# PURA and United Illuminating to Review New EV Charging Incentives with Club

Post by Barry Kresch

All are welcome to our virtual meeting on **January 25th at 7 PM** to hear and ask questions about the new incentive program for EV charging to be offered by the EDCs (utilities, or electricity distribution companies).

With us that evening will be Stefanie Keohane of the Public Utilities Regulatory Authority (PURA), which initiated this program as part of its grid modernization efforts, along with Charles Spence and Marriott Dowden of United Illuminating. Charles and Marriott are the consumer-facing individuals for the residential and commercial aspects of the program respectively.

Two recent blog posts discussed the <u>single family</u> and <u>multi-unit</u> residential parts of the program. There are also incentives targeted to workplace, commercial, and fleets, encompassing both level 2 and level 3 charging. Incentives include subsidies for charging hardware, installation (including make ready), and electricity costs (including demand charge mitigation).

This is a statewide program. Even though our speakers are from United Illuminating, Eversource customers have access to the identical program.

This meeting is being recorded and will be uploaded to the club YouTube channel.

The meeting is free but registration is required: https://us02web.zoom.us/meeting/register/tZYrcuutrzguGdd304Z\_k

# Route 7 EV Corridor Designation

Route 7 is now an EV Corridor as officially designated by the U.S. Department of Transportation Federal Highway Administration (FHWA). These alternative fuel corridor (electric is only one of them) designations are intended to raise awareness among current EV owners and the public at large of the access to nearby charging. This is part of a strategy to promote interstate cooperation and a national build out of charging corridors. All corridor designations have to be re-certified every 5 years. This designation currently applies to the section of Route 7 from the I-95 interchange to New Milford.

Along with the designation, the ceremony held at Fodor Farm in Norwalk also acknowledged the donation of a level 2 charging station by JuiceBar, a Connecticut manufacturer (based in Norwalk) of EVSE.

The presenters were (left to right):

Tammy Thornton, Wilton Go Green

Barry Kresch, President, EV Club of CT

Senator Bob Duff (Majority Leader)

Carlo Leone, CT Department of Transportation

Mayor Rilling of Norwalk

Daphne Dixon, President of Live Green CT First Selectman Dunn of Brookfield First Selectman Marpe of Westport Senator Will Haskell (Transportation Committee co-Chair) Paul Young of JuiceBar

# EVs Parade in Fairfield County

# 30 EVs Parade from Westport to Fairfield

On a glorious early fall day, the EV Club of CT in partnership with the Sustainable Fairfield Task Force held an EV parade from Westport to Fairfield, concluding with an EV showcase.

The parade was born one year ago as a way to hold an in-person event that would be safe during a pandemic. This year, the environment is somewhat better and we added a showcase as another outdoor event. This past weekend was the concluding weekend of National Drive Electric Week and a full slate of showcases and speaking events was held throughout the state. The EV Club participated as an exhibitor or speaker in several.





The Westport Police escorted the parade with their Tesla Model 3 police cruiser.

The police brought 3 of their plug-in vehicles, including a Prius Prime used for parking enforcement, and their newest addition, a Honda Clarity (above), used by the detectives.

There were three of the new Mustang Mach-E's in the parade.

Westport Second Selectman, Jen Tooker, and Representative Jonathan Steinberg were on hand in Westport to kick off the parade.

In the photos below...

Bob Laravie returned this year with his replica 1903 Baker Torpedo. The car is able to be driven and was in the parade. The Torpedo was one of the fastest cars of its time, capable of traveling in excess of 75 MPH. It was the first car to have seat belts.

Barry Kresch and Analiese Paik are in front of the Proterra electric transit bus that belongs to Greater Bridgeport Transit. It is too small to see, but they are holding postcards urging legislators to support the Transportation Climate Initiative in the special session of the legislature. There have always been a lot of reasons to support TCI but now there is a new and important one. If the Infrastructure and Reconciliation bills pass in Congress, there are a lot of federal funds that will come with state matching requirements. The proceeds from the carbon auction could be used for this match. In other words, TCI could be used to leverage a greater share of available federal dollars. Please contact your state representatives and tell them to support TCI now.



# **EV Make and Model Movers**

Post by Barry Kresch

# Tesla Continues to Lap the Field

The chart at the top of the post shows the trend of all EV makes and shows net registrations at each point in time. It makes very obvious the fact that registrations are largely concentrated among a small number of companies. This trend begins with 2017, which was the first year we received data from the Department of Motor Vehicles (DMV), and covers every data point we have through July 2021. Beginning with January 2020, updates have been provided semi-annually as that frequency is driven by the statutory requirements for EV

reporting imposed upon the DMV.

Tesla has continued to have substantial increases. Toyota had a notable pop. Chevrolet reversed the negative momentum and gained modestly. Ford, BMW, Hyundai, Honda, Volvo, Porsche, Chrysler and Jeep all had modest increases. Other makes had very small increases or were flat. I will look at the vehicles that were added and drill down to models to see what caused the changes.

The pie chart below shows the vehicles added by make for the first half of the year. Tesla, with 1421 adds, was double the nearest competitor, Toyota, though the latter still had a strong period with 761 adds. The other makes with over 200 adds were Chevrolet, Hyundai, BMW, Ford, and Jeep.



This second pie chart is filtered for BEVs (the title of the chart does not change when the filter is applied), where Tesla accounted for 6 in 10 vehicles added followed by Chevy, Hyundai, and Ford.



The charts below are a filtered review of net registration trends by model within make (i.e. net cumulative registrations). This provides some context to how lineups and model impact have evolved over time. There is some degree of a rising tide lifting all boats, but there are some new models that are decidedly making a difference. They are presented in order of the number of registered units for the make.

#### Tesla

Starting with Tesla, while the Model 3 continues to register

significant gains at each data point, and remains the most widely registered model with 3,426 vehicles, the momentum has shifted to the Model Y. The first bar, the small one, for the Model Y is small due to lack of supply. While Tesla still can't seem to build them fast enough (as of this writing, we are advised of a  $\sim 6$  month wait for most orders), the delivery count is now substantial at 1,329, approaching that of the Model S at 1,580, which it will certainly pass when we receive our next update in January 2022. Again, we are looking at registrations, but it indicates that the Model Y is outselling the Model 3. Tesla has a new plant under construction in Texas and a new battery design (the 4860) forthcoming. These developments should speed the production of the Model Y and enable Tesla to begin deliveries of the Cybertruck. Inside EVs reports Tesla having over 1.25 million pre-orders for the Cybertruck as of early August.



#### Toyota

The next largest make is Toyota. The Prius Prime PHEV has been around a while and had displayed a flattening trend, but registrations jumped in the first half of 2021 to 2,152. This makes it the second most widely registered model. Added to that is a decent start for the new RAV4 Prime, also a PHEV, but with one of the higher electric ranges in its class at 42 miles. There are 386 of them registered and there have been reports of their being supply-constrained. Toyota briefly made a BEV RAV4 in limited quantities. There are 2 of them in CT. The other vehicle here, the Mirai is a fuel cell car. There are 3 of those.

Toyota has been resistant to BEVs for lack of any obvious reason. They introduced a concept SUV this year, the bZ4X, and have announced a plan for 15 BEV models by 2025 (not necessarily all of them for the USA).



#### Chevrolet

The third most widely registered make is Chevrolet. The most widely registered Chevy is still the Volt (PHEV) that was discontinued in 2019. For a time, before the Model 3, it was the most widely registered model in the state. The decline over the last 4 data points is pretty gradual, considering the discontinuation, and could reflect a presence as a used vehicle. Chevy re-introduced the Bolt in 2021 and significantly reduced the price (possibly due to GM phasing out of the federal tax incentive). The Bolt has been a lethargic presence since its introduction, but the combination of the new model and lower price enabled it to register a jump to 787 units registered. The new EUV version of the Bolt was

not yet available during the analysis period.



#### Ford

Ford jumped into fourth position among EV makes, very clearly on the strength of the new Mustang Mach-E. Ford has been manufacturing EVs, both BEV and PHEV, for some time without any models getting traction. More recently, they have switched to a strategy of building an EV version of their most iconic brands, the Mustang and the F-150. In the case of the Mustang, it is more a case of branding as the electric Mustang is an EUV. The F-150 Lightning really is an electric F-150 pickup.

The Mach-E BEV has 136 units, enough to make a difference for Ford overall. It has been a supply constrained vehicle and dealers have been selling them above MSRP. The Escape is a successful compact SUV and Ford has introduced a PHEV version. There is only one registered, but it is only just about to be rolled out. The F-150 BEV is not scheduled to begin deliveries until second quarter 2022. Reports are that Ford has preorders for over 100,000 units.



#### BMW

The next ranking make is BMW. As you can see, they have quite a few plug-in models. After initially building the stubby, though fun to drive i3, which is primarily a BEV, though there is an option for a small gasoline range-extender engine, BMW has pivoted to PHEV versions of its ICE lineup. The notable model here is the X5 Xdrive40e. The 2021 version boasts a substantial electric range improvement from only 14 miles to 50 miles, plus a 6-cylinder gas engine. It has become BMW's top plug in with 252 units. There was also a jump for the X3, though only to 74 units. The C Evolution is a motorcycle.



#### Hyundai

Hyundai is next and the Kona compact EUV is what is driving sales for them. There are 304 Kona vehicles registered. Hyundai announced that Ioniq will become its EV sub-brand, though the Kona is branded Hyundai.



#### Nissan

Nissan was one of the first entrants into the EV market with its BEV Leaf in 2010. It's registration stats have been flat since 2019. As of today, the Leaf is still their only entry, though they have expanded the number of trim levels and improved the range. They are planning to launch an EUV model called the Ariya in 2022.



#### Honda

Honda is a major automaker that has been largely MIA in the EV space. A few years ago, they introduced the Clarity PHEV. Club members who own one have reported a good experience with it and the electric range is among the highest in the category at 47 miles. Due to Honda pulling back on distribution, the number of registered Claritys has been declining. A small increase this year offered some hope, but I read in the publication, EV Adoption, that Honda has canceled the Clarity PHEV and fuel cell models. Honda has announced a BEV EUV called the Prologue for a model year 2024 introduction, along with an Acura stablemate.



#### Volvo



Volvo has several EVS, mostly PHEVs plus the new BEV, XC40 Recharge. The company saw a spike from its XC90 PHEV to 227 units registered. This high-end, large SUV only gets 18 miles of electric range. The new XC40 Recharge is off to a slow start with 31 units. Volvo has announced an aggressive pivot to EVs with an all-electric lineup by 2030 and has moved EV sales to its online portal.

#### Porsche

Porsche has also been in the game for a while and is a leader among high-end automakers not named Tesla. Their newest introduction, the BEV Taycan sports car, had the biggest increase to 116 units.



#### Audi

Audi got into EVs with the A3 PHEV. It didn't get traction, but the newer BEV E-Tron has been growing, now at 169 units, as well as to a lesser degree the Q5 PHEV compact EUV with 64 units.



#### **Everyone Else**

At this point, we start getting into some very small numbers, but I will mention a few others.

Chrysler, which has only one EV, the PHEV Pacifica minivan, rose to 214 units.

Jeep introduced its first EV, the PHEV Wrangler, which had a decent first year at 202 units.

New luxury carmaker Polestar (part of Geely, the owner of Volvo) has only 8 units for its Polestar 2 hatchback. (There were no Polestar 1 vehicles, an expensive, high performance PHEV.)

Mercedes has announced upcoming BEVs, the EQ series, with the EQS (like its S series), EQE (like its E series), and EQB, and electric EUV. The EQS is scheduled to arrive this year. The others will be 2022. Up to this point, Mercedes is another example of a major manufacturer that sells very few EVs. There are 8 models with registered units in the state with the highest being the GLC 350e at a measly 61 units.

Volkswagen, which has also announced aggressive targets for EVs, introduced the ID.4 in this country following a successful introduction of the smaller ID.3 in Europe. At this point, there are only 57 of these registered in CT, but it is still in a rollout phase.

Every screenshot here is taken from the <u>Interactive EV</u> <u>Dashboard</u>, July 2021 on the website. Using the slicers (checkboxes) enables drilldown to individual makes and models as I have done here.

# Call for EV Owners for Electric Car Guest Drive

#### Get Paid for Sharing Your EV Enthusiasm

A lifetime ago (okay, 2 years) in pre-pandemic days, the club participated in several EV ride and drive events, called Electric Car Guest Drive, staged by the publisher of Electric Car Insider. My blog post about the first event is <u>here</u>. These events, typically sponsored by a utility or power authority, involve EV owners bringing their vehicles to be used for test drives (or guest drive) with the owner in the passenger seat. The drive is over a pre-planned route about 1.5 - 2 miles in length on local roads. No highway driving. Owners are paid \$300 for each day they participate. Arrival is 9AM and the event runs from 10-4. Lunch is provided, as well as an optional dinner.

The test drive is casual with no dealerships or salespeople on site. Owners explain the vehicle, describe the ownership experience, and answer questions. Just conversation, no sales pressure of any kind. These events have been demonstrably successful at promoting EV ownership with 31% of test drivers buying an EV within 6 months.

Members of the public taking the drives are pre-registered and pre-screened.

If you are concerned about Covid, so are we! The event will only happen if it is safe. The organizer and the utility are watching developments closely. Drivers must be vaccinated. We await final word on protocol for the public and will update this space once we know. If you are interested, register to save the date.

Dates and locations:

September 23, 24, 25 - Middletown, NY (Orange County)

October 16 - Utica, NY

October 23 - Niagara Falls, NY

October 29, 30 - Middletown, NY

Those Utica and Niagara Falls locations are a bit far from CT, but there are a small number of folks on our list in upstate NY.

This is a link with more background information: www.electric-car-insider.com/evpresenters/

There is a registration link on that page. Or contact the publisher, Chris Alan, directly at Chris@electric-car-insider.com

Register for as many or as few days as you like. It's a fun day!

# Time for Ludicrous Mode

Post by Barry Kresch

An Opportunity for Large Cuts in Emissions Along With Major

### Budgetary Savings.

When the Westport Police were doing their diligence in advance of the purchase of a Tesla Model 3 for use as a patrol car, they worked with Sustainable Westport (SW) to run a set of estimates for the payback time period. After running the numbers, they were confident that within 3 years, the purchase premium would be recovered.

The vehicle entered service in February 2020. This spring, the EV Club approached the Westport Police about their interest in doing a deep dive on the financials: purchase, customization, operation, and maintenance. The police shared granular details of costs, including a maintenance schedule, which is the basis for the analysis. The <u>completed analysis</u> showed that full payback happens in year one and considerable savings are realized by year 4.

When I initially started the analysis, my expectation was that the SW numbers were reasonable and we would end up somewhere in that neighborhood. I hadn't thought the financials would end up being such a slam-dunk with savings of \$52,000 over 4 years, enough to buy a new Tesla.

# Police fleet vehicles offer a bigger opportunity than initially expected.

This Tesla Pilot was only a test, but it begs the question: with such strong results, is there any reason not to go all-in for EVs, and forget gradualism?

To help understand what the financial ramifications look like, I used the information I had learned about the Tesla and the Ford Explorer comparison vehicle to model what a transition might look like. This is a general, somewhat macro exercise, and not specific to Westport or anywhere else. I would need more data for that. Nevertheless, I believe it is possible to generate directional numbers with the information at hand. The scenario, which is for a fleet of 12 vehicles, is obviously not New York City, but the basic findings wouldn't change if it were larger.

#### Scenario

- A starting fleet of 12 patrol cars, 4 Ford Crown Victorias, and 8 Ford Explorers. The Crown Vic was a ubiquitous patrol car before Ford discontinued them. Many are still around, including in Westport.
- It is assumed the price for the Crown Vic and the Ford Explorer are the same. They probably aren't but doubt the difference is that much.
- Service life is 4 years for the Ford patrol cars and 3 vehicles are turned over each year. The Tesla service life is 6 years. The service life is what is used in Westport.
- In the business as usual (BAU) scenario, each vehicle is replaced by a new Ford Explorer.
- In the ZEV scenario, each car is replaced by a Tesla Model 3.
- All cars are fully customized for law enforcement. When a new car replaces a like car, it is assumed that customization is reused and a zero cost is assigned in those instances. (This is most certainly understating the cost as the customization presumably does not install itself. If I had those costs, it would narrow the customization differential between Ford and Tesla due to less frequent turnover of the Teslas.) Also, in real life, if there is a model refresh, that can cause customization parts not to fit. Based on history, that is likely to happen more frequently with the Ford. But for the sake of keeping it simple for this exercise, all customization is treated as 100% re-usable.

• It is assumed that the first 6 Teslas will have to incur full customization costs and in the BAU case, the same goes for the Explorers that replace Crown Vics. But in general, the BAU scenario has a lesser degree of customization.

The chart at the top of the post depicts the cumulative savings in this hypothetical example of 12 patrol cars over 12 years with staggered turnover. It comes in just a whisker short of \$800,000. The charts below show the cumulative cost lines by year for each scenario. The charts for the fixed costs are calculated on an amortized basis with fixed costs divided by the respective service life of each vehicle.



#### Components

The three charts below break this up into the 3 categories of expense: acquisition, customization, and ongoing costs (fuel

and maintenance).

Acquisition — This chart illustrates cumulative acquisition costs. Keep in mind that acquisition is staggered as neither scenario does envisions retiring vehicles before their normal service life ends. The cost curve slightly favors Tesla because, on an amortized basis, the annual cost of a Tesla is slightly lower. The longer this comparison is extended, the greater the differential would be.



Customization – The customization costs are somewhat lower in the BAU scenario. This is due to the fact that replacing the 8 incumbent Ford Explorers does not incur customization costs in this model. Customization costs are a bit lower for a Tesla, so in the early years as Teslas are customized and Explorers replace Crown Vics and require customization, the Tesla cost curve is lower. It catches up once the Crown Vics are fully replaced. Once the fleet is fully Tesla, that part of the curve flattens out. As noted earlier, if there are any costs incurred in the re-use of customization, it would narrow the differential as the service life is shorter for the Explorers.



Ongoing Costs — As we saw in the earlier Model 3 patrol car analysis, there are large savings in fuel and maintenance for an EV. Electricity is more efficient than gasoline and these vehicles need much less maintenance. This category saves around \$940,000.



This makes manifest the ramifications inherent in the Westport Analysis. There are major savings to be had. This is not to underestimate the complexities of the budget process and the need to deal with upfront acquisition costs. However, as noted in the earlier analysis, the upfront purchase premium is recovered within one year, so it isn't that big a burden.

We have data on the police patrol vehicles, but the same logic applies to other vehicles on the force and for a municipality in general. With savings this substantial, to borrow a Tesla term, it pays to up the pace of acquisition to Ludicrous Mode.

# CHEAPR Does Double Duty

#### 2 Rebates per Licensed Driver

That is the double-duty reference. A major, and welcome, change is that drivers can get the rebate twice, as opposed to the previous limit of once. There has to be a minimum of 24 months separation between the rebates. Also, June 7th starts with a clean slate. For anyone who has previously gotten a CHEAPR rebate, the count resets and you can get 2 more.

#### Data Appear to be in a Transitional Phase

As CHEAPR transitions to the new program (all that has preceded until now has been the "pilot) with new incentives and new rules, effective June 7th, the monthly publication of the data set looks a little stunted. We are assuming this is due to reporting changes that will need to be implemented to accurately track the new program.

For June, there were only 31 reported rebates and none after June 15th. Also, the rebates occurring after June 7th were not at the new rebate levels. We do not know if that is an artifact of moving away from the old system. I have a feeling there will be numerous corrections next month. May numbers were restated to 131 rebates.

17 of the 31 rebates were for the Tesla Model 3. The next highest model was the Toyota Prius Prime with 4.

#### Rebate+

There were no Rebate+ incentives awarded. This could be due to the aforementioned questions about the data or it (likely) is that the program is still working out the kinks and just beginning outreach.

I have seen some chatter on social media questioning why the

incentive for a used EV is higher than for a new car. The answer lies in the population that is being targeted. Lowerincome folks need more help and this was the recommendation of the consultant. CHEAPR itself does not get into the income verification business. That is something that is invasive and the program seeks to avoid that. So a proxy is used, which is receiving benefits from one of the designated public assistance programs. It remains to be seen whether this sets the bar in the right place. For very low-income people, buying even a used EV may still be a stretch. And due to the process of the buyer submitting the information and waiting for approval, they have to float the cash until they get reimbursed.

# Webinar – EV Purchase incentives and Free Charging

#### EV Purchase Incentives, EVSE (charging equipment) Subsidies, Free Charging

This past Tuesday, July 27th, the EV Club presented a webinar jointly sponsored with Sustainne, LLC, Sustainable Westport, and the Town of Westport on how to save money when buying and charging an EV.

The speakers were Analiese Paik, CEO of Sustainne, Paul Vosper, CEO of JuiceBar, and Barry Kresch, President of the EV

Club. These were the areas we covered:

- Latest changes to CT CHEAPR program of EV purchase incentives
- Update: There is a recent change to the CHEAPR program not reflected in the webinar. EV buyers can now receive 2 rebates beginning with June 2021, meaning if you had previously received a rebate, you can receive 2 more. They must be spaced at least 24 months apart.
- Federal purchase incentive
- Newly release EV Rate Design from the Public Utilities Regulatory Authority (PURA) that directs the utilities to offer a range of subsidies for residential, Multiple Dwelling Units, commercial, fleets, and municipalities. These include subsidies for the purchase and installation of level 2 or level 3 chargers and discounts on electric rates.
- Many automakers offer some level of free charging with the purchase or lease of a new EV. They vary a lot and are either miles or time-limited. There are also numerous options for free level 2 public charging.

A written summary of the PURA program is <u>here</u>.

Link to the blog post with the latest CHEAPR rebates is <u>here</u>.

We have been receiving positive feedback. The webinar was recorded and is now available on our YouTube channel.

# How to Save Money on an EV

#### All You Need to Know About EV Incentives and Free Charging Opportunities

Virtual webinar: July 27th at 7 PM. Free registration is required:

https://us02web.zoom.us/webinar/register/WN\_3fImyGBzT4yz0zrxex5Lg

The EV Club will be jointly producing and sponsoring a virtual webinar about the latest in incentives and free charging. Specifically, these are federal and state purchase incentives, incentives that reduce the cost of the electricity used to charge your electric vehicle, incentives to defray the cost of buying EV charging equipment, and free charging opportunities.

The incentives around EVs and charging are fluid.

The state recently implemented a number of changes to its CHEAPR EV purchase incentive program.

There is an expectation that either included or alongside the Biden Administration infrastructure plan, there will be an updated federal purchase incentive. The bill that was reported out of the Senate Finance Committee looks very good, but it could change considerably as it makes its way through the legislature. There is also a federal tax credit for the purchase of an EV charging station that is due to expire at the end of this year. We are waiting to see if that resurfaces. The President and the leaders of the two chambers have talked about getting this done before the August recess. It may be cutting it close, but we are hopeful that the contours of the new plans will be known by the end of July.

The Public Utilities Regulatory Authority is in the process of adjudicating a new EV rate design that would include lower

rates to charge an EV as well as subsidies for charging hardware. A preliminary document was issued on June 17th. The final document is due July 14th. This is a complex piece of regulation, but we will provide the key highlights for the webinar.

# Dealer-Funded Study Paints Misleading Picture of Direct Sales

A new report by the Connecticut Center for Economic Analysis—which acknowledges in its opening sentence that it was commissioned by the Connecticut Auto Dealers Association (CARA)—paints a gloomy picture for the state's economy if legislation allowing the direct sales of electric vehicles in the state is passed into law—arguing that the bill "increases risks" to existing dealers, and that "those risks would threaten" 40k jobs and \$3.9 billion in GDP.

These numbers are unbelievable for a reason: They aren't based on legitimate assumptions or any factual evidence. The study uses vague language to paper over its disingenuous premise, ultimately harming the public policy debate in Connecticut. The study's conclusions should be disregarded for the following reasons:

 This study is an attempt to counter the actual evidence from data provided by the National Auto Dealers Association showing that states which are open for direct sales have outperformed states that do not allow direct sales in dealership revenue and employment by a significant margin.

- The report's topline numbers are based on an impossible scenario due to the contractual and legal provisions protecting Connecticut's franchise dealerships.
- The report does not account for the benefits of direct sales—which include cost savings for consumers, bolstered consumer protections, job growth, and openmarket competition.
- The report's findings are based on a logical fallacy: It points to the jobs and economic benefits provided by dealer locations and argues that SB 127 would undermine these benefits, yet the purpose of SB 127 is to enable new, EV-only manufacturers to build dealerships in the state.

SB 127 is a straightforward fix to state law that enables EVonly manufacturers like Tesla and Rivian to build retail locations in Connecticut. To understand direct sales and SB 127, <u>click here</u>.

More detail on these flaws in the study below.

This study is an attempt to counter the actual evidence from data provided by the National Auto Dealers Association (NADA) showing that states which are open for direct sales have outperformed states that do not allow direct sales in dealership revenue and employment by a significant margin.

Since Tesla pioneered the direct sales business model in 2012, it is clear from a review of NADA's state-level data on sales

and employment that states, where traditional dealerships coexist alongside Tesla's manufacturer-owned dealerships have outperformed the national average. Meanwhile, states like Connecticut that are closed to direct sales underperformed open states by nearly 30 points in sales revenue, and by 9 points in employment growth.

Connecticut is no exception—seeing sales and employment growth rates that are far below the national average. Connecticut's auto dealers have not benefited from the healthy competition allowed by open markets.

	2012			2019			Sales %	Employment
	Sales (\$ m)		Employment	it Sales (\$ m)		Employment	Change	% Change
Nationwide	\$	676,439	963,400	\$	1,026,818	1,134,442	52%	18%
Open States	\$	489,409	701,663	\$	756,064	838,007	58%	21%
Closed States	\$	185,687	259,637	\$	269,006	292,701	29%	12%
Connecticut	\$	8,788	12,056	\$	10,140	13,973	15%	<mark>16%</mark>
Source: NADA Data 2012 and 2019								

## The report's topline numbers are based on an impossible scenario due to the contractual and legal provisions protecting Connecticut's franchise dealerships.

The report makes the following claim about SB 127: "If passed, it would at present apply only to a handful of stand-alone global companies manufacturing exclusively EVs, they could then market in Connecticut. Yet, established manufacturers are trending towards manufacturing exclusively EVs, most notably Volvo and General Motors (GM) by 2035. While those legacy manufacturers who move to just EV production are unlikely to terminate contracts with all current dealers in Connecticut, **legally they could**." This is an utter falsehood. The author is correct that traditional auto manufacturers are unlikely to terminate their franchise contracts—but legally they are prohibited by Connecticut law from canceling or even failing to renew a franchise without "good cause" by this section (Sec. 42-1331.) of the statute.

"Good cause" is defined very specifically in this section, and only applies to insolvency, closing for business, conviction of a felony, fraud, or revocation/suspension of license. Dealerships and traditional automakers are aware of these protections: for example, Cadillac recently had to offer buyouts to franchisees who didn't want to sell EVs. Dealers are <u>entitled</u> to renewal of their franchise contracts in perpetuity by state law as long as they meet these conditions.

#### The report does not account for the benefits of direct sales—which include cost-savings for consumers, bolstered consumer protections, and open-market competition.

In addition to being based on an incorrect legal premise, the report's conclusions are based on an extremely rudimentary analysis: It establishes a best-case-scenario snapshot of the economic contributions from Connecticut's franchised dealerships, and assumes this industry is zeroed-out in 2040.

As noted above, this scenario is not possible legally due to franchise protection laws. However, it also paints a picture of a stagnant economy where market segments stack like Legos, and removing the traditional-dealership brick leaves a void that cannot be filled. By this logic, the state of Connecticut would have never recovered from the decline of its arms manufacturing and shipbuilding legacy from the 1800s. Connecticut's economy will not recover through protectionism, but instead by enabling new businesses to enter the state and existing businesses to evolve. Direct sales will contribute to Connecticut's economy in the following ways:

- By stimulating the electric vehicle market in Connecticut and prompting the installation of charging stations—both in public and in people's homes.
- By enabling American manufacturers to invest in the state and build retail locations.
- By allowing Connecticut's architects, mechanics, electrical engineers, construction workers, attorneys, salespeople, administrative staff, and other professionals with opportunities for 21<sup>st</sup>-Century jobs with new electric vehicle manufacturers.
- By creating greater flexibility for electric vehicle buyers and saving them the time and cost to travel out of state to purchase an electric vehicle.
- By protecting consumers by requiring manufacturer-owned dealerships to be regulated by existing Connecticut law; and by providing an alternative for customers who are dissatisfied with the current franchise dealer system.

The study considers none of these factors when assessing the impact on Connecticut's economy from a legally impossible scenario, in which no new cars are sold in the state after 2035, which brings us to our final point:

The report's author conflates direct sales with online EV sales, and the findings are based on a logical fallacy: It points to the jobs and economic benefits provided by dealer locations and argues that SB 127 would undermine these benefits, yet the purpose of SB 127 is to enable new, EV-only manufacturers to build dealerships in the state.

The sales activities that would be permitted by SB 127 are unrelated to online vehicle sales. EV buyers in all 50 states are already able to buy electric vehicles online due to the interstate commerce clause. The purpose of SB 127 and direct sales is to enable auto manufacturers to build retail locations in Connecticut.

The study defines its dire scenario as one "where dealers are displaced by out-of-state commerce facilitated by Bill 127." Ironically, this is the current situation for the manufacturers that are urging to be allowed to sell their vehicles in the state of Connecticut. These companies are currently forced into online-only out-of-state commerce...enabling them to invest in Connecticut will result in more in-person auto retail, more jobs, and more economic growth.