

Regional Workforce Advisory Meeting:

Electric Vehicles

August 27, 2021

9:00 AM - 11:00 AM



Housekeeping

- Enable your video (optional)
- Please stay on mute unless you are called on to ask a question
- Submit all questions and commentary within the Chat
- This meeting will be recorded and will be provided as part of the post meeting materials

ICEBREAKER!
What is the
BEST
morning
beverage?

Welcome and Introduction



Renee John
Project Leader
21st Century Workforce
Valley Vision

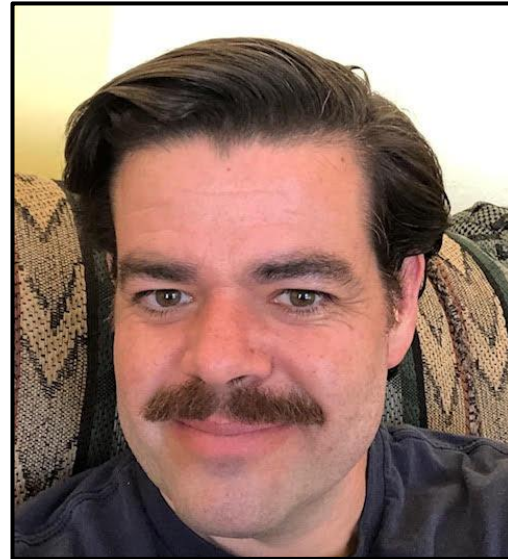
Welcome and Introduction



Kim Harrell

Associate Vice President,
Economic and Workforce
Development, Cosumnes
River College

Interim North Co-Chair
NFNRC



Orion Walker

Regional Director,
Employer Engagement, Energy,
Construction and Utilities, Greater
Sacramento Region



Jeff Briggs

Regional Director, Employer
Engagement, Sacramento
State, Advanced
Manufacturing, Greater
Sacramento Region

Supported By



Agenda

- 9:00 AM** Welcome & Introduction
- 9:10 AM** Trends and Opportunities
- 9:20 AM** Policy Implications, Training Assets & Occupational Information
- 9:45 AM** Rio Hondo College Alternative Fuels Program
- 10:15 AM** Community-based Programs Discussion
- 10:55 AM** Conclusion and Next Steps

Trends & Opportunities



Chris White
Senior Manager
Frontier Energy
Sacramento Office

Policy Implications



Caitlin Blockus
Project Manager
Valley Vision

Policy Drivers

- **What drives policy around Electric Vehicles (EVs)?**
 - Federal, state, and local governments
 - Air Quality Districts
- **What affects legislation & regulations regarding EVs/EV infrastructure?**
 - Mitigation of climate change
 - Evolving codes and standards
 - Local ordinances

Federal Policies

- **Bipartisan Infrastructure Deal features the first national investment into EV charging infrastructure within the US**
 - Dedicates \$7.5 billion to installing EV charging stations
 - Will deploy EV chargers along highway corridors to aid long-distance travel
 - Create convenient charging where people live, work, and shop
 - Focus on rural, disadvantaged, and hard-to-reach communities

Federal Policies

- **FERC Order 2222 allows distributed energy resources (DERs) to participate in and support energy transmission systems**
 - Will support the electric grid of the future and promote competition in electric markets
 - Removes the barriers preventing distributed energy resources (DERs) from competing on a level playing field
 - **Benefits include:**
 - lower costs for consumers through enhanced competition
 - more grid flexibility and resilience
 - more innovation within the electric power industry

State Policies

- **Senate Bill 100 (De León)**

- Ensures that 60% of California's electricity is renewable by 2030
- Sets a goal of powering all state agency & retail electricity sold in California with renewable zero-carbon resources by 2045

- **Senate Bill 49 (Skinner)**

- Requires energy efficient standards to manage energy loads in order to help maintain electrical grid reliability
 - Impacts electric vehicle charging
 - Leads to much higher efficacy in transportation and power

State Policies

- **Executive Order B-48-18 (Brown)**
 - Set a target of putting 5 million Zero Emission Vehicles (ZEVs) on the road by 2030
- **Assembly Bill 2127 (Ting)**
 - Required the California Energy Commission to assess the electric vehicle charging infrastructure needed to meet the state's goals of 5 million ZEVs by 2030
 - Found that CA will need ~1.5 million chargers for these ZEVs

State Policies

- **N-79-20 (Newsom)**

- By 2035, all new cars and light duty trucks must be Zero Emission Vehicles
- Order requires state agencies, in partnership with the private sector, to accelerate deployment of affordable fueling and charging options
- Requires support of new and used zero-emission vehicle markets to provide broad accessibility

Training Assets and Occupational Information



Aaron Wilcher
Director
North Far North Center
of Excellence



C·O·E

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FOR LABOR MARKET RESEARCH

EV Advisory Series: Part 1

Market, Occupation, Program Data



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Aaron Wilcher, Director
COE, Greater Sacramento (North)
Valley Vision, LRCCD EV Advisory
August 27, 2021

Preso overview

- Occupation data
- Jobs postings
- EV infrastructure data
- Program data

Key questions- research basis

- What special skills does AFV technology require for technicians? i.e. What makes an AFV technician different than a regular diesel/auto tech?
- Is there increasing demand for AFV technicians or general techs that need some specialized skills?

NOTE: Analysis offered generally focuses on AFV technicians – not a wider infrastructure analysis

Occupation data

**CEC-COE survey research findings:
(2014)**

**3/4 of fleet vehicle technicians repair
alternative fuel vehicles (AFVs)**

**1/2 of auto repair and dealership
technicians repair AFVs**

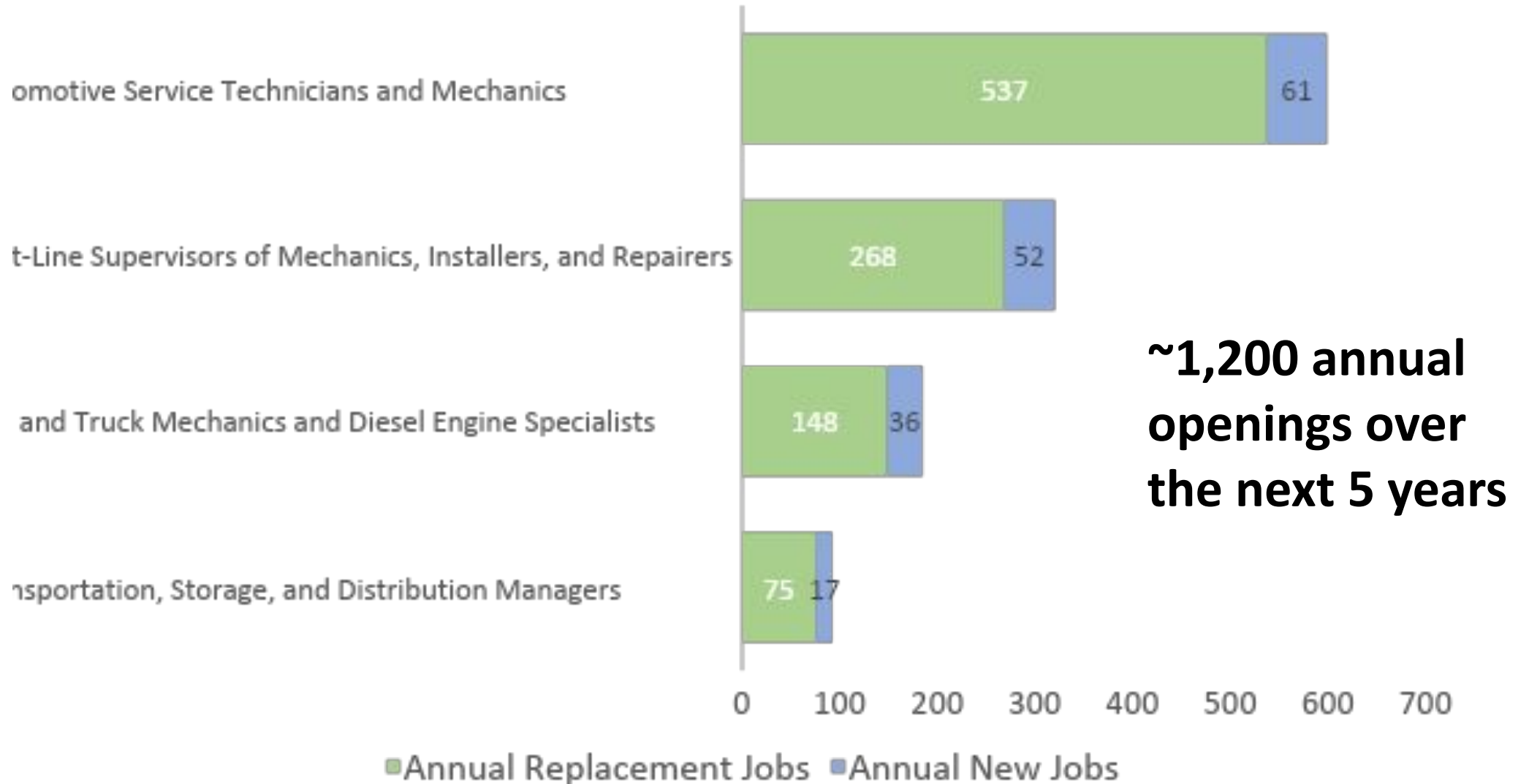
**2018 study update and new
analysis>>>>**



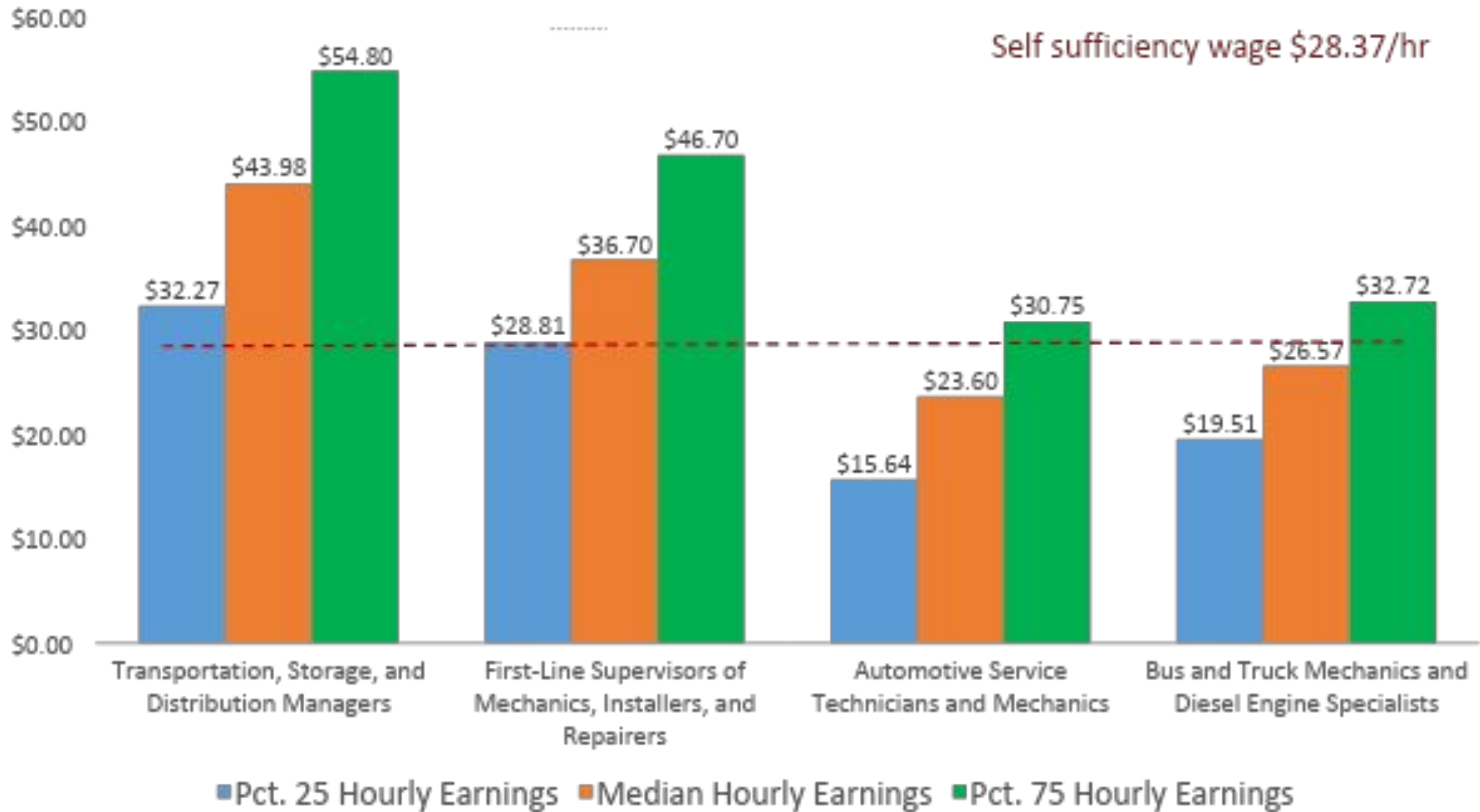
Occupation data

Description	2015 Jobs	2020 Jobs	2025 Jobs	2020-2025 Annual Openings	Median Hourly Earnings
Automotive Service Technicians and Mechanics	6,128	6,044	6,334	599	\$23.60
First-Line Supervisors of Mechanics, Installers, and Repairers	2,972	3,188	3,446	320	\$36.70
Bus and Truck Mechanics and Diesel Engine Specialists	1,561	1,723	1,904	185	\$26.57
Transportation, Storage, and Distribution Managers	800	1,081	1,166	92	\$43.98

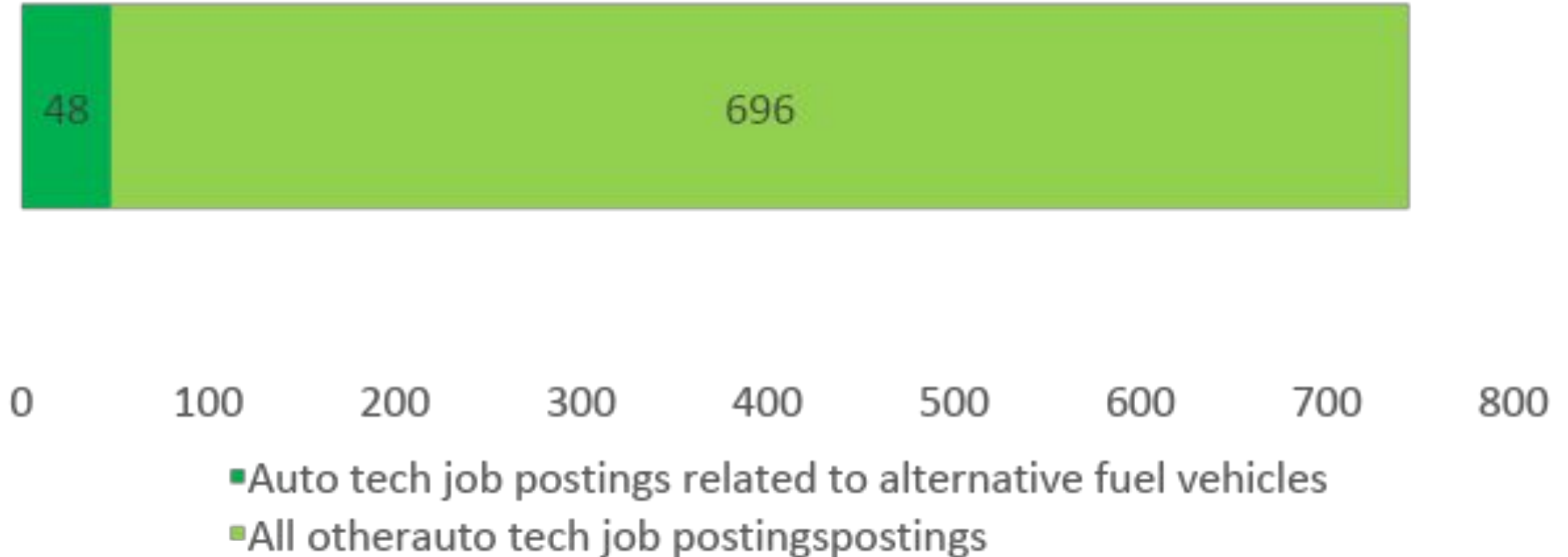
2020-2025 Projected Annual Openings



Occupation data



AFV auto techs and all auto techs jobs postings Aug. 1, 2020 – Jul. 31, 2021, Greater Sacramento region



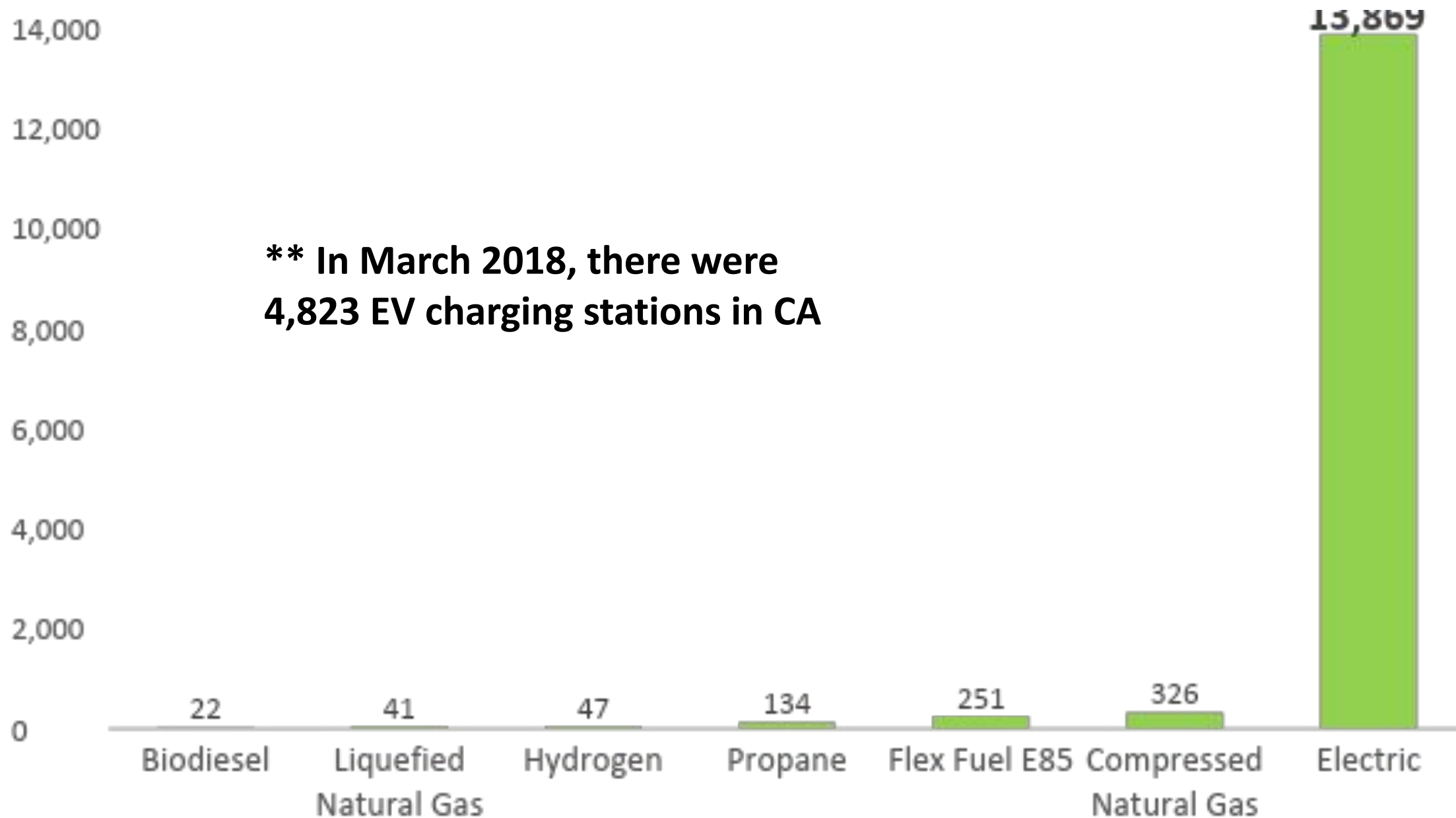
CNG/LNG diesel/fleet and all diesel/fleet tech postings Aug. 1, 2020 – Jul. 31, 2021, Greater Sacramento region



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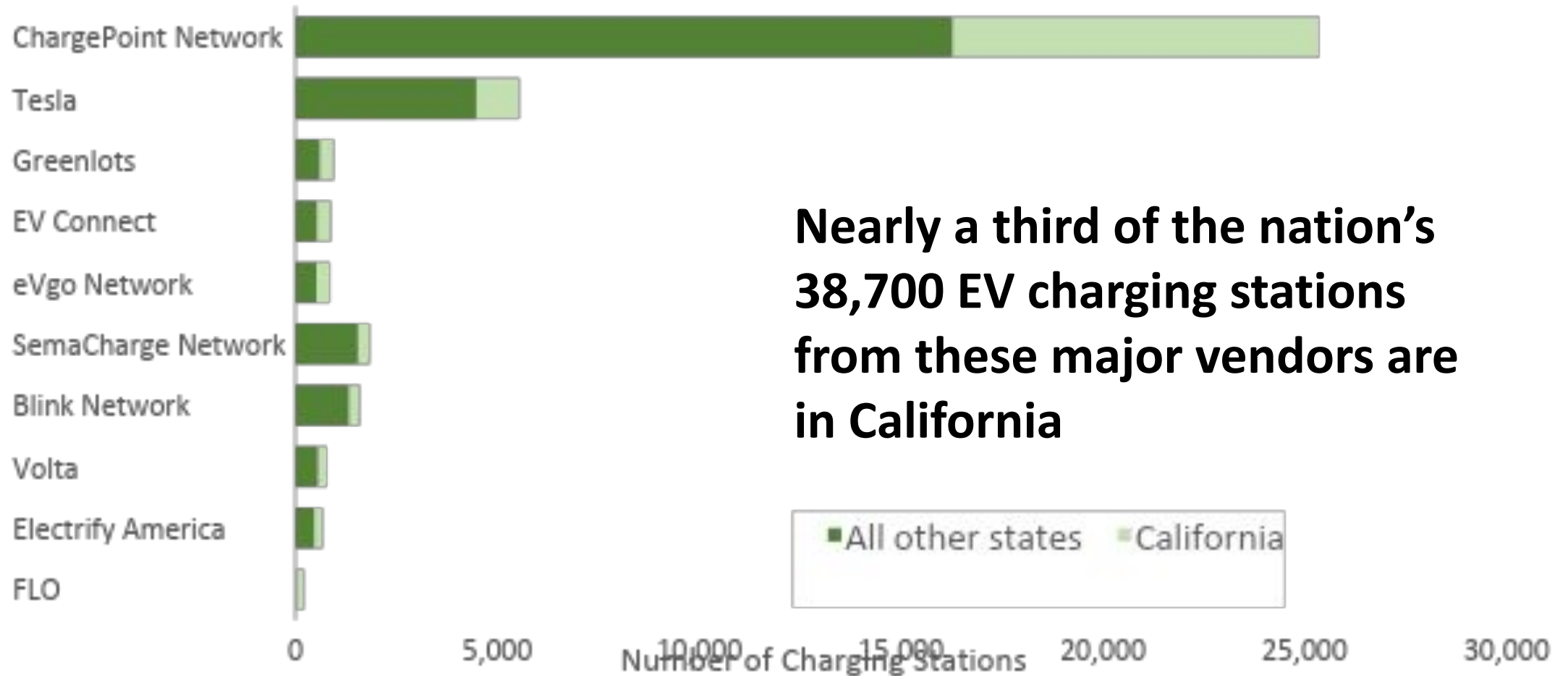
■ Diesel tech postings with CNG/LNG ■ All other diesel tech job postings

U.S. DOE Alternative Fuels Data Center: CA, Alt. Fuel Stations, by fuel type, Aug. 2021

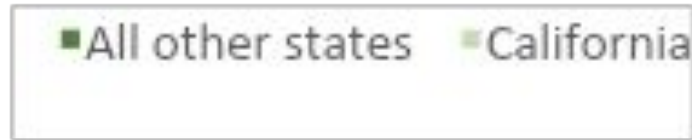


**** In March 2018, there were 4,823 EV charging stations in CA**

U.S. DOE Alternative Fuels Data Center: U.S. EV Charging Stations by Vendor, and CA's market share Aug. 2021



Nearly a third of the nation's 38,700 EV charging stations from these major vendors are in California



Programs related to projected jobs from mature “Mobility” Cluster, Greater Sacramento

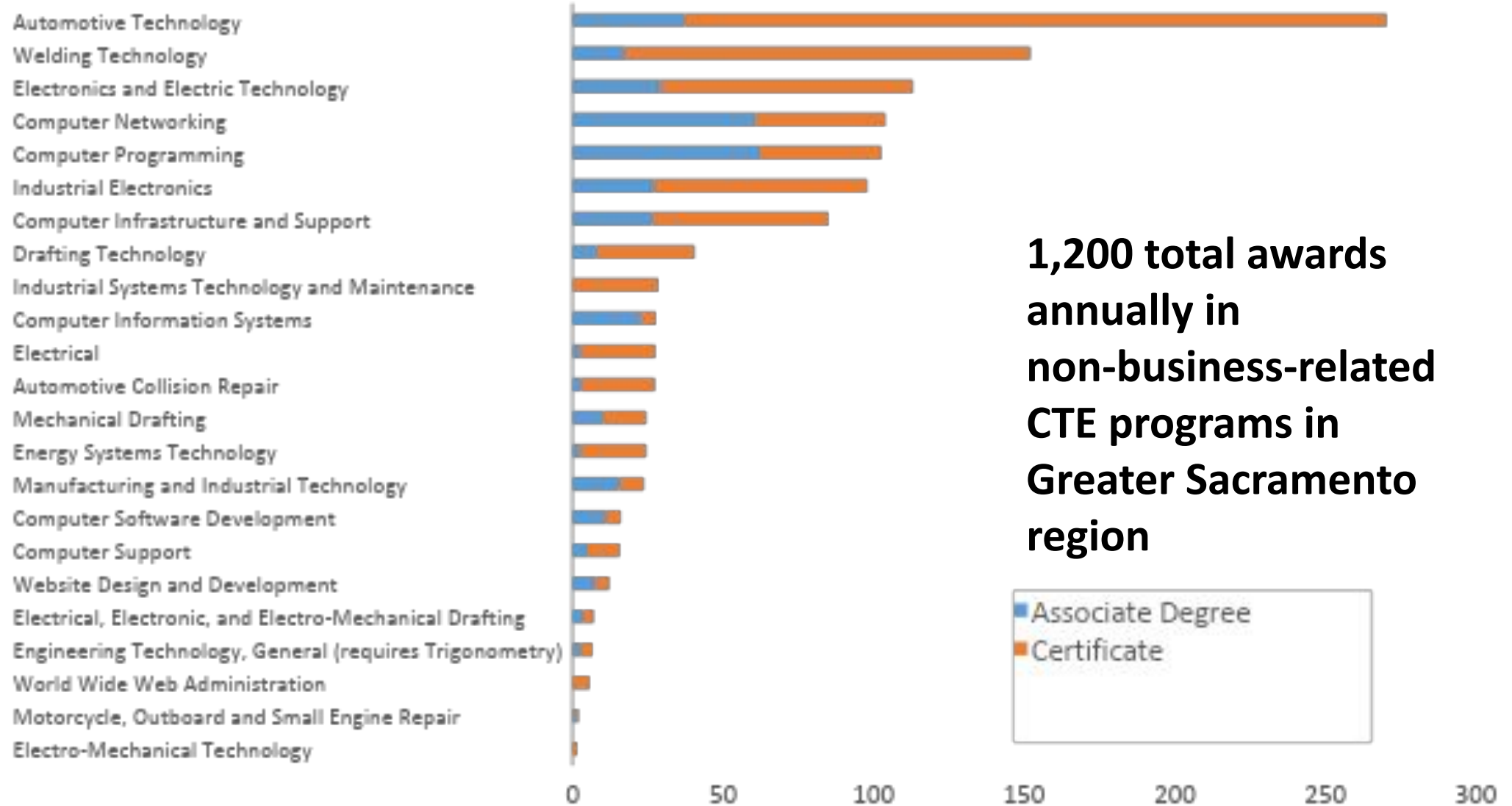
Jobs:

- **Vehicle painter**
- **Materials engineer**
- **UX designer**
- **Welder**
- **Industrial electrician**
- **Workshop foreman**
- **Design engineer**
- **Logistician**
- **Electronics engineer**
- **Operations Manager**
- **Plant mechanic**

Programs:

- **Automotive tech**
- **Welding tech**
- **Electronics tech- various**
- **Computer networking/program.**
- **Drafting tech- various**
- **Industrial tech & maint.**
- **Computer info systems**
- **Auto collision**
- **Energy systems technology**
- **Manufacturing tech**
- **Computer support**

Programs awards related to projected jobs from mature “Mobility” Cluster- 3 year average



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Rio Hondo College Program and Development



Professor John Frala
Coordinator of Alternative
Fuels and Electric Vehicles
Rio Hondo College

Community-Based Programs Discussion



Kevin Dobson
Founder and
Executive Director,
Capital College &
Career Academy



**Rachanee
Jackson**
Student Coordinator,
Green Tech Education
and Employment



Morri Elliott
Director,
SAVA Charter School

September 17, 2021 - Employer and Industry Panel

**Join us for the second
session of
our two-part advisory
on **Friday,**
September 17th, 2021**



Click [HERE](#) to register for Session 2, or click the link that will be dropped in the chat!

THANK YOU FOR JOINING

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