

COX AUTOMOTIVE

Q4 MANHEIM USED VEHICLE VALUE INDEX CALL

Jan. 8, 2025



The Cox Automotive Ecosystem

Our category-leading portfolio delivers the connected solutions, tools and services that dealers, OEMs, lenders, fleet operators and consumers expect.

COX AUTOMOTIVE



Agenda

Time Check: 60 Minutes

Intro & Cox Automotive

Mark Schirmer, Director, Corporate Communications

Business Update

Grace Huang, President, Inventory Solutions

The Economy

Jonathan Smoke, Chief Economist

Wholesale Market

Jeremy Robb, Senior Director, Economic and Industry Insights

Used-Vehicle Market

Scott Vanner, Senior Analyst, Economic and Industry Insights

Q&A



Business Update

Grace Huang

President
Inventory Solutions



Inventory Solutions | State of the Business

Key Indicators from 2024 and What They Signal for the Year Ahead



**Digital Dominates
But Physical Auctions
Remain Vital**



**Used EVs Are Already
Making Waves at
Wholesale**



**AI is Everywhere
...And There's Even
More Ahead**



**Logistics Investments
Are Paying Off
For Clients**



**Dealers' Appetite for
Connecting Retail &
Wholesale Is Increasing**

2024 Highlight | Unrivaed Solutions for Used EVs

No Other Company is Investing in Supporting Used EVs AT SCALE Like Cox Automotive



INFRASTRUCTURE

\$500M investment in infrastructure, expertise and capabilities

900+ EV chargers throughout the Manheim network



EV BATTERY HEALTH

100% of locations deployed VIN-specific EVBH solution in 2024

41,000+ VIN-specific battery health scores delivered to clients



EDUCATION

5th Auto Tech Training Center opened in 2024

~500 technicians trained in 2024

2024 Highlight | Powerful AI & Automation

Driving Confidence and Efficiencies Across the Marketplace



Launched **33rd** Fixed Imaging Tunnel,
Covering **45%** of Manheim's Volume



Delivered Numerous Enhancements to
Condition Reports and Inspection Process



Enhanced MMR with Industry-First
Automatic Adjustments using OEM Build
Data



2024 Highlight | Supply Chain Transformation

Investment in Vehicle Logistics is Paying Off For Clients



Cox Automotive Fuels ~**16M** Million Vehicle Moves Each Year



\$100M Investment in Central Dispatch Transformation from Load Board to Marketplace



Central Dispatch Launched Fully Integrated Marketplace, Private Marketplaces, Carrier App, APIs and More



Looking Ahead: 2025 and Beyond

The Future Has Never Been Brighter



**Deliver a More Seamless
Manheim Marketplace
Experience**



**Expand AI and
Automation throughout
the Marketplace**



**Provide More
Unrivalled Solutions
for EVs, Fleets and
Beyond**



**Take Central Dispatch
Transformation to the
Next Level**



**Create More Retail-to-
Wholesale Connections
for Clients**

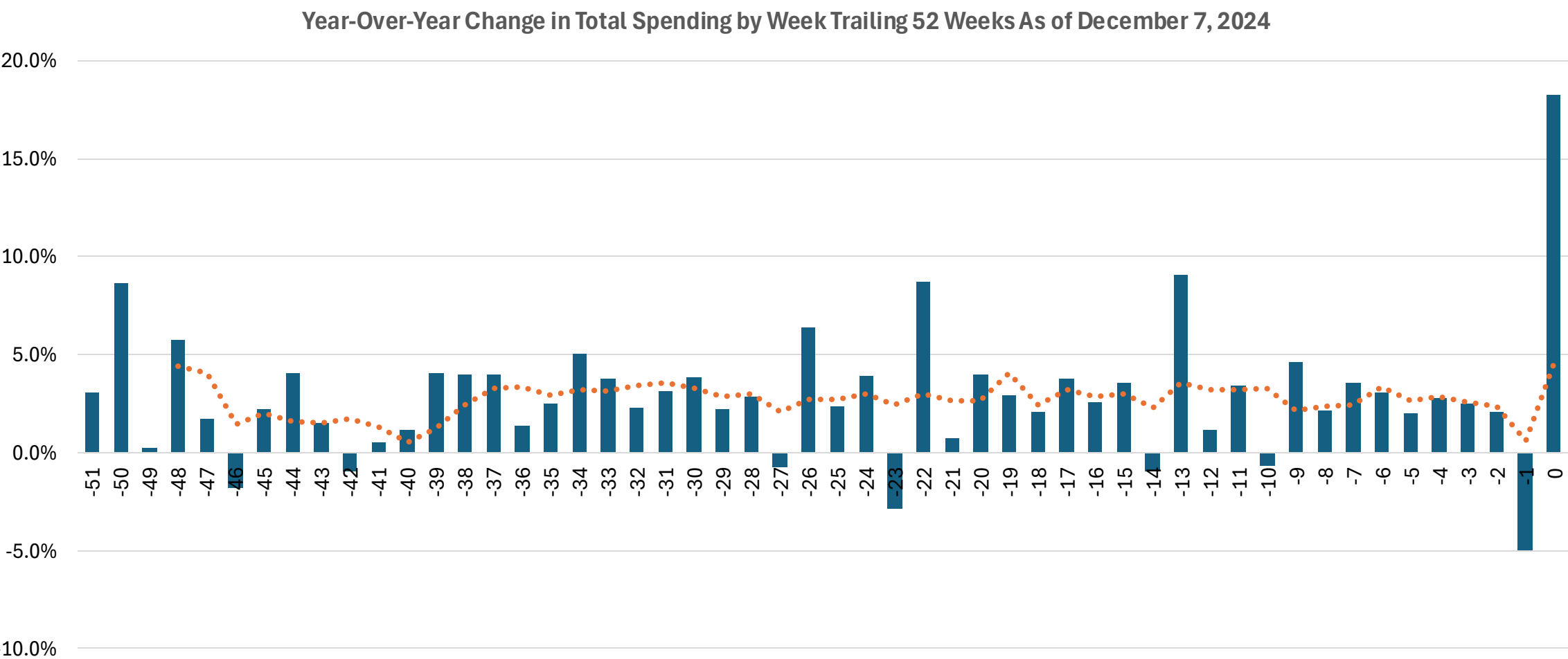
The Economy

JONATHAN SMOKE
Chief Economist



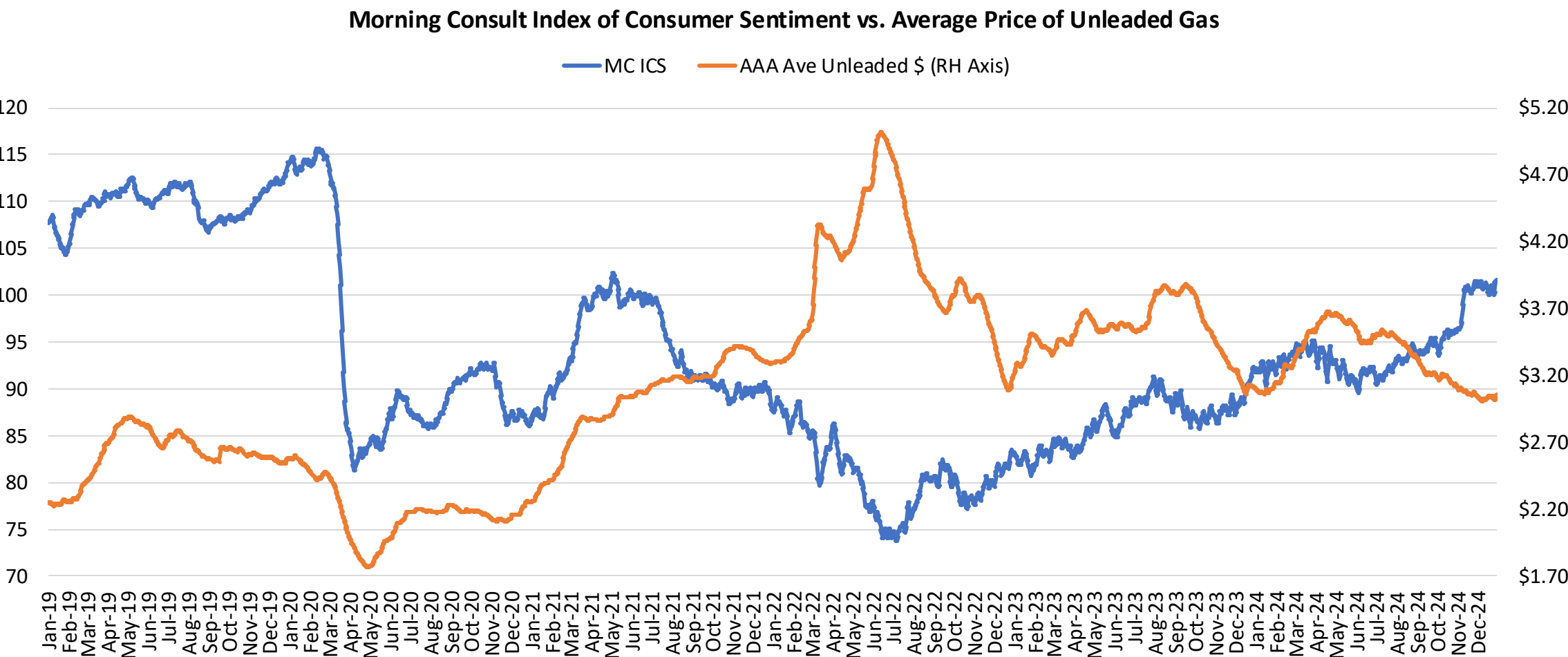
Consumer Spending Growth Surging in Early December

Total spending trends were volatile with timing of Thanksgiving this year, but consumer spending is increasing



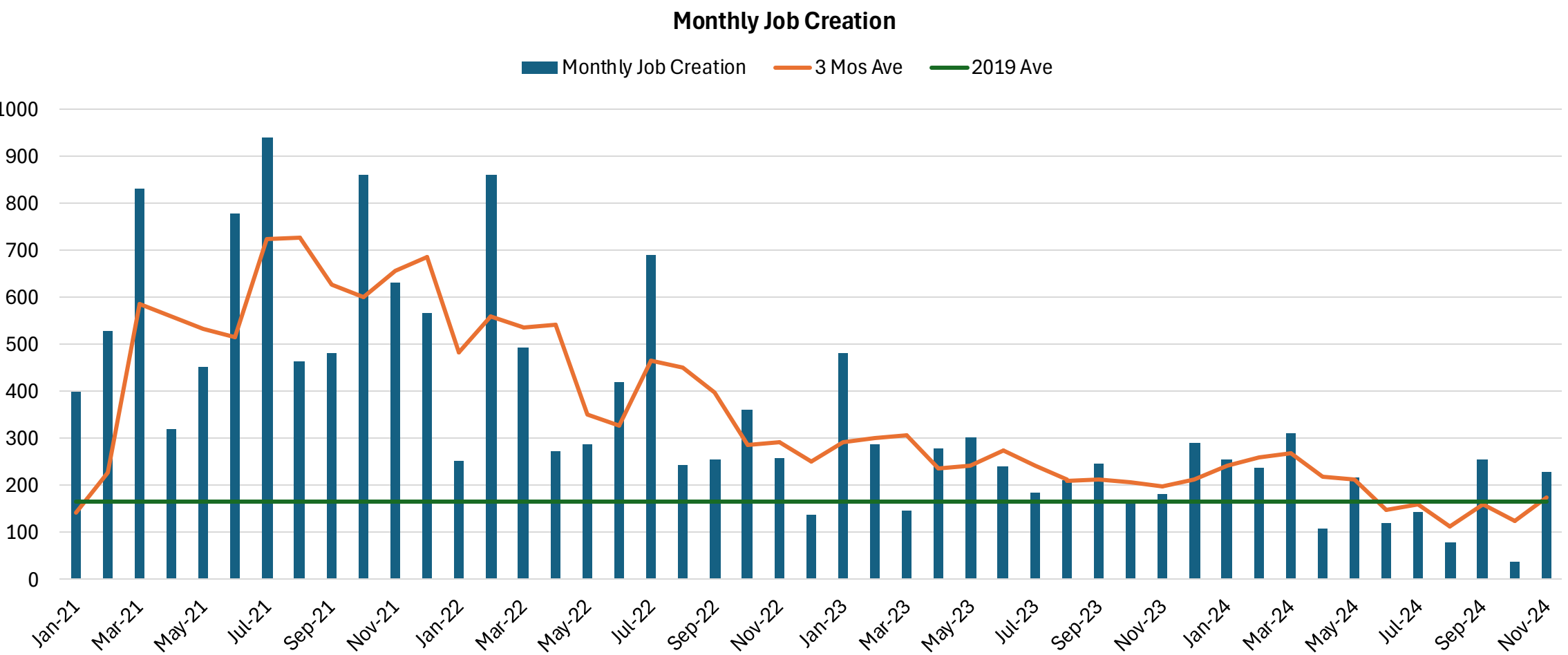
Consumer Sentiment Reached Highest Level Since May 2021

The Index of Consumer Sentiment increased 5.6% in November and 0.1% in December



Post Hurricanes, Labor Market Has Stabilized

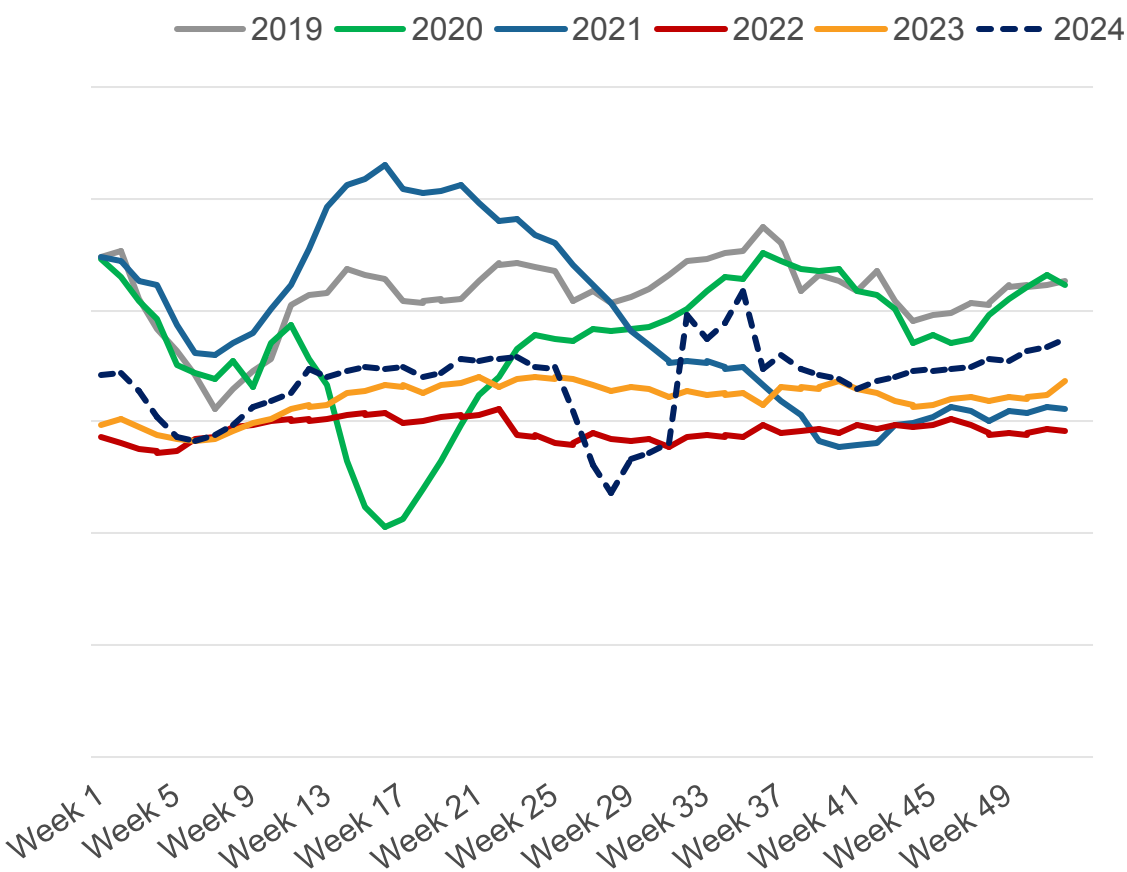
With 227,000 jobs added in November, 3-month ave recovered to 173,000 new jobs per month; 2019 ave 166,000



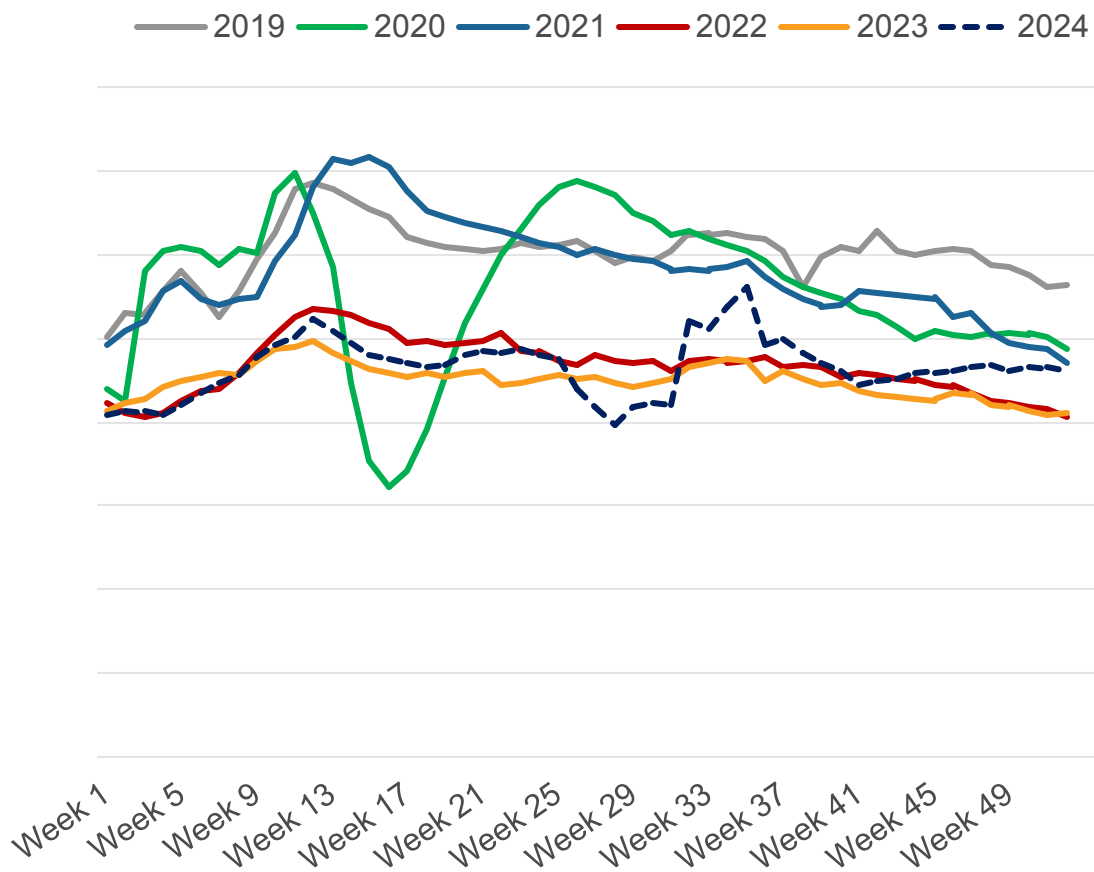
Retail Vehicle Sales Show Strength at Year End

Sales trends for new increased in December and used trends were flat, bucking the seasonal trend

New Retail Sales

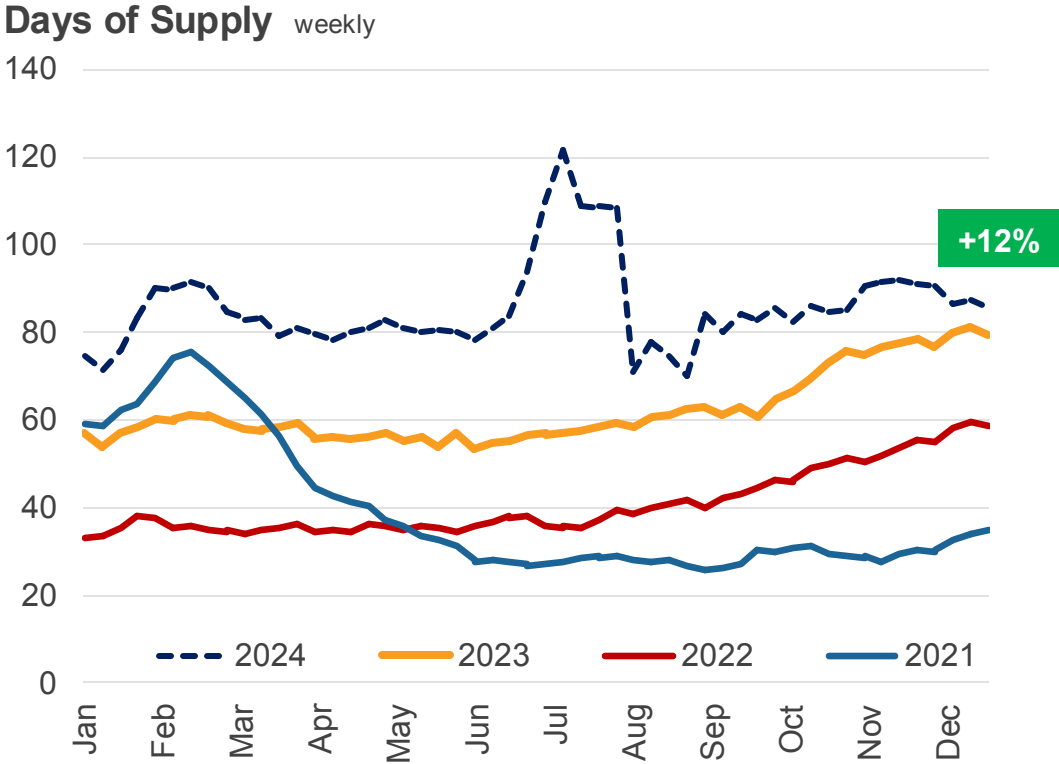
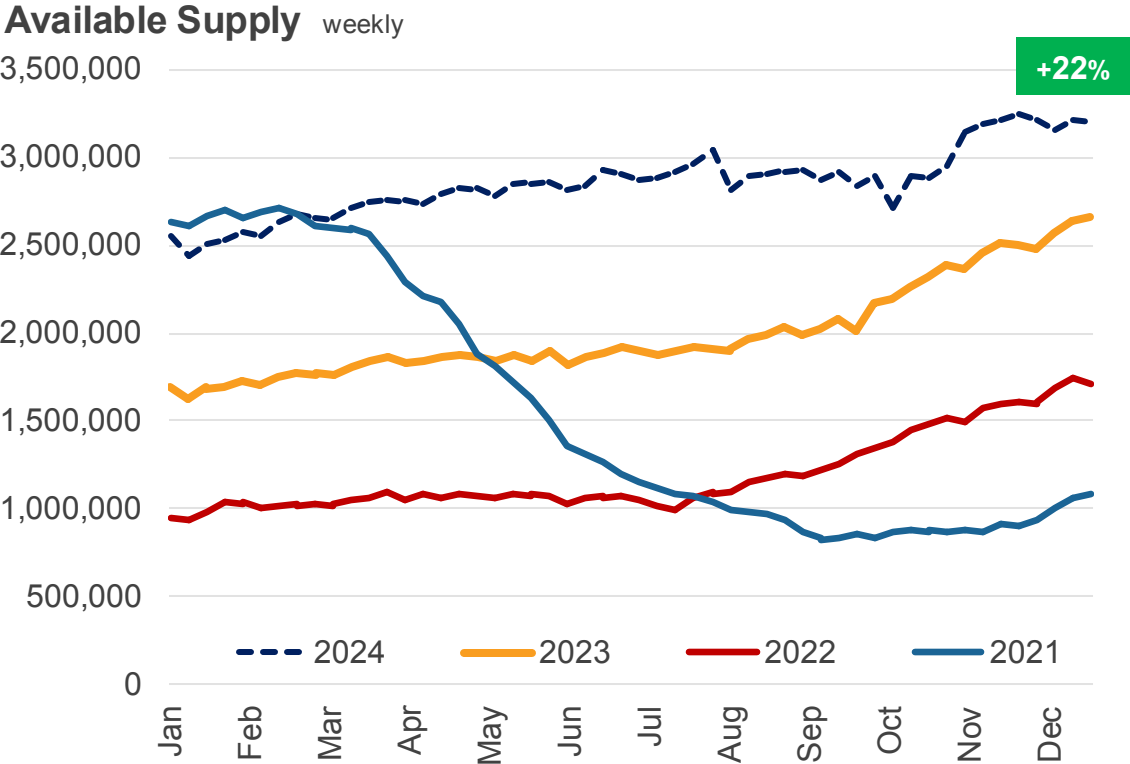


Used Retail Sales



New-Vehicle Inventory | Up 22% From Last Year

New inventory grew over most of Q4, but Days' Supply has fallen into year end, now 12% higher y/y



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

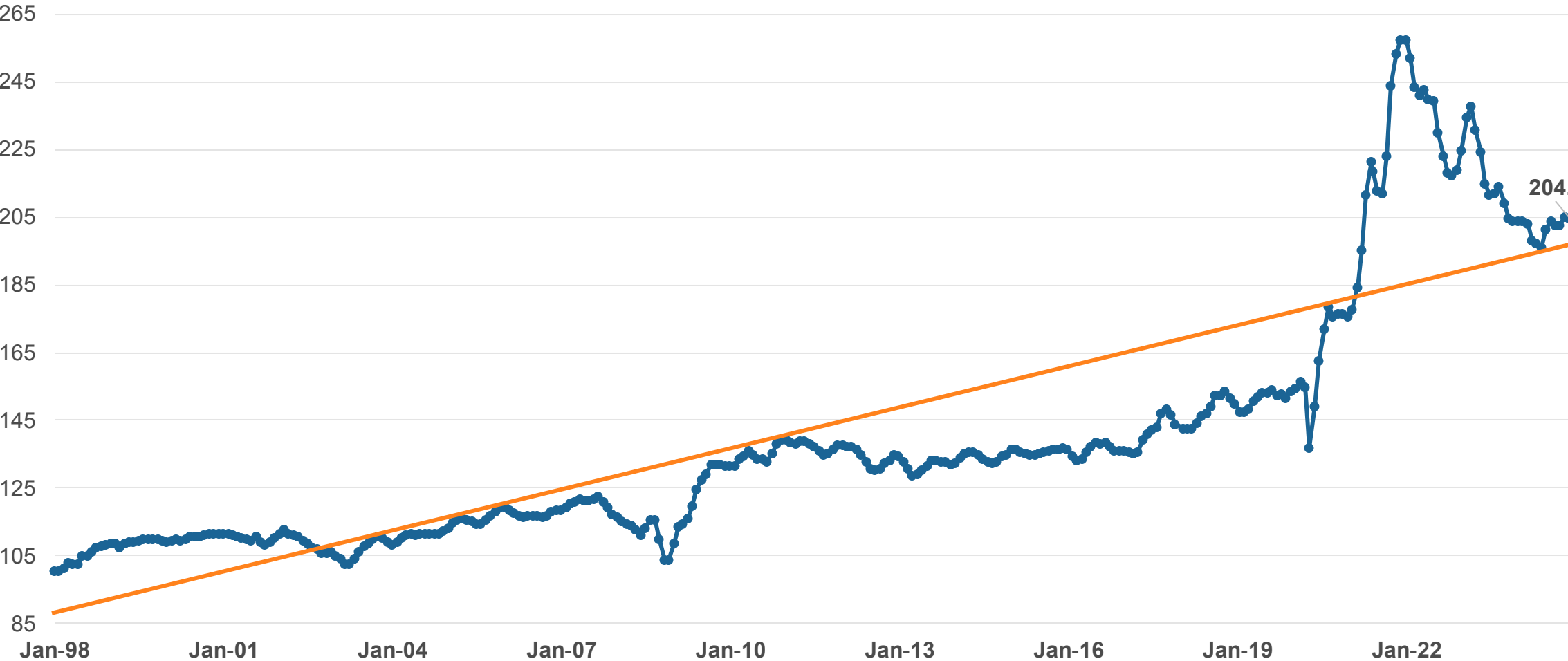
Steps

1. All Manheim U.S. sales
2. Classify by market segment
3. Account for differences in mileage
4. Weight to provide smoother segment mix
5. Seasonally adjust



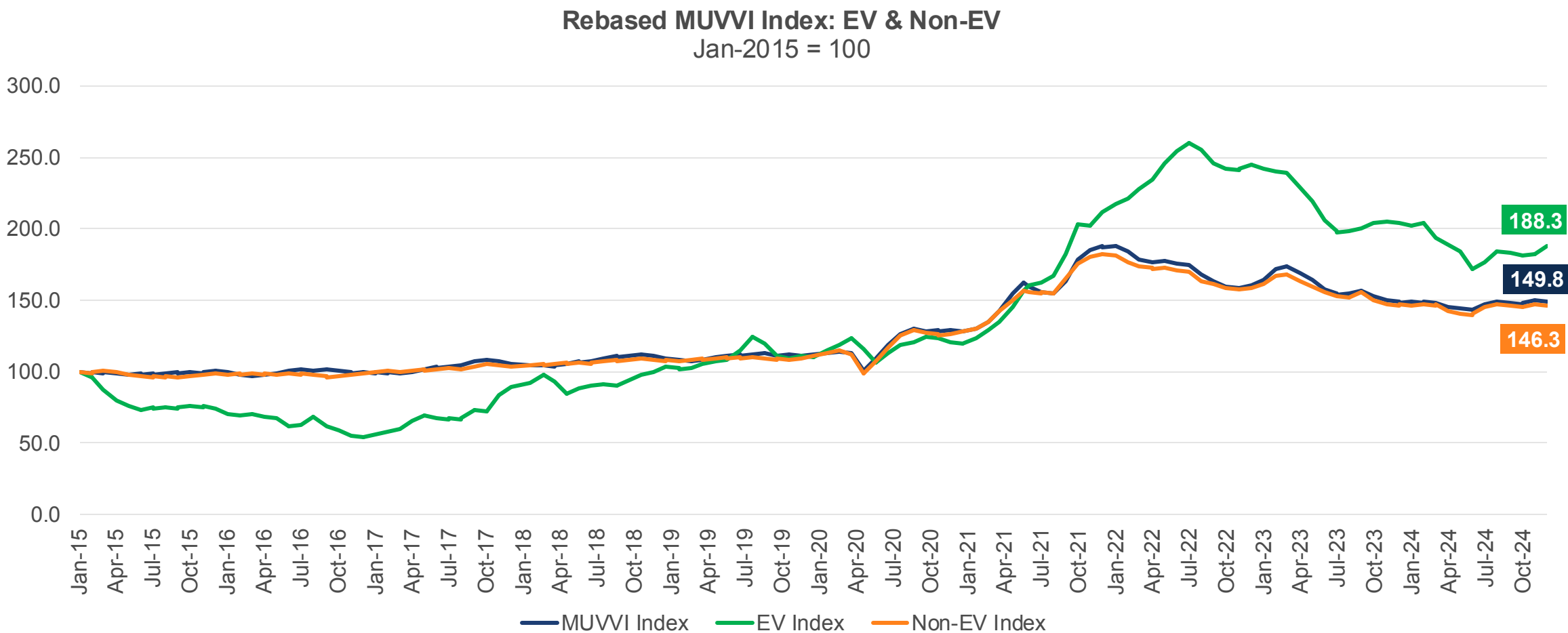
Wholesale Vehicle Values Fell Slightly in December

Prices fell 0.3% from November and now show a gain of 0.4% from last year



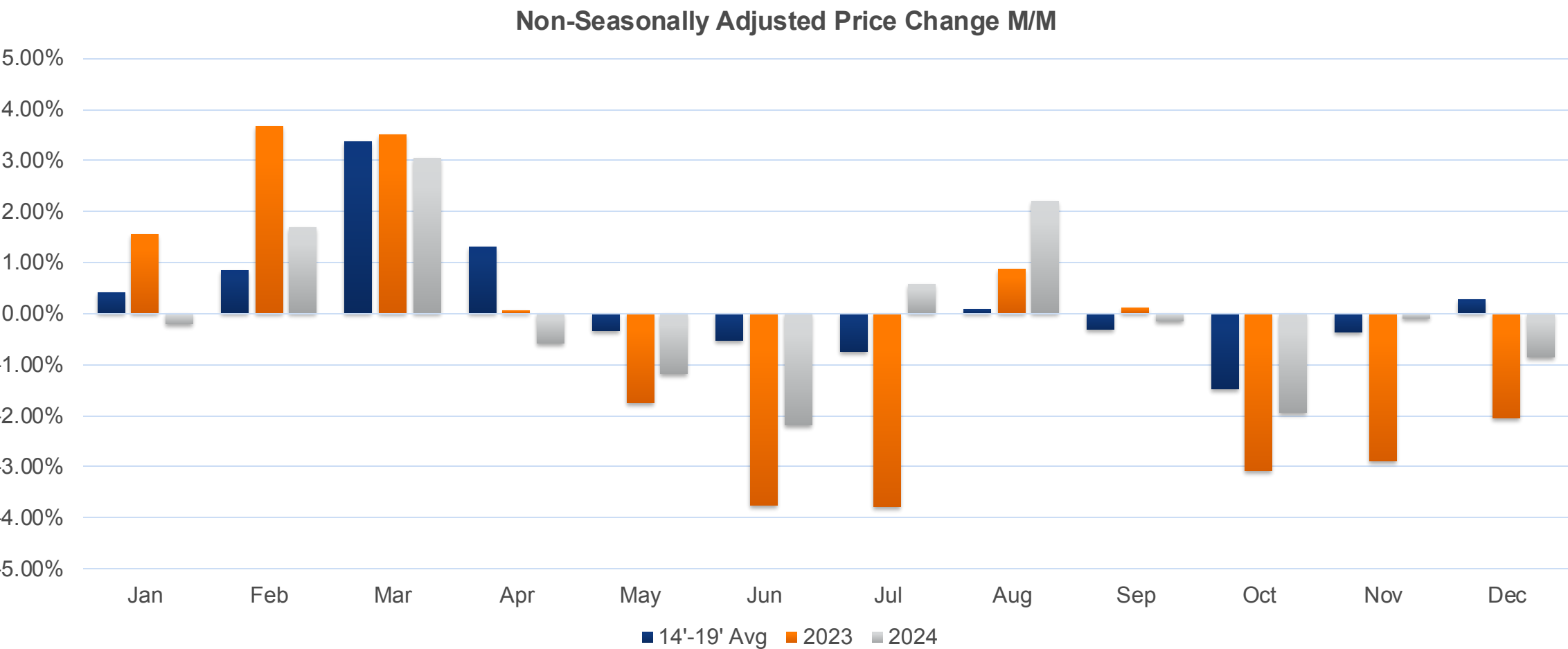
Manheim Index: EV & Non-EV

The EV Index has outperformed the Non-EV index over the 2H of 2024



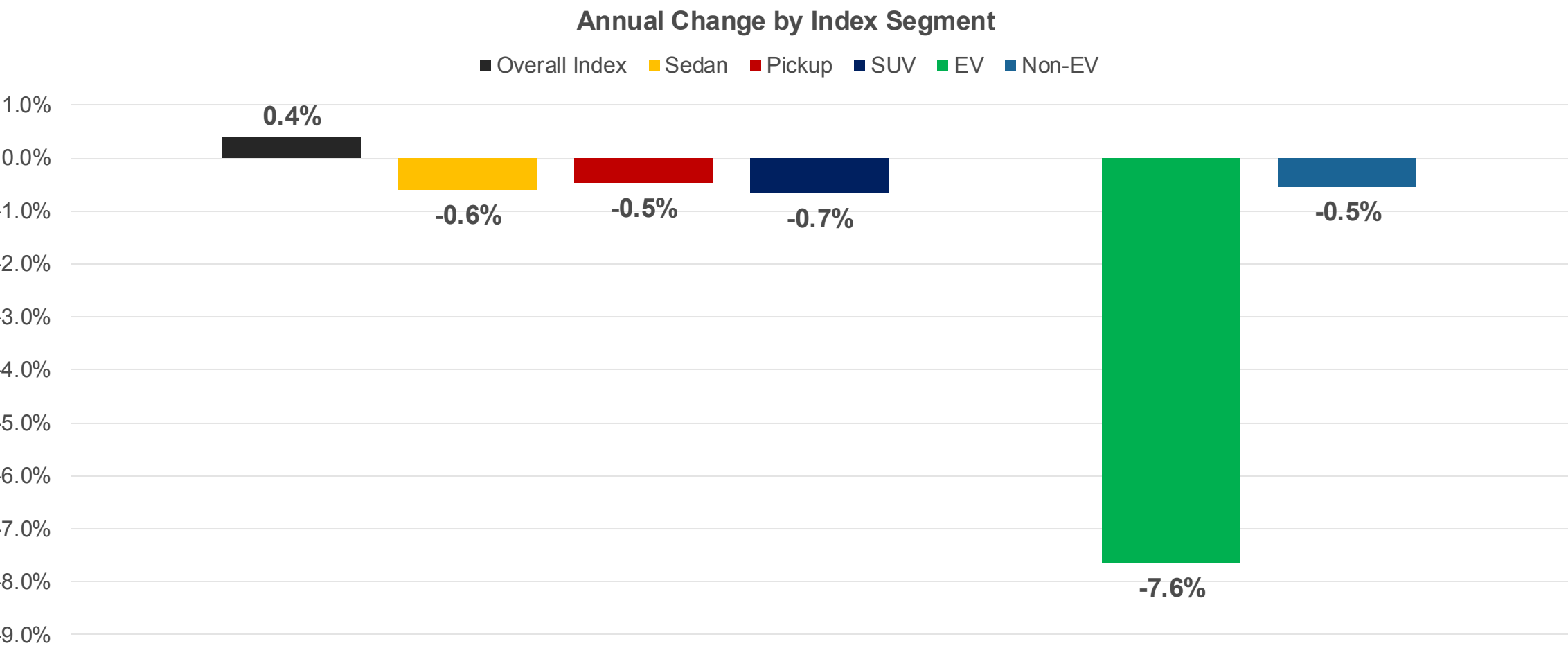
Month-Over-Month Performance Trend

Values have shown some variance from long term trends recently, and December declined more than typical



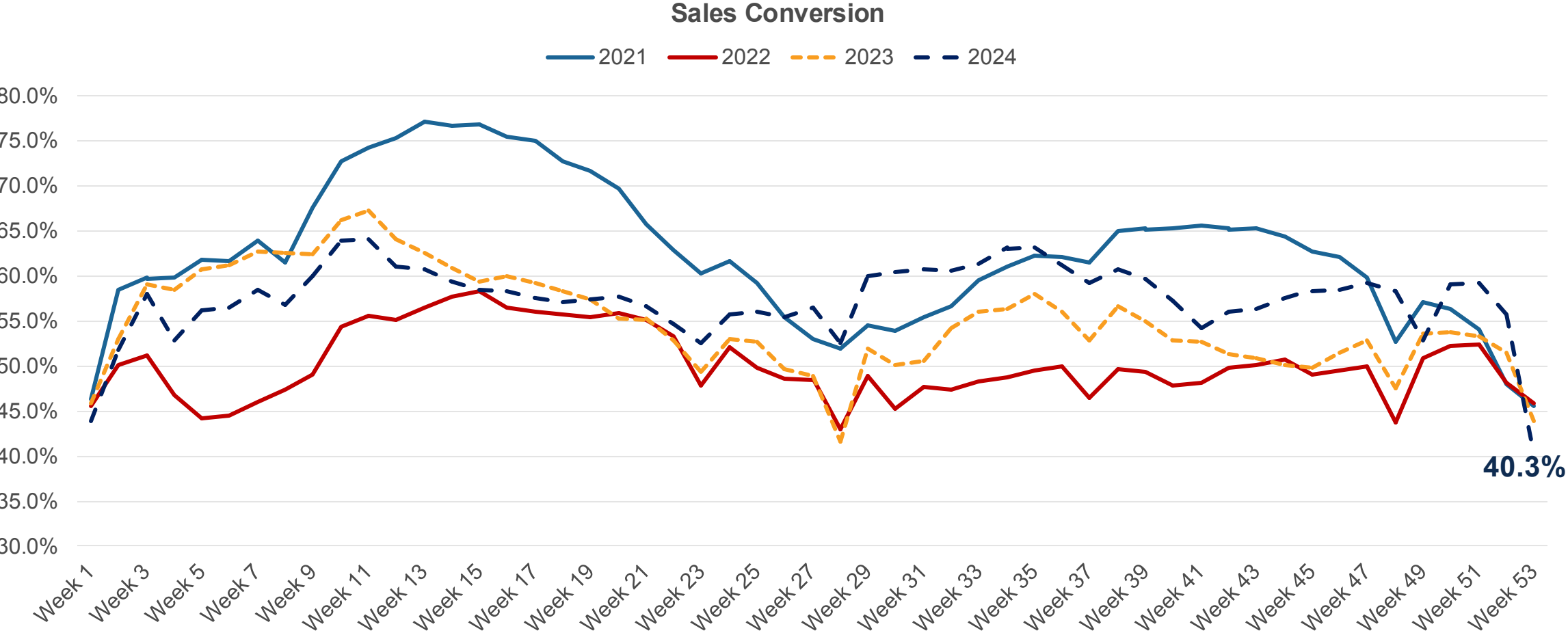
MUVVI Index Trends By Key Segment

The overall market is now up Y/Y though most segments are down while EV's continue to underperform



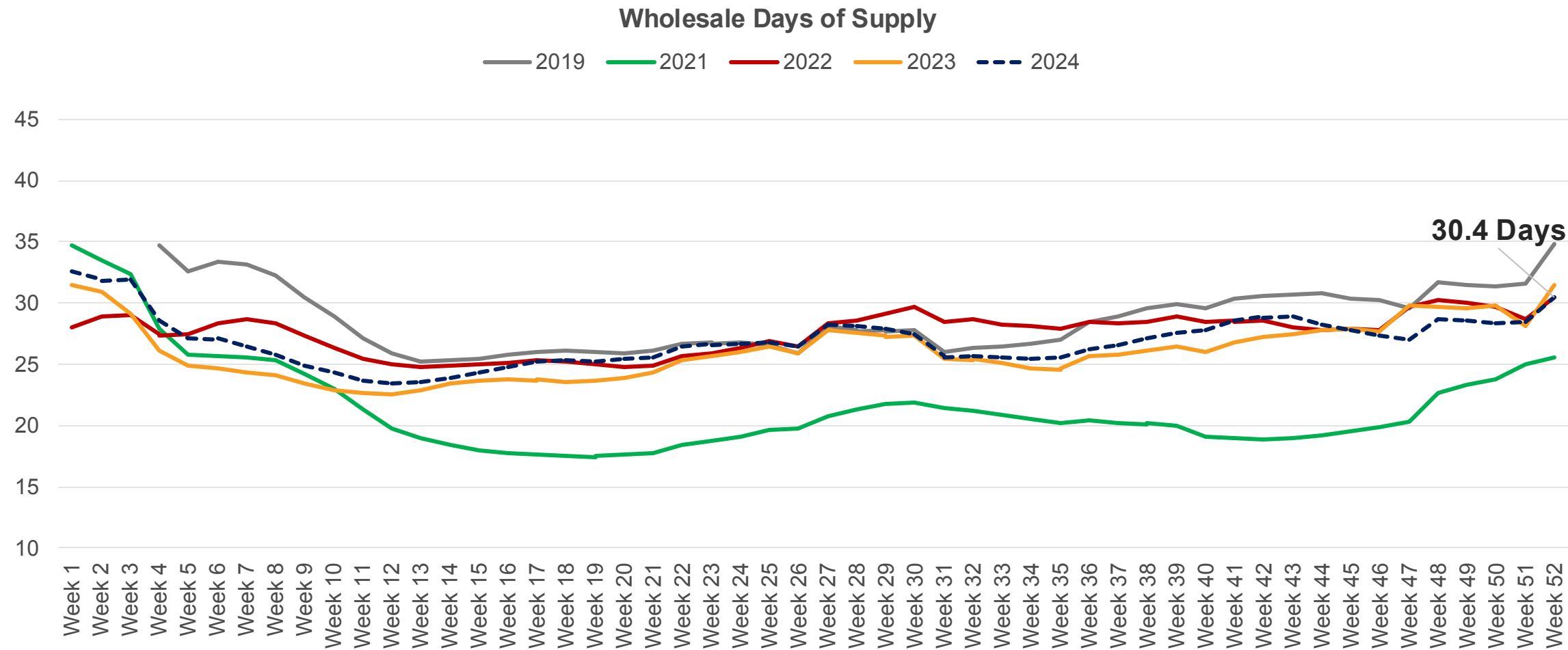
Wholesale Sales Conversion

Sales Conversion dropped in the last week of the year but has been higher than most years during Q4



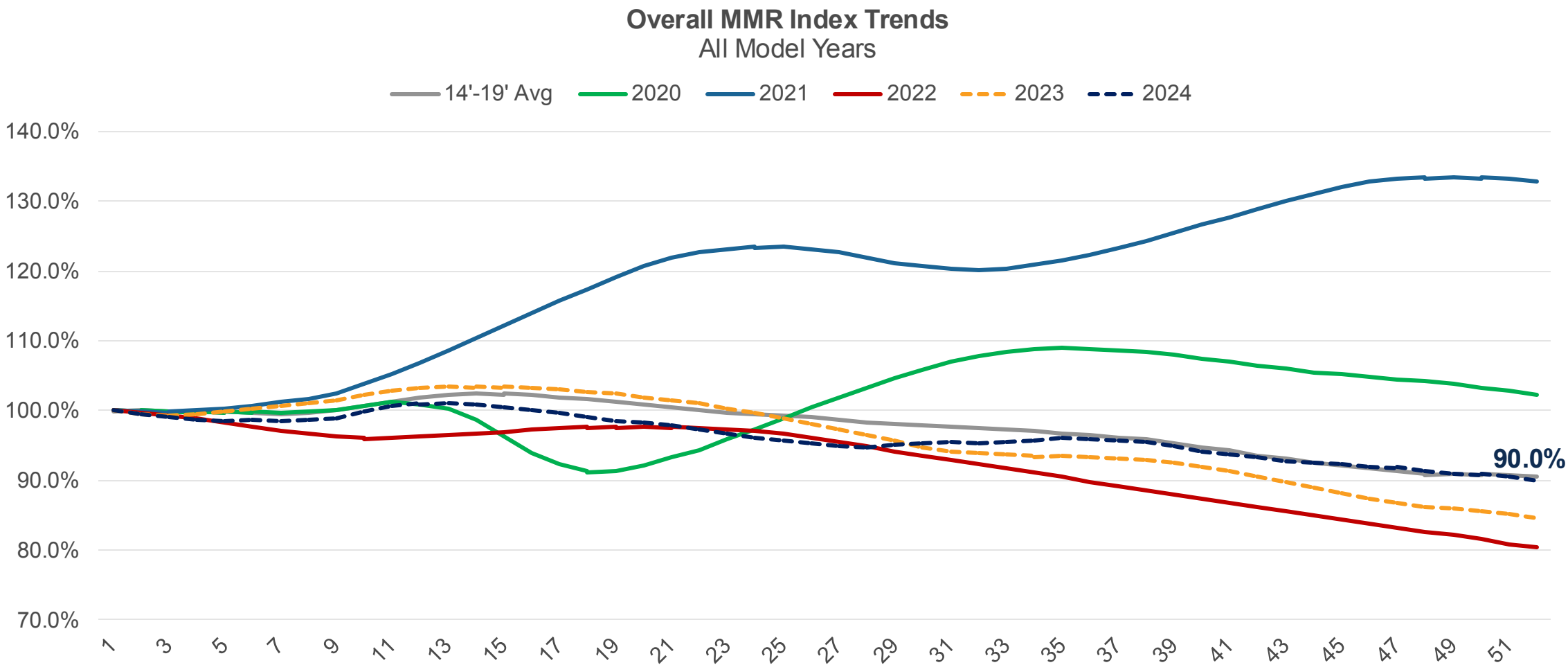
Wholesale Supply Rose at Year End – Seasonally Normal

Inventory is 10% higher Y/Y while Sales are up 13% as Days Supply rose to 30.4 Days, down 2% Y/Y



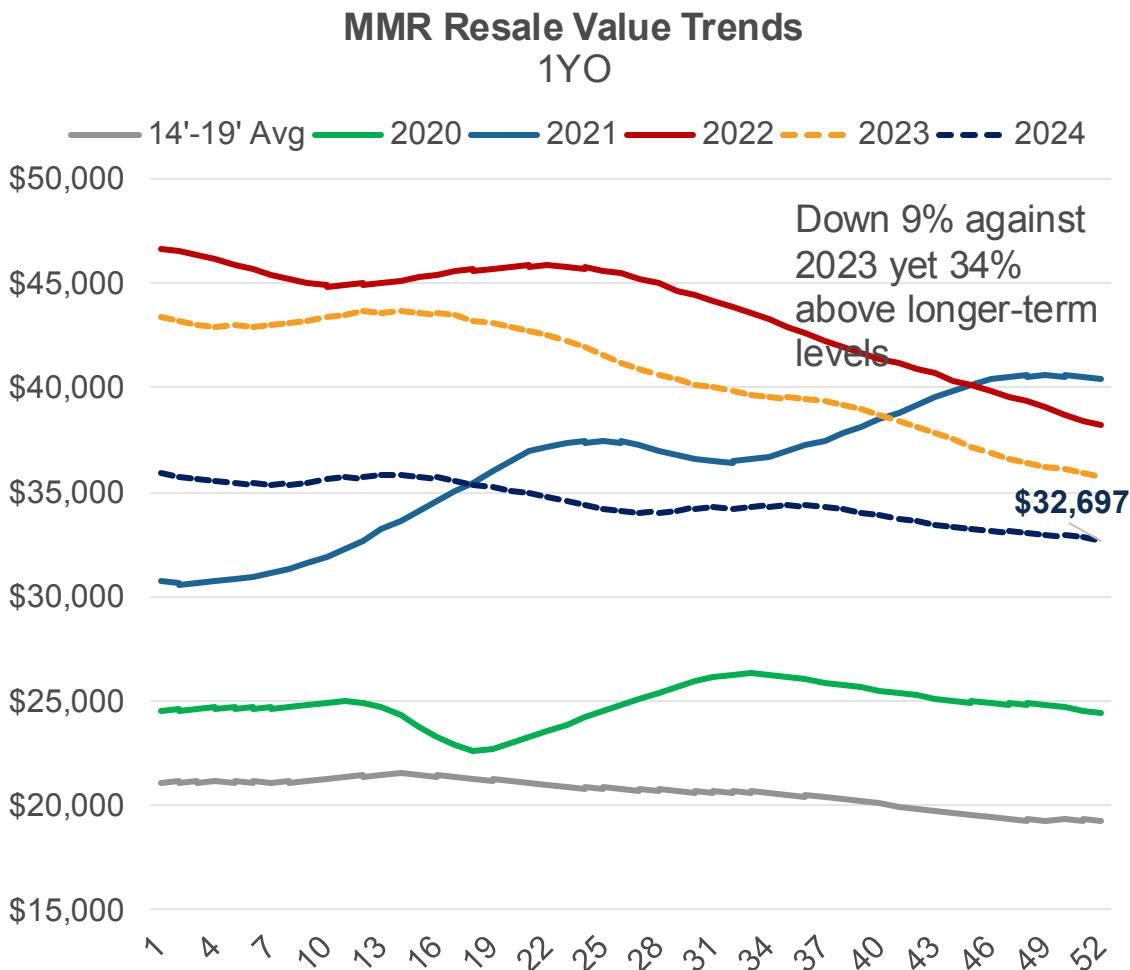
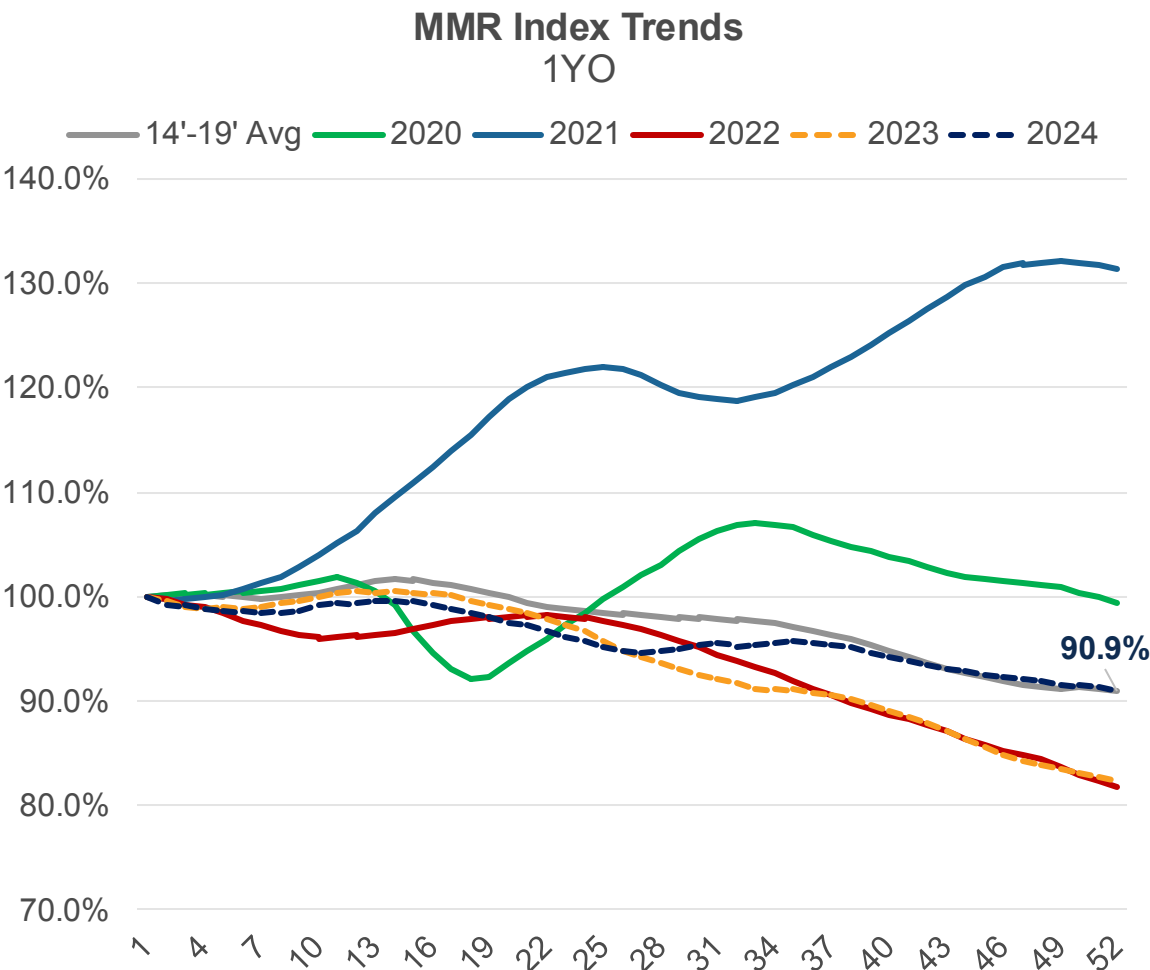
Overall Wholesale MMR Value Trends

Year-to-date wholesale values are just below the long-term trend but the path this year has varied



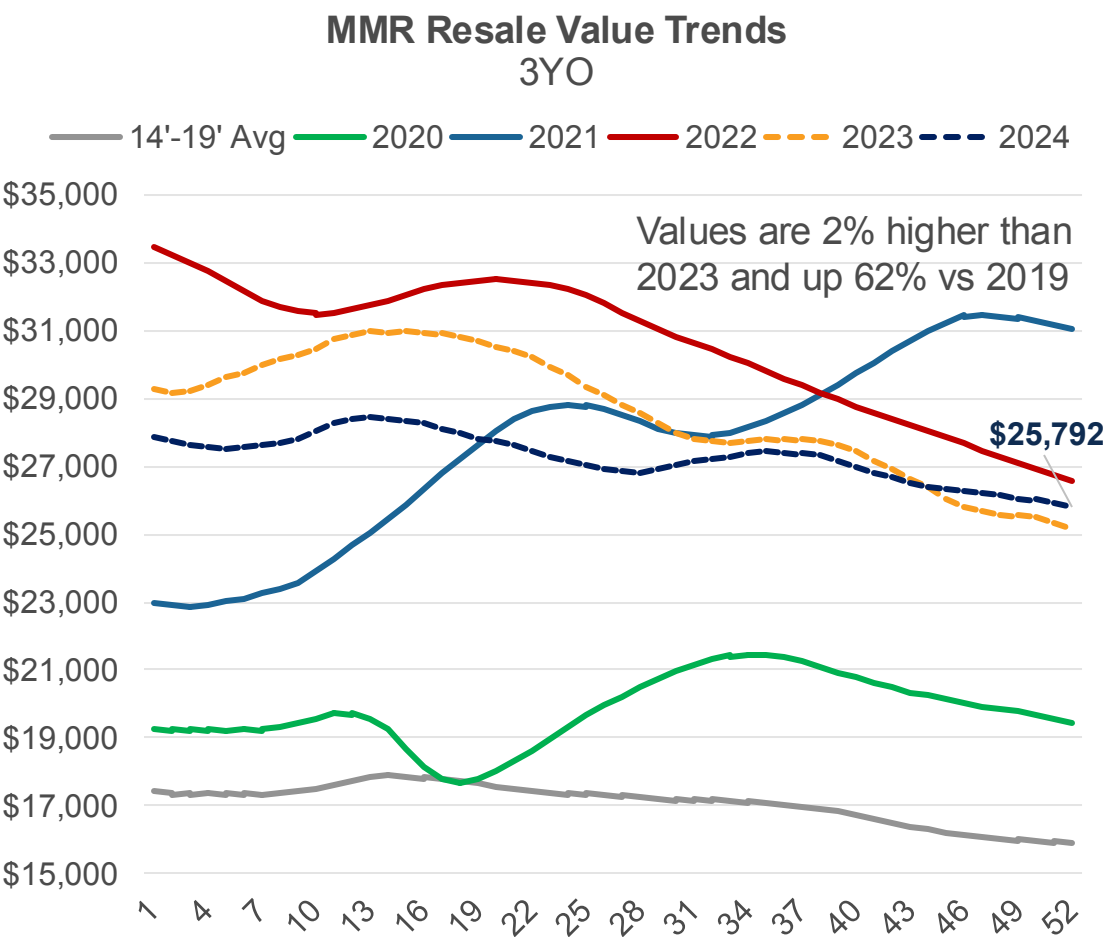
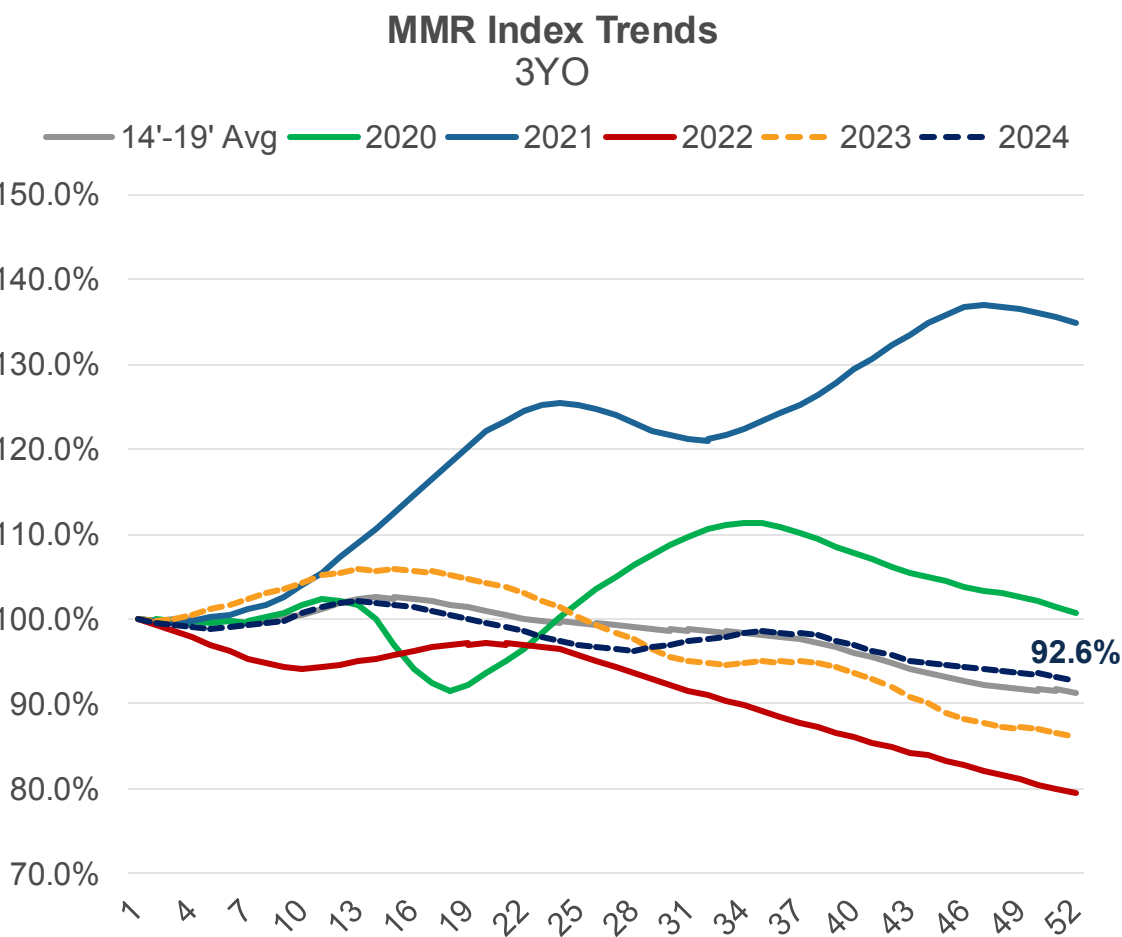
1YO MMR Index With Resale Values By Calendar Year

The 1YO has shown normal depreciation trends this year even as incentives have increased



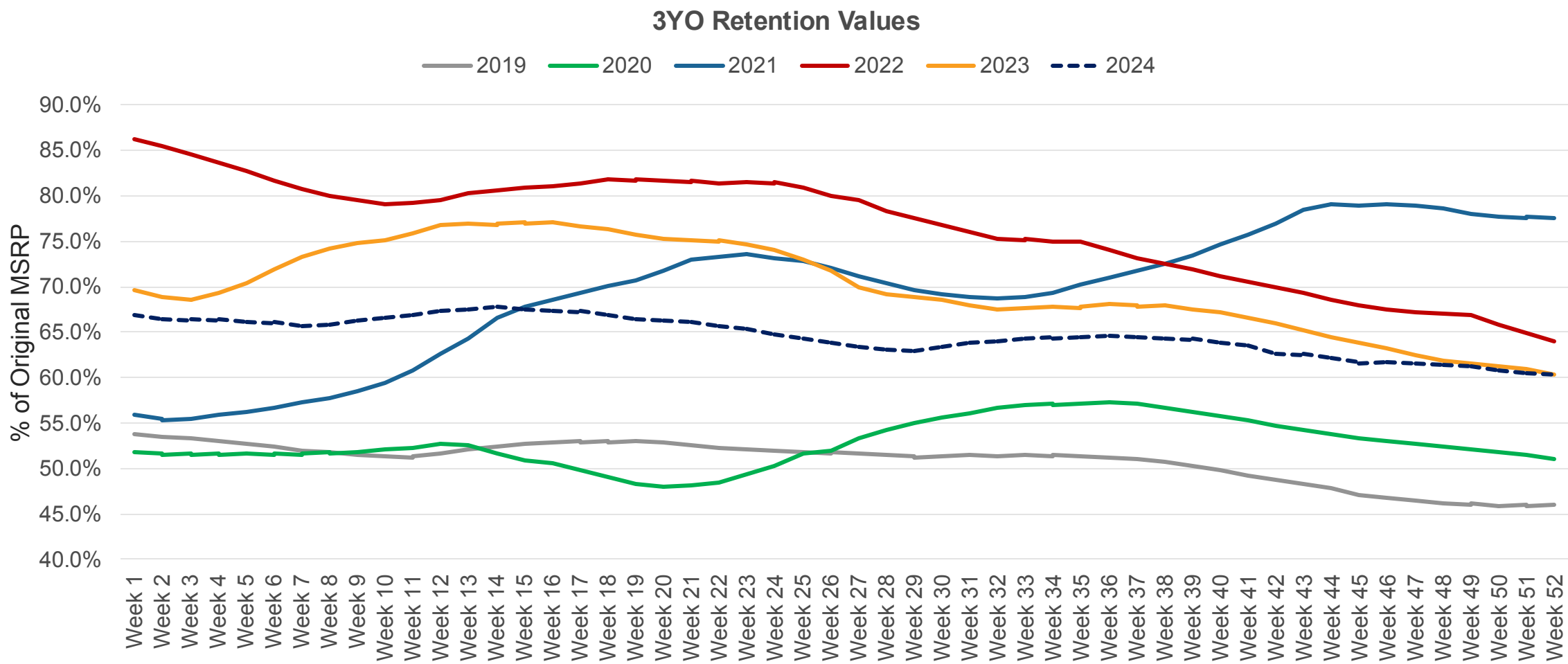
3YO MMR Index With Resale Values By Calendar Year

3YO values have continued to show less depreciation than other age segments over the course of 2024



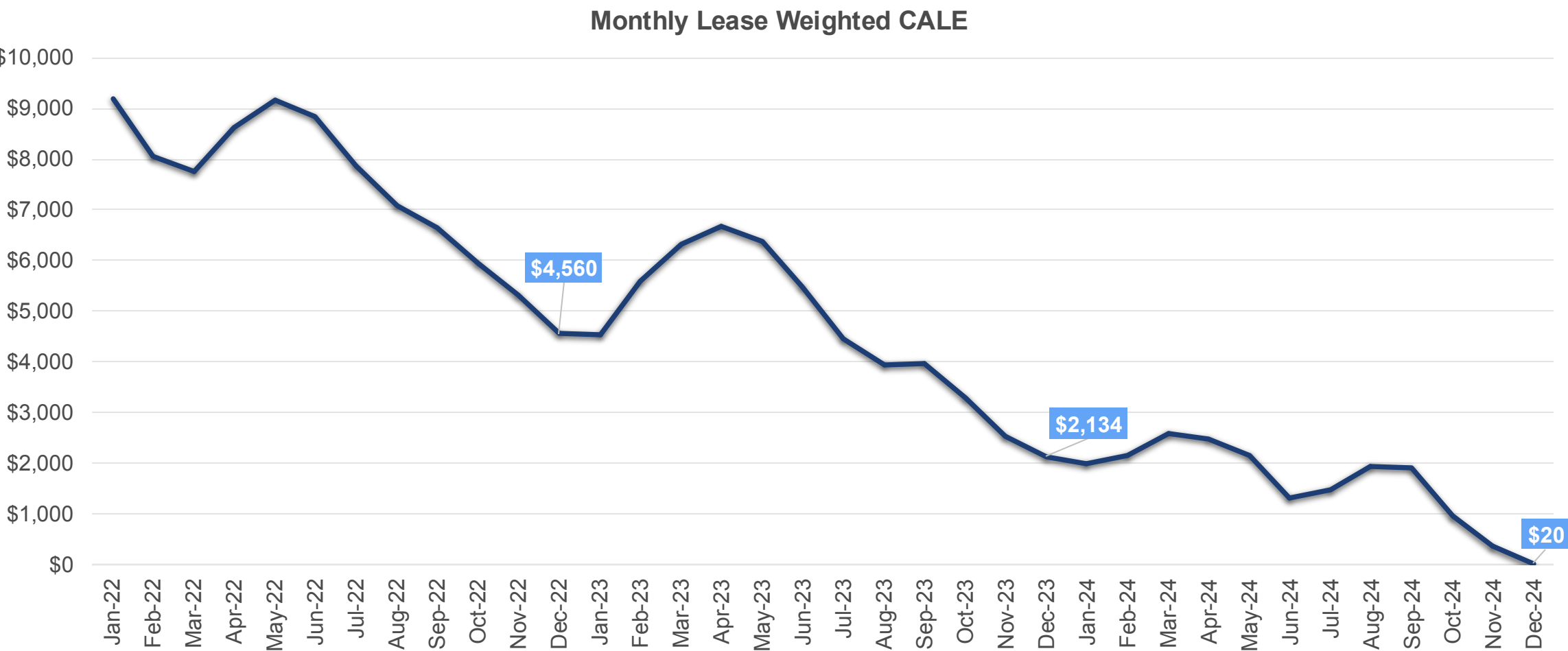
Retention Values at Auction

Retention values remain higher against historical standards but fell one point over the last month



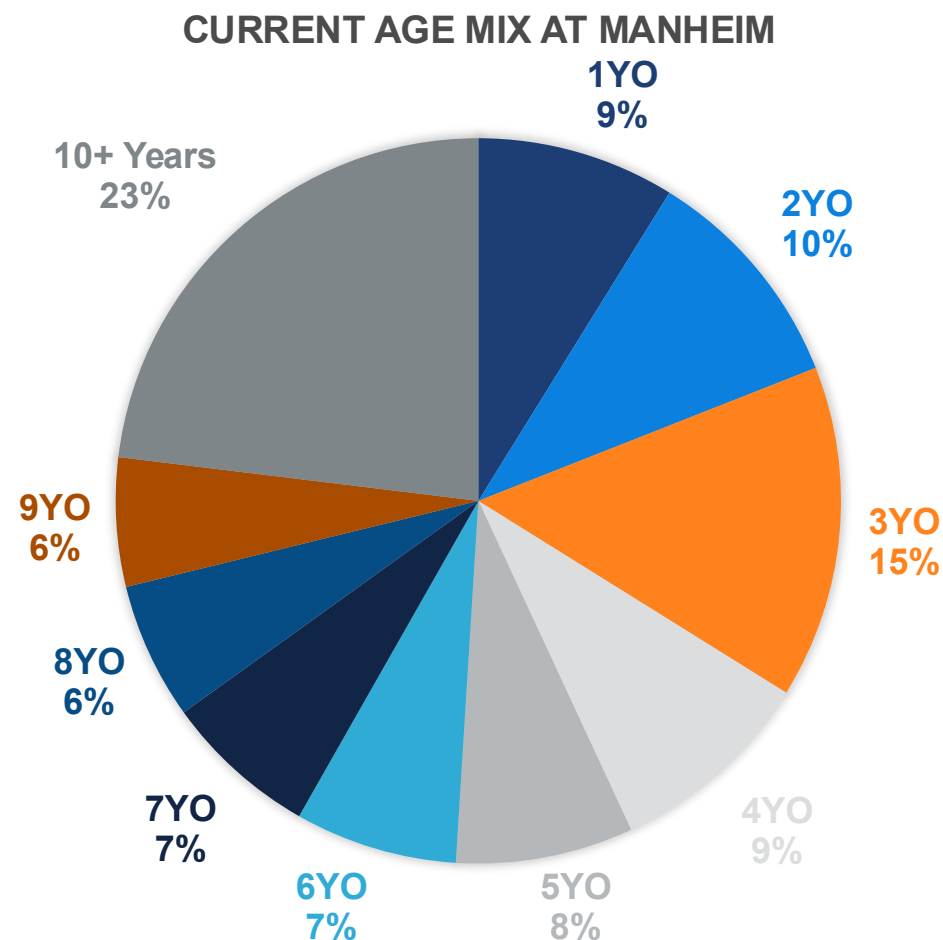
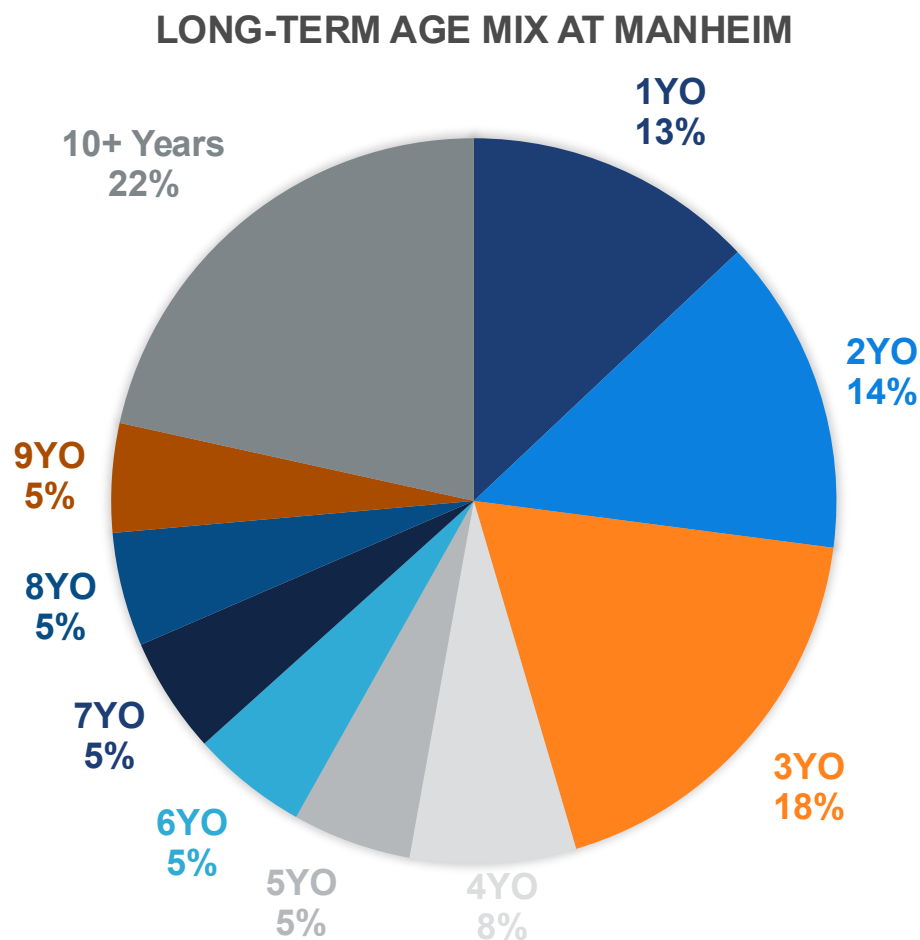
CALE: Lease Equity At The Lowest Point in Three Years

Lease equity remains slightly positive but is down substantially as residual values converge to market prices



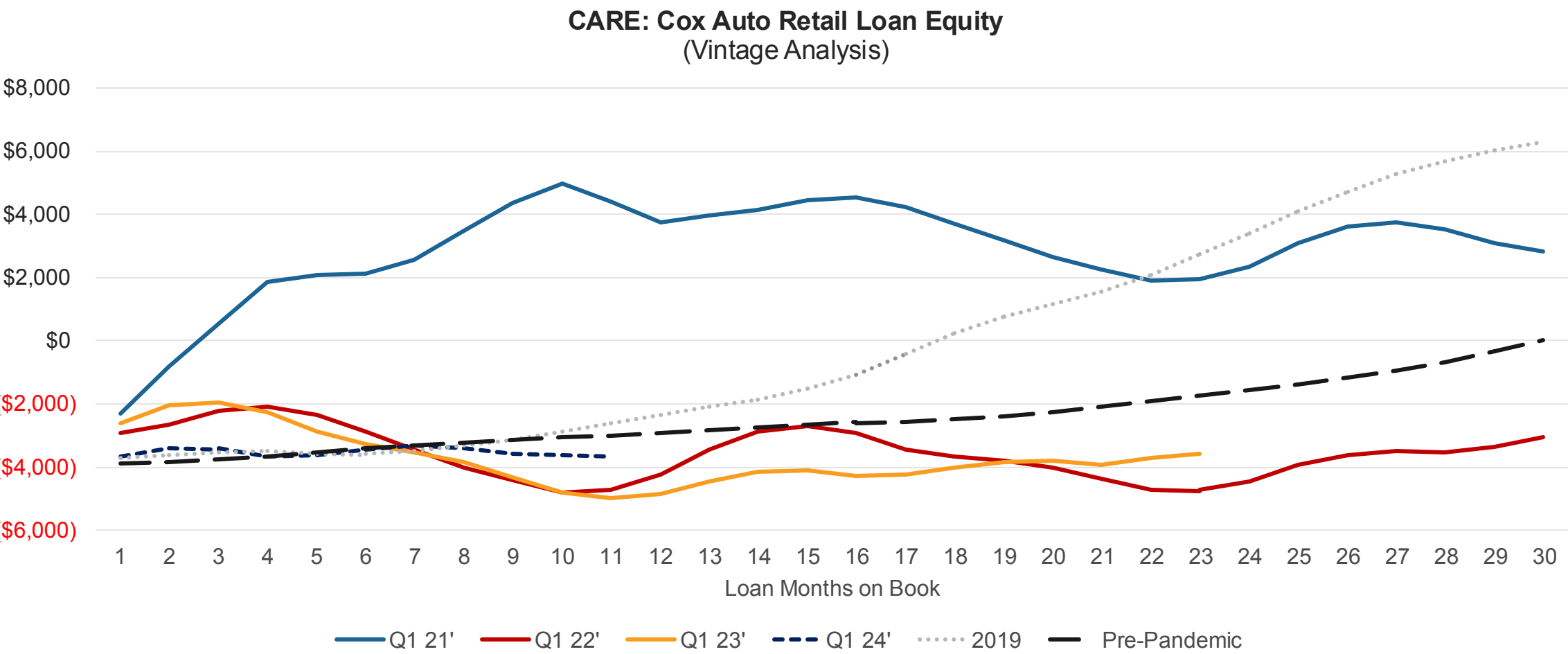
Sales Mix At Manheim

Total 1 to 3YO vehicles are 10 points less in mix at Manheim offset with gains in units older than 4 years old



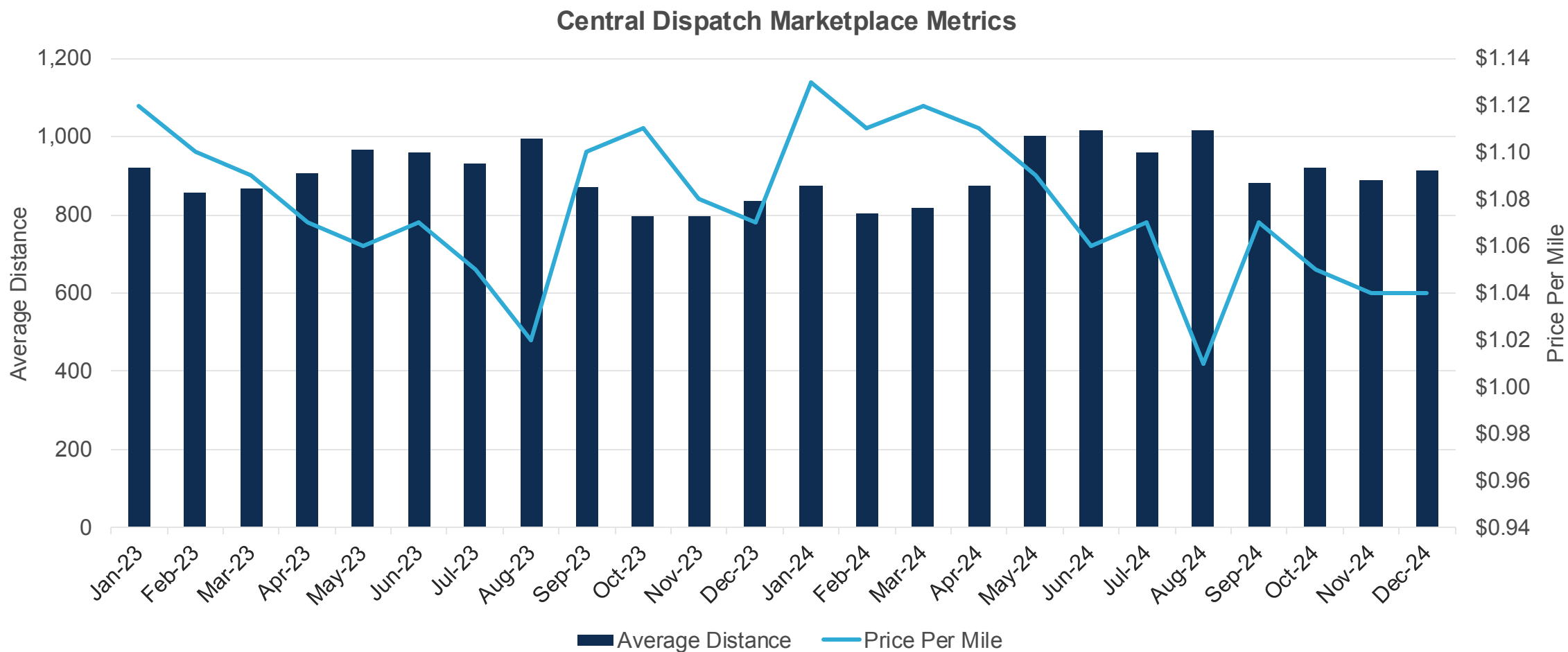
CARE: Loan Equity Performing Better Than Last Two Years

Current 2024 vintages show improvement in loan equity vs the last two years, still below long-term levels



Transportation Metrics: Prices and Mileage

Average miles moved up 9.6% year over year while Price Per Mile declined 2.8% against December 2023



Auction Data and Rental Market

Scott Vanner

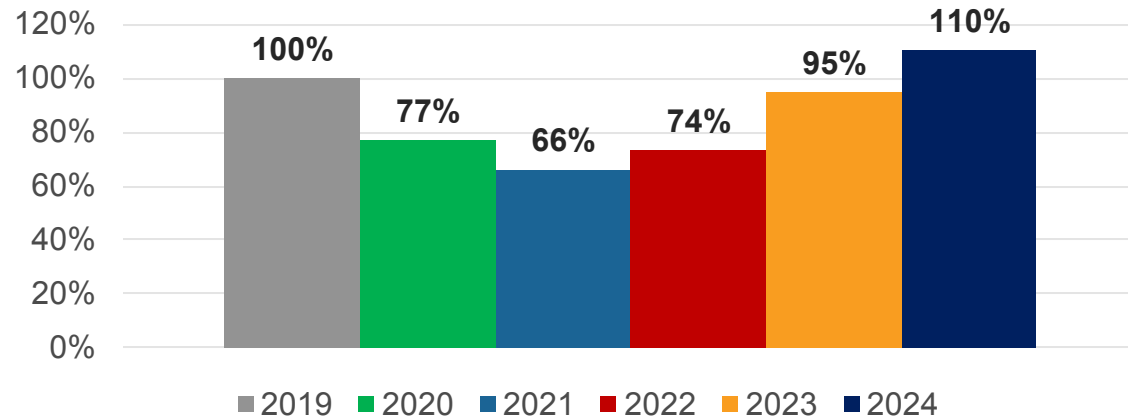
Senior Analyst of Economic and
Industry Insights



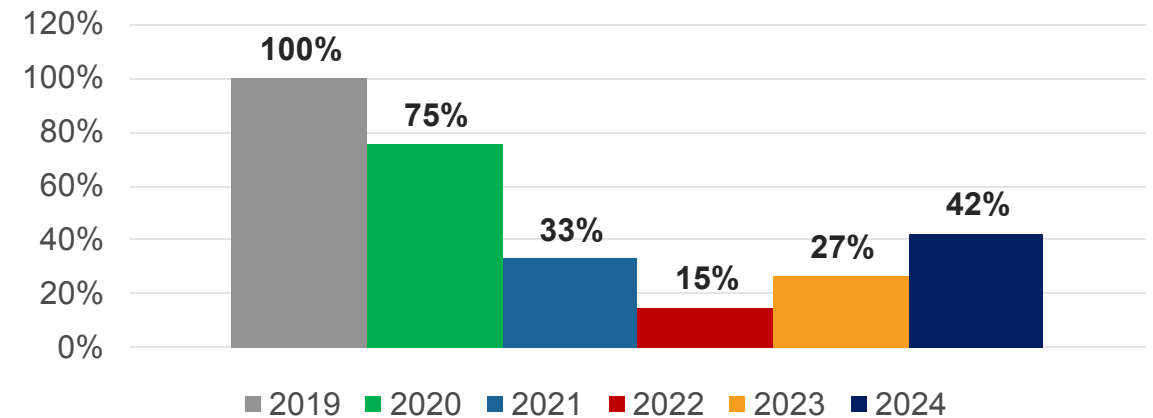
Auction Check-Ins for Commercial Segments

Repo holds higher against 2019, yet growth has slowed, while lease has slowed and rental has been stronger

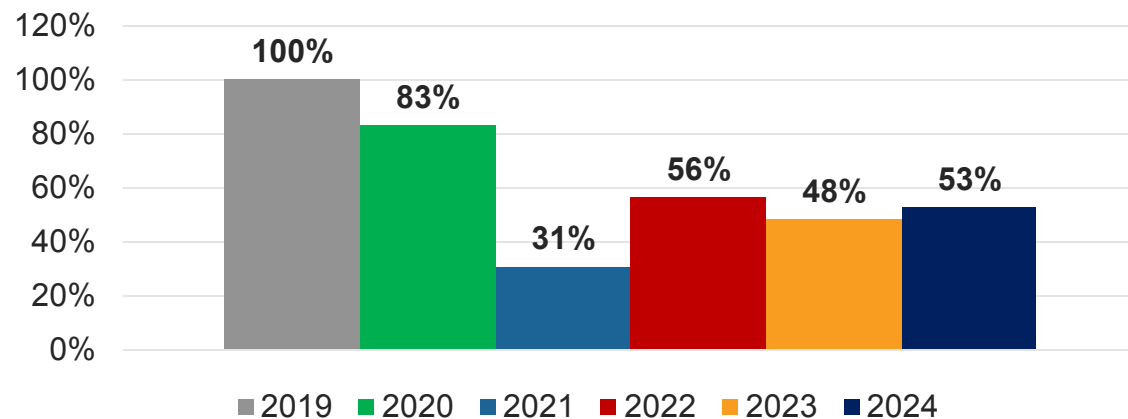
Repo Check-In Index
2019=100



Lease Check-In Index
2019=100



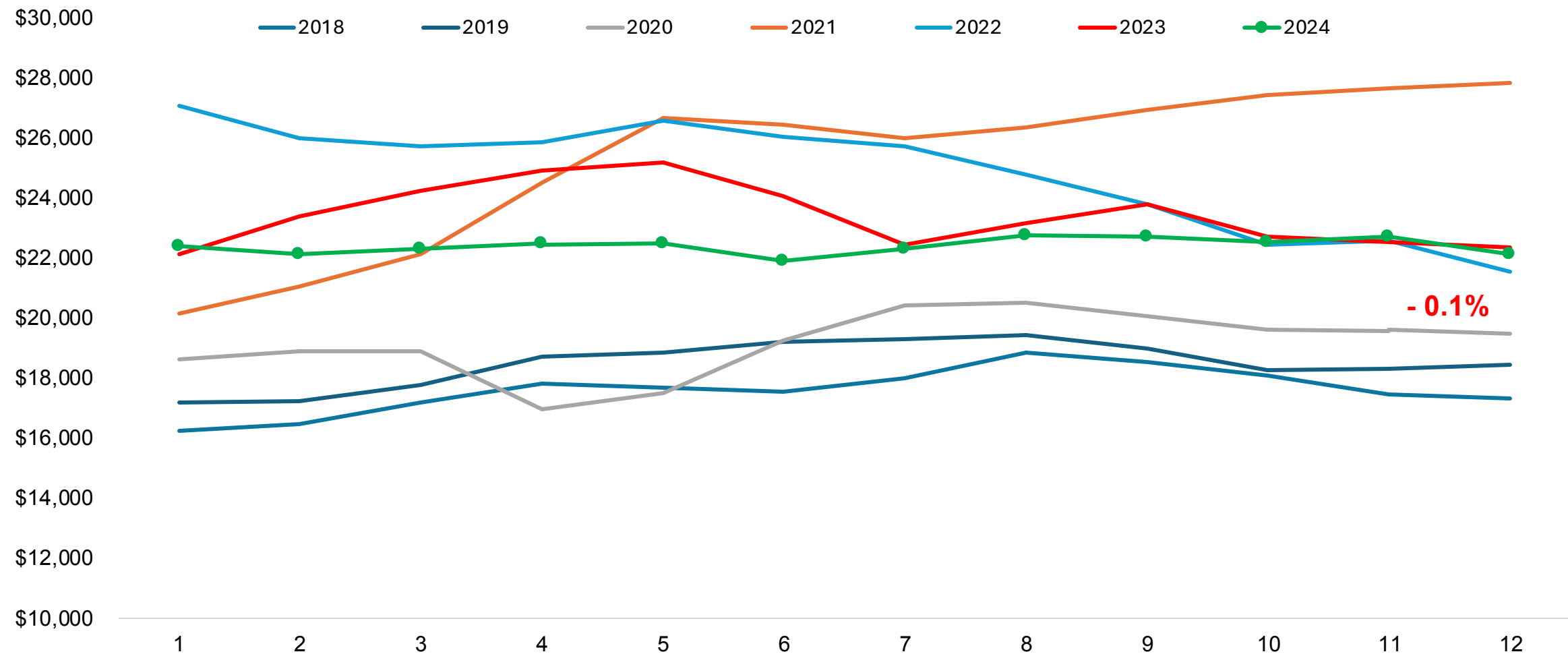
Rental Check-In Index
2019=100



- Repo +16% vs 23' & up +10% vs 19'
- Lease +65% vs 23' yet down (58%) vs 19'
- Rental up 10% vs 23' and down (47%) vs 19'

Rental Risk Average Auction Prices

Prices for units sold in December were down 0.1% year-over-year and down 0.3% from November



Rental Risk Vehicle Variety Increasing

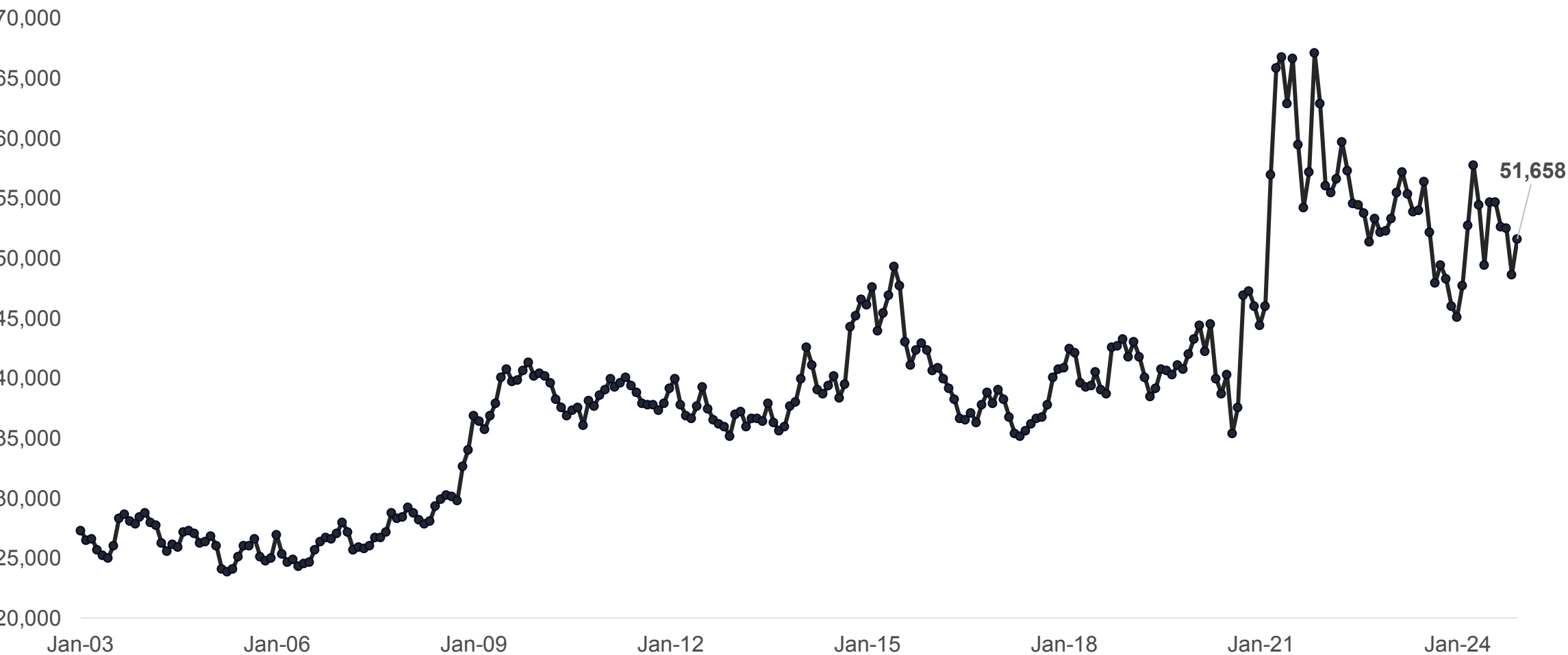
Auctions see less concentration of rental units sold from a configuration perspective

Rank	2022 Q4	2023 Q4	2024 Q4
Number of unique year, make, model, body configurations sold	4,164	3,886	4,541
Share accounted for top 10 YMMB	11.6%	14.3%	12.4%
Share accounted for top 25 YMMB	20.5%	24.8%	21.1%
Number of YMMB to reach 50% share	137	107	160



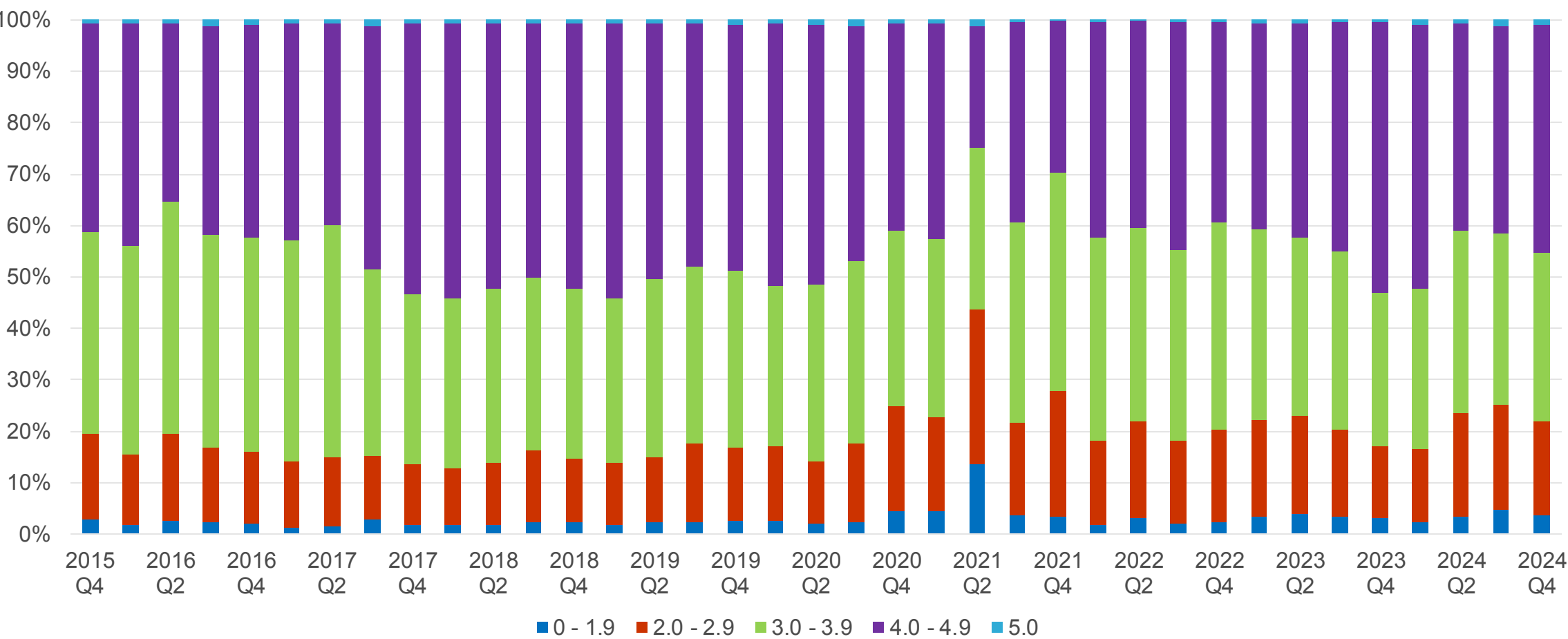
Rental Risk Average Mileage

Average mileage was up 6% compared to November and up 12% from December 2023



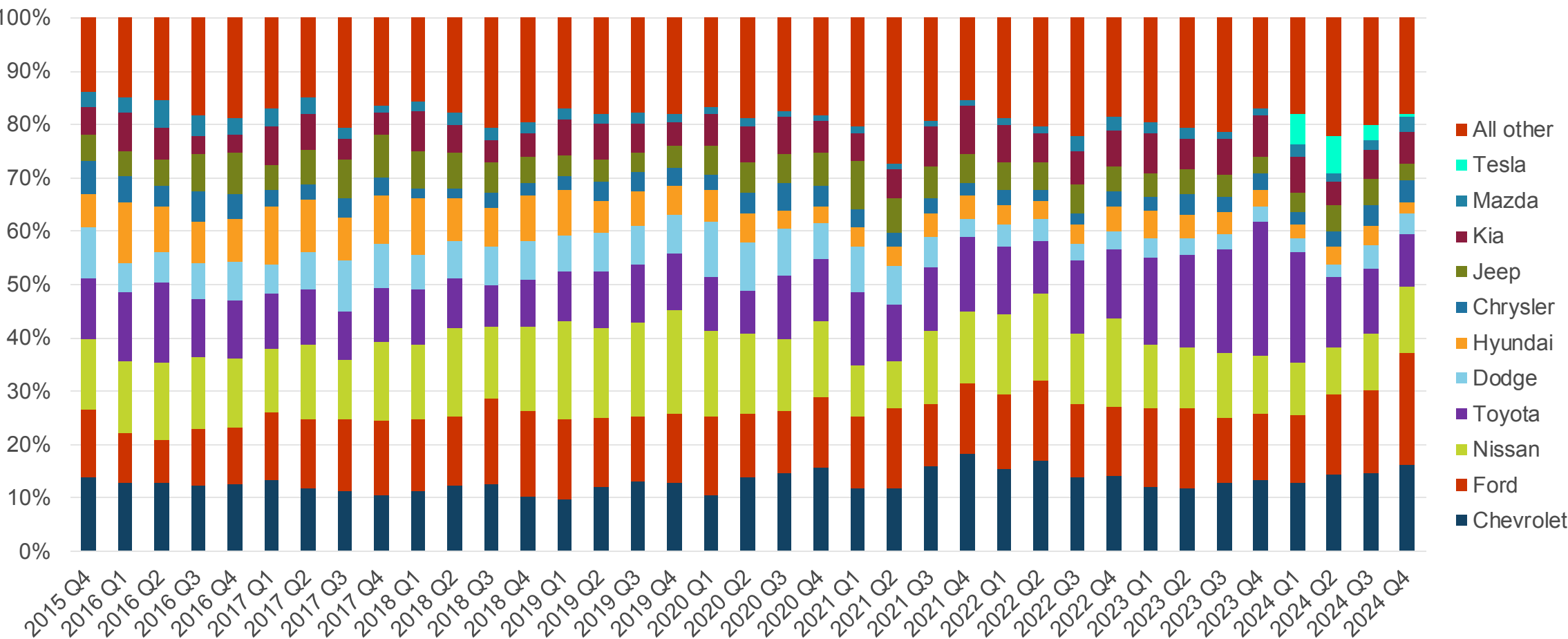
Rental Risk Sales Condition

A jump in share of higher graded units from previous quarter as share of lower graded units shrink slightly



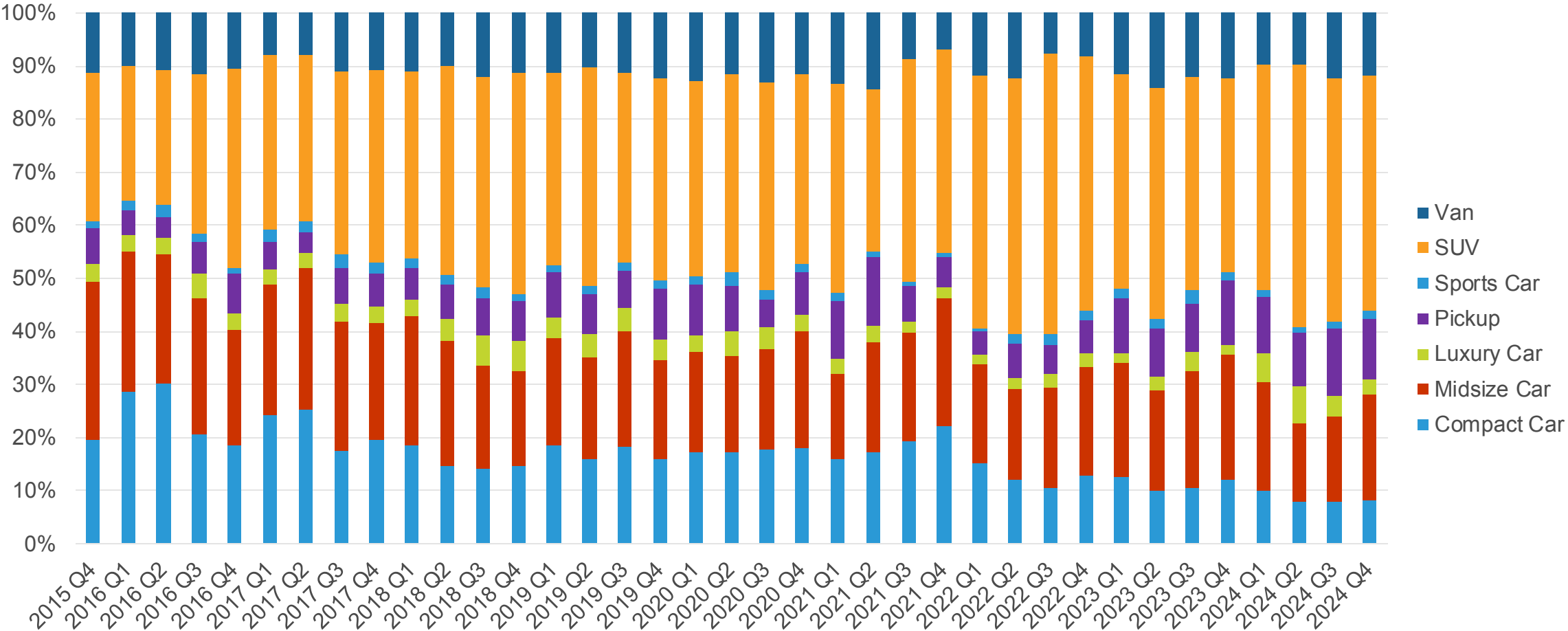
Rental Risk Sales By Make

Tesla's share continues to drop as Ford makes large gains



Rental Risk Sales by Vehicle Segment

Compact, Midsize, and Sports Cars are up, while all other segments are down from Q3 2024



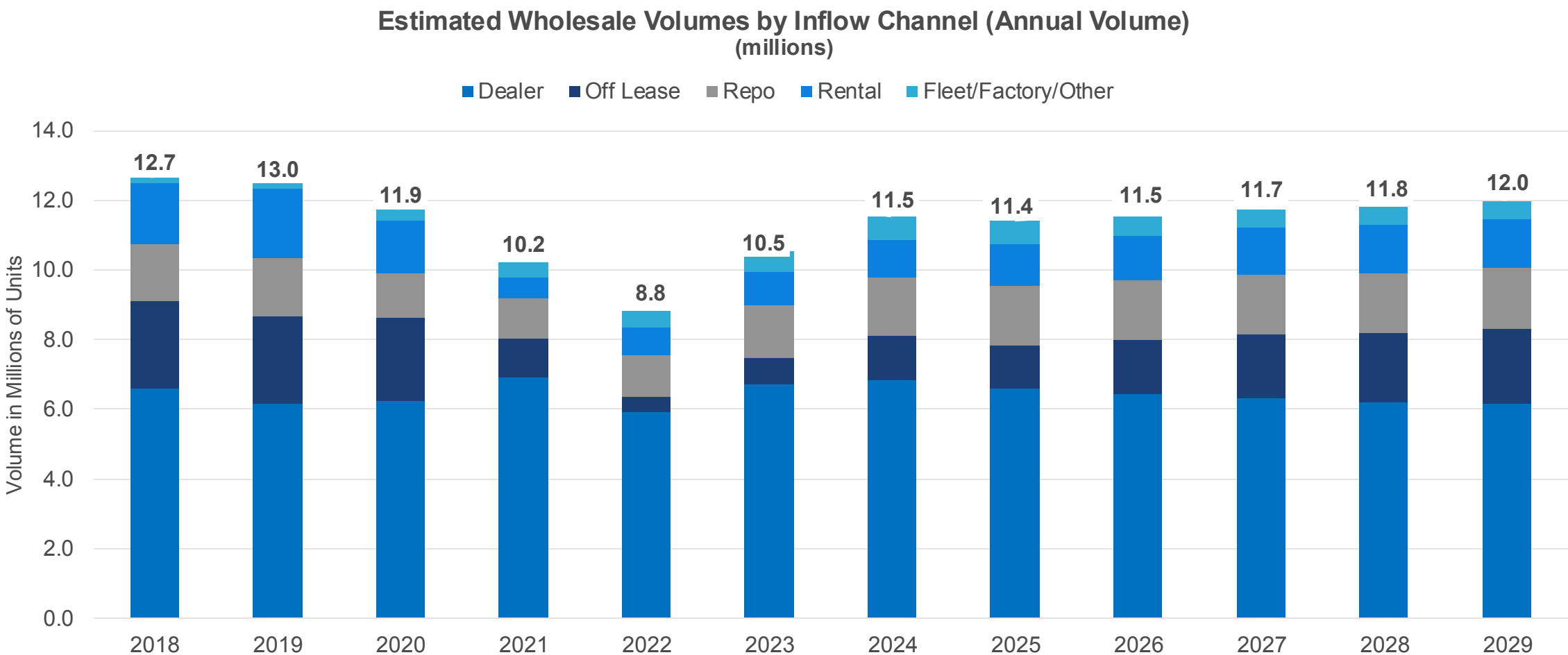
Manheim Insights on Top Volume Vehicles

Price trends on top selling vehicles in December showed the 2022 Malibu in several top categories

Rank	Source(Rank)	Category	Subcategory	Vehicle	Dec-25	Past 30 Days	Last Year	Current Dep	L12M Dep/Mo
1	All	MIDSIZE CAR	ENTRY MIDSIZE CAR	2022 CHEVROLET MALIBU 4D SEDAN LT	\$15,157	\$15,708	\$17,475	-3.5%	-1.1%
2	All	SUV	LUXURY SUV	2024 VOLVO XC90 HYBRID 4D SUV B5 PLUS BRIGHT THEME	\$36,353	\$36,358		0.0%	
3	All	SUV	LUXURY SUV	2024 VOLVO XC60 HYBRID 4D SUV PLUS DARK THEME	\$30,973	\$31,042		-0.2%	
4	All	MIDSIZE CAR	ENTRY MIDSIZE CAR	2023 CHEVROLET MALIBU 4D SEDAN 1LT	\$16,700	\$17,125	\$18,279	-2.5%	-0.7%
5	All	COMPACT CAR	PREMIUM COMPACT CAR	2021 TOYOTA COROLLA 4D SEDAN LE	\$14,633	\$15,313	\$15,888	-4.4%	-0.7%
1 Dealer	Dealer	MIDSIZE CAR	ENTRY MIDSIZE CAR	2022 CHEVROLET MALIBU 4D SEDAN LT	\$15,157	\$15,708	\$17,475	-3.5%	-1.1%
1 Lease	Lease	SUV	LUXURY SUV	2022 VOLVO XC60 AWD HYBRID 4D SUV B5 MOMENTUM	\$26,213	\$27,192	\$31,692	-3.6%	-1.4%
1 Rental	Rental	MIDSIZE CAR	ENTRY MIDSIZE CAR	2022 CHEVROLET MALIBU 4D SEDAN LT	\$15,157	\$15,708	\$17,475	-3.5%	-1.1%

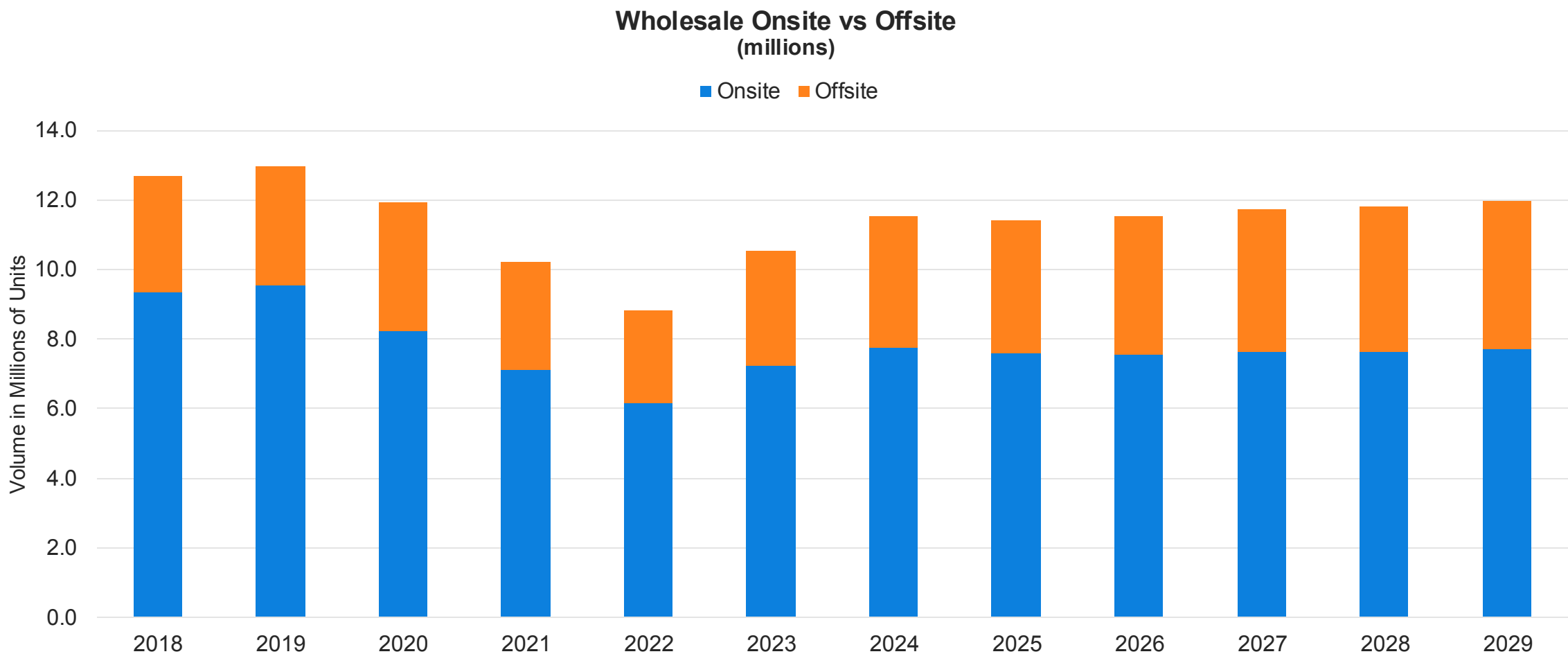
Wholesale Flows Bottomed in 2022

The wholesale market rebounded in the last two years, but growth will falter over 2025/2026



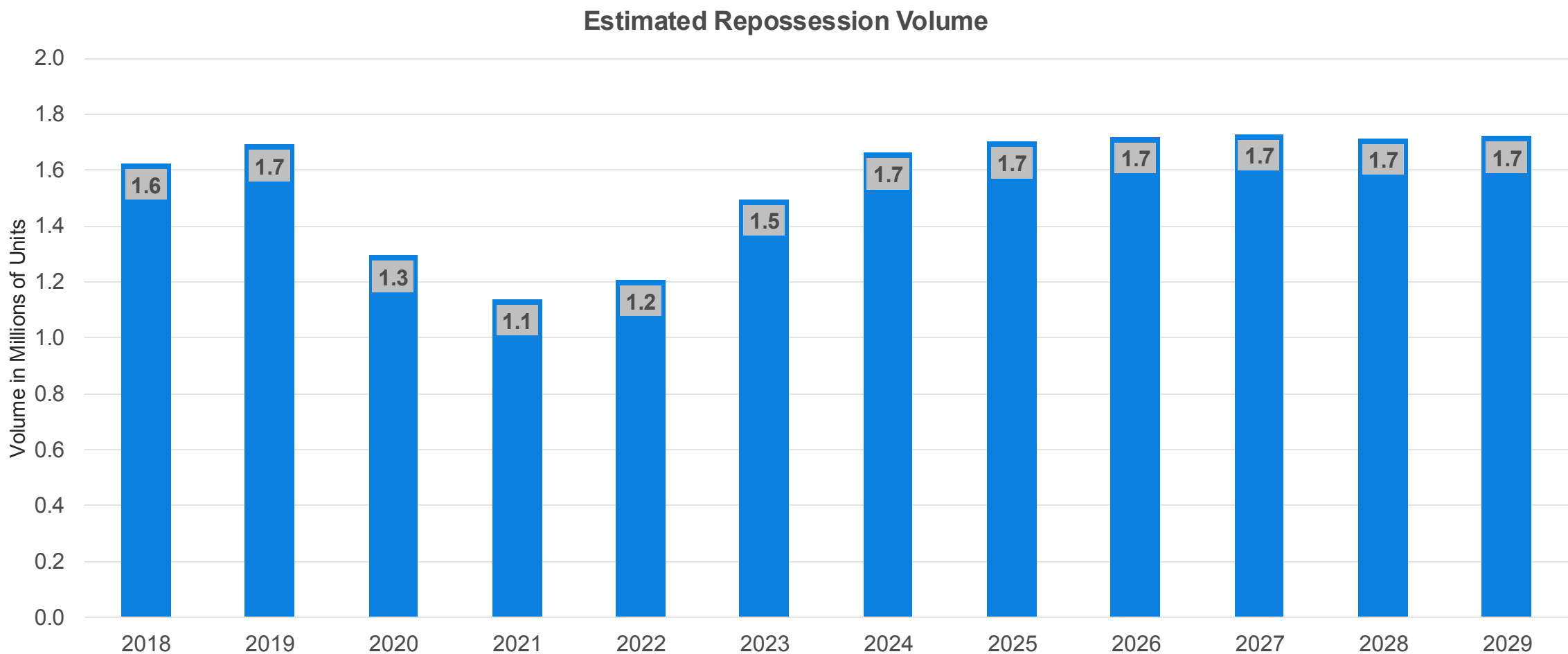
Onsite Physical Auction Market Does Not Fully Recover

With gradual shift to more transactions offsite and fully digital, onsite volume in 2029 is expected to be down 19% vs 2019



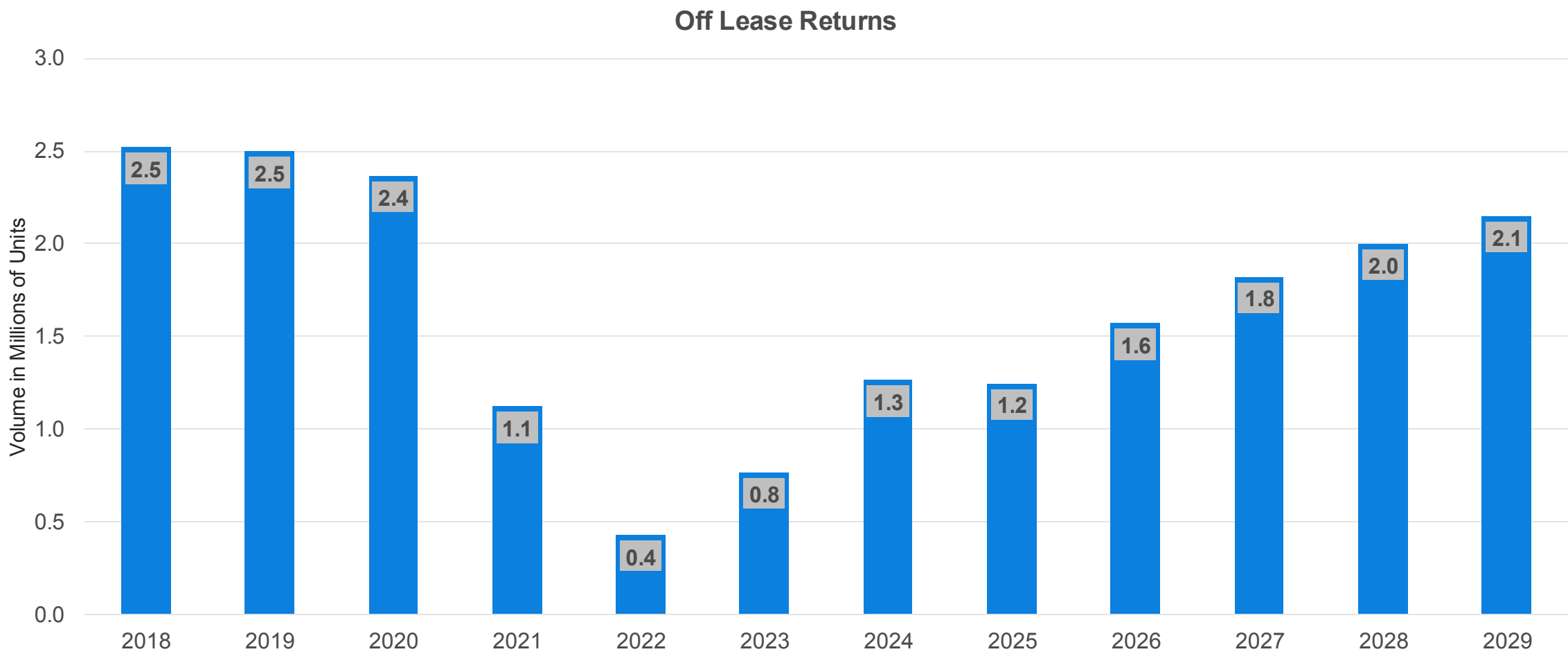
Repo Recovery Will Be More Normal

Longer term expect normalized default rates but low loan growth has an impact



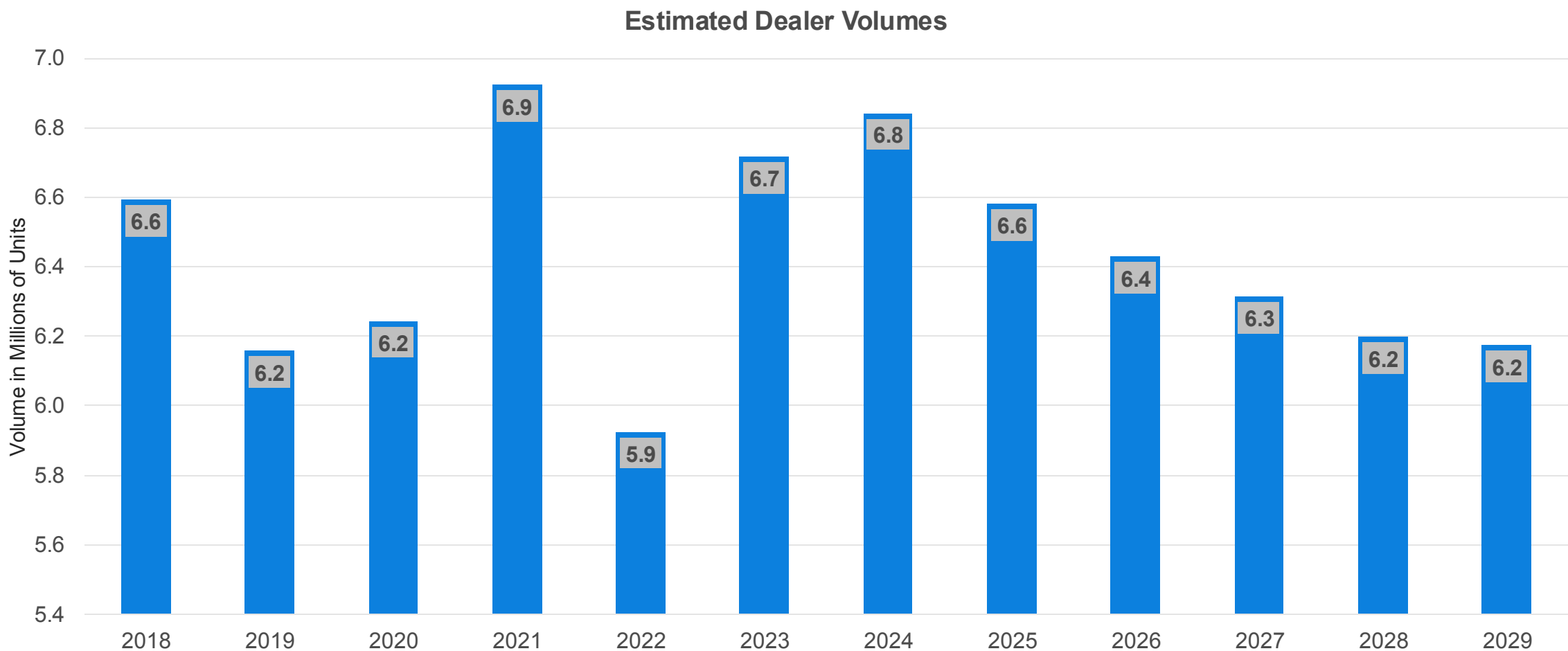
Off Lease Return Rate Will Grow But Maturities Fall Faster

Return rate hit historical low of 11% in 2022 vs. 62% in 2019, lease equity and maturities declining in 2025



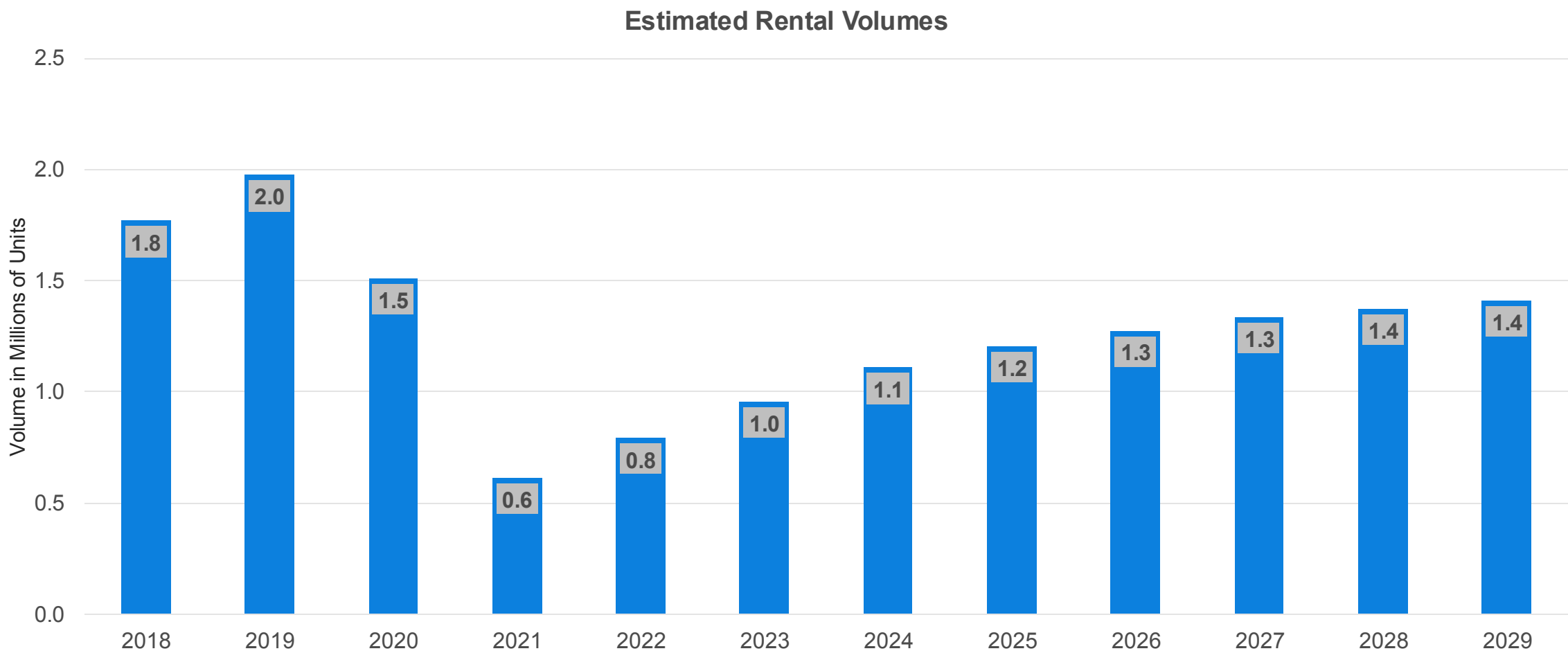
Dealer Volumes Peaked in 2021: Declining in Coming Years

Off-lease arbitrage and record retail sales powered 2021 but higher retail rates lower wholesale offloading



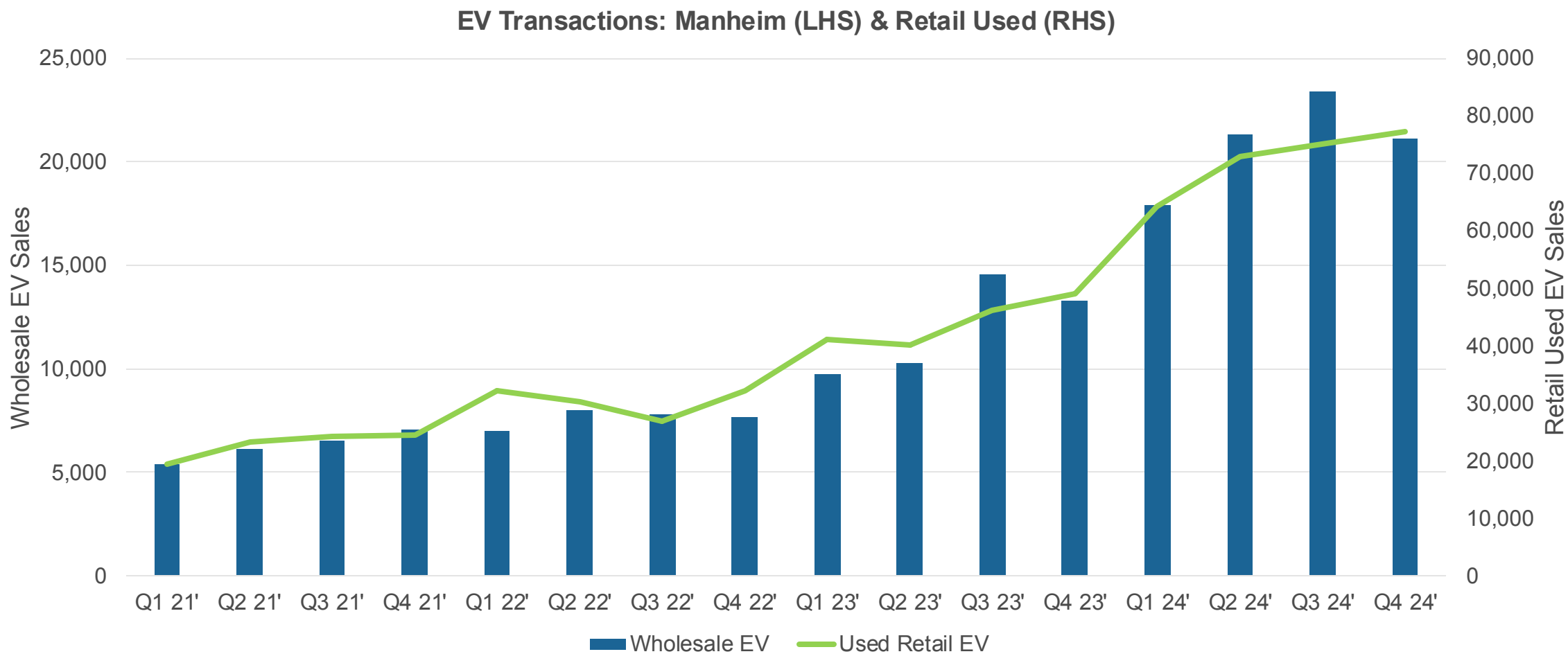
Rental Volumes Improve But Recovery Is Slow & Steady

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



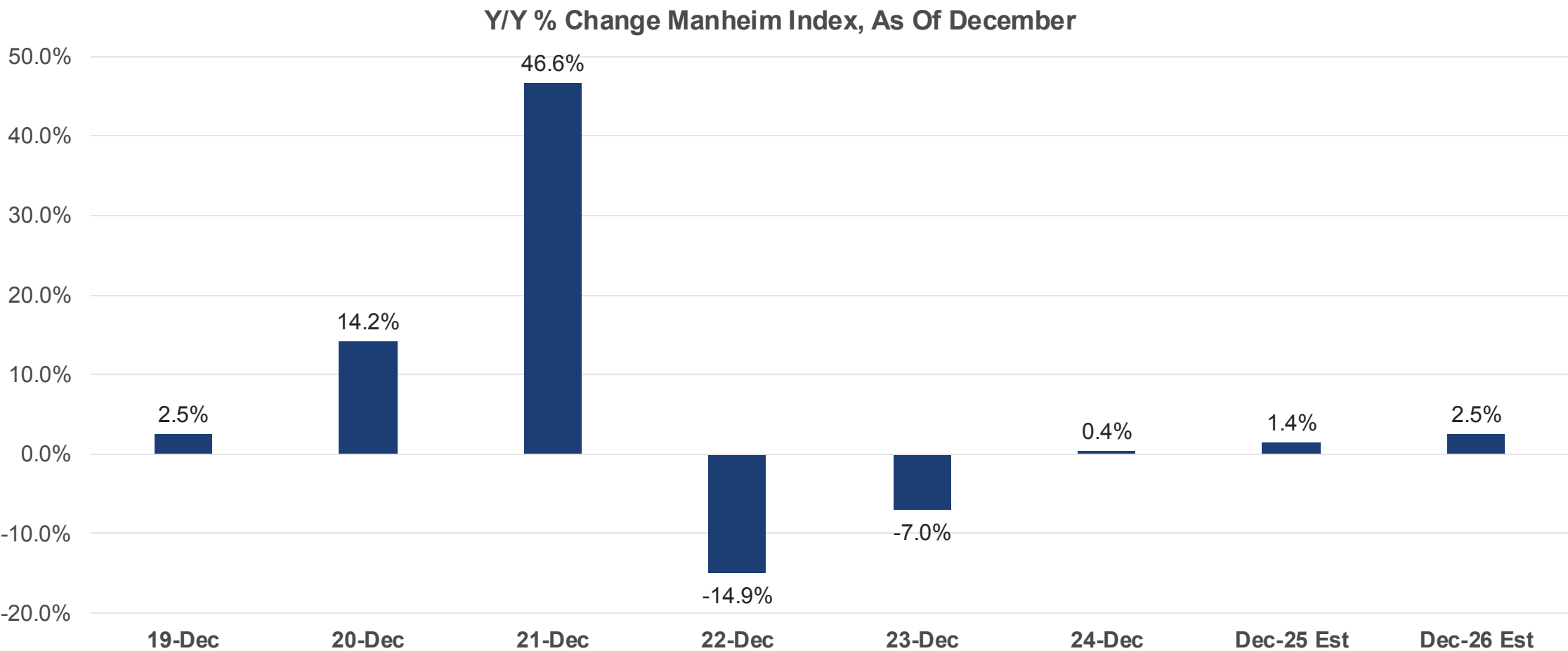
EV Transactions

Manheim EV sales are up 59% in Q4 Y/Y while used retail EV transactions have grown 57% over the same time



Used Vehicle Value Outlook Returning To Normal

2024 saw more normal depreciation trends vs previous years and we expect normalization to continue in 2025



2025 Forecasts

Updated Jan. 3, 2025

16.3M

NEW SALES

(+2.8% versus 2024)

13.3M

NEW RETAIL SALES

(+1.7 versus 2024)

3.0M

FLEET SALES

(+7.7% versus 2024)

3.3M

**NEW LEASE
VOLUME**

(+4.2% versus 2024)

25%

**LEASE
PENETRATION**

(+1.0% versus 2024)

2.5M

CPO SALES

(-1.6% versus 2024)

37.8M

USED SALES

(+1.0% versus 2024)

20.1M

USED RETAIL SALES

(+1.2% versus 2024)

+1.4%

**DEC 2025 Y/Y MANHEIM
USED VEHICLE
VALUE INDEX**

COX AUTOMOTIVE

Q&A



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

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COX AUTOMOTIVE

THANK YOU FOR ATTENDING!

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to speak with an expert:

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