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.

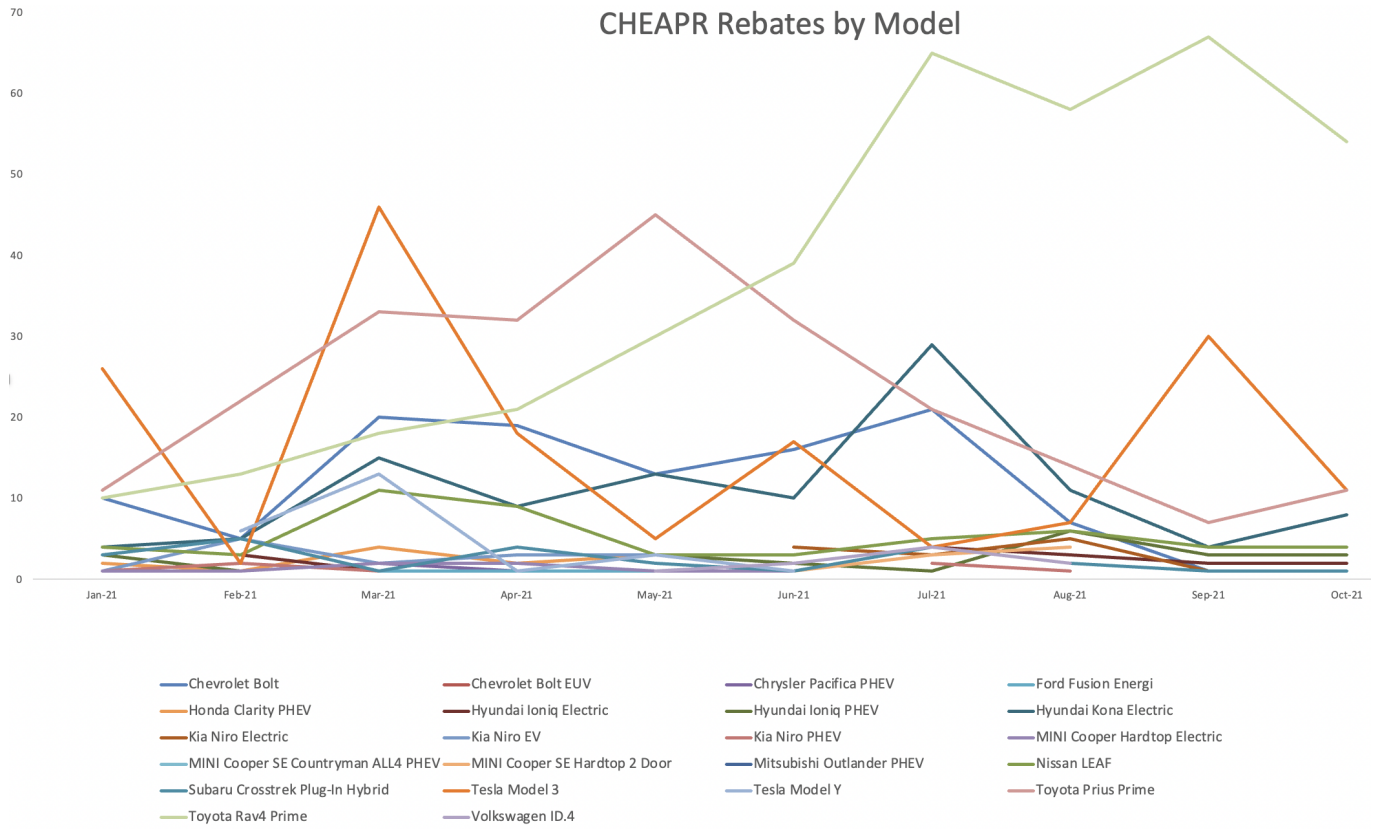
With respect to the budget, while the program is budgeted for $3 million per year, it had over $5 million in the bank due to the rollover of past unspent funds. Continuing the program as is pretty much guarantees at least an underspent first half of the year. Even if at the March meeting, the board adopts 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.

CHEAPR October Update

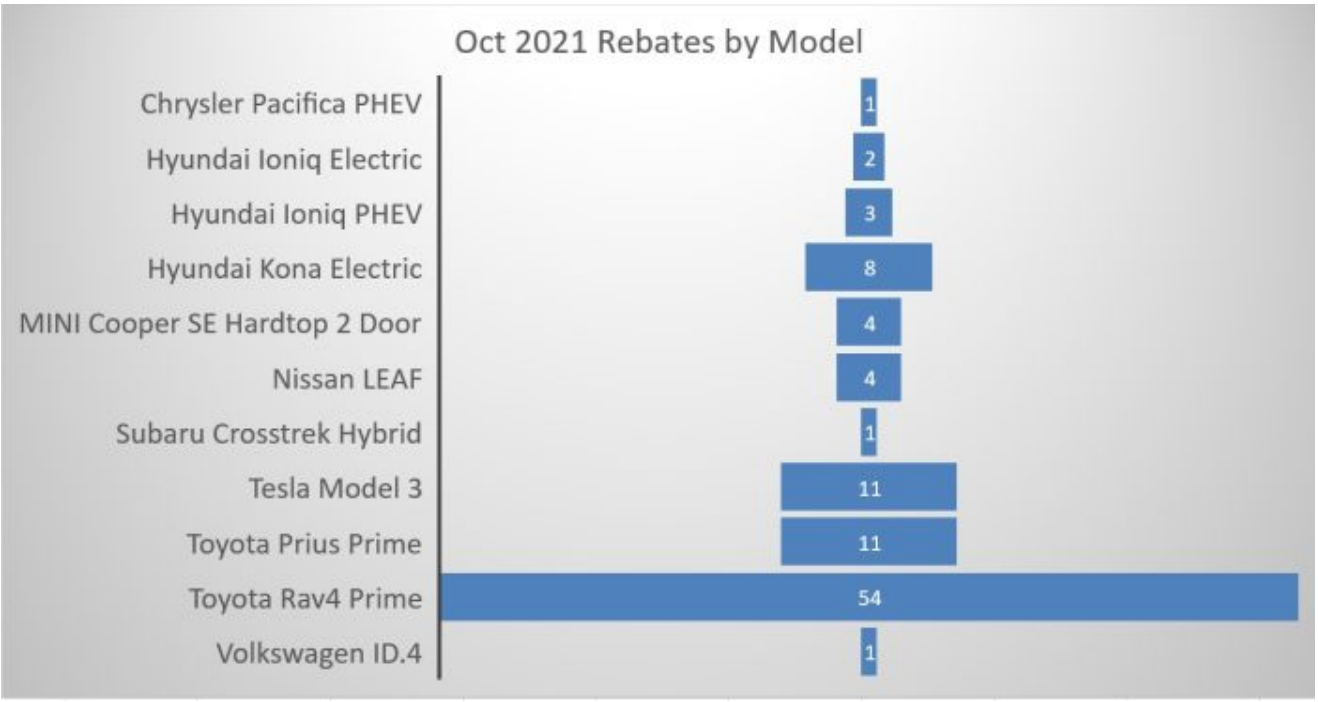
Rebates Slip in October

100 rebates were awarded in October, down from 124 in September. Of these rebates, 1 was a Rebate Plus for a used Leaf. (There have only been 3 Rebate Plus awards to date.) Rebate expenditures year to date (excluding admin and dealer rebates) are $1,394,500. We'll likely be around $1.7 million for the year, making for the third consecutive year that the program will have been under-spent. If funds continue to roll over, the budget for next year could be over $6 million. At the very least, that provides a more than comfortable cushion for any prospective changes.

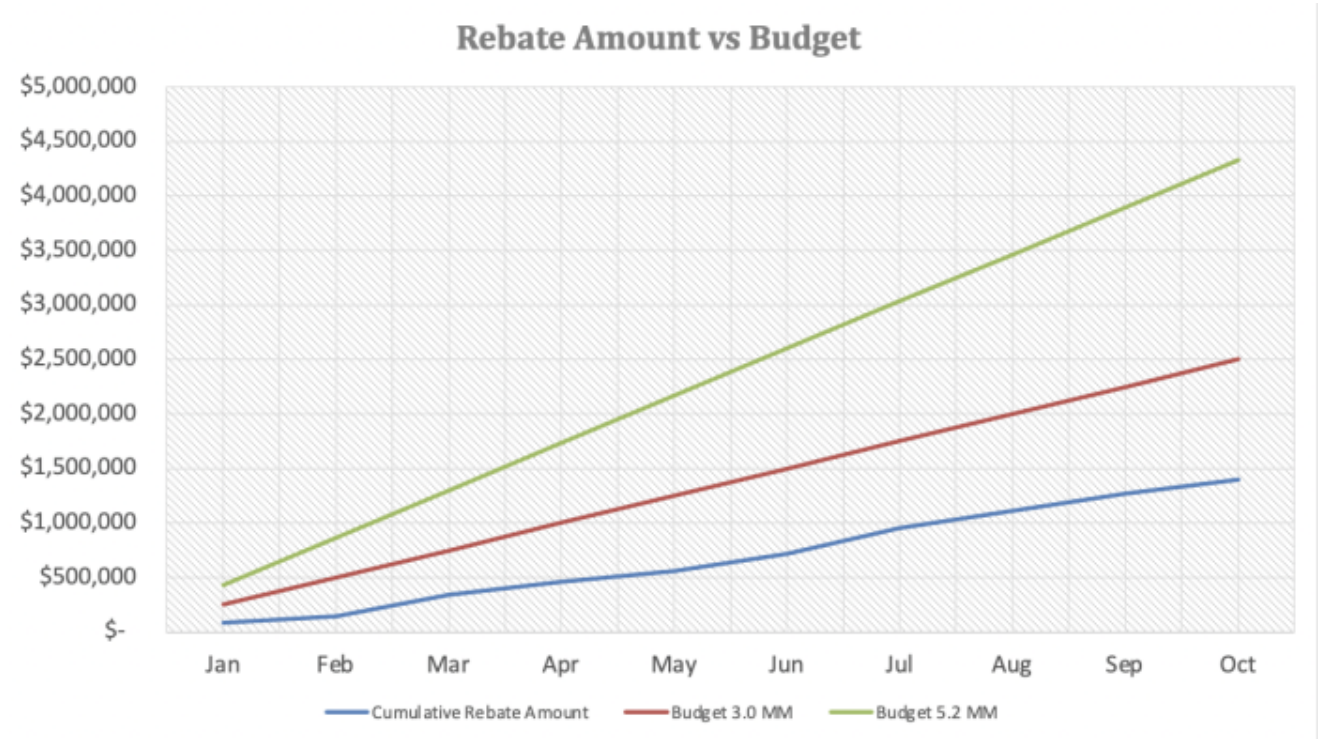
The trend of PHEVs dominating the rebates continues with 70 of the 100 rebates falling under that fuel-type. From our perspective, although we're fine with PHEVs being part of the program, it has a lower emissions impact if they represent the lion's share. This is likely to continue. The biggest rebate-driver continues to be the Toyota RAV4 Prime, accounting for over half of all rebates. It looks to be a major success and appears to have cannibalized its lower-cost stablemate Prius Prime. The PHEV trend is also driven by the lack of new BEV models that qualify under the MSRP cap and GM's continuing saga of the Bolt battery recall (manufacturing has still not restarted and won't this year).

There were 11 Tesla Model 3 rebates, more than any other BEV,

but going forward, there will no longer be any Tesla rebates. Tesla slightly reconfigured and raised the price of the base trim level Model 3 about a month ago. According to Tesla.com, the vehicle cost is now $44,990 before taxes, title, and destination charges. The range is slightly increased to 267 miles. 0-60 acceleration is 5.8 seconds, slow by Tesla standards. As the pipeline of earlier orders gets fulfilled, rebates for the Model 3 will cease as it is now above the $42,000 cap. In terms of newer BEV models, there was one rebate for the Volkswagen ID.4. Not all of the ID.4 trim levels qualify for the rebate.



There is a meeting of the CHEAPR board later this month. We hope they will take a hard look at program performance now that there are 5 months of data since the revisions were implemented. We hope they will think about ways to improve the Rebate + incentives, where the parameters are set for the main incentive, and how there are other potential toggles to control the burn rate should changes cause the program to run hot. The CT Electric Vehicle Coalition will be making its recommendations and publishing them here.



Cutting the Cord – Westport Fire Department EV Training

Maintaining Safety for First Responders to an Accident Involving Electric Vehicles

This kind of cord-cutting risks a lot more than losing ESPN.

The Westport Fire Department is conducting staff training on dealing with EVs in an accident, for example, if there is severe damage, if occupants need to be cut out of the car, or if there is a potential for “thermal runaway” (battery igniting). First responders need to know how to safely handle the battery cables, and if necessary, where to cut.

EV Club owners and local dealers loaned their vehicles to the Westport Fire Department for training sessions being conducted this week and next. In this photo, there is a Chevy Volt, Toyota Prius Prime, and Honda Clarity, all of them plug-in hybrids. Other training sessions have battery electric vehicles, including a Jaguar iPace and Tesla Model 3.

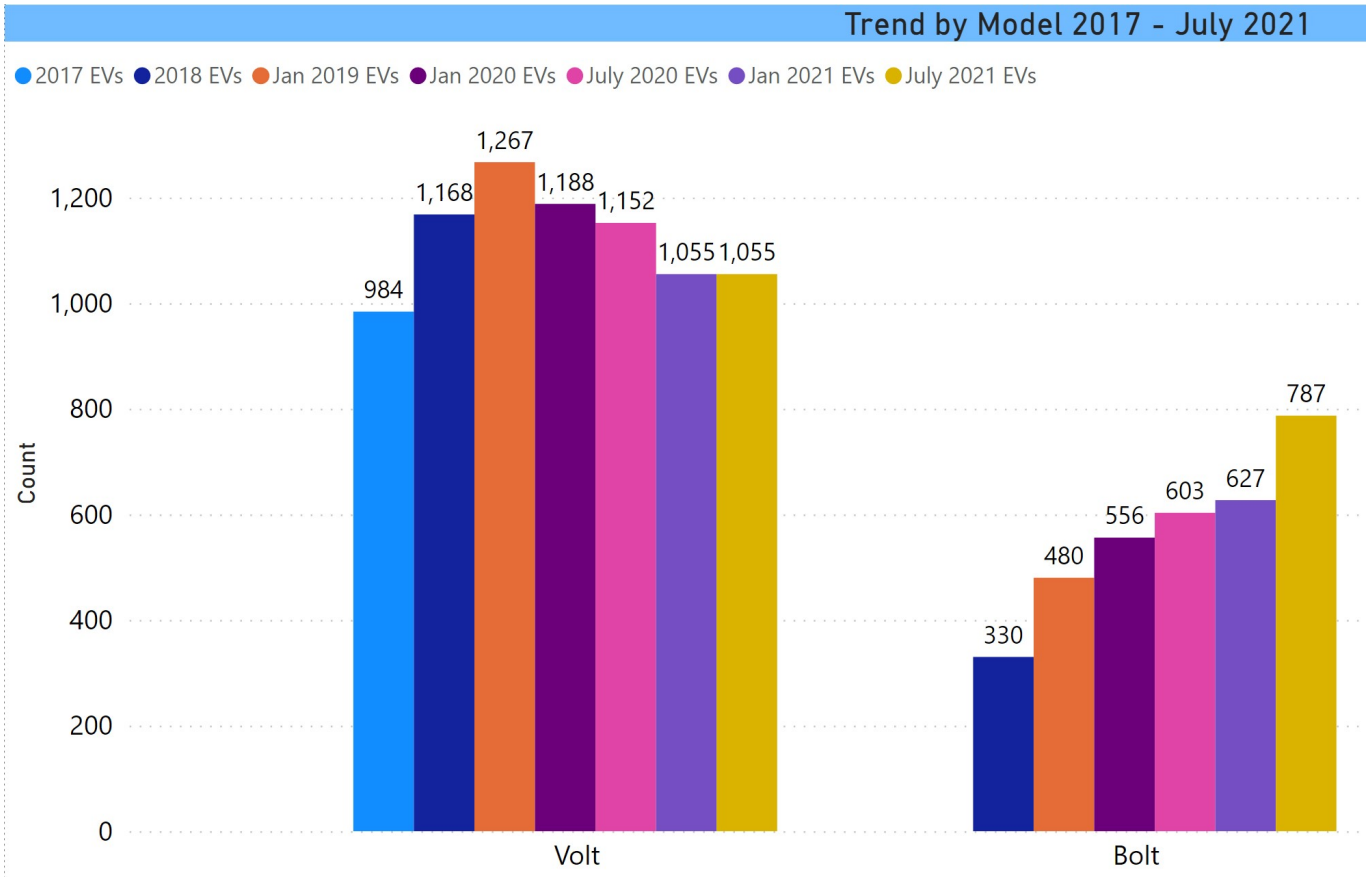
The photo at the top of the post, from left to right, is of Brett Kirby, Assistant Chief of the Westport Fire Department, EV Club President Barry Kresch, and Jason Emery, an outside trainer brought in specifically for EV training.

These photos are of the trainer and fire department personnel observing the wiring of a Tesla Model 3.

Bolt Owners Still Treading Water

The Chevrolet Bolt recall is inching closer to the one year mark, having started in November of last year. GM expanded the scope of the vehicles being recalled over the course of several stages until in August, it expanded to every Bolt manufactured. That’s the bad news/good news. The recall involves every Bolt, but it hasn’t been a big seller. The irony is that was beginning to change. Since the introduction of the redesigned model this year which came with a lower price, it has been getting traction as one of the better BEV

values. Below is the registration trend of the Bolt in CT, compared with its stablemate Volt that was discontinued in 2019. The most recent numbers in the chart are as of July 1, which was before deliveries began of the Bolt EUV.



There may finally be a ray of hope. ElectricDrive.com reported that GM has identified the cause and that its supplier, LG Chem, has restarted production lines. New battery cells could be reaching dealers by later this month. It is not known how long it will take to work through the recall backlog as well as the resumption of new vehicle manufacturing. The automaker also announced “new diagnostic software” to be deployed over the next 60 days.

The recall does tell us a couple of things. If you read the ElectricDrive piece, the problem is described as a defect in the manufacturing process. There is more detail than that, but the point is that it isn’t a problem with the battery design

or underlying technology. It is strictly quality control. In the article, it specifies that the problem occurred at the LG plant in Korea. But LG opened a plant in Michigan in 2019 and newer Bolts have batteries manufactured at that facility. The fact that GM included Bolts with batteries manufactured in each facility indicates a more across the board concern. (Batteries are very heavy and expensive to ship. It is much more cost-effective to co-locate battery and vehicle manufacturing. The Michigan facility is likely part of how GM was able to lower the price of the refreshed Bolt. Perhaps it provides some measure of hope that there will be a meaningful battery manufacturing presence in this country, a critical national security technology, as opposed to our usual practice of developing technology and then ceding the manufacturing to the Chinese, e.g. solar panels.)

There are a number of Bolt owners among club members. For a variable number of months now, depending upon which recall batch their vehicle is in, they have been living with a vehicle that needs to be garaged outdoors and used in a range-compromised fashion. The Bolt's 259 mile range is now effectively 163 with the guidance to maintain a battery state of charge of not less than 70 miles and no more than 90%. With this slow-rolling, multi-stage recall, where there is still no definitive no end in sight, how proactively has GM or its Chevy dealers been communicating with their customers? Bolt owners responded to our query between September 21st and October 4th.

GM has been in a difficult spot, given the expanding scope of the recall, the elusive nature of the cause, and possibly its negotiations to get LG to assume some portion of the liability. Nonetheless, GM and Chevy dealers are responsible to the customers and the general consensus is that there has been a minimal level of communication. The near-silence from GM may be be because it hasn't had much to say, but there does not seem to be much of a communications strategy in place. The

number of communications from GM seems to basically be one, or one per recall if the vehicle was in one of the earlier batches before the full scope of the problem became apparent. The content boils down to, “be patient.” Some owners are frustrated, while others have more equanimity, with GM getting points for proactively expanding the scope of the recall. The dealers don’t seem to be much in the loop. Updates have not been forthcoming as the saga has dragged on. No complimentary loaners have been provided.

Some customers have requested that GM repurchase their vehicle. One advised that there is a YouTube channel called “Wrenching Fool” that provides guidance on how to go about getting a case number. The repurchase requests are being evaluated by GM on a case by case basis and do not appear to have been resolved to this point.

There was one exception to that. Club-member Glen Zackowski reports reaching a favorable repurchase deal with his dealership, Grossman Chevrolet, in Old Saybrook. He will have to wait until the car is fixed. At that point, he will be the owner of a new Bolt EUV. No doubt, staying in the family helped. Customers also report that they like the car. They just wish this process had been made easier for them.

Westport Police Led The Way, And Will Be Again Next Week

Tesla Tech Enables Innovative Solutions to Law Enforcement Customization

The Westport Police were out in front of the market when they acquired a Model 3 for patrol car duty in December 2019.

What is becoming apparent is that their diligence and attention to detail placed them further ahead than others who made a similar move after they did.

Case in point – how does one handle the police electronics. In a conventional ICE police car, the vehicle is equipped with a heavy-duty alternator. The Tesla doesn't have an alternator – what to do?

One option, as was done with a Model Y that went into service this past July in Eden Prairie, Minnesota, is to add a second 12-volt battery. This photo was published in DriveElectricCanada.ca. It shows the additional battery parked tidily in the frunk.

While that works, a more elegant solution was arrived at in Westport, which was to wire the police electronics directly into the large battery. The police report this being a trivial

drain. It required the police and Whelen Engineering working with Tesla to do some recoding to make it happen.

The point is that there is a lot there when it comes to the potential to re-purposing the native tech in a Tesla. Westport has also been able to incorporate some of the camera and computing power into the license plate reader.

We don't know how widely this knowledge about these opportunities to lower the cost of customization is being disseminated, though the Westport Police have more than done their part in terms of being generous with their time and sharing what they have learned.

The police have the approval for another electric patrol car, which will most likely be the Model Y.

Model 3 to Lead EV Parade

Officer Charles Sampson, who was the project leader for the Tesla patrol car, will be driving the Model 3 as the escort for the EV parade on October 2nd. There will be an opportunity to check out the vehicle before the start of the parade. The parade departs from the Westport Train Station at 10 AM. Registration is still open at https://bit.ly/GreenWheels

Drivers should arrive between 9 and 9:30 to give us time to organize.

Governor Lamont Meets with EV

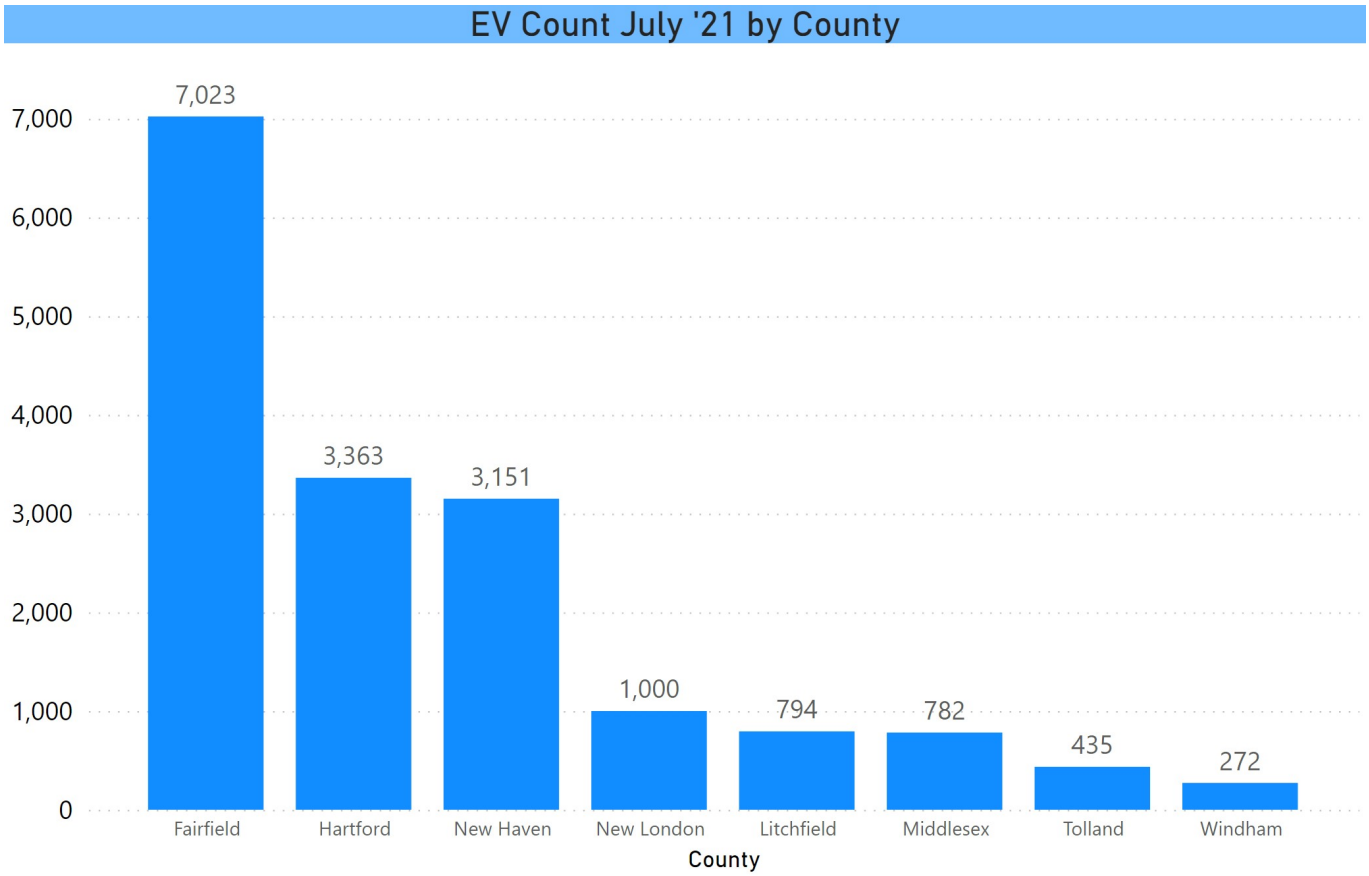
Club

The photo above shows the governor meeting with Bruce Becker, Analiese Paik, and Barry Kresch of the EV Club of CT. This was a meeting about how the environmental community can more effectively mobilize to support a progressive environmental agenda.

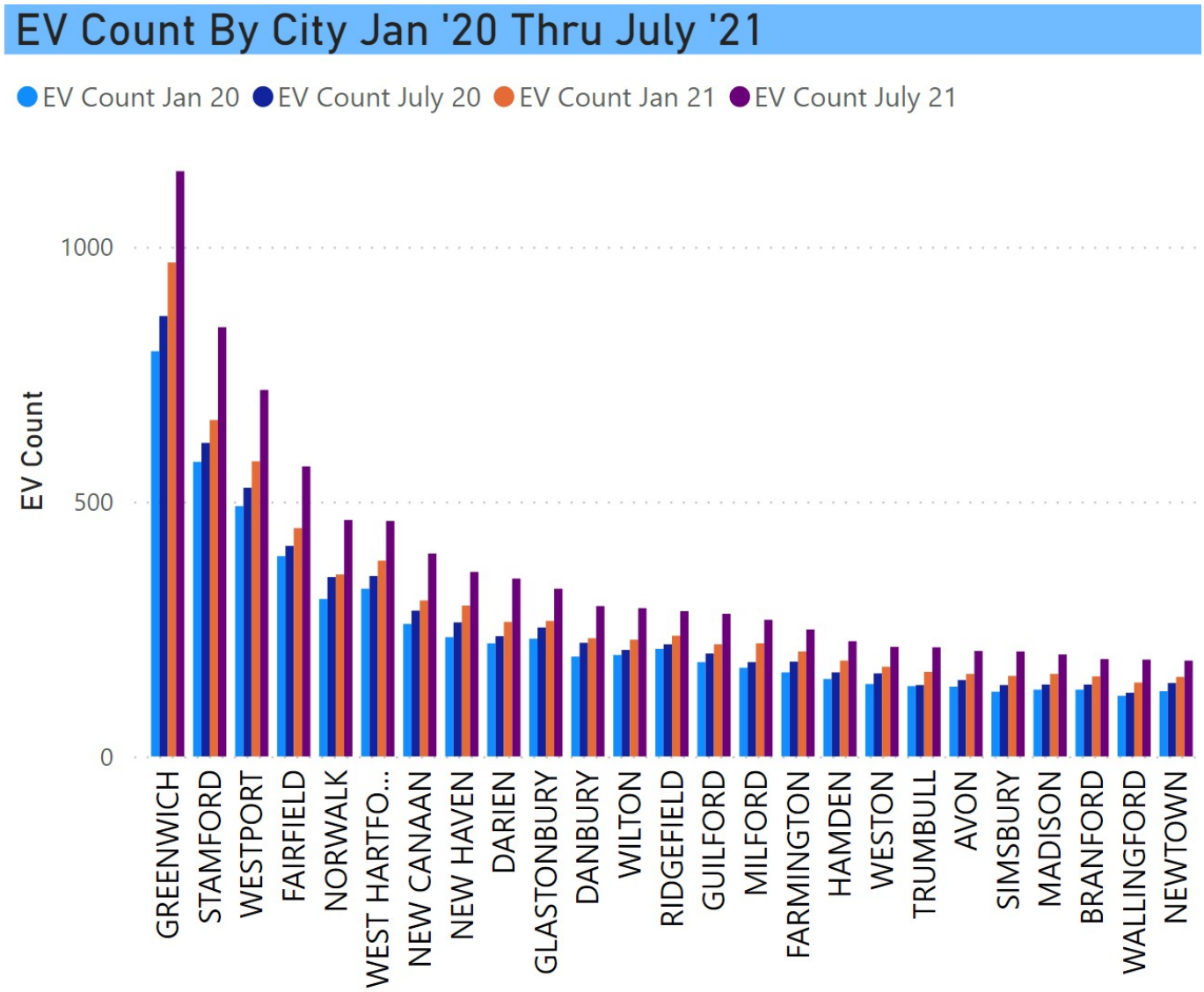
Where The EVs Are – July 2021

Fairfield County is Home to 41% of EVs

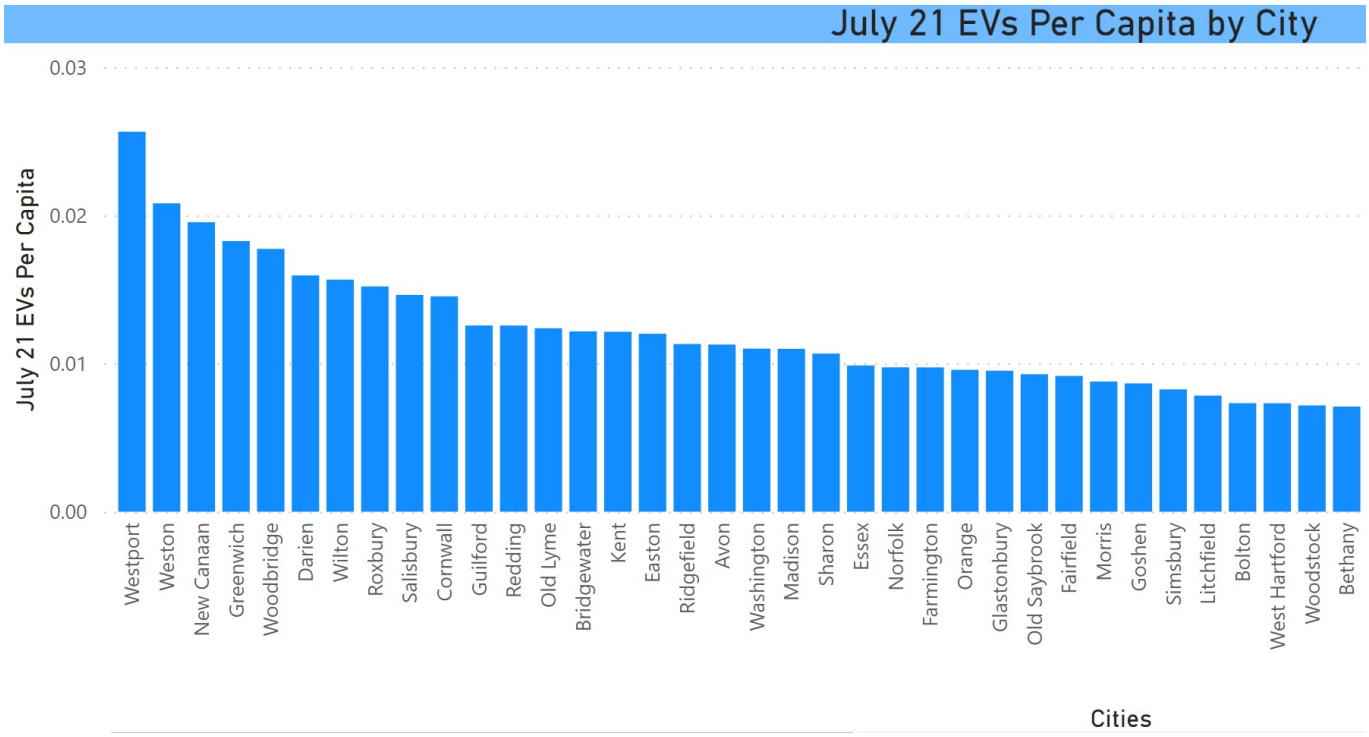
7023 of 17,217 EVs in the state are registered in Fairfield County.



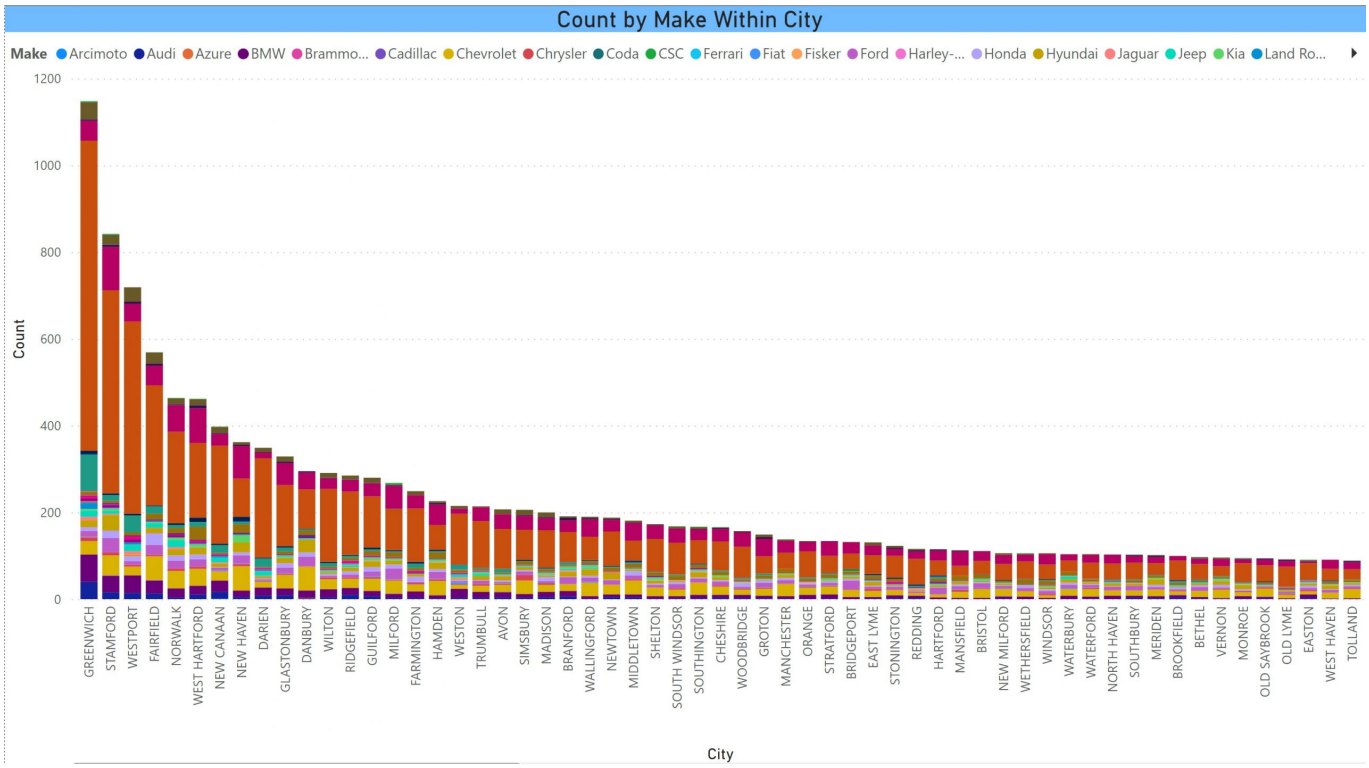
The map at the top of the post shows the distribution of EVs across cities. The larger the bubble the greater the number of EVs, with the top cities being Greenwich, Stamford, Westport, Fairfield, Norwalk, West Hartford, and New Canaan. These ranks don't change that quickly but Norwalk has overtaken West Hartford. There is nowhere near enough room to display all cities in the static screenshot of the recent trend below. In the interactive dashboard, there is both a slider and a slicer to help navigate the larger charts.

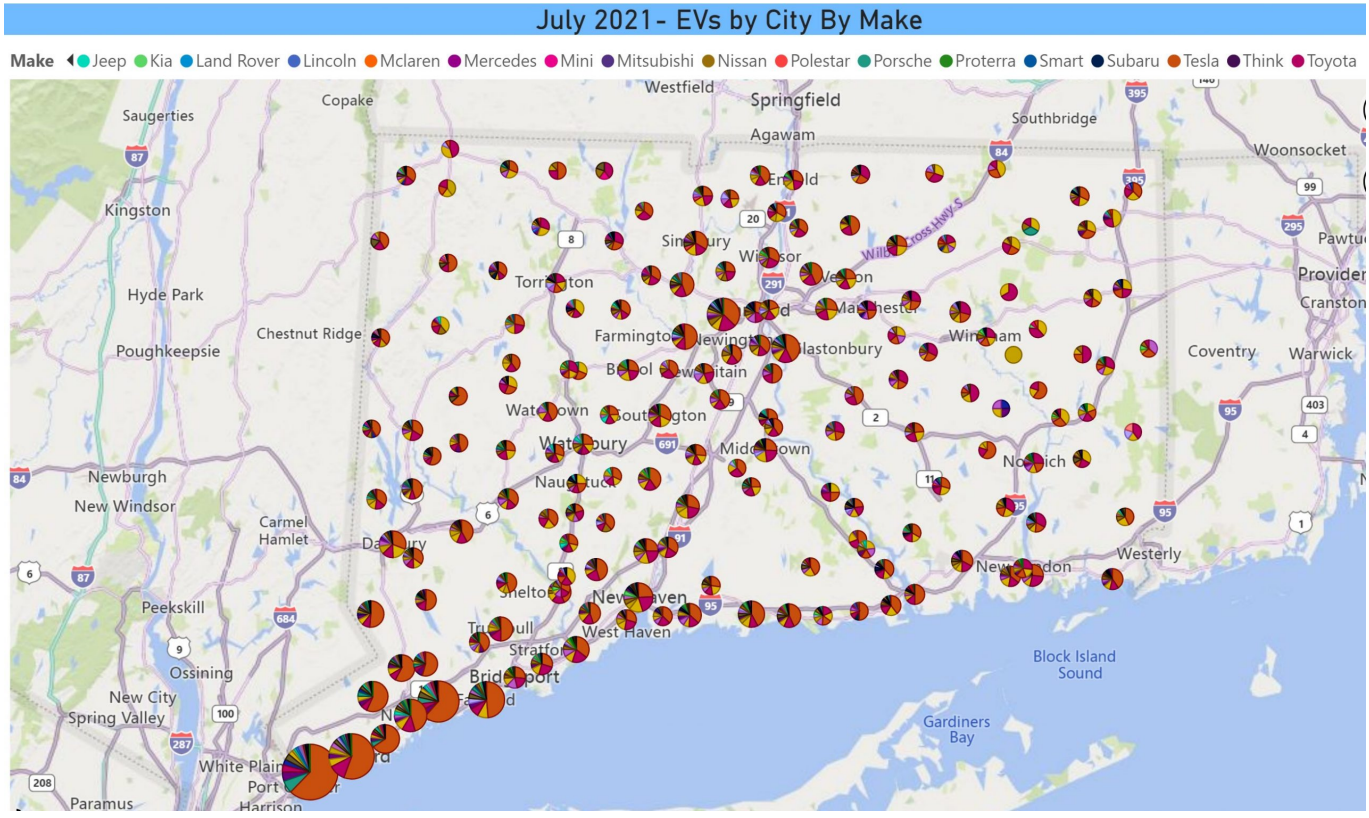


Adjusting for population reveals a different rank with mostly smaller towns in Fairfield County dominating: Westport, Weston, New Canaan, Greenwich, Woodbridge, Darien, and Wilton.



The two charts below show EVs by make by city. These do not come directly from the DMV because the DMV separates the geo from the other information. I have created my own estimates based on the available data. Again, the screenshot is not large enough to display all cities and all of the makes in the legend. The dominant orange color is Tesla. Below the bar chart is the same data in map form with bubbles sized to overall EVs and the wedges representing each make. Again, it looks better in the dashboard which has more visual flexibility.





If anyone has any questions about a particular city, please email EVClubCT@gmail.com.

New EV Rate Design Released by PURA

Public Utilities Regulatory Authority (PURA) Directs Utilities to Offer EV Charging Incentives

The final rate design adjudication was released on July 14th. Even though it is the final version, it actually isn't quite final yet. We now know a lot about the program, but the document creates working groups to fill in unfinished gaps on some important details, such as some rates, approved equipment, etc. The PURA doc is uploaded to the website as a blog post here. It doesn't exactly read like Jurassic Park, but we need this kind of thing if we are to wean ourselves off "dino juice."

The program is quite comprehensive, containing incentives for residential and commercial, the latter including workplace charging and fleets, and which also applies to municipalities. The incentives cover hardware, service upgrades, make-ready, demand charge mitigation, and discounted electric rates.

It is important to note that this program takes effect in January 2022. It is not retroactive. If you purchase a charger tomorrow, it will not be eligible for the subsidies.

Below is a summary of the incentives referenced in the chart at the top of the blog post. These are hardware and installation-related discounts:

- A residential incentive of up to $500 for the cost of an EV charger. This incentive is for a smart charger, which is a WiFi-connected charger. EV charger prices vary, in part depending upon how many amps are drawn by the charger, but according to MYEV.com, the range for a smart charger is $600-$800. If you take advantage of this incentive, you are required to participate in a managed charging program. The point of the connected charger is to enable the utility (which is also known as an Electric Distribution Company or EDC) to see and communicate with the charging unit.
- Also for a residence, there is a subsidy to help with the cost of an electric service upgrade if that is necessary if your current panel does not have the capacity to accommodate the added amperage of an EV charger. The amount of the subsidy is not yet determined.
- There is no mention in the chart of a subsidy specifically for installation, so we assume for now that the $500 applies to both hardware and installation. Installation costs can vary considerably depending on how far your panel is from your garage. It could be as much as $1,000.
- There are similar incentives offered for multi-unit dwellings (MUD), workplace chargers, and make-ready. The incentive is 50% of the cost of the charger subject to a cap for the site and a minimum number of charging ports. Note that this is ports, not chargers. There are dual-port charging units. There are higher site caps for MUDs, public level 2, and DCFC charging in underserved communities.
- There is a 100% make-ready incentive, which means the EDC will pay to bring the power to where the chargers will be installed. This is a big deal.
- Finally, there is a subsidy of 50% for the installation of a DCFC charger, which is short for DC current fast charger, also known as a level 3 charger. These are

commercial, high voltage units that can quickly charge an EV capable of accepting a fast charge, which applies to most battery electric vehicles.
- There will be a list of specific approved charging equipment. This is necessary for the utilities to be sure they are able to get the information they need from the charger. This list will be finalized later in the year.

Residential Incentives for Electricity Usage

As noted in the first bullet about residential charging, a household can receive an incentive for participating in a managed charging program. There are 2 levels, called basic and advanced. As mentioned earlier, receiving the incentives for the hardware require participation, along with giving the EDC permission to capture data from the charger.

- Basic incentive. In this program, a consumer will be notified of an upcoming demand response event (i.e. when the EDC is expecting there to be a high demand for electricity and they need to take measures to avoid brownouts or blackouts). The consumer has the option to decline participation. However, the default setting is opt-in. Incentives are awarded for participation. The particulars are still being developed, but there is a cap of $200 per year, which will be sent as a direct payment to the consumer.
- Advanced (direct load control). The consumer will set charging sessions (via app, web portal, email or text) and the EDC has the right to throttle the rate of charge. The particulars of the incentive are still under development. Your participation level will influence the size of your incentive. We hope this is not too burdensome a level of admin for the consumer.

- The Authority has directed the EDCs to submit recommendations for EV rates for MUDs, which could involve sub-metering.

Note: A common way of protecting the grid, which is used in other places but is not part of this program, is time of use (TOU) charging. We are disappointed that this isn't part of the program because it is a very simple, easy to understand, no maintenance approach. If you charge during off-peak hours, you get a lower rate. Easy. The adjudication specifically states that it doesn't foreclose moving that way at some future point. There are regular evaluation points built into this 9-year program. And there is nothing to say that TOU can't be combined with managed charging. Theoretically, if every EV (assuming many more of them than there are today) started a charging session at the first minute of the off-peak period, there could be a demand surge, but managed charging could mitigate that.

There is an existing installed base of EV chargers, and many of these, my guess is almost all of them, are so-called dumb chargers. They are not WiFi enabled so the EDC can't see or interact with them. The program tasks the utilities to develop a workaround to include these chargers as it could jumpstart program participation. There are existing programs at other utilities, Con-Ed comes to mind, that do just that. With Con-Ed, the driver gets a flash-drive type device to install in the car's USB port, or with some manufacturers, there is the ability to connect directly to the telematics of the vehicle with the owner's permission, and incentives will be developed to reward off-peak charging. This actually comes a little closer to time of use. Finally, a recent development is that there is equipment coming on the market that can add connectivity to a dumb charger. PURA is aware of this, as well as developments in better accessing vehicle telematics, and there is the potential for this part of the program to evolve.

The $200 cap on residential demand response rebates seems low

to us. The concern is the lack of differentiation between one and two (or more) EV households. We want to see all vehicles participating.

Demand Charges

Demand charges affect commercial establishments. If the demand for electricity spikes for a period of time above normative levels, electric rates increase substantially. Demand charges have been a barrier to the installation of level 3 charging stations. The adjudication directs the EDCs to maintain a temporary rate-rider to mitigate demand charges while taking the time to develop a more permanent and sustainable solution. Demand charges were originally developed so that those putting the most strain on the grid contribute disproportionately to necessary upgrades. These rules were developed long before the modern EV and definitely need to be re-thought.

Outreach

On balance, this is a strong program. We look forward to seeing, and if possible, being a part of, how it evolves. We intend to keep our members informed and hope the outreach, in general, is effective so it hits the ground running in January!

CT Electric Vehicle Registrations Grow 36%

Post by Barry Kresch

17,217 electric vehicles are now registered in Connecticut

This is a topline description of the new dataset. A more in-depth profile will be available when the EV dashboard is updated in a few weeks. The usual disclaimer: This is registrations (not sales). It is cumulative and net and includes new and used vehicles, as well as someone who already owns an EV who moved into the state. On the other hand, vehicles turn over all the time, and these exit the dataset.

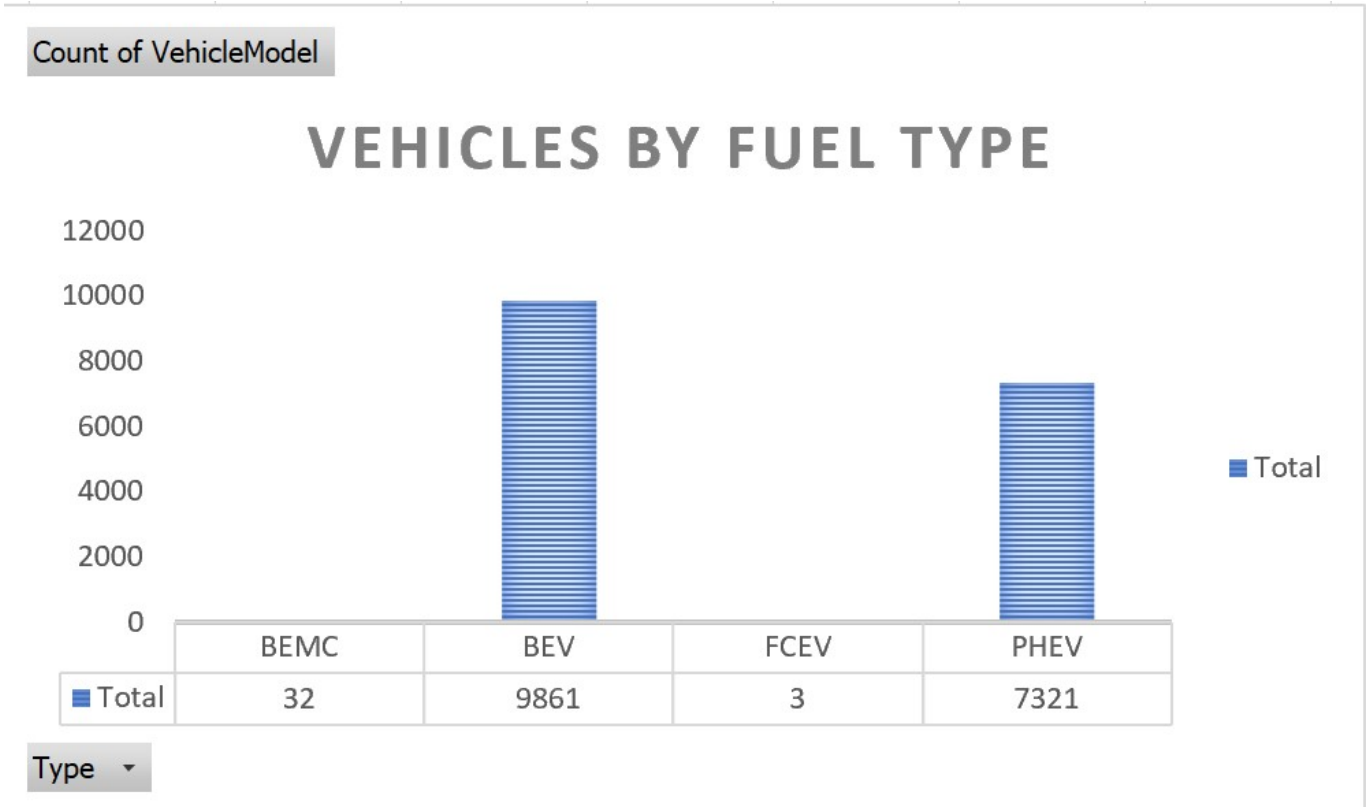
The new count of EVs as of July 1 has been released by the Department of Motor Vehicles. The new count of 17,217 represents a 36% increase from the 12,624 one year ago. This is an improvement from the 18% 12-month growth rate we saw in January, but it still falls short of the level of growth needed achieve the 2030 goal of 500,000 electric vehicles set forth in the MultiState Zero Emission Vehicle Action Plan Memorandum of Understanding. There is obviously still a pandemic influence over the growth rate as the economy didn't begin to recover until the last few months. The growth rate for the past 6 months is 25%. If we were to double that, then we would be roughly on pace with what we need. I will calculate a new required compound annual growth rate and include it in a subsequent post.

One hopeful sign is that the 4335 EVs registered in the first half ot 2021 was about the same as the total for all of 2020, which was 4408. (These may not be completely apples to apples as COVID affected how registrations were handled. I think it still gives a reasonable general picture.)

Fuel Type

The definition of EV in the file includes battery electric vehicles (BEV), Plug-in Hybrid Vehicles (PHEV), Fuel Cell (FCEV), and electric motorcycles (BEMC). Below are the numbers

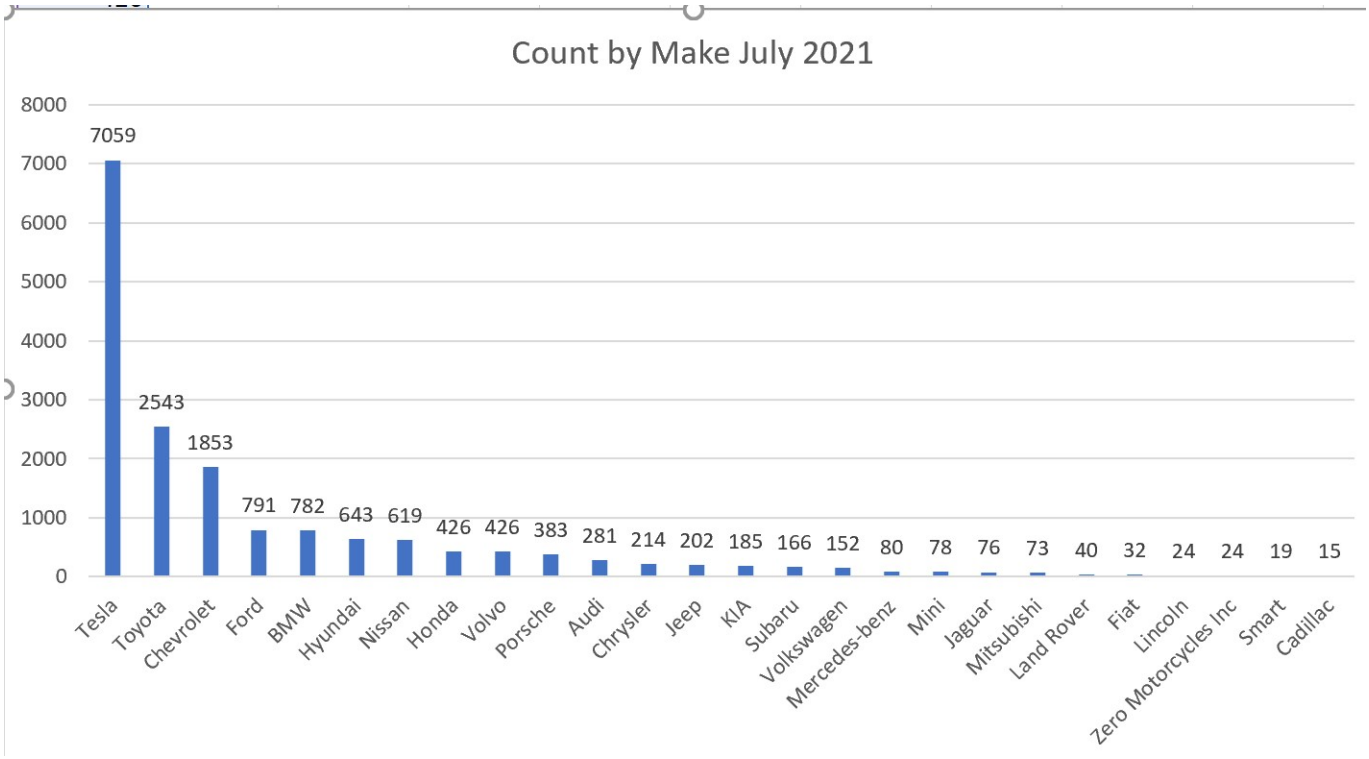
for each.



BEVs account for 57% of all EVs. The FCEV count remains where it has been as these are not sold in the state at this time. BEMCs went from 25 to 32.

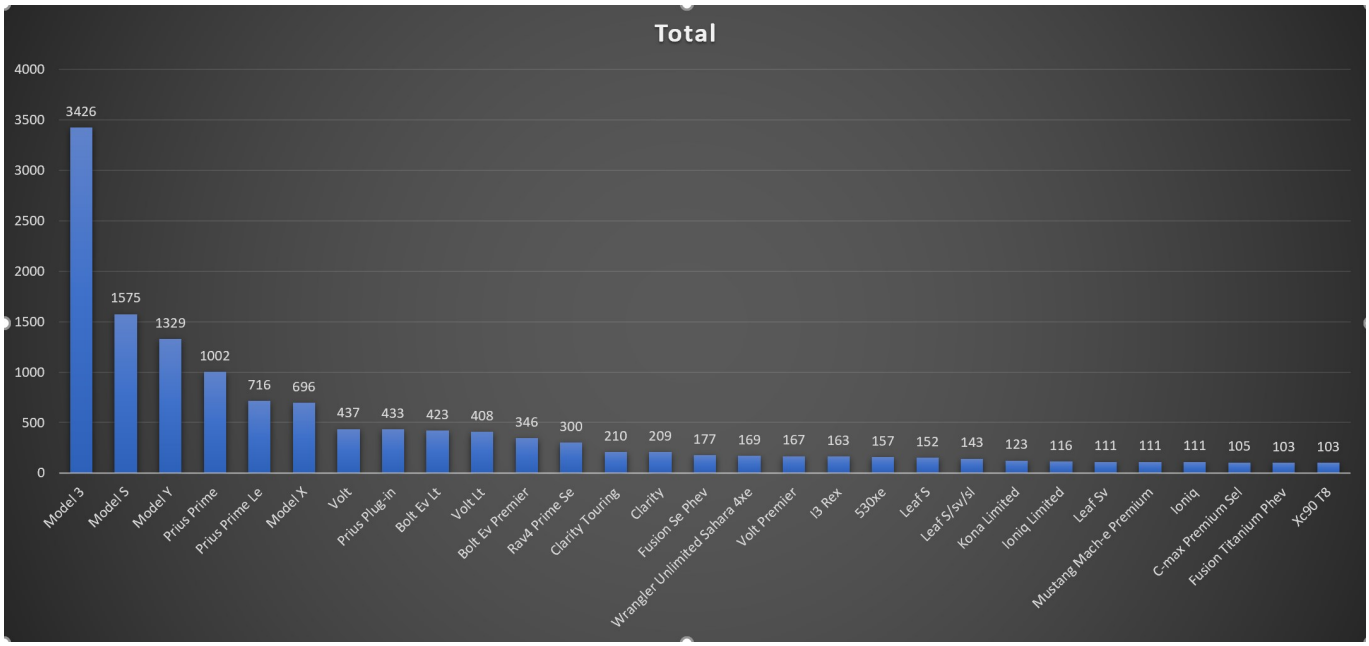
Top EV Makes

Tesla continues to lead all EV Marques by a mile.



This pattern is consistent with what we have been seeing. There are a small number of makes that account for almost all registered, followed by a long tail. This chart includes any make in double digits, not a very high bar, but there are quite a few below that level. When the dashboard is updated, it will have the full list. The only real change is that Toyota had a nice increase of 33% from January. Toyota saw increased registrations for its Prius Prime models as well as a good start for the RAV4 Prime. Tesla had a 20% increase, obviously off a larger base. Chevrolet reversed its net decline and increased 9%. The net declines were caused by the discontinued Volts gradually declining. This implies an improvement for Bolt sales.

The top make is the Tesla Model 3, which increased 16% since January. The top models are below.



The Model Y has now surpassed the Model X. It increased 101% since January. You will note that some models have multiple names due to different names for different trim levels. This is how the file comes. I will consolidate it for the dashboard as I think that is an easier comparison to make for our purposes. There are 3 Prius variations and they total 2151, making it the second most widely registered EV.

Some New Brands

These is an arbitrary list and counts of some of the newer EVs on the market. In some cases, there are still limited production runs, so it will not be indicative of how successful the vehicle will be.

Audi Q5 Plug-in – 64

BMW X5 Plug-in – 252. This has quickly become the most widely registered BMW EV.

Ford Mustang Mach-E – 136

Jeep Wrangler Plug-in – 202

Polestar 2 – 8

Proterra Electric Buses – 4

VW ID.4 – 57

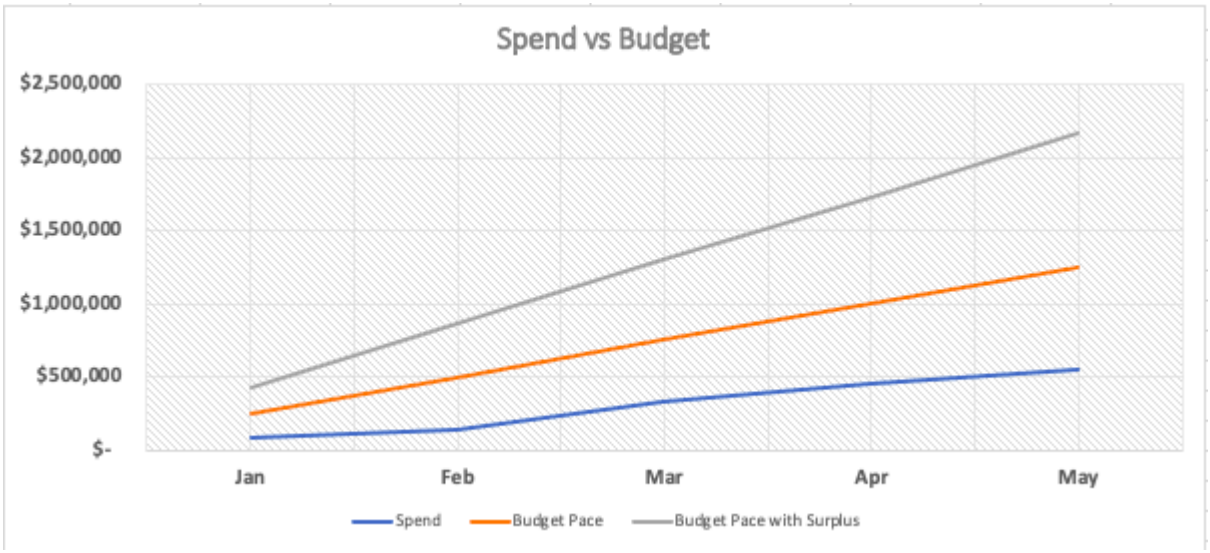
Volvo Xc40 Recharge – 31

CHEAPR Data Through May 2021 and New Program Takes Effect

Toyota Dominates May Rebates

The two plug-in hybrid offerings from Toyota dominated the rebate activity for May. The Prius Prime (44 rebates) and the RAV4 Prime (30 rebates) together accounted for 61% of the 123 May rebates. (The April count was slightly restated to 125.) The only other vehicles in double figures were the Chevrolet Bolt (12) and Hyundai Kona (10). May marked the first appearance of a VW ID.4 with one rebate. Driven by Toyota, the balance of the rebates tilted heavily toward PHEVs, 85 vs. 38 BEVs.

The program spend continues to pace well under the available funds. The new incentives will help somewhat, but we doubt by



enough.

There has been some press about the program this week as the Governor's office issued a release about the new program, which was picked up by a number of newspapers. Readers of this blog will know that the CHEAPR board approved these modifications in February, but implementation only recently happened on June 7th.

The big headline numbers that are featured, such as up to $7500 in rebates, or on the CHEAPR home page, up to $9500, only apply to Fuel Cell vehicles, which are not currently for sale in the state. But the higher rebates and income-limited incentives are now live and we will see the early reporting in one month.

All rebates by model in the table below:

⊙ May	123
Chevrolet Bolt EV	12
Chrysler Pacifica PHEV	1
Ford Fusion Energi	1
Honda Clarity PHEV	3
Hyundai Ioniq Electric	2
Hyundai Ioniq Plug-In Hybrid	3
Hyundai Kona Electric	10
Kia Niro EV	2
Kia Niro Plug-In Hybrid	1
MINI Cooper Hardtop Electric	1
Nissan LEAF	1
Nissan LEAF Plus	2
Subaru Crosstrek Plug-In Hybrid	2
Tesla Model 3	5
Tesla Model Y	2
Toyota Prius Prime	44
Toyota Rav4 Prime	30
Volkswagen ID.4 Pro	1