Increasing EV Adoption in Public Fleets
Serving Disadvantaged Communities
Electric Vehicle Suitability Assessment Results
California’s Public Fleet Pilot Project

### EV Suitability Assessment Participants

<table>
<thead>
<tr>
<th>City/Agency</th>
<th>Top 5 Fleet Vehicle Applications</th>
<th>Vehicles in Fleet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda County</td>
<td>Motor pool</td>
<td>20</td>
</tr>
<tr>
<td>City of Ceres</td>
<td>Inspection/code enforcement</td>
<td>5</td>
</tr>
<tr>
<td>San Joaquin County</td>
<td>Social services</td>
<td>4</td>
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<tr>
<td>City of Visalia</td>
<td>Natural resources/environmental health</td>
<td>7</td>
</tr>
<tr>
<td>City of Colton</td>
<td>Recreation</td>
<td>6</td>
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<tr>
<td>Metropolitan Water District of Southern California</td>
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<td>56</td>
</tr>
<tr>
<td>City of Compton</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>City of Selma</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

### Existing Fleet Vehicles

- **Fuel economy:** 23 mpg
- **Engine-on time spent idling:** 27%
- **Daily driving distance:** 23 miles

### Top five fleet vehicle applications

- Motor pool
- Inspection/code enforcement
- Social services
- Natural resources/environmental health
- Recreation

### Modeling Results

- **27 PHEVs Recommended**
- **41 BEVs Recommended**

### Participant Feedback

- **100%** of participants were “very satisfied” with the process.
- **86%** of participants said they were more likely to acquire EVs after the assessment.
- **86%** of participants said they were very likely to acquire EVs within one year.

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The information is extremely valuable for us to be able to make informed decisions regarding the placement of new EVs in our fleet.

- Doug Bond, Transportation Services Manager, Alameda County

### EV Suitability Assessment Process

1. **Data loggers** were installed to track current vehicle usage and provide a baseline for comparison with potential EV replacement models.
2. The second-by-second data was then used to “drive” virtual EV simulation models.
3. The results show the business case for EVs under individualized fleet conditions.

### Total Savings Potential

| Total Cost of Ownership Savings | 615,650 |
| Total Fuel Savings              | 2,984   | 211,897 |
| Total CO2e Emissions            | 9,456   | 89,456 |

### Total Reductions

- **5,243 tons of CO2e**
- **301,353 gallons of gasoline**

- **25% reduction in fuel consumption**
- **57% reduction in CO2e emissions**

### Total Savings Potential

- **$2,869,515**
- **$2,253,867**

### Total Reductions

- **21% reduction in fuel costs**
- **30% reduction in fuel consumption**
- **57% reduction in CO2e emissions**