

# CHEAPR 3.0 Program Design Proposal

*CHEAPR Board Meeting*

July 17 2020

John Livermore – Senior Director, Northeast

*with thanks to Shawn Jones, Jesse Emge, John Anderson, Brett Williams and others at CSE*



Center for  
Sustainable  
Energy™

# CHEAPR Board Meeting Presentation Outline

---

- Introduction
- New Direction for CHEAPR
- Proposed Approach
- Proposed Program Design
- Outreach & Education
- Questions/Discussion





A close-up photograph of a person's hand plugging a charging cable into the charging port of a white electric car. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public charging station with several orange charging cables is visible, along with a building and a bicycle parked nearby.

# Introduction



# CSE Areas of Expertise



## Clean Transportation

Adoption of electric vehicles  
and deployment of charging  
infrastructure



## Built Environment

Advancing energy efficiency  
and renewable resources



## Technology Convergence

Interconnecting systems to  
achieve decarbonization

# CSE and CHEAPR

---

- ✓ Administering CHEAPR program since 2015
- ✓ Work closely with CT-DEEP to guide and fine-tune program
- ✓ Processed about 6,500 rebate applications to-date (8% reject rate)
- ✓ Paid out over \$11 million in rebates and \$800k in dealer incentives
- ✓ Chosen to administer Phase 3 of CHEAPR through 2022





# Oregon DEQ

<b>Fuel-Cell EVs</b> 	\$4,500	\$2,500	\$5,000	<u>e-miles</u> ≥ 120    \$2,000 ≥ 40      \$1,700 ≥ 20      \$1,100 < 20      \$500	\$2,500 battery capacity > 10 kWh, additional \$2,500 or low income households for BEVs only \$1,500 battery capacity less than 10 kWh
<b>All-Battery EVs</b> 	\$2,000	\$2,500	<u>e-miles</u> ≥ 200    \$1,500 ≤ 200    \$500		\$750
<b>Plug-in Hybrid EVs</b> 	\$1,000	\$1,500	\$500	MSRP > \$60k = \$500 max.; point-of-sale via dealer	MSRP less than \$50k, Point-of-sale via dealer voucher, pre-qualification for Charge Ahead rebate, Fleet rebates available
<b>Zero-Emission Motorcycles</b> 	\$750			e-miles ≥ 35 – Urban Dynamometer Driving Schedule; Consumer Income cap; increased rebates for low incomes	
		MSRP ≤ \$50k, no fleet rebates	MSRP ≤ \$42k (PHEV & BEVs), MSRP ≤ \$60k (FCEVs); dealer assignment; \$75 dealer incentive on \$500 rebate level; \$125 dealer incentive on \$1500-\$5000 rebate level		



A close-up photograph of a person's hand plugging a charging cable into the charging port of an electric vehicle. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public bicycle-sharing station is visible, with several bicycles docked. The overall atmosphere is one of modern, sustainable urban transportation.

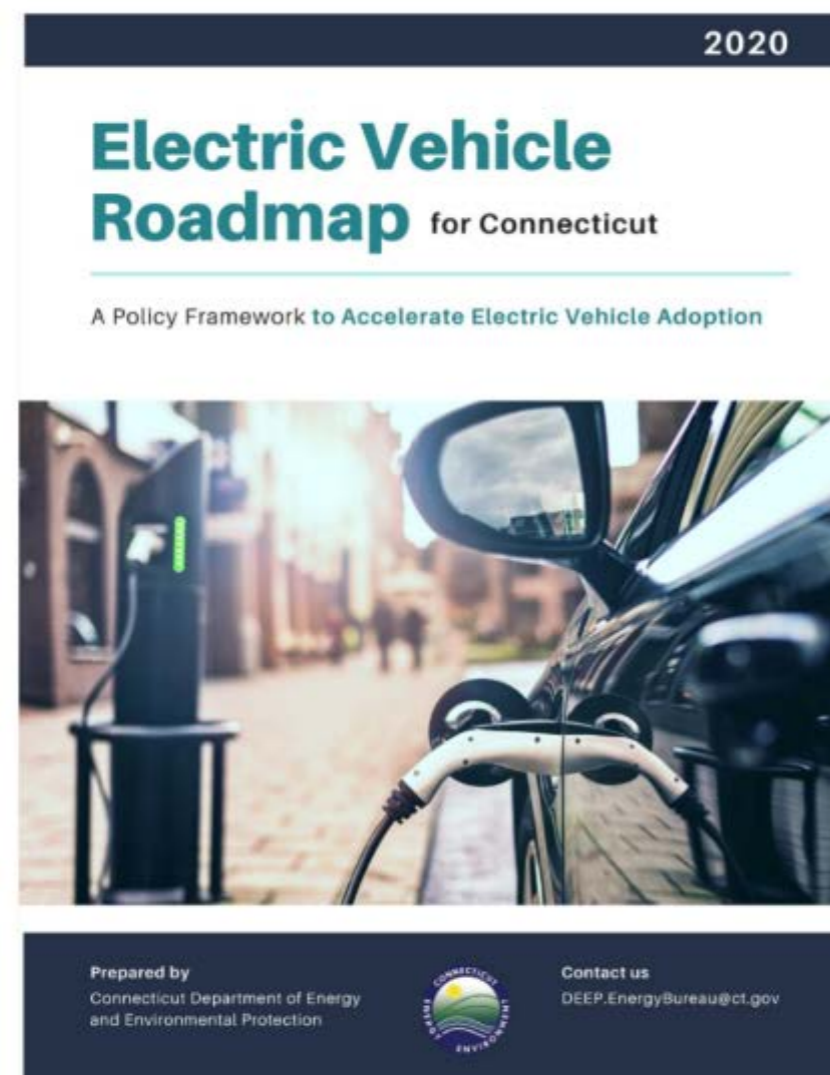
# **New Direction for CHEAPR**



# CHEAPR 3.0 / EV Roadmap

The CHEAPR pilot program is currently transitioning to the new CHEAPR program established under [Public Act 19-117](#).

- ✓ CHEAPR Board
- ✓ New and Used Vehicles
- ✓ Low-to-Moderate Income (LMI) Criteria



	EV Roadmap Recommendations	Notes	Progress
<b>General Requirements</b>			
1	Retain Program Administrator		Completed
<b>New Program Rebate Parameters</b>			
2	Establish Rebate Levels	Requires Board Approval	Recommendation established
3	Establish Rebate Bins	Requires Board Approval	Recommendation established
4	Establish LMI Qualifications	Requires Board Approval	Recommendation established
5	Establish MSRP Limitations	Requires Board Approval	Recommendation established
6	Establish Eligibility Qualifications	Requires Board Approval	Recommendation established
<b>New Program Components</b>			
7	Dealer Incentive Inclusion Y/N	Requires Board Approval	Recommendation established



# Key Findings: CHEAPR Program Impacts

See [Appendix A](#) for Data

- Approximately 80% of rebated EVs replace older, more polluting vehicles
- Avoiding > 30 tons of GHG emissions per vehicle (12-year life) at costs <\$100/ton
- Rebate influence on purchase/lease:
  - moderately to extremely important to 90%
  - essential to > 50%
- Dealer sales incentives motivate EV salespeople, particularly those with prior EV ownership experience



A close-up photograph of a person's hand plugging a charging cable into the charging port of a white electric vehicle. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public charging station with multiple charging cables is visible, along with a bicycle parked nearby. The overall atmosphere is clean and modern, emphasizing sustainable transportation.

# Proposed Approach



# CHEAPR 3.0 Proposed Approach

- ✓ Build on CHEAPR's current systems, processes and outreach methods – maintain point of sale incentive.
- ✓ Offer a solid, scalable program that incorporates an income-qualified used EV program component.
- ✓ Design program to be easily adaptable to support anticipated growth and program changes.
- ✓ Rollout of new optimized EV Incentive Platform in Q1 2021 to support current point-of-sale incentive program, and streamline the new program features.





A close-up photograph of a person's hand plugging a charging cable into the charging port of an electric vehicle. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public charging station with multiple charging cables is visible, along with a bicycle parked nearby. The overall atmosphere is clean, modern, and sustainable.

# Proposed Program Design



# CHEAPR 3.0 Scope of Work

- Task 1: Program Design
- Task 2: Program Implementation Manual
- Task 3: Rebate Application Process Design
- Task 4: Rebate Processing Platform, Dealer Application Portal, Financial Module, Public Facing Statistics Module and Online Customer Survey
- Task 5: Program Implementation
- Task 6: Outreach and Education Materials
- Task 7: Reporting Requirements
- Task 8: Program Wind Down Procedures

# CHEAPR 3.0 Program Design

- ✓ CSE's program design recommendations are structured to meet the requirements set forth in Section 94(b) of Public Act 19-117 to provide rebates that total at least three million dollars annually to Connecticut residents who purchase or lease a new battery electric vehicle (BEV), plug-in electric vehicle (PHEV) or fuel cell electric vehicle (FCEV); or who purchase a used electric vehicle.
- ✓ Recommendations informed by CSE's extensive experience collaboratively developing and implementing six (6) statewide and numerous regional EV incentive programs.
- ✓ Q1 2021 launch of Used vehicle & Supplemental LMI rebate program components.
  - New EV Solutions platform will integrate new program components seamlessly, with no market disruption.
  - Will provide time to internalize any federal stimulus directed at auto industry.
  - Will reiterate focus on customer convenience by maintaining point-of-sale incentive.



# CHEAPR 3.0 Coronavirus Considerations

## Challenges

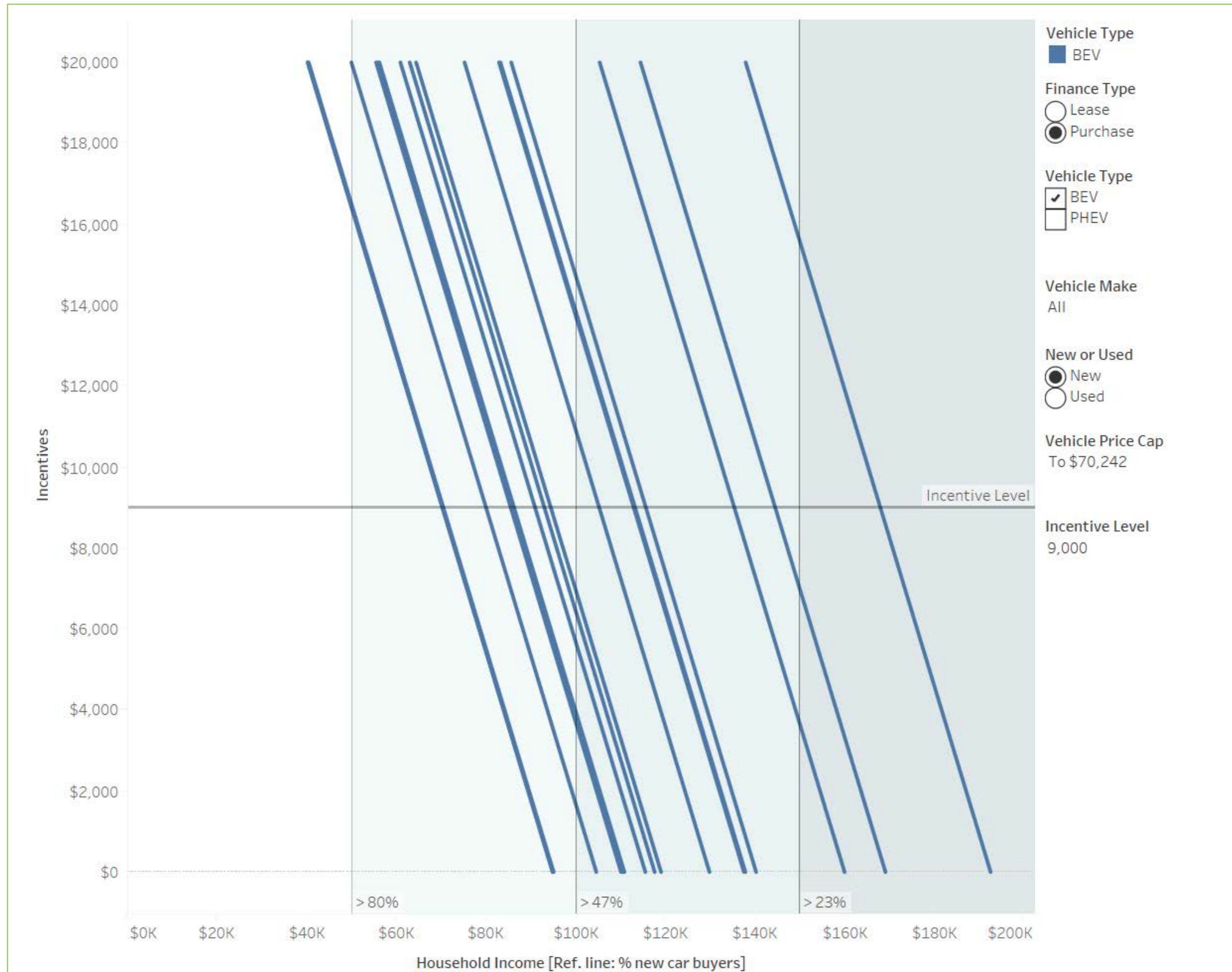
- Dealerships are struggling – focused primarily on staying in business.
- New CHEAPR program features need to be timely and easy for dealers to implement.
- Limited in-person engagement for the foreseeable future.
- New EV vehicle sales down approximately 25%; new ICE vehicle sales down approximately 40%.

## Opportunities

- Transportation patterns shifting toward solo modes of transportation – opportunity to promote EVs as best alternative.
- Increased online outreach and education opportunities.

# CSE's Affordability Modeling Tool

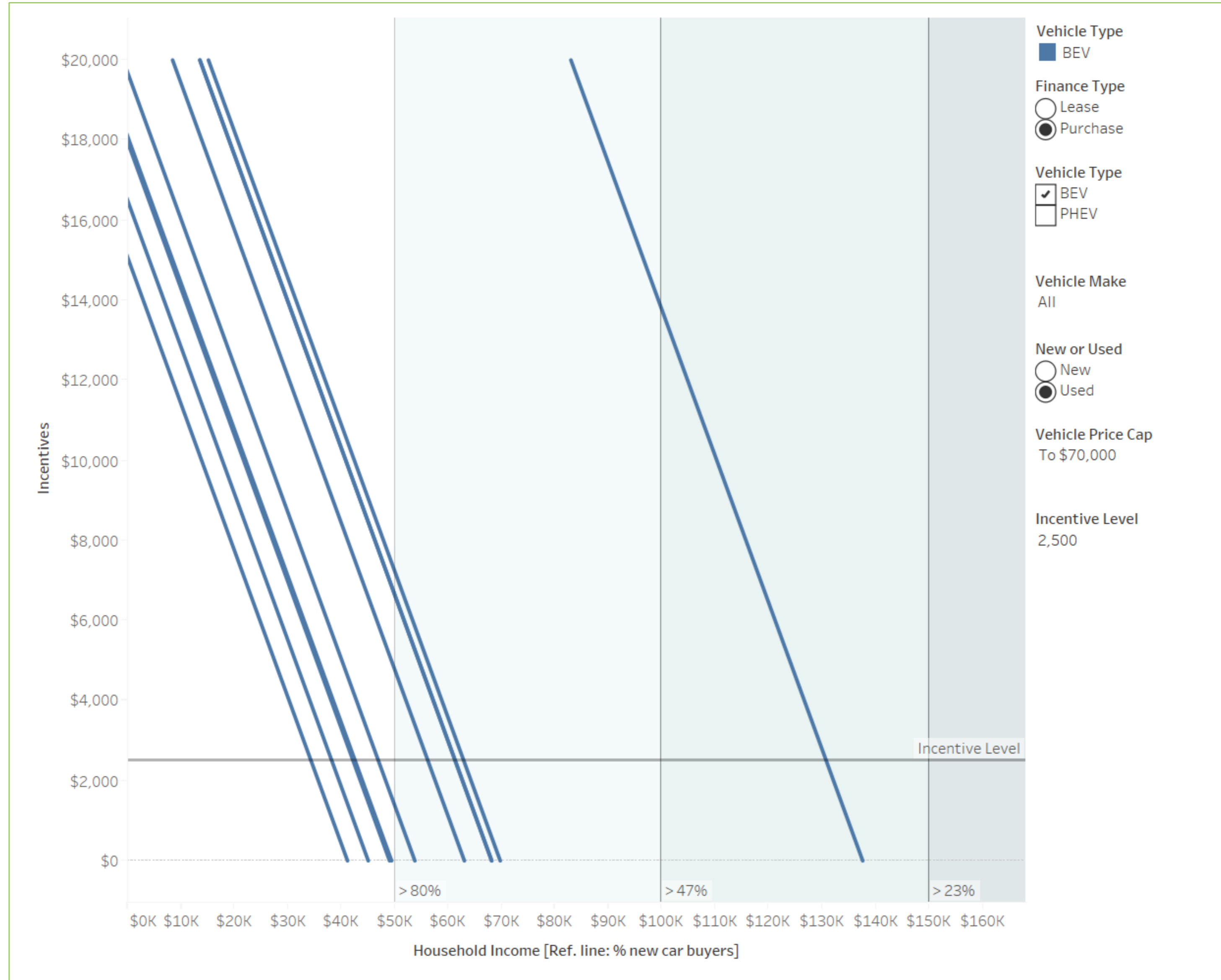
## Example 1: Fully Stacked New EV Incentive





# CSE's Affordability Modeling Tool

## Example 2: Fully Stacked Used EV Incentive



# Income-Based Eligibility: Implementation Considerations

- **Dealer reluctance**, fears about liability for unintended actions that could be viewed as discriminatory
- **Outreach complexity**, consumer confusion
- **Application complexity**, affects all applicants
- **Intrusiveness**, tax forms
- **Wait times**, even for priority applicants
- **Investment** in processing systems and data security, **labor**
- **Potential Fraud** such as more than 1 application from same address
- **Loopholes** such as self-reported income for non-tax filers



# CHEAPR 3.0 New Vehicle Program Design Options

	New Vehicle Program Design	
Type	Base Rebate	Supplemental LMI Rebate
Fuel-Cell EVs	\$5,000	\$2,000
All-Battery EVs >200 e-miles	\$1,500	\$2,000
All-Battery EVs <200 e-miles	\$500	\$1,500
Plug-in Hybrid EVs	\$500	\$1,500

- Maintain current program rebate levels for new electric vehicles, including Dealer Incentive.
- Implement a Supplemental Low-to-Moderate Income (LMI) rebate.
- Rebate customers need to pre-qualify under the direct income eligibility (income cap) approach for Supplemental LMI rebate.
- Rebate levels designed to focus more on LMI consumers and to stretch program funding to avoid stops and starts.
- Base rebate rollout upon CHEAPR Board approval + 90 days; Supplemental LMI rebate rollout Q1 2021.

# CHEAPR 3.0 New Vehicle Base Rebate Burn Rate Projections

Scenario	Description	Estimated End of Funding
<b>Fast Recovery</b>	New vehicle base rebates	November 2022
<b>Moderate Recovery</b>	New vehicle base rebates	April 2023
<b>Slow Recovery</b>	New vehicle base rebates	December 2023

- Future new EV rebate volumes are projected using data from program inception in April 2015 through May 2020.
- Using the current rebate levels, 2020 & 2021 years' incentive funding (currently projected at \$4.9M) for base new vehicle rebates is predicted to be exhausted between November 2022 and December 2023.
- Supplemental LMI and Used vehicle rebates to be added to projection model.
- Reconvene each October to revisit rebate levels for following program year.



# CHEAPR 3.0 LMI Used Vehicle Program Design Options

- Increase access to CHEAPR program: Equity for Low and Moderate Income (LMI) Consumers
- Direct Income Eligibility vs. Indirect Income Eligibility Program Design.
- Income verification (pre-qualification voucher approach)
- CSE’s new Affordability Modeling Tool to model interaction of Customer income level, Vehicle sales price, and Rebate level.
- Simplify process for auto dealers, and include dealer incentive.
- Rollout Q1 2021

		Used Vehicle Program Design Options	
	Type	Direct Income Eligibility	Indirect Income Eligibility
<b>Income Cap</b>	Area Median Income	No	No
	Hard Cap	\$50,000 single / \$75,000 family	No
	Consumer Prequalification	Yes	No
	Soft Cap	No	No
	Categorical	No	No
<b>Price Cap</b>	Purchase Price	No	\$25,000
<b>Rebate Amounts</b>	BEV	\$2,000	\$1,500
	PHEV	\$750	\$500
	FCEV	\$5,000	\$2,000

# Alternative to Proposed Q1 2021 CHEAPR 3.0 Used Vehicle Rebate Launch (considered but not recommended)

---



## Use Current Rebate Processing Platform - Phase 1 of 2-phased approach

- Modify existing rebate processing platform to include used vehicle types.
- This would require limiting access to existing participating new car dealers [Note: New car dealers represent close to 70% of the used car market in CT.]
- Use sales price cap as proxy, instead of income cap, to eliminate the income verification process.
  - *Schedule implications:* Modifications to existing platform tentatively projected to be complete around October, so would only be active for 3-4 months before new EV Solutions platform launch. Also, diverts resources and potentially pushes out launch of new EV Solutions platform.
  - *Budget implications:* \$30-45k in additional costs - not in original budget.
  - *Potential market confusion:* Interim process active for only a few months before EV Solutions platform launch. Dealers asked to learn two different systems.



A close-up photograph of a person's hand plugging a charging cable into the charging port of an electric vehicle. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public bicycle-sharing station is visible, with several bicycles docked. The overall atmosphere is one of sustainable urban transportation.

# Outreach & Education



# CHEAPR 3.0 Dealer Outreach

- Provide direct and indirect support to dealerships through trainings and the promotion of the CHEAPR program to auto dealership sales staff.
- In-person and remote visits and training, using video conferencing. Training topics to include: Rebate Application Process, Online Dealership Portal, CHEAPR Program Requirements, Rebate Eligibility, and Customer Pre-Qualification.
- Live and Recorded Dealer Promotional Events and Webinars, archived online for 24/7 access.
- Identify additional dealer training opportunities with the Connecticut Automotive Retailers Association (CARA).





# CHEAPR 3.0 Equity Outreach

- Expand program's reach by establishing partnerships with community-based organizations (CBOs) to promote the CHEAPR used vehicle rebate, focusing on LMI and underserved communities.
- Deliver webinars in collaboration with CBOs.
- Leverage DEEP's membership in Gov. Lamont's Council on Climate Change (GC3).
- Virtual Town Hall meetings to discuss program details, answer questions, and build trusted relationships.
- Virtual Ride and Drives, using GoPro and other related technologies.





# Proposed Outreach Approach

---

1

## Partnerships with CBOs

Expand program's reach by establishing partnerships with community-based organizations (CBOs) that focus on LMI and underserved communities to promote the CHEAPR used vehicle rebate and supplemental LMI rebate.

2

## Equity Materials

Collateral will be aligned with community values (i.e., lower fuel and maintenance costs, reliable transportation, reduced local air pollution) and, when possible, presented in a consumer's native language. Collateral will also be used to dispel common misconceptions about EVs.

3

## Online Resources

All collateral will be accessible online as well as additional resources from other government leadership groups like the Governor's Council on Climate Change (GC3) and DEEP's ongoing community engagement through its Environmental Justice Program.

4

## Online Events

Due to the current pandemic, events and engagements will be moved to an online platform. Presentations will be developed to meet the needs of the specific group and will be engaging, interactive, and informative.





# CHEAPR Equity Outreach Proposed Tasks



CHEAPR 3.0's rebate for Used EVs and supplemental LMI rebate will make owning an EV more accessible to the community members most affected by air pollution in Connecticut



Research LMI / Underserved Community landscape, create equity collateral and enhance program website.

Create relationships with CBOs, local government agencies, health focused non-profits and community meeting groups

Execute outreach through online presentations and disseminating equity collateral

Track outreach and reformat / restructure as needed

Task 1

Task 2

Task 3

Task 4



A close-up photograph of a person's hand plugging a charging cable into the charging port of an electric car. The scene is set outdoors at sunset, with warm, golden light and lens flare effects. In the background, a public charging station with several orange charging cables is visible, along with a bicycle parked nearby. The overall atmosphere is bright and optimistic.

# Questions / Discussion / Next Steps