

2022 Report to the California Legislature on the San Joaquin Valley Air Pollution Control District's Use of AB 2522 Motor Vehicle Fees to Achieve and Maintain Ambient Air Quality Standards

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Executive Summary

Assembly Bill (AB) 2522 (Arambula, Chapter 677, Statutes of 2008) authorizes the San Joaquin Valley Air Pollution Control District (District or SJVAPCD) to assess a per-year, per-motor vehicle fee to provide funding for incentive-based programs that achieve emissions reductions needed to meet and maintain federal ambient air quality standards. As required under Health and Safety Code section 40613, the California Air Resources Board (CARB) is providing this report to the California Legislature to assess the District's use of the fee.

CARB believes the District is spending the fees in a manner consistent with AB 2522. The District is successfully and innovatively using fees assessed pursuant to AB 2522 to fund District-run incentive-based programs that achieve emissions reductions from mobile sources that are critically needed to meet federal air quality standards. The District administers a suite of effective incentive programs, including long-standing and popular programs to repair high-polluting passenger vehicles and to replace heavy-duty trucks, agricultural tractors, and school buses, among many others. Furthermore, the District has complied with requirements of AB 2522 by convening and soliciting spending recommendations from an environmental justice advisory committee and by spending more than the minimum statutorily required amount in disproportionately impacted environmental justice communities.

In total, fees assessed pursuant to AB 2522 have provided \$346.7 million in grants for a wide range of projects in the San Joaquin Valley (Valley) from September 2011 when the fee became effective through March 17, 2022. One hundred percent of fees collected has been used for grants; no funds have been used for District administrative costs. Grant recipients have contributed an additional \$732.3 million in matching funds, resulting in a total combined District and grant recipient investment of \$1.08 billion. Projects funded with fees collected pursuant to AB 2522 have resulted in the elimination of 17,852 lifetime tons of harmful emissions throughout the Valley. The District has spent 72.4 percent of AB 2522 funds, or \$251 million, on projects to mitigate air pollution impacts in disproportionately impacted environmental justice communities.

Background

The San Joaquin Valley experiences some of the worst air quality in the nation. The region, bounded on three sides by mountains and frequently experiencing stagnant weather conditions that trap pollutants on the Valley floor, is nonattainment for multiple federal air quality standards for ozone and particulate matter, pollutants that have significant harmful impacts on the health of Valley residents. Mobile sources, including passenger vehicles, heavy-duty trucks, and off-road equipment, are major contributors to this pollution. To meet air quality standards and provide clean air for Valley residents, substantial and rapid reductions in mobile source emissions are necessary. State regulations will achieve the majority of the needed reductions, but voluntary incentive-based measures spearheaded by the District are also critical for accelerating the rate of emissions reductions.

AB 2522 authorizes the District to assess a per-year, per-motor vehicle fee to provide funding for such incentive-based programs, to achieve emissions reductions needed to meet and

maintain federal air quality standards.¹ Pursuant to AB 2522, the District approved a \$12 fee in October 2010.² The fee is effective only after CARB has found and filed with the Secretary of State that the District (1) “has undertaken all feasible measures to reduce nonattainment air pollutants from sources within the District’s jurisdiction and regulatory control” and (2) has notified CARB that the fee has been adopted and provided an estimate of total funds generated annually by the fee.³ In December 2010, CARB filed an Executive Order⁴ making the necessary findings, noting that the District was implementing stringent emissions control measures, and that the District had notified⁵ CARB that the fee had been adopted and was anticipated to generate approximately \$34 million annually. The fee was effective as of September 2011.

AB 2522 authorizes the District to assess a fee in any of fiscal years 2009/2010 through 2023/2024, although the District may only assess the fee after the 2012/2013 fiscal year if the United States Environmental Protection Agency (U.S. EPA) has approved the District’s proposed classification of its nonattainment status for ozone from Severe to Extreme.⁶ Since U.S. EPA approved this classification in May 2010,⁷ the District may assess the fee through the 2023/2024 fiscal year. The District Governing Board voted to approve continuing to receive and use the fee in April 2015⁸ and again in April 2017⁹.

District Grant Programs Supported with AB 2522 Funds

Fees assessed pursuant to AB 2522 play an essential role in funding District incentive-based grant programs that achieve necessary emissions reductions from mobile sources. While regulating emissions from mobile sources falls within the State’s authority, and CARB regulations and standards are the foundation of the statewide strategy to clean the air and attain air quality standards, the District’s many voluntary incentive-based measures complement CARB’s regulations and achieve critical reductions on accelerated timelines. Ongoing, stable funding for the District’s incentive-based programs is vital, and fees assessed pursuant to AB 2522 make up an important part of the funding stream.

¹ H&SC section 40612(a)(1)

² SJVAPCD, Resolution 10-10-14, October 21, 2010. https://www.valleyair.org/Workshops/postings/2011/5-19-11-rule3170/FinalDraftStaff_3170.pdf (See Attachment D, pdf page 104)

³ H&SC sections 40612(c)(1)(A) and 40612(c)(1)(B)

⁴ CARB, Executive Order G-10-126, December 10, 2010. https://www.valleyair.org/Workshops/postings/2011/5-19-11-rule3170/FinalDraftStaff_3170.pdf (See Attachment F, pdf page 113)

⁵ SJVAPCD, “Request for Findings Required by California Health and Safety Code Section 40612,” November 10, 2010. https://www.valleyair.org/Workshops/postings/2011/5-19-11-rule3170/FinalDraftStaff_3170.pdf (See Attachment D, pdf page 102)

⁶ H&SC section 40612(b)

⁷ 75 FR 24409, May 5, 2010. <https://www.govinfo.gov/content/pkg/FR-2010-05-05/pdf/2010-9599.pdf>

⁸ SJVAPCD, Resolution 15-4-7B, April 15, 2015.

http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2015/April/final/07.pdf

⁹ SJVAPCD, Resolution 17-4-18, April 20, 2017.

http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2017/April/final/13.pdf

AB 2522 funds support a wide range of projects across nearly two dozen grant programs. Grant programs for off-road equipment, heavy-duty trucks, and light-duty vehicles receive about 79 percent of the funds (Figure 1). The total annual grant amount has ranged from approximately \$25 million to \$40 million, with recent years consistently seeing in excess of \$30 million (Figure 2). Grants are available to Valley residents, businesses, and public agencies, and help reduce emissions from agricultural equipment, construction equipment, heavy-duty trucks, passenger cars, school buses, locomotives, and more (Table 1). Since September 2011, the District has funded more than 80,100 individual projects using these funds.

Figure 1. Grant Program Components Funded with Fees Assessed Pursuant to AB 2522

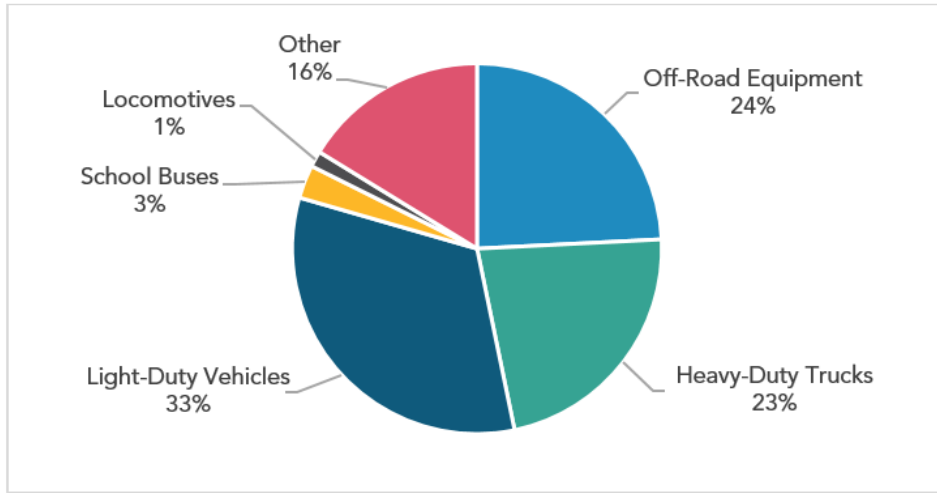


Figure 2. Annual Total Amounts of Funding Provided from Fees Assessed Pursuant to AB 2522

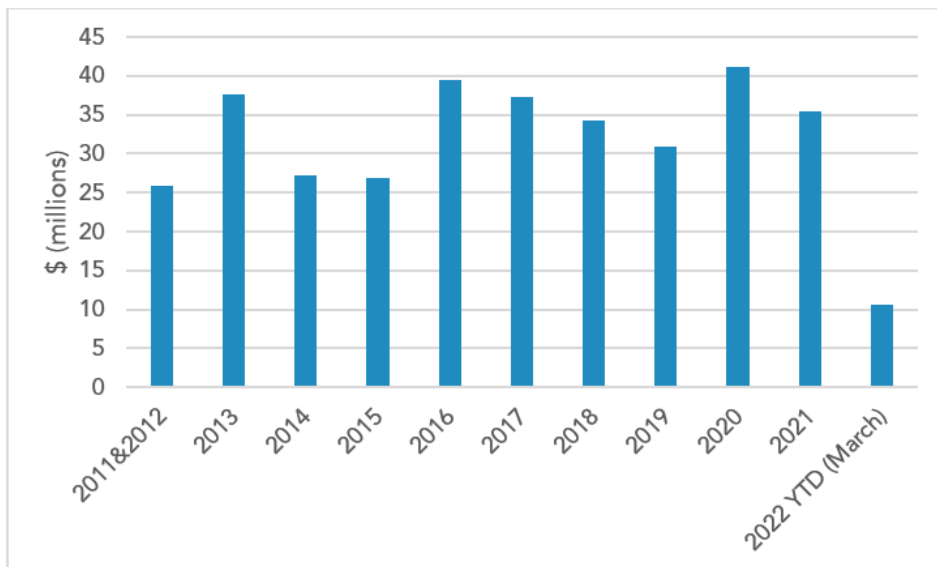


Table 1. Funding Provided from Fees Assessed Pursuant to AB 2522 (\$ millions), September 1, 2011, through March 17, 2022, (Year-to-Date [YTD]) by Grant Program Component

Grant Program Component	2011 & 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 YTD	Total
Off-Road Equipment (ag tractors, construction equipment, etc.)	3.49	20.01	6.24	7.38	9.62	14.05	11.72	4.06	3.59	3.11	0.62	83.89
Heavy Duty Truck Replacement	4.97	12.04	8.97	9.15	12.46	8.23	4.34	3.80	4.41	4.47	0.61	73.45
High Polluting Vehicle Repair	17.10		0.60		2.95	2.68	3.44	3.73	5.98	8.49	1.78	46.76
Public Benefits - Light-Duty Alternative Fuel Vehicles		4.85	3.22	5.98	4.30	2.44	2.72	5.15	8.10	5.82	1.13	43.71
Drive Clean - Light-Duty Alternative Fuel Vehicles					3.74	3.28	2.75	5.12	4.23	1.24	2.55	22.90
Dairy Feed Mixer Electrification							5.54	0.92	5.63	4.88	3.17	20.13
EV Charger-Public				0.07	0.27	0.45	1.47	2.08	3.82	1.68	0.43	10.28
School Bus Replacement & Retrofit		0.47	2.68	0.20	4.29	0.74	1.50	0.21				10.09
Alternative Fuel Infrastructure			4.98		0.41	2.76	0.63					8.78
Community Improvement Vehicle Use Reduction								1.84	2.82	0.19		4.85
Locomotives	0.34					2.50				1.97		4.80
Heavy Duty Truck Fleet Expansion								1.05	1.03	2.60		4.68

Grant Program Component	2011 & 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 YTD	Total
Advanced Transit & Transportation Projects with Public Agencies		0.26	0.50	3.49								4.24
EV Charger-Private							0.15	1.51	0.81	0.53	0.15	3.15
Technology Advancement				0.21	0.07			1.00				1.28
Enhanced Transportation Strategy				0.07	1.16							1.23
Lawn & Garden Commercial Replacement								0.36	0.36	0.27	0.10	1.09
Van Pool Vouchers							0.03	0.01	0.30	0.19	0.04	0.57
Transit Bus Subsidy				0.39		0.03	0.04	0.04	0.02			0.53
Bicycle Infrastructure					0.12	0.09						0.21
Alternative Fuel Training								0.002	0.02			0.02
Heavy Duty Truck Reuse Program	0.01											0.01
Total	25.91	37.62	27.20	26.94	39.40	37.24	34.34	30.89	41.11	35.44	10.58	346.7

The District grant programs which receive funding from fees assessed pursuant to AB 2522, listed above in Table 1, reduce emissions from a range of mobile source-related areas. These programs are described briefly below. More information on these and other District programs can be found at www.valleyair.org/grants and in the Incentive-Based Strategy appendix of the 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards at www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/E.pdf.

Off-Road Equipment

The District provides incentive funds for the replacement of in-use, off-road mobile equipment engaged in agricultural operations. Replacing old, dirty pieces of agricultural equipment with newer, cleaner equipment through voluntary incentives accelerates emissions reductions for the Valley and is highly cost-effective. The District also runs a first-of-its-kind Tractor Trade-Up Pilot Program which provides incentives to pairs of applicants whereby owners of old, dirty tractors will trade up to a newer, cleaner tractor supplied by grant awardees in exchange for a monetary incentive from the District for the purchase of a new, cleaner model. In addition to the agricultural-focused programs, the District's Off-Road Replacement Program provides incentives to replace heavy-duty off-road mobile equipment used in construction and other non-agricultural services.

Heavy-Duty Trucks

The District's Truck Replacement Program is a critically important voluntary incentive program to replace older on-road heavy-duty trucks with the cleanest available technologies. The program provides incentives for truck technologies that meet zero- and ultra-low-NOx emissions standards and includes an option to support clean heavy-duty vehicle fleet expansion. These incentive funds help fleets transition to cleaner-than-required technologies years ahead of statewide mandates. To date, 2,232 trucks have been replaced with new, cleaner technology.

Light-Duty Vehicles

High-Polluting Vehicle Repair

The District's award-winning Tune In & Tune Up program, operated in partnership with Valley Clean Air Now, helps owners of high-polluting vehicles take voluntary action to improve air quality by subsidizing expensive smog repairs. With a focus on outreach to low-income communities, the program provides Valley residents with the opportunity and necessary funding to make emissions-related repairs to their vehicles, significantly reducing emissions throughout the Valley, particularly in disadvantaged communities. To date, the District has hosted 179 weekend screening events with 60,800 vehicle repairs completed.

Light-Duty Alternative Fuel Vehicles (Public and Private)

The District has incorporated a vehicle replacement component into the Tune In & Tune Up program. This first-of-its-kind program identified vehicles at Tune In & Tune Up events which

were not good candidates for repair and provided additional funding to retire and replace those vehicles with cleaner, more efficient vehicles. Based on the initial success, this pilot program served as a model for developing the statewide Enhanced Fleet Modernization scrap only and the Clean Cars 4 All scrap-and-replace programs. In addition, the District's Drive Clean! program provides rebates to Valley residents and businesses for the purchase or lease of new, clean-air vehicles. For Valley public agencies, the New Alternative Fuel Vehicle Purchase program provides funding for the purchase of new, light duty alternative fuel vehicles including natural gas, electric and plug-in hybrids.

School Buses

School bus replacements and retrofits play a vital role in reducing school children's exposure to both cancer-causing and smog-forming pollution. The District's school bus replacement and retrofit programs provide grant funding for new, safer school buses and air pollution control equipment (retrofit devices) on buses already on the road. To date, 154 school buses have been replaced with cleaner technology.

Locomotives

Diesel particulate matter emissions from locomotives present a health risk for Valley residents, particularly those who live near rail yards. The District provides grant funding to replace old, high-polluting locomotives with newer, cleaner engines.

Alternative Fuels

EV Charger (Public and Private)

The District's "Charge Up!" electric vehicle charger incentive program provides funding for public agencies, businesses, and owners of multi-unit dwellings to install electric vehicle chargers. These chargers will support existing electric vehicle owners and encourage the growth of the clean technology in the Valley.

Alternative Fuel Training

This program provides funding to develop and advance the education of personnel from qualifying agencies that are using alternative fuel or are transitioning to alternative fuels on the mechanics, safe operation, and maintenance of alternative fuel vehicles and infrastructure.

Alternative Fuel Infrastructure

The District offers incentive programs for the purchase and installation of alternative fueling infrastructure to support clean vehicle technology. These programs complement the District's grants to incentivize clean vehicle technology adoption.

Alternative Modes of Transportation

Transit Bus Subsidy

This program provides public transportation pass subsidies to public agencies to encourage commuter rideshare as an alternative to single occupant vehicle commutes for daily long-distance travel.

Van Pool Voucher

This program provides subsidies to Valley residents for commuting via rideshare rather than driving alone. Reducing miles traveled by encouraging participation in van pools reduces emissions associated with single occupant vehicle traffic.

Bicycle Infrastructure

This program provides funding for bicycle infrastructure projects, including Class I (Bicycle Path Construction), Class II (Bicycle Lane Striping), and Class III (Bicycle Route) projects. A bicycle transportation network that provides viable options for travel to school, work, and commercial sites can reduce emissions from motor vehicles.

Enhanced Transportation Strategy

Public agencies can receive funding from the District for projects that achieve quantifiable emissions reductions through the deployment of clean alternative fuels and commute strategies that reduce vehicle miles traveled and emissions.

Other Programs

Dairy Feed Mixer Electrification

Electrifying feed mixing equipment reduces diesel emissions from agricultural tractors that mix and deliver feed, on-road trucks used to deliver feed, and other off-road equipment used in the feeding process at dairies and other confined animal feeding operations in the Valley. This pilot incentive program follows the District's demonstration of an electrified feed mixing system through the Technology Advancement Program.

Lawn and Garden Replacement (Commercial and Residential)

The District's "Clean Green Yard Machine" rebate program provides incentives to Valley businesses and residents to replace old, gas-powered landscape maintenance equipment with non-polluting electric models.

Community Improvement Vehicle Use Reduction

The District provides funding for eligible land use and community development projects to promote a reduction in vehicle miles traveled and associated emissions through enhanced walkability and increased use of zero emission transportation alternatives.

Technology Advancement

The Technology Advancement Program (TAP) is the District's strategic approach to encouraging innovation and development of new emission reduction technologies. The TAP will consist of an ongoing review of new technology concepts, interagency partnerships, funding for technology advancement programs, and collaborations to build and expand local capacity for research and development in the San Joaquin Valley. Mobile sources are a technology focus area within the TAP. Mobile source projects will demonstrate zero or near-zero emissions solutions to mobile source categories with emphasis on goods and people movement, off-road equipment, or agricultural equipment.

Environmental Justice

AB 2522 directs the District to spend at least \$10 million of the fee revenue to "mitigate the impacts of air pollution on public health and the environment in disproportionately impacted environmental justice communities" in the Valley.¹⁰ In addition, the District must convene and solicit spending recommendations from an environmental justice advisory committee.¹¹ The Environmental Justice Advisory Group (EJAG) was formed in 2008 as part of the District's effort to develop an Environmental Justice Strategy. With the advent of AB 2522, the District solicited recommendations from EJAG on how funds could be spent to benefit disproportionately impacted environmental justice communities.

In April 2011, the EJAG Board established a standing EJAG Grants Committee (Grants Committee) to provide recommendations for the use of incentive funds. The Grants Committee returned with its first recommendations on priority project areas for the District the following year and has provided updated recommendations annually. EJAG recommendations have consistently included that the District use incentive funds in environmental justice communities for school bus replacement, retrofit and replacement of on-road heavy duty trucks, expansion of the Tune-In Tune-Up and Vehicle Replacement programs, continuation of the heavy-duty engine program, and development of bicycle and non-combustion motorized vehicle programs.

The District has included EJAG funding priorities as feasible in the grant spending plan approved through the District's formal annual budgeting process. In total, the District has spent 72.4 percent of AB 2522 funds, or \$251 million, on projects, including ones recommended by the EJAG, to mitigate air pollution impacts in disproportionately impacted environmental justice communities, far in excess of the \$10 million requirement in AB 2522.

¹⁰ H&SC section 40612(b)

¹¹ Ibid.