STAFF REPORT

MEETING DATE:	**June 28, 2016**
SUBJECT:	**Recommend Greenhouse Gas Emission Reduction Target for consideration by the California Air Resources Board**
AGENDA ITEM:	**9**
STAFF CONTACT:	**Daniel Wayne, Senior Transportation Planner**

SUMMARY:

The California Air Resources Board (CARB) is charged with assigning and periodically updating regional targets for reducing per-capita greenhouse gas (GHG) emissions associated with automobiles and light trucks. In response, metropolitan planning organizations (MPOs) are required to develop a Sustainable Communities Strategy (SCS) demonstrating how the region intends to meet CARB's targets. CARB has solicited recommendations from each MPO regarding a possible new target for the year 2035. Staff recommends a 6% reduction based on reasonably anticipated revenues while acknowledging additional gains totaling 12% that could be achieved with more state and federal funding support.

STAFF RECOMMENDATION:

It is recommended that the board of directors propose a per capita greenhouse gas emission reduction target of -6% for the year 2035, and the potential of up to -12% with additional state and federal funding support.

DISCUSSION:

The 2015 Regional Transportation Plan (RTP) included the region's first SCS, as required by the Sustainable Communities and Climate Protection Act of 2008 (commonly known as Senate Bill 375). An SCS demonstrates how the region intends to meet CARB-assigned targets for per capita greenhouse gas emissions associated with automobiles and light trucks for the year 2020 and 2035, based on a 2005 baseline year. Periodically, CARB may update regional targets in consultation with the respective MPO.

In July 2010, the SRTA Board of Directors recommended a 0% change in per capita GHG emissions for both target years, which CARB subsequently accepted. Policies and programs in the 2015 RTP enabled the region to exceed this goal, netting a forecast -4.7% for 2020 and weakening to -0.5% for 2035 due to future population growth outpacing resources for new programs such as redevelopment.

In preparation for the 2018 RTP update, CARB has asked SRTA to provide a new recommendation for the 2035 target. The following range reflects the minimum target CARB is likely to accept and the maximum feasible target that could reasonably be achieved with improved state and federal support:

Planning Year	Achievable with no additional GHG emission reduction strategies beyond what is in the current 2015 RTP	Achievable based on a combination of regional GHG emission reduction efforts, local agency support, and generous state and federal funding assumptions
2035	-0.5%	-12%

The minimum target reflects the status quo, or current reductions achieved through projects and policies in the 2015 RTP. It relies on transportation-efficient land use combined with incremental enhancements in public transportation and active transportation. A more aggressive target will require additional and more transformative strategies. The following are presented alongside their estimated GHG emission reduction potential and cost to implement, given a moderate (-6%) and maximum (-12%) proposed target.

GHG Emission Reduction Strategy	Assumptions for 2018 – 2035 (additional strategies needed to achieve per capita GHG reductions)	Estimated Moderate/Maximum	
		Additional GHG Reductions	**Additional cost to Implement**
Land Use	• An additional 5% of future growth in unincorporated areas will occur within the urban sphere of influence in response to market influences such as the rising cost of transportation. • SRTA will obtain additional grant funds to continue the agency's Infill & Redevelopment Incentive Pilot Program. • SRTA will continue to support local agencies and developers in successfully competing for capital grants through the Affordable Housing & Sustainable Communities Program.	-0.2% (mod) -0.5% (max)	$30M (-6%) $60M (-12%)
Alternative Fuel Vehicles	• Plug-in electric vehicles (PEVs) market share will increase to 2% • Local agencies will obtain PEV charging station grants. • Local agencies will adopt policies and programs encouraging the installation of charging stations for certain types of development.	-2% (mod) -3.3% (max)	$10M (-6%) $20M (-12%)
Technology-Enabled Travel Demand Management & Transportation System Management	• Recent and emerging mobility-enhancing technologies will be commonplace in the Shasta Region by 2035, resulting in increased system efficiency. Examples include 'Waze' real time traffic info sharing; ride-sharing applications such as 'Uber' and 'Lyft'; vehicle-to-vehicle communication; and autonomous vehicles. • Advances in virtual communication will supplant trips and increase remote working. • Local agencies will employ transportation system management strategies to increase network efficiency, including signal control management and vehicle-to-infrastructure communication.	-0.7% (mod) -1.5% (max)	$10M (-6%) $20M (-12%)
Active Transportation	• SRTA and local agencies will jointly plan and implement a network of active transportation expressways with connections to the roadway network and trip destinations. • SRTA's active transportation programs will continue to successfully leverage Active Transportation Program (ATP) and other grants with Transportation Development Act and State Transportation Improvement Program funds.	-0.7% (mod) -1.5% (max)	$20M (-6%) $30M (-12%)
Local Public Transportation	• RABA and Community Transportation Service Agency (CTSA) buses will transition to alternative fuels as older vehicles are retired. • Public transportation mode share increases from 1% to 5% in response to the targeted introduction of on-demand public transportation services, access to real-time fixed-route transit information, extended service hours, and new Sunday service. • With SRTA's support, public transportation providers will receive grant funding for alternative fuel vehicles and fueling infrastructure.	-1% (mod) -2% (max)	$20M (-6%) $40M (-12%)
Intercity Public Transportation	• SRTA will obtain capital and operating grant funds to implement intercity express bus service to/from Sacramento.	-0.9% (mod) -1.6% (max)	$20M (-6%) $30M (-12%)
Sustainable Freight Movement	• SRTA will lead a coordinated freight efficiency program to include a possible consolidated freight hub; industry clustering; alternative fuel infrastructure; relocation of UPRR rail switching from Downtown Redding; and increased rail freight transport.	-0.5% (mod) -1.6% (max)	$10M (-6%) $20M (-12%)
	Estimated Total	**-6% (mod)** **-12% (max)**	**$120M (mod)** **$220M (max)**

The estimated -6% and -12% reductions, and the corresponding cost to implement them, is based on a combination of the region's recent and forecasted awards from grant programs designed to support GHG reductions. It should be noted that many of the above strategies result in GHG reductions that fall outside of the passenger vehicle and light truck emissions specifically called-out within Senate Bill 375. CARB is willing to consider such reductions, especially when the cost/benefit ratio is favorable and an adequate range of conventional strategies have been employed.

In choosing targets to recommend to CARB, a higher target based on a wide range of strategies would help SRTA and local agencies' make a stronger case for future grants. For example, both SRTA and local agencies would be able to point to the ambitious regional GHG targets to justify and add weight to requests for active transportation infrastructure grants, public transportation operating and capital grants, infill and redevelopment grants, and so forth.

With this in mind, staff recommends that the board of directors propose a target of -6%, which is midway between the region's current target (0%) and the maximum feasible target (-12%) premised on the strategies and assumptions outlined above. The -6% target would be more in line with the state's ambitious goal of reducing statewide GHG emissions to 40% below 1990 levels by the year 2030 (Executive Order B-30-15), while bolstering the region's pursuit of grants. It is further recommended that the board of directors provide other information, stating that the region may be able to reduce per capita GHG emission by as much as -12.0% should greater state and federal funding support be made available. The intent of the secondary recommendation is to put the onus on the state to back up its aspirational goals with the resources required to achieve them.

ALTERNATIVES:

The board of directors may choose to: 1) take no action since MPOs are not required to submit a proposed target to CARB; 2) propose different targets for CARB consideration; or 3) refer the matter back to staff for additional information.

OTHER AGENCY INVOLVEMENT:

(The Technical Advisory Committee (TAC) recommendation needed.)

FINANCING:

There is no direct fiscal impact associated with the target recommendation. The recommended -6% target is based on approximately $120 million in additional state and federal funding support through the year 2035.

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Daniel S. Little, AICP, Executive Director