

Characteristics of Low/Moderate Income Participants in California's Clean Vehicle Rebate Project

What Low/Moderate Income populations are adopting Electric Vehicles in California

Thanks to James Tamerius, John Anderson, Amy Lastuka, Jamie Orose and others at CSE

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Sustainable
Energy™

California Clean Vehicle Rebate Project

Fuel-Cell EVs	\$5,000
All-Battery EVs	\$2,500
Plug-in Hybrid EVs	\$2,500 (i3 REx) \$1,500
Zero-Emission Motorcycles	\$900

- ≥ 20 e-miles
- Income cap
- Increased rebates for lower-income households (+\$2,000)

Filter by:

Consumer Type: (All)

Rebate Type [1]: Low-/Moderate-Income Inc...

Equity Communities [2]: (All)

County: (All)

Electric Utility: (All)

Air District: (All)

CA Senate District [3]: (All)

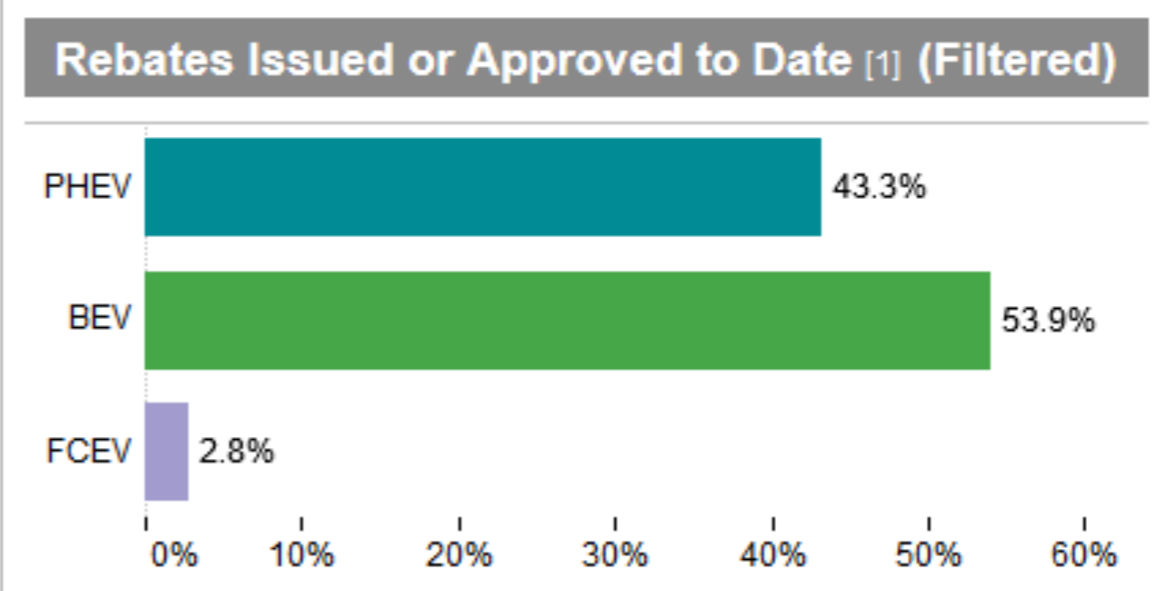
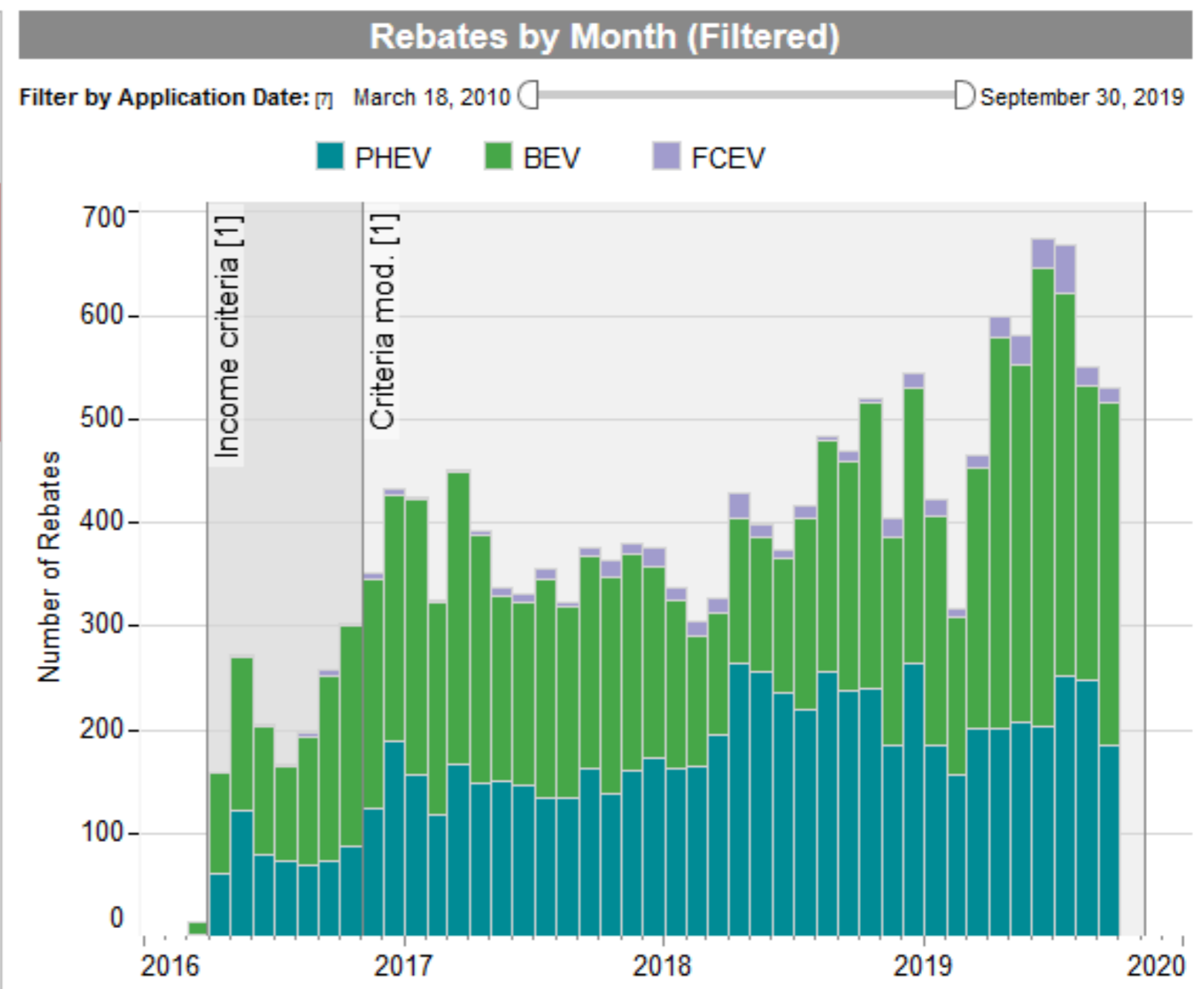
CA Assembly District [3]: (All)

Vehicle Category [4]: (All)

Make: (All)

Funding Source [5]: (All)

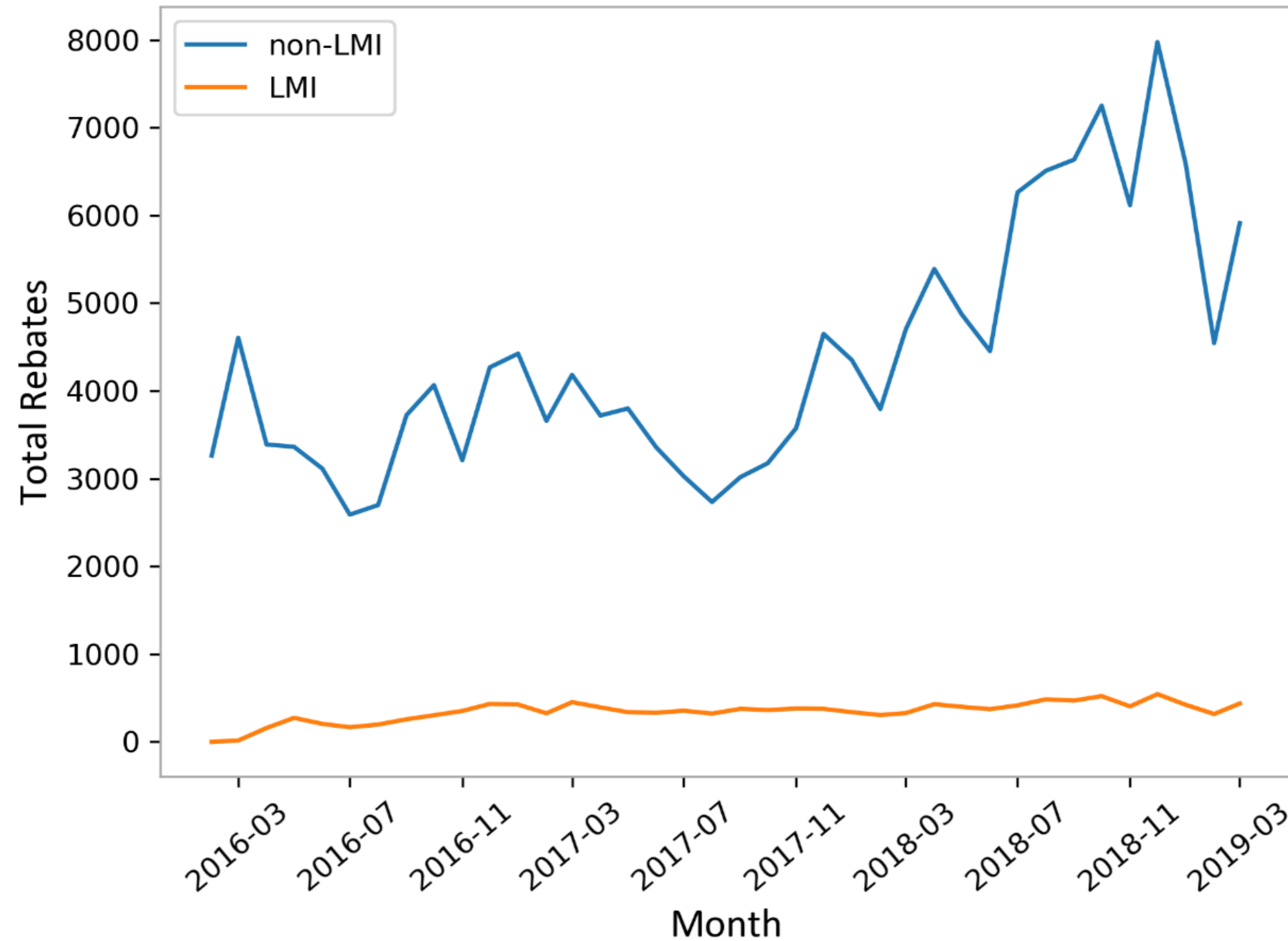
Grant Number [8]: (All)



Data is updated monthly. Last updated: November 07, 2019



Rebates by Population over Time



Research Question



What LMI populations are adopting EVs in California?

Methods

CVRP application and consumer survey (2016-2017 and 2017-2018) data - Increased Rebate for Lower-Income Consumers

Age, education, household income, household size, race/ethnicity



Latent Class Analysis

**We assume that LMI rebate consumers are comparable to all LMI EV adopters

Results

We identified four distinct LMI EV Consumer Groups:

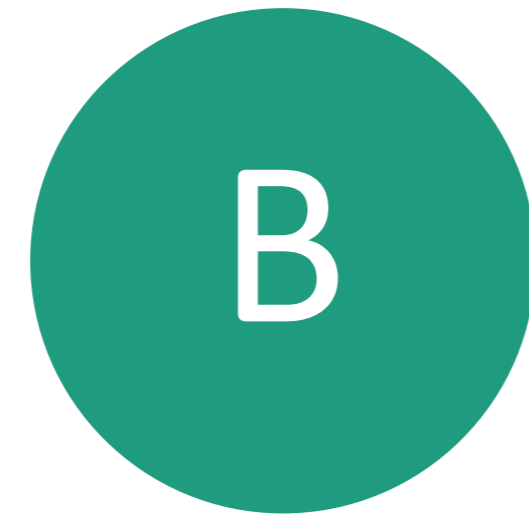
- Older/White
- Middle-Aged/White
- Younger/Asian American
- Younger/Latino

Results



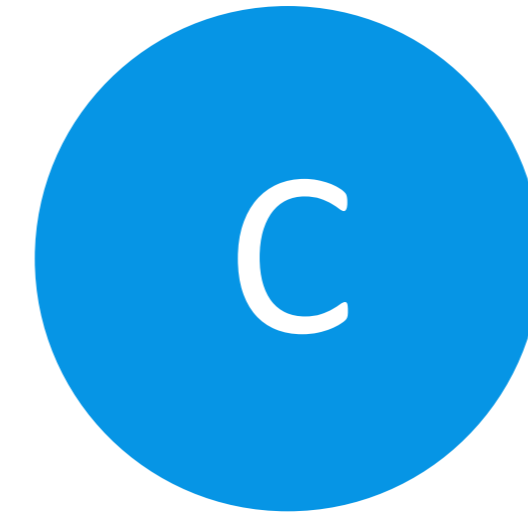
Older/White

- Oldest group
- Lowest income
- Small household sizes
- Environmental impacts importance in decision to get EV



Middle-Aged/White

- Middle-Aged
- Highest income
- Largest household sizes



Younger/Asian American

- Young
- Highest educational attainment
- Large households



Younger/Latino

- Youngest group
- Lowest average educational attainment
- Large households
- Main motivation: saving money on fuel

Discussion

This analysis identified four distinct LMI EV adopter groups

This can improve targeted marketing strategies for LMI populations and increase LMI EV adoption

Future analysis could provide greater insights by comparing these results to the general car buying population

E.g. What percentage of older/white purchase EVs?

Contact

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