

ORANGE COUNTY AUTO OUTLOOK™

3rd Quarter, 2023

Orange County New Retail Automotive Market Data - Retail Sales *Does Not Include Fleet Sales

FORECAST

New Vehicle Market Predicted to Trend Higher During Next Two Years



Key factors boosting new vehicle sales

Pent-up demand is growing. New vehicle registrations since the onset of the pandemic have been well below average. And although sales recovered from the low point of the recession in 2009, it took several years for the market to rebound. The pent-up demand that accrued between 2009 and 2015 had barely been released before the pandemic and ensuing supply chain issues boosted the total again. Pent-up demand will support new vehicle sales for several years.

Employment and household incomes are strong. As mentioned on the right, recession is still a possibility and affordability has weakened, but the unemployment rate is low and wage growth is steady.

Impressive array of new products. Today's new vehicles offer significant improvements compared to the average 10 year old car. Aside from the fact that their current vehicle may be wearing out, advances in safety features, performance, alternative powertrains, and infotainment are all factors luring shoppers into dealerships.



Key factors holding back new vehicle sales

Interest rates are high. The prime interest rate has increased by more than five points during the past three years, placing significant upward pressure on vehicle loan and lease payments.

Vehicle prices are high. Average transaction prices moved higher last year due to supply chain issues, inflationary pressures, and higher vehicle content. Escalating prices and higher rates have weakened vehicle affordability, which will be an issue holding back sales.

Soft landing not guaranteed. Most economists expect growth to remain positive despite higher interest rates, but this is not a sure thing. The economy is essentially at break even right now, and it wouldn't take much to push it to recession.

Other threats. After being put on hold since the pandemic hit in March of 2020, student loan payments are restarting, gas prices are high, excess household savings have been depleted, and if the UAW strike lingers, sales could be impacted.

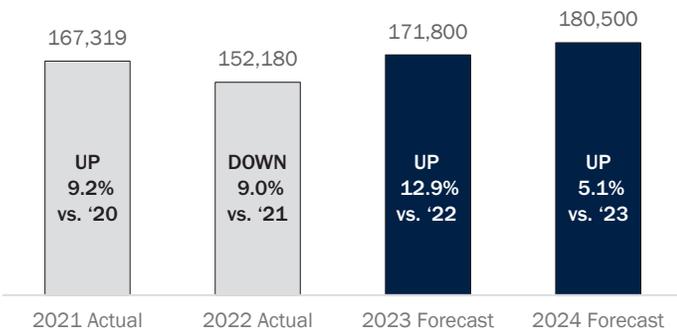
Key Trends in Orange County Market



- » Forecast summary: pent-up demand will provide momentum for the new vehicle market over the next 15 months, while the negative factors will place a ceiling on how high sales can go.
- » County new retail light vehicle registrations are predicted to increase 12.9% this year and 5.1% in 2024.
- » Registrations exceeded 43,000 units in the Third Quarter of this year and increased 18.9% versus depressed year-earlier levels.
- » Battery electric vehicles accounted for 28.2% of the market in the first nine months of this year, up from 20.3% last year. BEV share declined from the Second to the Third Quarter of 2023, however (see page 4).
- » Rivian, Tesla, Honda, Buick, and Land Rover had the largest percentage increases so far this year.

Forecast for County New Retail Light Vehicle Registrations

Market Summary



	YTD '22 Sept.	YTD '23 Sept.	% Chg. '22 to '23	Mkt. Share YTD '23
TOTAL	113,584	128,657	13.3%	
Car	34,901	38,521	10.4%	29.9%
Light Truck	78,683	90,136	14.6%	70.1%
Domestic	37,602	47,229	25.6%	36.7%
European	22,479	23,509	4.6%	18.3%
Japanese	41,949	45,954	9.5%	35.7%
Korean	11,554	11,965	3.6%	9.3%

The graph above shows annual new retail light vehicle registrations in 2021 and 2022 and Auto Outlook's projections for 2023 and 2024. Historical data sourced from Experian Automotive.

Domestics consist of vehicles sold by GM, Ford, Stellantis (excluding Alfa Romeo and FIAT), Tesla, Rivian, and Lucid. Data sourced from Experian Automotive.

Orange County New Vehicle Market Dashboard



COUNTY MARKET VS. U.S.

**% Change In
New Retail Market
YTD 2023 thru September
vs.
YTD 2022**

**Orange County
UP 13.3%**

**U.S.
UP 7.0%**

New retail light vehicle registrations in Orange County increased by 13.3% during the first nine months of this year, better than the 7% improvement in the Nation.

Data sourced from Experian Automotive.



TRACKING ECONOMIC INDICATORS

Monthly Unemployment Rates in Orange County



Average Hourly Earnings for All Workers in County - Aug. 2023



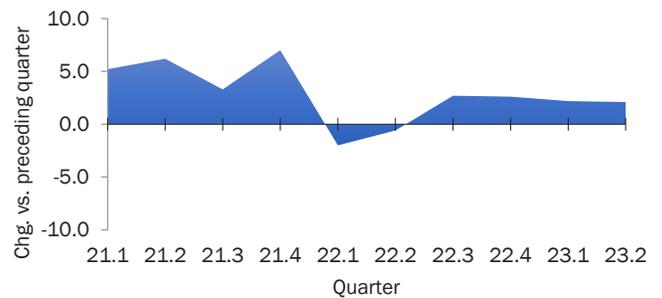
The county unemployment rate stayed below 4% in August of this year. Wages were up slightly versus year earlier. Consumer sentiment remains subdued, while GDP growth has stayed positive during the past four quarters.

University of Michigan Consumer Sentiment (U.S.)
Key Values During Past 10 Years



10 year high - 101.4 (Mar. 2018)
12 month high - 71.6 (July 2023)
Most recent - 67.7 (Sept. 2023)
10 year low - 50.0 (Jun. 2022)

Percent Change in U.S. Gross Domestic Product
Change vs. previous quarter



Sources: Bureau of Labor Statistics, University of Michigan, and U.S. Bureau of Econ. Analysis.

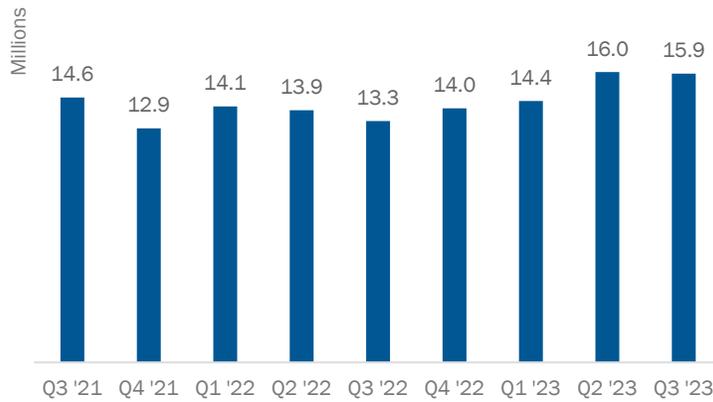
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Orange County New Vehicle Market Dashboard



MARKET PERFORMANCE DURING PAST TWO YEARS

Orange County Quarterly Registrations
Seasonally Adjusted Annual Rate, Converted to Equivalent U.S. New Vehicle Market SAAR (millions of units)



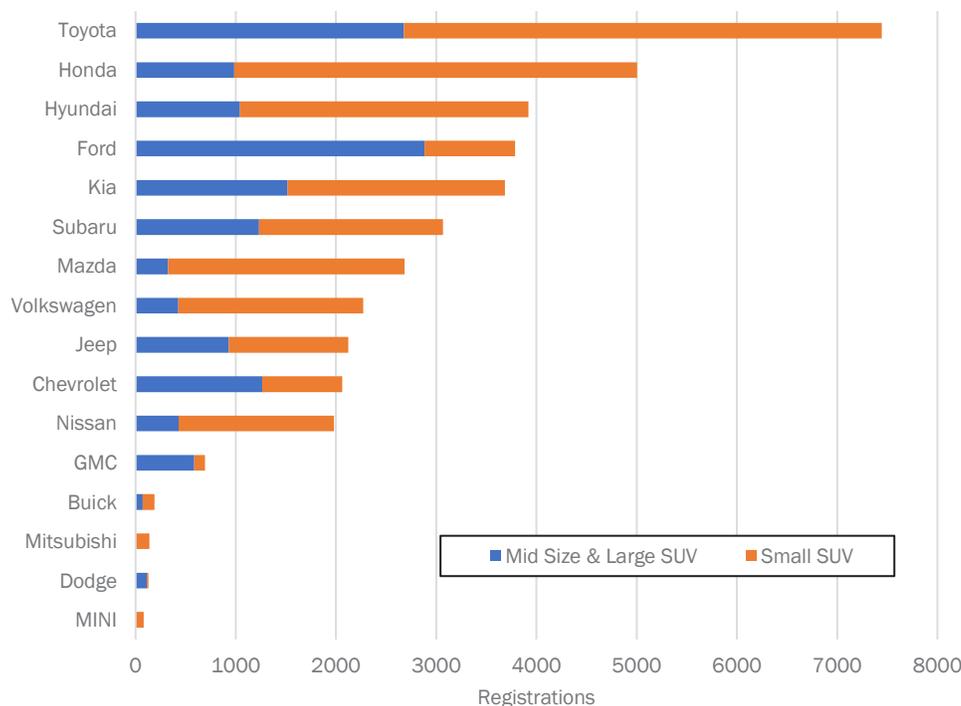
The graph on the left provides an easily recognizable way to gauge the strength of the county market. It shows quarterly registrations based on a seasonally adjusted annual rate. These figures are then indexed to SAAR sales figures for the U.S. new vehicle market. So just like in the national market, when the quarterly SAAR is above 17 million units, the county market is strong, 15 million is about average, and below 13 million is weak. Equivalent SAAR levels in the county slipped from 16.0 million in the Second Quarter of this year to 15.9 million in the Third Quarter.

Data sourced from Experian Automotive. SAAR estimates: Auto Outlook.



NON LUXURY BRAND SUV RANKINGS

New Registrations by Brand for Mid Size/Large and Small Non Luxury SUVs in County Market - YTD '23 thru September



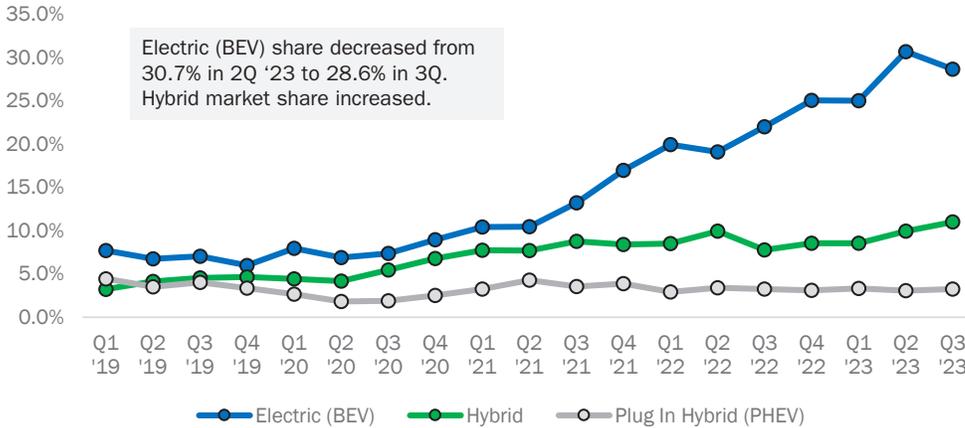
SUV Shares For Each Brand		
Brand	% Small SUV	% Mid & Large SUV
Toyota	64%	36%
Honda	80%	20%
Hyundai	73%	27%
Ford	24%	76%
Kia	59%	41%
Subaru	60%	40%
Mazda	88%	12%
Volkswagen	81%	19%
Jeep	56%	44%
Chevrolet	39%	61%
Nissan	78%	22%
GMC	16%	84%
Buick	62%	38%
Mitsubishi	100%	0%
Dodge	12%	88%
MINI	100%	0%

The graph shows registrations by brand for Mid Size/Large SUVs (blue bar) and Small SUVs (orange bar). Table shows the percentage breakdown for each brand. Toyota was the best-selling non luxury SUV brand, with Small SUV registrations accounting for 64% of total. Data sourced from Experian Automotive.



Vehicle Powertrain Dashboard

Quarterly Alternative Powertrain Market Share (includes hybrid and electric vehicles)

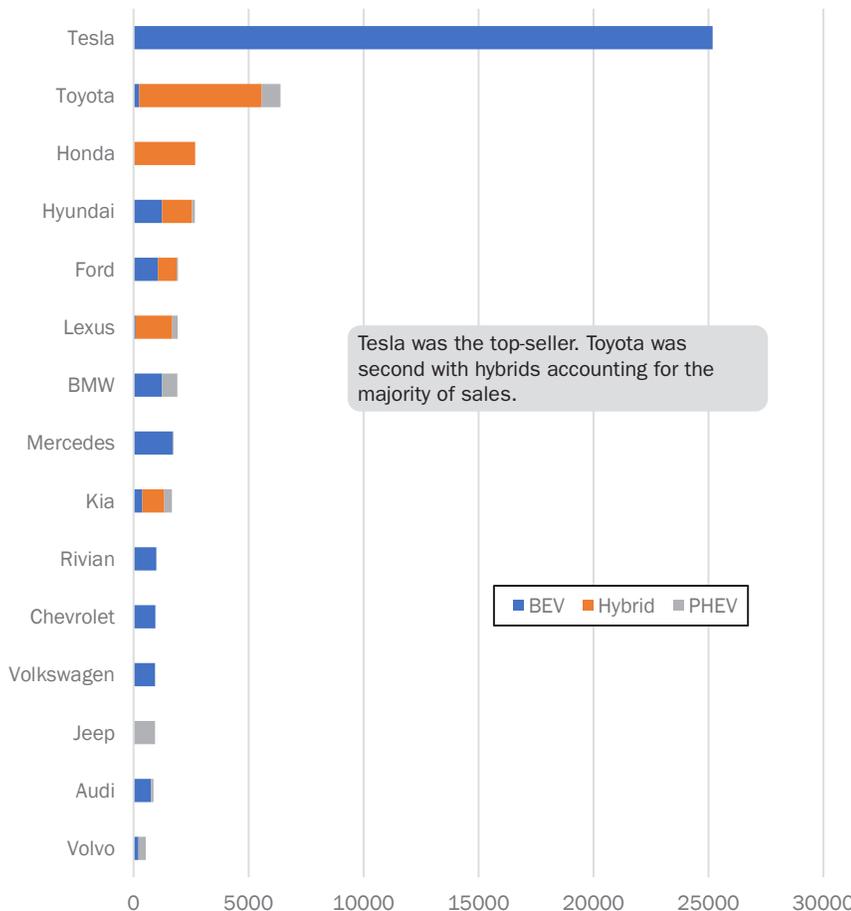


YTD Share by Engine Type (2022 and 2023, thru Sept.)

	YTD '22	YTD '23
Electric (BEV)	20.3%	28.2%
Hybrid	8.7%	9.9%
Plug In Hybrid (PHEV)	3.2%	3.2%

Data sourced from Experian Automotive. Hybrid vehicle market share excludes mild hybrids.

Alternative Powertrain Registrations in Orange County by Brand YTD 2023 thru September



Market Share for Top 25 Selling BEVs, PHEVs, and Hybrids YTD '23 thru September

Model	Type	Mkt. Share
Tesla Model Y	BEV	28.7%
Tesla Model 3	BEV	15.6%
Honda CR-V	Hybrid	3.0%
Toyota RAV4	Hybrid	2.7%
Tesla Model X	BEV	2.3%
Honda Accord	Hybrid	2.0%
Chevrolet Bolt	BEV	1.8%
Volkswagen ID.4	BEV	1.8%
Toyota Corolla	Hybrid	1.7%
Ford Mustang Mach-E	BEV	1.5%
BMW i4	BEV	1.5%
Hyundai Ioniq 5	BEV	1.3%
Toyota Sienna	Hybrid	1.3%
Rivian R1S	BEV	1.2%
Lexus RX	Hybrid	1.2%
Jeep Wrangler	PHEV	1.2%
Toyota Highlander	Hybrid	1.1%
Ford Maverick	Hybrid	1.1%
Mercedes EQS SUV	BEV	1.0%
Toyota RAV4	PHEV	1.0%
Hyundai Tucson	Hybrid	1.0%
Tesla Model S	BEV	0.9%
Mercedes EQS Sedan	BEV	0.8%
Toyota Camry	Hybrid	0.8%
Toyota Prius	Hybrid	0.8%

Data sourced from Experian Automotive. Hybrid vehicle market share excludes mild hybrids.

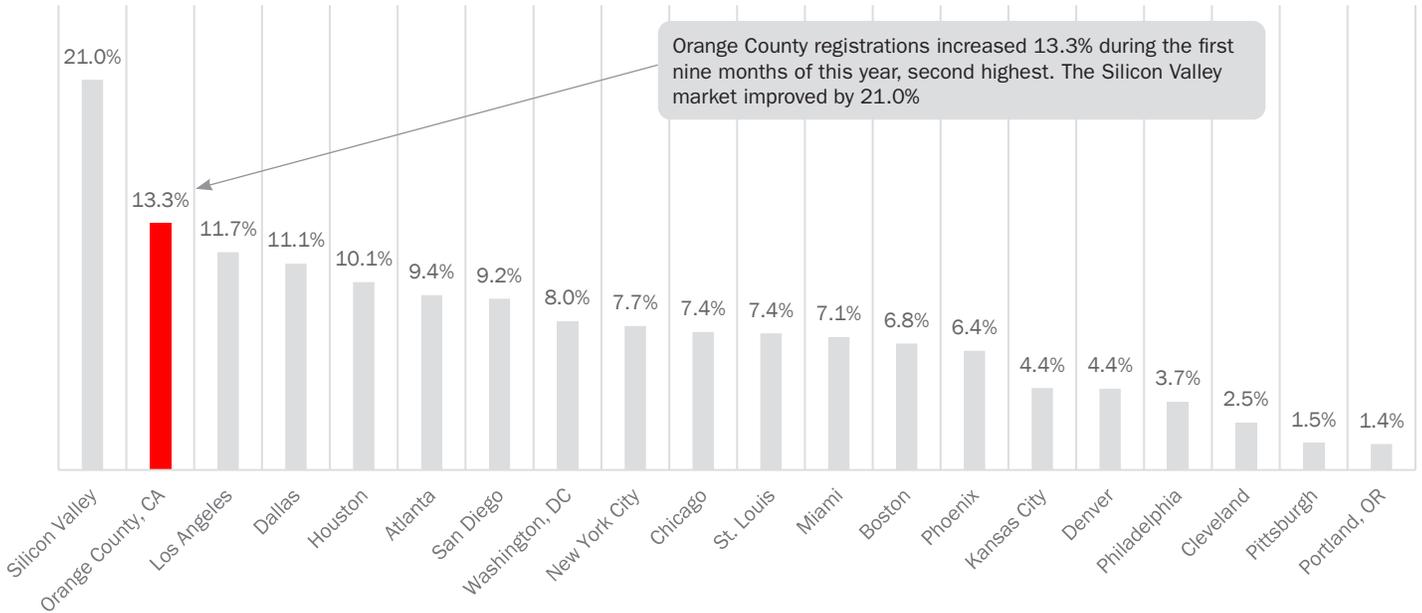
Comparison of Selected Metro Area Markets



Results in Area New Vehicle Markets

The graph below provides a comparison of how metro area new vehicle markets have performed so far this year. It shows the percent change in new retail light vehicle registrations during the first nine months of this year versus the same period a year earlier.

Percent Change in New Retail Light Vehicle Registrations - YTD 2023 vs. YTD 2022 (thru September)

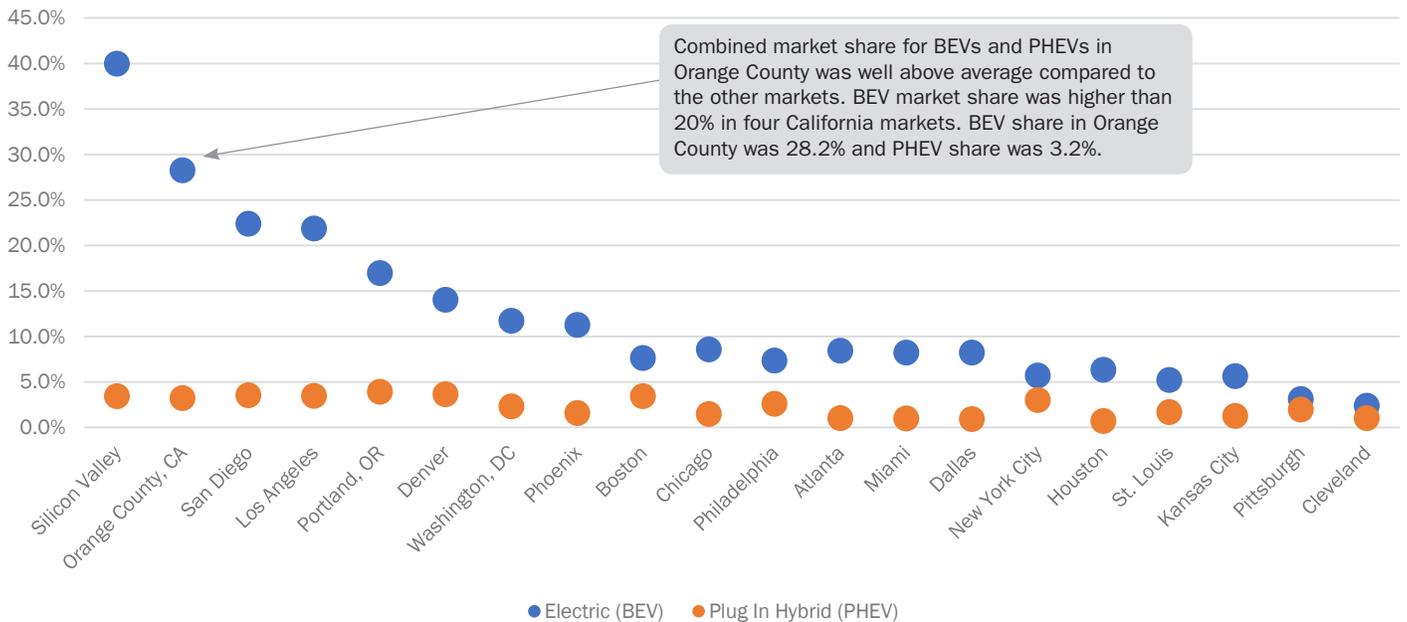


Orange County registrations increased 13.3% during the first nine months of this year, second highest. The Silicon Valley market improved by 21.0%



Comparison of BEV and PHEV Market Share

Electric (BEV) and Plug in Hybrid (PHEV) Market Share - YTD 2023 thru September



Combined market share for BEVs and PHEVs in Orange County was well above average compared to the other markets. BEV market share was higher than 20% in four California markets. BEV share in Orange County was 28.2% and PHEV share was 3.2%.

Markets are shown from left (highest) to right (lowest) based on combined BEV and PHEV market share. Data sourced from Experian Automotive.

BRAND SEGMENT MARKET SHARES

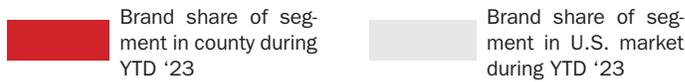
Top Selling Brands in 7 Primary Segments



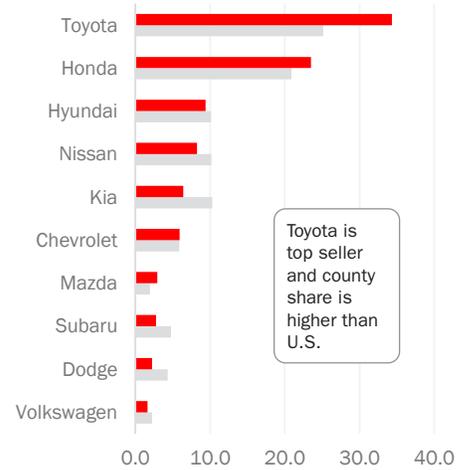
The seven graphs on this page show brand market share in seven key segments during the first nine months of 2023 in both the Orange County and U.S. markets. County percent share is depicted by the red bars, U.S. share is light gray. Top ten brands in each segment are ranked from top to bottom based on Orange County market share.

Segments were defined based on model classifications instead of overall brand positioning. For instance, Chevrolet appears on the Luxury and Sports cars graph because of the Corvette. Small SUVs consists of both Sub Compact and Compact models.

Legend for all graphs

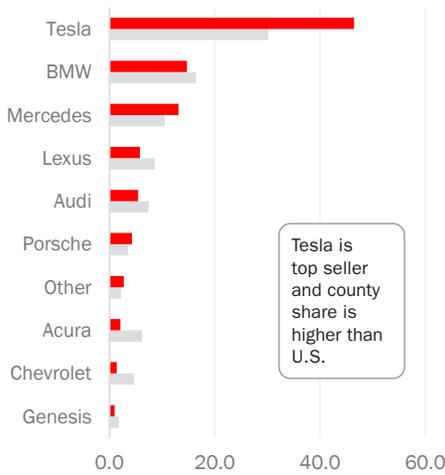


Non Luxury Cars



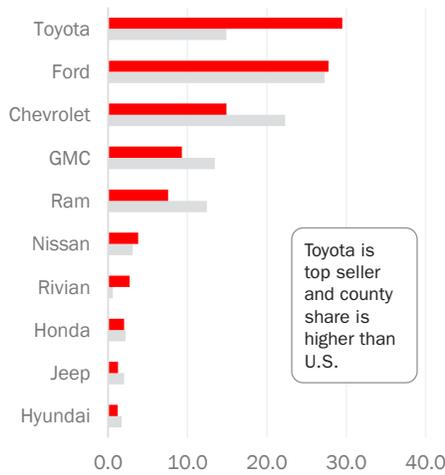
Toyota is top seller and county share is higher than U.S.

Luxury and Sports Cars



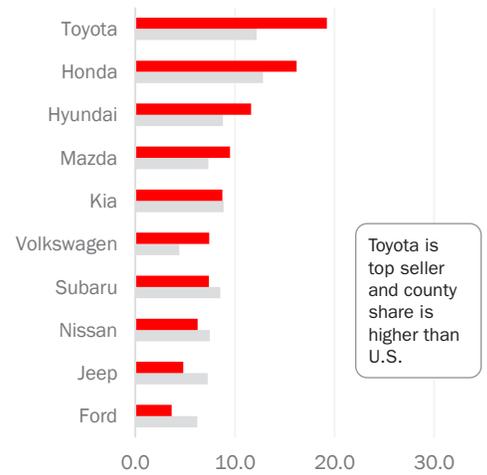
Tesla is top seller and county share is higher than U.S.

Pickups



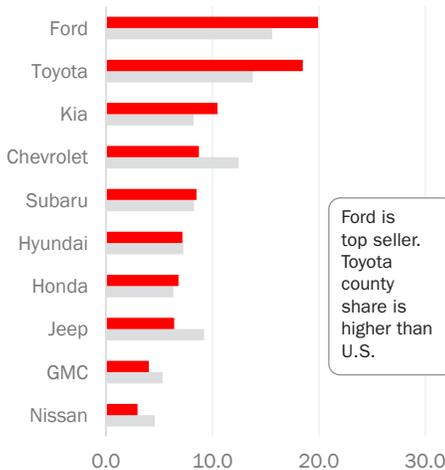
Toyota is top seller and county share is higher than U.S.

Small Non Luxury SUVs



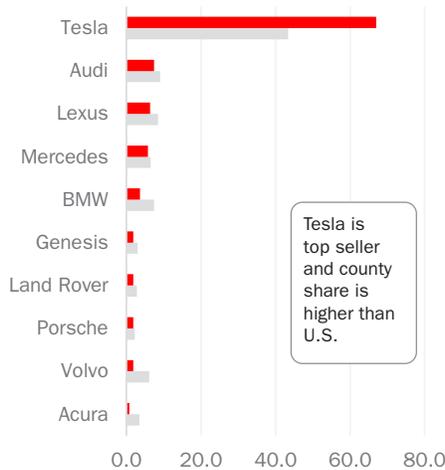
Toyota is top seller and county share is higher than U.S.

Mid and Full Size Non Luxury SUVs



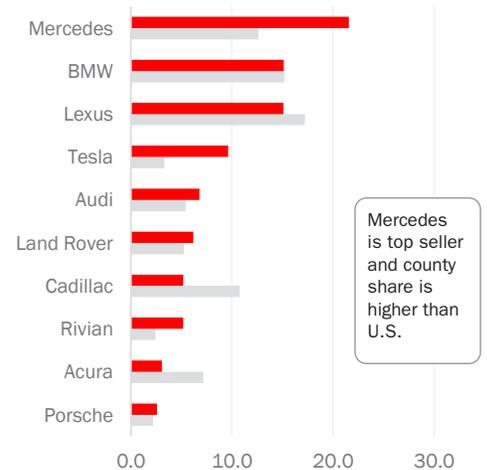
Ford is top seller. Toyota county share is higher than U.S.

Small Luxury SUVs



Tesla is top seller and county share is higher than U.S.

Mid and Full Size Luxury SUVs



Mercedes is top seller and county share is higher than U.S.

COMPARISON OF ORANGE COUNTY AND U.S. MARKET

Orange County Market Improved at Twice the Rate of U.S.

	Orange County Retail Market	U.S. Retail Market
% change in registrations		
YTD '23 thru Sept. vs. YTD '22	13.3%	7.0%
Car share of industry retail light vehicle market		
YTD '23 thru Sept.	29.9%	20.5%
Domestic brand market share		
YTD '23 thru Sept.	36.7%	40.2%

Brand	New Retail Registrations -YTD '23 thru Sept.				Market Share (YTD 2023)		
	Orange County		U.S.		Orange County	U.S.	Variance
	Regs.	% ch. vs. YTD '22	Regs.	% ch. vs. YTD '22			
Acura	965	11.6%	97,380	33.8%	0.8	1.1	-0.3
Alfa Romeo	87	-27.5%	6,138	-29.0%	0.1	0.1	0.0
Audi	3,567	19.4%	131,188	21.8%	2.8	1.4	1.4
BMW	5,524	4.5%	224,202	1.2%	4.3	2.4	1.9
Buick	189	42.1%	107,343	52.5%	0.1	1.2	-1.1
Cadillac	906	16.5%	94,796	11.4%	0.7	1.0	-0.3
Chevrolet	5,366	17.1%	941,918	15.0%	4.2	10.2	-6.0
Chry Dodge Jeep Ram	4,413	-17.9%	726,879	-19.4%	3.4	7.9	-4.5
Chrysler	274	37.0%	38,229	12.3%	0.2	0.4	-0.2
Dodge	573	-9.5%	85,357	-7.8%	0.4	0.9	-0.5
Jeep	2,272	-19.5%	374,790	-22.7%	1.8	4.1	-2.3
Ram	1,294	-24.7%	228,503	-21.2%	1.0	2.5	-1.5
Ford	7,780	0.6%	938,445	-0.9%	6.0	10.2	-4.2
Genesis	819	3.9%	42,095	12.7%	0.6	0.5	0.1
GMC	1,853	7.6%	354,113	7.4%	1.4	3.8	-2.4
Honda	10,501	46.3%	802,428	26.2%	8.2	8.7	-0.5
Hyundai	5,922	-1.6%	510,438	1.8%	4.6	5.5	-0.9
Infiniti	404	19.5%	41,059	37.0%	0.3	0.4	-0.1
Jaguar	64	-42.3%	5,130	-14.5%	0.0	0.1	-0.1
Kia	5,196	9.5%	536,600	15.0%	4.0	5.8	-1.8
Land Rover	1,208	39.5%	48,426	36.9%	0.9	0.5	0.4
Lexus	4,455	7.5%	200,559	6.5%	3.5	2.2	1.3
Lincoln	314	-8.7%	51,866	-9.1%	0.2	0.6	-0.4
Maserati	122	-8.3%	4,420	-8.5%	0.1	0.0	0.1
Mazda	3,260	0.6%	233,442	16.9%	2.5	2.5	0.0
Mercedes	7,128	0.9%	198,197	-3.5%	5.5	2.1	3.4
MINI	316	-17.7%	21,406	10.7%	0.2	0.2	0.0
Mitsubishi	157	-8.7%	57,637	-4.6%	0.1	0.6	-0.5
Nissan	4,087	4.1%	454,494	9.8%	3.2	4.9	-1.7
Polestar	50	-76.7%	1,951	-67.0%	0.0	0.0	0.0
Porsche	1,552	1.4%	46,688	6.1%	1.2	0.5	0.7
Rivian	989	126.8%	23,102	211.6%	0.8	0.3	0.5
Subaru	3,619	-8.0%	421,152	9.7%	2.8	4.6	-1.8
Tesla	25,179	53.3%	470,554	50.9%	19.6	5.1	14.5
Toyota	18,506	1.9%	1,159,904	-0.5%	14.4	12.6	1.8
Volkswagen	2,589	3.8%	193,350	-6.6%	2.0	2.1	-0.1
Volvo	904	3.4%	74,540	11.3%	0.7	0.8	-0.1
Other	666	36.2%	14,711	25.6%	0.5	0.2	0.3

The two tables above provide a comparison of the Orange County and U.S. new light vehicle markets. Data sourced from Experian Automotive.

Orange County New Retail Car and Light Truck Registrations									
	Third Quarter			YTD thru September			YTD Market Share (%)		
	2022	2023	% chg.	YTD '22	YTD '23	% chg.	YTD '22	YTD '23	Chg.
MARKET SUMMARY									
TOTAL	36,227	43,078	18.9%	113,584	128,657	13.3%			
Cars	11,127	13,488	21.2%	34,901	38,521	10.4%	30.7	29.9	-0.8
Light Trucks	25,100	29,590	17.9%	78,683	90,136	14.6%	69.3	70.1	0.8
Domestic	12,348	15,301	23.9%	37,602	47,229	25.6%	33.1	36.7	3.6
European	7,435	7,494	0.8%	22,479	23,509	4.6%	19.8	18.3	-1.5
Japanese	12,203	16,056	31.6%	41,949	45,954	9.5%	36.9	35.7	-1.2
Korean	4,241	4,227	-0.3%	11,554	11,965	3.6%	10.2	9.3	-0.9
BRAND REGISTRATIONS									
Acura	216	302	39.8%	865	965	11.6%	0.8	0.8	0.0
Alfa Romeo	39	28	-28.2%	120	87	-27.5%	0.1	0.1	0.0
Audi	1,031	1,194	15.8%	2,987	3,567	19.4%	2.6	2.8	0.2
BMW	1,731	1,641	-5.2%	5,284	5,524	4.5%	4.7	4.3	-0.4
Buick	43	69	60.5%	133	189	42.1%	0.1	0.1	0.0
Cadillac	281	344	22.4%	778	906	16.5%	0.7	0.7	0.0
Chevrolet	1,715	1,785	4.1%	4,584	5,366	17.1%	4.0	4.2	0.2
C/D/J/R	1,745	1,388	-20.5%	5,372	4,413	-17.9%	4.7	3.4	-1.3
Chrysler	39	92	135.9%	200	274	37.0%	0.2	0.2	0.0
Dodge	217	203	-6.5%	633	573	-9.5%	0.6	0.4	-0.2
Jeep	959	688	-28.3%	2,821	2,272	-19.5%	2.5	1.8	-0.7
Ram	530	405	-23.6%	1,718	1,294	-24.7%	1.5	1.0	-0.5
Ford	2,435	2,316	-4.9%	7,735	7,780	0.6%	6.8	6.0	-0.8
Genesis	327	260	-20.5%	788	819	3.9%	0.7	0.6	-0.1
GMC	582	653	12.2%	1,722	1,853	7.6%	1.5	1.4	-0.1
Honda	1,723	3,668	112.9%	7,176	10,501	46.3%	6.3	8.2	1.9
Hyundai	2,132	1,987	-6.8%	6,021	5,922	-1.6%	5.3	4.6	-0.7
Infiniti	76	133	75.0%	338	404	19.5%	0.3	0.3	0.0
Jaguar	26	12	-53.8%	111	64	-42.3%	0.1	0.0	-0.1
Kia	1,782	1,976	10.9%	4,745	5,196	9.5%	4.2	4.0	-0.2
Land Rover	245	369	50.6%	866	1,208	39.5%	0.8	0.9	0.1
Lexus	1,345	1,573	17.0%	4,146	4,455	7.5%	3.7	3.5	-0.2
Lincoln	121	79	-34.7%	344	314	-8.7%	0.3	0.2	-0.1
Maserati	42	50	19.0%	133	122	-8.3%	0.1	0.1	0.0
Mazda	856	1,097	28.2%	3,241	3,260	0.6%	2.9	2.5	-0.4
Mercedes	2,398	2,206	-8.0%	7,064	7,128	0.9%	6.2	5.5	-0.7
MINI	154	104	-32.5%	384	316	-17.7%	0.3	0.2	-0.1
Mitsubishi	34	54	58.8%	172	157	-8.7%	0.2	0.1	-0.1
Nissan	1,050	1,365	30.0%	3,925	4,087	4.1%	3.5	3.2	-0.3
Polestar	50	14	-72.0%	215	50	-76.7%	0.2	0.0	-0.2
Porsche	457	533	16.6%	1,530	1,552	1.4%	1.3	1.2	-0.1
Rivian	143	458	220.3%	436	989	126.8%	0.4	0.8	0.4
Subaru	1,322	1,204	-8.9%	3,933	3,619	-8.0%	3.5	2.8	-0.7
Tesla	5,254	8,120	54.5%	16,425	25,179	53.3%	14.5	19.6	5.1
Toyota	5,581	6,660	19.3%	18,153	18,506	1.9%	16.0	14.4	-1.6
Volkswagen	900	892	-0.9%	2,495	2,589	3.8%	2.2	2.0	-0.2
Volvo	227	310	36.6%	874	904	3.4%	0.8	0.7	-0.1
Other	164	234	42.7%	489	666	36.2%	0.4	0.5	0.1

Other includes Aston Martin, Bentley, Ferrari, Freightliner, GEM, Lamborghini, Lotus, Lucid, McLaren, and Rolls Royce.

Orange County Auto Outlook

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Explanation of Data

Data presented in Auto Outlook measures new vehicle registrations in Orange County. Monthly recording of registrations occurs when vehicle title information is processed.

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