CVRP Participant Characteristics

An Application Data Derived Update

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Other Consumer Characteristics Resources:

Publications

- B.D.H Williams and J.B. Anderson (2022, Sep.), *From Low Initial Interest to Electric Vehicle Adoption: “EV Converts” in New York State’s Rebate Program, Transportation Research Record: Journal of the Transportation Research Board.* Includes open-access data-summary *appendix.* DOI: 10.1177/0361198122118537

Reverse chronological as of 4/2023; key sources marked with a diamond bullet.
Other Consumer Characteristics Resources:

Select Presentations & Video


- Data from Statewide Electric Vehicle Rebate Programs: Vehicles, Consumers, Impacts, and Effectiveness (2021, Jul.)

- EV Purchase Incentives: Program Design, Outputs, and Outcomes of Four Statewide Programs with a Focus on Massachusetts DOI: 10.13140/RG.2.2.13166.08001. (2020, Dec.)

- Electric Vehicle Incentives and Policies DOI: 10.13140/RG.2.2.34976.46089. (2019, Nov.)


  - Electric Vehicle Rebates in Disadvantaged Communities: Evaluating Progress with Appropriate Comparisons (2016, Oct.)

- Implementation Status Update (2015, Dec.)

Reverse chronological as of 1/2023; key sources marked with a diamond bullet.
Participant Characteristics
New Car Market Composition: Income

- Federal Poverty Level is defined by income and household size. For example, for a household size of 4:

<table>
<thead>
<tr>
<th>Year</th>
<th>FPL</th>
<th>400% FPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$26,200</td>
<td>$104,800</td>
</tr>
<tr>
<td>2021</td>
<td>$26,500</td>
<td>$106,000</td>
</tr>
<tr>
<td>2022</td>
<td>$26,500</td>
<td>$106,000</td>
</tr>
</tbody>
</table>

- CVRP Income Cap
  - $250,000 for single individuals,
  - $340,000 for a head of household,
  - $500,000 for joint filing

Key takeaway:
The majority of 2019 new car market buyers reported income between 400% FPL and the CVRP income cap.
CVRP Application Data

Applicant types: Individual only
Purchase date range: Apr. 9, 2019 to Feb. 16, 2023
Application date range: Jan. 1, 2021 to Mar. 1, 2023
Application status: Approved applications only
Total applications: 90,149
Rebates Issued By Key Income Levels

Key takeaways:

About 75% of CVRP recipients have household incomes between 400% FPL and the income cap. In contrast, only 65% of the new car market who would qualify for CVRP’s income criteria (i.e., excluding the highest income new car buyers) are in this income range.

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Application Approved, Check Sent; Application Type = Individual; n = 90,149
Rebate Types Issued By Key Income Levels

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Application Approved, Check Sent; Application Type = Individual; n = 90,153
The 300-400% FPL bar contains 437 applications (4.6%) submitted before the threshold for increased rebates was increased to 400% FPL.

Key takeaway: Approximately 15% of recipients in the 0–300% FPL level and just over 20% of 300–400% FPL level applicants qualify for, but do not claim, increased rebates.

If CVRP goes LMI-only, will these participants exit the program or increasingly opt for an increased rebate?
Key takeaways: 62% of standard rebate recipients have household incomes 600% FPL or greater. 36% of increased rebate recipients in this data window have household income between 300–400% FPL.
Rebate Distribution By Income

Key takeaway: Rebates in each income as a percentage of FPL group tend to be concentrated at lower income levels.
Distribution of Rebates by Gender and FPL

Gender Distribution by Rebate Type per Income Bin

Key takeaway: Gender identity distribution looks similar across FPL income groups.
Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 78,445
Race/ethnicity question is a "select all that apply," percentages are calculated using total number of respondent answers where multiple answers are coded as "More than one Race."

Key takeaways:
Respondents who identify as white or Caucasian received the largest number of rebates.
Increased rebate recipients are more racially diverse than standard rebate recipients.
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Increased rebate recipients are more racially diverse than standard rebate recipients.
Distribution of Rebates By Race

Key takeaway:
Within rebate types, there appears to be slightly more racial diversity among participants at lower income levels than higher income levels.
Distribution of Rebates By Ethnicity

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 85,487 (not including those who chose not to answer)

Key takeaway:
Slightly lower participation from Hispanic EV adopters in 600+% FPL group than other groups.
Distribution of Rebates by Tax Filing Status

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; $n = 90,149$

**Key takeaway:**
Across both rebate types, most recipients are married and filing jointly, followed by single filers. There are slightly more single and head-of-household filers among Increased Rebate recipients.
Distribution of Rebates by Tax Filing Status and FPL

<table>
<thead>
<tr>
<th>FPL Range</th>
<th>Standard Rebate</th>
<th>Increased Rebate</th>
</tr>
</thead>
<tbody>
<tr>
<td>600+  FPL</td>
<td>Head-of-Household, 4%</td>
<td>Jointly, 67%</td>
</tr>
<tr>
<td>400-600% FPL</td>
<td>Head-of-Household, 7%</td>
<td>Jointly, 62%</td>
</tr>
<tr>
<td>300-400% FPL</td>
<td>Head-of-Household, 8%</td>
<td>Jointly, 49%</td>
</tr>
<tr>
<td>0-300% FPL</td>
<td>Head-of-Household, 11%</td>
<td>Jointly, 58%</td>
</tr>
</tbody>
</table>

**Key takeaways:**

Among increased rebate recipients, there are slightly higher rates of joint filers in the 300–400% FPL income range and slightly more single filers in the 0-300% FPL range.

Among standard rebate recipients, there are slightly more joint filers in higher income households, and perhaps correspondingly fewer single and head of household filers.
Key takeaway: Across both rebate types, household sizes are relatively equal, ranging from 1 to 4 persons for recipients with income under 600% FPL. However, at the highest income level, most recipients live in 2-person households.
Rebate Distributions in DACs by FPL

Key takeaways: No major differences in increased rebate participation by DAC status across income groups. As income increases, the percentage of rebate consumers living in DACs decreases.

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 87,415
Rebate Distributions in LICs by FPL

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 87,415

Key takeaways: No major differences in increased rebate participation by LIC status across income groups.
Although similar in pattern to the DAC distributions (i.e., higher income is equated with lower percentages of buyers living in LICs), the relative percentages of buyers living in Low Income Communities is larger than the analogous percentages living in DACs across the income spectrum.
Rebate Distribution by Selected Air Districts

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 90,141

Key takeaways:
A higher percentage of participants living in the South Coast and San Joaquin Valley have household income less than 600%, 400% and 300% FPL.
Rebated Vehicle Categories by FPL

Key takeaway:
There is little difference between the distributions of vehicle categories across the four income levels.

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; n = 90,149
Rebated Vehicle Body Styles by FPL and Rebate Levels

Applications received between Jan 1, 2021 and March 1, 2023
Application Status = Approved, Check Sent; Application Type = Individual; \( n = 90,156 \)

### Rebates Issued

<table>
<thead>
<tr>
<th>Rebate Type</th>
<th>Standard Rebate</th>
<th>Increased Rebate</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUVs</td>
<td>25,858</td>
<td>12,904</td>
</tr>
<tr>
<td>Sedans</td>
<td>1,060</td>
<td>943</td>
</tr>
<tr>
<td>Hatchbacks</td>
<td>6,839</td>
<td>1,228</td>
</tr>
<tr>
<td>Station Wagons</td>
<td>769</td>
<td>911</td>
</tr>
<tr>
<td>Pickups</td>
<td>1,181</td>
<td>158</td>
</tr>
<tr>
<td>Passenger Vans</td>
<td>1,004</td>
<td>141</td>
</tr>
<tr>
<td>2-3-Wheeled Vehicles</td>
<td>1,288</td>
<td>16</td>
</tr>
<tr>
<td>0-300% FPL</td>
<td>116,168</td>
<td>125</td>
</tr>
<tr>
<td>300-400% FPL</td>
<td>1,054</td>
<td>83</td>
</tr>
<tr>
<td>400-600% FPL</td>
<td>2,022</td>
<td>5</td>
</tr>
<tr>
<td>600%+ FPL</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

**Key takeaway:**
SUVs are very popular for all consumers, but particularly for higher-income consumers.
Average Price Paid for Rebated Vehicles Before and After Feb 24, 2022*

Key takeaway:
After the February 24, 2022 MSRP changes, average vehicle purchase prices increased across the income spectrum. However, as vehicle prices were already rising prior to that point, this may reflect market changes independent from the CVRP.

*As of February 24, 2022, eligible Large Vehicles were limited to base MSRP of $60,000 or less; eligible Cars limited to base MSRP of $45,000 or less.
Applications received between Jan 1, 2021 and Feb 23, 2022 (n = 59,571)
Applications received between Feb 24, 2022 and March 3, 2023 (n = 30,582)
Application Status = Approved, Check Sent; Application Type = Individual