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<b>Document Title:</b>	Item 5b. Energy Commission's School Bus Replacement Program presentation
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<b>Filer:</b>	Kristy Chew
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# School Bus Replacement Program



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May 2019



# Senate Bill 110

- Funding: \$75 million
- Eligible applicants: school districts, county offices of education (COEs) and transportation joint power authorities (JPAs).
- Priority given to the oldest school buses, school buses operating in disadvantaged communities and to schools that have a majority of students eligible for free or reduced-price meals.
- Any school bus replaced shall be scrapped.



# School Bus Replacement Update Phase 1

School bus replacement (two phases):

**Phase 1:** Solicit public school districts/COEs/JPAs.

- Released May 2018
- Closed September 2018
- Rank List posted November 2018  
[https://www.energy.ca.gov/contracts/GFO-17-607\\_Rank\\_List.pdf](https://www.energy.ca.gov/contracts/GFO-17-607_Rank_List.pdf)
- We received over 200 applications requesting replacement of over 1500 diesel school buses.
- Notice of Proposed Awards (NOPA) to be posted in May 2019
- Targeted approval at July 2019 Business Meeting



# School Bus Replacement Update Phase 1

- CNG NOPA was posted November 2018
  - Notice of Proposed Award (NOPA) can be found here: [https://www.energy.ca.gov/contracts/GFO-17-607\\_revised\\_NOPA.pdf](https://www.energy.ca.gov/contracts/GFO-17-607_revised_NOPA.pdf)
  - Awarded 25 CNG Buses to 7 School Districts and 1 JPA for a total amount of \$4 million
  - Awarded \$2.1 million in new and upgraded CNG fueling stations
  - Approved at an April 2019 Business Meeting



# Scoring Results

## GFO-17-607 (CNG Buses – Jan 30, 2019)

Applicant	Region	# of Students (ADA)	CalEnviroScreen Score	Free and Reduced Price Meals	Bus Ages	Total # of Buses
Washington USD	Central	2,500	96-100%	90%	1990 (2) 1996 (1)	3
North Monterey Co. USD	Central	4,200	81-85%	83%	1988 (2)	2
Palo Verde USD	South	2,900	76-80%	74%	1988 (1) 1990 (2)	3
Raisin City Elementary	Central	293	86-90%	95%	1992	1
Antelope Valley Schools Transportation Agency (JPA)	Los Angeles	N/A*	91-95%	71.5%	1990 (3) 1992 (3)	6
Lake Elsinore USD	South	20,600	91-95%	66%	1990 (6)	6
Elk Grove USD	North	59,800	91-95%	53.9%	1990 (3)	3
West Park Elementary	North	237	96-100%	91%	1996	1
<b>TOTALS</b>						<b>25</b>



# GFO-17-607 Ranking Results

## Analysis of All Buses Eligible for Electric Vehicle Replacement

Regions	Number of Applying Local Education Agencies	Number of Buses 1999 and Older	Total Number of Buses Eligible for Replacement	Percentage of Eligible Buses 1999 and Older
Northern	53	249	444	56%
Central	99	420	602	70%
LA County	12	53	86	62%
Southern	35	256	417	61%
<b>TOTALS</b>	199	<b>978</b>	1,549	63%



# GFO-17-607 Ranking Results

## Ranking: Analysis of Top 75 Buses in each Region

Regions	Number of Applying Local Education Agencies	Age Range of Buses	Total Score Range	Bus Type A Requests	Bus Type C Requests	Bus Type D Requests	TBD Bus Type Requests	TOTAL
Northern	24	1983 - 1997	81.9 to 98	20	14	41		75
Central	32	1978 - 1992	87.7 to 99.2	5	5	61	4	75
LA County	12	1984 - 2004	59.2 to 95	24	17	34		75
Southern	15	1985 - 1997	82.5 to 95.4	2	11	62		75
<b>TOTALS</b>	<b>83</b>			<b>51</b>	<b>47</b>	<b>198</b>	<b>4</b>	<b>300</b>





# School Bus Replacement Update Phase 2

**Phase 2:** Solicit manufacturers to design, construct, and deliver the replacement electric school buses. The purpose of this solicitation is to establish a bulk purchase price for the school districts to utilize.

- . Released December 2018
- . Closed March 29, 2019
- . To be awarded May 2019
- . Approval at July 2019 Business Meeting



# Electric School Bus Benefits



1. Improves Children's Health
2. Lowered Emissions
3. Quieter Smoother Ride
4. Lower Maintenance
5. Lower Fuel Cost
6. Potential Vehicle to Grid



# Vehicle-to-Grid

- GFO-18-604 required vehicle-to-grid on all funded school buses.
- Must have ability to charge with AC level 2 SAE J-1772.
- Discharge via use of type 1 combined charging system (CCS).





# Infrastructure Update

Provide EV and CNG fueling infrastructure to support awarded buses (ARFVTP Funds).

- Infrastructure workshop held in November 2019
  - Presentation and infrastructure checklist can be found here:

<https://www.energy.ca.gov/transportation/schoolbus/documents/index.html>

- CNG infrastructure awarded November 2018
- EV infrastructure to be awarded May 2019
- Coordinating with utilities to leverage funds
  - PG&E [Fleet Ready Program](#)
  - SG&E MD/HD EV Infrastructure Program
  - SCE [Charge Ready Program](#)



# Workforce Training & Development Update



Provide workforce training and development opportunities and resources to support electric school bus maintenance, charging, and operations (ARFVTP Funds).

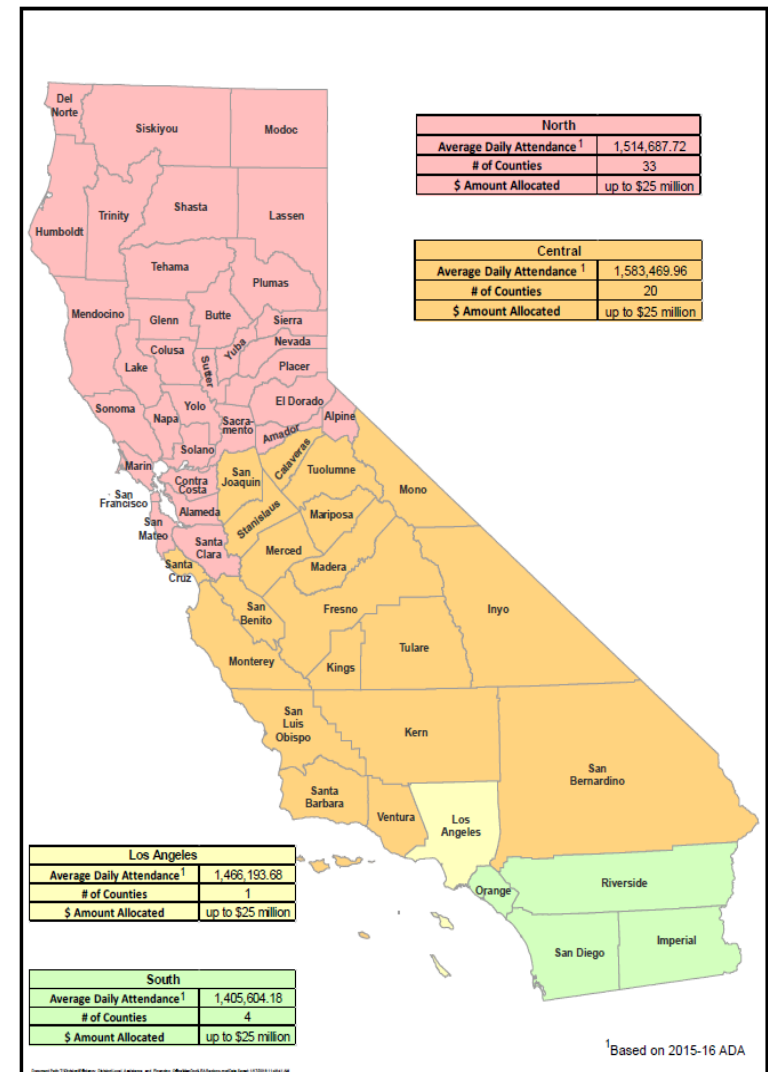
- To be awarded June 2019
- Amount of award \$1 million



# SB 110 Funding

## School Bus Funds

- \$75 million (SB 110 Funds) for EV school buses.
- ✓ Funding distributed among 4 regions.
- ✓ Each region will receive \$18.75 million.





# ARFVTP Funding

## Electric Infrastructure

- \$13 million for EV infrastructure.
  - \$60k per awarded school bus.



## CNG School Bus Component

- \$4.0 million for CNG school buses.
  - \$165k per school bus.
- \$2.1 million for CNG infrastructure.
  - Up to \$500k per awardee.



## Workforce Training & Development

- TBD for workforce training & development for awardees who choose electric buses.



# Key Milestones

Activity	Date
Execute CNG School Bus and Infrastructure Agreements with School Districts	Q2 2019
Execute Bulk Purchase Price Agreements with Bus Manufacturer(s)	Q3 2019
Execute EV School Buses and Infrastructure Agreements with School Districts	Q3 2019
Begin Installing EV Charging Infrastructure	Q3 2019
Begin Delivering EV School Buses	Q4 2019





# Stay Connected

School Bus Website/List Server:

- <http://www.energy.ca.gov/transportation/schoolbus/index.html>
- Follow instructions on bottom left corner

Contact:

- [Schoolbusprogram@energy.ca.gov](mailto:Schoolbusprogram@energy.ca.gov)

The screenshot shows the California Energy Commission website page for the School Bus Replacement Program. The page features a header with the CA.GOV logo and navigation links. Below the header is a banner image with the word "ELECTR" and a close-up of a vehicle's charging port. The main content area is titled "The School Bus Replacement Program" and includes text about Senate Bill 110, the program's goals, and funding. A photograph of a yellow school bus is also present. At the bottom, there is a "Subscribe" form with fields for first name, last name, and email address, and a "Contact" section with contact information for Jennifer Masterson. There are also links for "Proceeding Information" and "Workshops, Notices, and Documents".