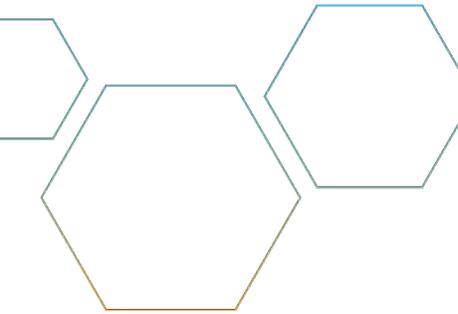




INDUSTRY INSIGHTS 2024 WEBCAST

January 8, 2024



COX AUTOMOTIVE



WHERE IT ALL CONNECTS

The most complete and connected ecosystem

COX AUTOMOTIVE

Autotrader 

 CentralDispatch

 Dealer.com

 Dealertrack

 EV Battery Solutions

 FleetNet America

 Fleet Services

 **Kelley Blue Book**

 Manheim

 NextGear Capital

 vAuto

 VinSolutions

 xtime

AGENDA

Time Check: 60 Minutes

Intro & Cox Automotive

Forecast: 2024

New-Vehicle Market

Electric Vehicle Market

Wholesale and Used-Vehicle Markets

2024 Forecasts & Playlist

Q&A

Mark Schirmer, Director, Corporate Communications

Jonathan Smoke, Chief Economist

Charlie Chesbrough, Senior Economist

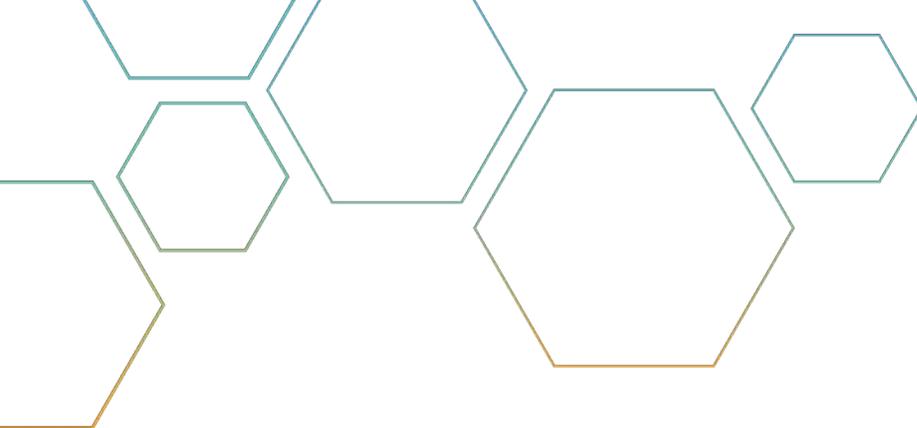
Stephanie Valdez Streaty, Director, Industry Insights

Jeremy Robb, Senior Director, Economic and Industry Insights

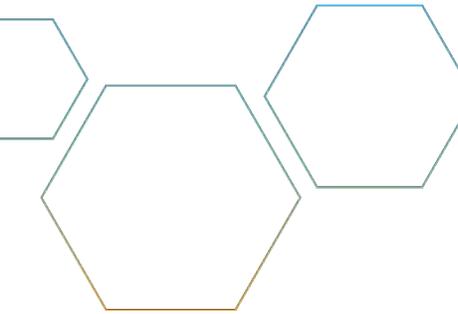
Jonathan Smoke, Chief Economist and Resident DJ

w/ Michelle Krebs, Executive Analyst

Erin Keating, Senior Director, Economic and Industry Insights



FORECAST: 2024



JONATHAN SMOKE

Chief Economist

COX AUTOMOTIVE



FORECAST: 2024

5 themes to look for in '24

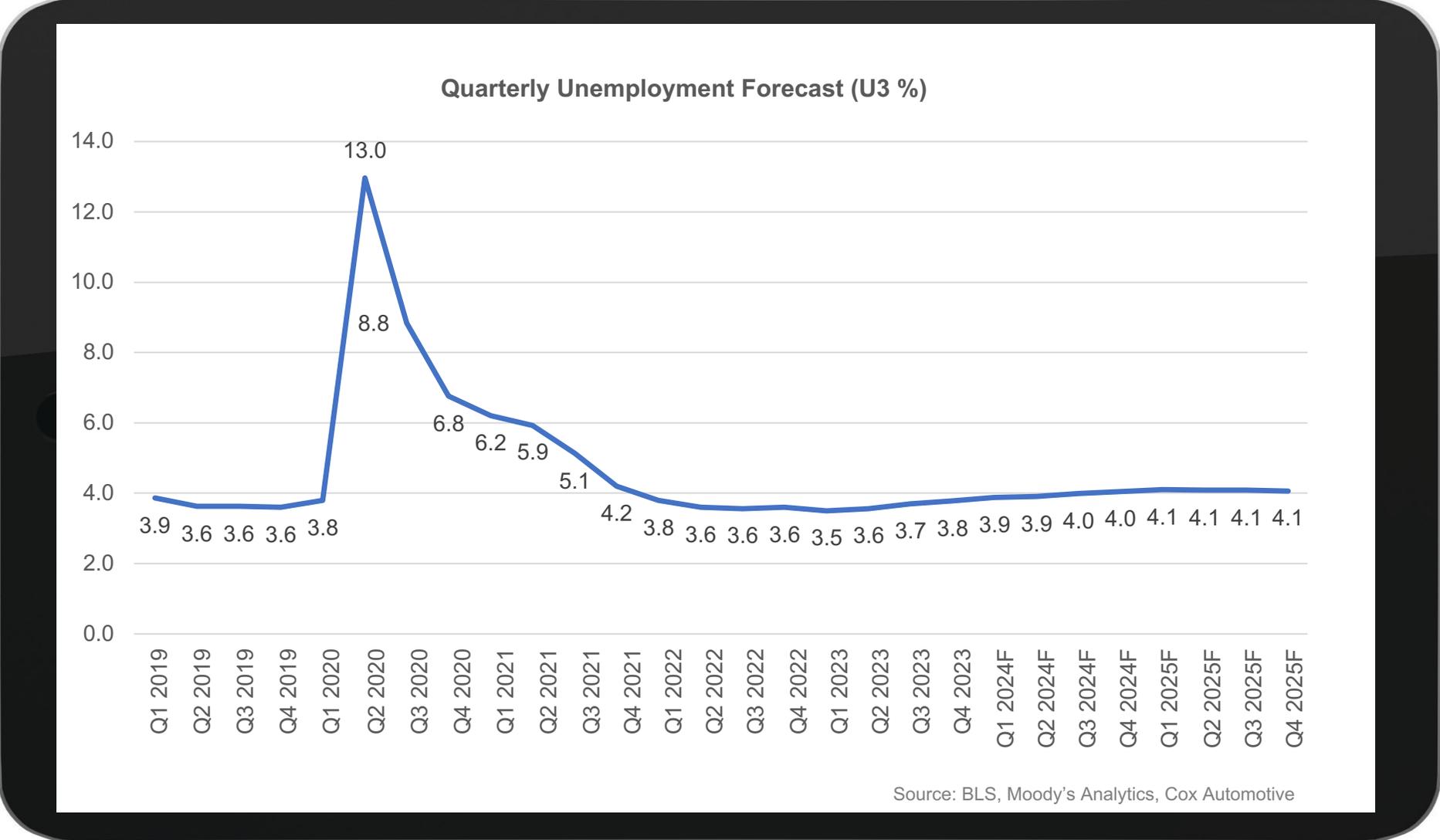
1. **Slow Growth Ahead**, But It Beats a Recession.
2. **Vehicle Supply Is Back to Favoring Consumers**, with Downward Pressure on Prices.
3. In 2024, We Officially **Bid Farewell to the Seller's Market**.
4. In the Electric Vehicle Market, 2024 Will Be the **Year of More**.
5. Car Buying in America: **Normal Is Nice**.



SLOW GROWTH AHEAD | An Economic Roadmap for 2024



SLOW GROWTH AHEAD | Weak but Stable Job Market

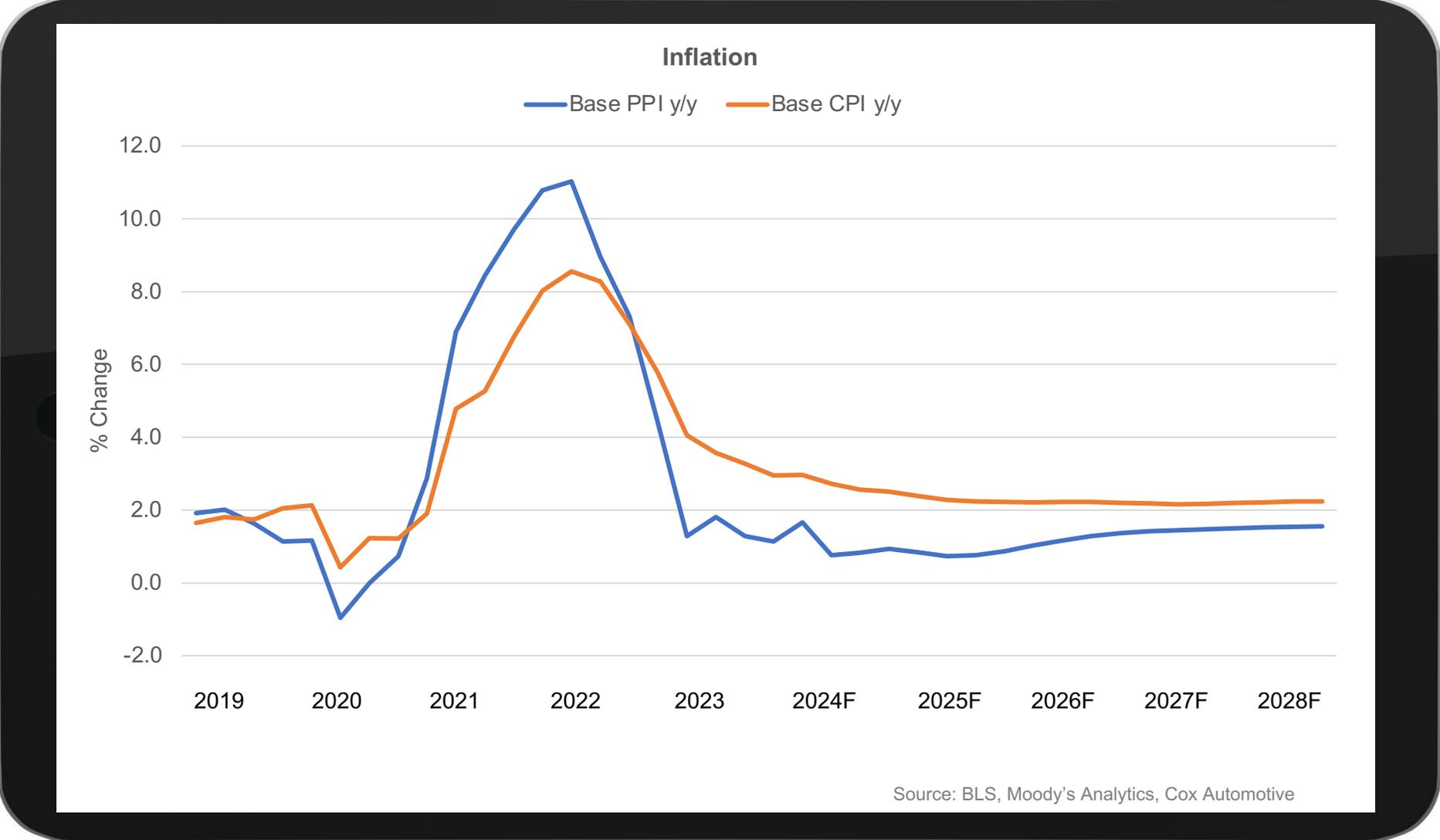


Source: BLS, Moody's Analytics, Cox Automotive

SLOW GROWTH AHEAD | An Economic Roadmap for 2024



SLOW GROWTH AHEAD | Inflation Declines in 2024

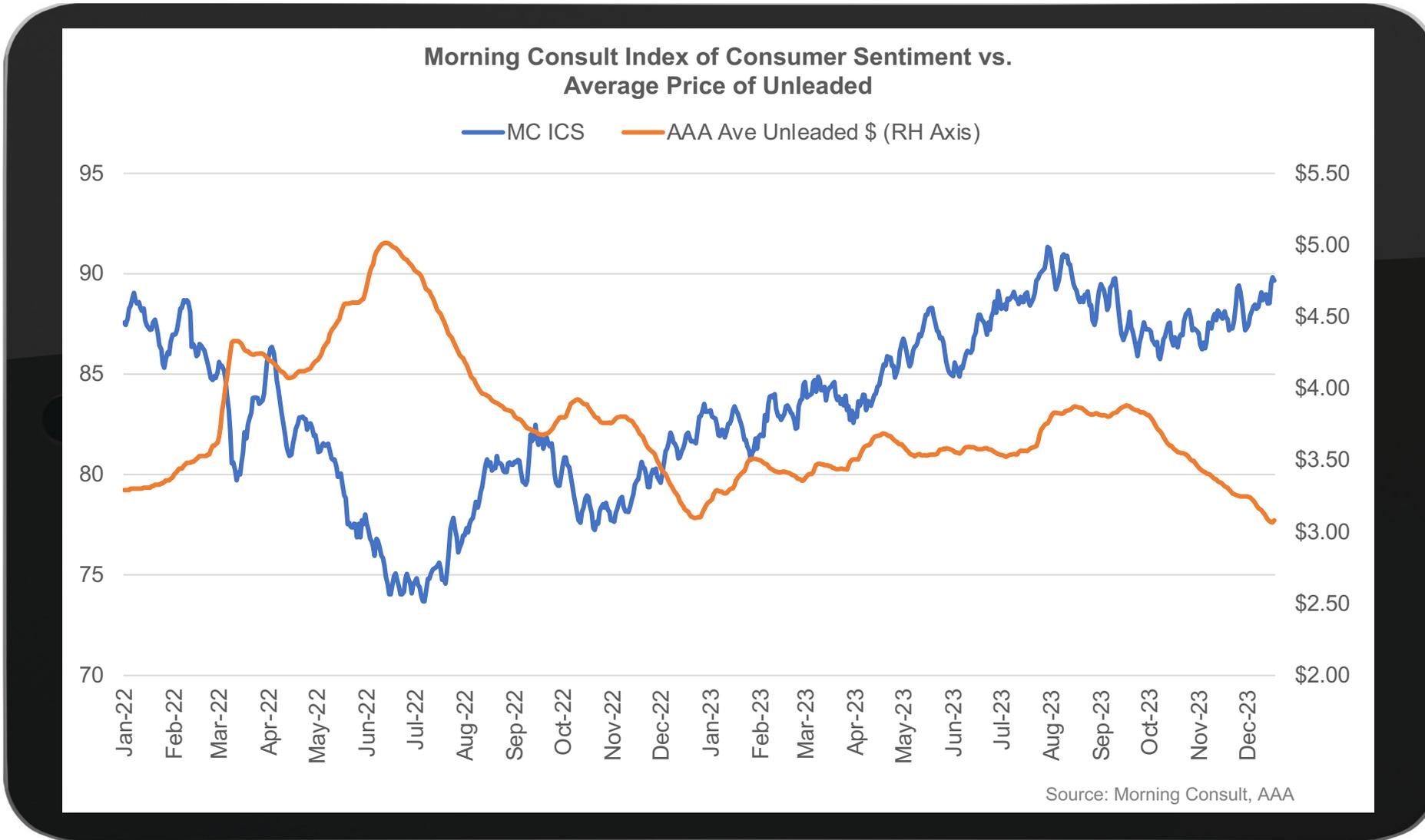


Source: BLS, Moody's Analytics, Cox Automotive

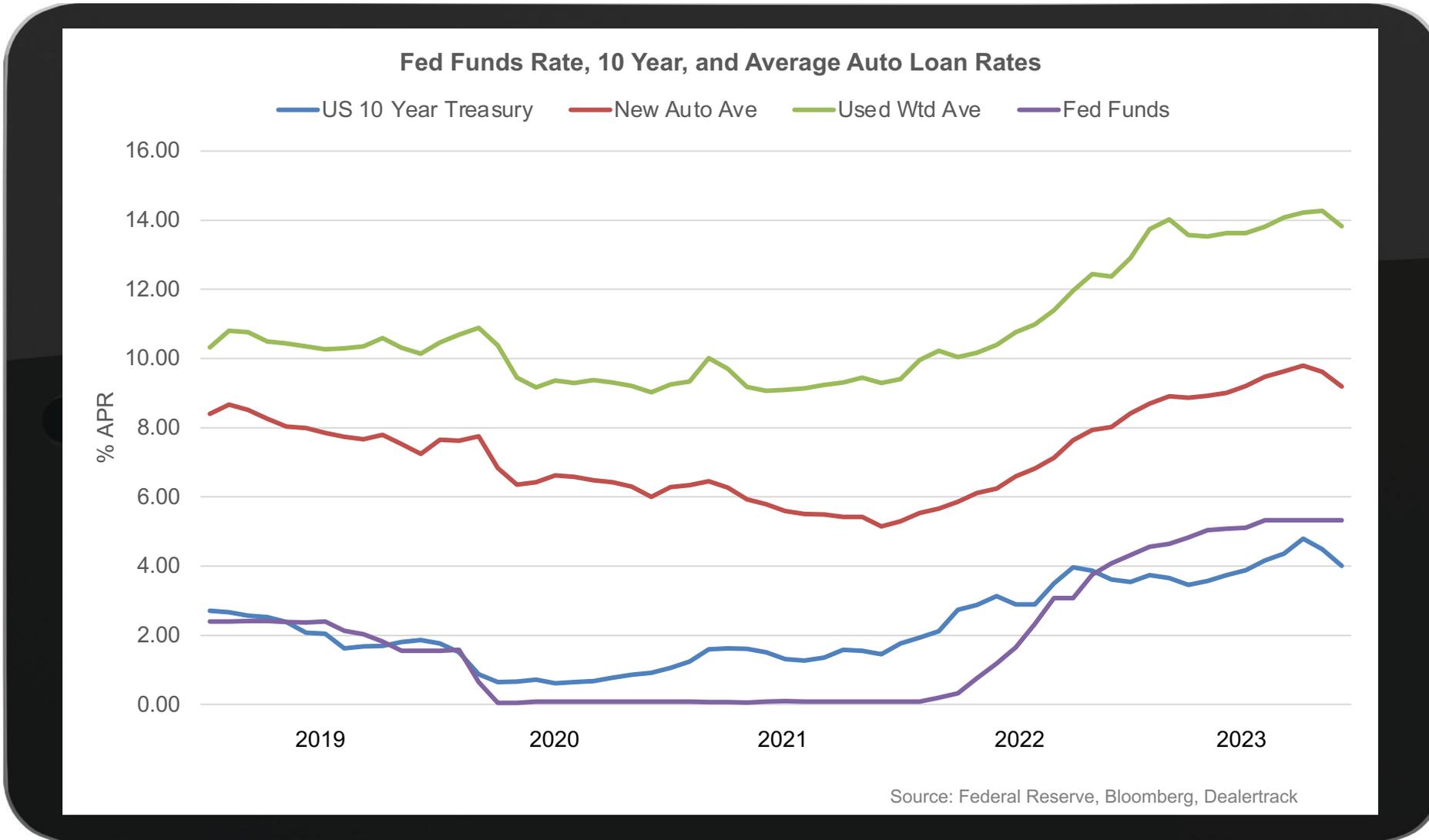
SLOW GROWTH AHEAD | An Economic Roadmap for 2024



SLOW GROWTH AHEAD | Consumer Sentiment Improving



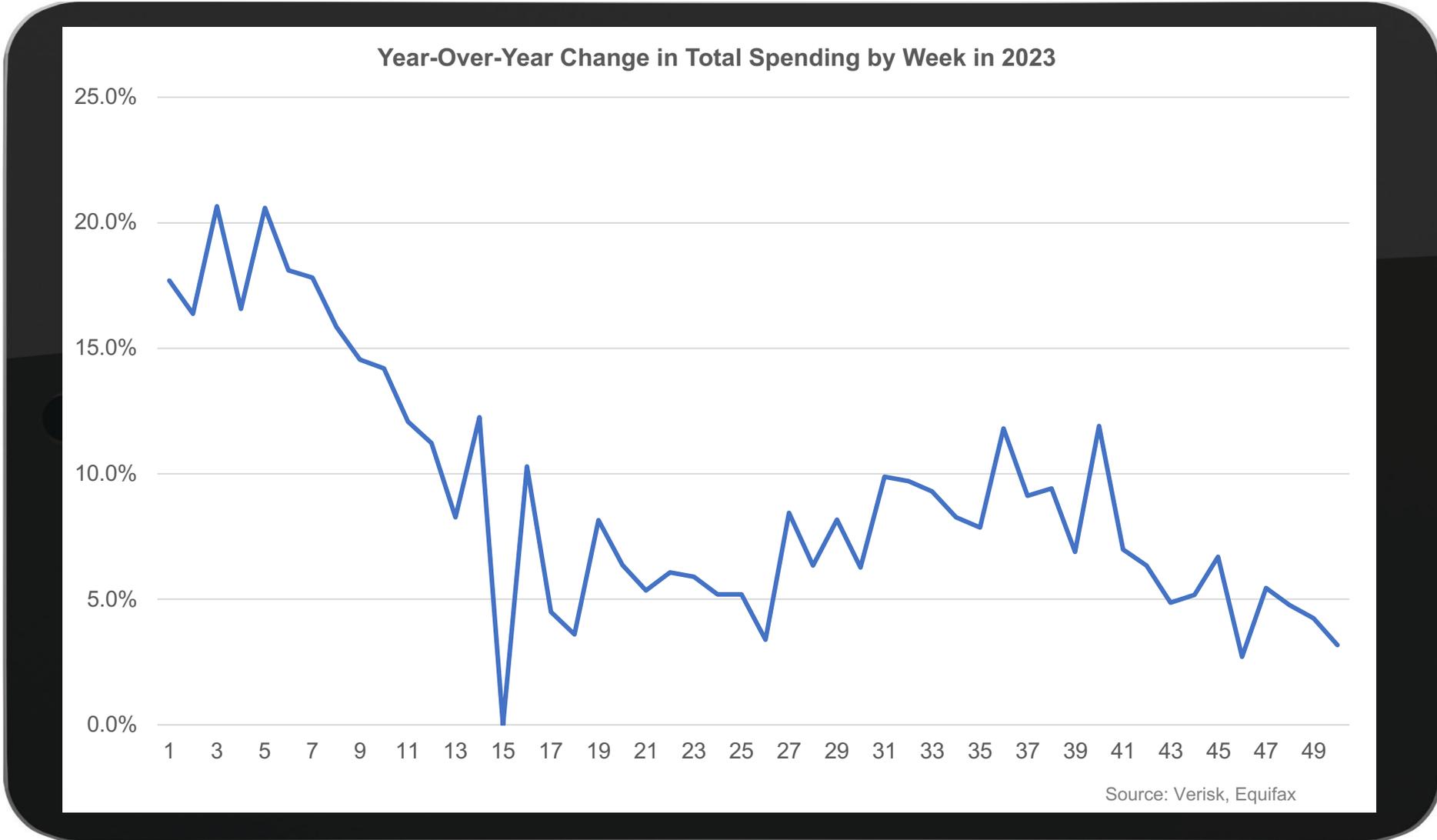
SLOW GROWTH AHEAD | Interest Rates Begin to Decline



SLOW GROWTH AHEAD | An Economic Roadmap for 2024

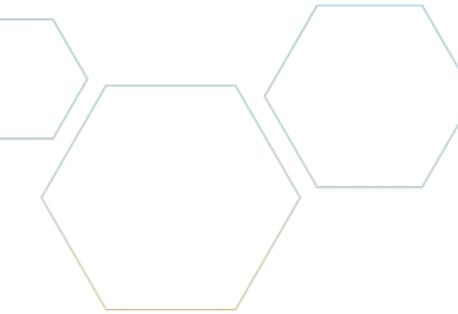


SLOW GROWTH AHEAD | Consumer Spending Growth Slows





NEW-VEHICLE MARKET

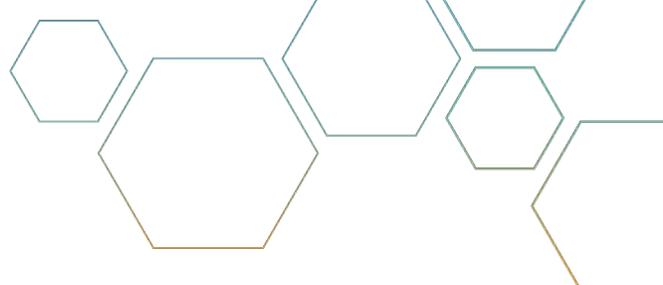


CHARLIE CHESBROUGH

Senior Economist

COX AUTOMOTIVE

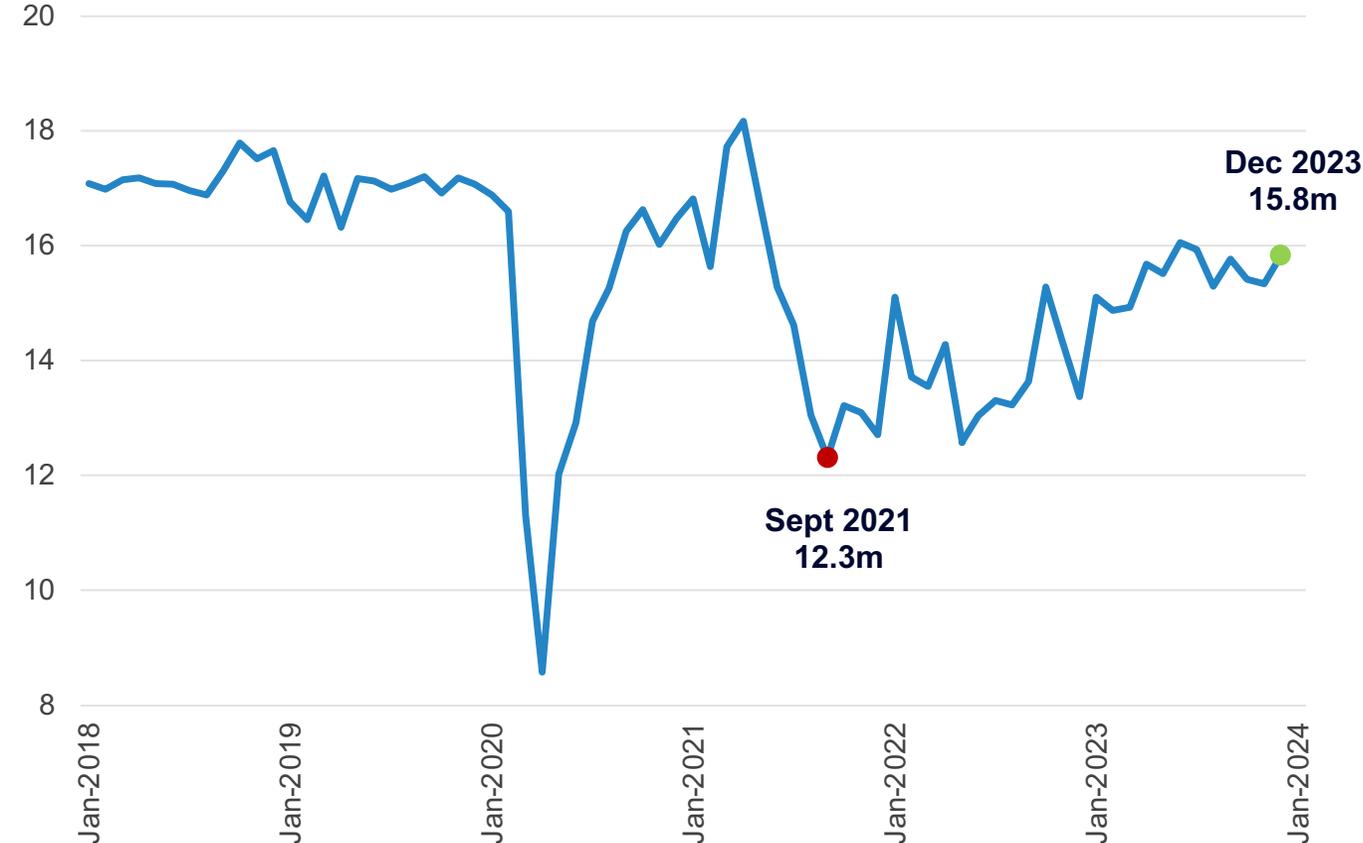




NEW-VEHICLE SALES | 2023 Finishes with 15.46 Million

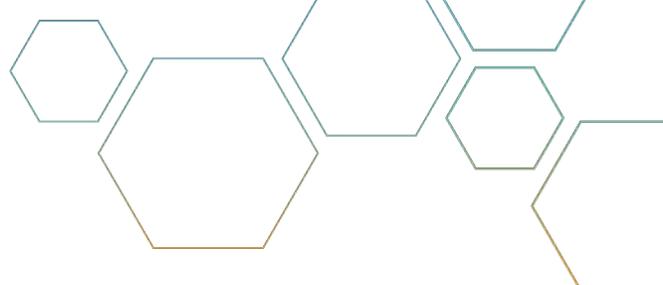
A bumpy recovery since hitting bottom, and expected to continue through 2024

Monthly Light Vehicle Sales SAAR (millions)



Period	Sales millions	SAAR millions
Dec 2022	1.27	13.5
Dec 2023	1.43	15.8
<i>Change</i>	13.0%	+2.3m
Q4 2022	3.59	14.2
Q3 2023	3.96	15.7
Q4 2023	3.85	15.5
<i>Change Y/Y</i>	7.3%	+1.3m
<i>Change Q/Q</i>	-2.8%	-0.2m
YTD 2022	13.75	13.8
YTD 2023	15.46	15.5
<i>Change</i>	12.4%	+1.7m
CY 2024 Forecast	15.7m	+200K - 300K

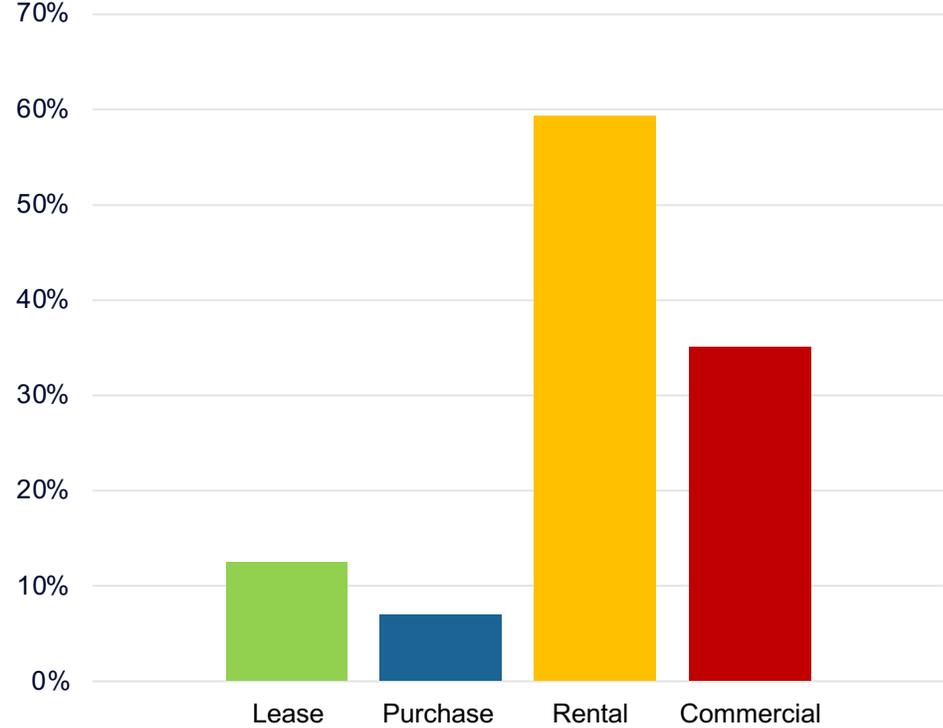
Source: Cox Automotive, Bureau of Economic Analysis



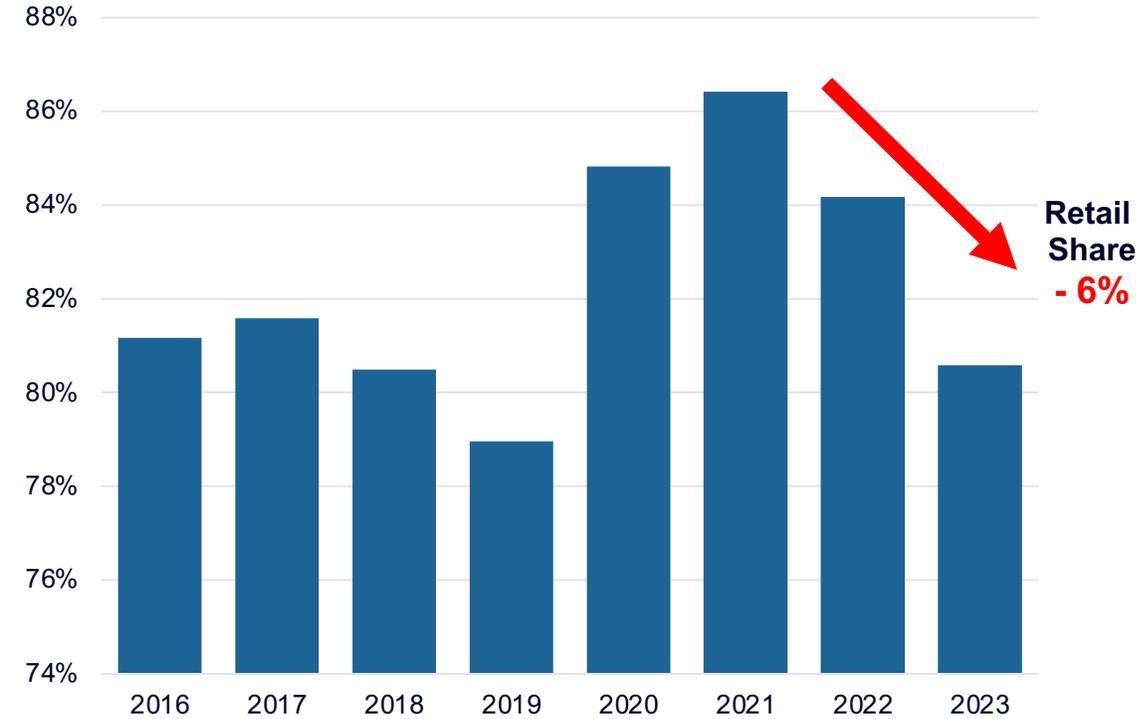
SALES CHANNELS | Fleet Sales Drive 2023 Gains

Pent-up rental and commercial demand unleashed, but further growth will be more difficult

YTD Change In 2023 Sales



Retail Share (Purchase-Lease) of Total Sales

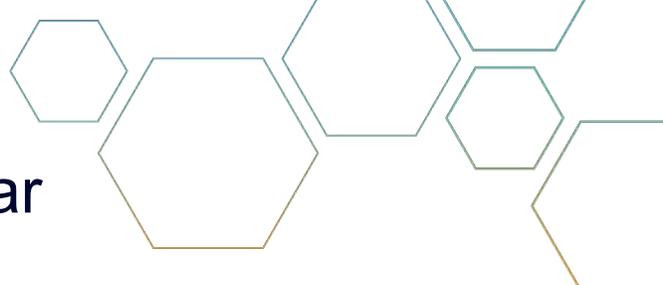


Source: Cox Automotive, Kelley Blue Book

OEM SALES | GM Wins Title – Honda Gains Most Share

While Toyota, Ford and Stellantis had tough year

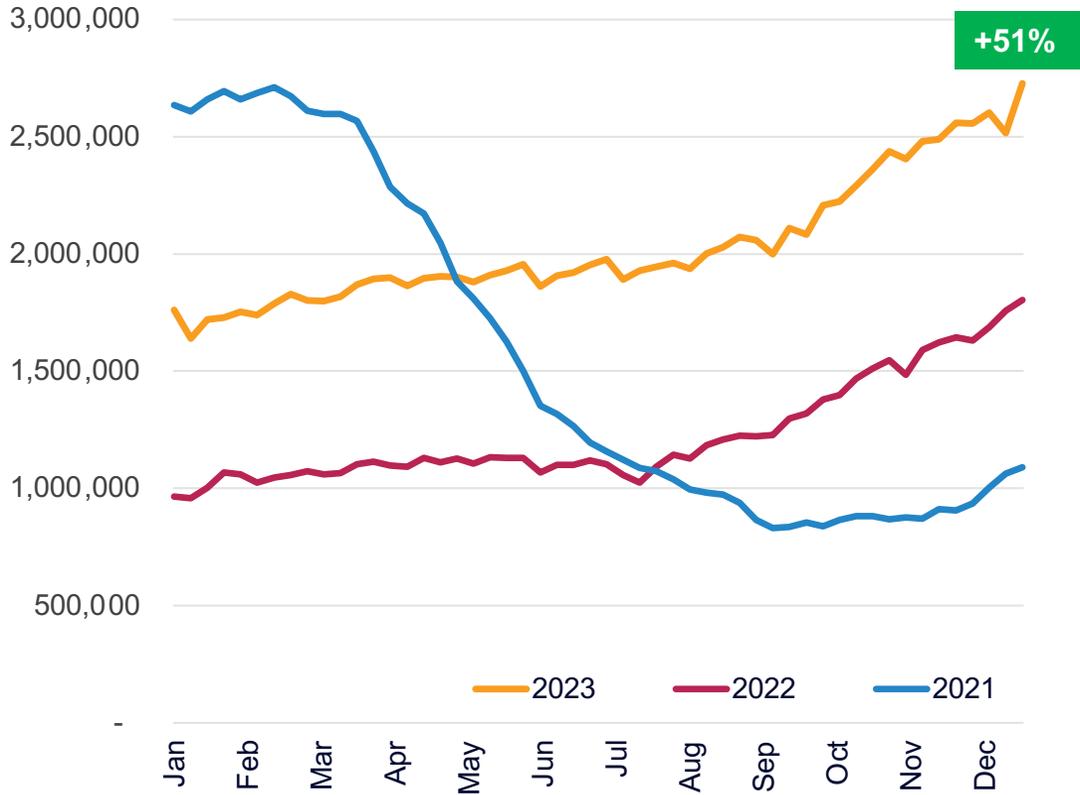
OEM	Q4 2022	Q3 2023	Q4 2023	Y/Y Change	Q/Q Change	CY 2022	CY 2023	Change	Share 2022	Share 2023	Difference
GM	618,692	669,234	619,834	0.2%	-7.4%	2,258,429	2,577,648	14.1%	16.3%	16.5%	0.3%
Toyota	536,740	590,296	619,661	15.4%	5.0%	2,108,457	2,248,477	6.6%	15.2%	14.4%	-0.8%
Ford	479,769	497,108	484,458	1.0%	-2.5%	1,850,925	1,981,332	7.0%	13.3%	12.7%	-0.6%
Hyundai	386,898	430,302	402,339	4.0%	-6.5%	1,474,224	1,652,821	12.1%	10.6%	10.6%	0.0%
Stellantis	347,669	380,563	343,552	-1.2%	-9.7%	1,547,076	1,527,090	-1.3%	11.1%	9.8%	-1.3%
Honda	255,250	339,143	337,511	32.2%	-0.5%	983,507	1,308,186	33.0%	7.1%	8.4%	1.3%
Nissan Mitsu	211,768	239,074	221,351	4.5%	-7.4%	815,160	986,136	21.0%	5.9%	6.3%	0.5%
Tesla	131,574	156,621	161,375	22.6%	3.0%	522,444	654,888	25.4%	3.8%	4.2%	0.4%
VW	143,979	167,279	176,248	22.4%	5.4%	558,009	632,994	13.4%	4.0%	4.1%	0.0%
Subaru	155,466	163,131	164,863	6.0%	1.1%	556,581	632,083	13.6%	4.0%	4.1%	0.0%
BMW	112,057	91,849	108,795	-2.9%	18.4%	361,892	385,927	6.6%	2.6%	2.5%	-0.1%
Mazda	79,517	88,834	90,737	14.1%	2.1%	294,909	363,354	23.2%	2.1%	2.3%	0.2%
Mercedes-Benz Group	88,493	90,011	92,992	5.1%	3.3%	350,949	354,723	1.1%	2.5%	2.3%	-0.3%
Geely Volvo	32,655	36,098	39,561	21.1%	9.6%	111,509	140,590	26.1%	0.8%	0.9%	0.1%
Tata JLR	21,806	21,059	21,338	-2.1%	1.3%	68,546	80,101	16.9%	0.5%	0.5%	0.0%
Rivian	8,054	15,564	13,972	73.5%	-10.2%	20,332	50,122	146.5%	0.1%	0.3%	0.2%
Lucid	1,060	1,457	1,512	42.6%	3.8%	2,656	5,779	117.6%	0.0%	0.0%	0.0%
Vinfast	0	1,159	1,120	-	-3.4%	0	3,129	-	0.0%	0.0%	0.0%
Fisker	0	997	1,672	-	67.7%	0	2,669	-	0.0%	0.0%	0.0%
NATION	3,611,447	3,979,779	3,902,891	8.1%	-1.9%	13,885,605	15,588,049	12.3%	100.0%	100.0%	0.0%



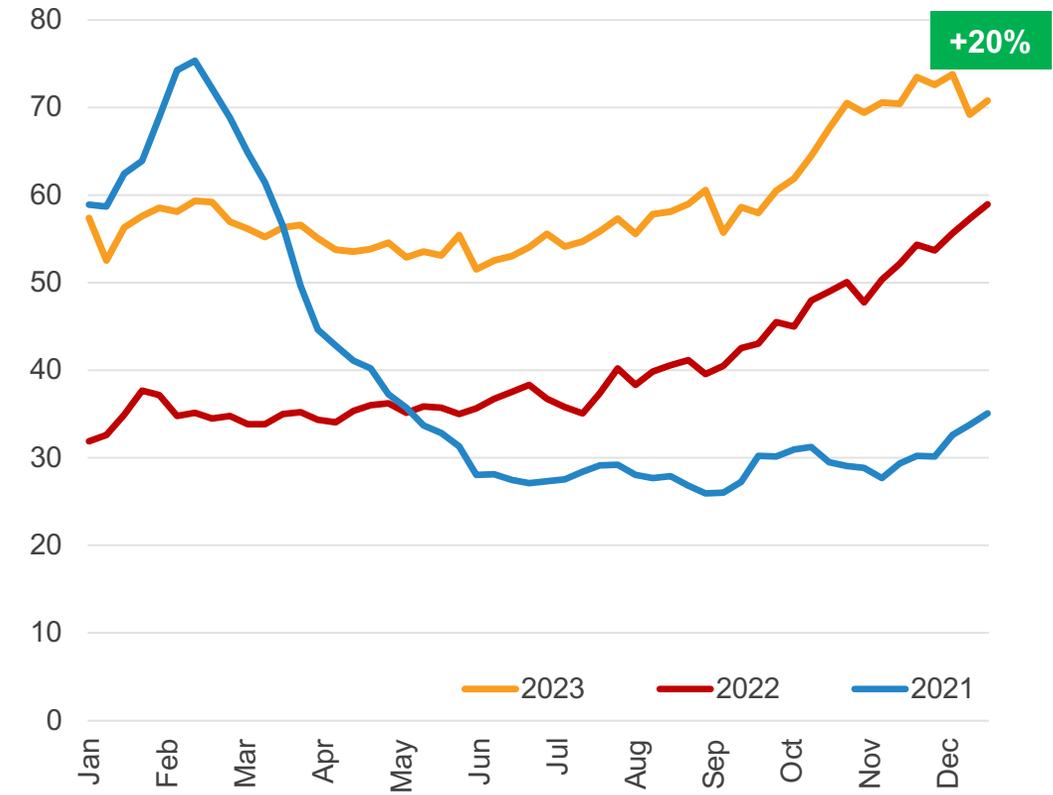
NEW-VEHICLE INVENTORY | Finished Up 51% vs. Last Year

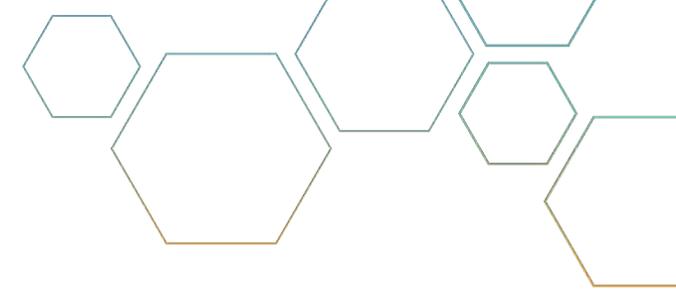
Currently over 900K more units than last year, days of supply at 71 – up 20%

Available Supply weekly



Days of Supply weekly

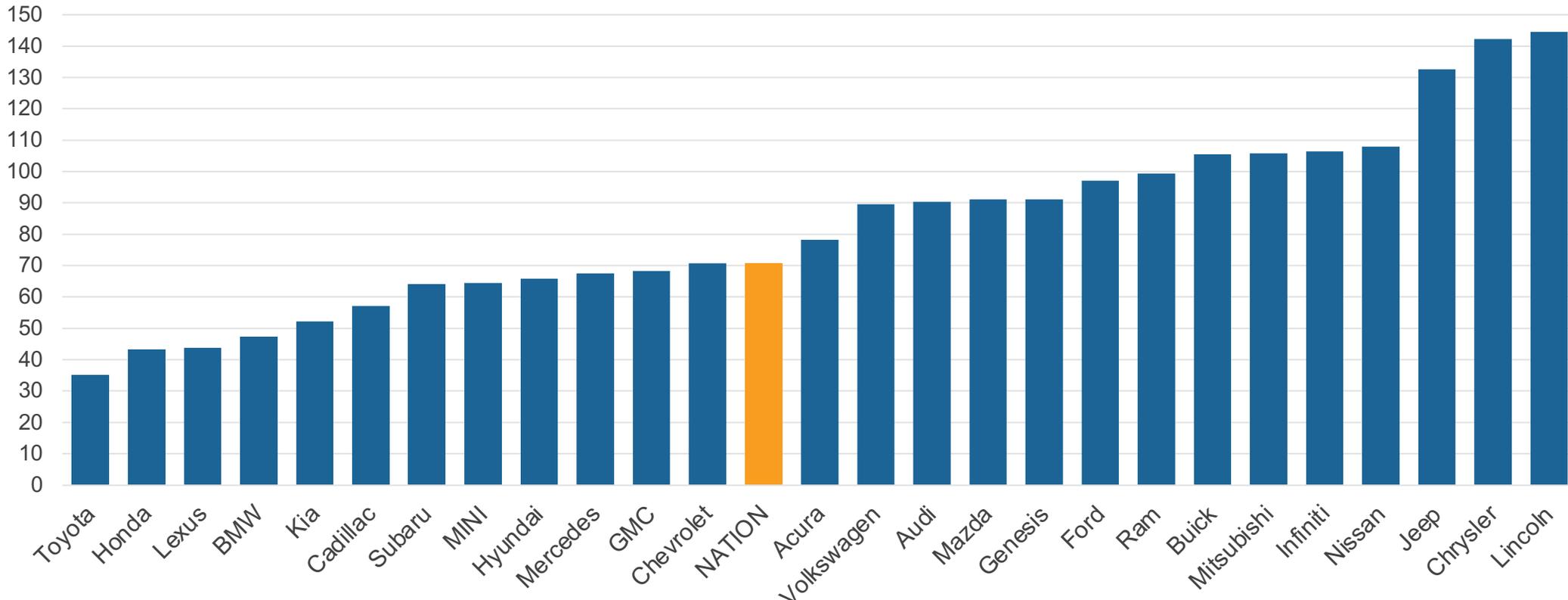




BRAND INVENTORY | Supply Situation Remains Varied

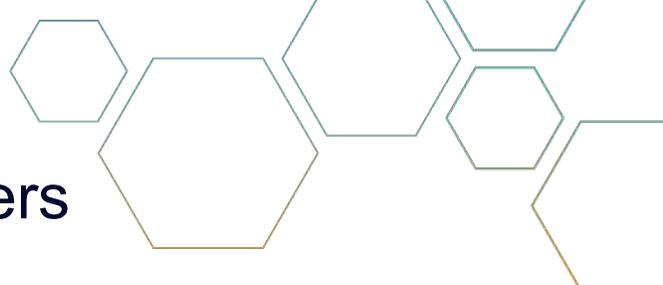
Some brands remain in limited availability while others have accumulation

New Vehicle Days Of Supply



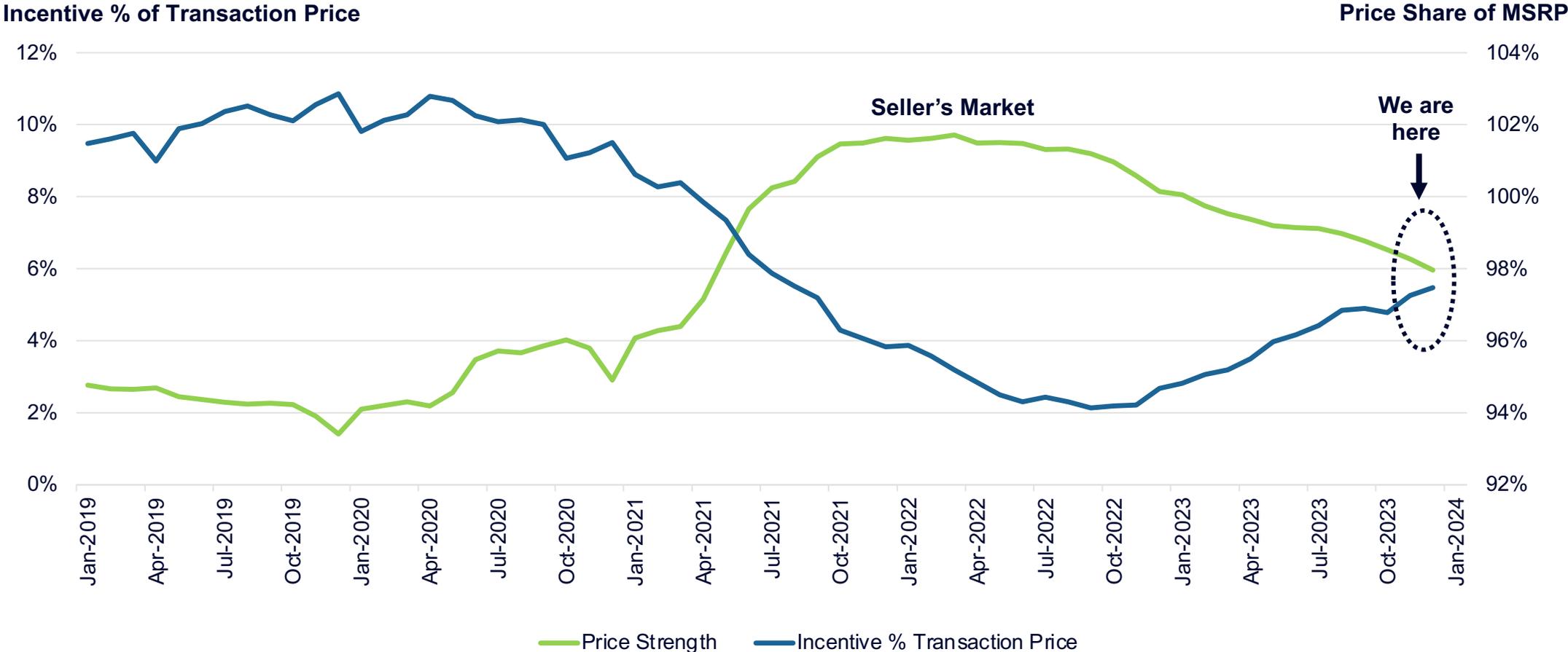
Inventory Tight

Inventory Accumulating

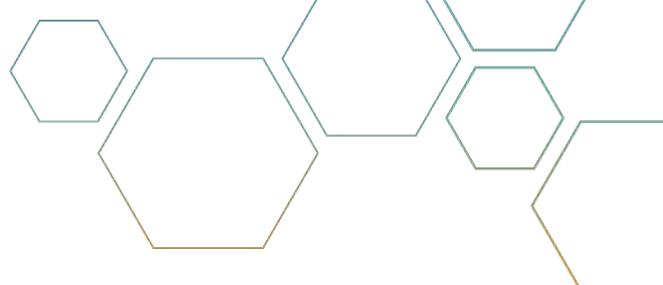


CHANGING PRICES | Seller's Market Shifting Towards Buyers

Incentives rising again and price strength is eroding

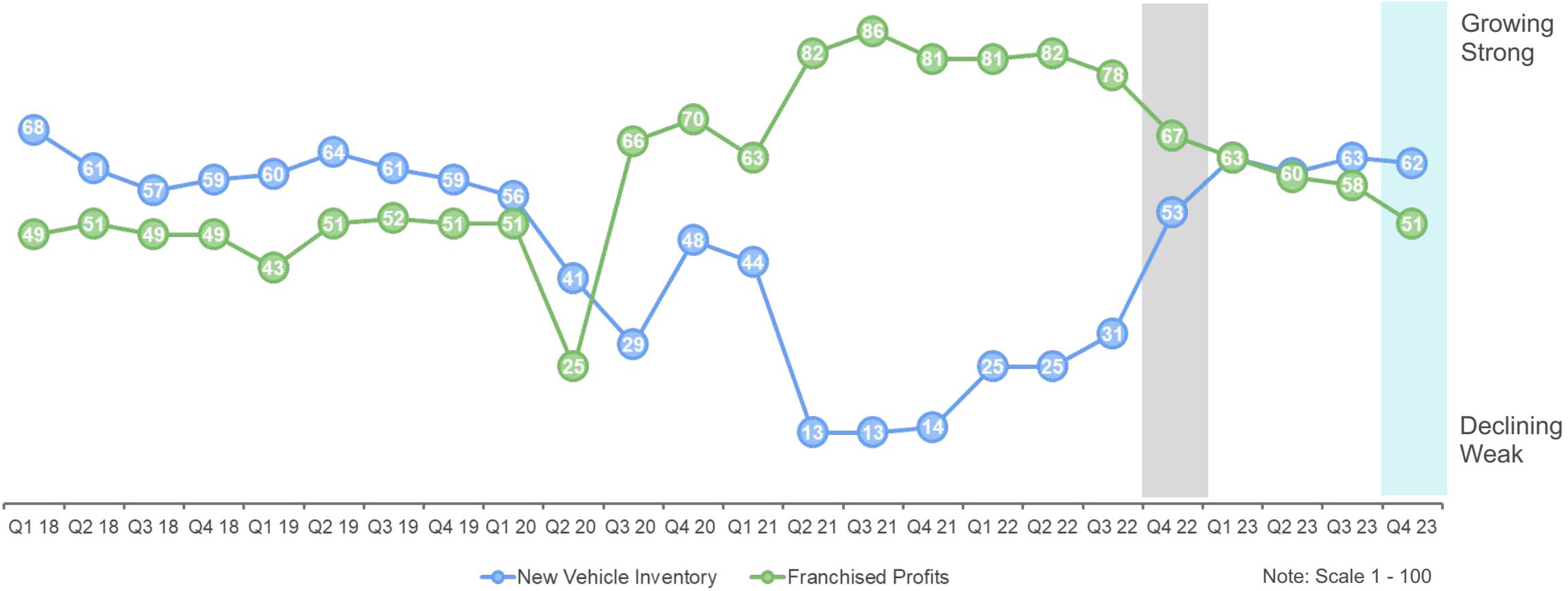


Source: Cox Automotive, Dealertrack, Kelley Blue Book



DEALER SENTIMENT | Price Pressure Having Impact

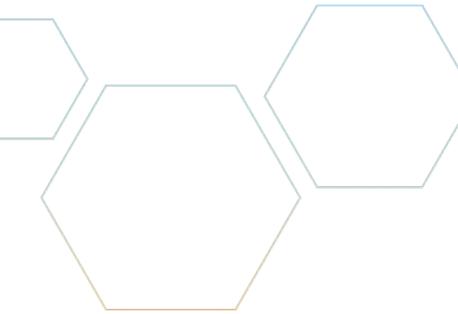
As the market returns to normal so is profitability



Source: Cox Automotive Dealer Sentiment Index, Q4 2023



ELECTRIC VEHICLE MARKET

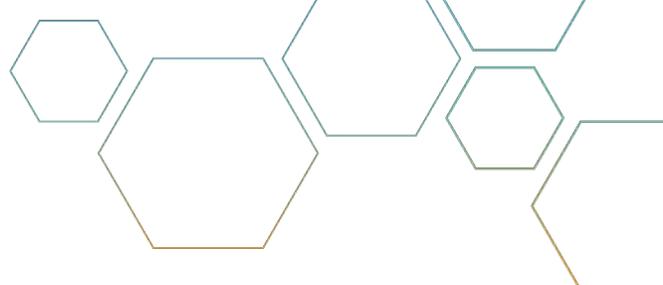


STEPHANIE VALDEZ STREATY

Director, Industry Insights

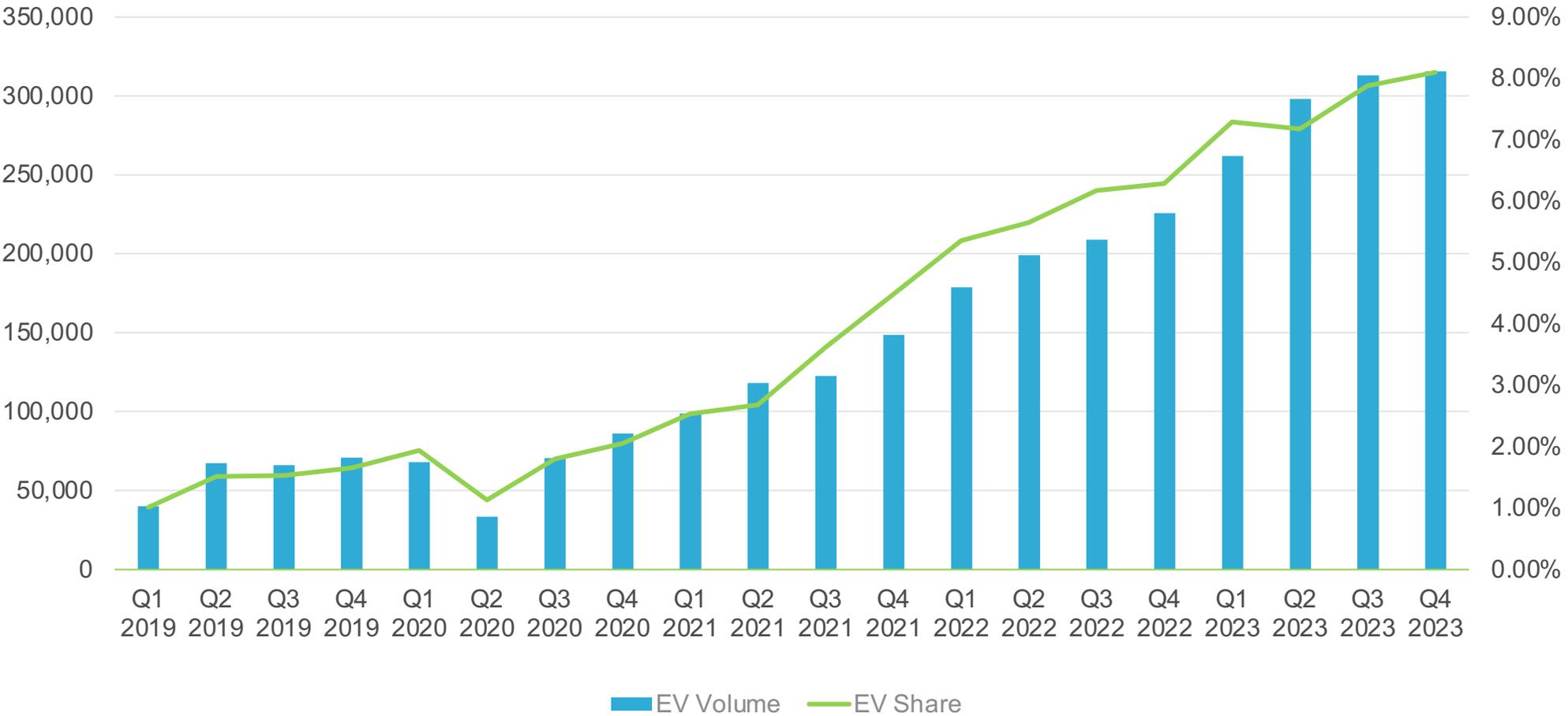
COX AUTOMOTIVE

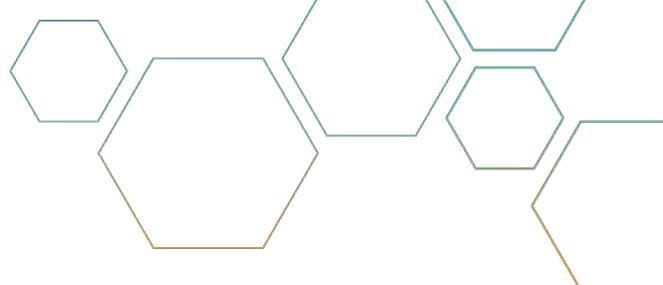




EV SALES ESTIMATES | Record Year, Growth Slows

Q4 up only slightly from Q3; year over year growth of 46% pushes total sales to 1.1 million

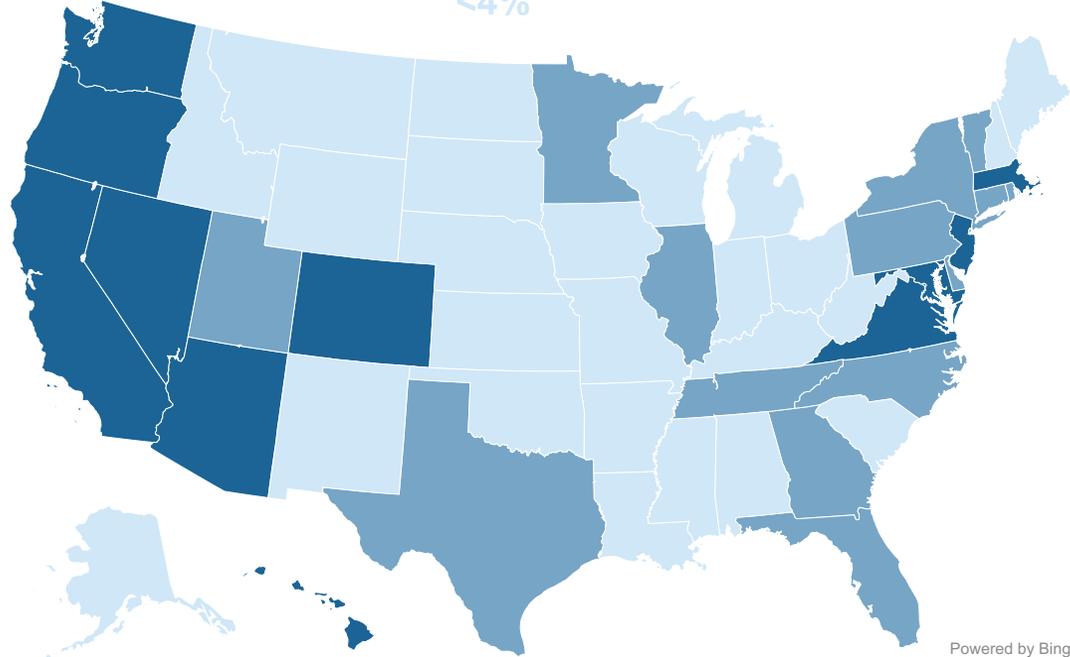




EV SALES ADOPTION | Uneven, An Opportunity

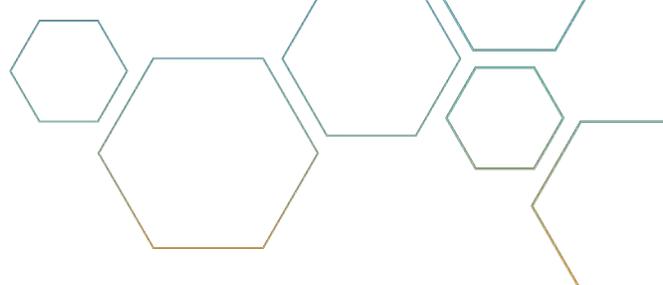
Low penetration of EVs in some states suggests product knowledge, value proposition and consumer interest lacking

EV Share of Retail = 7.4% Nationally
>7.4%
4%-7.4%
<4%



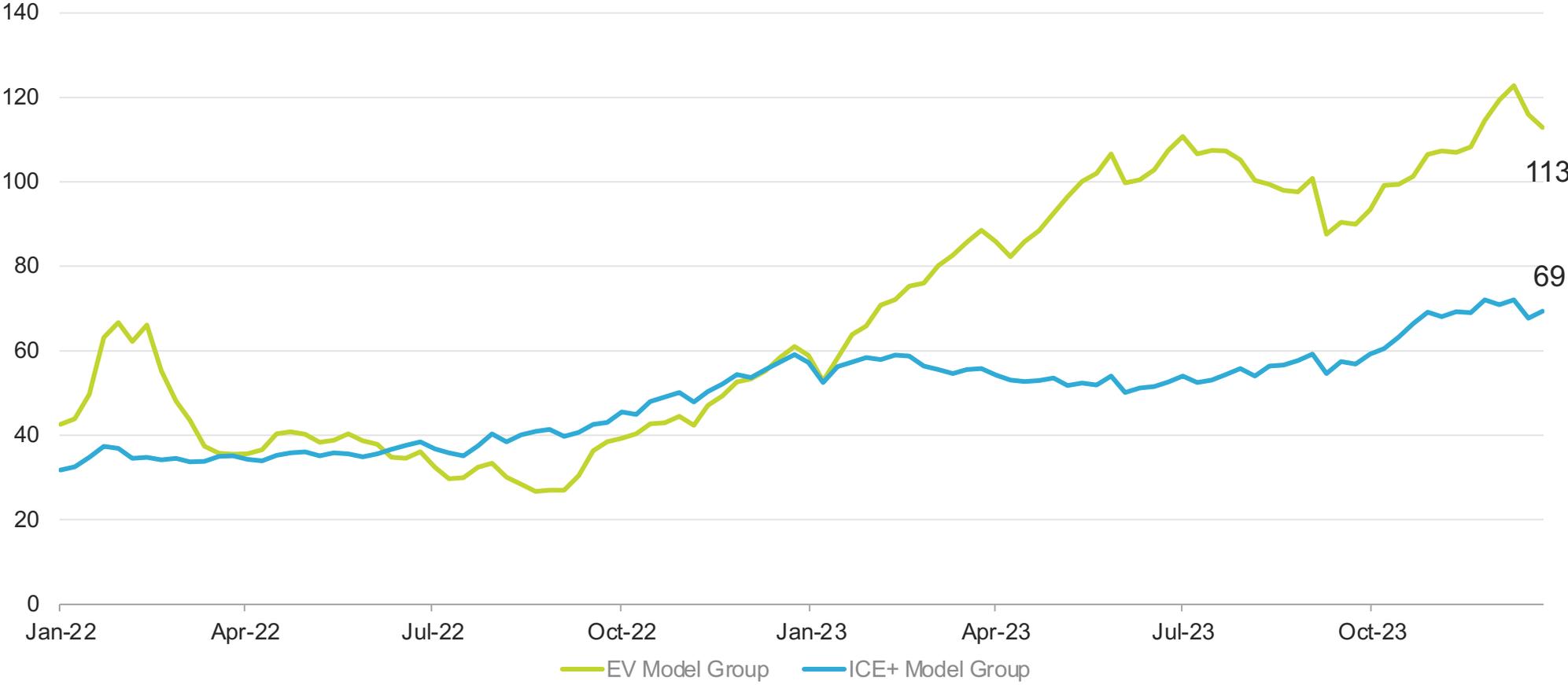
Powered by Bing
© GeoNames, Microsoft, TomTom

	EV Share of Retail Sales
CALIFORNIA	21.1%
WASHINGTON	15.4%
NEW JERSEY	10.3%
NATION	7.4%
CONNECTICUT	6.6%
TEXAS	5.4%
NEW YORK	4.7%
PENNSYLVANIA	4.1%
MICHIGAN	3.1%
OHIO	3.0%
WEST VIRGINIA	1.1%
NORTH DAKOTA	0.7%

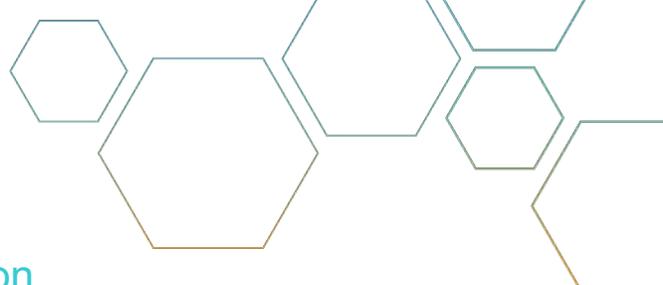


EV INVENTORY | Well Above Industry Average

EV inventory increased by 92% in 2023, averaging 113 days' supply to end the year

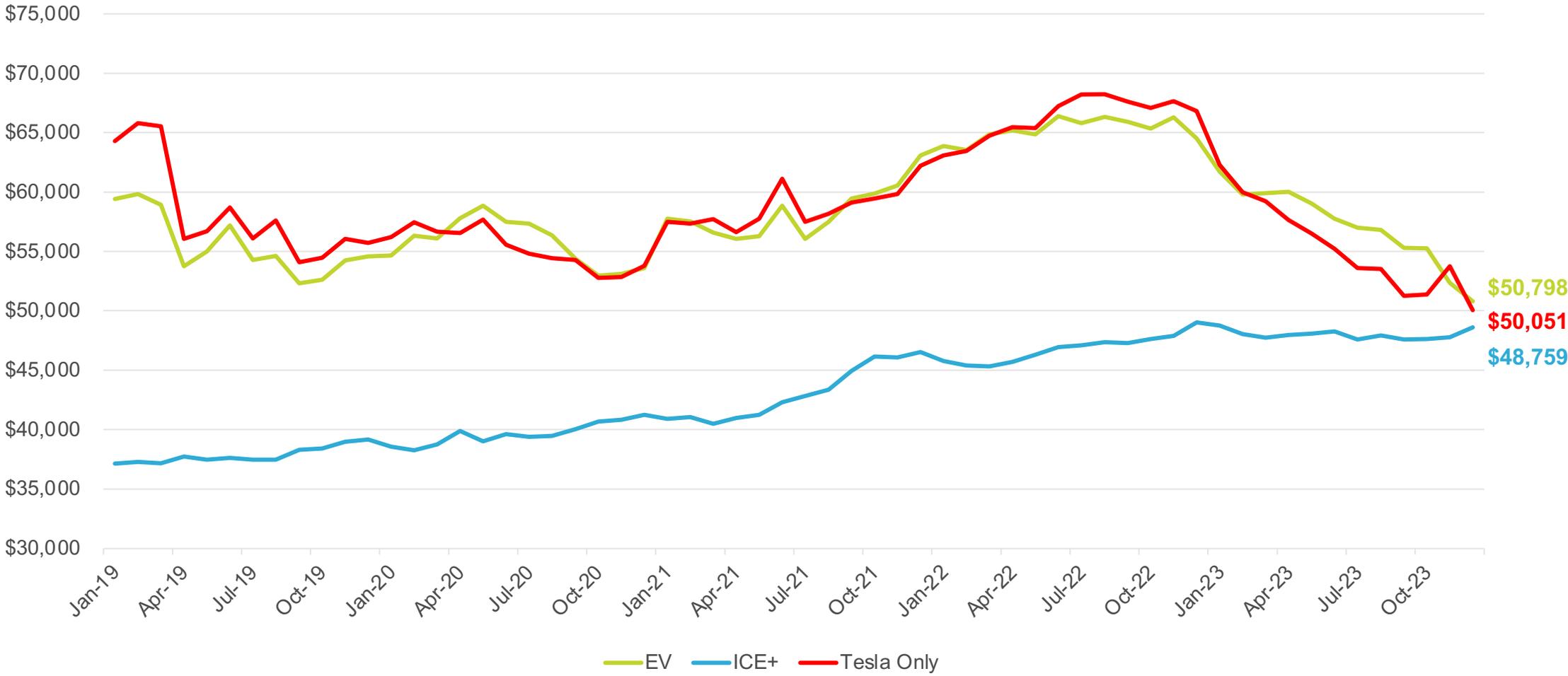


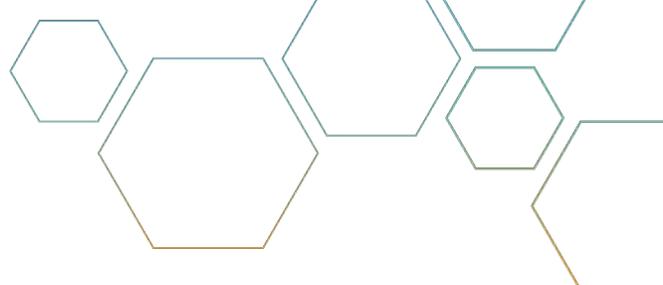
Note: Tesla, Rivian and Brands with a "Direct to Consumer Platform" are not represented.



EV TRANSACTION PRICE | Tesla Leads the Way Down

EV prices near parity with ICE, driven by surplus inventory, higher incentives and competition

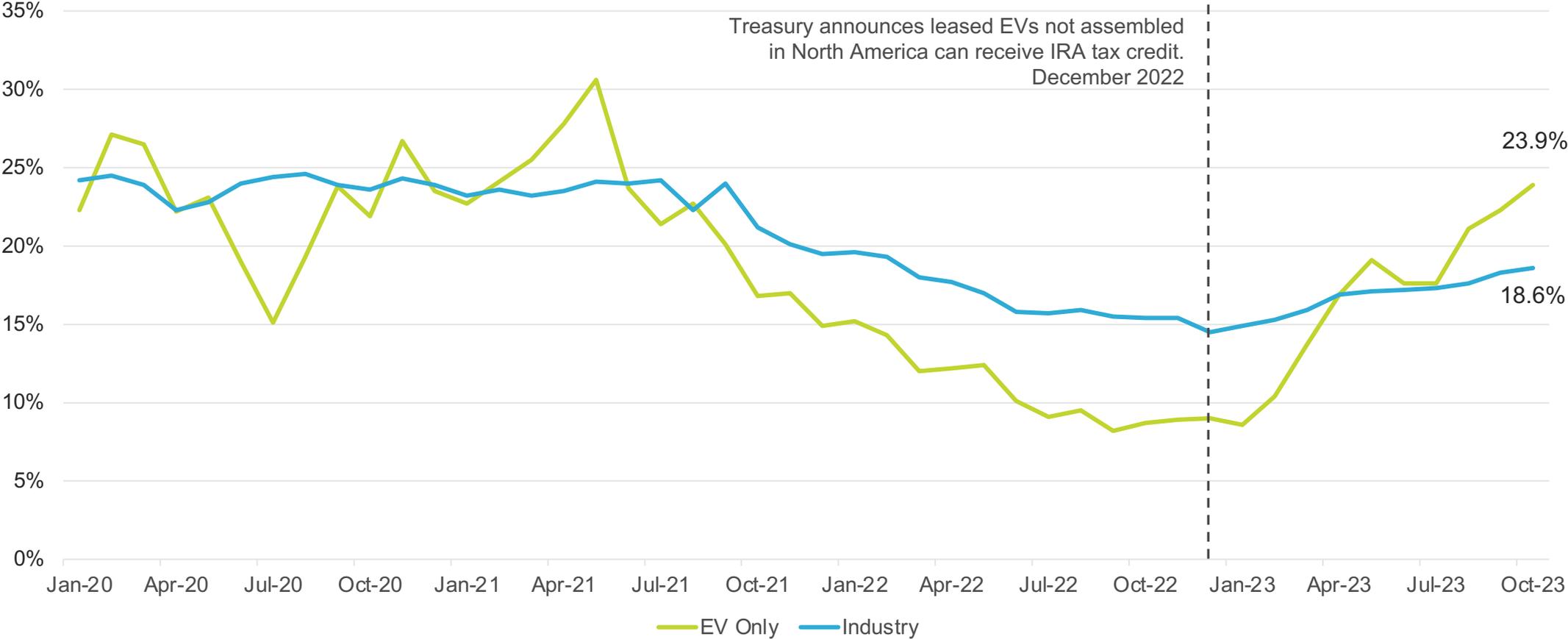


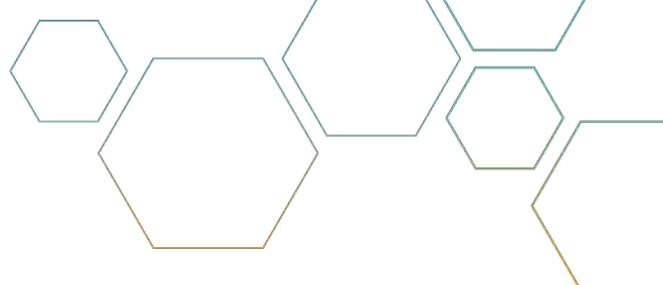


EV LEASING | Expected to Rise Further in 2024

Electric vehicle leases continue to increase with stricter eligibility for IRA tax credits.

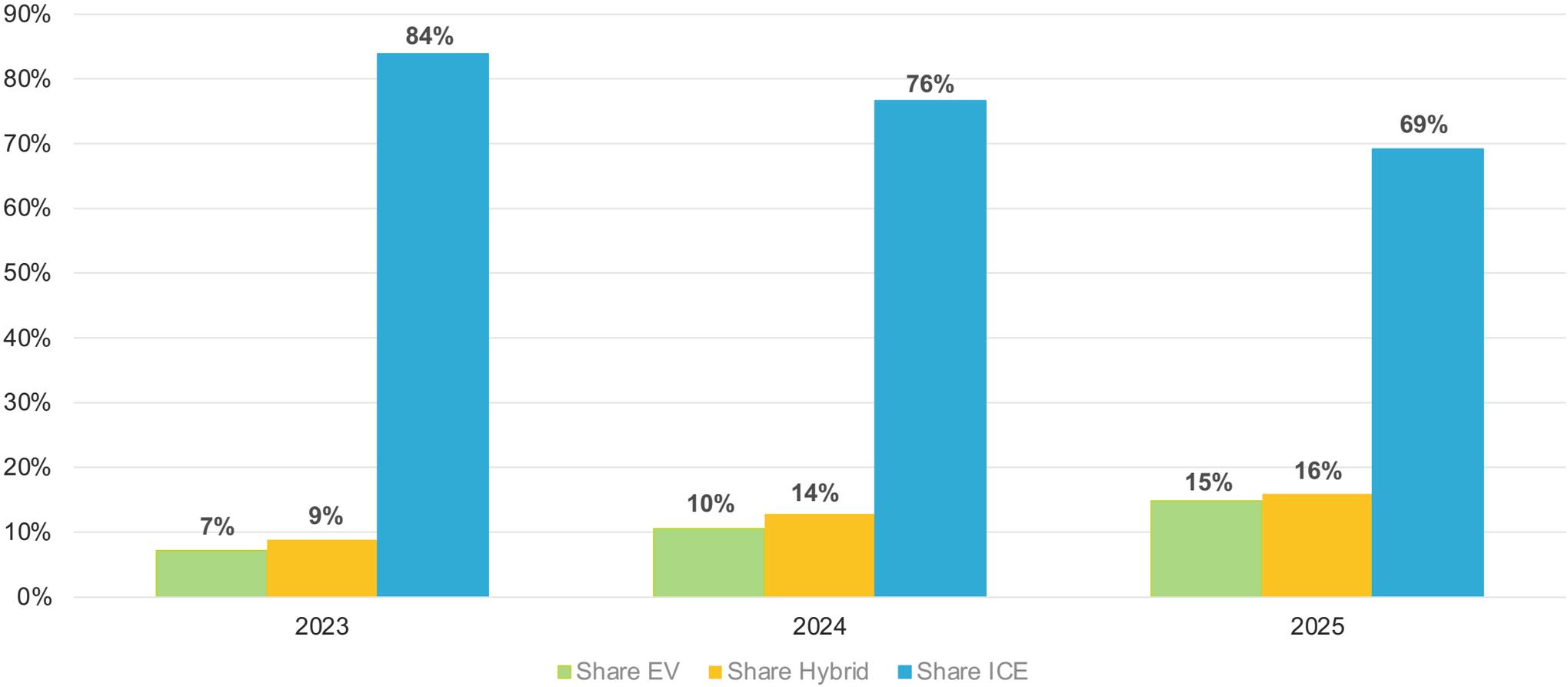
Lease Share of Retail Sales

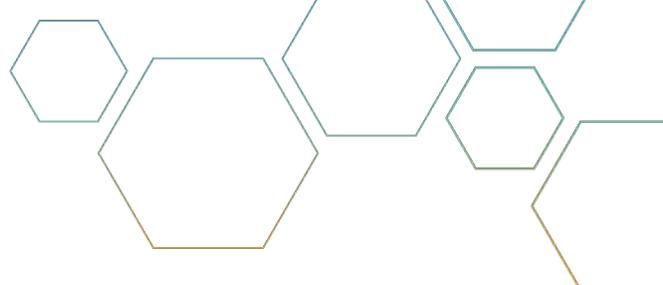




POWERTRAIN SHARE ESTIMATES | 24% in 2024

Role of alternatives rising and will accelerate in coming years.





EV STAMPEDE | More Models, More Choice, More Sales

2024

37

Mercedes-Benz, MINI, Polestar, LINCOLN, LOTUS, BUICK, TESLA, VOLVO, TOYOTA, ACURA, HYUNDAI, LUCID, RAM, Jeep, Mazda

2025

34

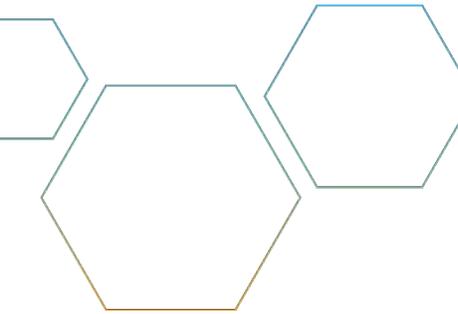
Mercedes-Benz, MINI, Ford, LINCOLN, LOTUS, CHEVROLET, ACURA, VOLVO, DODGE, KIA, HYUNDAI, JAGUAR, TOYOTA, NISSAN, INFINITI, Jeep, LAND-ROVER, AUDI, Mazda

70+

NEW VEHICLES
COMING IN
2 YEARS



WHOLESALE MARKET



JEREMY ROBB

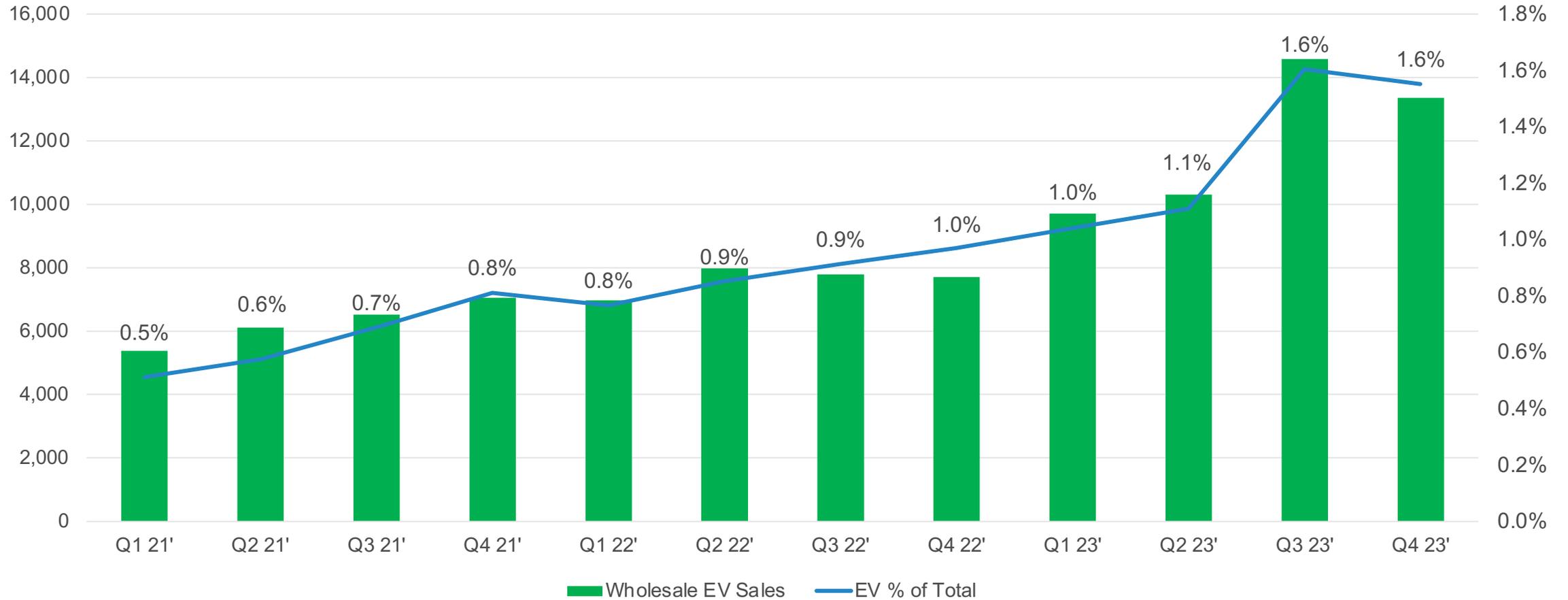
Senior Director, Economic and Industry Insights

COX AUTOMOTIVE



EVs AT AUCTION: | Increased Year Over Year at Manheim

Q4 EV transactions growth climbed, +73% year over year though unit sales were down against prior quarter



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

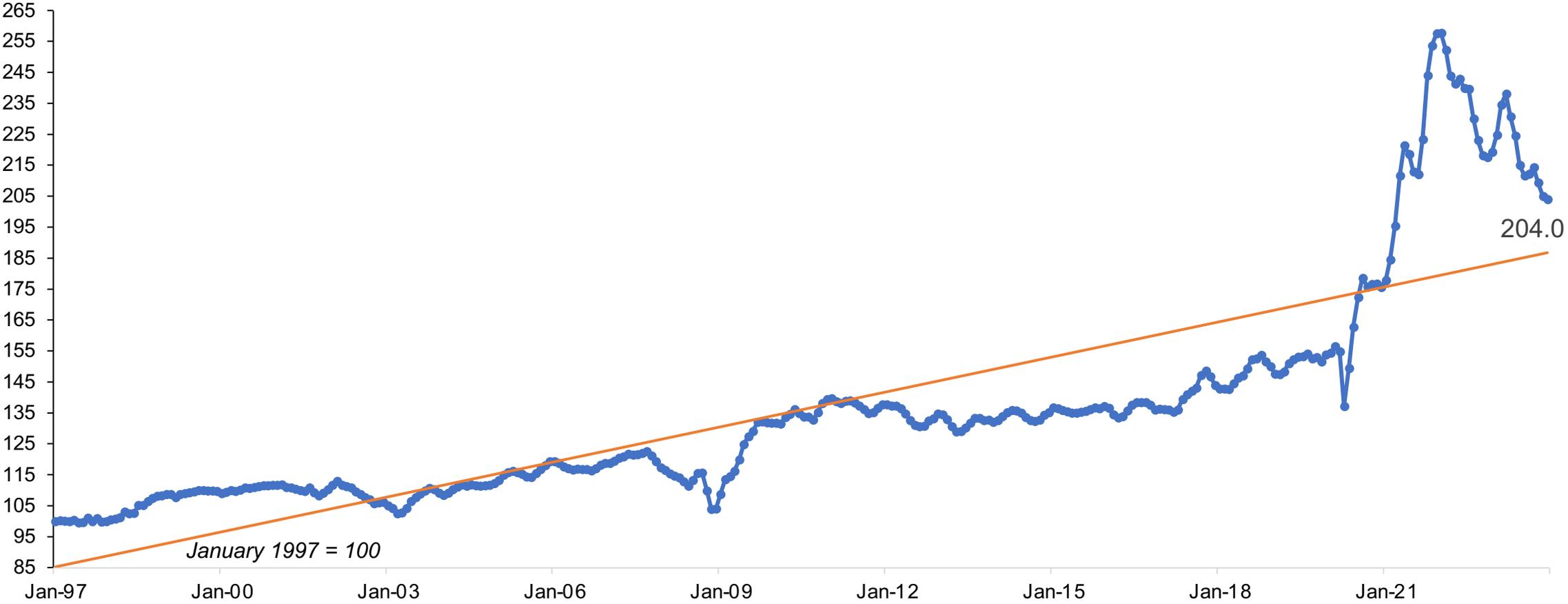
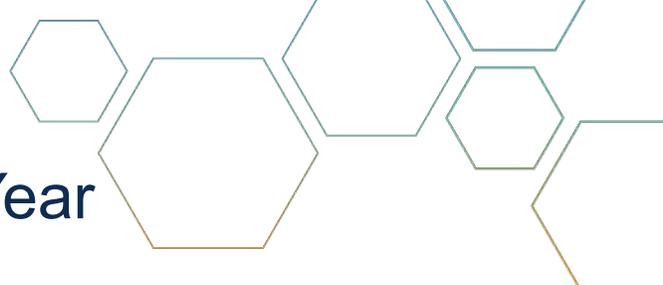
Steps

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



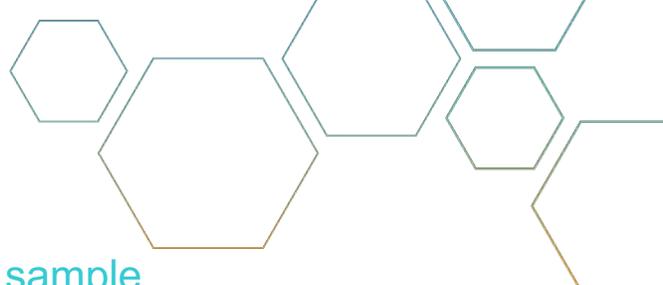
WHOLESALE VALUE | Down in December and Year Over Year

Prices declined 0.5% from November and were down 7.0% from December 2022

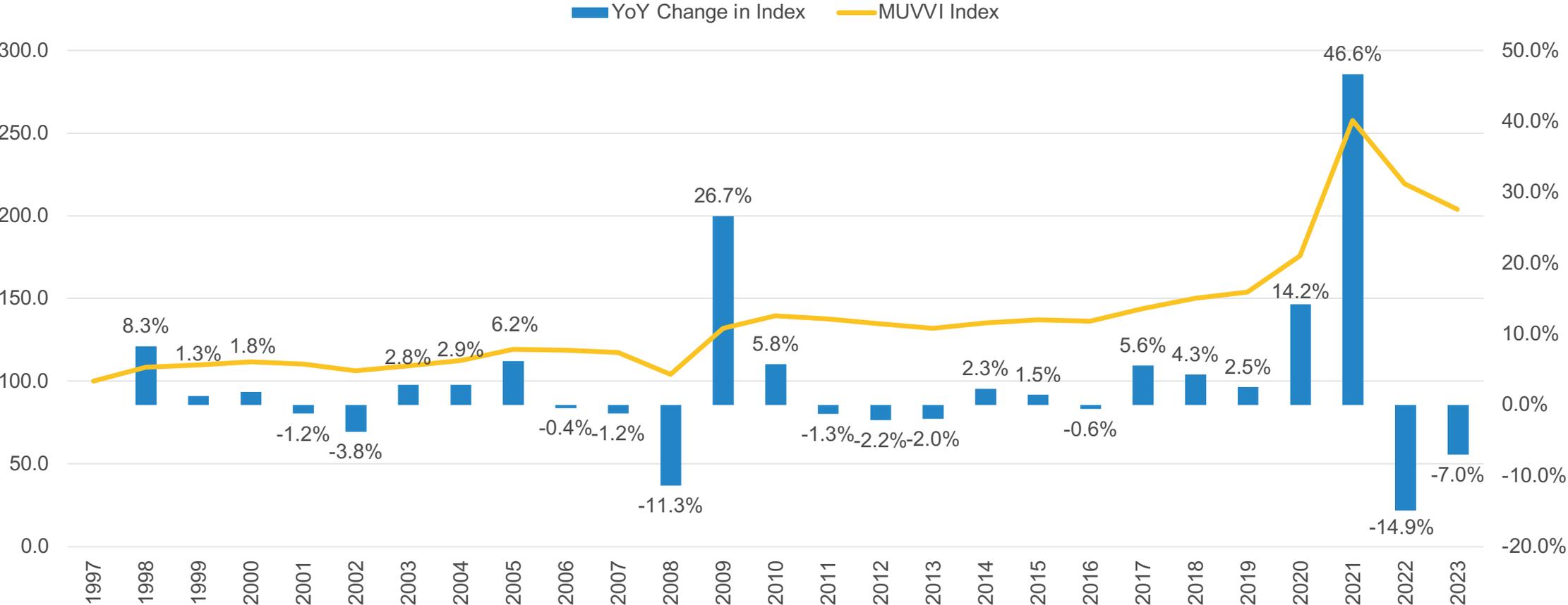


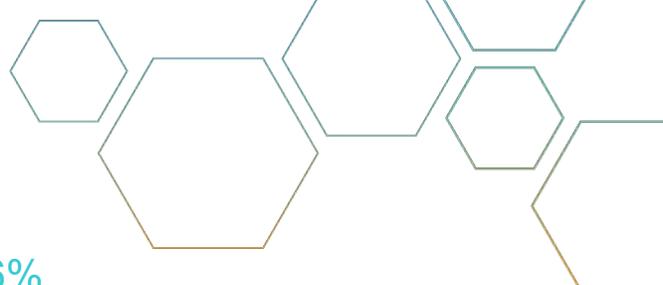
THE MUVVI INDEX | A Natural Upward Bias

MUVVI values typically rise by 2.3% each year on the index, as higher price units enter the sample



Historical MUVVI Index at Year End

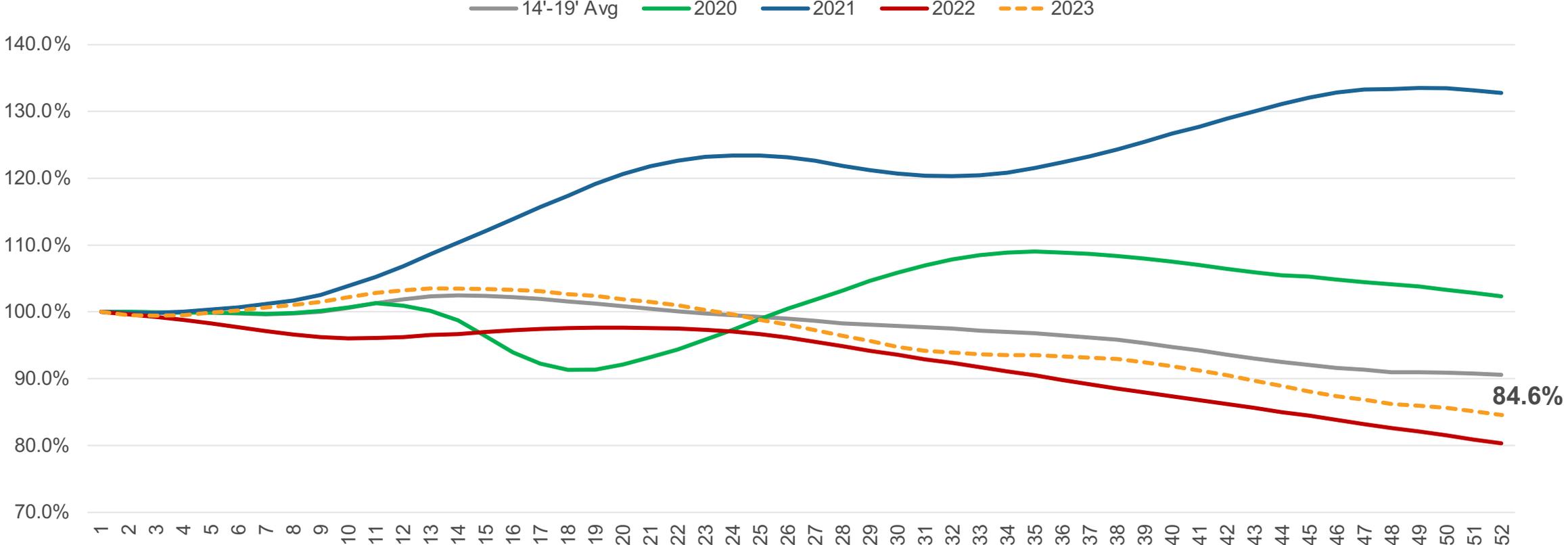




MMR VALUE TRENDS | Indications of Normalization

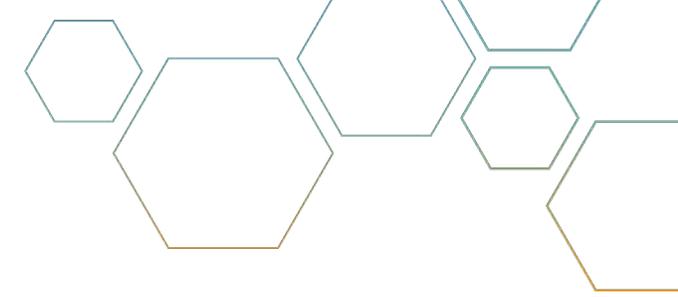
Depreciation trends were a bit stronger for most of Q4, with the overall index ending at 84.6%

Overall MMR Index Trends
All Model Years

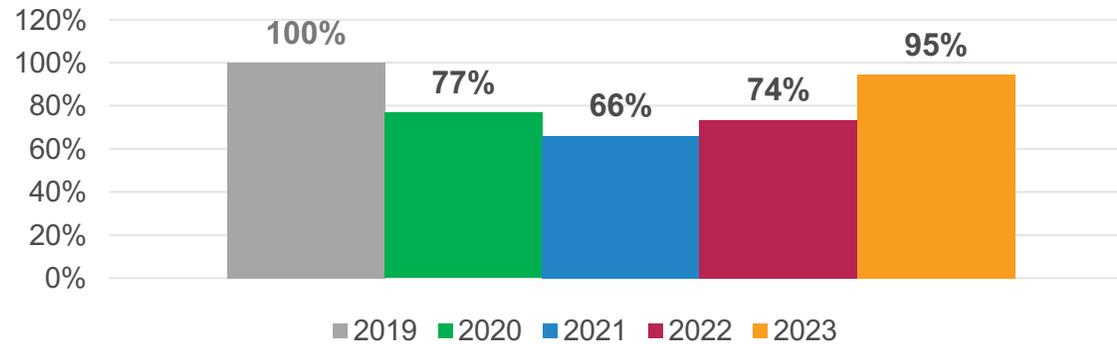


AUCTION CHECK-INS | Off-Lease Volume Remains Low

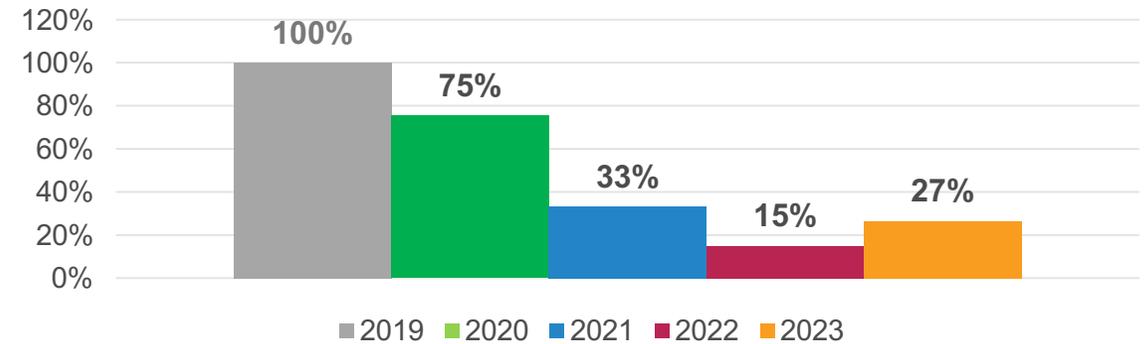
Repo & lease check-in rates continue to rise, but a long road to normal for off-lease



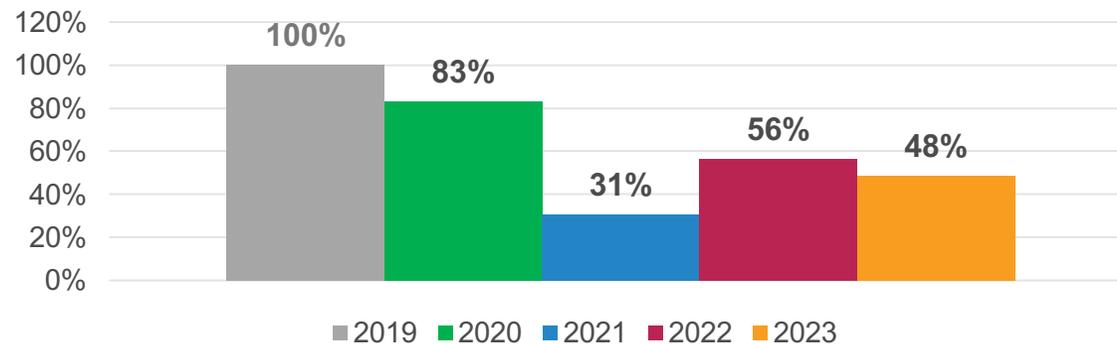
Repo Check-In Index 2019=100



Lease Check-In Index 2019=100



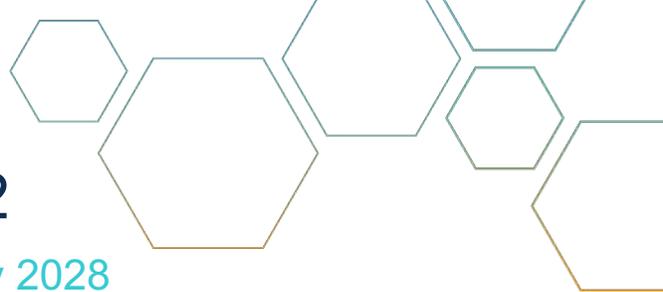
Rental Check-In Index 2019=100



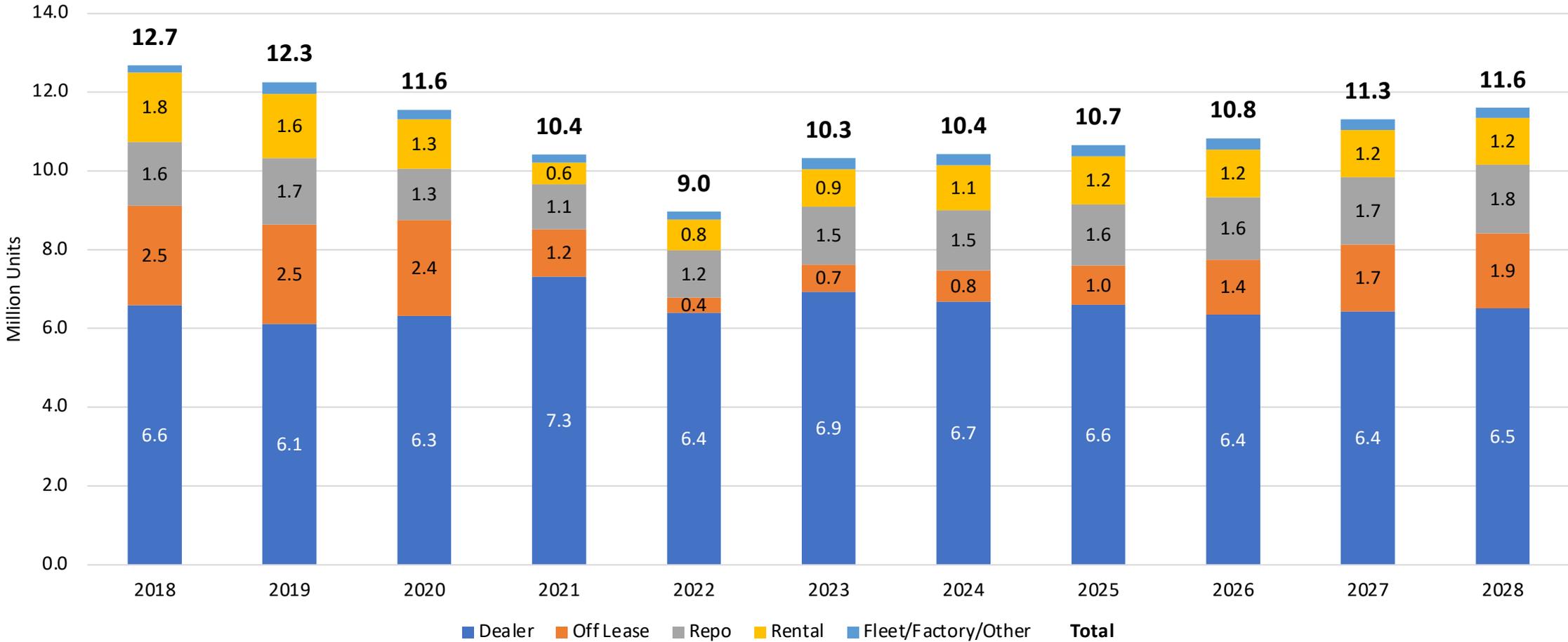
- Repo +29% vs 22' but down (5%) vs 19'
- Lease +76% vs 22' yet down (73%) vs 19'
- Rental down (14%) vs 22' and down (52%) vs 19'

WHOLESALE FLOW | Steady Rise After Hitting Low in 2022

After 13% decline in 2022, wholesale market should see gradual recovery to 2020 levels by 2028

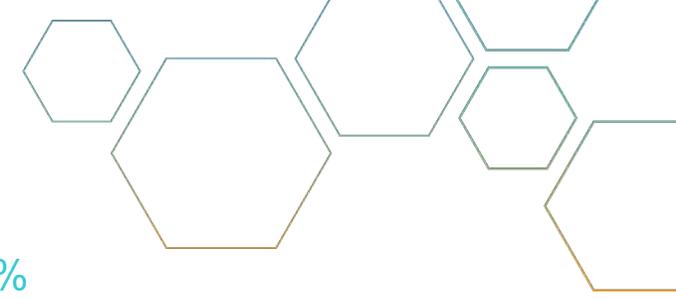


Estimated Wholesale Volumes by Inflow Channel (Annual Volume)

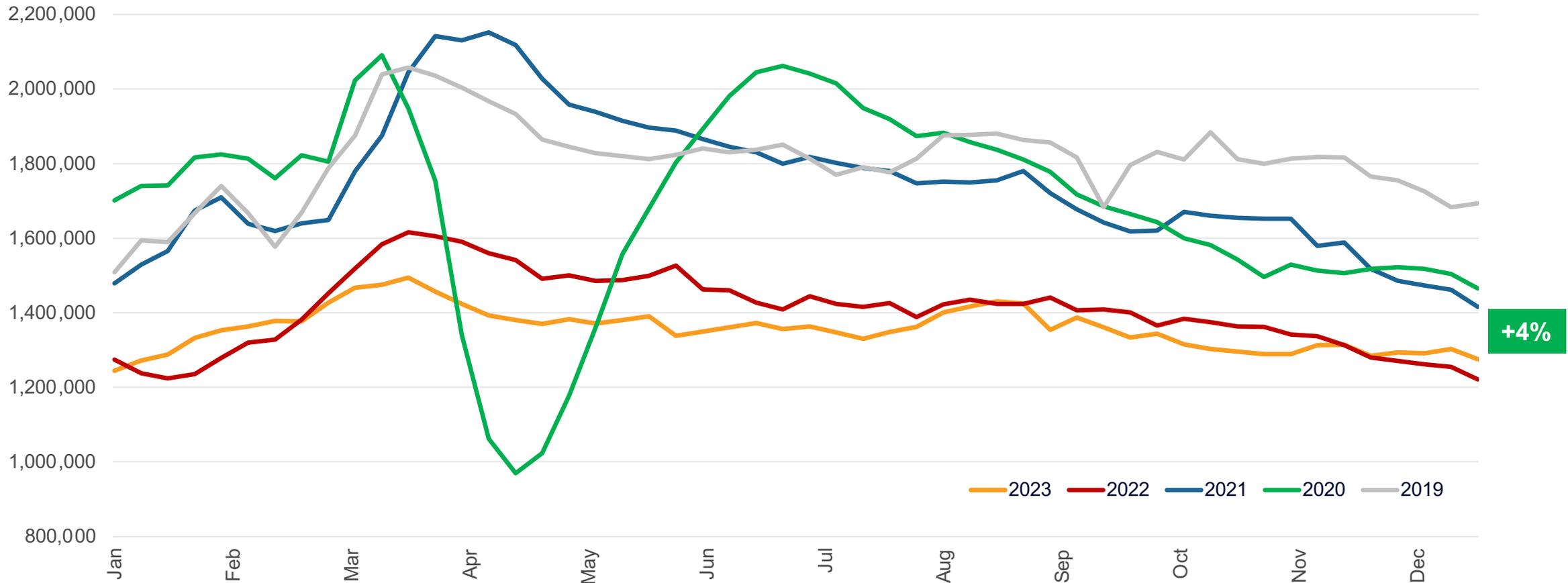


RETAIL USED SALES | Constrained Market, Down in 2023

Weekly sales estimates declined at the end of December, up 4% Y/Y for Week 52; YTD -3%



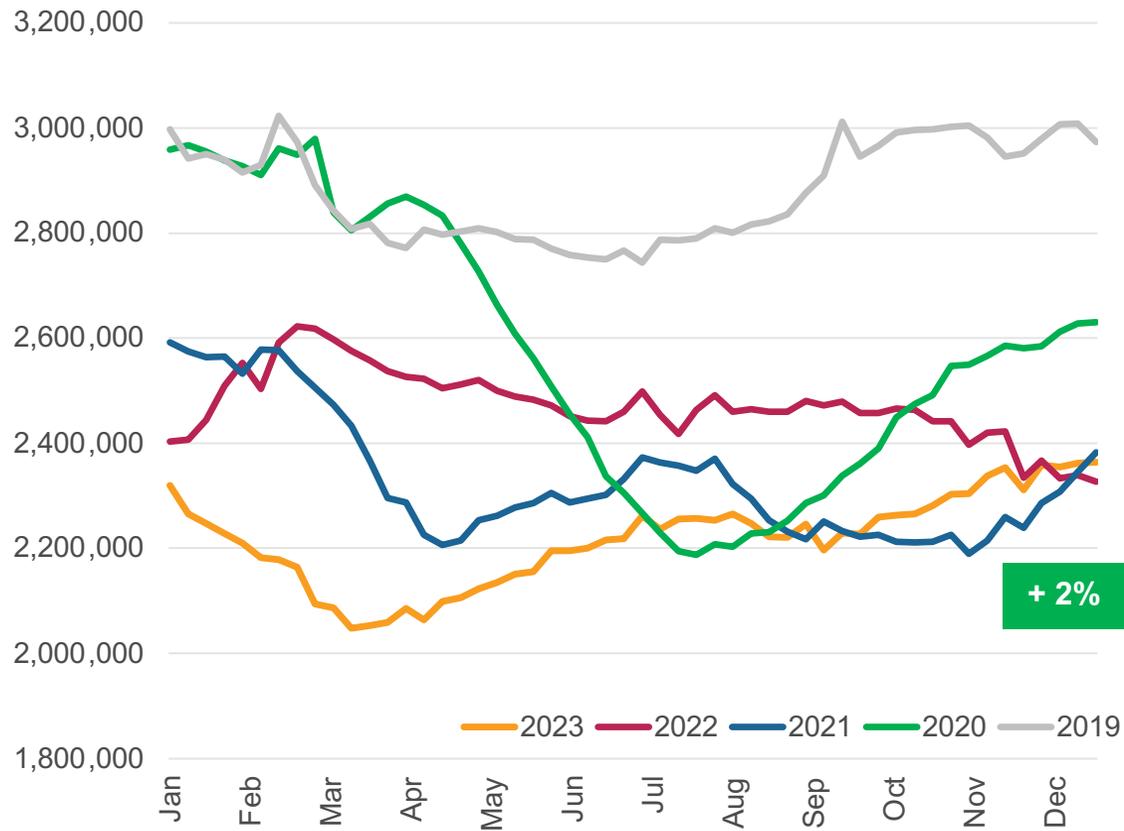
Estimated Rolling 30 Day Retail Sales weekly



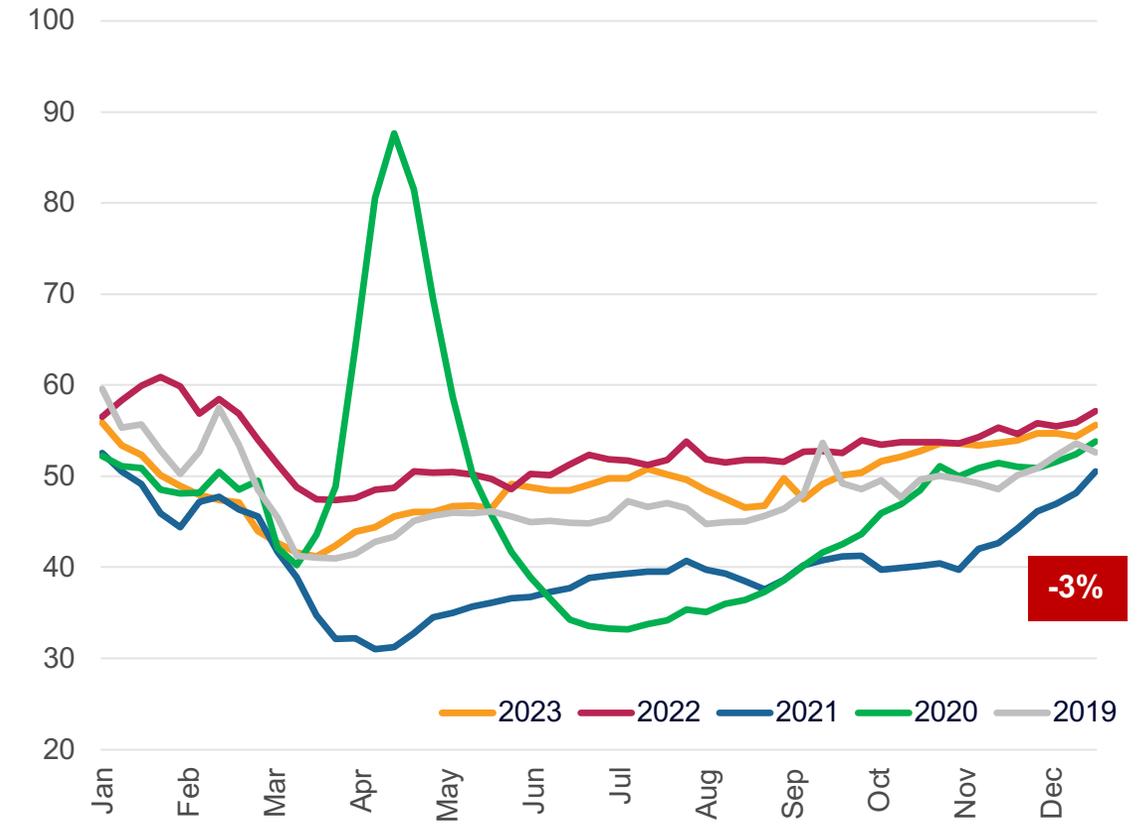
RETAIL USED INVENTORY | Steady Improvement Since Spring

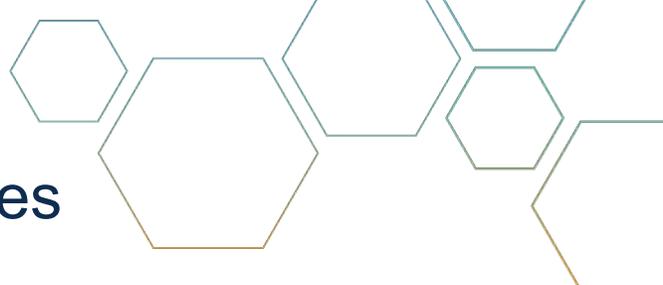
Total supply up 2% or 37K from last year; Days' supply at 56, down 3% from the end of 2022

Available Supply weekly



Days of Supply weekly

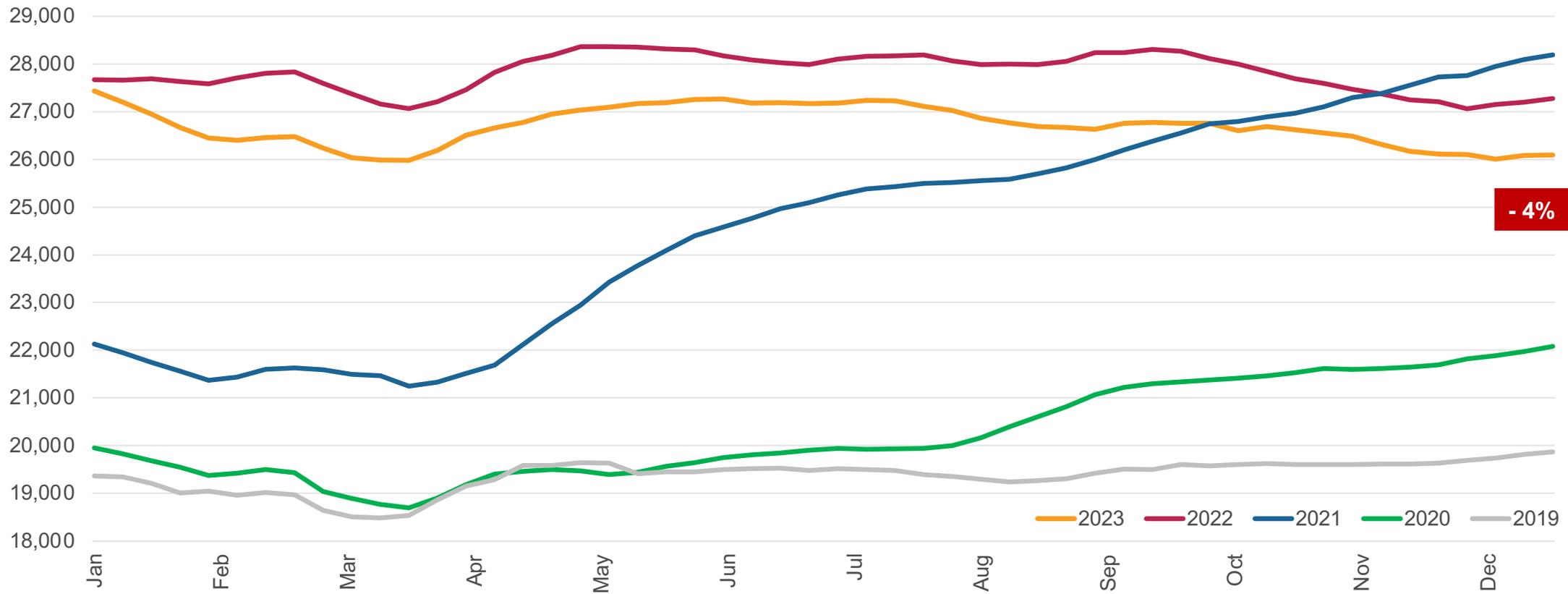


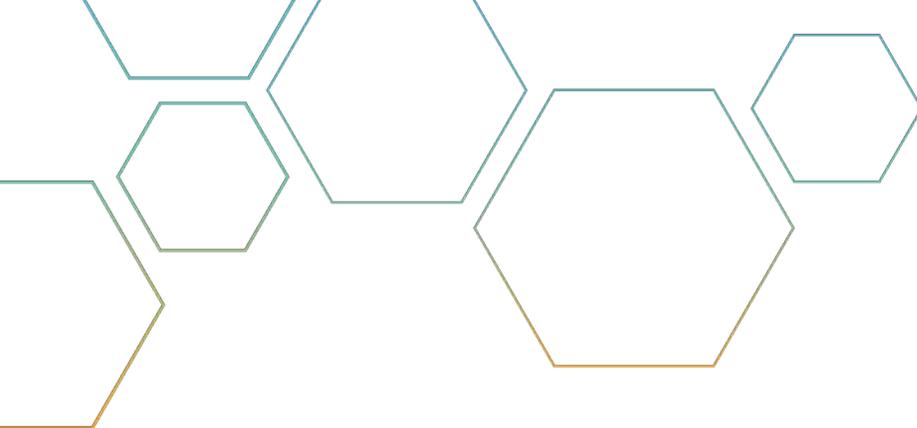


RETAIL USED PRICES | Downward Price Pressure Continues

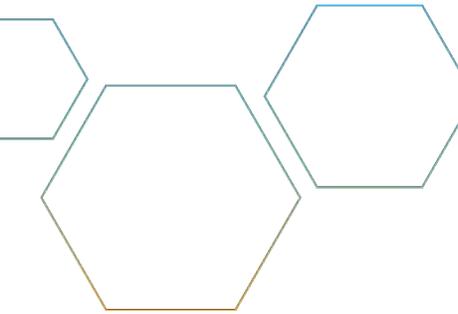
Listing price held lower than 2022 all year and was flat in December

Average Listing Price weekly





2024 FORECASTS & PLAYLIST



JONATHAN SMOKE

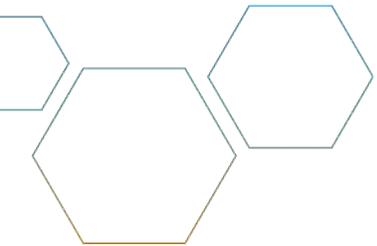
Chief Economist

COX AUTOMOTIVE



2024
FORECASTS

Jan. 8, 2024



15.7M

NEW SALES

(2023: 15.5M)

12.7M

NEW RETAIL SALES

(2023: 12.7M)

3.0M

FLEET SALES

(2023: 2.8M)

2.9M

NEW LEASE
VOLUME

(2023: 2.6M)

23%

LEASE
PENETRATION

(2023: 20%)

2.7M

CPO SALES

(2023: 2.6M)

36.2M

USED SALES

(2023: 35.9M)

19.2M

USED RETAIL SALES

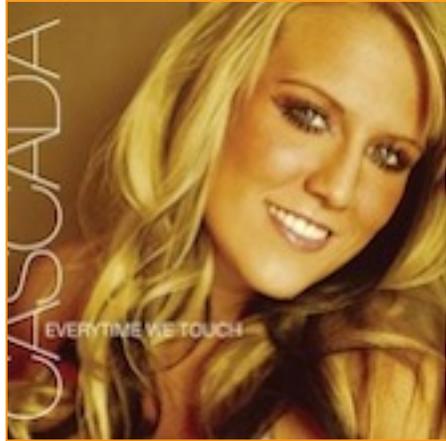
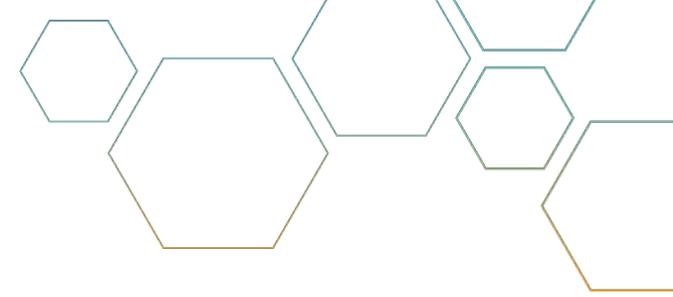
(2023: 19.0M)

+0.5%

DEC 2024 Y/Y MANHEIM
USED VEHICLE
VALUE INDEX

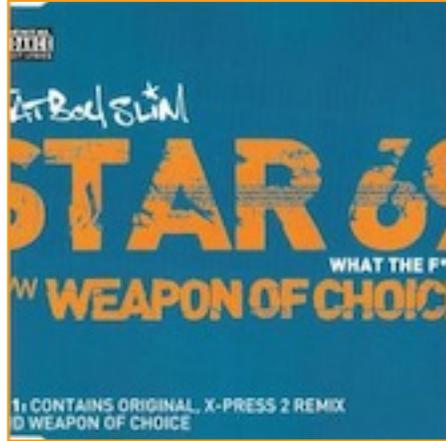
(2023: -7.0%)

2024 PLAYLIST



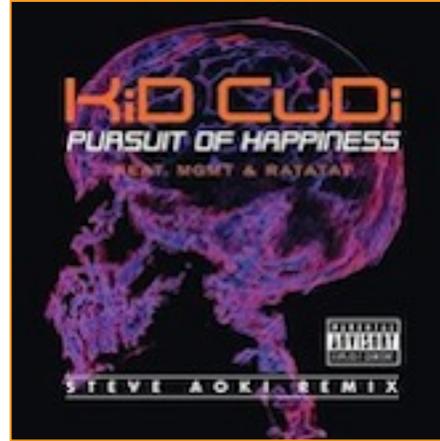
**Everytime We
Touch**
By Cascada

**Slow Growth
Ahead**



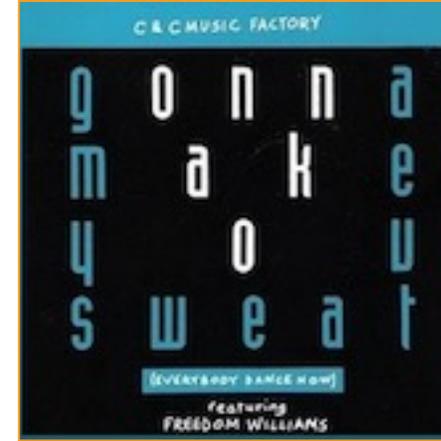
**The Weapon of
Choice**
By Fatboy Slim

**Vehicle Supply Is
Back to Favoring
Consumers**



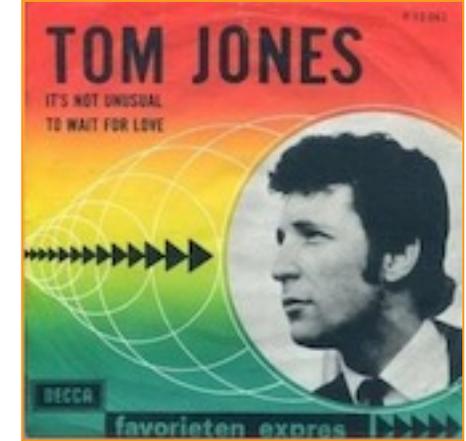
**The Pursuit of
Happiness (Steve
Aoki Remix)**
By Kid Cudi

**Bid Farewell to the
Seller's Market**



**Gonna Make You
Sweat (Everybody
Dance Now)**
By C+C Music
Factory

Year of More

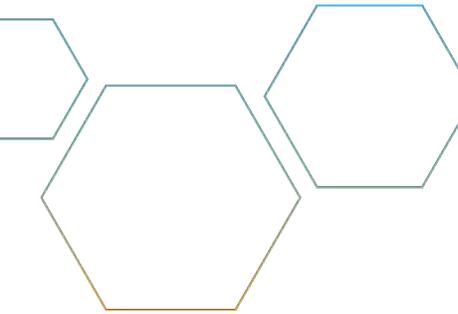


**It's Not Unusual
By Tom Jones**

Normal Is Nice



Q&A



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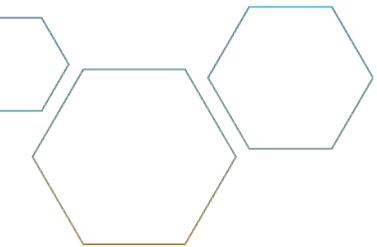
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Auto Market Snapshot: www.coxautoinc.com/marketsnapshot

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.





THANK YOU FOR ATTENDING!

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