

# **Sustainable Communities Performance Monitoring Through CALOTS Tool Upgrade**

## **Work Group Meeting #2: March 17, 2014 (SCAG) Meeting Summary (Draft)**

### **Attendees**

- Ping Chang: SCAG (Project Team)
- Juan Matute: UCLA Lewis Center (Project Team)
- Norman Wong: UCLA Lewis Center (Project Team)
- Madeline Brozen: UCLA Lewis Center (Project Team)
- Herbie Huff: UCLA Lewis Center (Project Team)
- Michael Gainor: SCAG (Project Team)
- Sarah Jepson: SCAG
- Jonathan Nadler: SCAG
- Hilary Norton: FAST
- Patricia Ochoa: Coalition for Clean Air
- Martin Potter: City of Burbank
- Peter Soderberg: Los Angeles County Bicycle Coalition
- Alan Thompson: SCAG
- Kristin Torres: SCAG
- JungA Uhm: SCAG
- Ping Wang: SCAG
- Ying Zhou: SCAG

### **Teleconference**

- Marco Anderson: SCAG
- Tom Bartlett: City of Calabasas
- Michele Hasson: Leadership Counsel
- Josh Lee: SANBAG
- Katherine Lee: American Lung Association
- Miles Mitchell: City of Los Angeles
- Nancy Pfeffer: Gateway Cities Council of Governments
- John Procter: SCAG
- Victor Rubin: PolicyLink
- Jim Sullivan: Coachella Valley Association of Governments
- Jennifer Ward: Western Riverside Council of Governments

### **Project Background**

'REVISION' (Transformative Upgrade of 'CALOTS') is funded through a grant awarded to SCAG from the California Strategic Growth Council, and this Work Group will provide input into the project. SCAG has entered into an MOU with UCLA to provide technical support for upgrading the 'CALOTS' tool.

The 'REVISION' project originated as 'CALOTS' (California Land Opportunity Tracking System), a project that SCAG and UCLA jointly developed about 10 years ago and is now in need of technical and topical upgrades. Both 'CALOTS' and 'REVISION' are tools that seek to help local jurisdictions develop and monitor Sustainable Communities Strategies (SCS) by providing localized data. SCAG

has been heavily involved in these local efforts through its 'Compass Blueprint' program and now through the regional Sustainability Program. SCAG also provides technical support to local jurisdictions through its 'Toolbox Tuesday' series. These efforts notwithstanding, there is currently no tool or resource available to provide a web-based platform to allow local communities to track and analyze progress toward SCS goals, particularly at the subregional level. This is where the 'REVISION' project can assist.

## **Scope of Work**

The overall project scope was developed with flexibility and with options because technology, data, and policy evolve over time. The Work Group will provide input in project scoping and establishing priorities. The UCLA project team expects to have a product ready by the end of 2014. Webinar and/or in-person training opportunities for using the tool will be made available in 2015. Fine-tuning of the tool will occur during 2015.

## **Project Overview & Goals**

**Goal 1:** Transform the existing public analytical tool for planning in the Sustainable Communities Planning era.

**Goal 2:** Create a common regional performance monitoring tool for use in neighborhood and community-level time series analyses.

**Goal 3:** Make the tool useful for a full range of stakeholders:

- Transportation & land use planners working in cities, subregions, and at the regional level.
- Community groups interested in Sustainable Communities Strategy (SCS) implementation.
- Real estate developers seeking infill opportunities in walkable transit priority areas with high locational efficiency.
- Elected officials seeking high level information about changes in employment.

## **Project Name & Timeline**

- Still seeking suggestions for a new project name. 'Revision' may be too literal in terms of upgrading the website and the wording is not user friendly. Please send ideas for alternative project names.
- Currently in the 'Work Group' phase. After this meeting, UCLA will be entering into an intensive period of developing the website.
- By end of May: Final Content and Features Plan, and Final Technical Plan.

## **Crime Data**

- At the last meeting, stakeholders expressed interest in how crime rates or perceived safety in various neighborhoods affects walking and biking. Some routes are perceived to be more secure than others.
- Simple solutions are not available. Some websites provide aggregated regional crime rates that are regularly updated by local police departments. But these levels of aggregation do not help for neighborhood level analysis.
- Crimemapping.com is the most commonly used crime website in this region. It is used by LAPD, but does not currently permit extraction of data from the website. LAPD is only one of many police departments in the region, and it's uncertain whether all local police agencies provide data to the site. Some DOJ/FBI data sources provide aggregate numbers but not at the spatial resolution needed for neighborhood level analysis. UCLA will continue to monitor opportunities for future resources as they become available.

## **Bicycle/Pedestrian Collision Data**

- The Transportation Injury Mapping System (TIMS) is a statewide collision mapping database. The data has a time lag, but most recent collision data is available. There are limits on the meaning of the data due to minimal bicycle and pedestrian activity data. Exposure rates are also uncertain, and it is therefore difficult to generate firm conclusions from the data.
- There may be some value in identifying specific areas with both high pedestrian amenities and high crash rates to provide insight into opportunities for effective investment in particular areas.

## **CalEnviroScreen**

- The California Communities Environmental Health Screening Tool (CalEnviroScreen) is a state resource developed for identifying disadvantaged communities. It is useful for funding purposes in helping determine which communities are eligible for Environmental Justice cap and trade funded investments.
- The tool was created by the Office of Environmental Health Hazard Assessment (OEHHA) of the California EPA.
- The tool continues to be updated, and UCLA will monitor any new developments.
- Data is currently reported at the zip code level, but may eventually become available by census tract.
- CalEnviroScreen combines multiple environmental health factors including:

### **Exposure indicators**

- Ozone
- PM 2.5
- Diesel PM
- Pesticide use
- Toxic releases
- Traffic

### **Environmental Effects Indicators**

- Cleanup sites
- Groundwater threats
- Hazardous waste facilities/generators
- Impaired water bodies
- Solid waste sites/facilities

### **Sensitive Populations**

- Children and elderly population percentages
- Asthma rates
- Low birth weight

### **Socioeconomic factors**

- Educational attainment
- Linguistic isolation
- Poverty rates

## **Modified Retail Food Environment Index (MRFEI)**

- MRFEI is published by the Centers for Disease Control and Prevention (CDC).
- Data available at the census tract level for 2011.
- Provides ratio of healthy food retailers to total number of neighborhood food retailers.
- UCLA will recreate the MRFEI and compare results with previously developed data.

## **Parks and Recreation**

- A stakeholder at the last CALOTS meeting recommended using the California Protected Areas Database (CPAD).
- CPAD has an API to allow downloading data from the site for archiving and historical analysis.
- **Note:** See response to Question #4 below related to the extent of accuracy of the CPAD data.

## **Housing Market Data**

- UCLA researchers recently acquired the entire DataQuick dataset. It provides historical local real estate information. It contains a large quantity of data and it won't be updated due to pricing constraints. It will need to be determined how best to use the data.
- Zillow and Trulia each provide local level housing data comparable to DataQuick.
- Beyond these sources, UCLA is still figuring out exactly what data to use and how to use it for housing market dynamics.

## **Land Use Data**

- Because of inconsistent land use data the land use map will not be regularly updated, but the most recent data available from SCAG will be used.
  - Assessor data could be used, but there are issues of inconsistency with different counties using different coding schemes.
  - The SCAG Land Use Map could be used. **Note:** Land use data will be synchronized with the SCAG data every four years for the RTP/SCS cycle.

## **Electric Vehicles**

- There is only one aggregator, 'Recargo', that shows electric vehicle infrastructure, but this source requires payment of an annual licensing fee and will therefore not be incorporated into CALOTS.

## **Parking Inventory**

- UCLA will provide a framework for user-generated parking information.
- This effort will be seeded by data being acquired from the 'ParkMe' website, which shows available off-street parking in downtown Los Angeles.
- There is some value in obtaining information from various parking studies for individual cities and in speaking with Walker Parking Associates. Prefer multi-dimensional system focused on more than just available spaces (occupancy rates, time of day parking restrictions).

## **Base Map Platform Options**

### **1) OpenStreetMap (OSM):**

- User editable.
- Downloadable in multiple open formats.
- Highly engaged editor community.
- Selected building footprints available (but not all).
- Map view is less familiar to users than Google Maps.
- Completely open sourced data, but not yet as complete as other map databases.
- No build-in aerial imagery currently available.
- Will be useful for some data regardless of use in base map.

## 2) Google Maps:

- Familiar user interface.
- Aerial imagery available (plus 'Street View').
- User editable, but editor community not as strong as OSM.
- Can perform analysis only within Google environment.
- Closed data source is not downloadable.

## Primary Use Cases

- **Assessment of High Quality Transit Areas**  
Not all High Quality Transit Areas (HQTA's) are equal (some are more walkable than others). The tool should be able to distinguish differences between HQTA's. It could also evaluate which quadrant or intersection surrounding a transit station offers the best opportunities for pedestrian development.
- **Evaluate neighborhood change over time**  
Use updated American Community Survey (ACS) data, long-term employment data, and transit commute time.
- **Identify infill development opportunities**  
Identification of infill development opportunities is the current primary use case for CALOTS to facilitate decision-making for housing element planning and local development.

## Discussion

**1) Question:** Will it be possible to include data for street lighting levels as a performance measure for roadway bicycle/pedestrian safety?

**Response:** The project is not currently reviewing street lighting. DWP may have some data. There also may be a remote sensing solution. UCLA project team will review options.

**2) Comment:** There have been some recent changes related to reporting requirements for bicycle/pedestrian crashes. SCAG staff will send these to the group.

**3) Question:** Could you please define what is classified as a 'healthy' and 'less healthy' food retailer in the 'Modified Retail Food Environment Index'?

**Response:** The project is currently using CDC defined index. UCLA project team will review the exact definitions before creating our revised index.

**4) Comment:** In working with local jurisdictions on updating the land use database, several cities have mentioned that their 'open space' designations aren't accurate. (Calabasas and Long Beach are both having issues with accuracy).

**Response:** SCAG does not have perfect information for some land use categories. CPAD is the best data resource currently available. The option of combining 'OpenStreetMap' parks data with CPAD data may be evaluated as an alternative. The project team will work through SCAG to obtain updated local open space maps to improve upon existing CPAD data.

**5) Question:** Would it be possible to incorporate electric vehicle data into the user-generated standard for the parking inventory tool?

**Response:** UCLA will review options.

**6) Question:** Would it be possible to include hours of parking lot operation and availability of bike parking?

**Response:** It is believed that the parking data will include hours of operation data. UCLA will make sure to include this in user provided data. LADOT can be consulted regarding the possibility of obtaining their bicycle parking data, but it is uncertain if other local cities have this information publicly available. UCLA will also work with the 'ParkMe' application, the 'LA Express Park' program, and with parking consultants to further define options.

**7) Question:** Does 'OpenStreetMap' include number of lanes data? If it does, that information can be used to evaluate bicycle network level of stress and the fitness of a given roadway for bike lane improvements.

**Response:** The existing 'OpenStreetMap' routing algorithm already includes multiple roadway factors that might affect the bicycling experience. UCLA will review the data to determine whether it also includes number of lanes per road.

**8) Question:** In the analysis of mode shift at the development level, how does the tool account for features within that development to evaluate changes in CO2? For example, how is data used to assess improvements in transit accessibility?

**Response:** GHG emissions are difficult to track at the block group level. They are best calculated at the regional level. The project team is hesitant to translate CALOTS data to neighborhood level GHG reductions. UCLA will provide downloadable data to allow users to perform local emissions calculations themselves. This may allow users to better visualize neighborhood level improvements in CO2 emissions in response to increases in density.

**9) Question:** What is the context for discerning differences among High Quality Transit Areas? Also, how will the effect of other exogenous factors, such as gas prices, be accounted for?

**Response:** Multiple neighborhood variables influence an area's evolution in response to transit improvements. In the City of Los Angeles, for example, it may be possible to research land use change or lack of land use changes along the 'Blue' and 'Green' transit lines, and identify other neighborhood level variables besides the presence or absence of light rail transit to explain these changes. Analysis could also be done to identify areas that may be most in need of government interventions. For example, identification of areas where people could commute by transit to work, but would need a car for most other trips. An important measure of location efficiency is the availability and quality of neighborhood amenities accessible by walking, biking, or transit use. This is where the comparison between regional efficiency versus neighborhood level efficiency is important. Another primary use case for performance indicators are for small scale regional plans to determine the extent that neighborhood level planning in High Quality Transit Areas is supportive of regional sustainable community goals.

**10) Question:** Is it possible to measure co-benefits derived from the implementation of a Sustainable Communities Strategy? For example, asthma rates in comparison with the jobs/housing balance in a specific area?

**Response:** Most co-benefit data is not available at the scale required to meet the needs of this project. Some co-benefits may show up in 'CalEnviroScreen' data, and UCLA will evaluate the opportunity to parse out those components. Public health data sources tend to be limited in geographic specificity due to privacy concerns. ACS data is useful for evaluating general year to year progress at the neighborhood level.

**11) Question:** Will performance metrics for jobs/housing balance be included?

**Response:** UCLA will use LED (longitudinal employer-household dynamics) data for the map. LED provides data at the block group level. The jobs/housing balance measure may include Transportation/Housing Cost Index (THCI) data which is available at the block level. The 2012 RTP/SCS includes three types location efficiency:

- Transportation efficiency: Access to transit and improved accessibility through use of active transportation modes.
- Resource efficiency: Consumption levels of water and energy.
- Cost efficiency: Combined housing and transportation affordability.

**12) Question:** Will data for sales tax receipts and economic data be evaluated at the block level?

**Response:** Sales tax data is rather difficult to obtain at the local level because of constraints with the availability and use of State Board of Equalization data. Also, it is cost prohibitive to extract neighborhood level data from aggregated sources. Local city councils need to pass resolutions to allow public access to some neighborhood level economic data.

**13) Comment:** Please provide preliminary findings on the use of sales tax data. SCAG creates 'Local Profiles' reports which include historical retail sales for the local jurisdictions and eventually for City of Los Angeles council districts. Perhaps CALOTS can link to 'Local Profiles' data.

**14) Question:** How will the non-motorized accessibility index be calculated and what is the status of 'Walk Score' development?

**Response:** Walkscore.com data for Los Angeles County will be purchased and compared to the results of our analysis. The project will then develop a non-motorized accessibility index that is more sensitive to the weighting of specific amenities determined to be conducive to active transportation. The selection and weighting of amenities may be flexible by neighborhood based on general preferences of various socioeconomic groups. UCLA will meet with the active transportation subgroup to work on this.