



Carl Moyer Program Statistics 2024 Reporting Cycle

This document provides details on the Carl Moyer Program (Moyer Program or CMP) engine/project expenditures and resulting emission reductions as reported by local air in the Clean Air Reporting Log (CARL) system. The data in the document reflects reported data through the 2024 reporting cycle, as of October 2024.

Introduction

The Moyer Program provides incentive grants to fund the incremental cost of cleaner-than-required engines, equipment, and other technology. The core principle of the Moyer Program is to achieve cost-effective¹ emission reductions that are permanent, surplus, quantifiable, enforceable, and creditable to the State Implementation Plan (SIP). Covered pollutants include oxides of nitrogen (NO_x), reactive organic gases (ROG), and particulate matter (PM).

The Moyer Program is implemented in partnership between the California Air Resources Board (CARB) and local air districts. Air districts administer the program, select the projects to fund and contract with the applicants while CARB works collaboratively with the air districts and other stakeholders to establish Guidelines² and provide oversight.

CARB allocates funds to the air districts according to statute and takes into account population, air quality and other factors. Air districts are allowed a minimum allocation of \$200,000 and air districts that accept a larger allocation must provide matching funds. While regular Moyer funds come from smog abatement and tire fees, the air districts use local funds, often motor vehicle registration fees under Assembly Bill (AB) 923 (Firebaugh, Chapter 707, Statutes of 2004), to meet their matching funds targets.

¹ Cost effectiveness limit may vary by project. Infrastructure projects enable the deployment of advanced technologies and are exempt from cost-effectiveness requirements and therefore do not have any reported emission reductions.

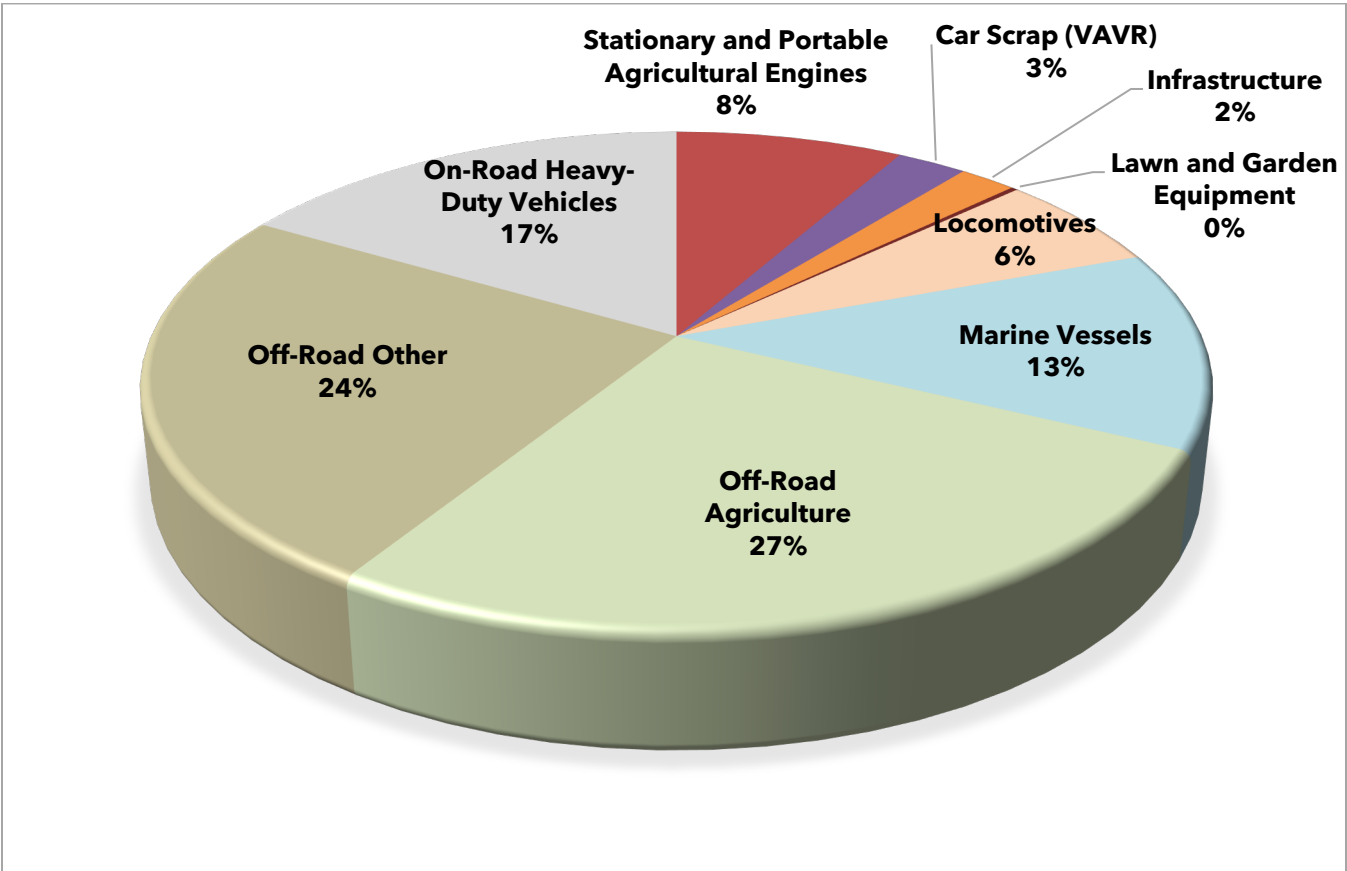
² [Carl Moyer Guidelines](http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm): <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>

Background

The Moyer Program funds a variety of project types and source categories that air districts report to CARB annually, by August 29 of each year. Details about the vehicles, equipment, engine, and other emission reduction technologies are reported in the districts in the CARL system and the air district certify that the data are accurate and complete.

The pie chart below, generated from Table 2, shows the percent of funds spent in the different source categories since the inception of the program.

Chart 1: Percent of Liquidated Funds by Source Category since Inception in 1998



Methodology: The last publication of the CMP Statistics was in 2021 (with a correction made 10/04/2023). Since then, the methodology for processing and presenting the program’s data has been redeveloped so that benefits are presented per fiscal year (FY). This means that project/engine counts and emission reductions presented below have now been apportioned per FY. In many of the tables below, fractional values of items such as engines/project count will be present because it represents the amount of funding applied towards the destruction of an engine or the completion of a project provided by a specific fiscal year. Instances of this in the tables below will be denoted with a footnote.

Additionally, this report focuses on liquidated data exclusively and applies this new methodology to data starting with FY 2005-06 up through FY 2019-20. Data prior to this, starting in FY 1998-99, will not have program benefits apportioned in the same way as it predates the existence of the CARL system. However, benefits from those years will be posted at the end of the document for posterity purposes.

Future CMP Statistics will publish the data associated with the most recently liquidated FY and project data that has not yet passed its liquidation deadline and considered to be in progress.

Timeline: The Moyer Program began in 1998 and funds were first allocated in FY 1998-99, called "Moyer Year (MY) 1." The data below will focus on the allocations that have been closed out since the last publication of the statistics. In other words, these allocations have passed their liquidation deadline where the air districts have been required to have expended all of the funds towards projects. Allocations are distinguished by FY and MY. The years of focus in this report are shown below:

Allocation FY	Moyer Year (MY)	Liquidation Year³
2017-18	20	2022
2018-19	21	2023
2019-20	22	2024

Emission Reductions: Emission reductions are in tons and are derived by multiplying the annual emission reductions by the life of each project. The project life is the number of years the project achieves surplus emission reductions; it is also the contract period. Emission reductions are provided in total tons for the project and have been apportioned based on the amount of funding provided per FY.

Engine/Project Count: The engine/project count refers to the number of engines that have been scrapped or the number of individual infrastructure projects completed.

Source Categories: The data in the tables and charts provide program information by general source category and detailed source category. For example, the general source category data group is "Off-Road - Other" that includes off-road construction, off-road cargo handling, off-road ground support equipment, transportation refrigeration units, and forklifts. The category agricultural pumps include both stationary and portable agricultural irrigation engines. In the tables below, special emphasis has been put on projects that are zero-emission (ZE) or support ZE technology, like is the case with certain infrastructure projects.

³ Liquidation deadline is June 30th of the liquidation year.

Funds Liquidated: Liquidated funds represent the reported funds spent on projects via contract or a voucher. Funding sources include regular Moyer funds, Match, Non-Match, Moyer State Reserve funds, Rural Assistance Program, Moyer Interest and Salvage (salvage proceeds are from selling scrapped equipment for salvage). Also, air districts may report Non-Match AB 923 funded projects to CARB for SIP credit; however, there is no Non-Match allocation or target for air districts to meet. Last, the summation of funds may slightly vary due to rounding.

Environmental Justice (EJ) Areas: Several new tables show how Moyer funds benefit priority populations per AB 1390 (Firebaugh, Chapter 763, Statutes of 2001) which required air districts with a population of over 1 million or more inhabitants to expend at least 50 percent of Moyer funds in low-income and/or minority populated areas (Health & Safety Code § 43023.5). In the case of EJ areas, air districts self-define their EJ areas and report in CARL if the project benefits EJ areas.

Data Sources: The data presented below is generated from the CARL system from the 2024 reporting cycle. Please note that data from the CARL system is a snapshot in time and is subject to change. Data for projects liquidated by an air district are considered finalized but occasionally require updates to properly account for funds. There may be differences in the numbers in this publication of the CMP Statistics when compared to the 2021 CMP Statistics due to the reasons stated above, the change in methodology, and rounding.

Results and Tables

Table 1: Liquidated Funding by Fiscal Year

Fiscal Year	Project Allocation	Admin Allocation	Total Allocation*
FY 2005-06 (MY 8)	\$94,977,598.75	\$3,363,440.25	\$98,341,039.00
FY 2006-07 (MY 9)	\$91,604,320.25	\$6,443,688.61	\$98,043,008.86
FY 2007-08 (MY 10)	\$91,695,315.57	\$6,520,052.14	\$98,215,367.71
FY 2008-09 (MY 11)	\$81,818,774.17	\$6,103,081.49	\$87,921,855.66
FY 2009-10 (MY 12)	\$70,762,693.25	\$5,124,653.75	\$75,887,347.00
FY 2010-11 (MY 13)	\$66,308,762.55	\$4,804,070.45	\$71,112,833.00
FY 2011-12 (MY 14)	\$70,645,468.15	\$5,114,021.85	\$75,759,490.00
FY 2012-13 (MY 15)	\$63,268,683.30	\$4,692,584.10	\$67,961,267.40
FY 2013-14 (MY 16)	\$66,280,498.36	\$4,725,577.64	\$71,006,076.00
FY 2014-15 (MY 17)	\$69,543,514.06	\$4,966,298.94	\$74,509,813.00
FY 2015-16 (MY 18)	\$69,257,379.00	\$5,236,155.00	\$74,493,534.00
FY 2016-17 (MY 19)	\$68,670,836.00	\$5,206,416.00	\$73,877,252.00
FY 2017-18 (MY 20)*	\$72,190,573.45	\$5,228,172.55	\$77,418,746.00
FY 2018-19 (MY 21)*	\$83,026,474.55	\$5,713,917.44	\$88,740,391.99
FY 2019-20 (MY 22)*	\$99,107,725.50	\$6,789,797.50	\$105,841,323.00
Totals	\$1,159,158,616.91	\$80,031,927.71	\$1,239,129,344.62

* Allocations include regular Moyer funds, Moyer State Reserve funds, air district required Match funds, and rural assistance program funds that have passed their liquidation deadline.

**Liquidation deadline after 10/04/2023 CMP Statistics publication.

Table 2: Liquidated Moyer Funding by Source Category Since Inception*

Source Category	Engine/Project Count	Total Liquidated Funds
Stationary and Portable Agricultural Engines	7,763	\$114,085,721
Light-Duty Vehicles	32,592	\$35,168,574
Infrastructure	96	\$28,683,299
Lawn and Garden Equipment	13,323	\$3,207,687
Locomotives	209	\$87,172,678
Marine Vessels	2,272	\$179,378,090
Off-Road Agriculture	5,300	\$371,330,943
Off-Road Other	3,457	\$340,245,830
On-Road Heavy-Duty Vehicles	7,987	\$230,413,571
Totals	72,998	\$1,389,686,393

* Funding is since inception through FY 2019-20 (MY 22) following liquidation deadline.

Table 3: CMP Statistics by Fiscal Year

Fiscal Year	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Liquidated Funds**
FY 2005-06 (MY 8)	4067.6	23,466.7	2,656.3	801.6	\$100,075,642
FY 2006-07 (MY 9)	5589.1	12,569.8	1,299.7	443.7	\$96,644,423
FY 2007-08 (MY 10)	3349.1	9,980.4	801.5	252.4	\$93,908,226
FY 2008-09 (MY 11)	9592.2	8,887.6	1,125.0	264.0	\$84,423,049
FY 2009-10 (MY 12)	2597.7	5,220.4	446.3	140.1	\$72,136,182
FY 2010-11 (MY 13)	5579.7	6,050.9	639.0	212.0	\$79,593,467
FY 2011-12 (MY 14)	11718.3	4,677.0	645.4	164.3	\$74,774,604
FY 2012-13 (MY 15)	3836.5	4,367.1	494.8	173.4	\$67,513,364
FY 2013-14 (MY 16)	2641.4	4,295.3	507.4	167.0	\$68,424,249
FY 2014-15 (MY 17)	4758.7	4,320.9	536.3	140.9	\$73,032,307
FY 2015-16 (MY 18)	1881.5	4,121.0	385.9	179.1	\$73,032,003
FY 2016-17 (MY 19)	2263.7	4,121.3	357.2	171.9	\$71,365,367
FY 2017-18 (MY 20)**	1833.8	3,138.2	264.6	122.8	\$78,060,675
FY 2018-19 (MY 21)**	2044.6	4,251.9	329.1	168.0	\$86,630,767
FY 2019-20 (MY 22)**	2675.7	3,896.8	325.6	176.2	\$108,174,307
Totals	64429.7	103,365.3	10,814.2	3,577.6	\$1,227,788,633

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Liquidated funds include regular Moyer funds, Moyer State Reserve funds, air district required Match funds, Rural Assistance Program funds, interest earned on Moyer funds, Non-Match funds, and Salvage funds, and can exceed project allocations.

** Liquidation deadline after 10/04/2023 CMP Statistics publication.

Table 4: FY 2017-18 (MY 20) Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	19.0	74.9017	8.0767	4.4607	\$551,643
Light-Duty Vehicles	1073.8	37.3075	60.5062	0.4199	\$1,146,282
Infrastructure**	14.2	0.0000	0.0000	0.0000	\$5,725,925
Lawn and Garden Equipment	138.0	0.0500	0.7840	0.0330	\$20,010
Locomotives	1.6	193.3945	13.8424	6.9259	\$2,418,250
Marine Vessels	46.8	163.6625	0.8370	7.1607	\$4,525,228
Off-Road Agriculture	314.4	1,298.6232	130.0106	76.2574	\$25,935,473
Off-Road Other	144.3	1,204.1823	46.7546	26.3226	\$32,337,830
On-Road Heavy-Duty Vehicles	88.6	166.1010	3.7979	1.1817	\$5,400,035

* Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 5: FY 2017-18 (MY 20) Zero-Emission Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	5.0	17.9670	2.4498	1.1393	\$137,432
Infrastructure (supports ZE technology)**	9.7	0.0000	0.0000	0.0000	\$2,297,609
Lawn and Garden Equipment	138.0	0.0500	0.7840	0.0330	\$20,010
On-Road Heavy-Duty Vehicles	4.3	2.1186	0.1051	0.0585	\$622,418

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 6: FY 2017-18 (MY 20) Environmental Justice Portion by Air District

Air District*	Liquidated Funds	Funding Liquidated in EJ Community	EJ %
Bay Area AQMD	\$10,009,101	\$2,522,611	25%
Sacramento Metropolitan AQMD	\$4,553,899	\$2,512,154	55%
San Diego County APCD	\$4,705,912	\$2,273,235	48%
San Joaquin Valley APCD	\$11,058,886	\$7,223,557	65%
South Coast AQMD	\$35,036,838	\$31,859,570	91%
Total	\$65,364,636	\$46,391,126	71%

*Only air districts with environmental justice requirements are listed.

Table 7: FY 2018-19 (MY 21) Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	25.2	115.5165	10.3385	6.9484	\$612,753
Light-Duty Vehicles	1153.3	38.0583	56.2003	0.2570	\$1,478,520
Infrastructure**	34.0	0.0000	0.0000	0.0000	\$4,831,181
Lawn and Garden Equipment	146.0	0.0399	0.4179	0.0140	\$32,350
Locomotives	0.8	51.0700	3.8803	2.0297	\$814,817
Marine Vessels	36.4	147.8082	1.6229	5.9651	\$4,123,501
Off-Road Agriculture	411.0	2,534.8595	236.1234	146.2128	\$43,358,440
Off-Road Other	132.8	1,141.4906	10.0805	5.7970	\$25,007,516
On-Road Heavy-Duty Vehicles	132.8	223.0148	10.4833	0.8090	\$6,371,690

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 8: FY 2018-19 (MY 21) Zero-Emission Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	3.1	9.8711	1.2071	0.5113	\$117,580
Infrastructure (supports ZE technology)**	32.0	0.0000	0.0000	0.0000	\$2,340,278
Lawn and Garden Equipment	146.0	0.0399	0.4179	0.0140	\$32,350
Off-Road Other	4.6	1.9069	0.4031	0.1466	\$174,832
On-Road Heavy-Duty Vehicles	2.5	3.1771	0.3165	0.0576	\$715,075

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 9: FY 2018-19 (MY 21) Environmental Justice Portion by Air District

Air District*	Funds Liquidated	Funding in EJ Community	EJ %
Bay Area AQMD	\$11,035,361	\$2,555,616	23%
Sacramento Metropolitan AQMD	\$5,046,327	\$4,471,968	89%
San Diego County APCD	\$5,832,951	\$2,591,474	44%
San Joaquin Valley APCD	\$13,900,523	\$11,145,818	80%
South Coast AQMD	\$38,140,292	\$34,152,720	90%
Total	\$73,955,454	\$54,917,596	74%

*Only air districts with environmental justice requirements are listed.

Table 10: FY 2019-20 (MY 22) Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	10.0	69.4332	5.2659	3.0367	\$285,604
Light-Duty Vehicles	245.4	7.9292	12.1717	0.0637	\$287,617
Infrastructure**	20.9	0.0000	0.0000	0.0000	\$4,902,715
Lawn and Garden Equipment	1370.9	1.4195	22.1527	0.3924	\$1,463,685
Locomotives	2.2	122.1815	11.3895	4.8725	\$3,608,782
Marine Vessels	77.1	367.8350	4.5499	15.0507	\$8,563,724
Off-Road Agriculture	640.8	2,255.6434	236.5309	146.0345	\$53,074,642
Off-Road Other	112.7	809.6018	10.5573	4.8547	\$18,960,218
On-Road Heavy-Duty Vehicles	208.5	262.7131	22.9332	1.8956	\$17,027,320

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 11: FY 2019-20 (MY 22) Zero-Emission Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	0.4	0.2859	0.0869	0.0155	\$25,461
Infrastructure (supports ZE technology)**	14.1	0.0000	0.0000	0.0000	\$617,880
Lawn and Garden Equipment	1370.9	1.4195	22.1527	0.3924	\$1,463,685
Off-Road Other	21.7	21.3162	3.9429	0.9464	\$1,021,968
On-Road Heavy-Duty Vehicles	24.8	31.8689	3.4908	0.2857	\$6,392,163

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 12: FY 2019-20 (MY 22) Environmental Justice Portion by Air District

Air District	Funds Liquidated	Funding in EJ Community	EJ %
Bay Area AQMD	\$13,876,357	\$5,831,511	42%
Sacramento Metropolitan AQMD	\$6,215,160	\$3,467,558	56%
San Diego County APCD	\$8,475,924	\$6,578,879	78%
San Joaquin Valley APCD	\$18,661,807	\$18,411,792	99%
South Coast AQMD	\$45,694,276	\$32,289,820	71%
Total	\$92,923,524	\$66,579,560	72%

*Only air districts with environmental justice requirements are listed.

Table 13: FY 2005-06 (MY 8) through FY 2016-17 (MY 19) Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	3382.5	19,112.3270	1,984.5493	573.2311	\$62,782,938
Light-Duty Vehicles	30119.2	1,366.4644	1,808.5825	16.2780	\$32,256,155
Infrastructure**	74.0	0.0000	0.0000	0.0000	\$13,223,478
Lawn and Garden Equipment	11668.0	4.0700	66.3980	2.7510	\$1,691,642
Locomotives	169.7	6,529.8769	451.2075	195.0983	\$77,146,681
Marine Vessels	1505.6	13,515.2308	928.6926	480.1779	\$127,238,945
Off-Road Agriculture	3776.3	18,612.4214	2,288.9789	881.9726	\$247,183,688
Off-Road Other	2404.9	23,616.3619	2,097.7238	709.6364	\$238,774,853
On-Road Heavy-Duty Vehicles	4775.5	9,321.7437	268.8080	251.4293	\$154,624,504

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 14: FY 2005-06 (MY 8) through FY 2016-17 (MY 19) Zero-Emission Program Statistics by Source Category

Source Category	Engine/Project Count*	Life NOx (tons)	Life ROG (tons)	Life PM (tons)	Total Liquidated Funds
Stationary and Portable Agricultural Engines	1982.0	15498.4	1548.1	447.0	\$38,614,847
Infrastructure (supports ZE technology)**	9.6	0.0	0.0	0.0	\$40,132
Lawn and Garden Equipment	11668.0	4.1	66.4	2.8	\$1,691,642
Marine Vessels	6.0	314.3	12.1	7.5	\$6,184,004
Off-Road Agriculture	2.0	1.7	0.1	0.1	\$58,300
Off-Road Other	121.5	549.9	40.2	20.0	\$8,619,604

*Decimal values in this column reflect the apportionment of engines or project counts across fiscal years. They represent the share of funding from a specific fiscal year that was used to destroy an engine or complete a project.

**Infrastructure projects do not directly obtain emission reductions.

Table 15: FY 2005-06 (MY 8) through FY 2016-17 (MY 19) Environmental Justice Portion by Air District

Air District*	Funds Liquidated	Funding in EJ Community	EJ %
Bay Area AQMD	\$131,999,875	\$68,982,657	52%
Sacramento Metropolitan AQMD	\$82,645,839	\$55,320,181	67%
San Diego County APCD	\$50,936,343	\$28,542,779	56%
San Joaquin Valley APCD	\$148,065,777	\$100,765,623	68%
South Coast AQMD	\$402,078,124	\$214,194,838	53%
Total	\$815,725,958	\$467,806,078	57%

*Only air districts with environmental justice requirements are listed.

Table 16: FY 1998-99 (MY 1) through FY 2004-05 (MY 7) by Source Category - from 2006 Status Report

Source Category	Count	Life NOx+ ROG (tons)	Life PM (tons)	Funds Executed
On-Road	2,782	15,426	418	\$46,990,021
Off-Road Other	662	13,649	654	\$25,165,414
Off-Road Agriculture	157	628	26	\$1,778,700
Agricultural Pumps	4,326	39,834	1,778	\$49,852,783
Marine Vessels	606	16,629	954	\$34,926,693
Locomotives	35	1,268	26	\$3,184,149
Light-Duty Vehicles*	0	0	0	\$0
Lawn and Garden Equipment*	0	0	0	\$0
Infrastructure*	0	N/A	N/A	\$0
Total	8,567	87,434	3,857	\$161,897,759

* These source categories were not available in the early years of the Moyer Program.