Increasing EV Adoption in Public Fleets Serving Disadvantaged Communities

Electric Vehicle Suitability Assessment Results California's Public Fleet Pilot Project

In 2015, the California Air Resources Board initiated the Public Fleet Pilot Project, offering increased electric vehicle (EV) incentives for public agencies in disadvantaged communities through the Clean Vehicle Rebate Project (CVRP).

As CVRP administrator, the Center for Sustainable Energy (CSE) partnered with FleetCarma to evaluate the effectiveness of EV suitability assessments in assisting government fleets to acquire clean vehicles. Eight California agencies were selected for a complimentary analysis, and 85 vehicles were analyzed for EV replacement suitability. Such analyses are intended to bolster confidence and inform decision-making to help integrate EVs into specific fleet needs.

EV Suitability Assessment Participants

San Joaquin County **Alameda County** City of Selma City of Visalia

City of Compton

Assessment Process Data loggers were installed to track current vehicle usage and provide a baseline for

comparison with potential EV replacement models. The second-by-second data was then used to "drive" virtual EV simulation models. The results show the business case for EVs under individualized fleet conditions.





Log baseline vehicle operation to determine how vehicles are currently used.

into FleetCarma EV models to evaluate EV suitability and operational costs.





Discover which EV technologies best match fleet vehicle duty cycles and optimize total cost of ownership.

Existing Fleet Vehicles

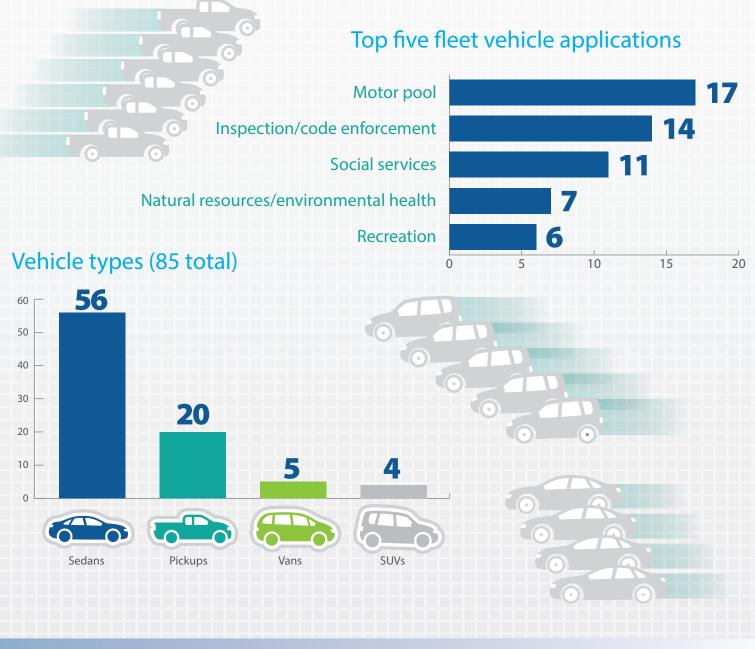
Average baseline vehicle performance

City of Colton Metropolitan **Water District** of Southern California









Replacement recommendations - 68 of 85

Modeling Results



Baseline vehicles vs. recommended replacements performance

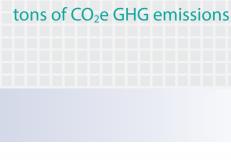
Baseline VS. vehicles

\$2,869,515	cost of ownership 21% reduction	\$2,253,867
301,353 gallons	Projected lifetime fuel usage 70% reduction	89,456 gallons
5,243 tons of CO₂e	Projected lifetime CO ₂ e emissions 57% reduction	2,259 tons of CO₂e
Total savings potential	oil	CO ₂

total cost of ownership savings







2,984

Recommended

replacements







86% of participants said they were very likely to acquire EVs within one year. "The information is extremely valuable for us to be able to make

- Doug Bond, Transportation Services Manager, Alameda County





⊘ Air Resources Board







