



air pollution control district
SANTA BARBARA COUNTY

2026 Ozone Plan

Community Advisory Council

August 27, 2026

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Our Mission

To protect the people and the environment of Santa Barbara County from the effects of air pollution.

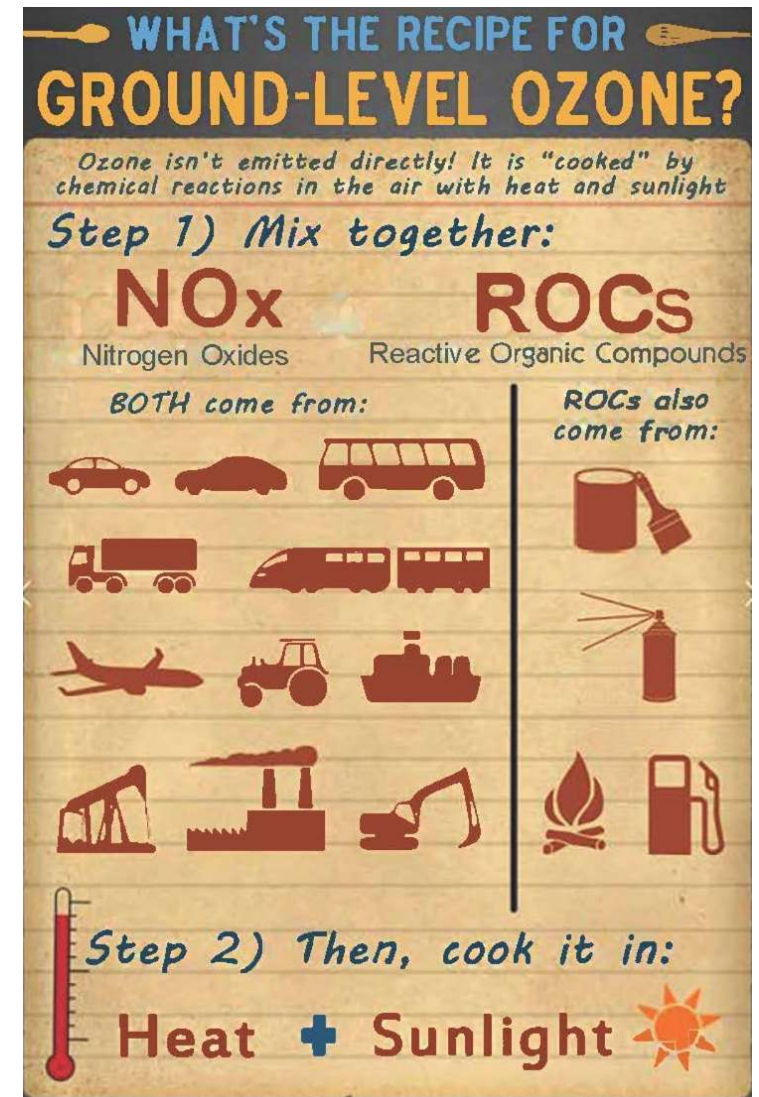


2026 Ozone Plan Structure

- Chapter 1: Introduction
- Chapter 2: Air Quality Trends
- Chapter 3: Emission Inventory & Forecasts
- Chapter 4: Stationary & Area Source Control Measures
- Chapter 5: Transportation Control Measures
- Chapter 6: Voluntary Incentive Strategies
- Chapter 7: Attainment Strategy

What is Ozone?

- Ozone is formed through a reaction of NO_x and ROCs in the presence of heat & sunlight.
 - NO_x: Oxides of Nitrogen (NO and NO₂)
 - Primarily from combustion sources.
 - ROCs: Reactive Organic Compounds
 - Primarily from combustion and coatings/solvents
- High levels of ozone are typically recorded during the afternoon between April - October.
- Breathing ground-level ozone can cause numerous health-related effects.



State Ozone Standards

State Standard	Year Adopted	Ozone Concentration
1-Hour Ozone	1988	0.09 ppm
8-Hour Ozone	2005	0.070 ppm

Designation Years	Attainment Status
1989 - 2015	N
2016 - 2018	NA-T
2019	A
2020 - 2021	N
2022 - 2025	NA-T

- **Attainment (A):**

- No violations in the last 3 years.

- **Nonattainment (N):**

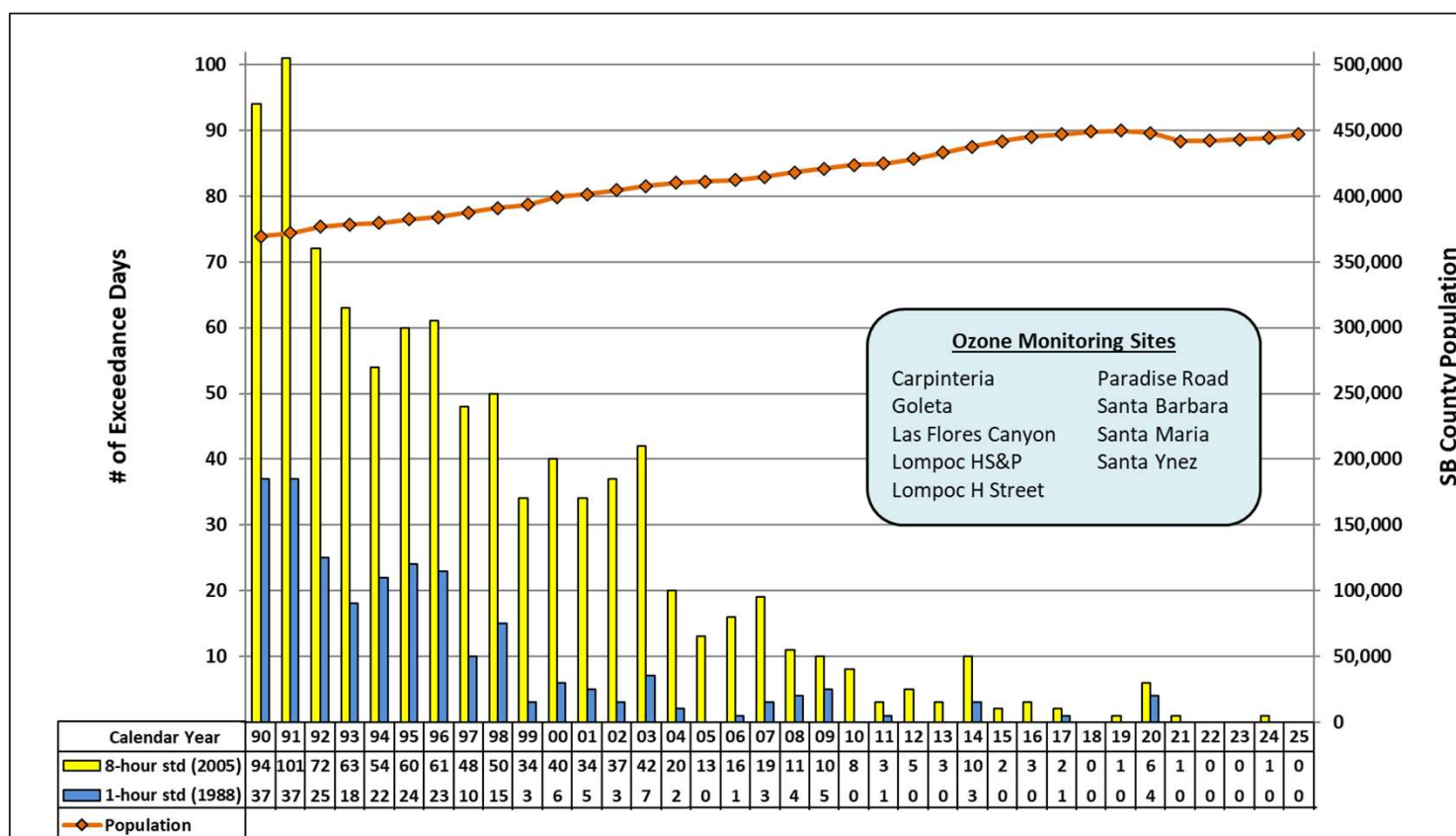
- Violations of the standard in the last 3 years.

- **Nonattainment-Transitional (NA-T):**

- 3 or fewer exceedances in the last year.
- Designation signifies that the region is close to attaining the standard, and additional control measures may be delayed.

Chapter 2: Air Quality Trends

Figure 2-1: Ozone Exceedance Trends vs Population, 1990 - 2025

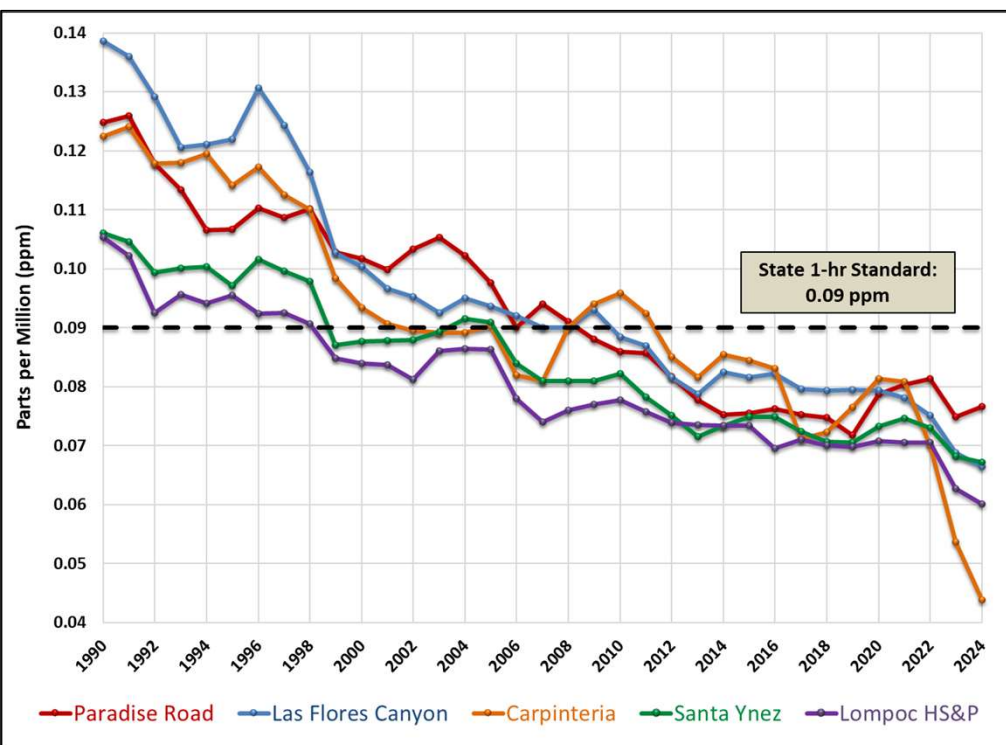


Chapter 2: Air Quality Trends

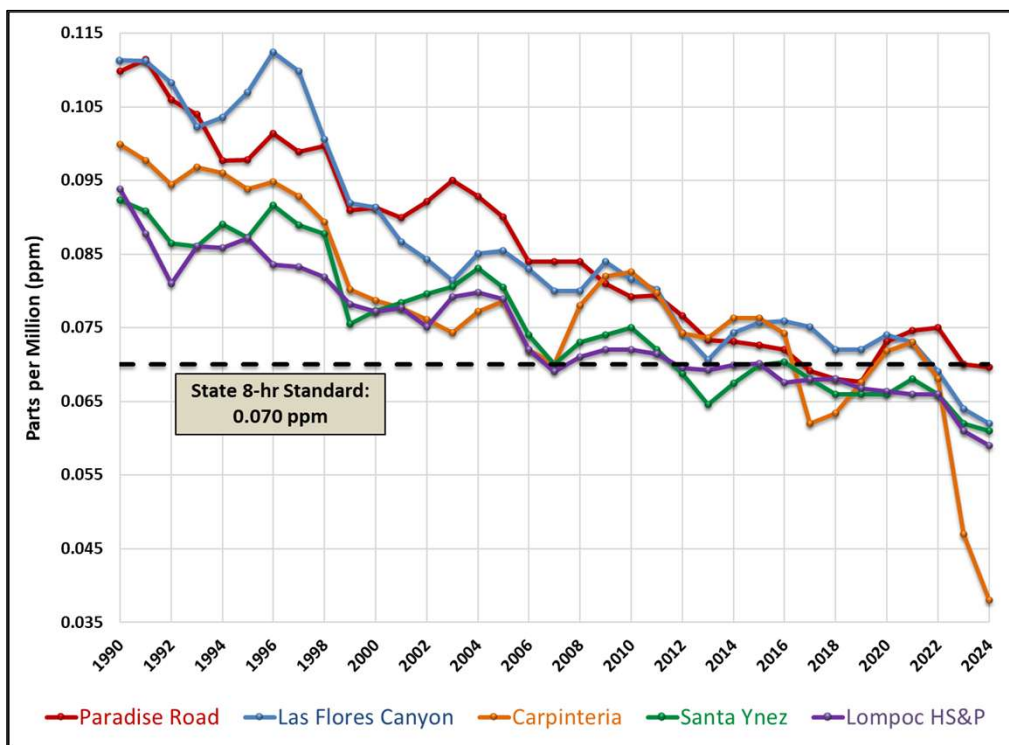
TABLE 2-2: CONTRIBUTING FACTORS TO THE EXCEEDANCE DAYS, 2019 - 2025

Exceedance Days	Contributing Factors	Maximum Ambient Temperature at Monitoring Station
10/6/2019	South-eastern transport winds.	<i>Paradise Road: 89°F Las Flores Canyon: 74°F Carpinteria: 76°F</i>
8/18 - 8/21/2020	Northern California Wildfires with northern transport winds: ▪ LNU (Sonoma–Lake–Napa Unit) Lightning Complex, ▪ SCU (Santa Clara Unit) Lightning Complex, ▪ CZU (San Mateo–Santa Cruz Unit) Lightning Complex.	<i>Paradise Road: 105°F, 104°F, 98°F, 99°F</i>
10/2 - 10/3/2020	Creek Fire in Fresno County.	<i>Las Flores Canyon: 97°F, 91°F Carpinteria: 89°F, 83°F Santa Barbara: 85°F, 80°F</i>
6/17/2021	Heat wave with stagnant conditions.	<i>Paradise Road: 99°F</i>
6/22/2024	Heat wave with southerly transport winds.	<i>Paradise Road: 99°F</i>

Chapter 2: Expected Peak Day Concentrations



1-hour EPDCs (Figure 2-2)



8-hour EPDCs (Figure 2-3)

Chapter 2: Designation Values

Monitor Location	2024 Values: 8-hr O ₃ Standard	
	EPDC (ppm)	Designation Value (ppm)
Paradise Road	0.070	0.073
Las Flores Canyon	0.062	0.061
Carpinteria	0.038	0.038
Santa Barbara	0.056	0.056
Goleta	0.055	0.055
Santa Ynez	0.061	0.060
Lompoc HS&P	0.059	0.062
Lompoc H St.	0.051	0.051
Santa Maria	0.053	0.055

Legend:

Gray: Invalid EPDC

Yellow: Violates standard
(0.070 ppm)

• Key Points:

- To have a valid EPDC, monitoring data for the last 3 years needs to meet all state criteria.
- Invalid EPDCs **cannot** be used to exclude extreme concentration events.

Chapter 2: Air Quality Trends

- **Summary:**

- 1 exceedance of the 8-hour ozone standard at Paradise Road in 2024.
- Paradise Road had an invalid EPDC in 2023, which will affect the final designation values up to and including the 2025 monitoring year.
- Santa Barbara County is expected to remain as Nonattainment-Transitional until the 2026 monitoring data is reviewed and finalized by CARB.
 - **Earliest potential change to ozone attainment: January 2028.**

New Santa Maria Monitoring Station



Chapter 3: Emission Inventory

- **Four major categories:**

- 1) **Stationary Sources:** Engines, Boilers, Gas Stations, Oil Wells, Autobody Shops
- 2) **Area Sources:** Residential Heaters, Consumer Products, Pesticides
- 3) **On-road Vehicles:** Passenger cars, Heavy-duty Trucks, Buses
- 4) **Other Mobile Sources:** Off-Road Equipment, Harbor craft, Trains, Airplanes

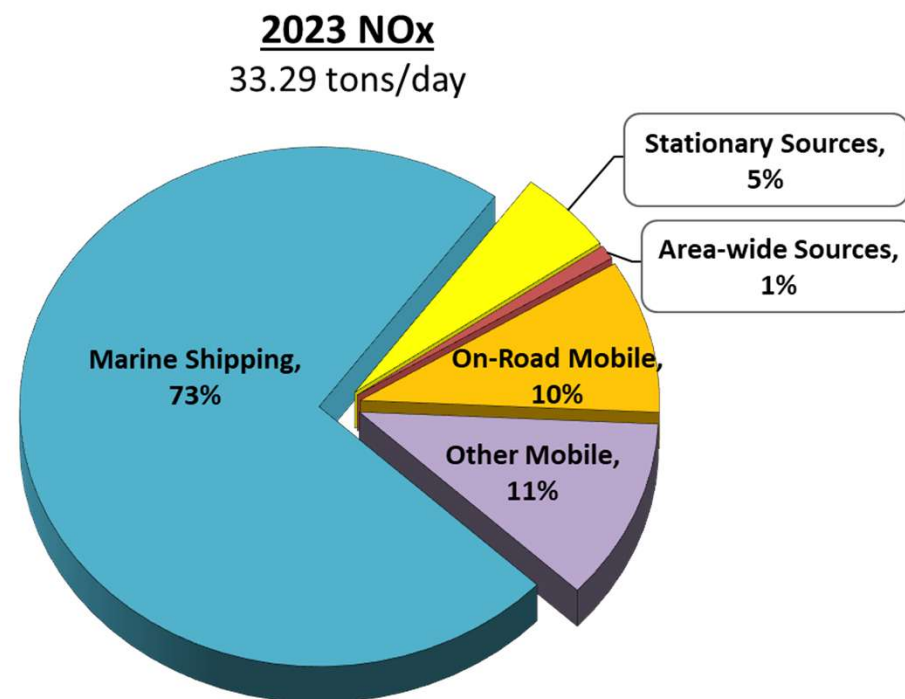
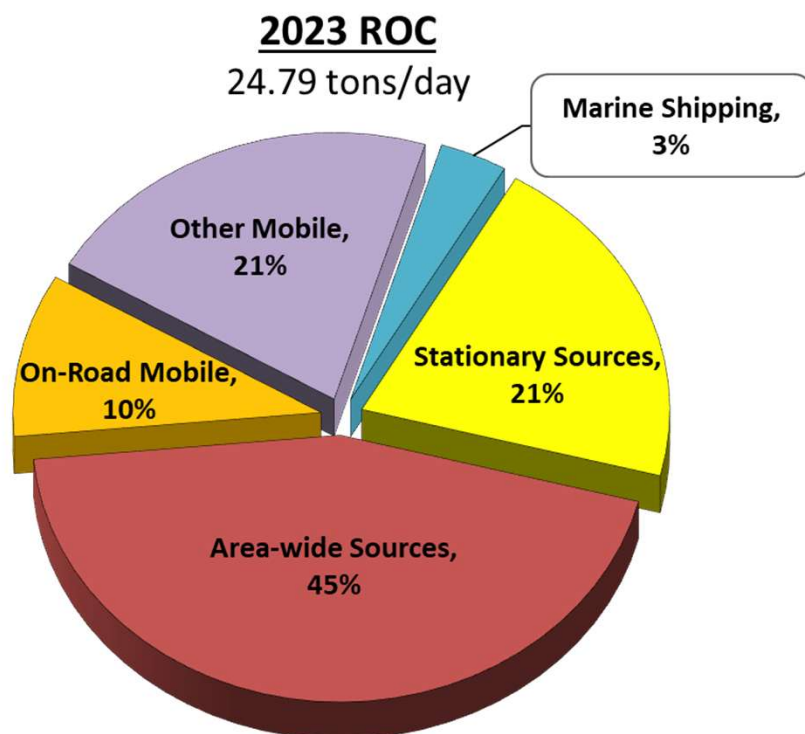
- **Planning inventory:**

- Does not include natural sources.
- Biogenic, Oil & Gas Seeps, and Wildfire emissions are shown for reference in Appendix A.

- **“Base year” (2023) and “Future years” (2035, 2045)**

- Future years apply “growth profiles” and “control profiles” from CEPAM (California Emission Projection Analysis Model).

Chapter 3: Emission Inventory



Chapter 3: Growth Profiles

Table 3-1:

Activity Indicator	Units	Value			Growth Rate from 2023	
		2023	2035	2045	2035	2045
Population	Residents	443,463	457,286	468,941	3%	6%
Housing	Households	151,318	159,930	165,700	6%	10%
Vehicle Miles Travelled	Million Daily Miles	9.34	10.33	10.52	11%	13%
NG Combustion: <i>Residential</i>	Million Therms	60.1	58.6	54.6	-3%	-9%
NG Combustion: <i>Commercial</i>	Million Therms	31.7	33.4	34.7	6%	10%
NG Combustion: <i>Industrial</i>	Million Therms	17.1	17.5	20.3	2%	19%
Petroleum Wells: <i>Onshore</i>	Active Oil & Gas Wells	876	776	702	-11%	-20%
Petroleum Wells: <i>Offshore</i>	Active Oil & Gas Wells	106	173	157	64%	48%
OGVs: <i>Auto Carriers</i>	Growth Rate	1.00	1.34	1.60	34%	60%
OGVs: <i>Containerships</i>	Growth Rate	1.00	1.39	1.72	39%	72%
OGVs: <i>Tankers</i>	Growth Rate	1.00	1.17	1.01	17%	1%

Chapter 3: Growth Profiles – Oil & Gas

- **Onshore Oil & Gas:**

- Assumes a 1% reduction in active wells each year.
 - Statewide Rate: 2.9% reduction per year.
- Does not include any impacts from the potential County ordinance under development, which may phase-out existing oil & gas operations in the future.

- **Offshore Oil & Gas:**

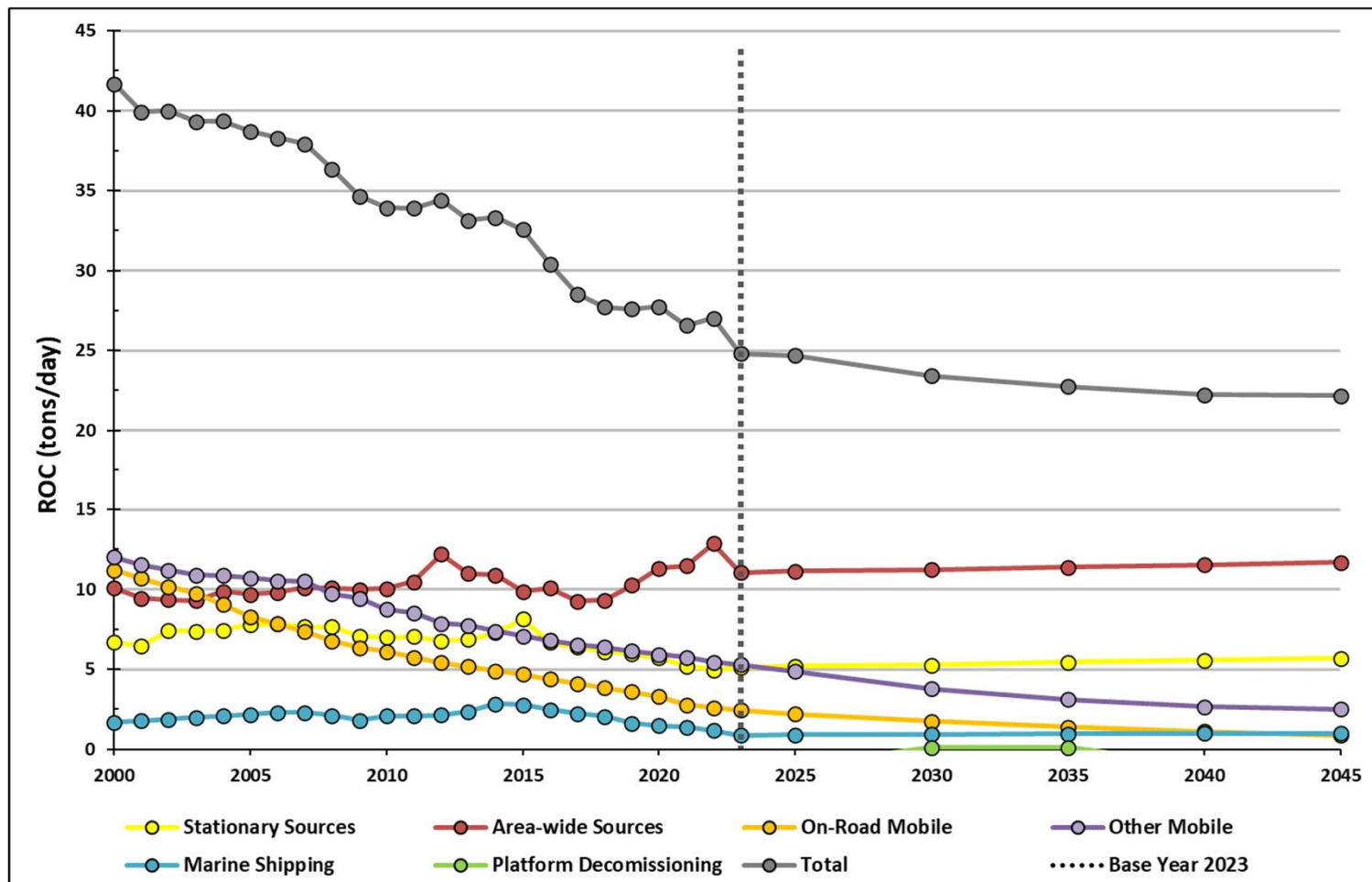
- Assumes a 1% reduction in active wells each year.
- Assumes the Sable Santa Ynez Unit is fully operational in Future Year 2035.
- Does not include any new offshore leases and/or platforms that may be authorized under the National OCS Oil and Gas Leasing Program.
- Includes emissions associated with the decommissioning of existing platforms as a separate line item.

Chapter 3: ROC + NOx Inventory Forecast

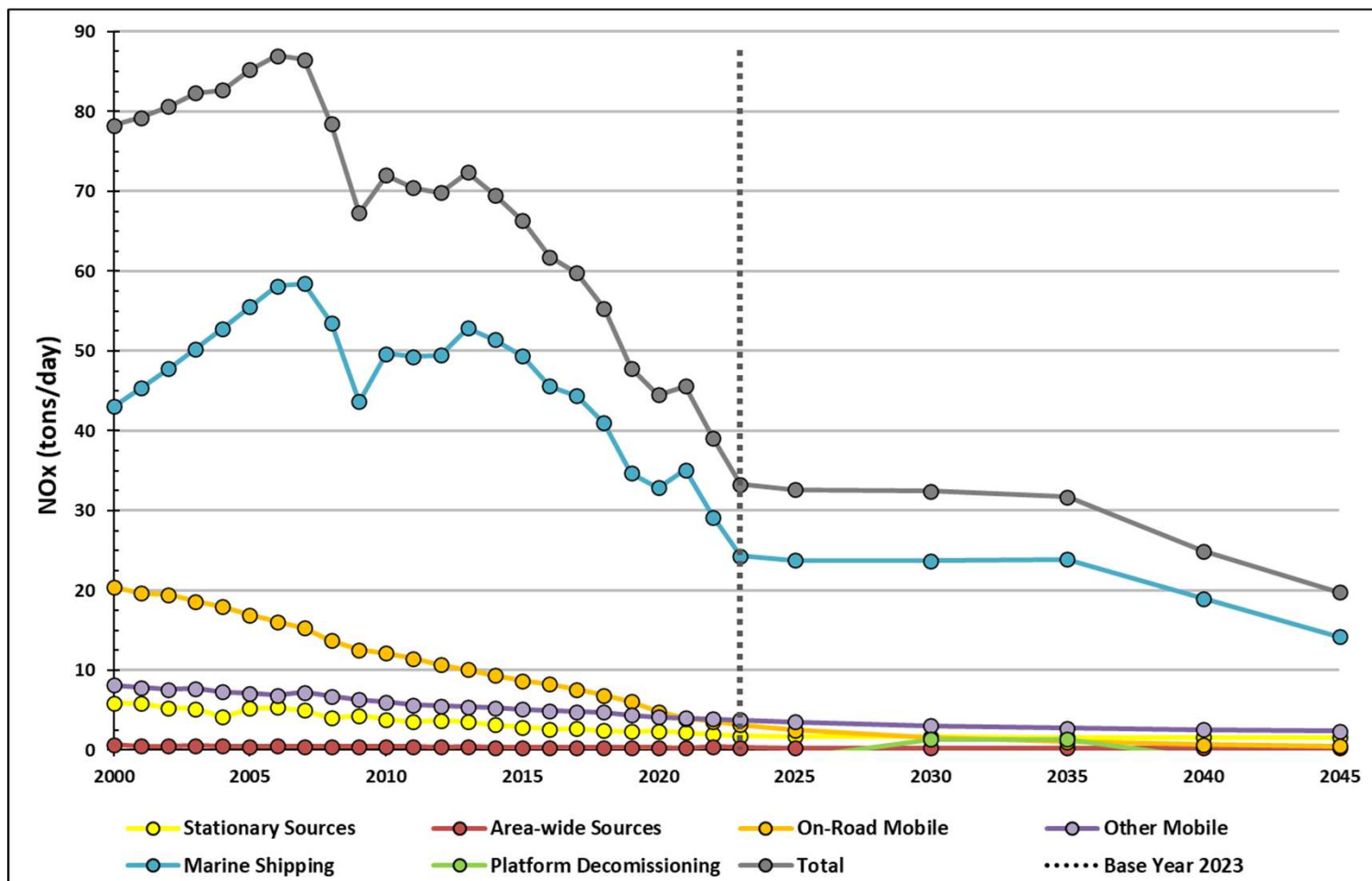
Table 3-2:

Source Category	ROC (tons per day)			% Change (2023-2045)	NOx (tons per day)			% Change (2023-2045)
	2023	2035	2045		2023	2035	2045	
Stationary Sources	5.12	5.43	5.70	11%	1.76	1.62	1.63	-7%
Area-wide Sources	11.05	11.38	11.69	6%	0.30	0.26	0.25	-18%
On-Road Vehicles	2.46	1.40	0.88	-64%	3.18	1.07	0.48	-85%
Other Mobile	5.28	3.10	2.51	-52%	3.76	2.76	2.42	-36%
Marine Shipping	0.88	0.95	0.98	12%	24.29	23.88	14.20	-42%
Platform Decommissioning	-	0.11	0.00	-	-	1.33	0.00	-
ERCs	-	0.39	0.39	-	-	0.81	0.81	-
Total	24.79	22.76	22.16	-11%	33.29	31.73	19.77	-41%

ROC Emission Trends By Source Category



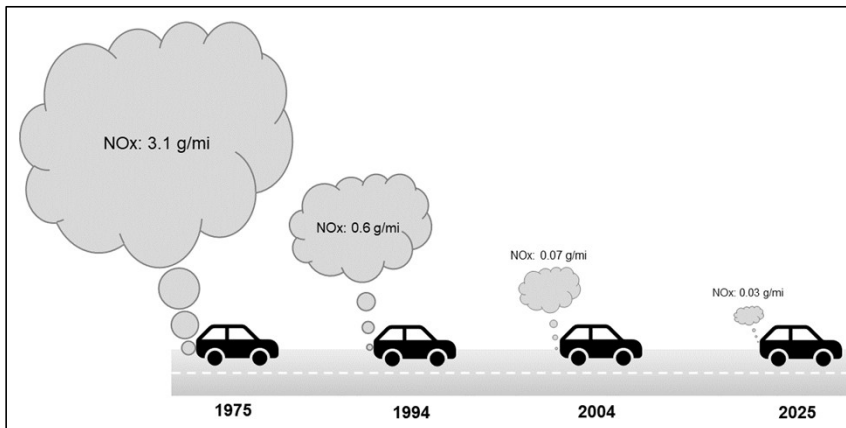
NOx Emission Trends By Source Category



Chapter 3: Emission Inventory

- **Summary:**

- District works with CARB to refine methodologies to accurately depict both the current and future emission inventory.
- On-road and Off-road inventories will decrease in future forecast years due to existing regulations.
- Marine Shipping continues to be the largest contributor to the regional inventory.



Chapter 4: Stationary & Area Source Control Measures

- **Control Measure Categories:**

- 1) Adopted Measures
- 2) Proposed Measures
- 3) Contingency Measures
- 4) Further Study Measures

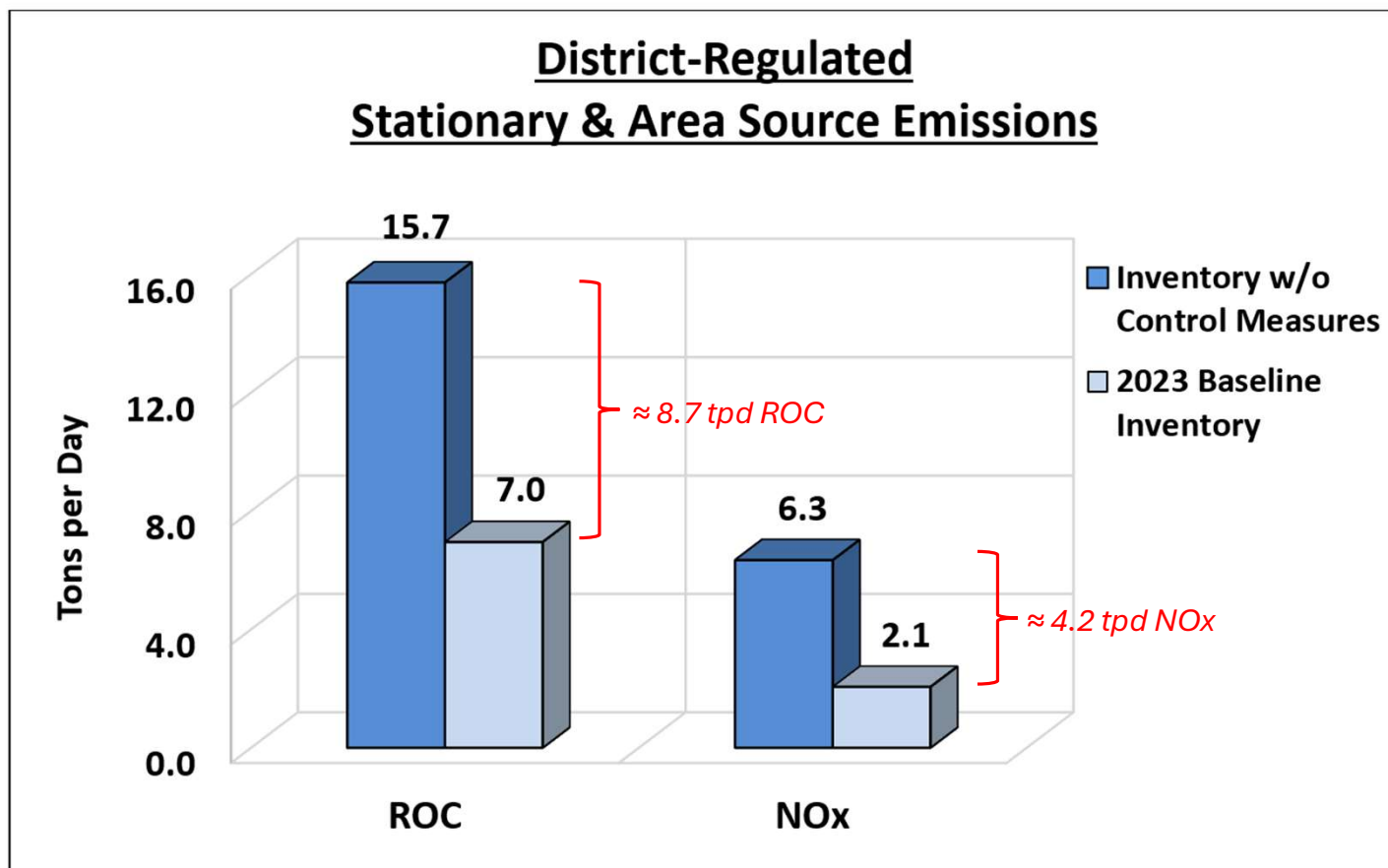
- **Adopted 35 control measures since the original 1991 Clean Air Plan.**

- Primarily based on the “every feasible measure” strategy to expeditiously attain and maintain the ozone standard.
- All adopted measures have gone through the established rule development process.
- The control measures have achieved around 3,200 tons/year of ROC reductions and 1,500 tons/year of NOx reductions based on staff report estimates.

[Tables 4-1 and 4-2; ≈ 8.7 tons/day ROC Reductions and ≈ 4.2 tons/day NOx Reductions]

Chapter 4: Stationary & Area Source Control Measures

FIGURE 4-1: ESTIMATED IMPACT OF DISTRICT CONTROL MEASURES



Chapter 4: New Measure Review

- **For the 2026 Plan, staff analyzed potential rules:**
 - 1) Compared our rules to those adopted by other Air Districts;
 - 2) Considered the magnitude and cost-effectiveness of the emission reductions;
 - 3) Considered the feasibility to implement the potential new requirements.
- **Also considered the Nonattainment-Transitional designation requirements:**
 - 1) Air quality trends;
 - 2) Current and projected emission inventory;
 - 3) District is NO_x-limited → NO_x reductions are more effective at reducing regional ozone.
- **Staff recommends no new stationary source measures for adoption in the next 3 years.**

Chapter 4: Other Measures

- **Contingency Measures:**

- Measures that must be adopted if CARB determines that the District isn't making adequate progress.
- 2026 Plan includes two contingency measures:
 - 1) Rule 321: Solvent Cleaning Machines and Solvent Cleaning
 - 2) Rule 351: Surface Coating of Wood Products

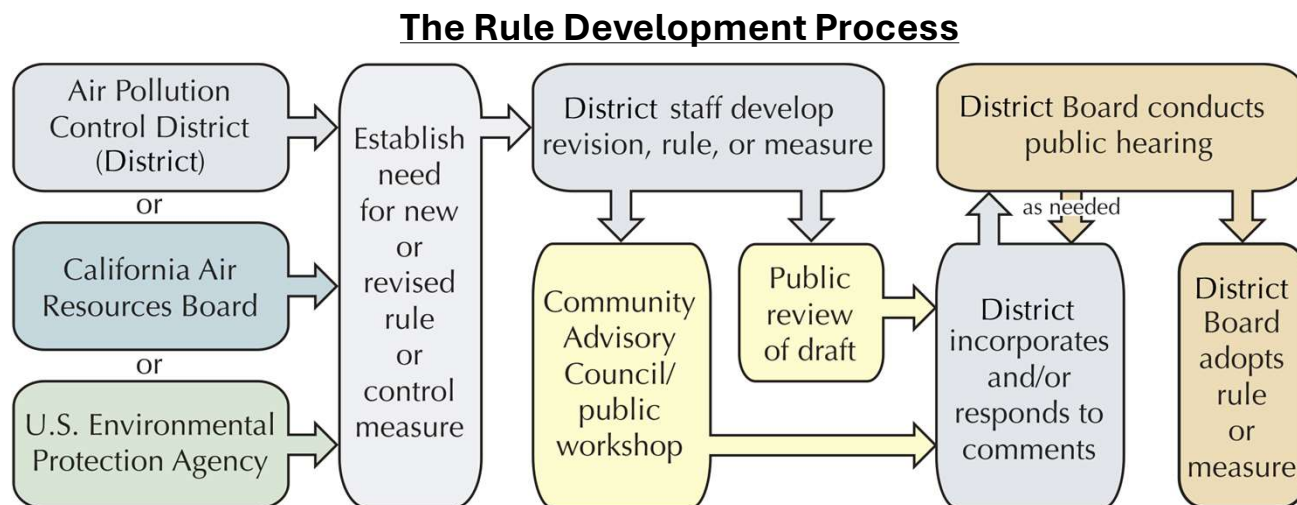
- **Further Study Measures:**

- Measures that the District plans to track and investigate further if necessary.
- 2026 Plan includes two further study measures:
 - 1) New Rule: Organic Material Composting
 - 2) Rule 352: Residential Furnaces & Water Heaters

Chapter 4: Stationary & Area Source Control Measures

- **Summary:**

- District has already adopted 35 cost-effective control measures to help attain the ozone standards.
- The County is projected to be in attainment within the next 3-year period, and so no new measures are recommended to be incorporated into the Ozone Plan at this time.

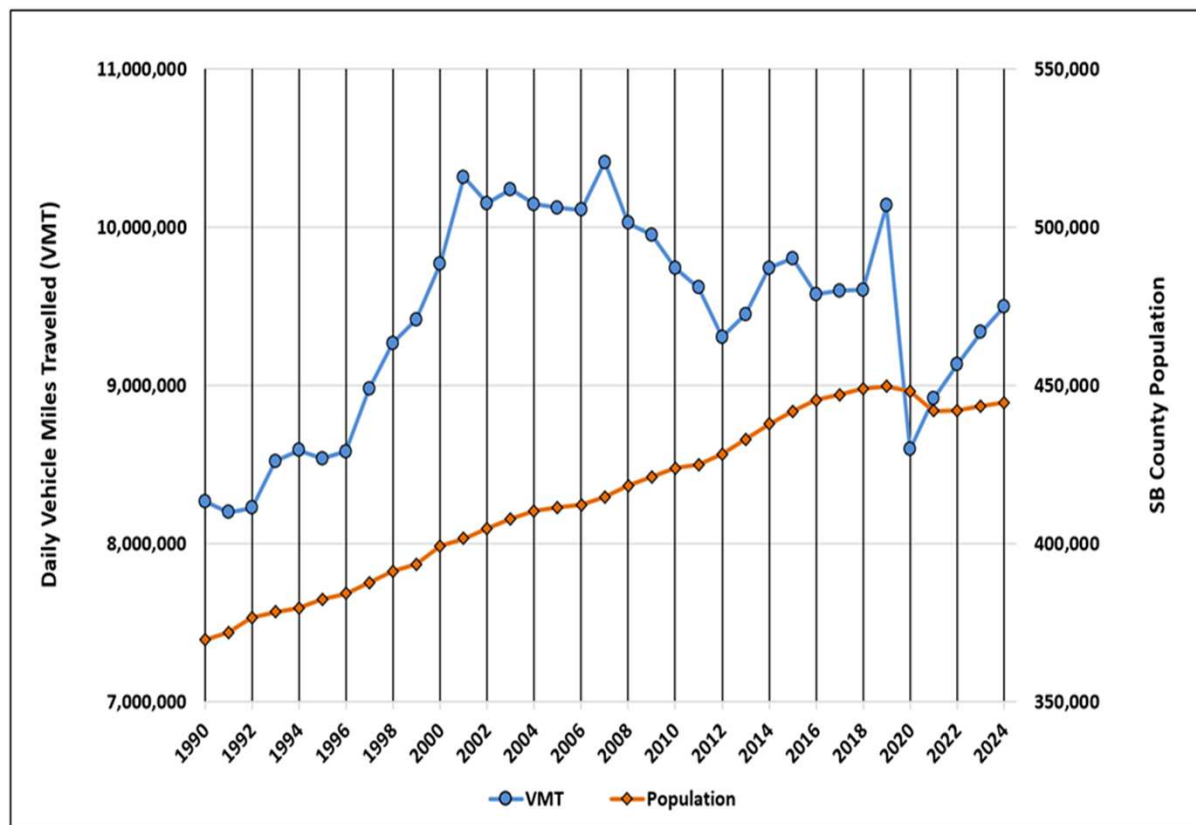


Chapter 5: On-Road TCMs

- **Transportation Control Measures (TCMs):**

- Defined as “any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.”
- TCMs reduce emissions from on-road motor vehicles by:
 - 1) improving the existing transportation system to allow motor vehicles to operate more efficiently;
 - 2) inducing people to change their travel behavior to less polluting modes; or
 - 3) ensuring emission control technologies are fully and expeditiously realized.
- SBCAG is responsible for developing new TCMs.

Chapter 5: On-Road Vehicle Activity Trends



- **Highlights:**

- VMT growth significantly outpaced population growth during the 1990s.
- VMT was relatively stable during 2000s and 2010s, with a dip and recovery due to the Great Recession.
- VMT significantly dropped due to the COVID-19 pandemic.

Chapter 5: Project Highlights

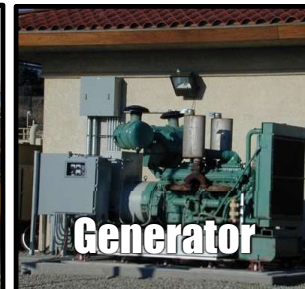
TCM	TCM Name	Project Sponsor	Project Description
T-6	High-Occupancy Vehicle Lanes	SBCAG, Caltrans	US 101 HOV Lanes: Carpinteria
T-13	Accelerated Retirement of Vehicles	SBCAPCD	Old Car Buy Back Program
T-18	Alternative Fuels	SBCAPCD, C5	U.S. Department of Energy's Clean Cities & Communities Program



Chapter 6: Voluntary Grant & Incentive Strategies

- **Highlights:**

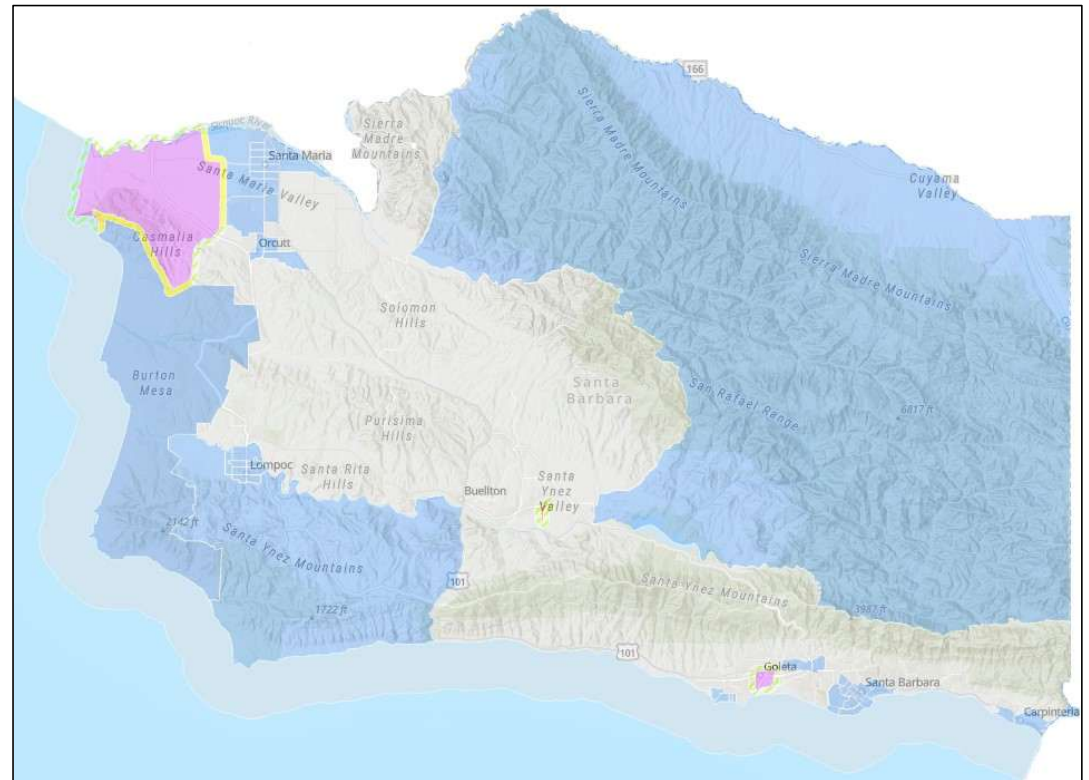
- Since 1988, District has awarded over \$60 million to fund projects that voluntarily reduce emissions.
- Grants and incentives funded with Carl Moyer, Community Air Protection (AB 617), FARMER, Woodsmoke Reduction, Clean Air Fund, and DMV revenue.
- Prioritize projects in Disadvantaged and Low-Income Communities and utilizing Zero-Emission Technologies.



Chapter 6: Voluntary Grant & Incentive Strategies

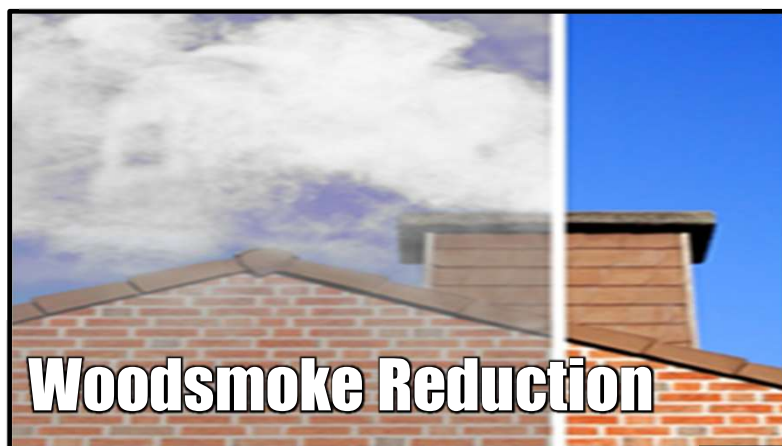
- **Disadvantaged Communities**

- 1) Guadalupe census tract
- 2) Old Town Goleta census tract
- 3) SYV Band of Chumash Indians
- 4) Eastside Santa Barbara census tract



<https://webmaps/arb.ca.gov/PriorityPopulations/>

Chapter 6: Voluntary Grant & Incentive Strategies



Chapter 7: Attainment Strategy

- Connects key points from previous chapters.
- Summarizes how the District plans to attain the state ozone standard:
 - 1) Stationary Source Program
 - 2) Emission Inventory Tracking
 - 3) Land-use/CEQA Review
 - 4) Transportation Control Measures
 - 5) CARB Mobile Source Strategy
 - 6) Voluntary Grant & Incentive Strategies
 - 7) Prescribed Burn Program
 - 8) Public Awareness and Education

Federal Waiver Discussion

- Under the current federal administration, recent CARB regulations have had their CAA waivers partially or fully disapproved, which will result in increased mobile source emissions and health impacts across the state.

**TABLE 7-1: ESTIMATED EMISSION INCREASES DUE TO RECENT FEDERAL ACTIONS IN
SANTA BARBARA COUNTY, BY REGULATION**

State Regulation	Emission Increases in Calendar Year 2037 (tons per day)		
	NOx	ROC	PM _{2.5}
Heavy-Duty I&M (Out of State Reqs.)	0.142	0	0.001
Heavy-Duty Omnibus	0.020	0	0
Advanced Clean Trucks	0.061	0.004	0.002
Advanced Clean Fleets	0.079	0.007	0.004
Advanced Clean Cars II	0.060	0.113	0.006
In-Use Locomotive	0.237	0.003	0.005
TOTAL – ALL REGULATIONS	0.599	0.127	0.019

Closing Remarks

- **Staff Recommendation:**

- Discuss and consider recommending that the APCD Board of Directors adopt the 2026 Ozone Plan

- **Timeline for the 2026 Ozone Plan:**

- August 27, 2026 CAC Meeting Present complete Plan
- October 15, 2026 Board Meeting Target adoption hearing

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