

DOCKETED

Docket Number:	20-TRAN-02
Project Title:	SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment
TN #:	233310
Document Title:	Presentation - CEC SB 1000 Workshop
Description:	N/A
Filer:	Christina Cordero
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	6/4/2020 10:11:01 AM
Docketed Date:	6/4/2020



Senate Bill 1000

Electric Vehicle Charging Infrastructure Deployment Assessment

Public Workshop

Tiffany Hoang, Air Pollution Specialist
Fuels and Transportation Division
June 4, 2020



Workshop Agenda

- Introductions and Housekeeping
- Overview
 - Senate Bill 1000
 - Clean Transportation Program
- Proposed Methodology
- Preliminary Analysis
- Questions, Public Comment, and Discussion



Housekeeping

- The Q&A box is available for questions and comments throughout the presentation
- Participants on the phone can use the “raise hand” feature to ask questions and provide comments at the end of the presentation
- Diversity Survey



Commitment to Diversity

The California Energy Commission (CEC) adopted a resolution on April 8, 2015 to firmly commit to:

- Increase participation of women, minority, disabled veterans and LGBT business enterprises in program funding opportunities.
- Increase outreach and participation by disadvantaged communities.
- Increase diversity in participation at CEC proceedings.
- Increase diversity in employment and promotional opportunities.



Senate Bill (SB) 1000 Overview

Lara, Chapter 368, Statutes of 2018



Statute Intent & Policy

- "That local entities not adopt ordinances that create unreasonable barriers to the use of electric vehicle infrastructure"
- "To promote and encourage the use of electric vehicle infrastructure and to limit obstacles to its use"
- "To increase access to electric vehicle infrastructure in all California communities"

Statute: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1000



The California Energy Commission's Role

TASK

Assess whether charging station infrastructure is disproportionately deployed

PARAMETERS

Population Income (low, middle, high)
Population Density
Geographical Area

GOAL

Inform proportionate deployment of charging station infrastructure



Clean Transportation Program Funding

SB 1000 will inform the **Clean Transportation Program Investment Plans** which are prepared each year to guide the allocation of program funding for transportation solicitations.

The Clean Transportation Program Investment Plans [page](https://www.energy.ca.gov/programs-and-topics/programs/clean-transportation-program/clean-transportation-program-investment):

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

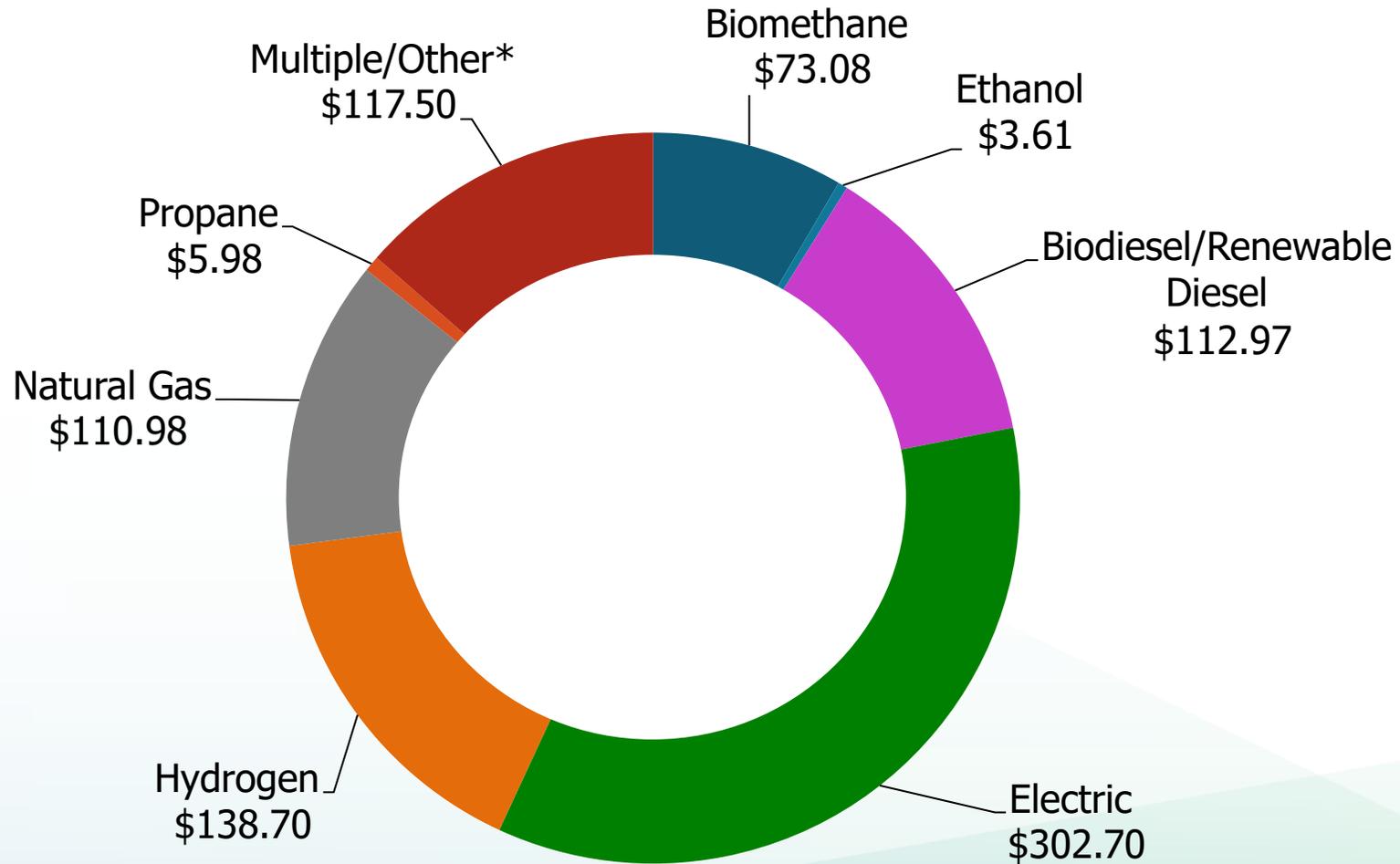


Clean Transportation Program Overview



Clean Transportation Program

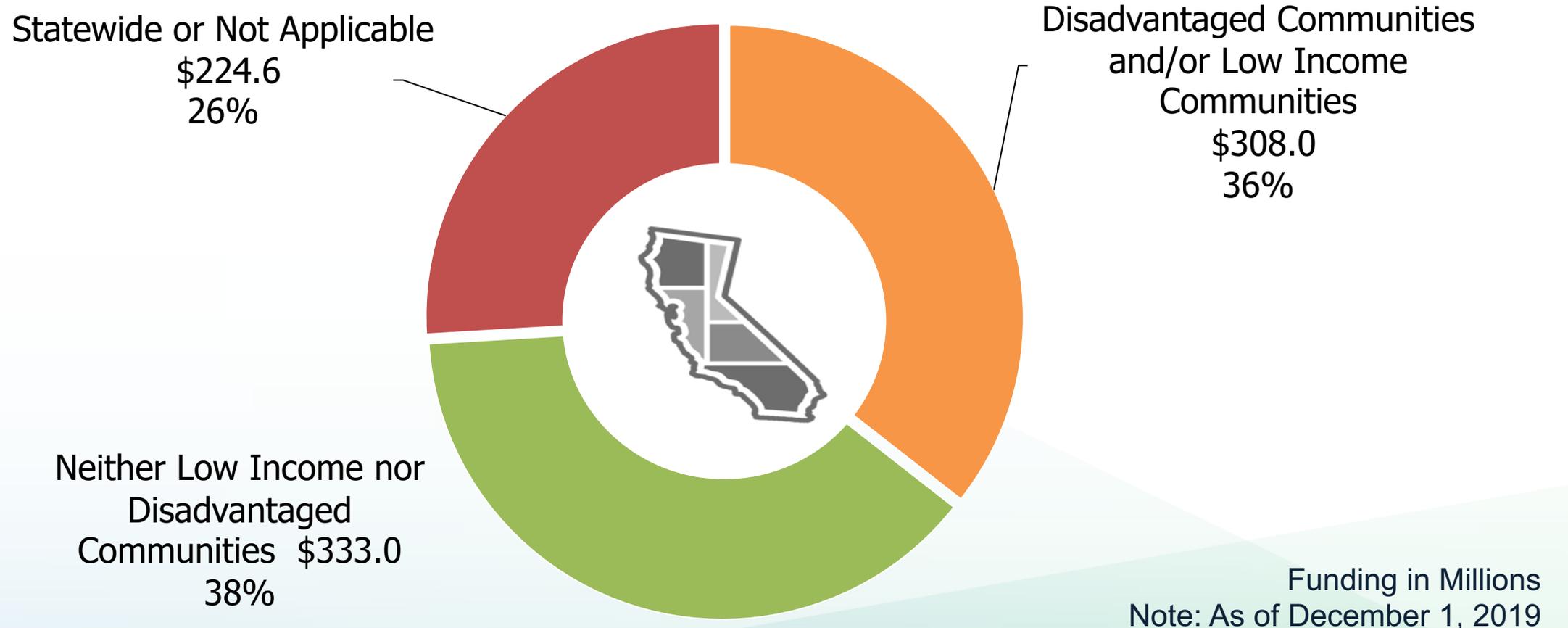
Funding as of December 1, 2019 (in millions)





Clean Transportation Program

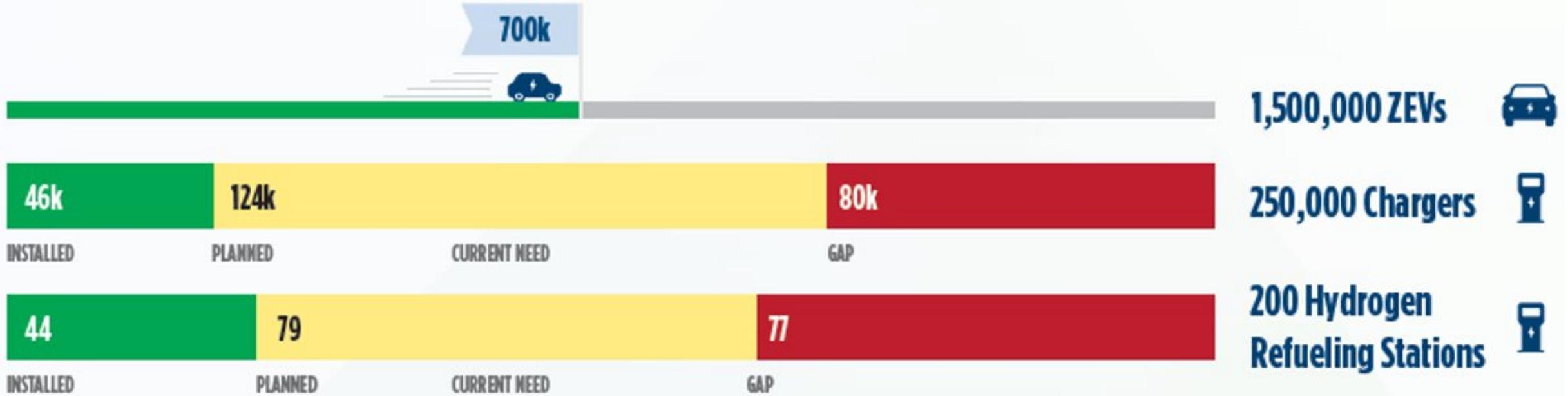
Funding Toward Disadvantaged and/or Low-Income Communities





California's Zero Emission Vehicle Targets

PROGRESS TO 2025 GOAL



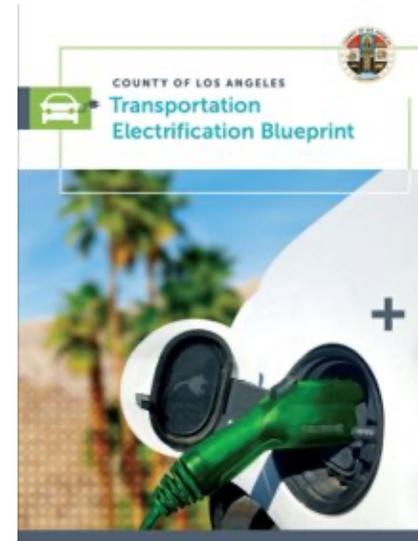
PROGRESS TO 2030 GOAL: 5,000,000 ZEVs





Clean Transportation Program

Light-Duty Charging Infrastructure Projects





Proposed Methodology & Preliminary Analysis



Overview of Proposed Methodology

1. Define low-, middle-, and high-income levels; population density; geographical area
2. Collect and assess available charging station infrastructure data
3. Assess infrastructure distribution and access across population income levels, population density, and geographical area

Covered in this presentation

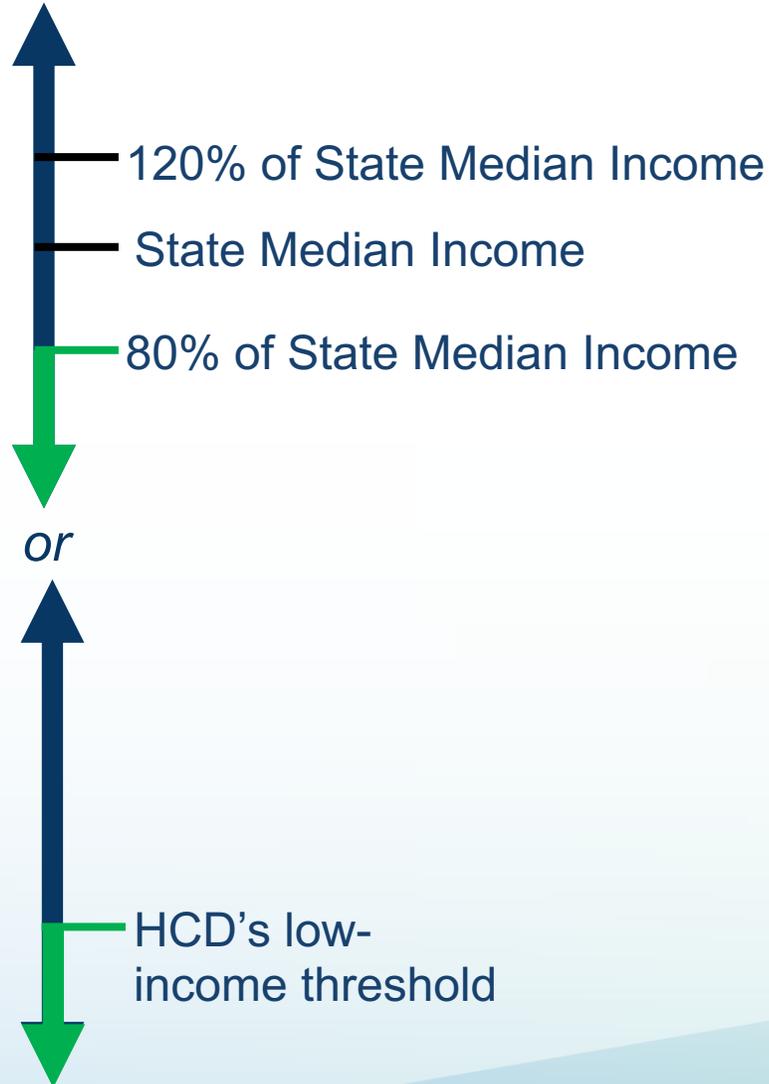


-
4. Assess whether infrastructure is disproportionately deployed by population income level, density, or geographical area
 5. Conduct an infrastructure gap analysis using EVI-Pro estimations
 6. Inform station deployment and investment decisions
 7. Reassess deployment yearly

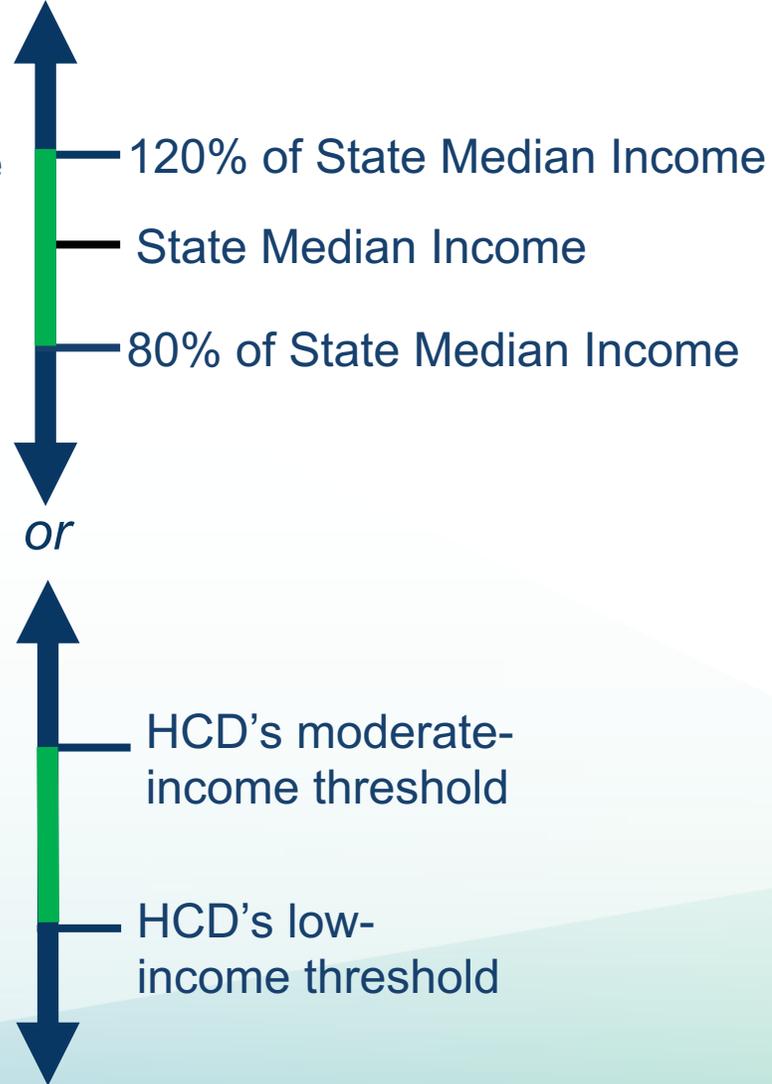


Proposed Definitions for Income Communities

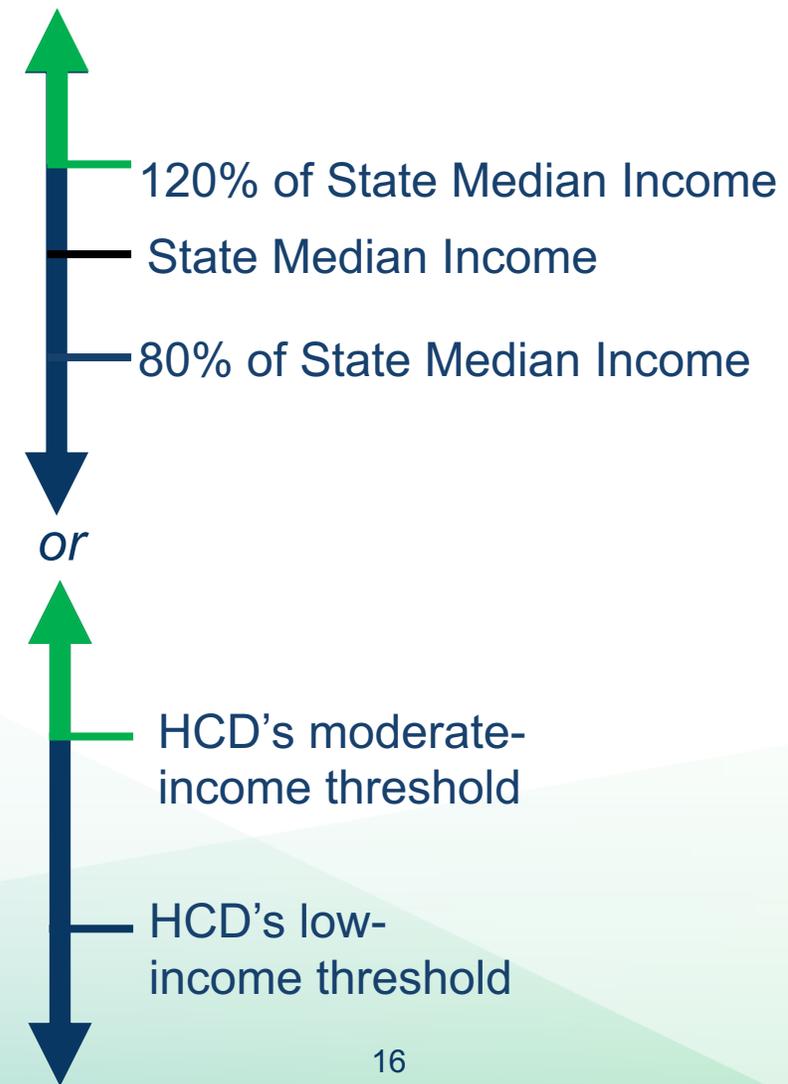
Low-Income



Middle-Income

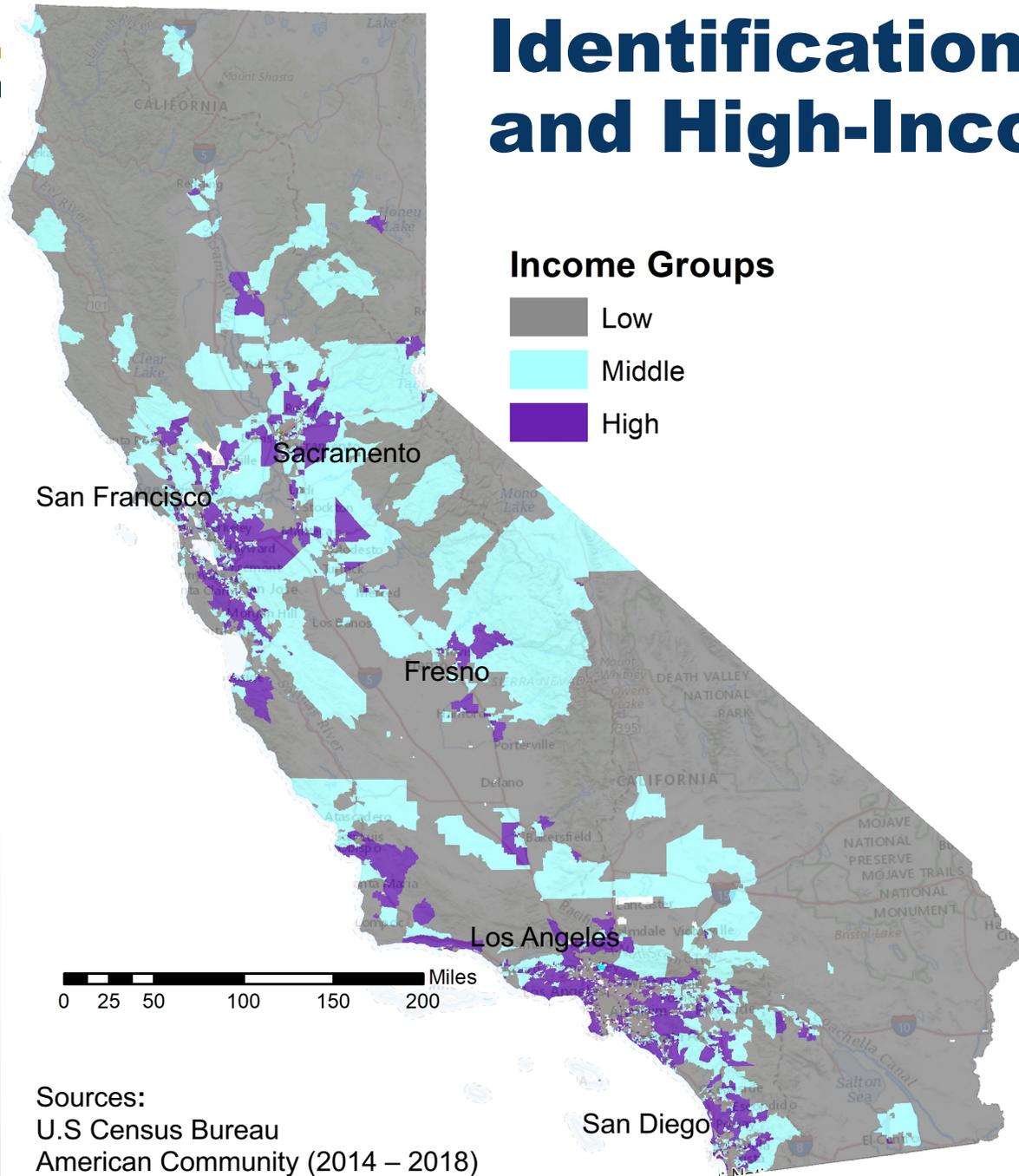


High-Income



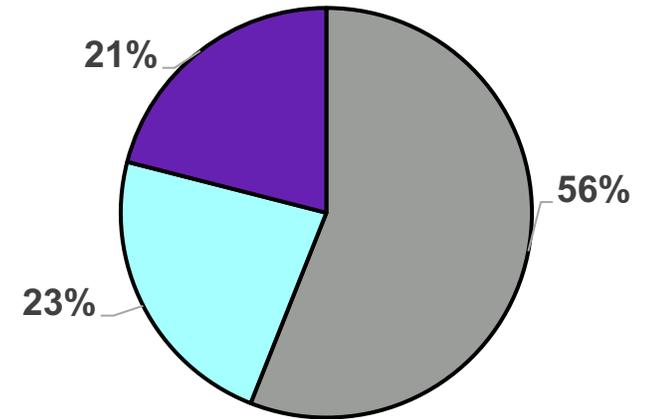


Identification of Low-, Middle-, and High-Income Communities

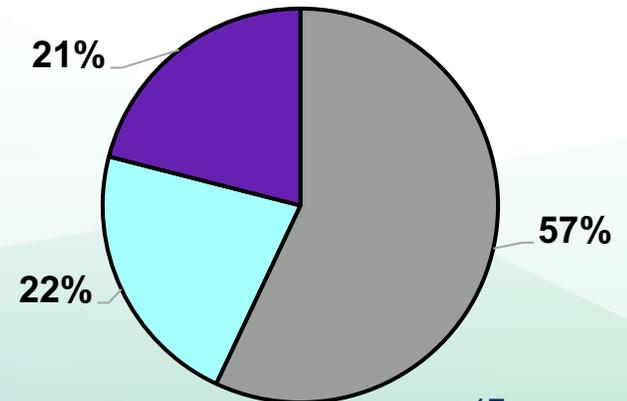


Sources:
U.S Census Bureau
American Community (2014 – 2018)

Total Population

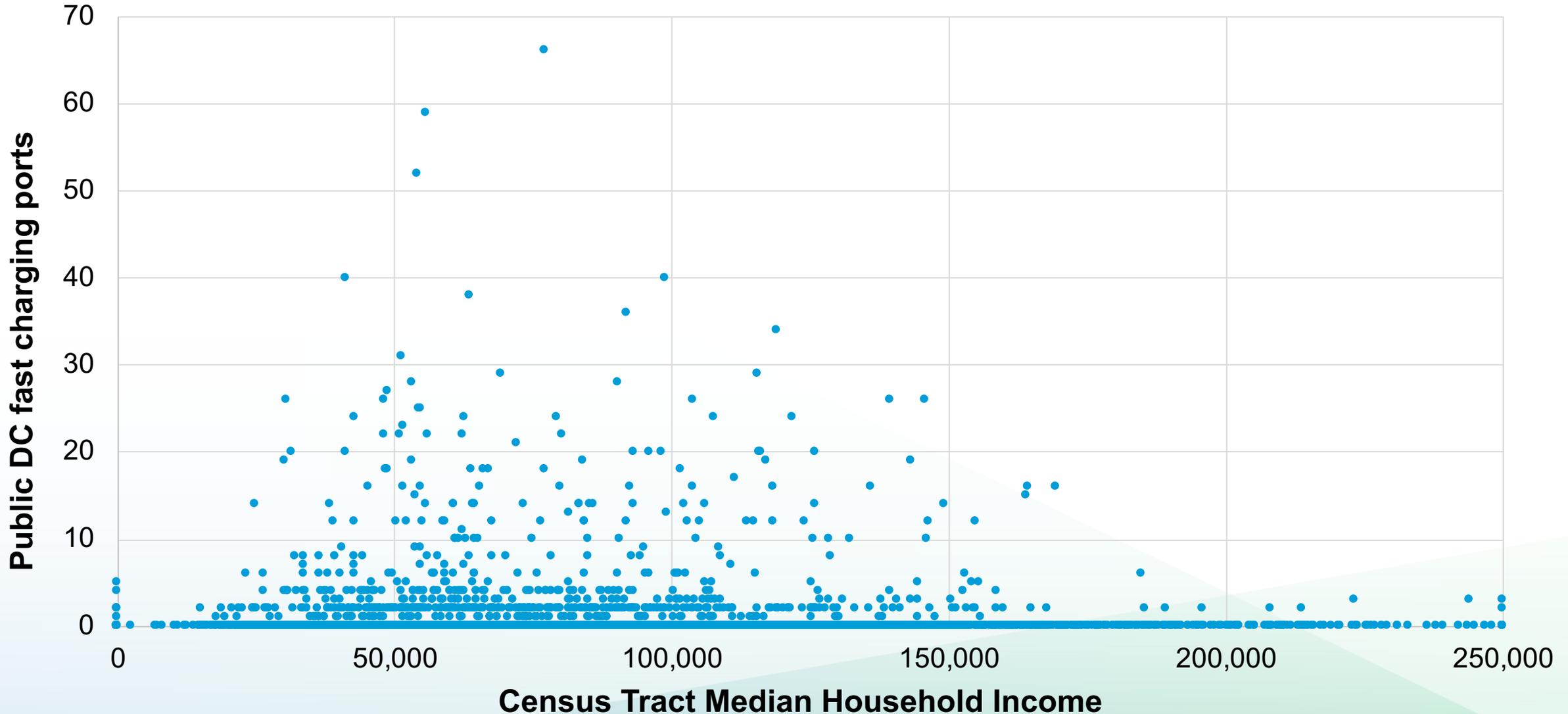


Census Tract Communities



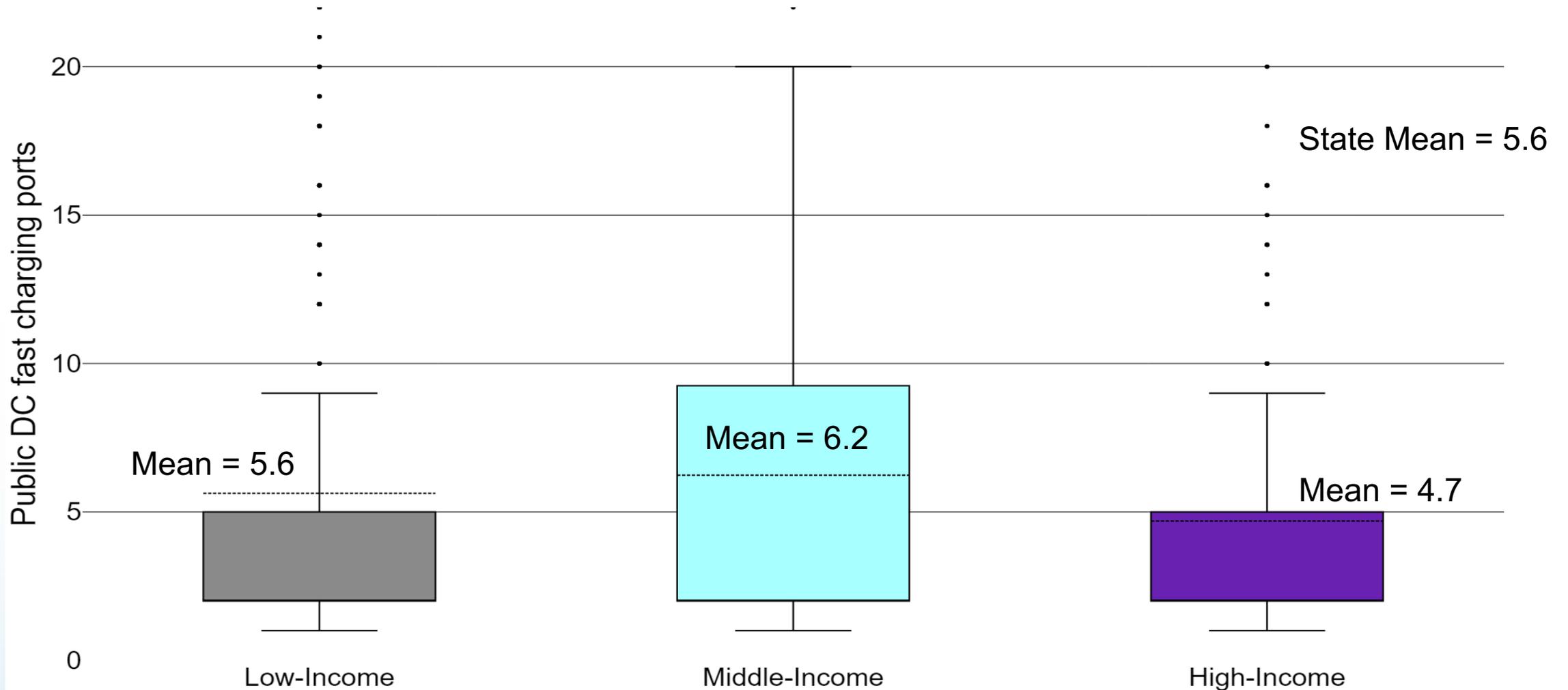


DC Fast Charging Port Distribution by Census Tract Median Household Income



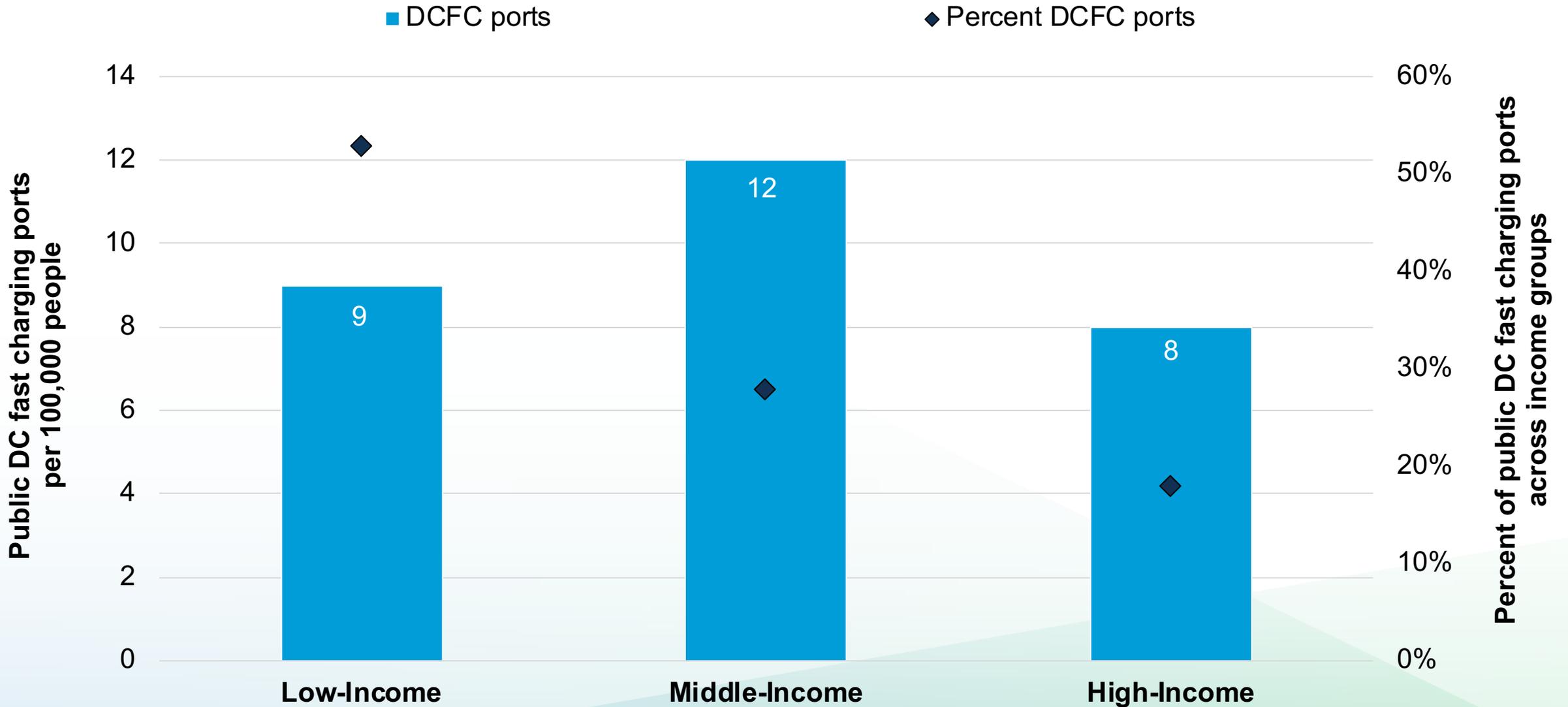


Distribution of Census Tract DC Fast Charging Port Counts across Income Communities



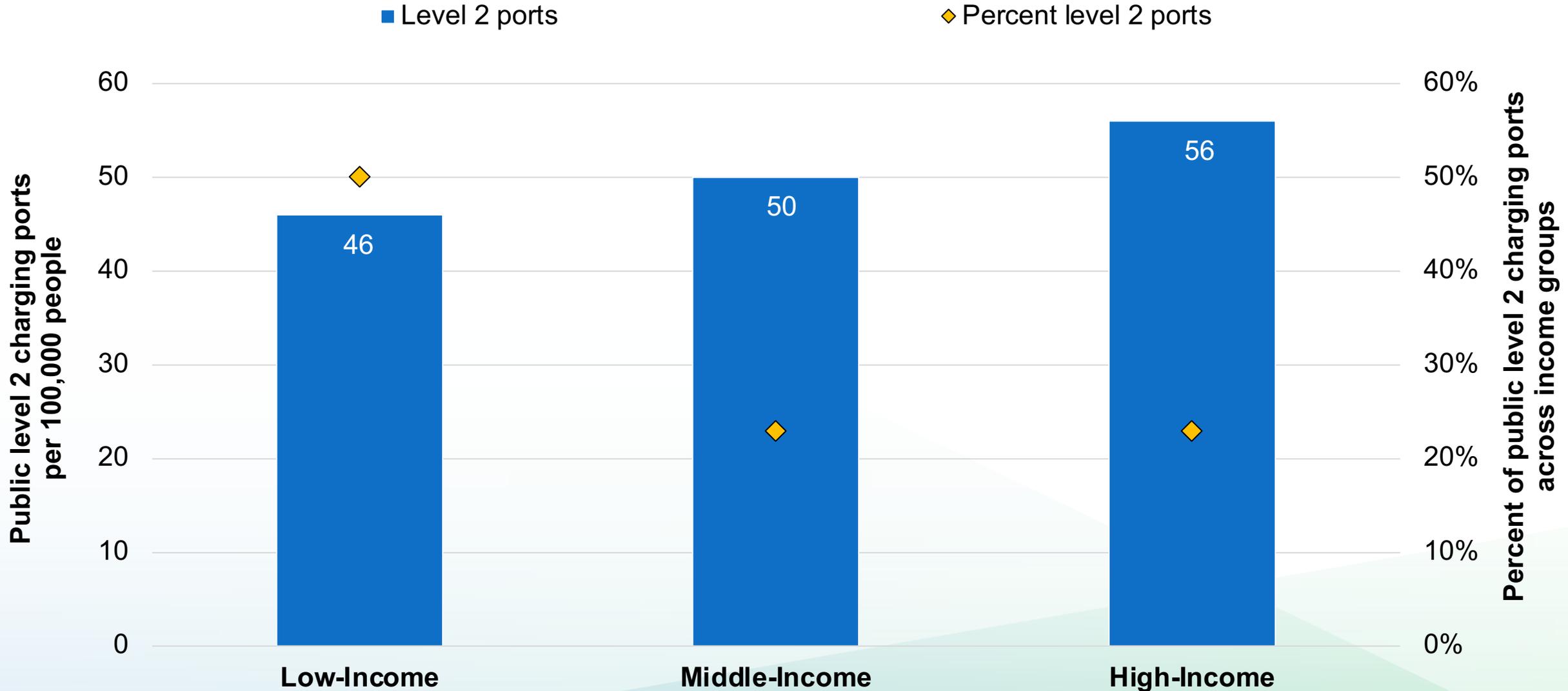


DC Fast Charging Port Access and Distribution across Income Communities





Level 2 Charging Port Access and Distribution across Income Communities



4% of public level 2 ports are in census tracts with no reported median household income.

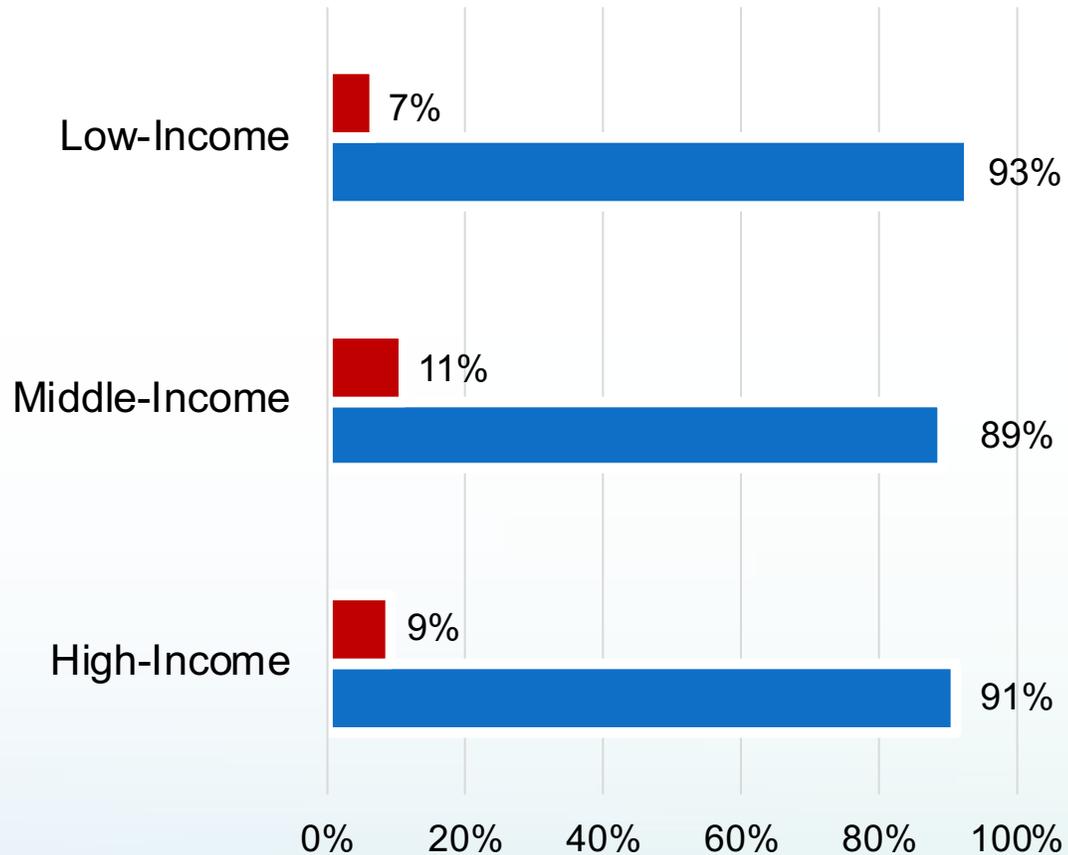
Sources: Alternative Fuels Data Center, American Community Survey 2014 - 2018 5-year estimates



Charging Access and Distribution across Income Communities

Level 2 Connector Access

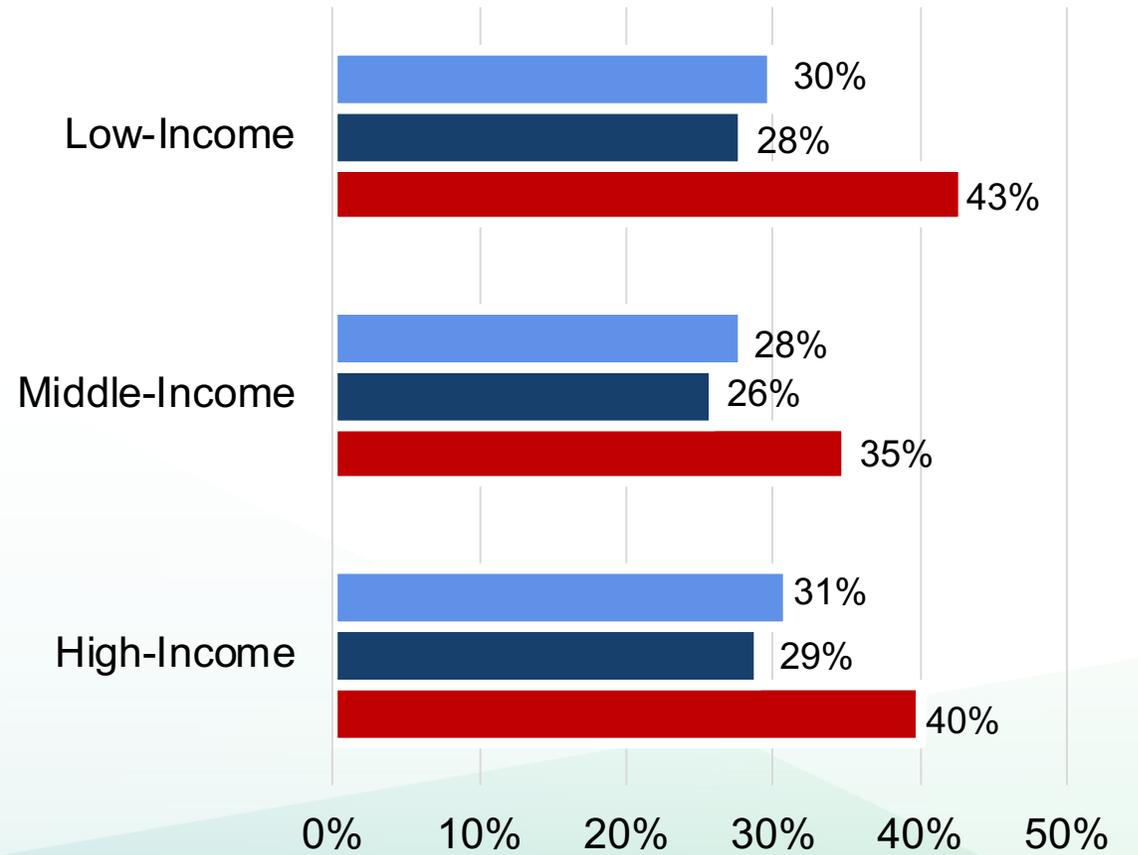
■ Tesla connectors ■ J1772



Percentage of ports with connector type

DC Fast Connector Access

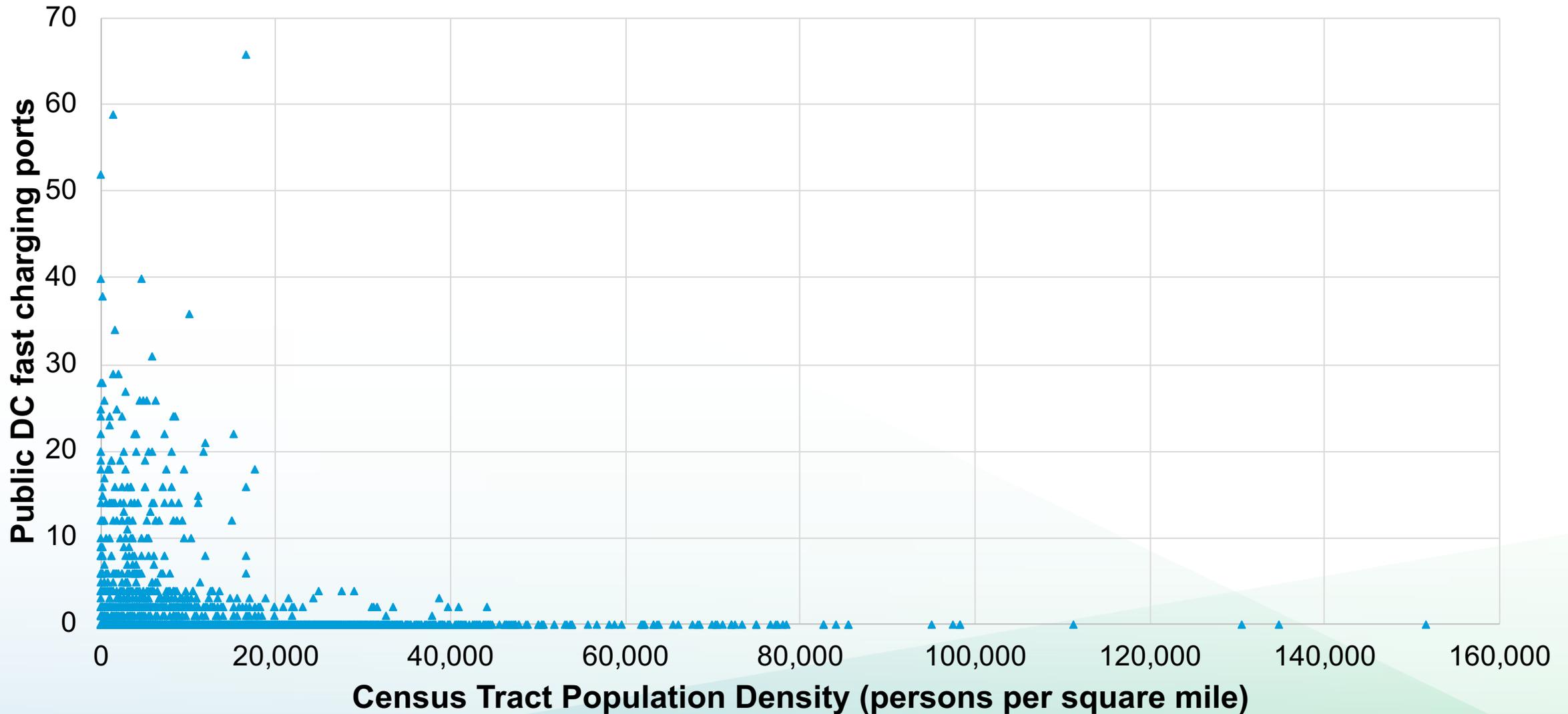
■ Combo connectors ■ CHAdeMO ■ Tesla



Percentage of ports with connector type

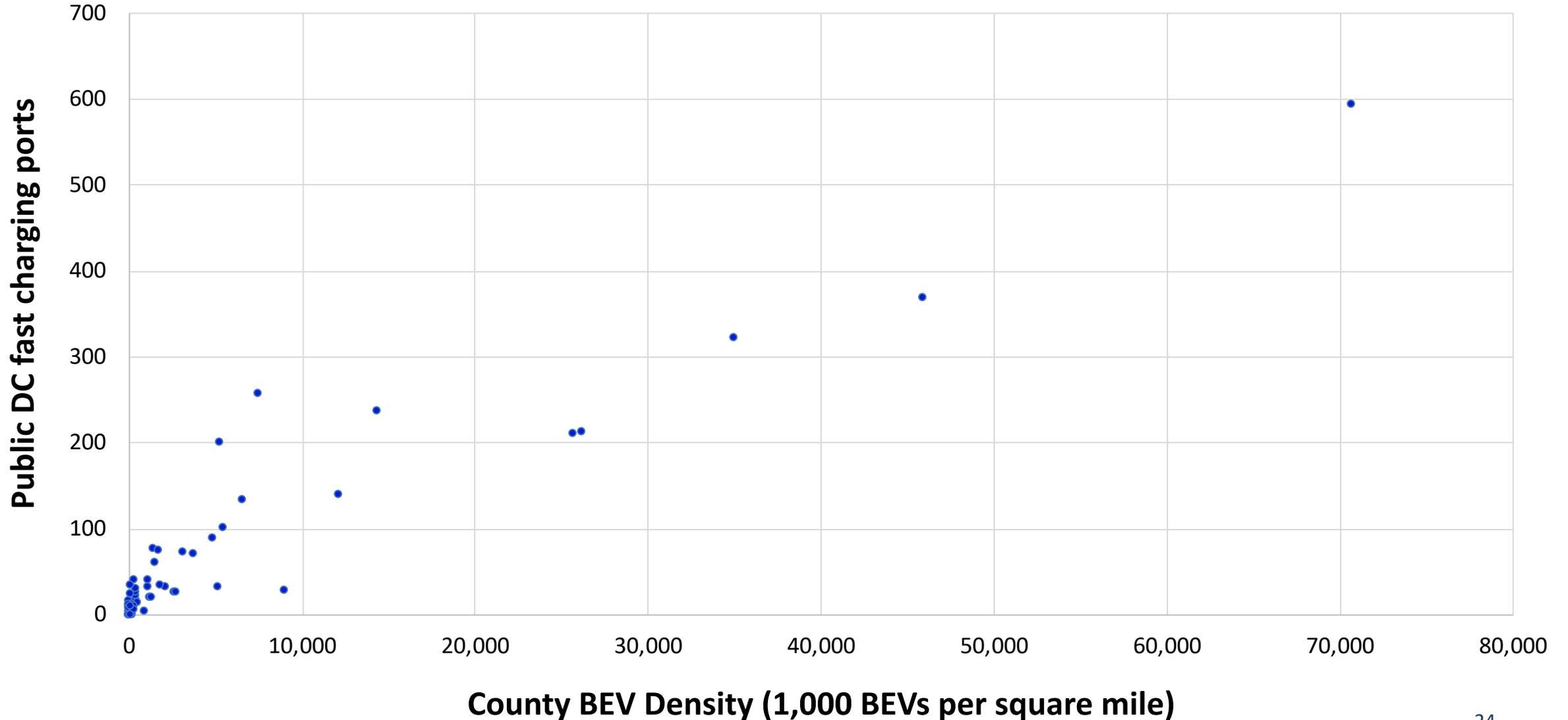


DC Fast Charging Port Distribution by Census Tract Population Density





DC Fast Charging Port Distribution by County Battery Electric Vehicle Density





Questions





Parameter Definitions

1. Do you recommend other definitions, data sets, or identification methods for population income level, population density, or geographical area?



Infrastructure Deployment

1. Are distribution and access the same?
2. Do you have recommendations for measuring charging infrastructure distribution and access?
3. Are there other indicators for deployment that we should evaluate?
4. Do you have recommendations for how to look for disproportionate deployment?



Open Discussion





Q&A / Public Comments

1. Phone lines
2. Raise hand feature
3. Q&A questions

Email or call the Public Advisor's Office:

PublicAdvisor@energy.ca.gov

(916) 654-4489

(800) 822-6228 (toll free)



Request for Information & Feedback

Docket #: 20-TRAN-02

- [Docket log 20-TRAN-02:](https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-TRAN-02)
<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=20-TRAN-02>
- Submit comments via the [CEC E-Commenting System:](https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=20-TRAN-02)
<https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=20-TRAN-02>
- Email Docket Unit: DOCKET@energy.ca.gov

Reference “SB 1000 Electric Vehicle Charging Infrastructure Deployment Assessment” in the subject line. If providing comments to questions included in this presentation, please reference the slide number and/or question.

All comments due by 5:00 p.m. on Thursday, June 18, 2020



Thank You!

Tiffany Hoang
Tiffany.Hoang@energy.ca.gov
(916) 654-4521