



Vehicle Market Update: Not Done With COVID Yet

January 2023

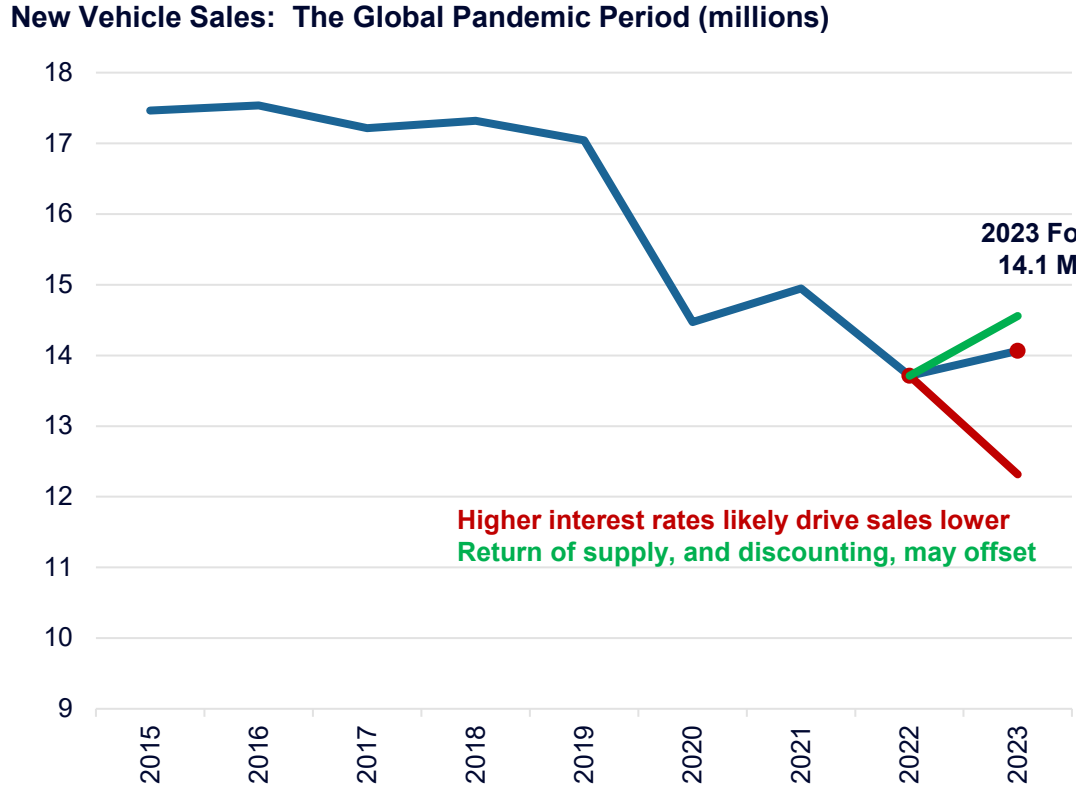
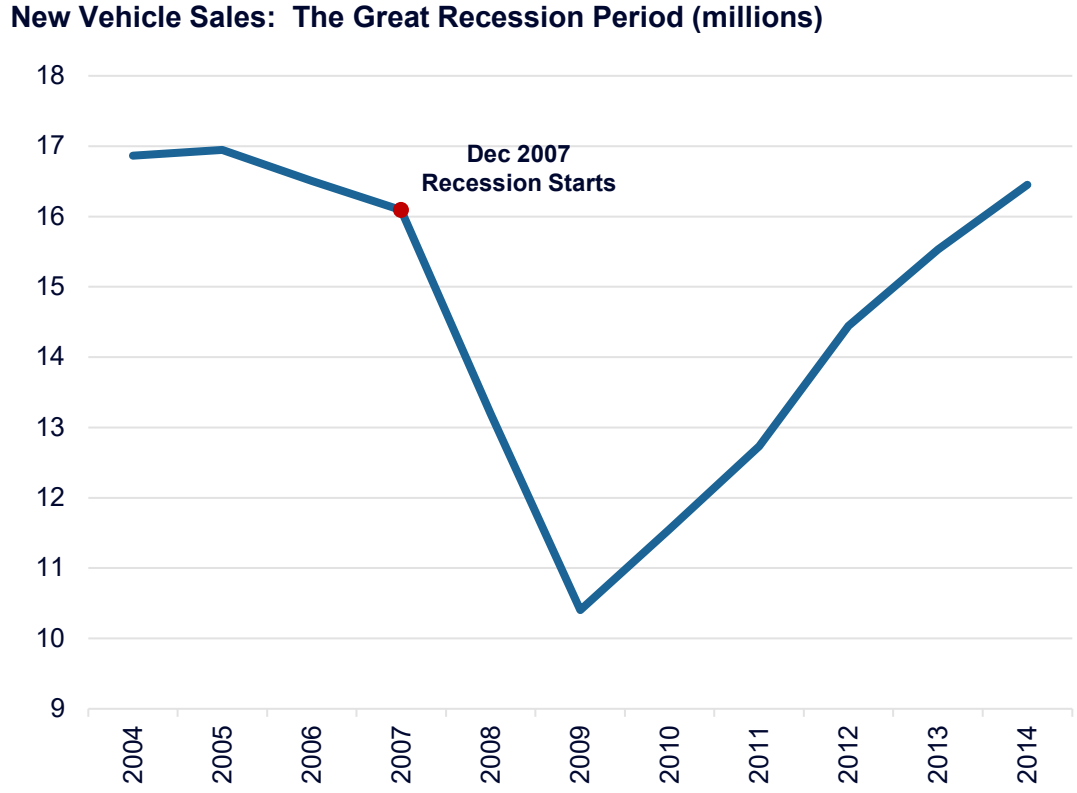
Charles Chesbrough
Senior Economist
Cox Automotive

COX AUTOMOTIVE



Recession Risk | Vehicle Market In Different Situation Today

Sales fell off a cliff in 2008, but will only fall off a curb if recession does occur



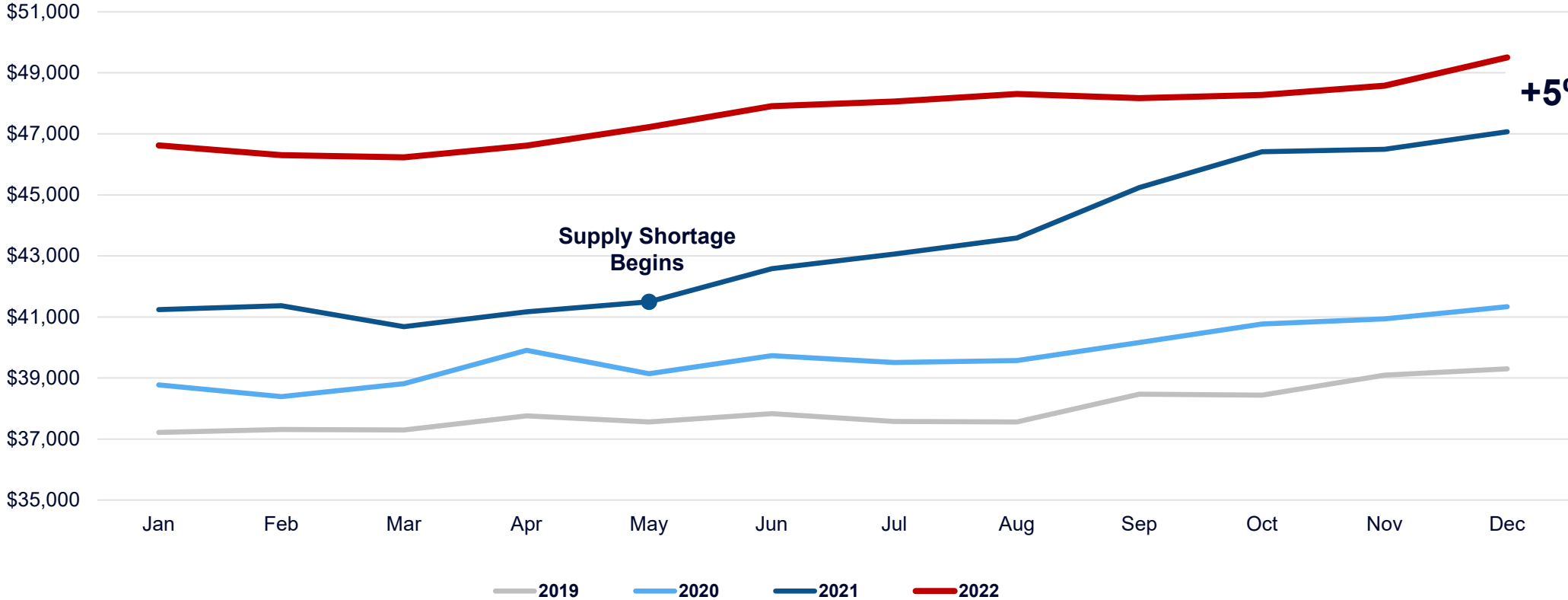
Higher interest rates likely drive sales lower
Return of supply, and discounting, may offset

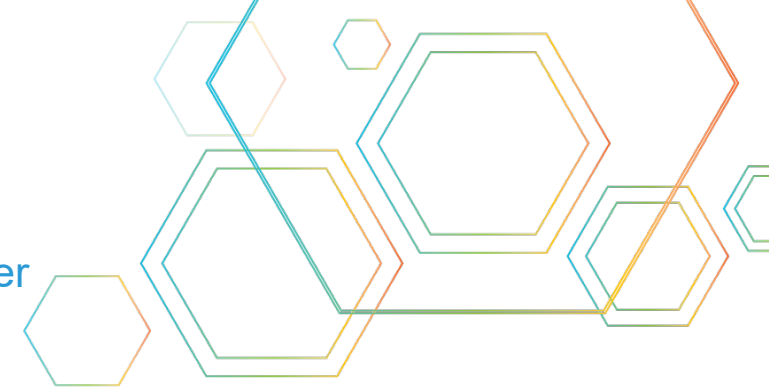


Transaction Prices | Finished 2022 Near \$49,507

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

Estimated Monthly Transaction Prices

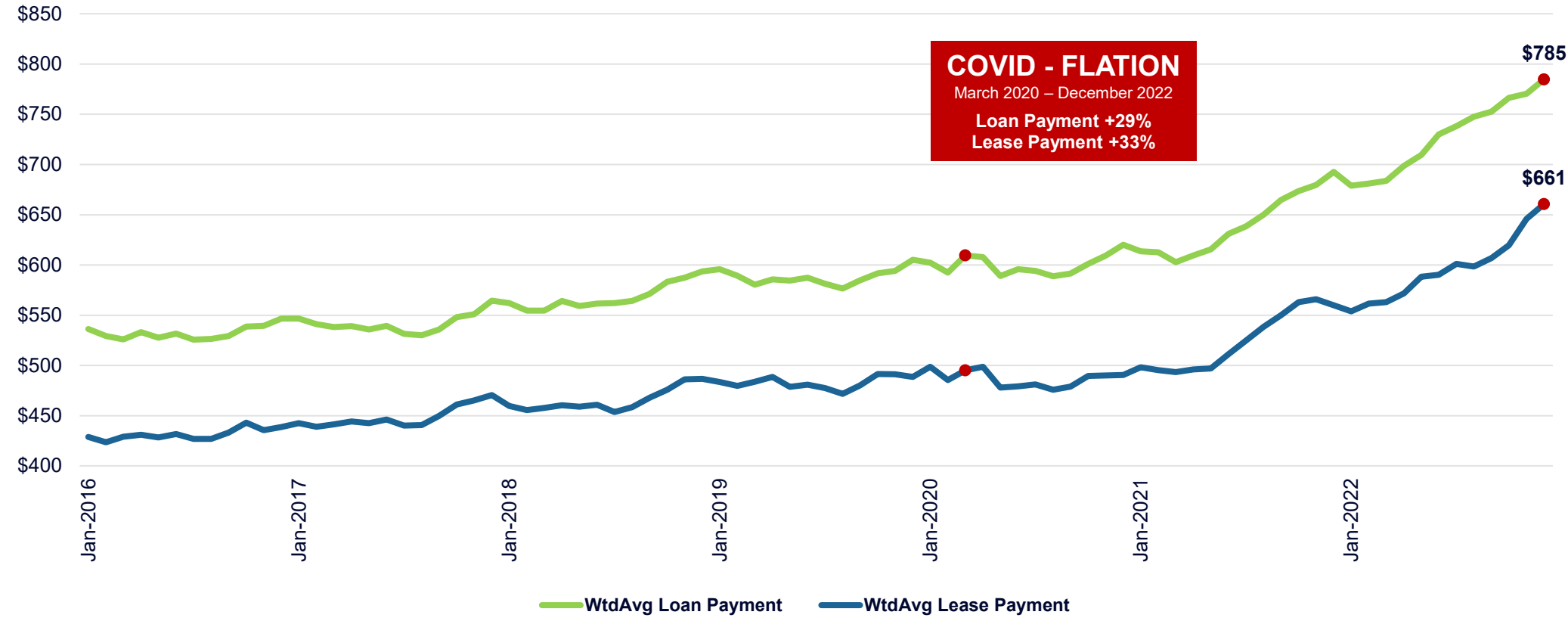




Monthly Payments | Average Loan = \$785, Lease=\$661

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

Average Monthly Loan and Lease Payment

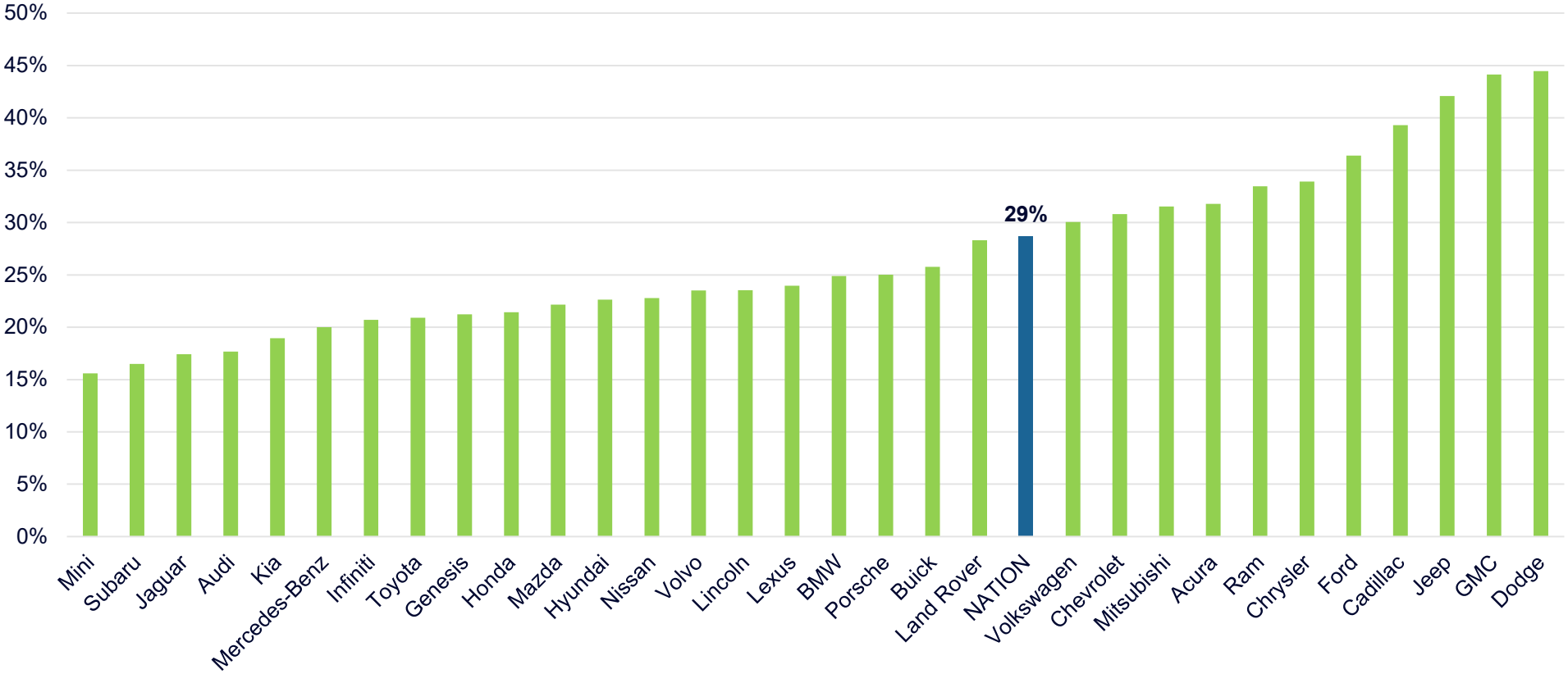


Change In Payments | Detroit Brands Have Largest Increases

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

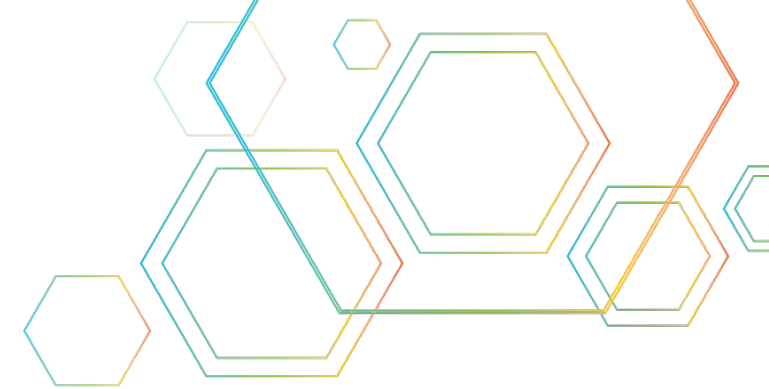


Change In Average Monthly Loan Payment (March 2020 - December 2022)



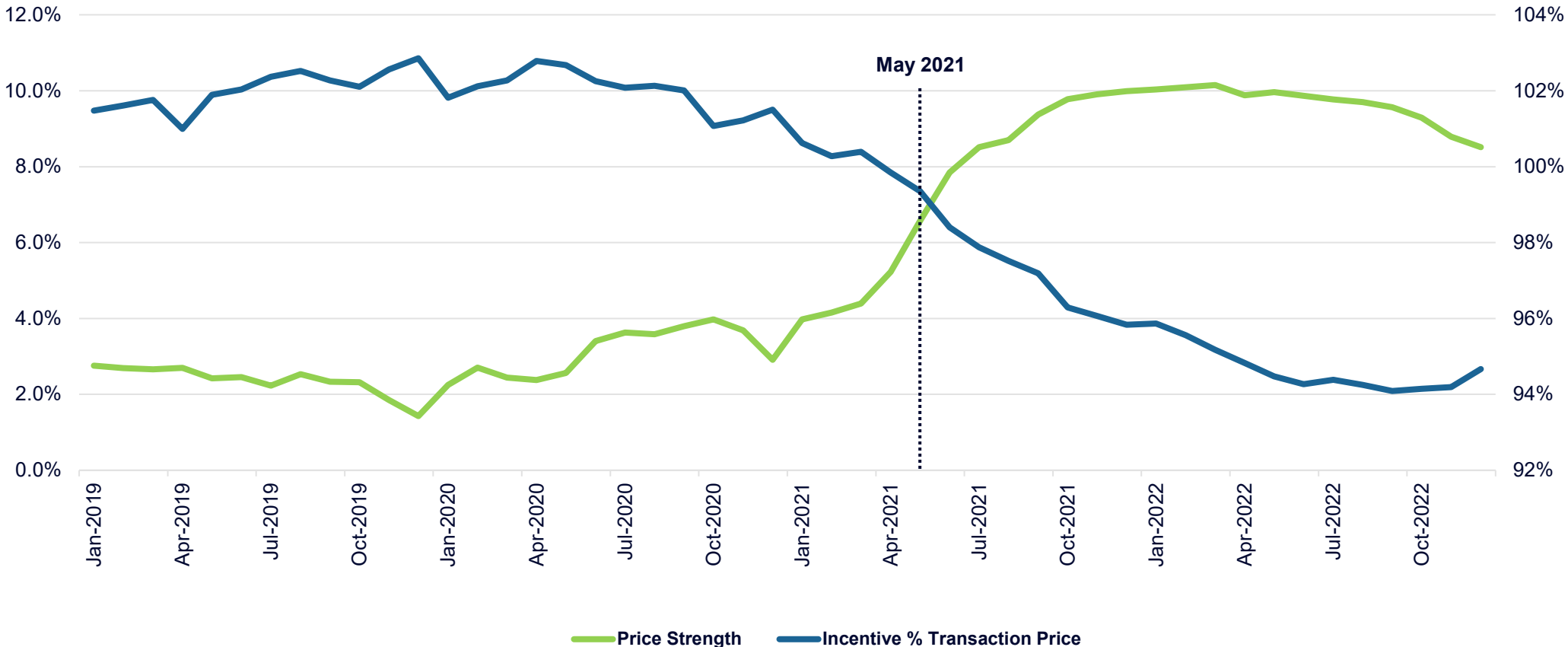
Seller's Market | Strong Margins Now Weakening

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



Incentive % of Transaction Price

Price Share of MSRP

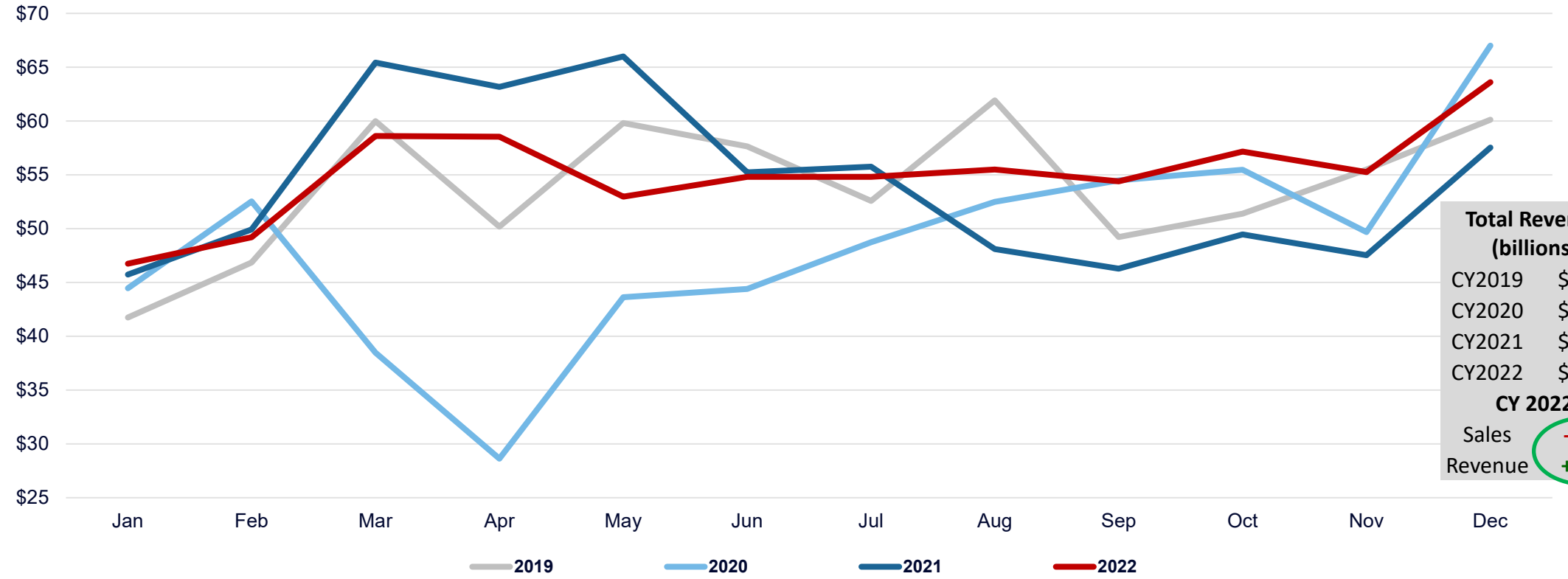




Total Revenue | High Prices Offsetting Lower Volumes

Lower supplies is transforming business models – why get back to “normal”

Monthly Transaction Revenue (\$ billions)



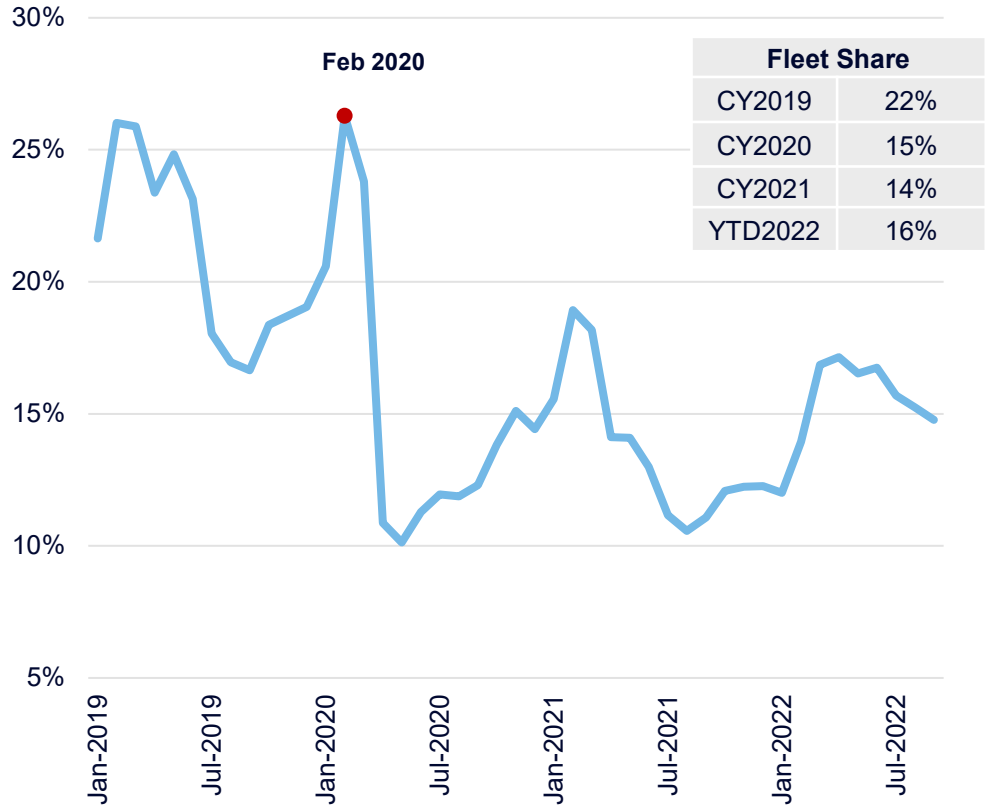
Total Revenue (billions)	
CY2019	\$647
CY2020	\$580
CY2021	\$650
CY2022	\$662
CY 2022	
Sales	-8%
Revenue	+2%



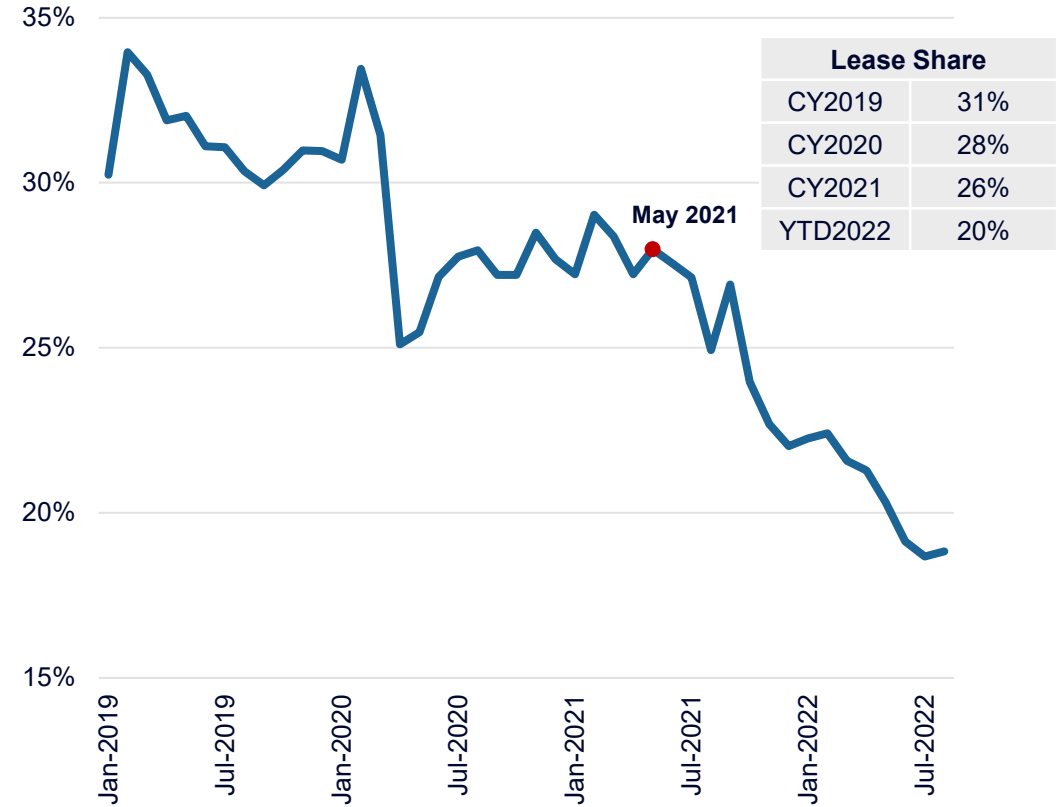
Sales Channels | Less Fleet and Lease Continues

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

Fleet Share of Total Sales



Retail Lease Share of Retail Sales

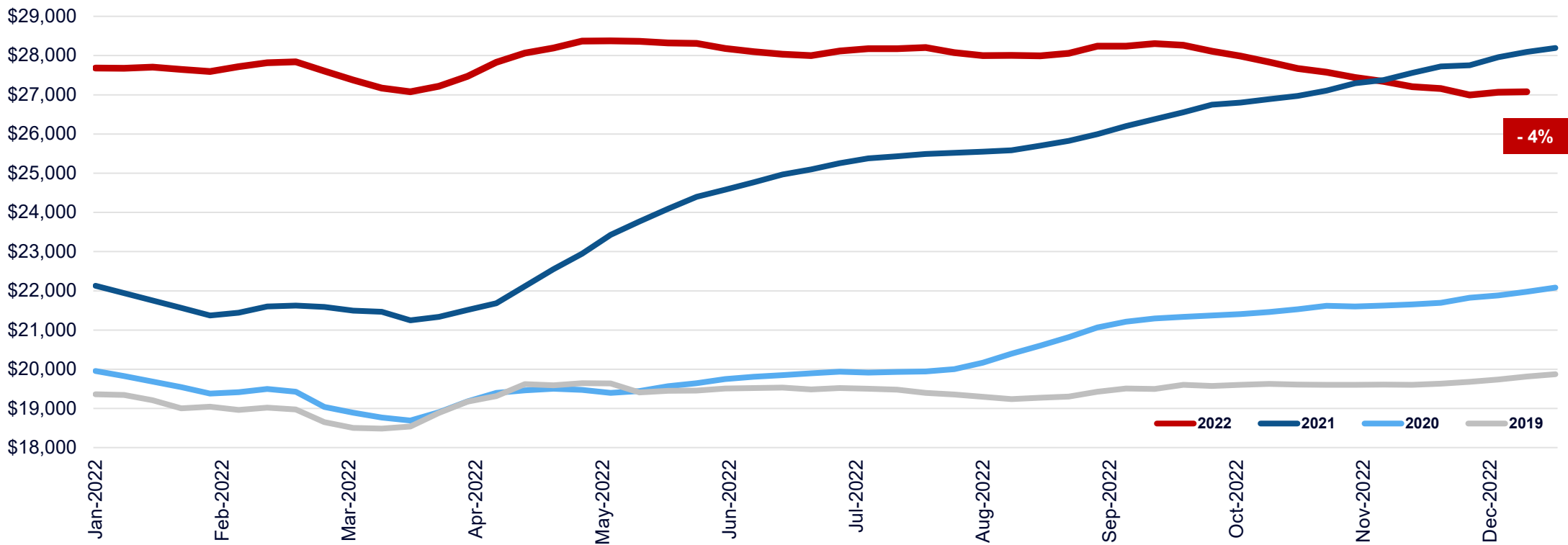


Used Vehicle List Price | Now Lower Than Last Year

Used prices showing weakness – giving back some of last year’s crazy gains



Average List Price weekly

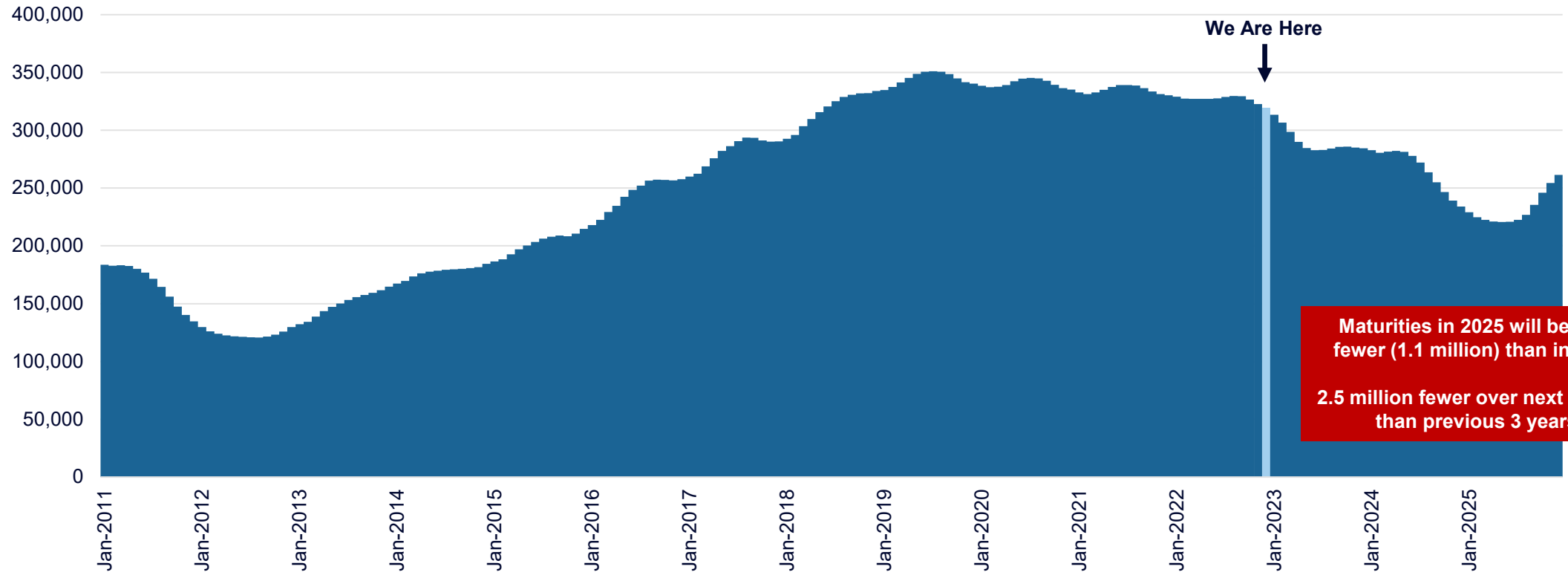




Lease Maturities | Far Fewer In Coming Years

Impact of Covid not fully felt yet – less sales today means less off-lease in 2024 and 2025

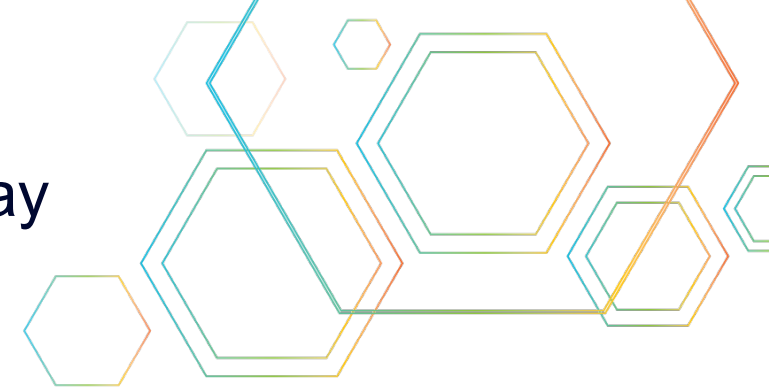
Monthly Lease Maturities



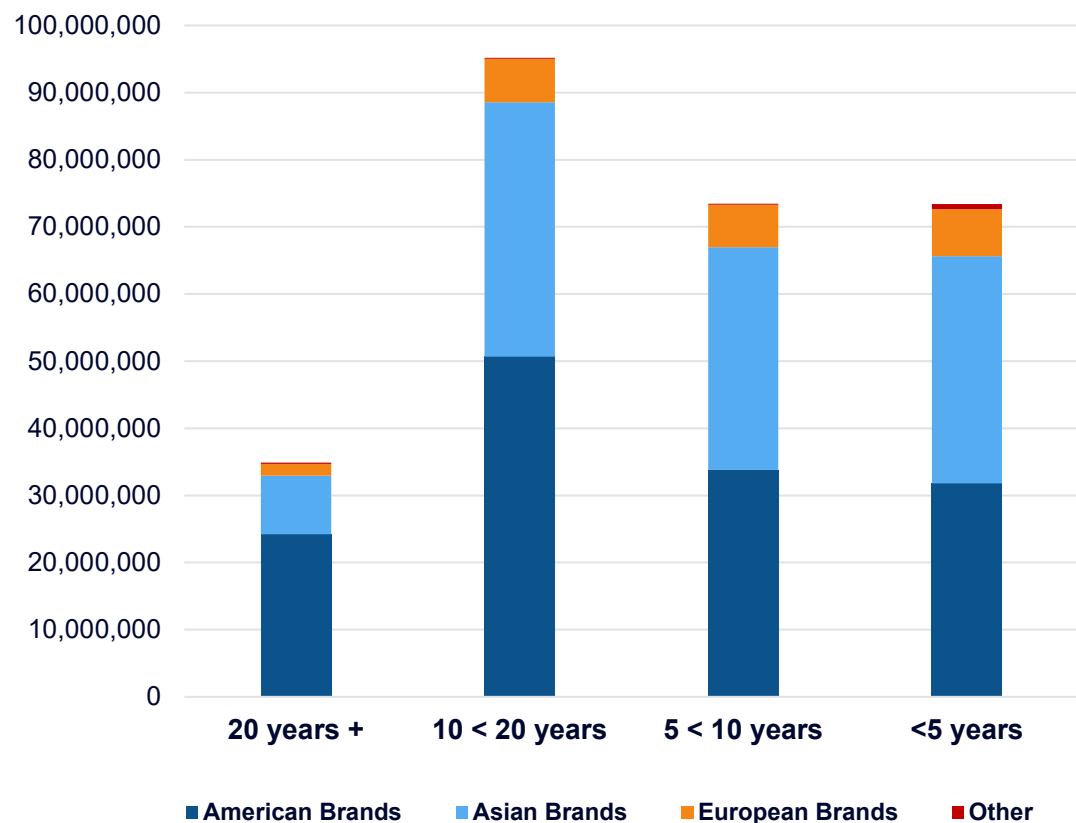
Maturities in 2025 will be 30% fewer (1.1 million) than in 2022
2.5 million fewer over next 3 years than previous 3 years

Light Vehicle Parc | Transition To Electrified Far, Far Away

280 million vehicles on the road – 99.5% use gasoline



Vehicles In Operation By Model Year Age



- Average vehicle age is 12+ years – and value has increased – likely extending expected usage life even further

Year	12 Year Old Vehicle Wholesale Value
2019	\$3,900
2022	\$5,500
change	41%

- EVs to remain a small fraction of the vehicle population over the next 20 years.
- Dealer repair & maintenance capabilities for new EV technology and old ICE powertrains will be growing necessity.
- Transition to an electrified vehicle fleet will be a long, slow process – to accelerate, government intervention will be required, and will be disruptive.
- Future Chip Shortage? Will replacement microchips be available in the future to support technology repairs for the existing fleet?