Hawaii Auto Outlook™

Sponsored by: Hawaii Automobile Dealers Association

FORECAST

Tight Supplies Continue to Dictate Pace of State New Vehicle Sales



Key factors boosting new vehicle sales

Pent up demand is accumulating. Auto Outlook estimates that 17,400 new vehicle purchases have been postponed since the onset of the pandemic and ensuing vehicle supply shortages. This will provide a boost to sales for an extended period.

The labor market is near full employment. As mentioned on the right, recession might be around the corner and new vehicle affordability has weakened, but the unemployment rate is very low and total employment is increasing. It's extremely rare for the economy to enter a sharp and prolonged downturn when the labor market is as tight as it is now.

Household wealth has increased. Household net worth has reached record highs and consumers have greatly increased their holdings of cash and equivalents. This will help households in weathering any prospective economic downturn.

Impressive array of new products coming out. The bevy of new models being introduced offering alternative powertrains and advanced technology should lure many new vehicle shoppers into the market.



Key factors holding back new vehicle sales

Lean supplies have placed a ceiling on sales levels. The lingering microchip shortage and pandemic-related supply issues continue to be the primary factor impacting the market. Demand will soften in the coming months, but insufficient production is still the main roadblock holding back sales.

New vehicle affordability has taken a turn for the worse. Tight inventories have pushed vehicle prices upward, rising fuel prices have cut into disposable income, and higher interest rates are boosting monthly payments. Higher wages have helped, but monthly vehicle loan and lease costs as a percent of disposable income have moved higher during the past several months.

Chances of recession have increased. GDP growth declined in the First and Second Quarters of this year and many economists expect a recession as the Fed puts the brakes on the economy to fight inflation. New vehicle sales almost always decline during economic downturns, but lean supplies have already pushed sales to very low levels. It would take a deep recession for sales to decline further.

Forecast for Hawaii New Retail Light Vehicle Registrations in 2022



Baseline scenario: 55,500 down 4.1% vs. '21

Alternative upside: 57,500 down 0.6% vs. '21

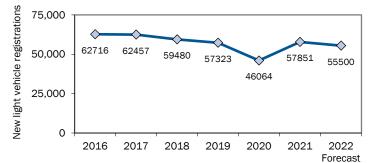
Alternative downside: 52,600 down 9.1% vs. '21

First Half Results in State Market



Hawaii new retail registrations declined 9.4% during the first six months of 2022 versus year earlier. Lagged reporting of registrations in early 2021 prevented a steeper decline. COVID-related staffing issues and other factors resulted in a delay in processing during the first several months of last year. As a result, reported registrations in the first half of 2021 were relatively low. Backlogged registrations were incorporated in monthly figures during the summer of 2021. Third Quarter registrations this year could decline by more than 20% versus elevated year earlier results.

Annual Trend in State Market



The graph above shows annual new retail light vehicle registrations from 2016 thru 2021 and Auto Outlook's projection for 2022. Historical Data Source: AutoCount data from Experian.

Market Summary

	YTD '21	YTD '22	% Chg.	Mkt. Share
	June	June	'21 to '22	YTD '22
TOTAL	29,118	26,373	-9.4%	
Car	7,068	5,730	-18.9%	21.7%
Light Truck	22,050	20,643	-6.4%	78.3%
Domestic	6,823	5,981	-12.3%	22.7%
European	2,835	2,487	-12.3%	9.4%
Japanese	17,267	15,410	-10.8%	58.4%
Korean	2,193	2,495	13.8%	9.5%

Domestics consist of vehicles sold by GM, Ford, Stellantis (excluding Alfa Romeo and FIAT), and Tesla. Note: delayed reporting of registrations in early 2021 impacted the figures shown above Data Source: AutoCount data from Experian.

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Hawaii New Vehicle Market Dashboard



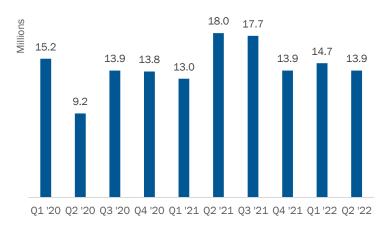






MARKET PERFORMANCE DURING PAST TWO YEARS

Hawaii **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 state 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 state market is strong, 15 million is about average, and below 13 million is weak. Quarterly registrations stayed below 15 million units in the first two quarters of this year.

Data Source: AutoCount data from Experian. SAAR estimates: Auto Outlook.



HAWAII MARKET VS. U.S.

% Change In **New Retail Market** YTD '22 thru June vs. YTD '21

Hawaii

U.S.

DOWN 9.4% DOWN 17.9%

New retail light vehicle registrations in Hawaii declined by 9.4% during the first six months of this year versus year earlier, better than the 17.9% drop in the Nation. Note: delayed reporting of registrations in Hawaii impacted the year-to-date percent change in registrations. See page one for more details.

Source for state registrations: AutoCount data from Experian. U.S. figures estimated by Auto Outlook.

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Hawaii New Vehicle Market Dashboard





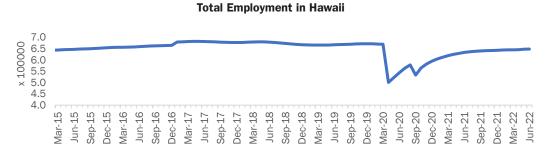




JUNE 2021

5.9%

TRACKING ECONOMIC INDICATORS



Monthly Unemployment Rates in Hawaii

MAY 2022

50 NO TO NE TO NE 54

JUNE 2022

32 NO 12 NE 11 PR 5A

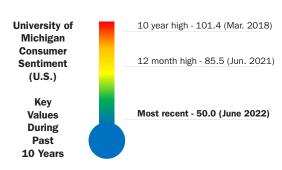
Average Hourly Earnings for All Workers in State - June 2022



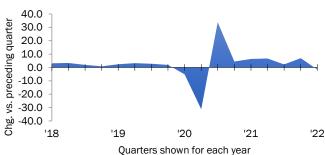


Up \$1.17 vs. year earlier

The state unemployment rate was 4.3% in June of this year and total employment moved closer to pre-pandemic levels. U.S. GDP declined in the First and Second Ouarters of 2022 and many economists are predicting a recession, but the strong labor market should partially offset the negative consequences of the softening economy. Consumer sentiment fell to low levels as inflation picked up steam.



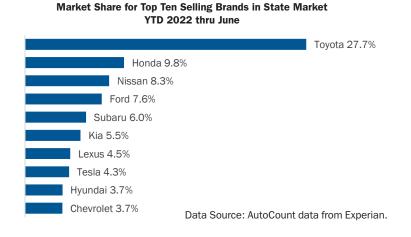




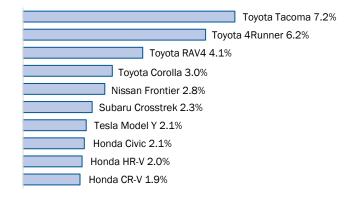
Sources: Bureau of Labor Statistics, University of Michigan, and U.S. Bureau of Econ. Analysis.



TOP TEN RANKINGS IN STATE MARKET



Market Share for Top Ten Selling Models in State Market YTD 2022 thru June



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Hawaii New Vehicle Market Dashboard



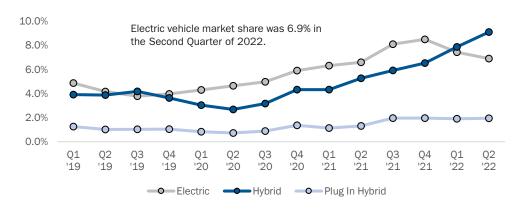






TRACKING ELECTRIC AND HYBRID VEHICLE SALES

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



YTD Share by Engine Type (2021 and 2022, thru June)

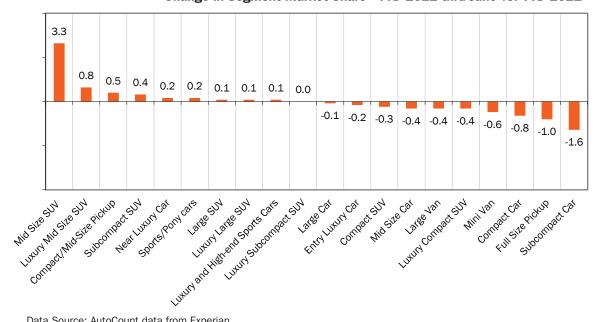
	YTD '21	YTD '22
Hybrid	4.9%	8.3%
Electric (BEV)	6.4%	7.0%
Plug In Hybrid (PHEV)	1.2%	1.9%

The graph above shows estimated hybrid powertrain and electric vehicle market share. Registrations by powertrain for vehicles equipped with multiple engine types were estimated by Auto Outlook. The estimates are based on model registrations compiled by Experian, and engine installation rates collected from other sources.



CHANGE IN SEGMENT MARKET SHARES

Change in Segment Market Share - YTD 2022 thru June vs. YTD 2021



Segments with largest increases:

Mid Size SUV **Luxury Mid Size SUV** Compact/Mid Size **Pickup**

Segments with largest declines:

Subcompact Car Full Size Pickup

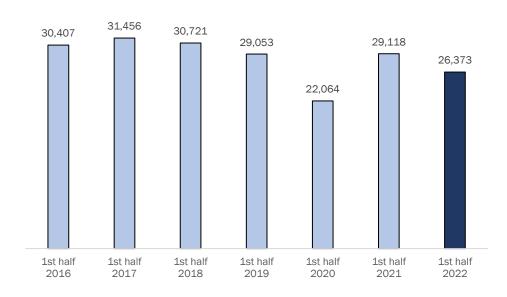
Compact Car

Data Source: AutoCount data from Experian.

REVIEW OF FIRST HALF RESULTS

January thru June 2022 Registrations Well Below 7 Year Average

Hawaii New Retail Light Vehicle Registrations January thru June, 2016 thru 2022



KEY FACTS



Two outliers stand out on the graph: the first half of 2020 (when the pandemic started) and the first half of this year when supply constraints held back sales.

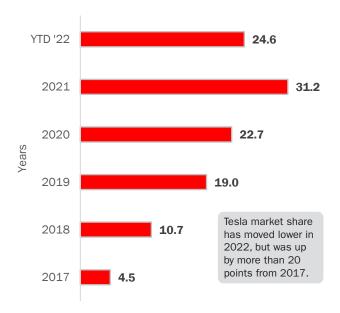
Registrations in the first half of this year exceeded the pandemic lows of 2020, but declined by 15% versus the average total from 2016 thru 2019.

Last year's total exceeded 29,000 units, higher than the first half of 2019, despite the lag in reporting that pushed the measured total lower (see page one).

LUXURY CLOSE UP

Tesla's Dramatic Rise...and Fall???

Tesla Percent Share of State Luxury Market 2017 thru 2021, 2022 thru June



The graph above shows Tesla's percent share of the Hawaii luxury vehicle market from 2017 thru 2021, and the first half of this year. Tesla share increased from just 4.5% in 2017 to 24.6% during the first six months of this year. Tesla was second in the state luxury market so far this year, just behind Lexus (25.3% share). Source: AutoCount data from Experian

What's ahead for Tesla?



Optimistic: Tesla can continue to make gains

Tesla has a head start in the electric vehicle market. When many consumers think of BEVs, they think of Tesla.

Cybertruck is reportedly being introduced in 2023. The radically styled pickup could provide a boost to Tesla sales

Some believe Tesla has a competitive advantage in battery production and technology.

Pessimistic: Tesla market share has reached its peak

It's gospel in the industry: new product increases sales. Cyclical model redesigns are key for brands to maintain or grow market share. Tesla has never had a significant redesign and based on typical industry standards, some models are getting stale.

Tesla regularly ranks below average in most measures of vehicle quality and dependability. With a steady stream of new BEVs scheduled to hit the market, this could be a competitive disadvantage for Tesla.

Tesla is reportedly incurring significant losses related to the opening of new production facilities. Is this a "one-off" cost that will go away when the plants are up and running? Or does it foretell future profitability challenges?

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BRAND SEGMENT MARKET SHARES

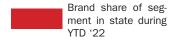
Top Selling Brands in 7 Primary Segments



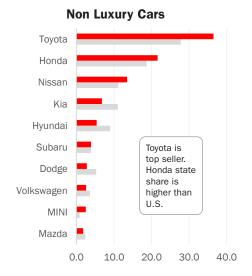
The seven graphs on this page show brand market share in seven key segments in the first half of 2022 in both the Hawaii and U.S. markets. State percent share is depicted by the red bars, U.S. share is light gray. Top ten brands in each segment are ranked from top to bottom based on Hawaii market share.

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. Email Auto Outlook (autooutlook@icloud.com) for market share information for Vans and Mini Vans.

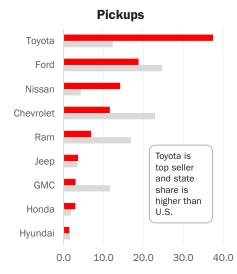
Legend for all graphs

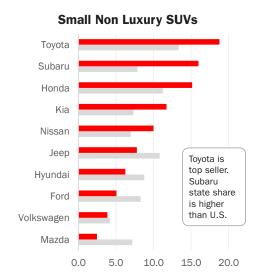




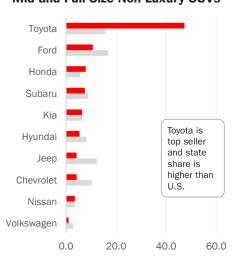


Luxury and Sports Cars Tesla BMW Lexus Mercedes Porsche Audi Tesla is top seller and Acura state share is higher Chevrolet than U.S. Volvo Genesis 0.0 40.0 10.0 20.0 30.0

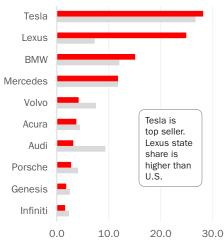




Mid and Full Size Non Luxury SUVs

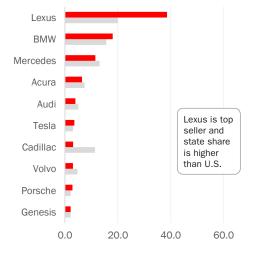


Small Luxury SUVs



Data Source: AutoCount data from Experian.

Mid and Full Size Luxury SUVs



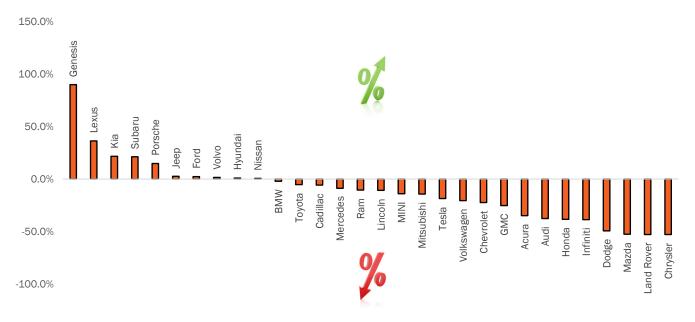
BRAND SCOREBOARD

Ten Brands Had Increases in First Half of 2022

The graph below shows the percent change in new retail light vehicle (combined car and light truck) registrations during the first six months of this year versus a year earlier. Actual figures are shown in the table on page 8. Percent change figures during the first half of this year were somewhat inflated due to a processing delay that impacted the measurement of registrations in the first half of 2021. See page one for more details.

Data source: AutoCount data from Experian.

Percent Change in State New Retail Light Vehicle Registrations (Top 30 brands) - YTD '22 thru June vs. YTD '21



COUNTY SCOREBOARD

All Four County Markets Declined So Far This Year

The table on the right provides a summary of each of Hawaii's four retail light vehicle markets. The table is divided into four sections. Market Summary shows total new retail light vehicle registrations during the first six months of 2021 and 2022 and the percent change. The second and third sections show Light Truck and Domestic Brand market share. The fourth section shows market share figures for the top 10 selling light vehicle brands in the state. The top rated county in each category is shaded.

Data Source: AutoCount data from Experian.

New Vehicle Markets Summary								
	Hawali	Kauai	Maui	Oahu				
Market Summary								
YTD 2021 thru June	4261	1589	3740	19528				
YTD 2022 thru June	3841	1447	3326	17759				
Percent change	-9.9%	-8.9%	-11.1%	-9.1%				
Light Truck Market Share								
YTD 2021 thru June	81.1%	88.8%	81.6%	72.4%				
YTD 2022 thru June	83.5%	87.5%	82.9%	75.5%				
Change (share points)	2.4	-1.3	1.3	3.2				
Domestic Brand Market Share	1							
YTD 2021 thru June	24.7%	26.1%	23.2%	23.0%				
YTD 2022 thru June	24.3%	26.5%	24.8%	21.6%				
Change (share points)	-0.4	0.4	1.6	-1.4				
Market Share for Top 10 Sellir	ng Brands in State -	YTD '22 thru Jun	е					
Toyota	26.8%	34.0%	25.3%	27.9%				
Honda	9.0%	8.5%	11.7%	9.7%				
Nissan	9.1%	7.9%	6.8%	8.4%				
Ford	9.6%	12.4%	8.8%	6.5%				
Subaru	11.0%	10.6%	8.4%	4.1%				
Kia	9.2%	4.9%	5.8%	4.7%				
Lexus	0.9%	1.2%	3.3%	5.7%				
Tesla	1.9%	2.1%	3.5%	5.2%				
Hyundai	2.9%	3.5%	3.3%	4.0%				
Chevrolet	5.3%	3.5%	3.3%	3.4%				

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				Brai	nd Registi	rations R	Report					
			Hawa	II New Reta	ill Car and	i Light T	ruck Regist	rations				
			Second (Quarter					YTD thr	u June		
		egistrations			et Share (%	,		egistrations			ket Share (%	
	20 '21	20 '22	% change	20 '21	2Q '22	Change	YTD '21	YTD '22	% change	YTD '21	YTD '22	Change
TOTAL	17,117	12,747	-25.5				29,118	26,373	-9.4			
Cars	4,083	2,680	-34.4	23.9	21.0	-2.9	7,068	5,730	-18.9	24.3	21.7	-2.6
Light Trucks	13,034	10,067	-22.8	76.1	79.0	2.9	22,050	20,643	-6.4	75.7	78.3	2.6
Domestic Brands	3,899	2,756	-29.3	22.8	21.6	-1.2	6,823	5,981	-12.3	23.4	22.7	-0.7
European Brands	1,678	1,138	-32.2	9.8	8.9	-0.9	2,835	2,487	-12.3	9.7	9.4	-0.3
Japanese Brands	10,148	7,504	-26.1	59.3	58.9	-0.4	17,267	15,410	-10.8	59.3	58.4	-0.9
Korean Brands	1,392	1,349	-3.1	8.1	10.6	2.5	2,193	2,495	13.8	7.5	9.5	2.0
A	474	100	44.5	1.0	0.0	0.0	204	100	24.0	4.0	0.0	0.0
Acura Audi	171 149	100 73	-41.5 -51.0	1.0 0.9	0.8 0.6	-0.2 -0.3	304 261	198 163	-34.9 -37.5	1.0 0.9	0.8 0.6	-0.2 -0.3
BMW	487	367	-24.6	2.8	2.9	0.3	810	793	-37.5 -2.1	2.8	3.0	0.2
Buick	36	17 24	-52.8	0.2	0.1	-0.1	57	23	-59.6	0.2 0.2	0.1	-0.1
Cadillac Chevrolet	29 671	450	-17.2 -32.9	0.2 3.9	0.2 3.5	0.0 -0.4	69 1,250	65 971	-5.8 -22.3	4.3	0.2 3.7	0.0 -0.6
CDJR Total	1,038	765	-32.9	6.1	6.0	-0.4	1,760	1,529	-22.3	4.3 6.0	5.8	-0.0
Chrysler	76	29	-20.3 -61.8	0.1	0.0	-0.1	1,760	56	-13.1 -52.9	0.4	0.2	-0.2
		29 72	-61.6 -60.2		0.2		288	146	-52.9 -49.3			
Dodge	181 532	450	-60.2 -15.4	1.1 3.1	3.5	-0.5 0.4	288 887	910	-49.3 2.6	1.0 3.0	0.6 3.5	-0.4 0.5
Jeep	249	450 214	-15.4 -14.1	3.1 1.5	3.5 1.7	0.4	466	910 417	-10.5	3.0 1.6	3.5 1.6	0.0
Ram		950										
Ford Genesis	1,125 27	36	-15.6 33.3	6.6 0.2	7.5 0.3	0.9 0.1	1,950 40	1,996 76	2.4 90.0	6.7 0.1	7.6 0.3	0.9 0.2
GMC	144	109	-24.3	0.2	0.9	0.1	292	218	-25.3	1.0	0.8	-0.2
Honda	2,322		-24.3 -49.7	13.6	9.2	-4.4		2,577	-25.5	14.3	9.8	-0.2 -4.5
Hyundai	2,322 596	1,167 526	-49.7 -11.7	3.5	9.2 4.1	0.6	4,178 966	2,577 975	-36.3 0.9	3.3	3.7	-4.5 0.4
Infiniti	48	17	-11. <i>1</i> -64.6	0.3	0.1	-0.2	93	57 57	-38.7	0.3	0.2	-0.1
Jaguar	13	4	-64.0 -69.2	0.3	0.0	-0.2	93 25	11	-56.0	0.3	0.2	-0.1
Kia	769	787	2.3	4.5	6.2	1.7	1,187	1,444	21.7	4.1	5.5	1.4
Land Rover	52	20	-61.5	0.3	0.2	-0.1	104	49	-52.9	0.4	0.2	-0.2
Lexus	533	578	8.4	3.1	4.5	1.4	864	1,178	36.3	3.0	4.5	1.5
Lincoln	18	15	-16.7	0.1	0.1	0.0		33	-10.8	0.1	0.1	0.0
Maserati	7	7	0.0	0.0	0.1	0.1	9	18	100.0	0.0	0.1	0.1
Mazda	321	131	-59.2	1.9	1.0	-0.9	572	271	-52.6	2.0	1.0	-1.0
Mercedes	340	259	-23.8	2.0	2.0	0.0	617	563	-8.8	2.1	2.1	0.0
MINI	112	64	-42.9	0.7	0.5	-0.2	193	166	-14.0	0.7	0.6	-0.1
Mitsubishi	21	13	-38.1	0.1	0.1	0.0	35	30	-14.3	0.1	0.1	0.0
Nissan	1,265	876	-30.8	7.4	6.9	-0.5	2,175	2,190	0.7	7.5	8.3	0.8
Other	10	6	-40.0	0.1	0.0	-0.1	23	17	-26.1	0.1	0.1	0.0
Porsche	82	76	-7.3	0.5	0.6	0.1	135	155	14.8	0.5	0.6	0.1
Subaru	822	799	-2.8	4.8	6.3	1.5	1,312	1,590	21.2	4.5	6.0	1.5
Tesla	838	426	-49.2	4.9	3.3	-1.6	1,408	1,146	-18.6	4.8	4.3	-0.5
Toyota	4,645	3,823	-17.7	27.1	30.0	2.9	7,733	7,318	-5.4	26.6	27.7	1.1
Volkswagen	352	189	-46.3	2.1	1.5	-0.6	527	419	-20.5	1.8	1.6	-0.2
Volvo	74	73	-1.4	0.4	0.6	0.2	132	134	1.5	0.5	0.5	0.0
Source: AutoCount	data from Ex	perian.										

The table shows new retail light vehicle (car and light truck) registrations in Hawaii. Figures are shown for the 2nd Quarters of '21 and '22, and year-to-date totals. Registrations in the first half of 2021 were impacted by processing delays. See page one for more information.