



Proposed Fiscal Year 2021-22 Funding Plan For Clean Transportation Incentives

Accompanied By

**Proposed Carl Moyer Program Changes, Agricultural Burning
Incentives for Combustion Equipment, and the Climate Heat
Impact Response Program**

Board Presentation
November 19, 2021



Today's Presentation



Funding Plan for Clean
Transportation Incentives



Revisions to Carl Moyer
Program



Agricultural Burning Incentives
for Combustion Equipment



Climate Heat Impact
Response Program

Incentives play a critical role



Support the State's climate change, air quality, ZEV deployment, and petroleum reduction goals

Accelerate the transition of fleets to zero-emission



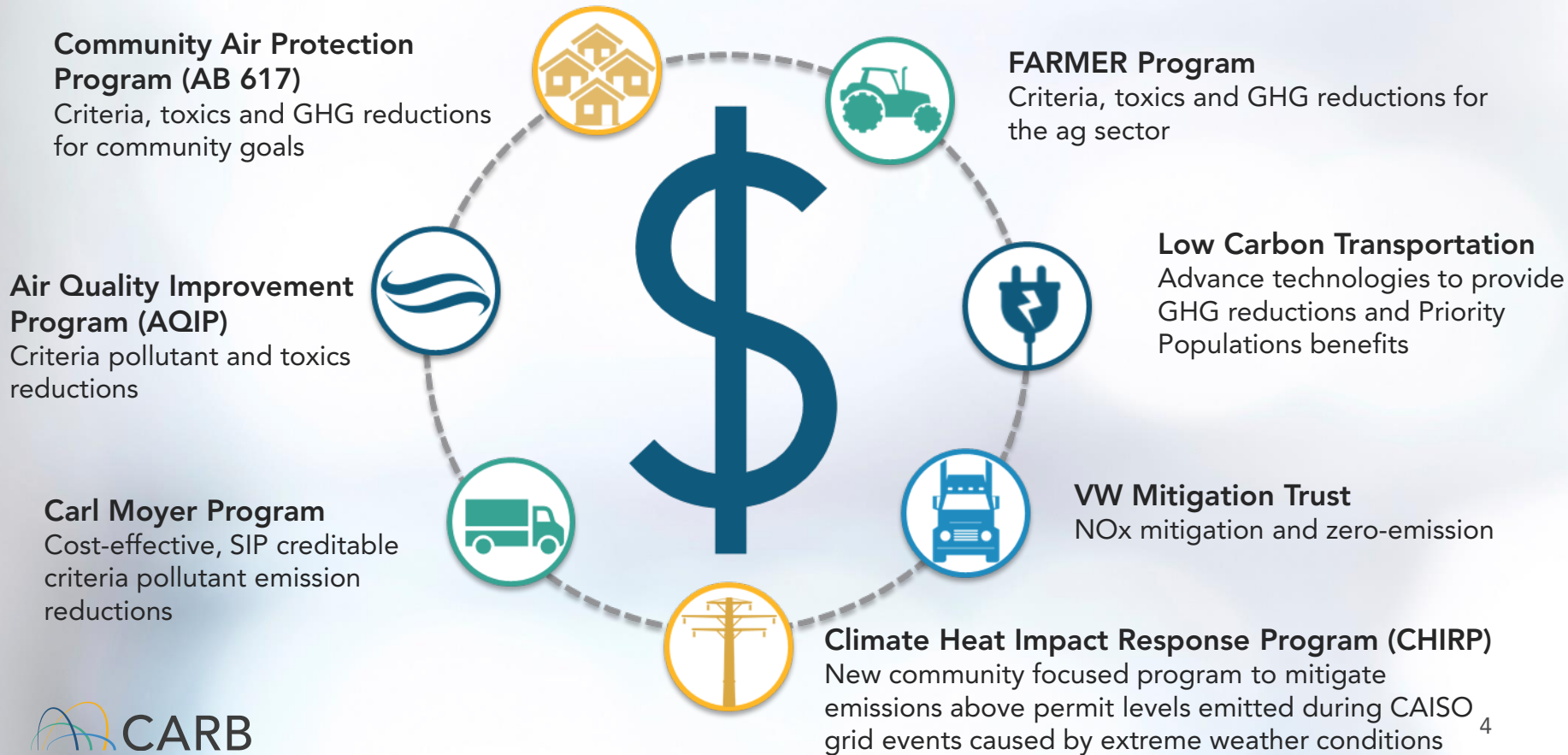
Support equitable, community-driven clean transportation and multi-sector approaches

Promote economic growth and job training and apprenticeship opportunities



Build on successes of previous investments and incorporate lessons learned

CARB's Portfolio of Incentive Programs



Highlights of Proposals

- Increased focus on equity
- Support meeting federal air quality standards and climate goals
- Flexibility to address community specific needs
- Broader approach to consider transportation systems as a whole

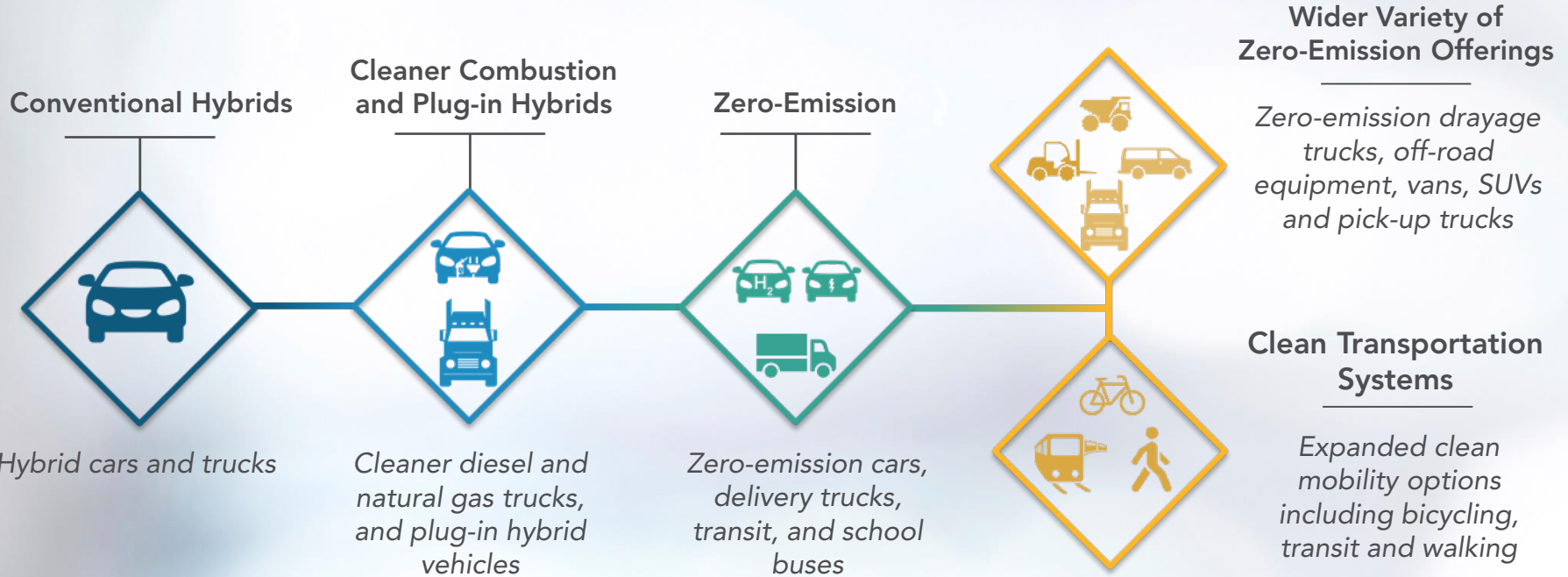
Largest Budget for Incentives

- FY 2021-22 State budget included:
 - \$1.5 billion ZEV Acceleration Package, including Low Carbon Transportation
 - \$28.64 million for AQIP
 - \$180 million for incentives for alternatives to agricultural burning
 - \$45 million to replace vehicles to certified 0.02 gram per brake horsepower-hour NOx standard or cleaner through the Carl Moyer Program

The Funding Plan for Clean Transportation Incentives



Incentives drive development of cleaner, more affordable technologies



Truck Technology Advancement

- State incentives for natural gas trucks since 2005
- Zero-emission trucks are commercially available
- Underserved communities are asking for zero-emission now

California has provided over
\$1 Billion for natural gas



\$3.9 Billion Investment for ZEV Deployment



- First installment in proposed multi-year ZEV Package
 - Totals \$3.9 billion across three budget years
 - Includes appropriations to CEC, GO-Biz, and CalSTA
- For FY 2021-22 the appropriation to CARB includes:
 - \$595 million from GGRF for Low Carbon Transportation
 - \$838 million from the General Fund
 - \$86.5 million from the Air Pollution Control Fund
 - \$28.64 million for the Air Quality Improvement Program (AQIP)

Extensive Public Process

January
Governor's
Proposed
Budget

May
Revise

July
Final
Budget

August 8
*Workshop and
Discussion
Document*

November
Board Meeting



March 30
Workshop

18 public work
groups

October 8
*Proposed Plan
Released Begin 30-day
public comment
period*

Funding Plan Highlights

- Focus on allocating funds to projects that can support economic stimulus and recovery efforts
- Continue to take steps to transition from broad purchase incentives to more targeted strategies
- Targets 60% of Low Carbon Transportation funds to benefit priority populations
- Proposes enhanced metrics and evaluation methodology, in response to State Audit

Benefits to Overburdened Communities



\$1.5 Billion for FY 2021-22 Across Light-Duty and Heavy-Duty Sectors

Category	FY 2021-22 Investment (millions)
CVRP	\$525
Clean Transportation Equity Investments	\$150
Clean Trucks, Buses, and Off-Road Equipment	\$873
Total	\$1,548

Light-Duty and Clean Transportation Equity Investment Goals

- CARB light-duty vehicle investments
 - Vehicle purchase incentives
 - Clean mobility investments
 - Community capacity building investments
- Support long-term transformation of the State's fleet and accelerate ZEV deployment
- Bring zero-emission and clean mobility options to priority populations
- Expand transportation choices and reduce VMT

Vehicle Purchase Incentives Allocations

\$75 Million to Clean Cars 4 All
For incentives to replace old vehicles with clean vehicles in certain air districts, and prepare for expansion statewide



\$23.5 million proposed for Financing Assistance
To support loans and grants to help lower-income Californians purchase clean vehicles and shift the program to a needs-based approach

\$515 Million to CVRP
To support rebates for clean vehicles



\$10 Million to the Electric Bicycle Incentive Project
A new project to support incentives for electric bicycles

CVRP

- \$515 million intended to last three years
 - Updated Three-Year Plan for CVRP and the ZEV Market includes plan to ramp down the program and focus on lower-income consumers
- Phased approach to changes
 - Phase 1: 1 million EVs sold in California
 - Decrease income cap for standard rebates and reduce MSRP cap for smaller vehicles
 - Phase 2: 1.25 million EVs sold in California
 - Further decrease income cap for standard rebates, remove PHEVs, reduce rebate amounts

Clean Cars 4 All

- Preparing for expansion statewide by proposing changes to the regulation through a separate public process
 - Request Executive Officer be granted authority to implement changes after regulation is approved
 - Allow districts flexibility to remove conventional hybrids from eligibility and lower income eligibility
 - Give the Executive Officer discretion to increase incentive amounts



**CLEAN CARS
FOR ALL**



**CLEAN CARS
4 ALL**

Clean Mobility Investments Support New Transportation Systems



\$10 Million to Clean Mobility Options
To support statewide Clean Mobility Options Voucher Pilot and open a new funding window and expand clean transportation options for low-income and overburdened communities

\$25 Million to the Sustainable Transportation Equity Project (STEP)
To support community-based mobility solutions for priority populations and overburdened communities



\$10 Million to Clean Mobility in Schools
To support bold zero-emission transformations at schools in overburdened communities

Proposed Capacity Building Project Allocations for Priority Populations



\$5 million to Access Clean California and Community Organizations

For outreach, community needs assessments, and technical assistance

\$1.5 Million for Workforce Training and Development

New project to support zero-emission training for dealerships and partnerships with vocational schools



Proposed Heavy-Duty Project Allocations

\$28.64 million for Truck Loan Assistance

To help small-business fleet owners to secure financing for upgrading their fleets to comply with regulations and adopt zero-emission trucks



\$80 million for Heavy-Duty Demos and Pilots

To support the drayage truck and infrastructure pilot and off-road demonstration projects



\$194.95 million for CORE

For vouchers for zero-emission off-road equipment

\$569.5 million for HVIP

For zero-emission truck and bus vouchers

Clean Truck and Bus Vouchers (HVIP)

- Proposed policy changes help enhance equity, support small fleets with more economic need, and strengthen the ZEV market
 - Introduce fleet size limits starting in 2023
 - Require ZEP Cert for vehicle eligibility starting in 2023
 - Revise disadvantaged community voucher enhancement
- Introduce Set-Asides
 - Support deployment of 1,000 zero-emission drayage trucks, 1,000 zero-emission transit buses, and 1,000 zero-emission school buses
 - Innovative Small e-Fleets set-aside to support small fleets

Clean Off-Road Equipment Vouchers (CORE)

- Greatly expand investment in the off-road sector with proposed \$194.95 million allocation
- Expand eligible equipment
 - Zero-emission small off-road equipment
 - \$30 million dedicated to incentives for California small business and sole-proprietor landscaping companies
 - Zero-emission construction equipment

Funding Plan Contingencies

- To minimize disruptions and consistent with past practice, Staff proposes that the Board grant the Executive Officer authority to:
 - Allocate a portion of future years funding in the event of a waitlist or funding shortfall for first-come, first-served projects
- Will use a transparent, public work group process to:
 - Add or scale back funding levels
 - Make technical or administrative changes

Proposed Changes to the Carl Moyer Program Guidelines



Carl Moyer Program

- Statewide emission reduction program eligible for SIP credit, supports multiple categories
- SB129 provided \$45 million for severe or extreme non-attainment air districts to replace medium- and heavy-duty vehicles with:
 - Certified 0.02 NO_x standard or lower, by end of fiscal year 2022-23
 - Zero-emission vehicles

Proposed Funding Allocation

Air District	Heavy-Duty Vehicle Population	Relative Percentage	Proposed Allocation
South Coast Air Quality Management District	159,600	71%	\$32,100,000
San Joaquin Valley Air Pollution Control District	64,300	29%	\$12,900,000
Total	223,900	100%	\$45,000,000

Proposed Cost-Effectiveness Adjustments

- Propose to adjust cost-effectiveness limits for advanced and zero-emission on-road projects, including funding amount thresholds
 - Provides increased funding amounts to facilitate the transition to advanced and zero-emission technology which further reduces emissions statewide and in impacted communities

Proposed On-Road Advanced Technology Cost-Effectiveness Limits

Cost-Effectiveness Limit Types	Current Limits (\$/ton)	Proposed Adjustment (\$/ton)
On-road Optional Advanced Technology Limit	\$100,000	\$200,000
On-road Zero Emission Technology Limit	\$100,000	\$500,000

- Also propose to adjust for inflation the cost-effectiveness limits for other categories
- Staff will continue to work with CAPCOA, air districts, and stakeholders in a public process to make additional administrative changes to further streamline the program for on-road projects.

Proposed Agricultural Burning Incentives for Combustion Equipment



Progress Phasing Out Agricultural Burning in San Joaquin Valley

- Near-zero burning in San Joaquin Valley by 2025
- SJVAPCD Alternatives to Agricultural Open Burning Incentive Program successful and oversubscribed
- \$180 million in State 2021-22 Budget for transition to alternative disposal methods for agricultural material
 - For non-combustion, unless CARB finds alternatives are not available

Need for Combustion Alternatives in Limited Applications

Progress

- Incentive Program improved access to alternatives
- SJVAPCD has already received \$40+ million worth of applications for new alternative equipment
- Significant interest on non-combustion alternatives
- Technology suitable for wire-grown crops

Remaining Challenges

- Growing but limited availability of non-combustion alternatives; equipment delivery delays
- Wire-grown crop materials
- Equipment size appropriate to farm size
- Still inadequate access to services, especially with increased demand due to rapid phase-out
- Small growers impacted

2025


- Successful Phase Out of Agricultural Burning in San Joaquin Valley

Prioritization of Alternatives

Chipping, shredding, soil incorporation, spreading, and other non-combustion alternatives



Additional on-field alternatives, including air curtain burners, where non-combustion alternatives not feasible (e.g., wire-embedded vineyards), with justification



Additional alternatives when other on-field alternatives not feasible (e.g., landfilling)

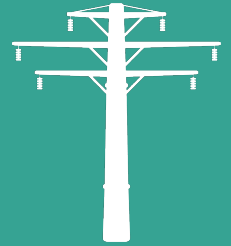
Technology Suitability for Wire-Grown Crops

- Wire-grown crop material, e.g., from cordon-pruned vineyards, cannot easily be chipped
- Shortage of specialty equipment needed to chip wire-embedded agricultural material
- Only projects with these types of concerns should be eligible for State funding

Staff Recommendation

- Staff recommends the Board find:
 - There is clear and convincing evidence that non-combustion alternatives are not available in the numbers needed to meet the increasing demand
 - The District can use funds granted via the Budget Act of 2021 for non-stationary combustion alternatives, as a second priority option if non-combustion alternatives are not available
- Report back to the Board in 2022

Proposed Climate Heat Impact Response Program



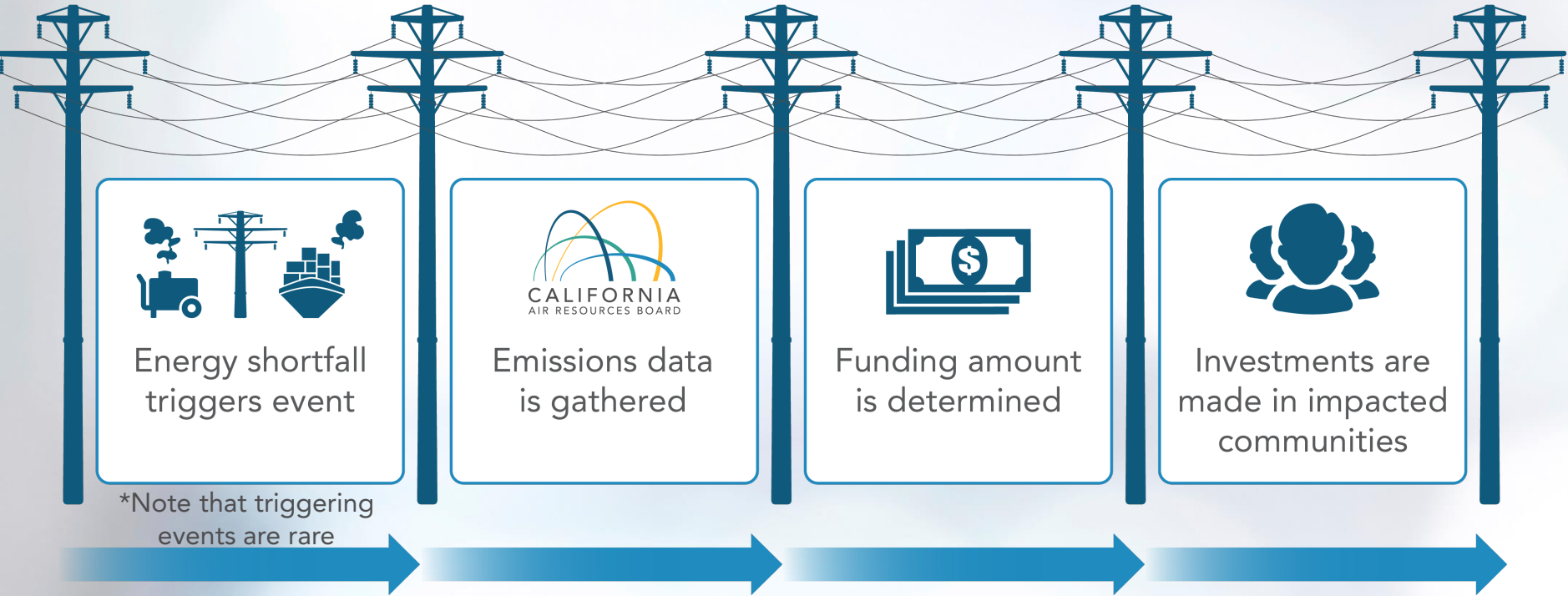
Climate Heat Impact Response Program (CHIRP)

- Emergency Proclamation on July 30, 2021
- The State can take actions to:
 - ✓ Reduce the demand on the grid
 - ✓ Increase energy capacity to the grid
- By November 2021, CARB is to develop a mitigation plan to mitigate emissions associated with California Independent System Operator (CAISO) declared events
- These events are uncommon, none occurred during the window of the Proclamation

Proposed CHIRP Mitigation Goals

- **Mitigate** excess emissions generated and reduce exposure during CAISO events
- **Consult** affected communities
- **Focus** on projects to mitigate current and future emission impacts, build grid resilience
- **Complement** other incentive programs, avoiding redundancy with other incentive programs
- **Provide** transparency through regular updates on project progress, outcomes

Proposed Mitigation Plan



Potential Community Projects

- With impacted communities, identify potential projects to mitigate and reduce current and future emission impacts and build grid resiliency
- Potential projects include:
 - ✓ Emission mitigation measures currently supported through existing programs
 - ✓ New mitigation projects allowed after a public meeting with CARB Executive Officer approval

Conclusion & Recommendation

Staff's Proposal Advances Clean Transportation and Improves Air Quality

- The proposals:
 - Advance climate goals and air quality goals
 - Provide benefits to low-income and disadvantaged communities
 - Build significant momentum for expanding the market for clean vehicles and transportation options

Staff's Recommendation

- Approve proposed Funding Plan,
- Approve the proposed Carl Moyer changes
- Approve the CHIRP Mitigation Plan
- Find that funds granted via the Budget Act of 2021 can be used for combustion alternatives