Appendix G: Annual Performance Goals and Evaluation for the Clean Cars 4 All and Enhanced Fleet Modernization Programs

Fiscal Year 2023-2024

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Overview

The California Air Resources Board (CARB or the Board) has over 50 years of experience reducing mobile source emissions, improving air quality, and reducing climate pollutants. Through these efforts, the State and our most polluted regions have seen dramatic improvements in ambient air quality. Even with our progress, however, many areas of the State exceed current health-based ambient air quality standards that the State must legally meet. Additionally, many near-source, disadvantaged and low-income communities continue to experience disproportionately high levels of air pollution and the resulting detrimental impacts to their health.

Studies consistently show that mobile source pollution exposure near major roadways contributes to and exacerbates asthma, impairs lung function, and increases cardiovascular mortality. Residents of communities located near major roadways, often residents who have lower incomes, are at increased risk of asthma attacks and other respiratory and cardiac effects. People in these communities are also more sensitive to, and likely to experience, the negative impacts of climate change. This history of disproportionate exposure to polluted air makes it essential to prioritize disadvantaged and low-income communities and households, collectively known as priority populations,¹ who will benefit the most from the reduced emissions and cost-saving benefits of cleaner, less polluting, newer technology vehicles, and alternative modes of transportation.

Mobile sources and the fossil fuels that power them account for most of the pollutants in our air. They contribute most of the diesel particulate matter (PM) emissions, as well as smog- and particulate- forming pollutants, such as oxides of nitrogen (NO_x), and the largest portion of greenhouse gas emissions (GHG) in California. Unfortunately, transportation still accounts for about 50% of California's GHG emissions. Therefore, it is imperative that CARB optimize its mobile source control programs to maximize emissions reductions from all types of air pollutants so that California can meet our air quality, climate, and community risk reduction goals. Achieving these milestones early on would provide immediate benefits in the communities that continue to bear the brunt of poor air quality.

Zero-emission vehicles (ZEV) are a key part of the solution. In 2020, Governor Newsom signed *Executive Order (EO) N-79-20*² which established the goal that 100% of California sales of new passenger cars and trucks be zero-emission by 2035. Additionally, CARB recently approved the Advanced Clean Cars II Regulation which set this goal into motion by making it a requirement. The Clean Cars 4 All program (CC4A) and the Enhanced Fleet Modernization Program (EFMP) contribute to these goals by providing much-needed

¹ Priority Populations webpage, California Climate Investments, accessed on August 15, 2023, https://www.caclimateinvestments.ca.gov/priority-populations.

² Executive Order N-79-20, Executive Department, State of California, accessed on August 15, 2023, https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf.

incentives for lower-income residents living in and near disadvantaged communities to scrap their older vehicles and purchase or lease new or used conventional hybrid, plug-in hybrid (PHEV), zero-emission (ZEV) replacement vehicles, or alternative mobility options.

CC4A and EFMP have been overseen by CARB and implemented by participating air districts for over eight years since 2015. These programs have been increasingly popular and in high demand, thus successfully helping thousands of people transition into cleaner, more reliable, advanced technology vehicles. Advanced technology vehicle types include Battery Electric Vehicles (BEV), Conventional Hybrid Vehicles, Fuel Cell Vehicles, and PHEVs. As shown later in this report, participant feedback indicates that reliable and dependable transportation helps people access the basic goods and services they need to be able to live, access educational and employment opportunities, and support their families and loved ones. Oftentimes, people who live in disadvantaged or low-income communities may not have the resources to repair their older vehicles and prices to fix vehicles have gone up by up to 20% this year.³

CC4A and EFMP have delivered real and meaningful equity benefits. However, there is always room for program improvement. Historically, the CC4A program was only available to people living in ZIP codes containing Disadvantaged Communities (DAC). In 2022 the Board approved the expansion of the district programs to all areas of their respective jurisdictions, and districts will begin rolling out that expansion in 2023 and 2024. Combined with the statewide program, low-income individuals in all areas of the State will now have access to the CC4A program. This also complements the EFMP program, which has been open to low-income consumers statewide. Additionally, options for vehicle-charging need to be readily available and widespread for program participants to use them.

Assembly Bill (AB) 630 (Cooper, Chapter 636, Statutes of 2017) requires CARB to set specific and measurable goals for the EFMP and CC4A program, which CARB has done since Fiscal Year (FY) 2019-20.⁴ CARB staff consulted with staff from the California Bureau of Automotive Repair (BAR) regarding data and information for the EFMP portion of this report. One of the requirements of AB 630 is a performance analysis of the program, broken down by air district. The analysis must include both the replacement component of the program and the scrap-only program (later referred to collectively as "programs") to identify areas to be emphasized when developing future goals or updating the program guidelines. AB 630 requirements include:

³ Car repair costs are up almost 20% over the past year. Here are 6 reasons why https://www.cnbc.com/2023/07/25/car-repair-costs-are-up-almost-20percent-over-the-past-year-hereswhy.html, accessed on September 14, 2023.

⁴ Annual Performance Goals for the Enhanced Fleet Modernization Program and Clean Cars 4 All webpage, CARB, accessed on August 15, 2023, https://ww2.arb.ca.gov/our-work/programs/clean-cars-4-all/annualperformance-goals-efmp-cc4a.

- 1. Identify whether a district has a backlog or waitlist of applicants and the air district's recommendations, or CARB's, on how to eliminate the problem.
- 2. Include an evaluation of the funding for targeted outreach in DACs or low-income communities (LIC) and include whether the funding should be enhanced or modified to reach the goals set per AB 630.
- 3. Recommend how incentive funding levels can be modified to maximize participation and emissions reductions.

The AB 630 Report identifies the goals that were set for FY 2022-23, evaluates program performance for FY 2022-23,⁵ sets goals for FY 2023-24, and identifies areas for overall program improvement. To aid in the goal setting calculations, only project data prior to June 30, 2023, were used for this analysis to align with the Proposed FY 2023-24 Funding Plan for Clean Transportation Incentives, which this report is an appendix to. The goals and metrics provided in this report are primarily generated using data reported to CARB by implementing air districts on a quarterly basis. Staff considered the recommendations from the Senate Bill (SB) 350 Low-Income Barriers Study, such as working to understand community transportation needs and improving awareness of programs like CC4A, to increase CC4A's effectiveness in providing access and support for eligible residents.

Clean Cars 4 All

Background

The CC4A program is designed to help people with the greatest need switch their higher polluting vehicles for cleaner, more advanced technology vehicles or other mobility options. The program also provides additional incentives to improve access to vehicle charging for program participants (participants) who choose a qualifying replacement technology.

The program is an essential component to CARB's efforts to address climate change, reduce criteria pollutants, and prioritize disadvantaged and low-income communities. CC4A is part of a larger suite of Low Carbon Transportation Investments (LCTI). The largest of these programs, the Clean Vehicle Rebate Project (CVRP), is not anticipated to receive additional funding. CVRP will close with no waitlist offered once funding runs out.

The California Legislature (Legislature) sets the budget for LCTI annually. CARB then allocates funding to CC4A through the Clean Transportation Incentives Funding Plan (Funding Plan). Additionally, the Legislature sometimes directly appropriates funding to the CC4A program.

When a vehicle is retired through CC4A, an incentive is paid on behalf of the participant toward the replacement mobility option of the participant's choosing. CC4A incentives have historically been available to participants with household incomes at or below 400% of the

⁵ Data for FY 2022-23 in this report includes Quarters 3 & 4 of year 2022 and Quarters 1 & 2 of year 2023.

Federal Poverty Level (FPL)⁶ which, in 2023, is equivalent to \$120,000 per year for a household of four.⁷ To ensure participants with greater needs are better served, the participant pool is grouped into three subcategories as shown in Table G-1. FPL shown in the Table G-1 is for the year 2023 which changes every year.

Table G-1: Clean Cars 4 All Income Subcategories as a Percent of the Federal Poverty Level

Income Category	Percent of the Federal Poverty Level	2023 Income for a Family of Four
Low-Income	≤ 225%	≤ \$67,500
Moderate-Income	226 - 300%	\$67,800 - \$90,000
Above-Moderate Income	301 - 400%	\$90,300 - \$120,000

The CC4A program is designed to provide higher incentives to participants in the lower-income categories. Historically, at least 89% of program funds have gone to participants in the low-income category as illustrated in Figure G-1.

⁶ Income examples based on 2023 FPL values. Most recent values can be found on the Federal Poverty Level webpage, Healthcare.gov, accessed on August 23, 2023, https://www.healthcare.gov/glossary/federal-poverty-level-fpl/.

⁷ U.S. Federal Poverty Guidelines Used to Determine Financial Eligibility for Certain Programs webpage, Office of the Assistant Secretary for Planning and Evaluation, accessed on August 23, 2023, https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines.



Figure G-1: Project Funds^{a,b} per Income Threshold

^a Excludes 15% administrative expenses.

^b FPL may change each year.

At the start of FY 2022-23, four air districts implemented CC4A: South Coast Air Quality Management District (South Coast or South Coast AQMD), San Joaquin Valley Air Pollution Control District (San Joaquin or San Joaquin Valley APCD), Bay Area Air Quality Management District (Bay Area or Bay Area AQMD), and Sacramento Metropolitan Air Quality Management District (Sacramento or Sacramento Metropolitan AQMD).⁸ Combined, these air districts have helped over 16,000 Californians obtain newer, cleaner, and more reliable transportation as illustrated in Figure G-2.

18,000 Sacramento 16,000 Start 14,000 **Bay Area** 12,000 Start 10,000 South Coast 8,000 & _{6,000} San Joaquin Start 4,000 2,000 0 2016 2017 2015 2018 2019 2020 2021 2022 2023 Projects per Year Cummulative Projects

Figure G-2: Clean Cars 4 All Incentives by Air District and Overall, 2015 through Quarter 2 of $2023^{a,b}$

Due to significant community interest, funding appropriated in the Budget Act of 2022 (AB 1624 and SB 840), as well as the previous Budget Act of 2021 (AB 128 and SB 170), CARB has expanded the program in several ways. In the FY 2021-22 LCTI Funding Plan, CARB approved an initial allocation of \$5 million for the San Diego Air Pollution Control District San Diego or San Diego APCD to develop a local CC4A program. Additionally, for

⁸ SDAPCD recently began their program, received initial funding, and is developing and finalizing its program plan.

FY 2022-23, staff began to develop the statewide program. The next steps to enable this expansion are addressed in more detail in the Future Program Activity section of this report.

Funding History

Since FY 2014-15, CARB has allocated a total of \$435.6 million for CC4A. This includes \$217 million⁹ of LCTI funding, \$10 million of Volkswagen (VW) funding, \$3.6 million of Air Quality Improvement Program (AQIP) funding, and \$205 million from the General Fund. As of June 30, 2023, CARB granted 62% (\$271.6 million) of the total allocation to implementing program administrators of which approximately 53% (\$143 million) was expended. The Board approved the remaining allocation of \$245 million for CC4A on November 17, 2022. The Budget Act of 2023 and associated trailer bills included a total allocation of \$80 million from the Greenhouse Gas Reduction Fund (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. In the FY 2023-24 Clean Transportation Incentives Funding Plan, CARB staff proposed a total allocation of \$28 million for the Clean Cars 4 All program including \$14 million of LCTI funds for CC4A air district programs and \$14 million from the General Fund for the statewide program. Figure G-3 shows the program-wide funding allocations per FY since 2014-15. The funding allocation for FY 2019-20 appears low because there was an excess of funds from previous years and staff proposed that \$40 million in unencumbered funding in existing grants would be reallocated to a general reserve and allocated to air districts based on future evaluations of program demand.¹⁰ Funds for FY 2023-24 are somewhat low due to lower appropriations from the California Legislature for Clean Mobility Equity and Light-Duty Vehicle Purchase Incentive Programs.

⁹ These values include the additional \$50 million allocation approved on November 19, 2021.

¹⁰ Proposed Fiscal Year 2019-20 Funding Plan for Clean Transportation Incentives, California Air Resources Board, published September 20, 2019, https://ww2.arb.ca.gov/sites/default/files/2019-09/fy1920fundingplan.pdf.



Figure G-3: Clean Cars 4 All Funding Allocation^c (in millions) per Fiscal Years

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^b This figure does not include San Diego Air Pollution Control District (SDAPCD) since their program is still being finalized. SDAPCD aims to officially launch their program later during the 2023-24 FY.

[°] Including local funds.

Some air districts have also contributed additional local funds to their CC4A programs. As shown in Table G-2, San Joaquin Valley APCD provided \$800,000 to pilot the EFMP/CC4A program in 2014. South Coast AQMD and Bay Area AQMD contributed a total of \$6 million and \$10 million, respectively, over the life of their programs to maintain operations when needed.

Table G-2: Additional Funding Amounts Air Districts Contributed to their Clean Cars 4 All Programs

Air District	Funding Amount	Timeframe	Average Funding per Fiscal Year
Bay Area AQMD	\$10,000,000	2020-2022	\$5,000,000
South Coast AQMD	\$6,200,000	2015-2022	\$885,700
San Joaquin Valley APCD	\$800,000	2014	\$800,000

Air districts may also use local funds to fund additional outreach efforts, augment their existing program funds, and provide additional flexibility within the constraints placed on those local funds. One such example is Bay Area AQMD's use of local funds to add an additional \$500 "plus-up" incentive for locally funded participants with eligible clean technology vehicles who are also enrolled in other social assistance programs such as CalFresh/Supplemental Nutrition Assistance Program (SNAP). At this time, consistent funding is needed to maintain program growth, as interest and demand for the programs continues to grow, despite challenges described below. Staff will continue to collaborate with the air districts on how best to use available allocated funds.

Fiscal Year 2022-2023 Results

The consensus among the air districts at the end of FY 2022-23 regarding the most significant current challenges the program faced was eligible vehicle availability in both the primary and secondary vehicle markets. With the ongoing health and economic crises, global supply chains remained constricted, especially in crucial materials for vehicle manufacturing. This led to a significant shortage of new vehicles.¹¹ This supply shortage caused new vehicle prices, which were already unaffordable for many CC4A participants, to increase 10% in 2021 alone.¹² Due to their lower price point and affordability, the majority of

¹¹ Automakers' Problems are Much Worse than We Thought, CNN Business website, September 28, 2021, https://www.cnn.com/2021/09/28/business/auto-industry-supply-chain-problems/index.html, accessed June 3, 2022.

¹² New and used car prices keep climbing. Don't expect relief anytime soon, CNBC, https://www.cnbc.com/2022/01/08/new-and-used-car-prices-keep-climbing-dont-expect-relief-soon.html, accessed June 3, 2022.

CC4A participants have historically chosen used vehicles as their replacement option. However, with the recent conditions in the new vehicle market, the used-vehicle supply has also declined, and used-vehicle prices increased by 46% between January 2021 and January 2022.¹³ These factors made it more challenging for the program's priority population participants to not only locate eligible replacement vehicles, but especially those vehicles that participants can afford without incurring a significant financial burden. The effects of the 2022-23 FY's funding issues combined with the external market factors, and ongoing demand for cleaner transportation options in these priority communities, made determining an appropriate program FY 2022-23 goal uniquely challenging and pointed to the need for increased and continued funding for the five existing air district programs as well as the expansion of the program to statewide coverage.

The global situation improved in FY 2022-23 compared with the two previous FYs. However, even with improvements to these global issues, many people and families still struggled to make ends meet. Demand for CC4A has continued to soar. Therefore, there is a definite need to continue to fund this crucial program that helps people get into cleaner, more reliable vehicles that help to improve our air quality and reduce the negative impacts of climate change.

Results - Primary Metric - Participation Rates and Vehicle Replacements

The primary metric for the CC4A program is the number of eligible low to moderate income Californians who have replaced their older, higher-polluting vehicles with cleaner, and more reliable, modes of transportation. This is measured in two ways. One is through the participation rates in the air district programs. A second way is through the vehicle replacements, analyzed through the vehicle technology types and the alternative mobility options chosen. CARB staff also analyzed the Electric Vehicle Supply Equipment (EVSE or charging equipment) installations, and the number of charging cards given to program participants.

Each air district witnessed a continued influx of new applications and interest throughout FY 2022-23. However, due to limited funding being available to CC4A programs, some programmatic delays, as well as new vehicle supply constraints and shipping delays exacerbated by the coronavirus pandemic and economic crisis, air districts were unable to satisfy the applicant demand during the FY 2022-23 as shown in Figure G-4. This adversely affected program performance when compared to historical norms as detailed in the air district sections below.

¹³ Vehicle Market Insights, Manheim Used Vehicle Value Index Call, https://site.manheim.man-uat.com/en/services/consulting/used-vehicle-value-index.html, accessed October 4, 2023.



Figure G-4: Program Demand by Air District in Fiscal Year 2022-23^{a,b,c}

^b The figure represents data for Q3-Q4 of 2022 and Q1-Q2 of 2023.

^c San Joaquin Valley APCD stopped accepting new applications due to high demand however, the district continues to process existing applications.

^a Note that projects are funded on a rolling basis. Therefore, an application may be received in one FY and funded during a later FY. Hence, projects funded shown in this figure may have been due to an application received in a prior FY.

Table G-3 and Figure G-5 summarize participation data compared to the original goals for each of the four implementing air districts for FY 2022-23. Participation in the past few years has been low for a variety of reasons. These include the coronavirus and economic crises, which as noted above, led to problems such as vehicle supply shortages and shipping delays. For FY 2022-23, the number of participants was close to the goal set by some of the air districts. And the Bay Area nearly doubled their goal.

Table G-3: Clean Cars 4 All Participation Goals and Rates by Air District for Fiscal Years 2022-23

Air District	Fiscal Year 22-23 Goal	Fiscal Year 22-23 Actual ^a
South Coast	2,000	1,032
San Joaquin Valley	800	765
Bay Area	550	947
Sacramento Metropolitan	250	213
San Diego	50	_b
Total Annual Participants	3,500	2,957

^a Funded with State funds only.

^b San Diego held a soft launch in August 2023 due to delays securing a BAR-certified vehicle dismantler.



Figure G-5: Fiscal Year 2022-23 Participation Rates

Voucher redemptions remained slightly below expectations due to vehicle market conditions and elevated interest rates. The effects of global inventory and supply chain problems are still having a negative impact on the vehicle market. Despite recent decreases in used-vehicle prices, prices remain high by historical standards, especially in the used-vehicle market. After years of high demand and low inventories pushed used vehicle prices to record highs, prices decreased 28% year-over-year beginning in July 2022 and reached levels not seen since April of 2021.¹⁴ Used-vehicle inventories have also improved in the past year. In June 2023, the used ZEV inventory in the United States hovered between 31,000 and 32,000 vehicles, more than double the number in 2022.¹⁵ California has the largest share of this inventory of used ZEVs with a total monthly average of about 7,000 used light-duty ZEVs as of April 2022.¹⁶ Historically, 70% of CC4A replacement vehicles have come from the used-vehicle market due to their affordability for lower-income households.

¹⁴ Recurrent Automotive. *Used Electric Car Prices & Market Report - Quarter 2 2023.* https://www.recurrentauto.com/research/used-electric-vehicle-buying-report

¹⁵ Najman, Liz. Recurrent Automotive. *California Electric Vehicle Trends.* https://www.recurrentauto.com/research/california-electric-vehicles

¹⁶ Ibid

According to stakeholder feedback, lower-income participants find it increasingly difficult to locate vehicles that fit their budgets and needs. These price and inventory issues have caused increases in the time needed for participants to find a suitable vehicle, with average search times increasing from 30 days up to 90 days or more according to some air districts. These factors continued to adversely affect program performance and project completion statistics when compared to historical norms as detailed individually for each air district, below. As increased incentive amounts become available in the coming months, program participants should find it easier to locate suitable vehicles. Please note that stated FY 2022-23 totals are based on the first three quarters of project data for that FY and one projected quarter to align with the Proposed FY 2022-23 Funding Plan for Clean Transportation Incentives.

South Coast AQMD

South Coast AQMD expected to complete 2,000 projects in FY 2022-23. The district was able to complete 1,032 replacements. This is nearly twice as many as the previous fiscal year but only 52% of the FY 2022-23 goal. In addition to the challenges laid out earlier in the report, the air district also lost a third-party contractor which reduced the number of case managers available to support applicants.

San Joaquin Valley APCD

San Joaquin Valley APCD expected to complete 800 projects during FY 2022-23. Due to improving vehicle market conditions in the Valley and high demand for their program, they completed 765 replacements or 96% of their goal.

Bay Area AQMD

In FY 2022-23, Bay Area AQMD expected to complete 550 vehicle replacements. The air district was able to exceed this target by helping 947 participants. In addition to funding provided by CARB, program demand was sufficient to support \$10 million in local funding between 2020 and 2022. Bay Area has spent a total of \$5.2 million in local funding, including over \$124,000 in FY 2022-23.

Sacramento Metropolitan AQMD

In FY 2022-23 Sacramento Metropolitan AQMD expected to complete 250 vehicle replacements. They were able to meet 85% of this goal by completing 213 replacements.

Alternative Mobility Options

The FY 2020-21 LCTI Funding Plan required participating air districts to increase the available incentive limit for alternative mobility options by \$2,500, from \$5,000 to \$7,500 in

accordance with the approved *CC4A Guidelines*.¹⁷ Since this increase, some air districts have shown an increase in the number of participants choosing mobility options over replacement vehicles. Bay Area AQMD and South Coast AQMD have implemented electric bicycles (e-bikes) as a mobility option. Bay Area AQMD is also offering passes for public transit. Sacramento Metropolitan AQMD made passes available through Sacramento Regional Transit, however, their contract recently expired. After the contract expired, Sacramento Metropolitan AQMD began operating a new pilot program for mobility options. The pilot program provides participants with a pre-paid card that can be spent on regional transit, car sharing, car rental, and Amtrak. Overall, the vast majority of participants choose to purchase a replacement vehicle. About 50 participants chose a mobility option in FY 2022-23, more than twice as many as any previous year.

Funded Vehicles by Technology Type

CARB staff also track the number of vehicles funded by the type of technology: BEVs, Conventional Hybrid Vehicles, Fuel Cell Vehicles, and PHEVs. Data also include information on EVSE installations, portable charger purchases, and pre-paid charging cards, as well as alternative mobility transportation options such as e-bikes and pre-paid public transit cards. Table G-4 and Figures G-6 and G-7 show the vehicle replacements by vehicle technology type for FY 2022-23.

¹⁷ Proposed Guidelines for the Clean Cars 4 All and Enhanced Fleet Modernization Programs Regulation webpage, California Air Resources Board, https://ww2.arb.ca.gov/rulemaking/2018/proposed-guidelinesclean-cars-4-all-and-enhanced-fleet-modernization-programs, and Proposed Fiscal Year 2020-21 Funding Plan for Clean Transportation Incentives, California Air Resources Board,

https://ww2.arb.ca.gov/sites/default/files/2020-11/proposed_fy2020-21_fundingplan.pdf

Replacement Vehicle Technology	South Coast	San Joaquin Valley	Bay Area	Sacramento	All Air Districts
Plug-In Hybrid Electric Vehicle	377	381	185	72	1,015
Conventional Hybrid	452	300	270	60	1,082
Battery Electric Vehicle	168	84	430	80	762
Fuel Cell	23	0	24	1	48
Alternate Mobility Transportation	12	0	38	0	50
Total Vehicle Replacements	1032	765	947	213	2,957

Table G-4: Fiscal Year 2022-23 Funded Vehicle Technologies and Options by Air District^a

^a Includes State and local funded projects. Data does not include projects funded solely with local funds. Figure G-6: Clean Cars 4 All Fiscal Year 2022-23 Number of Vehicles Funded by Technology Type





Figure G-7: Vehicle Replacement Technology by Air District

Table G-5 shows the number of EVSE installations and portable charger purchases, as well as charging cards for FYs 2021-22 and 2022-23. Complete historical participation data used in the generation of the annual Funding Plan summary can be found on CARB's *EFMP Scrap* and *Replace and CC4A Summary Report* webpage.¹⁸

¹⁸ EMFP Scrap and Replace and CC4A Summary Report webpage, https://ww2.arb.ca.gov/efmp-scrapand-replace-and-cc4a-summary-report, accessed September 15, 2023.

Air District	Fiscal Year 21- 22 Charging Equipment⁵	Fiscal Year 22- 23 Charging Equipment⁵	Fiscal Year 21- 22 Charging Cards	Fiscal Year 22- 23 Charging Cards
South Coast	1	0	0	0
San Joaquin Valley	8	1	0	0
Bay Area	23	56	0	0
Sacramento Metropolitan	8	11	233	40
Total	40	68	233	40

Table G-5: Charging Equipment Installations and Charging Card Data^a

^a Includes State- and local-funded home and portable chargers.

^b Charging equipment is only for BEVs and PHEVs.

Results - Secondary Metric - Program Performance and Co-Benefits from Participant Surveys

Developed through a robust public process, the CC4A program was intended not just to provide participants the benefit of cleaner and more efficient vehicles, but to also deliver the co-benefits that come with having more reliable transportation, such as greater access to economic opportunities. While some participants realize these co-benefits, the California State Auditor Report 2020-114 (State Auditor Report) highlighted the need to better quantify these co-benefits. In response to the State Auditor Report, CARB has added an analysis of participant surveys (surveys) as a secondary metric of program effectiveness to this report on an ongoing basis. These surveys allow CARB and the air districts to better gauge program performance and outlook from the perspective of the participants themselves, and to inform improvements to the program to better serve the participants and provide both the emissions benefits and co-benefits from the programs. While CARB established standardized survey questions, each air district has the flexibility to include additional questions to better serve their constituents. Each air district also determines the appropriate means to reach their constituents for survey distribution and feedback collection.

Figure G-8 demonstrates that air district program survey response rates have not met the requirements as not all air districts have been able to reliably collect the required survey responses. As shown in the figure, approximately 43% of eligible survey participants responded to the 30-month survey. The South Coast, Bay Area, and Sacramento Metropolitan air districts each use electronically distributed surveys and compile the responses into sortable databases. San Joaquin air district relies on physical mail-in surveys and, unfortunately, this approach has proven challenging for the air district. The response rate is low and it is difficult to track and compile the responses. As such, the San Joaquin air district was not able to provide any substantive survey data for this report.

Moving forward, CARB will continue to collaborate with all participating air districts to improve survey response rates and we have since refined survey questions and the methodology. Each air district is now required to request and collect survey data from potential, unsuccessful, and successful program participants to best identify and understand barriers to entry and demographic data. Surveys are administered at various stages of application, and they include: an initial survey that captures basic participant data; before and after approval which identifies potential barriers to entry through the application process, time of transaction; and at 12-, 24-, 30- month ownership intervals. While the surveys have since been deployed in the spring of 2023, data is still pending. The current required survey questions can be found at the end of this document.



Figure G-8: Clean Cars 4 All Participant Survey Response Rates - 30-Month Survey

Fiscal Year 2022-23 Feedback from Participants – Key Successes

"I never, ever could have afforded an EV without your financial help. This is the best car I've ever owned."

"It has helped me and my family through the struggles of the rising costs of living."

The prices of ZEV cars are higher than gasoline cars. It is financially very hard for lower-income families to afford the ZEV cars and ZEV cars are not a priority of individuals or families that fall into the low-income category. The responses received from Bay Area AQMD indicated that the financial incentives directly helped them consider some of the best cars in the market. The incentives allowed participants to obtain far newer, cleaner, and safer vehicles than what participants expected. CC4A incentives have also swayed some already prospective car buyers away from internal-combustion engine vehicles and toward cleaner technologies.

"I was relieved that we were not required to pay taxes on the grant. Tax returns help me to pay back unexpected expenses that I incurred throughout the past year and the registration fee on the new car was substantially greater than I was accustomed to."

The relief and gratitude expressed by the respondent for not having to pay taxes on the CC4A incentive that they received. Tax returns are crucial for them as they help cover unexpected expenses from the past year. Program participants should not have to pay taxes on vehicles purchased through the CC4A program. However, this has been the practice in some air districts. Additionally, the participant mentioned that the registration fee for their new car was higher than expected, emphasizing the financial challenges they face and the importance of tax returns in managing their finances.

"Thank you for making our environment and helping lower income communities!"

There is consensus among participants that their replacement vehicle has led to savings by spending less money on gas and less time at gas stations. Ninety-six% of respondents indicated that they are spending less money on fuel. The savings have helped "keep food on the table and a roof over [their] heads." This has become especially apparent with the recent spike in gas prices: average gas prices rose nearly 50% since mid-2021.¹⁹ Sudden price increases like this can have an especially hard impact on low-income households. Participants have appreciated that the increased fuel economy, or lack of necessary fuel use altogether for their replacement vehicle, has helped offset the impacts of rising fuel prices. Participants also expressed satisfaction at the reduced environmental impact of their replacement vehicle. The use of new and cleaner technologies aids participants in feeling engagement and ownership in the effort toward cleaner air.

I first applied for the program 1 year ago. The wait time was long due to the program waiting for funding but very worth it.

This program is very effectively for the people with low income, at first we thought everything was fake because of the long time but it was really worth it."

A few of the respondents expressed the long wait time for the application to process but mentioned that it was worth the wait. Indeed, the entire application time, pre-approval, approval, issuing of checks and delivery of the cars can be a time-consuming process but respondents indicate that it helps financially and therefore is worth it.

¹⁹ U.S. All Grades All Formulations Retail Gasoline Prices, U.S. Energy Information Administration webpage, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=pet&s=emm_epm0_pte_nus_dpg&f=m, accessed on June 3, 2022.

"I like being able to take my kids to museums and places we might not otherwise would have gone. We were restricted before because our vehicle couldn't make long drives. We've gone to so many new places and it's really enriched our lives."

The response highlights the positive impact of being able to take family members to new, cultural, educational, or fun places. This suggests that family experiences are greatly enhanced when there is the opportunity to explore and discover new environments together. This feedback underscores the idea that there were limitations in the past, particularly due to their older vehicle's inability to make long drives and that the newer, cleaner vehicle provides a newfound ability to travel, thus enriching their lives.

Fiscal Year 2022-23 Feedback from Participants – Challenges

"The dealers marked up the price of the vehicle to compensate for this bonus. As a result the entire process didn't actually save me that much money on the car purchase itself."

"The program is helpful, but I felt the interaction with dealership was really bad. I kept calling around for months, but most dealers didn't have many EV available. Most dealers also didn't bother getting back to me even though I gave them my information. I had to extend my grant many times due to the difficulty of finding an EV. They also slapped extra \$5000 on most car purchases."

These responses illustrate the disappointment experienced by the individuals when trying to purchase a ZEV through a program or incentive. They highlight two key issues: price markups and dealer communication. In the first response, the main theme is the disappointment in the car dealers marking up the price of the vehicle to compensate for a bonus or incentive, ultimately undermining the potential cost savings for the buyer. The second response centers around the difficulties encountered when dealing with dealerships in the context of the ZEV purchase program. It highlights the lack of responsiveness from dealers, the scarcity of available ZEVs, and additional charges, such as a \$5,000 premium, further frustrating the potential buyers.

"The timeframe to purchase a vehicle was too short given the state of the used car market and low availability of hybrid vehicles in the summer of 2022. I spent more money on a new replacement vehicle than originally planned because there were no affordable used vehicles available."

This response underscores much of the discussion above surrounding the challenges and constraints faced by individuals when trying to purchase a vehicle in the summer of 2022, particularly related to the limited availability of hybrid vehicles and the subsequent financial impact of having to buy a new replacement vehicle instead of an affordable used one within a tight timeframe.

"Public charging stations have ended up being more expensive than I thought."

"There are none of the charging stations associated with the credit program near me."

A recurring issue reported by program participants that purchased PHEVs or BEVs is managing the charging of their vehicles. Approximately, 1% of South Coast AQMD survey respondents and 4% of qualifying Bay Area AQMD survey respondents reported difficulty ensuring adequate charging of their vehicle, either due to long charging times, the expense of public charging, or the lack of reliable charging locations. While CC4A offers an additional incentive for EVSE, most participants did not participate in this aspect of the program. Based on stakeholder feedback, it appears that people may not be aware of this option. Another reason may be the challenges associated with renters not being able to install EVSE at their multi-unit dwelling. CARB will work with air districts to ensure that this opportunity is clearly communicated to participants to ensure that they have all the available information to choose a method of transportation that meets their needs. Some air district programs have already begun enacting new programs or processes to direct participants toward EVSE installations. Sacramento Metropolitan AQMD developed new processes with the Sacramento Municipal Utility District to increase outreach to eligible CC4A participants and leverage combined funding to make EVSE installations more affordable. San Joaquin Valley APCD developed contracts with installers to simplify and streamline the application and installation process for participants. San Diego APCD is also factoring in EVSE installation and planning coordination with local electrician groups to provide this offering as early as possible once they begin their program. However, some air districts have mentioned that it has been difficult to find qualified electricians that meet all the required certifications. Statewide, the California Energy Commission (CEC) and the California Department of Transportation plan to increase EVSE infrastructure with 250,000 public and shared private EV chargers by 2025 and forecasts the need for 1.2 million chargers by 2030 for light-duty vehicles. This is discussed in the *Charging Infrastructure and Charging Cards* section of the Future Program Activity section of this report.

Upfront cost for installation and long wait times for reimbursement processing also remain significant barriers for many of CC4A's target population. In response to the large number of public comments and participants that cannot install or use at-home vehicle charging, as of November 2020, CARB authorized the purchase of charging cards in lieu of EVSE installations. These pre-paid cards provide needed funds and flexibility for participants to fully use their new vehicle's electric technology. Each participating air district is developing the necessary plans and processes to incorporate this charging card option into their program. For example, Sacramento Metropolitan AQMD has contracted with EVGo and allocated funding to provide up to 300 charging cards for qualifying applicants. At least 219 eligible participants have already signed up for this program. However, even with this prepaid option, some participants still have difficulty locating a qualifying charging location due to the variety of different charging networks regionally and across the state. In response to this issue, CARB and the air districts are working to find avenues to access a broader range of charging networks such as unified charging cards or merchant-locked prepaid

credit cards. CARB also continues to work with other agencies to expand public charging options that can then become available to CC4A participants.

While diverting program funds to increase charging access would reduce available funds for replacement vehicles in the short-term, this support could assist in alleviating consumer range-anxiety and encourage electric vehicle technology adoption and industry growth. Air districts have indicated that additional funding would allow them to further promote charging options without reducing the number of participants they serve.

"It was hard finding a qualifying vehicle with the limited network of participating dealers."

Approximately 5% of respondents mentioned issues related to coordinating with car dealers. While this may seem like a low response rate, this figure includes responses only from those participants in the South Coast AQMD, Bay Area AQMD, and Sacramento Metropolitan AQMD that have passed the12-month ownership milestone, or those participants in South Coast AQMD and Bay Area AQMD that have passed the 24-month ownership milestone. However, air districts report it is an on-going concern that they are hearing about and so it is highlighted here as indicative of a potentially larger problem program wide. Issues mainly revolve around difficulty finding viable replacements due to lack of nearby dealerships or available inventory. Participants reported feeling rushed into purchasing a less suitable replacement due to vehicle availability and vehicle purchase deadlines mandated by the program. Additionally, participants felt participation in the program reduced the ability to negotiate better pricing as normally would be done during vehicle purchases leading to larger than desired loans. However, during public discussions, dealership representatives have commented that the dealerships incur expenses while the vehicle is being held due to long incentive payment processing times.

As approved dealerships are the only means to purchase vehicles under this program, it is essential that program participants feel confident in negotiating with dealerships. CARB will work with air districts and stakeholders to improve educational outreach to participants covering items such as how to use new vehicle technology and additional assistance programs, such as Financing Assistance. This could include conducting work groups to develop formal baseline subject criteria or best practices materials for all air district programs and other such measures. This ensures participants can find and afford replacement vehicles that meet their everyday needs. Air districts have already taken measures to help alleviate some of the stresses such as offering significantly more time for participants to choose a vehicle without feeling rushed.

It is equally important for dealership staff to understand the program to better serve the participants. CARB will work with air districts to further engage with dealers to educate dealer staff on program requirements and processes. If necessary, CARB and the air districts may re-examine program implementation plans with dealerships to ensure that areas of improvement are addressed. CARB staff will also examine alternative measures such as conducting public workgroups to solicit stakeholder feedback and potential solutions for

dealer engagement. South Coast AQMD's program has already taken initial steps in developing new outreach and contracts with dealerships to further emphasize these consumer education and protection components while also setting up a direct phone contact to help prioritize and expedite incentive payments to dealerships. Bay Area AQMD and Sacramento Metropolitan AQMD are also exploring opportunities to expand their contracted dealership network to provide more inventory and options to program participants. With the continued growth of these programs, even in difficult times, an increasing number of dealerships are showing interest in participating with the program and expanding clean transportation options to more residents.

"A little bit of a hassle [when] applying for this program, too many hoops and loops to jump through."

Some applicants have indicated that the application process for their air district program is complicated or burdensome, especially for applicants that lack technical skills. This has sometimes led to applicants considering withdrawing from the program or experiencing extensive delays to replace their vehicle.

The recent funding issues created strains on program resources and limited the number of potential incentive vouchers which reduced more recent program throughput. However, the air districts worked through these challenges to find new methods that help mitigate delays such as incorporating remote vehicle inspections and providing one-on-one support. CARB and air district staff are continuing to collect and analyze data from various points in the application process to identify potential bottlenecks and solutions.

Participating air districts continue to train their staff and develop ways to help guide participants to find the necessary documentation to participate in their programs. Many participants have appreciated the proactive and responsive nature of the case management staff and credit them with ensuring the completion of their project. CARB and air district staff continue to collect and analyze data from various points in the application process to identify potential bottlenecks and solutions. One such method is CARB's refinement of the participant survey which will incorporate aspects to further inquire about challenges participants face specific to the application and eligibility verification process.

"It would be really helpful if you could let [participants] know all the benefits/incentives they may be eligible for."

In the pursuit of air pollution and emissions reductions, the State of California and its local air districts have enacted a network of programs with this goal in mind. However, California's intricate system of State and local incentive programs can be difficult for participants to navigate and fully utilize. This can mean that participants may not receive the full assistance available toward their vehicle purchase or complimentary benefits such as solar power to reduce vehicle charging costs. Additionally, with adoption of these new technologies into their households, participants are concerned about potential maintenance expenses such as vehicle battery replacements.

CARB has developed Access Clean California (formerly known as the One-Stop-Shop Pilot Project) and is further expanding it. This program provides a central location, called the Access Clean California Benefits Finder, for participants to access various light-duty vehicle incentive and related clean energy incentive programs to help stack eligible incentives and make the transition to electric transportation as affordable as possible. The Access Clean California Benefits Finder also provides centralized income verification for applicants, to help streamline their application process to multiple programs. All air districts implementing CC4A are required to work with Access Clean California to ensure consistent and accurate information is provided, and that applicants can easily apply from the Access Clean California Benefits Finder application tool. Access Clean California will also link with local incentives so participants will be able to conveniently access California's unique suite of incentive and assistance programs. Having a single initial point of information helps applicants easily access all programs as they continue to grow and expand to new service areas. CARB and the air districts are also pursuing opportunities to share and streamline portions of program application processes such as incorporating a single simplified income verification methodology. This work is alongside ongoing general improvements to air district program websites to improve upfront program clarity to prospective applicants. Access Clean California's community outreach network and partnerships can also be utilized to reach underserved communities and direct the program to participants that would benefit most from these incentives.

Fiscal Year 2022-23 Secondary Metric - Participant Survey Conclusions

As illustrated by the above examples, the overall participant feedback reflects both a generally positive view of the CC4A program in making newer, cleaner vehicles affordable to consumers that may have otherwise been priced out of the market and opportunity for improvements to better achieve the overall program goals. CARB staff will take steps to address the specific concerns as described above such as:

- Continue to collaborate with air districts to incorporate prepaid charging cards and other support for charging options.
- Collaborate with air districts to update their program implementation plans to incorporate additional guidance and education for participants on the potential financial impacts of program participation.
- Collaborate with air districts and participating car dealerships to improve and standardize their practices and consumer education in each air district program.
- Continue to make improvements to application processing to reduce applicant and car dealership wait times.
- Further integrate with Access Clean California to ensure participants are aware of and can apply to complementary clean energy programs for which they may be eligible and to reach underserved communities.

These improvements will also contribute to meeting some Senate Bill (SB) 350 Report recommendations such as improving outreach, program education, and application

processing assistance to underserved communities. These efforts will contribute to improving the understanding of local transportation needs and incentive accessibility for California's priority populations. CARB staff will also develop more robust procedures to garner additional feedback as noted in the *Areas for Future Study and Program Improvement* section below.

Fiscal Year 2023-24 Goals

Primary Metric - Vehicle Replacements

The goals for FY 2023-24 include goals for CC4A air district programs, including San Diego APCD, as well as goals for the CC4A Statewide program. CARB developed the FY 2023-24 goals through a public process. Specifically, staff conducted meetings with the air districts which began in March 2023 and continued through August 2023 and have held work group meetings regarding AB 630, to increase transparency and coordination with the administering air districts and stakeholders in the goal setting process. In 2022, CARB staff determined that additional data were necessary to accurately set program goals. Thus, in the fully executed FY 2022-23 grant agreements, CARB required air districts to submit additional metrics and details such as participant survey data and planned program updates. Air districts were offered the opportunity to submit additional metrics and details, such as applicant processing times, participant survey data, and planned program updates. These data incorporate each air district's operational capacity and program demand to develop additional quantitative metrics that better gauge the success of the programs and inform future goalsetting. In order to help low-income Californians obtain cleaner and more reliable transportation options, CARB staff also considered the changing economic conditions when developing the FY 2023-24 goals.

Similar to FY 2022-23 goals, CARB staff determined that some general baseline assumptions need to be included for each participating air district to make future projections about funding needs and program demands. Therefore, CARB staff made the following general baseline assumptions for each air district based on proposed funding amounts and past project data:

- 1) The average total cost of each incentive is \$11,110.²⁰ (See Appendix A for an explanation for this calculation).
- 2) Administrative funds account for 20% percent for air district and statewide programs.
- 3) With FY 2022-23 and FY 2023-24 allocations, funding would be available to meet demand and program application processing capacity for the next two fiscal years. Participation is primarily determined by applicant demand, funding being fully available, and air district processing capacity. All implementing air districts use a

²⁰ The average incentive amount is consistent with Appendix A of the FY 2022-23 LCTI Funding Plan.

website to help outreach to potential low-income residents living in DACs. Low-income residents have access to relevant program information and can submit initial application information at any time. Case managers then process these requests as received.

4) Low vehicle supply and higher prices may continue to extend timelines for project completion.

Based on all available data and program plan communications from the air districts, the agreed upon FY 2023-24 goals can be found in Table G-6 Both the San Diego APCD and Statewide programs are in their initial stages of implementation and will need time to establish their programs and ramp up their involvement. Hence, the second-year goal for San Diego is conservative and the initial goal for the statewide program is also low. The Statewide program may be funded in late winter 2023 or early spring of 2024, which only leaves a few months of potential Statewide program operation. Once the Statewide program is established, the number of participants that could be brought through the program in the first year may be similar to the number of participants that the South Coast AQMD and the San Joaquin Valley APCD brought through their programs in the initial years, 500 – 2,000 within the first four years.²¹

Air District	Fiscal Year 23-24 Goal
South Coast	1,800
San Joaquin Valley	800
Вау Агеа	700
Sacramento	250
San Diego	50
Statewide Expansion	75
Total Annual Participants	3,675

Table G-6: Participation Goals for Air District and Statewide Expansion Fiscal Year 2023-24

South Coast AQMD

²¹ Annual Performance Goals for the Enhanced Fleet Modernization Program and Clean Cars 4 All, Fiscal Year 2019-2020, CARB webpage, accessed on September 29, 2022.

The South Coast Air Quality Management District expects to complete 1,800 replacements in FY 2023-24. CARB and South Coast AQMD expect the program to maintain high participation rates in FY 2023-24 and beyond, as the program continues to ramp up and funding for FY 2022-23 becomes available. The air district will also use the new funding to develop a targeted outreach campaign aimed at underserved communities.

San Joaquin Valley APCD

A goal of 800 replacements has been established for San Joaquin Valley APCD for FY 2023-24. San Joaquin Valley APCD will continue to work through a backlog of applications and is expected to experience high demand in the form of additional applications during FY 2023-24.

Bay Area AQMD

A goal of 700 incentives has been established for Bay Area AQMD for FY 2023-24. With the FY 2022-23 and FY 2023-24 funding allocations and additional case management staff hired in FY 2022-23, the district's processing capacity should remain steady. CARB and district staff will continue to monitor how program expansion affects demand in the coming year. The air district has also begun a targeted outreach campaign and continues to analyze applicant demographics to increase participation in underserved communities.

Sacramento Metropolitan AQMD

A goal of 250 incentives has been established for Sacramento Metropolitan AQMD for FY 2023-24. The air district is analyzing demographic information to enact a targeted outreach campaign. With a consistent partnership with their contractor and continued targeted outreach, CARB and air district staff expect program participation and project completion rates to remain consistent in the coming year.

San Diego APCD

A goal of 50 incentives has been established for San Diego APCD for FY 2023-24. As noted above, San Diego APCD is currently in the development phase of their program. During FY 22-23, progress was made by contracting with GRID Alternatives (GRID) to be the program administrator. The District and GRID have been meeting regularly to develop the San Diego CC4A program. The air district has launched a *program webpage* and has been working to secure contracts with a car dismantler and car dealers to help serve the program. The requirement for the car dismantler to have a Bureau of Automotive Repair (BAR) certification has been a limiting factor in how many local dismantlers are eligible for the program. The current San Diego CC4A program is in a "soft open" period where the District is working through processes to ensure a successful area-wide launch. Some prospective applicants have submitted initial paperwork to work through program eligibility requirements. When the car dismantler and more car dealers are under contract and ready to serve the program a more official opening of the program will be announced.

Statewide Expansion

CARB supports prioritizing the communities in most need, which includes communities designated as DACs through CalEnviroScreen. The statewide program will cover all areas of the state not currently covered by air district programs, and will particularly target low-income, tribal, border, and rural communities statewide. Through outreach, the program also aims to target more black communities and other communities of color. This is consistent with the core principles of the program to focus benefits on those that have the highest barriers to clean transportation.

Existing air district programs require residency in or near DACs and use ZIP codes containing DACs to determine eligibility. These programs operate on a first-come, first-served basis. To ensure that the statewide program supports DACs throughout the state, it must evolve to a needs-based program that goes above and beyond the first-come, first-served model. It will build upon the program's existing approach because it will develop a community-level focus on consumer protection, outreach, and education. This shift in program design specifically addresses community concerns with the current first-come, first-served model because it will ensure that funding is prioritized for Californians in most need, respecting the needs of local communities, as well as supporting California's climate and air quality commitments.

Historically, the exclusively DAC requirements have served as an important parameter to ensure investments are directed to communities disproportionately burdened by negative environmental and climatic impacts; however, there are DACs beyond the current air district borders as well as other priority populations including tribal, rural, and low-income communities that do not have the resources to access cleaner technologies under the current program. With the statewide expansion, as well as modifications to the air district programs to allow expansion to people with low incomes separate from DACs, CC4A will continue to prioritize the communities and individuals in most need in DACs and low-income communities and will limit income to 300% of the FPL.

CARB expects that the FY 2022-23 sum of \$125 million to conservatively fund 8,000 vehicle replacement projects. However, in the program's start-up FY the goal for the number of projects that can be funded is much smaller, between 50–100 projects. While this goal may seem small, there is limited time for program operation. This is similar to when individual air district CC4A programs began, following final approval of the Funding Plan.

In February 2023, CARB released a competitive solicitation for a statewide program administrator which concluded in March. From this solicitation, the Community Housing Development Corporation (CHDC) was selected as the statewide program administrator, and CARB is currently working with CHDC to implement a grant agreement. CHDC will then finalize the implementation plan, enter into agreements with automobile dealerships, and train the dealerships on program administration. Additionally, CHDC will also conduct outreach to communities, help participants sign up for the program, process applications, and help participants find a suitable vehicle. Finding a suitable vehicle can take time, as the primary market is the used-vehicle market, and availability is currently low. CHDC has a preexisting network of grassroots community-based organizations (CBO) that they will use to conduct targeted outreach in priority populations, both demographically and geographically. CHDC would also collaborate with CARB staff to continue to establish relationships with other CBOs to represent diverse communities and to continue to support the communities most in need.

Alternative Mobility Options

CARB will continue collaborating with air districts and other stakeholders to further expand these mobility options to maximize emissions reduction benefits and access to alternate modes of transportation. In addition to increasing the number of mobility options, these efforts will focus on identifying and promoting mobility options in historically underserved communities most in need of transportation alternatives. CARB will also work to coordinate with other alternative mobility option efforts, such as the planned statewide Electric Bike Incentive Program, for possibilities of incentive stacking or other synergies.

Enhanced Fleet Modernization Program

Background

EFMP consists of two component programs: A statewide Scrap-Only program implemented by BAR, and a Scrap-and-Replace program overseen by CARB and implemented by South Coast AQMD and San Joaquin Valley APCD. The Scrap-Only program provides a \$1,500 incentive for low-income, less than 225% of the Federal Poverty Level (FPL), participants throughout the State to retire their vehicle at a BAR-licensed vehicle dismantler. The Scrap-and-Replace program is offered to low-income residents with incomes less than 400% of the FPL. The Scrap-and-Replace program offers an additional incentive amount, up to \$4,500, in addition to the Scrap-Only incentive, toward the purchase of a qualifying newer vehicle. Funding for EFMP comes from a one-dollar surcharge on vehicle registration, which generates approximately \$33 million annually. The majority, just over 90%, of the annual EFMP budget goes to BAR to implement the Scrap-Only program. CARB uses the remainder, typically \$2.8 million, or less than 10%, to implement the EFMP Scrap-and-Replace program. Historically, South Coast AQMD, and San Joaquin Valley APCD, the two implementing air districts, have evenly split this \$2.8 million so that each receives \$1.4 million. Because funds have historically been split evenly between the two air districts and used in a similar manner, the performance of the EFMP Scrap-and-Replace program is evaluated as a whole, rather than by each air district.

Historically, both component programs have been oversubscribed, therefore, the primary determinant of participation levels each year was the amount of funding available and the average total cost of each incentive. However, due to recent changes in used-vehicle market conditions, such as low vehicle inventory, especially for used vehicles, and increased vehicle prices, participation in the Scrap-Only program decreased. (See the *Goals FY 2021-22* and *FY 2022-23 Goals* sections of this report for more details.)

Enhanced Fleet Modernization Program Potential Projects

Each fiscal year, a goal is set for the EFMP program. Based on the amount of funding appropriated to each program, a potential number of vehicle replacements that could be completed based on allocated funding is determined. Then, taking into consideration various factors such as forecasted available supply and economic conditions, a realistic goal is set for the number of projects that could be funded during the FY.

Table G-7 summarizes the potential vehicle replacements (potential projects) for FY 2022-23 and goals for the EFMP Scrap-Only and Scrap--and-Replace programs.

Table G-7: Enhanced Fleet Modernization Program Appropriations, Potential Projects, and Goals for Fiscal Year 2022-23

Enhanced Fleet Modernization Program	Fiscal Year 2022-23 Appropriation (\$ million)	Fiscal Year 2022-23 Potential Projects	Fiscal Year 2022-23 Goal
Statewide Scrap- Only	\$29.5	21,000	10,000ª
Enhanced Fleet Modernization Program Scrap- and-Replace Total	\$2.8	560 ⁵	550°
South Coast Air Quality Management District	\$1.4	280	275 ^ь
San Joaquin Valley Air Pollution Control District	\$1.4	280	275 ^ь

^a Assumes continuation of the current \$1,500 incentive amount. Scrap-Only retirements may be higher if the incentive amount is increased in proportion to recent increases in used-vehicle prices.

^b This is based on the average total cost of each incentive, which is \$5,000 (the average includes projects receiving the mobility option of \$7,500).

^c Assumes all funds will be used within the fiscal year and is the sole funding source of incentives. Does not include split-funded CC4A incentives.

Enhanced Fleet Modernization Program Results for Fiscal Year 2022-23

The performance metric for EFMP is the number of vehicles brought through these programs. Table G-8 summarizes the results for the FY 2022-23 EFMP Scrap-Only and Scrap-and-Replace programs.

Table G-8: Enhanced Fleet Modernization Program Scrap-Only and Scrap-and-ReplaceResults Fiscal Year 2022-23

Enhanced Fleet Modernization Program	Fiscal Year 2022-23 Goal	Fiscal Year 2202-23 Actual (Enhanced Fleet Modernization Program Funded Only)	Fiscal Year 2022-23 Actual (Split- Funded)	Fiscal Year 2023-24 Goal
Statewide Scrap- Only	10,000	10,260	n/a	10,000
Enhanced Fleet Modernization Program Scrap- and-Replace Total	550ª	62	656	550ª
South Coast	275ª	48	227	275ª
San Joaquin Valley	275ª	14	429	275ª

^a Assumes all funds will be used within the fiscal year and is the sole funding source of incentive. Does not include split funded CC4A incentives.

The EFMP Scrap-Only projects are funded on a first-come, first-served basis, rather than having funds allocated per region or air district. In FY 2022-23, the EFMP Scrap-Only result of 10,260 vehicles slightly exceeded the FY 2022-23 goal of 10,000 vehicles. The FY 2021-22 EFMP Scrap-Only retirement goal of 13,000 vehicle retirements was around 35% lower than the prior year's goal due to the anticipated impact of higher used-vehicle prices. In FY 2021-22, the actual EFMP Scrap-Only result was 11,110 vehicles²² which was somewhat less than the goal of 13,000 vehicles.

The increased value of older vehicles led more consumers to retain their vehicles or sell them to others (dealers and private parties) for continued use. Between July 2020 and July 2021, the Bureau of Labor Statistics Consumer Price Index for Used Cars and Trucks rose by over 40%,²³ and has remained elevated since that time. The sudden and drastic increase in used vehicle prices compared to the static incentive amount of \$1,500 for EFMP Scrap-Only led to lower than anticipated participation for this program.

The EFMP Scrap-and-Replace goals for this section are calculated assuming all funds will be used within the FY as the sole funding source for replacement projects. However, to maximize program benefits, EFMP Scrap-and-Replace funds are often used to split-fund CC4A projects to maximize incentives for cleaner technologies for participants in priority populations. These split-funded projects are included in CC4A program performance metrics stated above. Air districts will at times fund replacement incentives using only EFMP Scrap-and-Replace funds for participants with household incomes lower than 400% of the FPL (\$120,000 for a family of four in 2023) that are not able to qualify for the CC4A program. South Coast AQMD issued 142 such Scrap-and-Replace only incentives for FY 2022-23. San Joaquin Valley APCD issued six such standalone EFMP Scrap-and-Replace only incentives for FY 2022-23 as shown above in Table G-8.

Enhanced Fleet Modernization Program Goals for Fiscal Years 2023-24

The goal for FY 2023-24 for the EFMP Scrap-Only and the EFMP Scrap-and-Replace programs is the number of vehicles brought through these programs as detailed below.

Statewide Scrap-Only Program

The overall goal of the Statewide EFMP Scrap-Only program is to use all available funds to retire older and higher-polluting vehicles. With the FY 2022-23 appropriation of \$29.5 million, the program had the capacity to afford to retire at least 21,000 vehicles. However, the FY 2022-23 practical goal was determined to be 13,000 vehicle retirements due to the elevated used-vehicle prices previously discussed. Any funds not used at the end

²² Tentative yearly total as of 7/14/2022.

²³ BLS Series ID CUUR000SETA02. Series Title: Used cars and trucks in U.S. city average, all urban consumers, not seasonally adjusted, U.S. Bureau of Labor Statistics, accessed 7/14/2022, https://data.bls.gov/timeseries/CUUR0000SETA02?output_view=data.

of the FY remain in the Enhanced Fleet Modification Subaccount and remain available for reappropriation.

With the FY 2023-24 appropriation of \$29.5 million, the program could afford to retire at least 21,000 vehicles this FY. However, CARB and BAR staff are setting the practical goal at 10,000 vehicles. During FY 2023-24, EFMP Scrap-Only participation is expected to decrease due to higher used-car prices. BAR and CARB staff will continue to monitor market conditions and evaluate the need to raise incentive amounts, if needed. If incentive amounts are raised in proportion to recent increases in used-vehicle prices, the number of vehicle retirements would likely increase.

Enhanced Fleet Modernization Program Scrap-and-Replace

FY 2022-23 funding for Scrap-and-Replace was \$2.8 million and was evenly split between South Coast AQMD and San Joaquin Valley APCD. While the Scrap-and-Replace funding is restricted to the same lower-income levels served by CC4A, it is not limited to either advanced technology replacement vehicles, or to residents of DACs. This provides air districts the flexibility to ensure that they can serve constituents for whom an advanced technology vehicle may not be an adequate replacement. The demand for this flexibility determines if the funding is used to pay a portion of CC4A projects or is attributed to separate EFMP Scrap-and-Replace transactions. If all of the funding went to EFMP Scrap-and-Replace transactions, approximately 560 vouchers could have been funded. This is based on the average total cost of each incentive, which is \$5,000 (the average includes projects receiving the mobility option of \$7,500). Thus, staff determined that a goal of 550 transactions funded in whole or in part by EFMP Scrap-and-Replace funds was an appropriate goal.

Future allocations of EFMP Scrap-and-Replace funds may be broadened to include other air districts, where there may be a greater number of applicants who would be eligible for EFMP Scrap-and-Replace but not CC4A.

Areas for Further Study and Program Improvements

The primary performance metric demonstrates steady program growth for all air districts and the secondary participant survey metric shows generally positive responses. However, discussions with the air districts and review of the participant surveys have highlighted areas that CARB and the air districts can continue to improve to make the CC4A program more beneficial for participants.

Program data and results over the last few years have allowed staff to identify areas for improvement. Among the data sources are participant surveys, which help highlight issues program participants face when using the program. Participants provided survey feedback regarding difficulties they experienced with car dealerships while finding and purchasing a vehicle. Improved coordination with dealerships by CARB and program administrators will provide opportunities to improve understanding of the source of the difficulties and what

role each party can play to provide the participants with a better experience. Improved participant surveys, which will be implemented soon, will provide staff with more detailed data so that additional areas of improvement may be identified. As previously mentioned, staff will also continue to monitor EFMP Scrap-Only Program data to determine if an increase in incentive amounts is necessary.

Future Program Activity

As previously mentioned, ZEVs are a necessary component toward achieving California's long-term environmental and equity goals. Every person in California deserves to benefit from improved air quality, reduced impacts from climate change, and to have reliable and convenient ways to access employment, educational institutions, residences, and places to recreate in our state. Hence why CARB is pursuing a Statewide CC4A program, in addition to the air district CC4A programs, in response to stakeholder input and legislative interest.

While there have been many successes with CC4A and it has proven to be a popular program, challenges exist. One challenge is that historically, only people in DACs were eligible to apply for the program. Additionally, there are a variety of incentive programs that people can apply for, often causing potential program participants confusion and extra work to apply for them. Another challenge is that vehicle inventories have not fully recovered from the coronavirus and economic crisis. Higher interest rates on vehicle loans and a lack of widespread EVSE infrastructure throughout the State also present challenges for the program and the participants. There is still a continued need for greater outreach and education regarding the program and zero emission technologies, as well as a continued need for various agencies and stakeholders to collaborate to better align and streamline various incentive funding programs.

Statewide Expansion

CARB will continue to collaborate with air districts, stakeholders, and other agencies to strengthen and streamline programs where possible. The aim of this effort is to continue to strengthen and streamline incentive funding programs to make it easier for potential program participants to apply for such programs and to reduce the amount of work they need to complete to participate in the programs. CARB will continue to coordinate with such organizations as *Access Clean California* and CARB's *Clean Vehicle Assistance Program* to leverage resources and make it easier for program participants to take advantage of incentive funding opportunities.

Fiscal Year 2023-24 Proposed Changes

The FY 2023-23 Clean Transportation Funding Plan includes two changes to CC4A proposed by staff. 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 as early as October 2023, staff is proposing to add ZEMs to CC4A and Financing Assistance as an eligible replacement vehicle type. 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. While these changes are likely to increase program demand, it is too early to estimate the magnitude of the impact.

As directed by the Legislature in SB 1382 (Gonzalez, Chapter 375, Statutes of 2022) conventional hybrids will no longer be an eligible vehicle type in CC4A as of January 1, 2025. Staff will work with program administrators to estimate the impact this change will have on program and present the findings in the FY 2024-25 Annual Performance Goals and Evaluation for the Clean Cars 4 All and Enhanced Fleet Modernization Programs.

Over the next three years, staff will continue to monitor program data and market conditions and continue to collaborate with stakeholders to identify any necessary policy changes. Staff will closely monitor participation in the new San Diego program as well as the new statewide program.

Charging Infrastructure and Charging Cards

CARB continues to recognize that the lack of widespread EVSE infrastructure is a significant barrier to expanding the CC4A program statewide. CC4A works with another California program, Access Clean California, to address this challenge. Access Clean California provides funding and resources to its outreach partners to help CARB spread the word about its clean transportation equity programs and build trust and capacity in priority populations. In support of these partners, Access Clean California also maintains a resource hub to make outreach resources more accessible, and provides a platform for partners to come together, share lessons learned, exchange best practices, and facilitate communication. Access Clean California offers a centralized application tool that enables consumers to determine eligible programs and help them kickstart their application. Access Clean California also highlights other programs, such as CVRP²⁴ and the Financing Assistance program, that offer charging benefits and works with energy providers to include charging and/or infrastructure opportunities and programs within its outreach materials.

CARB also plans to explore potential avenues within the CC4A program to increase the uptake of EVSE infrastructure incentives at residences by program participants. This includes greater support of prepaid charging cards, which will provide opportunities for residents who are unable to install EVSE at their primary residence. Funding amounts for installing EVSE infrastructure at one's home could also be increased to attract more applicants to this incentive option. Another option would be for air districts to partner, or continue to partner, with utility companies to leverage combined funding to make EVSE installations more affordable. Air districts could also contract, or continue to contract, with EVSE installers to

²⁴ Note that CVRP will phase out and is anticipated to run out of funds as early as October 2023.

simplify and streamline the application and installation process for program participants. CARB will continue to collaborate with other State agencies to increase EVSE infrastructure.

Outreach and Education

Moving forward, CARB will continue to collaborate with the CEC to reduce barriers to EVSE adoption in disadvantaged and low-income communities, and with communities regarding outreach and education. There is a need to continue to listen to communities to determine how the program should evolve to meet the changing needs of people living in California. CARB is engaged in active efforts to obtain comments from communities through listening sessions and improved surveys that will be available to all participating air districts.

Beginning with the FY 2022-23 Annual Performance Goals and Evaluation for the Clean Cars 4 All and Enhanced Fleet Modernization Programs Report, staff incorporated the annual reports into each year's Clean Transportation Incentives Funding Plan. This was done to ensure that the public has the opportunity to provide input on the performance goals and evaluation of the programs. It also allows for a closer alignment of goal setting and available funding. Additionally, this provides greater transparency regarding program performance and future plans.

As of January 1, 2023, and under the direction of SB 1382, (Gonzalez, Chapter 375, Statutes of 2022), CARB is required to coordinate with implementing air districts and community-based organizations to identify barriers to participation as well as provide an assessment to the effectiveness of outreach programs. Currently CARB has improved and revamped surveys to encapsulate responses regarding program satisfaction as well as areas to improve the program. Through a public process and with stakeholder approval, CARB will conduct a baseline analysis using CalEnviroScreen 4.0 of factors such as linguistic isolation, poverty, and ethnicity. As such, CARB will conduct this analysis and share the results with the implementing air districts and CHDC.

Alongside directing CARB to conduct the data-driven analyses to determine the effectiveness of targeted outreach, SB 1382 also allows for vehicles that were either purchased or leased to CC4A participants to have a partial sales tax exemption effective January 1, 2023. All participating air districts are currently in the midst in conducting outreach to educate participating automobile dealerships on this new requirement. The California Department of Tax and Fee Administration has also provided flyers that are to be distributed to these dealerships as a resource.

Conclusion

CC4A continues to make significant progress to provide equitable access to clean transportation options for people living in low-income and disadvantaged communities in California. Transportation equity contributes toward closing the socioeconomic gaps caused by generations of economic and health disparities and is essential to achieving California's air quality and climate goals. The CC4A program has continued to experience high application volumes since reopening in late 2021, despite fluctuating vehicle market conditions and lingering effects of the global health crisis. The closure of the CVRP program is expected to increase demand for CC4A in the coming years.

As CARB staff continues to collaborate with air districts and stakeholders through the public process to implement the statewide CC4A program, CARB will prioritize engagement with community members, grassroots CBOs, and stakeholders to ensure that the program meets the needs of priority populations. Additionally, CARB will continue to identify areas for program improvement and collaborate with air districts and stakeholders to propose changes to program guidelines in air district programs, and statewide, as needed. Some changes may be implemented by air districts through modification of air district implementation plans, and some will be formally proposed and finalized through the annual Clean Transportation Incentives Funding Plan process.

This annual AB 630 Report remains an important element of CC4A because it provides program oversight of participation goals and accounts for participant and stakeholder input for overall program refinement. The participation goals established in this document reflect staff's expectation of continued program growth in FY 2023-24, especially with the growth of the somewhat newer programs in the Bay Area and Sacramento Metropolitan air districts, as well as the upcoming launch of the program in the San Diego air district, as well as the statewide program. CARB will continue to evaluate each air district's progress toward these goals at the end of each fiscal year and make the results available on our website. Staff will also begin to evaluate the statewide program once data are collected for that portion of the program, likely beginning with the FY 2024-25 AB 630 Report.

CC4A remains an important component of California's robust equity incentives portfolio. It is important for CARB to continue to collaborate with air districts and stakeholders to develop ways to improve CC4A's reach to the populations that need it the most. Additionally, continuous effort to recognize and increase the co-benefits that program participants can realize through these incentives is also essential to maximize the overall value and benefits of the program. CARB staff looks forward to continued collaboration with air districts and stakeholders on this work that ensures CC4A's growth and success toward helping achieve California's equity, clean transportation, air quality, and climate protection goals.

Minimum Required Participant Survey Questions²⁵

Initial Survey Questions²⁶

- 1. First Name
- 2. Last Name
- 3. CC4A²⁷ ID
- 4. Email
- 5. Home address
- 6. Age
- 7. Race²⁸
- 8. Ethnicity²⁹
- 9. Gender³⁰
- 10. How did you hear about the Program?
- 11. CC4A has a vehicle replacement program and a mobility program. The vehicle replacement program retires your current vehicle for funds to help purchase or lease a new or used vehicle. The mobility program retires your current vehicle and provides you with funds for other mobility options like public transit or an e-bike. Are you interested in vehicle replacement?
- 12. What technology would you have purchased without the program?
- 13. What body style would you have purchased without the program?
- 14. When would you have purchased a vehicle without the program?
- 15. What is your primary motivation for getting a replacement vehicle?
- 16.CC4A has a vehicle replacement program and a mobility program. The mobility program retires your current vehicle and provides you with funds for other mobility options like public transit or an e-bike. Are you interested in the mobility program?
- 17. What are the primary forms of transportation you would use after receiving the mobility program funds?
- 18. Do you have another vehicle you could use if your current vehicle is retired?
- 19. If there is anything else you would like to share, please do so here.

End Before Approval³¹

- 1. First Name
- 2. Last Name

²⁵ Many of these questions are multiple choice. Answers to these are not currently displayed.

²⁶ Surveys questions are dependent on participant responses. For example, if a participant selects that they are interested in only vehicle replacement options, then questions regarding mobility would not be displayed.

²⁷ District-administered programs may or may not have a unique identifier for participants.

²⁸ While mandatory, this question has an option for other.

²⁹ While mandatory, this question had an option of not Hispanic or Latino

³⁰ While mandatory, this question had a prefer not to say option

³¹ To be administered to participants who ended the application before application has been approved.

- 3. CC4A³²ID
- 4. According to our records, you did not complete your application to CC4A, why did you not complete your application?³³
- 5. Why do you not qualify?
- 6. Which documentation were you unable to provide?
- 7. Why were you unable to provide the documentation?
- 8. Why are you no longer interested in the program?

End after Approval³⁴

- 1. First Name
- 2. Last Name
- 3. CC4A ID
- 4. Our records show you were approved for CC4A but did not buy or lease a vehicle through the program. Did you buy or lease a vehicle without the program?
- 5. What was the main reason to buy or lease a vehicle outside of the program?
- 6. Which program changes would have made it easier to buy or lease a replacement vehicle through the program?
- 7. What was the main reason you did not buy a vehicle through the program?
- 8. What program changes would have made it easier to buy or lease a replacement vehicle through the program?
- 9. If there is anything else you would like to share, please do so here.

Time of Purchase Survey³⁵

- 1. First Name
- 2. Last Name
- 3. CC4A ID
- 4. What were the most challenging aspects of the program?
- 5. Was the dealer knowledgeable about the program process?
- 6. Were you excluded from any pricing promotions due to participating in the program? For example, could not receive time-sensitive discounts.
- 7. Do you have any suggestions for how the program can be improved beyond items listed above?
- 8. What technology is your replacement vehicle?
- 9. Are you aware of the additional electric vehicle service equipment (EVSE) reimbursement, portable charger (if available), or pre-paid charging card incentive?

³² District-administered programs may or may not have a unique identifier for participants.

³³ Questions 5-8 will show depending on participant answer in question 4.

³⁴ To be administered to participants whose application have been approved but have not yet purchased a vehicle.

³⁵ To be administered to participants who have successfully completed and application and have purchased/leased a vehicle.

10.Do you intend to participate in the AVSE or portable charger (if available) program? 11.If there is anything else you would like to share, please do so here.

12, 24, 30-Month Surveys

- 1. First Name
- 2. Last Name
- 3. CC4A ID
- 4. Do you still own or lease your replacement vehicle?
- 5. What is your replacement vehicle's current odometer reading?
- 6. Have your job opportunities increased due to participating in the program?³⁶
- 7. If you have improved job opportunities or salary increases due to the program, you can provide more detail here if you like.³⁷
- 8. Do you expect to keep up with your loan on your replacement vehicle?³⁸
- 9. Why do you not expect to keep up with your loan?
- 10. Is the replacement vehicle meeting your needs?
- 11. How is the replacement vehicle not meeting your needs?
- 12. Has your replacement vehicle needed any major repairs, excluding regular maintenance (tire or fluid changes) or collisions?
- 13. Approximately what is the cost of repairs?³⁹
- 14. Has your replacement vehicle had any majority reliability issues?
- 15. What was the nature of the reliability issue?
- 16.Did you have difficulty finding a mechanic to work on the vehicle because of its technology (battery electric vehicle/hybrid electric vehicle)?
- 17. Approximately how many days were you unable to use your vehicle due to the reliability issues you mentioned above?
- 18. What technology is your replacement vehicle?
- 19. Are you aware of the electric vehicle service equipment (EVSE) reimbursement or portable charger incentive component of the program?
- 20. Did you participate in the EVSE or portable charger program?
- 21. What are the primary reasons you will not participate in the EVSE or portable charger program?
- 22. Do you anticipate any of the following challenges to participating?⁴⁰
- 23. If there is anything else you would like to share, please do so here.

³⁶ This question is not required.

³⁷ This question is not required.

³⁸ Subsequent questions are dependent on participant response.

³⁹ This question is dependent on participant response in Question 12

⁴⁰ There are a variety of answers relating to EVSE challenges which include but are not limited to permitting, availability, inability to afford electricity, and maintenance of the equipment.