



California Energy Commission

2022 Scoping Plan Update Workshop: Zero-Emission Vehicle Infrastructure

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Clean Transportation Program Origins in Statute



- Established by Assembly Bill 118 (Nunez, 2007)
- Provides approximately \$95.2 million per year
- Extended to January 1, 2024 by Assembly Bill 8 (Perea, 2013)



Highlights of Investments 2009-2021

13,000+ Installed or
Planned Chargers

Creation of Efficient
Block Grants for ZEV
Infrastructure

83 New or Upgraded
Publicly Available
Hydrogen Refueling
Stations

27 ZEV or ZEV
Infrastructure
Manufacturing
Projects

Workforce Training
for More than 22,000
Trainees and 277
Businesses

71 Low-Carbon,
Sustainable Fuel
Production Projects
within California

Leveraged over
\$734 Million in
Private and Other
Public Funds



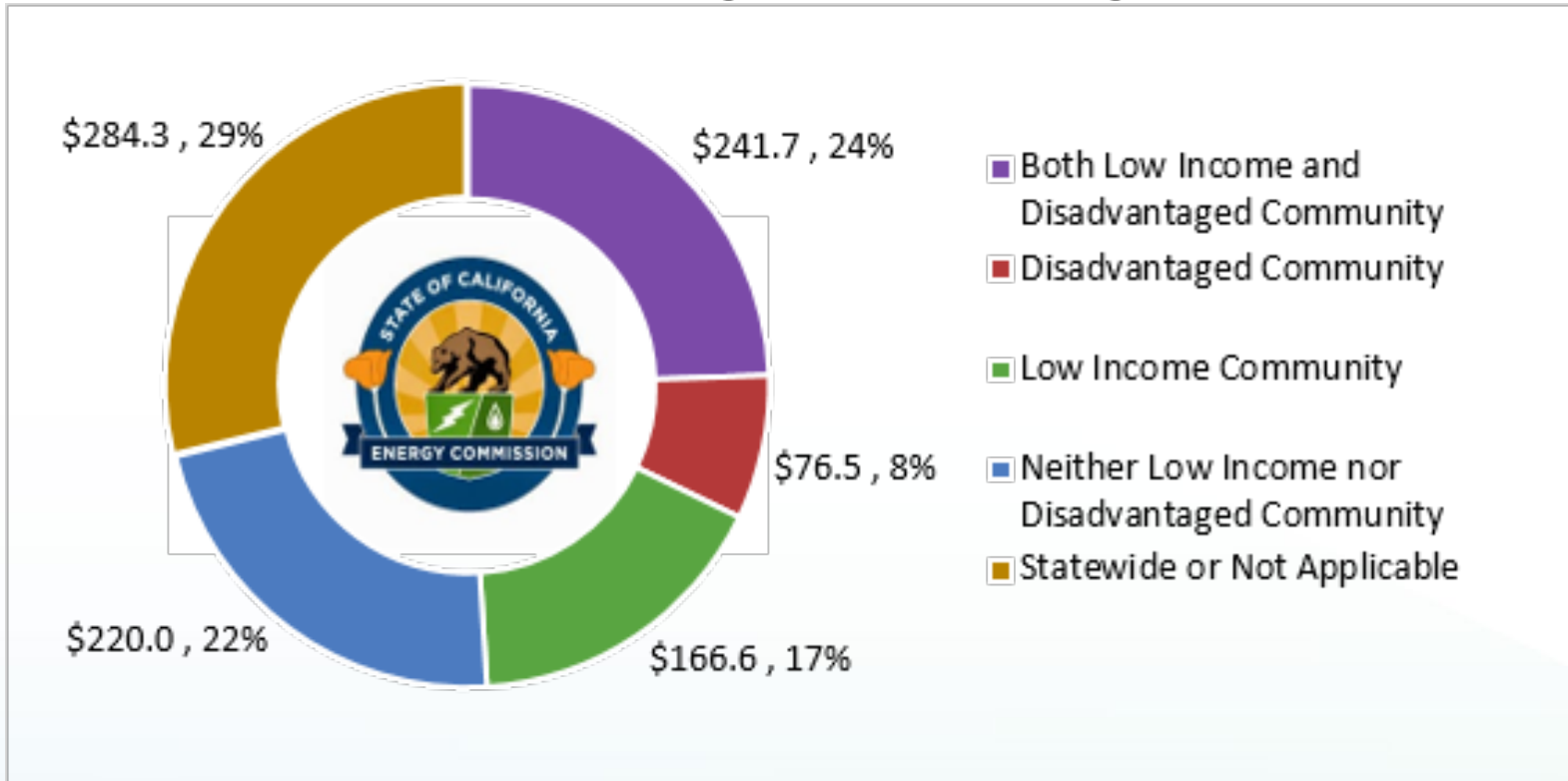
Commitment to Inclusion, Diversity, Equity and Access

- Collaboration with the Disadvantaged Communities Advisory Group
- Prioritize and invest in proper community outreach and engagement
- Partner with local community-based organizations
- Develop metrics that go beyond funding locations
- **Seeking to provide 50% of Clean Transportation Program funds to benefit low-income and disadvantaged communities**



Investment Results as of April 2021

Clean Transportation Program Funding as of April 2021*



Source: CEC Fuels and Transportation Division staff

49%
Funding in
LIC/DACs

*Results subject to change with CES 4.0 update, adding Tribal areas.



ZEV Statistics

Vehicle Population

New ZEV Sales

EV Chargers

Hydrogen Stations

School Buses

School Bus Chargers



ELECTRIC VEHICLE CHARGERS IN CALIFORNIA

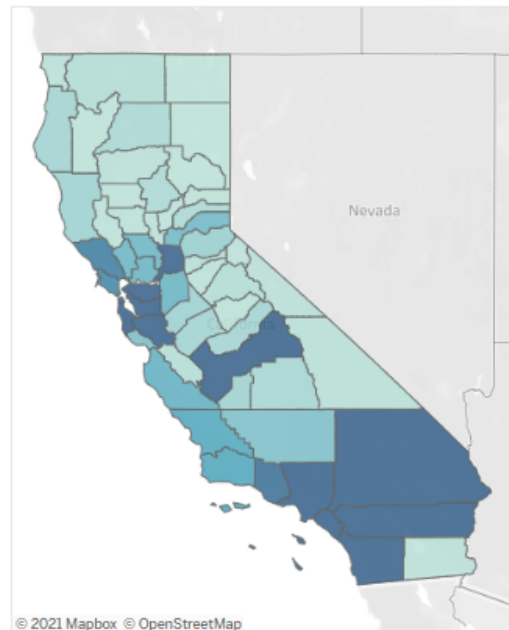
TOTAL ELECTRIC VEHICLE CHARGERS

Total Public and Shared Private Electric Vehicle Chargers

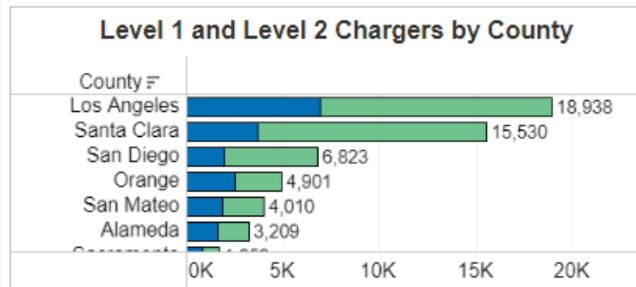
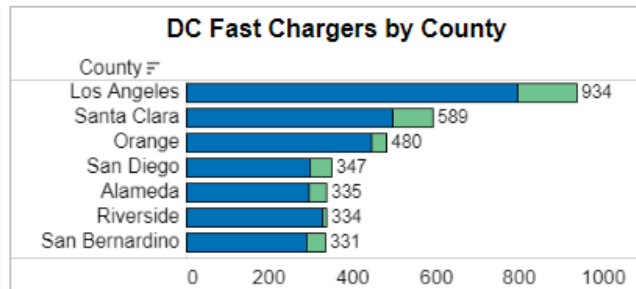
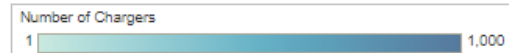
73,443

Public
44.26%
32,507

Shared Private
55.74%
40,936



© 2021 Mapbox © OpenStreetMap



	Public	Shared Private	Grand Total
Level 1	316	349	665
Level 2	26,800	39,970	66,770
DC Fast	5,391	617	6,008
Number of Chargers	32,507	40,936	73,443

SELECT FILTERS

County
(All)

Access
 (All)
 Public
 Shared Private

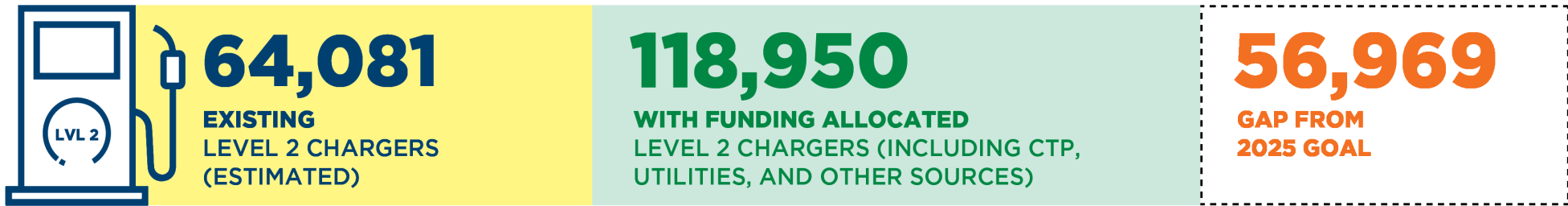
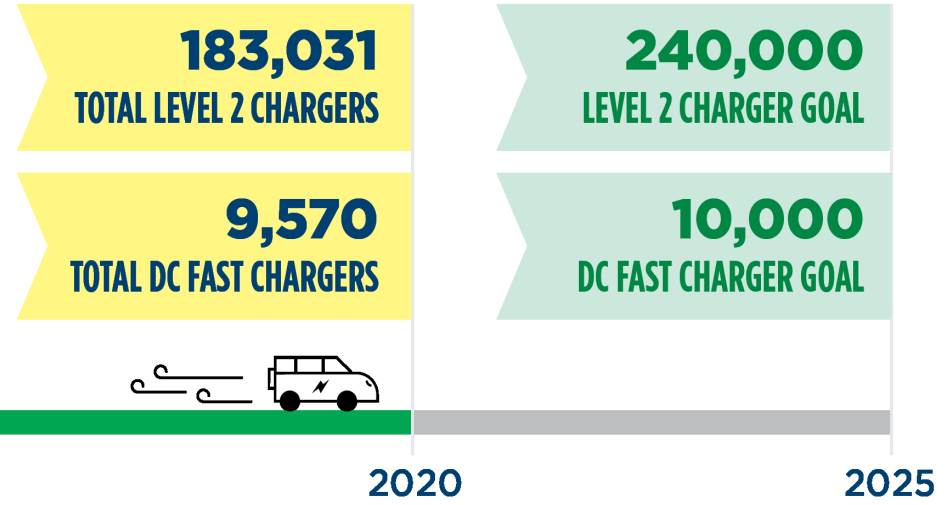
Access Legend
■ Public
■ Shared Private

RESET FILTERS



Progress Report

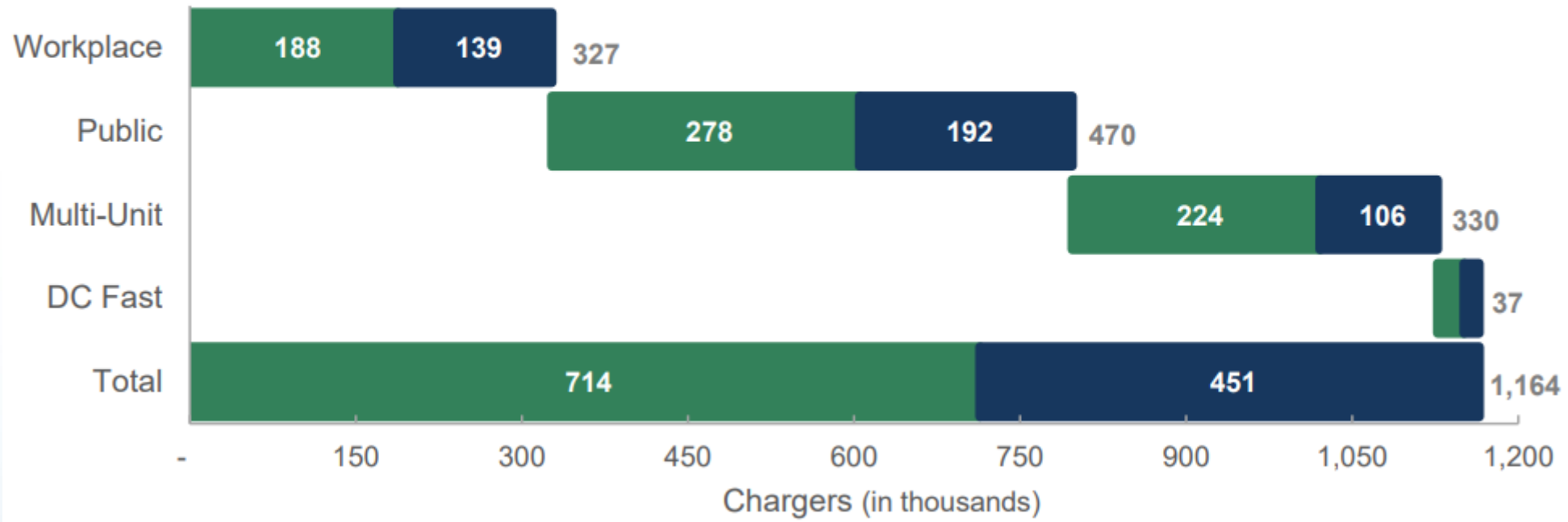
250,000 Chargers by 2025





2030 Goals: AB 2127 report

Figure 1: Projected 2030 Charger Counts to Support 5 Million and 8 Million Light-Duty Zero-Emission Vehicles





Light-Duty EV Charging Infrastructure Investments

Block Grants

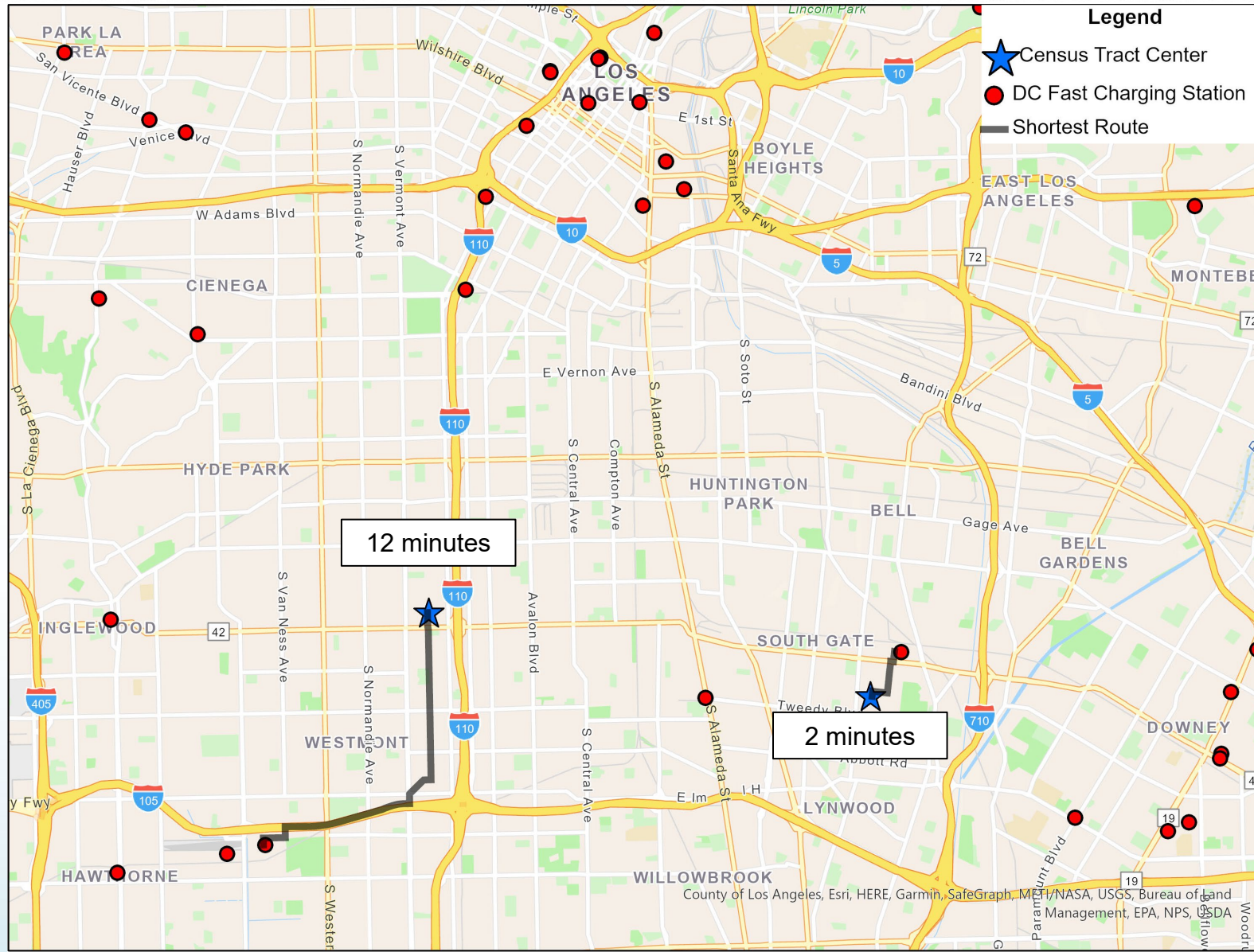
- CALeVIP
 - \$193 million in CEC rebates + \$36 million from funding partners
 - >\$250 million oversubscription
- Second Block Grant for Light-Duty Electric Vehicle Charger Incentive Projects
 - Open solicitation; applications due tomorrow (June 11th, 2021)

Other Funding Opportunities

- Blueprints, Phase I and II
- BESTFIT
- Coming this year: Infrastructure to serve:
 - Ridehailing and other on-demand fleets
 - Multi-unit dwelling residents
 - Rural drivers

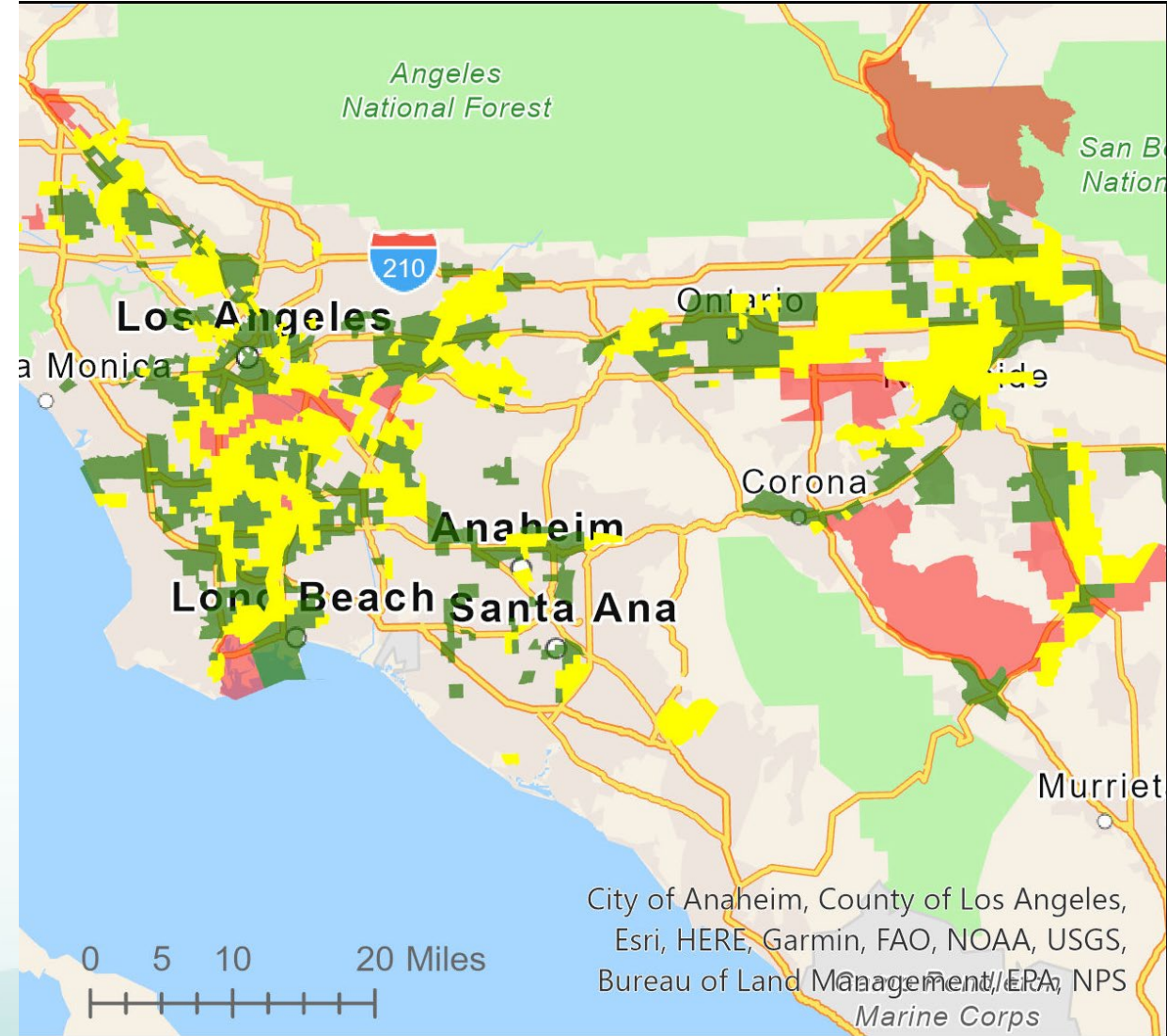
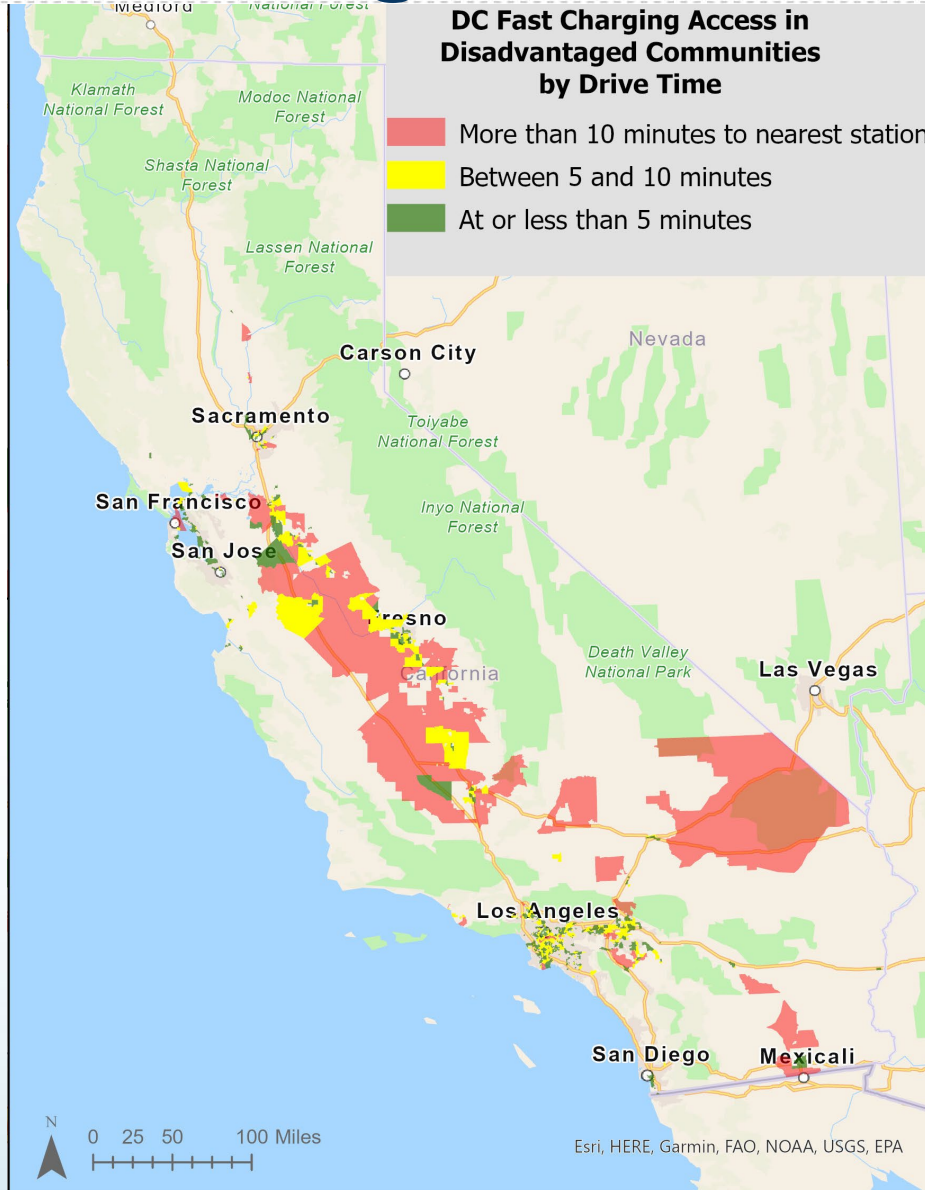


Measuring Access to Fast Charging with New Drive Time Analysis





Potential to Serve Disadvantaged Communities with Long Drive Times



Sources:
AFDC (February 2021)
CES 3.0

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

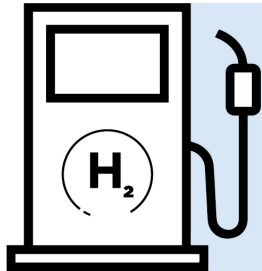
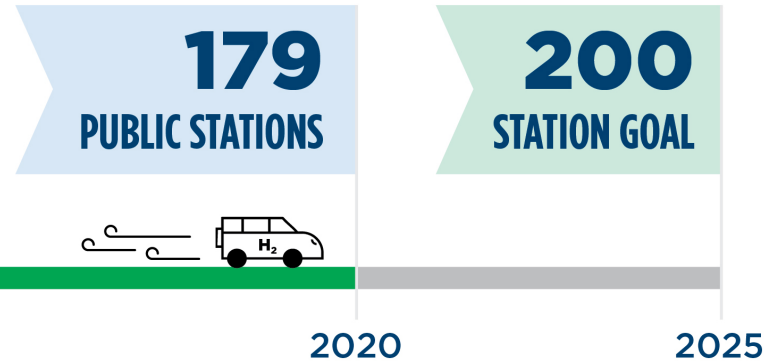
City of Anaheim, County of Los Angeles,
Esri, HERE, Garmin, FAO, NOAA, USGS,
Bureau of Land Management, EPA, NPS
Marine Corps



Publicly-Available Hydrogen Station Investments

Progress Report

200 Hydrogen Fueling Stations by 2025



47

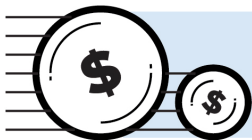
**OPEN
RETAIL HYDROGEN
FUELING STATIONS**

132

**IN DEVELOPMENT
HYDROGEN FUELING
STATIONS**

21

**GAP FROM
2025 GOAL**

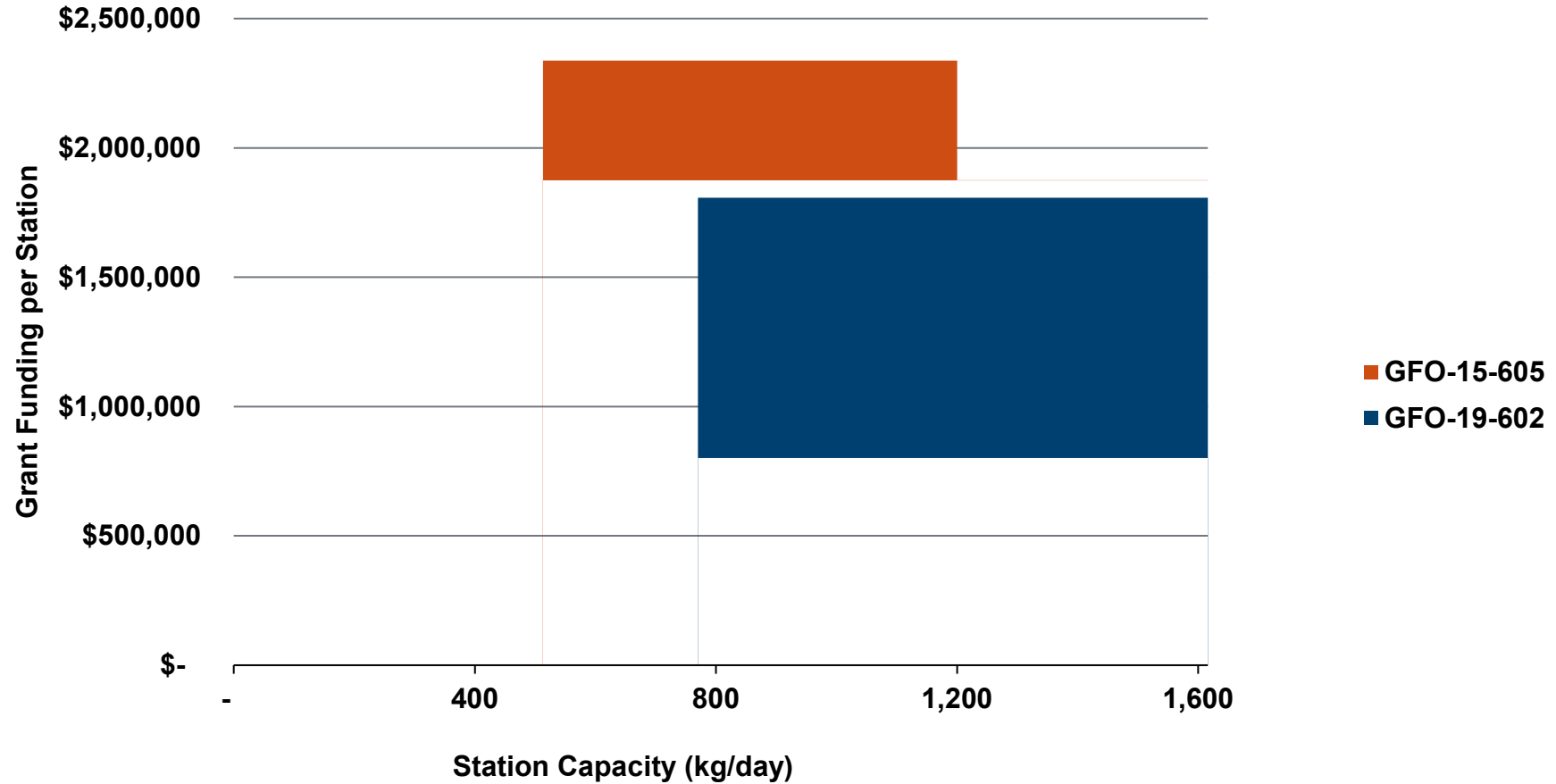


**HYDROGEN FUNDING
ALLOCATED TO DATE**

\$166 million



H₂ Station Capacity Increasing, Costs Decreasing



Source: 2020 AB 8 Joint Agency Staff Report



Medium- and Heavy-Duty (MD/HD) ZEV Infrastructure Investments

- Block Grant for MD/HD ZEV Infrastructure Incentive Projects
- Blueprints for MD/HD ZEV Infrastructure
- Zero-Emission Transit Fleet Infrastructure Deployment
- Zero-Emission Drayage Truck and Infrastructure Pilot Project
- School Bus Replacement Program
- Hydrogen Fuel Cell Demonstrations in Rail and Marine Applications at Ports (H2RAM)



Proposed Zero Emission Vehicle Infrastructure Investments

Governor's Budget Proposal, May 2021

(Dollars in Millions)

Program	2021-22	2022-23	2023-24	Total
Drayage Truck Infrastructure	\$85	\$85	\$80	\$250
Drayage Truck & Infrastructure Pilot Project	\$25	-	-	\$25
Transit Buses	\$30	\$30	\$30	\$90
School Buses	\$20	\$15	\$15	\$50
Clean Transportation Program/ZEV Infrastructure	\$500	-	-	\$500
Total	\$660	\$130	\$125	\$915



More Information

<https://www.energy.ca.gov/funding-opportunities/solicitations>

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California Energy Commission > Funding > **Solicitations**

Solicitations

Information about funding opportunities that the California Energy Commission offers that advance the state's transition to clean energy and transportation through innovation, efficiency, and the development and deployment of advanced technologies.

- FUNDING**
- Solicitations**
- Awards
- Funding Resources



More Information

<https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/clean-transportation-program-investment>

California Energy Commission > Programs and Topics > All Programs > Clean Transportation Program > Clean Transportation Program Investment Plans

Clean Transportation Program Investment Plans

The program invests up to \$100 million annually, leveraging public and private investments to accelerate the development of clean, efficient, low-carbon technologies to reduce greenhouse gas emissions and petroleum dependence. Each year, the Energy Commission prepares an investment plan to determine funding priorities and opportunities.

- CLEAN TRANSPORTATION PROGRAM**
- Advisory Committee for the Clean Transportation Program Investment Plan
- Clean Transportation Funding Areas
- Clean Transportation Program Investment Plans** ^



Thank you

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