



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT

**AGENDA: 5**

# **Light-Duty Electric Vehicle Update**

**Technology Implementation Office (TIO) Steering  
Committee Meeting  
May 13, 2022**

**Tin Le  
Supervising Staff Specialist  
tle@baaqmd.gov**

# Presentation Outcome



- Provide information on Electric Vehicle (EV) adoption in the Bay Area
- Provide an update on Bay Area Clean Cars for All (CCFA) Program
- Provide an overview of other EV incentive programs available to Bay Area residents

# Presentation Outline



- Background: Bay Area Electric Vehicle (EV) Goals
- Status of EV adoption in the Bay Area
- CCFA Program update
- Next Steps and Challenges



# Requested Action



None. Informational item only.

# Background: Bay Area EV Goals



## ELECTRIC VEHICLE TRENDS AND GOALS



11,917 public charging ports currently

30,000 public charging ports needed (NREL)

In 2020 3.9% of the Bay Area fleet were EVs, with a goal of 90% by 2050

In 2022 16.3% of new sales in CA were EVs



### Public charging ports

16% DC Fast

83% Level 2

1% Level 1



### Progress towards our EV Adoption Goals

2022: 383,348



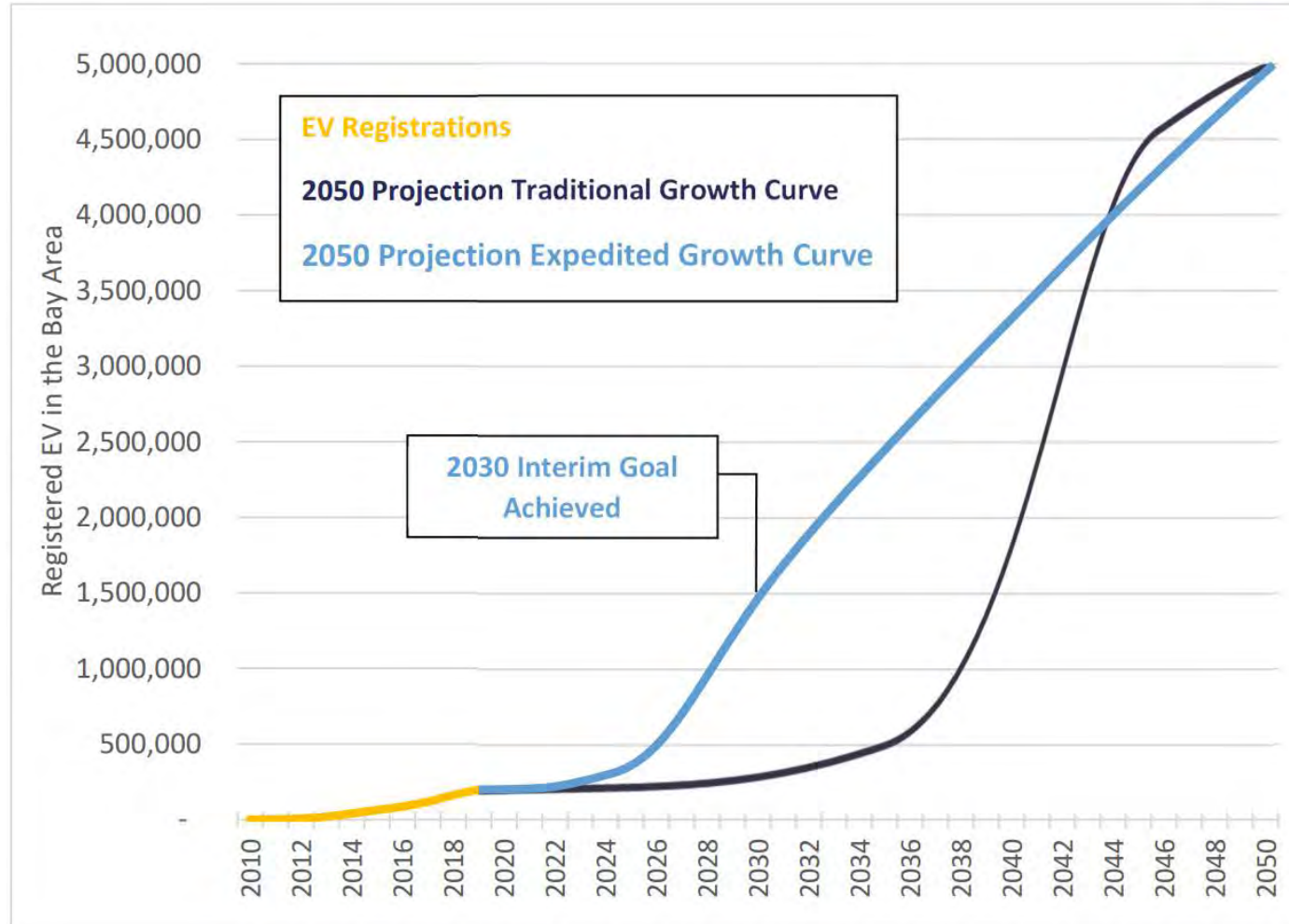
2015: 71,672

2030: 1.5 million

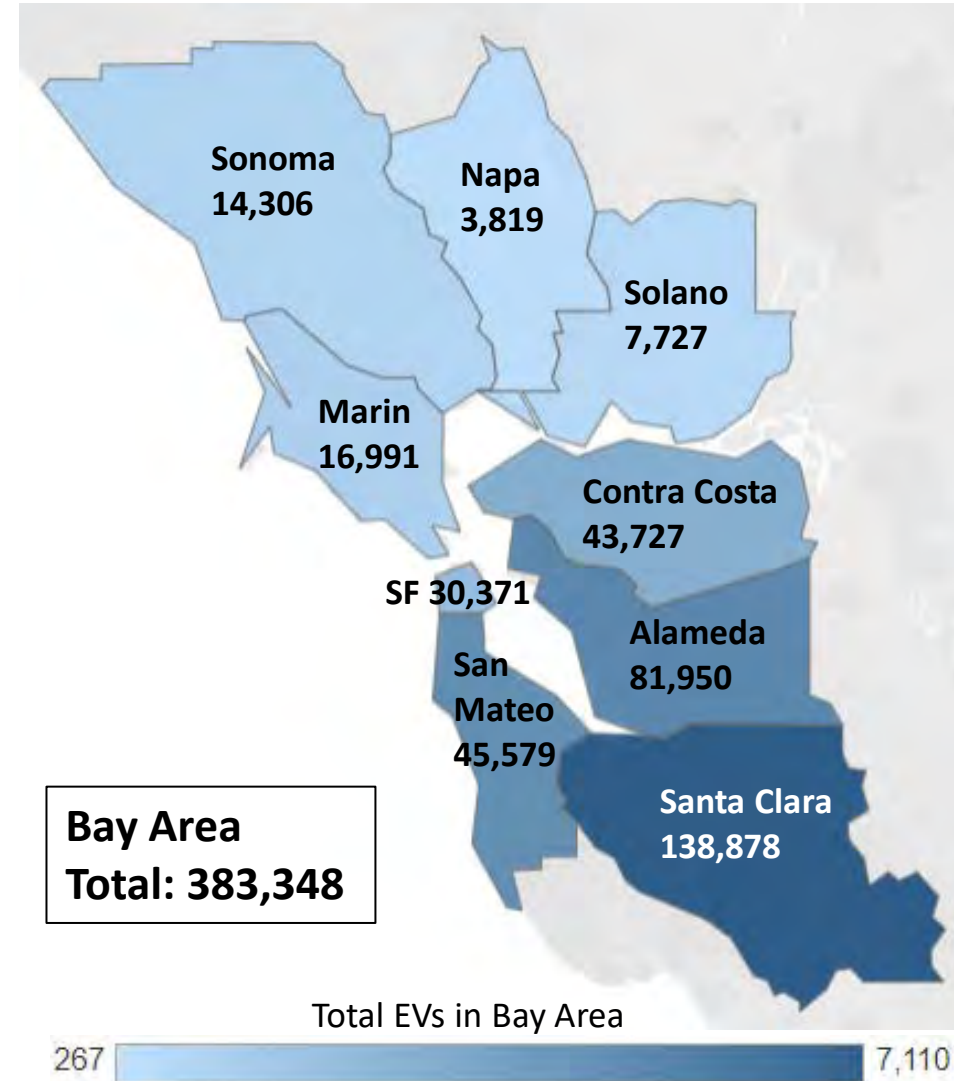
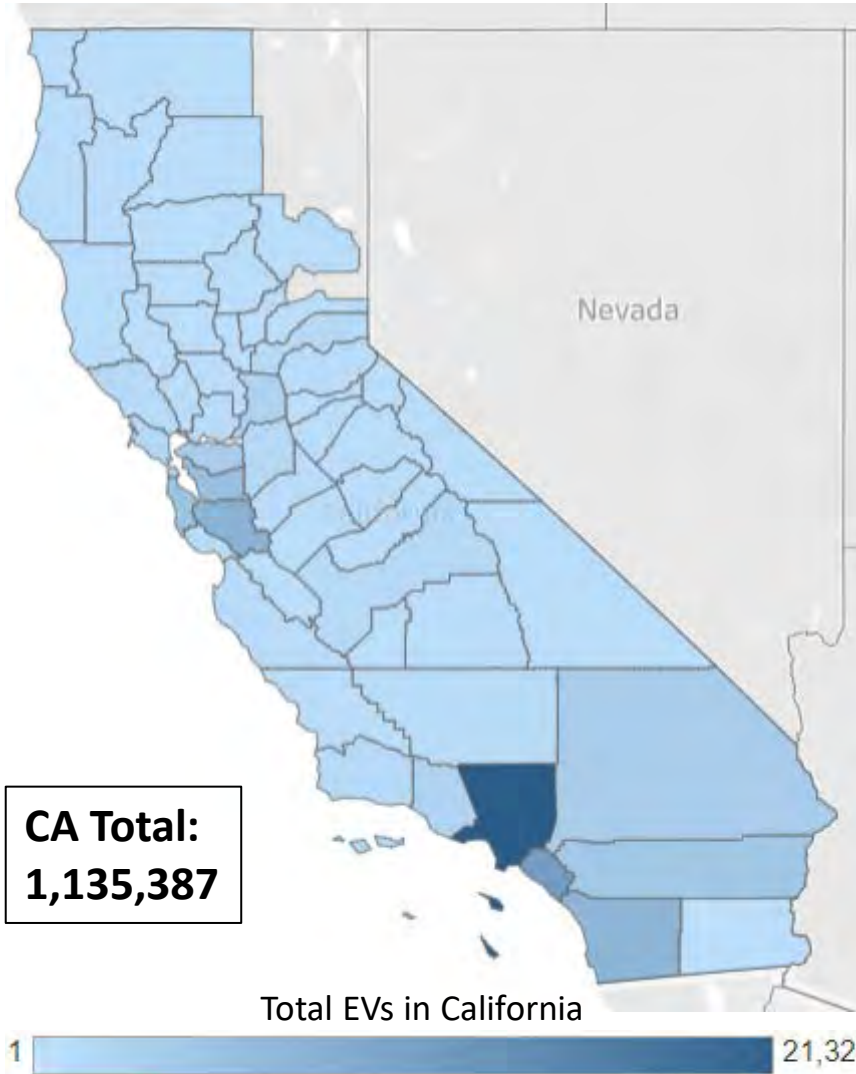


2050: ~5 million

# Bay Area EVs and Projected Increase to Meet 2050 Goal



# EV Adoption in the Bay Area





**Income-qualified residents\* who retire  
an older vehicle**



## **Advanced Technology**

- Purchase or lease, new or used
- Hybrid, plug-in hybrid, battery electric, and fuel cell electric vehicles
- Home charger installation or portable charger for plug-in hybrid and battery electric vehicles



## **Mobility Options**


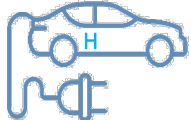



- PEX pre-paid debit card
  - Public transit (Clipper Card)
  - Electric bicycles
  - Carsharing (future option)

\* ≤400% Federal Poverty Level



# Program Overview (cont.)



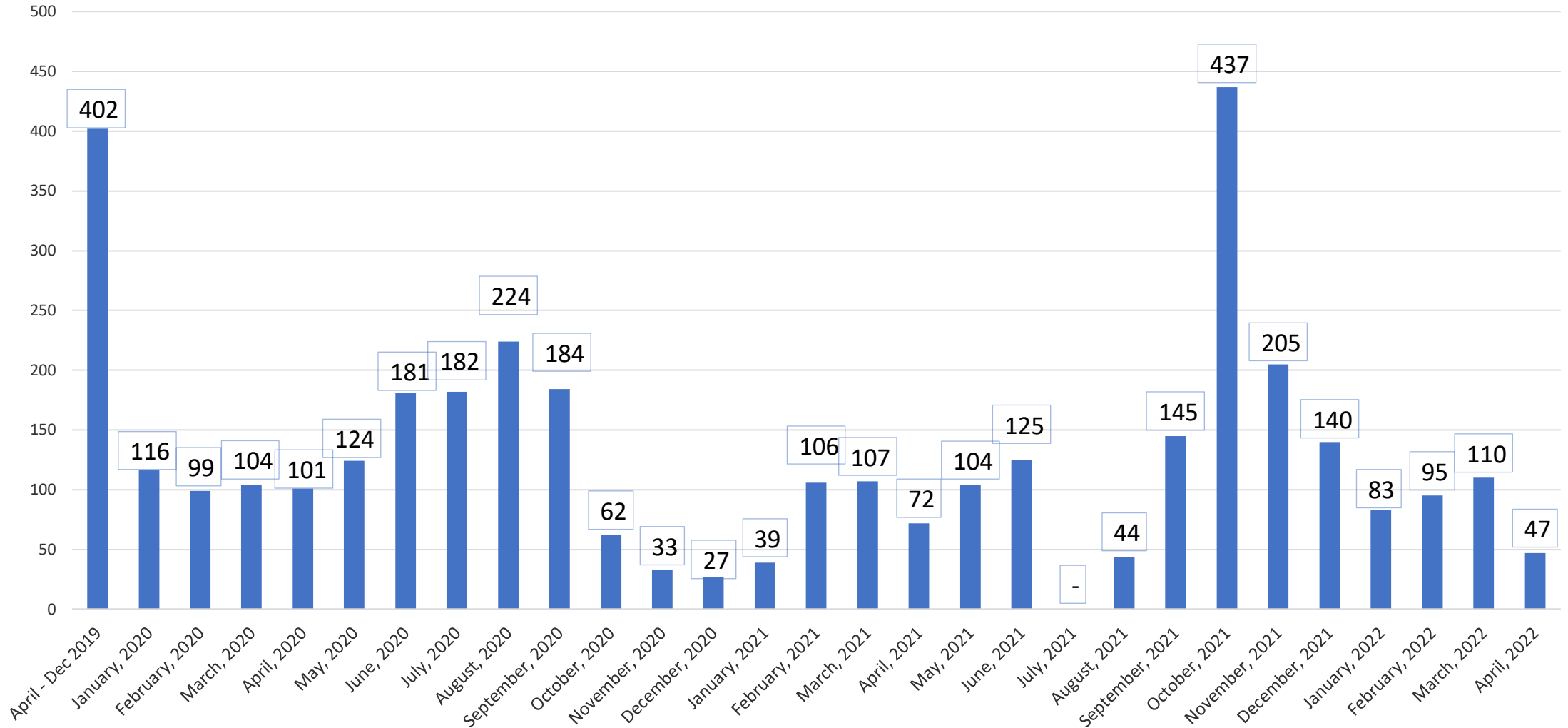
Clean Transportation Options	Incentive Amount Available
 <span data-bbox="876 525 988 562">Hybrid</span>	<b>\$5,000 - 7,500</b>
 <span data-bbox="876 672 1116 709">Plug-In Hybrid</span>	<b>\$5,500 - \$9,500</b> Plus \$2,000 rebate for charger
 <span data-bbox="876 836 1128 873">Battery Electric</span>	<b>\$5,500 - \$9,500</b> Plus \$2,000 rebate for charger
 <span data-bbox="876 993 1274 1031">Fuel Cell Electric Vehicle</span>	<b>\$5,500 - \$9,500</b>
 <span data-bbox="876 1143 1146 1180">Mobility Option</span>	<b>\$5,000 - \$7,000</b>

3,698 applications submitted through April 11, 2022

# Application Trends



## CCFA Applications Submitted per Month





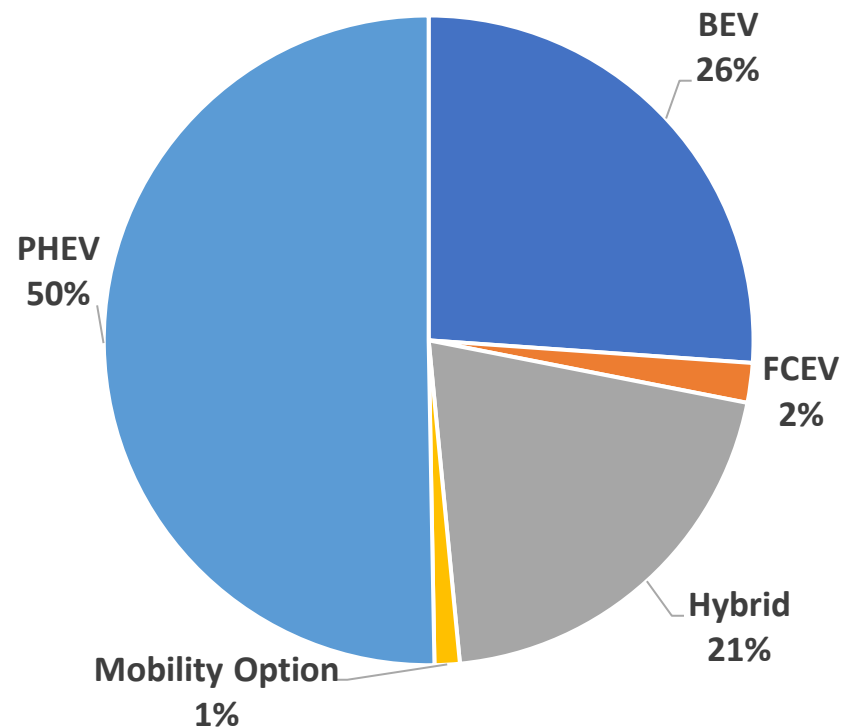
# CLEAN CARS FOR ALL

# CCFA Program Stats

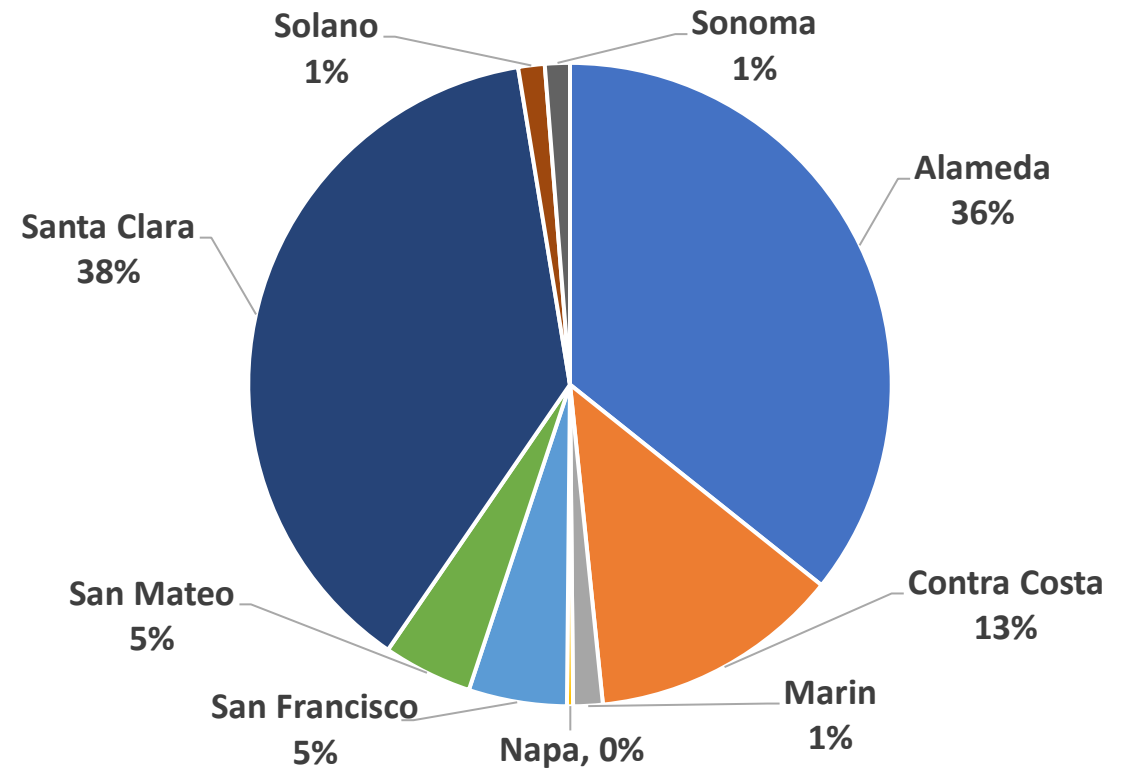
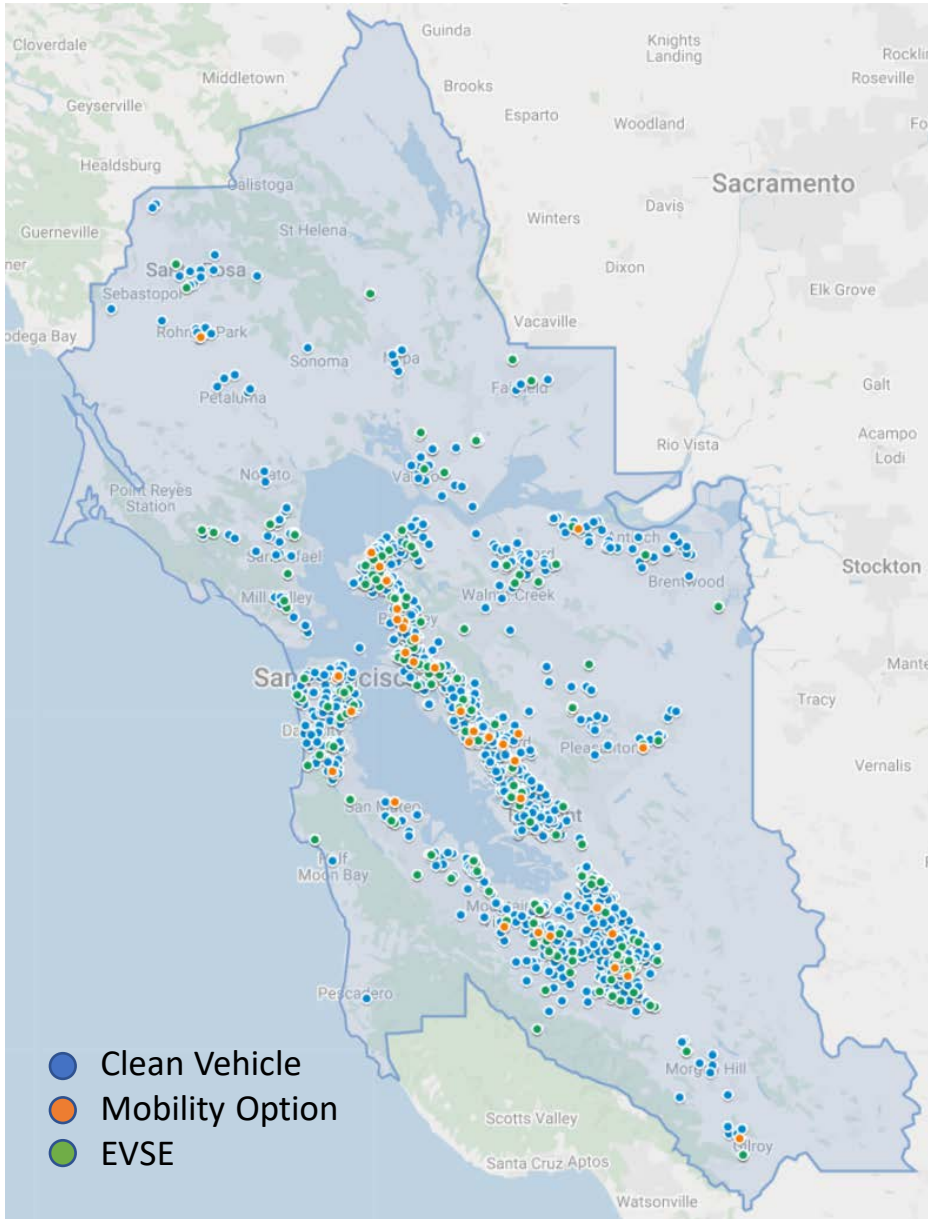


- Program launched March 2019
- Currently open to 76 disadvantaged zip codes
- Budget - \$42M
  - CCI, VW, AQIP, TFCA
- Awarded
  - \$23.6M
  - 2,819 grantees
    - 35 Mobility Option
    - 175 EVSE

Awarded  
Clean Transportation Options









# Geographic Distribution of Awards



# Other Incentive Programs



Other Programs	New EV	Used EV	EV Charging	Stackable with CCFA?
 <b>CALIFORNIA CLEAN FUEL REWARD™</b>	Up to \$750	✗	✗	✓
 <b>CALIFORNIA CLEAN VEHICLE REBATE PROJECT™</b>	\$1,500-\$7,000	✗	✗	✓
 clean vehicle assistance program	\$2,500-\$5,000	\$2,500-\$5,000	Up to \$2,000	✗
 Driving Clean Assistance Program	\$2,500-\$5,000	\$2,500-\$5,000	Up to \$2,000	✗
 <b>MCE</b>   My community. My choice.	\$3,500	✗	✗	✓
 <b>PENINSULA CLEAN ENERGY</b> Used EV Rebate Program	✗	\$3,700-\$4,000	✗	✓
Federal Tax Credit	Up to \$7,500	✗	✗	✓

# Next Steps and Challenges



- Increased support for underserved communities and targeted outreach
- Statewide CCFA Program
- Expand authorized dealership network
- EV supply chain issues leading to vehicle shortages and high costs
- Phase out of conventional Hybrid



# Feedback Requested



- Discussion of CCFA Program and its role in achieving Bay Area goals.





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AGENDA: 6

# Electric Vehicle Infrastructure

**Technology Implementation Office (TIO) Steering  
Committee Meeting  
May 13, 2022**

**Danny Fung  
Staff Specialist  
dfung@baaqmd.gov**



# Presentation Outcome



- The Committee will receive an update on publicly available electric vehicle (EV) charging stations in the Bay Area

# Presentation Requested Action



- None, informational item.

# Presentation Outline



- Provide an update on publicly available EV charging stations in the Bay Area
- Discuss the Air District's the *Charge!* Program
- Discuss StopWaste Technical Assistance and ongoing outreach efforts
- Questions

# BAY AREA



## ELECTRIC VEHICLE TRENDS AND GOALS



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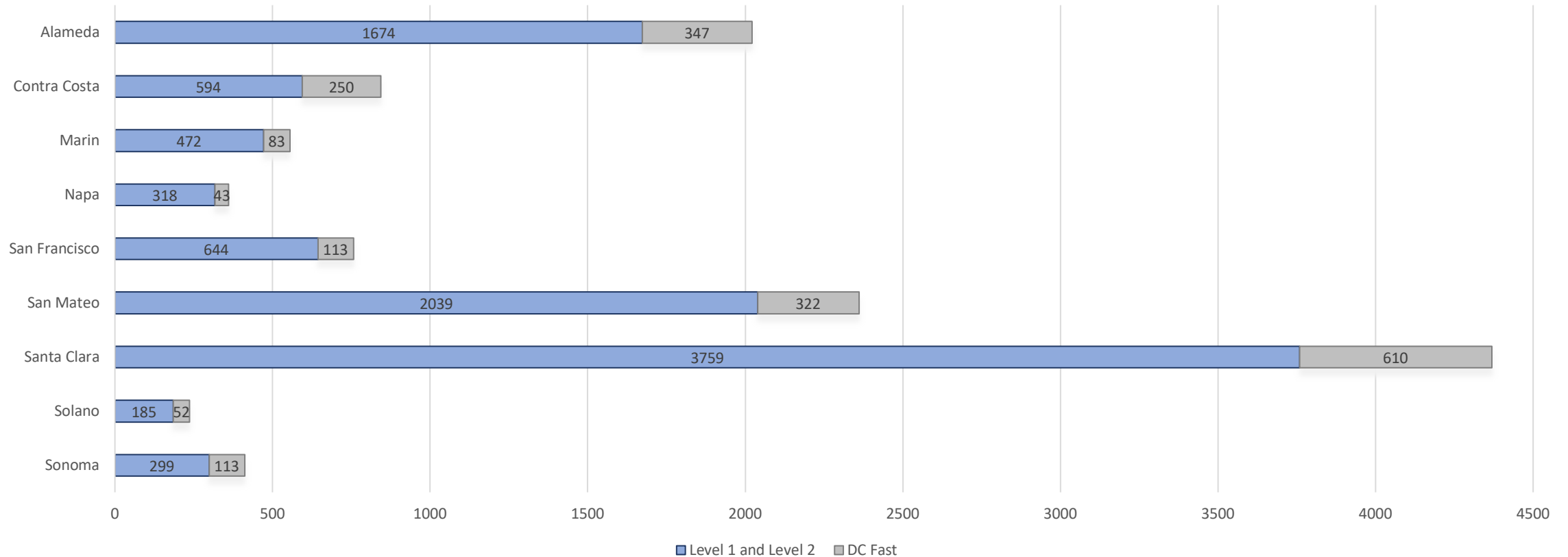


2050: ~5 million

# Existing Bay Area EV Infrastructure

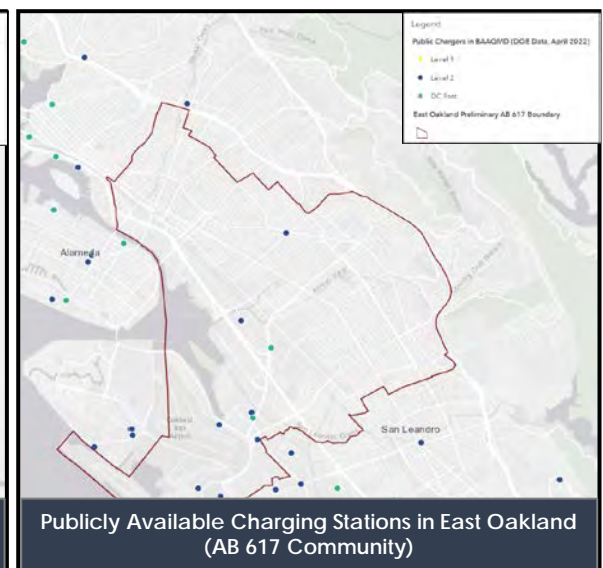
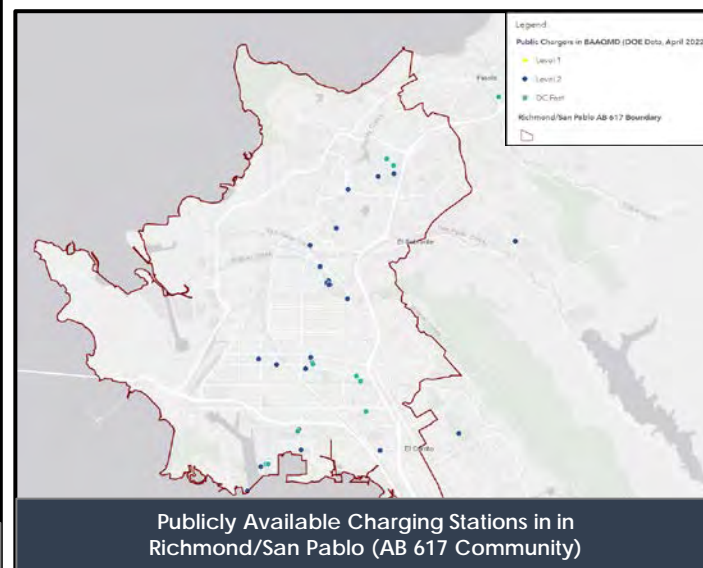
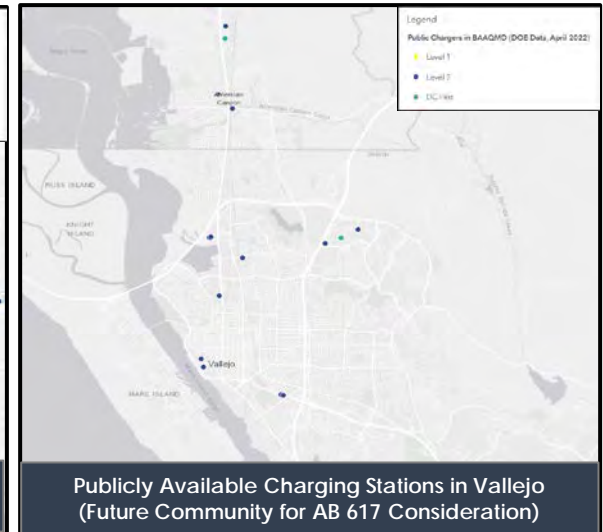
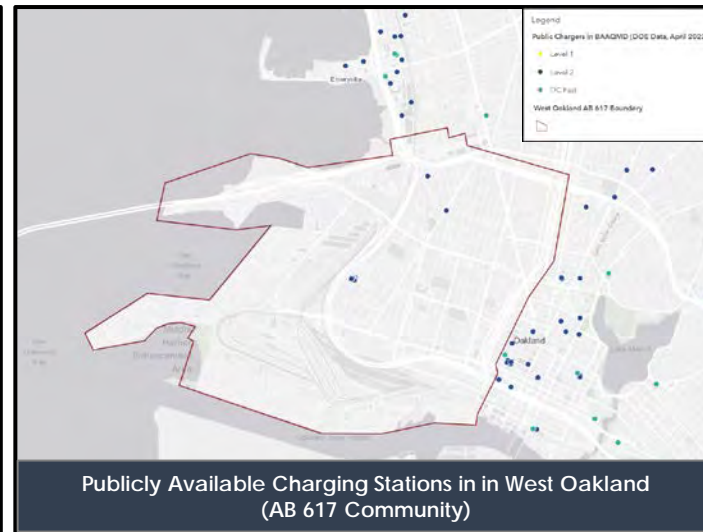
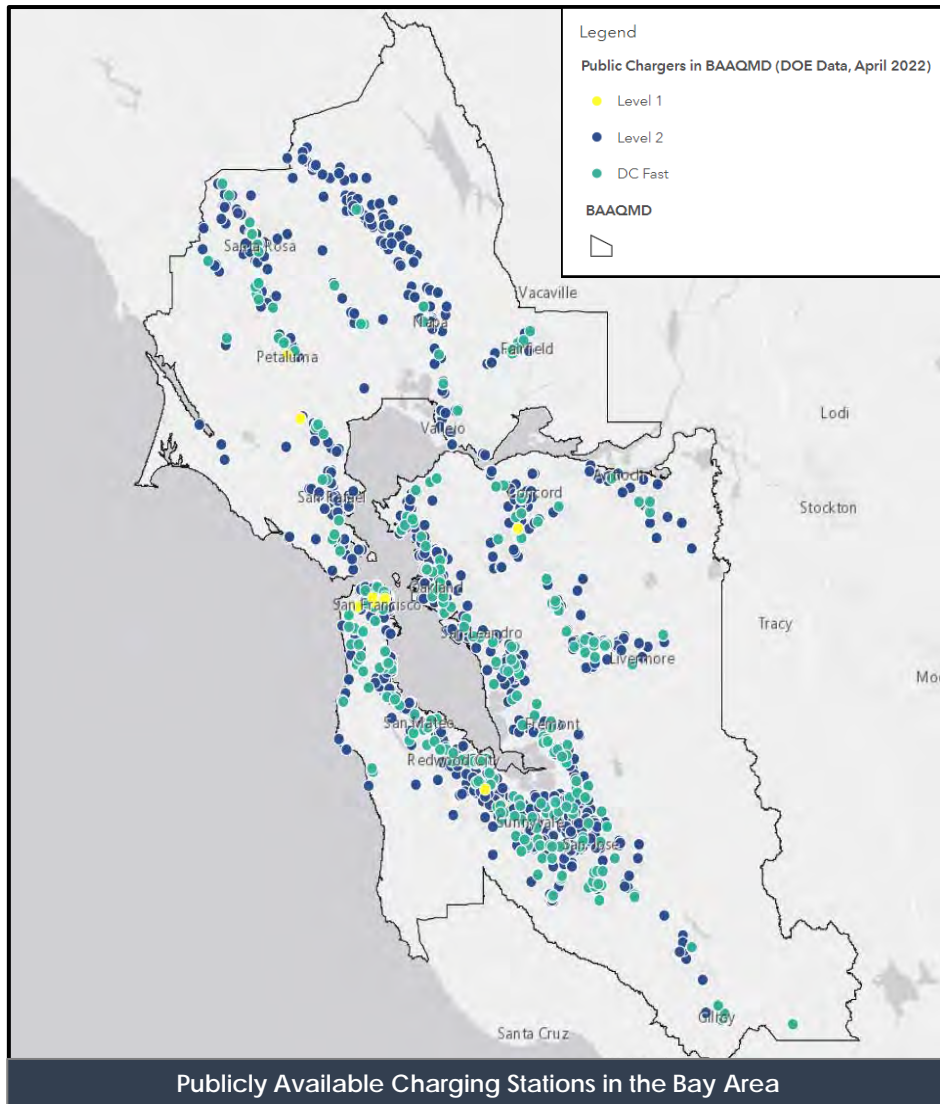


ELECTRIC VEHICLE CHARGING PORTS BY COUNTY



- Total public EV charging ports as of April 2022: ~11,939
  - Source: U.S. Department of Energy's [Alternative Fuels Data Center](#)

# Existing Bay Area EV Infrastructure Cont'd

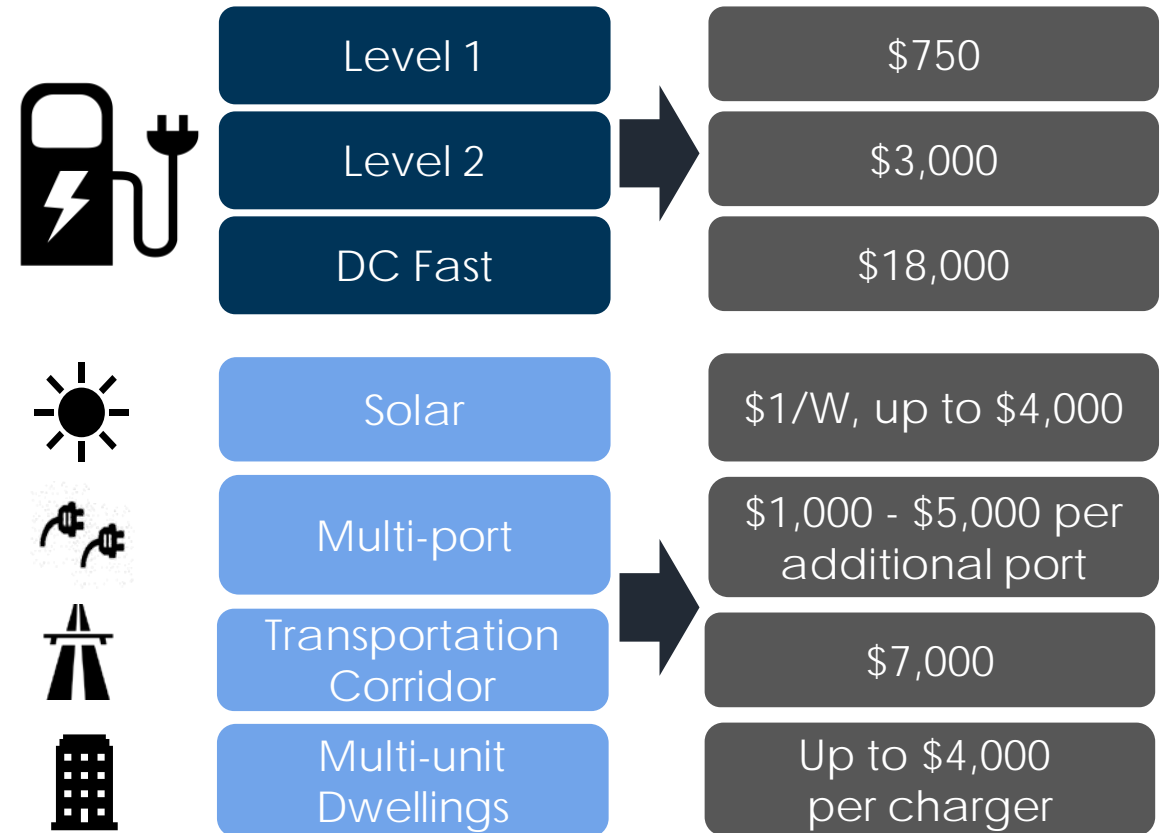




# Charge! Program Overview



- Since 2016, the *Charge!* Program has provided grant funding for publicly accessible EV charging in the Bay Area
- Open to public agencies and private businesses
- Charging location types:
  - Workplace
  - Destination
  - Transportation corridors
  - Transit parking
  - Multi-unit dwellings





# 2022 *Charge!* Program Solicitation



- \$7M available from Transportation Fund for Clean Air and Mobile Source Incentive Fund
- Solicitation period: December 7, 2021 – March 1, 2022
- Funding priorities:
  - AB 617 communities
  - Affordable and below market-rate housing
  - Disadvantaged & low-income communities
  - Environmental justice communities
  - Multi-unit dwellings (MUDs)
  - Low charger density regions





# 2022 *Charge!* Program Solicitation Cont'd

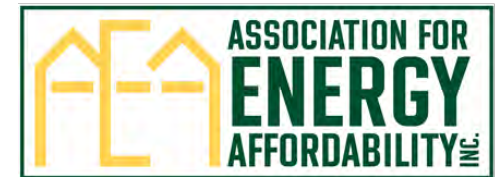


- Competitive/ranked solicitation
- Currently evaluating and scoring projects

# StopWaste Pilot Overview



- Air District's Bay Area EV Acceleration plan performed market research to better understand barriers preventing property managers and landlords from installing EV charging at MUDs.
- Barriers to installing EV chargers at MUDs include:
  - A lack of time to research EV charging.
  - Uncertainty about cost and upgrade requirements.
  - Suggested that technical assistance, including site assessments, would help increase installations of EV charging at MUDs.



# StopWaste Pilot Cont'd



- The Air District contracted with Alameda County Waste Management Authority (StopWaste) to perform outreach and technical assistance for MUDs in West Oakland and Richmond/San Pablo.
- Experience has shown that having existing relationships and employing contractors from these communities increases the ability to integrate local knowledge and meet community needs.
- StopWaste
  - Has connections with existing multi-family building owners.
  - Was the lead implementer for the BayREN multifamily programs, which includes a rebate and technical assistance program for energy efficiency projects.
  - ECO (sub-contractor) has experience working in West Oakland and Richmond AB 617 communities.

# Additional Efforts



- The Air District has recently applied for grant funding to support EV charger installations at MUDs.
  - If awarded, the Air District will work with partner organizations and community groups to identify project sites to install EV chargers across the Bay Area, specifically in Oakland, Richmond/San Pablo, and Vallejo.
    - Reduce out-of-pocket expenses for MUD owners and residents.
  - Goal is to install EV chargers solely at MUDs with affordable housing units to serve disadvantaged and low-income communities.
  - Assist residents with applying for Clean Cars for All Program grant funding.

# Feedback Requested/Questions



1. What EV charging needs do you see in areas that you frequently visit?
2. What are the priority areas in your communities?
3. Do you have recommendations for outreach and engagement?
4. Do you have thoughts about the future of EVs and EV charging infrastructure?



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AGENDA: 7

# Climate Tech Finance Statewide Expansion

Technology Implementation Office (TIO) Steering  
Committee Meeting  
May 13, 2022

Tamara Kohne  
Staff Specialist  
[tkohne@baaqmd.gov](mailto:tkohne@baaqmd.gov)

# Presentation Outcome



- The Committee will receive an update on the possible statewide expansion of the Climate Tech Finance program

# Presentation Requested Action



- None; informational item



# Presentation Outline



- Program Overview
- Impact to Date
- Potential Statewide Expansion
- Program Marketing

# Program Overview



## Mission

Reduce greenhouse gases (GHGs) by increasing access to capital to accelerate climate technology commercialization



## Tools

**Working Capital** for  
Business Growth

*Loan guarantees of up to  
\$2.5M or 90%*

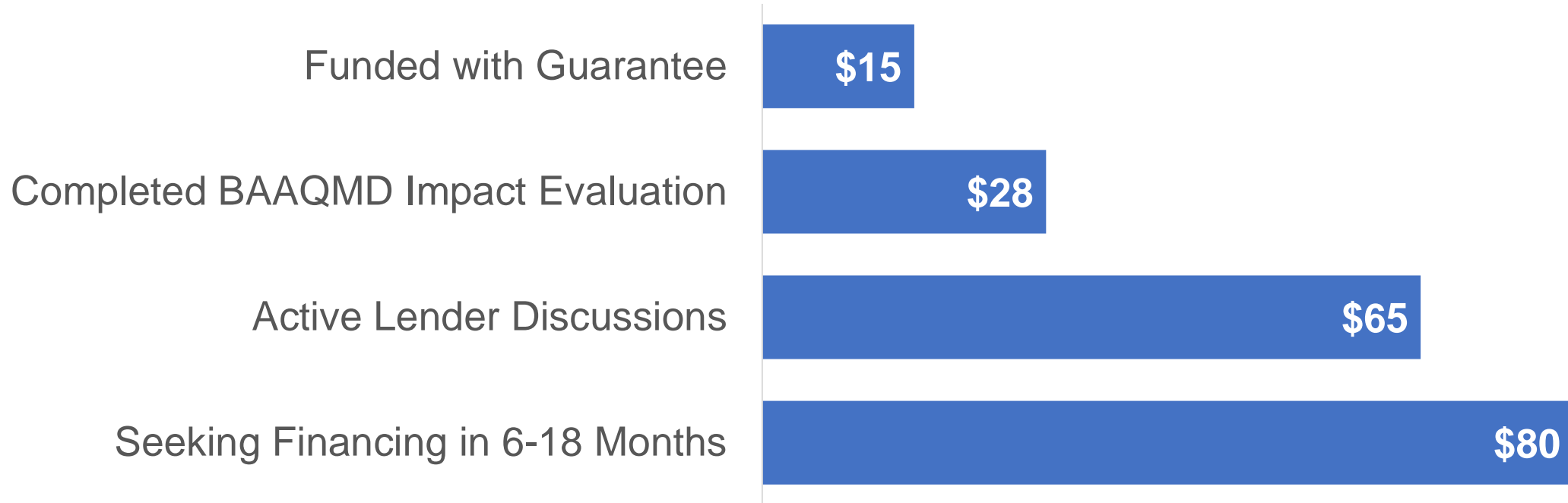
**Loans** for Buying  
Climate Tech

*Low-interest loans of up to  
\$30M over 30 years*

# Program Impacts



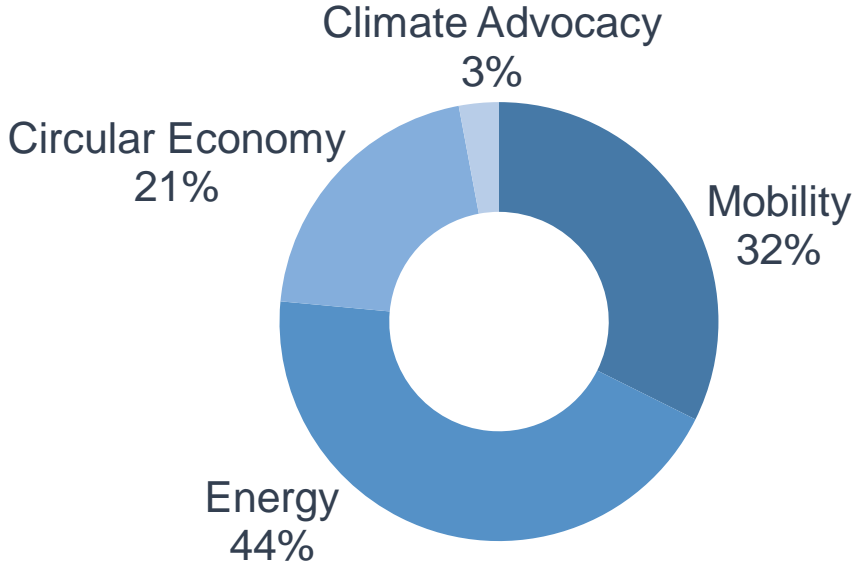
## Total Loan Amount (\$M)



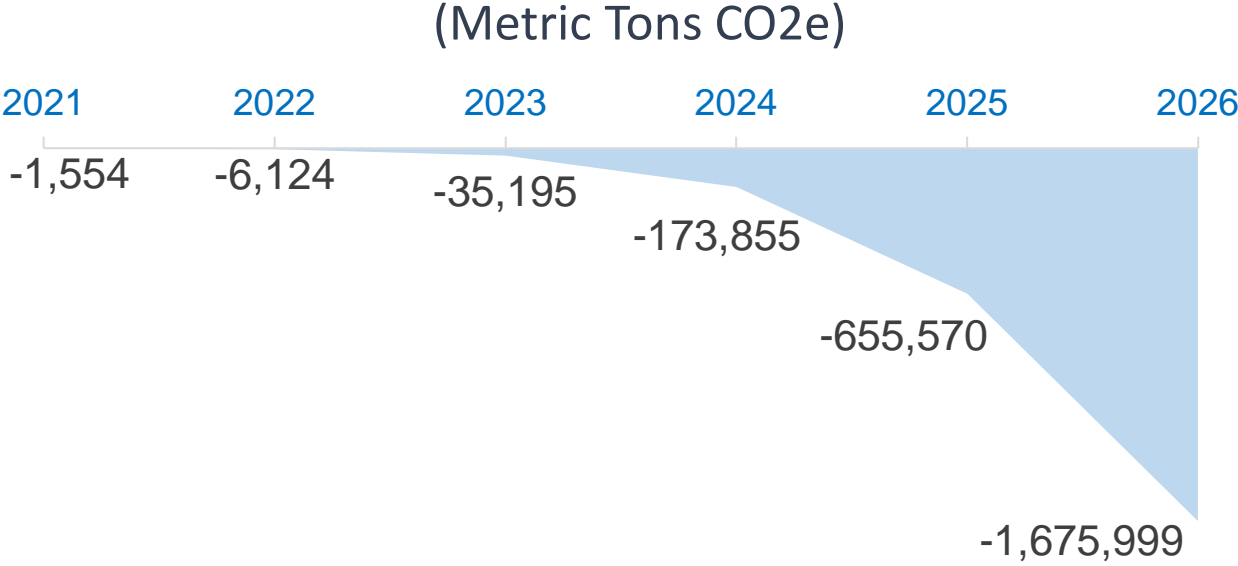
# Program Impacts Cont'd



## Technology Sectors



## Projected GHG Reductions



# Potential Statewide Expansion



## California Climate Tech Finance

- California programs slated to receive ~\$900M from State Small Business Credit Initiative (SSBCI)
- Our banking partner (IBank) will need to facilitate large volume of loans
- Likely to enhance loan guarantee beyond current \$2.5M max
- Climate Tech Finance is IBank's primary climate program
- Discussions of fee sharing with IBank to support Climate Tech Finance statewide

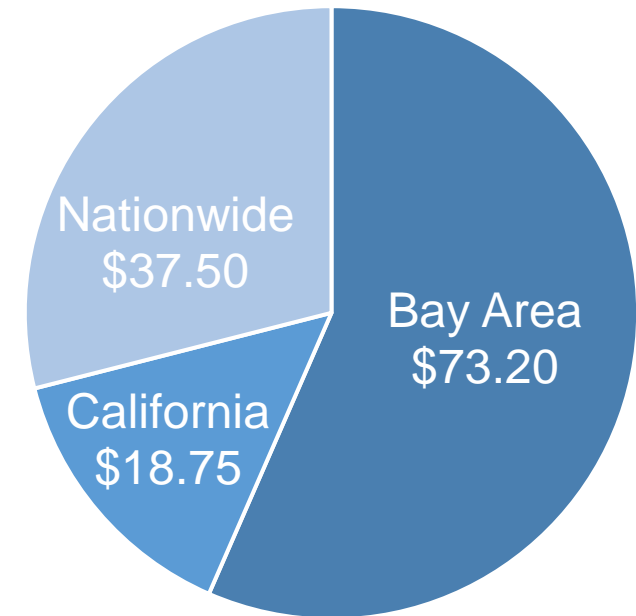
# Potential Statewide Expansion Cont'd



## California Climate Tech Finance

- Robust pipeline of Bay Area and California entrepreneurs
  - Nearly half of pipeline has presence outside Bay Area
- Prominent lenders participating in the program

## Pipeline Volume by Region (\$M)



River City Bank



Farmers & Merchants Bank  
*California's Strongest, since 1907.*



EAST WEST BANK

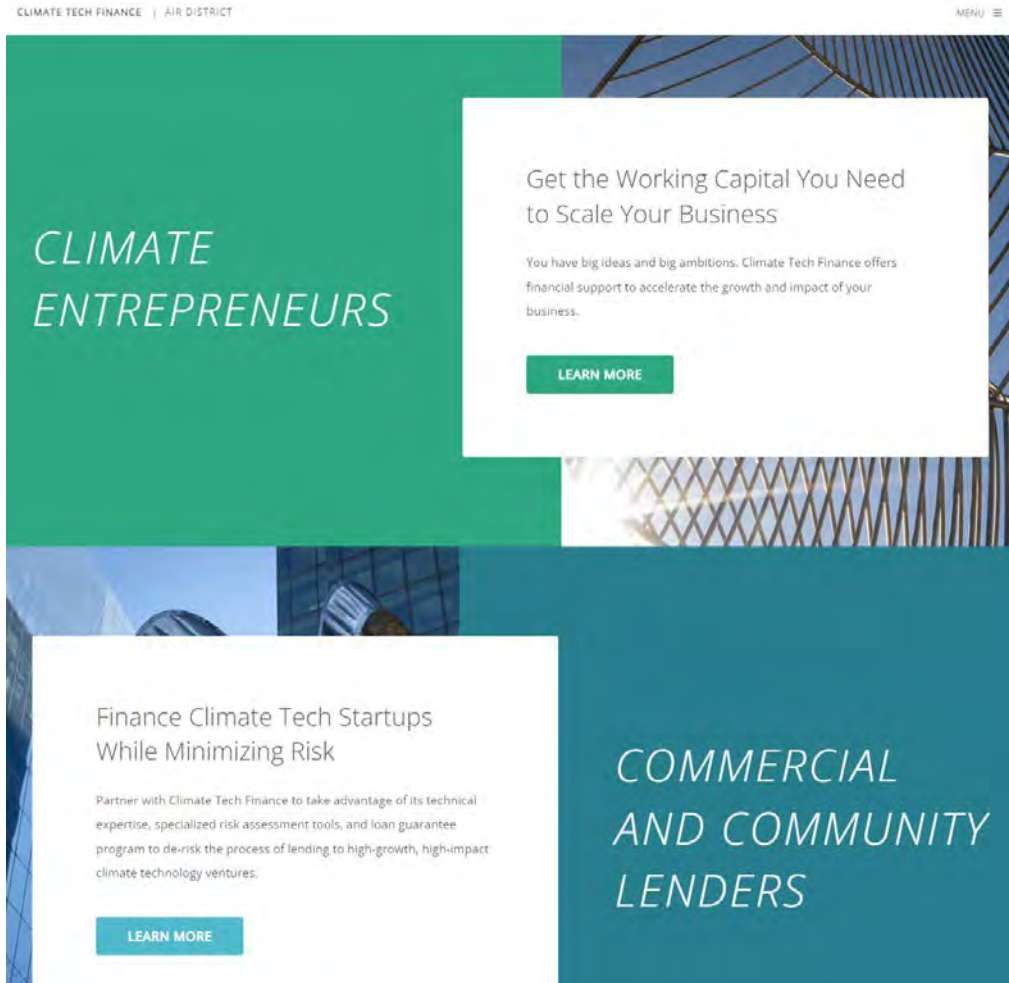


Community  
Vision  
CAPITAL & CONSULTING



CALIFORNIA  
BANK OF COMMERCE

# Program Marketing



- **New Climate Tech Finance website: [ctf.baaqmd.gov](https://ctf.baaqmd.gov)**
- **Salesforce CRM implementation**
- **Outreach Campaign to identified referral networks**

# Feedback Requested



- Discussion of statewide expansion opportunities for Climate Tech Finance