

TRACKING LAND USE CHANGES THAT SUPPORT SUSTAINABLE COMMUNITIES

I. OBJECTIVE

The objective of this research project is to support the evaluation of progress toward the goals of Senate Bill (SB) 375. The project will develop a methodology, collect data, and construct baseline measures for use in the future to assess land use change in California through time. The results of this project will be useful to ARB as it develops a program to track and monitor progress on SB 375.

II. BACKGROUND

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) requires Metropolitan Planning Organizations (MPOs) to do more integrated land use, transportation, and housing planning. The program, now in its sixth year of implementation, has resulted in the development of Sustainable Communities Strategies (SCS), which show that, if implemented, the major regions of California can reduce transportation-related GHG emissions compared to 2005 levels. By February 2015, all MPOs will have adopted their first SCS and several are already undergoing their second round of SCS planning as part of their Regional Transportation Planning effort.

In the Update to the Scoping Plan, one of the recommended actions to achieve the State's post-2020 climate goals is to "ensure GHG emission reductions from approved SCSs are achieved or exceeded through coordinated planning." In addition to vehicle miles traveled (VMT) and fuel usage data, tracking the effectiveness of land use policies is an important element to verify the progress toward the goals outlined in SB 375. In particular, there is a need to understand the extent to which shifts in regional and local planning are resulting in actual changes in land use across the State through time.

Although several years have passed since the inception of SB 375, land use changes take time and detectable changes in land use from business as usual may not be apparent for several more years. This is particularly true when factoring in likely impacts of the recent recession. However, this project will develop a framework and baseline to enable future tracking and evaluation of how land use changes over time. Given that many factors influence land use change, this proposal does not intend to provide causational attribution to a single State policy or program. As such, additional methodologies may be employed to help assess if SB 375 has contributed to any shifting of land use development patterns in California, to the extent possible.

III. SCOPE OF WORK

- Assess and select land use change indicators. As part of this project, the research team will select key indicators to serve as proxies for land use change. The indicators must rely on recognized and consistent data that is readily available and anticipated to be so in the future. The research team must survey land use monitoring efforts being

conducted by Metropolitan Planning Organizations and to the extent possible, align or leverage this existing work into developing a statewide indicator/set of indicators. Potential indicators include, but are not limited to: average residential and employment densities; new housing start mix (e.g. percent new dwellings that are multi-family vs. small lot attached vs. large lot detached); land use mix; changes in housing affordability relative to local wages; percent of infill vs. greenfield development; etc.

- Potential data sources include, but are not limited to: parcel level data, U.S. Census data, building permit data, satellite and aerial imagery.
- Define and develop an appropriate baseline to allow for future comparison. Map baseline indicator data using Geographical Information Systems (GIS). The appropriate geographical unit of analysis will be determined in coordination with ARB.
- In addition to quantitatively assessing land use change, to the extent possible, this project will develop qualitative methods to explore the extent to which regional and local planning efforts are resulting in changes in actual land development. This may require, among other things, examination of General Plan Updates, zoning ordinance updates, specific plans, land use or habitat conservation plans.

IV. DELIVERABLES

- Quarterly progress reports and conference calls;
- Draft final report;
- Peer-reviewed publication(s), as appropriate;
- Final report and research seminar in Sacramento;
- All data and analyses generated through the course of this project;
- Additional deliverables to be determined in consultation with ARB staff.

V. TIMELINE AND BUDGET

It is anticipated this project will be completed in 18 months from the start date. This allows 12 months for completion of all work through delivery of a draft final report. The last 6 months are for review of the draft final report by ARB staff and the Research Screening Committee (RSC), modification of the report by the contractor in response to ARB staff and RSC comments, and delivery of a revised final report and data files to the ARB. The estimated budget for this project is \$150,000.