

# Research



# Developing Statewide Sustainable Communities Strategies Monitoring System for Jobs, Housing, and Commutes

This project develops a tract-level system for monitoring progress toward achieving SB 375 goals across the State of California. Phase I developed a prototype for Los Angeles, and Phase II scaled up the system to the whole state.

#### WHAT WAS THE NEED?

Senate Bill 375 (2008) is an integral part of California's commitment to offset the adverse effects of climate change by promoting coordinated sustainable land-use, transportation, and housing strategies to reduce greenhouse gas (GHG) emissions from private automobiles. This includes compact and higher-density development near public transit. The monitoring system measures short-term real-world changes in land-use patterns that may affect per capita vehicle miles traveled and GHG. The selected indicators track key changes in land-use patterns and recent developments relative to sustainability goals.

# WHAT WAS OUR GOAL?

The project's goal is to develop a statewide monitoring tool that helps guide the effective implementation of sustainable community strategies (SCS) outlined in SB 375. The objectives are to identify consistent and robust data and indicators for every neighborhood (census tract) that gives policy makers and planners insights into recent real-world changes for small geographies.

#### WHAT DID WE DO?

The Statewide Monitoring System was developed in two stages. Phase I, funded by California Air Resources Board, involved the construction of the Los Angeles Prototype Monitoring System. Phase II, funded by California Department of Transportation (Caltrans), refined and scaled up the monitoring system to the entire state. The empirical work included identifying, testing and



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assembling small-area data, and constructing and testing indicators.

The monitoring system measures short-term (approximately four years out from the 2010 baseline) changes in new housing development, net changes in subsidized affordable housing, and net changes in jobs. These changes are assessed against baseline characteristics of occupied housing unit density, jobs-housing fit, access to jobs from residential location, access to high-quality transit locations (HQTL), and average person miles traveled by workers at job site. Baseline indicators represent the state of land-use patterns/activities around the adoption of the first sustainable community strategy plans. The baseline functions as comparison for subsequent changes.

The distribution of changes is assessed against the baseline, to uncover how much and in what direction changes are occurring compared to the existing conditions prior to the implementation of adopted plans. It should be noted that the system covers only a selection of land-use dimensions, and the current system does not directly evaluate the state and metropolitan planning organization (MPO) implementation efforts.

### WHAT WAS THE OUTCOME?

The statewide results suggest that land-use development and land-use activity during the first part of the decade were largely inconsistent with broader SB 375 goals. The data, representing the early years following the enactment of SB 375, indicate that for California as a whole, new housing units were relatively less concentrated in all of the following areas: higher density tracts, high job-access tracts, and high-quality transit location areas. The data also shows that net increases in jobs were most concentrated in areas with relatively higher average commutes and more concentrated outside of HQTL areas. The spatial distribution of changes in subsidized affordable housing during the test period (2010-2014) is generally unchanged from the 2010 baseline, thus

reproducing the preexisting imbalance of lowearning jobs and affordable housing. These trends reflect changes occurring during the first four-year transportation planning cycle under SB 375, not an assessment of the Regional Transportation Plans adopted during that timeframe.

The analysis indicates that there are considerable needs and opportunities for the State to work collaboratively with MPOs and local governments to further implement SCS strategies in order to meet the GHG reduction goals pursuant to SB 375.

# WHAT IS THE BENEFIT?

Caltrans is pursuing the research presented in this report as part of a broader effort to track key changes in land-use and the built environment that reflect progress in meeting the GHG reduction goals of SB 375. The results can be useful in uncovering what changes are occurring and for guiding refinements and adjustments to policy. This report, the methods and data used, and the monitoring system can be used by MPOs and other agencies to evaluate progress toward some of the goals of SCS plans, policies, and programs.