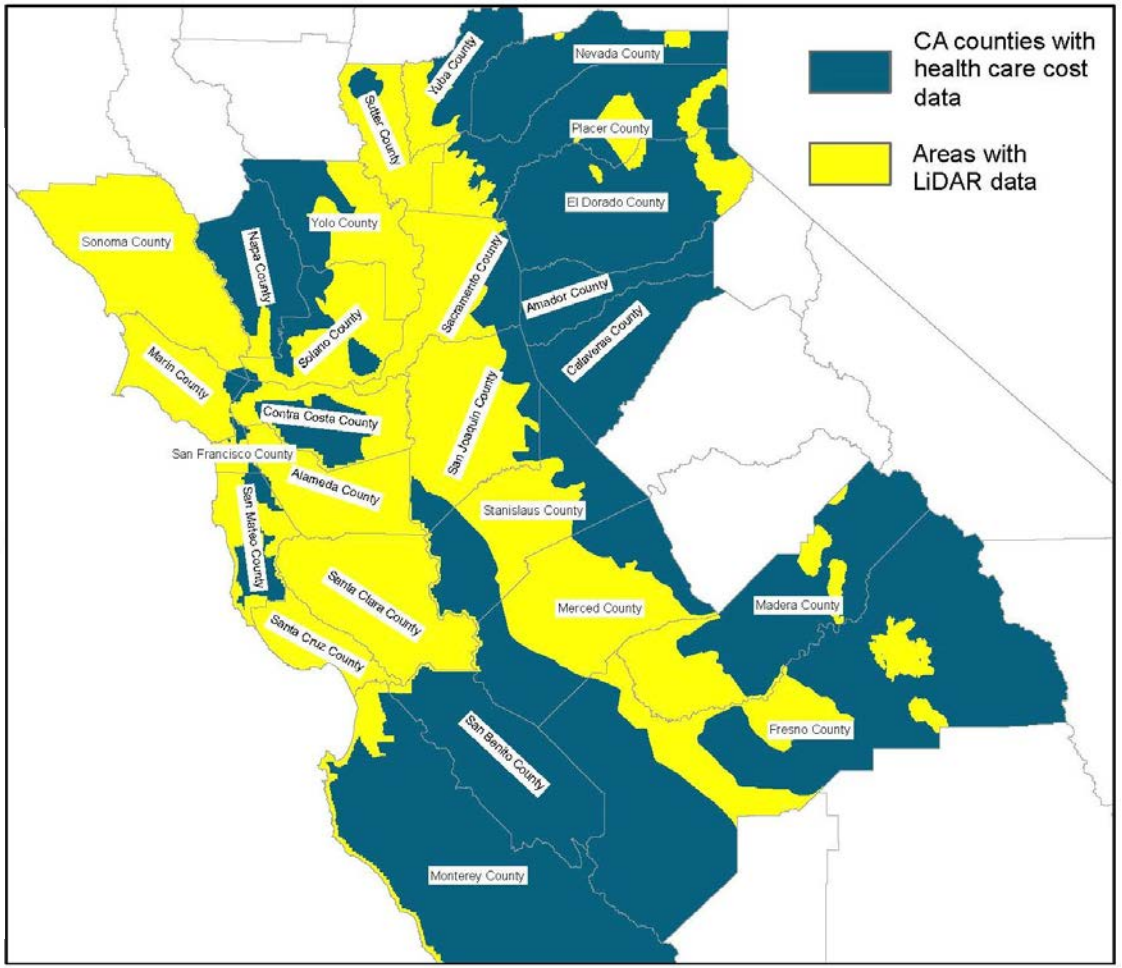
TBD: Health Economics Analysis

Ray Tretheway hires DrPH



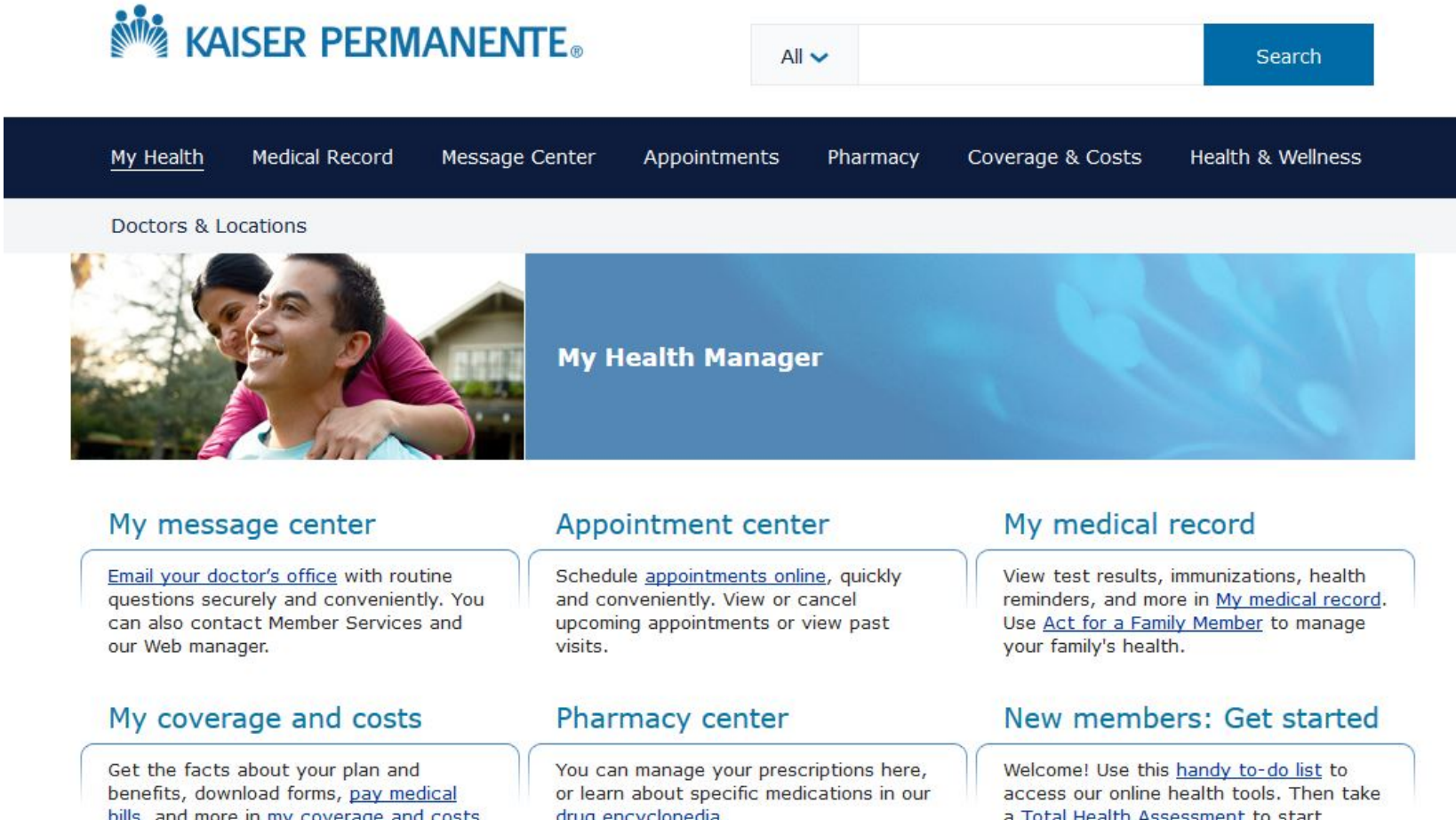
Tree$ ROI: The Next Steps

Larger Region



Tree$ ROI: The Next Steps

Actual Health Care Costs



Tree$ ROI: The Next Steps

Health Care vs $ Tree Care $

Photo credit: West Coast Arborists, Inc.

Rx: New Research Paths

- Do the math: health care $$$ savings
- +++ ↑↑↑QOL, creativity, and productivity $$$
- Include Wealth as a control factor – not just Income?
- How do we reach the doctors & nurse practitioners?
- Cross-sector research: pooling $ and ↑↑innovation
- Cap & Trade investment = RESEARCH Goldmine

Rx: …Beyond the Box again

Thank you!
Questions?

Cindy Blain
cblain@CaliforniaReLeaf.org
916.497.0034

CALIFORNIA ReLEAF