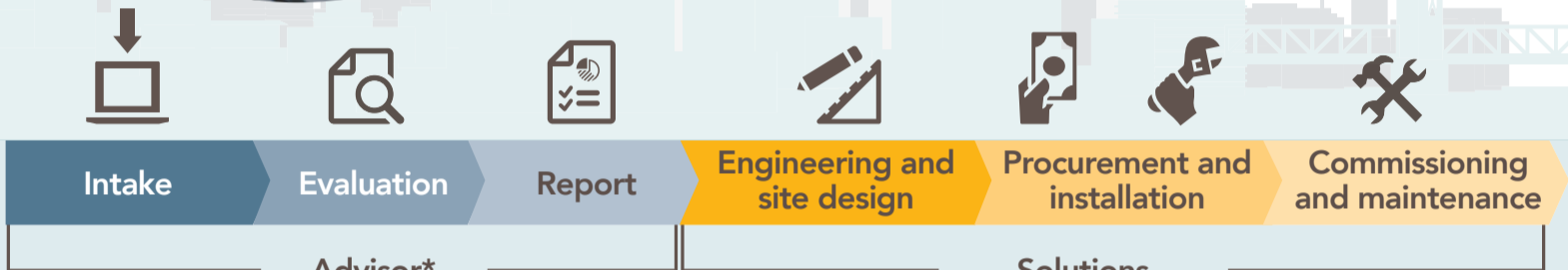


# Commercial EV Advisory & Installation



The SMUD eFuel Advisor program provides customized, comprehensive reports to customers, while SMUD eFuel Solutions offers full design and installation services for EV charging projects.



- Site and operations analysis
- Vehicle and infrastructure TCO
- Technology recommendations
- Detailed cost estimates
- Grant and incentive information

- Project design and quote\*
- Engineering and permitting
- Project management and construction
- Charger procurement
- Options for M&O, lease

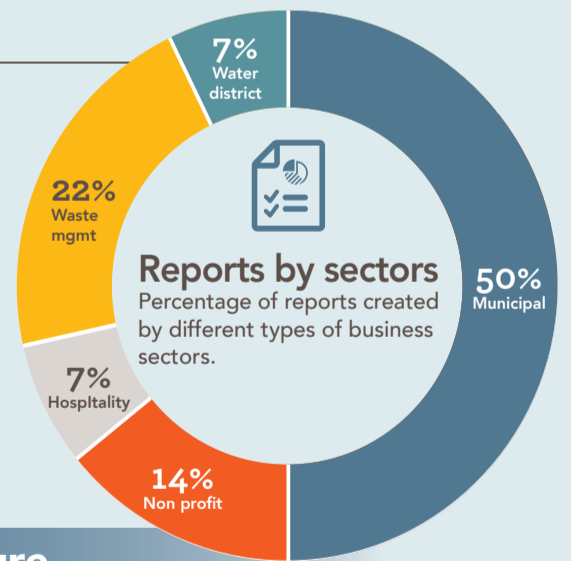
\*No cost to customers

### Advisor metrics

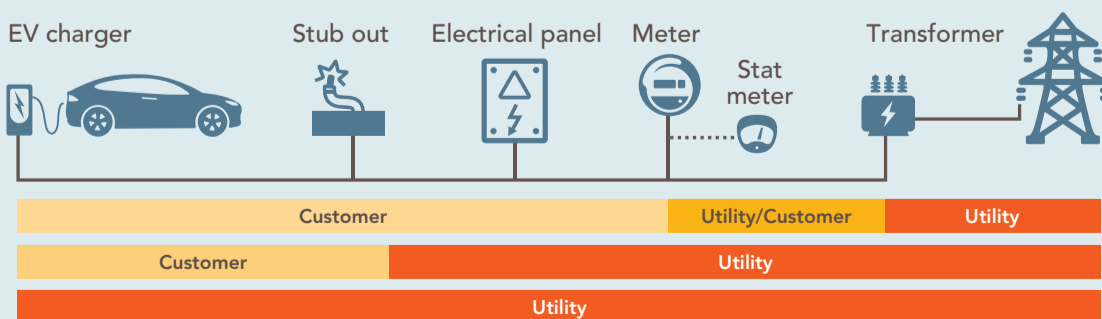
Reports 2022	5
2023	21
2024	25
Average cost per report	\$27,000

### Solutions pipeline

Projects with SMUD grants	19
Non-granted projects	5
Average number of AC or DC ports per project	12/4
Average expected project cost	\$300k



## Models of utility support for EV charging infrastructure



1. Standard utility approach
2. Utility make-ready program
3. SMUD eFuel Solutions

# SMUD eFuel<sup>®</sup> Services Commercial EV Advisory & Installation

Report samples

Sacramento Food Bank



SMUD eFuel Advisor Report  
Sacramento Food Bank  
10/20/2023

## 1 Executive Summary

Sacramento Food Bank is interested in converting its vehicle fleet to electric vehicles (EVs) and installing charging systems for these vehicles.

This report details recommendations for the electrification of Sacramento Food Bank's vehicle fleet and for the installation of charging infrastructure to support those vehicles at the Food Bank site located at 1951 Bell Ave. Seventeen (17) light-, medium-, and heavy-duty vehicles are located at the Food Bank site. The Food Bank fleet specifically consists of three sedans, one cargo van, ten box trucks, and three tractor trailer trucks. The Family Services Campus has additional vehicles and trailers that are not included in this report's recommendations.

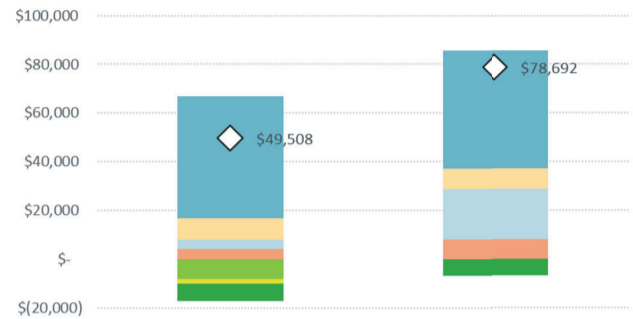
Based on current fleet operations and available EVs in the market, all fleet vehicles are feasible for replacement with EVs. The recommended replacement electric vehicles are shown in Table ES-1.

Table ES-1. Recommended EVs

Vehicle Model	MSRP	Availability	Range (miles)	Seats
	\$26,500	Immediately	260	5
<a href="https://www.chevrolet.com/electric/bolt-ev">https://www.chevrolet.com/electric/bolt-ev</a>				
	\$46,295	Immediately	126	2
<a href="https://www.ford.com/commercial-trucks/e-transit/">https://www.ford.com/commercial-trucks/e-transit/</a>				
	\$542,000 <sup>2</sup>	Immediately	130	3
<a href="https://www.internationaltrucks.com/trucks/emv-series">https://www.internationaltrucks.com/trucks/emv-series</a>				
	\$480,000 <sup>3</sup>	Immediately	275	2
<a href="https://www.volvotrucks.us/trucks/vnr-electric/">https://www.volvotrucks.us/trucks/vnr-electric/</a>				

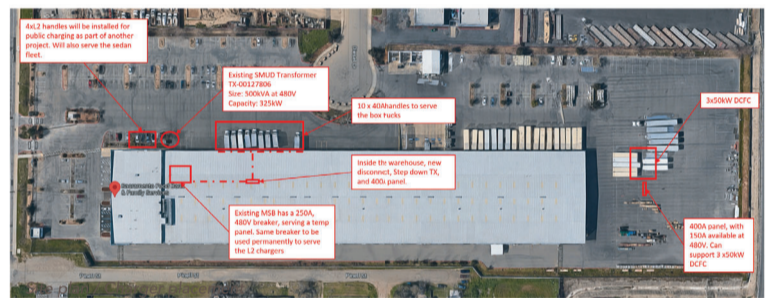
Executive summary of a typical report, showing EV recommendations

Ford E-Transit vs Ford Transit, 10-year NPV



	Ford E-Transit	Ford Transit
Vehicle Price and Taxes	\$50,020	\$48,345
Insurance	\$8,664	\$8,374
Electricity/Fuel Cost	\$3,737	\$20,744
Maintenance Cost	\$4,317	\$8,017
Residual Value	\$(7,024)	\$(6,789)
LCFS Credit Estimate	\$(1,955)	
Incentives	\$(8,250)	
<b>TOTAL</b>	<b>\$49,508</b>	<b>\$78,692</b>

Total cost of ownership estimate



## Solutions project Nugget Markets

Scope: Rip-and-replace 2x DC and 2x L2 public chargers

Project line item	Invoice amount
Chargers/Materials/Markup	\$143,495
Contractor install	\$9,576
<b>Total project cost</b>	<b>\$153,071</b>
<b>% Below/Above budget</b>	<b>-15%</b>



## Lessons learned

- Find firms with experience/background in EV/EVSE
- Prime contractor should be doing most of the work (no middlemen)
- Right size vendor for the application
- Don't be overly prescriptive with product options – allow flexibility.
- Consider design/build vs separate engineering contract
- Time and materials vendor costs can be more cost-effective than lump-sum
- Management of direct-install programs is labor intensive for utility PM



## Next steps

- Pivot to web-based TCO tool for fleet and charger recommendations
- Offer site visits for select customers
- Refine eFuel Solutions install process

