Cox Automotive

Q2 MANHEIM USED VEHICLE VALUE INDEX CALL

July 9, 2024















Agenda

Time Check: 60 Minutes

Intro & Cox Automotive

Mark Schirmer, Director, Corporate Communications

The Economy

Jonathan Smoke, Chief Economist

Driving Confidence in Wholesale

Brad Burns, Associate Vice President, Vehicle Information

Wholesale Market

Jeremy Robb, Senior Director, Economic and Industry Insights

Used-Vehicle Market

Scott Vanner, Senior Analyst, Economic and Industry Insights

Q&A



The Cox Automotive Ecosystem

Together, our solutions deliver the connected experience that dealers, lenders, OEMs, and consumers and fleet operators expect.































The Economy JONATHAN SMOKE

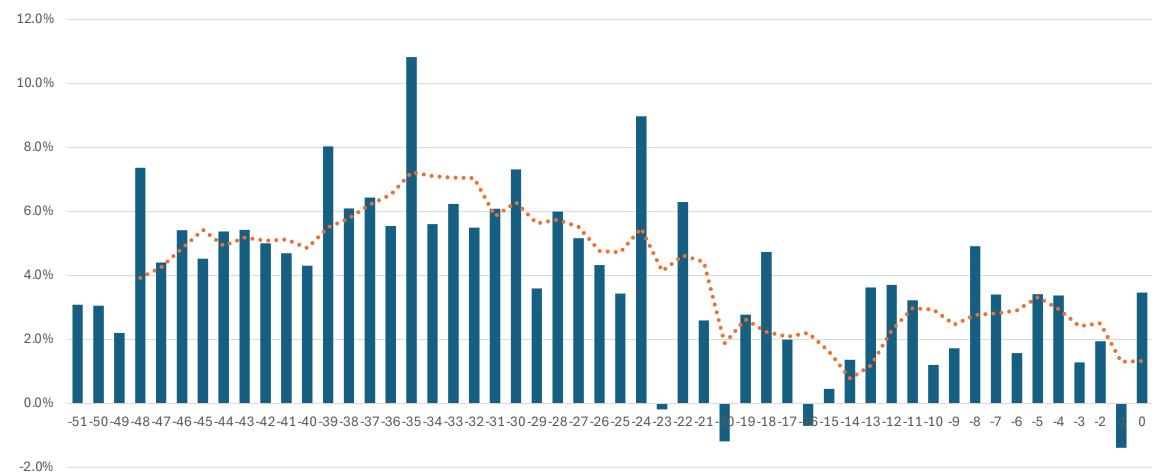
Chief Economist



Consumer Spending Slowed in May But Picked Back Up in June

Total spending turned negative y/y in the final week of May as all major categories were down y/y

Year-Over-Year Change in Total Spending by Week Trailing 52 Weeks As of June 8, 2024

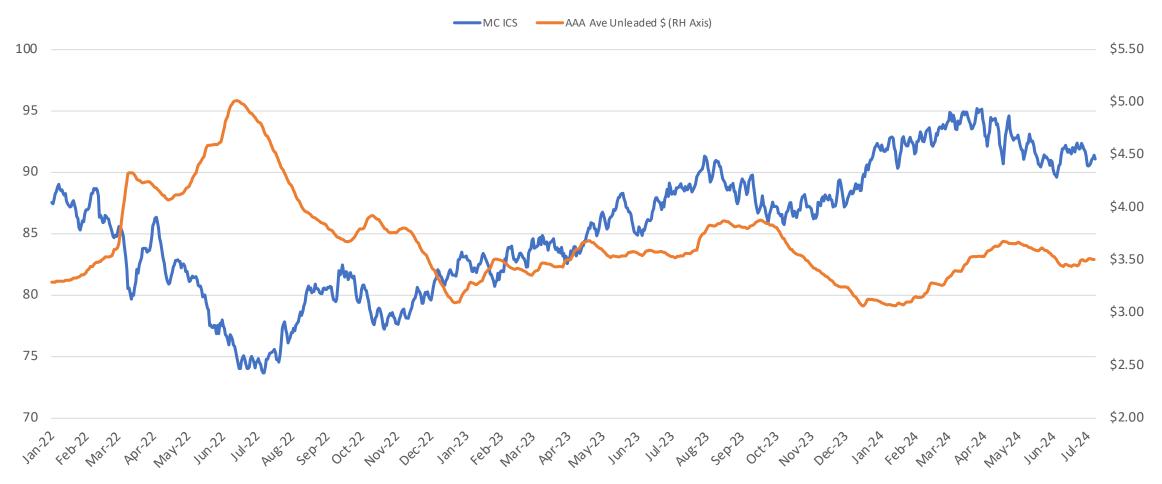




Consumer Sentiment Moved Up Slightly in June

The Index of Consumer Sentiment increased 0.6% in June but faded at month end

Morning Consult Index of Consumer Sentiment vs. Average Price of Unleaded

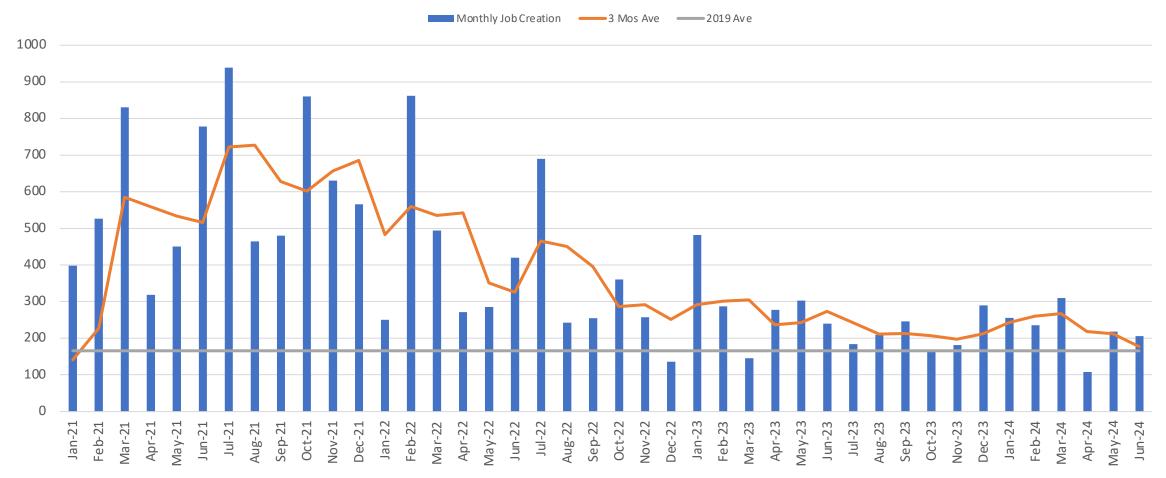




Job Growth Decelerating Towards 2019 Average

Last three months saw 177,000 new jobs average per month, weakest since January 2021; 2019 averaged 166,000

Monthly Job Creation



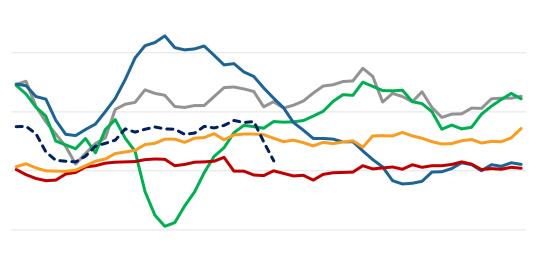
Retail Vehicle Sales Impacted By DMS Software Outage

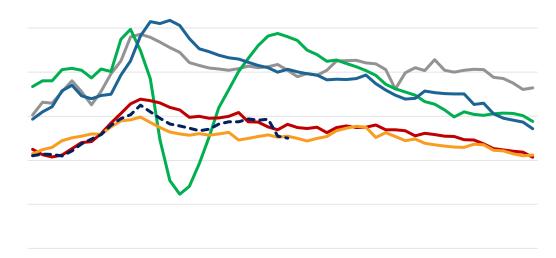
New sales were down 9% in the latest week of data and used sales were down 1%, impacted by the software outage

New Retail Sales

Used Retail Sales





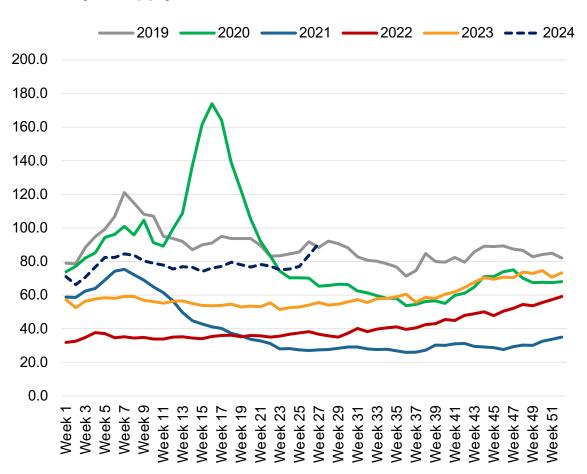


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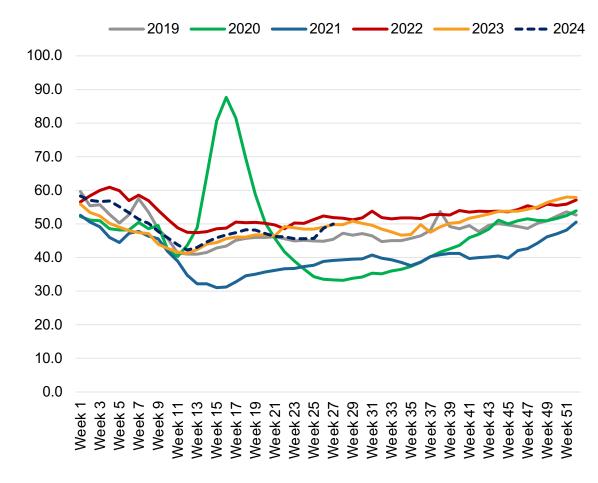
Supply Impacted by DMS Software Outage

New supply is 35 days higher y/y and up 8% w/w while used supply rose 2% in the last week

New Days' Supply



Used Days' Supply



Driving Confidence in Wholesale

Brad Burns

Associate Vice President, Vehicle Information



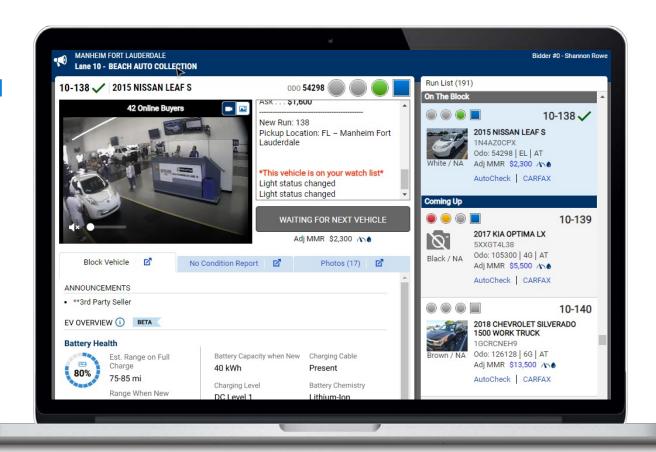
Digital Wholesale Continues to Dominate

of vehicles at Manheim have been sold to digital buyers YTD in 2024

of dealers are buying of dealers are buying more vehicles digitally today than a year ago today than a year ago

350 miles

average distance Simulcast buyers are transporting purchases.



Advanced Imaging: Driving Confidence with Al

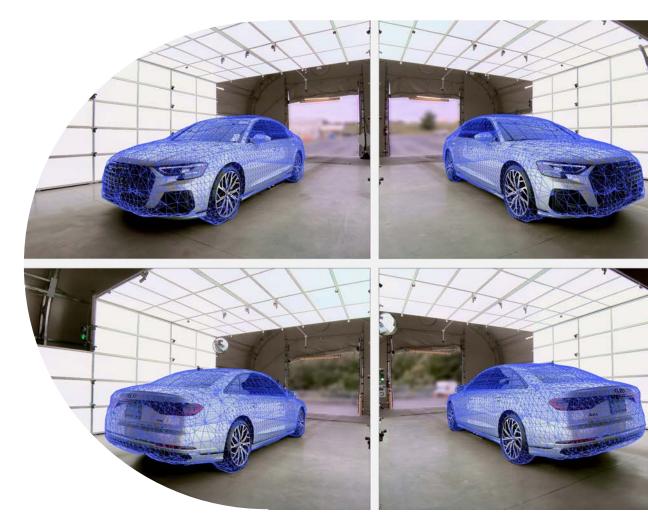


Fixed Imaging Tunnel Expansion Continues



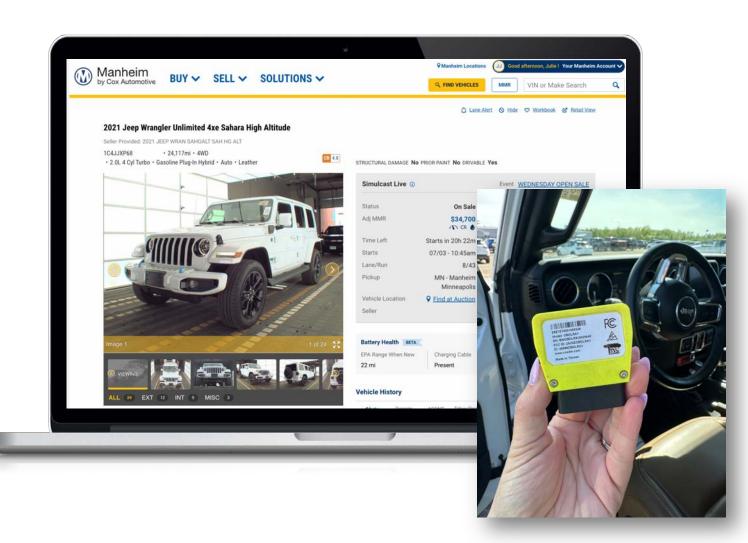
Automated Damage Detection Designed for Remarketing

- Manheim is delivering next generation vehicle information.
- Al technology analyzes thousands of images from each vehicle and presents damages to inspectors.
- We've trained our Al technology for years on hundreds of millions of images.
- Damage Detection for remarketing requires a higher standard.



Industry First: VIN-Specific Battery Health Solution

- VIN-specific solution directly measures the state of health for each EV
- In-depth battery health information is automatically sent to vehicle listings on Manheim.com over the air
- Solution is fully deployed across
 Manheim's entire network.



Wholesale Market Jeremy Robb

Senior Director of Economic and Industry Insights



Manheim Used Vehicle Value Index

Concept

A single measure of used-vehicle price change that is independent of underlying segment shifts in the characteristics of vehicles being sold

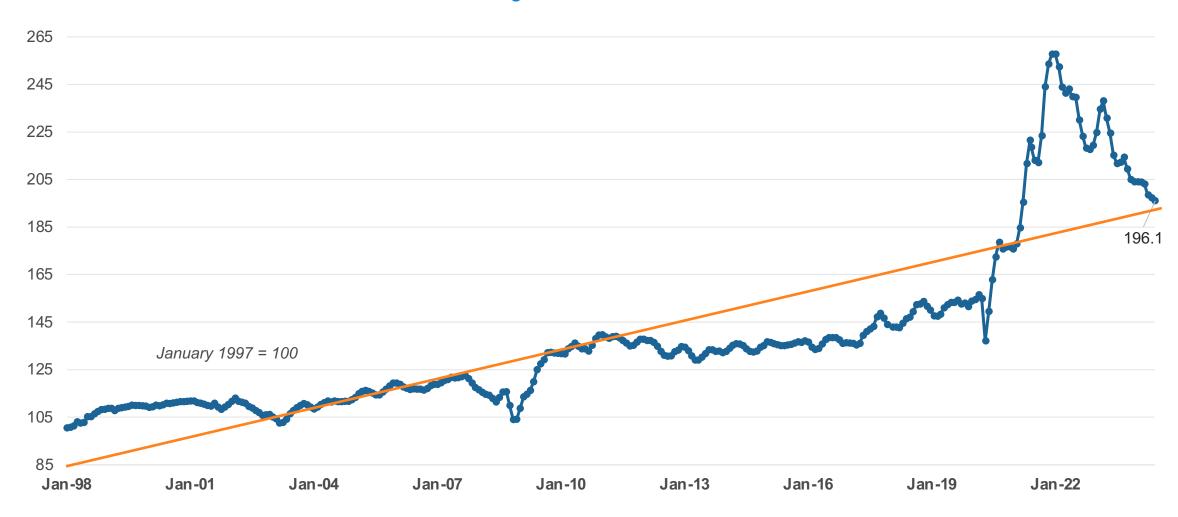
Steps

- All Manheim U.S. sales
- Classify by market segment
- Account for differences in mileage
- Weight to provide smoother segment mix
- Seasonally adjust



Manheim Used Vehicle Value Index

Prices declined 0.6% in June and are down 8.9% against 2023





Source: Manheim, Cox Automotive

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Year-Over-Year Performance Trend

The index has shown year-over-year declines since September 2022, but the pace has slowed from April onward



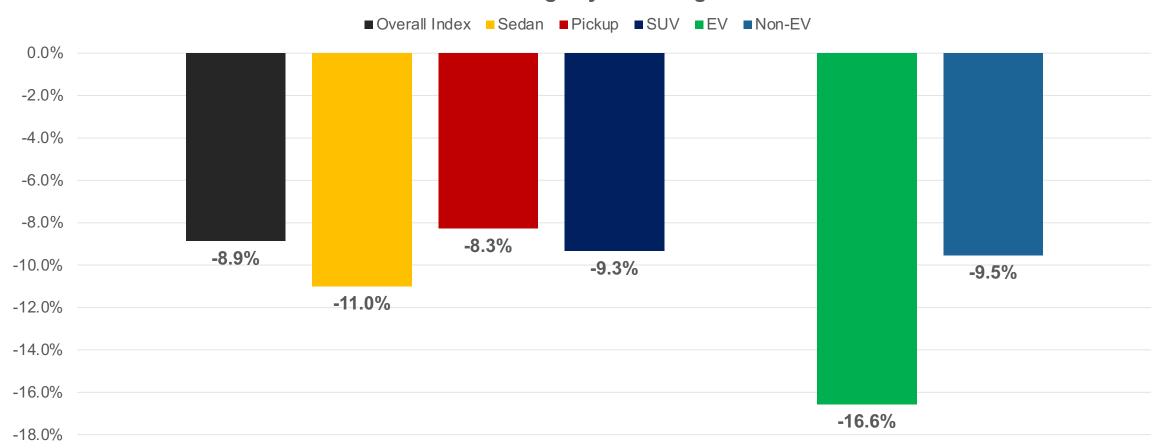


Source: Manheim, Cox Automotive

MUVVI Index Trends By Key Segment

Pickups outperformed the market while sedans were weaker as EVs hit 2.5% of all wholesale transactions

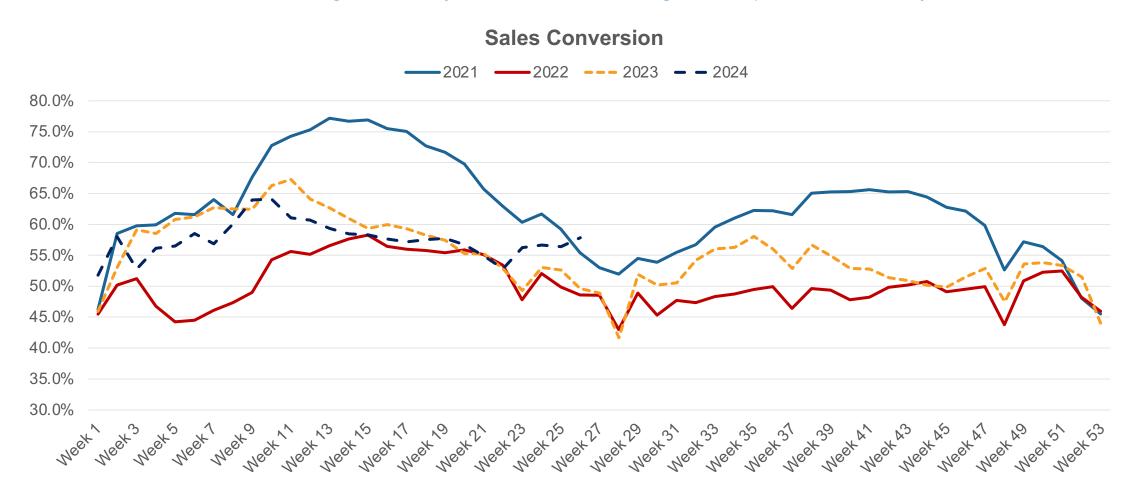
Annual Change by Index Segment





Wholesale Sales Conversion

Sales conversion has moved higher recently to 57.8%, now running several points above last year

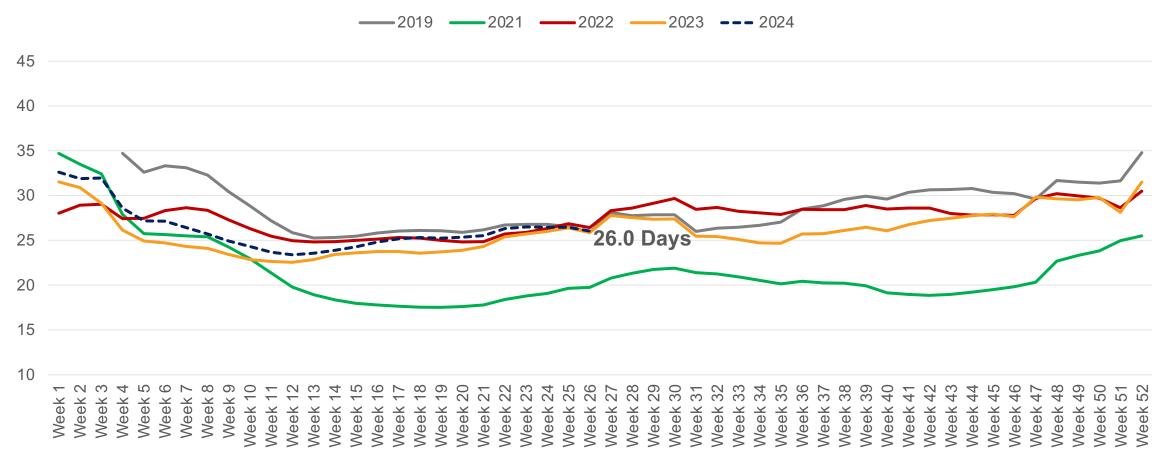




Wholesale Supply

Inventory is +15% year-over-year and sales are +14% as days' supply falls to 26.0 Days, flat vs 23'







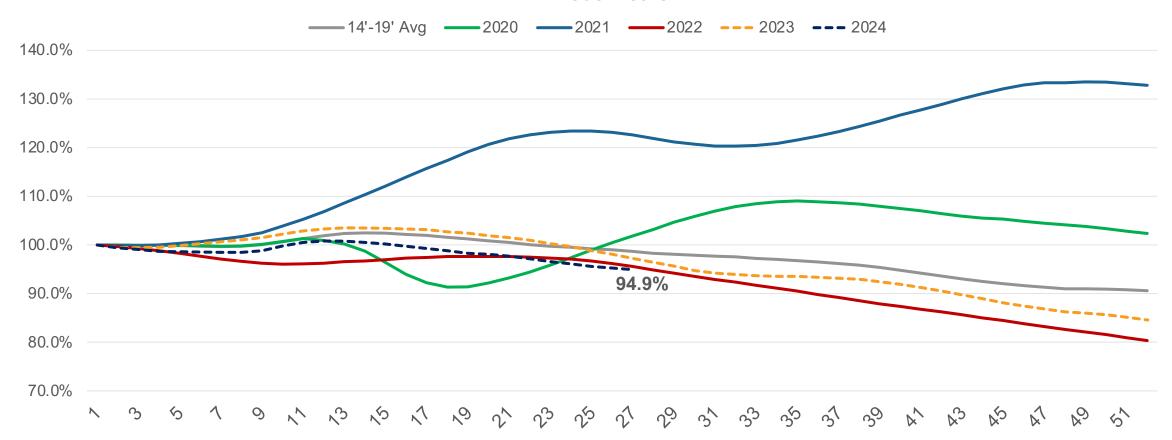
22

Overall Wholesale MMR Value Trends

Depreciation trends are running a bit higher than long term averages and now below 2022

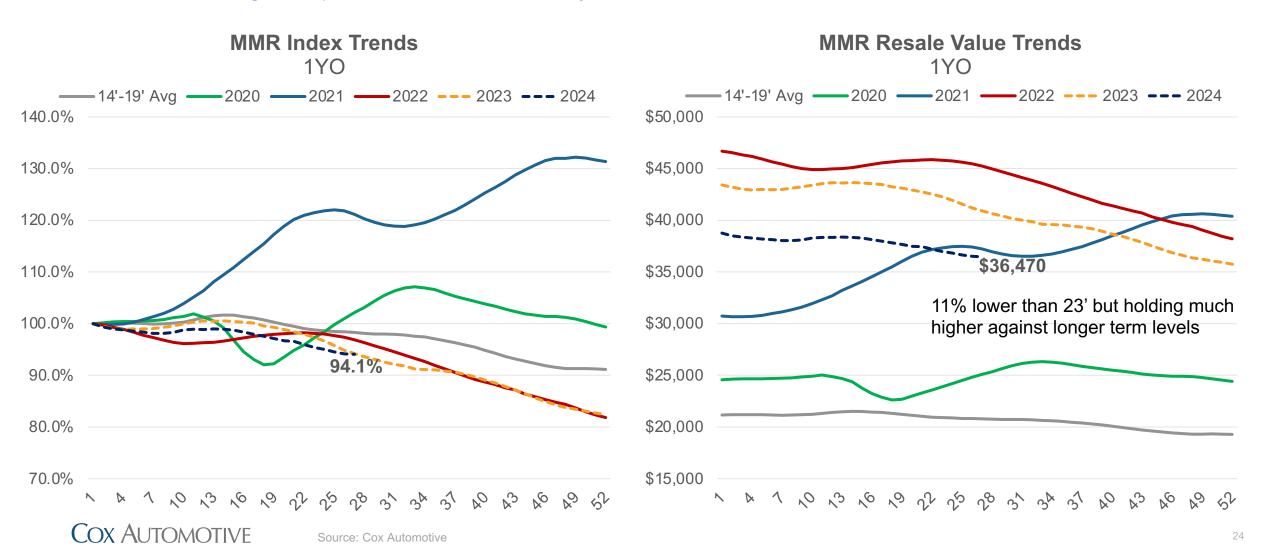
Overall MMR Index Trends

All Model Years



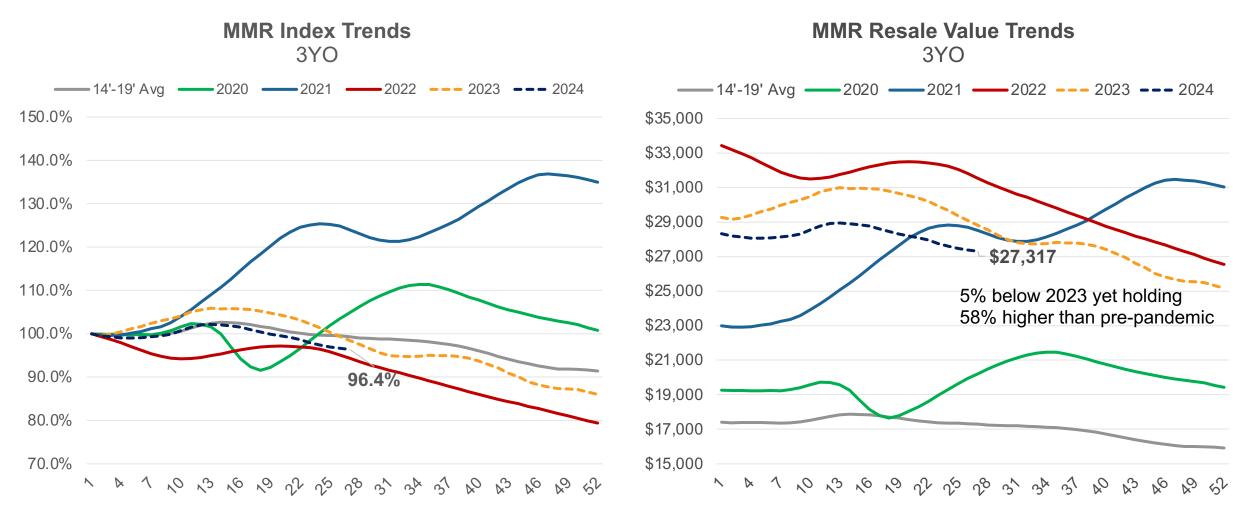
1YO MMR Index With Resale Values By Calendar Year

The 1YO shows higher depreciation overall but weekly declines slowed in the last week of June



3YO MMR Index With Resale Values By Calendar Year

3YO values declined more in May but weekly depreciation trends have decelerated in recent weeks



COX AUTOMOTIVE

Source: Cox Automotive

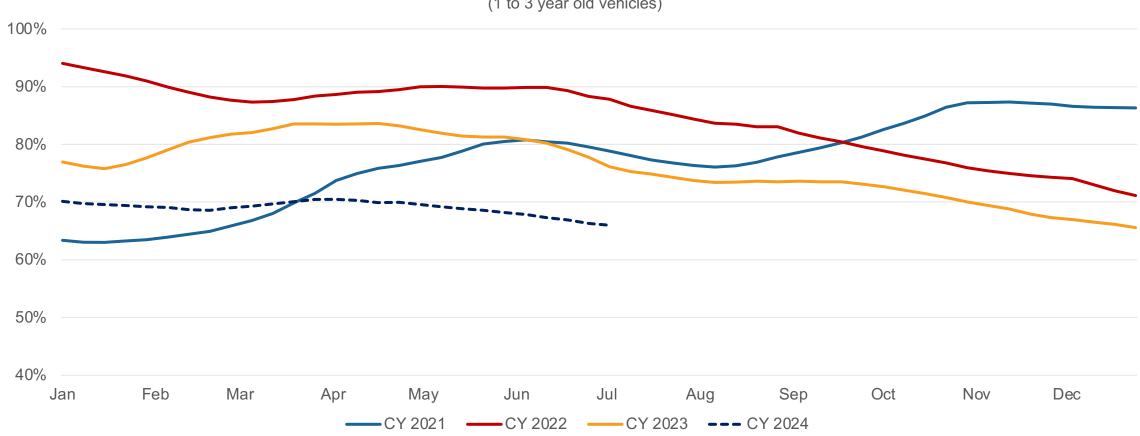
25

Retention Values at Auction

Retention metrics declined in the second quarter and remains lower than the last few years

Auction Retention Values

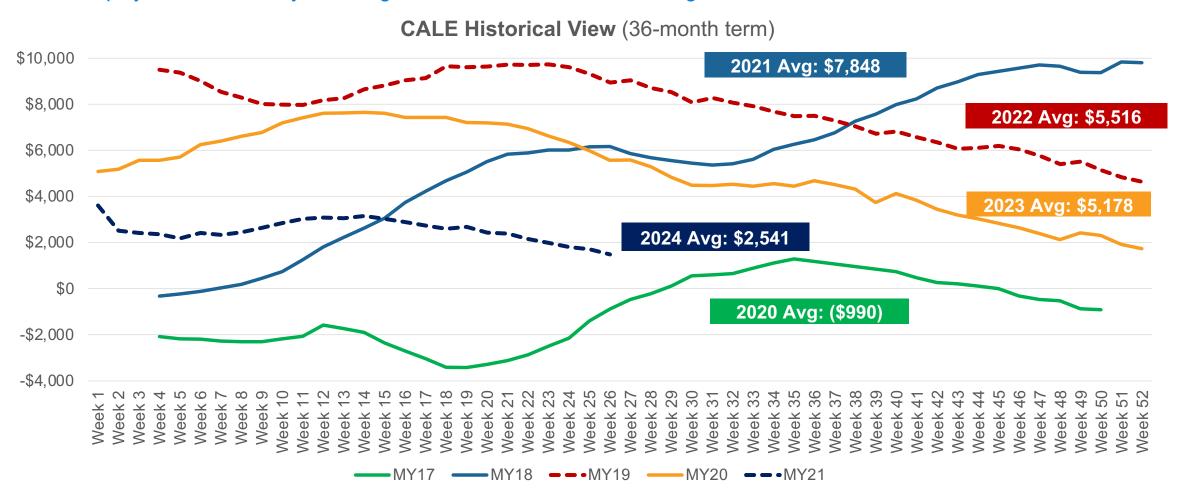
(1 to 3 year old vehicles)





CALE: Lease Equity

Lease equity has been slowly declining while a few brands are now negative

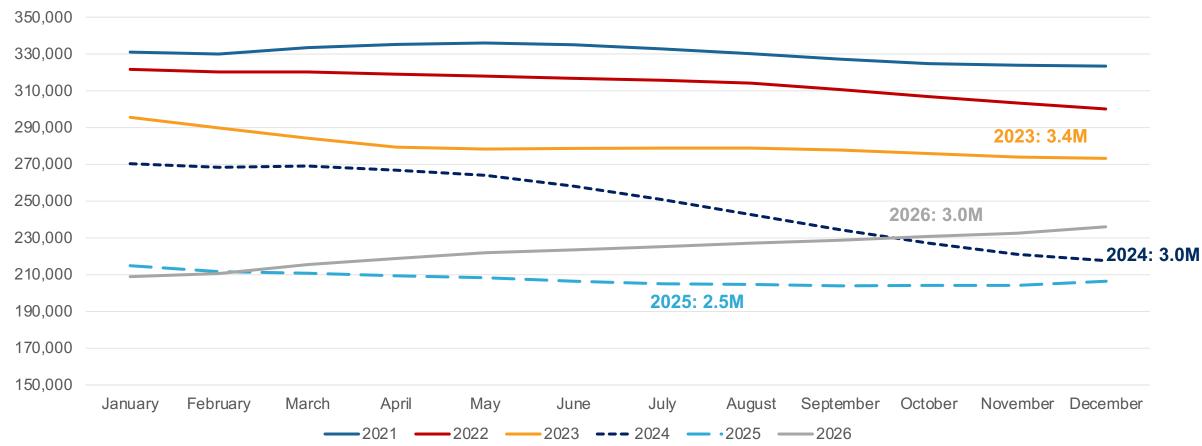




Lease Maturities

In the 2nd half of 2024, Lease maturities will drop substantially and remain lower for several years







Auction Data and Rental Market

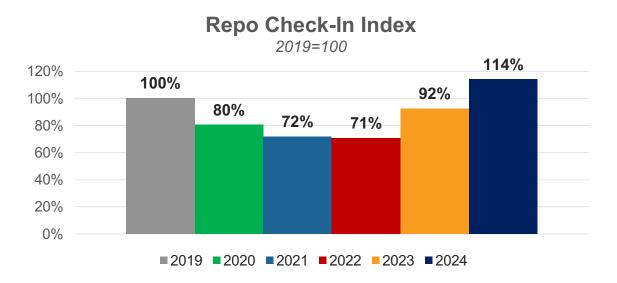
Scott Vanner

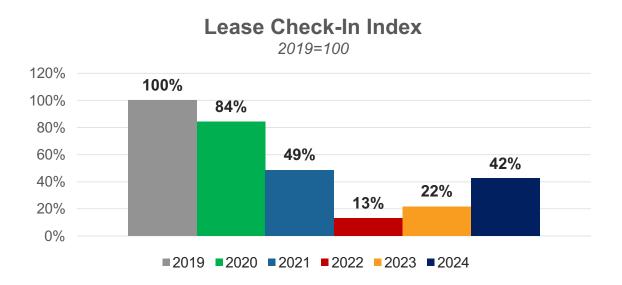
Senior Analyst of Economic and Industry Insights



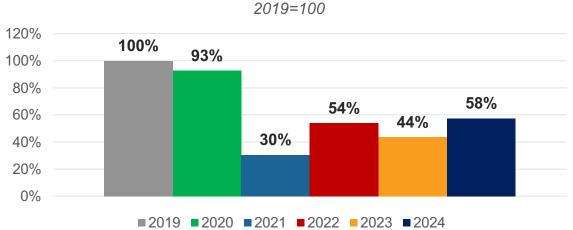
Auction Check-Ins for Commercial Segments

Repo now up +14% v 2019 levels, as Lease increases 94% vs 23' yet much lower against Pre-Covid





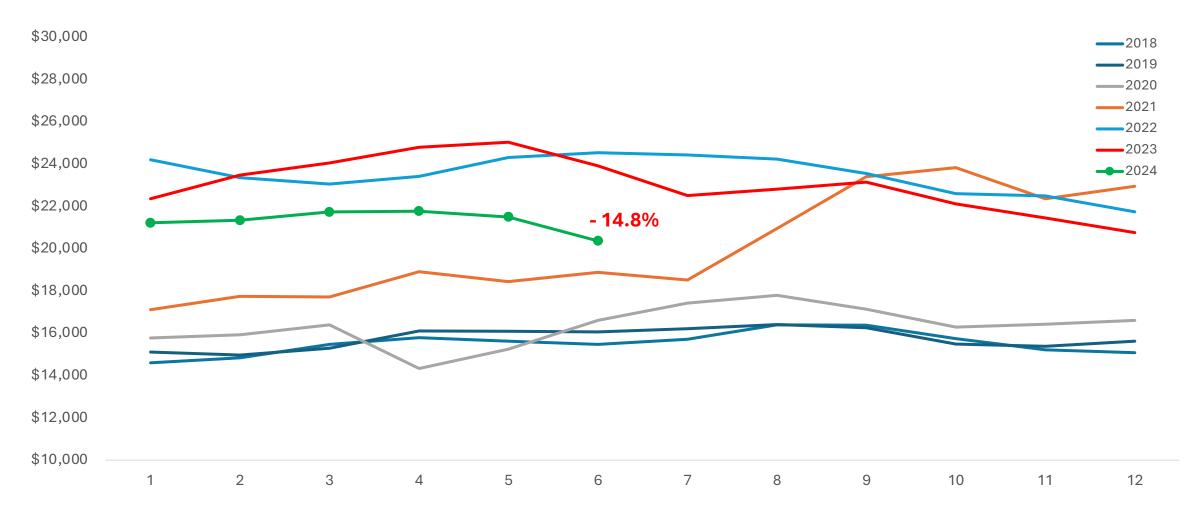




- Repo +23% vs 23' & up +14% vs 19'
- > Lease +94% vs 23' yet down (58%) vs 19'
- Rental up 32% vs 23' and down (42%) vs 19'

Rental Risk Average Auction Prices

Prices for units sold in June were down 14.8% year-over-year and down 5.3% from May





Rental Risk Vehicle Variety Increasing

Shares of top configurations increased versus 2023 with unique configurations up 59% year over year

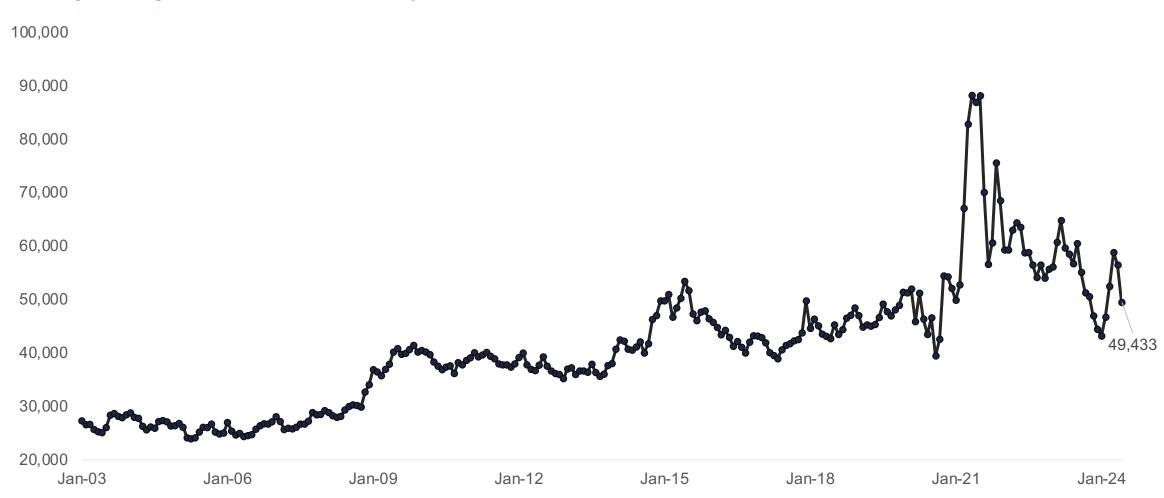
Rank	2022 Q2	2023 Q2	2024 Q2
Number of unique year, make, model, body configurations sold	3,472	3,422	5,433
Share accounted for top 10 YMMB	13.9%	7.2%	13.3%
Share accounted for top 25 YMMB	24.5%	13.7%	19.5%
Number of YMMB to reach 50% share	94	468	225





Rental Risk Average Mileage

Average mileage was down 12% from May and down 13% from June 2023





Rental Risk Sales Condition

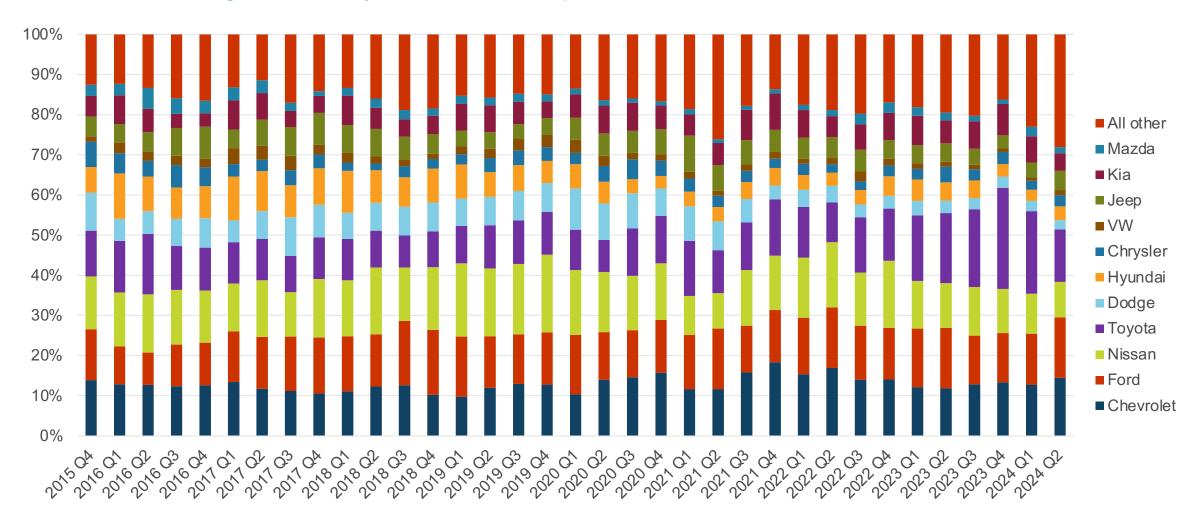
Share of higher graded units drops from previous quarter





Rental Risk Sales By Make

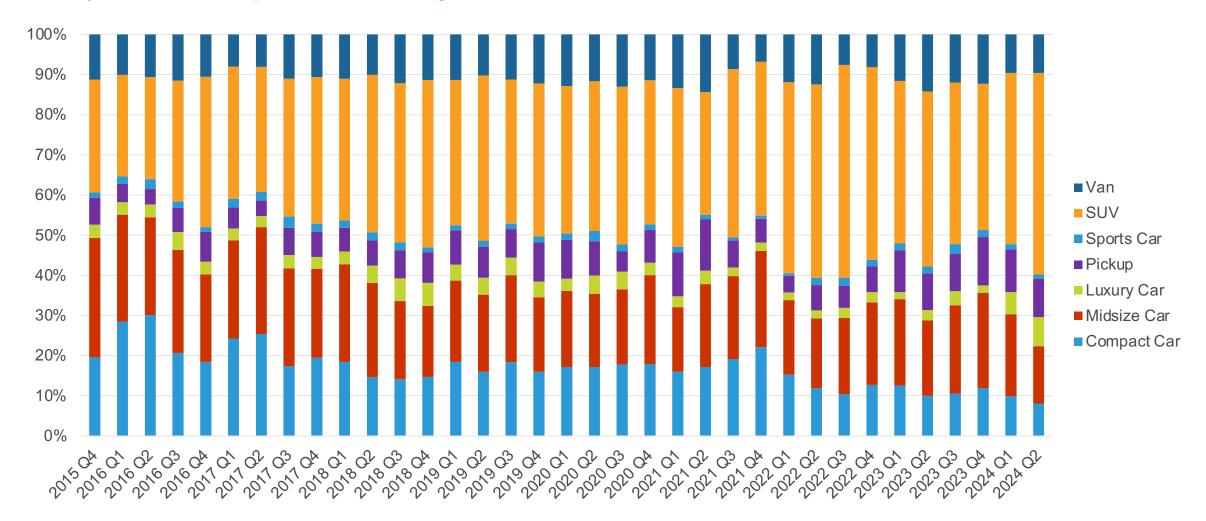
"All other" continues gains, while Toyota continues to drop





Rental Risk Sales by Vehicle Segment

Luxury and SUVs are up, while all other segments are down from Q1 2024





Manheim Insights on Top Volume Vehicles

Price trends on top selling vehicles in June were lower across the board but two of the top 5 were EVs

Rank	Source(Rank)	Category	Subcategory	Vehicle	1-May	Past 30 Days	Last Year	Current Dep	L12M Dep/Mo
1	All	Luxury	LUXURY CAR PREMIUM	2023 TESLA MODEL 3 2WD 4D SEDAN	\$22,464	\$25,619	\$37,645	-12.3%	-3.4%
2	All	SUV	SUV MIDSIZE	2021 FORD EXPLORER 4WD 4C 4D SUV XLT	\$25,181	\$26,425	\$32,119	-4.7%	-1.8%
3	All	Compact Car	COMPACT CAR PREMIUM	2023 CHEVROLET BOLT EUV 4D SUV LT	\$15,514	\$17,066	\$27,279	-9.1%	-3.6%
4	All	SUV	SUV MIDSIZE	2023 NISSAN ROGUE AWD 3C 4D SUV SV	\$21,402	\$22,506	\$29,485	-4.9%	-2.3%
5	All	Truck	PICKUP LITE DUTY FULLS	2021 FORD F150 4WD V6 CREW CAB 2.7L XLT	\$33,353	\$34,858	\$40,432	-4.3%	-1.5%
1 Dealer	Dealer	Compact Car	COMPACT CAR PREMIUM	2021 TOYOTA COROLLA 4D SEDAN LE	\$15,576	\$15,776	\$19,081	-1.3%	-1.5%
1 Lease	Lease	SUV	SUV MIDSIZE	2023 NISSAN ROGUE AWD 3C 4D SUV SV	\$21,402	\$22,506	\$29,485	-4.9%	-2.3%
1 Rental	Rental	Luxury	LUXURY CAR PREMIUM	2023 TESLA MODEL 3 2WD 4D SEDAN	\$22,464	\$25,619	\$37,645	-12.3%	-3.4%

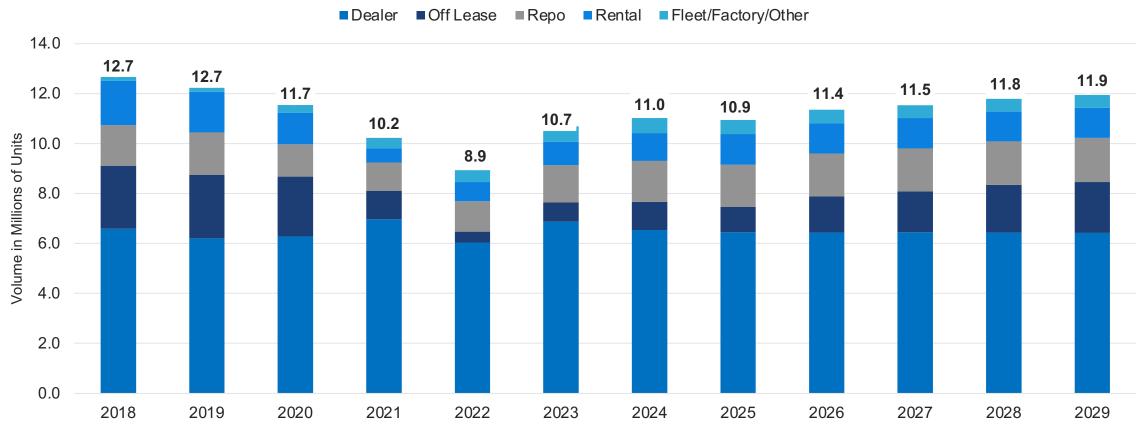


Wholesale Volume Estimates

After the 13% decline in 2022, the market should gradually recover as the 2021/2022 impact continues for used

Estimated Wholesale Volumes by Inflow Channel (Annual Volume)

(millions)



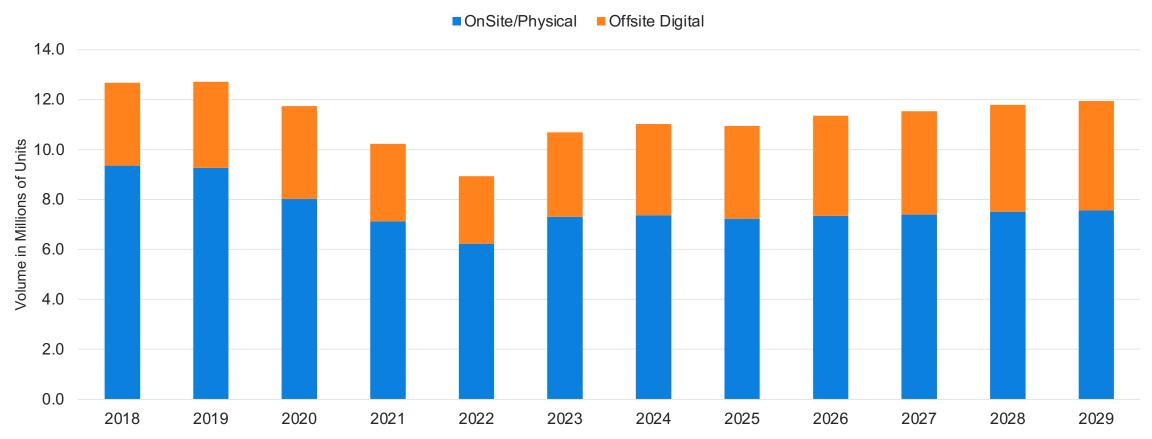


On-Site Physical Versus Offsite Auction Volumes

With a gradual shift of transactions offsite and fully digital, onsite volume in 2029 is expected to be down 18% vs 2019

Wholesale Onsite/Physical vs Offsite

(millions)

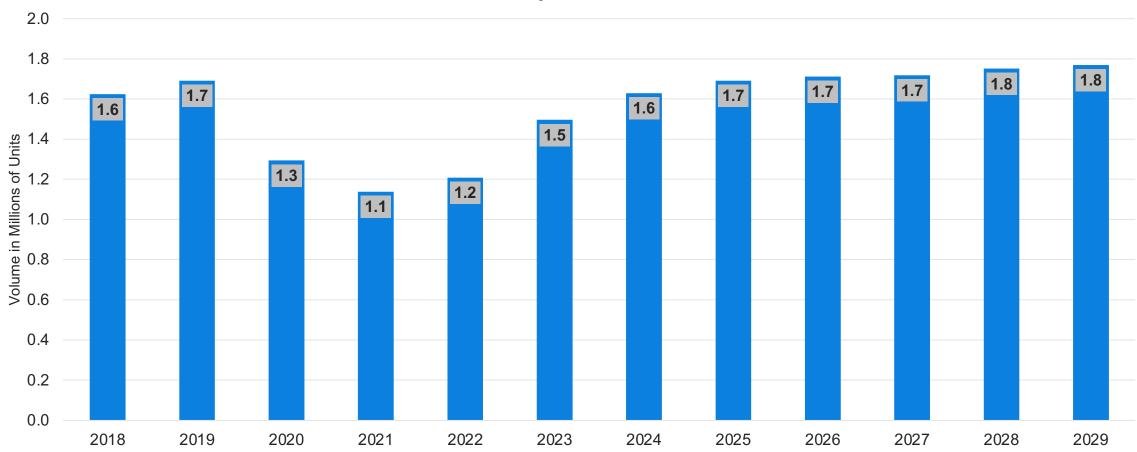




Repossessions

Longer term expect normalized default rates by credit tier resulting in higher overall defaults in 2025

Estimated Repossession Volume

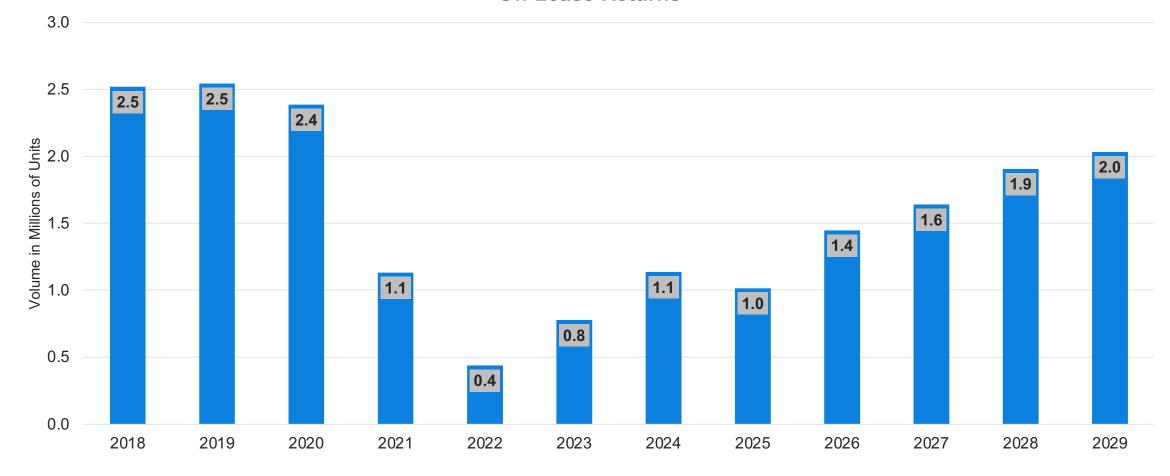




Off Lease Returns

Return rate hit a historical low of 11% in 2022 vs. 62% in 2019 but lower maturities start in 2H 2024

Off Lease Returns

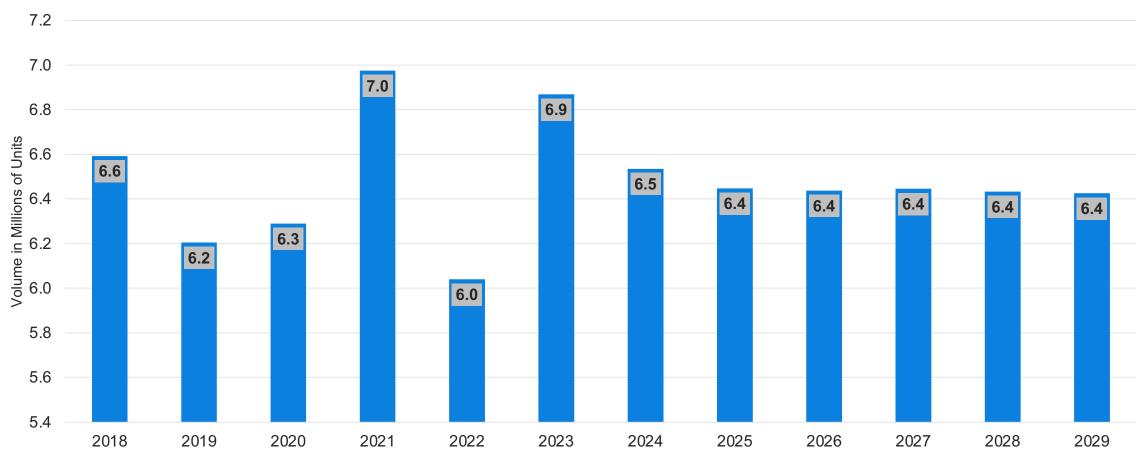




Dealer Volumes

Off-lease arbitrage and record retail sales powered dealer consignments +11% in 2021 but lower in the future

Estimated Dealer Volumes

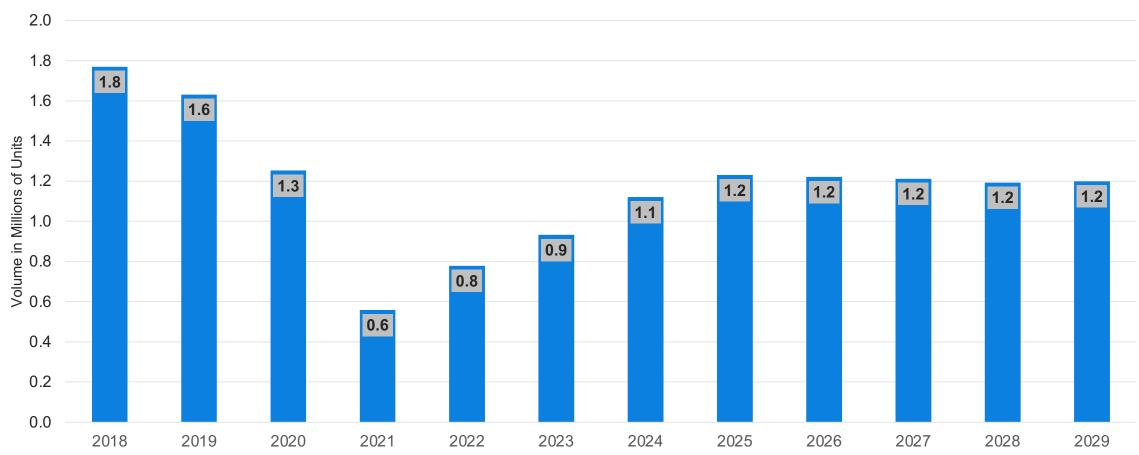




Rental Volumes

Total fleet size will expand but still fall short of pre-pandemic levels as share of the new market recovers slowly

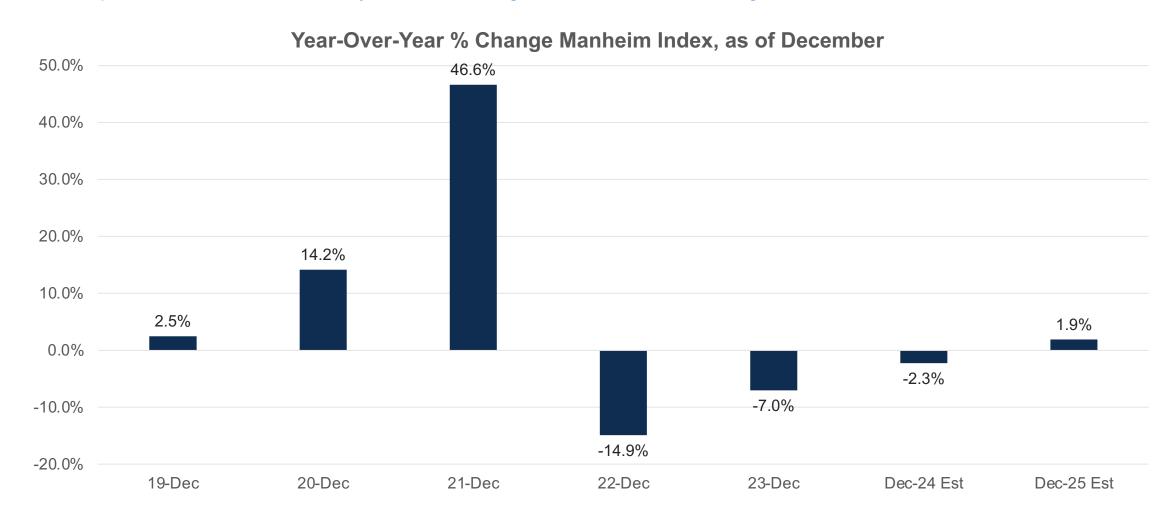
Estimated Rental Volumes





Depreciation

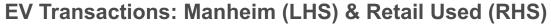
2024 depreciation forecast is lower yet it remains higher than historical average moves

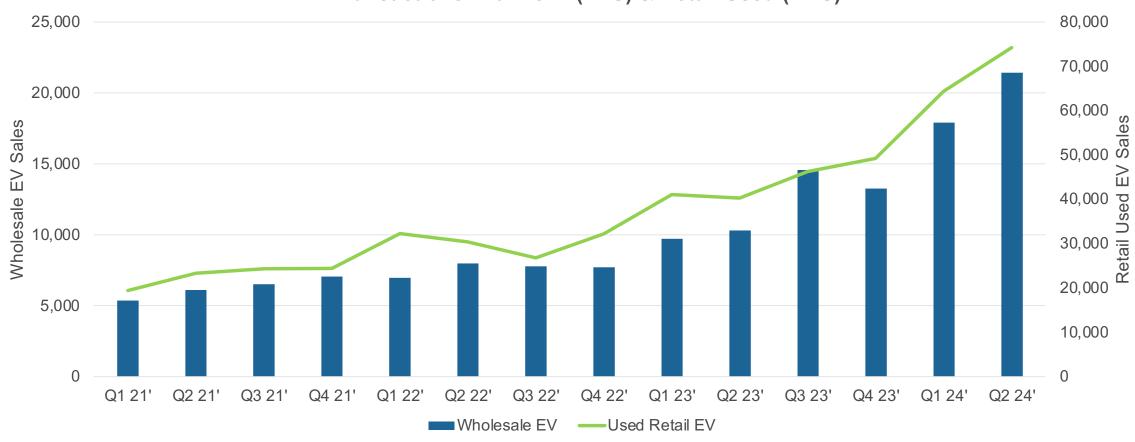




EV Transactions

1H 2024 Used Retail EV sales have grown 70% with wholesale volume up 97% vs 1H 2023







15.7M **NEW SALES** (2023: 15.5M)

12.8M **NEW RETAIL SALES**

(2023: 12.7M)

3.0M **FLEET SALES**

(2023: 2.8M)

2024 Forecasts

Updated June 24, 2024

2.9M

NEW LEASE VOLUME

(2023: 2.7M)

23%

LEASE **PENETRATION**

(2023: 21%)

2.7M

CPO SALES

(2023: 2.6M)

36.8M **USED SALES** (2023: 36.4M)

19.6M **USED RETAIL SALES**

(2023: 19.3M)

-2.3%

DEC 2024 Y/Y MANHEIM USED VEHICLE VALUE INDEX

(2023: -7.0%)



MORE AUTO INDUSTRY DATA AND INSIGHTS FROM COX AUTOMOTIVE

The go-to source for insights based on the largest breadth of first-party data in the automotive ecosystem

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Fresh content from Chief Economist Jonathan Smoke and the Industry Insights team is published regularly

Auto Market Snapshot: www.coxautoinc.com/marketsnapshot

This dashboard is a one-stop dashboard for the most recent data points our team is tracking.

From the Newsroom: www.coxautoinc.com/signup

The Cox Automotive biweekly newsletter, published every other Tuesday, is a round-up of news from Cox Automotive and perspectives from its analysts and experts on topics dominating the automotive industry.



Cox Automotive

THANK YOU FOR ATTENDING!

Contact us with questions or to speak with an expert:

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