

Los Angeles Department of Transportation – Fleet Electrification



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LADOT Battery Electric Bus Experience to Date

- LADOT purchased four battery electric buses through a grant provided by the California Energy Commission (CEC)
 - The goal of this project was, broadly, to demonstrate battery electric bus technology, evaluate their use on LADOT routes, and share the knowledge with the industry
 - Buses were tested on two urban routes from March 2017 through April 2019
 - To charge the buses, LADOT installed four vehicle chargers at the depot on East Washington Boulevard in downtown Los Angeles



LADOT – Electric Bus Expansion

- LADOT wins \$36.1 million grant from the California Transit and Intercity Rail Capital Program (TIRCP)
 - LADOT will undertake a highly transformative DASH system enhancement project to increase ridership and reduce headways by 100%
 - Grant will be used for funding of 112 zero emission battery electric buses, facility upgrades, and charging infrastructure
 - The project will nearly double the DASH program and will be deployed along modified routes that will make connections to regional bus and regional rail service



LADOT – New Facility

- LADOT has built a new operating and maintenance facility that will have the capability to charge 77 electric buses, 3 acres.
- LEED Platinum
- 5 maintenance bays
- Parking structure 100 spaces
- Solar Panels: 1,364 (280W)
- Annual 600,000 Kw-Hr/year



LADOT – Facility Electrification Plans

- CALSTART is currently assisting LADOT with a full bus facility electrification plan for three to possibly five sites under FTA funding
 - The work will encompass all LADOT bus depot yards to prepare LADOT to operate a 100% electric fleet
 - Select Deliverables:
 - Analysis of overall impact of an electric fleet based on duty cycles and current/planned operating schedules
 - Phasing plan for vehicles and infrastructure
 - Applications for infrastructure upgrades with LADWP – Electric Service Planning Forms; Conceptual Single Line Diagrams (electrical site drawings), and Load Schedules
 - Analysis of distributed energy resources
 - Analysis and recommendation of charging equipment and charging station management software



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