

San Mateo County Transportation Programs Climate Impact Report (Draft Final)

C/CAG Board of Directors

January 10th, 2019

RICAPS technical assistance is available through the San Mateo County Energy Watch program, which is funded by California utility customers, administered by Pacific Gas and Electric Company (PG&E) under the auspices of the California Public Utilities Commission and with matching funds provided by C/CAG.

Background and Context

- **Part of Countywide Sustainability and Climate Planning**
 - New state climate target (SB 32): 40% below 1990 levels by 2030
 - In coordination with Office of Sustainability Regionally Integrated Climate Action Planning Suite (RICAPS) program
- **Publication Purpose:**
 - Identify how SMCTP 2040 supports state climate targets for 2030 and beyond, including other efforts such as Alternative Fuels Readiness Plan (AFRP)
 - Quantify contributions to reduction of GHG emissions countywide
- **Meeting Targets:**
 - Reduce countywide GHG emissions related to transportation (40% below 1990 levels by 2030)
 - Emphasize how cities and community members can support implementation of C/CAG programs

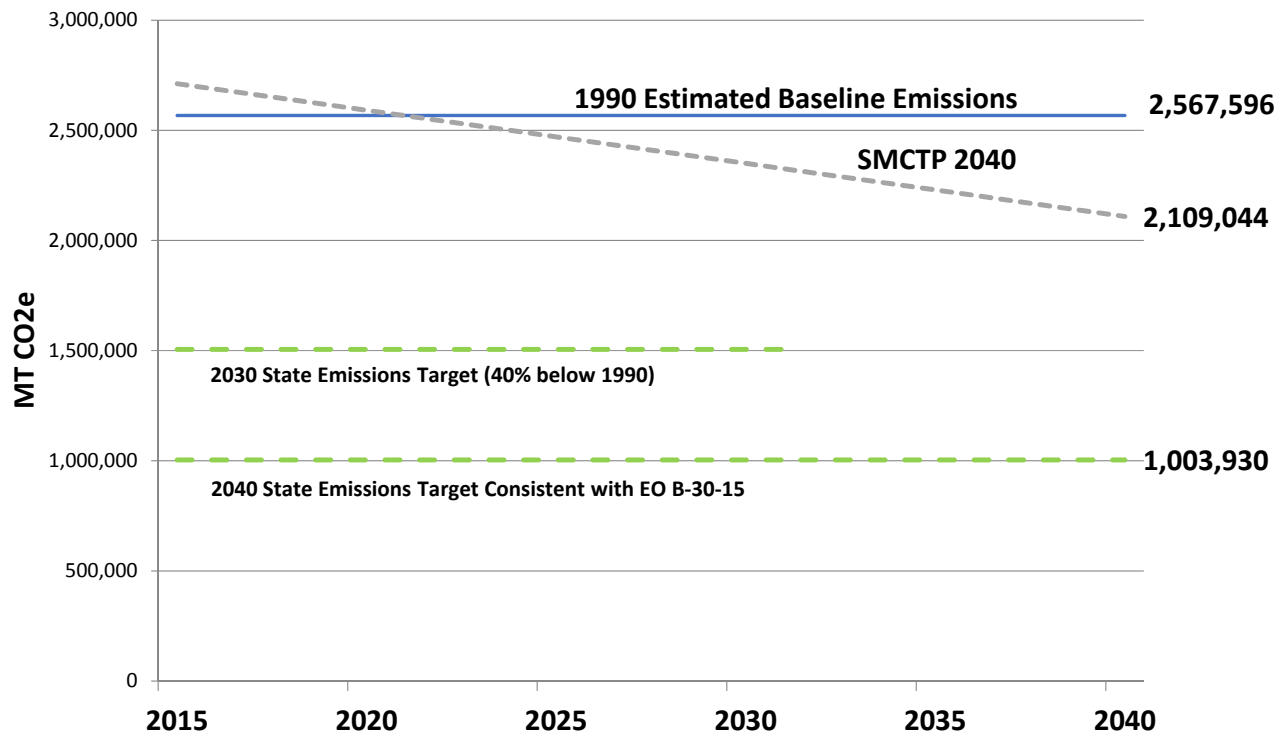


Developing the Publication: Step 1 – Does SMCTP 2040 hit the state goal?

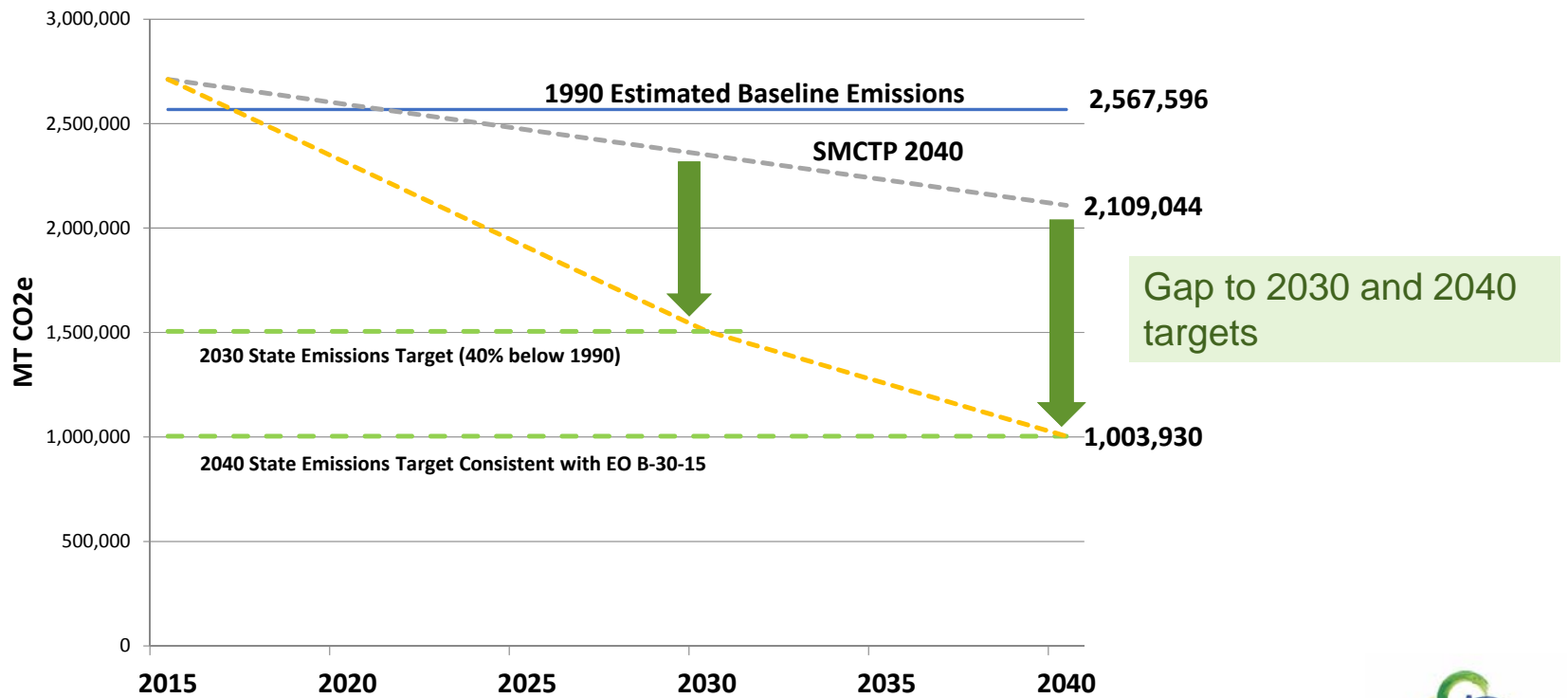
Calculating the Greenhouse Gas Impact of the SMCTP 2040

$$\text{VMT} \times \text{MTCO}_2\text{e}/\text{VMT} = \text{MTCO}_2\text{e}$$

C/CAG Transportation Programs Climate Impact Report: Pathway to State Targets



C/CAG Transportation Programs Climate Impact Report: Pathway to State Targets



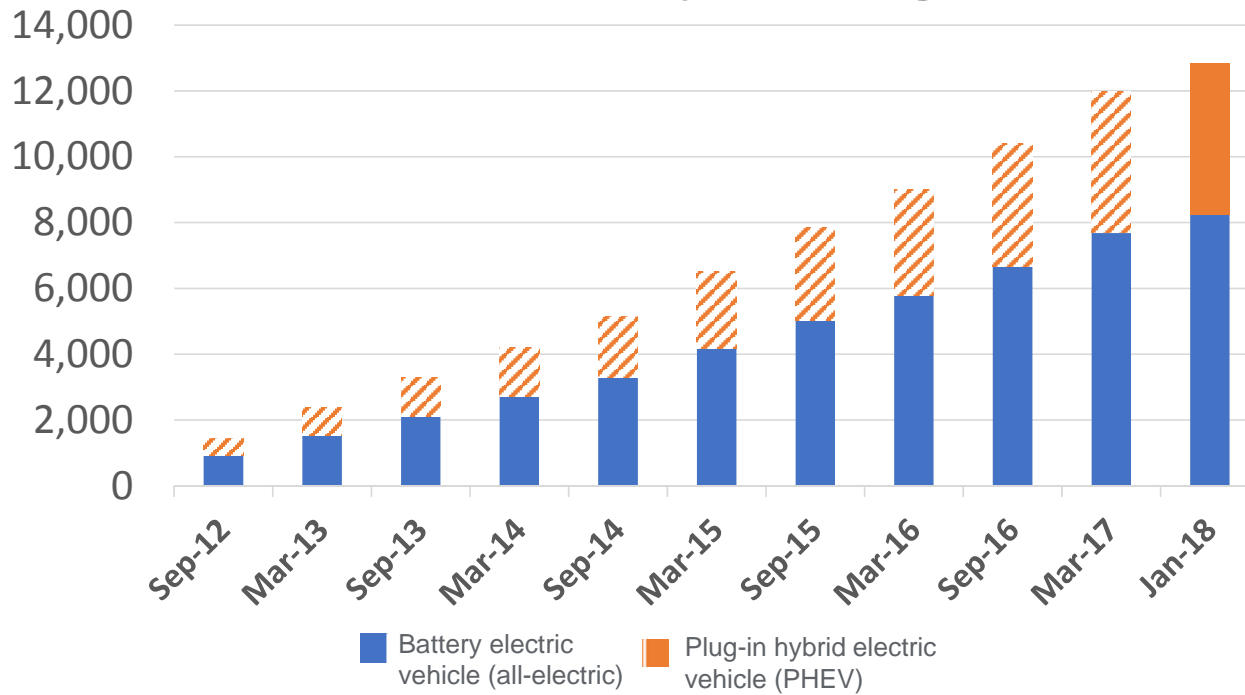


Developing the Publication: Step 2 – What is needed to achieve the state climate goal?

- Is there more we can do with clean vehicles (e.g., electric vehicles)?
- **CARB EMFAC2017** assumptions related “clean vehicles”
 - 4.5% of VMT are electric vehicles by 2040
- **Penetration of electric vehicles needed to achieve state climate goal:**
 - 45% by 2030
 - 60% by 2040

Where are we today with electric vehicles?

San Mateo County - DMV Registration Data



Total registered vehicles = ~700,000

About 2% of vehicles are plug-in electric



Report Recommendations

- **Emphasize SMCTP 2040 strategies for VMT reductions**
 - Identifies how Vision, Goals and Objectives relate to GHG emissions reductions
- **Look to Alternative Fuels Readiness Plan (2015)**
 - Identifies recommended Next Steps:
 - Educate and train government staff on issues related to alternative fuels
 - Implement the outreach and marketing strategies
 - Introduce initiatives to increase alternative fuel vehicles in San Mateo County fleets
 - Explore public-private partnership opportunities

Publication Overview

Transportation Programs Climate Impact Report Strategy Areas

-  Land Use
-  Bicycles
-  Pedestrians
-  Public Transportation
-  Transportation System Management/ITS
-  Transportation Demand Management
-  Parking
-  Modal Connections
-  Clean Vehicles

SMCTP 2040 Chapters and AFRP



DRAFT FINAL



November 2018



Stakeholder review process

- Initiated by County Office of Sustainability (OoS)
- Draft results reviewed by TAC and CMEQ
- Draft report presented to TAC, CMEQ, and RMCP
 - Comments provided by other city staff
- Draft final report to C/CAG Board

Conclusion and Next Steps

- Strong foundation for GHG emissions reductions through existing C/CAG plans and programs
- Many programs underway to reduce VMT and support multimodal transportation choices
- Continued focus on SMCTP 2040 implementation and to strengthen policies and programs related to clean vehicles



THANK YOU!



Developing the Publication: Step 1 – Does SMCTP 2040 hit the state goal?

What VMT data is available?

	C/CAG model (for SMCTP 2040)	MTC model (Plan Bay Area)
1990	Baseline year for state goal (assumes 2005 is 15% higher than 1990) ¹	
2005	5,959,194,700	4,093,274,900
2015	6,161,995,000	4,239,689,000
2040	7,463,578,000	4,928,210,000

¹ California Air Resources Board (<https://www.arb.ca.gov/cc/ab32/ab32.htm>)

² Estimated based on MTC ratio of VMT from 2005 to 2015

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VMT

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MTCO2/VMT

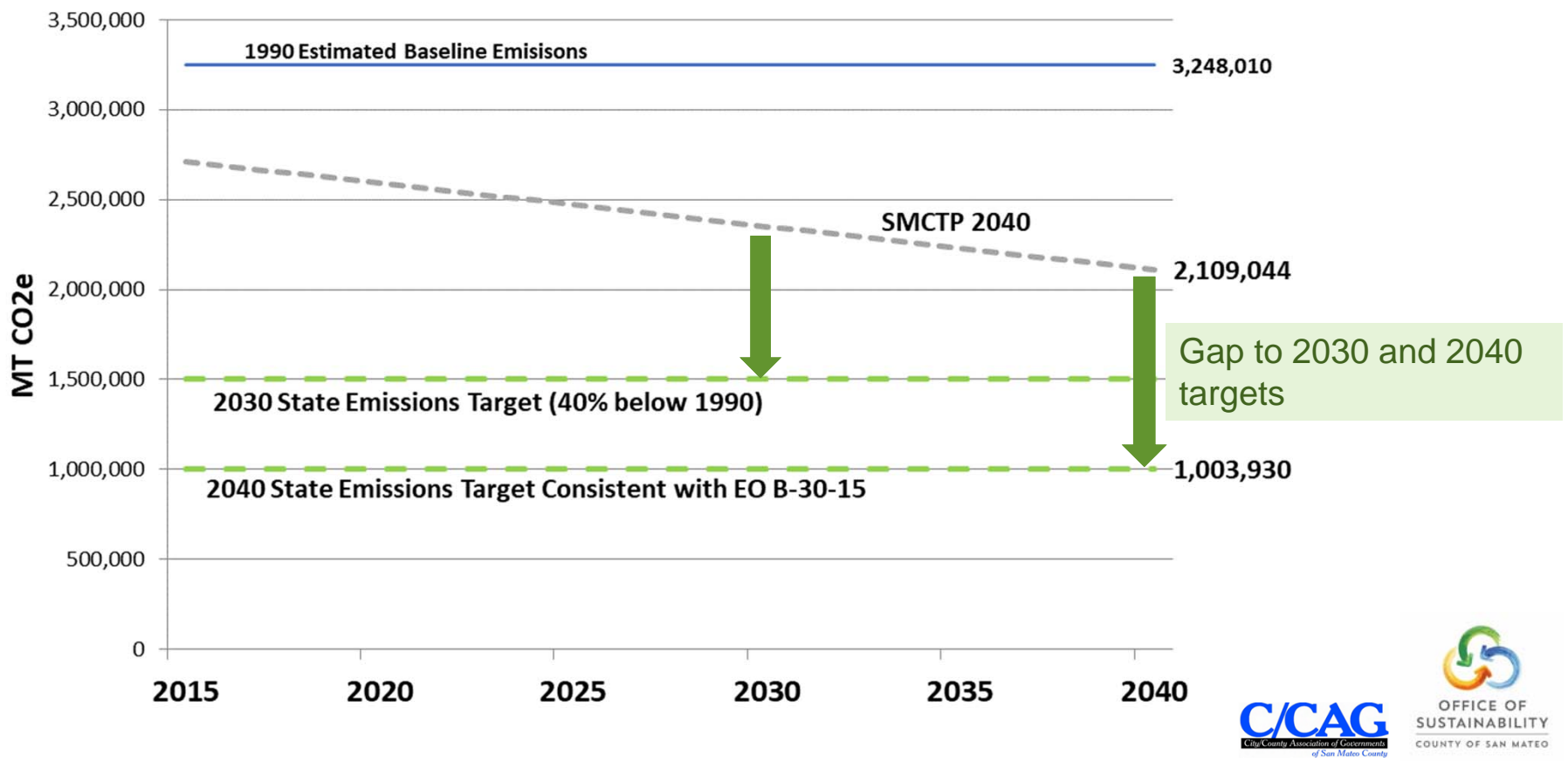
Estimated using CARB
EMFAC2017 (v.1.0.2)

For San Mateo County
(2005, 2015, 2040)

² Estimated based on MTC ratio of VMT from 2005 to 2015

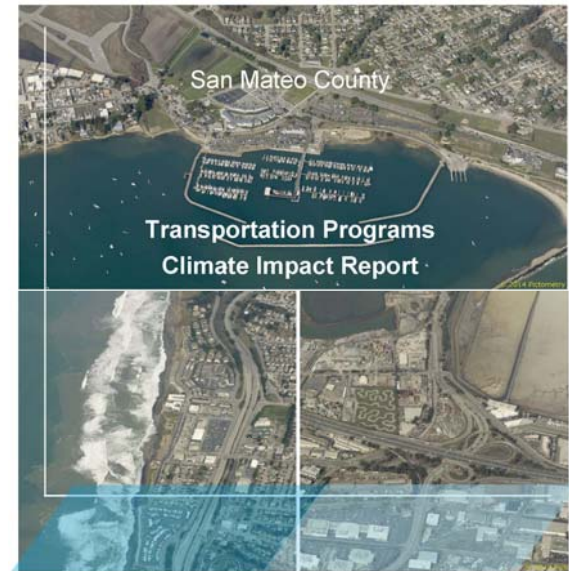
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Developing the Publication: Step 1 – Does SMCTP 2040 hit the state goal?



C/CAG Transportation Programs Climate Impact Report

1. Introduction – Background and Context
2. Our Countywide Transportation Emissions
3. Transportation Climate Action Strategies
 - 3.1 Land Use
 - 3.2 Bicycles
 - 3.3 Pedestrians
 - 3.4 Public Transportation
 - 3.5 Transportation System Management
 - 3.6 Transportation Demand Management
 - 3.7 Parking
 - 3.8 Modal Connectivity
 - 3.9 Clean Vehicles
4. Implementation and Next Steps
5. Conclusion



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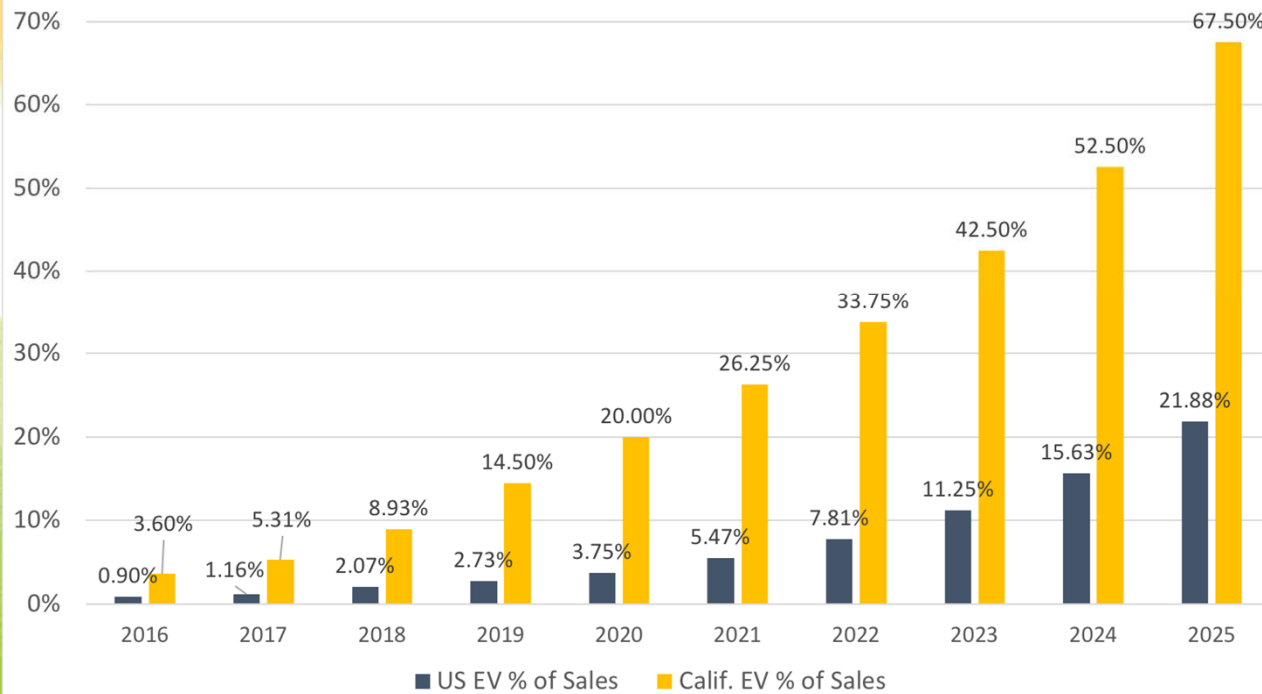
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How does this compare to market forecasts?

EV Share of New Vehicle Sales: US versus California 2016-2025

Data: GoodCarBadCar.net | InsideEVs | Auto Manufacturers Alliance/IHS Markit |
Chart & Projections: Loren McDonald / EVAdoption.com



Bloomberg New Energy Finance:

54% of new car sales by 2040