

STAFF REPORT

SUBJECT: SB-375: Regional Greenhouse Gas Target Setting

MEETING DATE: May 6, 2010

AGENDA ITEM: 13

RECOMMENDATION:

Authorize submittal of letter to Air Resources Board by Executive Director outlining factors for consideration in developing regional Greenhouse Gas emission reduction targets for the SBCAG region.

STAFF CONTACT: Michael Powers

SUMMARY

A consultation process is taking place between California Air Resources Board (CARB) and the Metropolitan Planning Organizations (MPOs) with the objective of establishing consistent information to assist CARB in establishing Greenhouse Gas (GHG) reduction targets for each MPO. SBCAG staff is participating in this process. It is important for SBCAG to provide input to ARB to help ensure that the GHG targets established by the state are realistic. The targets that will be adopted later this year need to be based on strategies that are reasonable for our region and that projected travel and GHG reductions are supported by modeling results that account for factors unique to our region (e.g., projected growth rates, external trips, institutions in the region that generate significant travel that are beyond control of SBCAG and local agencies, e.g., Chumash reservation, VAFB, UCSB, and USP). In the absence of such input from SBCAG, there is a risk that the state will set targets based on input from other dissimilar regions (e.g., larger metro areas) which may be unrealistic. The provision of this input is only a part of the target setting consultation process being used by ARB and does not commit SBCAG to adoption of any specific measures in the Sustainable Communities Strategy (SCS) that will be developed as part of the next RTP update.

Staff has identified a number of factors related to the establishment of GHG targets for our region that ARB should be aware of in establishing our targets. These include:

1. Summary of conditions related to the economic recession impacting short term growth
2. Updated population, employment, and household forecasts
3. Major institutions, such as UCSB and VAFB, beyond SBCAG's influence
4. Benefits of in-vehicle emission reductions on future GHG formation.
5. Quantitative assessment of strategies and programs to limit GHG formation.

SBCAG staff discussed these general factors and planning scenarios with TPAC and the members generally believed that providing this information to ARB would provide ARB with important local information as they establish Greenhouse Gas emission targets for the SBCAG region. The information in the letter to ARB was shared with TPAC, but we did not specifically

request action on a letter as it was still in development. TPAC members expressed concern with the currency of travel forecasts given the impacts of the economic recession. Both TTAC and TPAC committees concurred that a joint meeting to discuss SB-375 and GHG target setting is needed once ARB establishes draft targets for SBCAG. ARB is expected to set draft targets by the end of June, this year. A draft letter to ARB is attached.

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 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

A consultation process is occurring 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 four largest MPOs in the state have proposed to evaluate different packages of strategies in their respective regions. This format will be used by all MPO’s to summarize the strategies and 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 MPO regions in the state.

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.

It is important for SBCAG to provide input to ARB to help ensure that the GHG targets established by the state are realistic. The targets that will be adopted later this year need to be based on strategies that are reasonable for our region and that projected travel and GHG reductions are supported by modeling results that account for factors unique to our region (e.g., projected growth rates, external trips, institutions in the region that generate significant travel that are beyond control of SBCAG and local agencies, e.g., Chumash reservation, VAFB, UCSB, and USP). In the absence of such input from SBCAG, there is a risk that the state will

set targets based on input from other dissimilar regions (e.g., larger metro areas) which may be unrealistic. The provision of this input is only a part of the target setting consultation process being used by ARB and does not commit SBCAG to adoption of any specific measures in the Sustainable Communities Strategy that will be developed as part of the next RTP update.

The strategies selected by SBCAG for its target setting analysis were compiled from the existing 2009 RTP, prior studies such as 101 In Motion, ongoing operations such as the Traffic Solutions TDM Flex Work and Van Pool programs, updated analysis of new broad proposals, and a few other examples of strategies that have been or are being analyzed. The focus of the evaluation is the assessment of these programs on lowering countywide vehicle trips, vehicle miles traveled, and, Greenhouse Gas emissions. Table 1 summarizes the scenarios:

Scenario A

Scenario A emphasizes reduction of vehicle miles travelled and system efficiency through the implementation of Transportation Demand Management and Systems Management measures. Such measures could include congestion relief at identified traffic bottlenecks, and expanding the vanpool, telecommuting, flex work, and other TDM programs.

Scenario B

Scenario B examines transit improvements and commuter friendly intercity rail between Ventura and Goleta to reduce vehicle trips in the region. This scenario also examines the benefits of an exercise conducted for 101 In Motion that evaluated the impacts of a change in land use on regional trips and VMT. The packaging of these results presents a foundation for future examination of the relationship between transit and transit supportive land use policies.

Scenario C

Scenario C examines pricing as a strategy to reduce the demand on the transportation system. 101 In Motion evaluated a toll lane option for Highway 101 and determined that it was infeasible. In addition, only one of eight cities in the County charges people to park their cars, so this package is rather thin. However, that city, which is Santa Barbara, is considering the use of parking charges to divert single occupant commuter trips to other modes. This sample proposal is included to insure we look at a variety of approaches.

Summary evaluation of benefits of alternative scenarios

The individual measures and the benefits of the proposals are summarized in Table 2 and presented in narrative form below. All these measures, the assessment methodology, and their impacts on passenger car trips, vehicle miles traveled, and CO₂ are described in detail in the accompanying technical appendix. This Appendix also summarizes the guidelines established through the ARB and the MPO regional consultation process.

- Preliminary analyses of the alternative planning scenarios indicates that the potential of these measures to impact GHG reduction is relatively small (less than 1% of VMT and GHG reduction) for the 2035 horizon year, and even less for the 2020 interim year.
- Implementation of the State “Pavley” in-vehicle emission controls and the Low Carbon Fuel Standard (LCFS) gasoline standards will enable the SBCAG region to generate less passenger vehicle emissions in both 2020 and 2035 than were generated in 1990. This analysis is based on travel activity data from the SBCAG model run through the air quality emissions model, EMFAC, and the Pavley Post Processor distributed by ARB. These emission reductions dwarf savings from selected TDM, TSM, and other measures. While this analysis inherently assumes our existing vehicle fleet “turns over” to a newer, cleaner fleet, which may be optimistic given existing economic conditions, it does bode well for ongoing reductions in the contributions of passenger vehicles to CO₂ emissions.

- The parking pricing example has indicated significant potential to achieve GHG reduction benefits. However, since only three institutions in Santa Barbara County (the City of Santa Barbara, Santa Barbara City College, and UCSB) charge for parking, this alternative has limited applicability at this time for Santa Barbara County.
- The TDM alternative remains the best approach to reduce GHG emissions in the future since small changes in individual behavior can result in cumulative reductions in single occupant vehicle trips and vehicle miles traveled.
- While transit system improvements examined alone appear to have limited GHG reduction benefits, the analysis by other MPOs indicate the combination of supportive land uses, transit expansion, and, fare policy options can achieve beneficial results. The effect of changes in land use on future emissions tied to vehicle trips and Vehicle Miles traveled is yet to be determined and will be assessed during the development of the Sustainable Communities Strategy as part of SBCAG’s response to SB-375.

Table: 1 Description of SBCAG Alternative Planning Scenarios for SB375 GHG Emissions Reduction Target Setting

Scenario Categories		Methodology	Level of Deployment	2009 RTP Baseline	Scenario A: TDM & TSM Alternative	Scenario B: TSI & Land Use Alternative	Scenario C: Pricing & Disincentives
Transportation Demand Management (TDM) and Transportation System Management (TSM)							
1	Rideshare, Individual Marketing, Flex Work (Telecommute, Vanpool)	Modify 101 IM Package Option in Model - Base trip reduction - 1085 trips reduction for each AM & PM period. Run model	Assumed an increase of 100% trip reduction as "ambitious but achievable" approach (from 1085 to 2170 trips for each peak period) for 2020 and 2035	1085 trips reduced for each AM and PM peak hour	Test		
2	Traffic Solutions: Commuter Challenge	Review and post process new/ongoing Commuter Challenge Programs for GHG benefits.	Assess all modes of transportation including bike trips as part of larger promotions such as "CycleMaynia" or bike month.	No	Test		
3	Traffic Solutions: Awareness Programs	Review and post process new/ongoing TS Awareness Programs for GHG benefits.	Assess effectiveness of dissemination of promotional information to the general public and employers throughout Santa Barbara County at address vehicle trip reduction.	No	Test		
4	Traffic Solutions* Dynamic Ridesharing	Review and post process new Dynamic Ridesharing Programs for GHG benefits.	Employ smart phone technology to enable real time instant carpool matching	No	Test		
5	Parking Pricing	Use CSMP results for 101 mainline to formulate approach. Post process	CSMP assumed a system-wide ramp metering in place on South Coast 101 where the right conditions exist. Queue spill-back detectors are assumed in operations in test sites.	No	Test		
6	Operational strategies: ITS, Signal Synchronization	Assumed signal synchronization in place to estimate GHG reduction benefits via 2035 travel flows and improved average speeds. Post process	Assumed two potential arterial corridors on the South Coast for signal synchronization to estimate GHG reduction benefits. Post process	No	Test		
Transportation System Improvements and Land Use							
1	Expand transit system, transit station P&R Facilities	Double existing transit frequency and run model based on 2007 trunk and express. Post process expanded PnR facilities	Based on with 2007 transit system (2009RTP), assumed new PnR facilities and project vehicle reduction using counts, field surveys.	Limited		Test	
2	Commuter Friendly Train Rail Service Expansion	Modify 101 IM "Commuter Rail" to "Expand Commuter Friendly Rail Service" both in each AM and PM periods, using the latest CSMP analysis on Commuter Friendly Rail Service Improvements assumptions	CSMP assumed a lower vehicle trips reduction than the 101 Im Study (from 385-285 trips reduction). By 2035, the original 101IM vehicle trip reduction is assumed based on new state supported trains.	385 trips reduced for each AM and PM period.		Test	
3	SubArea Redevelopment Pattern	Test lower employment growth rate and re-development pattern in the Goleta Area	Assumed higher household population and no vacant land devoted to housing and employment with job increases due to density at job sites, resulting in 75% less in employment.	No		Example	
Pricing and Disincentives							
1	Parking Pricing	Assess Parking Pricing Policy Options proposed in the Draft City of Santa Barbara (PlanSB). Post Process	Limit to draft City of Santa Barbara's (PlanSB) proposal	No			Example

Table 2: Summary GHG Emissions Reduction for 2035 Forecast and Alternative Planning Scenarios

2035 Forecast and Alternative Planning Scenarios	Methodology	Vehicle Trips	VMT (Pass. Vehicles) 2/	Daily GHG Emissions Per Capita (lbs) (No Pavley Adj.)	Other Benefits
2005 Baseline (Modeled)	Model	1,331,802	10,798,463	22.24	
2035 Horizon Year (Modeled)	Model	1,663,729	12,978,262	22.62	
		Vehicle Trips Reduction	VMT Reduction (Pass. Vehicles) 2/	Daily GHG Reduction per Capita (No Pavley Adj.)	Other Benefits
Scenario A: TDM / TSM					
1. 101 In-Motion (TDM Package Option)	Model	5,955	128,700	0.07	
2. Commuter Challenges	Post Process	615	13,545	Inclusive	
3. Traffic Solutions Awareness Programs	Post Process	144	3,180	Inclusive	
4. Dynamic Ridesharing	Post Process	249	5,187	Inclusive	
5. Bottleneck Relief - Ramp Metering	Post Process	NA	NA	NA	Reduce delays, increase safety
6. Operational - Signal Synchronization	Post Process	NA	NA	0.01	Reduce a total daily GHG of 2 tons, reduce peak speeds and
CUMULATIVE		6,963	150,612	0.08	
Scenario B: TSI and Land Use					
1. Expand Transit System Services	Model	2,234	7,184	0.1	Increase 3,129 daily boardings
2. Expand Park-n-Ride Facilities	Post Process	551	26,737	Inclusive	
3. Expand Commuter-Friendly Train Rail Service	Model	Inclusive	Inclusive	Inclusive	
4. Land use (Employ't Reduction & Densification)	Post Process	NA	21,000	Inclusive	Reduced 2-7% vehicle trips on 101 during peak hour.
CUMULATIVE		2,785	33,921	0.1	
Scenario C: Pricing and Disincentives					
1. Parking Pricing Case Study 3/	Post Process	28,762	172,000	0.32	
CUMULATIVE REDUCTION (A + B + C)		38,510	356,533	0.50	

1/ Based on SBCAG Modeled output and include XX trips
2/ Based on a 50/50% Split IXXI approach and include 50% neighboring IXXI VMT.
3/ Based on PlanSB Alt 2.

Other Factors influencing the selection of SBCAG’s GHG reduction targets

SBCAG staff also recommends we share other pertinent information with ARB related to establishing GHG reduction targets for our region. The factors include:

1. Updated population, employment, and household forecasts;
2. Summary of conditions impacting short term growth
3. Major institutions beyond SBCAG’s influence
4. Impact of Pavley vehicle emission reductions

Each of these factors is discussed below and will be included in a letter to ARB staff.

Updated population, employment, and household forecasts

In 2007 SBCAG adopted an update to our Regional Growth Forecast. Unfortunately, the update was not completed in time to be incorporated into the update of our regional travel model. Consequently this updated growth forecast was not used in our most recent 2008 RTP, adopted in 2009. Therefore, the growth forecasts in our adopted RTP overestimate the amount of growth the region anticipates. The Table below compares the 2002 RGF forecasts used in our RTP with the more up-to-date forecasts. As the attached table indicates the current forecast (prepared just prior to the 2008-09 recession) projects less growth than the prior forecast. For the year 2020 the current forecast projects 10 percent less population, 4 percent less households, and 7 percent less jobs for 2020 than the 2002 RGF. The 2030 forecasts show 8 percent less population, 1 percent less households, and 10 percent less jobs.

Comparison of Previous 2002 with Current 2007 Regional growth Forecasts

		Population		Households		Employment	
		2020	2030	2020	2030	2020	2030
Previous Forecast	2002	505,000	521,000	164,641	166,671	231,000	257,000
Current Forecast	2007	459,600	481,400	157,648	164,422	216,000	233,000
% Difference		-9.8	-8.2	-4.4	-1.3	-6.9	-10.3

Summary of conditions impacting short term growth

Based on recent (2010) data from the California Economic Forecast, Real Estate Outlook, local economic indicators show a slowdown in activity. According to the report commercial vacancy rates are higher as a result of ongoing weakness in the labor market in both the retail and office sectors. Office vacancy rates have increased in the south coast of Santa Barbara County from a low of 3% in the winter of 2008 to a high of over 8% in 2010. Retail vacancy rates increased from 1.3% in winter 2008 to 2.5% in 2010. Lease rates have also declined falling up to 33% in the south coast. There is virtually no new building in the county. Many projects are on hold until labor and home sales market conditions improve. New residential housing units countywide have dropped from 723 in 2007 to 213 in 2009. The number of residential units in foreclosure peaked in July of 2008 totaling 666 countywide then declined 56% by the end of the year. Since then the number of units in foreclosure have remained mostly stable with a monthly average of 200–360. In addition, the countywide median home selling value is way off its peak in 2007 of over \$575,000 to the current median of \$292,000.

The local labor markets in Santa Barbara County are still losing workers. According to recent employment statistics from the California Employment Development Department the current unemployment rate is high at 9.9% compared a low of 5 percent in 2008. There is no evidence that job creation will begin anytime soon, however the rate of economic contraction has improved, i.e. declined. The countywide non-farm job growth has been negative since the beginning of 2008 but continues to decline at a lower rate as of February 2010.

The SBCAG countywide employment forecast contained in the current Regional Growth Forecast 2007 is based, in part, on the CalTrans long-Term economic forecasts. According to the updated forecasts recently released by CalTrans and produced by the California Economic Forecast Project, nearly 3,400 wage and salary jobs were lost in 2009, a decline of -1.8 percent. Non-farm employment declined at a slightly higher rate of -1.9 percent.

The principal employment sectors in Santa Barbara County are the public sector, retail trade, and services. Last year the only sectors that showed growth in the county were government and education and health services. The farm sector, which accounts for 9 percent of total employment, lost 160 jobs in 2009, declining 1 percent. However, the total value of crop production exceeded \$1.1 billion in 2008, on the strength of strawberries, broccoli, and wine grapes.

According to the report employment growth will remain modest in Santa Barbara County over the next five years. The report forecasts a year of stagnant job growth in 2010. For the year a decline of 480 jobs or 0.3 percent is forecast. By 2011 recovery is underway, with employment increasing by 0.8 percent. The professional services, government, leisure services, retail trade, construction, education and health services, and farm sectors each add at least 1,200 jobs between 2010 and 2015. Together they account for 98 percent of net job creation. No other sector is expected to add more than 350 jobs from 2010 to 2015.

The Caltrans report also suggests population growth will remain modest in the county. Annual growth in the 2010 to 2015 period averages 1.0 percent per year. Net migration for the entire county is expected to remain positive over the medium term forecast horizon. The south county

will likely have negative net migration, but that will be offset by gains in the north county. From 2010 to 2015, there is an average of 1,100 net migrants entering the county per year.

The table below compares employment forecasts from the current SBCAG RGF 2007 with the newly released CalTrans report. The CalTrans forecasts are consistently lower from 1.0 to 5.5 percent for each forecast period suggesting the SBCAG forecasts are too aggressive.

Employment Forecasts, SBCAG 2007 Regional Growth Forecast and CalTrans Forecast

Forecast Source	Wage and Salary Employment					
	2010	2015	2020	2025	2030	2035
SBCAG 2007 Forecast	188,050	209,000	216,000	225,000	233,000	241,000
CalTrans 2010 Forecast	185,900	198,000	208,900	219,500	229,300	237,400
% Difference	-1.1	-5.5	-3.4	-2.5	-1.6	-1.5

The UC Santa Barbara Economic Forecast, also recently released, paints a similar economic picture. According to the report, construction has been the hardest hit industry in the region and those construction jobs lost aren't going to return to 2006 levels through the end of their forecast in 2013. Retail trade employment experienced the third largest employment decline in the county, after construction and hospitality, losing more than 2,000 jobs, or 10.2 percent, from the peak. Retail job growth will continue to be slow for the foreseeable future, with employment levels not returning to pre-recession levels until the end of 2013. Santa Barbara County's professional and business services industry will also take some time to fully recover. Since 2007, its' lost almost 1,500 jobs. The sector, heavily dependent on business profits, will make only slow upward gains for a while.

Major Institutions beyond SBCAG's Influence

There are major institutions in Santa Barbara County that are beyond SBCAG's immediate influence. These include Vandenberg Air Force Base, a federal institution in north Santa Barbara County and the University of California at Santa Barbara, a state institution in south Santa Barbara County. Other institutions or employers beyond SBCAG's immediate influence but exhibiting relatively less of an overall effect on growth include the Santa Ynez Band of Chumash Indian Reservation Casino and Hotel facilities which is a large employer in the Santa Ynez Valley and the Federal Correctional Facility located within the City of Lompoc.

Vandenberg Air Force Base (VAFB)

VAFB, located to the west of Lompoc along the west coast of the County, is a large military installation that has surprisingly relatively little "military" activity. However, Vandenberg Air Force Base (VAFB), the Air Force Space Command organization is responsible for all Department of Defense space and missile launch activities on the West Coast and all US satellites destined for near polar orbit, is located in northern Santa Barbara County. With no fixed base air wing, airport operations are primarily limited to helicopter training and rescue operations, and the occasional fixed wing aircraft training mission. However, the base includes a military airfield with a runway of 10,500 feet capable of serving various military jets and long-range transport aircraft. VAFB is located entirely within the County, comprising 5.6% of the County's total land and 33% of its coastline.

VAFB is a source of significant traffic, attracting contract workers on a daily basis from the Lompoc and Santa Maria Valleys. Average daily vehicle traffic at the main gate and Highway 1 and the Lompoc-Casmalia Rd both approach 15,000 ADT.

Forecasts provided by VAFB show significant growth in government (space and ballistic) launches, fluctuating from 14 to 18 launches per year and averaging around 15 between 1998

and 2003. Commercial launch activity is projected to grow more dramatically, from 9 launches per year to nearly 30 in the same period. For 2005, 22 launches were scheduled—the most launches since 1985 and twice what occurred in 2004. Based on this and other activity the SBCAG regional forecast assumes Vandenberg AFB will continue in its importance as new commercial space ventures are implemented in the early part of the forecast.

The dominant role Vandenberg Air Force Base plays in North County was displayed in the mid 1980's during the employment buildup for the space shuttle program and the resulting sharp decline after the Challenger disaster. A continuing, but less dominant, role is anticipated to result in new manufacturing and construction employment as launch facilities are used for commercial applications. A 166 million dollar space center has been proposed, to be built on 66 acres just outside Vandenberg's main gate. The project will include a permanent launch viewing site, visitor center, educational complex, a conference center and an IMAX theater.

Vandenberg AFB is also expected to be the recipient of additional personnel and programs as a result of continued nationwide realignments of defense programs that began in the early 1990's. VAFB may be the recipient of additional defense programs such as the Airborne Laser Program that could add 500 additional personnel for a few years after 2005. The long-term potential for commercial space launch activities at Vandenberg AFB is still viable. A reusable Launch Vehicle is also being developed that may use the Vandenberg AFB's airfield although other sites are being considered. Vandenberg successfully launched a Minotaur II rocket from Space Launch Complex-8 on March 14, 2006. The Minotaur rocket carried six low-earth orbiting, micro-satellites. Vandenberg AFB will continue in its importance as new commercial space ventures are implemented. At Vandenberg, as of 2006, there are 3,150 military employees, 1,090 civilian government and 4,680 contractor employees. Vandenberg will increase its housing by approximately 600 units.

University of California, Santa Barbara (UCSB)

Comprising slightly over 1,000 acres UCSB is located on a spectacular coastal setting in the unincorporated area of Santa Barbara County, adjacent to the City of Goleta. UCSB enrolls 22,850 students; about 3,050 of them are at the graduate level. There are and approximately 1,200 faculty and 2,800 staff.

UCSB and other large institutions present some forecasting challenges. The population model used in the SBCAG growth forecast contains a separate assessment of the "fixed aged" population residing at institutions such as the University of California, Santa Barbara (UCSB). This institution generally cycles people in-and-out of school on a rotating basis so that the young student population does not generally age, as does the population that stays in the area for a longer period. The "group quarters" population is also forecast separately since it contains a special population, e.g., correctional facilities, dormitories, and group care homes. This group quarter's population does not utilize conventional housing units. They are not considered part of the household population that requires a housing unit.

The UCSB Long Range Development Plan is undergoing an update. This plan outlines the potential for 5,000 additional dormitory student "beds" and 1,600 faculty and staff on or near campus housing units but still needs to go through Coastal Commission approval. The plan also includes housing for the faculty, staff and student increase. The UCSB Long Range Development Plan includes \$28 million dollars worth of campus renovations and seismic upgrading as well as a \$28 million dollar dormitory addition.

The proposed LRDP has created some tension between UCSB and adjoining local agencies over the impacts of proposed growth on the adjacent agencies. The County of Santa Barbara and City of Goleta submitted an extensive letter of comment calling attention to off-campus

impacts on traffic, resource use, housing demand, parking, public services, consistency with local plans, among other issues.

Chumash Indian Reservation

The Chumash Casino, Hotel, and Spa will likely continue to attract players and associated service related employment to the Santa Ynez Valley. The Santa Ynez Band of Chumash Indians is a significant employer in the Santa Ynez Valley with approximately 1,000 employees. The Bureau of Indian Affairs, (BIA), has agreed to allow the Chumash to annex 6.9 acres for a museum and cultural center, located across Highway 246 from the Chumash Casino. The Chumash plan a 3.5- acre commemorative park, a 14,350 square foot cultural center and museum, and a two-story commercial building with 27,600 square feet of space. The Chumash have another request with BIA to annex a separate 5.81-acre parcel that is near the Casino and the Chumash recently purchased a 1,300 acre ranch in the Santa Ynez Valley.

Lompoc Federal Correctional Facility

The Lompoc Federal Correctional Facility in the City of Lompoc is a significant employer with approximately 800 bed spaces. Recently the facility has downgraded its security status from maximum to minimum security and reduced its workforce by 100.

Impact of State “Pavley” controls on vehicle emissions

Assuming implementation of the State “Pavley” in-vehicle emission controls and use of Low Carbon Fuel Standard (LCFS) gasoline these two measures alone apparently will enable the SBCAG region to generate in both 2020 and 2035 less passenger vehicle emissions that were generated in 1990 (4,730 tpd). This analysis is based on travel activity data from the SBCAG model run through the air quality emissions model, Emfac, and the Pavley Post Processor distributed by ARB. These emission reductions dwarf savings from selected TDM, TSM, and other measures. While this analysis inherently assumes our existing vehicle fleet “turns over” to a newer, cleaner fleet, which may be optimistic given existing economic conditions, it does bode well for ongoing reductions in the contributions of passenger vehicles to CO₂ emissions.

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 of events. 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. The material in this staff report will constitute the basics of our submission to CARB staff.

Schedule for SB 375 Target-setting Activities

<u>Activity</u>	<u>Agency</u>	<u>Date</u>
Prepare analysis of alternative scenarios	MPOs	Winter/Spring, 2010
Submission of draft target setting analysis to ARB	4 large MPO's	May 17, 2010
RTAC briefing on modeling results	4 large MPO's	May 24-25, 2010
MPO submission of draft target setting analysis to ARB	Remaining MPO's	May 30, 2010
Recommend draft targets to ARB Board	ARB staff	June 30, 2010
Provide comments on draft targets	MPOs	July – September, 2010
Public Workshop	ARB	August, 2010
Approve final targets	ARB Board	September 30, 2010

* This is optional for each MPO.

Source: Regional Targets Advisory Committee Report, pp. 10 – 12, updated April, 2010

COMMITTEE REVIEW

SBCAG discussed these general factors and scenarios with TPAC and the members generally believed that this information would be of use to ARB in setting emission targets. The information in the letter to ARB was shared with TPAC, but we did not specifically request action on a letter as it was still in development. TPAC members were particularly concerned with the currency of travel forecasts given the impacts of the economic recession. Both TTAC and TPAC committees concurred that a joint meeting to discuss SB-375 and GHG target setting is needed once ARB establishes draft targets for SBCAG. This will occur by the end of June, this year.

ATTACHMENTS

Figure 1 SBCAG, SB375 Implementation Schedule

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

Attachment 1 Technical Appendix, *Preliminary Analysis of Alternative Greenhouse Gas Emission Reduction Strategies for the SBCAG Region* for submittal to California Air Resources Board, Draft, SBCAG

Attachment 2 Draft letter to Doug Ito, Air Resources Board, *Factors impacting the establishment of Greenhouse Gas Reduction Targets for the SBCAG MPO Region*

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, through means such as funding for supportive local infrastructure near public transit and funding for regionally coordinated preservation 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.