

Electric Vehicle Parking Strategic Plan

June 16, 2022



- Metro operates nearly 50 Park & Ride locations, several with multiple lots, totaling over 19,000 spaces. Has always been and will continue to be open charge point protocol.
- As of May 2022, Metro vendor Axxerra operates 108 Level 2 EV charging ports, of which 81 are deployed at Park and Ride (P&R) locations for public use. Contract expires August 2022
- Metro does not currently have chargers installed for employee use at its facilities.

- The Electric Vehicle (EV) market in California is gaining critical mass. At the end of 2021, over 837,000 battery (BEV) and plug-in hybrid (PHEV) electric vehicles were registered across the State.
- More than one-in-three were registered in the Los Angeles-Long Beach-Santa Ana Metropolitan Statistical Area (MSA).

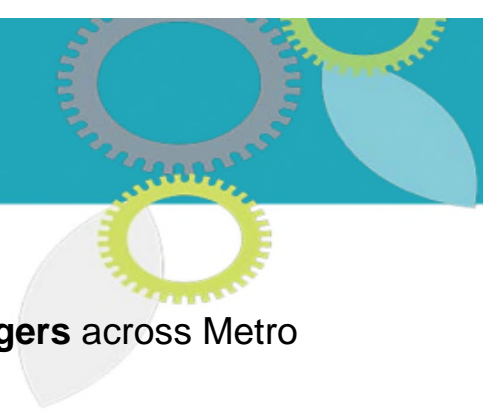
- Metro is poised to take on a broader national and transit leadership role in EV charging infrastructure once this EV strategic plan is implemented



- In 2020, Governor Newsom issued Executive Order N-79-20, requiring California to phase out the sale of non-zero-emission vehicles by 2035
- The 2019 Metro Climate Action and Adaptation Plan (CAAP) commits to a 79% reduction in greenhouse gas (GHG) emissions by 2030 - strategies include *installing EV charging infrastructure at Metro facilities for employee and commuter use.*
- The 2023-2028 EVPSP provides a strategic blueprint for sustainable, cost-effective, and efficient investments in electric vehicle charging infrastructure at Metro facilities for use by employees, transit riders and the public.



Metro[®] EV Parking Strategic Plan Summary



The EV Parking Strategy is a **five-year plan to install and operate a network of 2,000 chargers** across Metro facilities, including:

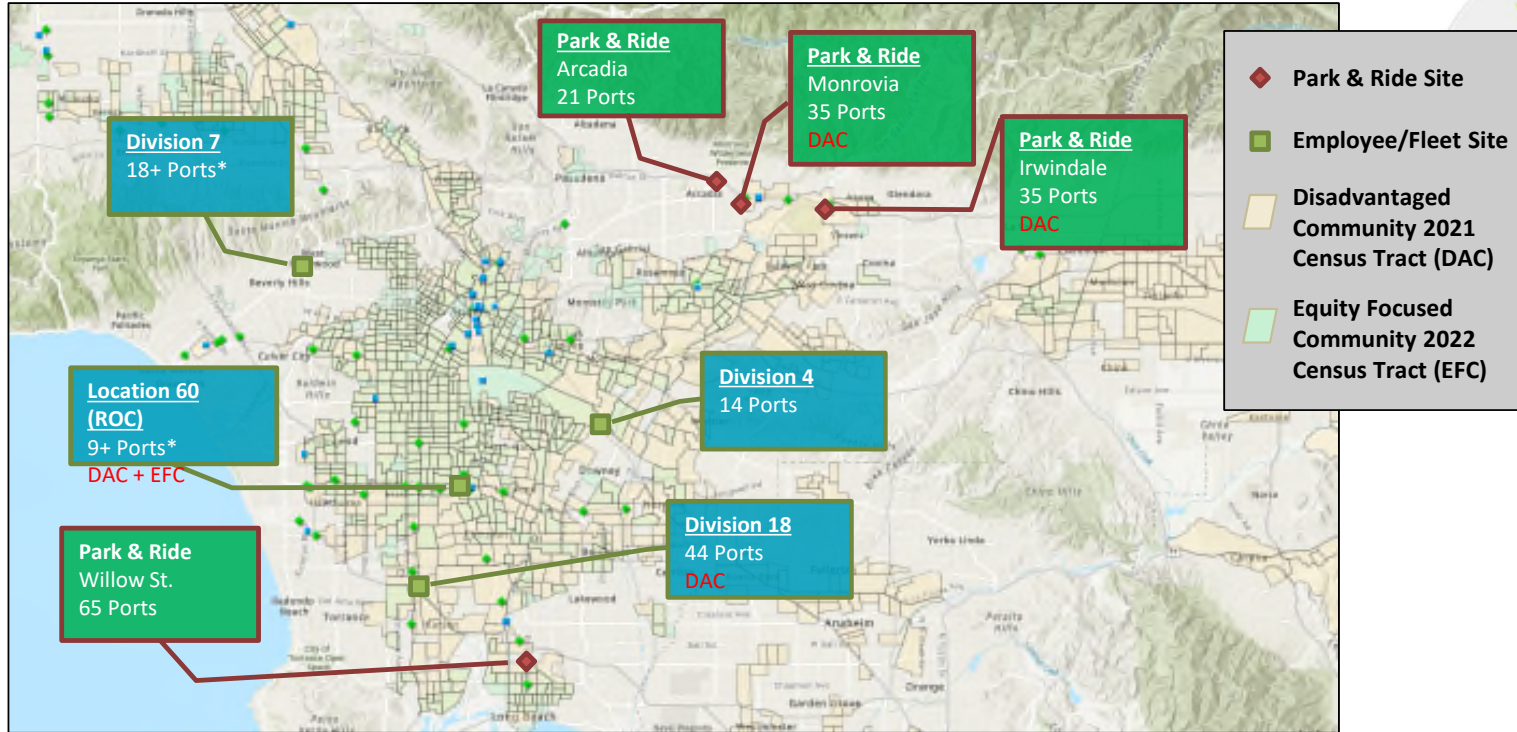
- Installing an average of 4 chargers at each Metro workplace to support EV ownership among our employees
- Installing chargers for Metro customers at Park & Ride facilities
 - 5% (950) of the total Park and Ride spaces by 2028 and 10% (1900) by 2030.
 - 50% of EV chargers within DACs and 30% within EFCs
- Ensure Capital Project parking plans include **make-ready infrastructure for 20%** of all planned spaces in compliance with CalGreen Tier 2 standards and **chargers installed at 10% of spaces**
- Leverage our real estate portfolio, programs, and partnerships to develop publicly available fast-charging services in the LA region.



The EV Parking Strategic Plan prioritizes Metro facilities for EV charging deployment based on a variety of factors:

- **Community Impact:** Locations in disadvantaged communities (DACs) and Equity Focused Communities (EFCs).
- **Utility Incentives:** Sites with highest available incentives to offset costs. Incentives may vary over time.
- **Total Parking Spaces:** Sites with more spaces to accommodate chargers can increase cost-effectiveness and locational flexibility to identify lowest cost site options.
- **Location:** End-of-line locations with more customers who frequently leave vehicles for 6+ hours, 4-5 days a week and connect with modes of transportation including bike and Metro Micro.
- **Structure Type:** Garages often have lower installation costs than surface lots, increasing likelihood of utility program selection.
- **Traffic Analysis Zones (TAZs):** Use of Metro's residential and commercial Traffic Analysis Zones scores for each station based on likely residential EV ownership and routes used to commute to/from work.
- **Available Real Estate:** Allows for the potential to install solar PV or battery storage in the future to help offset additional energy required to power EV charging or provide resiliency benefits.

Proposed Early Priority Sites - SCE Charge Ready



**Site may increase port count based on SCE review of site costs during preliminary design*

Notes:

- Metro has 8 Charge Ready Site applications (~241 chargers) under consideration by SCE
- Applications will continue to be submitted for Charge Ready to reach 300 spaces

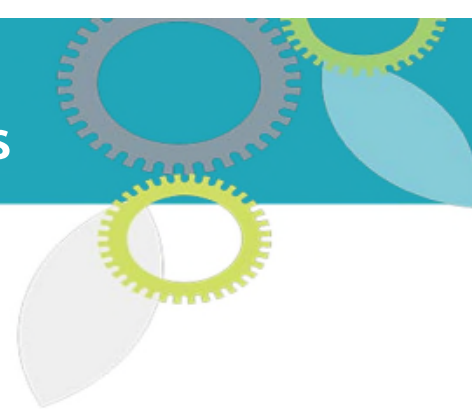
EV Charger Installation and Operation Costs – Short Term

Near-Term Operations Budget	Cost/Month	24-Month Extension Cost	
> Monthly Network Operations	\$7,000	\$168,000	
> Field Maintenance & Repairs	\$3,417	\$82,000	
Near-Term Operations Total		\$250,000	
FY23 Charge Ready Installation Budget	Unit Cost	Units ²⁴	Total Cost
> Charging Equipment (per port)	\$2,771	246	\$681,666
> Installation, Commissioning, and Project Management (per port)	\$188	246	\$46,248
Charge Ready Installation Total			\$727,914

EV Charger Installation and Operation Costs – Long- Term

Estimated Cost / Revenue Source	\$ (M)	Estimated Charging Units
Capital Estimate		
> Employee	\$4.0	125
> P&R	\$44.1	1725
EVPSF Capital Total	\$48.1	
Potential Utility Incentives	-\$13.4	
Operations Estimate		
	\$ (M)	Estimated Charging Units
> Employee	\$2.1	125
> P&R	\$14.8	1725
> Program Management	\$1.5	
EVPSF Operations Total	\$18.4	
Potential LCFS Revenues	-\$4.8	
Potential Charging Revenues	-\$6.9	

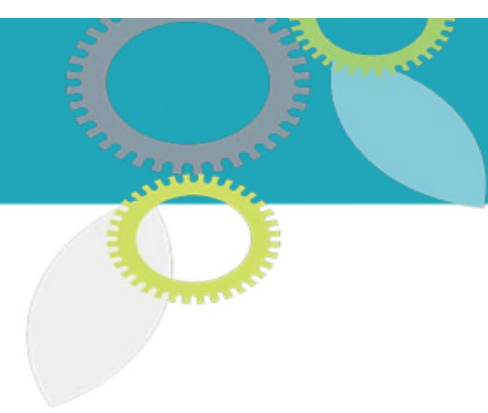
	SCE Charge Ready	LADWP EV Charging Station Rebate Program
Total Funding	\$437 million	\$12 million (per annual funding allocation)
Program Design	Utility-designed, -constructed, and -owned make-ready infrastructure, plus rebates for the purchase of customer-owned chargers	Rebate for the purchase and installation of charging station(s)
Incentive Amount	<ul style="list-style-type: none"> > Covers full make-ready cost (Approx. \$12,000/port) > EVSE rebate: \$725/port or \$2,900 for DACs 	<ul style="list-style-type: none"> > \$4,000 for first charging station; \$5,000 for DAC (+500 for dual port) > One additional rebate per every four parking spaces electrified



Program	Funding Agency	Size	Details
Alternative Fuel Corridor grant program (IIJA)	U.S. Dept. of Transportation	\$2.5B (5 years)	<ul style="list-style-type: none">> Details under development, grant implementation expected in late 2022> For deployment along with designated Alt. Fuel Corridors, and possibly in other publicly accessible locations> Intended to facilitate long-distance travel, priority for rural or low- and moderate-income neighborhoods, and multifamily communities with low access to parking
National EV Formula program (IIJA)	State of CA	\$384M (CA)	<ul style="list-style-type: none">> \$5B national program, with funding to be made available to states on a highway formula funding basis
Surface Transportation Block Grants	U.S. Dept. of Transportation	\$72B	<ul style="list-style-type: none">> Funded through IIJA, funds states and local governments to use the funding to best address local needs> Newly allows installation of EV Charging as eligible project types
CALeVIP and Light-Duty EV Charging Infrastructure	California Energy Commission	\$270M (2021-2022)	<ul style="list-style-type: none">> From 2018-2021, Southern California funding reserved for DC Fast Chargers> Up to \$80,000 per DCFC, 80% of project costs> Existing funding exhausted in 2021

- *Low Carbon Fuel Standard Credits Revenues*
 - Up to \$20M/year in recent years. Increase in LCFS credits due to increased electrification of Metro fleet

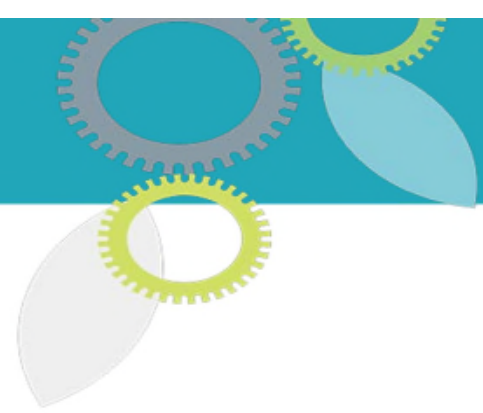
- Existing Contract: A La Carte. Separate contract for the separate parts of EV Charger Program
- Charging as a Service: Metro to pay all-inclusive fee for the installation of infrastructure and operations and maintenance of EV Parking Network
- Public-Private Partnership
 - Metro has a long history of P3 or P3-related activities
 - Renewable energy and energy efficiency projects
 - Environmental clean-up and property development
 - Project Development Agreement needs to be developed in the next 18 months
- Workforce Development Opportunity to Create New Skilled Labor and Expertise including Metro Staff



Milestone	Expected Timing
Development of P3 scope	July - December 2022
Industry outreach	September - December 2022
RFP solicitation and evaluation	January - April 2023
Contract negotiation	May - June 2023
P3 onboarding and charging network transfer	July - December 2023



- June Board adoption of the Electric Vehicle Parking Strategic Plan (EVSP).
- Procure a P3 partner with a Project Development Agreement over the next 18 months
- Convene Metro staffed interdisciplinary implementation team





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Next Steps

