



# SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS REGIONAL PLANNING WORKING GROUPS

## Public Health Working Group Meeting

March 19, 2020

1:30 p.m. – 3:00 p.m.

Due to public health concerns, please join via web conferencing:

To join the meeting: <https://scag.zoom.us/j/326205700>

Dial-In: +1 669 900 6833

Meeting ID: 326 205 700

## AGENDA

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**1. WELCOME, SELF INTRODUCTIONS**

*Courtney Aguirre, SCAG*

**2. CALIFORNIA PUBLIC HEALTH ASSESSMENT MODEL (C-PHAM) – LOCAL CASE STUDY**

*Larry Frank, Urban Design for Health*

**3. CALIFORNIA HEALTHY PLACES INDEX (HPI) UPDATE & ATP APPLICATIONS**

*Bill Sadler and Helen Dowling, Public Health Alliance*

**4. CLIMATE CHANGE & PUBLIC HEALTH CONSIDERATIONS**

*Elizabeth Rhoades, Los Angeles County Department of Public Health, Environmental Health*

**5. RANDALL LEWIS HEALTH POLICY FELLOWSHIP- SITE RECRUITMENT**

*Courtney Aguirre, SCAG*

**6. CONNECT SOCAL UPDATES**

*Courtney Aguirre, SCAG*

**TO PARTICIPATE VIA WEB CONFERENCING**

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SCAG, in accordance with the Americans with Disabilities Act, is committed to providing special accommodations to those who are interested in participating in the workshop. SCAG is also committed to helping those with limited proficiency in the English language by providing translation services at the workshop in accordance with Title VI of the Civil Rights Act. We ask that you provide your request for special accommodations or translation services at least 72 hours prior to the meeting so that SCAG has sufficient time to make arrangements. For Public Health inquiries, please contact Courtney Aguirre, Program Manager, at [aguirre@scag.ca.gov](mailto:aguirre@scag.ca.gov) or by calling (213) 236-1990.



## California Public Health Assessment Module (C-PHAM)

Developed by Urban Design 4 Health – [www.ud4h.com](http://www.ud4h.com)



Dr. Larry Frank, President  
 Dr. William Bachman, Senior Analyst & Marketing Strategist  
 Jim Chapman, Managing Principal  
 Urban Design 4 Health – [www.ud4h.com](http://www.ud4h.com)

March 19, 2020

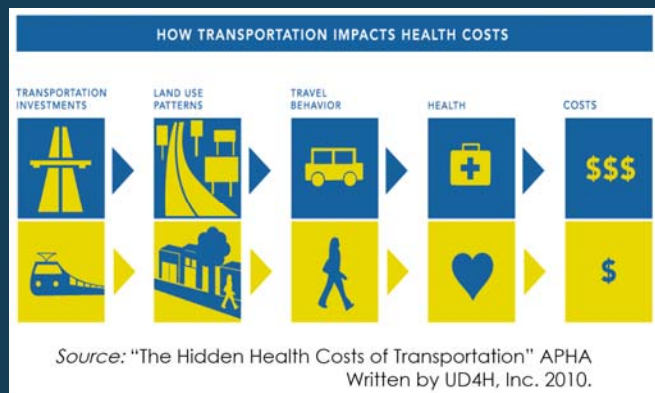
[www.scag.ca.gov](http://www.scag.ca.gov)

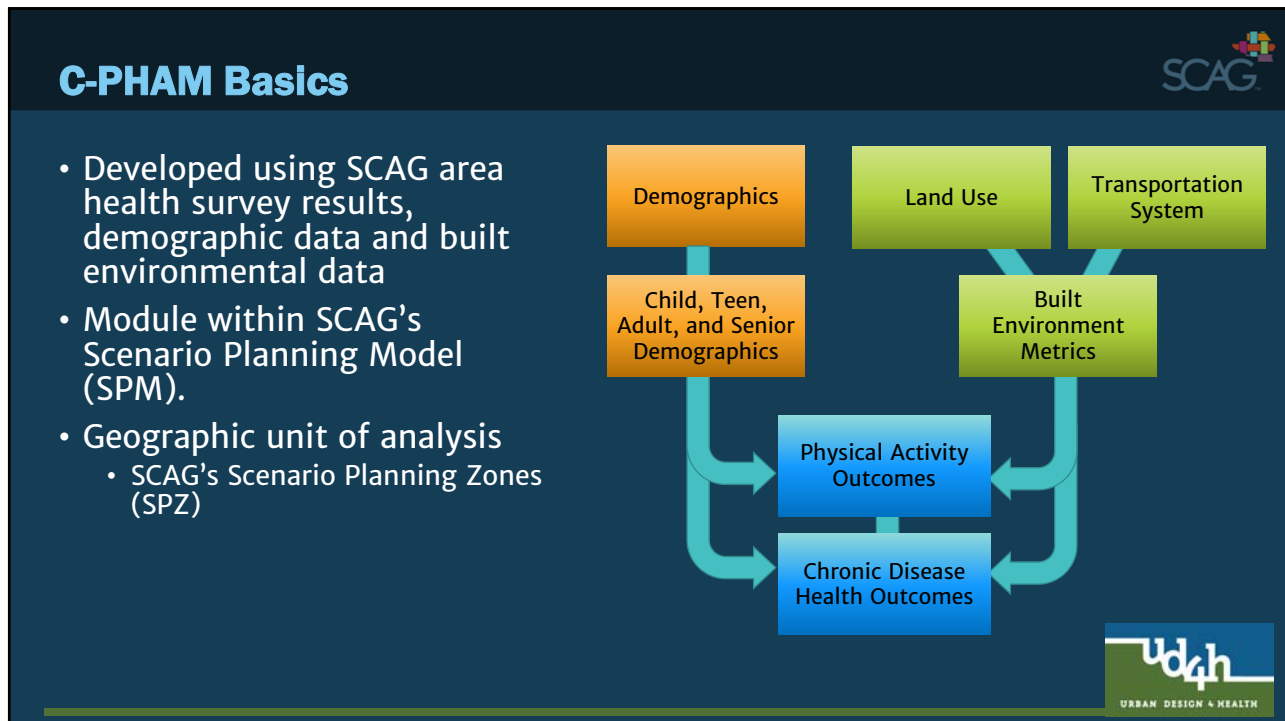
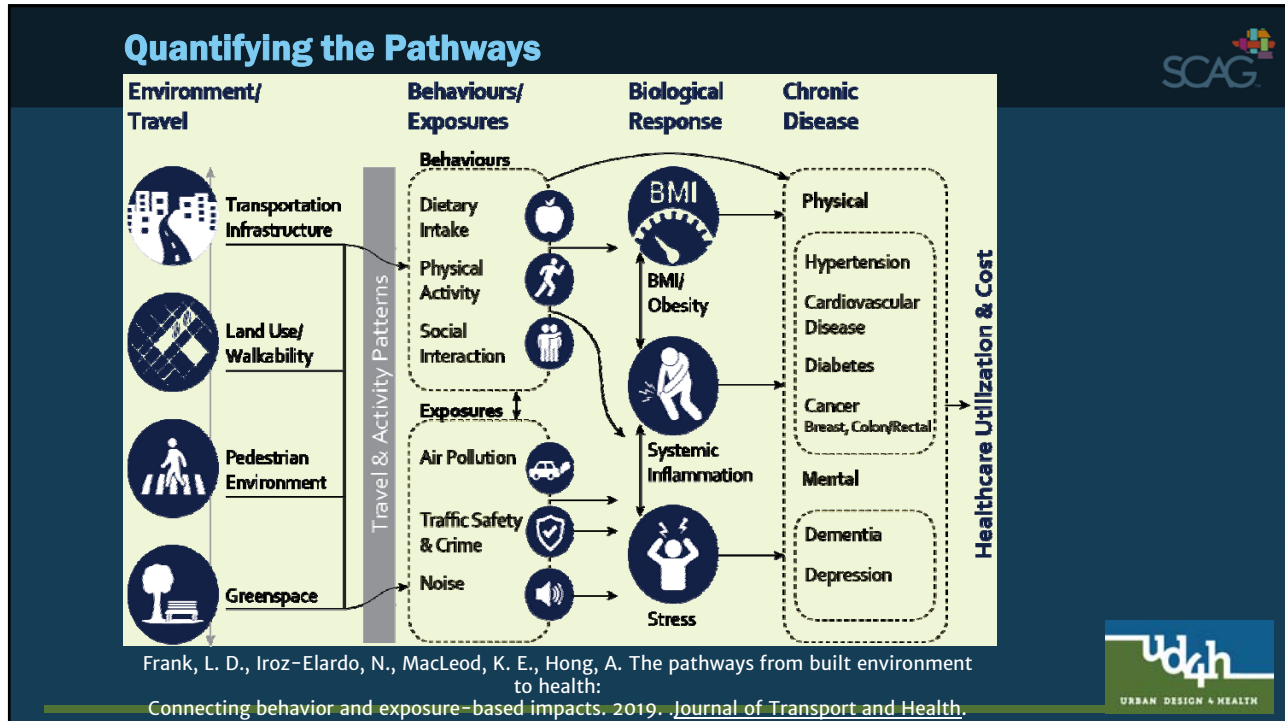


## California Public Health Assessment Model (C-PHAM)



- Health module (connected to scenario planning software)
- Planners able to quantify community public health implications of various land use and transportation scenarios.
- Provide health impact estimates at a geographic scale useful for making local, neighborhood-level decisions
- Opens door to add health impact costs to planning process





## C-PHAM 2016



- 2015 -- version 1 created in 2015 to work with the Southern
- Applied to 2016 Regional Transportation Plan (RTP) using a base year of 2012 and a 2040 future year
- 30 counties, 150m grid cell
- Technical advisory committee

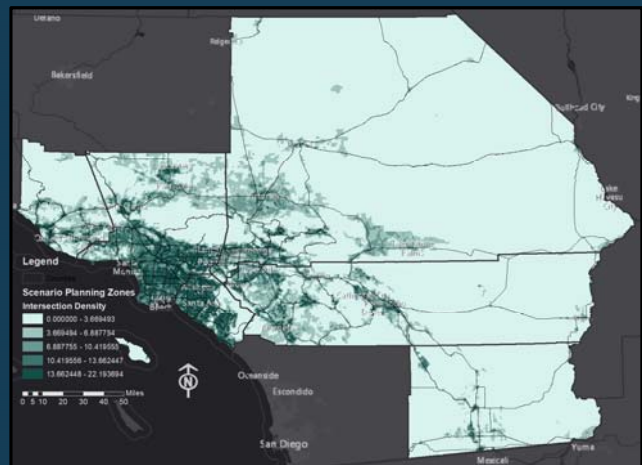
Adults: Ages 18-64	No Plan	2040 Plan	Glendale
<b>Recreation Physical Activity - Minutes Daily</b>	14.6 min	+ .4%	+ 9%
<b>Walking - Minutes Daily</b>	12.1 min	+ 33%	+ 10%
<b>Biking - Minutes Daily</b>	1.6 min	+ 26%	+ 12%
<b>Auto - Minutes Daily</b>	64.8 min	- 4.4%	- 6%
<b>Obese Population (%)</b>	26.3%	- 1.3%	-3%
<b>High Blood Pressure (%)</b>	21.5%	- 1.2%	- 1%
<b>Heart Disease (%)</b>	4.4%	- 1.0%	0%
<b>Diabetes - Type 2 (%)</b>	6.1%	- 1.0%	- 11%



## C-PHAM 2019



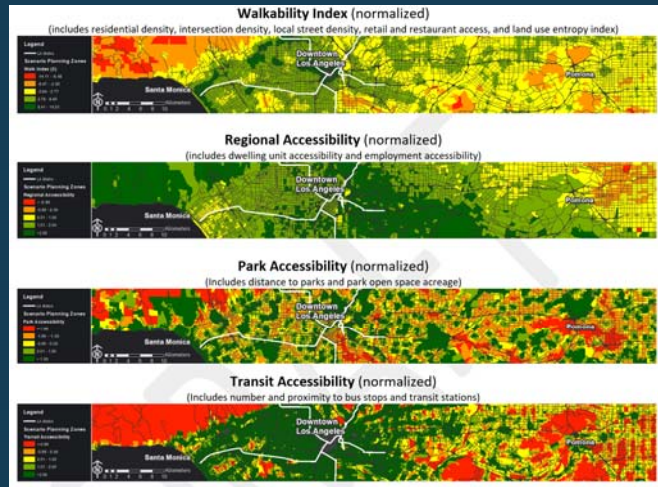
- Updated for SCAG region only
  - California Health Interview Survey (CHIS) 2015-2017
- Age group models (child, teen, adult, senior)
- Changed geographic unit to scenario planning zone (SPZ)
- Travel behavior models unchanged (2012 CHTS)
- Technical advisory committee



## Data Requirements (SPZ geography)



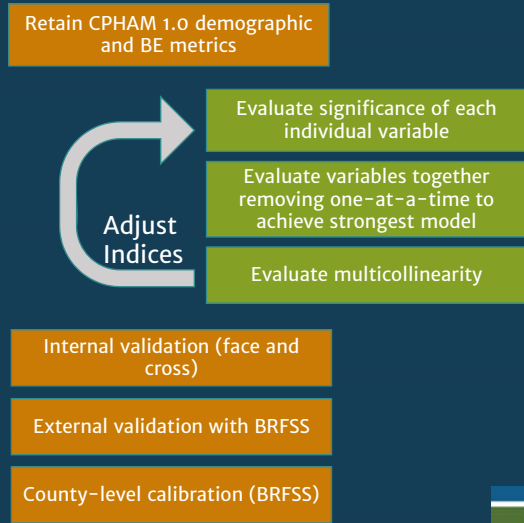
Demographics	Built Environment
Average age	Walkability index
Average household size	Transit accessibility
Average number of vehicles	Regional accessibility
% female	Park accessibility
% for each race/ethnicity	Major road index
% employed	Distance to school
% renters	
% households with children	
% at each income range (6 levels)	
% disability	



## Model development methods



- Models developed using California Household Interview Survey (CHIS)
- Code developed by UD4H and submitted to UCLA Data Access Center (DAC)
- Two-part, binary, or Poisson regression models depending on nature of data
- Models developed for Child, Teen, Adults, and Seniors
- Models include type2 diabetes, cardiovascular disease, high blood pressure, obesity, and general health



## Final set of models



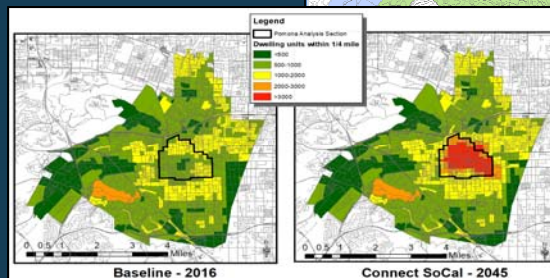
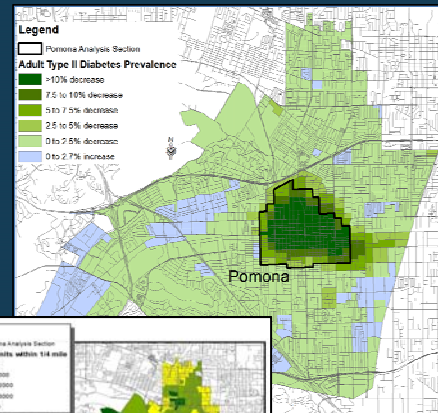
Outcome	Seniors (65+)	Adults (18-64)	Teens (13-17)	Children (5-12)
any walking for transportation	X	X		
minutes/wk transport walking for those with any	X	X		
any walking for recreation	X	X		
minutes/wk recreational walking for those with any	X	X		
body mass index	X	X	X	X
likelihood of being overweight or obese	X	X	X	X
likelihood of being obese	X	X	X	X
likelihood of having high blood pressure	X	X		
likelihood of having heart disease	X	X		
likelihood of having type 2 diabetes	X	X		
likelihood of having poor self-reported health	X	X	X	X
days/week with at least 60 minutes PA			X	X
days/week walk or bike to school			X	X
walk or bike to school at least one day a week			X	X



## Case Study – City of Pomona



- Evaluated impact of Connect SoCal on City
- Focus on downtown area -- largest changes in built environment (87 SPZs)
- Increase in residential density, retail/office FAR, and employment accessibility
- Demographics unchanged
- Improved all health outcomes
- No significant changes in areas with unchanged built environment



## Value to existing California communities



### In SCAG Region

- Ready source of baseline and Connect SoCal plan health outcomes from SCAG
- Model algorithms developed from California Health Interview Survey participants living in the SCAG area
- Opportunity to extend or expand scenarios with SCAG
- Opportunity to apply models to other custom uses with UD4H

### Outside SCAG Region

- Model algorithms can be applied to any region that has the input data at similar geographies to the SPZ
- Region specific models can be developed through UD4H using same approach



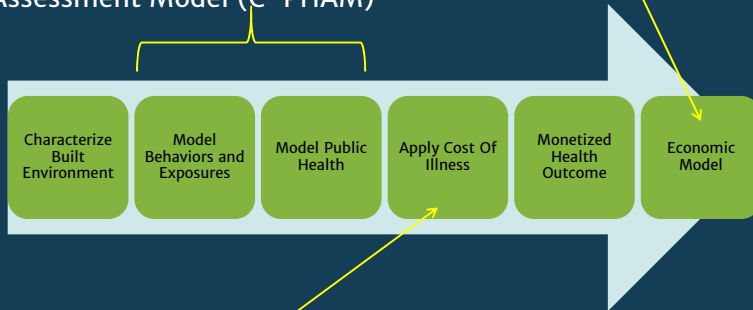
## Opportunity to estimate health costs of long range plans



Use health modeling tool like the California Public Health Assessment Model (C-PHAM)

Use Input-Output model

- REMI Transight
- IMPLAN
- REDYN



Use published Cost Of Illness Literature

- Direct (Healthcare Expenditures)
- Indirect (Productivity)

### 2016 Analysis by UD4H/AECOM

- Greater LA Region
- \$8.41 benefit per \$1 invested in active transportation
- From
  - Labor force productivity
  - Reduced health care costs
  - Reduced travel expenditure
  - Increased mobility
  - New construction





## Health Related Economic Benefits of Active Transportation Investments

\$1 spent returns over \$8 in economic growth



\$13 billion in active transportation investments will turn into \$113 billion in Sales Output.

**First study in the world to show monetized benefits of healthy land use.**

Urban Design 4 Health (2016). Active Transportation Health & Economic Impact Study. Southern California Association of Governments; Los Angeles, CA.  
<http://urbandesign4health.com/projects/health-monetization-of-active-transportation>



## Three Policy Levels



Regional Accessibility



Walkable, Complete Neighborhoods (Macro-scale)



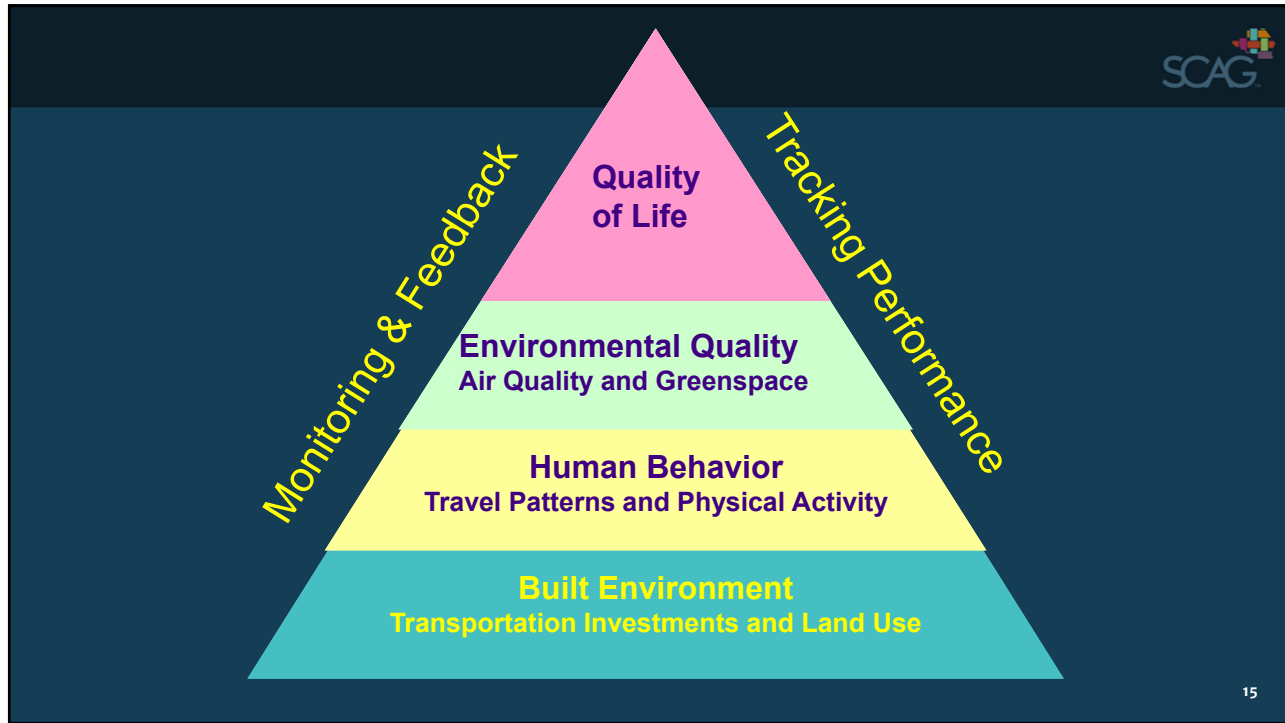
Pedestrian Environment (Micro-scale)



[www.sfbetterstreets.org](http://www.sfbetterstreets.org)







**Thank you!**



Dr. Larry Frank, President

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Jim Chapman, Managing Principal

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# The California Healthy Places Index Update and ATP Applications

**Bill Sadler, JD, MURP**  
Director of Operations

**Helen Dowling, MPH**  
Data Manager

SCAG Public Health Working Group  
March 19, 2020



## Agenda

- Introduction to the Healthy Places Index (HPI)
  - History & Methodology
  - Key Features & Functions
- Using HPI for ATP Applications
  - Characterizing Disadvantaged Communities
  - Defining Project Areas
  - Identifying Local Health Concerns
- Current Use Cases
- New Features & Functions






*Every Californian should have the opportunity to live a healthy life.*

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# CDC's Social Determinants of Health



Neighborhood and Built Environment

Health and Health Care

Community Conditions

Social and Community Context

Education

Economic Stability

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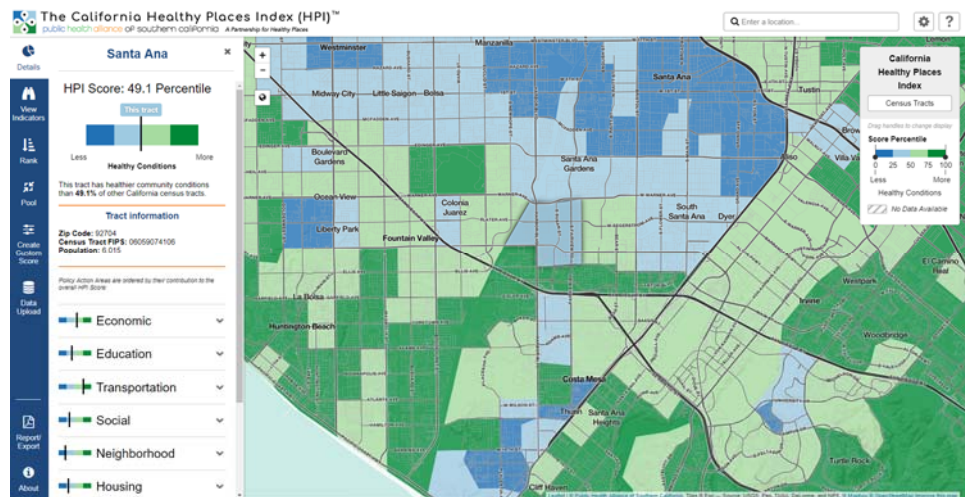
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How can we **QUANTIFY** and **COMMUNICATE** the impact of community conditions to spur policy action?

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# California Healthy Places Index (HPI)



The California Healthy Places Index (HPI)™

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Search: Enter a location.

**Santa Ana**

HPI Score: 49.1 Percentile

Health Conditions: Less (blue) | This tract (green) | More (dark green)

This tract has healthier community conditions than 48.7% of other California census tracts.

**Tract Information**

Zip Code: 92704  
 Census Tract FIPS: 06059024105  
 Population: 6,015

Policy Action Areas are ordered by their contribution to the overall HPI score.

- Economic
- Education
- Transportation
- Social
- Neighborhood
- Housing

California Healthy Places Index  
 Census Tracts  
 Score Percentile: 0 (Less) | 25 | 50 | 75 | 100 (More)  
 Healthy Conditions  
 No Data Available

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## Alignment with Social Determinants of Health

### CDC's Social Determinants of Health



### California Healthy Places Index Policy Action Areas



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## HPI's Unique Approach

### Granular

Fine geographic resolution reveals the variation *within* cities, counties, and communities

### Policy Solutions

Each indicator is supported by a wealth of policy solutions detailed in our Policy Guides

### Validated

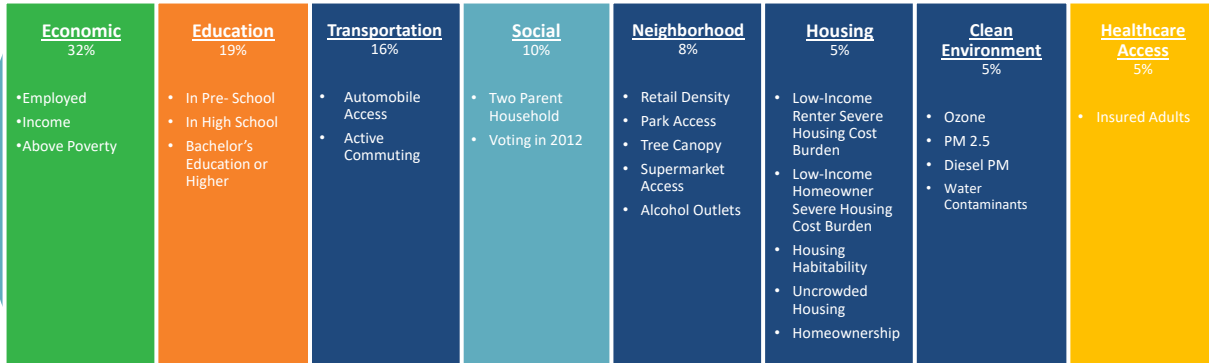
Each indicator – and the overall index – is linked to a summary health outcome: **life expectancy at birth**

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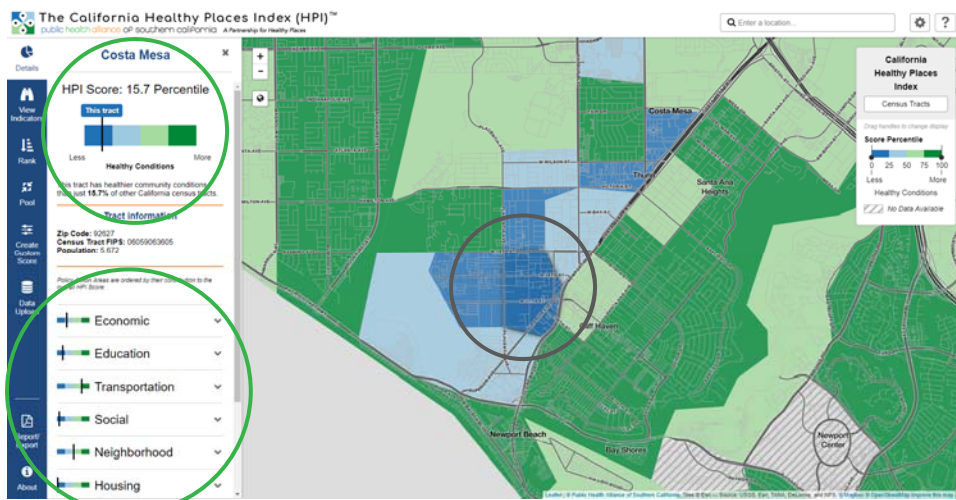
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# Final California Healthy Places Index

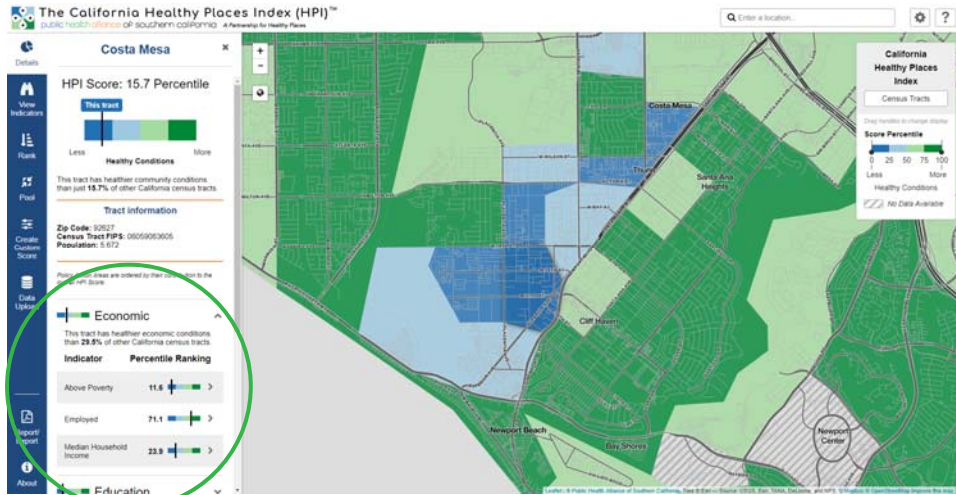
Comprises **25 indicators** that represent community conditions at the Census tract level, grouped into eight **Policy Action Areas**.



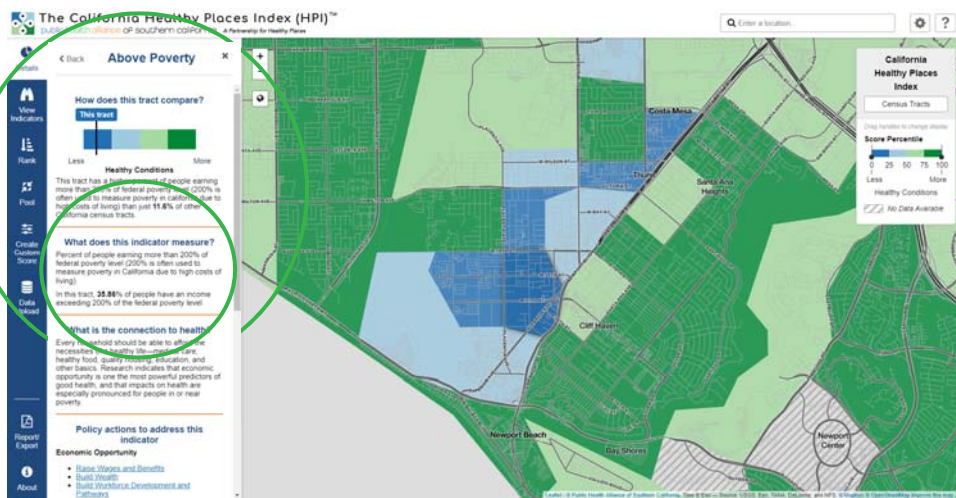
## From Data to Action Using HPI



# From Data to Action Using HPI



# Indicator Details Link to Policy Actions



# Actionable Policy Guides

## Economic Opportunity

### Raise Wages and Benefits

Raise workplace standards and wages to ensure that workers can stay out of poverty.

Find the policies that are right for you.

Several policy recommendations to consider

**Minimum Wages Ordinances** establish the minimum hourly rate of pay for employees within a jurisdiction—usually a city. Approximately 3.5 Million California households (or 38% of the state) do not currently earn a wage that is sufficient to provide for their families.<sup>14</sup> There is considerable flexibility in the design of a minimum wage ordinance. Some cities carve out exceptions for small businesses, non-profits, or unions. Ordinances can propose a one-time increase, stepped increases, or tie wages to costs of living. While the California State minimum wage will raise in increments to \$15 an hour by 2022, many cities have chosen to increase wages faster than this schedule. Some ordinances also establish other minimum standards such as paid sick days. An enforcement plan should accompany minimum wage ordinances to ensure that they have the desired impact. For more information, see: The Economic Policy Institute's Minimum Wage Tracker, the Congressional Budget Office's Effects of a Minimum-Wage Increase on Employment and Family Income, and the League of California Cities' Local Minimum Wage Laws and the Challenge of Balancing Interest, and Los Angeles County's Minimum Wage Ordinance.

**Living Wage Ordinances** set wage and benefit standards for firms that benefit from public contracts, subsidies, or resources including transportation and infrastructure projects. As with minimum wages, jurisdictions can tailor living wages to suite their conditions and needs. Some newer living wages are quite large in scope, covering: sick time, health insurance coverage, retirement, employee turnover, protections for union organizing, enforcement mechanisms to reduce wage theft, stable hours, and limiting background checks to encourage opportunities for formerly incarcerated people. For more information, see: The Bay Area Regional Prosperity Plan Steering Committee's Economic Prosperity Strategy, the City of Los Angeles' Living Wage Ordinance, and Santa Clara County's Living Wage Ordinance.

# Extensive Policy Options

ONE policy guide = MANY recommendations



Raise Wages & Benefits	Build Workforce Development	Build Wealth	Develop Community Economic Capacity	Improve Transportation Access
Minimum Wage Ordinances	Job-Focused Basic Skill Training Programs	Predatory Lending Ordinances	Industrial Land Preservation Strategies	Transportation for Economic Opportunity
Living Wage Ordinances	Industry Driven, Sector-Based Training Programs	Flexible, Low-Cost and Supportive Financial Products	Middle-Wage Job Creation Strategies	Improving Transit Service
Wage Theft Policies	Ban the Box Policies	Financial Coaching	Small Business Retention Initiatives	Transit & Mobility Passes
Paid Sick Day Policies	Paid Job Training and Placement Programs	Individual Development Accounts/Matched Savings Accounts	Worker Cooperative Support Initiatives	Provide Equitable, Low Cost Shared Mobility Services
	Early Childhood Education	Tax Preparation & Outreach Programs	Microenterprise Support Programs	Support for Walking & Biking
	High School Education	Homeownership Programs		



## HPI Policy Guides

 Employed	 Retail Density	 Ozone
 Median Income	 Park Access	 Fine Particulate Matter
 Above Poverty	 Tree Canopy	 Diesel Particulate Matter
 Preschool Enrollment	 Supermarket Access	 Safe Drinking Water
 HS Enrollment	 Alcohol Availability	 Insured Adults
 Bachelor's Education	 Low-Income Renter Housing	 Extreme Heat
 Automobile Access	 Low-Income Homeowner Housing Cost Burden	 Impervious Surfaces
 Active Commuting	 Housing Habitability	 Outdoor Workers
 2-Parent Households	 Uncrowded Housing	 Public Transit Access
 Voting	 Homeownership	 Sea Level Rise

## Do More With The HPI



- View data at multiple geographies
- Dive deep into local data with comprehensive decision support layers
- Quickly identify high- and low- ranked places
- Define custom project areas
- Upload your own data

## How-To Videos



HOW DOES YOUR  
COMMUNITY COMPARE?



[HealthyPlacesIndex.org/how-to/](https://HealthyPlacesIndex.org/how-to/)

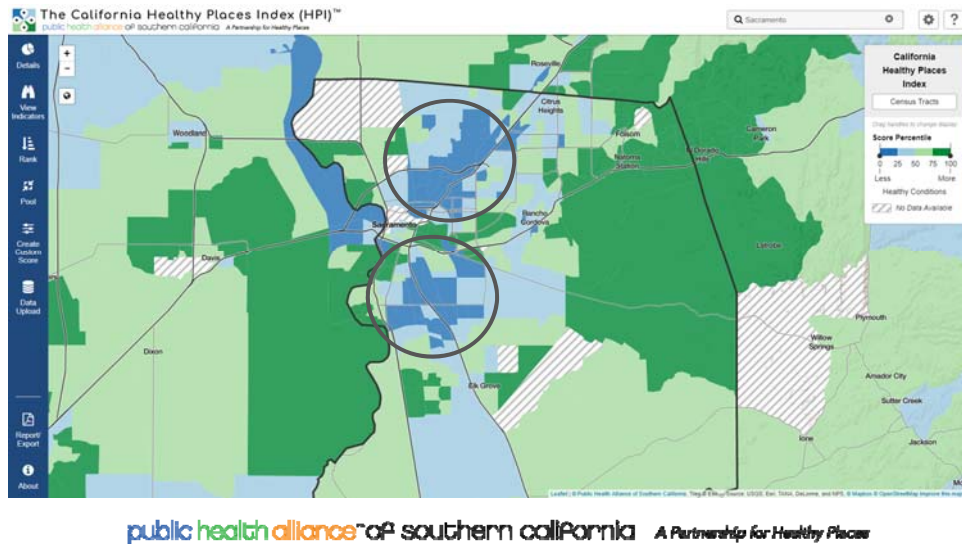
- Step-by-step how-to videos
- Brief 2-6 minute tutorials
- For non-technical audiences

## ATP Guidelines (Cycle 5)

### Characterizing Disadvantaged Communities

**Healthy Places Index (HPI):** The Index includes a composite score for each census tract in the State. The higher the score, the healthier the community conditions based on 25 community characteristics. The scores are then converted to a percentile to compare it to other tracts in the State. **A census tract must be in the 25th percentile or less to qualify as a disadvantaged community.**

## Identifying Disadvantaged Communities



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## ATP Guidelines (Cycle 5)

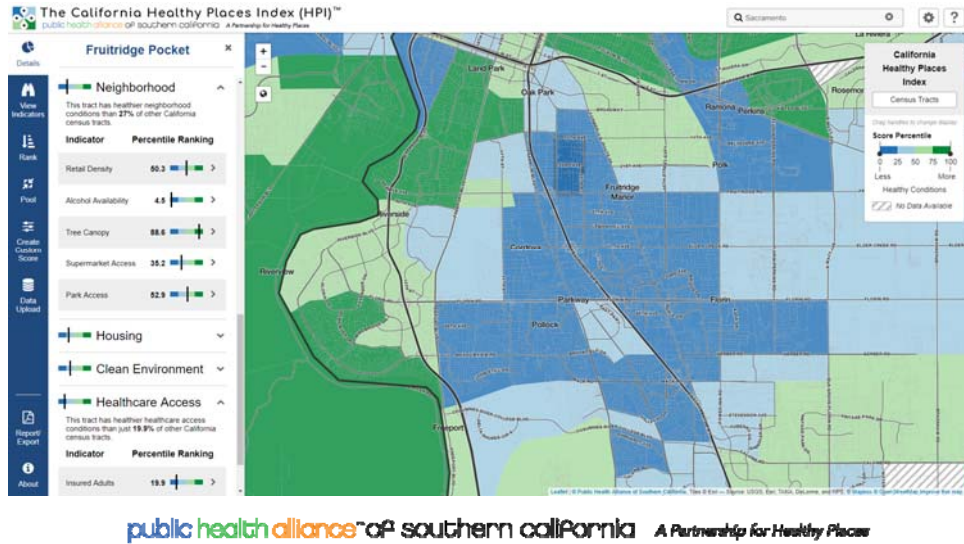
### Statement of Need

The local health concerns responses should focus on:

- Specific **local public health concerns, health disparity, and/or conditions in the built and social environment that affect the project community** and can be addressed through the proposed project.
- **Local public health data demonstrating the above public health concern or health disparity.** Data should be at the smallest geography available (state or national data is not sufficient). One potential source is the **Healthy Places Index (HPI)**.

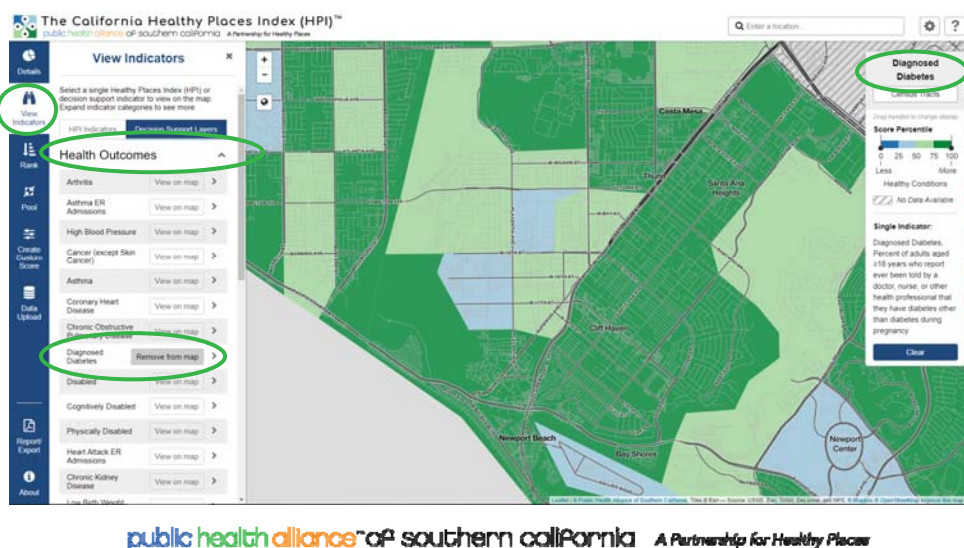
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# Identifying Disadvantaged Communities



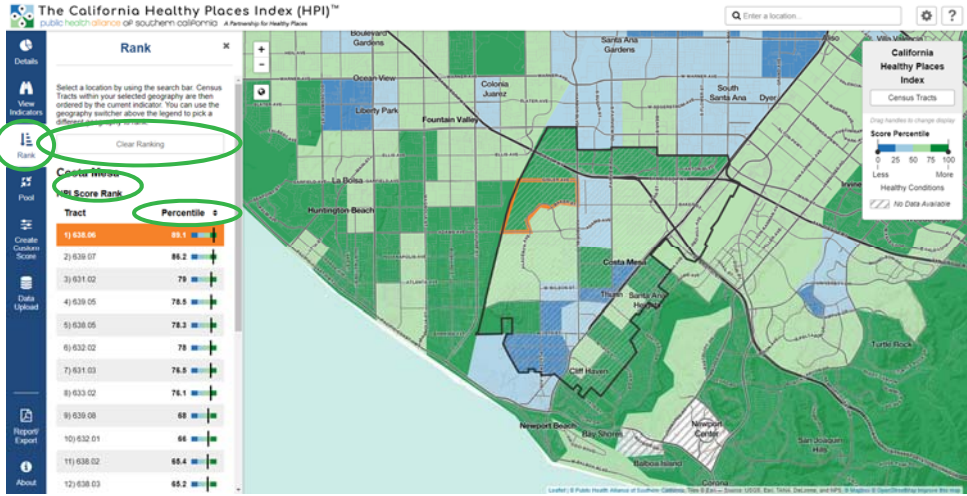
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# Decision Support Layers for Health Outcomes

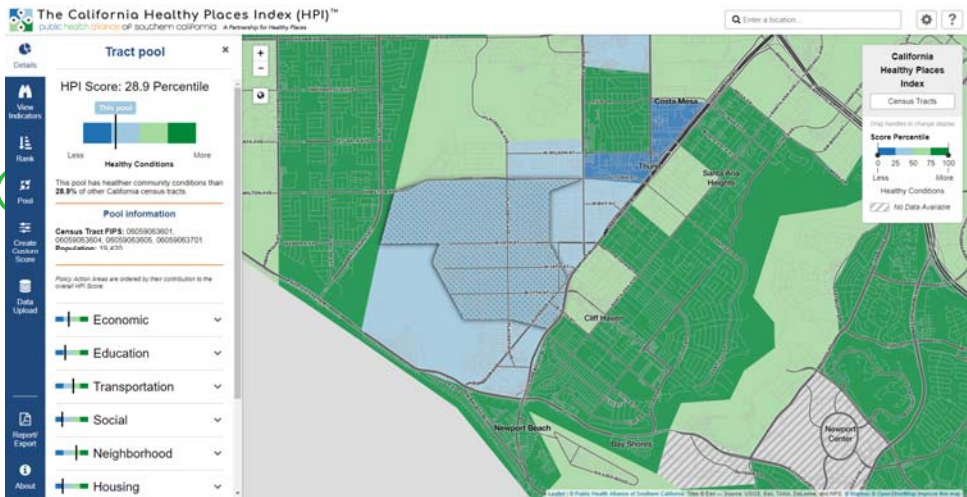


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# Ranking



# Custom Project Areas



# HPI Into Action Statewide

Over \$450 million in grant funding



**Caltrans**  
Sustainable Transportation Planning Grants (\$25M/yr)  
Adaptation Planning Grants (\$6M/yr)

**California Strategic Growth Council**  
Transformative Climate Communities (\$25M in 2018)

**California Transportation Commission**  
Active Transportation Program (~\$220M/yr)

**California Air Resources Board**  
Community Air Protection Program (\$5M/yr)



**California Department of Public Health (CDPH) – Nutrition & Obesity Prevention**  
Development of 3-Year Implementation Workplans

**CDPH – Maternal, Child and Adolescent Health Division**  
Community Birth Plan to Reduce Preterm Births in African American Women in Los Angeles

**CDPH – Office of Health Equity**  
Mortality Rates Among Caucasian Men in Central San Joaquin Valley

**California Air Resources Board**  
Research Call – Mapping and Evaluating Transportation Access and Built Environment



**Governor's Office of Planning & Research**  
General Plan Guidelines  
Senate Bill 1000 Guidance  
Integrated Climate Adaptation – CA Executive Order B-30-15  
Resilient CA – State Adaptation Clearinghouse

**California Natural Resources Agency**  
Safeguarding California Plan

**California Transportation Commission**  
Regional Transportation Plan Guidelines  
Comprehensive Multimodal Corridor Guidelines

**California Environmental Justice Alliance**  
SB 1000 Toolkit – Environmental Justice Element

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# HPI Into Action Locally & Regionally



**Southern California Association of Governments**  
Sustainable Communities Planning Grants

**Kaiser Permanente, Southern California**  
Mental Health & Wellness Initiative: Local Partnership Grants

**Riverside University Health System – Public Health**  
Adverse Childhood Experiences Score Program  
Census Tract Identification for Increased Women, Infant & Children Program Outreach

**Ventura – Community Memorial Health System**  
Wellness Collaborations - Prioritization by Census Tracts

**Contra Costa County, Department of Public Health**  
Targeting Home Energy Efficiency Resources



**Kaiser Permanente, Southern California**  
Catalyst of Organizational Assessment and Equity Framing  
Community Health Needs Assessment

**Los Angeles County Department of Public Health**  
85+ City and Community Health Profiles

**Santa Barbara County Public Health Department**  
Presentations on Federal Budget Impacts on Health, and Community Health Needs Assessment

**Santa Monica – St. John's Medical Center**  
Community Health Needs Assessment

**Solano County Public Health Department**  
Local Community Indicator Comparison Project

**Sutter County Public Health Department**  
Community Health Assessment, Community Health Improvement Plan, and Strategic Plan



**Southern California Association of Governments**  
2016 and 2020 Regional Transportation Plan  
Active Transportation Database

**Prevention Institute – Healthy, Equitable, Active Land Use Network**  
Strategic Planning Guide for Public Infrastructure Spending

**Hospital Association of Southern California**  
Communities Lifting Communities Initiative

**Ventura County**  
General Plan 2040 Update

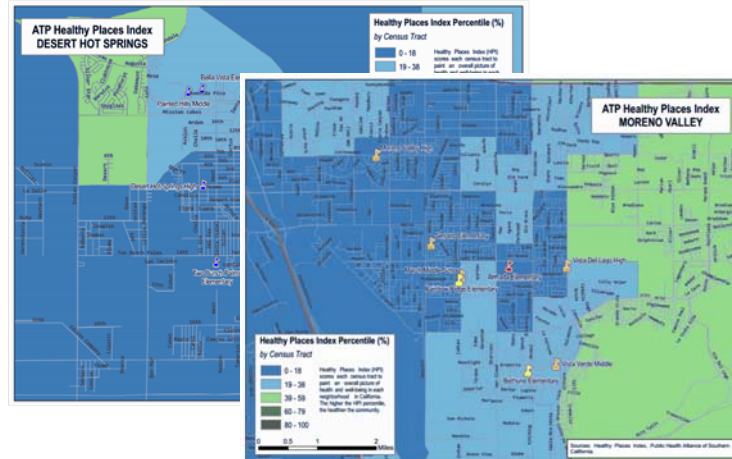
**Solano County Public Health Department**  
Maternal and Child Health Verification of Cumulative Health Impacts from Social Factors

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## Use Case: Riverside ATP Grant

- Used the Healthy Places Index for DAC identification
- Focused on Safe Routes to School Program



## Coming Soon: New HPI Features!

- Streamlined user interface
- Support for longitudinal data
- API keys
- Improved handling of uploaded data
- Expanded export & sharing functions

Join our mailing list for updates:

[HealthyPlacesIndex.org/mailling-list/](https://HealthyPlacesIndex.org/mailling-list/)

Thank you!



**The California Healthy Places Index (HPI)™**  
public health alliance of southern california *A Partnership for Healthy Places*

**CONNECT WITH THE ALLIANCE**

[Bsadler@PHI.org](mailto:Bsadler@PHI.org) | [Helen.Dowling@PHI.org](mailto:Helen.Dowling@PHI.org)

**HPI ON THE WEB**

[HealthyPlacesIndex.org](http://HealthyPlacesIndex.org) | [Map.HealthyPlacesIndex.org](http://Map.HealthyPlacesIndex.org)

**THANKS TO OUR FUNDERS**

The California Endowment | Kaiser Permanente of Southern California

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# Health Impacts of Climate Change

Elizabeth Rhoades, PhD  
Program Director, Climate Change and Sustainability  
Los Angeles County Department of Public Health

March 19, 2020



## Climate Change & Public Health

**The Global Climate and Health Alliance:**

*“...the climate crisis as a health emergency and people around the world are experiencing the impacts of climate change on their health, livelihoods, and homes...”*

*There is a rising tide of doctors, nurses, and other health professionals who recognize that protecting the health of our patients and our communities now requires us to push governments to deliver the needed climate action. Our ranks will only grow, and our demands become stronger, until national leaders put us on track to a stable, healthy climate.”* <sup>1</sup>

## Climate Change & Public Health

- Climate change is having and will continue to have significant public health impacts
  - It is our responsibility to enact strategies that protect people from those impacts
- Research shows that framing climate change in the context of health is the most effective way to talk about it so that people care

2



3



**County of Los Angeles Public Health**

## The impact of climate change on Los Angeles County

- Hotter temperatures
- Worse air quality
- More acres burned by wildfires
- More severe droughts
- Flooding
- More vector-borne disease
- Greater impact on overburdened communities<sub>5</sub>

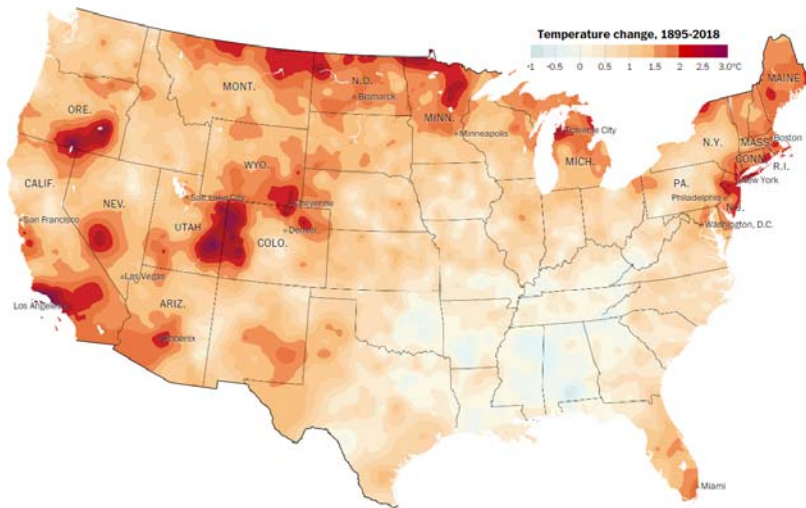
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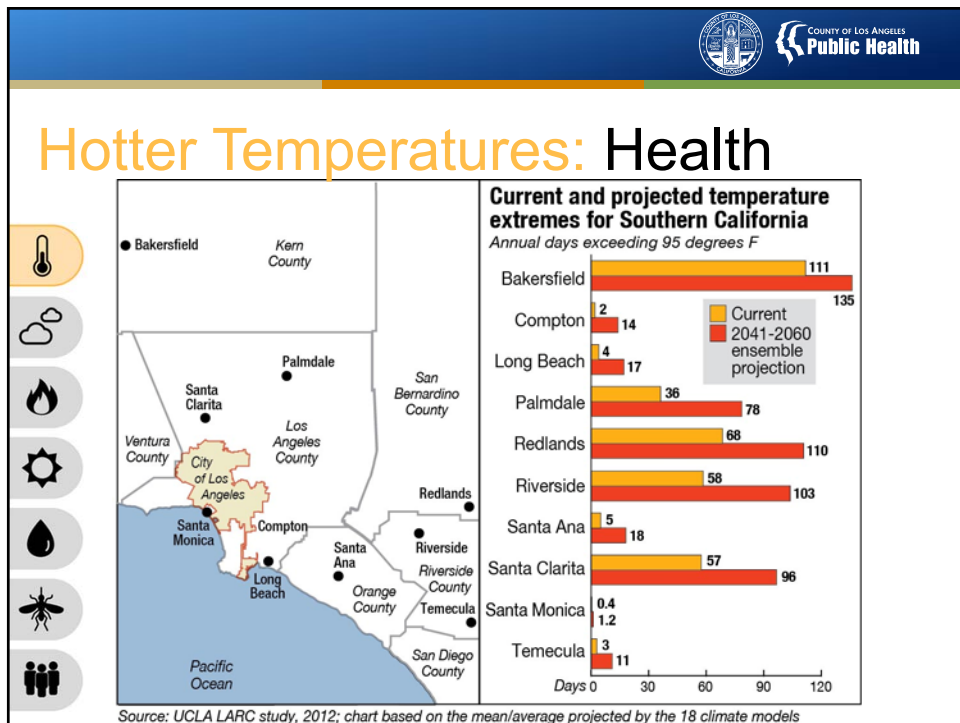
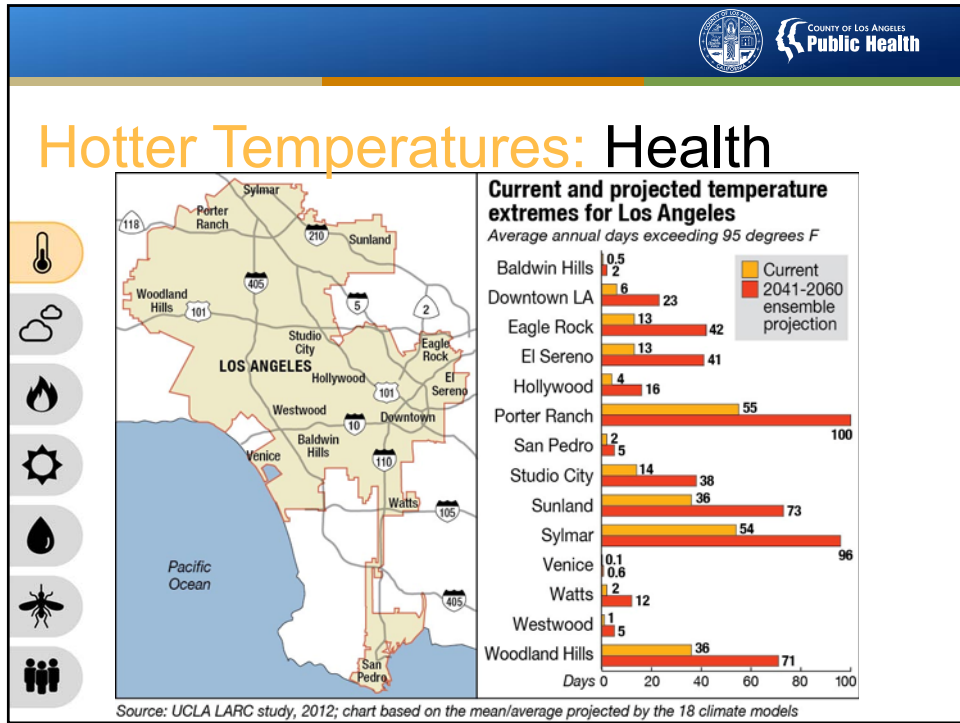
# Hotter Temperatures




- Globally
  - The 2010s were the hottest decade on record
  - 2019 was the second hottest year on record


# Hotter Temperatures








## Hotter Temperatures: Health

-  • Heat waves are serious:
  -  – Philadelphia (1993): **118 deaths**
  -  – Chicago (1995): **739 deaths**
  -  – California (2006): **> 650 deaths**
  - 
  - 
  - 



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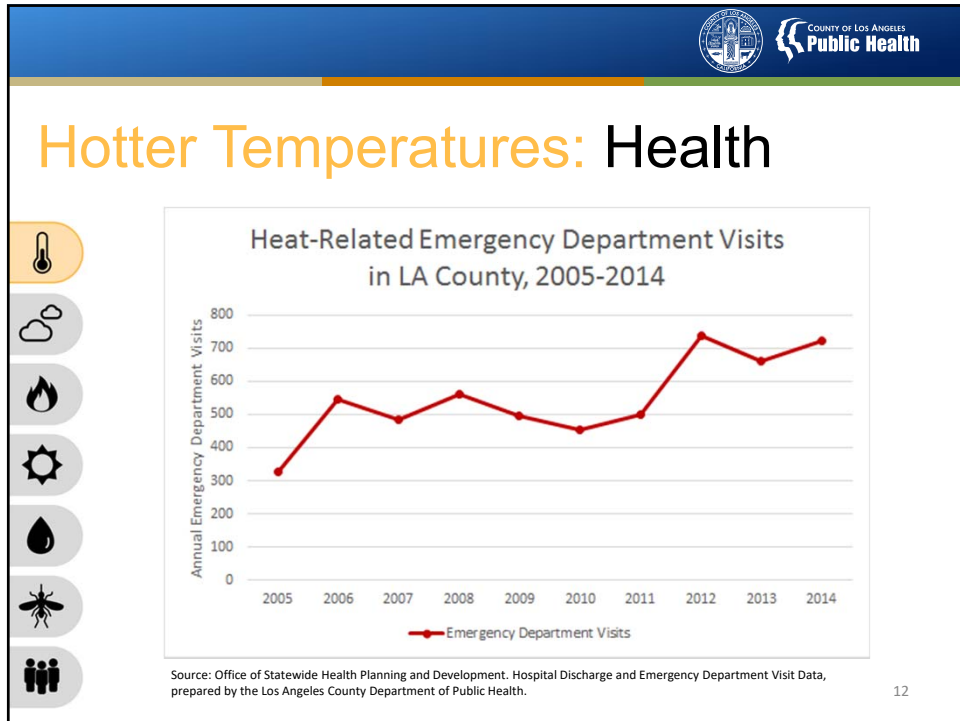



## Hotter Temperatures: Health

-  • California's 2006 heat wave
  -  – 16,166 excess ER visits
  -  – 1,182 excess hospitalizations
  - 
  - 
  - 
  - 



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## Poor Air Quality

**Smog sticks around**  
Pollution can get trapped in a basin when high pressure prevents air from moving.

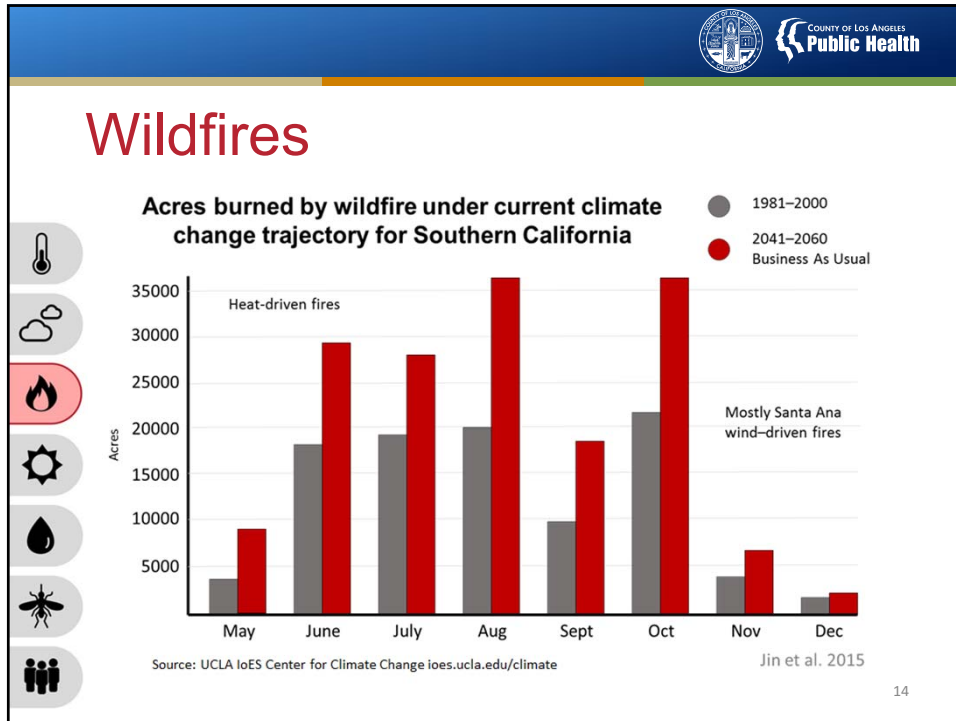
Sources: Times reporting and Google Earth  
Jon Schless / @latimesgraphics

- More creation of ground-level ozone
- Temperature inversions
- Wildfires
- Disproportionate impact on low-income communities, communities of color

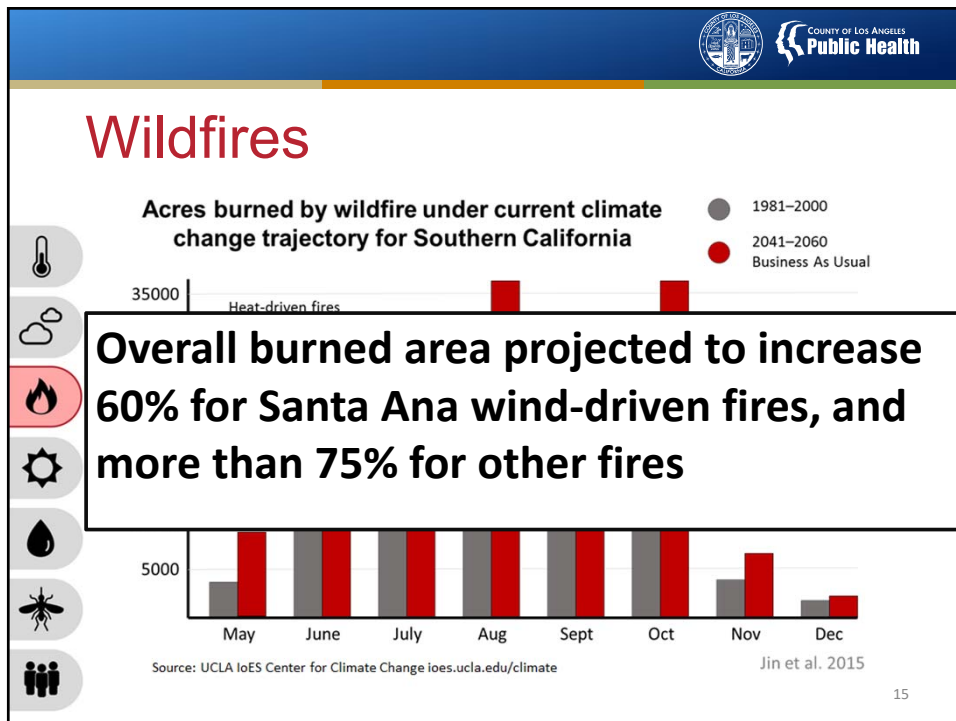
**May lead to:**

- Allergies
- Respiratory illness

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## Wildfires: Health

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- 
- 
- 
- 
- 
- 

- Injuries and deaths
- Destroyed homes
- Mental health problems from trauma
  - PTSD
  - Anxiety
  - Depression
- Poor air quality
  - Eye irritation
  - Respiratory illness (like asthma, COPD)
  - Allergies










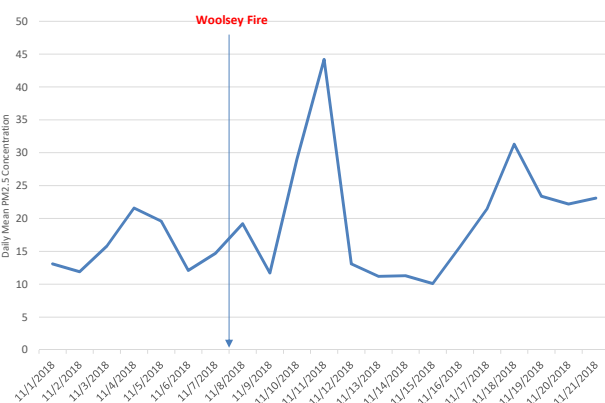
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## Wildfires: Health



### Particulate Matter Concentration following Woolsey Fire

- 
- 
- 
- 
- 
- 
- 




Date	Concentration
11/1/2018	13
11/2/2018	12
11/3/2018	15
11/4/2018	22
11/5/2018	20
11/6/2018	13
11/7/2018	15
11/8/2018	19
11/9/2018	12
11/10/2018	30
11/11/2018	45
11/12/2018	13
11/13/2018	12
11/14/2018	11
11/15/2018	10
11/16/2018	15
11/17/2018	22
11/18/2018	32
11/19/2018	24
11/20/2018	23
11/21/2018	24








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## Drought

- Caused by
  - Warmer temperatures
  - Changing precipitation patterns
- Impacts
  - Increases fuel for more extreme wildfires, leading to worse air quality
  - Poor water quality
  - Increased cases of Coccidioidomycosis (“Valley Fever”)










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## Valley Fever



Suspected, Probable, and Confirmed Annual Cases

	Year of Estimated Onset		
	2018	2017	2016
<b>California Total</b>	8,277	8,150	6,075
<b>Los Angeles County</b>	1,046	976	767








Source: California Department of Public Health. (2019). Coccidioidomycosis in California Provisional Monthly Report January - June 2019. Retrieved from <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciinCAProvisionalMonthlyReport.pdf>


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## Floods



- More flooding due to
  - Sea level rise
  - Changing precipitation patterns
  - Erosion
  - Wildfires










Source: City of Long Beach [news release](#) from 2017

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## Floods: Precipitation Patterns








- Average annual precipitation not expected to change significantly, however...
- Rainy and dry extremes expected to increase
- Frequency of atmospheric rivers may increase
- Late 21<sup>st</sup> century:
  - 25-30% more rain during rainiest day of the year
  - 40% increase in precipitation during atmospheric river events
  - Double the frequency of extremely dry years


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## Vector-Borne Diseases

- Warmer temperatures
  - Increase geographic range of vectors
  - Lengthen mosquito season
  - Shorten the breeding cycle










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## Vector-Borne Diseases

Invasive mosquito species that carry disease are now endemic to Los Angeles County and thrive in warmer weather.

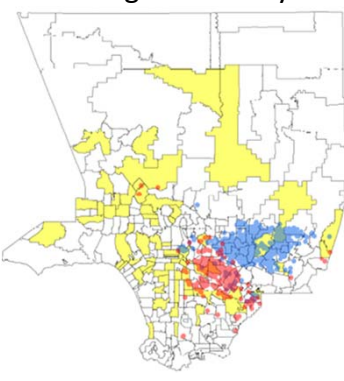








### Aedes aegypti and Aedes albopictus Mosquitoes in Los Angeles County Detection Sites by City

Alhambra Altadena* Arcadia Avocado Heights* Azusa Baldwin Park Bell Bellflower Bell Gardens Bradbury Carson Cerritos City of Industry Claremont Commerce Covina Catalina Diamond Bar Downey	Duarte East Los Angeles* El Monte Florence-Graham* Glendora Hacienda Heights* Hawaiian Gardens Huntington Park Irwindale La Cañada Flintridge La Mirada La Puente La Verne Long Beach Los Angeles Maywood Monrovia Montebello Monterey Park	Paramount Pico Rivera Pomona Rosemead Rowland Heights* San Dimas Santa Fe Springs San Gabriel South Gate San Marino Sierra Madre South El Monte South Pasadena South Whittier* Temple City Walnut West Covina Whittier* Willowbrook*
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\*Unincorporated Census-Designated Places



Adapted from: "Aedes aegypti and Aedes albopictus Mosquitoes in California Detection Sites by County/City." Updated June 23, 2017". California Department of Public Health. <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Documents%20Library/Aedes-DistributionMap.pdf>




Aedes aegypti locations are shown in red and Aedes albopictus locations are shown in blue. Zip codes with one or more Zika case are highlighted in yellow.

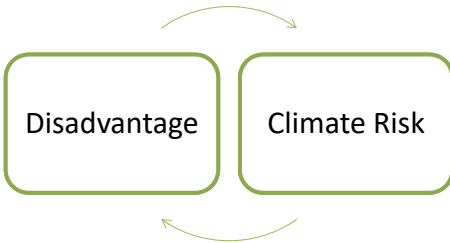
Source: Map taken from LA County Rx Prevention Article, [Preventing Zika Virus Infection and its Consequences](#)

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## Vulnerable Populations





*“The disproportionate impacts of climate change on individuals with pre-existing conditions and on socially disadvantaged groups threaten to greatly exacerbate existing health and social inequities, globally and within the U.S.” – The Public Health Institute*

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## People Most At Risk for Harm

- Low-income populations
- Communities of color
- Older adults
- Young children
- People with a chronic disease
- Athletes
- Outdoor workers
- People experiencing homelessness
- People without air conditioning
- Undocumented immigrants



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COUNTY OF LOS ANGELES  
**Public Health**

## SDOH and Climate Change

A diagram consisting of two circles. On the left is a blue circle containing the text "Social Determinants of Health". On the right is an orange circle containing the text "Climate Vulnerability". A light blue arrow points from the blue circle to the orange circle, and another light blue arrow points from the orange circle back to the blue circle, indicating a reciprocal relationship.

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COUNTY OF LOS ANGELES  
**Public Health**



## SDOH - Examples

A diagram consisting of two circles. On the left is a blue circle containing the text "Income". On the right is an orange circle containing the text "Climate Vulnerability". A light blue arrow points from the blue circle to the orange circle, and another light blue arrow points from the orange circle back to the blue circle, indicating a reciprocal relationship.


**Extreme Heat Vulnerability**

- Less likely to have A/C, or afford to use it
- More likely to live in urban heat islands
- Less likely to have access to a vehicle
- More likely to work outdoors

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## SDOH - Examples



Extreme Heat



→








Social Determinants of Health

Social Determinants of Health
• Illness → lost income and school days
• Higher food prices → less access to healthy food
• Higher energy bills → greater economic stress

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## Five Point Plan to Reduce the Health Impacts of Climate Change

	<p><b>Inform</b> ...and engage the general public about the nature of climate change and the health co-benefits associated with taking action to reduce carbon emissions.</p>
	<p><b>Promote</b> ...local planning, land use, transportation, water, and energy policies that reduce carbon emissions and support the design of healthy and sustainable communities.</p>
	<p><b>Provide</b> ...guidance on climate preparedness to local government and community partners to reduce health risks and create more resilient communities.</p>
	<p><b>Build</b> ...the capacity of Departmental staff and programs to monitor health impacts, integrate climate preparedness, and improve climate response.</p>
	<p><b>Adopt</b> ...best management practices to reduce carbon emissions associated with Departmental facilities and internal operations.</p>

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# DPH Climate Change and Sustainability Program

## Vision

*Resilient communities prepared for the health effects of climate change.*

## Mission

*To protect LA County residents, especially communities of color and low-income communities, from climate impacts by promoting actions that slow climate change and build resilience.*



CLIMATE CHANGE AND  
HEALTH EQUITY:  
Strategies for Action






# OurCounty Sustainability Plan



Los Angeles Countywide Sustainability Plan

LA County CSO Retweeted  
**Los Angeles County** @CountyofLA - Aug 6  
 It's #OurPlanYourPlanet! Learn about L.A. County's plan for an equitable, prosperous and resilient future at [ourcountyla.org](http://ourcountyla.org)



556 Views    0:05 / 1:20

[ourcountyla.org](http://ourcountyla.org)

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## OurCounty's Organizing Elements

**Goals (12)**  
 Broad, aspirational statement of what we want to achieve

→ **Strategies (37)** ←

Long-range approach or approaches that we take to achieve a goal\*

→ **Actions (159)**

Specific policy, program, or tool we implement to support a strategy\*

Progress tracking

**Targets**

Levels of performance

**Indicators**

Quantitative measures that are used to understand progress

\*Strategies may support multiple goals and actions may support multiple strategies

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## Climate solutions

- Strategies to address climate change are “no-regret” options that lead to healthier, more resilient, more equitable communities



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## Positive Strategies - I

“No-regret” options that create healthier, more resilient, and more equitable communities:



Source: LA County Tree Committee

Example A: Planting trees reduces temperatures & sequesters carbon.

**Co-benefit** = improved air quality, provides for stormwater capture, calms traffic, reduces noise, reduces crime, improves mental wellbeing

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## Positive Strategies - II

“No-regret” options that create healthier, more resilient, and more equitable communities:



Bryant Zhang, 9, Monterey Park  
Source: [Bike SGV Facebook](#)

Example B: Reducing vehicle miles traveled through active transportation lowers GHG emissions.

Co-benefit = more physical activity

Example C: Promoting cleaner fuels and energy production reduces GHG emissions.

Co-benefit = less air pollution

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## Questions?

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Program Director, Climate Change and Sustainability  
Los Angeles County Department of Public Health  
[erhoades@ph.lacounty.gov](mailto:erhoades@ph.lacounty.gov)



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# Randall Lewis Health Policy Fellowship

## Fact Sheet

The purpose of the Randall Lewis Health Policy Fellowship program is to ensure the development of health professionals who possess the necessary skills to influence positive change in public policy, systems, and the built environment in our local municipalities. These fellowships create educational and professional opportunities for students in health policy and related disciplines, provide for the expansion of the regional health policy infrastructure, and retain essential intellectual capital in our local communities.

**Applications:** Currently accepting applications for the 20-21 school year. Go to: <http://p4bhealth.org/get-involved/>.

**Length of Fellowship:** 8 months, 400 hours, typically September through May. This fellowship fulfills academic fieldwork requirements for urban planning, data science and public health students.

**Stipend:** A stipend is provided to fellows who complete the program. The Randall Lewis Health Policy Fellowship currently receives funding for fellow stipends from multiple sources including Lewis Group of Companies & Southern California Association of Governments (SCAG).

**Nature of Work:** Depending on a fellows' background, interest, experience and placement site, the field work projects can vary. Fellows might work within a Healthy Communities initiative context, such as within a city or county government. The focus usually is on development or implementation of a policy initiative. This may include projects such as:

- Research & development of general plan health elements
- Active transportation plans
- City planning and support
- Food deserts & healthy affordable food access



Partners For Better Health

8780 19th Street, #239  
Alta Loma, CA 91701

[p4bhealth.org](http://p4bhealth.org)

**Nature of Work cont'd:** Fellows may work with special populations such as youth, seniors, immigrants, low-income and communities of color. They are expected to have an understanding of how to appropriately foster inclusive community & local government collaboration standards of community engagement.

**Expectations:** All fellows are expected to do the following over the course of their fellowship year:

- Participate in an orientation session.
- Attend Fellowship meetings and trainings. Fellows meet as a group at least 6 times during the year. These learning sessions require travel within the Southern California region. The learning sessions developing leadership and professional skills, and a GIS training module.
- Submit a Scope of Work developed in conjunction with their site preceptor and approved by their university advisor.
- Attend a minimum of two external professional meetings, workshops or conferences per fellowship year.
- Attend and participate in the annual Fellowship Forum & Poster session. Fellows will present their work at an annual poster session and professional networking event held in late April each year.
- Prepare a two-page handout to be printed and distributed. Last year's booklet is on the website: <http://p4bhealth.org/get-involved/>.
- Submission of a final narrative detailing the fellow's experience and impact (approximately 1000 words).

For more information please contact Jaynie Boren, Executive Director of the Randall Lewis Health Policy Fellowship at [jaynieboren@hc2strategies.com](mailto:jaynieboren@hc2strategies.com) or at 951-218-2064.