

Polestar 2 Test Drive Event in Westport

Polestar 2 to Spend an Afternoon in Westport for Test Drives

A jazzy new entry in the luxury EV space, the Polestar 2, is being brought by Manhattan Motors to Westport on Saturday, November 7th at 12:00 PM. Test drives will be offered on a first-come-first-served basis.

Judging by the form-factor, it looks like a sport sedan. But it has a hatch and ample cargo space so that it feels like it is fitting in-between a sedan and a crossover. It is clearly targeting Tesla, along with the Jaguar iPace and the Audi eTron.

Location: Tecknow in Bedford Square, Westport

The location will be outside the Tecknow store at Bedford Square, 12 Elm Street in downtown Westport. If you come to the event, please leave the circle area for the Polestar. There is free parking across the street in the Baldwin lot.

Polestar is not exclusively an EV brand. The Polestar 1 is a sporty ICE vehicle Porsche competitor that starts at \$155,000. The vehicles are manufactured in China by Geely, which is also the parent company of Volvo. The car shares some architecture with Volvo but is a more futuristic, high-tech brand.

A Polestar 2 base trim level will set you back \$59,900, and a loaded vehicle gets to about \$72,000. According to the

manufacturer website, the EPA rated range is 233 miles delivered from a 78 kWh battery pack.

We have had one club-member do a test-drive to this point. His succinct evaluation: "Impressive."

Third Annual Multimodal Transit Summit

**Center for Latino Progress presents
Multimodal Transit Summit on
November 23rd, 10:00 AM – 7:00 PM**

This worthwhile summit explores sustainable and equitable transportation policies for a post-pandemic world. It is a full-day deep-dive. Local leaders, legislators, transportation professionals, engineers, among others come together for this program. There will be some EV-related content, specifically a panel in the evening portion on the CT CHEAPR purchase-incentive program.

This is the link to register: [Multimodal and Transit Summit – Registration](#)

Individual registration fees are \$45/professional, \$25 student/non-profit.

Speaker From FreeWire to Address Next Meeting on October 27th

Upcoming Meeting to Feature a Speaker From FreeWire

There is a virtual club meeting via Zoom scheduled for October 27th. John Erdman, Head of Strategic Accounts for [FreeWire](#), will be speaking to us about their latest charging solutions. John joined FreeWire this past August after having spent 9 years with ChargePoint.

One of the new mousetraps developed by FreeWire is a level 3 charger with a self-contained 160 kW battery that continuously draws power at the rate of 20kW per hour. This avoids the power consumption spikes typical of level 3 chargers, which are what cause facility owners to be subject to utility demand charges. We have seen first-hand in CT how that has become a major obstacle to expanding EVSE infrastructure.

We will also be providing an update on the latest information regarding proposed changes to the CHEAPR EV purchase-incentive program. Some of the proposed changes, which we have blogged about numerous times, such as [here](#) and [here](#), are controversial and, as of this writing, have still not been resolved. It is possible they will be by the 27th.

If you are interested in joining us and do not receive the club emails, please fill out the website contact form.

We look forward to virtually seeing many of you.

Electric Vehicles Parade Through Westport and Fairfield

Numerous EV Models Appear in Parade

30 EVs participated in this parade, a joint effort between the EV Club of CT and the Sustainable Fairfield Task Force. Parade participation was capped at this number to avoid being overly disruptive to local traffic



There was one novelty vehicle, a 1903 Baker replica. In its day, the Baker was quite the speedster, topping at about 48 MPH. It is a reminder that electricity was the dominant mode

of energizing cars around the turn of the previous century.

The parade followed a roughly 25-mile route, beginning at the Westport Metro-North Depot, where the proceedings were kicked off by Westport First Selectman Jim Marpe. The route headed north up Imperial Avenue, jagged over Jesup to then proceed up Main Street, looping around Avery and Myrtle, and taking a left onto the Post Rd. heading East. There it stayed until hitting downtown Fairfield, where it veered off to Old Town Hall and concluded with a second brief ceremony with Fairfield officials.

Throughout the event, masking was required and social distancing was observed.

Escorting the parade was the Westport Police Tesla Model 3 that has been fully outfitted as a police cruiser.

Deliveries of the newest Tesla Model, the "Y", have been coming into CT, and this was one of 4 appearing in the parade.



Tesla Model Y



Kia Soul EV



Chevy Bolt



Porsche Taycan



Plug-in Prius Prime Westport Parking Enforcement Vehicle

This Toyota Prius Prime, a plug-in hybrid, is one of four plug-in vehicles currently in use by the Westport Police and

it was the rear bookend of the parade.

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>

Westport-Fairfield EV Parade – National Electric Drive Week Event

EV Parade to be Part of Green Wheels Expo

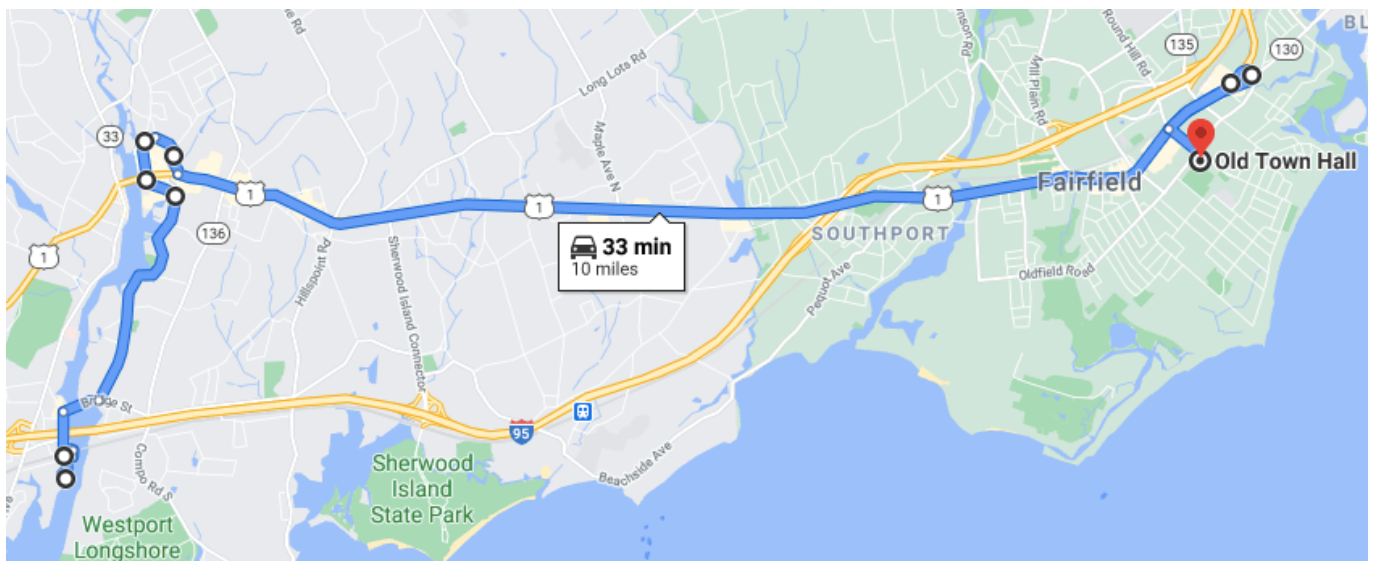
The EV Club and Sustainable Fairfield Task Force have partnered for National Drive Electric Week events, including an EV Parade. (The parade is currently fully subscribed.)

Parade Details:

Date: Sunday, September 27th

Time: Check-in is at 9:30 AM. The parade begins at 10:00 AM. It will last for approximately 1 hour.

Route: It begins at the Westport Metro-North Depot, New Haven-bound side. The route goes north through downtown Westport, then east on the Post Road, and ends at Old Town Hall in Fairfield.



We wish to thank all of the public officials who are supporting this event. Westport First Selectman Jim Marpe will give remarks pre-rally at the train station. Fairfield Selectwoman Nancy Lefkowitz will speak at the parade terminus at Old Town Hall. Westport Chief of Police, Foti Koskinas, will provide the parade escort in the Tesla Model 3 police cruiser. Two other WPD cars, a BMW i3 and a Toyota Prius

Prime, will also be along for the ride. WPD and the Fairfield PD have worked together to coordinate.

There will also be virtual events, including an interview with EVangelist Jay Leno (yes, that Jay Leno!).



I'm Buying an EV and Would Like to Expand My Solar Array

If you have solar and would like to expand it because you are buying an

EV

Or if you are starting from zero, this is the process for determining how to size a system and obtain necessary approvals from the utility.

This content was provided by Ron Nelson of Apex Solar

If you have a new construction home or are adding an addition to your home.....

If you are buying the new Cybertruck and need 10,000 kWh per year more than your normal electricity usage.....

If you just moved into your home.....

If you are removing fossil fuel burning heating sources and replacing them with efficient heat pumps/mini-splits.....

Apex Solar Power will work with you/your contractors to establish the number of kWhs needed on the roof or on a ground-mounted or carport solar solution.....we have a load calculator to determine this.....the manufacturers all have spec sheets that specify how much electricity is needed to power their equipment.

We present the above with the interconnection agreement to your utility company and they approve it.

Important note: The distributed generation department of every utility company can answer questions and does "get it".....calling the customer service call center, not so much.

ConnectedSolutions program at Eversource

The ConnectedSolutions program at Eversource literally pays you for buying a new Tesla Powerwall or Generac PWRcell battery clean back-up home/business solution. The 26% tax credit applies to the battery purchase when you power your battery with the sun. 22% next year.

Net Metering

Net Metering is the law of CT for now.

They (whoever makes bad decisions about the future of the Planet) tried to eliminate net metering in 2018. We who had solar were grandfathered in until 2032.

BUT, nothing was ever passed to replace net metering and many of us in the industry spoke out.

Net Metering is alive and well.

There may be action on Net metering after 2021.....or they will just continue it.

Home and commercial buildings going solar and installing clean battery storage/back-up make more sense. The utilities agree.

A green grid with local power makes sense.

July CHEAPR Stats – Upcoming Board Meeting

This will be the last CHEAPR post prior to the CHEAPR board meeting on Thursday, September 10.

Stats Update

The July stats have been published and rebate levels increased slightly over the desultory levels where they have been. There were 57 rebates in July, up from 46 in June. The numbers last year were 179 and 142 for June and July, respectively.

CHEAPR has spent \$362,500 through July, plus another \$40K or so on dealership incentives, out of an annual budget of \$3 million.

9/10 Board Meeting

The published agenda does not include a vote. At least that's what it says. Some key points:

- Despite DEEP's not soliciting public comments on the MSRP cap and base rebate levels, many spoke up about them. The CSE was asked to scenario model and are expected to present their work. It is hard to think of a more difficult modeling environment than the present. The big question, of course, is that while the program has underperformed ever since the levels were changed in October 2019, there is an unknown with respect to the take rate for the supplemental LMI and used EV incentives that are likely to be adopted.
- DEEP's position was that e-bikes cannot be statutorily defined as vehicles for the purposes of inclusion in CHEAPR. However, there is an agenda item about e-bike rebates.
- During the July meeting, there was a gap of roughly \$800K between funds spent on rebates and available funding. A more detailed report on the CHEAPR budget is due. If any preliminary information has been released, we have not seen it.

Should There Be An Incentive for E-bikes

An E-bike Pilot

Among the suggestions offered by members of the new CHEAPR board has been a pilot project for e-bike rebates.[\[1\]](#) This is most strongly advocated by those who are focused on lower-income households, which are often clustered in the state's largest cities.

E-bikes are an emission-free mode of transportation and could provide another transportation modality option for people who can't afford a car. Or it could be a cost-effective replacement for a second car.

E-bike Proposal Receives Divided Reception

An e-bike incentive has received a divided reception. If I were to characterize the opinions expressed during the public meetings and in the public comments submitted to DEEP, there seems to be support for an e-bike incentive, but with many opposed to its inclusion in CHEAPR.

The opposition to e-bikes being part of CHEAPR comes from two places. First, DEEP's reading of the statutory language concludes that CHEAPR can only be used for vehicles and that e-bikes cannot be considered vehicles, or more specifically, 'battery electric vehicles' based on the language. That interpretation has been disputed,[\[2\]](#) but from DEEP's perspective, this seems to be an end to the discussion.

The second reason is that a group that supports an e-bike purchase incentive feels that it should be done outside of CHEAPR with a separate pot of money to avoid being dilutive to getting EVs on the road.

The EV Club supports e-bike rebates. It would be preferable to have a new funding stream for them. Several people have

pointed out that CHEAPR, which is funded by clean-air fees[\[3\]](#), receives less than half of those fees, with the rest going to the general fund. We would like to see more of those funds diverted to supporting clean transportation, which could be where to source e-bike funding.

Proposal for E-bike Pilot

There is also the situation we are faced with this year. It is almost certain that CHEAPR will not spend its budget. The amount of money spent on rebates and dealership incentives in the first half of the year is only equal to about 22% of the \$3 million budget on an annualized basis. No matter what changes are made to the program, it will be next to impossible to use these funds. The under-spending is due to the changes made to the program in October 2019 and exacerbated by the recession.

So, here's our proposal. Create a carve-out and conduct an e-bike pilot in 2020 and into 2021. Allocate some reasonable budget, say in the range of \$150,000 – \$250,000, that would be a cap. We think this should be an LMI[\[4\]](#)-limited proposal, as the intent is not to subsidize e-bike purchase among affluent folks whose main interest is recreation. There would then be the opportunity to collect data. We could find out who is buying them, what they are being used for, and how effective the incentive is for motivating purchase and reducing emissions.

Rethinking the Cityscape

The broader context is that during our pandemic-induced lockdown, the clean-air benefits of having fewer cars on the road became [palpable](#). That, coupled with fears about virus transmission while using mass transit, inspired many cities to think about what a more people-friendly, less polluted urban landscape/streetscape might look like. Cities and town centers

have been closing streets to vehicular traffic and adding protected bike and pedestrian lanes. Parallel parking spaces have been converted to outdoor dining areas. Some of this is temporary and responsive because everything happened so fast. But it could be permanent, and we would all be better off for it.

The City of Hartford has a city-wide bicycle network plan [approved](#), a [Complete Streets ordinance](#), and a goal to reach 10% bicycle mode share by 2035 (in the [Plan of Conservation and Development](#)). Plans like this have not only environmental and lifestyle benefits, but they would reduce overall crash fatalities, especially for people walking and biking.

E-bike incentives are an idea worth exploring [\[5\]](#) and we have an opportunity to learn something about how such a program would work with funds that would otherwise remain unspent.

[\[1\] Index of e-bike rebate support letters](#)

[\[2\] People for Bikes, 8/12/2020 – CT CHEAPR public comment and e-bicycle as vehicle legal analysis](#)

[\[3\] Total proceeds from the motor vehicle greenhouse gas reduction fee were estimated to be \\$8 million per year based on these two Office of Legislative Research reports, \[here\]\(#\) and \[here\]\(#\). Only \\$3 million per year from that fee revenue was dedicated to the CT CHEAPR EV incentives.](#)

[\[4\] Low to Moderate Income Household](#)

[\[5\] How E-Bike Incentive Programs are Used to Expand the Market, 2019](#)

Presence of CHEAPR Among Eligible New Vehicles

Whenever we have looked at CHEAPR, it has appeared to be a worthwhile program. (Our complaint is with how the parameters were changed in October 2019.)

Creating a Comparison of Registered Vehicles with CHEAPR Rebates

For this analysis, which is seen in the chart at the top of the post, I began with all of the vehicles that were new to the file (comparing the January 2020 and July 2020 files). I then filtered that to the definition we have been using for new (as opposed to pre-owned) vehicles, which is the model year of 2019 or later. From that sub-set, I further winnowed it down to vehicles eligible for a rebate by make. Finally, I lined up the CHEAPR rebate data for the corresponding time period (first half of 2020), also by make.

There is some estimating here and not only for identifying new vehicles. Mostly, I used make as my proxy. For example, all new Chevrolets deemed new are considered eligible. This would only apply to one model, the Bolt, and it is possible to get a fully loaded Bolt that would exceed the MSRP cap and thus be ineligible. The same is true for the Mitsubishi Outlander. In the case of Tesla, I excluded all of the Model S, X, and Y vehicles, and took 25% of the Model 3. It is pretty easy to get above \$42,000 with Model 3 options (e.g. long-range, all-wheel drive), so I made the assumption that relatively few are eligible.

If one takes these leaps of faith with me, then it works out that 53% of eligible vehicles are associated with a CHEAPR rebate. Of course, the CHEAPR restriction of only one rebate

means that only first-time EV buyers can qualify. So it seems like the indicia are still pretty strong with respect to CHEAPR “driving” EV sales. If the rebate and MSRP cap were higher, CHEAPR could drive more EV sales.

If the chart at the top of the post is too dense to easily read, below is a chart with only the eligible and CHEAPR data points, and only the eligible makes.

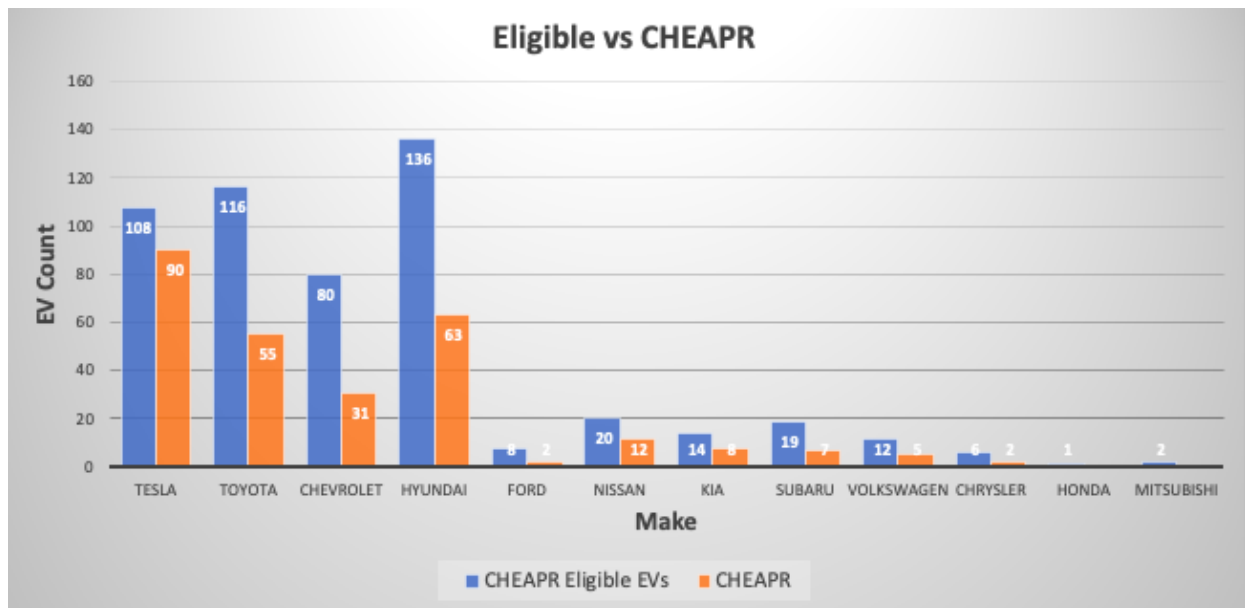


Chart by Barry Kresch