



Annual Report

2022

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



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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 Decree.¹ The VW settlement, which is made up of several Partial Consent Decrees and includes Appendices C and D, resolves California 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 2021 calendar year, as reported by Electrify America in its 2021 Annual Report submitted on April 30, 2022. The activities for the 2022 calendar year will be part of next year's report, as Electrify America is required to provide the full report on their 2022 implementation progress no later than April 30, 2023. This report also covers implementation of Appendix D in the 2021 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 projects.² VW is implementing this commitment through its subsidiary, Electrify America. For each

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.

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 fund.³ 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. CARB has complied 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 both Appendix C investments and Appendix D expenditures are aligned with the State's priorities. Electrify America's approved Appendix C investments, in its ZEV Investment Plan, 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 goals,⁴ and statutory climate pollutant goals, such as reducing greenhouse gas emissions to meet 2030 targets and achieving carbon neutrality by 2045.⁵ 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 ZEVs 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 by funding ZEV car share and shuttle/bus services that operate primarily in disadvantaged communities. The 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.

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 percent of light-duty vehicle sales, 100 percent of short-haul and drayage trucks in operation, and 100 percent of off-road equipment and operations, where feasible, to be zero-emission by 2035. It also calls for 100 percent 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>

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 percent 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 percent of the monies 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, 2021, \$162 million in funding for five project categories has been released in public solicitations. A total of \$115,732,500 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 fourth annual report reflects progress made during the first four 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, spells out the investments Electrify America proposes to make within the 30 months in the following four areas eligible for investment under the Consent Decree:

- Development and maintenance of ZEV infrastructure (including charging or hydrogen refueling stations),
- Building public awareness of ZEVs and ZEV infrastructure availability,
- Increasing ZEV access, 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, has 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.

Public Process

As of December 31, 2021, CARB has approved the Cycle 1, Cycle 2, and Cycle 3 ZEV Investment Plans. Prior to approval of the Cycle 1 Plan, CARB conducted an extensive public

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-Specific Second Partial Consent Decree.

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 on a monthly basis 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.

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

Table 1: Cycle 1 Plan Public Process

<i>Date</i>	<i>Activity</i>	<i>Information Provided</i>
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 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 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 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 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.
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 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.

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

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 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 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 will serve California’s plug-in drivers and allow for refueling up to 200 miles of range in 15-30 minutes. The remainder of this investment was used to install 350 fast charging and Level 2 charging 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.

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 which 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 paid for the charging infrastructure and marketing associated with each of the aforementioned projects. Almost \$19 million of the \$44 million investment supports fast-charging for GIG Chevrolet Bolt electric vehicles 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-Zero,¹³ 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

Electrify America, during development of its Cycle 1 Plan, shared third-party research indicating that more than half of all Californians were unaware of ZEVs. Electrify America's implemented awareness plan has contributed to brand-neutral ZEV awareness, through a combination of web-based, social, and traditional (TV and radio) media.

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 VW 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 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.

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

Table 5: Approved Cycle 2 Plan Investments¹⁴

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

Zero-Emission Vehicle Infrastructure: \$153 Million



Image source: Electrify America

Electrify America invested \$95-115 million to expand charging infrastructure within the six metropolitan areas where 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 percent of the 2022 plug-in electric vehicle population in California. Another \$25-30 million is being used 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 valleys). Additional ZEV Infrastructure investments that were approved in the Cycle 2 Plan include:

- \$8-12 million for 2,500-3,300 residential Level 2 demand response-capable chargers, and a website tool that is integrated with CARB tools that help low-income consumers identify existing incentives;
- \$4-6 million for charging infrastructure for electrified transit buses;
- \$2-4 million to build charging infrastructure to facilitate fueling of the coming generation of autonomous plug-in electric vehicles;
- approximately \$2 million for Level 2 charging in rural areas that have historically been underserved by charging infrastructure;¹⁵ and
- up to \$5 million for renewable generation that will decrease upstream emissions from electricity generation, and provide for greater economic sustainability.

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.

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, using ride-and-drive events to promote even stronger ZEV consideration.

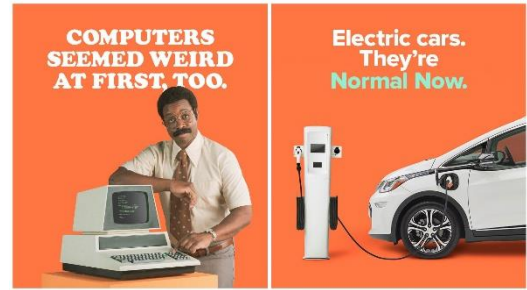


Image source: Electrify America

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 other efforts to improve affordability, and agreements to provide ultra-fast charging services to buyers of electric vehicles from a total of twelve brands.

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 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 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, Cycle2, 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.

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 out infrastructure in: Northern California, including Interstate-5 from Anderson to Yreka and California State highway routes 267, 28, and 89 in Northern Tahoe, and 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.

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 will take place in the City of Long Beach and the Wilmington neighborhood in the City of Los Angeles. Electrify America will work 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 will continue to use both traditional and social media to increase public awareness of ZEVs and ZEV benefits. Electrify America's Cycle 3 media efforts will continue to be brand neutral and may feature battery electric and fuel cell electric vehicles. Electrify

America's core pillars for Cycle 3 messaging will 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 would communicate 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 2021 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 initiating investments for the Cycle 3 Plan, especially in the rollout of charging infrastructure. The following sections first illustrate Electrify America's progress as of December 31, 2021, in implementing each of the Cycle 1 and Cycle 2 Plans, and in initiating the Cycle 3 investment plan categories, and then present actual expenditures to date in tables 8, 9, and 10 for the three investment plans.¹⁸

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 2021.

¹⁸ CARB staff are currently reviewing the 2021 annual report and working with Electrify America on clarification of some data and information presented in that report. All information from the 2021 annual report (pertaining to Cycles 2 and 3) shown in this report is as presented in Electrify America's publication and may not yet be fully verified by CARB staff.

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 2018	Q4 2019	Q4 2020	Q4 2021	Q4 2020	Q4 2021
Executed Site Agreements					128					
In permitting	72	165	228	269	--	--	--		N/A	N/A
Permit complete	35	152	207	262	--	--	--		N/A	N/A
Site work complete	9	128	185	248	--	--	--		N/A	N/A
Operational	3	78	152	214	15	241	241	241	30	30

Of the 214 DC fast-charger stations that were operational by the end of 2021, Electrify America states 61 of these were Cycle 2 projects, meeting its Cycle 2 station deployment goals. Electrify America also began design and engineering work on 28 stations that will be a part of Cycle 3. Electrify America reports that 49 percent of the operational DC fast chargers and 42 percent of the operational Level 2 chargers are in disadvantaged and low-income communities. Electrify America also reports that, of its investment in DC fast-charging stations, approximately \$90 million occurred in rural areas of the state.

By December 2021, Electrify America had installed more than 90 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 2021, 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 and has reported that all electricity delivered to California charging stations in 2021 was 100 percent renewable.

Finally, 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 on-board battery storage, and two Level 2 chargers, which allow two customers to charge simultaneously.

Electrify America reported that it experienced permitting and utility interconnect challenges in 2021.¹⁹ Permitting timelines continued to worsen in 2021, rising from an average of 77 business days in 2020 to 81 business days in 2021. Electrify America indicated that this is 26 percent longer than the national average. Electrify America reported that this extended timeline means it also costs Electrify America 47 percent 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), constrained permit review to health and safety matters, and precluded extended zoning review and aesthetic requests, but the Governor's Office of Business and Economic Development (GO-Biz) has determined that only 25 percent of California's AHJs were compliant with AB 1236 as of December 31, 2021. To ensure the enforceability of AB 1236, Assembly Member Kevin McCarty authored AB 970, 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 took effect in 2022.

Utility interconnection timelines did not improve in 2021, remaining at an average of 38 weeks. To expedite utility interconnection timelines, Electrify America suggests that utilities create teams dedicated to designing charging station services. Completion of new service requests alone can typically take seven weeks. Electrify America also recommends that utilities initiate easements and third-party permitting before finalizing the utility design plan, and that the State clarify in guidance that these permits will be held to the requirements of AB 1236 and AB 970. Furthermore, Electrify America reported that there are 31 weeks, on average, between completion of site construction and energization, and suggests that utilities create timelines for these new service construction projects that ensure they are completed on schedule. 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

Via its first Green City Initiative, Electrify America continued to invest in zero-emission car sharing and transit, and the associated charging infrastructure, in the Sacramento area in 2021. Throughout the implementation of the first Green City Initiative, Electrify America installed 14 DCFC 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, and, in 2021, received the ACT (Advanced Clean Transportation) Expo Fleet Award in the Transit & Mobility category. In 2021, the GIG fleet made more than 44,000 trips and logged more than 2.7 million miles, which Electrify

¹⁹ Descriptions of these challenges and Electrify America's responses to them are as reported by Electrify America in their 2021 Annual Report.

America reports to be an 81 percent increase from 2020. GIG estimates that 65 percent of the census tracts in its “home zone” are designated as disadvantaged and low-income census tracts.

Another car sharing service implemented as part of the Green City Initiative in Sacramento is a return trip car share program operated by Envoy Technologies, which provides services at 45 locations. Approximately 71 percent of the locations are in disadvantaged and low-income communities. In 2021, 382 users logged more than 6,200 trips using the program, which accounted for approximately 39,000 hours of travel time.

In August 2020, AAA launched a short-term ZEV rental subscription program in the Sacramento area, including 55 VW e-Golfs provided by Electrify America. Program vehicles were delivered to consumers’ homes, and the cost included insurance, repairs, maintenance, and emergency roadside assistance. COVID-19 proved to be a barrier to mass participation in the program. In Q1 2021, the program had only 19 qualified subscribers, and AAA informed Electrify America that the program will wind down. In Q2 2021, the vehicles were transferred and delivered to Valley Clean Air Now (CAN), who then would provide these vehicles to non-profits and community-based organizations (CBO) they identified in the Central Valley.

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 U.C. Davis to downtown Sacramento and U.C. Davis Medical Center. In 2021, the buses provided an estimated 589,000 passenger miles of service. 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 percent 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 provided an estimated 26,000 passenger miles of service during 2021, which is a 71 percent increase from 2020. Of the census tracts in the GreenPower shuttle service territory, 84 percent are in low-income and 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 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. 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. 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.

Public Education, Awareness, and Marketing

In Q3 2019, Electrify America launched a new \$17 million streaming audio, digital TV, and social media education and awareness campaign that focuses on four ZEV messaging pillars: vehicle performance, vehicle range, the breadth of product availability, and the availability of charging infrastructure. Included in that campaign was the website “Normal Now,” which provided information on battery electric and fuel cell electric vehicles in both English and Spanish and was aimed at addressing the public’s fear of change and lack of exposure to ZEVs by humorously showing how technology matures and becomes mainstream. “Normal Now” provides an overview of the benefits of ZEVs, with links to content-rich third-party websites.

In March 2021, the campaign launched Google and Bing paid search results. Additional paid media, such as digital display, digital radio, online video, paid social and podcasts, was added in May 2021. In December 2021, out-of-home advertisements at high-traffic malls were acquired. By the end of 2021, the “Normal Now” campaign registered more than 197 million impressions (listeners and viewers) in California, 39 percent of which were reported to be in low-income and disadvantaged communities.

In 2018, CARB reported that Electrify America targeted \$2.7 million to new partnerships with CBOs that have greater access to, and credibility within, California’s low-income or disadvantaged communities. In 2019, Electrify America concentrated its CBO efforts on Valley CAN because of Valley CAN’s demonstrated ability to further ZEV awareness in low-income and disadvantaged communities. The collaboration aims to assist community members with upgrading to a ZEV via CARB’s Clean Cars 4 All (CC4A) vehicle replacement program. In 2020, Electrify America announced an additional \$3 million investment to support CBO work to raise ZEV awareness and adoption in low-income and disadvantaged communities. The funding to these CBOs continued in 2021 and a summary of their activities is provided below:

- Breathe SoCal is collaborating with Plug In America to show the benefits of driving electric by providing ZEV ride-and-drive events for low-income and disadvantaged community populations in the greater Los Angeles County, San Bernardino, and Riverside County areas. In 2021, this partnership held ten ride-and-drive events that reached 472 people, 55 percent of whom stated they were likely to buy or lease an EV. Along with the ride-and-drive events, nine bilingual Facebook live events were conducted, reaching 301 individuals; 20 community tabling events were supported, which reached 2,805 individuals with information on EV incentives and rebates; and lastly, 221,418 individuals were reached through Facebook ads, organic posts, and email.
- The Central California Asthma Collaborative (CCAC) engages with low-income or disadvantaged community residents across the San Joaquin Valley, including via coordination of the Clean Vehicle Empowerment Collaborative (CVEC), a group of eight CBOs that serve as trusted messengers in disadvantaged Central Valley communities. This organization supports the development of an EV Navigator Program (EVN Program), providing residents one-on-one assistance with ZEV pricing, financing, and incentive applications. In 2021, the CCAC implemented the ZEV Equity program to assist residents with identifying incentives that are available if a ZEV is purchased. The program received

3,500 inquiries and 15,000 website visits and partnered with CBOs to conduct ZEV outreach at 61 events and via 34 online workshops that had 700 attendees in disadvantaged communities in the San Joaquin Valley. They also hosted in-person test drive events with three OEMs in disadvantaged communities in the San Joaquin Valley, which resulted in 153 test drives. Lastly, a pilot project was launched in Q4 2021 focused on Clean Vehicle Grants and the CVRP Rebate Now program, resulting in 100 ZEV incentive applications.

- Drive Clean Bay Area (DCBA) focuses on engaging local schools, nonprofits, and businesses to educate their stakeholders on driving electric. The DCBA campaign launched the ZEV Families Program in 2019, in collaboration with Acterra: Action for a Healthy Planet, Charge Across Town, and Cool the Earth, to connect low-income families in the San Francisco Bay Area to the clean transportation movement. In 2021, the DCBA held three ride-and-drive events that gave 150 rides and 302 in-car experiences. DCBA engaged seven schools from which 1,800 action pledges and 500 new contacts were collected. The program also conducted 10 bilingual EV Clinics that had 600 attendees, with over 400 live participants, and 49 follow-up consultations with 20 more follow-up consultations conducted. Additionally, DCBA developed five EV video testimonials, with 14 bilingual versions, to provide relevant and authentic EV stories that were shared through social media, presentations, and partners. Lastly, DCBA developed the EVs for Equity online campaign, which included a webpage, social media outreach, and video testimonial. The campaign reached 175,000 individuals.
- Ecology Action (EcoAct) works with four community partners to provide ZEV ride-and-drives, ZEV showcase events, and individualized ZEV purchase guidance by using bilingual EV ambassadors virtually and in person (when it is safe to do so). EcoAct operates in the California Central Coast region, including in Santa Cruz, San Benito, Monterey, San Luis Obispo, Santa Barbara, and Ventura counties. In 2021, the Spanish-bilingual EVs for Everyone campaign was developed, which reached 201,091 residents. Educational events organized by EcoAct, such as bilingual webinars, static car shows, and ride-and-drives, hosted 5,458 residents. Additionally, EcoAct assisted 543 residents with requests for EV Purchase Guidance 1:1 Assistance, assisted 67 Central Coast residents in purchasing their first EV, and recruited and trained 37 individuals as EV Purchase Guidance Advisors and Community Ambassadors. High-quality marketing assets, including digital and video testimonials, were developed, and 55 branded car kits were distributed to EV Owners.
- Liberty Hill Foundation (LHF) focuses on the emPOWER program - a partnership between LHF and nine CBOs operating across Los Angeles County in areas on the frontlines of industrial pollution. emPOWER leverages the extensive network of CBO partners across social media platforms, as well as through direct outreach to leverage local community members, volunteers, and leaders. In 2021, LHF and six CBOs secured 3,261 household consultations, conducted 2,686 phone conversations with residents, received 803 applicants to the Consumer Assistance Program (CAP) program, and held 90 online community events.
- Valley CAN and its partner, Charge Across Town, offer San Joaquin Valley low-income or disadvantaged community groups an opportunity to drive ZEVs, and provide hands-on help qualifying drivers for ZEV incentives through Community Clean Car Clinics and Tune

In & Tune Up events. Between July and December 2021, 65 Clean Car Community Clinics were held in communities in the San Joaquin Valley, which hosted 2,856 customers, 90 percent of whom were from low-income and/or disadvantaged communities. Also, during this time, 2,350 CC4A applications were initiated, 1,594 of which have been completed; applications from 367 of the 736 disadvantaged communities census tracts in San Joaquin Valley were received, and 73 percent of the CC4A customers were placed in ZEVs in 2021.

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 2021, Electrify America awarded four organizations funding, and three of the four are California-based:

- EcoAct partnered with Fused Learning, LLC, to develop and deploy a curriculum called “ZEV Future for All” to students in grades 4 – 8 across Northern California. During 2021, the Mission Zero Electric Vehicles, an innovative ZEV STEM education program, was created. For the program, 1,528 educators were enrolled, covering 20 counties and over 771 schools; 16,748 elementary, middle, and high school students received instruction, and learning units were provided and completed by 3,283 teachers. All program activity was conducted in low-income and disadvantaged communities, through schools in 129 low-income and disadvantaged community census tracts.
- Los Angeles Cleantech Incubator (LACI) ran workforce development and vocational training programs for EV charging station repair and other EV industry jobs, which allowed participants to gain hands-on experience in the Advanced Prototyping Center (APC) facilities, and expertise in Open Charge Point Interface (OCPI) and Open Charge Point Protocol (OCPP). In 2021, LACI engaged 60 Technical Bootcamp participants from LMI communities, and ensured that 100 percent of these participants earned at least one industry-recognized credential. The All-Women IT Support Course was launched in November 2021, which promotes green jobs held by women, and nine participants were from WorkSource centers in Watts and Boyle Heights. Lastly, LACI provided virtual hands-on training through lectures and a self-paced training model that also provided access to an IT practitioner.
- Valley CAN and Bakersfield College together will provide a curriculum and vocational training to community college automotive students. Bakersfield College will use a curriculum that will train students for “green collar” careers in the EV industry through a partnership with the California New Car Dealers Association. In 2021, a four-unit ZEV maintenance training curriculum was completed and certified, and a 40-hour introductory course and four-unit basic course were developed, both of which were offered to automotive students in Q1 2022. This partnership also worked with local franchise auto dealers to place technicians certified in ZEV maintenance into jobs. Lastly, in 2021, a partnership with the AB 617 Community Emissions Reduction Program was established for the City of Shafter to incorporate the ZEV maintenance course into Shafter’s Community Emissions Reduction Plan. This includes funding for ZEV maintenance training as one of the local programs is expected to be a part of the final plan that will be adopted by the Valley Air District and Shafter’s Community Steering Committee (CSC).

Electrify America also sponsored the following education and outreach activities in 2021:

- Veloz was sponsored for the development of the Incentive Assistant tool, which provides users with information about incentives available for their home Level 2 chargers. Veloz also continued the “Electric for All” marketing campaign and the “40 Million Reasons to Go Electric” phase of the campaign, which has a total of 41 million impressions, 10.8 million views and listens, and over 366,000 visits to ElectricForAll.org.
- The Los Angeles LGBT Center received sponsorship to support a brand-neutral education and outreach campaign in June, during Los Angeles’s Pride month. The program engaged community members, through a social media education campaign, on the benefits of driving electric, and provided an exchange of educational resources for Pride Month and other LGBTQ+ topics.
- Greenbiz received sponsorship for Verge21: The Climate Tech Event Conference, which convened industry leaders to support the acceleration of transportation and logistics solutions that are electric, clean, equitable, and reduce emissions. Under this sponsorship, branding and online marketing exposure was also deployed on the Greenbiz platform.
- Charge Across Town held the eMobility Showcase on the Embarcadero, in San Francisco, California. The eMobility Showcase provided test drives and experiences of EVs, for a total of 416 test drives with 223 passengers, 852 in-car experiences, 85 scooter rides, and 56 eBike rides. Charge Across Town conducted 332 pre-ride surveys and 220 post-ride surveys.
- Plug In America held EV ride-and-drive events. In 2021, Electrify America provided \$3,000 to support six ride-and-drive events, ensured two events were in low-income and disadvantaged communities, and supported five events put on by organizations that had diversity in leadership and the ability to reach diverse communities.

Finally, in 2021, Electrify America continued its nationwide branded marketing campaign, using digital media (paid social, digital display, digital radio, and online video) to increase utilization of Electrify America’s charging infrastructure, and awareness of Electrify America. In Q3 2021, Electrify America launched materials that featured regional routes, destination cities, and landmarks, as well as messaging about Electrify America’s national charging network. The Cycle 2 branded campaign delivered over 239 million impressions in California over the course of 2021.

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, 2021, as reported in its 2021 Annual Report.²⁰ The independent, third-party auditor has provided CARB an attestation that these expenditures were made consistent with the Consent Decree and Plan approvals.

²⁰ Electrify America, 2022. 2021 Annual Report to California Air Resources Board, April 30, 2022. (<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	Begin: \$120,000,000 Expended: \$120,000,000 Remaining: \$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 percent. 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.
Green City ZEV Access Demonstration Project	Begin: \$44,000,000 Expended: \$44,000,000 Remaining: \$0	Establish and market zero-emission car share and transit services.	
ZEV Awareness and Education	Begin: \$20,000,000 Expended: \$20,927,072 Remaining: \$0	Broad social, web-based, and traditional media brand-neutral awareness program.	
Administration	Begin: \$16,000,000 Expended: \$16,195,464 Remaining: \$0	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs, as provided in the Consent Decree.	
Total:	Begin: \$200,000,000 Expended: \$201,122,536 ²¹ Remaining: \$0		

* Table 8 accounts for Cycle 1 creditable expenditures.

²¹ 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	Begin: \$153,000,000 Expended: \$156,319,295 Remaining: \$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 through 2021 in disadvantaged and low-income communities exceeded 35 percent. 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.
Public Education, Awareness and Marketing	Begin: \$27,000,000 Expended: \$27,909,765 Remaining: \$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).	
Green City ZEV Access Demonstration Project	Expended: \$101,011 Remaining: \$0	Provide operational support to the zero-emission car share and transit services.	
Administration	Begin: \$20,000,000 Expended: \$15,669,930 Remaining: \$0	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs, as provided in the Consent Decree.	
Total:	Begin: \$200,000,000 Expended: \$200,000,000 Remaining: \$0		

* Table 9 accounts for Cycle 2 creditable expenditures through December 31, 2021.

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

Investment Category	Amounts/Expenditures	Description	Low-income / DAC Spend
ZEV Infrastructure	Begin: \$127,000,000 Expended: \$27,810,732 Remaining: \$99,189,268	Install, operate, and maintain highway and community charging stations.	Electrify America has demonstrated to CARB staff that Cycle 3 creditable costs through 2021 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.
Public Education, Awareness and Marketing	Begin: \$28,000,000 Expended: \$0 Remaining: \$28,000,000	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.	
Green City ZEV Access Demonstration Project	Begin: \$25,000,000 Expended: \$606,208 Remaining: \$24,393,792	Establish and implement projects for medium and heavy-duty electric vehicles.	
Administration	Begin: \$20,000,000 Expended: \$1,499,340 Remaining: \$18,500,660	Overhead expenses include personnel, service agreement, office/facility, legal, and related costs as provided for in the Consent Decree.	
Total:	Begin: \$200,000,000 Expended: \$29,916,280 Remaining: \$170,083,720		

* Table 10 accounts for early Cycle 3 creditable expenditures allowed by CARB, in 2021.

Low-Income or Disadvantaged Community Benefits

As described in Tables 8 and 9, Electrify America has provided CARB staff with confidential expenditure information demonstrating that Cycle 1 and Cycle 2 ZEV Investment Plan spending in each of the investment categories meets or exceeds the 35 percent 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 percent 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 NOx 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 million.²² 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 NOx caused by the subject VW diesel vehicles in California. Staff calculated the estimated initial NOx target as 10,000 tons and will evaluate potential adjustments to the target as updated information becomes available. The estimate takes into account the VW diesel car recall and buy-back

²² California's total Trust allocation is \$422,636,320.

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:

- Fully mitigate the lifetime excess NOx caused by the subject VW diesel vehicles, while reducing risk to children and other sensitive populations;
- 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 percent of each installment may go to any one bus category. Staff expects at least 50 percent 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. Funding requests for school buses quickly exceeded the 50 percent bus category threshold described above. The table below shows the total funding requests received for all bus categories as of December 31, 2021.

Table 12: Zero-Emission Bus Applications Received²³

Category	Number of Vehicles	Funds Requested
School Bus	541	\$216,400,000
Transit Bus	171	\$34,520,000
Shuttle Bus	83	\$13,280,000
Total	795	\$264,200,000

Table 13 below shows the contracted funding for zero-emission buses as of December 31, 2021. The SJVAPCD is continuing to enter into contracts with selected grantees for the remaining funding from the first installment.

²³ 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 13: Zero-Emission Bus Funding Awarded as of December 31, 2021

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
School Bus	72	\$28,535,099	76%
Transit Bus	36	\$10,220,000	100%
Shuttle Bus	13	\$2,067,496	77%
Total	121	\$40,822,595	83%

Project administrators have created a public website to track the awarded funds for all projects.²⁴ The site is updated regularly, and features tools to display where funded vehicles and equipment are being deployed.

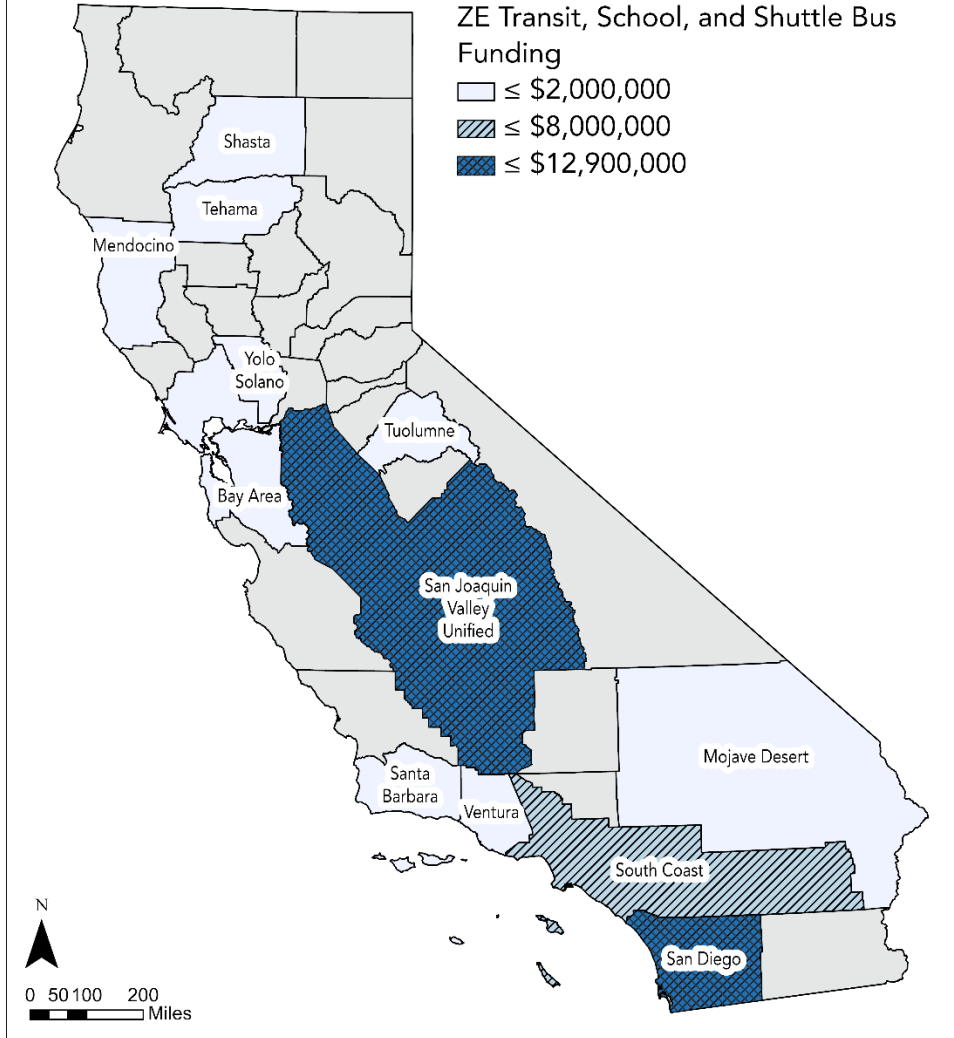
To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$57,120,000 for vehicle purchases and about \$4,116,000 for administrative costs. The disbursements in 2020 included delivering the first 6 buses, and in 2021 included delivering 73 more buses with 51 claims being paid on those buses. Since inception, the project administrator and CARB have expended about \$1,508,000 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.

CARB staff is coordinating with the air district administrators on releasing the second installment of funding (\$65 million) in late 2022 or early 2023. We continue to consider options for addressing the high demand for school bus funding, the need to meet the required NOx emission reduction target and shortening the air district processing time for contract and claims.

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

²⁴ California's VW Environmental Mitigation Trust Results website: <https://www.californiavwtrust.org/>

Zero-Emission Transit, School, and Shuttle Bus Project Funding Through December, 2021 by Air District



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 freight trucks and port drayage trucks with new zero-emission technologies. While a portion of this allocation will support the early deployment of existing commercially available trucks, 70 percent 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 percent 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 percent 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 percent 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. The table below shows the total funding requests received as of December 31, 2021.

Table 14: Zero-Emission Class 8 Truck Applications Received²⁵

Category	Number of Vehicles	Funds Requested
Drayage Trucks	42	\$7,370,000
Dump Truck	12	\$2,235,000
Freight Trucks	137	\$29,914,131
Waste Haulers	58	\$11,229,105
Total	249	\$50,748,236

Table 15 below shows the contracted funding for zero-emission Class 8 Trucks as of December 31, 2021. The SCAQMD is continuing to enter into contracts with selected grantees for the remaining funding from the first installment.

²⁵ 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.

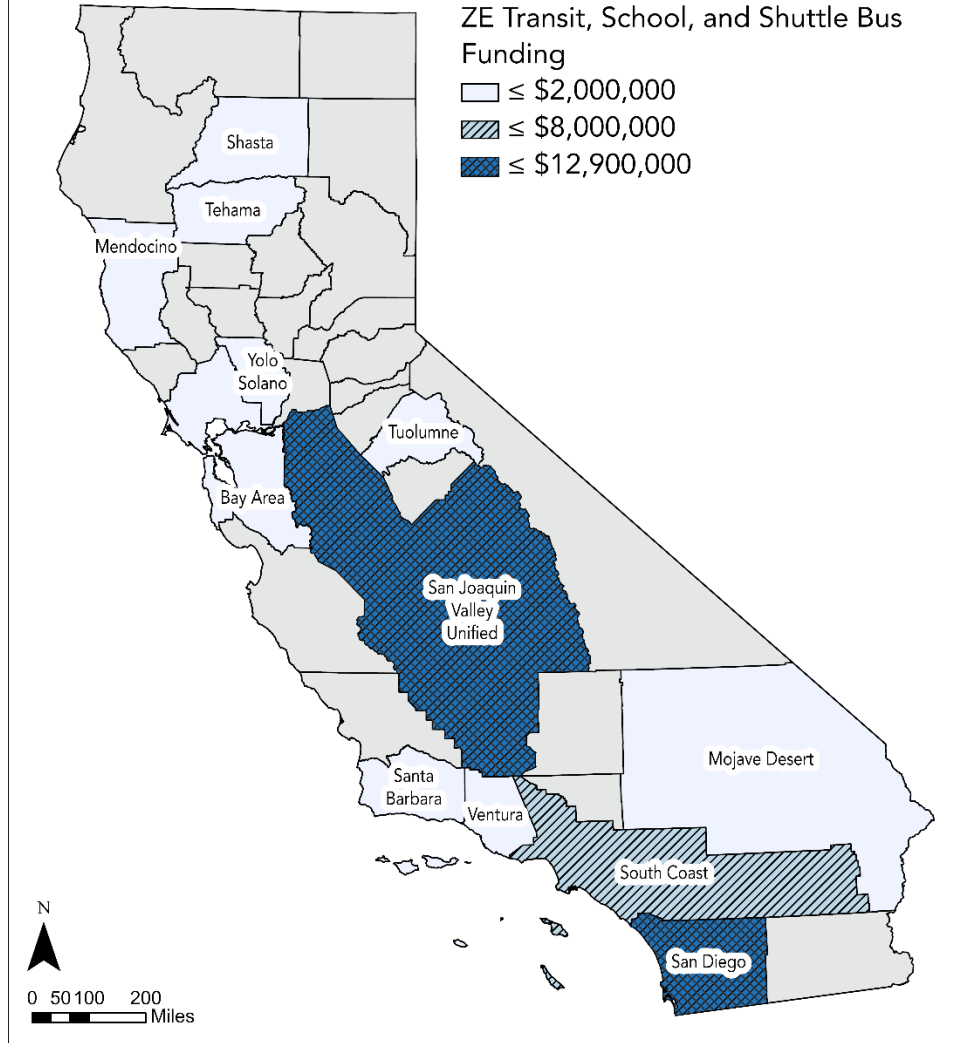
Table 15: Zero-Emission Class 8 Truck Funding Awarded as of December 31, 2021

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Drayage Trucks	2	\$400,000	100%
Freight Trucks	46	\$9.2M	100%
Waste Haulers	11	\$2.2M	90%
Total	59	\$11.8M	98%

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 \$3,261,000 for administrative costs through December 2021. The project administrator and CARB have expended about \$2,502,000 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.

Zero-Emission Transit, School, and Shuttle Bus Project Funding Through December, 2021 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 NO_x 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 percent 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 ports²⁶ 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 Solicitation²⁷

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 re-solicited the remaining funds from the first installment in second quarter 2021. The new solicitation is a first-come, first-serve model, to streamline the application process. The solicitation closed in 2022 and will re-open later in the year. Statewide outreach included hosting two webinars, providing presentations to tenants at ports and airports, coordinating with statewide organizations and associations to distribute information to interested parties, and mass emails and direct outreach to potential applicants. The table below shows the total funding requests from the first-come, first-serve solicitation.

²⁶ PortStrategy, California Ports Cautious After Volume Loss, June 11, 2020. <https://www.portstrategy.com/news101/world/americas/1247720.article>

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.

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	32	\$4,878,731
Airport Ground Support Equipment	44	\$1,087,163
Ferry/Tug/Tow Repowers	0	\$0
Shore Power	4	\$8,535,000
Total	80	\$14,500,894

Table 18 below shows the contracted funding for Zero-Emission Freight and Marine as of December 31, 2021. 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.

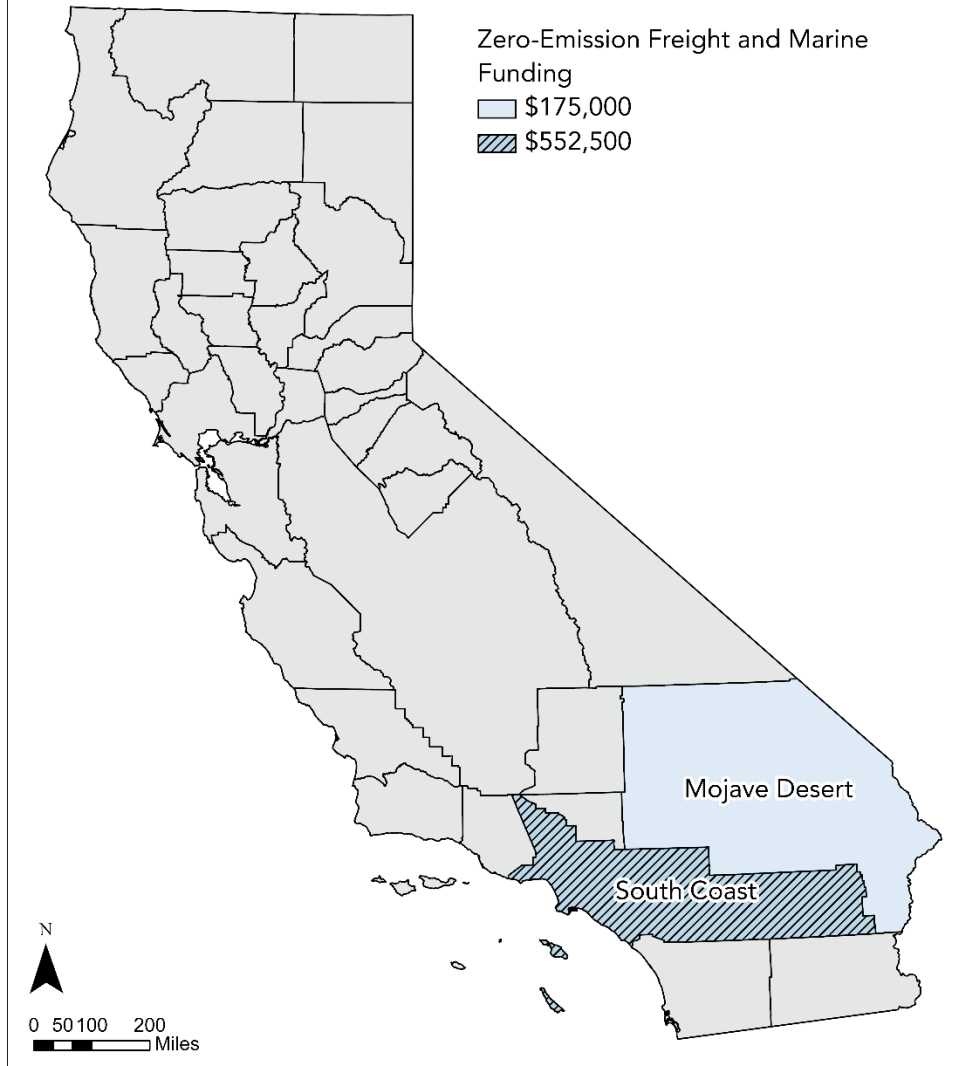
Table 18: Zero-Emission Freight and Marine Funding Awarded as of December 31, 2021

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Heavy-Lift Forklifts/Cargo Handling Equipment	6	\$625,200	100%
Airport Ground Support Equipment	3	\$102,300	100%
Shore Power	1	\$2,500,000	100%
Total	10	\$3,227,500	100%

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$727,500 for vehicle purchases, and about \$2,262,000 for administrative costs. Since inception, the project administrator and CARB have expended about \$2,172,000 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 Project Funding Through December, 2021 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

NO_x 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 percent 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 Solicitation²⁸

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.

²⁸ 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 20: Combustion Freight and Marine Applications Received from First Come, First-Serve Solicitation

Category	Number of Vehicles/Equipment	Funds Requested
Freight Trucks	12	\$853,735
Drayage Trucks	75	6,370,000
Waste Haulers and Dump Trucks	63	\$5,066,615
Concrete Mixers	1	\$85,000
Total	151	\$12,375,350

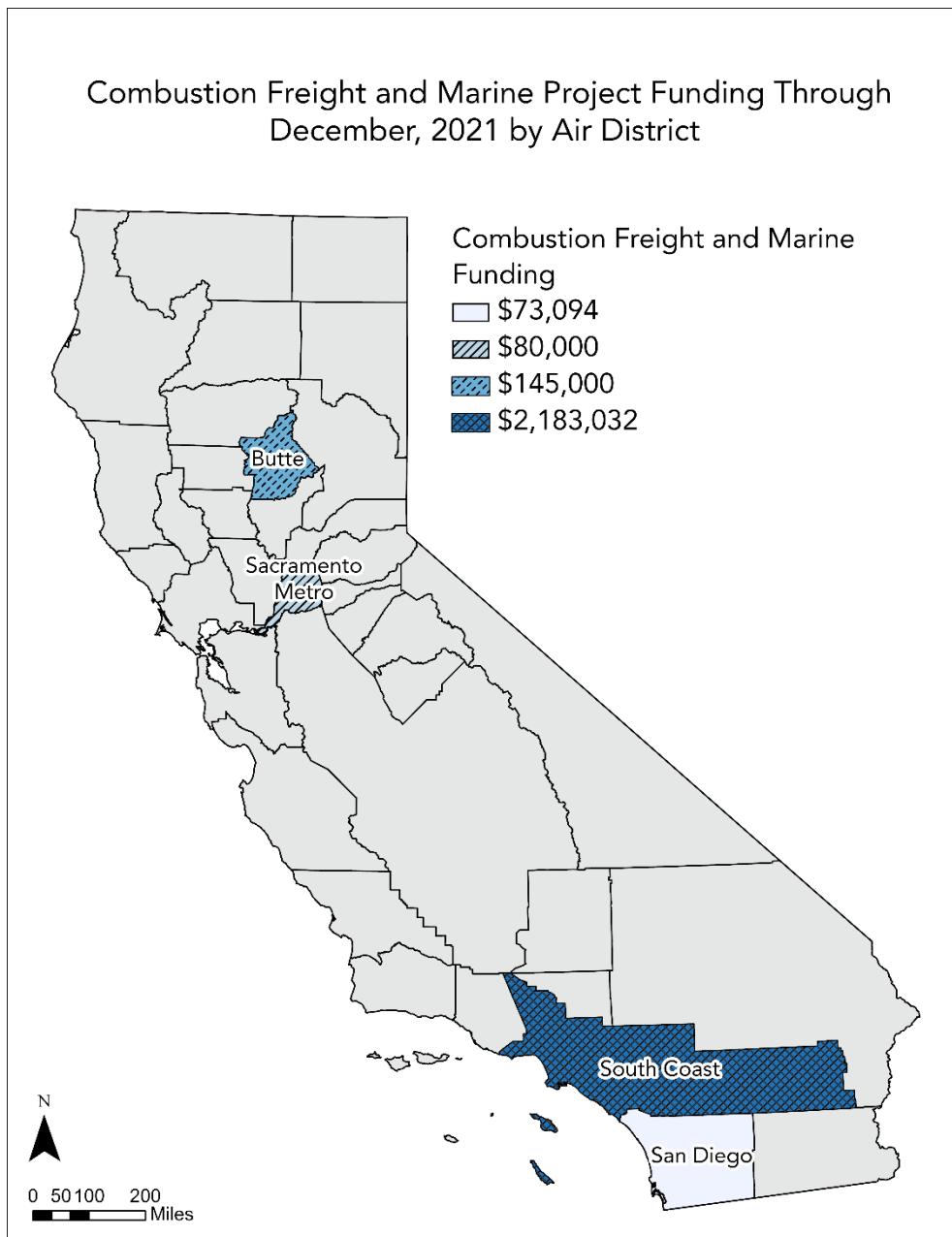
Table 21 below shows the contracted funding for eligible applicants from the Combustion Freight and Marine first competitive solicitation as of December 31, 2021. In January 2022, SCAQMD executed the remaining contracts from the first competitive solicitation (not included in Table 21), which included 27 freight trucks to US Foods totaling \$1.28 million, all in disadvantaged communities. As of December 31, 2021, no projects from the first come, first served solicitation have been executed. 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, 2021

Category	Number of Vehicles	Funding Awarded	Percentage in Low-Income or Disadvantaged Communities
Freight Trucks	0	\$0	N/A
Drayage Trucks	16	\$1.36M	94%
Waste Haulers and Dump Trucks	22	\$1.17M	95%
Concrete Mixers	0	\$0	N/A
Total	38	\$2.53M	95%

To cover current costs, and in anticipation of upcoming costs, the Trustee has approved and disbursed to California \$12,480,000 for vehicle purchases, and about \$2,659,000 for administrative costs. Since inception, the project administrator and CARB have expended about \$2,033,000 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, 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 percent 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

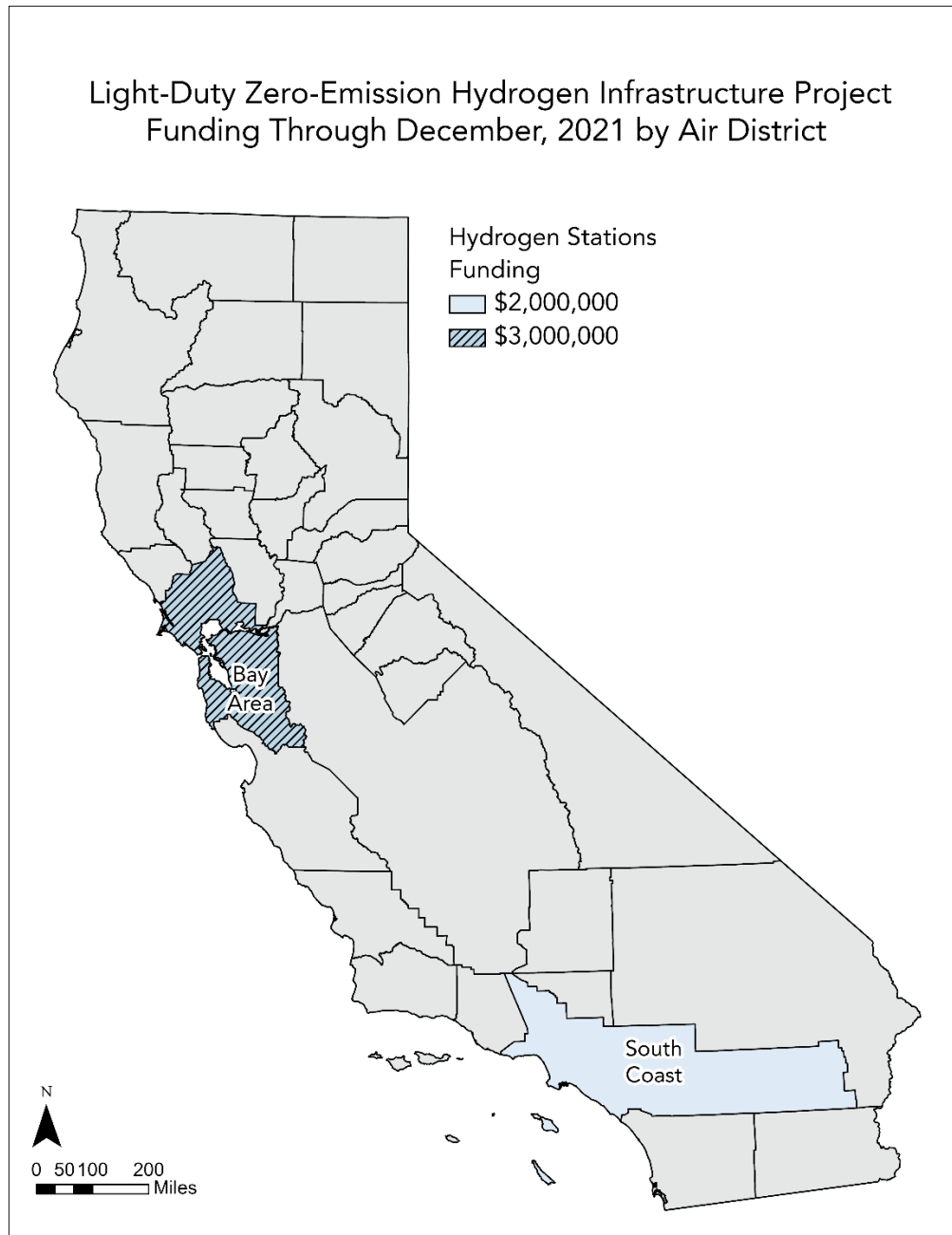
Proposed Station Address	City	Proposed Award
2160 South Euclid Avenue	Oakland	\$1,000,000
510 East Santa Clara Street	San Jose	\$1,000,000
1930 South Waterman Avenue	San Bernardino	\$1,000,000
3160 Carlson Boulevard	El Cerrito	\$1,000,000
6392 Beach Boulevard	Buena Park	\$1,000,000

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 \$5,000,000 for equipment purchases, and about \$1,107,000 for

administrative costs. Since inception, the project administrator and CARB have expended about \$433,000 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.



Reserve: \$63 Million

The Beneficiary Mitigation Plan allocates \$63 million (15 percent 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 percent 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 percent going towards projects and 10 percent 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, 2021 includes an accounting of the State's Trust funds - cumulative and this reporting period. As of December 31, 2021, about \$102,000,000 has been disbursed from the Trust for vehicles, engines, or equipment and \$13,500,000 for administrative costs which includes the more intensive program development and project start-up costs. Together this adds up to almost \$116,000,000. \$41,000,000 of the \$116,000,000 was disbursed from the Trust in 2021. Projects are still in the early stages of implementation, and funds are typically not disbursed to the project administrator until after project scoring and selections have occurred, and the project administrator is preparing to enter into a contract with the selected grantee.

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, 2021; the total cumulative amount expended through December 31, 2021; 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, 2021, 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 2021, the closing market value was \$312,514,258 and disbursed \$41,279,050 for a total of \$353,793,308. When compared to the remaining balance at the beginning of 2021, as reported by the Trustee on January 1, 2021, California's portion of the Trust lost value equal to \$12,717,581.

Table 24: California's VW Mitigation Trust Expenditures as of December 31, 2021

Project Funding Category	Amounts/Expenditures	Description	Status
Zero-Emission Transit, School, & Shuttle Buses	Begin: ¹ \$130,000,000 Disbursed: \$57,120,000 Remaining: \$72,880,000	Replace existing diesel buses with zero-emission technologies; no more than 50 percent of funds to one bus category; first-come, first-serve.	First \$65 million statewide installment was released in October 2019; about \$63 million is committed, and bus purchases are underway.
Zero-Emission Class 8 Freight and Port Drayage Trucks	Begin: ¹ \$90,000,000 Disbursed: \$27,000,000 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: \$727,500 Remaining: \$69,272,500	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: \$12,480,000 Remaining: \$47,520,000	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: \$5,000,000 Remaining: \$5,000,000	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.
Reserve (including administrative costs)	Begin: ¹ \$63,000,000 Disbursed: \$13,404,761 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 \$5,610,438 Disbursed: \$115,732,500 Remaining: \$312,514,258	Current Reporting Period (1/1/2021 through 12/31/2021):	Begin: \$366,510,889 Earned: ² -\$12,717,581 Disbursed: \$41,279,050 Remaining: \$312,514,258

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.

Low-Income or Disadvantaged Community Benefits

As shown in Table 11 on page 26, each project funding category will meet or exceed the 35 percent target set by SB 92 for benefiting low-income or disadvantaged communities. In fact, CARB expects more than 50 percent 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.²⁹ 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, 2021. 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, 2021

Project Funding Category	Contracted Project Funding	Current Percentage Benefiting Disadvantaged or Low-Income Communities ³⁰
Zero-Emission Transit, School, and Shuttle Buses	\$28,142,287	83%
Zero-Emission Class 8 Freight and Port Drayage Trucks	\$17,789,690	100%
Combustion Freight and Marine Projects	\$2,531,126	95%
Zero-Emission Freight and Marine Projects	\$3,227,500	100%
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

²⁹ California’s VW Environmental Mitigation Trust Results website: <https://www.californiavwtrust.org/>

³⁰ For each subsequent annual report, staff will update the percentage of funding benefiting disadvantaged or low-income communities as more projects are funded.

Environmental Protection Agency in the California Communities Environmental Health Screening Tool 3.0, 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 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 percent 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.

