General Services Department (GSD)

Fleet Services Division

Council Update – 21-0890

GSD EV Plan

Authority to hire 3 positions (August 2022):

- One Sr. Management Analyst
- Two Equipment Specialist

EV Study

- Selection of the consultant is projected to occur in October and work on the various tasks and studies will begin thereafter.
  - Develop a long term plan for electrification and charging infrastructure for City fleet, prioritizing the four largest fleets maintains.
  - Conduct a cost analysis for operating EVs vs. Gas-powered Vehicles/Hybrid and other alternative fuel vehicles.
  - Develop criteria and metrics for future public and employee EV charger installations, including number of chargers, type, and mix (level two vs fast chargers).
  - Identify best practices to maximize shared use of EV chargers, market review and outlook for emerging technologies, and new deployment methods such as ones where the City does not own the charging equipment.
  - Develop grant proposals for fleet, public, and employee EV chargers, as well as, grant proposals for electric vehicle purchases.

Current EV Fleet

Fleet EV Purchases

- 126 EV Sedans
- 46 Plug-in Electric Hybrids
- 2 Hybrid Electric Street Sweepers
- 4 Light Duty EV Trucks (1 unit in-service)

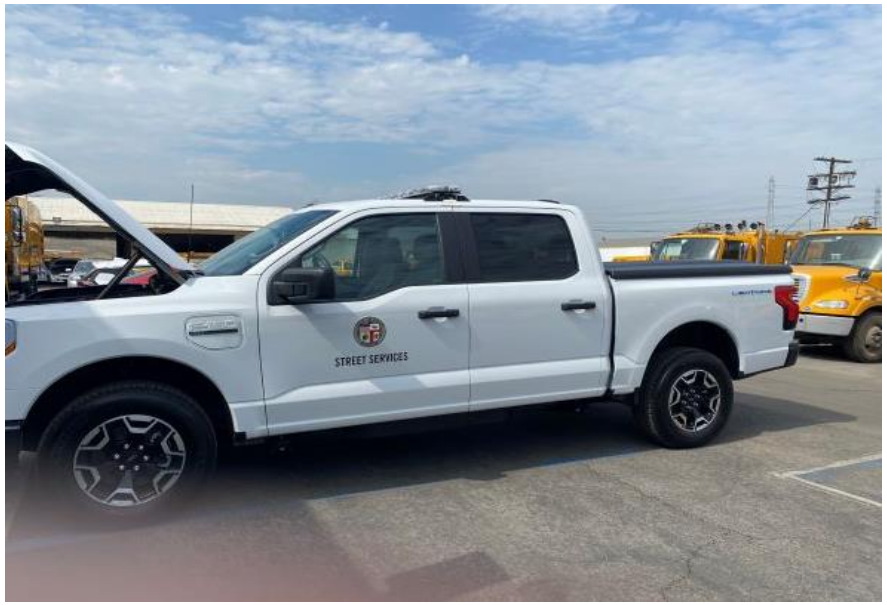

PHOTO: Ford F-150 Lightning

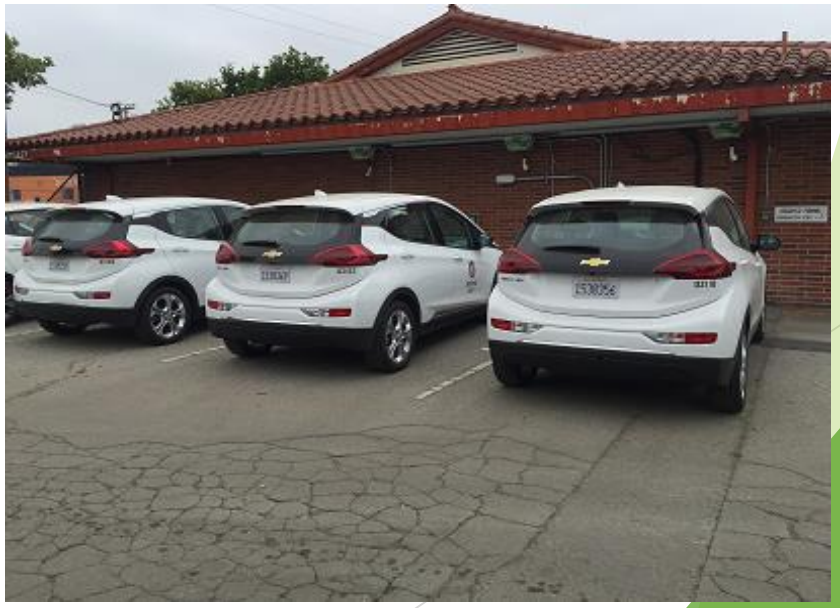

PHOTO: Chevy Bolts

EV Infrastructure for City Fleet

EV Charging Infrastructure Program

- Installed about 125 (125 Level-2) in 17 facilities Citywide
- Two portable solar EV chargers located at Valley Parking Enforcement

Pending Projects

- 24 Level-2 & 11 DC Fast Chargers in 7 various sites (3 Emergency Fuel sites, 1 Sanitation site, LADOT Central Parking Enforcement, Piper Tech, City Hall East)

Future EV Charger Projects in Progress

- 50-100 EV chargers at 10-12 facilities Citywide
- Central Service Yards, Sanitation Yards, Street Service Yards

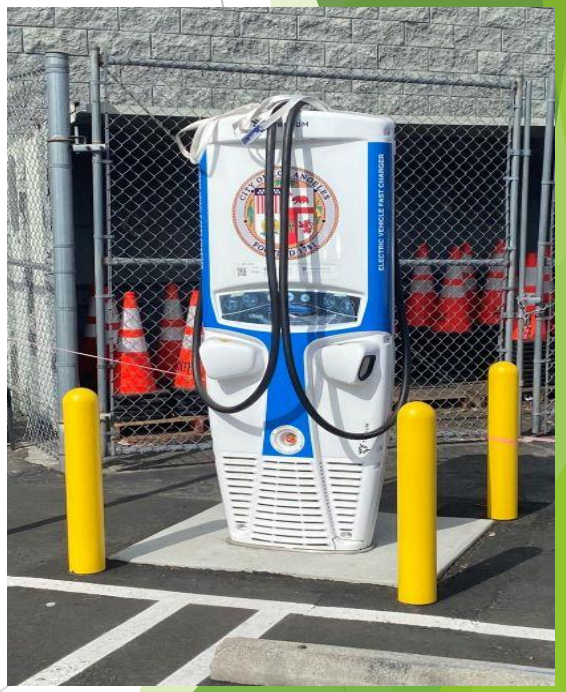

PHOTO: DC Fastchager

Meeting with Departments to Formulate Fleet Electrification and EV Infrastructure

GSD has conducted meetings with the four departments with the largest fleets that GSD maintains to discuss Fleet Electrification and EV Charging Infrastructure. In the past 20 years, GSD has worked with all departments (primarily the departments with the four largest fleets) to reduce emissions by purchasing and maintaining alternative fuel vehicles. Here is notable unit types with the most alternative fuel vehicles:

EQUIPMENT TYPE	INVENTORY	ALT FUEL	% FLEET ALT FUEL
AUTOMOBILE (SEDANS ONLY)	1153	1130	98%
REFUSE COLLECTION VEHICLE	806	664	82%
STREET SWEEPERS	164	164	100%
TOTAL	**2125**	**1958**	**92.1%**

Challenges of Fleet Electrification and EV Charging Infrastructure

GSD identified the following challenges to purchasing zero-emission vehicles:

- **Operational Needs** - Zero-emission equipment on the market does not meet the operational needs of the end user such as load capacity and range for medium and heavy duty vehicles. Additionally, availability is limited and the required delivery lead time is slow for zero-emission vehicles.
- **Funding** – There is a lack of funding to replace equipment. In FY 2022-23, GSD requested $50 million to replace equipment but only received $8 million. Currently, the equipment is about 53% past its useful life.
- **Higher Price Point** - A fully electric Chevy Bolt costs over 35% more than a Hybrid Toyota Prius. A fully electric Street Sweeper is double the cost of a Compressed Natural Gas powered.
- **Infrastructure** – Many City facilities lack power to install EV chargers to support EV replacements. The power grids at these City facilities will need to be updated. On top of these delays, the length of time for design and engineering work for installing chargers is a concern.

End of Report