

DOCKETED

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Los Angeles County Clean Transportation Program



Agenda Items

- Overview of County of Los Angeles Clean Transportation Program
- Installing Charging Stations Equitably
- Summary of User Fee Rate Analysis
- Developing the future workforce to install and maintain EVSE



Clean Transportation Program



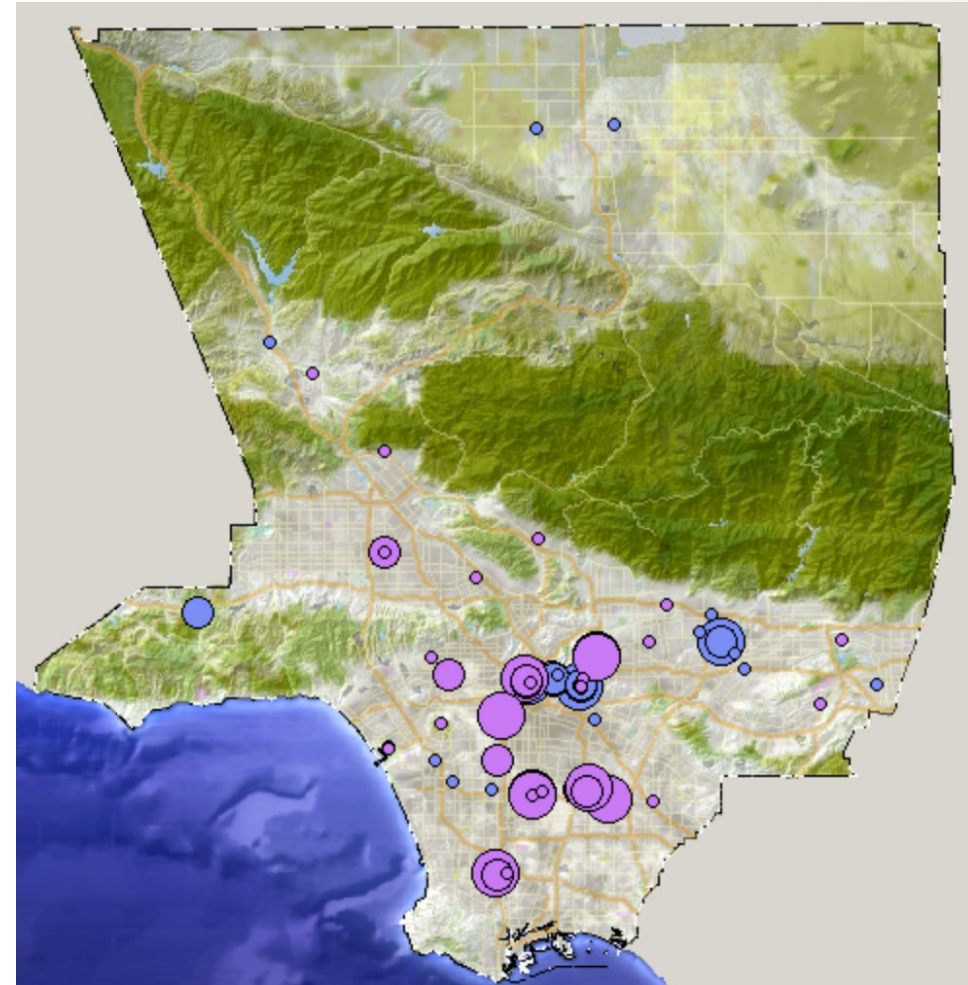
> 850 Level 2 and DCFC installed



15 Departments,
79 parking lots



38 lots accessible
to the public

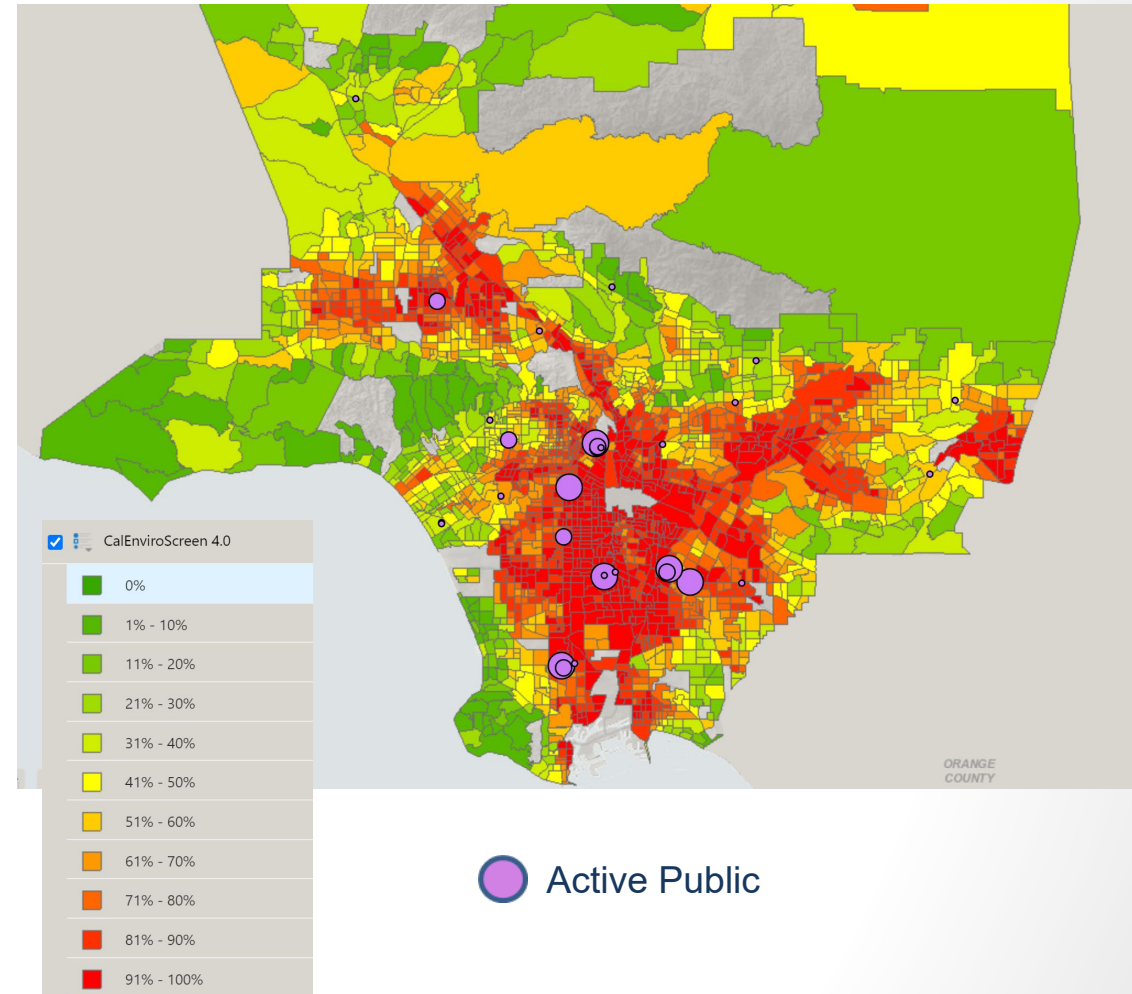


● Active Public

● Active Employee & Fleet

Serving LA County Residents

- Majority of publicly accessible charging stations are in CalEnviroScreen Disadvantaged Communities
- LAC has submitted 65 projects to SCE's Charge Ready Program
 - 900+ Level 2 ports at
 - Beaches, Parks, Libraries
 - 16 projects at LACDA housing



User Fee Analysis

Purpose

Evaluate the \$0.30/kWh and \$0.45/kWh (4-9pm) user fee to assess the impacts on utilization and cost recovery for long term operations

Survey Conducted

Collect information on what other municipalities are charging and how rates are set

Calculator Developed

Tool created for the County and other entities to evaluate cost neutral operations of EVSE networks

Factors in Model

- Utilization based on rates
- Electricity Costs
- Networking Cost
- Maintenance Costs
- Total Cost
- Projected Revenue
- Operating Deficit - Profit
- Scaling Factors

User Fee Report



Calculator



User Fee Analysis Findings

Add a Super Off- Peak Rate

Super-Off-Peak: \$0.25 (8am-4pm)

Off-Peak: \$0.30 (9pm-8am)

On-Peak: \$0.45 (4pm-9pm)

Key Outcomes

- Lower Super Off-Peak Rate will incentivize utilization
 - Reduced rate for constituents
- Encourages charging during Super-Off-Peak times of use.
 - Rate is comparable to residential rates
 - Provides grid resiliency
- Rates recover the cost of Operation & Maintenance YOY in Year 5 and cumulatively in Year 7

Labor and Workforce Considerations

- Current state: not enough workers with experience to meet EVSE goals and maintain EVSE
 - Too few qualified project managers with EVSE experience
 - Not enough contractors, design teams, and electricians with EVSE experience
 - EVITP is for state certified electricians, but there is not training for non-state certified electricians, project managers, and decision-makers
 - Information on code and legislative requirements is not universally known or understood by managers and financial decision makers who need to engage in processes early-on



Workforce Training

Partnered with California Conservation Corps and Cerritos Community College to develop workforce training with LADWP grant

- Classroom instruction
 - Electrical safety
 - EVSE installation basics
- 90 hours on-site with ISD's EVITP certified electricians
- Installed 14 Level 2 EVSE



Solution: Grant to Test Workforce Pilot

Received \$300,000 grant from the LADWP

- 43 new chargers at Olive View Medical Center
- \$15,000
 - Cerritos College to develop training and
 - CCC to purchase training materials
- 1 week training at Cerritos College and CCC training center
 - Electrical safety
 - EVSE basics
 - Concrete pads
 - Bending pipe, cutting conduit, pulling wire



Next Steps and Opportunities

- CCC is training a new cohort of 13 Corps members at the end of July
- Corps members that completed OVMC project are interested in doing more projects
- Crew sizes are typically 10, with one crew supervisor
- ISD electrician and Project Manager recommend 6 corps members per project
- ISD wants to expand to work with LA and Long Beach Corps, but needs funding
- *Any interest in having trained CCC corps members assist with future projects?*



On-Site Experience with EVITP-Certified Electricians

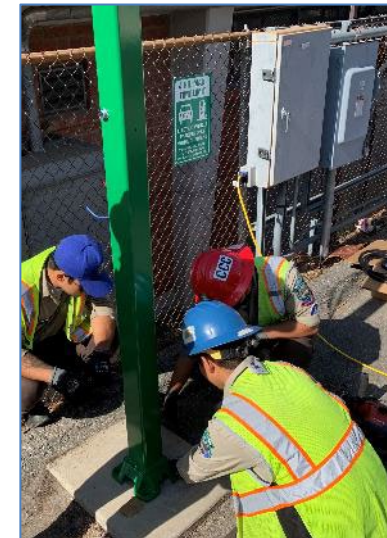


Best Practice Case Study

ISD: "Trusted Partner and Provider of Choice"

Over 90 hours, the CCC crew assisted with:

- Removing Level 1 chargers
- Reading construction drawings
- Trenching
- Calculations and sizing wire
- Concrete calculations
- Framing concrete
- Measuring, cutting, securing rebar
- Running conduit overhead and underground
- Terminating wires
- Anchoring equipment
- Mounting electrical disconnects, panels and transformers
- Installing polls and chargers



10/17/2022

LA County CEC IDEAL Workforce Pilot

LA County Regional EVSE Workforce Development Program

- \$500,000 from CEC
- Modular EVSE curriculum
 - Project Management
 - Installation
 - Maintenance
- For entry-, mid- and advanced- level workers
 - Electricians
 - Other crafts
 - Data communication
 - Project management
 - Facilities management
- Partnering with Cerritos College to expand CCC EVSE curriculum

Proposed Curriculum Topics

Module 1: EVSE Project Management

- a. State and local policies
- b. EVSE Code requirements
- c. EVSE permitting requirements
- d. Site inspection and design
- e. Communication and networking
- f. Utility company collaboration
- g. State and local Incentive programs

Module 2: EVSE Installation

- a. Introduction to Hardware
- b. Load calculation/assessment
- c. Electrical panel
- d. Wiring, conduit runs
- e. Networking/Commissioning
- f. Safety

Module 3: EVSE Maintenance

- a. Hardware/equipment repair
- b. Wireless connectivity, radio signals, mesh network
- c. Troubleshooting

LAC Regional EVSE Workforce Program Timing

2022 Develop Curriculum

- July / early August: Gather input on training needs from County, CCC, Cities, and Network providers
- August–December: Syllabus development by Jannet Malig, Director of the Advanced Transportation Technology and Energy Center at Cerritos College
- Interest in providing input, or recommending other companies?

2023 Pilot and Revise

2024 Train CC Faculty

LAC Regional EVSE Workforce Program Timing

2023 Pilot and Revise

90 people will pilot the training

- 10 County workers (Jan- Feb 2023)
- 20 CCC corps members (Mar- Apr 2023)
- 60 workers from around the County (city employees, contractors, network companies, etc.)

Course will be free for pilot participants

- Estimated 50 hours for all modules, but individuals can choose relevant modules
- TBD online or in-person instruction, some in-person labs at CCC Energy Center in Norwalk
- Certificate of completion from Cerritos College

Expectations

- Take pre- and post-survey to assess learning
- Take course evaluation to provide feedback on improvements
- Attend feedback session with Cerritos College to respond to proposed improvements

LAC Regional EVSE Workforce Program Timing

2024 Train CC Faculty

10 Faculty from 10 Community Colleges will receive training to offer curriculum

- \$800 incentive to participate
- Cart with tools and materials to support lab instruction

Community Colleges will have the flexibility to:

- Set course fees
- Fold curriculum into existing courses
- Offer as a stand-alone training

Final Curriculum will be posted on the Advanced Transportation and Logistics web portal and be available for all Community Colleges in the State to utilize

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