

Gateway Cities Subregional Sustainable Communities Strategy

Extended Abstract #58

Nancy Pfeffer, Network Public Affairs, LLC, 444 West Ocean Blvd., Suite 800, Long Beach, CA 90802

Wendy Tao, Cambridge Systematics, Inc., 555 12th Street Suite 1600, Oakland, CA 94607

Christopher Wornum, Cambridge Systematics, Inc., 555 12th Street Suite 1600, Oakland, CA 94607

INTRODUCTION

The severe world-wide drought in 1988 helped thrust global warming into the mainstream media and significantly increase the public concerns about the role of human activity on climate change. Despite frequent yet episodic attention from the federal legislators and agencies, no national policy let alone regulations were adopted over the next two decades to control human production of greenhouse gases (GHG). Nevertheless, over the past decade and especially in the last five years, over thirty state governments have adopted Climate Action Plans, including strategies for reducing transportation GHG emissions and implementation steps.¹

The engagement at the state level was especially early and aggressive in California, where Governor Schwarzenegger signed Assembly Bill 32, the Global Warming Solutions Act of 2006, setting the 2020 greenhouse gas emissions reduction goal into law. Two years later, Senate Bill 375 (SB 375) was passed – the first law in the nation to enhance climate change goals by promoting integrated planning and more sustainable communities. SB 375 was intended to symbiotically relate land use planning with GHG reduction.

The California law SB 375 requires each of the 18 metropolitan planning organizations (MPO) in the state to prepare a Sustainable Communities Strategy (SCS). The SCS is a blueprint on planning for future growth, outlining how the region will integrate land use, housing and transportation planning to meet a target for lower GHG emissions. Once adopted by the MPO, the SCS will be incorporated into that region's federally enforceable regional transportation plan. Via the SCS, each MPO must reduce its GHG per capita (measured as pounds of carbon dioxide equivalent or CO₂e) in 2020 and 2035 by a percentage specified by the California Air Resources Board (CARB) below a 2005 benchmark.

Transportation and land use are interlinked; deciding where and how dense to locate housing, office, retail and commercial properties impacts travel patterns to these destinations. Conversely, the geographic placement of transportation systems and networks influences where homes and businesses are built. Lack of coordination in location decisions has resulted in more frequent and longer trips, and thus higher GHG emissions.^{2,3} Land use density, diversity, neighborhood design, street connectivity, destination accessibility, distance to activity centers,

and proximity to transit can all reduce trip lengths and support travel by transit, walking, and bicycling.⁴

For decades, transportation and land use planners have been interested in finding ways to couple transportation planning and land use development. Frank Southworth describes a range of technical models measuring vehicle reduction from integrated transportation and land use planning in a 1995 review of tools, covering models developed in the 1980s and 1990s.⁵ In the last decade, many of the tools have become visioning scenarios that engage the public, with transportation and land use also linking with climate change issues. In California for example, regional blueprints are collaborative planning processes to create future visions that engage the public in an integrated planning framework since 2005.⁶

The California legislation SB 375 included a unique provision for the 14 subregions that make up the vast six-county Southern California Association of Governments (SCAG) region. According to the legislation, a subregion within SCAG may take delegation from SCAG to prepare its own SCS. Two of the fourteen subregions within the SCAG MPO, the Gateway Cities Council of Governments (GCCOG) and Orange County, exercised this option.

This paper documents how the Gateway Cities went about meeting the State mandate to reduce GHG. The Gateway Cities are a group of 27 cities in Southeast Los Angeles County, 26 of which participated in developing a subregional SCS. Their approach shows how GHG emissions reduction attributed to land use change is very limited for the subregion; however, focusing on local and regional transportation projects supporting existing land use change can not only significantly reduce GHG emissions, but can induce cities to go beyond the measures they would have pursued without mandated intervention. Their progress, however, faced the significant challenge of identifying and implementing effective GHG reduction strategies in the midst of the worst fiscal crisis local governments have faced since the Great Depression. The success of the 26 Gateway Cities was due in large measure to a process where individual cities selected workable strategies for their conditions and then evaluated the effectiveness of these strategies. The COG staff and consultant team then bundled these individual efforts into a subregional strategy that works for the unique conditions in this subregion.

This paper describes the process the COG staff and consultant team followed to prepare the first SCS in the SCAG region that measures the GHG reduction and exceeds the regional targets assigned to SCAG by CARB.

DEVELOPMENT OF STRATEGY PORTFOLIOS

To develop the SCS, the Gateway Cities COG held four technical workshops with the city planning and public works directors from all of the jurisdictions. These workshops were the interactive tools for cities to work with the consultant research and analysis, and develop portfolios of GHG reduction strategies for each jurisdiction. This approach started with each city assembling three broad categories of strategies that they would select and implement: transportation projects, transportation demand management (TDM) activities, and land use strategies. The planning directors and public works officers followed a three-step procedure for developing each city's program for contributing to the subregional SCS.

Step 1: Screening

Each city first selected among the universe of GHG reduction strategies a subset that could be implemented at the subregional or jurisdictional level. They then ranked these selected strategies according to their fit with the city's market conditions, transit infrastructure, land use characteristics, and other circumstances that would affect the cost effectiveness and political feasibility of each candidate strategy.

Step 2: Scaling and Measurement

For each of the strategies that was screened and ranked, city staff considered appropriate levels of deployment for each strategy. This step included considering the following six attributes of each strategy:

1. Total amount of reduced GHG;
2. Bundling with other strategies to achieve the most effective combination (i.e., interactive or synergistic effects);
3. Performance over time (i.e., immediate to long term);
4. Fiscal cost, including any potential to generate revenues;
5. Cost effectiveness (cost per ton of CO₂e); and
6. Level(s) of government most appropriate to implement them.

Once each city had assembled an initial portfolio, the consultant team entered the technical characteristics of each strategy into the Los Angeles County Metropolitan Transportation Authority web-based software that measured GHG impacts of the strategies.⁷

Step 3: Bundling

The consultant team worked with each jurisdiction to group strategies into bundles on three criteria: a) logical combinations of strategies that may have synergies, such as transit investment, land use, and nonmotorized travel; b) consideration of the cost effectiveness of various strategies (e.g., selecting only those strategies meeting a particular cost-effectiveness threshold); and c) each jurisdiction's political conditions. The consultants then re-estimated the impacts of each bundle using the web-based software tool described above.

SUMMARY OF FINDINGS

The combination of all of the GHG reduction strategies and their synergies should enable the subregion as a whole to reduce GHG per capita from the benchmark in 2005 by approximately 8.5 percent in 2020 and just over 15 percent in 2035, which exceeds the regional targets.⁸

One of the primary goals of SB 375 involves motivating local governments to implement aggressive smart growth land use strategies, and integrate these with systematic transit and nonmotorized transportation investments. The consultant team and SCS Policy Development Committee advocated for this goal. Consultants, COG staff, and Committee members

encouraged city staff to consider aggressive land use reforms during the four technical workshops and numerous communications with individual cities throughout the SCS development process. Some cities had already incorporated significant smart growth policies during the most recent update to their general plans. Other cities considered pushing density and clustering of mixed-use development beyond what was specified in their general plans. Long Beach, for example, experimented with some extremely dense development throughout their transit corridors and central business districts (CBDs). At the end of this process, however, no city adopted land use policies for this SCS that significantly vary from those in their adopted general plans.

The communities in the Gateway Cities have been proactive in funding this Subregional SCS, and will continue to be proactive in developing and securing the necessary funds to implement the strategy. The voters in Los Angeles County have supported three “self-help” sales tax increases over the last 25 years in order to implement transportation measures. A small number of the Gateway Cities have traffic mitigation fees, and the Los Angeles County Metropolitan Transportation Authority is working on a pilot program for several of the cities. The success of the Gateway Cities SCS depends in good part in financial assistance from both the State and Federal government, recognizing that there is only so much local funding that is realistic and available.

ACKNOWLEDGMENTS

Members of the Gateway Cities SCS Policy Development Committee:

Mike Egan, City Manager of Bellflower
Jorge Rifa, City Manager of Commerce
Tom Modica, representing City Manager of Long Beach
Ron Bates, City Manager of Pico Rivera
Ken Farfswing, Chair of SCS Policy Development Committee and City Manager of Signal Hill
Aldo Schindler, Planning/Community Development Director of Bell Gardens
Torrey Contreras, Planning/Community Development Director of Cerritos
Sonia Southwell, Planning/Community Development Director of Lakewood
Brian Saeki, Planning/Community Development Director of Downey
Reuben Arceo, Planning/Community Development Director of La Mirada
Wayne Morrell, Planning/Community Development Director of Santa Fe Springs
Sonia Shah, Planning/Community Development Director of South Gate
Don Dooley, Planning/Community Development Director of Whittier
Steve Forster, Liaison to the Gateway Cities Public Works Officers, City of La Mirada

Gateway Cities COG Staff:

Richard Powers, Executive Director
Jack Joseph, Deputy Executive Director

REFERENCES

1. Gallivan, F.; Ang-Olson, J.; Turchetta, D. *Towards a Better State Climate Action Plan: A Review and Assessment of Proposed Transportation Strategies*. Transportation Research Board Annual Meeting: Washington, D.C., 2011.
2. *Driving and the Built Environment*; Transportation Research Board; TRB Special Report 298; National Academies Press: Washington, D.C., 2009.
3. Cambridge Systematics, Inc. *Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions*. Urban Land Institute: Washington, D.C., 2009.
4. Ewing, R., et al. *Growing Cooler: The Evidence on Urban Development and Climate Change*. Urban Land Institute, Washington, D.C., 2008.
5. Southworth, F. *A Technical Review of Urban Land Use – Transportation Models as Tools for Evaluating Vehicle Travel Reduction Strategies*; Prepared for the Office of Environmental Analysis and Sustainable Development, U.S. Department of Energy, July 1995.
6. California Department of Transportation. California Regional Blueprint Planning Program. See <http://calblueprint.dot.ca.gov/> (accessed July 2011).
7. The software, developed by Cambridge Systematics, is a web-based GIS application that calculates the GHG impacts of individual transportation projects. This functionality was based on previous Federally-sponsored research conducted for the Moving Cooler study [Cambridge Systematics, Inc. *Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions*. Urban Land Institute: Washington, D.C., 2009].
8. Gateway Cities Council of Governments. *Gateway Cities Council of Governments Subregional Sustainable Communities Strategy: In Accordance with California Senate Bill 375*, 2011. See <http://gatewaycog.org/sb375.html>.

KEY WORDS

Greenhouse gases, climate change, urban planning, transportation planning, sustainability, sustainable communities, SB 375