



## Public Workshop on the Fiscal Year 2023-24 Draft Funding Plan for Clean Transportation Incentives



Public Workshop Date and Location:  
Thursday, August 31, 2023  
10:00 a.m. to 3:00 p.m.  
Webinar

Link to *Webinar Registration*:

[https://us06web.zoom.us/webinar/register/WN\\_iBIEZ5AiQhagW7-L5ldlDQ#/registration](https://us06web.zoom.us/webinar/register/WN_iBIEZ5AiQhagW7-L5ldlDQ#/registration)

*Workshop presentation* will be posted on the morning of the workshop at:

<https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low-0>

Workshop notice: *Public Workshop on the Fiscal Year 2023-24 Funding Plan for Clean Transportation Incentives*

[https://ww2.arb.ca.gov/sites/default/files/2023-08/fy2324\\_fp\\_august\\_second\\_wrkshp\\_agenda2\\_0.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-08/fy2324_fp_august_second_wrkshp_agenda2_0.pdf)

Released: August 21, 2023

*Submit written comments to [CleanTransportationIncentives@arb.ca.gov](mailto:CleanTransportationIncentives@arb.ca.gov)*

## Workshop Information

Thursday, August 31, 2023, 10:00 a.m. – 3:00 p.m.

Webinar Information

Zoom *Webinar Registration* Link:

[https://us06web.zoom.us/webinar/register/WN\\_iBIEZ5AiQhagW7-L5ldlDQ#/registration](https://us06web.zoom.us/webinar/register/WN_iBIEZ5AiQhagW7-L5ldlDQ#/registration)

*Agenda*

[https://ww2.arb.ca.gov/sites/default/files/2023-08/fy2324\\_fp\\_august\\_second\\_wrkshp\\_agenda2.pdf](https://ww2.arb.ca.gov/sites/default/files/2023-08/fy2324_fp_august_second_wrkshp_agenda2.pdf)

All times are approximate – if a topic concludes early staff will proceed with the next item.

## Table of Contents

Public Workshop on the Fiscal Year 2023-24 Draft Funding Plan for Clean Transportation Incentives .....	1
Workshop Information .....	2
Introduction .....	5
Chapter 1: Background .....	10
Draft Funding Plan Goals and Priorities for FY 2023-24 .....	10
Intentional Benefits to Communities.....	11
Program Evaluation and Reporting.....	11
Research and Surveys.....	12
Project Goals.....	14
Funding Plan Development Process, Outreach, and Community Engagement.....	15
Public Meetings .....	16
Community Evening Meetings .....	17
One-on-One Meetings .....	17
Community Surveys .....	17
Chapter 2: Draft Funding Allocations.....	19
Draft Project Allocations.....	19
Clean Transportation Equity Projects .....	21
Heavy-Duty Vehicle and Off-Road Equipment Investments.....	21
State Operations.....	22
Measures to Expedite Funding to Oversubscribed Projects .....	22
Priority Population Investment Targets .....	22
Safeguards for Cap-and-Trade Auction Revenue Uncertainty.....	24
Chapter 3: Clean Transportation Equity and Light-Duty Vehicle Investments.....	25
Overview .....	25
Draft Allocations for Clean Transportation Equity and Light-Duty and Projects .....	25

Clean Cars 4 All .....	29
Financing Assistance for Lower Income Consumers.....	32
California E-Bike Incentive Project.....	34
Access Clean California .....	35
California Integrated Travel Project (Cal-ITP) Payment Issuance Strategy and Demonstrations .....	37
Sustainable Community-Based Transportation Equity Mobility Projects .....	39
Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects .....	42
Chapter 4: On-Road Heavy-Duty Vehicle and Off-Road Equipment Investments.....	44
Overview .....	44
Equitable Investments for ZEV Deployment.....	45
Compliance with Labor Standards.....	46
Implementation of Assistance and Purchasing Support Programs .....	47
Draft Allocations for Heavy-Duty Vehicle and Off-Road Equipment Investments.....	47
Clean Truck and Bus Voucher Incentive Project (HVIP).....	49
Innovative Small e-Fleet (ISEF).....	55
Clean Off-Road Equipment Voucher Incentive Project (CORE).....	58
Chapter 5: Addressing California Climate Investment Guideline Requirements Related to Priority Populations.....	61
List of Acronyms .....	69

## Introduction

The Funding Plan for Clean Transportation Incentives (Funding Plan) is a detailed guide that explains how Clean Transportation Incentive funds will be spent. These funds are appropriated to the California Air Resources Board (CARB or Board) through the California State Budget (State Budget). This document is the Draft Funding Plan for fiscal year (FY) 2023-24 (July 1, 2023 - June 30, 2024). It presents initial recommendations from CARB staff on how to allocate the funds in the State Budget for this fiscal year. The Draft Funding Plan also provides a summary of input received from interested parties so far, which includes input from priority populations. Priority populations are defined in the *California Health and Safety Code (H&SC) Sections 39711 and 39713*.<sup>1</sup> They include disadvantaged communities (DAC), low-income communities (LIC), and low-income households as defined in State law. This year, staff have moved much of the background information that was previously included in past funding plans to *CARB's Low Carbon Transportation Investments and Air Quality Improvement Program webpage*.<sup>2</sup> Staff made this change to make the document shorter and easier for interested parties to review and share their feedback.

The Draft Funding Plan will serve as a guide for discussion in an upcoming public workshop. The workshop is scheduled to be held on August 31, 2023. It is important to note that this draft does not represent the final decision, or action, of the Board. After staff receive input and feedback, we will develop the Proposed Funding Plan, which we will present to the Board for consideration. The Board Hearing where the Board considers the Proposed Funding Plan is scheduled to be held in November 2023.

The Budget Acts of 2021 and 2022 dedicated \$10 billion over five years across multiple agencies to support the State's ambitious zero-emission vehicle (ZEV) deployment goals. Known as the Zero Emission Vehicle Package, the driving policy for this multi-year, multi-agency effort is to equitably reduce carbon emissions from the transportation sector and speed up the adoption of ZEVs for transportation. The transportation sector is the largest contributor to air pollution and this effort specifically targets priority populations who are most affected by pollution. The Budget Act of 2023 and associated trailer bills maintains \$10.1 billion over six years (FY 2021-22 through FY 2026-27) across multiple agencies to

---

<sup>1</sup> "California Health and Safety Code (H&SC) Sections 39711 and 39713." *California Legislative Information*, Accessed 21 July 2023, [https://leginfo.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=26.&title=&part=2.&chapter=4.1.&article=](https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=26.&title=&part=2.&chapter=4.1.&article=)

<sup>2</sup> <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program>

decarbonize and accelerate ZEV transportation and focus on communities most impacted by air pollution. The responsibility for administering these funds falls upon CARB, the California Energy Commission (CEC), the California State Transportation Agency (CalSTA), and the Governor’s Office of Economic and Business Development (GO-Biz). These agencies collaborate to support an equitable transition to ZEVs, especially for the needs of priority populations. It is worth noting that these new funds build upon previous investments made by the State in ZEVs and ZEV infrastructure for more than a decade.

The Draft Funding Plan focuses on CARB's portion of the ZEV Package for FY 2023-24. This funding was approved as part of the Budget Act of 2023, specifically *Senate Bill (SB) 101* (Skinner, Chapter 12, Statutes of 2023)<sup>3</sup> as amended by *Assembly Bill (AB) 102* (Ting, Chapter 38, Statutes of 2023).<sup>4</sup> Additionally, adjustments to funds appropriated last year were made in *SB 114* (Committee on Budget and Fiscal Review, Chapter 48, Statutes of 2023),<sup>5</sup> the Education Omnibus Budget Trailer Bill. Among these funds, approximately \$634 million are designated for Clean Transportation Incentives.

The Draft Funding Plan consists of money from three different sources: the Greenhouse Gas Emission Reduction Fund (GGRF), the General Fund, and the Air Quality Improvement Fund (AQIF). A breakdown of the funds in the plan can be found in Table 1. The funds would go to a number of programs, including:

- \$140 million appropriated for clean transportation equity programs. This includes \$80 million for the broad suite of statewide transportation equity programs established under the Charge Ahead Initiative, SB 1275 (De León, Chapter 350, Statutes of 2014), including but not limited to the Clean Cars 4 All Program (CC4A), plus \$60 million specifically for Sustainable Community-Based Transportation Equity Projects (STEP) which increase access to zero-emission mobility in low-income communities, reducing vehicle miles traveled (VMT) and air pollution.
- \$455 million appropriated for heavy-duty vehicles, including \$80 million for zero-emission drayage trucks and \$375 million for zero-emission public school buses. Please note that the public school bus funding is part of the \$1.125 billion in

---

<sup>3</sup> "SB 101, Skinner. Budget Act of 2023." *California Legislative Information*, Accessed 21 July 2023, [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202320240SB101](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB101)

<sup>4</sup> "AB 102, Ting. Budget Act of 2023." *California Legislative Information*, Accessed 21 July 2023, [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202320240AB102](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240AB102)

<sup>5</sup> "SB 114, Committee on Budget and Fiscal Review. Education finance: education omnibus budget trailer bill." *California Legislative Information*, Accessed 21 July 2023, [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202320240SB114](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB114)

Proposition 98 funding originally appropriated to CARB in FY 2022-23 and covered in the FY 2022-23 Funding Plan. As part of the Legislature’s prudent fiscal approach to the 2023 budget, the \$1.125 billion appropriation was reduced to \$375 million. However, it is the intent of the Legislature to keep the Program funding whole by appropriating \$375 million in the 2024-25 and 2025-26 fiscal years to CARB.

- \$28.6 million designated for the Air Quality Improvement Program (AQIP) from AQIF.

**Table 1: Draft Appropriations for the FY 2023-24 Funding Plan (millions)**

<b>Project Category</b>	<b>Greenhouse Gas Emission Reduction Fund (GGRF)</b>	<b>General Fund</b>	<b>Air Quality Improvement Fund (AQIF)</b>
<b>Clean Transportation Equity Programs Established under SB 1275</b>	-	-	-
Vehicle Purchase Incentive Equity Programs	\$30	\$50	-
Sustainable Transportation and Mobility Equity Programs	\$60	-	-
<b>Heavy-Duty Zero-Emission</b>	-	-	-
Drayage Trucks	\$80	-	-
Public School Buses	-	\$375 <sup>a</sup>	-
<b>Air Quality Improvement Program</b>	-	-	\$28.6
<b>Funding Plan Total</b>	\$170	\$425	\$28.6
		<b>Total Budget</b>	<b>\$623.6</b>

<sup>a</sup> This funding was included in the FY 2022-23 Funding Plan as part of the \$1.125 billion for public school buses but is referenced again here because the SB 114 reverted the \$1.125 billion and instead appropriated \$375 million this year with a commitment to appropriate an additional \$750 million in future years.

Additionally, the State Budget includes appropriations for complementary funding for CEC. These funds support infrastructure projects that correspond to CARB's vehicle funds. In addition to the money covered in this Funding Plan, CARB is scheduled to receive another \$1.5 billion over the next three funding cycles as part of the ZEV Package agreed to by the Governor and the Legislature subject to future appropriations.

EnergIIZE Commercial Vehicles (Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles) is the nation's first commercial vehicle fleet infrastructure incentive project. It is funded by the CEC's Clean Transportation Program and implemented by CALSTART. CALSTART also administers the HVIP program, funded through CARB. Teaming up with CALSTART and CEC provides a user-friendly streamlined process for participation by breaking down infrastructure deployment barriers through targeted incentives and specialized assistance.

The Draft Funding Plan provides an overview of preliminary options for how to spend these funds. It takes into account input from various interested parties and meetings. The first meeting that CARB staff facilitated was a public work group meeting held on April 24, 2023. Additionally, public work group meetings were conducted between June and August 2023. CARB staff also met individually with interested parties, which included priority populations. To gather feedback, staff issued community surveys. Furthermore, additional comments from interested parties were collected. In this Draft Funding Plan, staff present their initial ideas on several topics, such as:

- CARB's priorities for the current funding cycle.
- How the funds will be allocated for each project category.
- Improvements to programs based on public input and CARB's evaluation of projects in previous years.
- Strategies to measure changes in behavior and the socioeconomic benefits resulting from projects.
- Plans for potential adjustments during the year, if needed. These are known as contingency provisions.

The Draft Funding Plan includes investments specifically focused on Clean Transportation Incentives. However, it is important to note that these investments are just one part of the larger funding portfolio made by the State for different initiatives. Other funding allocations also aim to promote clean transportation, support air quality and climate objectives, and provide benefits to priority populations. Apart from the investments mentioned in this Draft Funding Plan, CARB offers a range of incentive programs. These programs include the Community Air Protection Program (AB 617), Funding Agricultural Replacement Measures



for Emission Reductions (FARMER) Program, Carl Moyer Program, and Volkswagen (VW) Mitigation Trust.

During a public workshop scheduled to be held on August 31, 2023, staff will present initial recommendations for specific Clean Transportation Investments. These recommendations are listed in Table 1 above. Staff will then develop final proposed recommendations for the Board to consider. To gather input, staff will consider feedback from various sources. These include the August public workshop and topic-specific public work group meetings. Input will also include written submissions from interested parties and community surveys. Additionally, it will include individual meetings with communities, priority populations, and other interested parties. Staff aim to release the Proposed Funding Plan for public review and comment in October. The Proposed Funding Plan will be presented for consideration at the Board Meeting scheduled for November 16-17, 2023.

## Chapter 1: Background

In April 2023, California achieved a major milestone. The State surpassed its goal of 1.5 million light-duty zero-emission vehicles (ZEVs) sold in California two years ahead of schedule.<sup>6</sup> In April, nearly \$2 billion in ZEV incentives, as part of the broader multi-year, multi-agency, \$10.1 billion ZEV Package, were provided to help Californians – especially those who have lower incomes – afford to make the transition. The State has begun to see the economic benefits of these investments as ZEVs and their components represent the largest source of California exports, and in turn support jobs in a burgeoning industry for thousands of Californians.<sup>6</sup>

### Draft Funding Plan Goals and Priorities for FY 2023-24

According to CARB's climate and mobile source plans and strategies,<sup>7,8</sup> there is a need to transition to zero-emission technologies and cleaner fuels across all vehicle and equipment categories. This transition is necessary to meet goals to reduce greenhouse gas (GHG) emissions, smog-forming pollutants, and toxic pollutants. The importance of this transition is emphasized in the *California Sustainable Freight Action Plan*,<sup>9</sup> especially for the freight sector. Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) also sets goals to reduce emissions in communities with high exposures to toxic air contaminants and criteria pollutants.<sup>10</sup> Additionally, the *2022 Scoping Plan for Achieving Carbon Neutrality and the 2022 Progress Report on California's Sustainable Communities and Climate Protection Act*<sup>11</sup> (Senate Bill 150 Progress Report) highlights how important it is to adopt alternative ways to get around (alternative transportation modes), especially for priority populations.

---

<sup>6</sup> "California Surpasses 1.5 Million ZEVs Goal Two Years Ahead of Schedule." Office of Governor Gavin Newsom, 21 April 2023, <https://www.gov.ca.gov/2023/04/21/california-surpasses-1-5-million-zevs-goal-two-years-ahead-of-schedule/>

<sup>7</sup> "2022 Scoping Plan for Achieving Carbon Neutrality." California Air Resources Board, December 2022, <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

<sup>8</sup> "2020 Mobile Source Strategy." California Air Resources Board, October 2021, [https://ww2.arb.ca.gov/sites/default/files/2021-12/2020\\_Mobile\\_Source\\_Strategy.pdf](https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf).

<sup>9</sup> "California Sustainable Freight Action Plan." California Air Resources Board, July 2016, [https://ww2.arb.ca.gov/sites/default/files/2019-10/CSFAP\\_FINAL\\_07272016.pdf](https://ww2.arb.ca.gov/sites/default/files/2019-10/CSFAP_FINAL_07272016.pdf).

<sup>10</sup> *Criteria air pollutants* are types of air pollutants for which acceptable levels of exposure can be determined and specific air quality standards have been set. These standards help regulate and control the levels of pollutants in the air. Examples of criteria air pollutants include ozone (O<sub>3</sub>), carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), which are tiny particles suspended in the air. <https://ww2.arb.ca.gov/our-work/programs/criteria-air-pollutants>.

<sup>11</sup> "2022 Progress Report on California's Sustainable Communities and Climate Protection Act." California Air Resources Board, 8 June 2023, [https://ww2.arb.ca.gov/sites/default/files/2022-06/2022\\_SB\\_150\\_Main\\_Report\\_Draft\\_1.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-06/2022_SB_150_Main_Report_Draft_1.pdf)

## Intentional Benefits to Communities

Priority populations, such as communities that are most severely affected by air pollution, continue to face higher levels of pollution, which negatively impact their health. In order to address these unfair disparities, it is crucial to prioritize equity in program design and ensure intentional benefits are delivered. As Low Carbon Transportation projects have progressed, there has been a greater emphasis on targeting the benefits toward those who need them the most. While progress is being made, there are still areas where program improvements and better communication, collaboration, outreach, and engagement are needed. This will help to provide improved benefits for all Californians, especially priority populations. Staff collaborate with program administrators and community leaders to identify funding opportunities and develop strategies for outreach and engagement. This collaborative approach ensures that communities are actively involved in the decision-making process regarding investments and have equal access to funding opportunities. In addition to community outreach efforts to identify funding opportunities, incentives program staff have partnered with light-duty regulatory program staff through CARB's ZEV Equity Task Force which aims to identify partnerships to increase access to ZEVs in underserved communities. The ZEV Equity Task Force was formed in May 2023 in response to the Advanced Clean Cars II Regulations' Resolution 22-12 to "expand low-income and disadvantaged communities' access to ZEVs and zero-emission mobility."

## Program Evaluation and Reporting

CARB staff actively evaluate the various programs within the Low Carbon Transportation Investments initiative using different approaches. Staff seek input from program administrators, consumers, and communities to gather various perspectives, and analyze program data collected through surveys, telematics, and other evaluation methods. CARB also collaborates with universities through *research contracts*<sup>12</sup> to fund and study different projects in detail. In addition, staff work closely with interested parties who offer valuable insights, including their unique experiences with, and among, priority populations and their knowledge of equity principles. This collaboration helps shape *incentive grant solicitations*<sup>13</sup> so they are more inclusive and equitable and ensure that the investments meet community needs. CARB also directly engages with communities that have received funds to understand their firsthand experiences with the programs. The feedback gathered as a result of these interactions is used to shape program requirements and policies using a public process in an effort to improve access to incentives for those that need it the most.

---

<sup>12</sup> "Research" California Air Resources Board, Accessed 21 July 2023, <https://ww2.arb.ca.gov/our-work/topics/research>

<sup>13</sup> "Guiding Principles for Grant and Incentive Solicitations." California Air Resources Board, Accessed 21 July 2023, <https://ww2.arb.ca.gov/our-work/programs/accessible-clean-transportation-options-sb-350/guiding-principles-grant-and>

These connections help staff gain a deeper understanding of community needs and program objectives.

## **Research and Surveys<sup>14</sup>**

To better understand how projects encourage behavior change, CARB gathers information about the impact on behavior through surveys completed by participants. These surveys are administered at different points in the process, such as at the beginning of the application process, after a trip or purchase, and at varying intervals months to years after program participation. While CARB strongly encourages people to participate in these surveys, it is often completely voluntary. However, it is important to recognize that there are limitations to participant surveys. Some individuals may not be interested in taking surveys, while others may feel tired or overwhelmed if they have participated in multiple surveys. The way surveys are distributed can also introduce biases into the results. For instance, paper surveys may get more responses, but they require more resources to distribute and then perform the data entry. On the other hand, online surveys make it simpler to distribute and collect data, but people without internet access may not be able to participate. CARB staff is aware of these limitations and take them into account when analyzing the survey data.

CARB staff collaborate with both internal and external researchers to enhance these surveys, aiming for more efficient and effective data collection. Besides surveys, CARB uses different evaluation tools for clean mobility equity projects. Staff examine vehicle telematics data and review reports from project grantees about their activities and outcomes. Evaluations are also conducted to assess project effectiveness. CARB staff work to continuously improve their methods of data collection and analysis, and how they report on these programs.

CARB has joined forces with the University of California (UC) Berkeley Transportation and Sustainability Research Center for a research collaboration. The goal of this partnership is to develop models and processes for evaluating CARB's programs. The researchers aim to establish a new standard to assess the effectiveness, sustainability, and outcomes of various clean mobility equity pilot projects funded by CARB.

The research involves evaluating existing clean mobility projects funded by CARB using a hypothesis-based approach. This approach focuses on measuring different benefits, such as reducing GHG emissions and VMT. It also considers factors such as how to improve mobility equity, accessibility, user costs, and economic access. The researchers will also assess the financial sustainability of project services. The results of this evaluation will be presented in a Final Report, set to be released in the spring of 2024. The report will provide a summary of what the researchers found, lessons learned, and policy recommendations. CARB staff will

---

<sup>14</sup> Information on research and surveys will be moved to CARB's webpages for future year's Funding Plan documents.

carefully consider these points when they implement current and future clean mobility projects.

CARB is also funding a separate research contract (contractor to be identified) to develop an evaluation framework and identify performance metrics that can be used to understand the synergistic equity impacts of place-based, community-scale mobility investments for future projects.

In 2021, CARB partnered with the UC Berkeley Othering and Belonging Institute (OBI) to evaluate existing practices and develop recommendations for equitable, community-based transportation planning, including community transportation needs assessments. As part of this work, OBI is evaluating the community engagement and needs assessment approaches taken by some of CARB's project grantees that focus on transportation equity planning and small grassroots organization capacity building. The research aims to ensure that the people who will be impacted by the evaluation can play an integral role in the design, coordination, and implementation of evaluation activities and that their knowledge is incorporated into research findings. The evaluation is also informed by OBI's direct involvement in providing technical assistance to grantees. OBI's final discovery report will be published in 2023 and will be followed by a detailed equity recommendations report and final evaluation which will inform State and community-based organization approaches to advancing transportation equity, ensuring equity of investments, and maximizing impact beyond CARB's investments.

On the heavy-duty side, CARB requires grantees to conduct surveys with their end user fleets to get feedback on the user experience. The results of the surveys are incorporated into the grant's final reports. Vehicle purchasers participating in the Clean Truck and Bus Voucher Incentive Project (HVIP) are required to complete a survey for three years after they receive their vehicle. The survey assesses how satisfied the purchaser is with their vehicle and the HVIP project. This includes how well the vehicle functions in performing day-to-day operations and how important the HVIP vouchers are in making purchasing decisions.

In 2022, *Dream.org conducted a survey of over 500 fleets*,<sup>15</sup> primarily small and minority owned fleets, to address the critical gap in both the literature and the conversation about truck electrification. Through interviews, a digital survey, and a literature review, the survey explored what perceptions and existing knowledge small fleet owners already had about zero-emission trucks, the barriers to electrification that they anticipate, the solutions they find promising, and the best processes to intentionally engage them in shaping zero-emission truck policies and programs. The findings and recommendations offered learnings that are helping inform CARB's programs and policies. Primarily, these findings and recommendations include that small fleet owners' awareness of zero-emission trucks is limited to surface level awareness, and that it is easier for larger fleets to access capital,

---

<sup>15</sup> *Taking Charge: Supporting Small Fleets in the Transition to Zero Emission Trucks*, Dream.org, Accessed July 31, 2023, <https://dream.org/news-articles/no-fleet-left-behind/>.

apply for grants, and have spare vehicles when they encounter technical difficulties. The need for training, alternative financing options, access to infrastructure and programs providing support and information designed to address language barriers and reach minority fleet owners, were all identified as needs that could help small fleets transition to zero-emission. The recommendations in the Innovative Small e-Fleets Pilot (ISEF), launched last year, attempt to address the barriers to small and minority fleet adoption identified in this survey.

On the off-road sector side, Clean Off-Road Equipment Voucher Incentive Project (CORE) requires all purchasers to respond to a usage and experience survey. These surveys will be distributed by the project administrator. The results of the user experience surveys will be made public later and will help shape future off-road incentive policies.

## Project Goals

Every project has several goals it aims to achieve. These goals include reducing harmful emissions and ensuring our programs provide socioeconomic benefits for priority populations. The term "socioeconomic" refers to the combination of social and economic factors that influence people's lives. It involves looking at aspects like education, income, employment, and resources, which impact a person's overall well-being and opportunities. By understanding these socioeconomic factors, CARB staff can analyze and work to improve the social and economic aspects of a community or society.

In the previous year's Funding Plan for FY 2022-23, staff put forward strategies for identifying metrics to measure outcomes and successes of our clean transportation projects. This includes evaluating how effective projects are at generating behavioral changes and determining how we can expand the metrics used to measure the socioeconomic benefits. Staff have identified the following clean transportation projects that have already delivered, or will deliver, such benefits:

- Clean Cars 4 All (CC4A)
- Financing Assistance for Lower-Income Consumers (Financing Assistance)
- Clean Mobility Options (CMO) Projects
- Clean Mobility in Schools (CMIS)
- Sustainable Transportation Equity Project (STEP)

CARB staff continues to improve the metrics used to measure the success of each funded project. Staff collect data through program applications and surveys, which includes demographic information. Demographic information refers to data about specific characteristics of a population. This can include details such as race, ethnicity, gender identity, socioeconomic status, and more. Staff also analyze the demographic data to better understand who benefits from the investments and how the funds support the State's equity

goals set in *Governor Newsom's Executive Order (EO) N-16-22*.<sup>16</sup> This information is used to enhance program data tools and report outcomes from low carbon transportation investments. It also aligns with the goals outlined in the *Cap-and-Trade Auction Proceeds Fourth Investment Plan*.<sup>17</sup> As demographic data become more readily available for each funded project, staff will include it on CARB's website on each project's respective webpage(s).

## Funding Plan Development Process, Outreach, and Community Engagement

This section explains how CARB engaged with communities and reached out to different groups for the FY 2023-24 Draft Funding Plan. In an effort to make the Funding Plan development process more efficient, CARB staff combined public work group meetings during the day to reduce the number of meetings. Staff also held evening community work group meetings (community evening meetings) where the same topics discussed in the daytime meetings were presented but in a more accessible and plain-language format.

CARB staff also made sure to focus on priority populations throughout California, including Black, other people of color, tribal, disadvantaged, and low-income communities. Staff used the *California Climate Investments Priority Populations 2023 Map*<sup>18</sup> to identify areas that may not have received enough outreach in the past. Additionally, CARB worked with environmental justice organizations, community-based organizations (CBOs), and other groups that support disadvantaged communities. CARB collaborated with these partners to reach out to communities and learn about their clean transportation needs. Some of these partners included:

---

<sup>16</sup> "Executive Order N-16-22" Executive Department State of California, 13 September 2022, <https://www.gov.ca.gov/wp-content/uploads/2022/09/9.13.22-EO-N-16-22-Equity.pdf?emrc=c11513>

<sup>17</sup> "Cap-and-Trade Auction Proceeds Fourth Investment Plan." California Air Resources Board, November 2021, [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/Cap-and-Trade%20Auction%20Proceeds%20Fourth%20Investment%20Plan\\_FINAL.pdf](https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/Cap-and-Trade%20Auction%20Proceeds%20Fourth%20Investment%20Plan_FINAL.pdf)

<sup>18</sup> "California Climate Investments Priority Populations 2023." California Air Resources Board, Accessed 21 July 2023, <https://gis.carb.arb.ca.gov/portal/apps/experiencebuilder/experience/?id=6b4b15f8c6514733972cabdda3108348>



- [Access Clean California](#)<sup>19</sup> sitewide network of outreach partners
- CARB's [Environmental Justice Advisory Committee](#) (EJAC)<sup>20</sup>
- Assembly Bill (AB) 617 Community Steering Committees
- Over 250 environmental justice organizations across the State

## Public Meetings

Staff held one public workshop, five work group meetings, and three community evening meetings on the Draft Funding Plan. Table 2 summarizes these public meetings.

**Table 2. Public Meetings on the Development of the FY 2023-24 Draft Funding Plan to Date**

Date	Meeting
4/24/23	Process Update: Public Work Group on the New Fiscal Year 2023-24 Funding Plan Process
6/8/23	First Workshop: Kickoff the Fiscal Year 2023-24 Funding Plan Development Process
6/20/23	Evening Community Work Group: Overview of the FY 2023-24 Funding Plan Development Process
7/12/23	Public Work Group for FY 2023-24 Long-Term Heavy-Duty Investment Strategy
7/18/23	Evening Community Work Group: Long-Term Heavy Duty Investments Strategy and More
8/1/23	Public Work Group for Clean Transportation Equity and Light-Duty Vehicle Investments
8/10/23	Public Work Group Fiscal Year 2023-24 Funding Plan for Clean Transportation Incentives relating to HVIP, ISEF, and CORE
8/15/23	Evening Community Work Group: Clean Transportation Equity and Light-Duty Vehicle Investments
8/23/23	Public Work Group for Clean Transportation Equity and Light-Duty Vehicle Investments

<sup>19</sup> "About Access Clean California." *Access Clean California*, Accessed 21 July 2023, <https://accesscleanca.org/about>

<sup>20</sup> "Environmental Justice Advisory Committee." *California Air Resources Board*, Accessed 21 July 2023, <https://ww2.arb.ca.gov/environmental-justice-advisory-committee>



## **Community Evening Meetings**

In previous years, the Funding Plan development process involved primarily daytime public workshops and work group meetings. These meetings posed challenges for community members who faced unique barriers to attendance compared to individuals working in industry, government, and non-governmental organizations (NGOs). To address this issue, CARB introduced monthly community evening meetings as an accessible alternative for community members to engage with staff. These evening meetings covered the same topics discussed in the daytime meetings and workshops.

The community meetings had several goals, which were to:

- Provide a platform for community members to express their voices and share their priorities.
- Collaboratively generate solutions to address their clean transportation needs.
- Emphasize the key information about the funding plan that is relevant to community members.
- Establish ongoing communication and dialogue between staff and community members.

## **One-on-One Meetings**

CARB staff actively encourages all interested parties, with a particular focus on community members most affected by CARB's programs and policies, to contact CARB to set up one-on-one meetings. These meetings aim to delve deeper into the clean transportation needs of the interested parties. Staff will hold meetings with individual community members, CBOs, NGOs, and other relevant groups. The Proposed Funding Plan will include a summary of the comments collected from one-on-one meetings.

## **Community Surveys**

Staff used a survey that was given to different groups during the previous year's Funding Plan development. The survey will be sent to the following interested parties:

- Access Clean California Statewide Outreach Partner Network
- People who attended Community Evening Meetings
- AB 617 Community Steering Committees
- Environmental Justice Advisory Committee (EJAC) Members
- Over 250 environmental justice organizations in California

A total of 29 people have responded to the survey to-date. California community members may take the *community survey*<sup>21</sup> online by visiting our *Low Carbon Transportation Investments*<sup>22</sup> website or scanning the Quick Response (QR) code below. A summary of the survey results will be included in the Proposed Funding Plan.



---

<sup>21</sup> "Funding Plan for Clean Transportation Incentives Community Survey." California Air Resources Board, Accessed 21 July 2023,

[https://forms.office.com/Pages/ResponsePage.aspx?id=7qrlNy3sUCkOMDMYyHzAs-6QFSnG5OpBtsi\\_wa\\_DpUOUNRSjBaWU5DSUhCQU1YVTBLVTI4REtFUC4u](https://forms.office.com/Pages/ResponsePage.aspx?id=7qrlNy3sUCkOMDMYyHzAs-6QFSnG5OpBtsi_wa_DpUOUNRSjBaWU5DSUhCQU1YVTBLVTI4REtFUC4u)

<sup>22</sup> "Low Carbon Transportation Investments." California Air Resources Board, Accessed 21 July 2023, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low-1>

## Chapter 2: Draft Funding Allocations

Many zero-emission technologies are now widely available, and more are on the way. The State must continue to move forward on its path to achieve its ZEV goals as laid out in Executive Order (EO) N-79-20. It is also a time to move forward and help make sure everyone has fair access to zero-emission transportation options. The draft investments in this Funding Plan are meant to help expand the market for ZEVs in key vehicle categories. The goal is to increase the number of ZEVs for commercial deployment and support a sustainable market.

CARB staff determined draft project allocations through the incorporation of line items from the Budget Act of 2023. Staff also evaluated and anticipated demand. Staff reviewed the long-term planning elements of previous funding plans. CARB considered priorities identified by communities in CARB engagement efforts and documents such as *community emission reduction plans* (CERPs).<sup>23</sup> Staff assessed other available funding sources and took into account feedback from interested parties.

### Draft Project Allocations

The draft funding allocations are shown in Tables 3 - 5 below. More information regarding each of these projects and the rationale for these recommendations are described more fully in the remaining sections of this document.

---

<sup>23</sup> "*Community Air Protection Program Communities.*" California Air Resources Board, Accessed 21 July 2023, <https://ww2.arb.ca.gov/capp-communities>

**Table 3. Draft FY 2023-24 Project Allocations for Statewide Vehicle Purchase Incentive Programs Under SB 1275 (Millions)<sup>a</sup>**

Project Category	Greenhouse Gas Reduction Fund (GGRF)	General Fund <sup>a</sup>	Total Allocation
Financing Assistance	\$15	\$13	\$28
Clean Cars 4 All	\$15	\$13	\$28
California E-Bike Incentive Project	-	\$18	\$18
Access Clean California	-	\$5	\$5
California Integrated Travel Project (Cal-ITP)	-	\$1	\$1
<b>Total</b>	<b>\$30</b>	<b>\$50</b>	<b>\$80</b>

---

<sup>a</sup> Does not include any adjustments for project administration.

**Table 4. Draft FY 2023-24 Project Allocations for Sustainable Community-Based Transportation Equity Under SB 1275 (Millions)<sup>b</sup>**

Project Category	Greenhouse Gas Reduction Fund (GGRF)	Total Allocation
Mobility Projects	\$50	\$50
Planning and Capacity-Building	\$10	\$10
<b>Total</b>	<b>\$60</b>	<b>\$60</b>

---

<sup>b</sup> Does not include any adjustments for project administration.

**Table 5. Draft FY 2023-24 Project Allocations for Heavy-Duty Investments (Millions)<sup>c</sup>**

Project Category	Greenhouse Gas Reduction Fund (GGRF)	General Fund	Air Quality Improvement Fund (AQIF)	Total Allocation
Drayage Trucks - Heavy-Duty Vehicle Incentive Project	\$80	-	-	\$80
Public School Buses - HVIP	-	\$375 <sup>d</sup>	-	\$375
Innovative Small e-Fleets Pilot	-	-	\$14.3	\$14.3
Clean Off-Road Vehicles (CORE)	-	-	\$14.3	\$14.3
<b>Total</b>	<b>\$80</b>	<b>\$375</b>	<b>\$28.6</b>	<b>\$483.6</b>

<sup>c</sup> Does not include any adjustments for project administration.

<sup>d</sup> This funding was included in the FY 2022-23 Funding Plan as part of the \$1.125 billion for public school buses but is referenced again here because the Legislature reverted the \$1.125 billion and instead appropriated \$375 million this year with a commitment to appropriate an additional \$750 million in the future years.

## Clean Transportation Equity Projects

The Legislature appropriated \$140 million for vehicle purchase incentive programs and clean mobility investments. These funds will help increase access to clean transportation and mobility options that will benefit all Californians. Consistent with the direction provided by Senate Bill 1275 and SB 350, this includes priority populations. The appropriated funds cover vehicle purchase incentives, clean mobility investments, and planning and capacity building.

## Heavy-Duty Vehicle and Off-Road Equipment Investments

The Legislature appropriated \$484 million for heavy-duty vehicle and off-road equipment investments. This appropriation consists of \$80 million for drayage trucks, \$375 million for public school buses, and \$28.6 million to be split equally between the ISEF and CORE programs. The appropriated funds will help to pay for zero-emission drayage trucks. While the revised SB 114 (2023) general fund appropriation will assist in replacement of older

public school buses with zero-emission public school buses. For the AQIP funds, staff propose to allocate money to ISEF and CORE, while recognizing that available funding is not sufficient to meet demand. These investments would continue to support the transition of the California drayage fleet to zero-emission and help to turn over the State's public school bus fleet, which would provide cleaner public school buses for children, who are more susceptible to the health impacts from air pollution. Staff's proposal to continue to fund ISEF and focus on equitable investments that address challenges to zero-emission technology adoption for owner operators and small fleets would help to support California's small businesses, the backbone of California's economy. Lastly, investments in CORE's zero-emission off-road applications will need to continue to ensure that these growing technological advancements continue to move forward. CORE has been oversubscribed each year it has been funded, and we expect this to continue in FY 2023-24.

## State Operations

This year, the State budget for FY 2023-24 includes authorization to allocate up to five percent (5%) of the General Fund appropriation for administration. Staff propose to use a small portion of the General Fund and Greenhouse Gas Reduction Fund (GGRF) appropriations, about one percent (1%), for project development and administration by CARB. This one percent (1%) for project development and administration by CARB is separate from project administration costs used by third parties such as air districts, CBOs, etc.

## Measures to Expedite Funding to Oversubscribed Projects

To minimize market disruptions, staff is prioritizing delivering funds to projects quickly so that the air quality and economic benefits of these projects can be realized. To do so, CARB intends to rely on contingency provisions outlined in *Chapter 6 included in the FY 2022-23 Funding Plan* and the Executive Officer's authority to allocate a portion of funds to appropriate projects prior to Board consideration of the Proposed Funding Plan.<sup>24</sup> Additional details are included in the following chapters.

## Priority Population Investment Targets

A key component of these programs is to provide health and economic benefits to California's priority populations. Priority populations include disadvantaged communities, low-income communities, and low-income households collectively. Assembly Bill 1550

---

<sup>24</sup> "Proposed Fiscal Year 2022-23 Funding Plan for Clean Transportation Incentives." California Air Resources Board, November 2022, [https://ww2.arb.ca.gov/sites/default/files/2022-10/proposed\\_fy2022\\_23\\_funding\\_plan\\_final.pdf](https://ww2.arb.ca.gov/sites/default/files/2022-10/proposed_fy2022_23_funding_plan_final.pdf)

established a target for *priority populations*<sup>25</sup> for the State's Cap-and-Trade auction proceeds investments.<sup>26</sup> Program administrators are required to focus outreach and engagement to priority populations. This helps to ensure that funds reach communities and provide benefits where they are most needed. It also helps to meet and exceed established targets.

On May 3, 2022, the California Environmental Protection Agency (CalEPA) updated the designation of disadvantaged communities to include additional geographic areas. It also updated the reference years used to determine low-income communities and low-income household thresholds.<sup>27</sup> Additional areas encompassed in the designations include:

- Lands that are under the control of Federally recognized Tribal Governments. For purposes of this designation, a Tribe may establish that a particular area of land is under its control even if not represented as such on CalEPA's DAC map and therefore should be considered a DAC by requesting a consultation with the CalEPA Deputy Secretary for Environmental Justice, Tribal Affairs and Border Relations at [TribalAffairs@calepa.ca.gov](mailto:TribalAffairs@calepa.ca.gov).
- Census tracts that receive the highest 25 percent of overall scores in the *California Communities Environmental Health Screening Tool (CalEnviroScreen) 4.0*
- Census tracts that lack overall scores in CalEnviroScreen 4.0 due to data gaps but that have received the highest five percent (5%) of CalEnviroScreen 4.0 cumulative pollution burden scores

In addition, census tracts identified in the 2017 disadvantaged community designations as disadvantaged will maintain their designation.

In the FY 2022-23 Funding Plan, staff recommended that at least 60-70 percent of Low Carbon Transportation funds be invested in projects that meet one of the AB 1550 criteria with the following targets:

- At least 45-50 percent of funds for projects located within, and that benefit individuals who live in, disadvantaged communities
- At least 15-20 percent of funds for projects located within, and that benefit low-income communities, or that benefit low-income households

Each year staff considers the targets as a floor and strive to exceed them. Staff consider whether there are provisions that can be incorporated into project solicitation designs and

---

<sup>25</sup> "Priority Populations." *California Climate Investments*, Accessed 21 July 2023  
<https://www.caclimateinvestments.ca.gov/priority-populations>

<sup>26</sup> *Health and Safety Code Section 39713*.

<sup>27</sup> Additional information on *CalEPA's designation* is available at: <https://calepa.ca.gov/envjustice/ghginvest/>

implementation requirements to help ensure that CARB exceeds the minimum targets. CARB does not limit the disadvantaged community and low-income community or household focus to Low Carbon Transportation Investments. Investments from the Air Quality Improvement Fund (AQIF) and the General Fund are also designed to benefit priority populations as well. Staff is evaluating CARB's investment targets for this year's proposed FY 2023-24 funds, and an update will be provided in the Proposed Funding Plan.

### **Safeguards for Cap-and-Trade Auction Revenue Uncertainty**

The Low Carbon Transportation Investments are a part of the Cap-and-Trade Expenditure Plan developed each year by the California Legislature. As in past years, this Funding Plan relies in part on future revenues generated at auctions in the upcoming fiscal year. Staff will consider how to divide the Low Carbon Transportation appropriation that is available between projects in each of the three suballocations in a manner that reduces project disruptions and maximizes immediate benefits to communities.



## Chapter 3: Clean Transportation Equity and Light-Duty Vehicle Investments

### Overview

CARB's clean mobility and light-duty vehicle investments are aimed at supporting the long-term transformation of California's fleet and ensuring that this transformation occurs in an equitable manner. The investments include vehicle purchase incentives and clean mobility investments, both of which incorporate, and are supported by, outreach, technical assistance, and workforce training and development. This chapter discusses the draft allocations for these investments.

### Draft Allocations for Clean Transportation Equity and Light-Duty and Projects

The Budget Act of 2023 and associated budget trailer bills include \$140 million for clean transportation equity investments established under the Charge Ahead California Initiative, to help increase access to clean transportation and mobility options benefiting low-income and disadvantaged communities and low-income households consistent with the direction provided by SB 1275 and SB 350. This includes at least \$80 million to statewide equity transportation programs established by SB 1275 including, but not limited to, CC4A, and at least \$60 million for Sustainable Community-Based Transportation Equity Projects. Finally, staff proposes to use a small portion of the total appropriation to fund equity vehicle purchase incentive outreach efforts through Access Clean California and to provide support for CalSTA and its partners, the California Department of Transportation (Caltrans) on the *California Integrated Travel Project (Cal-ITP)*.<sup>28</sup>

Table 6 outlines the proposed allocations for each vehicle purchase incentive program and each clean mobility project, considering current project demand and uptake, administrator capacity to spend funds, and funding that has already been allocated in past FYs but not spent. CARB staff considered stakeholder comments received through the public process and prioritized investments that can result in the most immediate impact in communities. Only 75 percent of the \$90 million of Low Carbon Transportation GGRF funding can be spent initially with the remaining 25 percent, or \$22.5 million, available after the fourth Cap and Trade auction of the FY and direction from the Department of Finance.

---

<sup>28</sup> "Cal-ITP" Cal-ITP, Accessed 21 July 2023, <https://www.calitp.org/>

In Table 6, CARB’s Clean Mobility Investments are grouped into two categories. In an effort to reduce confusion and make it easier for communities to apply for and access clean mobility funding, CMO, STEP, and CMIS have been combined into one funding category - the Sustainable Community-Based Transportation Equity Mobility Projects. In addition, CARB is setting aside specific planning and capacity building funding to support dedicated outreach, ongoing technical assistance, community capacity building, workforce training and development, and other critical clean mobility investment needs through the Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects. Additionally, further investment to expand workforce training and development in communities will continue to be funded through CARB’s vehicle purchase incentives, clean mobility, planning and capacity building programs. To support economic opportunities more fully across clean transportation sectors and maximize benefits for priority populations, CARB’s workforce investments go beyond light-duty vehicles and the ZEV market to include medium- and heavy-duty applications, including the Inclusive, Diverse, Equitable, Accessible, and Local (IDEAL) ZEV Workforce Pilot Project.

**Table 6. FY 2023-24 Proposed Allocations for Vehicle Purchase Incentives and Clean Mobility Investments (millions)**

<b>Project Category</b>	<b>Total Allocations to Date<sup>e</sup></b>	<b>GGRF Allocations</b>	<b>General Fund Allocations</b>	<b>Total Proposed Allocation</b>
CVRP	\$1,601	-	-	-
<b>Statewide Equity Transportation Programs</b>	-	-	-	-
CC4A	\$125	\$15	\$13	\$28
Financing Assistance	\$133.5	\$15	\$13	\$28
California E-Bike Incentive Project	\$13	-	\$18	\$18
Access Clean California	\$15	-	\$5	\$5
Cal-ITP	\$1	-	\$1	\$1
Zero-Emission Assistance Program	\$10	-	-	-
<b>Sustainable Community-Based Transportation Equity Projects</b>	-	-	-	-
Sustainable Community-Based Transportation Equity Mobility Projects (CMO, STEP, CMIS)	\$203.4 <sup>f</sup>	\$50	-	\$50

Project Category	Total Allocations to Date <sup>e</sup>	GGRF Allocations	General Fund Allocations	Total Proposed Allocation
Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects	\$9.7 <sup>g</sup>	\$10	-	\$10
<b>Total</b>	<b>\$2,111.7</b>	<b>\$90</b>	<b>\$50</b>	<b>\$140</b>

<sup>e</sup> Funding shown here includes Low Carbon Transportation Allocations, AQIP allocations, and VW settlement Funds. CVRP received \$146 million from AQIP and has received \$940 million from Low Carbon Transportation. Since FY 2017-18, \$25 million of each year's CVRP allocation has been earmarked for increased rebates for low- and moderate-income applicants. CC4A received \$3.6 million from AQIP and \$10 million from the VW settlement funds. Financing Assistance received \$10 million from the VW settlement funds, and Access Clean California also received \$5 million from the VW settlement funds. Totals are rounded to the nearest million.

<sup>f</sup> \$8 million in funding was provided through partnership with CEC.

<sup>g</sup> \$1.5 million for FY 2021-22 Clean Transportation Equity Investments for a new workforce training and development at adult education and vocational schools solicitation, \$1 million in FY 2020-21, one percent GGRF State Operations funding to support IDEAL ZEV Workforce Pilot Project (IDEAL ZEV Workforce) implementation with CEC, \$1 million in FY 2021-22 one percent GGRF State Operations funding and \$1.275 million in FY 2021-22 one percent GGRF State Operations funding to support ZEV training and career opportunities through California Community Colleges.

As a part of last year's Funding Plan, CARB approved \$215.5 million for a joint solicitation to select an administrator for the Financing Assistance Programs, Statewide CC4A, and the Zero-Emission Assurance Program (ZAP). The solicitation closed in March 2023, and the Community Housing Development Corporation (CHDC) was selected as the grantee. Staff is currently working to execute the grant agreement and launch the new joint program before the end of 2023. In addition, the new joint program will implement a needs-based model, which prioritizes applications from DAC/LIC and very low-income consumers by streamlining the application process and providing support and case management throughout the process. Collaboration with CBOs and grassroots organizations is at the center of the outreach and education strategy under this new joint program.

Furthermore, CARB's longest-running vehicle purchase incentive program, the Clean Vehicle Rebate Project (CVRP), received an allocation of \$515 million in FY 2021-22 with the intent to fund the program through FY 2023-24. In a public work group held on May 30, 2023,<sup>29</sup> CARB staff provided updated end-of-funding projections indicating that the program could be out of funding as early as November 2023. This is due in large part to Tesla Model 3 and Model Y vehicles becoming eligible for the program once again, leading to an increased volume averaging about 11,000 applications per month since March 2023. As staff does not anticipate additional funding for the program, CVRP will close with no waitlist offered once funding runs out. In addition, CVRP has maintained a list of new vehicles eligible for the program that CARB's other vehicle purchase incentive programs point to. With the closure of CVRP, staff is looking for the best way to transfer and maintain this list on a CARB website going forward and will be soliciting stakeholder input through the funding plan process. Staff's recommendation will be included in the Proposed Funding Plan.

Moreover, projects that do not receive funding allocations for this FY will be moved to [CARB's Low Carbon Transportation Investments and Air Quality Improvement Program webpage](#).<sup>30</sup> The projects not receiving funding allocations this year include:

- CVRP
- Rural School Bus Pilot Project

---

<sup>29</sup> "Low Carbon Transportation Investments and AQIP Meetings and Workshops." California Air Resources Board, Accessed 21 July 2023, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low-0>

<sup>30</sup> <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program>

## Clean Cars 4 All

---

*Draft General Fund Allocation-\$ 15 million*

*Draft Low Carbon Transportation Allocation-\$ 13 million*

*Clean Cars 4 All Program Webpage<sup>31</sup>*

---

### Draft Funding Allocation

The Clean Cars 4 All (CC4A) program currently operates in five Air Districts (Bay Area, San Diego, South Coast, San Joaquin Valley, and Sacramento Metropolitan). The Budget Act of 2023 and associated trailer bills included a total allocation of \$80 million from GGRF and the General Fund for statewide equity transportation programs including, but not limited to, CC4A and related equity programs created under the Charge Ahead California Initiative. Staff recommends allocating up to \$28 million to the CC4A program to be shared between the Statewide and district programs for FY 2023-24.

### Projections

CC4A is currently on pace to complete 2,900 vehicle replacements in FY 2022-23 while expending \$22 million. Air Districts have expended or committed 83 percent of the FY 2021-22 funds and will begin spending FY 2022-23 by the fourth quarter of 2023. The expansion of existing Air District programs along with the new statewide and San Diego Air District programs is expected to significantly increase program demand in FY 2023-24. Program demand will also be increased due to CVRP phasing out, leaving CC4A and Financing Assistance as the only two vehicle purchase incentive programs available to lower-income consumers. Participation data from these programs indicates there is high demand among lower-income consumers for clean vehicles. Due to program expansion, increased incentive amounts, and the ending of CVRP, staff estimate that CC4A will complete 3,400-4,150 projects in FY 2023-24 and expend between \$49 and \$60 million. The final version of the FY 2023-24 Funding Plan will contain quantification methodologies and updated projections. Considering the projected demand, existing fund balances from prior FYs, and the need to ensure consistent funding in future years, staff is recommending an allocation of \$28 million for FY 2023-24. However, if demand for funding is lower than \$28 million, then staff is proposing that funds can be shifted to meet demand for the Financing Assistance for Lower-Income Consumers Program.

---

<sup>31</sup> <https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all>

## Potential Changes to Project Criteria

Staff is proposing two changes to CC4A project criteria for FY 2023-24. The first change involves zero-emission motorcycles (ZEM) which are currently only eligible through CVRP. Since CVRP is projected to run out of funding and close in November 2023, staff is considering adding ZEMs to CC4A and Financing Assistance as an eligible replacement vehicle type. ZEMs will provide participants with an additional zero-emission option when choosing a replacement through either CC4A or Financing Assistance.

The second change involves funding for adaptive equipment. Language included in the Budget Act of 2022 provided direction for CARB staff to consider increased incentive levels to accommodate increased costs associated with adaptive equipment for eligible Californians with physical disabilities. Staff is investigating the costs associated with, and types of, adaptive equipment and researching the complexities of this issue. Staff is also consulting with disability rights advocates and will discuss this issue, along with the proposal for adding ZEMs, through upcoming public work groups and workshops. Staff will provide an update along with any proposals in the final version of the FY 2023-24 Funding Plan to be released later this year.

In addition, staff is working on updates to grant agreements for individual Air District programs to incorporate program changes approved in the FY 2022-23 Funding Plan. These changes include increased incentive amounts, lowering the income cap, and expanding the air district programs beyond ZIP codes containing DACs to all areas of their respective jurisdictions. Additionally, SB 1382 (Gonzalez, Chapter 375, Statutes of 2022) exempts eligible vehicle purchases funded by CC4A from state sales and use taxes. As program administrators begin to spend their FY 2022-23 allocations, these changes will be incorporated into their respective programs. Staff is not proposing changes to incentive amounts including the incentive amounts found in [Table 22 of the FY 2022-2023 Funding Plan](#).

## Reporting Requirements

As part of the response to the CARB Audit Report,<sup>32</sup> CARB is taking measures to improve evaluation, analysis, and reporting of socioeconomic benefits for program participants. This includes an updated survey to provide for more streamlined data

---

<sup>32</sup> California State Auditor. *California Air Resources Board: Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals*. February 2021. <http://auditor.ca.gov/pdfs/reports/2020-114.pdf>

collection, analysis, and identification of benefits or areas for improvement. The updated survey has been incorporated into all CC4A grant agreements and is required to be used in Air District survey efforts. As per direction under the updated CC4A grants, Air Districts have begun to implement these surveys and CARB awaits results from those surveys.

An expected socioeconomic benefit of the CC4A is an increase in vehicle reliability. The updated survey will provide data regarding the frequency of disruptions of service of the scrapped and incentivized vehicles as a relative measure of reliability. Another expected benefit is improved access to employment and goods and services. Evaluation methods will include surveys in which participants self-report on improved access, and on participant testimonials.

Additionally, under the direction of SB 1382 (Gonzalez, Chapter 375, Statutes of 2022), CARB and program administrators are required to identify populations that are being underserved by the program, determine the barriers hindering participation and propose strategies to overcome those barriers. Information gathered from the updated participant surveys will help identify underserved populations, identify barriers to the program and inform efforts to develop solutions to reduce barriers and reach underserved populations.

## Financing Assistance for Lower Income Consumers

---

*Draft General Fund Allocation-\$ 15 million*

*Draft Low Carbon Transportation Allocation-\$ 13 million*

*Financing Assistance for Lower Income Consumers Program Webpage<sup>33</sup>*

---

### Draft Funding Allocation

The Budget Act of 2023 and associated trailer bills included a total allocation of \$80 million from GGRF and the General Fund for statewide equity transportation programs including, but not limited to, CC4A and related equity programs created under the Charge Ahead California Initiative. As Financing Assistance is one of the equity programs under this initiative, staff recommends allocating up to \$28 million to the statewide Financing Assistance program for FY 2023-24.

### Projections

As CVRP is phasing out, the only vehicle purchase incentive programs available to low-income consumers are Financing Assistance and CC4A. Data collected from implementing these programs for a few years, indicate there is great demand and interest among low-income consumers for clean vehicles, such that the statewide program spent the two recent major allocations very quickly. With recent changes in the electric vehicle (EV) market, increased EV awareness, and increased incentives under the needs-based model suggest that the Financing Assistance project demand is between \$90 million and \$120 million for FY 2023-24. Considering the projected demand, market conditions, and the budget appropriation for FY 2023-24, staff is recommending an allocation of up to \$28 million. If demand for funding is lower than \$28 million, then staff is proposing that funds can be shifted to meet demand for CC4A.

### Potential Changes to Project Criteria

Staff proposes two changes to the Financing Assistance project criteria for FY 2023-24, consistent with changes recommended for CC4A to ensure continued alignment. Zero-emission motorcycles (ZEM) are currently only eligible through CVRP. Since CVRP is projected to run out of funds and close in November 2023, staff is considering adding ZEMs to CC4A and Financing Assistance as an eligible replacement vehicle type. ZEMs would provide participants with an additional zero-emission option when they choose a replacement through either CC4A or Financing Assistance. Language included in the

---

<sup>33</sup> <https://ww2.arb.ca.gov/our-work/programs/financing-assistance-lower-income-consumers>



Budget Act of 2022 provided direction for CARB staff to consider increased incentive levels to accommodate the increased costs associated with adaptive equipment for eligible Californians with physical disabilities. Staff is investigating the costs associated with, and types of, adaptive equipment and researching the complexities of this issue. Staff is also consulting with disability rights advocates and will discuss this issue, along with the proposal for adding ZEMs, through upcoming public work groups and workshops. Staff will provide an update along with any proposals in the Proposed Funding Plan scheduled to be released later this year.

### Reporting Requirements

As staff transitions to implementing a needs-based model, staff will develop new metrics to measure the impact of incentives through this project. Currently, staff relies on program data and surveys of program participants to understand the impacts of the program on vehicle purchasing, financing needs, and behavioral and socioeconomic impacts. An expected socioeconomic benefit of this project is to bring the benefits of clean transportation and access to low-interest automobile loans to priority populations that are most impacted by pollution and who do not have a vehicle to scrap, which can be evaluated by measuring the number of clean vehicles purchased by low-income consumers and the number of loans facilitated by the program. Staff will also evaluate the importance of having access to low-interest loans during the process of purchasing a clean vehicle through the use of surveys. Staff continues to find ways to collect and evaluate data in a way that helps to inform overall program design. Staff is working to identify ways to collect and assess more data to better understand the impacts the program has on overall credit scores, and as the needs-based approach is implemented, staff will continue to refine program evaluation metrics.

## California E-Bike Incentive Project

---

*Draft General Fund Allocation—\$ 18 million*  
*California E-Bike Incentive Project Webpage*<sup>34</sup>

---

### Draft Funding Allocation

The Budget Act of 2023 and associated trailer bills included a total appropriation of \$80 million from GGRF and the General Fund for statewide equity transportation programs under the Charge Ahead California Initiative. As the California E-Bike Incentive Project is one of the equity programs under this initiative, staff recommends allocating up to \$18 million to the California E-Bike Incentive Project for FY 2023-24.

### Projections

The California E-Bike Incentive Project will open the first funding window in the fall of 2023. Staff anticipates that any additional funding from FY 2023-24 will be fully subscribed. Future funding projections will be developed once the program is open and data is available to do so.

### Potential Changes to Project Criteria

Staff is not proposing any changes to the California E-Bike Incentive Project criteria for FY 2023-24.

### Reporting Requirements

The California E-Bike Incentive Project aims to achieve GHG emission reduction benefits by providing individual incentives for e-bikes to help motivate consumer purchasing decisions, lower barriers to e-bike ownership and displace VMT with bicycle trips.

CARB and the program administrator are developing criteria for a third-party evaluator to assess telematic data through California E-Bike Incentive Project applicant participation. The data will be used to help quantify GHG emission reductions and the reduction of VMT through the use of e-bikes. Staff will incorporate the findings into next year's funding plan.

---

<sup>34</sup> <https://ww2.arb.ca.gov/our-work/programs/california-e-bike-incentive-project>

## Access Clean California

---

*Draft General Fund Allocation—\$5 million*  
*Access Clean California Program Webpage*<sup>35</sup>

---

### Draft Funding Allocation

The Budget Act of 2023 and associated trailer bills included a total appropriation of \$80 million from GGRF and the General Fund for statewide equity transportation programs under the Charge Ahead California Initiative. As Access Clean California is one of the equity programs under this initiative, staff recommends allocating up to \$5 million to the Access Clean California program for FY 2023-24. This draft allocation will allow the project to scale-up implementation, including expanding the network of outreach partners, expanding the scope of the centralized application webtool (called the Benefits Finder), and filling outreach gaps through targeted outreach by grassroots community organizations in priority communities across the state.

### Projections

Access Clean California is designed to increase awareness and enable more efficient implementation of CARB's Clean Transportation Equity projects and expand participation by priority populations. Because this is an "enabling" project, CARB staff is not quantifying any funding projections.

### Potential Changes to Project Criteria

Staff is not proposing any substantial changes to Access Clean California. However, though a direct appropriation has not been made, staff is continuing to prepare for implementing SB 1230 (Limon, Chapter 371, Statutes of 2022), which requires CARB to create, contingent upon appropriation by the Legislature, a single unified education and application portal that would enable an applicant to apply with a single application to CARB's clean vehicle purchase incentive programs. This work is already underway with Access Clean California. CARB staff intend to issue a new solicitation for the administration of this project in late 2023 or early 2024. Proposed changes for the new solicitation include expansion of the outreach partner network with a focus on partnering with grassroots-level community organizations, enhancement of technical assistance and capacity building for grassroots community-based organizations, increased outreach coordination among consumer incentive project

---

<sup>35</sup> <https://ww2.arb.ca.gov/our-work/programs/access-clean-california>

administrators, and further alignment with statewide project streamlining efforts, including Clean Cars 4 All and Financing Assistance.

### Reporting Requirements

As an “enabling” project, the Access Clean California project will help achieve the emission reductions anticipated for CC4A, Financing Assistance, and CVRP, as well as the various clean mobility investments, which are quantified in those sections of the Funding Plan. However, it is still important to measure the success of this project. CARB will report the outcomes of this project on [CARB’s Access Clean California website](#). Staff proposes to use metrics such as the number of successful applications, outreach events, training sessions, and networking workshops. CARB will also require the grantee to develop surveys of participants as a way to determine how well the project is working and determine whether refinements are needed.

## California Integrated Travel Project (Cal-ITP) Payment Issuance Strategy and Demonstrations

---

*Draft General Fund Allocation—\$1 million*

*California Integrated Travel Project Payment Issuance Strategy and Demonstrations Webpage<sup>36</sup>*

---

### Draft Funding Allocation

The Budget Act of 2023 and associated trailer bills included a total appropriation of \$80 million from GGRF and the General Fund for statewide equity transportation programs under the Charge Ahead California Initiative. As the California Integrated Travel Project (Cal-ITP) Payment Issuance Strategy and Demonstrations support the equity programs under this initiative, staff recommends allocating up to \$1 million to Cal-ITP for FY 2023-24. It is anticipated that this funding would likely be administered through an Interagency Agreement, or other appropriate mechanism, to support and expand upon the work that has begun to identify payment issuance approaches to make vehicle charging and other mobility options easier to access for individuals who have low-incomes, or who are unbanked or underbanked.

### Projections

Cal-ITP is designed to support CARB’s suite of light-duty equity programs and, because this is an “enabling” project, CARB staff is not quantifying any funding projections.

### Potential Changes to Project Criteria

Staff is not proposing any substantial changes to Cal-ITP or the identified work that CARB proposed to fund through this partnership.

### Reporting Requirements

Cal-ITP supports various projects across CARB’s light-duty vehicle incentive suite by ensuring that any transit customer, and specifically underbanked and unbanked customers, can easily pay for transit by accepting Euro Pay, Mastercard, and Visa open-loop payments. Because this project supports consumer transit and micromobility<sup>37</sup> options offered in

---

<sup>36</sup> <https://www.calitp.org>

<sup>37</sup> Micromobility refers to small, lightweight transportation options that are designed for short-distance travel. These options include electric scooters, bicycles, and other similar devices. Micromobility is becoming

CARB's other incentive projects, such as CC4A and CMO, staff is not quantifying any direct emission reductions benefits for this project. Instead, this project is expected to help achieve the emission reductions projected for other light-duty vehicle incentives. The overarching goal of this investment is to improve how residents with low-incomes can obtain and use benefits from CARB's Clean Transportation Equity and Light-Duty Vehicle incentives. Staff proposes to use metrics such as CARB's ability to produce a payment card, and the number of payment cards issued, to measure the success of Cal-ITP. In addition, staff will continue to identify additional metrics as more data is collected and report results to the public using CARB's public process.

---

increasingly popular as a convenient and environmentally-friendly way to get around cities and urban areas. It offers a flexible and affordable alternative to traditional modes of transportation, such as vehicles or buses, for short trips. By using micromobility, individuals can reduce their carbon footprint and contribute to a cleaner and more sustainable environment.

## Sustainable Community-Based Transportation Equity Mobility Projects

---

*Draft Low Carbon Transportation Allocation-\$50 million  
Sustainable Community-Based Transportation Equity Mobility Projects Webpage<sup>38</sup>*

---

### Draft Funding Allocation

The Budget Act of 2023 and associated budget trailer bills appropriated \$60 million for Sustainable Community-Based Transportation Equity projects. Of this amount, staff is proposing to allocate \$50 million to clean mobility projects and \$10 million to Planning and Capacity Building projects (see the following section titled Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects).

### Projections

Staff expects to fund projects that range in size from \$2 million to \$10 million, on average, which would result to between five (5) and 25 mobility projects. If demand for funding is lower than \$50 million, then staff is proposing that funds can be shifted to meet demand for Planning and Capacity Building projects.

### Potential Changes to Project Criteria

In the past, CARB has funded three separate pilot mobility projects: 1) the Clean Mobility Options Voucher Pilot (CMO), 2) Clean Mobility in Schools (CMIS), and 3) the Sustainable Transportation Equity Project (STEP). Previously, each of these programs were administered separately and had their own application and administration process. To reduce confusion and make it easier for communities to apply for, and access, clean mobility funding, CARB released a joint Request for Applications for Planning and Capacity Building, CMIS and STEP on July 24, 2023, using funding from FY 2022-23. Due to timing and other administrative factors, CMO was not included in this Request for Applications. Going forward, CARB is looking to further streamline program requirements and incorporate project types previously funded through the CMO pilot. Starting with funding allocated this year, staff is considering funding community-based projects through one Request for Applications solicitation.

---

<sup>38</sup> <https://ww2.arb.ca.gov/sustainable-community-based-transportation>

Staff is also considering releasing a solicitation to select a single statewide Mobility Project Administrator that will oversee specific elements of grant management, project assistance and support, and data collection/evaluation for all transportation equity mobility projects (STEP, CMIS, and CMO) funded with FY 2023-24 and future funding. While it is believed that CARB staff will continue to be able to oversee the joint Request for Application process, application scoring, and project selection, these duties, in the future, may need to be incorporated into those of the statewide mobility project administrator, where staffing shortfalls exist.

CARB's clean mobility funds will be directed to disadvantaged and low-income communities throughout the state. Due to the ongoing goal to promote equity, CARB will prioritize investments to fill gaps in access, such as in tribal governments, rural communities, Black communities, and other communities of color. The solicitation may be (1) competitive, (2) first-come, first-served, (3) needs-based, (4) lottery, or (5) some combination of these approaches as determined through an implementation public work group process after approval of the Proposed Funding Plan.

### Reporting Requirements

Staff continue to work with project grantees to collect and report the following project data on an annual basis and use this data to assess funding gaps and make programmatic improvements. When available, this data will be reported to the public annually.

**Estimated benefits:** CARB staff and technical assistance providers work with funding applicants to calculate GHG emission reductions and other co-benefits, such as criteria and toxics emission reductions, VMT reductions, travel cost savings, and jobs supported, before project implementation begins. California Climate Investments has developed tools to model the impacts from investments including travel cost savings<sup>39</sup> and jobs,<sup>40</sup> which will be used to calculate these benefits. These estimates will then be re-calculated annually using updated inputs based on actual data from project implementation and operations.

**Project outcomes:** Grantees are required to track data on the impact of funded projects during project implementation.

---

<sup>39</sup> "Co-benefit Assessment Methodology Travel Cost Savings." California Air Resources Board, October 2019, [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final\\_travelcost\\_am\\_corrected.pdf](https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final_travelcost_am_corrected.pdf)

<sup>40</sup> "Job Co-benefit Assessment Methodology." California Air Resources Board, May 2021, [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final\\_jobs\\_am.pdf](https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final_jobs_am.pdf)



**Vehicle telematics data:** Grantees collect quantifiable data on project operations, such as the number of users, number of trips, VMT per user and per trip, average utilization rate, and average fare cost, via vehicle telematics.

**User surveys:** Grantees deploy multiple user surveys over the course of project implementation to collect data that cannot be collected via telematics. This includes, but is not limited to, data such as the demographics of service users, user experience, trip purpose, alternative transportation mode if project service had not been available, pre-project travel behavior and changes in travel behavior post-project, pre-project transportation challenges and changes in transportation access post-project, and changes in perception of ZEVs and equipment post-project.

**Community engagement and outreach:** Grantees track data on outreach and engagement activities, including quantitative data, such as the number of events/activities and participants reached, and qualitative data on the nature and impact of the events/activities.

**Socioeconomic benefit analysis:** CARB is continuing to collect data on and develop a process for understanding the socioeconomic benefits to clean mobility users from clean mobility investments. This will include a calculation that will incorporate the value of reliable, clean transportation and the cost savings of funded clean mobility services relative to other options. The analysis will continue to be updated and estimates refined based on stakeholder feedback obtained through a public work group process and additional grantee surveys and vehicle telematics data.

## Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects

---

*Draft Low Carbon Transportation Allocation-\$10 million Sustainable Community-Based Transportation Equity Planning and Capacity Building Projects Program Webpage<sup>41</sup>*

---

### Draft Funding Allocation

The Budget Act of 2023 and associated budget trailer bills appropriated \$60 million for Sustainable Community-Based Transportation Equity projects. Of this amount, staff is proposing to allocate \$10 million to Planning and Capacity Building projects and \$50 million to clean mobility projects (see the previous section titled Sustainable Community-Based Transportation Equity Mobility Projects).

### Projections

This allocation will fund two separate efforts administered by a single statewide administrator: 1) community planning and capacity building grants, which consist of funding provided through the statewide administrator to project awardees to implement their project(s), and 2) project assistance and support provided by the statewide administrator to the project awardees in the form of technical assistance, guidance, and other non-monetary support for project implementation. Of the \$10 million allocation, staff expect to fund up to \$7.5 million in community planning and capacity building projects that range in size from \$200,000, on average, up to \$500,000. This would result in approximately 15 to 37, or more, community-based projects. CARB anticipates a significant portion of this funding will support staff time for organizations to work with community residents, build partnership networks, support community-led transportation planning processes, develop and implement community education and outreach campaigns, and conduct workforce training and development programs. The remaining \$2.5 million will be available, on a reimbursement basis, to support the statewide administrator's responsibilities, including oversight of specific elements of grant management, project implementation support, and regional coordination and outreach through grassroots community-based organizations. If demand for funding is less than \$10 million, then staff is proposing that funds can be shifted to meet demand for the Sustainable Community-Based Transportation Equity Mobility Projects.

---

<sup>41</sup> <https://ww2.arb.ca.gov/our-work/programs/planning-and-capacity-building>

## Potential Changes to Project Criteria

Staff is not proposing changes this year to project criteria for the Planning and Capacity Building grants nor for the statewide administration and project assistance/support.

## Reporting Requirements

Staff continue to work with project grantees to collect and report project data on an annual basis and use this data to assess funding gaps and make programmatic improvements. When available, this data will be reported to the public annually.

**Estimated benefits:** Planning and Capacity building is intended to strengthen local coordination, leadership, knowledge, and skills to prepare disadvantaged and low-income communities for future clean mobility funding opportunities. As such, these projects support the development of activities to identify or plan future mobility projects and do not result in direct emission reductions. In the future, CARB staff and technical assistance providers will work with project grantees to calculate emission reductions for mobility projects that result from these planning efforts and other co-benefits, such as travel cost savings and jobs supported before project implementation begins. The California Climate Investments staff has developed tools to model the impacts from investments including travel cost savings<sup>42</sup> and jobs,<sup>43</sup> which will be used to calculate these benefits.

**Project outcomes:** Grantees are required to track data on the impact of funded projects during project implementation.

**Community engagement and outreach:** Grantees and technical assistance providers deploy surveys and collect data on project implementation to evaluate project success. This includes, but is not limited to, data such as the demographics of community participants, outreach and engagement activities, including quantitative data, such as the number of events/activities and participants reached, qualitative data on the nature and impact of the events/activities, and other project metrics that may be attributed to community transportation needs assessments and other planning projects.

---

<sup>42</sup> "Co-benefit Assessment Methodology Travel Cost Savings." California Air Resources Board, October 2019, [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final\\_travelcost\\_am\\_corrected.pdf](https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final_travelcost_am_corrected.pdf)

<sup>43</sup> "Job Co-benefit Assessment Methodology." California Air Resources Board, May 2021, [https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final\\_jobs\\_am.pdf](https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/final_jobs_am.pdf)

## Chapter 4: On-Road Heavy-Duty Vehicle and Off-Road Equipment Investments

### Overview

This section of the Draft Funding Plan describes proposed heavy-duty vehicle and off-road equipment (heavy-duty) investments to be funded through Clean Transportation Incentives. Staff is providing an overview of CARB's heavy-duty investments in the context of the Long-Term Heavy-Duty Investment Strategy and the current technology and market landscape followed by preliminary funding recommendations for, and descriptions of, the following projects:

- Clean Truck and Bus Voucher Incentive Project (HVIP) - Drayage Trucks and Public School Buses Only
- Innovative Small E-Fleets (ISEF)
- Clean Off-Road Equipment Voucher Incentive Project (CORE)

The HVIP programs that will receive funding for the 2023-24 fiscal year are the Drayage and Public School Bus programs. The Truck Loan Assistance program has ended. Although some projects are not proposed to receive additional funding this fiscal year, CARB will continue to provide ongoing implementation information by posting updates on [CARB's Low Carbon Transportation Investments and Air Quality Improvement program webpage](#).<sup>44</sup> These projects are:

- Advanced Technology Demonstration and Pilot Projects
- Zero-Emission Truck Loan Pilot Project

CARB's strategy for heavy-duty investments enables progress toward State climate change and air quality goals, while promoting equity by ensuring that investments benefit the communities most impacted by poor air quality and providing assistance to small fleets, owner-operators, and small businesses.

As the market for advanced technologies matures, the role for incentives is shifting to small fleets and businesses most in need of financial support. Regulations, such as the Advanced Clean Fleets Regulation, require cleaner vehicle technologies for larger fleets and provide long-term market certainty and continued growth in the market. The following regulations

---

<sup>44</sup> <https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program>

are a key part of CARB's strategy to support cleaner technologies through a strategic combination of incentives and regulations:

- Innovative Clean Transit Regulation, adopted December 2018
- Zero-Emission Airport Shuttle Bus Regulation, adopted June 2019
- Advanced Clean Trucks Regulation, adopted December 2020
- Heavy-Duty Omnibus Regulation, adopted August 2020
- Clean Truck Check (Heavy-Duty Inspection and Maintenance Regulation), adopted December 2021
- The Airborne Toxic Control Measure (ATCM) for In-Use Diesel-Fueled Transport Refrigeration Units, adopted February 2022
- Advanced Clean Fleets Regulation, adopted April 2023
- Upcoming Seaport and Railyard Cargo Handling Equipment Regulations

## Equitable Investments for ZEV Deployment

The successful deployments of zero-emission truck and bus technologies from early investments have been instrumental in advancing the zero-emission on-road vehicle market to where it is today, with a wide array of vehicles and equipment on the commercial market. More recent investments in the development and demonstration of zero-emission off-road vehicles and equipment have resulted in a growing list of commercial products in the off-road sectors. Continued support of these early markets in the form of commercial incentives plays an important role in:

- Meeting California's air quality and climate goals
- Achieving vehicle and equipment deployment targets
- Ensuring all Californians experience improved air quality and have access to clean transportation incentive programs
- Supporting high-quality jobs
- Enhancing California's leadership role as an incubator and marketplace for clean, zero-emission technology

Governor Newsom's Executive Order (EO) N-79-20 sets near-term and longer-term targets to meet these objectives: 100 percent of medium- and heavy-duty vehicles in the State should be zero-emission by 2045 for all operations, where feasible, and all drayage trucks should be zero-emission by 2035. In addition, the EO directs CARB to develop regulations to make these targets a reality and to collaborate with other agencies to develop and propose strategies to achieve 100 percent zero-emission off-road vehicle and equipment by 2035, where feasible. The California Zero-Emission Vehicle Market Development Strategy

establishes priorities, roles and responsibilities of State agencies and private stakeholders to achieve the goals of EO N-79-20 and advance the ZEV market to scale.

To achieve these widespread ZEV adoption targets, all fleets, including small fleets and fleets facing financial challenges, must be able to access zero-emission technologies. This year, CARB continues to build on previous efforts to ensure that investments are equitably distributed, continue the implementation of assistance and purchasing support programs, and comply with the requirements of AB 794 (Carrillo, Chapter 748, Statutes of 2021)<sup>45</sup> by ensuring all drayage and short-haul trucking fleets receiving incentives are in compliance with applicable labor standards.

## Compliance with Labor Standards

Assembly Bill (AB) 794 directed CARB to implement new compliance verification requirements regarding labor standards for drayage and short-haul trucking fleets participating in applicable CARB incentive programs beginning in FY 2022-23. The bill requires these fleets to provide a self-attestation and demonstrate that they do not have any “applicable law violations,” which the bill defines as a final determination, order, judgment, or award issued against a fleet purchaser of vehicles for engaging in illegal conduct related to the misclassification of employees as independent contractors, including the failure to pay wages, imposing unlawful expenses on employees, etc. AB 794 also allows third-parties to report to CARB that a trucking fleet has failed to provide a truthful attestation. If the third-party can substantiate these allegations, then CARB must evaluate the report in collaboration with relevant agencies. Failure of a fleet purchaser to comply fully with all the required provisions of AB 794 is considered a breach of the grant agreement, a breach of the fleet purchaser agreement, and will be cause for immediate termination of the agreements and potential return of incentive funds granted. AB 794 also requires CARB to develop a new website to display disclosures and attestations from short-haul and drayage trucking fleets that receive an incentive. A rental or leasing entity that purchases vehicles for use in fleet operations using an incentive program subject to AB 794 must notify lessees of these vehicles, with lease terms of greater than one year, that the lessee must comply with the requirements applicable to fleet purchasers.

---

<sup>45</sup> *Sections 39680 through 39693 of the California Health and Safety Code.*

## Implementation of Assistance and Purchasing Support Programs

Senate Bill (SB) 372 Medium- and Heavy-Duty Fleet Purchasing Assistance Program: Zero-Emission Vehicles (Leyva, Chapter 639, Statutes of 2021),<sup>46</sup> directed CARB to develop an assistance and purchasing support program to assist in the adoption of medium- and heavy-duty zero-emission vehicles. Following the direction of SB 372, CARB has developed and is implementing additional financial and non-financial mechanisms to support the transition of fleets to zero-emission vehicles. Some of these non-financial mechanisms include expanded outreach, education, and technical assistance and coordinating with State agency partners, communities, and fleets to better understand how we can collaborate to support the total transformation of the transportation sector. In the coming months, staff will also look to expand our efforts when it comes to educating lenders and insurers about the need for, and regulations that will require, widespread zero-emission adoption.

## Draft Allocations for Heavy-Duty Vehicle and Off-Road Equipment Investments

For FY 2023-24, the State budget includes \$80 million in Low Carbon Transportation funding to support the deployment of zero-emission drayage trucks through HVIP. The budget also appropriated \$28.6 million in AQIF funds which staff proposes to split equally between the ISEF and CORE programs while acknowledging that the available funding is not sufficient to meet demand. Other HVIP categories that have received funding in the past will not receive new funds this fiscal year. It also includes an appropriation of \$375 million from Proposition 98 General Funds for public school buses. Staff's draft FY 2023-24 allocations are shown in Table 7. Staff will continue to seek input on the draft allocations and on the projects listed in Table 7.

---

<sup>46</sup> "SB 372, Leyva. Medium- and heavy-duty fleet purchasing assistance program: zero-emission vehicles," California Legislative Information, 8 October 2021, [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220SB372](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=202120220SB372)

**Table 7. Draft FY 2023-24 Heavy-Duty Vehicle and Off-Road Equipment Project Allocations (Millions)**

<b>Project Category</b>	<b>Greenhouse Gas Reduction Funds (GGRF)</b>	<b>General Fund</b>	<b>Air Quality Improvement Fund (AQIF)</b>	<b>Total Allocation</b>
<b>Clean Trucks and Buses</b>	-	-	-	-
Public School Buses - HVIP	-	\$375 <sup>h</sup>	-	\$375
Drayage Trucks - HVIP	\$80	-	-	\$80
Innovative Small e-Fleets Pilot	-	-	\$14.3	\$14.3
<b>CORE</b>	-	-	\$14.3	\$14.3
<b>Total</b>	<b>\$80</b>	<b>\$375</b>	<b>\$28.6</b>	<b>\$483.6</b>

---

<sup>h</sup> This funding was included in the FY 2022-23 Funding Plan as part of the \$1.125 billion for public school buses but is referenced again here because the Legislature reverted the \$1.125 billion and instead appropriated \$375 million this year with a commitment to appropriate an additional \$750 million in the future years.

The following sections provide more information on each of these projects.



## Clean Truck and Bus Voucher Incentive Project (HVIP)

---

*Draft Low Carbon Transportation Allocation-\$80 million  
Clean Truck and Bus Voucher Incentive Project Webpage<sup>47</sup>*

---

### Draft Funding Allocation

The FY 2023-24 budget provides \$80 million from GGRF to be implemented through HVIP, specifying the full amount for zero-emission drayage trucks.

Additionally, SB 114, the education omnibus budget trailer bill, reverted the FY 2022-23 AB 181 (Committee on Education, Chapter 52, Statutes of 2022) appropriation of \$1.125 billion from the General Fund to CARB for zero-emission public school buses and \$375 million to CEC for installation of accompanying fueling infrastructure. SB 114 replaces the AB 181 appropriation with a one-time appropriation in FY 2023-24 from the General Fund of \$375 million to CARB to administer grants to help local education agencies replace heavy-duty internal combustion public school buses with zero-emission public school buses. An additional \$125 million is appropriated to CEC for complementary grants to support fueling infrastructure. These funds will be provided directly to local education agencies and will help protect children from harmful air pollution by accelerating the transition of the state's public school bus fleet to zero-emission or renewable fuel technology. Additionally, the California Legislature is set to appropriate \$375 million in FY 2024-25 and again in FY 2025-26 to CARB and \$125 million in FY 2024-25 and again in FY 2025-26 to CEC to replace heavy-duty internal combustion public school buses with zero-emission public school buses and supporting charging infrastructure.

### Projections

Since reopening in 2021, HVIP remains available to fleets of all types and sizes. As of June 2023, over \$600 million remains across HVIP Standard and set asides for transit buses, drayage trucks, public school buses, and the ISEF pilot. Staff expects demand for HVIP to increase over the next year as milestones for Innovative Clean Transit and Advanced Clean Fleets regulations approach.

### Potential Changes to Project Criteria

As HVIP enters its thirteenth year, the project continues to adapt to changing needs. This year, the project strengthens its focus on supporting underserved fleets and priority vehicle

---

<sup>47</sup> <https://ww2.arb.ca.gov/our-work/programs/clean-truck-bus-vouchers-hvip>

types and preparing the State for upcoming regulatory deadlines. Staff proposes incorporating lessons learned from the oversubscribed ISEF pilot by moving all standard small-fleet purchases to HVIP, providing the same elevated incentives that had been offered in ISEF, and supplementing ISEF funding from HVIP.

- **Fleet Size Limits:** The FY 2022-23 Funding Plan established that, beginning January 1, 2024, private fleets with more than 50 medium- and heavy-duty vehicles would no longer be eligible for HVIP. However, given expected demand ahead of Advanced Clean Fleets regulatory requirements and other measures designed to ensure fund availability for small fleets (such as the bulk purchase requirement), staff proposes delaying the eligibility change to January 1, 2025.
- **Small Fleet Support:** The ISEF pilot, funded as a set-aside within HVIP, is entirely focused on helping small businesses access zero-emission trucks through elevated purchase incentives and innovative access solutions like truck-as-a-service and expanded leasing and rental opportunities. Since its establishment, demand for ISEF has far exceeded funding. To help meet that demand and further serve California's small businesses, staff proposes the following changes:
  - Align the HVIP small-fleet definition with that of ISEF and match standard purchase incentives. This would result in HVIP offering double the base voucher amount to fleets with fewer than 20 medium- and heavy-duty vehicles and less than \$15 million in annual revenue.
  - All standard purchases formerly made through ISEF will be funded through HVIP Standard, allowing ISEF to focus on innovative solutions for small fleets.
  - The change in small fleet definition applies in all uses, including expanded stacking eligibility and the Disadvantaged Community voucher modifier.
- **Enhancements for Drayage and Refuse Trucks:** Staff proposes to extend the 25 percent voucher enhancements for zero-emission drayage and refuse trucks until December 31, 2024. Transitioning drayage trucks to zero-emission remains an important priority to support Executive Order N-79-20 and to provide benefits in California's priority populations communities. Similarly, refuse trucks are present in all communities statewide, but their impacts are felt particularly strongly by priority populations located near waste transfer stations who are burdened by multiple pollution sources.
- **Increase Annual Voucher Request Caps:** The FY 2020-21 Funding Plan established a 30-voucher annual limit on new voucher requests per fleet to ensure funding availability and to focus support on overcoming significant barriers with initial fleet deployments. To maintain CARB's commitment to zero-emission drayage trucks, the

cap was increased to 50 for drayage fleets. Mirroring increased support for refuse trucks, as explained above, staff proposes extending the 50-voucher annual limit to refuse trucks as well. Additionally, recognizing the needs of public transit agencies and the importance of State support in their ongoing transition to zero-emission, staff proposes to increase their annual request cap to 50 vouchers.

- Support Co-Funding with Sustainable Community-Based Transportation Equity Projects: CARB has multiple funding programs designed to empower under-resourced communities across California to better understand and overcome barriers to mobility through needs assessments and community-driven, incentivized deployments of zero-emission vehicles and other mobility options. With limited funding and high demand, staff proposes expanding funding for Clean Mobility Options (CMO), Clean Mobility in Schools (CMIS), and the Sustainable Transportation Equity Project (STEP) by using HVIP to cover costs for HVIP-eligible vehicles in project proposals. The change for grant recipients would be seamless: if an applicant proposes a project that includes HVIP-eligible vehicles, HVIP, rather than the mobility program, would cover those incentive costs not to exceed the current maximum HVIP funding allowed of the zero-emission vehicle purchase cost (excluding taxes and fees), leaving more funding in those programs for additional projects.
- Manufacturer Performance Review: A manufacturer rolling soft cap limit was established in 2020 to improve HVIP funding availability and encourage faster vehicle delivery. To reduce the administrative burden and better meet these goals, the manufacturer soft cap will be eliminated in favor of ad hoc review of manufacturer performance with vehicle delivery. Staff proposes to work with all manufacturers through the public workgroup process to determine metrics for review, such as a minimum percentage of vehicle delivery, as well as potential actions CARB can take to encourage faster delivery.
- Explore additional mechanisms for small fleet assistance to address challenges around borrowing costs, residual value, and insurance.
- Public School Bus Funding: In addition to grants to support the purchase of zero-emission public school buses, SB 114 allows up to 10 percent of the funding for public school bus replacement grants to be used to supplement funding for the grantee's school transportation program or for other associated costs such as workforce development and training. Staff proposes to develop a list of allowable expenses and will seek public input. Staff will then outline allowable expenses and all other program requirements in an appendix to the HVIP implementation manual. Additionally, while SB 114 specifies that funding is intended to be used to support the replacement of old public school buses with new, zero-emission public school

buses, if a school district is able to demonstrate significant unique challenges to the adoption of zero-emission technology as provided in SB 144, CARB and CEC may fund public school buses powered by low-emission renewable fuels. Given the significant demand for zero-emission public school buses and oversubscription of all recent zero-emission public school bus incentive programs, staff proposes to only offer grants for zero-emission buses with the first \$375 million in funding. Over the course of the next year, staff will develop criteria to evaluate unique challenges faced by some school districts and requirements for low-emission renewable fuel public school bus replacement grants with the potential for grants in future years.

In addition to these changes to project criteria, staff is clarifying the interface between HVIP and the Advanced Clean Fleets Regulation adopted by the Board in April 2023. HVIP will remain available to fleets purchasing a zero-emission truck or bus prior to compliance deadlines or in excess of regulatory requirements, including:

- Zero-emission drayage truck purchases in existing drayage fleets.
- High-priority and public fleets using the milestones option may access HVIP for any zero-emission vehicles purchased in excess of their milestone requirement. Similarly, State and local agencies not using the milestones option may access HVIP for any vehicles purchased above their requirement. For example, if a fleet on the 50 percent milestone purchases 20 trucks and 15 of those are zero-emission, five will be eligible for HVIP incentives.
- Eligible fleets purchasing zero-emission vehicles prior to a regulatory deadline will be able to access HVIP, even if those vehicles eventually are counted toward regulatory requirements. Eligibility relative to the regulatory deadline will be determined by purchase order date (high-priority and public fleets will be allowed to use a letter of intent or binding resolution in place of a purchase order).
- EnergIIZE Commercial Vehicles (Energy Infrastructure Incentives for Zero-Emission Commercial Vehicles) is the nation's first commercial vehicle fleet infrastructure incentive project. Funded by the California Energy Commission's (CEC) Clean Transportation Program and implemented by CALSTART. CALSTART also administers the HVIP program funded by CARB. Teaming up with CALSTART and CEC provides a user-friendly streamlined process for participation by breaking down infrastructure deployment barriers through targeted incentives and specialized assistance. When someone applies for an HVIP voucher, the Voucher Request Form includes a series of questions designed to assess the buyers' infrastructure readiness. Answers to these questions also give the EnergIIZE team information needed to support fleets.

HVIP does not prohibit vehicles receiving incentives from being used for future compliance purposes. In other words, an HVIP-funded vehicle purchased prior to or in excess of regulatory requirements, as explained above, can be used to count toward future requirements where applicable.

Finally, the FY 2022-23 Implementation Manual aligns the HVIP fleet size definition with Advanced Clean Fleets: all vehicles under direct control or common ownership anywhere, including out-of-state, count toward fleet size.

### Reporting Requirements

While traditional metrics like cost-effectiveness are commonly used to evaluate the effectiveness of programs, near-term emissions reductions are not the primary goal of HVIP. Rather, HVIP's guiding principles include promoting technology evolution and supporting equitable investments. Staff continues to work with stakeholders to develop metrics that can be used to quantify HVIP's progress toward these goals.

**Technology and Market Advancement:** Staff is tracking how the HVIP-supported market – and the model and technology diversity therein – continues to grow. From just four manufacturers in 2010, HVIP today has over 40 manufacturers offering 150 models. Staff is following the introduction of increasingly capable and specialized vehicles that meet the demands of California's diverse fleet.

**Supporting Small Fleets and Priority Populations:** To encourage deployment of the cleanest technologies in pollution-burdened and low-income communities, HVIP offers increased incentives. To date, 55 percent of vouchers have funded vehicles deployed in disadvantaged communities. But staff also work to ensure the financial benefits of incentives are realized by those facing the most challenges. HVIP already collects data on the share of vouchers going to public and small fleets – 43 percent, a proportion expected to rise with the changes proposed this year – but will soon be collecting information on the Disadvantaged Business Enterprise status of participating fleets. This metric will help staff tailor outreach and incentives to maximize participation among underrepresented groups. Cal Fleet Advisor has also been developed to offer technical assistance to all fleets and will be targeted toward small fleets and those in drayage operations. The technical assistance program will provide personalized assistance for those navigating funding options and the planning necessary to transition to zero-emission technology.

**Emissions Reductions:** As an important additional benefit, HVIP continues to secure emissions reductions. Each year staff estimates reductions in carbon dioxide (CO<sub>2</sub>) equivalent GHG, nitric oxide (NO<sub>x</sub>), fine particulate matter (PM 2.5), and reactive organic gas (ROG) emissions as conventional diesel vehicles are replaced by the advanced technology vehicles supported by this year's funding. Appendix A, which will be included in

the Proposed Funding Plan later this year, will provide these estimates and additional details on the assumptions used when performing calculations.

**Economic Benefits:** Incentives like HVIP catalyze additional investments by fleets, manufacturers, and other entities. As a result, HVIP has spurred the investment of \$3.4 billion from other public and private sources – more than \$3 for every \$1 of voucher investment. The vehicle purchases facilitated by HVIP also represent jobs in vehicle manufacturing, service providers, infrastructure construction, and many other areas. HVIP has supported almost 7,000 full-time jobs according to recent calculations using methodologies provided by California Climate Investments (CCI).

**User Surveys:** Staff use a number of methods to determine if HVIP is achieving program goals, including evaluating emission reductions, the percent of vouchers requested in disadvantaged communities and by small fleets, and other strategies described in the Long-Term Heavy-Duty Investment Strategy section. Building upon these existing evaluation methods, HVIP staff continues to improve its Fleet Survey, which focuses on various user experiences including factors that influenced the purchase decision. This survey is administered annually to all purchasers who had redeemed an HVIP voucher within the last three years.

## Innovative Small e-Fleet (ISEF)

---

*Draft General Fund Allocation—\$0 million*

*Draft Low Carbon Transportation Allocation—\$0 million*

*Draft Air Quality Improvement Program Allocation—\$14.3 million*

*Innovative Small e-Fleet Program Webpage<sup>48</sup>*

---

### Draft Funding Allocation

No funding has been allocated from the Greenhouse Gas Reduction Fund for this fiscal year. However, the Air Quality Improvement Program will receive \$28.6 million. Staff propose to allocate half of that, \$14.3 million, from AQIF for the Innovative Small e-Fleet pilot.

### Projections

The demand for increased vouchers for small fleets through the ISEF pilot surpassed available funding in the first year, which was set at \$25 million. \$35 million was ultimately requested. Therefore, we project a funding need of at least \$35 million in order to meet the demand that was displayed in the first funding year. If an increased allocation was to occur, this would allow for ISEF to stay open for vouchers continuously. This is something that many participants and dealers have requested as the start and stop nature of ISEF is difficult to plan for and results in small fleets waiting for more ISEF funds to be available before moving forward with their plans to adopt zero-emission technologies.

### Potential Changes to Project Criteria

The ISEF pilot was created as a set-aside in part to better understand the specific needs of small fleets and help inform policy for broader HVIP. Several lessons have already been learned through the first year of implementation. Staff also worked with stakeholders through individual meetings and work groups this summer to understand what changes are needed in order to ensure that funding is more successfully distributed to small fleets and that more innovative solutions are explored.

The start and stop nature of ISEF creates an unintended waiting period for small fleets who seek to adopt zero-emission technology as they stall their progress to await increased ISEF funds that are quickly requested each year. A significant share of ISEF was requested for standard purchase voucher requests and this high demand clearly shows that small fleets seek advanced technologies. While all ISEF funding was requested within the day of

---

<sup>48</sup> <https://ww2.arb.ca.gov/our-work/programs/innovative-small-e-fleet>

opening, a smaller proportion of funds were requested for innovative solutions beyond a standard purchase. A major goal of ISEF is to encourage exploration of these innovative solutions such as peer-to-peer trucking and other mechanisms. Staff plan to solicit new innovative solution providers and encourage these approaches as ISEF opens for the second year of voucher requests.

Staff is also considering expanding ISEF-eligible vehicles to include certain buses that may be commonly used by small businesses such as daycares and retirement homes.

### Impacts of Potential Changes

The proposed changes to ISEF could potentially increase the amount of funding that is allocated to small fleets who are requesting vouchers for innovative strategies such as peer-to-peer trucking and other mechanisms. The changes would also increase the diversity of projects that CARB has funded and will allow staff to understand different use cases and how they can be used by fleets in California. All changes will be used to inform HVIP policies and how we ensure small fleets are getting the assistance needed to overcome barriers to medium- and heavy-duty zero-emission vehicle adoption.

### Reporting Requirements

The FY 2023-2024 Funding Plan establishes the Innovative Small E-Fleet program independent of HVIP, previously this was a part of, or a set aside, within the HVIP program. ISEF is designed to support small fleets and individual owner/operators that are transitioning to zero-emission trucks since small fleets traditionally face multiple barriers to adoption. ISEF funds innovative mechanisms to assist with the transition to ZE such as flexible financing, as well as all-inclusive leases, peer-to-peer truck sharing, truck-as-a-service, assistance with infrastructure/charging, individual owner planning assistance, insurance, and fuel costs, as well as other support mechanisms. Staff continue to hold work groups to better understand the changes needed in order to ensure funding is successfully distributed to small fleets transitioning to zero-emission. All other reporting requirements are identical to the HVIP requirements.

To encourage deployments of the cleanest technologies in pollution-burdened and low-income communities, ISEF offers increased incentives. Staff also want the financial benefits of incentives to be realized by those facing the largest number of barriers. 100 percent of ISEF goes to fleets with 20 or fewer vehicles. In the first round of ISEF, 73 unique small fleets applied, of which 69 percent domiciled their vehicles in a disadvantaged community and the average fleet size was five vehicles. ISEF will also collect information on the Disadvantaged Business Enterprise status of participating fleets. This metric will help staff tailor outreach and incentives to maximize participation among underrepresented groups. Cal Fleet Advisor has also been developed to offer technical assistance to all fleets but will



be targeted toward small fleets and those taking part in drayage operations. The technical assistance program will provide personalized assistance for those attempting to navigate funding options and the planning necessary to transition to zero-emission technology.

## Clean Off-Road Equipment Voucher Incentive Project (CORE)

---

*Draft General Fund Allocation—\$0 million*

*Draft Low Carbon Transportation Allocation—\$0 million*

*Draft Air Quality Improvement Program Allocation—\$14.3 million*

*Clean Off-Road Equipment Voucher Incentive Project Webpage<sup>49</sup>*

---

### Draft Funding Allocation

No funding has been allocated from the Low Carbon Transportation appropriation for this fiscal year. However, as mentioned in the previous section, AQIP will receive \$28.6 million. Staff propose to allocate half of that, \$14.3 million, from AQIP for the Clean Off-Road Equipment Voucher Incentive Project (CORE).

### Projections

CORE has been in high demand and oversubscribed each funding cycle. Therefore, staff believe this high demand will continue in future years. In July 2022, CORE provided \$125 million for zero-emission off-road equipment; the program was oversubscribed by over \$100 million. Once CORE opened in 2022, three of the ten categories sold out within 90 minutes. The 2022 program remained open for six months. Over \$90 million from 2023 funding, and previous rounds, as well as cancelled vouchers were used to fund part of the 2022 contingency list. The CORE team was able to use the additional funding to fund all the oversubscribed categories, except terminal tractors. Due to the length of the terminal tractor contingency list, staff were not able to fund all the voucher requests. CORE reopened with high demand on July 18, 2023, with \$185 million available and within 60 minutes, three of the eleven categories (transport refrigeration units, mobile power units, and terminal tractors) were oversubscribed resulting in extensive contingency lists for these three categories. In addition, this round included a \$10 million small business set aside for the first 180 days of the program. All of the funds for the small business set aside were exhausted within 22 minutes.

### Potential Changes to Project Criteria

The combination of high demand for incentive funding for off-road equipment with the significant reduction of funding for zero-emission off-road equipment will require CORE to

---

<sup>49</sup> <https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-vouchers>

adapt by making strategic changes to the program this budget year. Staff will evaluate the current equipment categories and consider how to optimize zero-emission off-road options with the limited funding resources available. Due to the significant reduction in CORE funding, CORE will be limited to only small businesses. Staff is proposing to increase support toward small businesses and will also review incentive amounts to ensure limited funds are exhausted. The disadvantaged community enhancement will remain at 10 percent to continue equitable support. In addition, staff is proposing to limit funding to specific CORE equipment categories including transportation refrigeration units, large forklifts, airport ground support equipment, construction and agricultural equipment. Staff also propose to eliminate the higher cost, larger business equipment like railroad engines, commercial harbor craft, and cargo handling equipment. To better support small businesses, staff will continue to allow stacking incentives with other funding programs if the program requirements are met for the other funding sources.

Staff will hold multiple public meetings in early 2024. The purpose of these meetings will be to discuss the upcoming program relaunch, implementation manual updates, and to seek interested party feedback on equipment types. Staff proposes to incorporate lessons learned from CORE's previous funding rounds to review voucher pricing, equipment maturity, equipment eligibility, warranty requirements, and limit voucher requests.

- Voucher pricing for small businesses will be reviewed and optimized prior to the next funding round. Staff will continue to review optimal use of funding, consider using price per kilowatt (kW) per equipment type, or limit the cost on a manufacturer's suggested retail price, or evaluate other options.
- Equipment eligibility will be renovated to streamline the application process while keeping basic CORE requirements. Lacking a zero-emission certification process, CORE staff need to use the equipment eligibility as a quasi-certification to ensure the off-road equipment funded meets or surpasses an owner's expectations. A worksheet or eligibility application template may be developed and added to the application process.
- Warranty requirements of zero-emission off-road equipment will be reviewed. The current three-year warranty may work with some equipment types but may be overly costly for other equipment manufacturers. Overall, CORE staff's priority is to protect the small business owner with the best warranty.
- Removing mature off-road equipment from the CORE eligible equipment portfolio and moving the equipment to other incentive programs with scrappage requirements that ensure emission reductions will be considered.

## Impacts of Potential Changes

The FY 2023-24 funding is expected to further drive wide-scale adoption of commercially available clean off-road equipment and development of zero-emission infrastructure, which in turn will drive down costs and strengthen the supply chain to support a broader zero-emission market. This program supports building on successful technology applications that have secured a foothold in the market, and staff anticipates expansion to additional off-road applications as the technology matures. Each year staff estimates reductions in carbon dioxide (CO<sub>2</sub>) equivalent GHG, nitric oxide (NO<sub>x</sub>), fine particulate matter (PM 2.5), and reactive organic gas (ROG) emissions as conventional diesel equipment is replaced by the advanced technology equipment supported by this year's funding. Appendix A, which will be included in the Proposed Funding Plan later this year, will provide these estimates and additional details on the assumptions used when performing calculations.

## Reporting Requirements

Staff will continue to use a comprehensive assessment of the project effectiveness, including appropriate metrics and data collection methodologies. An example is assessing the acceptance of zero-emission off-road equipment using metrics such as feedback on usage purpose and satisfaction; usage data, such as hours of use of new equipment; and factors that influence the purchase decision. These metrics can be assessed through participant surveys. The assessment will also evaluate how effective the project is at achieving other expected outcomes, such as improving zero-emission technology acceptance, reducing advanced technology component costs, and increasing private investment. This will build upon existing data collection elements already included in the CORE program, such as end-user surveys.

## Chapter 5: Addressing California Climate Investment Guideline Requirements Related to Priority Populations

CARB's California Climate Investments Guidelines (CCI Guidelines)<sup>50</sup> provide direction for implementing agencies that administer programs funded by appropriations from the Greenhouse Gas Reduction Fund (GGRF). The CCI Guidelines include requirements and recommendations on how to provide benefits for priority populations, in addition to targets established by CCI for each program. Priority populations include disadvantaged communities, low-income communities, and low-income-households as defined by State law.<sup>51</sup> This chapter outlines the steps CARB is taking to meet the CCI Guideline requirements regarding priority population investments. The requirements related to evaluating investments for priority populations and maximizing benefits for disadvantaged communities can be found in *Section V of the CCI Guidelines* and are summarized below, along with the actions CARB is taking to address them.

While these requirements formally only apply to programs and projects funded with Cap-and-Trade auction proceeds, CARB is committed to maximizing priority population benefits for all of the investments in this Funding Plan regardless of the funding source. As such, projects funded with appropriations from the General Fund are discussed in this chapter as well those funded from GGRF.

**CCI Guideline Requirement:** Assess program structure for opportunities to target investments to benefit priority populations and evaluate projects for potential benefits to priority populations, using the CCI quantification, benefits, and reporting criteria.<sup>52</sup>

**CARB Action:** Staff expects that every project funded in the FY 2023-24 Funding Plan will provide benefits for AB 1550 priority populations. The project category descriptions included in Chapters 3 and 4 of this Funding Plan describe the anticipated AB 1550 benefits for each project.

---

<sup>50</sup> "Funding Guidelines for Agencies that Administer California Climate Investments." *California Air Resources Board*, Accessed 21 July 2023, <https://ww2.arb.ca.gov/resources/documents/funding-guidelines-agencies-administer-california-climate-investments>

<sup>51</sup> "California Health and Safety Code (H&SC) Sections 39711 and 39713." *California Legislative Information*, Accessed 21 July 2023, [https://leginfo.ca.gov/faces/codes\\_displayText.xhtml?lawCode=HSC&division=26.&title=&part=2.&chapter=4.1.&article=](https://leginfo.ca.gov/faces/codes_displayText.xhtml?lawCode=HSC&division=26.&title=&part=2.&chapter=4.1.&article=)

<sup>52</sup> "CCI Quantification, Benefits, and Reporting Materials." *California Air Resources Board*, Accessed 21 July 2023, <https://ww2.arb.ca.gov/resources/documents/cci-quantification-benefits-and-reporting-materials?corr>

For each project, staff will use the criteria listed on the [CCI Quantification, Benefits, and Reporting Materials](#) webpage to evaluate the AB 1550 benefits and to develop project solicitation and grant requirements. As project funds are expended, CARB will report the AB 1550 benefits in future Annual Reports to the Legislature on California Climate Investments Using Cap-and-Trade auction proceeds.

**CCI Guideline Requirement:** Target funding, to the extent feasible, for projects that benefit priority populations and when selecting projects for a given investment, give priority to those that benefit disadvantaged communities.

**CARB Action:** The FY 2023-24 Funding Plan includes a mix of projects that are available statewide on a first-come, first-served basis and those that are limited to disadvantaged communities, low-income communities, or low-income households (collectively referred to as priority populations). These are clearly specified in the Funding Plan. Many of CARB's equity projects are limited to disadvantaged and low-income communities or low-income households to ensure that these innovative clean transportation projects focus exclusively on benefiting priority populations. In cases where projects are not limited to disadvantaged communities, many grant agreements include a requirement to focus outreach and engagement to disadvantaged communities to increase participation in those communities.

For the statewide first-come, first-served projects such as HVIP and CORE, staff have incorporated project criteria intended to increase support to priority populations. For both HVIP and CORE, voucher amounts are higher for vehicles that operate in disadvantaged communities in order to encourage fleets to use the ZEVs and equipment funded with these incentives in the most impacted communities.

Outreach and engagement are increasingly focused on priority populations. Specifically, CARB is increasing outreach efforts to focus on communities that have been historically marginalized such as Black and tribal communities. CARB is dedicating part of its FY 2023-24 transportation equity funds to support outreach and engagement, community transportation needs assessments, technical assistance, capacity building, and the Access Clean California project. These project elements are designed to increase awareness of, and enable, more efficient implementation of CARB's Low Carbon transportation equity projects and expand participation by priority populations.

**CCI Guideline Requirement:** Create or modify program guidelines or procedures to meet or exceed AB 1550 program targets.

**CARB Action:** This Funding Plan outlines the procedures CARB is taking to meet or exceed AB 1550 targets within each project section.

**CCI Guideline Requirement:** Design programs and select projects that avoid substantial burdens to residents of disadvantaged and low-income communities, such as physical displacement of low-income or disadvantaged community residents or businesses, including small businesses, women-owned, and/or minority-owned businesses; or increased exposure to toxics or other health risks.

**CARB Action:** In designing the projects in the Funding Plan, staff is careful to avoid or minimize potential substantial economic, environmental, and public health burdens. Any potential substantial burdens are identified early in the project development process and are discussed with interested parties through the public workshop and public work group process.

**CCI Guideline Requirement:** Implement outreach efforts that seek to directly engage and involve local community residents and CBOs in disadvantaged and low-income communities. Provide direct outreach and engagement to disadvantaged communities and identify an agency point of contact to provide the information on funding opportunities and to coordinate with other State agencies on California Climate Investments.

**CARB Action:** CARB has taken multiple actions to outreach to, and engage with, disadvantaged communities, low-income communities, and low-income households.

**Hire dedicated staff:** CARB has hired dedicated staff to assist with disadvantaged community and low-income household outreach on Low Carbon Transportation investments and help ensure these communities are aware of funding opportunities. As part of this, CARB is working with liaisons from State agencies administering California Climate Investments to better share information at community events, so citizens have access to all relevant California Climate Investment opportunities. This includes participating in the inter-agency California Climate Investments Outreach Work Group and collaborating with the Strategic Growth Council (SGC) on the California Climate Investments Outreach and Technical Assistance Program.

**Conduct outreach to help potential applicants access funding, particularly for priority populations:** CARB's multi-faceted outreach effort to support its Low Carbon Transportation Program and help ensure priority populations are aware of funding opportunities is summarized earlier in this chapter. These outreach efforts include the following elements:

- **Outreach events and pilots:** CARB has an enhanced outreach/education program on the Low-Carbon Transportation Program with a disadvantaged community focus. An important part of the effort is dedicated to assessing the needs of the communities and piloting training and fellowship opportunities. CARB is partnering with stakeholders, such as CBOs, community advocates,

and environmental justice groups to provide training and conduct outreach at community events aimed at explaining available incentives and increasing the community's awareness of these programs. CARB reports on the outreach events for its Low Carbon Transportation Program as part of each year's Annual Report to the Legislature on California Climate Investments. The list of public meetings held in 2022 across all of the state's California Climate Investments programs is available in an Excel file on the Annual Report website.<sup>53</sup>

- **Website:** CARB has developed a *user-friendly Moving California website* to promote Low Carbon Transportation projects and increase awareness about funding opportunities and projects that have been funded.<sup>54</sup>
- **Outreach by grantees:** As a part of project solicitations, CARB requires that applicants provide information on how they will outreach to disadvantaged communities, and their applications are scored in part on the quality of the outreach proposal. Each of CARB's grantees conducts outreach related to their project by focusing on increasing outreach for priority populations, including historically marginalized communities such as Black and tribal communities.
- **Access Clean California:** CARB implements Access Clean California to address a priority recommendation identified in CARB's SB 350 Guidance Document to increase awareness for low-income residents by expanding education and outreach on clean transportation and mobility options. One of the primary objectives of Access Clean California is to provide coordinated community-based outreach and education to maximize Low Carbon Transportation program participation and promote advanced technology vehicle adoption in disadvantaged communities, low-income communities, and low-income households. Additionally, CARB is implementing several outreach coordination strategies through Access Clean California identified in the SB 350 Strategic Outreach Roadmap as outlined below. CARB continues to hear from Black communities and tribal governments that meaningful outreach has not occurred in their communities, and because of this, they have not had the same opportunities as others to benefit from incentives. CARB is working to identify outreach strategies and funding opportunities to ensure communities are involved in the decision-making process for investments and

---

<sup>53</sup> "Annual Reports." *California Air Resources Board*, Accessed 21 July 2023, <https://www.caclimateinvestments.ca.gov/annual-report>.

<sup>54</sup> "Moving California." *California Air Resources Board*, Accessed 21 July 2023, <https://ww2.arb.ca.gov/sites/default/files/movingca/movingca.html>.



have equitable access to funding. In the Funding Plan, additional funding will be allocated to continuing this project.

- **Outreach Plan:** CARB led the development of the Strategic Outreach Roadmap to increase low-income residents' awareness of clean transportation and mobility options to address a priority recommendation identified in the SB 350 Guidance Document. CARB is leading implementation of the SB 350 Outreach Strategic Roadmap with the goal of improving State and local coordination and content development, tailoring and delivery of information, as well as strategies that will increase awareness of clean transportation and mobility options through improved education and information access for low-income residents across the state. The Strategic Outreach Roadmap includes actions intended to strengthen collaboration and partnerships, outreach to low-income residents in urban, rural, and tribal communities based on community-identified needs and increase the ability to participate in CARB, or related, incentive programs. During the development of the roadmap, CARB convened working groups consisting of both internal and external stakeholders to solicit feedback and identify outreach and community engagement best practices.

**CCI Guideline Requirement:** Ensure transparency and accountability and provide public access to program information.

**CARB Action:** All CARB grant agreements with funding recipients require grantees to collect and report to CARB all data necessary regarding AB 1550 benefits. This includes all information described in [Section VI \(Reporting Requirements\) of the CCI Guidelines](#). CARB uses this information to provide input for the Annual Report to the Legislature on California Climate Investments Using Cap-and-Trade Proceeds including the AB 1550 benefits of Low Carbon Transportation investments.

**CCI Guideline Requirement:** When evaluating projects for benefiting priority populations, implementing agencies must assess how potential projects meaningfully meet a community or household need. The CCI Guidelines provide a list of common needs identified by community advocates during the development of the guidelines. Letters of community support can also be used to document that investments address a community need.

**CARB Action:** Staff has reviewed the commonly identified needs of priority populations in the CCI Guidelines. The needs being met by proposed FY 2023-24 Low Carbon Transportation investments are shown in Table 8 below.

**Table 8. Common Needs of Priority Populations Addressed by Proposed FY 2023-24 Low Carbon Transportation Investments**

Need	Description
Public Health, Need 1	<p>Reduce health harms suffered disproportionately by priority populations due to air pollutants.</p> <p><i>All Low Carbon Transportation projects meet this need. All projects reduce criteria air pollutants and/or toxic air contaminants as co-benefits to each project, thereby reducing health harms due to air pollutants. A portion of funding from all projects will benefit priority populations.</i></p>
Economic, Need 5	<p>Reduce transportation costs and improve access to public transportation.</p> <p><i>The Low Carbon Transportation projects that provide consumer incentives for more fuel-efficient vehicles and alternative mobility options meet this need. These include CC4A, Financing Assistance, CMO, and STEP.</i></p>
Economic, Need 10	<p>Provide educational and community capacity building opportunities through community engagement and leadership.</p> <p><i>In this Funding Plan, staff propose to allocate funds directly to outreach, community transportation needs assessments, technical assistance and workforce training and development efforts. Additionally, public outreach is an element of many Low Carbon Transportation projects. For the clean transportation equity projects in particular, CARB will continue to require that grant awardees have strong community-based experience and commit to conduct extensive outreach and education tailored to the communities' projects will serve.</i></p>
Environmental, Need 1	<p>Reduce exposure to local environmental contaminants, such as toxic air contaminants, criteria air pollutants, and drinking water contaminants.</p> <p><i>All Low Carbon Transportation projects meet this need because they reduce criteria air pollutants and/or toxic air contaminants as co-benefits.</i></p>
Environmental, Need 2	<p>Prioritize ZEV projects for areas with high diesel air pollution, especially around schools or sensitive populations with near-roadway exposure.</p> <p><i>The Low Carbon Transportation projects that provide incentives for ZEVs to replace diesel vehicles meet this need. These include HVIP, CORE, CMS, and demonstration and pilot projects.</i></p>

In addition, CARB staff also meet routinely with community and environmental groups during each year's Funding Plan development process to get their direct input on the

projects they would like to see funded. Additionally, staff meet with these groups after the Funding Plan is adopted to ensure that community groups' input is incorporated into the project implementation phase.

**CCI Guideline Recommendations:** In addition to the requirements summarized above, the CCI Guidelines list a number of recommended program design strategies for targeting investments to priority populations.

**CARB Action:** In developing the FY 2023-24 Funding Plan, staff used a number of these strategies, including:

**Encourage projects that contribute to other State climate goals:** Many of the projects in this Funding Plan contribute to a variety of the State's climate goals. *CARB's climate goals* as they relate to the Funding Plan may be found on [CARB's Climate Investment and Funding Plan Goals webpage](#).<sup>55</sup>

**Coordinate investments and leverage funds where possible to provide multiple benefits and to maximize benefits:** CARB staff coordinate with other agencies and meet with interested parties individually, in public work group meetings, and in workshops to discuss ways to maximize project benefits. A number of the projects leverage private investments and other government investments where possible. CARB is actively working to better coordinate its heavy-duty ZEV investments closely with CEC's infrastructure investments, so it is easier for fleets to access infrastructure funding when they purchase ZEVs. CARB is also partnering with CEC to co-fund zero-emission workforce training and development projects in low-income and disadvantaged communities through the IDEAL ZEV Workforce Pilot and planned transportation electrification pre-apprenticeship program.

**Set aside a portion of funding for projects that benefit priority populations:** Funding for CMO, CMIS, and STEP are all limited to disadvantaged communities or disadvantaged and low-income communities. The demonstration and pilot projects are limited to disadvantaged communities. CC4A and Financing Assistance funding is limited to lower-income consumers. The Financing Assistance project and Statewide CC4A will move to a needs-based approach where consumers' applications will be prioritized depending on their location and financial situation.

**Offer higher incentive amounts for projects that benefit priority populations:** HVIP and CORE provide higher voucher amounts for zero-emission trucks, buses, and off-road equipment that operate in disadvantaged communities. In addition,

---

<sup>55</sup> <https://ww2.arb.ca.gov/resources/documents/climate-goals>

increased incentives were approved for CC4A recipients that live directly in a disadvantaged community census tract as a part of last year's Funding Plan.

## List of Acronyms

### A

AB - Assembly Bill

AB 617 - Community Air Protection Program

AQIF - Air Quality Improvement Fund

AQIP - Air Quality Improvement Program

ATCM - Airborne Toxic Control Measure

### C

CalEnviroScreen - California Communities Environmental Health Screening Tool

CalEPA - California Environmental Protection Agency

Cal-ITP - California Integrated Travel Project

CalSTA - California State Transportation Agency

CARB or Board - California Air Resources Board

CBO - Community-Based Organization

CC4A - Clean Cars 4 All Program

CCI - California Climate Investments

CEC - California Energy Commission

CERP - Community Emission Reduction Plan

CHDC - Community Housing Development Corporation

CMIS - Clean Mobility in Schools

CMO - Clean Mobility Options Projects

CO<sub>2</sub> - Carbon Dioxide

CORE - Clean Off-Road Equipment Voucher Incentive Project

CVRP - Clean Vehicle Rebate Project

**D**

DAC - Disadvantaged Communities

**E**

EV - Electric Vehicle

EJAC - Environmental Justice Advisory Committee

**F**

FARMER - Funding Agricultural Replacement Measures for Emission Reductions Program

FY - fiscal year

**G**

GF - General Fund

GGRF - Greenhouse Gas Emission Reduction Fund

GO-Biz - Governor's Office of Economic and Business Development

**H**

H&SC or HSC - California Health and Safety Code

HVIP - Clean Truck and Bus Voucher Incentive Project

**I**

IDEAL - Inclusive, Diverse, Equitable, Accessible, and Local ZEV Workforce Pilot Project

ISEF - Innovative Small e-Fleets Pilot

**L**

LIC - low-income communities

**N**

NGO - Non-Governmental Organization

NO<sub>x</sub> - Nitric Oxides

**O**

OBI - Othering and Belonging Institute

**P**

PM 2.5 - fine particulate matter

**Q**

QR code - Quick Response code

**R**

ROG - reactive organic gases

**S**

SB - Senate Bill

SGC - Strategic Growth Council

STEP - Sustainable Community-Based Transportation Equity Projects

**U**

UC - University of California

**V**

VMT - Vehicle Miles Traveled

VW - Volkswagen Mitigation Trust

**Z**

ZAP - Zero Emission Assurance Program

ZEM - Zero-emission motorcycles

ZEV - Zero-Emission Vehicle

ZIP - Zone Improvement Plan