


**CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE**

DATE: May 21, 2020

TO: Municipal Facilities Committee

FROM:  Sandra M. Russell, Police Administrator
Commanding Officer, Facilities Management Division
Los Angeles Police Department

SUBJECT: PROGRESS REPORT ON THE INSTALLATION OF ELECTRIC VEHICLE CHARGERS AT LAPD FACILITIES

Recommendation

That the Municipal Facilities Committee note and file this report.

BACKGROUND.

The Los Angeles Police Department (LAPD) made an initial installation of 104 Electric Vehicle (EV) Chargers at the Motor Transport Facility located at 260 South Main Street in May of 2016, to support the initial lease of 100 fully electric administrative support vehicles which were leased as part of a planned multi-year electrification of the Department’s non-emergency response fleet. Due to a lack of chargers in other locations in the City, the LAPD embarked on an aggressive campaign to install chargers at all Area stations and other core facilities to increase the range and functionality of the 200 EV.

BUDGET EXPENDITURES AND REQUESTS

Funding Provided FY 15/16	\$1.47 mil
Funding Provided FY 16/17	\$1.62 mil
Funding Provided FY 17/18	\$2.65 mil
Funding Provided FY 18/19	\$2 mil
Funding Provided FY 19/20	\$2 mil
Funding Request FY 20/21	\$2 mil
Total	\$11.74 mil
COSTS:	
Main Street Chargers	\$1.47 mil
Phase II	\$1.62 mil
Phase III – B Sites	\$1.85 mil
Phase III – A Sites	\$3.65mil
Phase IV – Proposed Cost	\$3.15mil
Total	\$11.74 mil

SCHEDULE OF INSTALLATION

Location	#DCFC Fleet	#L2 Fleet	Date of install	#L2 CEC Public	Date of install
PHASE 1					
Main Street Parking	4*	100	6/25/2016		
PHASE 2					
Central PD	1	3	7/15/2017		
77th PD	1	3	7/21/2017		
North Hollywood PD	1	3	8/28/2017	2	10/18/2017
Harbor PD	1	3	8/24/2017	3	10/18/2017
Pacific PD	1	3	8/10/2017		
ARTC	1	3	8/21/2017		
EVOC	1	3	8/28/2017		
West Valley PD	1	3	8/28/2017		
Topanga PD	1	3	9/14/2017	2	10/18/2017
PHASE 3					
B					
Newton	1	3	8/10/2018		
Hollenbeck	1	3	8/10/2018	2	10/18/2017
Olympic	1	3	8/10/2018	2	10/18/2017
Rampart	1	3	8/10/2018		
Mission	1	3	8/10/2018	2	10/18/2017
Valley Traffic	1	3	1/1/2019		
Foothill	1	3	1/1/2019		
Van Nuys	1	3	2/28/2019		
Devonshire**	1	3	6/30/19		
Northeast◇		7	4/1/2018		
A					
Wilshire‡	1	3	7/2020		
Southwest‡	1	3	6/2020		
Hollywood‡	1	3	5/2020		
Elysian Park∞	1	3	12/2020		
West LA∞	1	3	12/2020		
Southeast∞	1	3	12/2020		
TOTAL	28	179		13	

*1 DCFC 50/3 DCFC 25

‡These sites require DWP Equipment upgrades and have completed or are in the design process

∞These sites require additional power poles and DWP Equipment upgrades and have completed conceptual design

◇ Seven L2 chargers were installed when the station was built, additional chargers will be added in the Parking Structure.

L2 CEC Public - California Energy Commission Grant Funded Publicly Accessible EV Chargers. All available DWP grant funding were utilized and expended.

CURRENT STATUS AND CHALLENGES.

The LAPD has made substantial progress installing EV Chargers, working with the Bureau of Engineering, the Department of Water and Power and the City's current vendor, Green Lots. Of the 26 locations scheduled for the initial deployment of EV Chargers, only four are currently waiting for installation activities to commence. These facilities pose the most significant challenges, with four sites needing increased size power transformers installed and two requiring additional power lines and transformers installed.

The design work necessary for the transformer upgrades and power lines is being completed by DWP engineers who are actively participating in the projects. The design work for the three transformer upgrades is complete and equipment has been ordered and construction plans are being submitted for Building and Safety review. The three additional facilities require substantially more detailed design as these projects require the placement of power poles and pulling additional power to the site. However upon further investigation, one of these sites was found to be cost prohibitive to proceed with power line extension. LAPD will proceed with a transformer installation which will limit future expansion. The DWP cost estimates for the installation of the additional power were estimated to be between \$500,000 to \$610,000 for each site, however, as DWP progress with site assessments, the costs could potentially range from \$450,000 to \$1.7 million. The initial estimates were provided by DWP were based on standard distance calculations and did not account for topographic constraints to meet the infrastructure requirements. The increase in costs requires utilizing funds from Phase 4 in order to complete Phase 3.

Although the City enters uncharted territory with the COVID-19, work continues with extra precautions being taken including social distancing. In addition, the vendor has been provided the latest Building and Safety memo dated March 31, 2020, that outlines safety guidelines for construction sites. At this time, some minor delays have been experienced.

FUTURE GROWTH

With the completion of the on-going installation projects, the LAPD will have met its basic need to be able to deploy Electric Vehicles and continue the electrification of the non-emergency response fleet. With the direction from the Mayor's Office to continue to expand the use of fully electric vehicles and the constantly growing capacity of batteries, the LAPD will need to continue the development and growth of the power infrastructure and capacity of EV Chargers being installed. Currently, the DC Fast Chargers are rated at 50kw. The next phase of growth for LAPD facilities, once funding is identified, will be to upgrade power to the facilities and evaluate back-up power source capabilities. This will be necessary to efficiently charge light and heavy-duty trucks, transport vehicles, and eventually fully electric emergency response vehicles. If funding is not identified, only minor upgrades of a few lower powered chargers will be feasible. This will delay the Department's progress towards the zero emission vehicles goals, due to limited availability of high-powered chargers to meet both City and vehicle requirements.

Where possible, the Department has installed infrastructure that will support the additional and larger capacity chargers knowing that the demand and technology would change rapidly. The Department will continue to request funding through the budget process to increase the capacity and build an infrastructure that will allow the Department to achieve the increasing goals set by the Mayor's Office in the Green New Deal for zero emission vehicles.