

## EXHIBIT A

### **Sacramento Region Develops New Paradigm for Transportation Planning**

#### To Accompany Written Testimony of:

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#### Prepared for presentation to:

U.S. Senate Committee on Environment and Public Works  
Field Briefing, California State Capitol, Room 4202  
September 3, 2008, 12:30 p.m.

### **Regional Vision and Public Engagement**

For the past decade, the Sacramento region has been deeply invested in the development, adoption and implementation of integrated land use, transportation and air quality planning. The effort is led by the Sacramento Area Council of Governments, the Metropolitan Planning Organization (MPO) for the six-county region (Sacramento, Yolo, Sutter, Yuba, Placer and El Dorado counties) and the 22 cities within. In 1999, the Sacramento region had a population of 1,850,432. By 2007, the population of this fast-growing region had increased more than 12 percent to 2,268,620. Since 1999, the SACOG Board of Directors adopted four major plans: the 1999 Metropolitan Transportation Plan (MTP), the MTP for 2025 (adopted in 2002), the Blueprint long-range growth strategy (adopted in 2004) and the MTP2035 (adopted in 2008). As the surface transportation law has evolved from ISTEA (1991) to TEA-21 (1998) to SAFETEA-LU (2005), so too has the way that the Sacramento region does transportation planning.

#### *1999 MTP: The last of the old-school plans*

As the MPO for the region, SACOG is required to regularly update its MTP in a manner that is consistent with federal and state requirements, including the Federal Clean Air Act. Since 1974, portions of the SACOG region have not been able to attain the standards of the Clean Air Act, requiring that each MTP meet “conformity” requirements to ensure that the region is making adequate progress towards meeting the clean air standards.

Like many regional agencies around the country, SACOG produced its 1999 MTP largely by combining the individual transportation plans of its member cities, counties, and various transit districts into what then qualified as the regional plan. While this approach had a certain perceived benefit to member agencies and partners, it did not optimize the regional travel performance of the transportation system or the air emissions.

The underlying projected land use pattern for the 1999 plan was worked out by SACOG staff with senior planning staff of the local governments, based on their existing general plans, codes and development trends. There was no regional analysis or proactive behavior on SACOG’s part, such as explaining how the trend in development patterns might damage or benefit regional travel patterns and air emissions. SACOG did not have parcel-level geographic information system (GIS) data for most of its region, so it was unable to analyze land use trends in a detailed manner. SACOG’s regional travel model, SACMET, was a traditional four-step travel model with households and employment aggregated to travel analysis zones as the basic unit of analysis. Resident and stakeholder involvement was limited to one town hall meeting in each county, making

requested presentations, consulting with a standing SACOG committee of primarily senior public works staff from local governments, and one public hearing.

The plan was unanimously adopted by the SACOG Board of Directors, however its projected performance was modest-to-disappointing. The share of trips by transit was projected to stay constant at 1 percent, walk and bicycle mode share declined from 7.7 percent to 7.2 percent, the daily vehicle miles traveled (VMT) per capita increased by 6 percent and commute-period congested VMT per capita increased by 360 percent. A newly hired Executive Director, Martin Tuttle, was greeted with a lawsuit against the plan filed by a Sacramento environmental organization. The group opposed several road capacity projects in the plan and challenged technical and process details of the air quality conformity finding. The suit was settled in SACOG's favor, with a commitment to a more extensive public review process for the air quality conformity finding in the next MTP cycle.

*MTP for 2025: The first step forward*

The SACOG Board of Directors appointed a 55-person Transportation Roundtable to oversee development of the MTP for 2025. The Roundtable was broadly representative of the diverse interests in the SACOG region, from business and development interests to activists for environmental, housing and social justice issues, as well as civic organizations and academia. Notably absent from the Roundtable were senior public works staff from the cities and counties, and only one transit operator represented the 13 transit operators in the region. These people were apprised of progress through other standing SACOG committees, but they clearly were not the focal point for input. The Board appointed one of its members, the articulate Mayor of West Sacramento, Christopher Cabaldon, to be its liaison to the Roundtable. The Mayor's leadership is a thread through this story: he chaired the Roundtable, then chaired the Board during adoption of the Blueprint in 2004 and chaired its Transportation Committee to develop the new MTP in 2008 that was based on the Blueprint.

Over a two-year professionally facilitated process directed by Carolyn Verheyen of MIG, the members of the Roundtable developed decision-making ground rules. To capture the broad range of ideas and opinions, the Roundtable designed a range of transportation scenarios and asked SACOG to model the impacts of each, including one scenario that invested all of the available funds into road capacity enhancements, and one scenario that invested all of the funds into improvements to transit, walking, and bicycling systems. SACOG's technical capabilities had improved since the 1999 MTP. A regional GIS Collective was forming with cooperative working groups of the cities, counties, electric utility, fire services and others in the region. The Sacramento regional GIS Collective was formed to improve the quality and lower the cost of detailed land use data, and to establish standards and protocols that enabled data sharing among agencies. A new travel survey of 4,000 households in the region was conducted and then used to update the SACMET travel model. Other data and model improvements included splitting some zones to improve details in certain areas, improving a Pedestrian Environment Factor first tested in 1999, auto and transit costs, and networks.

The results of modeling indicated that neither extreme approach would yield a well-functioning regional transportation system. The scenario that balanced investment in automobile capacity with investments in the other modes performed better.

Early in the Roundtable's work, some SACOG Board members, led by Roger Dickinson, a veteran Sacramento County Supervisor familiar with the Envision Utah scenario planning exercise, advocated for a scenario to be developed that emphasized what were coming to be known as smart growth principles (e.g., mixing land uses, growing more compactly, and designing for pedestrians and transit-oriented uses). Environmental members of the Roundtable were supportive. SACOG's senior staff, supportive in concept, believed that to address land use in a technically and politically effective way would require a greater effort

than was possible in the final stages of the MTP for 2025. It is interesting to note that over a decade earlier, SACOG staff analyzed the travel benefits of a more compact future regional land use pattern. At the time, the Board felt that land use was not an issue with which they wanted SACOG involved. The study's findings were, however, cited by Dickinson, who had a high profile role in the 1990s effort, and some Board members, who were advocating for investigating land use. The Board agreed with the slower approach recommended by the staff and asked the Executive Director to pursue funds to conduct a comprehensive land use study to inform the next major MTP update.

Although land use was not thoroughly analyzed in the MTP for 2025 that the SACOG Board adopted in 2002, the plan did include several groundbreaking features. Most notably, for the first time, it established four regional funding programs, incentivizing smart growth with a new half-billion dollar community design program over 25 years, and increasing commitments to bicycle and pedestrian investments, air quality programs and transportation demand management. Both the process to develop the plan and the plan's substance sent a very clear message to the region. The MTP for 2025 was a true regional plan and not, as some had pejoratively described prior plans, a stapled compilation of the individual plans of the cities, counties and transit operators.

The MTP for 2025 was unanimously adopted by the SACOG Board in 2002, and although the environmental organization that filed lawsuit over the prior plan was still dissatisfied with some of the road investments in the plan, it did not litigate this time. Nevertheless, for all the plan's groundbreaking features, its less-than-stellar projected future travel and air quality performance were of concern to the SACOG Board, staff and many members of the Roundtable. In particular, the plan projected a nearly 60 percent increase in per-household travel spent in heavy congestion over the next 25 years, even with the build out of the MTP's massive \$2.5 billion list of transportation investments. This realization motivated many key people inside and outside of the government to get serious about a regional land use study. A shift in thinking among opinion leaders throughout the region began to be articulated that maybe congestion could not be resolved through transportation improvements alone. Maybe there was something about growth patterns in the region that was creating a demand for transportation improvements that simply could not be met. It was this environment that led the SACOG Board to launch the technically challenging and politically risky regional land use scenario planning project that eventually came to be known as Blueprint.

*Blueprint: A land use study that became a game changer*

The first year of the 30-month Blueprint planning process was spent designing the project, developing strategic partnerships, raising public and private funds, hiring staff and significantly upgrading the data and modeling capabilities of the agency. SACOG hired Mike McKeever to manage the Blueprint process who had recently re-located to Sacramento from Portland, Oregon. McKeever's professional experience had included extensive involvement working with local governments on the development and implementation of the first regional land use plan in Portland, as well as work on integrated land use-transportation planning with several regional planning agencies throughout the country. He was instrumental in the development of the PLACE<sup>3</sup>S (Planning for Community Energy, Environmental and Economic Sustainability) planning method and GIS-based software. Executive Director Tuttle made Blueprint the number one priority for the agency, and instructed his new project manager to design the best regional land use planning project ever conducted.

Behind the scenes, Tuttle and several Board members, namely the late Bill Hughes (Mayor of Citrus Heights), Folsom Councilmember Steve Miklos and West Sacramento Mayor Cabaldon, met privately with regional business, media and civic organization leaders to build support for a long range growth plan for the Sacramento region. Former Board members Tom Stallard from Yolo County and Jim Williams from Placer County assisted in the advocacy effort, which resulted in the Sacramento Metropolitan Chamber of Commerce, Valley Vision (a civic organization) and the local chapter of the Urban Land Institute, forming

the core strategic partnership for the project. Others joined as the project progressed, including the local chapters of the Building Industry Association, American Institute of Architects and the environmental organization that had sued SACOG over the 1999 MTP. A long-distance partnership with Robert Grow and other leaders of the Envision Utah project provided strategic and technical advice throughout the Blueprint process.

This strong base of support from non-governmental organizations helped the Blueprint overcome its first challenge. A freshman local state legislator, Assemblyman Darrell Steinberg of Sacramento, with the support of many of the more urban local governments on the SACOG Board, introduced a bill designed to change the way state sales tax revenues were distributed to local governments, to encourage communities to plan for sufficient housing and not overbuild sales tax-generating retail stores. Debate over the bill created a significant fissure on the SACOG Board. Weighted voting rules were invoked for the first time as the Board deliberated whether it would oppose or support the bill. Neither side could muster sufficient votes to pass a motion. SACOG remained neutral.

The experience led to a major, and ultimately positive, change in the structure of the SACOG Board. For several years, the Board had 14 members, causing many of the smaller cities to jointly pick a single representative. In 2003, the Board amended its bylaws to expand the Board to 31 members, providing every member jurisdiction with direct representation. Tom Cosgrove, a veteran Board member from the fast growing suburban city of Lincoln in Placer County led the reform effort. In retrospect, many credit the broader Board representation with creating the increased trust needed to pave the way for the development and adoption of the Blueprint.

### **Better Data for Local Decisions**

As the Board debated the controversial state legislation and reorganized itself, SACOG staff embarked on a number of enhancements to its data and modeling capabilities. Most notably parcel-level GIS data, including general plan and zoning designations, lot size, and ownership were developed for all 800,000 parcels throughout the six-county region. For the first time SACOG used an integrated forecasting model, called MEPLAN. This land use-economic-travel model uses economic costs, development policies (general plans), travel time, and household demographics to allocate future growth. The regional travel model, SACMET, was upgraded in a number of ways, most importantly the addition of a post-processing capacity, 4Ds. The 4Ds (density, diversity, design, and destination) are land use characteristics that influence travel behavior and are added to travel models to better understand the effects of smart growth land use design options on travel. The analysis uses elasticities, or percent change, to modify vehicle trips, vehicle miles traveled (VMT), and mode choices based on changes in the land use characteristics. During this same time period, the California Energy Commission contracted with a software development firm to create an internet server-based processing and delivery system for the PLACE<sup>3</sup>S software. This was an essential part of the project's success, enabling SACOG to use interactive planning technology in dozens of community meetings as well as providing the kind of parcel-specific land use planning accuracy at a regional scale and real time response speed that was not previously feasible with the desktop GIS version of the software. The internet-accessed software is called I-PLACE<sup>3</sup>S.

PLACE<sup>3</sup>S was designed to achieve two primary objectives: 1) provide sophisticated, objective technical information to illustrate the complex interrelationships between land use, transportation and air quality issues; and 2) provide that information in an easily-understood and accessible format so that everyone—residents, policymakers, stakeholders and professional staff—could use it to develop informed opinions. SACOG improved and expanded I-PLACE<sup>3</sup>S to better serve the needs of regional and local decision-making. The Blueprint process was designed to honor the simple precept that an involved and informed citizenry is an essential ingredient of a healthy democracy.

The first product of the effort was a Base Case scenario for growth through the year 2050 that assumed policy and market trend lines of the recent past would continue unchanged. The Base Case was developed by SACOG staff and consultants, with significant input from a first-in-the-region committee of the land use planning directors for SACOG's member cities and counties. A detailed projection for future growth in population, employment and housing in the region was developed by a consulting firm specializing in projections for the California economy. A demographic forecast was also prepared, including changes to the age, household size, ethnicity and incomes of the region's future population.

These regional-scale growth projections were then allocated to various communities throughout the region. Some of the key assumptions that had to be made to prepare the Base Case included projected housing densities, mix of housing stock between single and multi-family structures, and where the growth would most likely occur. The MEPLAN software was particularly helpful in projecting where market forces were likely to encourage future growth after the capacity of existing general plans was exhausted. The PLACE<sup>3</sup>S software was used to analyze existing general plan and zoning capacities, natural resource and other constraints, and to prepare a parcel specific 2050 planning scenario for analysis by the travel and air quality models.

The performance metrics for the region in 2050 if the Base Case scenario materialized were very bad. Congestion, time devoted to daily travel, supply of affordable housing, conversion of farmland and natural resource lands to urbanization, carbon dioxide and particulate matter all were significantly worse than current conditions. It is not an exaggeration to say the region was stunned. The lead editorial in the *Sacramento Bee* the next day was titled "SACOG shows region the road to ruin." There was a quick and nearly unanimous consensus that the Base Case future was not what the region wanted. But if not the current trends land use scenario, then what?

Alternatives to the Base Case future were needed. These scenarios were designed to test the technical and political viability and the applicability of seven growth management principles, commonly known as smart growth principles, as follows:

- Provide a variety of transportation choices
- Offer housing choices and opportunities
- Take advantage of compact development
- Use existing assets
- Mixed land uses and development types
- Preserve open space, farmland, natural beauty, through natural resources conservation
- Encourage distinctive, attractive communities with quality design

The principles were not assumed at the outset to be inherently good or bad, but ideas of sufficient seriousness to be worth examining. The Blueprint tested these principles at three geographic scales: neighborhood, county and regional.

Before the workshops began, an additional important piece of technical research was conducted. SACOG asked its partners at the Sacramento Metropolitan Chamber of Commerce, Urban Land Institute, and North State Building Industry Association to fund and help design a market research study on consumer housing preferences. The study, conducted by a national real estate marketing firm, showed stronger interest than many expected in what at that time were considered "alternative" housing products in the Sacramento region (e.g., single-family homes on small lots, attached housing products like townhomes and condominiums, or housing built in a walkable, mixed-use format). These types of products were not being built in Sacramento when the survey was conducted. Statistical analysis of the survey results showed that two-thirds of the people

over 55 in the sample preferred these alternative products. This is the same demographic group SACOG's demographic forecaster estimated would represent a full two-thirds of the growth in the region through 2050

### *The Neighborhoods*

A series of thirty neighborhood level workshops were held, at least one in 27 of SACOG's 28 member local governments. Multiple workshops were held in the two largest jurisdictions, Sacramento City and Sacramento County. To help reach out to communities across a large region, SACOG turned to Valley Vision, who was a full partner in executing the project. Valley Vision recruited and involved residents and stakeholders in the workshops, and they formed advisory committees of key opinion leaders and stakeholders within each county to further recruit workshop participants. The goal, realized at most workshops, was to seat individuals from five to seven diverse interests at each small group tables, including developers, local property owners and businesses, residents, activists from the environmental, housing and other issue specific communities, and public agency representatives.

Each host local government selected two case study sites to be the subject of their workshop, one an example of infill development opportunities and the other an example of "greenfield" (larger tracts of vacant land) development opportunities. Six to eight residents sat at each workshop table and, after watching an introductory video and PowerPoint presentation about the Blueprint, the region's changing demographics, smart growth principles and some details of the case study sites, they spent the balance of the evening designing a conceptual plan for one of the case study sites.

Project staff designed a series of interactive planning exercises for participants. In their small groups, participants used context maps, pictures and data, along with a map of the study area, and a menu of land use options to make decisions that were recorded by placing stickers on parcels that represented the land uses they wanted in their plan. Roving land use and transportation experts answered questions, and a trained facilitator guided the discussion.

A laptop computer operator, running the new web-based I-PLACE<sup>3</sup>S software via cell phone connection, was available at each table to enter the plan as the residents created it and, at various junctures, to tell them how it was performing on key metrics like jobs-housing balance, housing diversity, vehicle miles traveled, air emissions per household, and mode choice (i.e., percent of trips by car, transit, walking, and bicycling). An economic reality test included in I-PLACE<sup>3</sup>S conducts a planning-level pro forma analysis on the proposed development ideas for every parcel. This Return On Investment function was used to test the profit performance and, thus, investment feasibility for private developers.

This public involvement process reflects a significant advancement from the days of asking residents "what do you want?" and recording their opinions on flip charts. The entire workshop was designed both to empower the residents by building their knowledge base and to reinforce the message that this was an information-based planning process, not one that had been pre-cooked in some manner or was dominated by a particular planning philosophy. The technical results of these neighborhood workshops are summarized at [www.sacregionblueprint.org](http://www.sacregionblueprint.org). Every table's plan is saved on the SACOG website and can be viewed at any time.

Two important findings became clear to many SACOG Board members. First, the innovative outreach method attracted large numbers of people to the workshops. Many were new participants in local land use issues. Second, there was a striking degree of agreement on the types of plans people supported, among the very diverse people at each table, among the tables at each workshop, and among the communities where the workshops were hosted. The smart growth principles of pedestrian and transit design, housing products that provided far more diversity than common in the current marketplace (in part, to provide greater affordability,

but also to meet the needs of the aging population), were supported throughout the region—whether they were from a low-income neighborhood in urban Sacramento or an affluent suburban jurisdiction.

It is worth noting that, of the other regional scenario planning exercises in the country at that time, none had conducted extensive neighborhood-scale planning this early in the process. SACOG was, in fact, pointedly advised by veterans of some of these other planning processes not to do neighborhood-scale planning early in the process because it would generate too much controversy and the project would never be able to proceed to alternative regional scenarios. However, SACOG's approach to Blueprint from the outset was grounded in trying to find land use solutions that would work, would be politically supportable, and could be implemented at-scale quickly. The experience with too many planning projects at all scales is that enthusiasm and therefore, performance falls off after the plan is adopted and moves to implementation. SACOG wanted to minimize the chances for what one representative from the U.S. Department of Energy (one of the funders for the development of the PLACE<sup>3</sup>S planning method) termed "stranded inspiration."

By the time the neighborhood workshop series was complete, it was clear that the Blueprint project had acquired legs. Many participants commented about how great the experience was. The development community, some of whom were initially skeptical of where the project was headed, gained confidence through seeing first-hand that a wide diversity of residents supported growth on infill and greenfield sites alike in their communities. Blueprint, with its broad public support and positive media coverage, provided the region with an inspiring, consensus growth plan for its future.

### The Counties

SACOG convened committees of senior land use planners within each of the counties and built three alternative county level planning scenarios for growth through 2050 to compare to the Base Case scenario. The planners started with the participant input from the neighborhood workshops. They examined the results of the current-day housing market preference survey and the long-range demographic forecast to develop realistic targets for what portion of future housing construction should be planned for about eight different low-, medium- and high-density housing products. Current general plans and zoning codes were assessed to determine to what extent built densities were at or below allowed densities. The planner committees discussed ways it may be possible to change local policies and codes over the next five decades. Each county prepared three scenarios, all designed to use smart growth principles, but in different ways and to different degrees. The overall growth rate within the county also typically varied between the three scenarios. This method of building the county scenarios was designed to blend visionary planning with real-world local policies and market conditions, again, towards the goal of ultimately finding a preferred scenario that would perform well, and could and would actually be implemented.

The county-level round of workshops was conducted with a minimum of one workshop in each county and several in Sacramento County. Modified but familiar maps, charts and stickers seen earlier in the neighborhood workshops were used. But this time the participants had to first choose the county-wide scenario they liked best, either the Base Case or one of the three alternatives. The scenarios were labeled A, B, C and D (an idea borrowed from Envision Utah) to avoid biasing people's opinions about their merits. Valley Vision again recruited and grouped five to seven people with diverse perspectives at each table. The "citizen planners" examined large posters with maps and performance metrics, comparing and contrasting the four scenarios, agreed on the single scenario they liked the most, and then used the stickers and felt markers to modify it to make it even more to their liking.

Again, facilitators at each table enter changes into a laptop and give an immediate feedback on how their changes would alter the performance of the scenario for travel behavior, air quality impacts, jobs-housing balance, total growth, and other impacts measured by I- PLACE<sup>3</sup>S. This time, the computers were connected

to the server via high-speed internet, not cell phones, to transfer much larger data sets resulting from more parcels in a county compared to a neighborhood.

The county workshop series was also well attended and built greater momentum and credibility for the project. People interested more in the environmental protection side of the issue seemed pleased that there was so much support for scenarios based on smart growth principles. People interested more in the housing supply and development side of the issue seemed pleased that the discussion was focused on managing growth well, rather than the often-typical fast versus slow or no-growth arguments. Following the county workshops, SACOG staff met with the committee of planners within each county to review the public input and decide which ideas that had been tested were supported by none or few, which ideas were supported by most or all, and which ideas had divided opinion. Through this process, a draft of three scenarios for each county fed into the creation of three regional scenarios.

### *Back to the Region*

An unexpected challenge arose out of this process. There was a great deal of consensus for the preferred growth pattern within the counties. Was there still a need to build alternative regional scenarios? SACOG staff strongly believed there was, if for no other reason than that the county scenarios had been analyzed in the workshops only for their impact on county-wide performance metrics. The project had yet to create a scenario to measure regional performance against the regional Base Case that everyone disliked so much. There were also, however, sufficient variations within the remaining county scenarios to make creating and analyzing the regional scenarios interesting on its own merits. The three regional scenarios that ultimately were created were similar or identical for about 80 percent of the growth through 2050. In one scenario, that final 20 percent was located in small towns (and one new town) around the periphery of the region; in another scenario, the final 20 percent was located in inner-ring suburban locations adjacent to existing urbanization, and in the final scenario, the final 20 percent growth was placed into inner infill and revitalization areas.

The four regional scenarios (Base Case plus three new ones) were also labeled A, B, C and D and taken to a large day-long regional forum attended by 1,500 people in downtown Sacramento. Facilitators for each table were recruited, drawing from local elected officials, senior local government staff, and staff from related state agencies, and transit and air districts. The training the facilitators were required to take, and their direct participation in the event, was an important element in building their understanding and support for what became the final preferred scenario.

Again, Valley Vision recruited and placed the participants at small group tables. After hearing introductory video and PowerPoint presentations, each table spent the balance of the day selecting the regional 2050 scenario they like best and then modifying it with peel-off stickers representing different land use types to better meet their preferences. This workshop was so large that SACOG did not have enough laptop computers for each of the 150 tables, so "live" computer analysis was conducted at only a few representative tables.

After the small group work, participants used individual keypad clickers to record both their personal preferences and the consensus preference of their small group. No tables voted for the Base Case scenario and very few for the scenario that placed the final 20 percent growth in the cities the farthest away from the urban core of the region. The consensus votes of the tables favored the scenario that placed the final 20 percent in the inner suburban areas, while the individual votes favored the scenario that placed the final 20 percent of the growth in inner infill areas, an interesting divergence that turned out to be not particularly difficult to resolve. After analyzing each of the table's maps, SACOG staff prepared a draft preferred scenario that was a balance of the two most popular scenarios from the regional workshop.

Throughout the entire workshop process, SACOG Board members, along with key public and private sector opinion leaders from throughout the region, were briefed and provided opportunities to give input and guidance on the project. Regular updates were targeted to the *Sacramento Bee's* editorial board, and to the region's congressional delegation. Board members were specifically engaged at least monthly, both at committee meetings and at Board meetings. The input from the elected officials hit a crescendo, however, with the last big event of the Blueprint, a first-ever regional summit of all city and county elected officials. In preparation for the summit, a random-sample public opinion poll was taken to measure residents' attitudes about growth and the principles that underpinned the draft preferred scenario (now modified and re-labeled "Blueprint Principles"). A national polling firm, Wirthlin Worldwide, conducted the survey and its president, the primary pollster for Governor and President Ronald Reagan, came to the summit to present the results personally. Among his key messages and advice to assembled local elected leadership of the region were that residents were: 1) very nervous about growth, fearing that it would degrade a quality of life that they currently believe was very high; 2) supportive of using the Blueprint growth principles to manage growth; 3) supportive of regional cooperation for managing growth, but skeptical whether their local officials would do it; and 4) dramatically more positive in their attitudes about the positive aspects of growth if they believed their local communities would use the Blueprint principles to help them make planning decisions.

The elected officials used electronic keypads to identify what aspects of the draft preferred Blueprint scenario they liked and disliked. The draft scenario was very popular with the participants, and the few areas of concern gave SACOG staff fairly clear direction about the types of final refinements needed before taking the plan to the SACOG Board for final action.

In April 2004, by the time the workshops and two regional forums had been conducted, more than 5,000 individuals had used the modeling software and given input into the future vision of land use in the Sacramento region.

### **The Blueprint Decision**

In December 2004, the SACOG Board unanimously adopted the Blueprint growth strategy. By this point in the process SACOG had received many regional, state and national awards for the project, including: The Governor's Award for Environmental and Economic Leadership, The Federal Highway Administration/Federal Transit Administration Transportation Planning Excellence Award, the U.S. Environmental Protection Agency National Award for Smart Growth Achievement, and the Association of Metropolitan Planning Organizations National Award for Outstanding Achievement. A remarkable group of broad-based supporters, individuals and organizations, came to the SACOG Board meeting to applaud the Board's work, including the North State Building Industry Association and the environmental organization that had sued SACOG. Instead, this same organization gave SACOG its Environmental Leadership Award for 2004.

The Board's Blueprint adoption action included a conceptual map for growth through 2050, a set of Blueprint growth principles, and an implementation strategy. The implementation strategy included actions such as pursuing state legislative reform to amend the California Environmental Quality Act (CEQA) to better promote Blueprint-style growth, development of a rural lands and open space strategy for the region, technical assistance to local governments to help them amend their general plans and zoning codes to reflect the Blueprint, and pursuit of financial incentives to assist, in particular, with infill development.

The Sacramento Blueprint is an unprecedented effort providing an in-depth analysis of the region's land use and transportation development patterns to address vehicle miles traveled and air quality emissions in the six-county region. Through Senator Boxer advocacy and leadership, in fiscal year 2004-2005 Congress awarded

SACOG a total of \$775,000 to help implement the Blueprint. In 2006, Congress awarded an additional \$875,000 (SAFETEA-LU allocation) in funding to be used for Blueprint implementation including: 1) upgrading modeling methods, integration of a travel module in the PLACE<sup>3</sup>S software used during the first planning phases of the Blueprint project and 2) community outreach for the update of the Metropolitan Transportation Plan for 2035 (MTP2035), which incorporated Blueprint strategies into the region's transportation plan to effectively leverage federal transportation funds for maximum benefit to the region.

- SACOG has used these past awards to provide direct grants and regional services through its Civic Engagement Program to cities and counties.
- SACOG staff and consultant are developing 3 educational videos, 4 educational PowerPoint presentations, 9 photo-simulations, and a 1,500-image database of smart-growth examples available through the SACOG website.
- SACOG, local governments and consultant are developing a 3-D urban design computer-simulation model for 56 square miles of urban infill areas.

In March 2008, the SACOG Board adopted a \$42 billion MTP2035 reflecting the Blueprint preferred growth scenario and principles. The MTP2035 represents investments in a transportation system that leads to reductions in the growth increment for vehicle miles traveled (VMT) per household by bringing jobs and housing closer together in a more compact land use pattern, with transportation mode-balanced investments to improve efficiency in our existing transportation system. The transportation investments in the MTP 2035, combined with Blueprint land uses, result in greenhouse gas emissions reductions, lowering CO<sub>2</sub> by 1 million metric tons annually by 2020.

SACOG will continue to award grants to jurisdictions that need enhanced public involvement assistance for Blueprint-supportive projects. In addition, SACOG will continue upgrading computer simulation capacity of the region and make the applications available for all local governments to use for educational and planning purposes.

### **MTP2035: First Integrated Land Use, Transportation and Air Quality Plan**

Immediately after Blueprint was adopted, SACOG went to work on the MTP2035. There were three main, related, technical and regulatory issues to address:

1. How could SACOG best employ the adopted Blueprint as its long-term land use plan for determining transportation needs in the MTP?
2. How would the MTP accommodate the new requirements in SAFETEA-LU, the reauthorized federal transportation bill?
3. How would the MTP address the new air quality plan (State Implementation Plan or SIP) being prepared by air districts to meet the new, tougher 8-hour ozone standards the federal government had promulgated to replace the 1-hour ozone standard?

SACOG, of course, wanted this MTP to be significantly influenced by the Blueprint; that is why the Board had launched the Blueprint in the first place. Federal MTP requirements most definitely do not allow an MPO to use a "visionary" land use allocation. In a series of meetings with high-level staff at both the Federal Highway Administration and the U.S. Environmental Protection Agency, it was clear that there would be no latitude to claim air quality benefits unless SACOG could demonstrate they would probably occur. This meant SACOG must demonstrate that projected land uses derived from the Blueprint were realistic and likely to be built. The partnership with the Sacramento Metropolitan Air Quality Management District, an active

public agency partner in the Blueprint process, was essential to working out these issues. Also, SACOG's commitment to extensive data collection, analysis, and state-of-the-art modeling tools was a critical component of persuading the federal oversight agencies that whatever travel and air emissions benefits SACOG claimed in the MTP from the Blueprint would be real and not illusory.

Compliance with new SAFETEA-LU requirements was a little trickier. Most of the new requirements for public participation, safety and security, congestion management and other specific issues were straightforward. More difficult was the requirement that air emission impacts of any MTP adopted after June 30, 2007 must conform to the new 8-hour ozone standard. But it was clear very early on that the State of California and its air districts would not have sufficient information from U.S. EPA soon enough to know how to conform to the 8-hour standard by the time SACOG would adopt the MTP. As a result, SACOG "conformed" its new MTP to a bridge State Implementation Plan (SIP), known as the Rate of Progress SIP, and after the 8-hour ozone SIP is completed in late 2008, a new MTP conformity process will be conducted.

In addition to meeting these three regulatory requirements, SACOG wanted to produce the new MTP using a stakeholder and public involvement process that met, or exceeded, the bar established by the Blueprint. A working committee to create an outreach strategy was established with SACOG's partner Regional Transportation Planning Agencies (RTPAs), the major transit operators, and the Sacramento Metropolitan Air Quality Management District, which had the lead role in developing the new SIP for the region. After the MTP for 2025 was adopted in 2002, public works directors requested greater involvement in developing the next plan. A regional committee of local government public works directors was actively involved throughout the project.

#### *The Analytical Tools*

In preparation for both the public workshops and the technical work of the MTP update, SACOG committed to another round of enhancements to its data and models. Workshop capabilities were improved by embedding a somewhat simplified version of SACMET, the regional travel model used for previous MTPs, into the I-PLACE<sup>3</sup>S software so that it could be used interactively to produce travel and land use information in minutes. [This upgrade included the "4Ds" land use sensitivities](#) (density, diversity, design, and destination) to better capture smart growth detail. SACOG's overall analytical capacity was improved by shifting from the SACMET 4-step model to a new, activity-based regional travel model, SACSIM. Activity-based models are the next generation in regional travel modeling. These models analyze travel patterns in a fundamentally different manner than traditional 4-step models. The 4-step model segments travel into individual trips by purpose (home-based work, home-based shop, non-home based, etc.). Activity-based models link trips into "tours" that begin and end at home, or work, depending on the list of activities associated with the tour. With this new approach the number and sequence of trips, the modes chosen, the time of day, and the total amount of travel time are internally consistent (less double counting of travel), which is not possible with 4-step models. Also, SACOG built the SACSIM model to function at the parcel level to enhance the ability to capture the benefits of fine-grained smart growth planning options. Other activity-based models may still aggregate data into zones, sometimes several hundred acres each, causing data to be averaged within the zone, reducing resolution and accuracy. I-PLACE<sup>3</sup>S, with its parcel-level land use planning capacity, is a perfect complement to SACSIM for detailed regional analysis outside of real-time workshop uses.

The net effect of the parcel-specific I-PLACE<sup>3</sup>S and SACSIM modeling capabilities is like shining a bright light into a room that had been under-lit; fine-grain relationships between specific land use choices and travel behavior are suddenly measurable. The prior models simply did not provide for sufficient detail to perform that level of analysis. SACOG's ability to understand the impacts and trade-offs between land use, transportation and air quality choices improved dramatically because of these modeling tools.

*The Process*

SACOG and its partners designed a two-part workshops series to support the MTP update. A series of 17 community workshops started the process. Valley Vision was reengaged as a partner and used many of the same techniques from Blueprint, recruiting a diverse group of participants and seating them at tables with others with a mix of perspectives. Nearly 1,800 citizen planners came out to workshops throughout the region between February and June 2006.

A transportation version of the Blueprint workshop program was designed, complete with menus, stickers, maps and posters. This time, instead of planning for a specific numbers of new people, jobs and houses coming to the region by 2050, participants were asked to design for mobility in 2035 and were given a budget. Federal law requires that MTPs only include transportation projects that can be delivered by revenues that are reasonably certain to be available. So, the budget was important to keep the workshops focused on what was realistic, and not an exercise to produce a dream list of ideas.

SACOG staff worked with senior local government planning staff to develop a preliminary land use map to show growth through 2035, the planning horizon year for the MTP. The 2050 Blueprint preferred scenario map was the starting place for developing the 2035 map, with changes made both to reflect the shorter timeframe as well as SACOG's best information on where local governments and the market were performing in ways consistent, or not, with the Blueprint. The preliminary land use allocation for 2035 was significantly refined over the course of the MTP planning process, as more empirical evidence became available from Blueprint implementation, and SACOG staff had more time to work, in detail, with local government planning staff.

SACOG staff worked with its partners and local agency staff to design three alternative transportation scenarios for each county. Participants listened to a short video and a PowerPoint presentation explaining how the underlying smarter growth land use pattern for this MTP would create more need for investments in alternative modes to the automobile, and for shorter distance automobile trips. Ways to quantify differences in mobility performance among the scenarios were also explained.

Participants in each small group agreed on the scenario they liked best and then used stickers representing a variety of transit, pedestrian, bicycle and road investments to modify the scenario to better match their preferences. Laptop computers again were used to show participants how their choices changed the performance of the scenario, for better or worse. This may have been the first time in the history of U.S. transportation planning that "live" feedback on regional travel performance was provided in a public workshop addressing an area this large.

The results of the county workshops were compiled, analyzed with the travel models at SACOG, and used to prepare three regional-scale transportation scenarios. To assist in the development of these scenarios, extensive modeling of alternatives was done in certain key corridors to ensure that all of the possible high-performance options were considered. This was a vastly greater level of transportation modeling to support these early stages of the planning process than SACOG was able to conduct in past MTP cycles. The commitment to base planning decisions on credible, objective information rather than planning philosophy or past plans, whether regional or local in scope, was again demonstrated by the quality, quantity and timing of this travel modeling.

SACOG deviated from the Blueprint approach to the large regional workshop for the MTP. Instead of inviting everyone to a single downtown location, eight simultaneous workshops were held throughout the region, linked by satellite video. The goal was to make it clear, by allowing more people to attend one of eight

dispersed workshops, that this truly was a regional plan being developed and their input mattered. The event was co-hosted by KCRA 3, the local network television station with the highest ratings in the Sacramento region. One of the station's news anchors served as emcee throughout the evening. Presentations at the largest site, Memorial Auditorium in downtown Sacramento, were broadcast to all eight sites, along with pre-packaged educational videos. The balance of the participants' work was done locally at each of the eight workshop locations.

Again, a diverse range of workshop participants sat in small groups, chose which of three regional scenarios they liked the most, and used menus and stickers to refine the map to better match their preferences. As with the community workshops, a budget was imposed. Laptop computers were not used interactively at these workshops, although at the end of the workshop all participants used electronic keypads to record their opinions on key issues. Although there were temporary technical issues with both the satellite and keypad technology at this event, it was a significant success, attended by nearly 1,500 people at the eight locations, and extensive input from residents was provided to guide development of the draft MTP.

The final big public involvement event was an hour-long live television show sponsored by KCRA 3, replacing the regular 6:30 newscast on January 31, 2007. Forty studio guests, selected by the station, were seated in an in-the-round, town-hall style studio and responded to questions posed to them by two news anchors. An online poll collected viewer feedback on several questions posed during the show. More than 56,000 viewers tuned in to watch this regional dialogue, and 1,300 gave immediate feedback responses through the interactive poll.

Significant public opinion research also was conducted. A regional telephone poll was completed to test attitudes on different transportation investment options. The poll was supplemented with four geographically representative focus groups of the general public and an online poll. A separate set of eight focus groups was conducted to focus on environmental justice issues. In total, more than 1,500 individuals gave input through focus groups and scientific polling. SACOG learned that all areas and groups of residents want a balance of highway/freeway improvements and public transportation expansion, with differences of emphasis.

### *The Decision*

On March 20, 2008, the SACOG Board unanimously adopted the MTP2035—the first MTP to explicitly propose a range of policies and associated strategies specifically designed to integrate with a Blueprint-influenced land use pattern. The SACOG Board's action also included the certification of the associated environmental document that includes meaningful mitigation measures to integrate the MTP's transportation plan with land use, air quality and climate change planning.

The region's early and serious commitment to integrated land use and transportation planning is evident in the diversity of alternatives to driving alone presented in the MTP that serve the shorter trips made possible through more compact and mixed land uses produced by the Blueprint. By 2035, the projected vehicle miles of travel per household are expected to decline approximately eight percent, while the increased travel within communities is expected to increase—80 percent in walk/bike trips and 300 percent in transit trips.

The budget of the MTP2035 is quite different from previous plans. Leading the change is a 56 percent increase in bicycle and pedestrian investments and a 35 percent increase in smart growth programs. These new investments are made possible by reducing the demand for investment in options that serve only single-occupant vehicles and allocating a larger share of flexible revenues to alternatives that meet the future set of mobility demands. Other critical non road-capacity priorities include a 21 percent increase in transit funding and a 17 percent increase in road operations and maintenance funding to better optimize the existing system. These increases offer meaningful progress to support Blueprint implementation and shorter trips, but are

limited by constrained dedicated operating revenue sources.

Important increases in road capacity are part of the MTP2035. Strategic road expansions include several carpool/bus lanes, largely in the inner areas of the region, and complete street grids that better serve local transit, bike, pedestrian and auto travel. Through matching MTP investments with supportive Blueprint land uses and focusing on critical bottlenecks, congested vehicles miles of travel per household increase a modest 12 percent, versus 60 percent projected in the last plan.

In 2006, California passed the Global Warming Solution Act (Assembly Bill 32), the toughest law in the nation for reducing greenhouse gas emissions. While the state is still working out the details of implementing the requirement to reduce emissions to 1990 levels by 2020 and to 80 percent below 1990 levels by 2050, the California Attorney General has been aggressively intervening with local governments, regional planning agencies, and developers to ensure that the greenhouse gas impacts of their plans are appropriately assessed and mitigated. The Environmental Impact Report (EIR) prepared to address environmental effects of the MTP2035, included a detailed analysis of greenhouse gas emissions estimated reaching out through 2035. SACOG found that one benefit of the new land-use-focused MTP2035 is it is expected to reduce per capita greenhouse gas emissions by 9.5 percent between 2008 and 2035 over the Base Case and that CO<sub>2</sub> would be reduced by more than 1 MMTCO<sub>2</sub>E compared to the prior MTP. SACOG projected in its EIR that this amount of CO<sub>2</sub> reduction likely would meet the state Air Resources Board's still to be set target for greenhouse gas savings from regional transportation and land use.

A long list of greenhouse gas mitigation measures contributed to the expected reductions. Included in the mitigation measures are:

- Condition MTP project funds on green construction practices;
- Develop regional climate action plan;
- Create alternative fuel vehicle and infrastructure toolkit;
- Implement a public education program on carbon reduction;
- Develop a regional parking policy;
- Develop a program to reduce carbon emissions for school trips;
- Implement a "Complete Streets" program;
- Implement a Rural-Urban Connections Strategy to address farmland and natural resource preservation and the economic needs of small communities; and
- Propose several of the MTP funding commitments to transit, smart growth, air quality, walking, bicycling and carpool/bus lanes as Transportation Control Measures for the new SIP.

Taken together, this package of mitigation measures charts the course for the next few years of planning innovation in the SACOG region. Already, the SACOG Board of Directors has initiated a Climate and Air Quality Committee to oversee implementation of these measures and co-sponsored a workshop on climate change for all city and county elected officials in the region.

### MTP2035 Implementation

SACOG will pursue three additional priorities, all being greenhouse gas mitigation measures in the MTP2035 Environmental Impact Report and potential Transportation Control Measures for the State Implementation Plan.

To continue its effort toward Blueprint implementation, the SACOG region sought a \$700,000 earmark in

FY 2009 for: a Rural-Urban Connections Strategy (education and outreach, technical tool, visioning project); addition of a greenhouse gas emissions calculation to the I-PLACE<sup>3</sup>S travel model (technical tool); and a “Complete Streets” Technical Assistance Program (technical tool and service).

*Rural-Urban Connections Strategy* is a complementary effort to the Blueprint, developing policy recommendations and technical tools to meet local and regional objectives for enhancing agriculture, rural economies and resource conservation including curbing greenhouse gas emissions and sequestering carbon. SACOG is seeking assistance to develop economic strategies and technology through a collaborative working group process involving stakeholders and experts from academia, public agencies, and the private sector in Phase I of the project.

*I-PLACE<sup>3</sup>S Software Enhancements* will add greenhouse gas emissions calculations to technology tool. I-PLACE<sup>3</sup>S is technically powerful yet simple and fast public domain software, currently being used in other California regions and gaining interest from regions around the country. SACOG operates it in public workshops in real time, enabling citizens to see the modeling results of their small table planning work. The current I-PLACE<sup>3</sup>S model estimates a variety of impacts on land uses and travel behavior, but does not have the capacity to estimate greenhouse gas emissions from travel. Adding this capacity to the I-PLACE<sup>3</sup>S software will increase our understanding of greenhouse gas emissions and the links between land development, transportation systems, and vehicle use as an opportunity for reducing the impacts of climate change over time.

*Complete Streets Technical Assistance Program* will help communities in the region build more complete streets. In Phase I, SACOG will create a curriculum to educate local jurisdictions and developers about best practices for complete street design, including policy guidance for incorporating complete streets into local legislation, methodologies for measuring and setting appropriate levels of service for bikes, pedestrians, transit, and vehicles, and guidelines that include facilities for all users appropriate to the type of road being built. A supplementary Safe Routes to Rural Schools module will focus on community outreach, public engagement, program and facility design, and analysis techniques. Community outreach will focus on low-cost, creative strategies to publicize services and facilities.

In Phase II, SACOG will conduct seminars and workshops to share the best practices information and provide technical assistance for local government staff and elected officials, and the private land use development, planning, engineering and design communities to assist with the design and construction of complete streets. SACOG will use 3D modeling and other visualizations to share complete street concepts. SACOG will also provide technical assistance to local governments to help them implement complete street policies and projects.

### **Regional Planning for Greenhouse Gas Reductions in California**

The story of these four major planning actions by SACOG traces a steady evolution to a new style of regional planning. The keys to success were commitments to: the highest quality data and modeling tools—necessary to ground policy-making in information; meaningfully engaging residents; and focusing on the connections and interactions between the land use, transportation and air quality planning issues.

The State of California is the first to adopt legislation establishing targets and a timeline for reducing greenhouse gases in Assembly Bill 32. The regional greenhouse gas reduction targets are aimed at realizing emission reductions through the implementation of Blueprint-style land use and transportation plans. The draft Scoping Plan proposes that the California Air Resources Board (ARB), along with other state agencies,

will work with regional and local governments to develop regional targets to reduce greenhouse gas emissions, and collaborate to design a comprehensive process to meet these needs. SACOG has been engaged with ARB in the development of the draft Scoping Plan.

The emission reduction assigned to this measure on first analysis appears rather modest, only 2 million metric tons of CO<sub>2</sub> equivalent (MMTCO<sub>2</sub>E) by 2020. In our MTP2035, we estimated that the SACOG region, which has 7 percent of the state's population, could achieve nearly 1 MMTCO<sub>2</sub>E by 2020 compared to a business-as-usual scenario. We expect to continue to provide technical information on our Blueprint and MTP2035 to ARB staff and encourage them to provide incentives for regions that exceed the modest draft target.

This year, State Senator Darrell Steinberg has authored Senate Bill 375 bringing together a diverse coalition of stakeholders including California League of Conservation Voters (co-sponsor), League of California Cities, California State Association of Counties, California Building Industry Association, Natural Resources Defense Council (co-sponsor), California Association of Councils of Governments, Environmental Defense Fund, Bay Area Council, and many more to further link transportation planning, land use planning, affordable housing, and CEQA reform to encourage the 17 region in the State of California to pursue and implement Blueprint regional plans. This legislation would further establish voluntary criteria for implementation of AB 32.

SB 375 integrates and aligns planning for housing, land use, transportation and greenhouse gas emissions for the 17 Metropolitan Planning Organizations (MPOs) in the state through amendments to several provisions in existing law.

#### *Regional Transportation Plans (RTP)*

ARB by July 1, 2010, after considering the recommendations from a broadly based advisory committee, would provide targets to the MPOs for greenhouse gas emissions for cars and light duty truck trips from the regional land use and transportation system. The MPOs, through significant involvement with the public and their member cities and counties, would prepare a Sustainable Communities Strategy (SCS) as a component of their Regional Transportation Plans (RTP, or MTP in the Sacramento region) that meets the target if feasible. They must use transportation and air emission modeling techniques consistent with guidelines prepared by the California Transportation Commission to document the greenhouse gas emissions. If the SCS does not meet the target, the MPO must adopt an Alternative Planning Strategy (APS) that does. However, the MPO is not required to implement the APS because it may include amounts of transportation funding and changes to land use patterns that go beyond what federal law allows. The ARB may accept or reject the MPOs determination that the SCS or APS meets the target, but it does not approve the SCS or APS and it may not suggest or require that the MPO make changes to either document. The adopted RTP must be an internally consistent document and current requirements that transportation funds may only be spent on projects consistent with the RTP are unchanged. Projects already programmed in the State Transportation Improvement Program through 2011 and projects, program and categories of projects in any county sales tax approved by the voters prior to December, 2010 are expressly exempted from the provisions of the bill. Several safeguards in the bill are included to preserve local government land use authority.

#### *California Environmental Quality Act (CEQA)*

The methods of CEQA analysis that are required for residential and residential-oriented mixed use projects that are consistent with an SCS or APS that ARB accepts as meeting the greenhouse gas target are changed.

- 1) Such projects would not have to analyze their growth inducing impacts or their impacts on climate change

or on the regional transportation network. A lead agency would not be required to address a reduced density alternative, because of car and light-duty truck trips. Residential and residential-oriented mixed use projects consistent with an SCS or APS that meets the greenhouse gas target. 2) A limited set of projects that meet a very stringent series of environmental and other criteria would be exempt from any CEQA analysis. 3) A more limited CEQA review than normal would be available to projects with a density of 20 dwelling units per acre that are within ½ mile of current or planned high quality transit service for any impacts that are sufficiently analyzed in the RTP EIR and provide adequate mitigation. 4) Local governments would be able to establish their own mitigation standards for local traffic impacts.

Regional Housing Needs Assessment (RHNA)

Each MPO's process for updating RHNA would occur every eight years instead of every five years to sync it with updates to RTPs, which occur under federal law in four year increments. The California Department of Housing and Community Development process for setting the regional housing allocations for the MPOs is amended to encourage providing sufficient housing to match the projected employment growth in a region, and the way the MPOs allocate the housing to each of the cities and counties must be consistent with the SCS. Local governments would be required to rezone their properties to be consistent with their updated Housing Element within three years (four years if the local government has completed 75 percent of its rezoning by the third year and meets one of three conditions: circumstances out of its control, lack of infrastructure to serve the sites, need for a major update to its general plan to meet its RHNA allocation). If a local government does not update its housing element within 120 days of the statutory deadline then it will have a four-year RHNA update cycle instead of an eight-year cycle.