



Annual Report | 2023

Senate Bill 92 (Committee on Budget and Fiscal Review, Chapter 26, Statutes of 2017) Report to the Legislature on Implementation of the Volkswagen Settlement Consent Decree. Appendix C and Appendix D



This report can be viewed at <https://ww2.arb.ca.gov/legislatively-mandated-reports>. To order a hard copy of this report, please contact David Ernest García, Ph.D., Legislative Director, at (916) 322-8520 or David.Garcia@arb.ca.gov.

Table of Contents

Executive Summary	2
The ZEV Investment Commitment - Consent Decree Appendix C	5
Public Process.....	6
Approved Cycle 1 Plan Investments.....	8
Zero-Emission Vehicle Infrastructure: \$120 Million.....	9
Green City ZEV Access Demonstration Project (Sacramento): \$44 Million.....	10
ZEV Awareness and Education: \$20 Million.....	10
Approved Cycle 2 Plan Investments.....	10
Zero-Emission Vehicle Charging Infrastructure: \$153 Million.....	11
Public Education, Awareness, and Marketing activities: \$27 Million.....	12
Approved Cycle 3 Plan Investments.....	12
Zero-Emission Vehicle Infrastructure: \$127 Million.....	13
Green City 2 (Long Beach/Wilmington): \$25 Million.....	13
Public Education, Awareness, and Marketing Activities: \$28 Million.....	14
ZEV Investment Plan Progress.....	14
Zero-Emission Vehicle Infrastructure.....	14
Cycle 1 Sacramento Green City ZEV Access Demonstration Project.....	16
Cycle 3 Long Beach/Wilmington Green City Initiative.....	17
Public Education, Awareness, and Marketing.....	18
Total Expenditures.....	20
Low-Income or Disadvantaged Community Benefits.....	23
VW Environmental Mitigation Trust – Consent Decree Appendix D	25
Public Process.....	25
Proposed and Actual Trust Expenditures.....	25
Zero-Emission Transit, School, and Shuttle Buses: \$130 Million.....	27
Zero Emission Class 8 Freight and Port Drayage Trucks: \$90 Million.....	30
Zero Emission Freight and Marine Projects: \$70 Million.....	32
Combustion Freight and Marine Projects: \$60 Million.....	35
Light-Duty Zero-Emission Vehicle Infrastructure: \$10 Million.....	39
Reserve: \$63 Million.....	41
Total Expenditures.....	42
Low-Income or Disadvantaged Community Benefits.....	46
Additional VW Mitigation Trust Program Changes Going Forward.....	49

Executive Summary



Senate Bill (SB) 92 (Committee on Budget and Fiscal Review, Chapter 26, Statutes of 2017), codified at Health and Safety Code section 39614, directs the California Air Resources Board (CARB or Board) to provide annual updates to the California Legislature on the progress of implementing the zero-emission vehicle investment plans under Appendix C of the 2.0-Liter Partial Consent Decree with Volkswagen (VW), and on proposed and actual expenditures of the monies received pursuant to Appendix D of the 2.0-Liter Partial Consent Decree¹. The VW settlement, which is made up of several partial consent decrees and includes Appendices C and D, resolves California's claims related to VW's use of illegal defeat devices - software designed to cheat on emissions tests - in certain 2009 to 2016 model year diesel cars that VW marketed and sold in California. This report covers implementation of Appendix C in the 2022 calendar year, as reported by Electrify America in its 2022 Annual Report submitted on April 30, 2023. The activities for the 2023 calendar year will be part of next year's report, as Electrify America is required to provide the full report on their 2023 implementation progress no later than April 30, 2024. This report also covers implementation of Appendix D in the 2022 calendar year.

A. VW Settlement Requirements in Appendices C and D

Under the terms of the VW settlement, VW will fund or invest more than \$1.2 billion in California over 10 years, as follows:

- Appendix C, the Zero-Emission Vehicle (ZEV) Investment Commitment, requires VW to invest \$800 million in California over a 10-year period - in four consecutive \$200 million, 30-month ZEV Investment Plan cycles - to support the increased use and availability of ZEVs in the State. Appendix C outlines four areas of qualified investments: ZEV infrastructure (including developing and maintaining ZEV charging or hydrogen fueling stations), ZEV public awareness, increased ZEV access, and Green City projects². VW is

¹ The partial consent decrees are available at <https://ww2.arb.ca.gov/resources/documents/vw-settlement-consent-decrees>.

² The 2.0-Liter Partial Consent Decree provided for a "Green City" initiative in one city. The California-only portion of the 3.0-Liter Partial Consent Decree adds a second Green City project requirement, and the second Green City must be located in a city with a population of about 500,000 that consists primarily of disadvantaged communities.

implementing this commitment through its subsidiary, Electrify America. For each 30-month cycle, Electrify America submits a ZEV Investment Plan that details its proposed investments for approval by CARB at a public hearing.

- Appendix D, the Environmental Mitigation Trust (Trust), is intended to fully mitigate all past and future excess oxides of nitrogen (NOx) emissions from the vehicles covered by the settlement, by requiring VW to pay about \$2.7 billion into a national mitigation trust fund³. California's allocation of the trust is about \$423 million. CARB developed a Beneficiary Mitigation Plan that describes the projects California will fund with its allocation. The Consent Decree defines the eligible mitigation actions; most are scrap and-replace projects for the heavy-duty sector.

B. Compliance with SB 92

SB 92 establishes several goals for expenditures made under Appendices C and D of the 2.0-Liter Partial Consent Decree. Some goals apply to both Appendices, while others are unique to one or the other. As this report details, CARB continues to meet all direction provided by the Legislature in SB 92.

One goal in SB 92 that applies to both appendices is that CARB must strive to ensure that Appendix C investments and Appendix D expenditures align with the State's priorities. Electrify America's approved Appendix C investments, in its ZEV Investment Plans, and the Appendix D Beneficiary Mitigation Plan expenditures align with the State's priorities, including the State's 2025 and 2030 ZEV goals, 2035 transportation electrification goals⁴, and statutory climate pollutant goals, such as reducing greenhouse gas emissions to meet 2030 targets and achieving carbon neutrality by 2045⁵. Electrify America's ZEV Investment Plans fund light-, medium-, and heavy-duty electrified vehicles and charging infrastructure. The Beneficiary Mitigation Plan funds mostly heavy-duty scrap and replace projects, with an emphasis on zero-emission vehicles and equipment.

Appendix C investments and Appendix D expenditures also align with California's goal of increasing access to clean transportation and mobility options, especially in underserved areas, as established by the Clean Energy and Pollution Reduction Act of 2015 (SB 350, De León, Chapter 547, Statutes of 2015). The Board-approved Appendix C ZEV Investment Plans achieve this goal by installing ZEV infrastructure in underserved areas and funding ZEV car share and shuttle/bus services that operate primarily in disadvantaged communities. The

³ This is the total amount required under both the 2.0-liter and 3.0-liter partial consent decrees. The 3.0-liter partial consent decree added \$225 million to the national Trust and about \$41 million to California's Trust allocation.

⁴ Governor Newsom's Executive Order N-79-20 calls for 100% of light-duty vehicle sales, 100% of short-haul and drayage trucks in operation, and 100% of off-road equipment and operations, where feasible, to be zero-emission by 2035. It also calls for 100% of heavy-duty trucks and buses in operation to be zero-emission, where feasible, by 2035. <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf>.

⁵ Executive Order B-55-18, Governor Brown, September 10, 2018. <https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf>

Beneficiary Mitigation Plan achieves this goal by funding ZEV transit, school, and shuttle buses, many of them serving California's low-income or disadvantaged communities.

SB 92 additionally requires that CARB strive to provide public transparency before approving Appendix C investments and Appendix D expenditures. To date, CARB has approved three of the four ZEV Investment Plans required by Appendix C through public hearings and has also approved the Beneficiary Mitigation Plan required by Appendix D as described in the Public Process section on page 25. For each of the ZEV Investment Plans and the Beneficiary Mitigation Plan, CARB staff undertook an extensive public process that included discussions with stakeholders, public workshops, and public Board meetings. As part of this public process, CARB posted each proposed ZEV Investment Plan and the Beneficiary Mitigation Plan for public comment before the respective public hearings to consider adoption of the Plans.

As it applies to Appendix C, SB 92 further prescribes that:

- CARB strive to ensure, to the maximum extent allowable under the 2.0-Liter Partial Consent Decree, that: (1) at least 35% of the funds for each ZEV Investment Plan benefit low-income or disadvantaged communities disproportionately affected by air pollution, and (2) VW or its subsidiary periodically submit progress reports to CARB on the implementation of the approved ZEV Investment Plan;
- CARB approve each ZEV Investment Plan at a public hearing;
- CARB post each proposed ZEV Investment Plan for public comment; and
- CARB report annually to the Legislature on the progress of the implementation of the approved ZEV Investment Plans.

As it applies to Appendix D, the legislation further prescribes that:

- CARB shall strive to ensure, to the maximum extent allowable under the 2.0-Liter Partial Consent Decree, that 35% of the moneys received pursuant to Appendix D benefit low-income or disadvantaged communities disproportionately affected by air pollution; and
- CARB shall report annually to the Legislature on the proposed and actual expenditures of the monies received pursuant to Appendix D. As of December 31, 2022, \$232 million in funding for five project categories has been released in public solicitations. A total of \$152,758,938 has been disbursed (expended) from the Trust to date.

The remainder of this report provides additional detail and addresses how CARB met the statutory requirements in SB 92, summarized above. This fifth annual report reflects progress made during the first five years of implementation. As implementation investments grow, CARB staff will have even more investment and expenditure information on which to report. CARB staff will continue to ensure compliance with SB 92.

The ZEV Investment Commitment - Consent Decree Appendix C

This section focuses on Appendix C of the 2.0-Liter Partial Consent Decree: The ZEV Investment Commitment. The ZEV Investment Commitment is intended to function as injunctive relief that complements the other pieces of the Consent Decree, addressing the impact to California's ZEV market resulting from VW's sale and marketing in California of approximately 70,000 2.0-liter high-emitting diesel vehicles as clean vehicles.

Under the terms of the ZEV Investment Commitment, VW must invest \$800 million in California over a 10-year period to support the increased use and availability of ZEVs in the state. These investments are being made through its subsidiary, Electrify America, in four consecutive \$200 million, 30-month ZEV investment cycles. Each of Electrify America's four separate \$200 million ZEV Investment Plans, which must be approved in whole or in part by CARB, describes the investments Electrify America proposes to make within the 30-month cycle. The following four areas for investment are eligible under the Consent Decree:

- Developing and maintaining ZEV infrastructure (including charging or hydrogen refueling stations),
- Building public awareness of ZEVs and ZEV infrastructure availability,
- Increasing access to ZEVs, and
- Establishing two "Green Cities," with an emphasis on transportation electrification projects like zero-emission car sharing and transit to increase mobility and, potentially, zero-emission freight⁶.

In addition to the requirements established under the 2.0-Liter Partial Consent Decree and SB 92, the Board, via Resolution 17-23, directed CARB to ensure, based on the Consent Decree requirements and Electrify America's voluntary commitments, that:

- Electrify America's ZEV Investment Plan awareness program materials be brand neutral, use a language other than English when appropriate, and include acknowledgement of hydrogen fuel cell electric vehicles when appropriate;
- Electrify America and CARB prepare and update a census tract-level map of charging station investments highlighting low-income and disadvantaged community investments;
- Electrify America provide hiring opportunities for qualified residents of disadvantaged communities; and
- CARB staff, after consulting with stakeholders, including environmental justice groups, labor organizations, auto manufacturers, and other EV charging companies, report to the Board at least twice a year on progress toward achieving the objectives of the Consent Decree.

⁶ The requirement for a second Green City project, to be implemented in a city with a population of approximately 500,000 that primarily consists of disadvantaged communities, is contained in the California-only portion of the 3.0-Liter Partial Consent Decree.

Public Process

As of December 31, 2022, CARB has approved the Cycle 1, Cycle 2, and Cycle 3 ZEV Investment Plans. Prior to approval of the Cycle 1 Plan, CARB conducted a public process to inform CARB's consideration of Electrify America's ZEV Investment Plans and subsequent implementation and oversight. The process included an early workshop, the release of a CARB Guidance Document to help Electrify America consider public and State feedback in developing its draft ZEV Investment Plan, and three Board meetings. Through this process, CARB confirmed reporting and disadvantaged community spending commitments from Electrify America. Tables 1, 2, and 3 on the following pages describe the Cycle 1, Cycle 2, and Cycle 3 Plan public processes in detail. The Cycle 1 public process was the more extensive of the three, as it was necessary to include additional foundational meetings during which staff educated the public on the 2.0-Liter Partial Consent Decree and solicited public and Board input that was used to develop CARB's guiding principles for Electrify America to consider in developing its ZEV Investment Plans.

Electrify America meets with CARB staff monthly to discuss implementation progress. Implementation of the Cycle 1 and Cycle 2 Plans is now complete, and Electrify America and CARB continue to meet monthly to discuss implementation of the Cycle 3 Plan. CARB approved Electrify America's Cycle 3 Plan at the June 2021 Board hearing. CARB will consider Electrify America's draft Cycle 4 Plan, after time for public comment on the draft Plan, at the December 2023 Board hearing.

Electrify America also provides CARB and the public with written quarterly and annual reports. To date, the company has submitted annual reports for the 2017, 2018, 2019, 2020, 2021, and 2022 calendar years; the last annual report was submitted on April 30, 2023. Electrify America provides public access to these reports on its website, which can also be accessed on [CARB's Volkswagen's ZEV Investment Commitment](#) webpage.

Table 1: Cycle 1 Plan Public Process

Date	Activity	Information Provided
12/2/16	Public Workshop	Staff summarized the Consent Decree and obtained input from the public to help shape guidance, as allowed by the Consent Decree, to Electrify America for use in crafting the Cycle 1 and future plans.
12/8/16	Board Meeting	Staff updated the Board on the Consent Decree, describing the content and different functions of the various appendices, and identified CARB's proposed priorities and guidance for the Cycle 1 Plan. Staff also summarized common themes from the public comments that CARB received at the 12/2/16 public workshop.
2/10/17	Publicly Posted Document Transmittal	CARB transmitted a Guidance Document ⁷ reflecting public and Board feedback to Electrify America regarding ZEV investment opportunities consistent with the objectives and criteria set forth in Appendix C to help inform Electrify America's development of the Cycle 1 Plan.
3/14/17	Publicly Posted Plan	CARB posted Electrify America's proposed Cycle 1 ZEV Investment Plan ⁸ for a four-week public comment period.
3/24/17	Board Meeting	Staff provided an overview of Electrify America's proposed Cycle 1 Plan to the Board and the public. Board members and stakeholders expressed concern that the Plan did not adequately respond to some aspects of CARB's February Guidance Document. In response, CARB staff committed to soliciting additional information from Electrify America addressing the concerns regarding the submitted Cycle 1 Plan.
5/24/17	Publicly Posted Request for Supplement	CARB staff outlined proposed Cycle 1 Plan concerns and requested that Electrify America submit a Plan Supplement with more information on proposed expenditures in disadvantaged communities, brand-neutral infrastructure and education, and a long-term investment planning vision. Electrify America submitted the Supplement on 6/29/17.
6/29/17	Publicly Posted Plan Supplement	CARB staff posted Electrify America's Supplement to the proposed Cycle 1 ZEV Investment Plan ⁹ for a two-week public comment period.
7/27/17	Board Meeting	Staff provided an overview of Electrify America's proposed Cycle 1 Plan, including the Supplement; the Board approved the Plan.

⁷ CARB, 2017. California Air Resources Board's Guidance to Volkswagen on First 30-Month Electric Vehicle Infrastructure Investment Plan of the 2.0 Liter Diesel Engine Partial Consent Decree Settlement, February 10, 2017.

(https://ww2.arb.ca.gov/sites/default/files/2020-03/zip_1_%20guidance_ac.pdf)

⁸ Electrify America, 2017. Cycle 1 California ZEV Investment Plan, March 8, 2017.

(<https://www.electrifyamerica.com/assets/pdf/California%20ZEV%20Investment%20Plan%20Cycle%201.3bc672a3.pdf>)

⁹ Electrify America, 2017. Supplement to the Cycle 1 California ZEV Investment Plan: June 29, 2017.

(<https://www.electrifyamerica.com/assets/pdf/Cycle%201%20CA%20ZEV%20Invest%20Plan%20Supplement.a92e7705.pdf>)

Table 2: Cycle 2 Plan Public Process

Date	Activity	Information Provided
10/3/18	Publicly Posted Plan	CARB staff posted Electrify America’s proposed Cycle 2 ZEV Investment Plan ¹⁰ for public comment.
11/15/18	Board Meeting	Staff provided an overview of the proposed Cycle 2 Plan. The Board did not have a quorum to vote on the Plan, and expressed concern that staff had not solicited enough comments from stakeholders regarding Electrify America’s progress toward achieving the objectives of the 2.0-liter Partial Consent Decree, as required by the Board.
12/7/18	Public Meeting	CARB staff solicited additional comments from stakeholders regarding Electrify America’s progress toward achieving the objectives of the 2.0-liter Partial Consent Decree.
12/13/18	Board Meeting	Staff provided an overview of the proposed Cycle 2 Plan and additional stakeholder feedback to the Board and public; the Board approved the Plan.

Table 3: Cycle 3 Plan Public Process

Date	Activity	Information Provided
05/04/21	Publicly Posted Plan	CARB staff posted Electrify America’s proposed Cycle 3 ZEV Investment Plan ¹¹ for public comment.
05/25/21	Public Meeting	CARB staff solicited additional comments from stakeholders regarding Electrify America’s progress toward achieving the objectives of the 2.0-liter Partial Consent Decree.
06/24/21	Board Meeting	Staff provided an overview of the proposed Cycle 3 Plan. The Board approved the Plan.

Approved Cycle 1 Plan Investments

CARB approved Electrify America’s Cycle 1 ZEV Investment Plan on July 27, 2017. The Cycle 1 Plan covered the 30-month period that concluded on June 30, 2019. Table 4 below shows the project funding categories and investment amounts approved by the Board for the

¹⁰ Electrify America, 2018. California ZEV Investment Plan: Cycle 2, October 3, 2018. (<https://www.electrifyamerica.com/assets/pdf/Cycle%202%20California%20ZEV%20Investment%20Plan.3e6ce81a.pdf>)

¹¹ Electrify America, 2021. California ZEV Investment Plan: Cycle 3, May 4, 2021. (<https://media.electrifyamerica.com/assets/documents/original/685-20210503PublicCaliforniaC3ZEVInvestmentPlanFinalvF.pdf>)

Cycle 1 Plan. The funding categories are consistent with the objectives and criteria set forth in Appendix C and SB 92 and were refined during an extensive public process.

Table 4: Approved Cycle 1 Plan Investments¹²

Investment Category	Investment (in millions)
ZEV Charging Infrastructure	\$120
Green City ZEV Access Demonstration Project (Sacramento)	\$44
ZEV Awareness and Education	\$20
Operational Expenses	\$16
TOTAL	\$200

Zero-Emission Vehicle Infrastructure: \$120 Million



Image source: Electrify America

The majority of this investment - \$75 million - was used to install a statewide network of 50 highway direct current (DC) fast charging stations that serve California’s plug-in drivers and allow for refueling up to 200 miles of range in 15 to 30 minutes. The remainder of this investment was used to install 350 fast charging and Level 2 charging stations at retail and community locations, municipal parking facilities, workplaces, and multi-family housing units in the

following six California metropolitan areas: Fresno, Los Angeles-Long Beach-Anaheim, Sacramento-Roseville-Arden Arcade, San Diego-Carlsbad-San Marcos, San Francisco-Oakland-Hayward, and San Jose-Sunnyvale-Santa Clara. Approximately \$5.2 million in Cycle 1 infrastructure funding was unspent in Cycle 1 and funded infrastructure activity in Cycle 2, as allowed under Appendix C.

¹² Table 4 only reflects planned Cycle 1 Plan investment amounts as approved by CARB. An exhibit of actual Cycle 1 Plan expenditures may be found in Table 8.

Green City ZEV Access Demonstration Project (Sacramento): \$44 Million

The Green City investment in Sacramento established two new car sharing services administered by GIG and Envoy; a new zero-emission, on-demand shuttle bus service along the Franklin Boulevard corridor (an area of the city that had been without a bus line); a new zero-emission transit bus service operating between the Davis and Sacramento campuses of the University of California, Davis; and the charging infrastructure and marketing associated with each of the aforementioned projects. Almost \$19 million of the \$44 million investment supported fast charging for GIG Chevrolet Bolt EVs and transit buses, and Level 2 charging for Envoy VW e-Golfs. Finally, Electrify America selected 3Fold Communications, a marketing agency with established connections to Sacramento’s low-income and disadvantaged communities, to create a Green City awareness campaign called Sac-to-Zero¹³ to grow awareness and use of Sacramento’s Green City programs.



Image source: Electrify America

ZEV Awareness and Education: \$20 Million



Image source: Jetstones TV Ad screen capture

During development of the Cycle 1 Plan, Electrify America shared third-party research indicating that more than half of all Californians were unaware of ZEVs. As part of Cycle 1, Electrify America implemented a brand-neutral ZEV awareness plan that included web-based, social, and traditional (TV and radio) media. This campaign included the “JetStones” ad which aimed to bring awareness to the advantages of ZEVs and the availability of different types of ZEVs. The campaign played a take on transportation in the Stone Age transitioning to the future which is electric. The campaign aired from 2018 through mid-2019.

Approved Cycle 2 Plan Investments

CARB approved Electrify America’s Cycle 2 ZEV Investment Plan on December 13, 2018. The Cycle 2 Plan covered the 30-month period that began on July 1, 2019, and concluded on December 31, 2021. The 2.0-Liter Partial Consent Decree provides that Electrify America may also complete its Cycle 1 spending activities during Cycle 2 without penalty. Table 5 below shows the project funding categories and investment amounts approved by the Board for the Cycle 2 Plan. The funding categories are consistent with the objectives and

¹³ Sac-to-Zero’s website is at <https://sactozero.com/>

criteria set forth in Appendix C and SB 92 and were refined during a public process that included a stakeholder meeting and two Board meetings.

Table 5: Approved Cycle 2 Plan Investments¹⁴

Investment Category	Investment (in millions)
ZEV Charging Infrastructure	\$153
Public Education, Awareness, and Marketing Activities	\$27
Operational Expenses	\$20
TOTAL	\$200

Zero-Emission Vehicle Charging Infrastructure: \$153 Million



Image source: Electrify America

Electrify America planned for \$95-115 million of the infrastructure investment to expand charging infrastructure within the six metropolitan areas in which investments were made in Cycle 1, as well as in three new areas: Riverside-San Bernardino, Santa Cruz-Watsonville, and Santa Rosa. Electrify America reports that these nine metropolitan areas are projected to have 89% of the 2022 plug-in electric vehicle population in California. A portion of this investment was also planned for station upgrades to include additional chargers or additional energy

storage. Another \$25-30 million was planned to expand primarily fast charging infrastructure along highways and regional routes, including in three rural areas with high concentrations of low-income or disadvantaged communities (the Central, Coachella, and Imperial valley's). These investment anticipated upto 85 chargers in areas and routes identified by Electrify America. Additional ZEV infrastructure investments that were approved in the Cycle 2 Plan include:

- Approximately \$2 million for 35 to 50 Level 2 chargers in rural areas that have historically been underserved by charging infrastructure;¹⁵ and

¹⁴ Table 5 only reflects planned Cycle 2 Plan investment amounts as approved by CARB. An exhibit of actual Cycle 2 Plan expenditures may be found in Table 9.

¹⁵ In a written request to Electrify America, rural community stakeholders and advocates expressed that: (1) they preferred Level 2 charging because of the typically lower cost, and (2) charger siting should prioritize health centers and educational institutions, as these sites are visited frequently and offer extended hours of access. Electrify America agreed to target placement of Level 2 charging stations toward educational and health care institutions, with site host permission.

- Up to \$5 million for renewable energy generation that will decrease upstream emissions from electricity generation and provide for greater economic sustainability.

Public Education, Awareness, and Marketing activities: \$27 Million

In Cycle 2, Electrify America continued to use traditional and social media to increase public awareness of ZEVs and their benefits, emphasizing: (1) the performance and comfort characteristics that drivers say they want, (2) vehicle range confidence (including the range of new vehicles and the convenience of public charging infrastructure), and (3) the diversity of vehicle choice. As awareness levels increase, Electrify America directly targeted marketing at this ZEV aware audience by using ride and drive events to promote even stronger ZEV consideration. Additionally, Electrify America used marketing to boost station utilization. Messaging communicated, for each charging station, its location, charging speed, acceptable payment methods, and nearby amenities. It also communicated information on accessibility, subscription plans, and agreements to provide ultra-fast charging services to buyers of electric vehicles from a total of twelve car companies.



Image source: Electrify America

Approved Cycle 3 Plan Investments

CARB approved Electrify America’s Cycle 3 ZEV Investment Plan on June 24, 2021. The Cycle 3 Plan covers the 30-month period from January 1, 2022, through June 31, 2024. Investments approved in the Cycle 3 Plan began after the Cycle 3 ZEV Investment Plan approval in 2021. Table 6 below shows the project funding categories and investment amounts approved by the Board for the Cycle 3 Plan. The funding categories are consistent with the objectives and criteria set forth in Appendix C and SB 92.¹⁶

Table 6: Approved Cycle 3 Plan Investments¹⁷

Investment Category	Investment (in millions)
ZEV Charging Infrastructure	\$127
Green City 2 (Long Beach/Wilmington)	\$25
Public Education, Awareness, and Marketing Activities	\$28
Operational Expenses	\$20
TOTAL	\$200

¹⁶ Details about the Cycle 1, Cycle 2, and Cycle 3 investment categories and progress are provided in the ZEV Investment Plan Progress section.

¹⁷ Table 6 only reflects planned Cycle 3 Plan investment amounts, as approved by CARB. An exhibit of actual Cycle 3 Plan expenditures so far in Cycle 3 may be found in Table 10.

Zero-Emission Vehicle Infrastructure: \$127 Million



Image source: Electrify America News Update, December 13, 2018.

The majority of this investment (\$70-100 million) will be used to enhance and expand charging infrastructure within six of the metropolitan areas in which investments were made in Cycle 1 and Cycle 2, and in five new areas: Stockton, Bakersfield, Santa Maria-Santa Barbara, Oxnard-Thousand Oaks-Ventura, and Visalia. Electrify America projects this investment would bring 27-56 more operational stations during the Cycle 3 period.

The second largest piece of the infrastructure investment (\$15-25 million) is to increase charging equipment density and enhance existing investments made along those highway and regional routes identified by Electrify America to be plug-in electric vehicle traveling routes. This includes building charging infrastructure in: 1) Northern California, including Interstate 5 from Anderson to Yreka and California State highway routes 267, 28, and 89 in Northern Tahoe, and 2) various routes in Southern California, including U.S. 101 from Los Angeles to Camarillo, I-215 from Murrieta to Riverside, CA-62 in Northern Joshua Tree, I-8 from El Cajon to El Centro, and I-10 from Indio to Quartzsite. Electrify America projects this investment would bring 10-12 more operational stations during the Cycle 3 period.

Additional ZEV Infrastructure investments that were approved in the Cycle 3 Plan include \$6-10 million for transit, medium-duty, and heavy-duty fleet charging to aid in conversion of these fleets to zero-emission technology. Lastly, \$2-4 million is to be invested in hardware development and capacity building through utilization of energy management tools and infrastructure planning tools to improve customer experience and station economics.

Green City 2 (Long Beach/Wilmington): \$25 Million

As part of its Cycle 3 ZEV Investment Plan, Electrify America's second Green City initiative takes place in the City of Long Beach and the Wilmington neighborhood in the City of Los Angeles. Electrify America is working to implement projects focused on charging infrastructure for public transit and heavy-duty electric vehicles, with efforts to tackle medium- and heavy-duty emissions predominantly in disadvantaged and low-income communities.



Image source: Electrify America New Update, June 29, 2021

Public Education, Awareness, and Marketing Activities: \$28 Million

Electrify America continues to use both traditional and social media to increase public awareness of ZEVs and ZEV benefits. Electrify America's Cycle 3 media efforts also continue to be brand neutral and features battery electric vehicles. Electrify America's core pillars for Cycle 3 messaging include ZEV performance, charging availability, affordability, models, and environmental impact.

Electrify America plans to address ZEV access through incentives directed to vehicle electrification of transportation network companies and education pathways for passengers. Electrify America also intends to use marketing to boost station sustainability. This marketing communicates charging location, accessibility, charging speed, customer experience, and corporate social responsibility, ensuring that the stations continue to be viable and support California's ZEV market after this investment period is over.

ZEV Investment Plan Progress

As required under the Consent Decree, Electrify America has submitted its 2022 annual report on time. CARB staff has reviewed the report and found that meaningful progress has been made toward the investment goals established in the Cycle 1 and 2 Plans, and in implementing investments for the Cycle 3 Plan. The following sections first illustrate Electrify America's progress as of December 31, 2022, in implementing the Cycle 3 investment plan categories, and then present actual expenditures to date in tables 8, 9, and 10 for the three investment plans.

Zero-Emission Vehicle Infrastructure

As previously mentioned in the descriptions of the Cycle 1 and Cycle 2 ZEV Investment Plans, Electrify America planned to deploy DC fast chargers at sites located both along highway corridors and in the Fresno, Los Angeles, Riverside-San Bernardino, Sacramento, San Francisco, San Diego, San Jose, Santa Cruz-Watsonville, and Santa Rosa metropolitan areas. The Cycle 3 Investment Plan expands charging infrastructure within the six metropolitan areas in which investments were made in Cycle 1 and Cycle 2, as well as in five new areas: Stockton, Bakersfield, Santa Maria-Santa Barbara, Oxnard-Thousand Oaks-Ventura, and Visalia. The Cycle 1 Plan also deployed Level 2 charging stations at workplace and multi-unit dwellings (MUD) within the same metropolitan areas.

Table 7 shows the annual deployment status of ZEV infrastructure under Cycles 1, 2, and 3 through the fourth calendar quarter (Q4) of 2022.

Table 7: Charging Infrastructure Status

DC Fast Charging Stations						Level 2 Charging Stations		
						MUDs/Workplace		Rural Solar
Status	Q4 2018	Q4 2019	Q4 2020	Q4 2021	Q4 2022	Q4 2018	Q4 2019	Q4 2020 - Q4 2022
In permitting	72	165	228	269	278	--	--	N/A
Permit complete	35	152	207	262	270	--	--	N/A
Site work complete	9	128	185	248	258	--	--	N/A
Operational	3	78	152	214	248	74	241	30

Of the 248 DC fast charger stations that were operational by the end of 2022, Electrify America states 34 stations were opened in 2022. Electrify America reports that 55% of the operational DC fast chargers and 47% of the operational Level 2 chargers are in disadvantaged and low-income communities. These stations provided more than 2.3 million charging sessions which is estimated to provide enough energy for 253 million miles to be driven.

By December 2022, Electrify America had installed 122 battery energy storage systems (BESS) that, in total, have a power rating of more than 30 megawatts. These onsite battery systems can reduce high utility demand charges and on-peak energy charges, while easing grid loads by using lower-priced energy that was stored during low-demand periods. These systems are also capable of operating as virtual power plants that provide behind-the-meter power to the electric grid for demand response. During 2022, Electrify America continued to incorporate these battery systems, with utilities approving 107 of the 110 applications for co-located battery systems, and commissioning 75 systems. Electrify America also continued to procure renewable energy for which charging station usage for 2022 was offset by REC purchases for LCFS purposes via Electrify Americas partner SRECTrade and with a minor amount of RECs provided by their interim Virtual Power Purchase Agreement (VPPA). EA has reported that all electricity delivered to California charging stations in 2022 was 100% renewable.

Finally, in 2020 and 2021 Electrify America deployed 30 transportable and solar-powered EV ARC™ 2020 stand-alone Level 2 charging stations to rural areas in the state, with a high proportion being placed in rural Fresno County. Each station is equipped with a 4.28-kilowatt (kW) sun-tracking solar array, 32 kW-hours of onboard battery storage, and two Level 2 chargers that allow two customers to charge simultaneously. These stations continued to be operated throughout 2022.

Electrify America reported that it continued to experience permitting and utility interconnect challenges in 2022¹⁸. Permitting timelines in California continued to average 81 business days in 2022 which is an increase from an average of 77 days in 2020. Electrify America indicated that this is 25% longer than the national average. Electrify America reported that this extended timeline means it also costs Electrify America 46% more, on average, to design and construct a fast-charging station in California than in the rest of the United States. AB 1236 (Chiu, Chapter 598, Statutes of 2015) established permit streamlining requirements for authorities having jurisdiction (AHJ), constraining permit review to health and safety matters and precluding extended zoning review and aesthetic requests. The Governor's Office of Business and Economic Development (GO-Biz) has determined that only 51% of California's AHJs were compliant with AB 1236 as of December 31, 2022. To ensure the enforceability of AB 1236, Assembly Member Kevin McCarty authored AB 970 in early 2021, which was sponsored by Electrify America, to set mandatory timelines for the permitting process for charging infrastructure. If those timelines are not met, then the permit applications are deemed approved. AB 970 was passed in September 2021 and the bill's provisions would apply beginning January 1, 2023.

Utility interconnection timelines did not improve in 2022, remaining at an average of 38 weeks in California, which is 62% longer than the national average. Electrify America also states the CPUC Rule 21, which allows utilities to require supplemental reviews during the interconnection process, extended utility timelines in 2022. On the energy storage side, Electrify America stated that utilities may start requiring new inverter certifications which may impact Electrify America's investments in energy storage. Also, in accordance with AB 841 (Ting, Chapter 372, Statutes of 2020), the CPUC created a 125-day timeline for new service construction.

Lastly, when deploying behind-the-meter BESS at charging stations, Electrify America reports that utilities have perceived this as a new or added load, which leads to time-intensive interconnection studies on this matter.

Cycle 1 Sacramento Green City ZEV Access Demonstration Project

Electrify America continued to report in 2022 on its zero-emission car sharing and transit services, and the associated charging infrastructure, in the Sacramento area via its first

¹⁸ Descriptions of these challenges and Electrify America's responses to them are as reported by Electrify America in their 2022 Annual Report.

Green City Initiative. Throughout the implementation of the first Green City Initiative, Electrify America installed 14 DC fast charging stations in Sacramento.

The GIG free-float (point-to-point) car share fleet in Sacramento continued to be the largest all-electric car share fleet in the United States. In 2022, the GIG fleet made more than 38,000 trips and logged more than 2.1 million miles. GIG estimates that 65% of the census tracts in its “home zone” are designated as disadvantaged and low-income census tracts. In Q1 2023, GIG announced that they will be discontinuing their car-share program in Sacramento due to a decrease in demand and increase in operational costs.

Another car sharing service implemented as part of the Green City Initiative in Sacramento was a return trip car share program operated by Envoy Technologies. In 2021, Envoy decided to reduce its services in Sacramento and as of 2022 has discontinued its operations in the city.

In Q1 2019, Electrify America signed an agreement with Sacramento Regional Transit (SacRT) and Yolo County Transportation District (YCTD) to provide 12 Proterra E2 Catalyst electric transit buses for the Causeway Connection, a service linking UC Davis to downtown Sacramento and UC Davis Medical Center. In 2022, the buses provided an estimated 1.26 million passenger miles of service which Electrify America reports to be a 114% increase from 2021. They were supported by ultra-fast charging stations at four sites - the SacRT depot, the YCTD depot, and two en route locations in Davis and Sacramento. Electrify America reports that 100% of this investment is considered to meet disadvantaged or low-income criteria.

In 2020, Electrify America in partnership with SacRT and the Franklin Neighborhood Development Corporation launched an on-demand micro-transit shuttle bus service along Franklin Boulevard, as part of SacRT’s SmaRT Ride initiative, using three GreenPower EV Star shuttles. The service continued throughout 2022 and provided an estimated 4,300 passenger miles of service. Of the census tracts in the GreenPower shuttle service territory, 88% are in low-income and/or disadvantaged communities.

Cycle 3 Long Beach/Wilmington Green City Initiative

With the approval of the Cycle 3 ZEV Investment Plan in June 2021, Electrify America began foundational work for the Cycle 3 Green City Initiative in the City of Long Beach and the Wilmington neighborhood in Los Angeles. In August 2021, Electrify America announced a collaboration with NFI Industries that will result in the installation of 34 ultra-fast DC chargers by December 2023 to support heavy-duty electric trucks. With the installation of these chargers, NFI plans to deploy 60 electric drayage trucks that will operate from the Ports of Los Angeles and Long Beach to NFI’s facility in Ontario, California. The installation will include 150 kW and 350 kW chargers at the NFI facility in Ontario, California. Distributed energy resources, including solar photovoltaic and battery storage, will be located at the charging site.

In 2022, Electrify America and 4 Gen Logistics announced that 30 dedicated 150 kW ultra-fast and 350 kW hyper-fast chargers with BESS at the Port of Long Beach, California will

be installed. Additionally, 14 ultra-fast and hyper-fast chargers with BESS at 4 Gen's Rialto, California location will also be installed. The installation of these chargers will support operations of 60 electric trucks that 4 Gen is operating.

Public Education, Awareness, and Marketing

Electrify America made progress for its brand-neutral media campaign in Q4 2022. This began with Electrify America working with Plug-In America (PIA) to engage people with a creative message for PIA's National Drive Electric Week and PIA's website. The creative message was displayed on social media channels, Facebook, Instagram, and Snapchat, and on a podcast partnership with Sirius XM media.

Also, in Q4 2022, Electrify America began their Cycle 3 brand neutral campaign, "As Seen on EV" which aims to educate viewers on the feasibility of EV ownership while addressing misconceptions. This campaign draws from TV show genres such as courtroom dramas and reality TV but re-envisioned to show the benefits of EVs. This media campaign went live in November 2022 and targeted audiences on social media and online and also drove the audience to a website, SeenOnEV.com, for more information.

The campaign ran through April 2023 and has delivered over 42.9 million impressions through streaming audio, outdoor ads, digital TV, and digital media, and generated 75 thousand clicks to the SeenOnEV.com by the end of 2022.

In 2022, Electrify America targeted almost \$3 million to support partnerships with community-based organizations (CBOs) that have greater access to, and credibility within, California's low-income or disadvantaged communities. The collaboration is with four CBOs and aims to assist community members with upgrading to a ZEV, supporting previous efforts to provide digital and in-person education, EV ride and drives, incentives, and community engagements. The funding to these CBOs continued in 2022 and a summary of their activities is as follows:

- Breathe SoCal shows the benefits of driving electric by providing ZEV ride-and-drive events, host ride-share driver EV educational sessions, and put together an EV competition in the Long Beach-Wilmington area. In 2022, this organization started outreach to farmers markets for EV education food program in the East LA, Monterey Park, Pico Union, and Pico Rivera areas. They also proposed the MOU for the youth "ready set go" program.
- Ecology Action (EcoAct) works with community partners to provide ZEV ride-and-drives, ZEV showcase events, and ZEV purchase guidance in the Central Coast region. In 2022, a kickoff meeting was held with other CBOs and organizations that EcoAct referenced in their request for proposal. At this meeting, the statement of work and deliverables were discussed and the contracts with these partners were being finalized.
- Valley Clean Air Now (CAN) and its partners offer San Joaquin Valley low-income or disadvantaged community groups an opportunity to drive ZEVs, provide hands-on help qualifying drivers for ZEV incentives through Community Clean Car Clinics and Tune In &

Tune Up events, and will try to recruit new dealers to be a part of the Clean Cars 4 All program. In 2022, Valley CAN's hotline was ramped up to provide DAC/LIC community members with ZEV counseling. Valley CAN also began setting up clean transportation options, which encompassed community members taking a pledge to use car share and take the bus while saving money for a ZEV.

- Plug In America (PIA) helps individuals and entities understand the benefits of EVs. PIA founded the National Drive Electric Week and will support EV ride and drives in California, including EV test drives in rural communities. In 2022, PIA met with its partners to identify events for Q1 and Q2 2023.

To further support brand-neutral ZEV education and awareness, Electrify America will use \$1.6 million to fund education and workforce development programs in science, technology, engineering, and math (STEM), as they relate to ZEVs. In Q3 2022, Electrify America finalized the RFP process for the Cycle 3 workforce development and STEM education funding and in March 2023, five organizations were announced that will receive funding. The organizations that were awarded these funds were: Acterra: Action for a Healthy Planet; Ecology Action; EV Noire; Sinclair Community College; and Valley Clean Air Now.

In Q3 2022, Electrify America's "Normal Now" campaign was a Silver Sponsor of the National Drive Electric Week grant program. This sponsorship supported six National Drive Electric Week events. The following education and outreach activities were sponsored by Electrify America in 2022:

- California Hydrogen Business Council for the Hydrogen California Leadership Summit.
- The Coalition for Clean Air was sponsored for the California Air Quality Awards. They were also sponsored for California Clean Air Day, which helped lead programming efforts in 91 locations.
- The LA Auto Show was sponsored, which hosts thousands of attendees and exhibitors.
- Veloz was sponsored for the ElectricForAll.org and Veloz.org websites.
- EVS36 was sponsored for the EVS36 Exclusive Ride & Drive and for a booth. EVS36 is an international conference on electric transportation and technologies that provides the opportunity to learn about electric transportation.
- The Los Angeles Cleantech Incubator was sponsored for the Transportation Electrification Partnership (TEP) Summit, which provided a chance for LA to reflect on their transition and related efforts to zero-emission energy.
- The Fully Charged Show LTD was sponsored for the executive headline. This was a live multi-city event that held attractions and exhibits on EVs and home energy.

- PIA was sponsored for the Drive Electric Earth Day California Ride and Drives and the National Drive Electric Week California ride-and-drives. This sponsorship provided local grants for in-person EV ride and drives at six locations.

Finally, in 2022, Electrify America continued its nationwide branded marketing campaign by partnering with Alex Guberman, who is the creator of the 'E for Electric' YouTube channel. As part of this partnership, Alex featured an Electrify America-sponsored ad in an episode during 2022. The ad consisted of Alex narrating over Electrify America footage, which had 976,000 views.

Total Expenditures

Tables 8, 9, and 10 on the following pages reflect Electrify America's expenditures under the Cycle 1, Cycle 2, and Cycle 3 ZEV Investment Plans, respectively, through December 31, 2022, as reported in its 2022 Annual Report¹⁹. The independent, third-party auditor has provided CARB an attestation that these expenditures were made consistent with the Consent Decree and Plan approvals.

¹⁹ Electrify America, 2023. 2022 Annual Report to California Air Resources Board, April 30, 2023. (<https://ww2.arb.ca.gov/resources/documents/electrify-america-reports>)

Table 8: Electrify America’s Cycle 1 ZEV Investment Plan Creditable Expenditures

Investment Category	Amounts/Expenditures		Description	Low-income / DAC Spend
ZEV Infrastructure	Planned: Expended: Remaining:	\$120,000,000 <u>\$120,000,000</u> \$0	Install, operate, and maintain highway and community charging stations.	Electrify America has demonstrated to CARB staff that, for each of the three spending categories, Cycle 1 cumulative creditable costs in disadvantaged and low-income communities exceeded 35%. However, Electrify America considers its specific disadvantaged and low-income community spending levels, and the percentage of its investments, as contained in its creditable cost reports, to be confidential and proprietary information. For this reason, CARB is unable to share the specific expenditures in disadvantaged and low-income communities.
Sacramento Green City ZEV Access Demonstration Project	Planned: Expended: Remaining:	\$44,000,000 <u>\$44,000,000</u> \$0	Establish and market zero-emission car share and transit services.	
ZEV Awareness and Education	Planned: Expended: Remaining:	\$20,000,000 <u>\$20,927,072</u> \$0	Broad social, web-based, and traditional media brand-neutral awareness program.	
Administration	Planned: Expended: Remaining:	\$16,000,000 <u>\$16,195,464</u> \$0	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs, as provided in the Consent Decree.	
Total:	Planned: Expended: Remaining:	\$200,000,000 <u>\$201,122,536²⁰</u> \$0		

²⁰ Expenditures in excess of \$200 million in a given 30-month cycle are not creditable unless approved in writing by CARB.

Table 9: Electrify America’s Cycle 2 ZEV Investment Plan Creditable Expenditures

Investment Category	Amounts/Expenditures		Description	Low-income / DAC Spend
ZEV Infrastructure	Planned: Expended: Remaining:	\$153,000,000 <u>\$156,319,295</u> \$0	Install, operate, and maintain highway and community charging stations.	Electrify America has demonstrated to CARB staff that, for each of the three spending categories, Cycle 2 creditable costs in disadvantaged and low-income communities exceeded 35%. However, Electrify America considers its specific disadvantaged and low-income community spending levels, and the percentage of its investments, as contained in its creditable cost reports, to be confidential and proprietary information. For this reason, CARB is unable to share the specific expenditures in disadvantaged and low-income communities.
Public Education, Awareness and Marketing	Planned: Expended: Remaining:	\$27,000,000 <u>\$27,909,765</u> \$0	Broad social, web-based, and traditional media brand-neutral awareness program. Market charger locations, charging speed, acceptable payment methods, amenities, accessibility, and affordability (subscription plans and automaker bundling).	
Sacramento Green City ZEV Access Demonstration Project	Expended: Remaining:	<u>\$101,011</u> \$0	Provide operational support to the zero-emission car share and transit services.	
Administration	Planned: Expended: Remaining:	\$20,000,000 <u>\$15,669,930</u> \$0	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs, as provided in the Consent Decree.	
Total:	Planned: Expended: Remaining:	\$200,000,000 <u>\$200,000,000</u> \$0		

Table 10: Electrify America’s Cycle 3 ZEV Investment Plan Creditable Expenditures

Investment Category	Amounts/Expenditures	Description	Low-income / DAC Spend
ZEV Infrastructure	Planned: \$127,000,000 Expended: <u>\$89,285,731</u> Remaining: \$37,714,269	Install, operate, and maintain highway and community charging stations.	Electrify America has demonstrated to CARB staff that Cycle 3 creditable costs through 2022 are being spent in disadvantaged and low-income communities. However, Electrify America considers its specific disadvantaged and low-income community spending levels, and percentage of its investments, as contained in its creditable cost reports, to be confidential and proprietary information. For this reason, CARB is unable to share the specific expenditures in disadvantaged and low-income communities.
Public Education, Awareness and Marketing	Planned: \$28,000,000 Expended: <u>\$3,745,341</u> Remaining: \$24,254,659	Broad social, web-based, and traditional media brand-neutral awareness program. Continue to use both traditional and social media to increase public awareness of ZEVs and ZEV benefits.	
Long Beach/ Wilmington Green City ZEV Access Demonstration Project Administration	Planned: \$25,000,000 Expended: <u>\$1,000,483</u> Remaining: \$23,999,517	Establish and implement projects for medium and heavy-duty electric vehicles.	
	Planned: \$20,000,000 Expended: <u>\$13,014,989</u> Remaining: \$6,985,011	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs as provided for in the Consent Decree.	
Total:	Planned: \$200,000,000 Expended: \$107,046,544 Remaining: \$ 92,953,456		

Low-Income or Disadvantaged Community Benefits

As described in Table 8, 9, and 10, Electrify America has provided CARB staff with confidential expenditure information demonstrating that Cycle 1, Cycle 2 and so far for Cycle 3 ZEV Investment Plan spending in each of the investment categories meets or exceeds the 35% target set by SB 92, and voluntarily agreed to by Electrify America, for benefiting low-income or disadvantaged communities disproportionately impacted by air pollution.

CARB staff will continue to oversee Electrify America's ZEV Investment Plan spending, and will strive to ensure that, to the maximum extent allowable under the 2.0-Liter Partial Consent Decree, at least 35% of Investment Plan funds benefit low-income or disadvantaged communities disproportionately affected by air pollution, consistent with SB 92.

VW Environmental Mitigation Trust – Consent Decree Appendix D

This section focuses on Appendix D of the VW settlement Consent Decree: The Trust (VW Mitigation Trust or Trust). The Trust is intended to fully mitigate past and future excess NO_x emissions from the VW vehicles that were the subject of the settlement. Under the terms of the Consent Decree, VW paid \$2.7 billion into a national Trust for specified eligible mitigation actions. Wilmington Trust, N.A., is the trustee for the national Trust, which is allocated to each of the 50 states, the District of Columbia, and Puerto Rico, based on their respective number of VW vehicles that were the subject of the settlement. California's total allocation of the Trust from both the 2.0-liter and 3.0-liter vehicle Consent Decrees is about \$423 million²¹. The eligible mitigation actions (project funding categories) listed in the Consent Decree include mostly scrap-and-replace projects for the heavy-duty sector.

Public Process

As the Lead Agency for implementing California's Trust allocation, CARB was responsible for developing a Beneficiary Mitigation Plan that describes how California's Trust allocation will be spent, including the goals for the use of the funds; the eligible mitigation actions to be funded and the corresponding allocations; the estimated emission reductions; and consideration of the emissions benefits for areas disproportionately impacted by air pollution. CARB developed the Beneficiary Mitigation Plan through an extensive public process, and the Board approved the plan at its public meeting on May 25, 2018, and reported the Plan to the Trustee in June 2018. To develop the Beneficiary Mitigation Plan, CARB staff held 8 public meetings over a 7-month period in 2017 and 2018. Following the Plan approval, the project administrators, in coordination with CARB staff, held 6 public work group meetings throughout the State to solicit feedback from stakeholders on designing the implementation process and application requirements for each of the 5 Board-approved project funding categories.

The funding described in the Beneficiary Mitigation Plan complements a portfolio of other clean transportation investments by CARB, other State agencies, and local governments. There will be considerable investment in heavy-duty vehicle emission reductions through the Beneficiary Mitigation Plan, and through continued implementation of the Carl Moyer Program, Low Carbon Transportation Investments, the Proposition 1B Goods Movement Emission Reduction Program, Funding Agricultural Replacement Measures for Emission Reductions, and the Community Air Protection Program (Assembly Bill 617). The next section describes the projects in the Beneficiary Mitigation Plan that are being funded by California's portion of the Appendix D funds.

Proposed and Actual Trust Expenditures

California's Trust expenditures are expected to fully mitigate the excess NO_x caused by the subject VW diesel vehicles in California. Staff calculated the estimated initial NO_x target as 10,000 tons and will evaluate potential adjustments to the target as updated information

²¹ California's total Trust allocation is \$422,636,320.

becomes available. The estimate takes into account the VW diesel car recall and buy-back requirements in the Consent Decrees, the uncertainty in heavy-duty vehicle or technology market demand, the mix of projects within the specified project funding categories that could be funded, and infrastructure needs.

Table 11 shows the project funding categories and allocations the Board approved in the Beneficiary Mitigation Plan.

Table 11: Project Funding Categories and Allocations

Eligible Mitigation Action Project Funding Category	Benefiting Low-Income or Disadvantaged Communities	Project Allocation (millions)
Zero-Emission Transit, School, and Shuttle Buses	50%	\$130
Zero-Emission Class 8 Freight and Port Drayage Trucks	50%	\$90
Zero-Emission Freight and Marine Projects Forklifts and Port Cargo Handling Equipment Airport Ground Support Equipment Oceangoing Vessel Shore Power Zero-Emission Ferry, Tugboat, and Towboat Repowers	75%	\$70
Combustion Freight and Marine Projects Low NOx* Class 7-8 Freight Trucks Tier 4 Freight Switchers Tier 4 or Hybrid Ferry, Tugboat, and Towboat Repowers	50%	\$60
Light-Duty ZEV Infrastructure	35%	\$10
Reserve (including administrative costs)		\$63
TOTAL	> 50%	\$423

*0.02 gram per brake-horsepower-hour (g/bhp-hr)

These investments will:

- Reduce risk to children and other sensitive populations, while striving to fully mitigate the lifetime excess NOx caused by the subject VW diesel vehicles;
- Support early adoption of commercially available zero-emission technologies in the heavy-duty sector;
- Align with State priorities, and help meet California’s ZEV and petroleum use reduction goals; and

- Invest funds statewide, with a focus on benefiting low-income or disadvantaged communities.

The following sections describe the project funding categories and expenditures, and the current status of each. As required by the Consent Decree, for each funded vehicle or engine in each of the categories, the existing eligible vehicle or engine must be scrapped.

Zero-Emission Transit, School, and Shuttle Buses: \$130 Million



Funding for this category is being used to scrap and replace older, eligible Class 4-8 conventionally fueled transit, shuttle, and school buses with new, commercially available zero-emission buses, supporting early adoption of zero-emission technologies and reducing diesel’s harmful impacts on children. The funding is being implemented in two equal installments of \$65 million each, released at least two years apart, and is being made available on a first come, first-serve basis. For each vehicle funded, the incentive amount includes funding to help offset ZEV infrastructure costs. No more than 50% of each installment may go to any one bus category. Staff expects at least 50% of the total project funds will benefit low-income or disadvantaged communities.

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is administering this funding category statewide, with CARB oversight. SJVAPCD conducted public work group meetings throughout the State in spring 2019 to seek input on the application process and requirements, with the intent of developing a streamlined funding process. SJVAPCD opened the first statewide \$65 million funding opportunity in October 2019 and opened the second statewide \$65 million funding opportunity in October 2022.

Funding requests for school buses quickly exceeded the 50% bus category threshold described above for both funding releases. Funding continues to be available for transit and shuttle buses. The table below shows the total funding requests received for all bus categories as of December 31, 2022.

Table 12: Zero-Emission Bus Applications Received²²

Category	Number of Vehicles	Funds Requested
School Bus	958	\$383,200,000
Transit Bus	194	\$38,660,000
Shuttle Bus	101	\$16,160,000
Total	1,253	\$438,020,000

Table 13 below shows the contracted funding for zero-emission buses as of December 31, 2022. The SJVAPCD is continuing to enter into contracts with selected grantees for the remaining funding from the first installment.

Table 13: Zero-Emission Bus Funding Awarded as of December 31, 2022

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
School Bus	80	\$32,716,000	75%
Transit Bus	44	\$11,660,000	100%
Shuttle Bus	27	\$4,290,000	89%
Total	151	\$48,666,000	82%

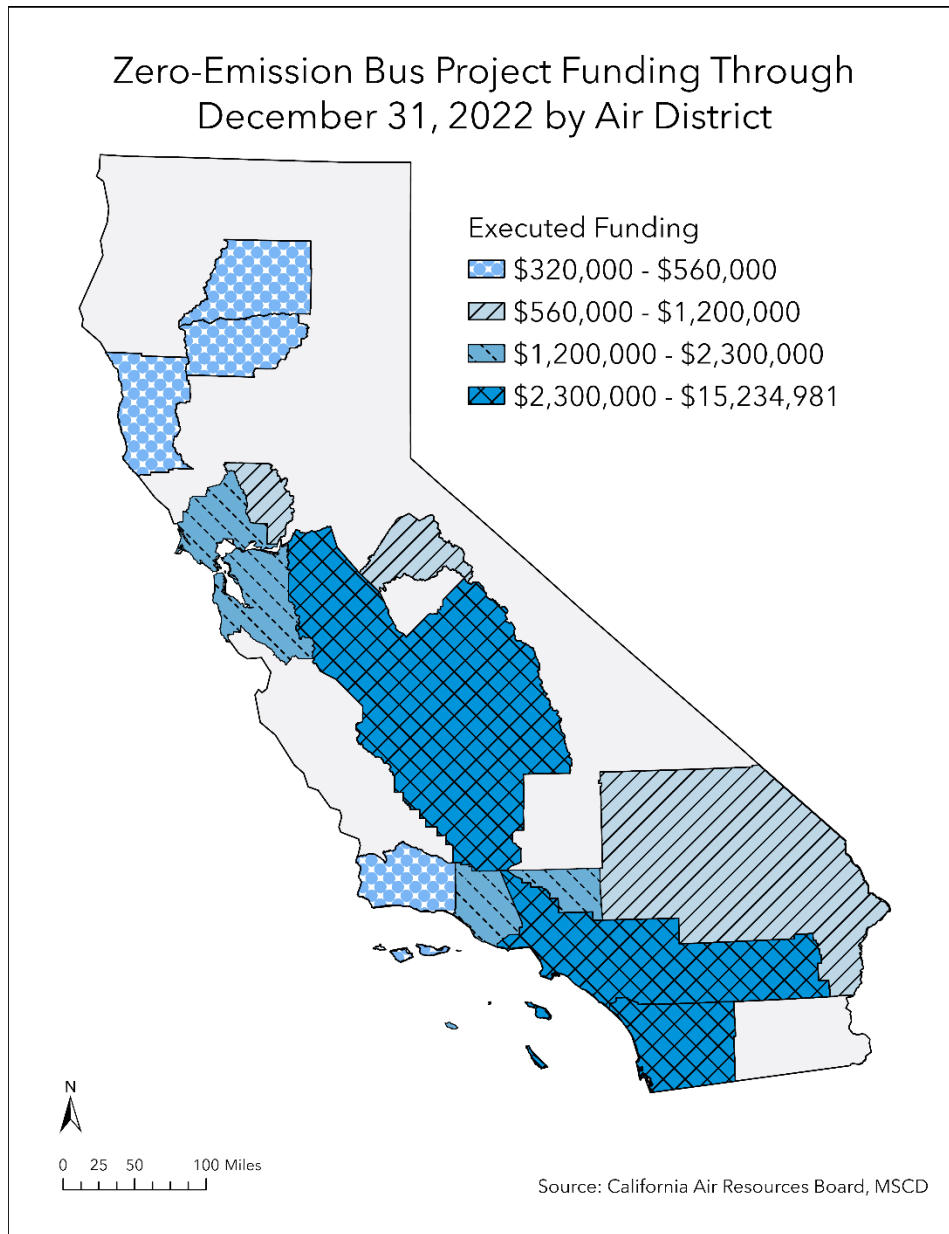
Project administrators have created a public website to track the awarded funds for all projects²³. The site is updated regularly, and features tools to display where funded vehicles and equipment are being deployed.

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$65,000,000 for vehicle purchases and about \$4,222,000 for administrative costs. Claims have been paid on a total of 66 buses, including 51 school buses, 10 transit buses and 5 shuttle buses. Since inception, the project administrator and CARB have expended about \$1,901,000 of the amount disbursed for administrative costs. This includes, but is not limited to, project development, staffing costs for statewide public meetings, application process development, travel, outreach (including website development), developing a database for tracking fund distribution and emission reductions, recordkeeping, and reporting.

²² Not all applications result in funded projects, as eligibility, contracting, and cost-share requirements may affect funding. Future reports will include information on funded projects as they occur.

²³ California's VW Environmental Mitigation Trust Results website: <https://www.californiavwtrust.org/>

The map below graphically illustrates the amount of Trust funding for zero-emission buses distributed across the state.



Zero Emission Class 8 Freight and Port Drayage Trucks: \$90 Million

Funding for this category is being used to replace eligible Class 8 conventionally fueled drayage trucks and freight trucks including waste haulers, dump trucks, and concrete mixers with new zero-emission technologies. While a portion of this allocation will support the early deployment of existing commercially available trucks, 70% of the allocation will be focused on expanding the market as manufacturers bring additional zero emission trucks to market in the next several years.



The South Coast Air Quality Management District (SCAQMD) is administering this funding category statewide, with CARB oversight. SCAQMD conducted public work group meetings throughout the State in spring 2019 to seek input on the application process and requirements, with the intent of developing a streamlined funding process. SCAQMD released the first statewide \$27 million installment (30% of the allocation for this project funding category) in summer 2020. While many zero-emission Class 8 trucks are commercially available today, manufacturer diversity was limited in 2018 when California's Beneficiary Mitigation Plan was approved. Therefore, less than 50% of the funding was allocated to the first installment to allow additional time for manufacturers to bring additional truck model diversity to the market. CARB staff is coordinating with the air district administrators on adjustments to increase uptake of the available funding and release the second installment once those adjustments are made.

Funds are being made available on a first come, first-serve basis. For each vehicle funded, the incentive amount is intended to help offset ZEV infrastructure costs. Staff expects that at least 50% of the total project funds will benefit low-income or disadvantaged communities.

The funding was over-subscribed within the first week, indicating a strong demand for commercially available Class 8 trucks. However, as SCAQMD worked to get truck projects under contract, a number of applicants withdrew or were deemed ineligible leaving roughly \$9 million in the first installment unclaimed. In August 2022, SCAQMD reopened the zero-emission Class 8 funding category and will continue accepting applications until the \$27 million has been fully allocated. The table below shows the total funding requests received as of December 31, 2022.

Table 14: Zero-Emission Class 8 Truck Applications Received²⁴

Category	Number of Vehicles	Funds Requested
Drayage Trucks	60	\$10,970,000
Dump Truck	14	\$2,635,000
Freight Trucks	140	\$27,514,131
Waste Haulers	73	\$14,229,105
Total	287	\$55,348,236

Table 15 below shows the contracted funding for zero-emission Class 8 Trucks as of December 31, 2022. The SCAQMD is continuing to enter into contracts with selected grantees for the remaining funding from the first installment.

Table 15: Zero-Emission Class 8 Truck Funding Awarded as of December 31, 2022

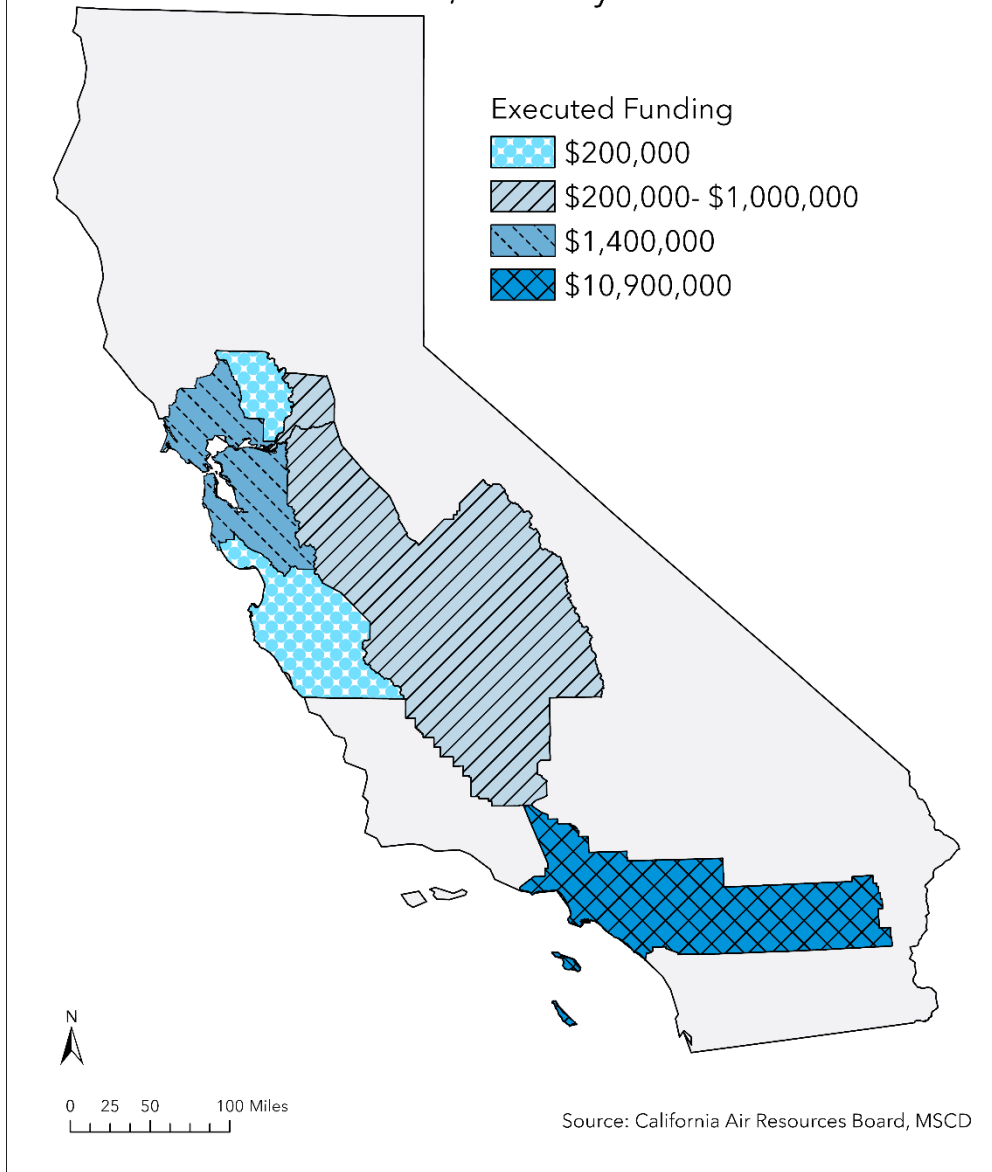
Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Drayage Trucks	5	\$1,000,000	100%
Dump Trucks	2	\$400,000	100%
Freight Trucks	61	\$12,100,000	84%
Waste Haulers	9	\$1,800,000	67%
Total	77	\$15,300,000	83%

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$27,000,000 for vehicle purchases and about \$3,316,000 for administrative costs through December 2022. The project administrator and CARB have expended about \$3,000,000 of the amount disbursed for administrative costs to support implementation, including, but not limited to, project development, staffing costs for statewide public meetings, online application process development, travel, outreach (including website development), developing a database for tracking fund distribution and emission reductions, application review, contract development and execution, recordkeeping, and reporting.

The map below graphically illustrates the amount of Trust funding for zero-emission Class 8 trucks distributed across the state.

²⁴ Not all applications result in funded projects, as eligibility, contracting, and cost-share requirements may affect funding. Future reports will include information on funded projects as they occur.

Zero-Emission Freight and Drayage Funding Through December 31, 2022 by Air District



Zero Emission Freight and Marine Projects: \$70 Million



Funding for this category is being used to replace eligible airport ground support equipment, forklifts, and port cargo handling equipment with new, commercially available, zero-emission technologies, and to install oceangoing vessel shore power systems at port terminals. Zero-emission repowers for ferries, tugboats, and tow boats are also eligible. The goal of this project

category is to maximize NOx reductions by funding the most cost-effective zero-emission freight or marine projects.

These funds are being administered in two equal increments of \$35 million, at least two years apart, so that CARB can monitor progress and adjust the implementation of the project category as needed. At least 75% of this allocation will benefit low-income or disadvantaged communities.

The Bay Area Air Quality Management District (BAAQMD) is administering this funding category statewide. BAAQMD conducted public work group meetings throughout the State in spring 2019 to seek input on the solicitation process and requirements. BAAQMD released a competitive solicitation for the first statewide \$35 million installment in June 2020, with a closing date in August 2020. The funding was under-subscribed, with about \$8 million in project applications received. Contributing factors include the COVID-19 pandemic’s impacts on maritime ports²⁵ and airports, the two primary sectors eligible for the funding, coupled with the early stage of zero-emission technology adoption in the off-road and marine sectors. The table below shows the total funding requests from the first competitive solicitation.

Table 16: Zero-Emission Freight and Marine Applications Received from Competitive Solicitation²⁶

Category	Number of Vehicles/Equipment	Funds Requested
Heavy-Lift Forklifts/Cargo Handling Equipment	8	\$900,524
Airport Ground Support Equipment	6	\$557,652
Ferry/Tug/Tow Repowers	2	\$4,635,523
Shore Power	2	\$2,073,484
Total	18	\$8,167,183

BAAQMD staff conducted a non-competitive solicitation in the second quarter of 2021 with the remaining funds from the first installment. The new solicitation is a first come, first-serve model, to streamline the application process and to allow for enhanced outreach and support to potential applicants. The solicitation closed in 2022 to allow the Administrator to make minor program updates approved by CARB and then was reopened in September 2022 and continues to be open. Statewide outreach included hosting five webinars, conducting presentations to tenants at ports and airports, coordinating with statewide organizations and associations to distribute information to potential applicants, and sending out multiple email blasts, and conducting direct outreach to potential applicants. The table below shows the total funding requests from the first come, first-serve solicitations.

²⁵ PortStrategy, California Ports Cautious After Volume Loss, June 11, 2020. <https://www.portstrategy.com/news101/world/americas/1247720.article> .

²⁶ Not all applications result in funded projects, as eligibility, contracting, and cost-share requirements may affect funding. Future reports will include information on funded projects as they occur.

Table 17: Zero-Emission Freight and Marine Applications Received from First Come, First Serve Solicitation

Category	Number of Vehicles/Equipment	Funds Requested
Heavy-Lift Forklifts/Cargo Handling Equipment	90	\$13,212,759
Airport Ground Support Equipment	44	\$1,055,405
Ferry/Tug/Tow Repowers	5	\$3,502,300
Shore Power	6	\$13,503,250
Total	145	\$31,273,714

Table 18 below shows the contracted funding for Zero-Emission Freight and Marine as of December 31, 2022. The BAAQMD is continuing to enter into contracts with selected grantees for the remaining funding from the first installment. CARB staff is working with all three air district administrators to increase uptake of available funding by reducing administrative barriers such as long contracting timelines, and other program improvements such as adjusting project funding amounts.

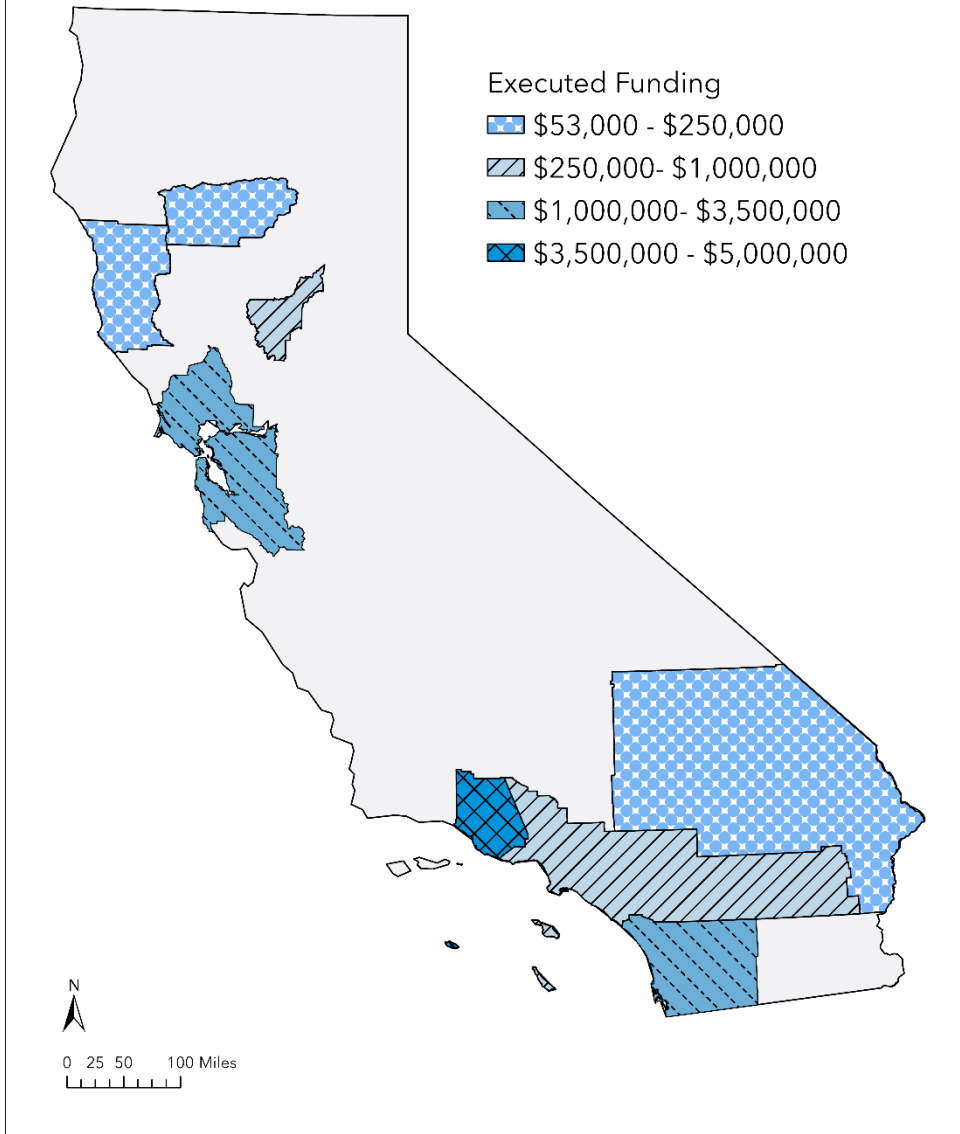
Table 18: Zero-Emission Freight and Marine Funding Awarded as of December 31, 2022

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Heavy-Lift Forklifts/Cargo Handling Equipment	15	\$1,533,000	70%
Airport Ground Support Equipment	7	\$280,400	36%
Ferry/Tug/Tow Repowers	3	\$1,005,000	0%
Shore Power	4	\$8,503,250	100%
Total	29	\$11,321,650	86%

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$15,470,250 for vehicle purchases, and about \$3,199,000 for administrative costs. Since inception, the project administrator and CARB have expended about \$2,732,000 of the amount disbursed for administrative costs. This includes, but is not limited to, project development, staffing costs for statewide public meetings, solicitation and application process development, travel, outreach (including website development), developing a database for tracking fund distribution and emission reductions, recordkeeping, and reporting.

The map below graphically illustrates the amount of Trust funding for zero-emission freight and marine projects distributed across the state.

Zero-Emission Freight and Marine Funding Through December 31, 2022 by Air District



Combustion Freight and Marine Projects: \$60 Million



Funding for this category is being used to replace eligible Class 7 and 8 freight trucks, including waste haulers, dump trucks, and concrete mixers, or their engines, freight switcher locomotives or their engines, and ferry, tugboat, and towboat engines, with the cleanest commercially available internal combustion or hybrid technologies. The goal of this project

category is to maximize NOx reductions by funding cost-effective, lower-emission engine

projects. Eligible trucks may only be replaced or repowered with engines meeting the 0.02 gram per brake horsepower-hour NOx standard or cleaner.

This funding category is being allocated in two installments of \$30 million each, at least two years apart, so that CARB can monitor progress and adjust as needed to stay on track with the NOx emission reduction targets, as described in the Beneficiary Mitigation Plan. Staff expects that at least 50% of this allocation will benefit low-income or disadvantaged communities.

SCAQMD is administering this funding category statewide. SCAQMD conducted public work group meetings throughout the State in spring 2019 to seek input on the solicitation process and requirements. SCAQMD released a competitive solicitation for the first statewide \$30 million installment in December 2019, with a closing date in March 2020. The funding was under-subscribed, with about \$7 million in project applications received. Contributing factors include the availability of funding from other programs at the time the solicitation was open, and prospective applicants’ potential hesitancy to apply for funding at the start of a global pandemic. The table below shows the total funding requests from the first competitive solicitation.

Table 19: Combustion Freight and Marine Applications Received from Competitive Solicitation

Category	Number of Vehicles/Equipment	Funds Requested
Freight Trucks	29	\$1,452,600
Drayage Trucks	34	\$1,898,747
Waste Haulers	33	\$3,070,000
Marine Engines	2	\$1,000,000
Total	98	\$7,421,347

SCAQMD re-solicited the remaining funds from the first installment in a first come, first-serve model, and the solicitation will remain open until funding from the first installment is exhausted. The table below shows the total funding requests from the first come, first-serve solicitation through December 31,2022.

Table 20: Combustion Freight and Marine Applications Received from First Come, First Serve Solicitation²⁷

Category	Number of Vehicles/Equipment	Funds Requested
Freight Trucks	83	\$5,754,145
Drayage Trucks	156	\$13,827,000
Dump Trucks	7	\$515,395
Waste Haulers	135	\$11,266,220
Concrete Mixers	1	\$85,000
Total	382	\$31,447,760

Table 21 below shows the contracted funding for eligible applicants from the Combustion Freight and Marine first competitive solicitation as of December 31, 2022, as well as 88 of the project vehicle contracts executed from the first-come, first-served solicitation. CARB staff is working with all three air district administrators to increase uptake of the available funding by reducing administrative barriers such as long contracting timelines, and other program improvements such as adjusting project funding amounts.

Table 21: Combustion Freight and Marine Funding Awarded as of December 31, 2022

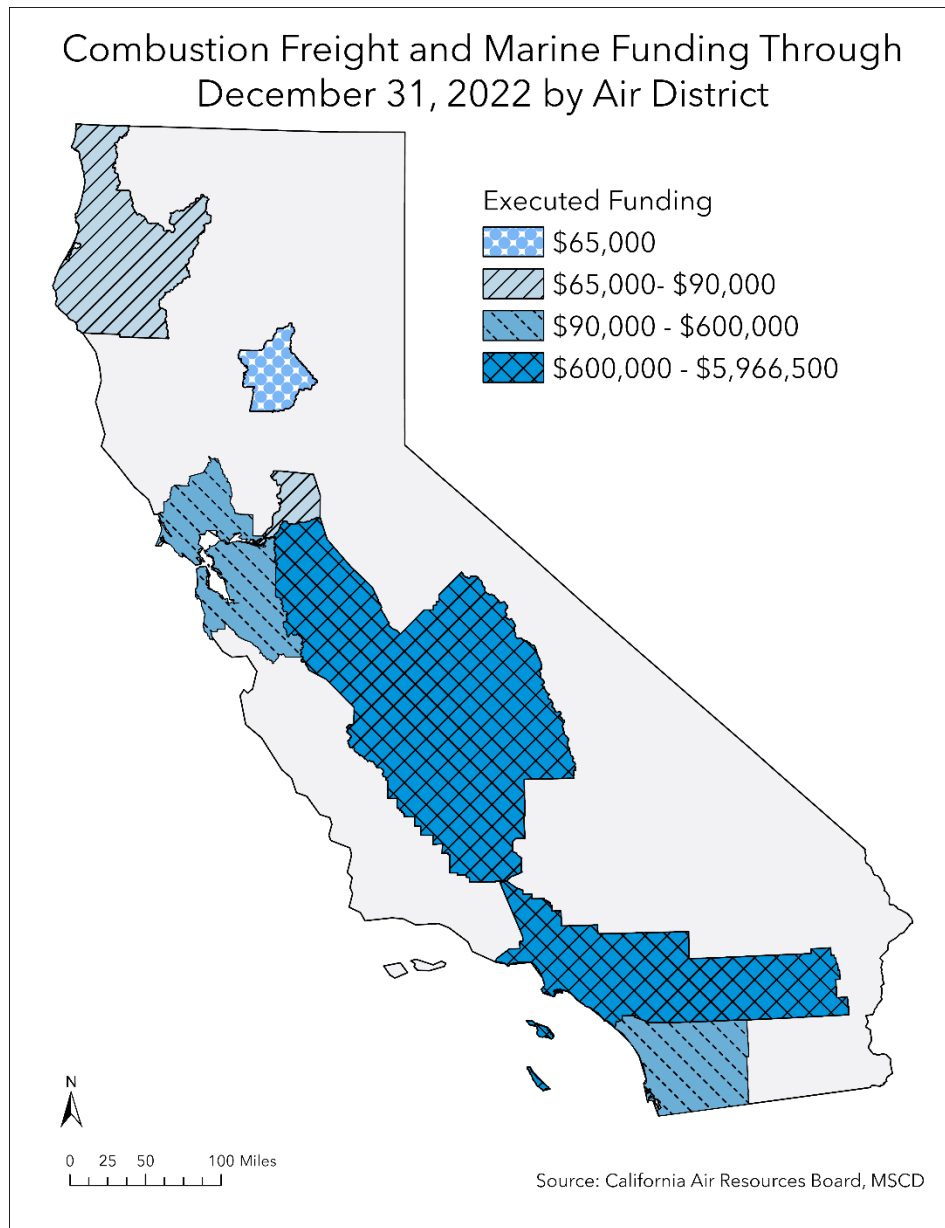
Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Freight Trucks	41	\$1,971,389	46%
Drayage Trucks	53	\$4,466,789	100%
Dump Trucks	0	\$0	N/A
Waste Haulers and Dump Trucks	52	\$2,714,267	100%
Concrete Mixers	0	\$0	N/A
Total	146	\$9,152,445	84%

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$19,980,000 for vehicle purchases, and about \$3,447,000 for administrative costs. Since inception, the project administrator and CARB have expended about \$2,792,000 of the amount disbursed for administrative costs. This includes, but is not limited to, project development, staffing costs for statewide public meetings, solicitation and application process development, travel, outreach (including website development),

²⁷ Not all applications result in funded projects, as eligibility, contracting, and cost-share requirements may affect funding. Future reports will include information on funded projects as they occur.

developing a database for tracking fund distribution and emission reductions, application review, developing and executing contracts with applicants, recordkeeping, and reporting.

The map below graphically illustrates the amount of Trust funding for combustion freight and marine projects distributed across the state.



Light-Duty Zero-Emission Vehicle Infrastructure: \$10 Million



Funding for this category is being used for fueling infrastructure for light-duty ZEVs, with a target of \$5 million for charging stations and \$5 million for hydrogen fueling stations. This allocation provides funding to help purchase, install, operate, and maintain new charging stations for battery electric vehicles.

Staff encouraged applicants to combine this funding with other available funding sources at the state, federal, and local level. These funds are administered statewide using a competitive process, and support projects that meet the fueling needs of a growing ZEV fleet and help fill gaps not met by other funding programs. At least 35% of this allocation is expected to benefit low-income or disadvantaged communities.

BAAQMD is administering this funding category statewide. BAAQMD conducted public work group meetings throughout the State in spring 2019 to seek input on the application process and requirements. BAAQMD and CARB staff have been working with the California Energy Commission, the GO-Biz, and other agencies to coordinate funding efforts. The \$5 million in funding for hydrogen fueling stations is augmenting the \$45.7 million available through the California Energy Commission's grant funding opportunity, released in January 2020. The 5 hydrogen fueling stations in the table below were preliminarily selected for \$1 million in funding each from the VW Mitigation Trust. The applicant is FirstElement Fuel, Inc., and all proposed stations are located in disadvantaged or low-income communities. Note that an originally awarded station, proposed at 2160 South Euclid Avenue in Ontario, CA, was replaced with a station, proposed at 4280 Foothill Boulevard in Oakland, CA. This change was made because the Ontario station was placed on hold by the site owner and the Oakland station was progressing faster than anticipated, and its construction timeframe aligned with the remaining stations.

Table 22: Proposed Hydrogen Fueling Station Awards

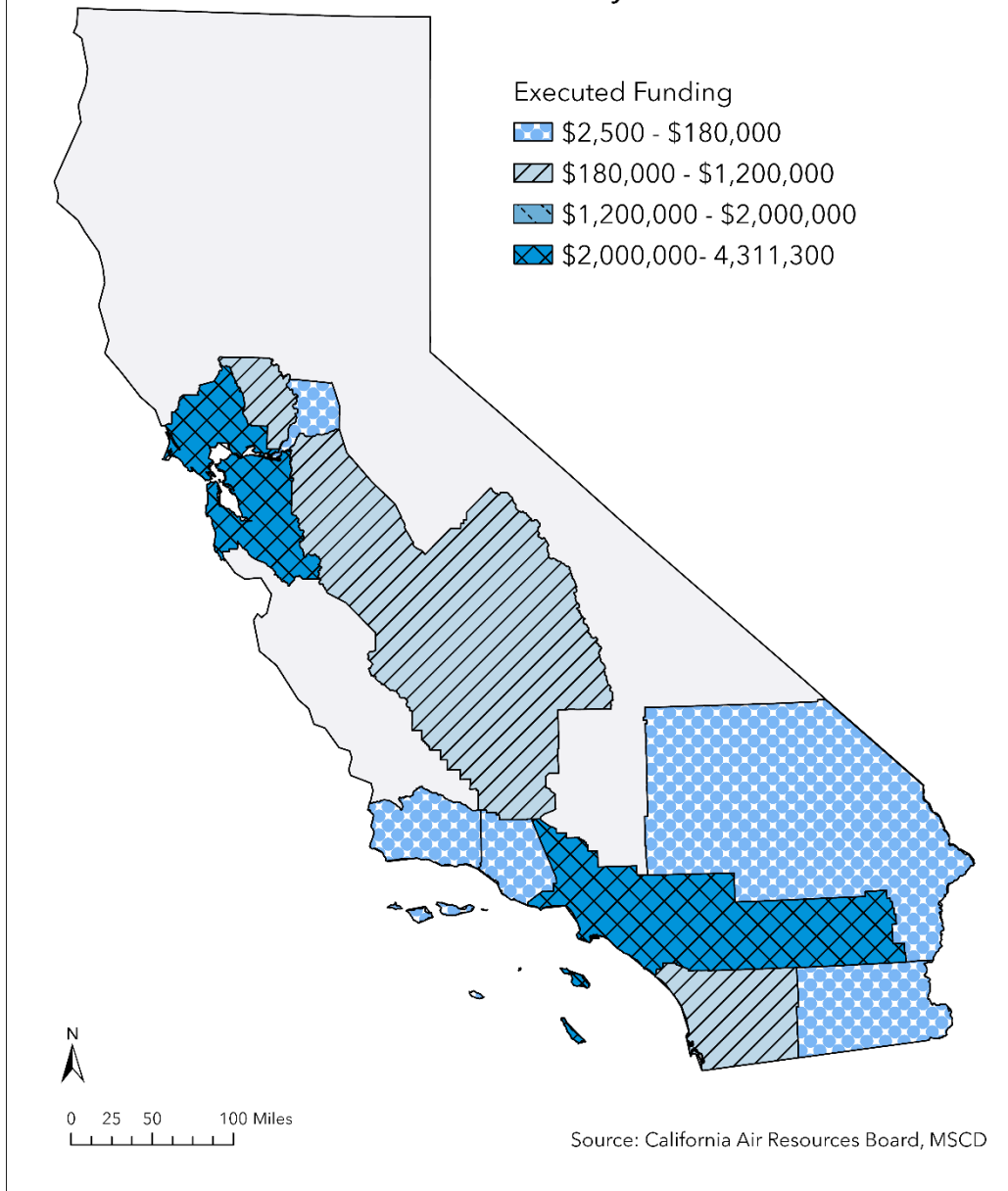
Proposed Station Address	City	Proposed Award
2160 South Euclid Avenue	Oakland	\$1,000,000
510 East Santa Clara Street	San Jose	\$1,000,000
1930 South Waterman Avenue	San Bernardino	\$1,000,000
3160 Carlson Boulevard	El Cerrito	\$1,000,000
6392 Beach Boulevard	Buena Park	\$1,000,000

BAAQMD released a competitive statewide solicitation for the \$5 million in funding for charging stations in May 2021. The application period closed August 18, 2021. Applications for 89 stations, including 460 chargers, have been received. These applications are being reviewed.

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$10,000,000 for equipment purchases, and about \$1,125,000 for administrative costs. Since inception, the project administrator and CARB have expended about \$701,000 of the amount disbursed for administrative costs. This includes, but is not limited to, project development, staffing costs for statewide public meetings, solicitation and application process development, travel, outreach (including website development), developing a database for tracking fund distribution and emission reductions, recordkeeping, and reporting.

The map below graphically illustrates the amount of Trust funding for light-duty infrastructure distributed across the state.

Zero-Emission Infrastructure Funding Through December 31, 2022 by Air District



Reserve: \$63 Million

The Beneficiary Mitigation Plan allocates \$63 million (15% of the State’s Trust allocation) for a reserve that will be used to cover administrative costs associated with implementing the project funding categories above, and to fund additional projects. The Consent Decree allows up to 15% of the State’s allocation to be expended on administrative costs, including those expended by project administrators and CARB. CARB does not expect to use the entirety of those funds on administration; the amount has been reserved to also provide funding for additional projects to ensure the NOx mitigation target is met. Any interest

earned from the Trust will also be placed in this category, to be used to fund additional projects and corresponding administrative costs. Interest earned by project administrators will be calculated separately, and will remain within each respective project funding category, with 90% going towards projects and 10% towards associated administrative costs.

As indicated in the project funding category descriptions above, California’s three largest air districts are administering, on a statewide basis, the project funding categories shown in Table 23, with CARB oversight. Each of these air districts has extensive experience administering public funds for air quality improvement programs and is well-suited to administer funding for the respective project funding categories.

Table 23: Project Funding Category Statewide Administration

Eligible Mitigation Action Project Funding Category	Statewide Administrator
Zero-Emission Freight and Marine Projects	Bay Area Air Quality Management District
Light-Duty ZEV Infrastructure	
Zero-Emission Transit, School, and Shuttle Buses	San Joaquin Valley Air Pollution Control District
Zero-Emission Class 8 Freight and Port Drayage Trucks	South Coast Air Quality Management District
Combustion Freight and Marine Projects	

Administrators are responsible for a wide range of tasks associated with implementing funding from the project funding categories. These include, but are not limited to, conducting public meetings to determine implementation details and funding application requirements; outreach, including targeted outreach for low-income or disadvantaged communities; developing solicitations or application materials; processing and scoring applications for project selection; tracking expenditures; calculating actual emission reductions; conducting inspections for scrapped vehicles and engines; record keeping; and reporting to CARB. CARB will oversee project administration and will conduct programmatic reviews and fiscal audits.

Total Expenditures

Table 24: California's VW Mitigation Trust Expenditures as of December 31, 2022 includes an accounting of the State's Trust funds - cumulative and this reporting period. As of December 31, 2022, about \$137,000,000 has been disbursed from the Trust for vehicles, engines, or equipment and \$15,308,000 for administrative costs which includes the more intensive program development and project start-up costs. Together this adds up to more than \$152,000,000. \$37,000,000 of the \$152,000,000 was disbursed from the Trust in 2022.

For each project funding category, Table 24 includes the beginning balance (proposed expenditures), the actual expenditures, and the remaining balance. In this report, "actual expenditures" refers to amounts disbursed to the State or its third-party administrators from the Trust and not actual liquidation by the State or third party. Once funding is expended from the Trust, it is available to fund completed vehicle and equipment projects, and support administration of the program. It is important to note that California's allocation of the national Trust was \$422,636,320, which has been rounded for the sake of the Beneficiary Mitigation Plan and this report to \$423 million. Therefore, the project funding category amounts were also rounded up.

All states who are beneficiaries of the Trust have balances that are subject to fluctuations based on the Trustee's investment of the monies and their market value, as well as fees and other Trust-related expenses. The "Cumulative Totals" shown at the bottom of the table reflect the original amount of California's allocation; the total cumulative amount of net earnings from the Trust through December 31, 2022; the total cumulative amount expended through December 31, 2022; and the total funds remaining (closing market value with accrued income). The table also includes the remaining balance at the beginning of the current reporting period, as reported by the Trustee on January 1, 2022, reflecting the opening market value with accrued income; the amount of net earnings in the current reporting period; the amount of State expenditures in the current reporting period; and the ending balance (closing market value with accrued income). All amounts in Table 24 are rounded to the nearest dollar.

For 2022, the closing market value was \$291,934,611 and disbursed \$37,026,478 for a total of \$328,961,049. When compared to the remaining balance at the beginning of 2023, as reported by the Trustee on January 1, 2023, California's portion of the Trust earned \$16,446,791.

Table 24: California’s VW Mitigation Trust Expenditures as of December 31, 2022

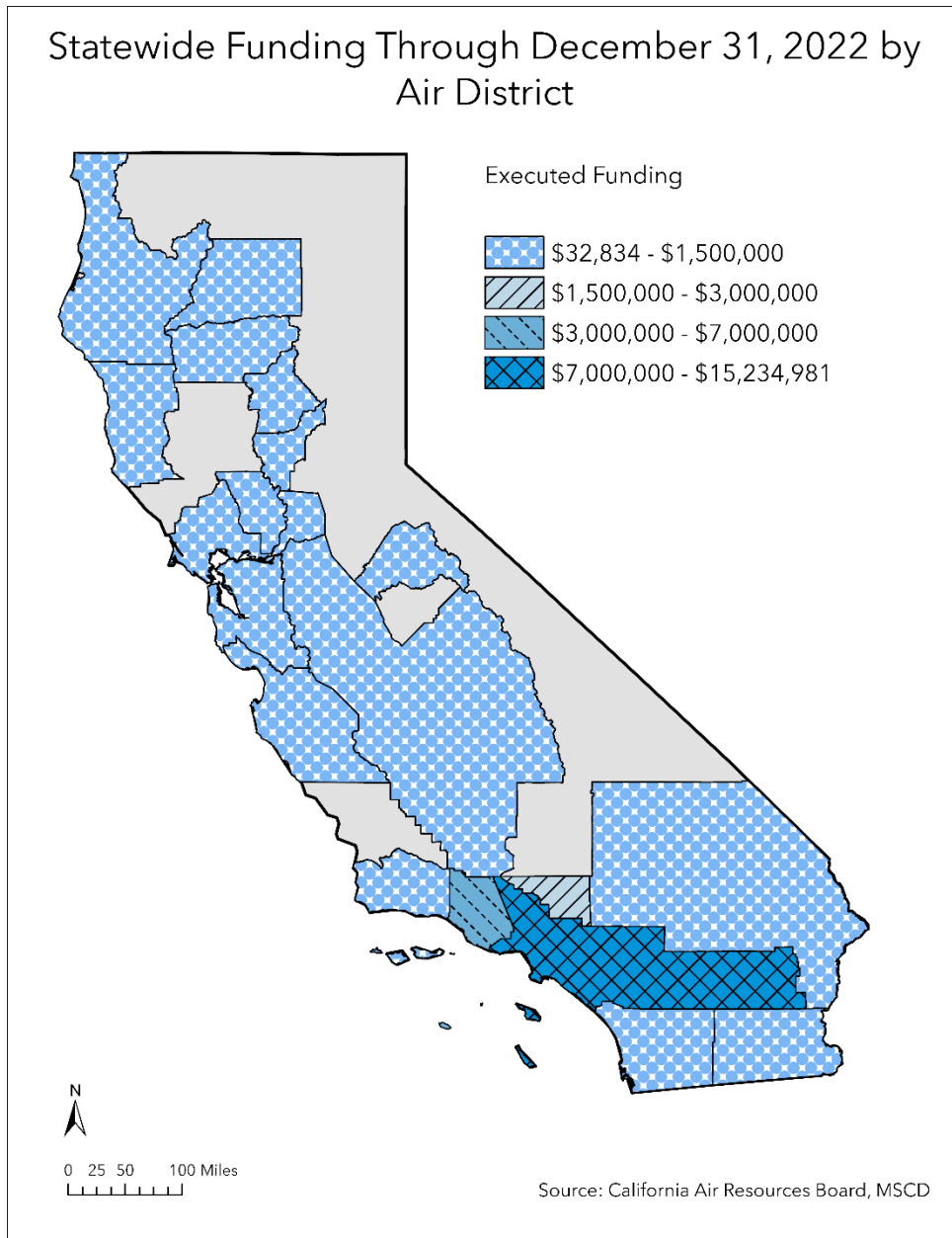
Project Funding Category	Amounts/Expenditures	Description	Status
Zero-Emission Transit, School, & Shuttle Buses	Begin: ¹ \$130,000,000 Disbursed: <u>\$65,000,000</u> Remaining: \$65,000,000	Replace existing diesel buses with zero-emission technologies; no more than 50% of funds to one bus category; first-come, first-serve.	\$65 million statewide installments were released in October 2019 and in October 2022; and more than 50% of the funds have been requested for school bus purchases.
Zero-Emission Class 8 Freight and Port Drayage Trucks	Begin: ¹ \$90,000,000 Disbursed: <u>\$27,000,000</u> Remaining: \$63,000,000	Replace existing diesel Class 8 freight and port drayage trucks with zero-emission technologies; first-come, first-serve.	First \$27 million statewide installment was released in summer 2020; contracts for vehicle purchases are underway.
Zero-Emission Freight and Marine Projects	Begin: ¹ \$70,000,000 Disbursed: <u>\$15,470,250</u> Remaining: \$54,529,750	Fund most cost-effective zero-emission projects in freight and marine sectors; competitive solicitation.	Solicitation for first \$35 million statewide installment was released in summer 2020 and was under-subscribed; solicitation was re-released with modifications in 2021.
Combustion Freight and Marine Projects	Begin: ¹ \$60,000,000 Disbursed: <u>\$12,480,000</u> Remaining: \$40,019,762	Fund most cost-effective clean combustion projects in freight and marine sectors; competitive solicitation.	Solicitation for first \$30 million statewide installment was released in December 2019 and was under-subscribed; solicitation was re-released with modifications in 2021.
Light-Duty ZEV Infrastructure	Begin: ¹ \$10,000,000 Disbursed: <u>\$10,000,000</u> Remaining: \$0	Purchase, install, operate, and maintain new charging and fueling stations for light-duty ZEVs.	Statewide solicitation for hydrogen stations (\$5 million) was released in 2020; all funds are committed. Solicitation for charging stations (\$5 million) was released in 2021.

Project Funding Category	Amounts/Expenditures	Description	Status
Reserve (including administrative costs)	Begin: ¹ \$63,000,000 Disbursed: <u>\$13,404,761</u> Remaining: \$49,595,239	Fund administrative costs for above projects; fund additional projects needed to meet NOx emission reduction target.	CARB and statewide administrators are currently engaged in implementation, including solicitations, project selection and administration, recordkeeping, and reporting.
Cumulative Totals:	Begin: \$422,636,320 Earned: ² \$22,057,229 Disbursed: <u>\$152,758,938</u> Remaining: \$291,934,611	Current Reporting Period (1/1/2022 through 12/31/2022):	Begin: \$312,514,258 Earned: ² \$16,446,791 Disbursed: <u>\$37,026,438</u> Remaining: \$291,934,611

¹ The beginning amounts for each project funding category are those reflected in the Beneficiary Mitigation Plan; the Plan used rounded numbers to correspond to California’s rounded total Trust allocation of \$423 million. All other amounts in the table above are rounded to the nearest dollar.

² The net amount of earnings at current market value after subtracting fees and other Trust-related deductions.

The map below graphically illustrates the amount of Trust funding for all projects distributed across the state.



Low-Income or Disadvantaged Community Benefits

As shown in Table 11 on page 26, each project funding category will meet or exceed the 35% target set by SB 92 for benefiting low-income or disadvantaged communities. In fact, CARB expects more than 50% of California’s Trust allocation to benefit communities that are disproportionately impacted by air pollution. Project funding categories that are competitively solicited include criteria requiring low-income or disadvantaged community

benefits. For first come, first-serve project funding categories, staff based its projections on an evaluation of historical participation data from other first-come, first-serve zero-emission heavy-duty vehicle incentives. As projects are implemented and funds are expended, CARB staff will track and annually report these benefits for each project funding category. Project administrators have created a public website to track awarded funds for all projects.²⁸ The site is updated regularly and will soon feature additional tools to display where funded vehicles and equipment are being deployed.

The table below shows the percentages of funds benefiting low-income or disadvantaged communities for the project categories that have data to report as of December 31, 2022. To ensure the most accurate reporting, only projects that have entered into contracts are included.

Table 25: Percentage of Contracted Project Funding Benefiting Disadvantaged or Low-Income Communities as of December 31, 2022

Project Funding Category	Contracted Project Funding	Current Percentage Benefiting Disadvantaged or Low-Income Communities²⁹
Zero-Emission Transit, School, and Shuttle Buses	\$47,666,000	82%
Zero-Emission Class 8 Freight and Port Drayage Trucks	\$15,300,000	83%
Combustion Freight and Marine Projects	\$9,152,445	84%
Zero-Emission Freight and Marine Projects	\$11,321,650	86%
Light-Duty ZEV Infrastructure	\$5,000,000	100%

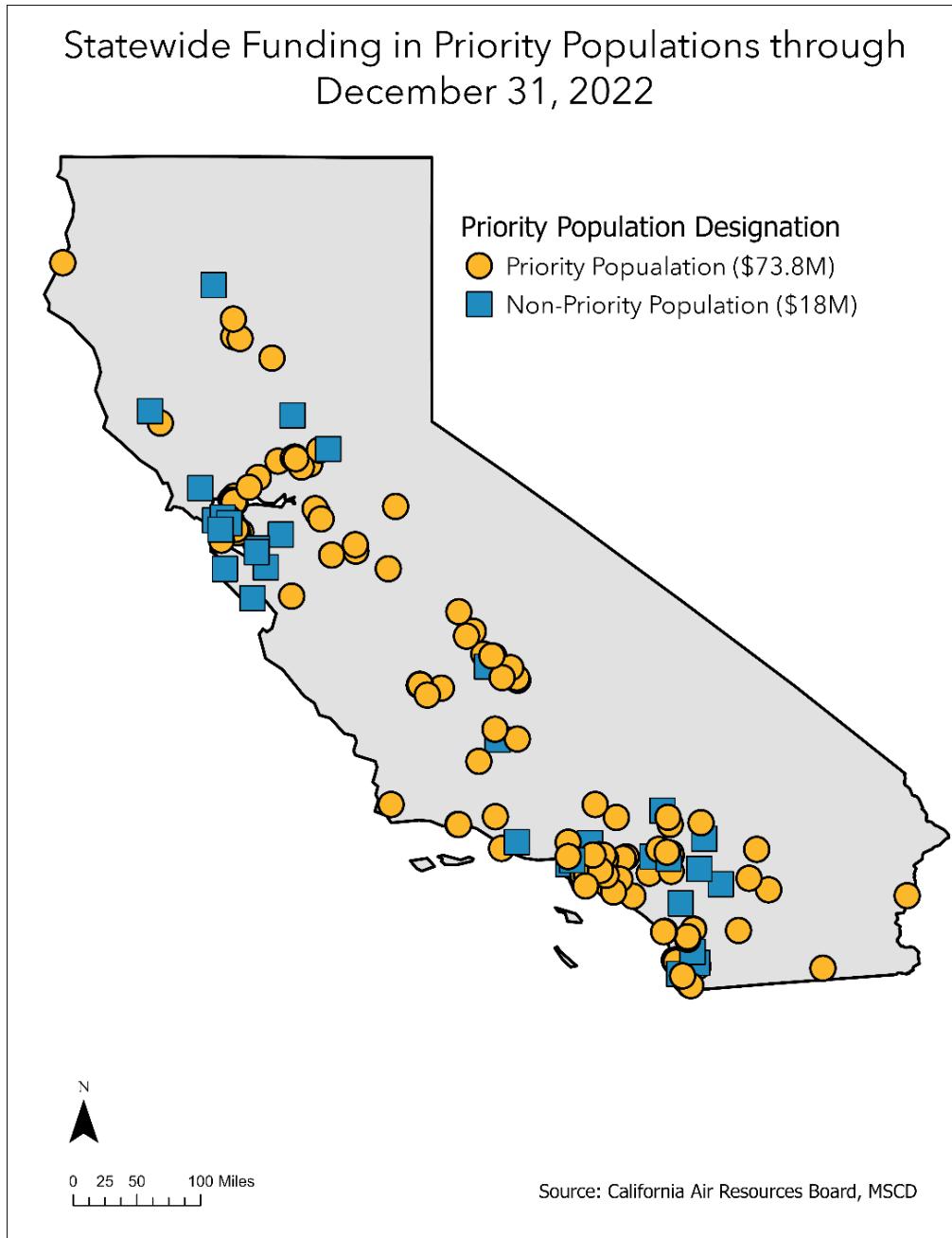
In order to maintain consistency with legislation that defined low-income and disadvantaged communities, and with California Climate Investment implementation, staff will use the low-income and disadvantaged community designations previously made by the California Environmental Protection Agency in the California Communities Environmental Health Screening Tool, as well as guidelines CARB continues to develop for State agencies implementing California Climate Investments. While project implementation is still in the early stages, CARB staff will continue to monitor fund expenditures and

²⁸ California’s VW Environmental Mitigation Trust Results website: <https://www.californiavwtrust.org/>

²⁹ For each subsequent annual report, staff will update the percentage of funding benefiting disadvantaged or low-income communities as more projects are funded.

low-income and disadvantaged community benefits. Future annual reports will include an ongoing assessment of these expenditures and benefits.

The map below shows the areas in the state that have received funding thus far. The VW Mitigation Trust expenditures are statewide and aim to benefit underserved communities in alignment with SB 92 which directs CARB to strive to ensure that 35% of the Trust allocation benefits low-income or disadvantaged communities. The projects are spread across the state with density in the larger air districts. Individual category maps are in the previous sections.



Additional VW Mitigation Trust Program Changes Going Forward

Next year's annual report, covering calendar year 2023, will include updates on implementation of several changes to the Beneficiary Mitigation Plan, including an update to the original projected NOx emission reduction target along with aligning incentive funding amounts with other CARB incentive programs. These changes were developed based on lessons learned during the first years of implementation, feedback from stakeholders, and ongoing coordination with the implementing air districts. CARB expects these changes to increase demand and expedite our ability to achieve NOx reductions. Over the next year, CARB will continue to monitor demand to determine if additional changes are needed.