



**SENATE BILL 375 IMPLEMENTATION:
PROPOSED FINAL GREENHOUSE GAS TARGETS**

File Number 3100000

Introduction

SANDAG is in the process of developing its first Regional Transportation Plan (RTP) subject to the provisions of Senate Bill 375 (SB 375) (Steinberg, 2008). The 2050 RTP is scheduled for Board adoption in summer 2011. At the July 9, 2010, Board of Directors Policy meeting, SANDAG staff provided an overview of the SB 375 implementation efforts, which included the draft greenhouse gas (GHG) target ranges issued by the California Air Resources Board (CARB) for the years 2020 and 2035.

Recommendation

The Board of Directors is asked to approve the submittal of the proposed final greenhouse gas (GHG) targets for 2020 and 2035, pursuant to Senate Bill 375 to California Air Resource Board for consideration in advance of the release of their proposed final GHG targets (anticipated to be released on August 9, 2010).

Discussion

On June 24, 2010, CARB staff presented an information item to its Board of Directors that described the process of collaborating with the metropolitan planning organizations (MPOs) to establish a draft GHG target within the timeframe required by SB 375. To inform CARB on where the existing RTPs for each of the four major MPOs [Southern California Association of Governments (SCAG), Metropolitan Transportation Commission/Association of Bay Area Governments (MTC/ABAG), SANDAG, and Sacramento Area Council of Governments (SACOG)] would lead, MPO staffs provided data on various scenarios that were tested to better understand the potential to reduce GHG emission from passenger vehicles. The GHG emission targets are relative to a 2005 baseline, which for SANDAG, was based on the 2030 RTP (Table 1).

Table 1 – SANDAG Greenhouse Gas Emissions
(Average Weekday Pounds Per Capita CO₂ Emissions from Passenger Vehicles)

MPO	2005 Base Year	2030 RTP		Percentage Change	
		2020	2035*	From 2005 to 2020	From 2005 to 2035
SANDAG	26.0	23.7	24.6	-8.8	-5.4

* The 2030 RTP has a 2030 horizon year. Data in the plan was extrapolated in order to estimate a 2035 per capita CO₂ emissions number.

At the June 24 meeting, CARB issued draft target ranges (Table 2) instead of specific targets, which reflect CARB’s desire to continue the collaboration with the MPOs to further refine the information to be considered before a final GHG target for 2020 and for 2035 are set. Since the CARB meeting, SANDAG staff has continued to collaborate with CARB and the other large MPOs to determine if a single target number for both horizon years is feasible. The draft targets that were issued by CARB for 2020 reflect commonality among the large MPOs for what would be aggressive and achievable within that timeframe. However, the GHG target range for 2035 is specific to the San Diego region as each large MPO received a different target range for that time horizon. The individual target ranges for 2035 were based on results of each region’s scenario testing process. The purpose of the scenario-testing process was to determine what additional GHG reductions could potentially be achieved. While CARB staff understands that additional analysis is required to determine feasibility and level of deployment of the measures included in the scenarios, the information was used as input into the GHG target-setting process.

Table 2 – California Air Resources Board Draft Greenhouse Gas Targets for the San Diego Region

Target Year	Per-Capita Reduction From 2005 Baseline
2020	5 to 10%
2035	5 to 19%

It also should be noted that throughout the scenario testing process, various transportation model inputs (i.e., fuel cost, vehicle maintenance cost) have been modified and tested to try to make each region’s model, and model inputs more consistent. Each iteration of the scenario testing process included some model input that may reflect different assumptions than prior scenario model runs, thus resulting in outputs that are not easily comparable.

After the July 9, 2010, SANDAG Board of Directors meeting, staff indicated that additional revisions to the hybrid GHG reduction scenario would be tested based on a further analysis of: (1) projected revenues through 2020 and 2035; and (2) assumptions made in the measures that were tested. SANDAG, to the extent feasible, used the model assumptions that would be used in the 2050 RTP in order to enable fair comparisons between the baseline assumptions and the results of the revised hybrid model analysis. SANDAG also contracted with a consultant to validate the methodology and assumptions made in the various elements of the hybrid scenario.

Based on feedback from the consultant, SANDAG assumed that the telecommuting benefits to GHG reduction would be slightly offset by trips that would still be made by commuters during those telecommute days. Additionally, the parking pricing measure that was presented to the Board of Directors was modified to reflect a slower progression of implementation. It should be further clarified that any policy measures included in the revised hybrid scenario will have to be further considered by the Board of Directors – including financial considerations – before they would be included in the 2050 RTP. Those discussions will occur this fall.

Senate Bill 375 includes a provision for the MPOs to propose targets for their respective regions prior to the final targets being set by the CARB Board. Based on the revised hybrid scenario (all measures included in the revised hybrid scenario are outline in Attachment 1) and the direction of CARB to set a target that is aggressive and achievable, the final targets for SANDAG are proposed to be within the draft ranges provided by CARB in June, and refined as depicted in Table 3.

Table 3 – SANDAG Proposed Final GHG Targets for the San Diego Region

Target Year	Per-Capita Reduction From 2005 Baseline
2020	7%
2035	13%

Next Steps

Over the next few weeks, SANDAG staff will continue to collaborate with CARB, Caltrans, and other MPOs and will report progress to the Board of Directors. A final GHG target is required to be set by CARB no later than September 30, 2010. In order to meet this deadline, CARB staff has indicated that they will be posting a report for its Board’s consideration on August 9, 2010. Pending Board of Directors approval, the proposed final GHG target would be submitted to CARB. If additional refinements to the proposed final GHG target are made, an update will be provided to the Board of Directors in September so that any further direction can be provided to CARB before the statutory deadline for setting final GHG targets of September 30, 2010.

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Executive Director

Attachment 1: SB 375 Target Setting: Revised Hybrid Scenario Description

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SB 375 Target Setting: Revised Hybrid Scenario Description

System Efficiency & TDM		Existing RTP Level of Deployment	On Model/ Off Model	2020 Level of Deployment	2035 Level of Deployment
1	Bottleneck relief projects	Revenue Constrained highway network	On	2020 Revenue Constrained highway network updated to include 17 additional projects: I-805 NB Plaza Blvd. Auxiliary Lane I-8 WB Fletcher Pkwy Auxiliary Lane I-15 SB Centre City Pkwy Auxiliary Lane I-15 SB Valley Pkwy Auxiliary Lane I-8 WB Texas St./Mission Ctr. Capacity Improvements I-805 NB University Ave. Auxiliary Lane SR-52 (AM/PM) Mast Blvd. Interchange Improvements SR-94 WB 49th St. Auxiliary Lane I-5 NB B St. Auxiliary Lane SR-78 EB/WB (AM/PM) Barham Dr. Auxiliary Lane I-805 SB Governor Dr. Auxiliary Lane I-805 NB La Jolla Village Dr. Auxiliary Lane I-5 SB 29th St. Auxiliary Lane I-5 NB Manchester Ave. Auxiliary Lane I-5 SB 5th Ave. Auxiliary Lane	2030 Revenue Constrained highway network (with 17 additional projects noted in the 2020 Level of Deployment)
2	Telecommuting/flexible/alternative work schedules	5 percent daily white-collar worker trip reduction	On	15 percent of daily white-collar work trip reduction <i>(Output reduced by 25 percent to account for trips made by telecommuters. This equates to an overall 11.25 percent reduction compared to the initial 15 percent assumptions)</i>	Same as 2020 deployment level
3	Vanpool programs	Projected 20 percent vanpool increase by 2010 already achieved	Off	70 percent increase in number of vanpools by 2020 (1,124 vans up from 662)	174 percent increase in number of vanpools by 2035 (1,814 vans up from 662)
4	Safe routes to schools strategies	Not included in RTP assumptions	Off	10 percent increase in walk/bike school trips by 2020 (159,775 trips up from 145,250)	20 percent increase in walk/bike school trips by 2035 (179,542 trips up from 149,618)
5	Carpool programs	Not included in RTP assumptions	Off	70 percent increase in number of carpoolers from 2010 to 2020 (214,724 carpoolers up from 126,587 carpoolers)	144 percent increase in number of carpoolers from 2010 to 2035 (309,342 carpoolers up from 126,587 carpoolers)
6	Buspool programs	Not included in RTP assumptions	Off	Buspool participation of 15 percent military personnel by 2020 (15,766 buspoolers)	Buspool participation of 40 percent military personnel by 2035 (41,708 buspoolers)

*Measures with ***bold italicized*** text reflect changes made from the previous hybrid scenario presented at May 28 Board meeting.

		Existing RTP Level of Deployment	On Model/ Off Model	2020 Level of Deployment	2035 Level of Deployment
Systems Development					
1	Transit system improvements	Revenue Constrained transit network	On	2020 Reasonably Expected transit network	2030 Reasonably Expected transit network plus 13 routes added from the Revenue Unconstrained network including: 150: UTC to Downtown 13: National City to Allied Gardens 929: San Ysidro to 8th St. Trolley 27: Pacific Beach to Kearny Mesa 660: El Cajon to Kearny Mesa 31: Mira Mesa to University Towne Centre 709: H St. Trolley to Otay Mesa 50: Bay Park to Kearny Mesa 35: Old Town to Ocean Beach 303: Oceanside to Vista 633: Old Town to San Diego International Airport 662: Centre City Shuttle 520: Orange Line Trolley – Unconstrained Headways
2	Transit station park-and-ride facilities	Revenue Constrained park-and-ride network	On	Model was allowed to unconstrain number of park-and-ride spaces at suburban lots and transit stations (3,500 additional spaces utilized above 16,800 in the 2020 Revenue Constrained network)	Model was allowed to unconstrain number of park-and-ride spaces at suburban lots and transit stations (6,900 additional spaces utilized above 17,500 in the 2030 Revenue Constrained network)
3	Bicycle network facilities	Not included in RTP assumptions	Off	Test full deployment of regional bicycle network (2035 network reduced by 50 percent to estimate 2020 time period) (280,031 bike trips)	Test full deployment of regional bicycle network (560,062 bike trips)
4	Pedestrian network facilities	Not included in RTP assumptions	Off	10 percent increase in all walk trips by 2020 (494,203 walk trips up from 449,275)	20 percent increase in all walk trips by 2035 (559,018 walk trips up from 465,848)
Pricing					
1	High-occupancy vehicle (HOV) and high-occupancy toll (HOT) lanes	2030 Revenue Constrained highway network: Managed Lanes (ML) on I-15, I-5, SR 52, and portions of I-805 HOV lanes on I-5, SR 52, SR 94 and portions of I-805	On	2020 Reasonably Expected highway network including the following enhancements over the Revenue Constrained plan: SR 94 from I-805 to SR 125: Add 2 HOV lanes	2030 Reasonably Expected highway network, including the following enhancements over the Revenue Constrained plan (where only 2 HOT lanes available, assumes 3 occupant HOV): I-5 from SR 905 to SR 54: Add 2 HOT lanes I-5 from SR 54 to I-8: Add 2 HOT lanes SR 78 from I-15 to I-15: Add 2 HOT lanes SR 94/SR 125 from I-805 to I-8: Add 2 HOT lanes I-805 from SR 905 to I-5: Add 4 HOT lanes
2	Regional parking pricing program	RTP model 5 zone parking: Zone 5 - Metropolitan Center: \$8 per day Zone 4 - Urban Center: \$6 per day Zone 3 - Town Center: \$4 per day Zone 2 - Community Center: \$1 per day Zone 1 - Other: \$0 per day	On	Adjust 5 zone system pricing as follows: Zone 5 - Metropolitan Center: \$16 per day Zone 4 - Urban Center: \$6 per day Zone 3 - Town Center: \$4 per day Zone 2 - Community Center: \$1 per day Zone 1 - Other: \$0 per day	Adjust 5 zone system pricing as follows Zone 5 - Metropolitan Center: \$24 per day Zone 4 - Urban Center: \$12 per day Zone 3 - Town Center: \$8 per day Zone 2 - Community Center: \$2 per day Zone 1 - NA: \$0 per day

*Measures with **bold italicized** text reflect changes made from the previous hybrid scenario presented at May 28 Board meeting.