



School Bus Replacement Program

March 23, 2022

Medium-Duty/Heavy-Duty Zero Emission Vehicle Technologies Office
Fuels and Transportation Division



Program Components and Funding

Three complementary funding components

- School Bus Replacement: to replace the oldest, dirtiest diesel school buses with battery electric school buses - \$75 million (SB 110) (100% encumbered)
- Charging Infrastructure - \$14 million (Clean Transportation Program) (100% encumbered)
- Workforce Training - \$1 million (Clean Transportation Program) (100% encumbered)



Recipient Criteria

- Eligible applicants: school districts, county offices of education, and joint power authorities
- Priority given to the oldest school buses, school buses operating in disadvantaged communities, and to schools with fifty percent or more students eligible for free or reduced-price meals in the prior year
- Any replaced school bus must be scrapped



Manufacturers Awarded

Awardees

- A-Z Bus Sales, Inc.
- The Lion Electric Co.

Applicant	Type of Bus	Bid
The Lion Electric Co.	Type A without Chair Lift	\$271,389
A-Z Bus Sales (Microbird)	Type A with Chair Lift	\$293,424
The Lion Electric Co.	Type C without Chair Lift	\$321,184
The Lion Electric Co.	Type C with Chair Lift	\$329,627
The Lion Electric Co.	Type D without Chair Lift	\$332,009
The Lion Electric Co.	Type D with Chair Lift	\$339,370



Delivery Timeline

Bus Delivery Schedule	
Cumulative Percentage of Delivered Buses	Delivery Date
5%*	12/31/2019
25%*	12/31/2020
50%*	12/31/2021
100%	9/30/2022

*Delivery Target Met



Progress to Date (As of December 2021)

Completed Deliveries

- 12 Buses (2019)
- 49 Buses (2020)
- 78 Buses (2021)
- Total by end of 2021 = 139

Completed Infrastructure

- 39 Districts with Completed Infrastructure
- 25 Districts with Completed Infrastructure/All Buses Delivered



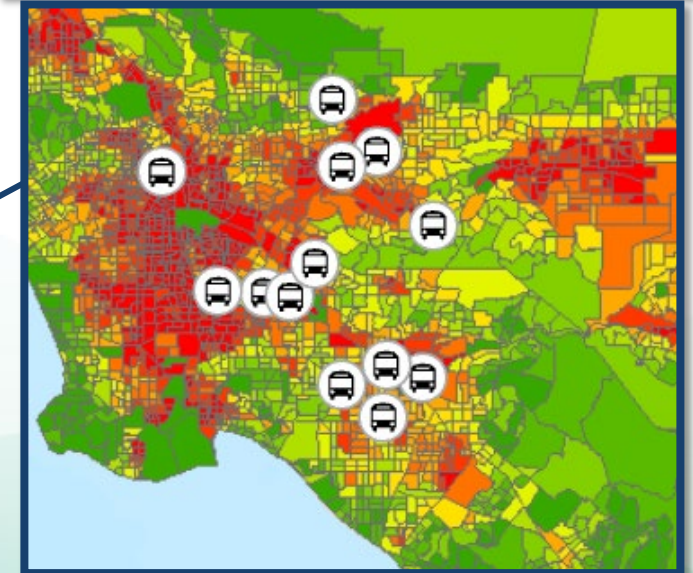
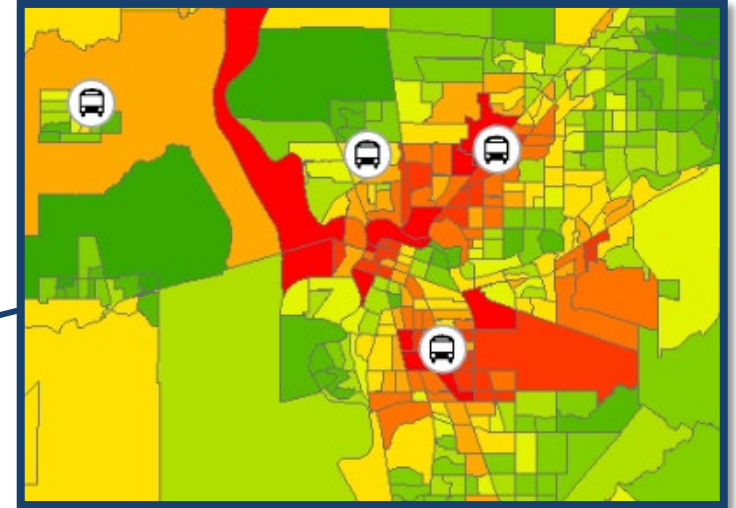
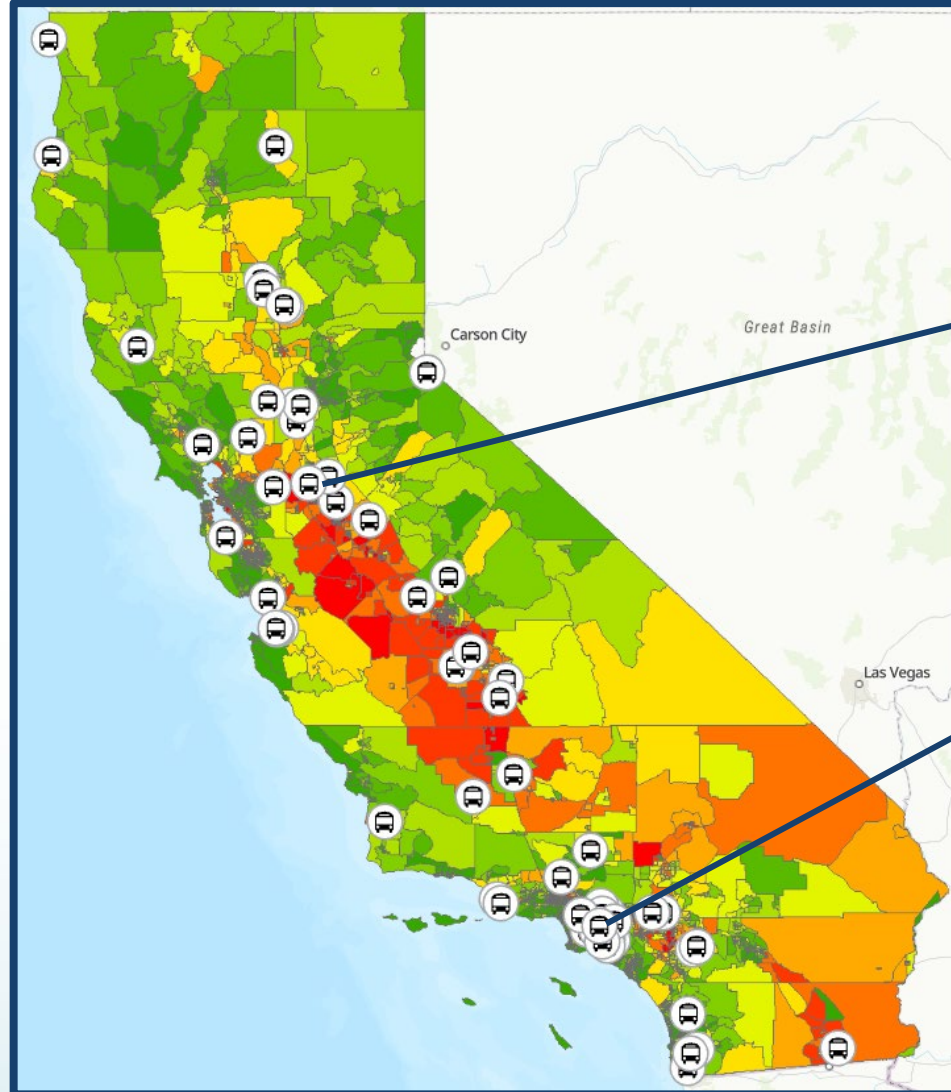


Distribution of Recipients Based on CalEnviroScreen 3.0

School Bus Recipient



CalEnviroScreen 3.0 Score





Distribution of Recipients Based on CPUC Tier 2 and 3 Fire Threat

Recipients Included in Tiers 2 and 3

- Fall River
- Lake Tahoe
- Oroville
- Sonoma
- Ukiah

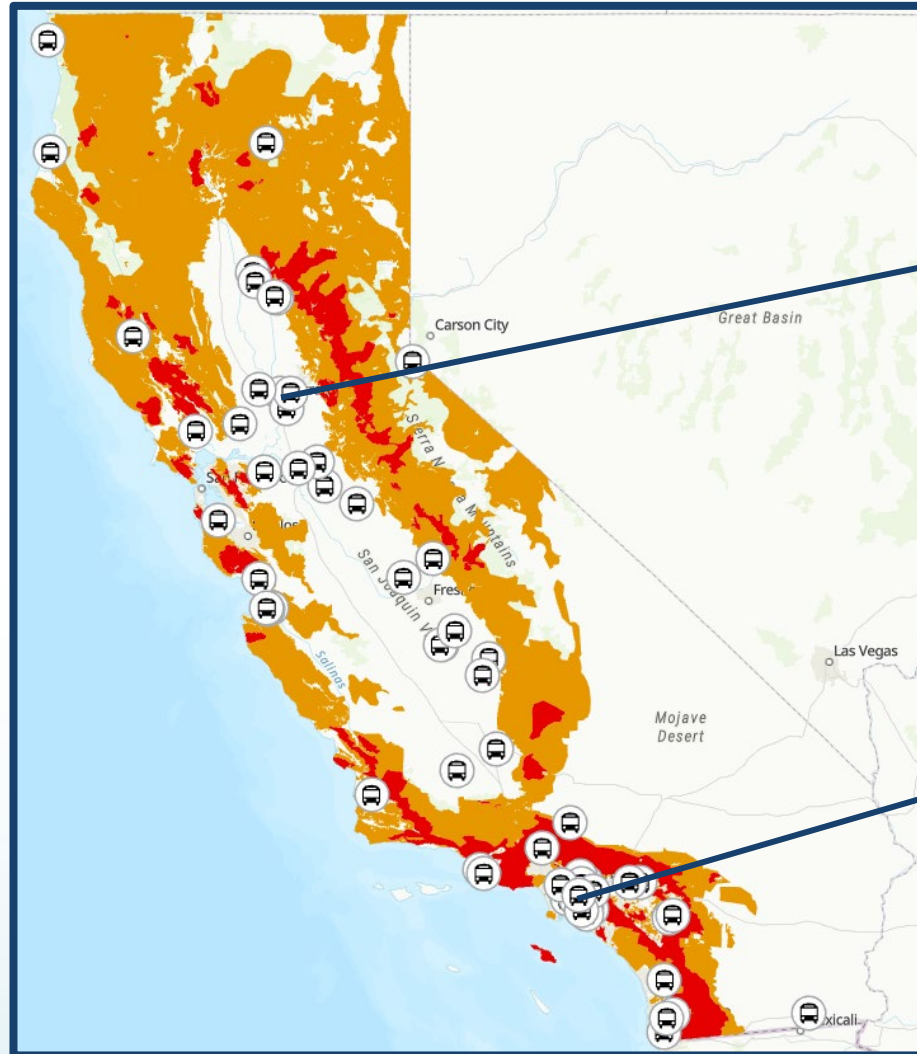
School Bus Recipient



CPUC Tier 2 Fire Threat



CPUC Tier 3 Fire Threat





Workforce Training

Cerritos College

- 79 technicians have taken training
- Technicians are complete with Level 2 Training
- Developing an On-Demand Video/Module Training

Future Training

- Electrical Safety/ESB Familiarization
- Heavy-Duty Electrical
- Diagnostics/ESB Systems/General Maintenance





Job Creation

Prop 39

- Division 26201 (a) "Create good-paying energy efficiency and clean energy jobs in California."

Manufacturer Jobs

- Long-term (23)

School District Jobs

- Short-term (49)
- Long-term (9)





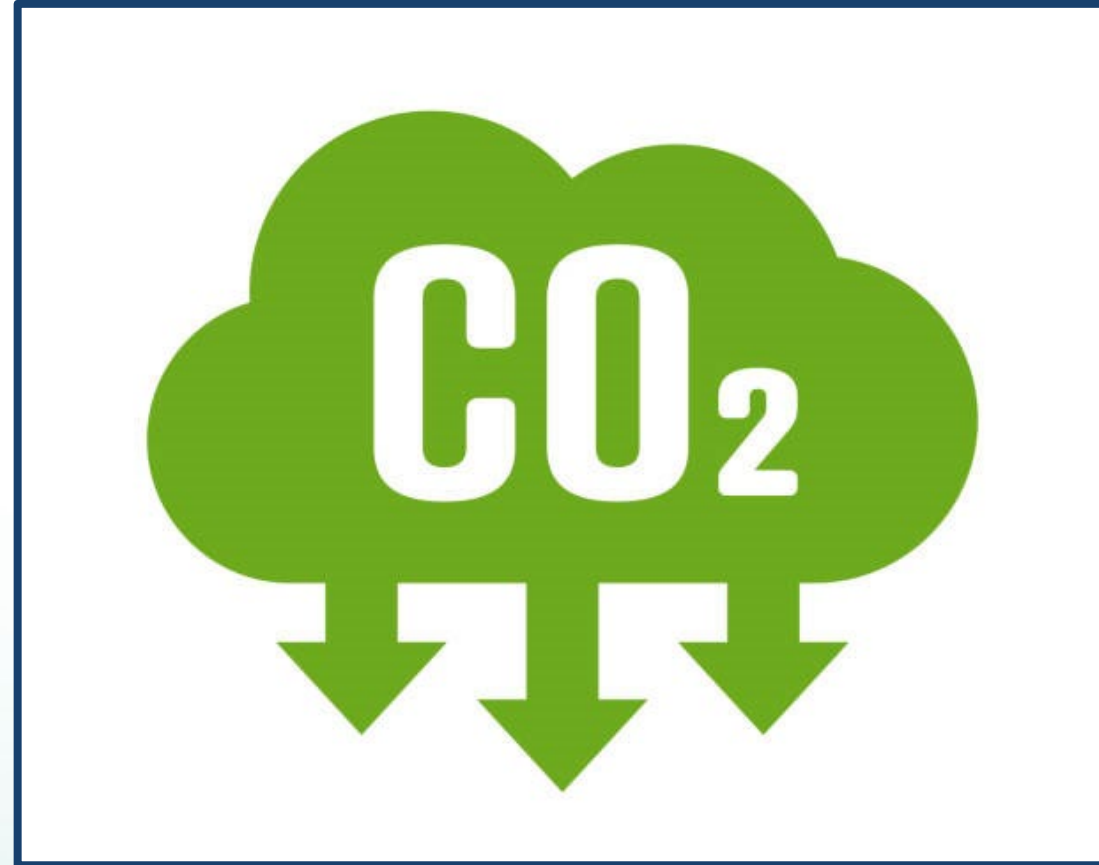
Health Benefits

Data Collection

- 14 Districts/34 School Buses
- 92,000 miles traveled
- 13,143 gallons diesel displaced

Emissions Reductions*

- 1.836 NO_x
- 0.104 PM2.5
- 0.158 HC
- 0.419 CO
- 147.9 CO₂



*Measurements in short tons, short ton = 2,000 lbs.



Future Program Implementation

Governor's Budget 2021

- \$450M School Bus Funding over 3 years - CARB
- \$50M Infrastructure - CEC
- Bi-weekly meetings
- Knowledge Transfer/Lessons Learned

Proposed Budget

- \$1.5B for ZEV School Buses
- Currently Proposed to CDE
- CARB/CEC/CDE sharing lessons learned

