

# STAFF REPORT

**SUBJECT:** Update on Greenhouse Gas Emission Targets

**RECOMMENDED ACTION:** Discussion

## DISCUSSION:

SJCOG has been charged with recommending greenhouse gas reduction targets to be achieved by the years 2020 and 2035, via the upcoming 2018 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS). The California Air Resources Board (ARB) considers those recommendations, makes refinements in cooperation with Metropolitan Planning Organizations (i.e., SJCOG), and finalizes targets.

In addition to SJCOG's efforts to comply with state climate change goals via its 2014 RTP/SCS, SJCOG is actively pursuing Valley-wide initiatives and local projects and initiatives to demonstrate progress toward achieving SB 375 goals. However, despite these ongoing SB 375 efforts, there exist outstanding variables beyond SJCOG or the Valley's control that negatively affect the extent to which targets can expand beyond previously set targets, including:

- **Transition to an updated travel demand model.** SJCOG's travel demand model is being updated and revalidated to incorporate the latest data such as the 2010 census and 2012 California Household Travel Survey data, and enhancements are also being made to the structure of the model for both sensitivity and functionality. Testing with the updated model suggests that even without adjusting any model inputs (e.g., land use, demographics, network modifications), the updated model is expected to calculate higher vehicle miles traveled and emissions than the previous model.
- **Transition to the new EMFAC2014 emissions model.** Testing with EMFAC2014 suggests that even without adjusting any model inputs, EMFAC2014 is calculating higher GHG levels in the future than were calculated with previous emissions model.
- **Impact of automobile operating costs on vehicle miles traveled and emissions.** Based on recent trends in fuel costs, current fuel price estimates for future years are considerably lower than those assumed in previous SB 375 Target Setting efforts. As a result, SJCOG's modeling demonstrates an increase in vehicle miles traveled and emissions associated with the reduced cost of automobile operation.

- **Impact of economic recovery on vehicle miles traveled and emissions.** The recovery rate and economic forecasts in SJCOG's 2014 RTP/SCS were developed prior to the recovery from the recession, and with the best information at the time. Leading up to the development of the RTP/SCS, the Valley had been slow to recover from the 2008 Recession, and this was forecast to continue in the development of the housing and employment represented in the future scenarios. The region has experienced relatively high unemployment, slow growth in jobs and rapid growth in housing. SJCOG expects economic recovery to occur at a faster rate than previously assumed in 2014 RTP/SCS documents. As such, increases in employment and income levels, as well as a revised distribution of low, medium, and high paying jobs are anticipated. As a result, SJCOG's modeling demonstrates an increase in VMT and GHG associated with economic recovery.

These variables present challenges for the region to be able to match the per capita greenhouse gas reductions previously achieved with the 2014 RTP/SCS. However, given the efforts underway in San Joaquin County in support of SB 375, and the efforts being committed to above and beyond those previously identified in the 2014 RTP/SCS, it is SJCOG staff's position that reaching the previously achieved per capita greenhouse gas reductions represents an aggressive yet achievable goal.

SJCOG staff shares the understanding of the impact of the outlined variables, and the conclusion that achieved previous reduction levels is possible, with the other regional transportation planning agencies in the San Joaquin Valley. As such, in November 2016, the Board directed staff to issue a SB 375 Target Setting recommendation (along with Valley partners) to the California Air Resources Board, establishing an SB 375 Target for San Joaquin County equivalent to the per capita greenhouse gas reductions previously achieved with the 2014 RTP/SCS.

#### Preliminary Target Submission

On December 30, 2016, the eight Metropolitan Planning Organizations of the San Joaquin Valley partnered to submit a SB 375 Target Setting recommendation report. This report outlined the challenges described in this staff report, and identified these challenges as being in common Valley-wide. Further, the report described the work being done to implement the air quality beneficial programs and projects identified in the 2014 RTP/SCS, as well as the many efforts underway in the Valley that go above and beyond the 2014 RTP/SCS. The final chapter of the report included individual target recommendations for each Valley county, equivalent to the per capita greenhouse gas reductions previously achieved with the 2014 RTP/SCS. In the case of San Joaquin County, these targets were:

- 12-13% greenhouse gas reductions per capita by 2020; and
- 14-15% greenhouse gas reductions per capita by 2035.

#### Recent Communications from ARB Staff

In early March, ARB staff reached out to SJCOG staff to:

- Provide a preview on how ARB plans to describe SB 375 progress throughout the state;
- Describe ARB's progress in developing their 2017 Climate Change Scoping Plan; and
- Introduce concepts for how SB 375 can be used to help achieve the goals of the 2017 Climate Change Scoping Plan.

At three public workshops in mid-March, ARB staff provided a briefing on the 2017 Climate Change Scoping Plan, which seeks reduce greenhouse gas emissions to 1990 levels by the year 2020, and to 40 percent below 1990 levels by the year 2030. These emission reduction goals are larger than those established in SB 375, and require efforts from the transportation, commercial, residential, agriculture, industrial, and electricity generation industries to achieve them.

Through these workshops, ARB staff briefly summarized the contents of the Valley's SB 375 Target Setting recommendation report, noting that that the Valley's recommendations were in line with the greenhouse gas reductions previously achieved with the 2014 RTP/SCS what they plan to present in their upcoming SB375 workshops. However, they noted that in order to meet the larger goals of the Scoping Plan, higher targets would be necessary.

### SJCOG Staff Assessment

In order to raise SB 375 targets to a level such that the larger goals of the Scoping Plan can be achieved, a new method for generating revenue for transportation projects would be needed. Specifically, road user pricing would need to be implemented, as it would provide a more stable revenue stream for transportation projects (as vehicle and fuel efficiencies continue to improve) while potentially causing commuters to reconsider their travel options if driving is priced per mile rather than per gallon.

SJCOG staff has shared concerns about the feasibility of such an assumption with ARB, and are seeking feedback on the following points:

- Because the 2017 Scoping Plan will be adopted before SB 375 Targets are finalized, SJCOG staff is concerned that the 2017 Scoping Plan will make assumptions regarding SB 375 Targets that may not be achievable by Metropolitan Planning Organizations.
- SB 375 Targets are meant to be “aggressive, yet achievable.” If targets are set too high, they cease to be achievable, and instead become aspirational. Targets in the aspirational range could cause some in the state to consider pursuing an Alternative Planning Study, as opposed to a Sustainable Communities Strategy.
- In order to price road usage such that it affects the decision to drive, the actual price per mile is likely to be high. Such a pricing proposal, and the overall revenue it would generate, could be so high that the proposal would be politically unworkable. Further, the effectiveness of road user pricing will vary by region.
- Because San Joaquin County residents commute long distances, it is likely that the residents of this county will contribute disproportionately in a road user pricing scenario, as compared to others in the state. As such, any equity should be considered in the dispersal of revenue associated with road user pricing.

**NEXT STEPS:**

ARB staff will provide an update on both the 2017 Scoping Plan and SB 375 Target Setting at their ARB Meeting March 23<sup>rd</sup>. ARB staff have committed to circulate preliminary SB 375 Target recommendations in mid-April, and will work with Metropolitan Planning Organization staff through the summer to refine their recommendations. The 2017 Scoping Plan is scheduled to be adopted in June, and SB 375 Targets are scheduled to be finalized in October.

**FISCAL IMPACT:**

None.

**RECOMMENDED ACTION:**

Discussion.

**ATTACHMENT:**

None.

*Prepared by: Ryan Niblock, Senior Regional Planner*