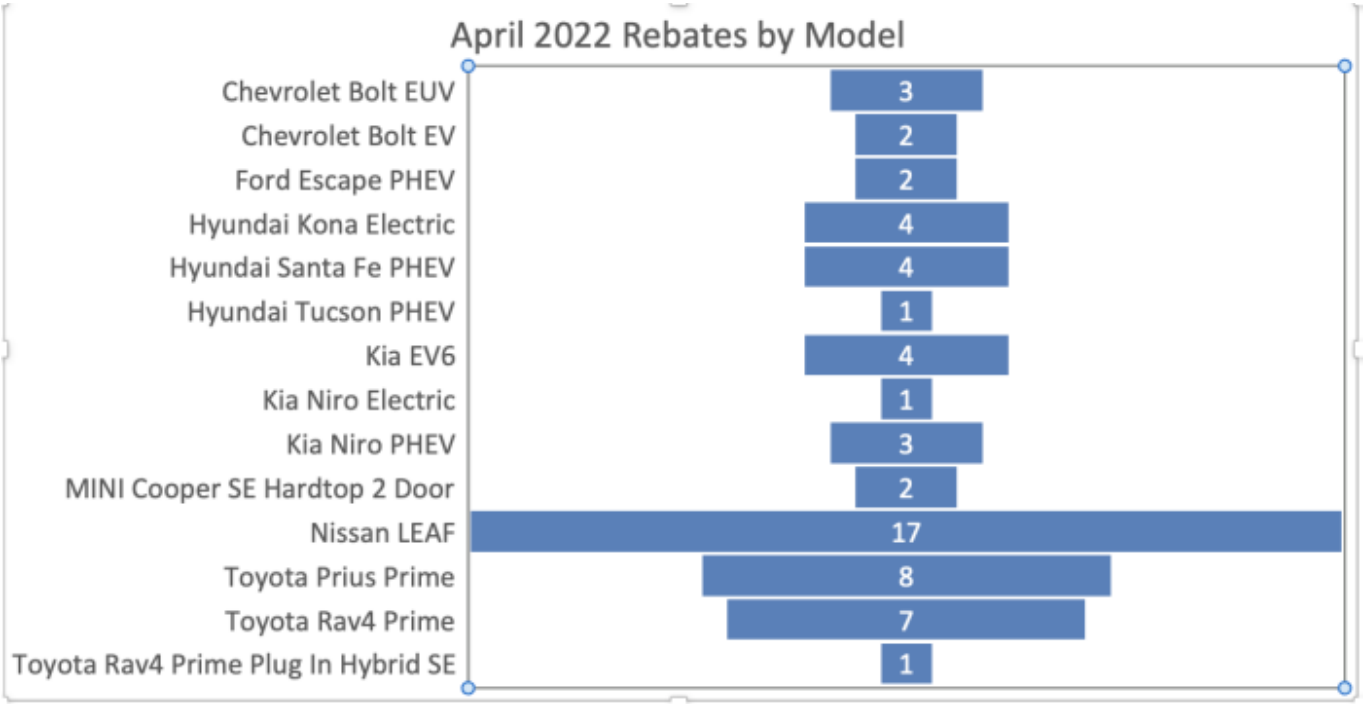
CHEAPR Update April 2022

Treading Water – Awaiting New Program Implementation

The data for April have been posted, a low number of 51 rebates. We are in a holding pattern at this point as we await the particulars of the implementation of changes mandated in Public Act 22-25 (a.k.a. SB-4). Rebates declined from 114 in March. There were no income-limited Rebate+ incentives awarded.

During these supply-constrained times, the rebates by model often fluctuate and that was the case in April with the large decline in the RAV4 Prime from 42 to 8. (Note: the numbers in the chart below do not tie back to the total. That is because there are slightly different numbers in the Tableau graphic on the CHEAPR website than the accompanying spreadsheet.) Given that the RAV4 Prime has been so dominant, it actually tilted the balance to a slightly higher number of BEVs, driven by a relatively strong number for the Nissan Leaf and signs of life for the Chevy Bolt and Kia EV6.

Of course, the new legislation is expected to dramatically change things. There are specifics that DEEP has to decide, as well as implementation logistics to be developed. There is a CHEAPR board meeting in a few weeks and we will report on any specific announcements made at that time. Our review of the legislation can be found here.



New Level 3 Chargers Coming to Highway Service Areas This Summer

Godot Is Soon To Arrive

This is the level 3 version of a post about out-of-service level 2 chargers from April 21st.

Level 3 chargers have been sitting lonely, forlornly, and non-functionally at several of the service areas on our major highways. And its been that way for roughly 4 years. We now have the background and going forward plans. This post refers to the non-Tesla chargers.

The chargers at the service centers we are aware of,

specifically the I-95 service center in Darien and the Merritt Parkway northbound service center in Greenwich, were originally installed by Eversource/DEEP working with the Department of Transportation in 2016. They have been out of service ("decommissioned") since 2018. I'm sure there is detail we don't know since those chargers were barely ever operational.

New Level 3 Fast Charger Installations

The state leases the service centers to a company called Project Service, LLC, based in New Haven, which also manages them. PS responded to our inquiry, saying that they are working with a new partner to install new DCFC equipment at their plazas. There are 6 sites where work is underway and installation is expected to be complete sometime during this summer. The 6 service areas are I-95 Fairfield (both directions), I-95 Madison (both directions), Merritt Parkway New Canaan (southbound), and Merritt Parkway Greenwich (northbound).

There are also Tesla chargers at PS service centers. These have been operational and are in the process of being upgraded.

DOT Survey

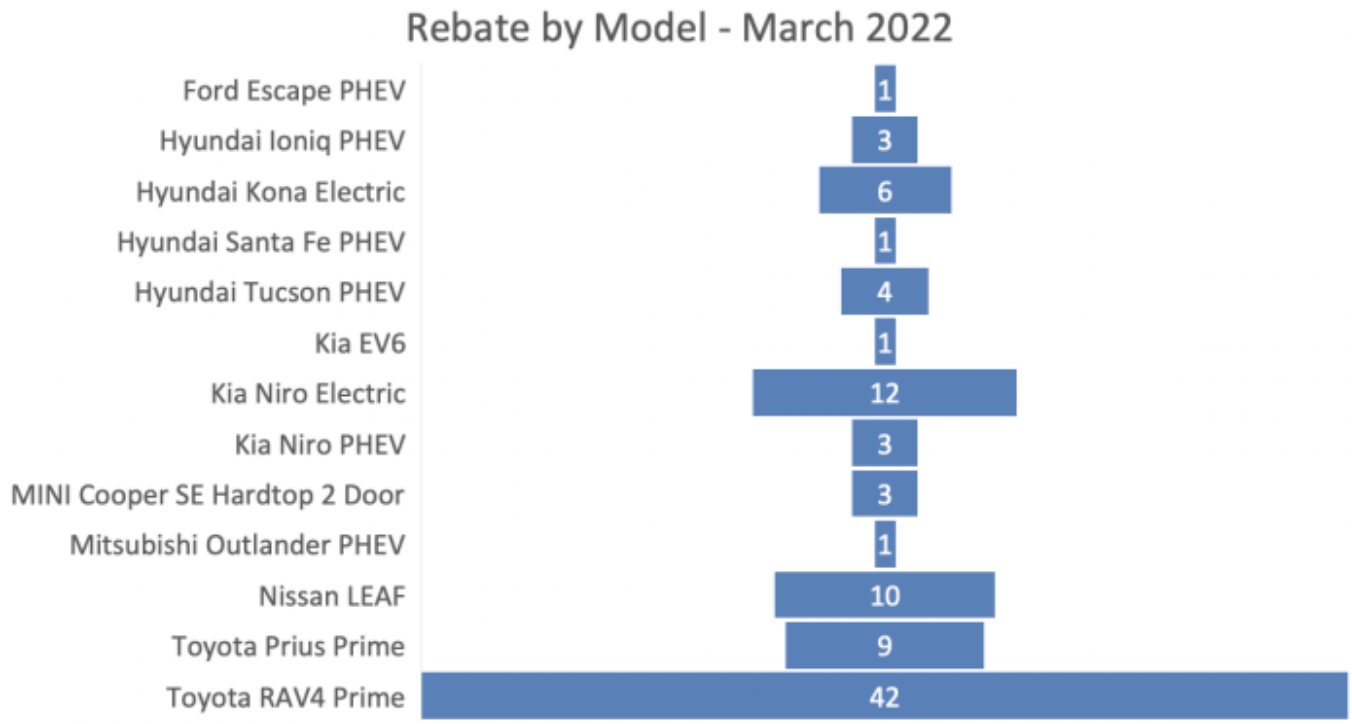
A larger, separate initiative, deploying the funding that is coming from the federal infrastructure legislation is being managed by the Department of Transportation and is in the planning stages. These funds are going to support level 3 chargers along major highway corridors. Public input is being sought as plans are further developed. There is currently a survey live on their website here. (It is a very high-level survey that takes 2 minutes.) The link will remain live

through June 3rd.

CHEAPR – Update and SB-4 Passes Senate

Modest Increase in March Rebates

The CHEAPR rebate count was up modestly to 96 rebates, 64 of them PHEVs. The big gorilla was the Toyota RAV4 Prime, continuing its run as by far and away the rebate leader. It is quite amazing to see how much the RAV4 has cannibalized the Prius Prime, which was down to only 9 rebates. The Kia Niro placed a distant second with 12 rebates, and the first rebate for the new Kia EV6 appeared. Below is the disposition of all the rebates by model.



Legislation

The major news is that SB-4, the big environmental omnibus bill which includes significant changes to CHEAPR has passed the Senate. The vote was largely along party lines with only one Republican voting in favor. It now goes before the House. Momentum seems to be with it. Since this is a short session, we'll know in less than a week. We will give a more detailed summary of the changes for CHEAPR if it passes, but the headlines are an increase in the MSRP cap to $50,000, loosening the requirements for the income-limited incentives, and extending eligibility to businesses, fleets, municipalities, and tribal entities.

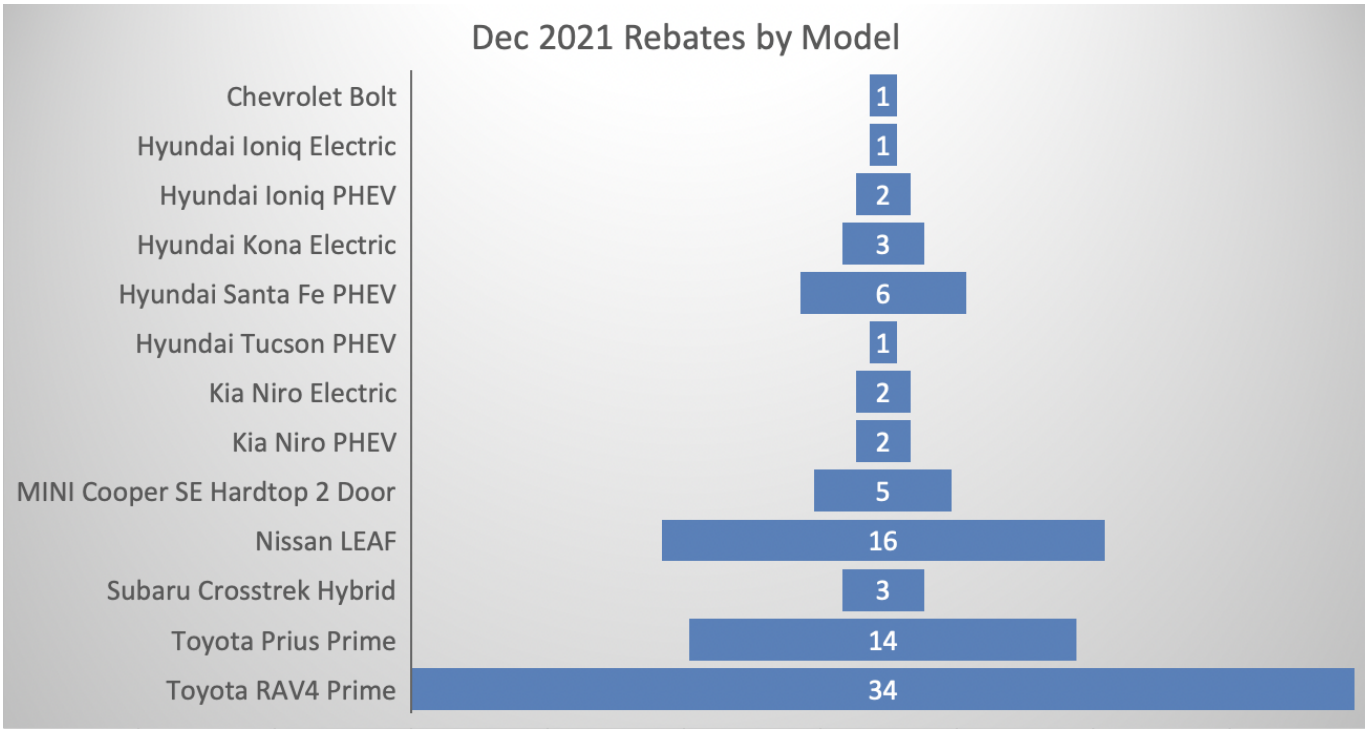
2021 CHEAPR Wrap

CHEAPR Quietly Finishes a Quiet Year

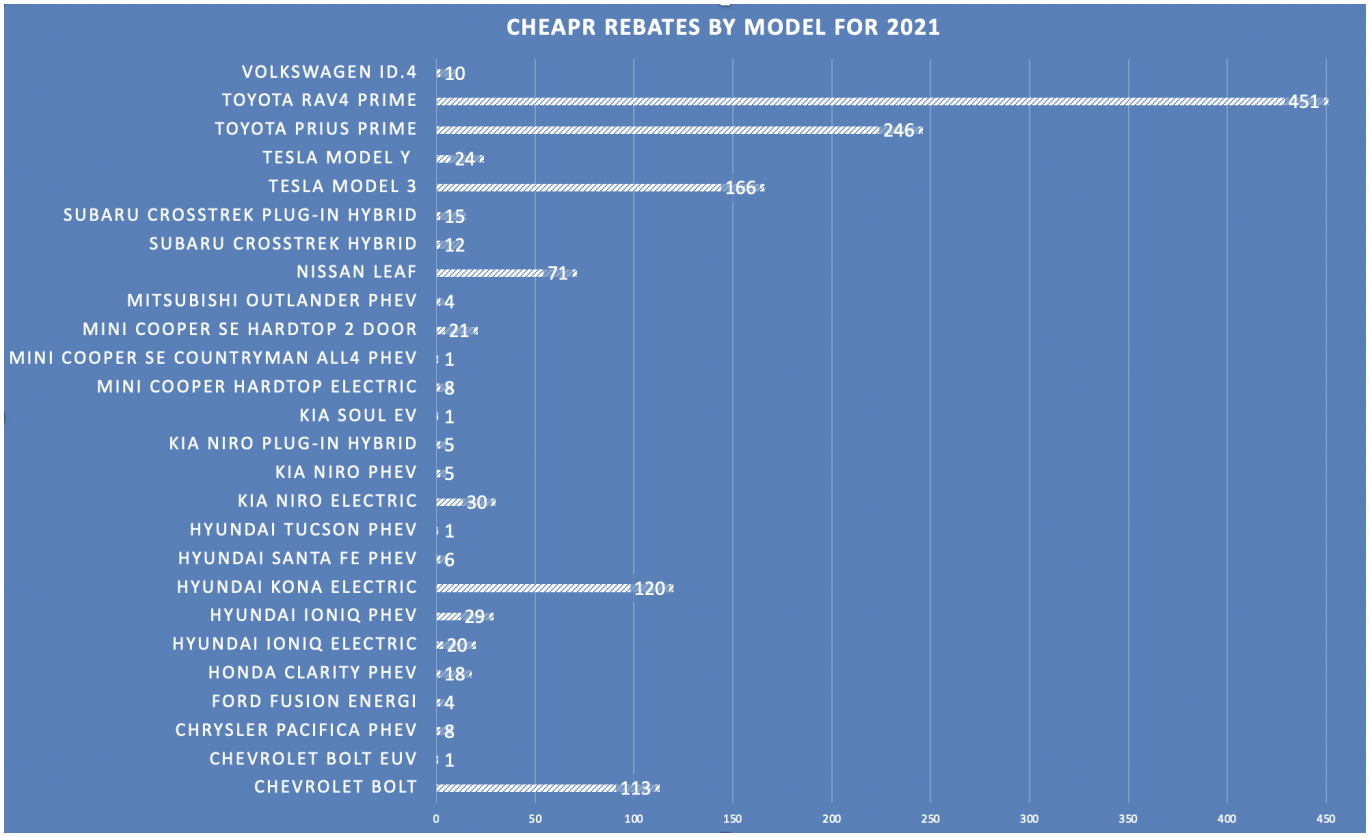
We can begin with the good news: 2021 was an improvement over 2020, though that is a low bar. Otherwise, meh.

There were 90 rebates awarded and $110,250 expended in December. The annual totals are 1390 rebates and $1,588,000, so another year in which the program did not spend its budget. With funds rolling over, that should mean a war chest of over $6 million for 2022. (The comparable annual totals for 2020 are 675 rebates and $723,500.)

The program also continues its recent trend of being dominated by PHEVs with the Toyota RAV4 Prime leading the way. 62 of 90 rebates in December were PHEV.



This is the distribution of models for the full year. The Model 3 Standard Range Plus was eligible before the price increase and the Model Y Standard Range was eligible briefly before Tesla halted production. As the year progressed, deliveries of the RAV4 Prime ramped and it correlated with a decline in Prius Prime deliveries. The RAV4 is likely to be a bigger part of 2022.



There appears to have been one Rebate+ incentive given in December.

This program has been in a trough for quite some time, and as we've written before, the next chance to approve changes will be at the March board meeting on March 16th, 3:00 – 5:00 PM. Unfortunately, their format is for public comments to occur at the end of the meeting. So they are essentially noted for the record and not used as input, something else that needs to be reconsidered.

DEEP Disappointment

CHEAPR Continues to Limp Along

At one point during the CHEAPR board meeting held on December 16, one of the board members observed (I'm saying this without sarcasm) that it is harder than it looks to give away money. By that measure, the program is performing with flying colors (that is sarcasm) as it looks to close another year without coming close to spending the budget, a year that was strong for vehicle sales generally. (Unspent funds get rolled over.) There seems to be a lack of urgency by most, though not all, of the board to get the program on track.

Higher Incentive Retained for the Present

As of June 2021, the base incentive levels were raised by 50%. A BEV now gets an incentive of $2250, up from the prior level of $1500. PHEVs were raised from $500 to $750. The higher incentive was positioned as a temporary adder, dependent on funds availability and set to sunset at the end of 2021. It comes as absolutely no surprise that depletion of funds was a non-issue. When we first wrote about the new incentives in June, it was an easy call back then. These incentive levels are now designated to remain in force until March (by a 5 to 2 vote) when an analysis and forecast that the board has requested from its consultant will be presented at the next board meeting. My prognostication is that the higher incentive will remain in force at through 2022.

Rebate Plus

The Rebate Plus incentives remain in force. These are so-called “LMI” incentives, targeted to lower and middle income people. They were not intended to be temporary. The problem has been that very few have been distributed – 3 through the end of October.

No Raise in MSRP Cap

There was a second motion to raise the MSRP cap to $45,000 from its current $42,000. This small raise wouldn’t have made much difference, but it failed 4-2, with the majority saying they wanted to wait to review the analysis in March.

Forecast and Budget

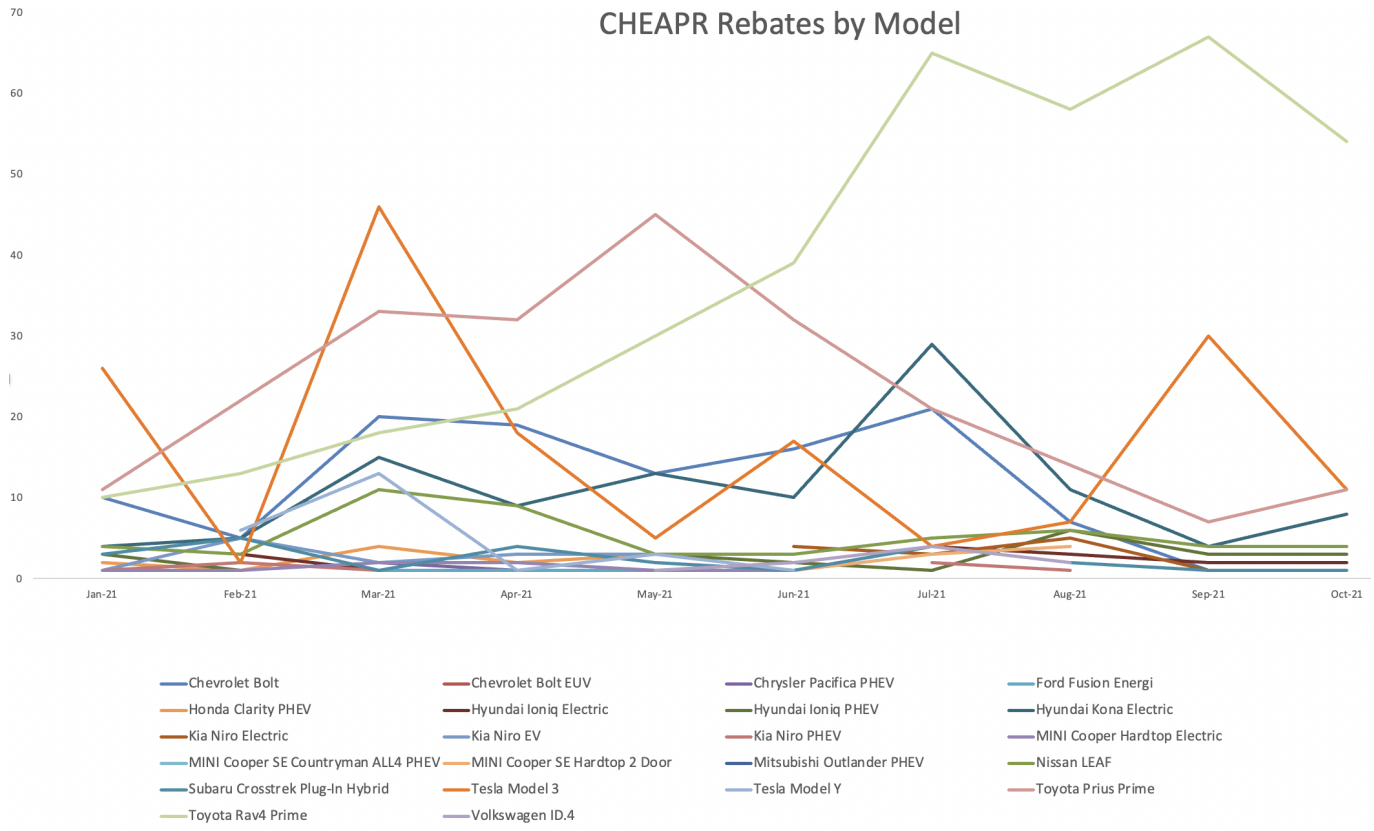
It is no secret that the EV Club and the larger EV Coalition want to see this program positioned more aggressively and break out of the multi-year doldrums. The consultant analysis, as it did last year, will involve forecasting. That is fine as far as it goes, but we should keep in mind that the forecast for 2021 missed by a mile. It can be an input but should not be sacrosanct.

With respect to the budget, while the program is budgeted for $3 million per year, it had over $5 million in the bank due to the rollover of past unspent funds. Continuing the program as is pretty much guarantees at least an underspent first half of the year. Even if at the March meeting, the board adopts a more proactive stance, there will still need to be an implementation period. The only thing that represents any change is a new wave of outreach for the Rebate Plus incentives targeting lower income individuals. More outreach is welcome, but we are not expecting more than a modest increase in these incentives.

The proposed changes that would make the most difference are a higher MRSP cap, looser LMI criteria, along with some kind of LMI pre-qualification so that it is cash on the hood. (There was pushback from DEEP on the pre-qualification based on experience in other states where many went through the pre-qualification process but did not then use the incentive, and whether that makes the idea an inefficient use of resources.) Even if these changes are implemented, given the backlog of unspent funds and likelihood of being in force for half the year at most, the chance of funds depletion in 2022 is vanishingly small.

Trends

Rebates follow vehicles, based on eligibility and popularity. The program has shifted toward a plug-in hybrid dominant pattern. PHEVs accounted for the majority of rebates in 8 of 10 months this year, and every month since April. Below is a chart if rebates by vehicle model by month for 2021 that is a bit difficult to read, but it shows the trends driving the changes:



- The RAV4 Prime PHEV looks to be a big hit for Toyota and is the line that shoots above all others on the graph. That has been the single biggest factor, though it has been somewhat offset by a concomitant decline in the Prius Prime. The RAV4 does seem to be cannibalizing Prius sales.
- There were several significant BEV declines in the Tesla Model Y, Model 3, and Chevy Bolt.
- The Model Y had some rebates early in the year, but Tesla has discontinued the base trim level of the vehicle and the other trim levels do not qualify for the rebate.
- The Model 3, where only the base trim level has qualified for the incentive, has been more of a factor. Since Tesla has been experiencing high demand for the Models Y and 3, the company has prioritized delivering the more expensive versions. There are spikes in Model 3 rebates when they deliver a batch. There was a big spike

in March and a lesser spark in September. More recently, there has been a price increase in the Standard Range Plus Model 3 and it no longer qualifies for rebates.
- The Chevrolet Bolt had seen improving sales with its recent refresh and lower price point. The recall stopped that dead in its tracks. The new Bolt EUV barely got out of the gate. Bolt rebates have been falling since July and have been zero for the most recent two months. New deliveries are not expected for at least another couple of months or so as GM works through its repair backlog.
- Finally, there are popular new BEVs that exceed the MSRP cap. As it currently stands, the rebate program excludes the first, second, and fourth most popular BEVs currently for sale in the U.S. that together comprise 75% of overall BEV sales (Tesla Models Y and 3, and Ford Mustang Mach-E).

EV Coalition Letter to DEEP

The EV Coalition sent a letter to DEEP to present our concerns and suggestions to the board. These are:

- Raise the MSRP cap to at least $50,000.
- Extend the temporary higher incentives levels through 2022. (This has been done through March and, as noted, could be extended further.)
- Loosen the income criteria for Rebate Plus. It is supposed to target lower middle income individuals but is in practice limited to low income.
- Add a pre-qualification for Rebate Plus so the rebate can be given at the point of sale and the consumer won’t have to float the cash.
- Make all EVs eligible for the Rebate Plus Used. Eligible used vehicles are limited to vehicles that were rebate eligible when new and exclude vehicles manufactured before the program inception in 2015. The point of an MSRP cap in the main program is to control costs by not

subsidizing individuals who can afford an expensive car. Where to draw that line is a matter of judgment. In the case of the Rebate Plus Used, there already is an income screen. We don't see the point of restricting vehicle choice and it really feels like an "own goal."

- Do a better job of calling out the main program components on the program home page. We have inquiries come to the EV Club with folks not fully understanding the program because they haven't taken the time to go through the denser material such as the FAQs.
- Delete the misleading headline that a consumer can get a rebate of as high as $9500. This would require a low-income individual to buy a new fuel-cell vehicle (the most expensive type of zero-emission vehicle). There have been no fuel cell incentives awarded in the program's history and none are currently for sale in the state.
- Improve dealer compliance. Though our evidence is anecdotal (i.e. people who reach out to the club), there are two concerns here. The first is from dealers who don't seem to want anything to do with the program and tell consumers that it is their responsibility to file for the incentive after the purchase, which, well, no. The second is where a dealer does know how the incentive works but does not want to float the cash for the time period from when the vehicle is delivered and when they get reimbursed by the state. One club-member told us the dealership literally gave him an IOU.
- As you can see from the low vote counts, the board has unfilled positions. 7 of the 8 serving board members were present at the meeting and there are 4 vacancies. The vacancies have existed for months. There is statutory language around who can fill board seats. For example, 3 seats are reserved for "Selection for Industrial Fleet or Transportation Companies," despite the fact that fleet or transportation company vehicles are not eligible for these rebates. One of these slots

is filled by one of the Deputy Commissioners of the Department of Transportation. There are no representatives of EV consumers/advocates. There is a dealership representative, a dealership trade association (vacant) representative, but no representatives from the companies seeking to sell direct in this state. The question remains whether this is a board that will ever lean forward to get more EVs on the road.

The club, of course, desires a successful purchase incentive program and would like nothing better than for DEEP to take a deserved bow for accomplishing this. We would like to think we're both working toward the same goals. It doesn't always feel that way. Strategically, we would like a successful program to act as a basis for asking for more support, especially if there are available green-focused funds as there would be if TCI were to pass. The way things are now, color us skeptical. Your comments are welcome.

Feb. CHEAPR Data And A Delay For The New Incentives?

Fleeting Model Y Rebate

February rebate data show 72 rebates awarded, totaling $59,000. January was restated and increased from 68 to 77 rebates with a total spend of $82,500.

The leading vehicle in terms of Feb. rebates was the Toyota Prius Prime, which accounted for 22 of the rebates, and was

followed by the newer Toyota PHEV, the RAV4 Prime, with 11. The RAV4 has been showing early signs of life. We don't know if the vehicle is supply constrained in CT as it is still being rolled out. These were the only two vehicles in double figures. With these two PHEVs dominating the rebates, the spend level was considerably lower than January.

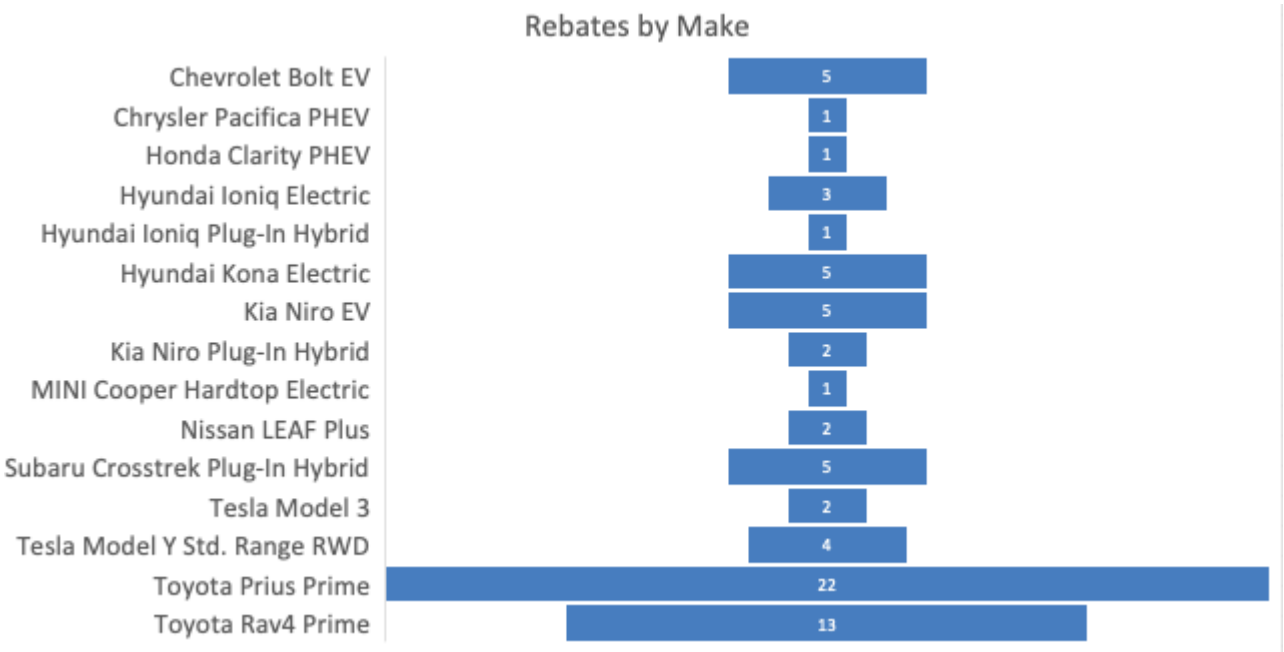
The Model 3 accounted for only 2 rebates. As we have seen, the number of Model 3 rebates fluctuates wildly because only the base level is eligible for the incentive. The CHEAPR rebates don't track with overall sales of the vehicle. There were 4 Model Y rebates which is unlikely to continue. Tesla first reduced the price of the basic Model Y, which is why some of them qualified for incentives, but it subsequently pulled the vehicle off its online configurator.

This was a tweet from Elon Musk that was published in Car and Driver. It was the sub-250 mile range that did not meet its standard of excellence. Off menu means it can still be ordered, but only by phone or in person in a showroom. It would not be surprising to see Tesla make some tweaks to the vehicle and then return it to the entrées. (UPDATE – We have heard that Tesla is not taking any new orders, not even off the menu, for the MY SR. If we are able to find out more details, we will update again.)

The CHEAPR board adopted a new incentive structure in February. The expectation was that it would become live on or

about April 1. Some time was needed for the software implementation. As of this writing on 3/27, there is nary a word on the CHEAPR website, nor a peep from DEEP. Communication is not DEEP's forte. No board meetings have been held since the new incentives were adopted and none have been announced. We are trying to find out if significant delays have been encountered.

These are the rebates by model for February:



Aug CHEAPR and October Vote

Few CHEAPR Rebates Given in August

Another tepid, desultory, underwhelming (I'm running out of adjectives – feel free to help in the comments) month for the CHEAPR program with only 40 rebates given out and a total

dollar amount of $28,000. This is the second-lowest month of the year and continues the dispiriting (another adjective!) trend we have seen since November 2019. One interesting item: there were 9 rebates for the new Toyota RAV4 Prime plug-in hybrid. Between the RAV4 Prime and the Prius Prime, Toyota vehicles dominated the rebate activity. The reporting has been that the plug-in RAV4 Prime is a severely supply-constrained vehicle at present and there was some doubt that any would make it out of California, but apparently, they have.

Note: CHEAPR often restates the prior month when issuing new data. In this case, July has increased from 57 to 62 rebates and it is incorporated into the title graph.

Decision Time

The next CHEAPR meeting is scheduled for October 9 at 11:00 AM.

The Center for Sustainable Energy (CSE) presented a set of proposals for program revisions in July. The agenda includes a vote on the new program. The meeting is scheduled for only one hour, so we don’t expect much discussion. We do not know if this will be an up or down vote on the package or if the items will be considered individually. We know that despite 3 meetings and public comments, there isn’t a consensus on all the items.

This is what we know to the best of our information.

The package that will likely be presented to the board in October will have no differences relative to what was proposed in July.

- No e-bike incentive or even a pilot test. Ix-nay on this from the DEEP attorneys.
- A used-EV income-limited (lower/middle income, or LMI) incentive (non-controversial).

- A supplemental LMI EV incentive (non-controversial).
- No changes to base incentive levels or to the MSRP cap.
- No changes to the much higher fuel-cell vehicle incentive, which stands at $5000 with an MSRP cap of $60,000.

UPDATES as of 10/25/20

Modeling scenarios include:

- Maintaining the current (since 10/19) MSRP cap of $42K or raising it to $50K.
- Base BEV incentives of $2500 or $1500.
- A possible temporary “stimulus” additional sample of $1750 for BEVs and FCEVs, and $500 for PHEVs.
- $500 increase to $2500 for the LMI incentive.
- Possible inclusion of scenarios with base-level incentives less than $1500.

Incentive Levels and MSRP Cap

Much commentary, from board members, public attendees, and public comments, was in favor of raising the base incentives and the MSRP cap to at least where they were before DEEP lowered them in October 2019. These currently stand well below comparable incentive programs in nearby states. The CSE was tasked with modeling scenarios and they forecasted that there was a possibility that demand would exceed available funds, thus risking disruption. This blog doesn’t buy that line of argument for several reasons.

- A pandemic and recession of unknown duration make for a difficult environment in which to model. There is a lot of guesswork here, exacerbated by the fact that there are no empirical data on the take-rates for the new LMI incentives. A disruption would likely only occur if the economy roars back and the participation rates are at the high end of estimates.

- The dealership contingent spoke out for a higher MSRP cap. They argued that leases have grown in popularity to about half of all new car sales, and people can manage a lease payment on a vehicle they can't afford to buy. Also, we are soon to see a wave of crossover and SUV EV launches, and these popular form factors are more expensive than sedans.
- Based on our analysis, and comments from the dealers, there isn't much of a used EV market at this time. The incentive will help, but it will take some time for auction bids to be influenced such that inventory can build. Also, used Teslas are probably too expensive for an LMI limited buyer (and we don't know how the rules will work for them – they may not qualify – something we will seek to find out).
- At the July meeting, when CSE proposed this incentive regime, they advised that the LMI system development would cause it not to be available until Q1 2021. We don't know if they have been able to work on it during this period when the program isn't finalized, but there could potentially be a delay.
- There is more money available – DEEP has indicated that the unspent funds from 2020 (they have only given out $398,000 in consumer rebates), as well as unspent bridge financing from 2019, will be rolled over into 2021. This will yield approximately $4.9 million in available funds (compared to the $3 million budget).
- The CHEAPR mission seems to be increasingly skewed towards the equity part of the mission. This blog supports the LMI incentives (and e-bikes, for that matter), but also sees the mission as just getting more EVs on the road. The program has fallen seriously short of that in the past year.

For these reasons, we think the best course is to raise the incentives and collect data. There will be plenty of time to course-correct if necessary. CHEAPR has an important role to

play in moving people to drive electric. This is attested to by consumers, dealers, and our data. Let's allow it to fulfill its potential.

Closing Pet Peeve

The $5000 fuel-cell rebate has never been given out in the 5+ years of the program's existence, and there is no sign it will be anytime soon. You can't buy one of these vehicles at present, and there is only 1 public hydrogen refueling station in the state. And yet, DEEP continues to use this as its headline incentive. It is misleading. It can be seen in the first sentence of the first paragraph on the CHEAPR home page. It was spoken out loud by Tracy Babbidge during the Sustainable Fairfield Webinar on September 28th. It was said by Victoria Hackett when she spoke at the Tesla leasing kickoff in February. Those are the occasions we are aware of but this is clearly not inadvertent. They are not helping themselves.

Editors Note: The October 9th meeting did not yield a resolution. A letter from the EV Coalition was debated that proposed a different structure. No vote was taken.

Meeting Details

We encourage members of the public to listen in! This is the Zoom info:

Webinar Information:

Join Zoom Meeting

https://ctdeep.zoom.us/j/99938032925

Meeting ID: 999 3803 2925

One tap mobile

+16468769923,,99938032925# US (New York)

Meeting ID: 999 3803 2925

Find your local number: https://ctdeep.zoom.us/u/adlDH6PJuC

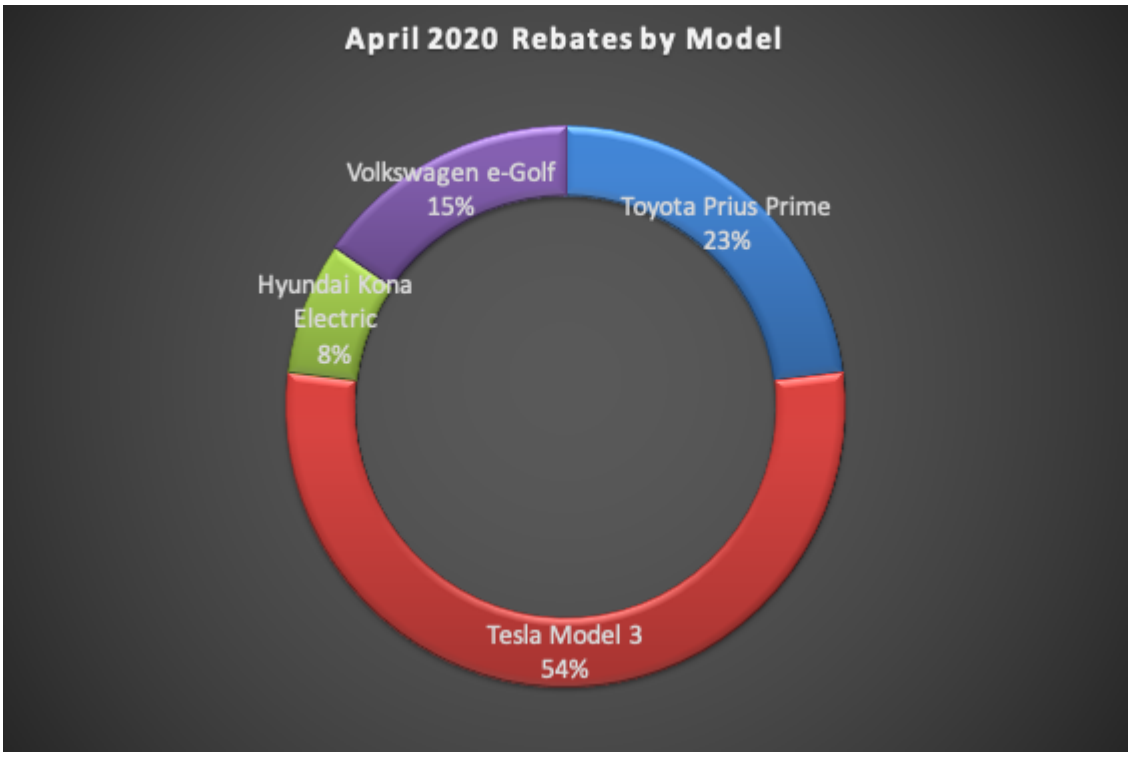
What if They Gave a Rebate and Nobody Came

Rebates at Lowest Level Ever

The lowest number of monthly rebates since its inception has been awarded by CHEAPR in April 2020, a not so grand total of 13, down from 90 in March.

There is almost no public reporting anymore of monthly new vehicle sales, but we know the automotive sector rapidly plunged in the latter half of March, which was felt over the duration of April. There have been some reports of a modest uptick in May.

Following the counter-intuitive increase in rebates in March (relative to Jan. and Feb.), when the rest of the world was collapsing, this is probably more in line with what will be



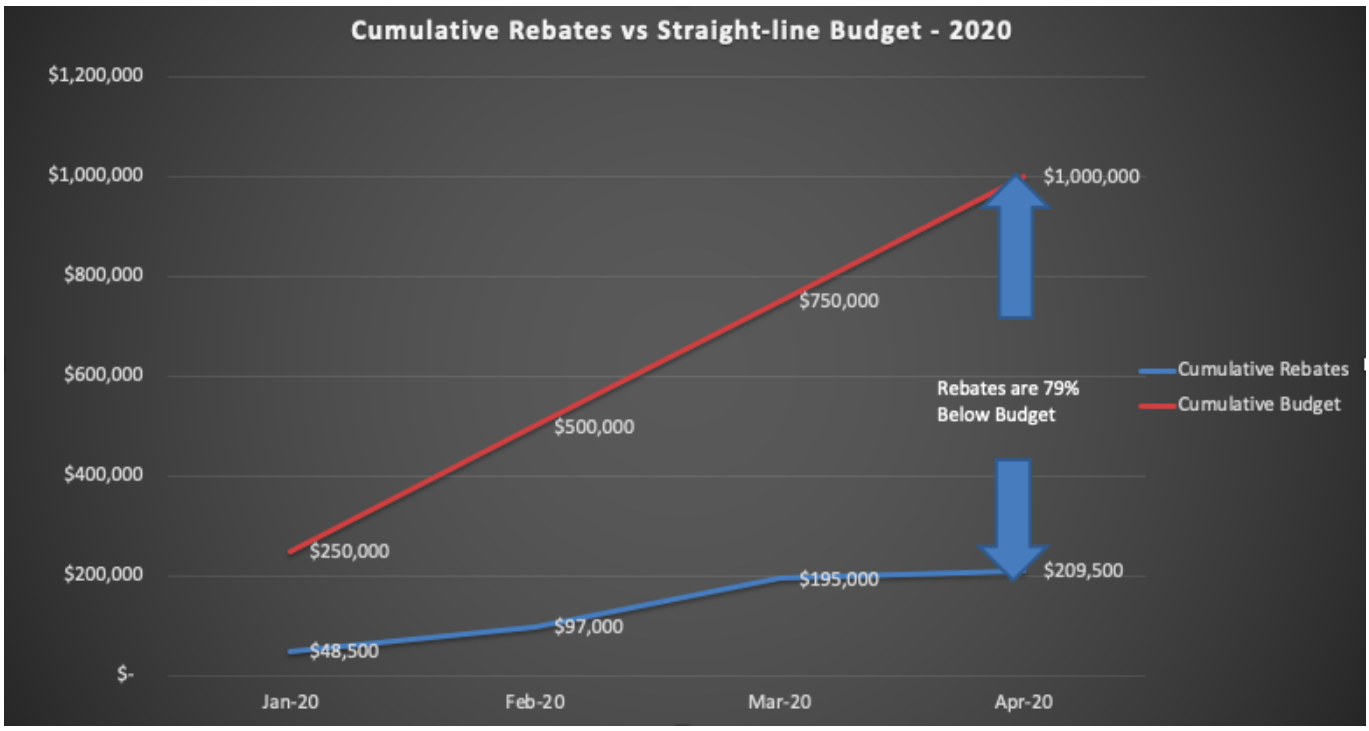
Tesla so dominates the EV market, as well as being the only manufacturer to post a sizable YOY sales increase in Q1, that how many Model 3s are rebate eligible is mostly what determines where the trend goes. It is also possible that some Model 3 supply disruption due to the temporary closure of the Fremont plant is part of the reason, as well. The Model 3 accounted for 54% of April rebates, which translates to all of 7. General Motors has been heavily discounting the Chevy Bolt, but there were no Bolt rebates in April.

CHEAPR Way Under Budget

This blog has been critical of the drastic restrictions imposed on rebate parameters in October 2019. DEEP told us at the Tesla Leasing Event in February that they were concerned that funds would run dry. That was a 3-month problem (Oct – Dec. 2019) until the new funding started, but the new CHEAPR board has yet to course-correct, despite pacing hugely under budget.

The CHEAPR budget is $3 million annually and there are no rules about how it is supposed to pace. There are good reasons for carefully managing the budget. Temporary funding disruptions are, well, disruptive. However, if we look at the

budget on a straight-line cumulative basis and compare it to the dollar amount issued for rebates, by that definition it is pacing 79% below budget.



There is also the consideration of a forthcoming rebate for used EVs. To this point, there has been no announcement, and we are doubtful there will be one anytime soon because the Roadmap recommends that an outside contractor be engaged to design and implement it, meaning this presumably hasn't happened yet. We also expect that an incentive for a used EV will be lower than for a new vehicle, and will include an income cap, as well as a lower MSRP cap. We don't see this as a budget-buster.

EV Roadmap and CHEAPR

The subject of purchase incentives is accorded 15 pages in the EV Roadmap and it traces the origins and thinking about the program. It is still true today, as it was in 2015 when CHEAPR was begun, that while battery prices are on a downward trajectory, EVs have not yet reached cost-parity with ICE vehicles. Cited in the Roadmap is a stat from the Multi-State

ZEV Action Plan that there was an average purchase price difference of greater than $10,000 between comparable EV and ICE vehicles in 2016. While EVs cost less to run and maintain, this headline price difference is a real barrier.

I have to say that it was a surprise to learn from the Roadmap that until 2020, CHEAPR was a pilot. For 5 years. Well, okay. With the legislation that was passed last year, it is now reconstituted with an independent board that remains situated in DEEP for administrative purposes.

Something that *has* changed is that two manufacturers, Tesla and General Motors, have exceeded the unit sales threshold for the federal EV tax credit and have passed beyond the phase-out period. There is no federal incentive for vehicles from these two manufacturers. The Roadmap cites projections from EVAdoption that indicate the next automaker to cross the sales threshold will be Nissan in the latter half of 2021. (This projection predates the COVID-19 crisis.) Attempts in Congress to modify the program and raise the threshold have not met with success. In this context, CHEAPR assumes a larger role.

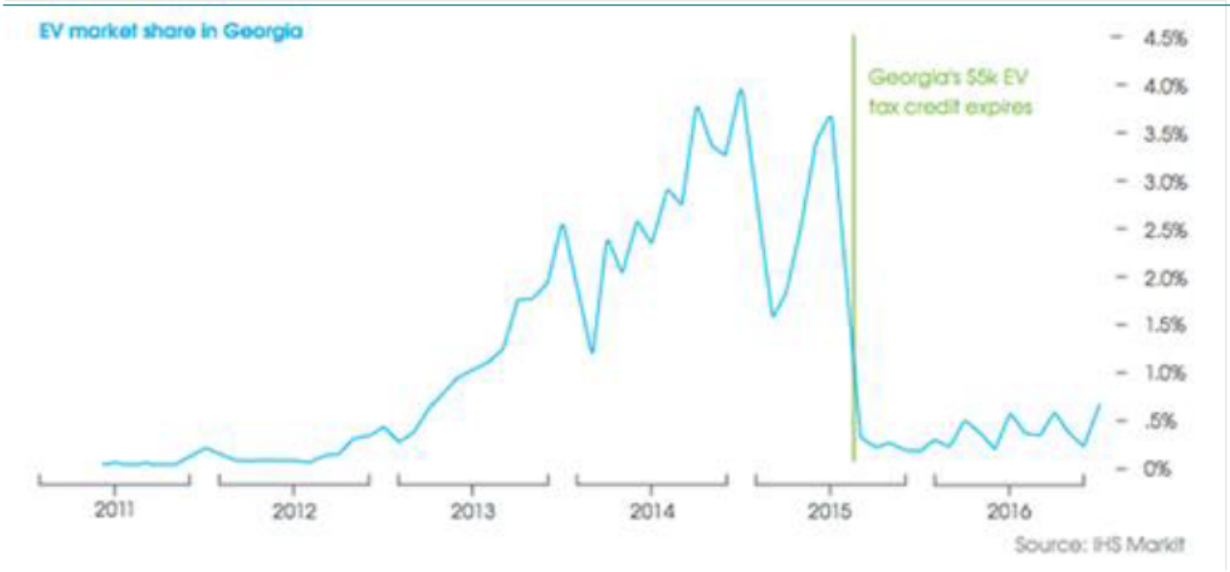
Value of Purchase Incentives

The EV Club of CT is a supporter of CHEAPR and available data indicate that incentives matter. CHEAPR has handed out 5,984 rebates through April 30, 2020. Given that there were 11,677 EVs registered in the state as of Jan 1, 2020, the program looks to have played a meaningful role. Survey-research of rebate recipients reports that over 80% of respondents cite the incentive as being either extremely or very important to their decision to acquire an EV.

The Roadmap cites experiences of similar programs in other states. One of them is Georgia, which has been cited previously in this blog, as a dramatic example of a “light switch test.” When Georgia lawmakers rescinded a generous tax credit of $5,000 and added an annual EV fee, sales fell off a

cliff. This is a graphical representation of what happened that was published on page 89 of the Roadmap.

Figure 19: Effect of the Georgia state EV tax credit repeal on Georgia's EV adoption rates



Rebate Parameters

There are several variables that go into how much of a rebate if any, a given EV purchaser qualifies for, which we are calling rebate parameters (and which DEEP refers to as "bins).

- Available funding
- Rebate size and tiers
- MSRP cap
- Future consideration of a rebate for used EVs, along with a likely income cap.
- One rebate lifetime per licensed driver

Rebates are offered for battery electric vehicles (BEV), Plug-in Hybrid Electric Vehicles (PHEV), and Fuel-Cell Electric Vehicles (FCEV). Rebate parameters have changed several times since the program began. The size of the rebate was originally pegged to the size of the battery pack but was modified in 2017 to be based on EPA-rated electric range. Battery pack size is not directly indicative of the range, so this approach makes sense. Also, over time, there are changes in technology (substantially longer ranges) and other aspects of the

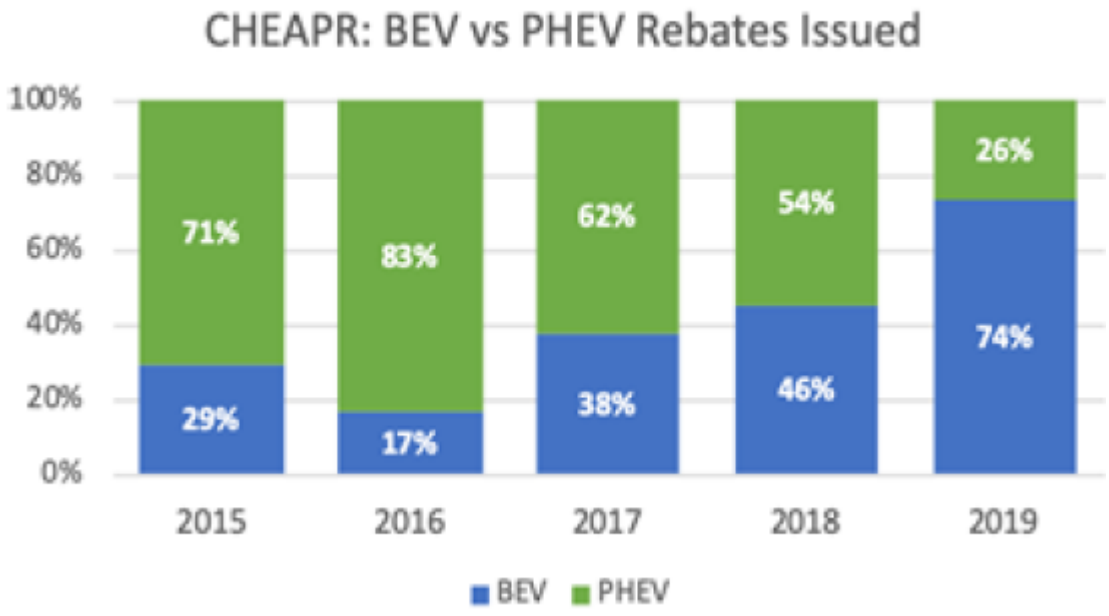
environment that gradually, but consistently, evolve.

The MSRP cap initially was $60,000. It was changed to $50,000 in October of 2018 and then to $42,000 where it currently stands. Rebate tiers are currently $5000 for any FCEV, $1500 for a BEV with a range of at least 200 miles, $500 for a BEV with a range of fewer than 200 miles, and $500 for any PHEV.

The number of rebates awarded has declined significantly since the October change and it is obviously because the lower level now excludes almost all trim levels of the Model 3. This blog has discussed this previously on April 2nd and in earlier posts.

We also noted that the lowering of the MSRP caused a shift in the mix of rebates toward PHEVs, which we discussed here. (April is the low-volume exception.) But you wouldn't know this from the Roadmap, which on page 83, contains this exhibit of rebates by fuel-type.

Figure 15: Rebate percentages by vehicle type over time



The footnote indicates that the rebate data had been updated through July 26, 2019, in other words, before the changes were made. It seems clear that lowering the MSRP cap was counter-

productive, both from the perspective of consumers being able to use the rebate along with making the funds less efficient in terms of zero-emission miles subsidized. The market in general is trending toward BEVs which may eventually change things. But we strongly feel that the MSRP should be raised to at least $50,000 (same as MA) or higher (NJ is $55,000 and NY is $60,000). The rebate levels could be left in place while the run-rate is evaluated with the higher MSRP, whatever modeling has been done for used EVs, and projections for when this depressed market normalizes. We are not aware of the law allowing unused funds from one year to be carried forward.

Dealer Incentive

A headline that appeared over a NY Times story in 2015 read, “A Car Dealers Won’t Sell: It’s Electric.” The unwillingness of many dealers to sell EVs has been a persistent bottleneck. So the idea that DEEP included in the original CHEAPR formulation a $300 incentive that would go to the dealership for each EV sold seemed a worthwhile experiment. It may sound slightly farcical to pay a business that is in the business of selling cars to sell cars, but if that is what it takes to seed change, so be it.

The incentive was subsequently lowered from $300 to $150. In the Roadmap, DEEP openly questions whether it is worth it and whether the funds would be better allocated to consumers to stretch what is a modest budget when compared to incentives in other states. (For example, the New Jersey per capita funding is 50% higher.) DEEP also found that the majority of the incentives were kept by the dealership, i.e. not given to the salespeople, which was kind of the basic idea.

This was underscored by two EV Shopper Studies done by the Sierra Club in 2016 and 2019. In the latter study, it was found that 74% of dealers did not have a single EV on the lot. The study did not report out CT separately (only CA had sufficient sample size for that) but in the 2019 study, there

were no local dealers among those visited in the research that scored the highest rating. Our EV Club does know of some dealerships that do a good job with EVs and we appreciate them. We just wish they were the norm and not the exception.

VW Works Around Its Dealers in Germany

The most interesting recent development is from VW in Germany. They have announced that VW corporate will take responsibility for selling EVs and the dealers will only act as agents. Dealers will arrange test drives and deliver the car, but will not otherwise be part of the sales process. They will receive a fee for each vehicle they deliver and they will not have to buy the car. This last part is particularly interesting because it eliminates the risk of having to carry the cost of financing the vehicle if it is a slow-seller. It is the closest one can come to direct sales while still maintaining the franchise sales model and implicitly acknowledges its limitations. Here is a more detailed description published in ChargedEVs.

Dealer Recognition Program

Instead of the dealership financial incentive, we endorse DEEP's proposal to work with the CT Auto Retailers Association (CARA) and create a dealer recognition program. If this is promoted to the consumer, it could serve to avoid some of the negative feedback loop that currently exists. We encourage that care is taken in giving this award so it isn't vaporware. EV Club of CT works with the Sierra Club to conduct its EV Shopper Studies and our feedback to them will be to separately track visits to dealerships that are recognized in this way to see if their actions match the certification.

Fuel-Cell Electric Vehicle Incentive

CHEAPR has included FCEVs in its incentive plan from the beginning when incentives were set at $3,000. In July of 2016,

the FCEV incentive was raised to $5,000. And when the MSRP cap was lowered to $42,000 for EVs, it was raised to $60,000 for FCEVs (they're more expensive).

There have been exactly zero of these incentives awarded and there is a total of 3 FCEVs registered in the state. There is only 1 public hydrogen refueling station in CT.

FCEVs were dropped from the federal tax credit in 2017.

The rationale in the Roadmap is to support all promising new technologies and DEEP recommends continuing these levels for FCEVs for the duration of the current funding, which is through 2025. Their goals are modest: 591 FCEVs in the fleet and 6 or 7 refueling stations in the state by 2025. Keep in mind that a hydrogen refueling infrastructure has to be built from scratch. The other rationale that we have heard is that FCEVs have a longer range (and a short refueling time if you can find a place to fill up). The range part of that used to be the case, but now the longer-range BEVs have a similar range as FCEVs and higher mpg-e. Certainly, the differential in incentive can no longer be justified by range alone.

This blog is not against FCEVs, which are zero-emission vehicles. We do feel that DEEP/CHEAPR over-emphasizes them and, at times, uses them to represent CHEAPR in an intellectually dishonest way. At the Tesla Leasing Event in February, the DEEP spokesperson said that the CHEAPR program offers rebates of up to $5,000. It may be a convenient headline, but it is only true in the narrowest technical sense. For all practical purposes, the max rebate is currently $1500. And almost no Tesla qualifies for even that.

This is a link to the Roadmap. DEEP recommendations for CHEAPR are on page 92. We won't repeat them here.

As we have made clear, these are our priorities:

- Raise the MSRP cap.

- Move quickly to implement an incentive for used EVs.
- Raise rebate levels, funds permitting.
- Eliminate the dealer incentive and re-purpose those funds for consumers.
- Develop guidelines for a dealer recognition program, which hopefully includes some input from consumers.
- Publish rebate data at the dealership level as they do in New York. Arguably, that alone is a dealer recognition program.
- Make e-bikes eligible for incentives under CHEAPR.

And, finally, one area where we are in agreement with the Roadmap, is to look to the future and the potential for leveraging incentives by partnering with utilities, as part of TCI, and with the manufacturers.

Charging Stations at NCC

2 new level 2 charging stations installed at NCC

The Westport Electric Car Club joined officials from Norwalk Community College, the State of CT and Town of Norwalk for the ribbon cutting marking the official unveiling of 2 new level 2 electric vehicle charging stations. In the photo, NCC President David Levinson is flanked by State Senator Bob Duff and Norwalk Mayor Harry Rilling.

NCC President David Levinson announced plans by NCC for its campus to be carbon neutral by 2025. With that as background, two electric vehicle charging stations have been installed at

the NCC West Campus. These stations were funded by a CT Department of Energy and Environmental Protection (DEEP) grant that was obtained for the college by Eric Gribin, the Director of its Building Efficiency and Sustainable Technology (BEST) program. The grant was supplemented by a donation from Karl Chevrolet of New Canaan.

These charging stations, as described by Tracy Babbidge, the Bureau Chief for Energy at DEEP, are 2 of 265 such installations across 55 towns throughout the state that have been funded by DEEP grants. Ms. Babbidge noted that transportation emissions account for 40% of emissions statewide. The efforts made by the state have earned it a 5th best ranking among all states for energy efficiency, improved from 9th three years ago.

These charging stations are open to the public, and per the terms of the DEEP grant, charging is offered free for 3 years. According to State Senator Bob Duff, 90% of CT residents should now be “range confident,” as opposed to being concerned about range anxiety.

Norwalk’s Mayor Rilling noted that this brings the number of public charging stations in the city to 7, and that Norwalk has accumulated credits to get another 3.