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
## California Clean Vehicle Rebate Project

<table>
<thead>
<tr>
<th>Category</th>
<th>Rebate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel-Cell EVs</td>
<td>$5,000</td>
</tr>
<tr>
<td>All-Battery EVs</td>
<td>$2,500</td>
</tr>
<tr>
<td>Plug-in Hybrid EVs</td>
<td>$2,500 (i3 REx) $1,500</td>
</tr>
<tr>
<td>Zero-Emission Motorcycles</td>
<td>$900</td>
</tr>
</tbody>
</table>

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

![ Rebates by Month (Filtered) ]

![ Rebates Issued or Approved to Date (Filtered) ]

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

BECC 2019
Rebates by Population over Time
Research Question

What LMI populations are adopting EVs in California?
Methods


Data

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

LCA

Variables

Latent Class Analysis

Assumptions

**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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