

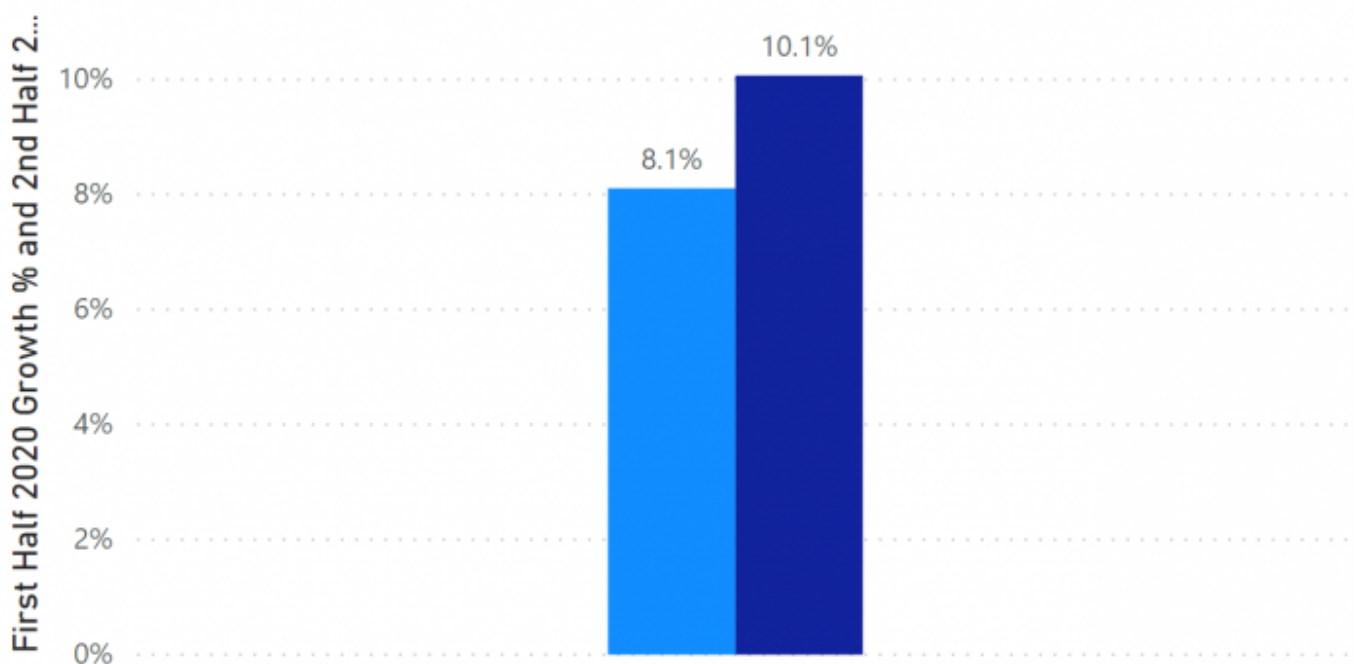
2020 – Turnover And Internal Dynamics of EVs in CT

The Equivalent Of 52% of EVs Added To The File in 2020 Turned Over

EV registrations in Connecticut increase 18.2% in 2020, a not great number in a very difficult year. However, as difficult as the year may have been, CT can be its own worst enemy with no direct sales and an underperforming purchase-incentive program. The chart below breaks this into the first vs second half of the year, clearly showing the effect of the lockdown followed by a modest recovery.

First Half vs Second Half 2020 EV Growth

● First Half 2020 Growth % ● 2nd Half 2020 Growth %



In January 2020, there were 11,677 EVs registered in the

state. 4408 vehicles were added to the file over the course of the year. But we ended the year at 13,800. In other words, there were 2285 EVs that left the file. The numbers varied considerably by brand. Tesla had the lowest percentage of the major brands with the equivalent of 33% of the incoming vehicles turning over. Honda had the highest percentage, and off-the-charts 462%. Which makes sense, since Honda basically stopped selling its one plug-in model, the PHEV Clarity, in 2019. (We hear it is coming back.) As cars were sold or leases expired, no replacements were entering the fleet. This table lists the top makes, ranked by the number of EVs registered on January 1, 2021.

Turnover By Make					
Make	Jan 2020 EVs	New EVs All 2020	Turnover Jan 21/20	Turnover % of Adds All 2020	Jan 2021 EVs
Tesla	4,444	2151	716	33%	5,879
Toyota	1,683	480	260	54%	1,903
Chevrolet	1,758	380	443	117%	1,695
Ford	687	133	195	147%	625
BMW	613	216	214	99%	615
Nissan	566	125	105	84%	586
Hyundai	237	235	33	14%	439
Honda	505	29	134	462%	400
Porsche	201	109	25	23%	285
Volvo	158	136	28	21%	266
Audi	89	97	17	18%	169
Total	11,677	4408	2285	52%	13,800

The same data drives the chart at the top of the post. Each of the components is its own bar. The table and the bar chart come from the [EV Dashboard](#), where they have full interactivity and slicers.

The obvious question is why the differences. We can try to infer. Some of it may have to do with leasing. A dealer on the CHEAPR board meetings reports that leasing is 50% of his new car business. That is higher than the national norms we've seen in Statista and other sources, but there is no doubt that leasing is big. Tesla came late to leasing and has yet to offer a buy-out option. And their cars have longevity. It is quite possible that a higher percentage of buyers equates to

lower turnover.

One comment mentioned by a dealer during a CHEAPR board meeting bears repeating. This person said that a significant portion of EV leasing customers coming to the end of their lease return to ICE in order to save money, especially given that they cannot get another CHEAPR incentive due to the program's once per lifetime limit. His suggestion: allow leasing customers to get the incentive twice but cut it by 50%. It's a thoughtful suggestion and would also have the benefit of lowering the program's burn rate for 2-3 years until it normalizes.

Aside from leasing, there is sales volume. Chevrolet and Ford, which are the largest brands with net negative registrations (i.e. turnover in excess of 100%) similarly suffer from a variation of what is happening with Honda, namely cancellation of nameplates coupled with a lack of other sales volume to replace the departing vehicles. In the case of Chevy, the near-term recovery plan is a redesigned and lower-priced Bolt and a reasonably priced EUV Bolt variation. We'll know at the end of the year how these will have fared. Ford, on the other hand, has what may be a significant win with the Mach-E, the EV crossover Mustang. There is a limited production run in 2021, which has been reportedly sold out (with dealers tacking on extra markup as reported in [Carbuzz.com](https://www.carbuzz.com)).

Similarly, the 99% BMW turnover and the 84% Nissan turnover indicate stasis. On the flip side, low turnover from Hyundai, Porsche, Volvo, and Audi could indicate some renewed vigor. Sales volume for the Audi is currently very low, but an ultra-premium brand like Porsche, placing in 9th position, indicates some success in a niche market. However, there are a lot of cars vying for this small segment, with the new Tesla Model S Plaid, for which it is too soon to have registration data, the presumptive early favorite.