

## STAFF REPORT

**SUBJECT:** SB-375 Implementation

**MEETING DATE:** April 15, 2010

**AGENDA ITEM:** 6J

**RECOMMENDATION:**

Receive status report on California Air Resources Board (CARB) and Metropolitan Planning Organizations Greenhouse Gas emission reduction target setting process

**STAFF CONTACT:** Michael Powers

**SUMMARY**

SB 375 set in motion a regional planning process that will ultimately require 18 of California's Metropolitan Planning Organizations (MPOs), including SBCAG, to develop and adopt "Sustainable Community Strategies," essentially regional land use plans that, if implemented, would result in the reduction of greenhouse gas emissions to target levels. The "SCS" must be integrated into the MPO Regional Transportation Plan. Before the process of developing a Sustainable Community Strategy can begin, however, the California Air Resources Board (CARB) must set targets for each region. A consultation process is taking place between CARB and the MPOs with the objective of establishing a reduction target.

SBCAG staff is participating in the SB 375 GHG target setting consultation process with the CARB, Caltrans, and other MPOs in the state. Staff is currently compiling information on the potential of various strategies, such as enhanced transportation demand management, improved regional transit, among other proposals, to reduce Vehicle trips, Vehicle Miles Traveled and Greenhouse Gas production. This analysis will form the basis for a letter to CARB that assists them in setting the SBCAG regional Greenhouse Gas reduction targets for 2020 and 2035.

**DISCUSSION:**

SB-375

SB 375 requires that Metropolitan Planning Organizations prepare a Sustainable Communities Strategy (SCS) as a new element of their Regional Transportation Plans, along with the traditional Policy, Action, and financial elements. The SCS must demonstrate how the development patterns and the transportation network, policies, and programs can work together

**Member Agencies**

Buellton ■ Carpinteria ■ Goleta ■ Guadalupe ■ Lompoc ■ Santa Barbara ■ Santa Maria ■ Solvang ■ Santa Barbara County

to achieve the greenhouse gas (GHG) emission reduction targets for cars and light trucks that will be established by the California Air Resources Board (CARB).

GHG emissions estimates from the SCS will be compared to the reduction targets to be established by CARB for the years 2020 and 2035. The enacted legislation also requires broader public outreach efforts to a variety of stakeholders during the preparation and review period of the SCS, including additional workshops and public hearings. The general schedule is provided in Figure 1. Development of the SCS coincides with the next update to the SBCAG Regional Transportation Plan and will conclude in 2014. However, early in the process, the California Air Resources Board must develop GHG emission reduction targets.

#### Method to establish Greenhouse Gas (GHG) emission reduction targets

As you recall from our briefing, which you received in November 2009, on the report by the Regional Targets Advisory Committee (RTAC), the California Air Resources Board (CARB) is charged with developing Greenhouse Gas (GHG) emission reduction targets for each of California's 18 Metropolitan Planning Organizations (MPO's). The report completed by the RTAC sets out recommendations for how ARB should set those targets (Figure 2). As part of its deliberations, the RTAC also examined many related issues such as the data that is gathered by Metropolitan Planning Organizations and how this data is used in regional travel modeling, the impact of land use on travel, the broader socioeconomic issues associated with infill as it might displace existing lower income residents, and the many challenges in meeting the GHG targets.

#### California Air Resources Board – Metropolitan Planning Organization Consultation Process

A consultation process has started between ARB and the MPOs with the objective of establishing a reduction target that the RTAC says must be "ambitious" enough to meet AB32's mandate, but "achievable" – i.e., within each region's financial and political grasp. The RTAC provided a specific methodology that CARB Staff are following in consulting with MPO's.

To date the consultation between CARB staff with the MPO's has been focused on the four largest MPO's, the Bay Area (MTC), LA Region (SCAG), San Diego (SANDAG), and Sacramento (SACOG). The four large MPOs in the state have proposed to evaluate different packages of strategies in their respective regions. In general, the strategies are attempting to quantify the benefits of Transportation Demand Management, Systems Management, transit improvements, land use alternatives, and pricing. While the particular elements of each scenario may differ from region to region these alternative strategies will provide CARB with a general indication of how effective GHG reduction measures are in the larger urban regions of the state, and which measures will enable the MPOs to meet the "ambitious and achievable" goal outlined in SB 375.

An example of the strategies, currently being developed by SANDAG is provided below.

##### *Scenario A*

Scenario A would focus on system efficiency through the implementation of Transportation Demand Management and Systems Management measures. Such measures could include congestion relief at identified traffic bottlenecks, telecommuting, expanding the vanpool program, and implementing Safe Routes to Schools strategies.

##### *Scenario B*

Scenario B would focus on transit improvements and Smart Growth development to reduce vehicle trips in the San Diego region. This scenario would maximize transit investments near smart growth opportunity areas and identify strategies to improve pedestrian and bicycle connections to transit.

### *Scenario C*

Scenario C would focus primarily on pricing as a strategy to reduce the demand on the transportation system. This scenario would evaluate the effect of adding additional high occupancy toll (HOT) lanes to the regional transportation system. In addition, this scenario would evaluate the effectiveness of implementing a vehicle miles traveled (VMT) fee, which would likely have a similar impact as an increased gas tax.

Until recently the discussions between CARB staff and the MPO's have been steeped in technical issues: How will CARB adjust the emissions model to account for lower emissions that will occur due to stricter state emission standards which impact the vehicle fleet over time? How do we account for interregional travel adjustments, i.e., which MPO is responsible for trips that begin in one region and end in another? Another discussion items between CARB and the MPO's is the assumption about future growth. Growth in population and employment typically results in growth in vehicles trips and VMT which impacts growth in GHG. Most forecasts developed by the State, regional economists, and MPO's, including SBCAG, were developed before the recession of 2008-10. With the recent downturn in the economy, increase in housing foreclosures, and decline in the number of housing and commercial developments in the pipeline these forecasts are generally paint an optimistic picture about forecast growth. Therefore, is the state raising false expectations about what reductions in GHG we can expect to gain from alternative land use patterns to address new growth if forecast growth will be significantly less than expected a few years ago?

SBCAG staff has participated in these conversations but it is evident that a similar process is needed between ARB and the smaller mid-size MPO's like SBCAG, SLOCOG, AMBAG, etc. This is because the GHG reduction strategies discussed by the larger MPO's have focused on strategies, such as congestion and parking pricing, light rail, etc. that are less relevant to our size, technical capabilities, and dimension of transportation problems.

### CARB – SBCAG consultation

SBCAG staff, along with APCD staff, met with CARB staff in November, 2009 and provided them a briefing on our growth forecast, travel model, and Regional Transportation Plan. In addition, staff is currently updating our regional travel model so the long-range travel forecast is consistent with our 2007 Regional Growth Forecast projections and the allocation of 30-year forecasted growth is consistent with recent updates to local land use plans.

What are the components of a GHG reduction strategy that SBCAG could develop to assist CARB as they prepare the MPO targets? SBCAG could inform ARB of our aggressive work on Transportation Demand Management through our Traffic Solutions Program and funding of additional transit services under Measure A. Both these strategies will promote use of alternative modes and reduce GHG emissions. In addition, SBCAG conducted an extensive corridor study of US 101 in the South Coast, i.e., 101 In-Motion. This study resulted in the selection of a strategy of a "lane and a train." During the course of the evaluation a number of improvement packages were evaluated and the quantitative assessments might be relevant to the development of GHG targets. SBCAG needs to insure ARB has this information about the SBCAG region to assist them in developing realistic targets for our region. Staff has engaged the services of Robert Leiter to assist us in the development of these scenarios. Mr. Leiter is familiar with MPO's, SB-375 and the RTAC report and has background knowledge of our region having attended UCSB and worked for the City of Ventura. TPAC supported this augmentation of staff resources in fact a few of the individuals have a good appreciation for his work since they have worked with Mr. Leiter in San Diego County over the past several years.

### Next Steps

Over the next few months, staff will continue to participate in the SB 375 GHG target setting process with CARB, Caltrans, and other MPOs in the state and will regularly report on progress. See below for general schedule. Staff is currently compiling information on what has been done

and what might be easily evaluated as a basis for a letter to CARB staff highlighting the GHG reduction potential of various strategies such as enhanced transportation demand management, improved regional transit, among other proposals. This letter will be subject to formal review by TPAC and the SBCAG Board.

**COMMITTEE REVIEW**

Staff has provided TPAC, the planning directors, briefings and received comments on: SB-375, RTAC report, regional GHC target setting process, development of work program elements and grant applications to fund SB-375 work, and, most recently, scenarios to assess potential GHG reductions. TTAC, the public works directors, have been focused on the Measure A Strategic Plan so this was a reasonable division of labor, but as their schedule loosens up staff will provide TTAC a briefing on SB-375 in May.

**Schedule for SB 375 Target-setting Activities**

<u>Activity</u>	<u>Agency</u>	<u>Date</u>
Prepare analysis of alternative scenarios	MPOs	April 30, 2010
Submit proposed regional target*	MPOs	April 30, 2010
Recommend draft targets to ARB Board	ARB staff	June 30, 2010
Provide comments on draft targets	MPOs	July – September, 2010
Approve final targets	ARB Board	September 30, 2010

\* This is optional for each MPO.

Source: Regional Targets Advisory Committee Report, pp. 10 – 12.

**ATTACHMENTS**

1. SBCAG, SB375 Implementation Schedule
2. Greenhouse Gas Reduction Target Setting Process: Specified in Recommendations of the Regional Targets Advisory Committee (RTAC) Pursuant to Senate Bill 375, pp. 9-11.

Figure 1

**SBCAG, SB-375  
IMPLEMENTATION SCHEDULE**

2007	RHNA Adoption, 2007-14 planning period Adoption 2000-2040 Growth Forecast
2009	Local Housing Element Adoption and Certification Adoption of SBCAG 2008 Regional Transportation Plan (October)
2009-10	MPO's like SBCAG consult with ARB on methodology for developing Greenhouse Gas Targets. SBCAG updates travel forecast.
2010	ARB Greenhouse Gas Targets to MPOs, SBCAG updates travel model capabilities
2010-11	Alternative land use and growth scenarios preparation and analysis
2011-12	Preparation of Sustainable Community Strategy, initiation of Regional Housing Needs Allocation and Regional Transportation Plan (RTP) update
2012-13	Integration of Sustainable Community Strategy into RTP update, with EIR preparation and certification, and inclusion of RHNA targets, for 2014-21 planning period
2014	Local Housing Element Adoption and Certification RTP Adoption inclusive of Sustainable Community Strategy

Figure 2

**Greenhouse Gas Reduction Target Setting Process:  
Specified in Recommendations of the Regional Targets Advisory Committee  
(RTAC) Pursuant to Senate Bill 375, pp. 9-11.**

1. MPO/ARB Interaction

SB 375 encourages a high level of ARB interaction with key stakeholders throughout the target setting process as evidenced by the representation on the Committee as well as specific direction for ARB to exchange technical data with MPOs and the affected air districts. The success of the target setting process, therefore, is described best through the collaborations that must continue to occur. Interaction with local governments, the public, air districts, other state agencies, and transportation and land use experts is important as discussed elsewhere in this report. The interactions between ARB and the MPOs are particularly critical given that the planning requirements of SB 375 fall to the MPOs to carry out.

The proposed process for setting greenhouse gas emission targets under SB 375 should center on collaboration among the MPOs and ARB, with support from Caltrans and the California Transportation Commission regarding modeling and regional transportation plan guidance. Technical input may also be solicited from other agencies, such as the Federal Highway Administration, Federal Transit Administration, and U.S. Environmental Protection Agency.

The target setting process will also require direct participation and buy-in from local jurisdictions, county transportation commissions (particularly for the SCAG region), affected air districts, and other major stakeholders. The MPO/ARB interactions and the emission reduction target setting process will be greatly enhanced by what the Committee has described as a “bottom-up” process. Transparency is also key to this process. The Committee recommends that all data, analyses and documents be available for public review at every step in the process.

To ensure effective and efficient communication between ARB and the MPOs between now and September 2010, the Committee recommends the following process as a way to set the level of expectation about how that interaction could occur.

Step 1            MPOs prepare an analysis of their adopted fiscally constrained RTP, which includes its assessment of the location and intensity of future land use that is reasonably expected to occur. The analysis would include estimates of respective regional 2005 base year, 2020 and 2035 greenhouse gas emission levels (e.g., for defined “No Project” and “Project” alternatives included in a RTP EIR or other related assessment), using their existing models. MPOs would work together with ARB to ensure that this analysis uses consistent long-range planning assumptions statewide, to the degree practicable, including, but not limited to:

- Existing and forecasted fuel prices and auto operating costs
- Reasonably available federal and state revenues
- Assumptions about fleet mix and auto fuel efficiency standards provided by ARB
- Demographic forecasts (e.g., aging of population and changes to household income and cost of living)
- Assumptions about goods movement-related travel impacts (e.g., heavy-duty trucks, rail, seaports and airport)

Each MPO's analysis would be made available to the public.

Step 2 ARB uses the results from Step 1 to compile greenhouse gas emission estimates for each of the MPOs individually in the base year of 2005 and the target years of 2020 and 2035. ARB staff would then meet with the MPOs to share those results, and make them available to the public for review. ARB staff would also compare baseline greenhouse gas emission estimates with MPO fuel use data for comparison. To the extent that there are differences, ARB will attempt to understand them. This would result in a greenhouse gas emissions "baseline" against which further reductions from regional strategies developed in Step 3 and 4 can be compared.

Step 3 Using a bottom up approach with input from regional and local officials and stakeholders, the MPOs would work with ARB to develop parameters for preparing sensitivity analyses and multiple scenarios to test the effectiveness of various approaches that would help identify the most ambitious achievable greenhouse gas emission reduction strategies for 2020 and 2035. ARB and MPOs are encouraged to coordinate and develop comparable packages across the regions. The policies and practices that could be incorporated into these alternative scenarios include, but are not limited to, those identified in the BMP list and may include:

- Increased transportation funding and system investments in modes that will reduce greenhouse gas emissions, such as public transit, rail transportation, and non-motorized transportation
- Improved integration between land use and transportation policies, of natural areas
- Inclusion of policies that promote infill, higher densities, mixed uses, improved pedestrian and bicycle connections, and open space preservation
- Increased use of transportation demand management measures to reduce single-occupant vehicle (SOV) travel demand
- Increased use of transportation systems management measures that will improve system efficiency
- Including pricing options, such as express lanes, parking, and various fuel taxes
- Accelerated integration of more fuel efficient and clean fuels automobiles into the fleet mix than what is already required by adopted state vehicles and fuels programs

- Increased funding for and/or supply of housing affordable to the local workforce

In this step, the MPOs and ARB would also identify the data inputs and outputs that should be obtained from existing or new scenario assessments developed with existing travel demand and land use models, off-model tools, sketch planning analyses, or the BMP spreadsheet tool. The Committee recommends that the data outputs be related to the performance indicators discussed in the performance monitoring section later in this report and should be comparable from region-to-region, to the extent feasible. Outputs may include those listed in the Performance Monitoring section, and may include:

- Greenhouse gas levels at target years
- Transportation performance measures
- Economic performance measures
- Other environmental performance measures
- Social equity performance measures
- Housing production performance measures

In identifying the measures to be used in developing these alternative scenarios, MPO staffs and ARB staff would use information from existing scenario assessments and cost-effectiveness studies wherever possible. The list of measures, alternative scenarios and data outputs identified for each MPO will be made available for public comment.

Step 4 MPOs analyze the alternative scenarios using a sketch planning tool, BMP spreadsheet tool, or other acceptable means, and forward the results to ARB and make them available to the public, explaining the reasons for any difference in key outputs resulting from the various methodologies used to analyze scenarios. ARB would compile the results, and, combined with its review of empirical studies and other relevant information that relates to passenger vehicle and light truck greenhouse gas emissions (including new auto fuel efficiency standards and clean fuels), prepare a preliminary draft uniform statewide target for public review and comment.

At this time, an MPO may also submit a proposed regional target pursuant to provisions of SB 375.

Step 5 ARB considers feedback from MPOs and other stakeholders on the preliminary draft uniform statewide target, as well as any formal regional target submittals received as part of Step 4, to assess whether any region's target should be adjusted either above or below the preliminary draft uniform statewide target. Such revisions would be subject to a "reasonably tough test" and would ensure that each region's target is the most ambitious achievable (see page 6).

Step 6 ARB staff recommends draft targets to its Board.

## Step 7

ARB, MPOs and others continue to exchange technical information and modeling results prior to final target setting by September 2010.

MPO and ARB shall encourage public participation in formulating alternative scenarios and determining outputs within the timelines noted below.

The process outlined above will require a significant effort by all participants within a relatively short period of time in order to allow ARB staff to submit draft targets to its Board by June 30, 2010 and final targets by September 30, 2010 in accordance with SB 375. Therefore, it is recommended that a specific schedule be developed by the participants, based on the following key milestones:

- Steps 1 through 4 should be completed as close to March 1, 2010 as possible (April 30, 2010 for the SCAG region);
- Steps 5 and 6 should be completed by June 30, 2010; and,
- Step 7 will be completed by September 30, 2010.