

# REVISION

*Performance Monitoring Tools to Assess Sustainable  
Communities Strategies*

## **SCAG Demographics Workshop June 13, 2016**

*A project of the Southern California Association of  
Governments supported by the UCLA Lewis Center for  
Regional Policy Studies  
Funded by the Strategic Growth Council*

# About REVISION

- **REVISION** is a regional mapping and analysis application that integrates a range of public and private data for sustainable communities planning and trend visualization.
- UCLA and SCAG received funding from the Strategic Growth Council to create a common regional performance monitoring tool for sustainable communities indicators.
- REVISION is a cloud-based application that is usable by anyone with a modern web browser. It is intended for a broad range of stakeholders.

# Project Advisory Group

Dozens of stakeholders attended advisory group meetings to provide input on needed analysis for sustainable communities planning, metrics and indicators to be included, and site functionality and usability. These included representatives from:

- the Southern California Association of Governments
- Councils of Governments in Orange County, South Bay, Western Riverside, San Bernardino, Gateway Cities, and Coachella Valley
- LA County, LA County Policies for Livable, Active Communities and Environments Program (PLACE), and San Bernardino County Public Health
- Cities of Lakewood, San Dimas, Anaheim, and Los Angeles
- NGOs such as the Community Health Councils, the Leadership Council, Safe Routes to School National Partnership, American Lung Association, PolicyLink, Fixing Angelenos Stuck in Traffic

# Data and Metrics on REVISION

## Demographics

- Age
- Race and Ethnicity
- Diversity
- Educational Attainment

## Planning Data

- Current & Planned High-Quality Transit Areas
- Transit Priority Areas
- Current & Planned Bike Network
- Public Transit Network
- Current Land Uses
- Building Density
- General Plan (Future Uses)
- Integrated Employment & Housing Growth Forecast
- Parking Space Inventory

## Livability

- Access to Healthy Food
- Disadvantaged Communities (CalEnviroScreen)
- Pollution Burdens Indicators
- Vulnerable Population Indicators
- Pedestrian and Bicycle Collisions
- Open Space

## Housing

- Rental Housing Price Index (Zillow)
- Ownership Housing Price Index (Zillow)
- Housing + Transportation Affordability
- Federally-Insured Mortgage Data
- Unit Occupancy Status
- Owner- vs. Renter-Occupied
- Housing Unit Crowding
- Assessor Data

## Economics & Employment

- Household Income Distribution
- Median Household Income
- Employment Status
- Job Density
- Employment Sector

## Mobility & Accessibility

- Pedestrian Accessibility (WalkScore.com)
- Regional Locational Efficiency
- Employment Access Index
- Commute Mode
- Median Commute Distance
- Average Commute Time
- Vehicles Available by Own vs. Rent
- Auto-Use GHG Per-Household
- Bicycle Volumes

# What can I do with REVISION?

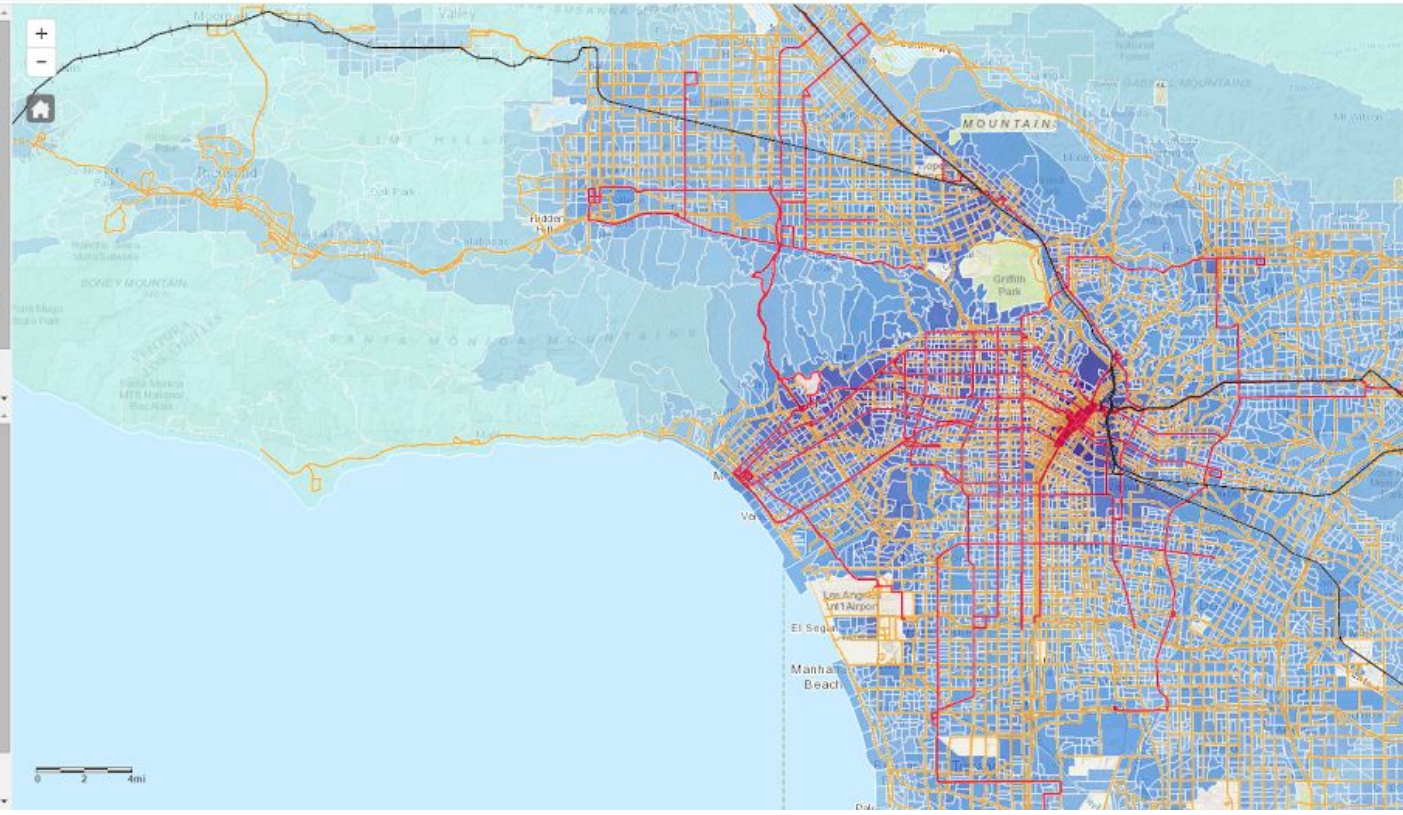
find information by using one of four tools focused on regional sustainability planning

<b>Map</b>	Visualize regional and neighborhood data on livability, mobility, accessibility, employment, and other planning metrics and indicators.
<b>Area Report</b>	See details on demographics, socio-economics, mobility, accessibility, housing affordability, environmental impacts, transit and bicycle networks for areas of about 3000 people.
<b>Property Report</b>	See detailed information for a specific property, including assessor information and crowd-sourced parking information
<b>Trends</b>	See trends in American Community Survey variables over time for areas of about 3000 people



- Layers
- Regional Efficiency Index (REI) 1
  - Employment Access Index (EAI) 1
  - Job Density 3
  - Median Commute Distance 3
  - Greenhouse Gas (GHG) Auto-Use Emissions 3
  - High Quality Transit and Transit Priority Areas 1
  - Public Transit 1
  - Walk Score 1
  - Intersection Density (per SQMI) 1
  - Bikeway Network 1
  - Bike Counts 1

- Legend
- Public Transit
- Rail
  - Rapid
  - Bus
- Employment Access Index (EAI)
- Employment Access Index
- 0.000000 - 4.037326
  - 4.042734 - 7.823804
  - 7.832561 - 12.002816
  - 12.011314 - 16.151172
  - 16.154521 - 20.745379
  - 20.751817 - 26.517176
  - 26.533146 - 33.910095
  - 33.980410 - 44.098378
  - 44.111111 - 55.000000

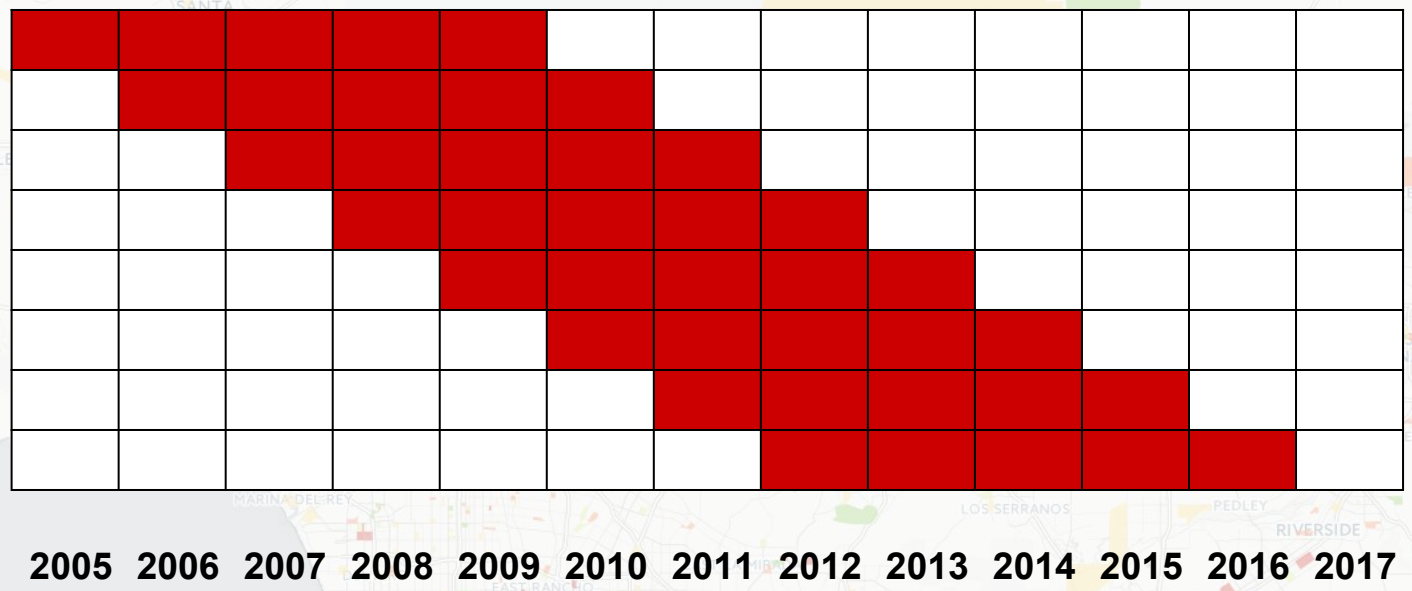


# Demonstration of REVISION

## [revision.lewis.ucla.edu](http://revision.lewis.ucla.edu)

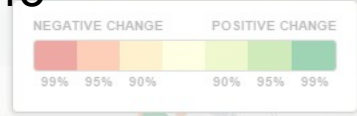
# Overlapping Data Comparison

Choose Variable: **ACS2009** +  
 -  
**ACS2010**  
 Occupancy Status  
**ACS2011**  
 Vacant  
**ACS2012**  
**ACS2013**  
**ACS2014**  
 Choose Year: **ACS2015**  
**ACS2016**  
 ACS 2006-2013  
 ACS 2009-2013



$$\frac{\hat{x}_1 - \hat{x}_2}{\sqrt{1-C} \sqrt{SE_1^2 + SE_2^2}} \geq z_{cl}$$

C = Overlap Yrs/5  
 SE = Margin of Error/1.645  
 X^ = Estimate



# Use Cases Considered

1. Assess change over time in neighborhoods ([white paper](#))
2. Assess changes in commuting modes and transportation use ([white paper](#))
3. Strategic Growth Council [Affordable Housing and Sustainable Communities Program](#) for Cap and Trade Funding
4. [SCAG SCS/RTP 2016](#) Performance Monitoring
5. Identify infill development opportunities (Current CALOTS use case) serves housing element planners and developers



# Questions

# Contact Information

**Project website:** <http://revision.lewis.ucla.edu>

**Project information site:** <http://www.lewis.ucla.edu/project/revision>

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