Sustainable Communities: Implementation Challenges and Opportunities

Policy Forum Series: January to March 2014

Issue

California’s transportation system is an integral part of the state’s economy, enabling personal mobility and goods movement for millions of people and businesses. However, it also accounts for more than 40 percent of the state’s greenhouse gas emissions (GHG), with around 75 percent of these emissions coming from passenger autos and trucks.

The Sustainable Communities and Climate Protection Act of 2008, Senate Bill 375 (SB 375) is designed to help California reach AB 32 GHG reductions targets by creating incentives for smarter land use and transportation planning with the goal of enabling more sustainable communities. SB 375 provides a framework for regional planning agencies to integrate their transportation, land use, and housing plans with performance targets for GHG emission reductions. Such integration may enable communities to provide better jobs-housing balance, improved options for travel, and strategic agricultural and natural-land preservation. However, realizing this potential requires an understanding of the possible strategies and their costs benefits, and implementation challenges for sustainable community efforts across the state.

From January to March of 2014, the UC Davis Policy Institute for Energy, Environment and the Economy and the National Center for Sustainable Transportation held four policy forums focusing on various topics related to the implementation of SB 375. Important themes included the need for appropriate incentives to encourage implementation of a region’s Sustainable Communities Strategy (SCS); the role of data collection, modeling and research to evaluate the effects and evidence of SB 375; and the potential for sustainable communities to reduce GHG emissions.

Policy Implications

Planning for sustainable communities with multiple transportation options, ample open space, high levels of accessibility, and thriving urban centers will be central to the achievement of California’s long-term environmental goals. Such planning will also require collaboration between local, regional, and state agencies to develop policies and strategies to achieve sustainable community development statewide.

Evidence suggests that mixed land use, jobs-housing balance, investments in transit, vehicle-miles pricing, parking pricing, biking and walking infrastructure, and car sharing programs can reduce vehicle miles traveled (VMT). The effectiveness of each policy varies depending on the context of the local environment, including the characteristics of existing infrastructure, programs, and population. Drawing on research that identifies the impacts of individual and combined strategies, jurisdictions can define the set of policies that fits their local needs and maximizes effectiveness.

Regional emissions reduction targets set by the California Air Resources Board (ARB) for regions covered by the largest 18 Metropolitan Planning Organizations (MPO) ranges from 5 to 8 percent by 2020 and 10 to 16 percent by 2035. Where the allocation of existing funds for regional transportation investment and community planning can be used to reward sustainable land use and transportation practices, public funds can structure incentives for local jurisdictions to help meet these regional targets. For example, the Strategic Growth Council (SGC) provides technical assistance, coordination between agencies, and funding support for sustainable communities planning and implementation.

Forum Findings

In addition to reducing GHG emissions, smart land use and transportation development also has the potential to
provide health and land preservation benefits. Analysis commissioned by the Governor’s Office of Planning and Research (OPR) suggests that adopting smart growth policies could save billions of dollars in health costs by encouraging active modes of transportation (Figure 1), and save tens of billions in infrastructure costs through avoided road and maintenance costs. Aggressive smart growth policies were also shown through modeling to have the potential to consume one quarter of the undeveloped land compared to business-as-usual land use policies (Figure 2).

**Figure 1: Cumulative Health Costs (billion $2012)**

![Cumulative Health Costs](image1)

**Figure 2: Land Consumption (mi²)**

![Land Consumption](image2)

Research from the USC Price School of Public Policy and the Institute of Transportation Studies (ITS) at UC Davis evaluated results from numerous studies to estimate the impact of land use, transit, pricing, behavioral, and other policies. While evidence exists to support policy action, more before-and-after data collection and analysis is needed to guide sustainable transportation and land use practices. This research will also benefit the local and regional models used to forecast the potential effects of policy choices.

General plans provide an opportunity for cities and counties to institutionalize the goals of SB 375 and to shape future development in light of them. Analysis from UC Davis finds that many general plans would benefit from a greater focus on sustainable community planning principles such as mixed-use development, infrastructure to support walking, biking, and transit, and incentives for infill development. Also important is project review that considers the full costs of providing, operating, and maintaining new infrastructure.

Implementation of SB 375 has already begun with the creation of SCSs by all of the major Metropolitan Planning Organizations (MPOs) in California; local governments across the state vary in their implementation of these plans. The future success of SB 375 will require an ongoing collaboration between local, regional, and state government entities and stakeholders; access to the latest evidence-based research; deliberate efforts to analyze the effectiveness, costs and benefits of specific policies and strategies; and sustained commitment to measuring progress at regular intervals.

Source: RapidFire modeling prepared by Calthorpe Associates for OPR, Retrieved from presentation by Louise Bedsworth and California @ 50 Million: California’s Climate Future

**Further Reading**


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