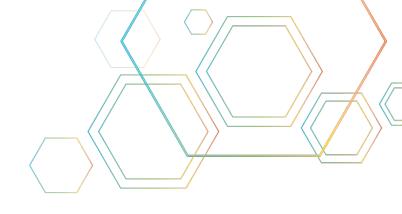


The Power of Cox Automotive

The World's Largest Provider of Automotive Services and Solutions



COX AUTOMOTIVE





























Agenda

Time Check: 90 Minutes

Intro & Cox Automotive

The Economy

Market Performance: Used Vehicles

Market Performance: New Vehicles

2023 Outlook & Playlist

Q&A

Mark Schirmer, Director, Corporate Communications

Jonathan Smoke, Chief Economist

Chris Frey, Senior Manager, Economic and Industry Insights

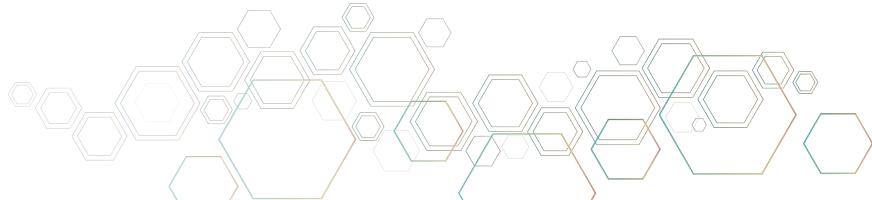
Charlie Chesbrough, Senior Economist

Jonathan Smoke, Chief Economist and Resident DJ

w/ Michelle Krebs, Executive Analyst

Jeremy Robb, Senior Director, Economic and Industry Insights

Rebecca Rydzewski, Research Manager, Economic and Industry Insights









Jonathan Smoke

Chief Economist



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Consumer Sentiment Improving Again

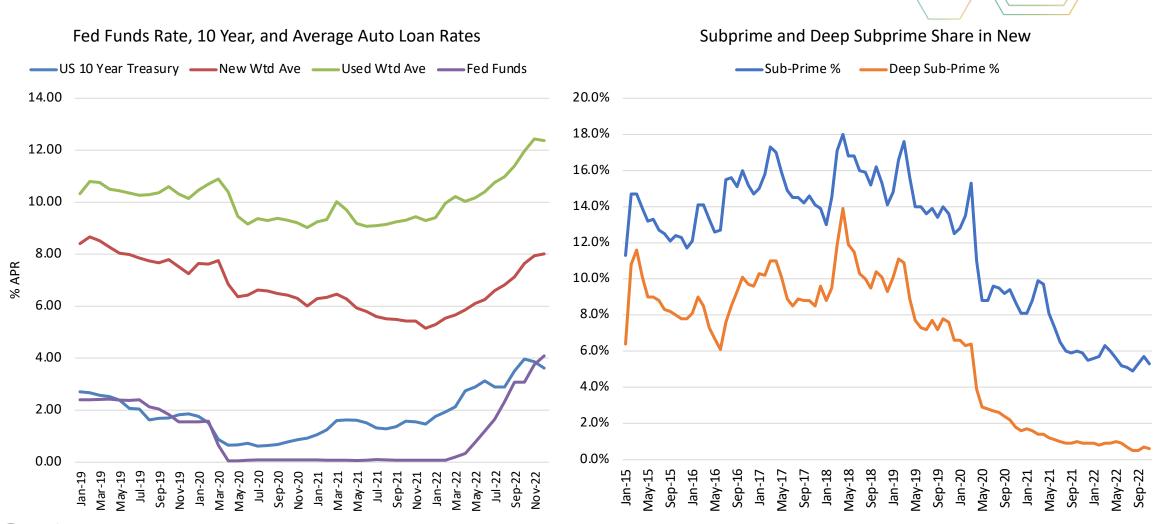
The Index of Consumer Sentiment increased 2.6% in November and 4.3% in December

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



State of the Industry

Fastest and largest increases in interest rates resulting in affordability crisis



The Economy

Overall Economy	Real GDP Growth	+7.0% (Q4 '21)	3.2% (Q3 '22)	+0.8% (Q4 '22 F)	
Employment Conditions	U3 Unemployment Rate	3.9% (Dec '21)	3.6% (Nov '22)	3.5% (Dec '22)	
Buyer Confidence	UofM Consumer Sentiment	70.6 (Dec '21)	56.8 (Nov '22)	59.7 (Dec '22)	
Wages	Earnings Growth	4.9% (Dec '21)	4.8% (Nov '22)	4.6% (Dec '22)	
Buyer Ability	Disposable Income Y/Y	6.0% (Nov '21)	2.9% (Nov '22)		

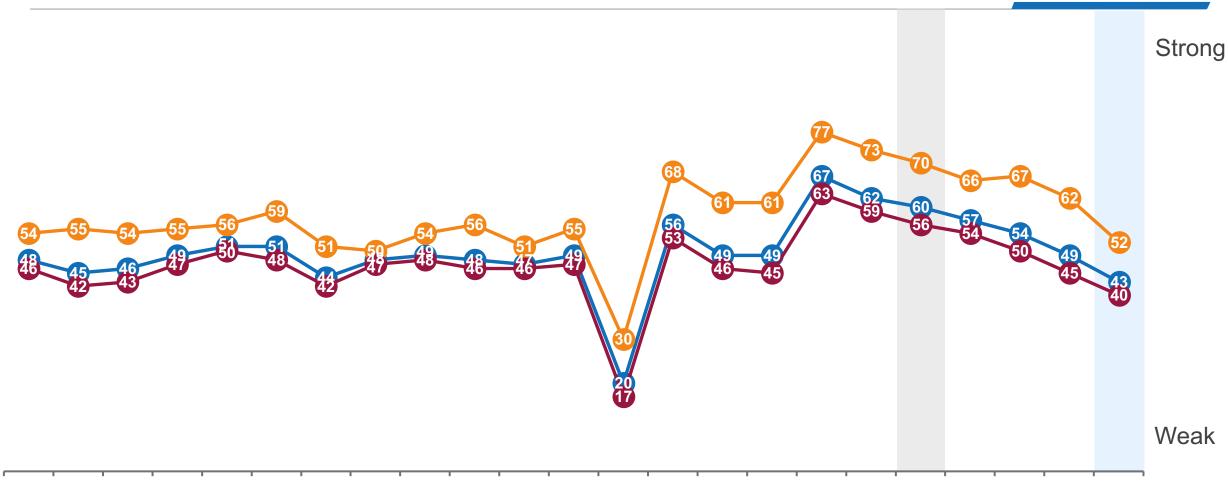
The Economy

Auto Finance	FRBNY	\$199 billion (Q3 '21)	\$185 billion (Q3 '22)		
Interest Rates	Effective Fed Funds Rate	0.08% (Dec '21)	4.09% (Dec '22)		
Borrowing Costs	Average New Auto Loan Rate	5.15% (Dec '21)	8.02% (Dec '22)		
Mobility Costs	AAA Average Retail Unleaded Gasoline Price	\$3.29 (Dec '21)	\$3.47 (Nov '22)	\$3.21 (Dec '22)	



FOURTH QUARTER 2022

How would you describe the current market for vehicles in the areas where you operate?

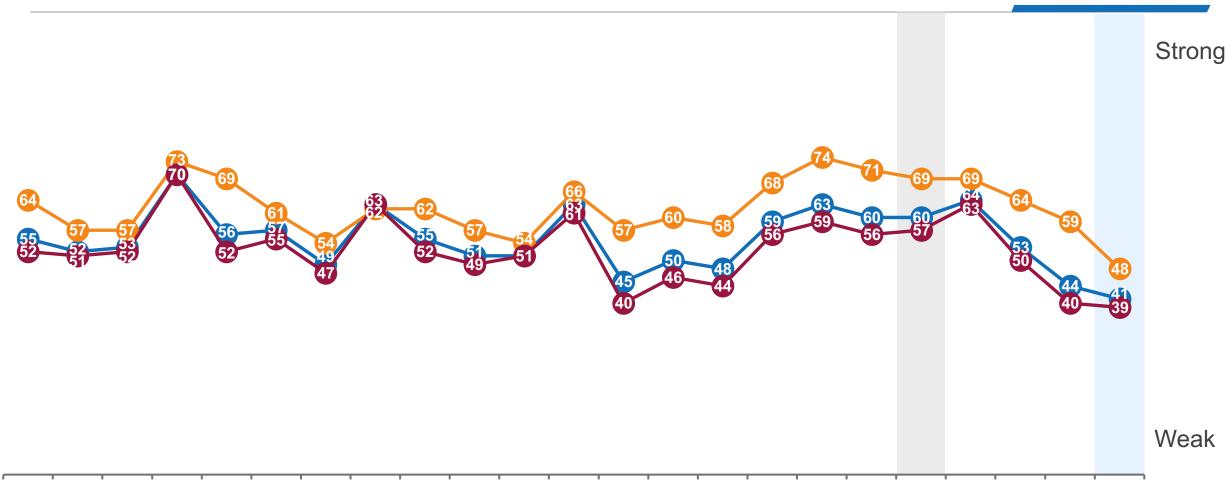


Q2 17 Q3 17 Q4 17 Q1 18 Q2 18 Q3 18 Q4 18 Q1 19 Q2 19 Q3 19 Q4 19 Q1 20 Q2 20 Q3 20 Q4 20 Q1 21 Q2 21 Q3 21 Q4 21 Q1 22 Q2 22 Q3 22 Q4 22



FOURTH QUARTER 2022

What do you expect the market for vehicles in your area to look like 3 months from now?



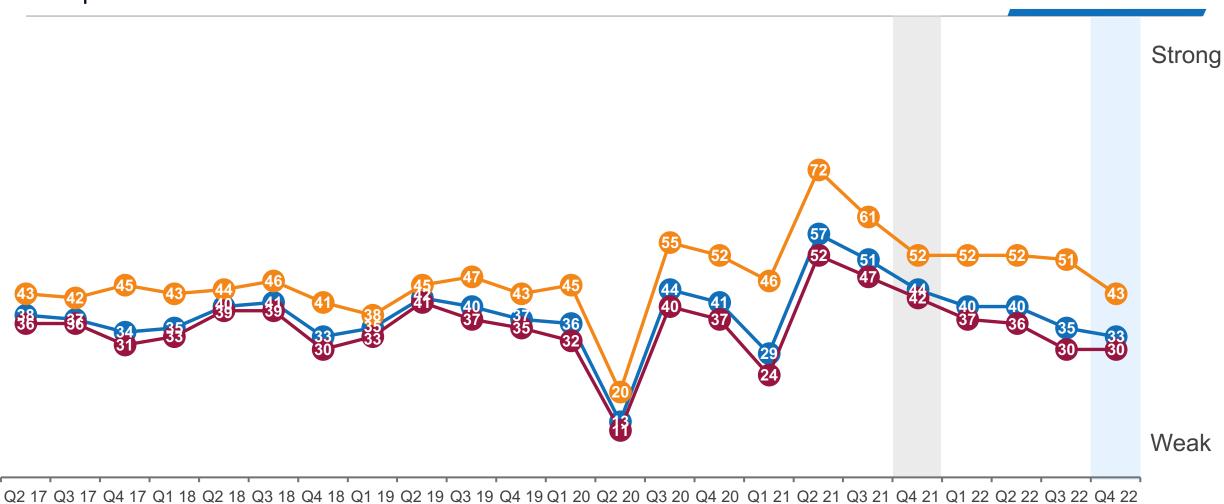
Q2 17 Q3 17 Q4 17 Q1 18 Q2 18 Q3 18 Q4 18 Q1 19 Q2 19 Q3 19 Q4 19 Q1 20 Q2 20 Q3 20 Q4 20 Q1 21 Q2 21 Q3 21 Q4 21 Q1 22 Q2 22 Q3 22 Q4 22



How do you rate the customer traffic to your dealership over the past 3 months?

Dealer Sentiment Index

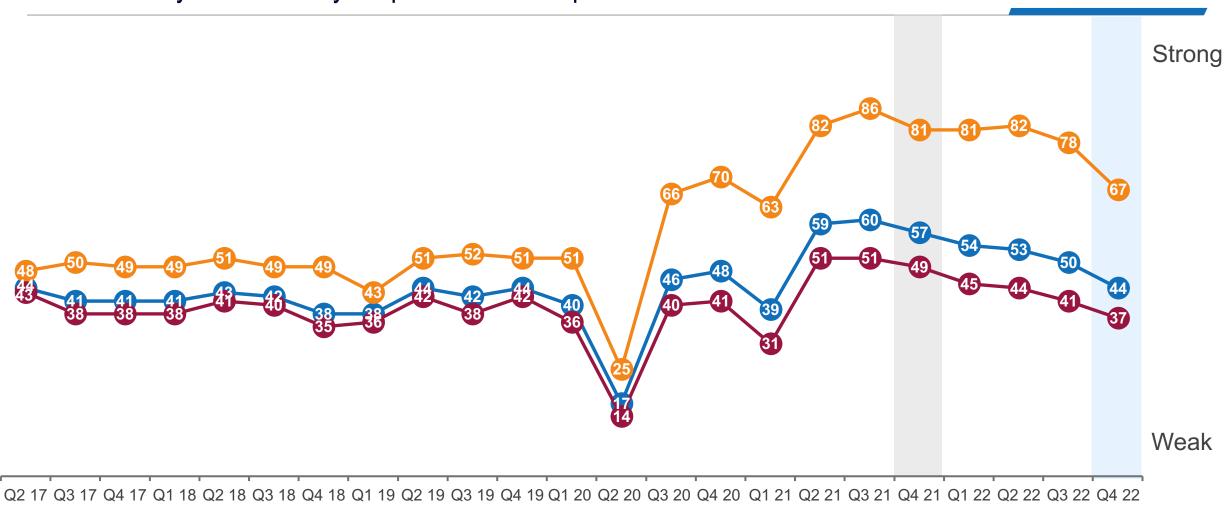
FOURTH QUARTER 2022





FOURTH QUARTER 2022

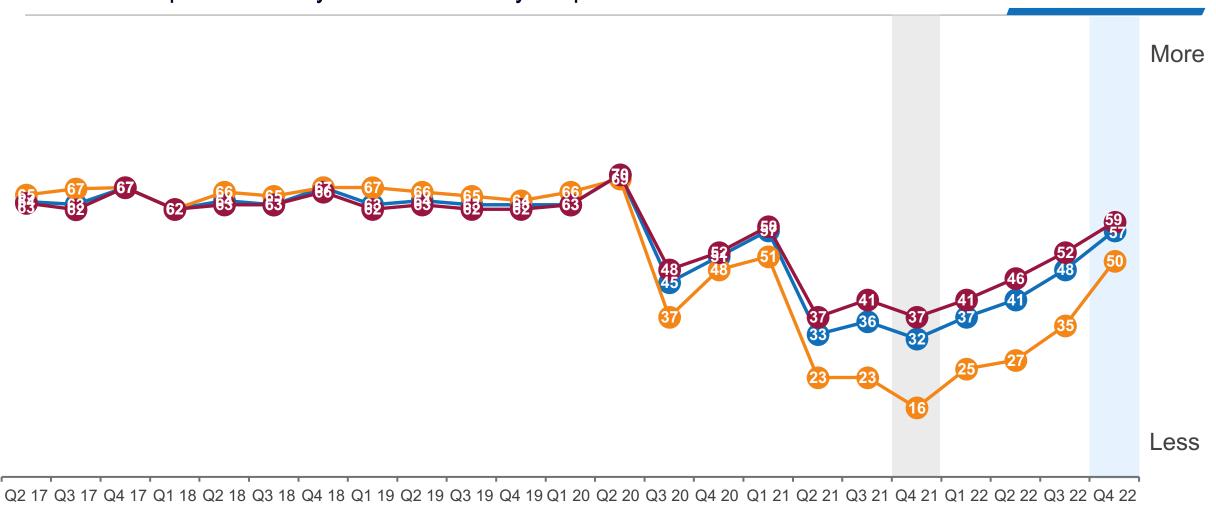
How would you describe your profits over the past 3 months?





FOURTH QUARTER 2022

How much pressure do you feel to lower your prices?



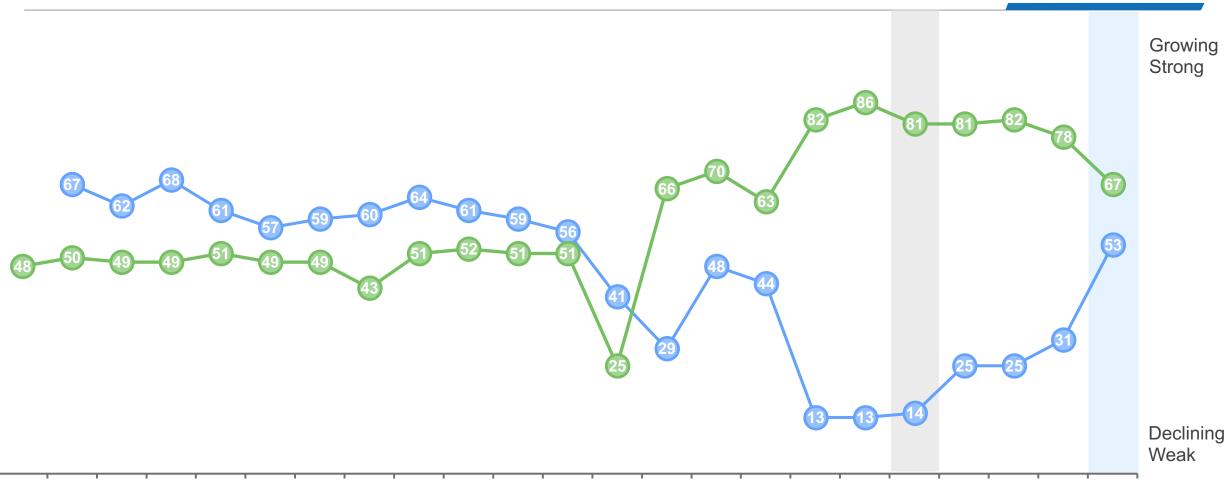
→Overall →Franchised →Independent

FOURTH QUARTER 2022

Inventory/Profits

How would you describe your profits over the past 3 months?

How would you describe the current new-vehicle inventory levels?



Q2 17 Q3 17 Q4 17 Q1 18 Q2 18 Q3 18 Q4 18 Q1 19 Q2 19 Q3 19 Q4 19 Q1 20 Q2 20 Q3 20 Q4 20 Q1 21 Q2 21 Q3 21 Q4 21 Q1 22 Q2 22 Q3 22 Q4 22

New Vehicle Inventory

Franchised Profits

COX AUTOMOTIVE / Research & Market Intelligence



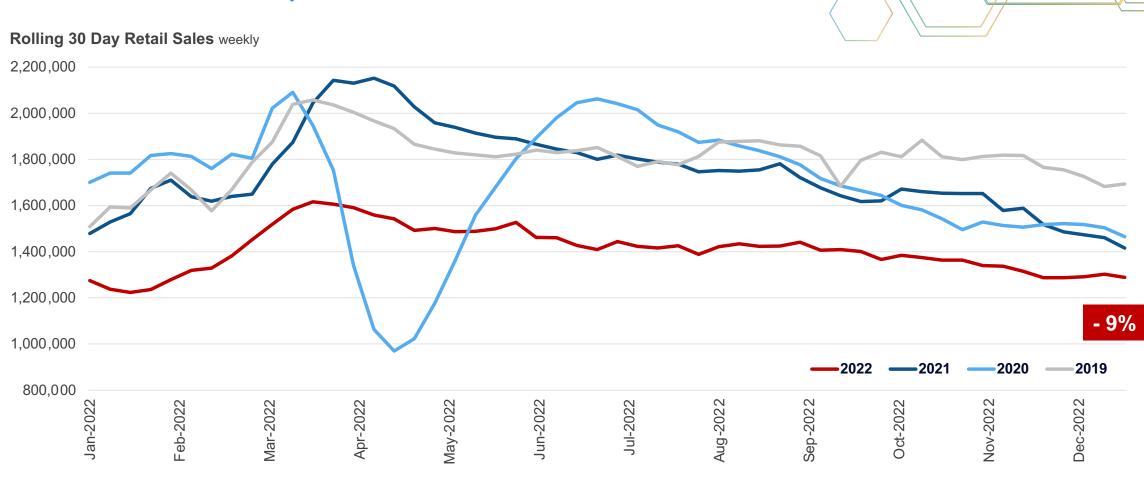


Chris Frey

Senior Manager, Economic and Industry Insights

Used-Vehicle Sales | Current Pace Down 9% From Last Year

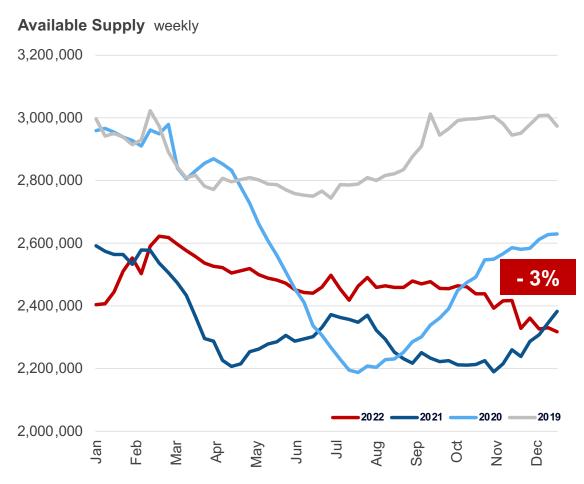
Downward trend to finish the year

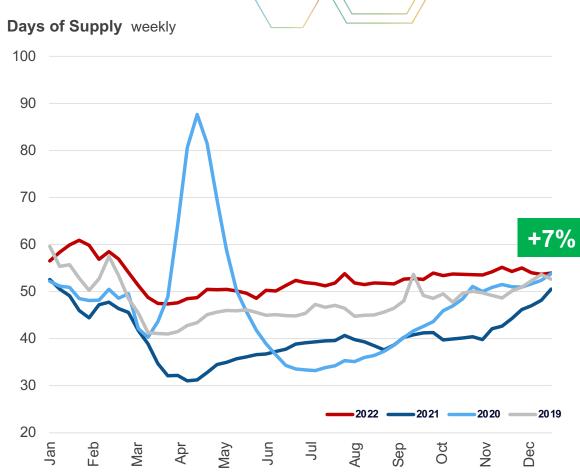




Used-Vehicle Inventory | Finishing Down By 3% From 2021

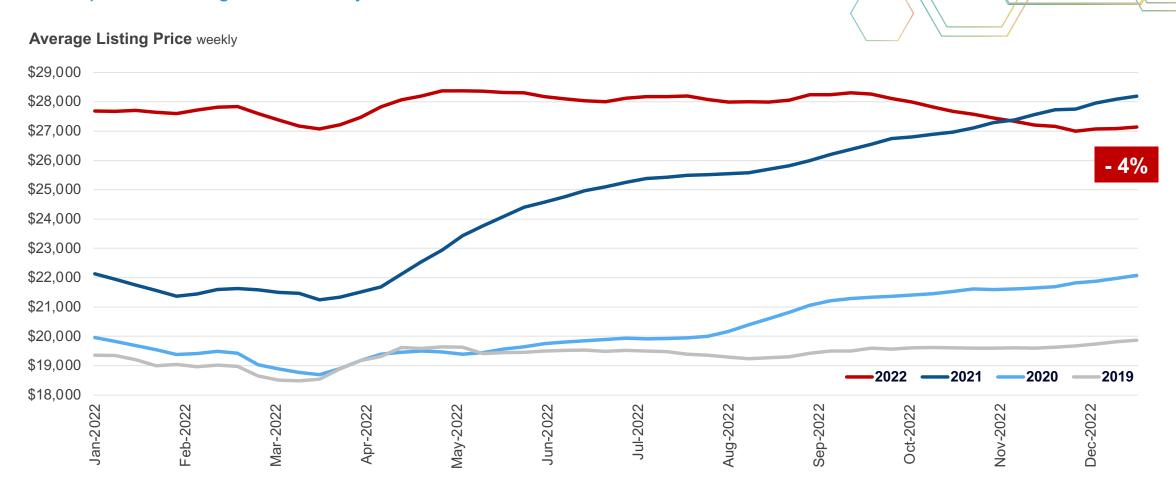
Days of supply stabilizing near 50 days – close to 2019 levels





Used-Vehicle Listing Price | Finishing Year Down 4%

Used prices showing some stability in December as decline slows





Price Movement | Ended Down Year with Larger Declines

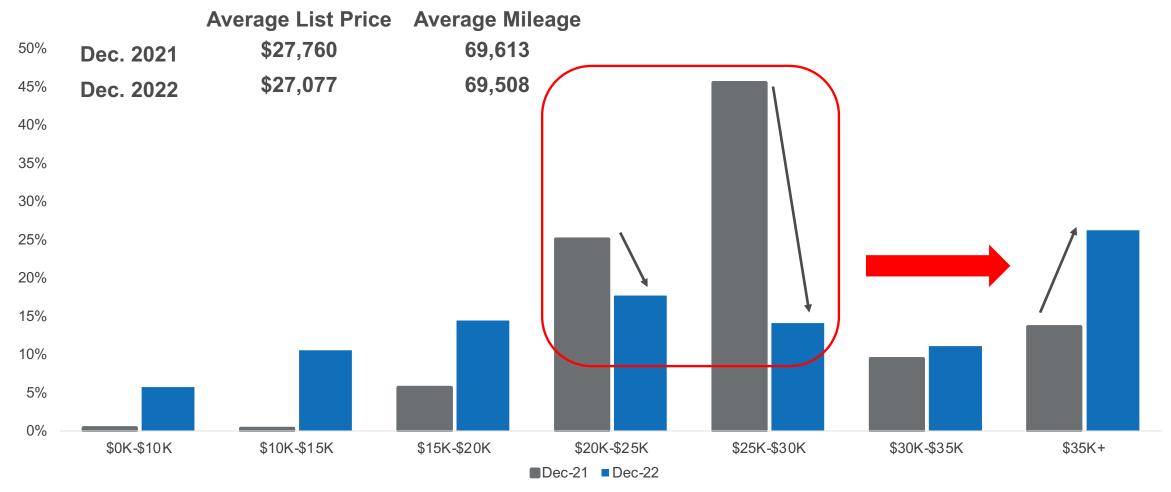
The average MY 2019 wholesale price declined 0.8% in last week of December, and retail declined 0.6%



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

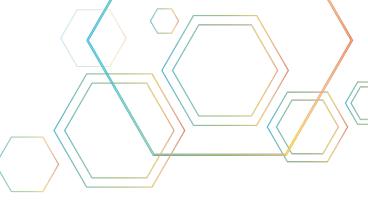
Retail Inventory | Higher-Price Skew Not as Pronounced as Q3

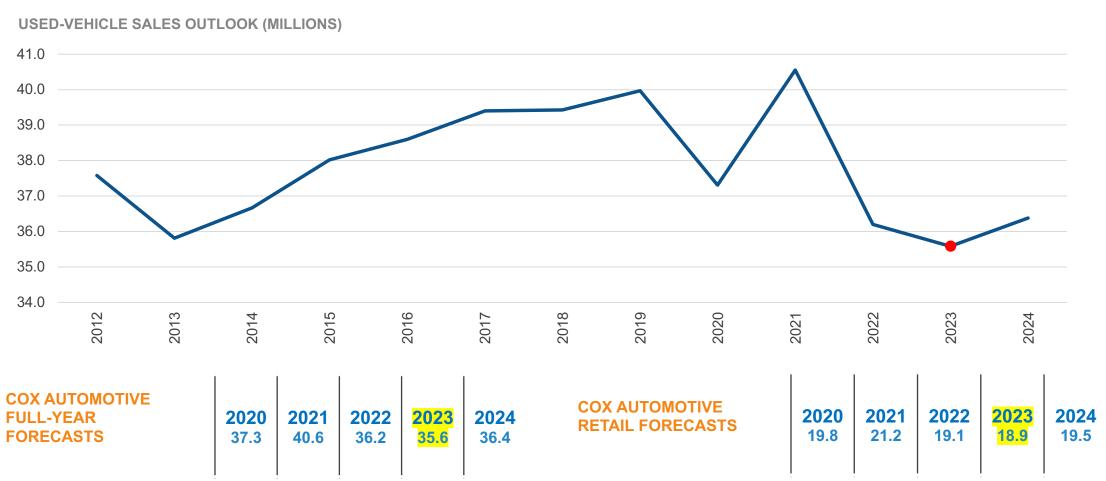
Nearly identical vehicles, on average, year-over-year, though fewer highest-priced units compared to Q3.



Used-Vehicle Outlook | More Decline In 2023 Expected

High prices, higher rates, less trades, no stimulus checks all lead to fewer sales







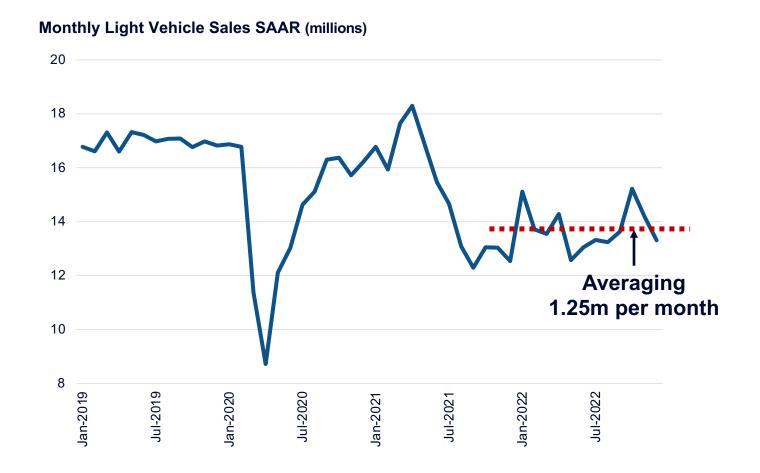


Charlie Chesbrough

Senior Economist

New-Vehicle SAAR | CY2022 Sales Finished Near 13.7 Million

Sales volume up in Q4 suggesting some optimism for this year



Time Period	Sales Millions	SAAR Millions			
December 2021	1.20	12.7			
December 2022	1.26	13.3			
Change	4.9%	4.7%			
Q4 2021	3.27	3.4			
Q3 2022	3.38	3.5			
Q4 2022	3.57	3.7			
Change Y/Y	9.1%	9.0%			
Change Q/Q	5.3%	5.3%			
CY 2021	14.95	14.9			
CY 2022	13.73	13.8			
Change	(-8.1%)	-7.9%			
2023 Forecast					
14.1 million (+ 2.7%)					

OEM Performance | GM Back On Top

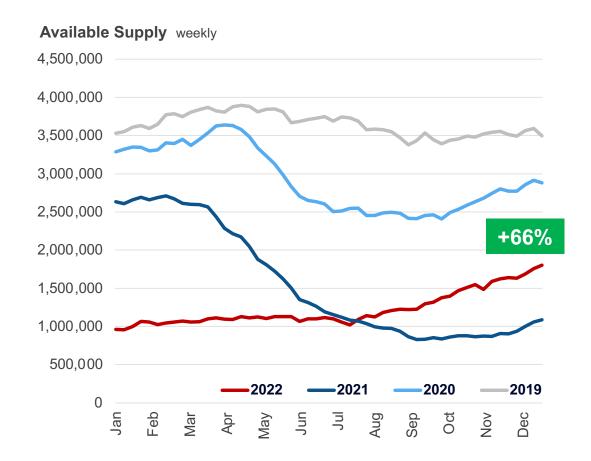
Supply limitations impacted sales last year but that is changing quickly

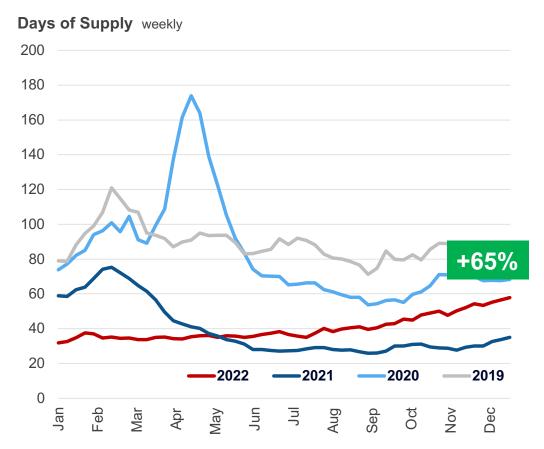
OEM	Q4 2021	Q3 2022	Q4 2022	Q/Q Change	Y/Y Change	CY2021	CY2022 Change	Share '21	Share '22	Diff.
General Motors	436,363	551,976	618,692	12.1%	41.8%	2,202,582	2,258,429 2.5%	14.6%	16.3%	1.6%
Toyota	474,378	526,020	536,740	2.0%	13.1%	2,332,262	2,108,457 (-9.6%)	15.5%	15.2%	-0.3%
Ford	504,138	461,424	479,769	4.0%	-4.8%	1,891,753	1,850,925 -2.2%	12.6%	13.3%	0.8%
Stellantis	411,513	385,665	347,669	-9.9%	-15.5%	1,777,393	1,547,076 (-13.0%)	11.8%	11.1%	-0.7%
Hyundai	313,638	384,451	386,898	0.6%	23.4%	1,489,118	1,474,224 -1.0%	9.9%	10.6%	0.7%
Honda	287,206	222,050	255,250	15.0%	-11.1%	1,466,630	983,507 -32.9%	9.7%	7.1%	-2.7%
Nissan/Mitsu	219,844	170,868	211,768	23.9%	-3.7%	1,079,676	815,160 -24.5%	7.2%	5.9%	-1.3%
Subaru	121,008	137,320	155,466	13.2%	28.5%	583,810	556,581 -4.7%	3.9%	4.0%	0.1%
VW	135,931	154,668	140,115	-9.4%	3.1%	641,094	554,145 -13.6%	4.3%	4.0%	-0.3%
Tesla	115,248	131,080	131,574	0.4%	14.2%	352,471	522,444 (48.2%)	2.3%	3.8%	1.4%
BMW	100,891	85,209	112,057	31.5%	11.1%	366,574	361,892 -1.3%	2.4%	2.6%	0.2%
Daimler	76,031	87,682	88,799	1.3%	16.8%	329,574	351,255 6.6%	2.2%	2.5%	0.3%
Mazda	59,543	72,589	79,517	9.5%	33.5%	332,756	294,909 -11.4%	2.2%	2.1%	-0.1%
Geely (Volvo)	28,135	24,532	31,342	27.8%	11.4%	124,591	110,196 -11.6%	0.8%	0.8%	0.0%
Tata (JLR)	17,101	16,002	21,806	36.3%	27.5%	92,380	68,546 -25.8%	0.6%	0.5%	-0.1%
Rivian	583	6,584	8,054	22.3%	1281.5%	584	20,332 3381.5%	0.0%	0.1%	0.1%
Lucid	577	654	1,060	62.1%	83.7%	577	2,656 360.3%	0.0%	0.0%	0.0%
NATION	3,302,128	3,418,774	3,606,576	5.5%	9.2%	15,063,825	13,880,734 -7.9%	100.0%	100.0%	0.0%



New-Vehicle Inventory | Finishing 66% Up From Last Year

Supply noticeably improving – now 715K more vehicles than in 2021

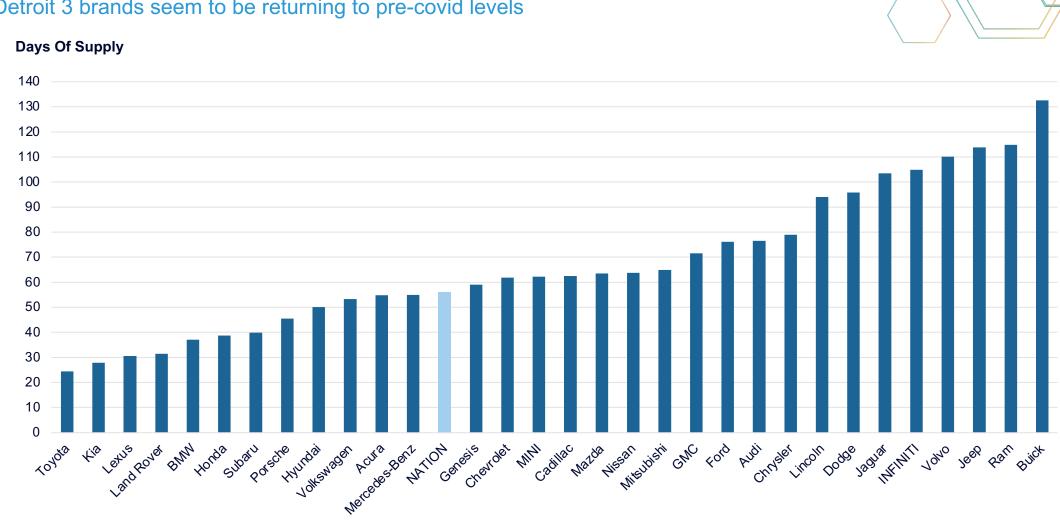






Brand Inventory | Supply Situation Varies





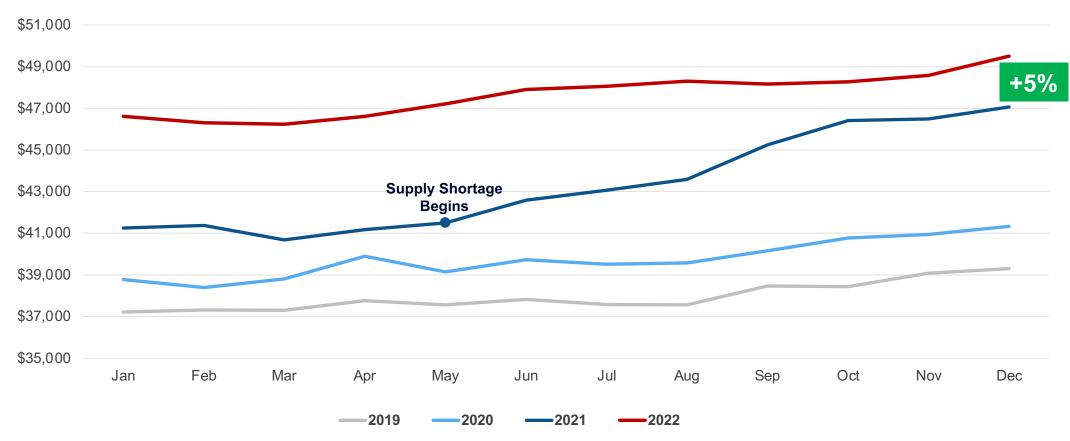


Transaction Prices | Finished 2022 Near \$49,507

Inflation slowing but no retreat - more expensive mix likely to continue



Estimated Monthly Transaction Prices

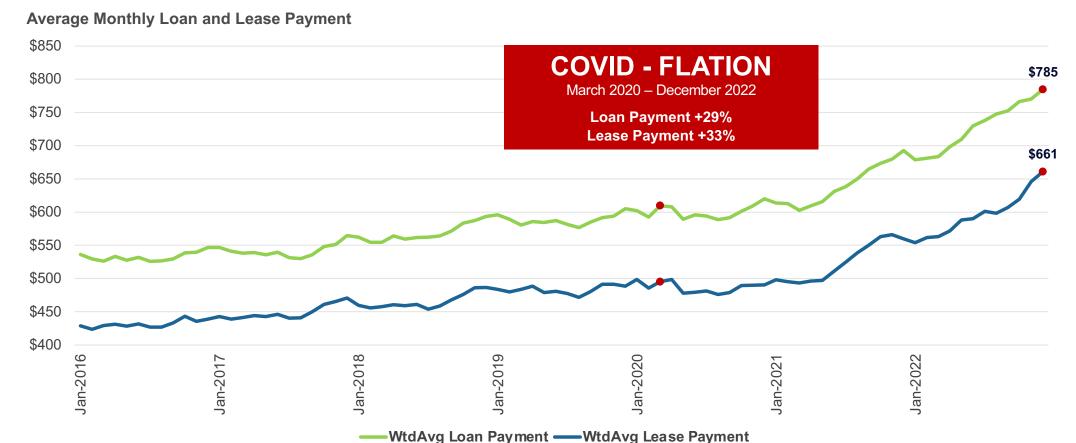




Monthly Payments | Average Loan = \$785, Lease=\$661

Lease payment rising more post Covid - rising interest rates will push both even higher



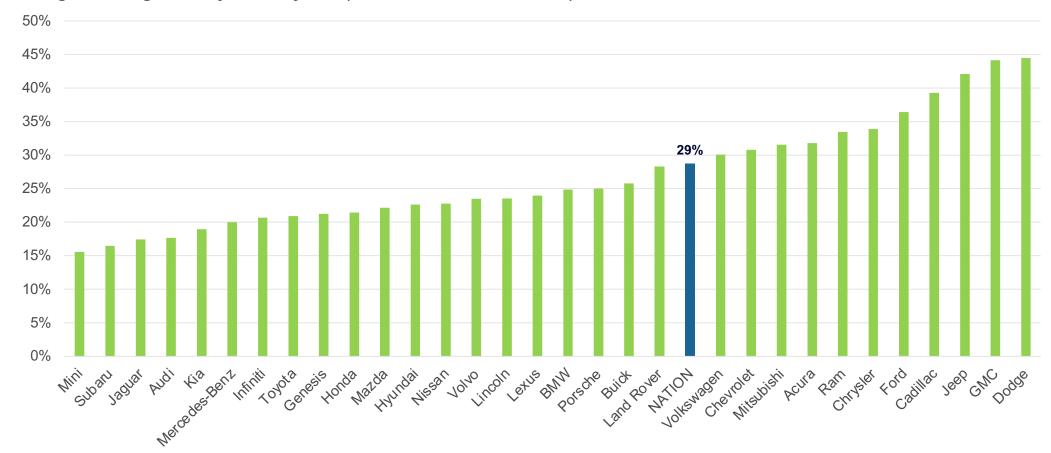




Change In Payments | Detroit Brands Have Largest Increases

Many brands show only mild inflation – may be less vulnerable to worsening conditions

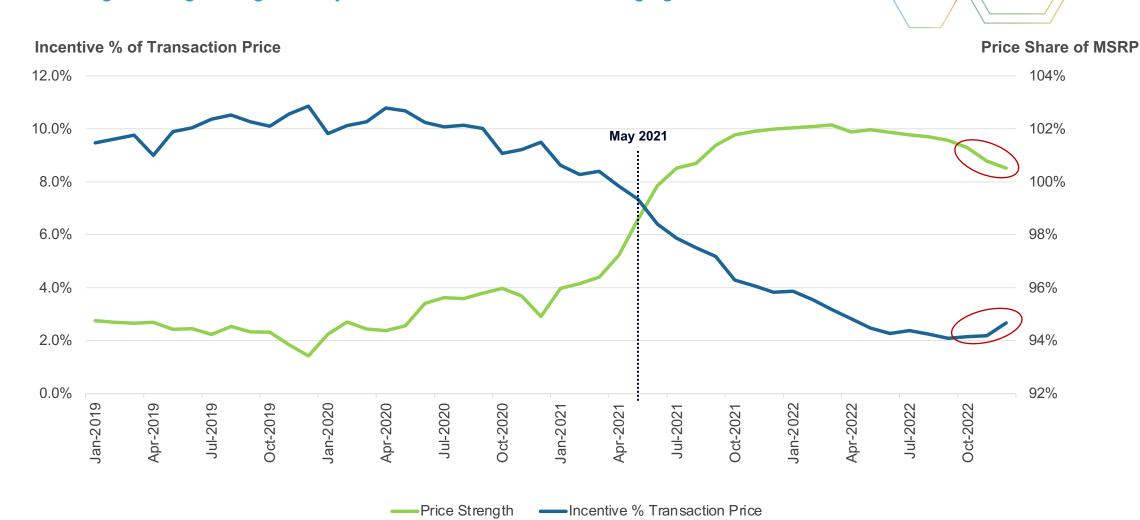
Change In Average Monthly Loan Payment (March 2020 - December 2022)





Seller's Market | Strong Margins Now Weakening

Discounting and negotiating still way down, MSRP=Price now changing





Big Brand Discounting | Strategies May Be Changing, Slowly

All brands well below two year ago levels, but some show up-tick in recent months

Hyundai

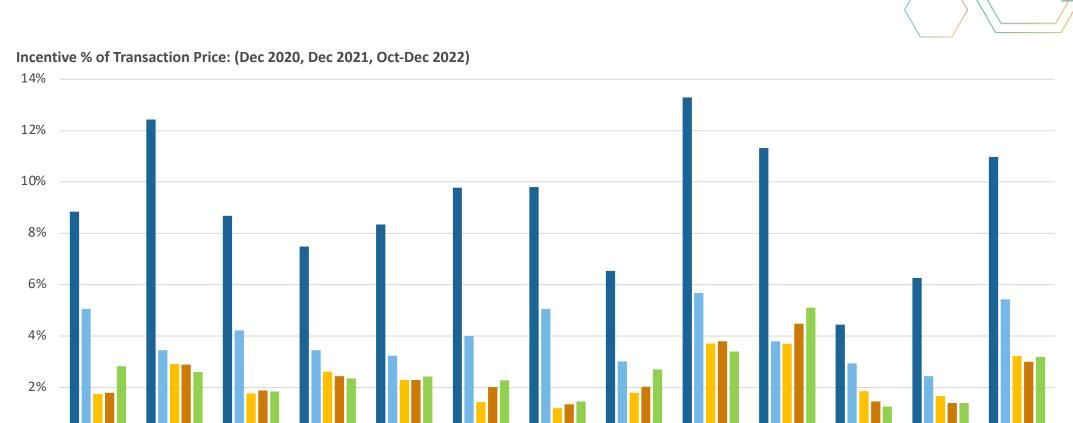
Jeep

12/1/2021

Honda

12/1/2020





Kia

10/1/2022

Mercedes

11/1/2022

Nissan

Ram

12/1/2022

Subaru



BMW

Chevrolet

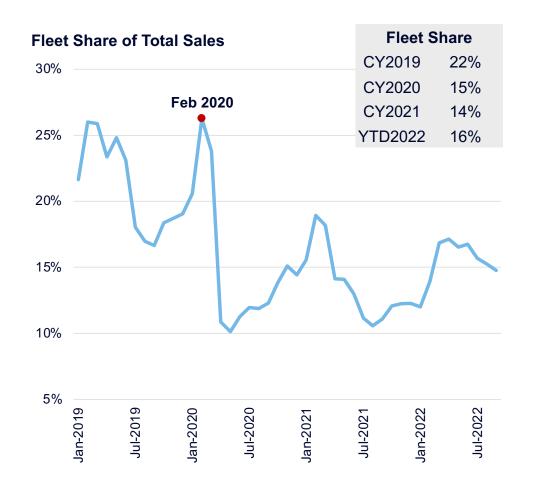
Ford

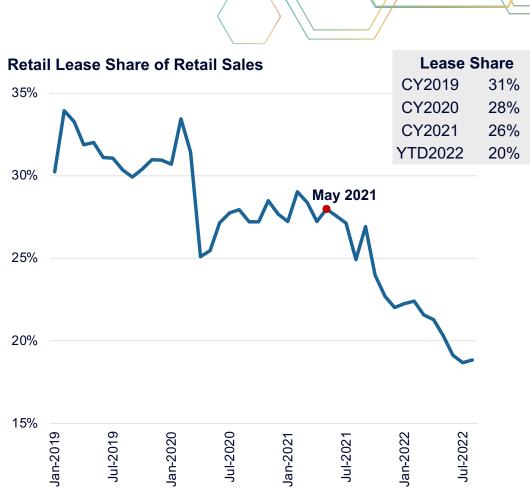
Volkswagen

Toyota

Sales Channels | Less Fleet and Lease Continues

Constrained supply keeping these sales low - offers future opportunities for OEMs

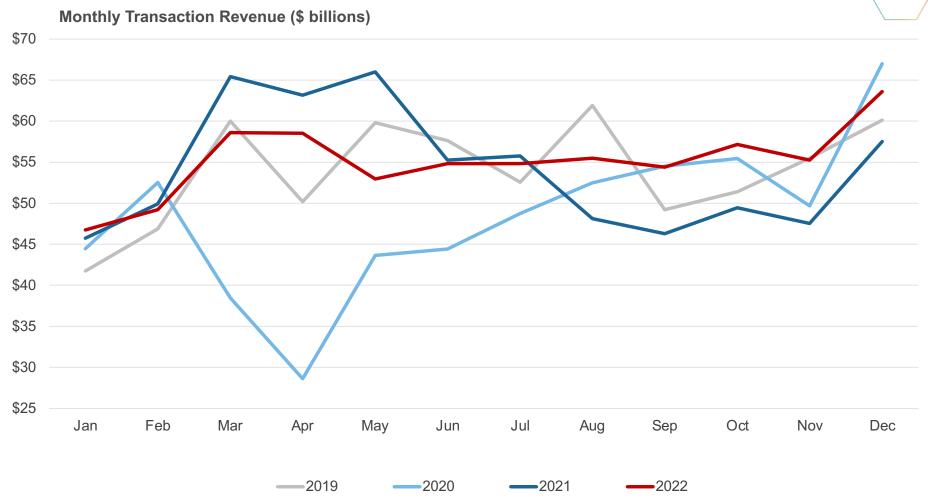






Total Revenue | High Prices Offsetting Lower Volumes

Lower supplies and incentives is transforming business models – why get back to "normal"



Total Revenue (billions)					
CY2019	\$647				
CY2020	\$580				
CY2021	\$650				
CY2022	\$662				
CY 2022					
Sales	-8%				
Revenue	+2%				





Jonathan Smoke

Chief Economist



COX AUTOMOTIVE



14.1M NEW SALES 11.9M
NEW RETAIL SALES

2.2M FLEET SALES

2023 FORECASTS

2.5M

NEW LEASE VOLUME

21%

LEASE
PENETRATION

2.2M CPO SALES

35.6M USED SALES

18.9M
USED RETAIL SALES

-4.3%
DEC 2023 Y/Y MANHEIM
USED VEHICLE
VALUE INDEX

10 PREDICTIONS FOR 2023



A Slow-Growing Economy Will Place Pressure on the Automotive Market.



Vehicle Affordability Will Be the Greatest Challenge Facing Vehicle Buyers.



New-Vehicle Inventory Levels Will Continue to Increase.



All-Cash Deals Will Increase to Levels Not Seen in Decades.



Total Retail Vehicle Sales Will Fall in 2023, as New-Vehicle Sales Grow, Used Sales Decline.



Dealership Service Operations Volume and Revenue Climb.



Sales of Electric Vehicles in the U.S. Will Surpass 1 Million Units for the First Time.



Half of Vehicle Buyers Will Engage With Digital Retailing Tools.



Used-Vehicle Values Will See Above-Normal Depreciation for a Second-Straight Year.



Federal Incentives Will Encourage More Fleet Buyers to Consider Electrified Solutions.

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2023 Playlist



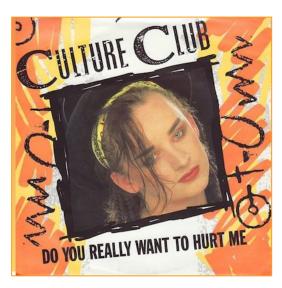
Hurts So Good By John Cougar Mellencamp

Industry benefited from a supply problem, but that's changing rapidly...



Eye of the Tiger By Survivor

More challenging market



Do You Really Want to Hurt Me
By Culture Club

The Fed would take recession over inflation



Beat It
By Michael Jackson

Just beat it





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

Cox Automotive Newsroom: www.coxautoinc.com/newsroom/

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

Auto Market Snapshot: <u>www.coxautoinc.com/marketsnapshot</u>

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.



