**NOVEMBER 3, 2022**LARPD Facilities Committee

# EBCE EV Fast Charging Network Development at LARPD-Managed Sites





### **Presentation Overview**

- Who is East Bay Community Energy (EBCE)
- 2. EBCE's Public Electric Vehicle Fast Charging Network Objectives
- 3. Context for EBCE's Prioritization of Public Fast Charging Network
- 4. Site Design and Site Selection Process
- 5. Master Site License Agreement Key Terms
- 6. Next Steps



## Who is East Bay Community Energy

- Non-profit public agency; Joint Powers Authority structure
- Default public power provider in Alameda County + City of Tracy
  - Residential, commercial/industrial, and municipal accounts
- City of Livermore elected officials sit on EBCE's Board of Directors
- Utility scale power supply + local investment in projects/programs that help JPA member cities achieve climate goals, faster
  - Ex. EBCE's Equitable Transportation Electrification program





# **EBCE's Equitable EV Fast Charging Network**

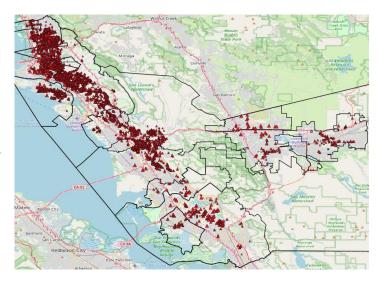
Action: EBCE is investing in building a public Electric Vehicle (EV) fast charging network.

- Goal: 40-50 hubs by 2030
- All hubs located in multi-family housing "hotspots"
- Areas with a dense concentration of multi-family properties to support residents and visitors alike

Rationale: 47% of Alameda County residents are renters who have no access to at-home charging, <u>a critical barrier to EV adoption</u>.

- Installation and cost responsibilities (landlord/tenant)
- Old buildings need major electrical upgrades
- Deeded/assigned parking spaces

**Outcome**: Make EV adoption more feasible for all residents by providing convenient, affordable, reliable fast charging near where renters live.



Multi-family Housing Properties in Alameda County



## California's EV Goals

#### By 2025:

- 1.5 million zero-emission vehicles (ZEVs) on the road
- 250,000 public & shared EV chargers

#### By 2030:

- 7.5 million ZEVs on the road
- 1.2 million public & shared EV chargers

On August 25, 2022, the California Air Resources Board (CARB) approved new rule requiring 100% of new car sales in California to be ZEVs by 2035.



## **Charging Needs in Livermore**

#### As of December 2020, Livermore had:

- Nearly 2,000 EV registrations
- 35 fast charging ports at 5 locations

#### 2025 projection for Livermore:

- Over 5,500 EV registrations (gap of ~3,500 EVs)
- Over 100 fast charging ports (gap of ~70 ports)



## **EBCE EV Fast Charging**: Site Design

#### Goal: Close the gap in equitable access to EV fast charging.

- By 2030 develop 40-50 fast charging hubs across EBCE service area
- Standard hub design: Minimum of 10 dual-port direct current fast chargers (DCFC) capable of charging up to 20 vehicles simultaneously (i.e., gas station model)
  - Requires use of ~22 existing parking spaces
    - Including dedicated ADA compliant spaces + electrical equipment placement
    - All spaces EV Only; available 24/7/365
    - Design flexibility possible if site has significant limitations (ex. 10 single port DCFC; higher capacity; 12-13 parking spaces)
  - DCFC: 30-45 minute dwell time (150+ kW chargers)



Project Design Example



# **EBCE EV Fast Charging**: Site Selection

To deliver cost-effective public network, EBCE is collaborating with JPA member cities to leverage city-owned real estate parking assets as site hosts.

Innovative Public-Public Partnership model to deliver lower EV fast charging projects costs → lower charging costs for drivers.

EBCE is identifying JPA member municipal lots/garages that meet the following priority attributes:

- 1. In a multi-family housing hotspot
- 2. Walkable driver amenities (e.g., café, grocery, retail, parks, etc.)
- 3. Fills gaps in existing fast charging locations (i.e., "charging deserts")
  - Investing in areas where private sector has not to date





## **Partnering with JPA Member Cities**

In collaboration with City of Livermore staff, EBCE has identified potential sites that meet these criteria.

- Phase I: EBCE/City have signed a Site License Agreement to install and operate 17 DCFCs at the L Street development
- Phase II: Sign a successive Master Site License Agreement (MSLA) granting EBCE the ability to assess and develop other City-owned sites.
  - MSLA would include City-owned sites that LARPD leases:
    - Robert Livermore Community Center
    - Rincon Library
    - Parks under development to be owned by city



## **EBCE Master Site License Agreement: Key Terms**

- 1. Term of EBCE MSLA: 15 years
- 2. No cost to LARPD or the City of Livermore
  - The City and LARPD will provide the real estate (parking spaces, area for electrical infrastructure) and access to parking spaces
  - EBCE will pay for construction, operation, and maintenance of the EV fast chargers
  - EBCE will pay for the electricity used by the EV fast chargers
    - New dedicated meter; all EV fast chargers will be supplied with EBCE's Renewable 100 electricity product
    - EBCE will also set rates for customer charging
- 3. EBCE may place signage related to the public EV fast charging hubs
- 4. After the City, LARPD, and EBCE agree on project engineering design details for each site, a "Notice to Proceed" will be issued by the City Manager's Office and the LARPD General Manager enabling EBCE to move forward with construction.



## **Next Steps**

• Staff will come back to the LARPD Board in December seeking approval to execute MSLA with EBCE and City of Livermore

