



Q1 Manheim Used Vehicle Value Index Call

April 7, 2022

COX AUTOMOTIVE



Presenters

Mark Schirmer, Director, Public Relations

Jonathan Smoke, Chief Economist

Zach Hallowell, Senior Vice President, Manheim Digital

Chris Frey, Senior Manager, Economic and Industry Insights

Kevin Chartier, Vice President, Manheim Consulting

The Power of Cox Automotive

Harnessing the power of connected data for game-changing results



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Jonathan Smoke

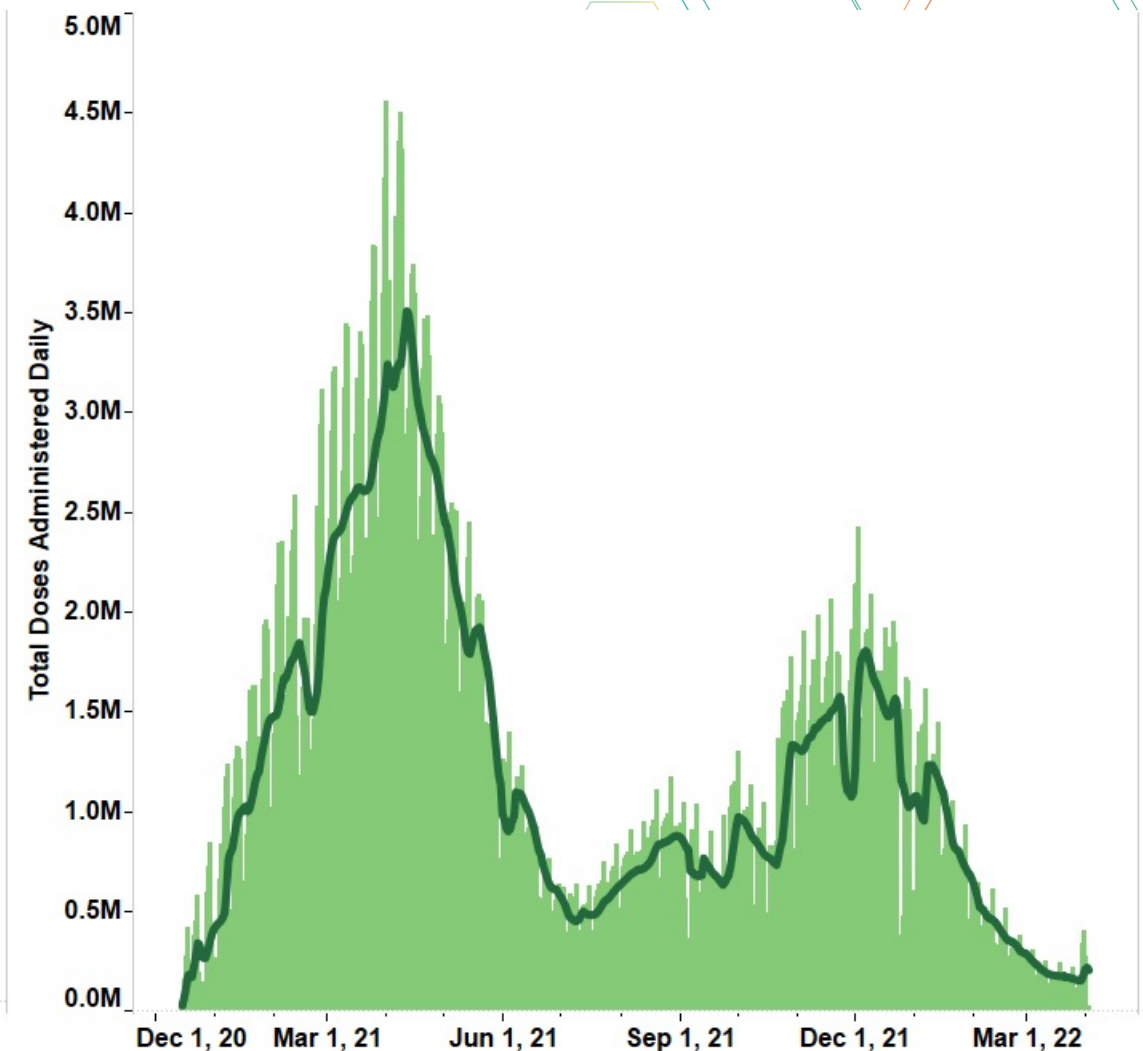
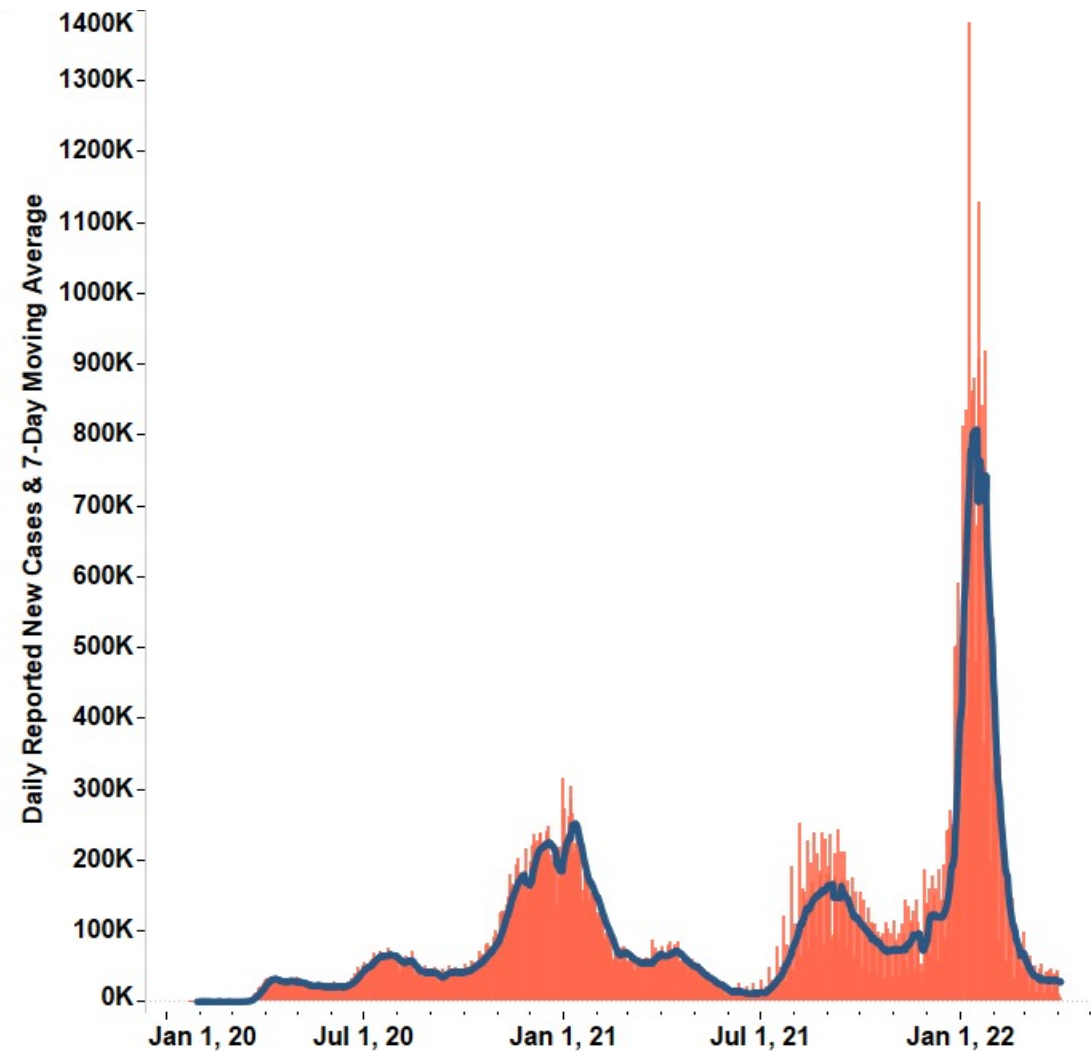
Chief Economist

 @smokeoncars

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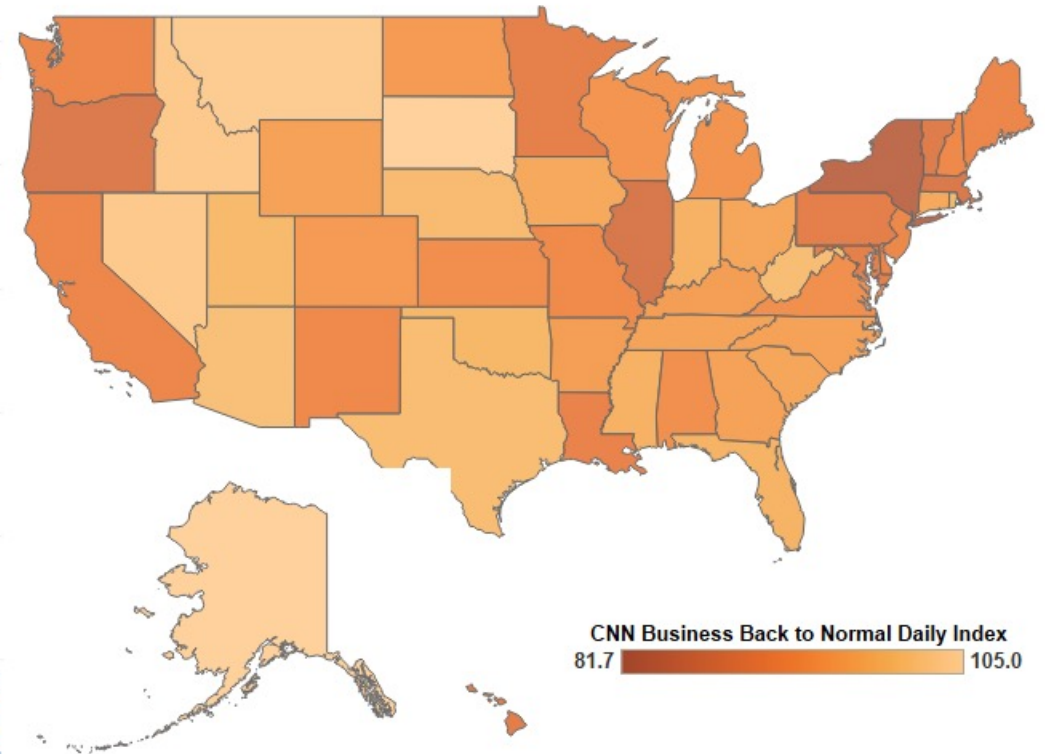
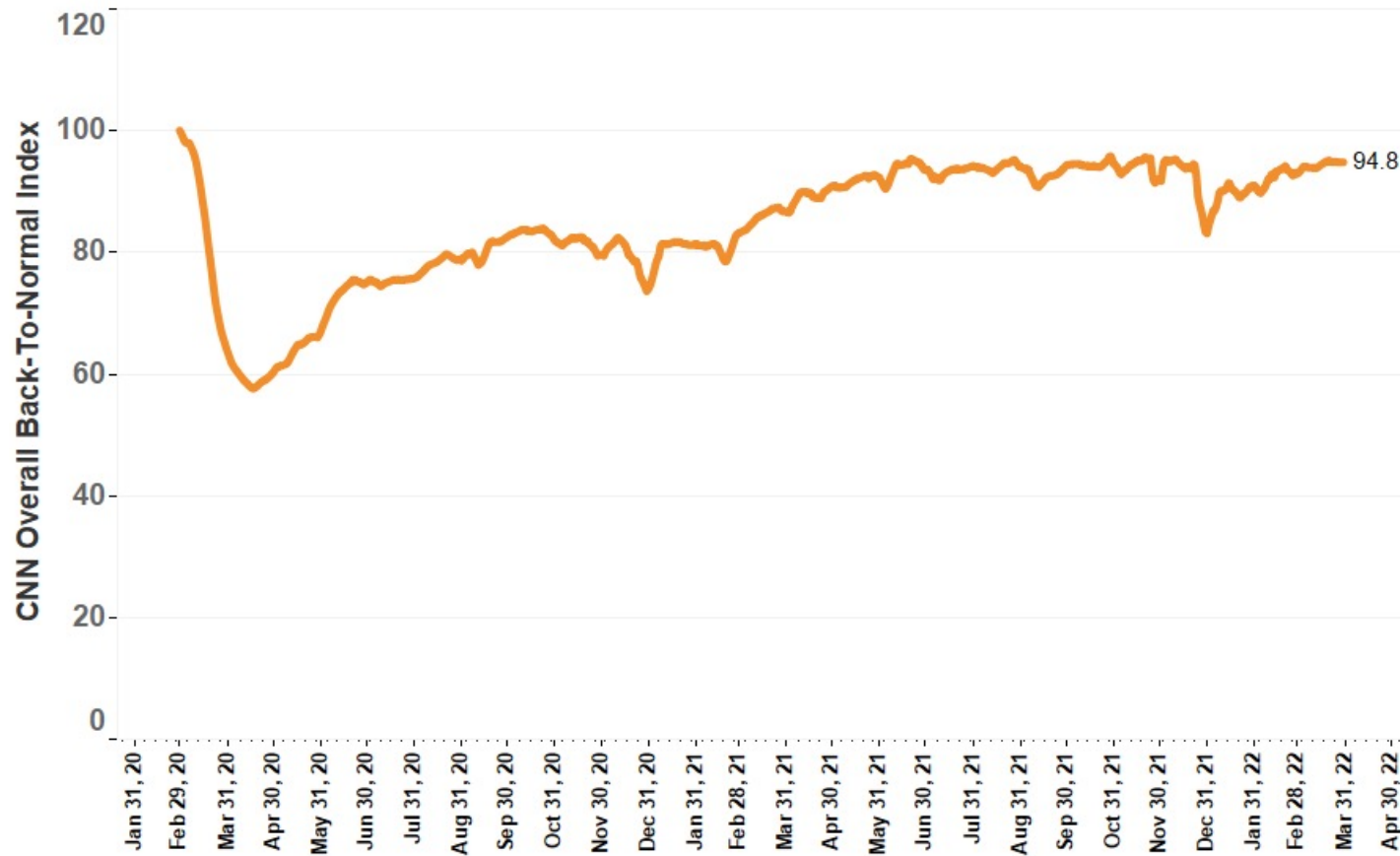
COVID-19 Daily Case and Vaccination Trends



Economic Activity Recovering from Omicron Wave

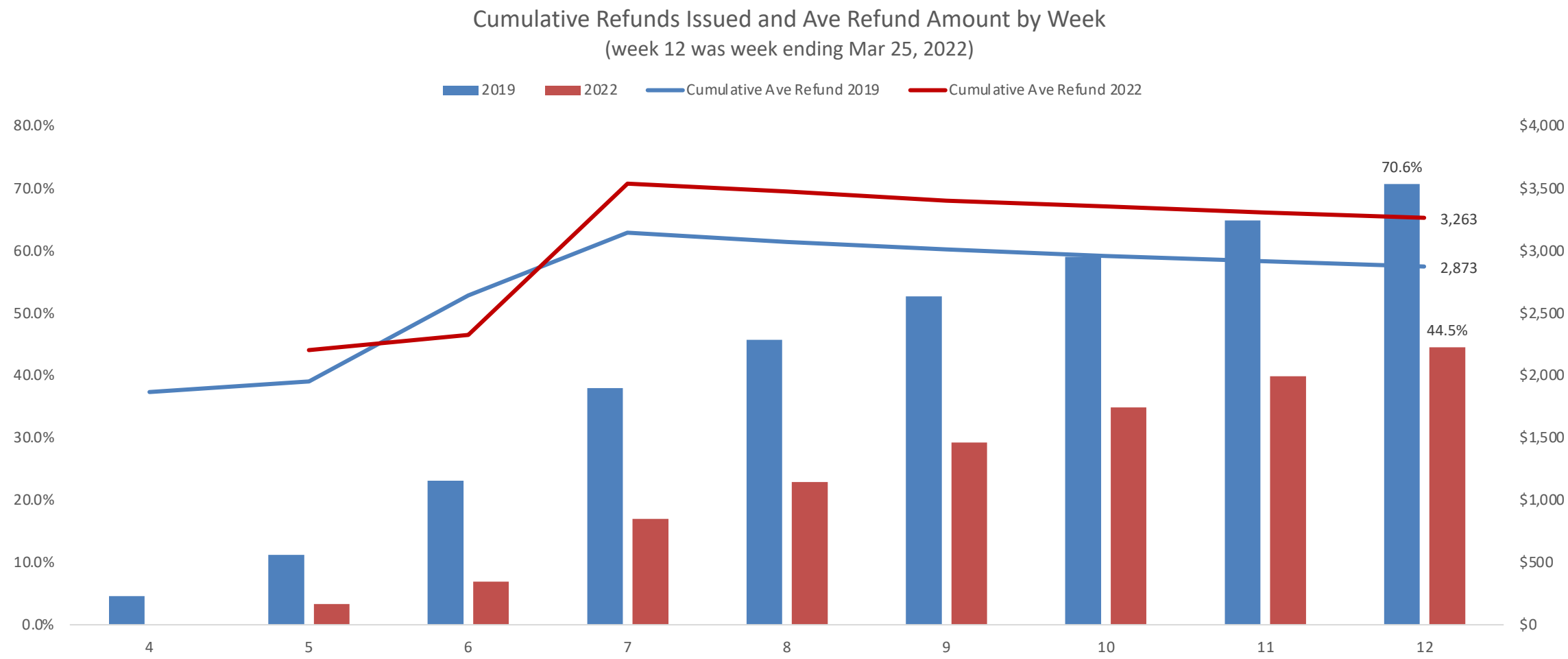
11 states now have activity higher than February 29, 2020

Moody's-CNN Business Back-To-Normal Index (February 29 = 100)

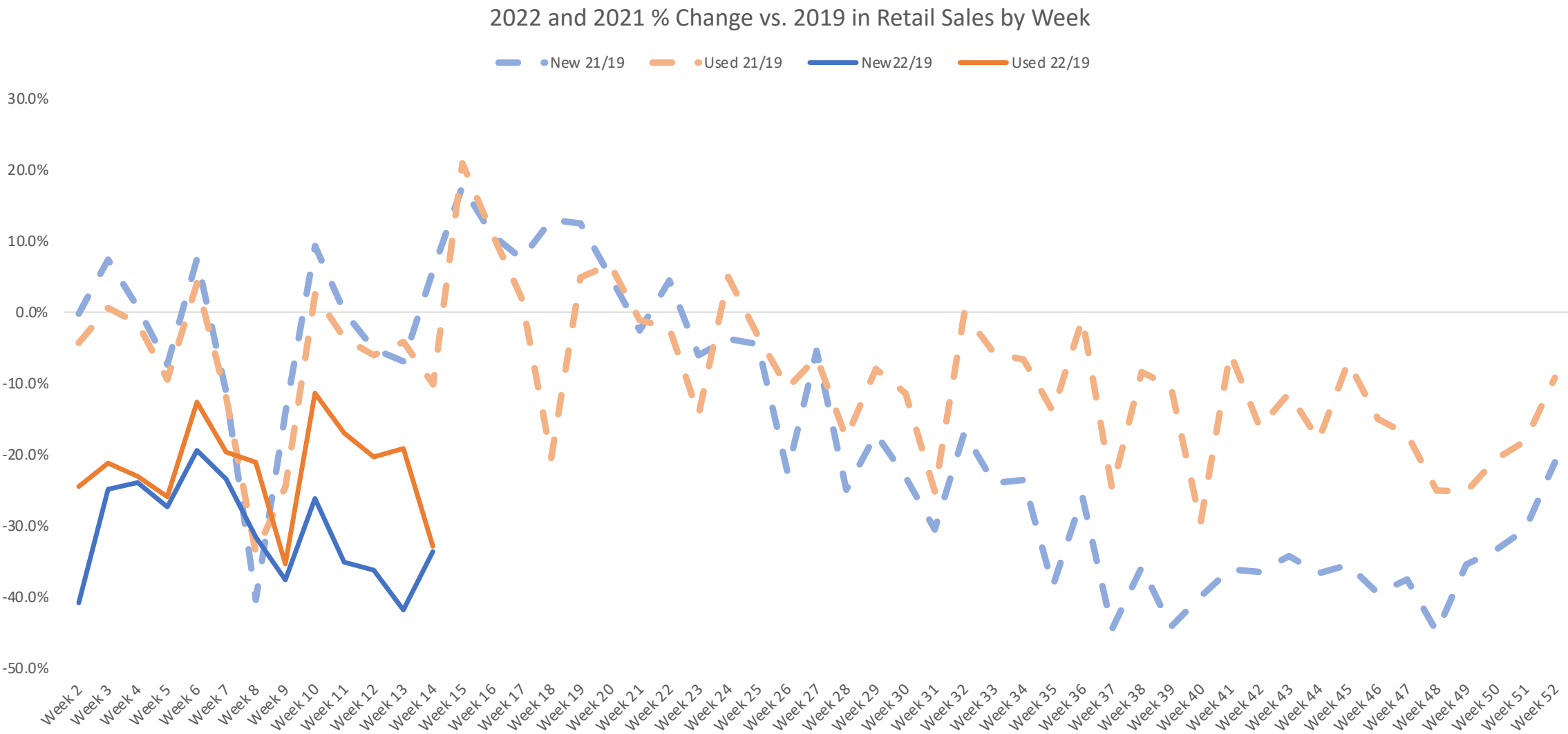


Tax Refund Season Several Weeks Behind Normal

Refund issuance did not reach critical mass in March, but average refund up 12% year over year

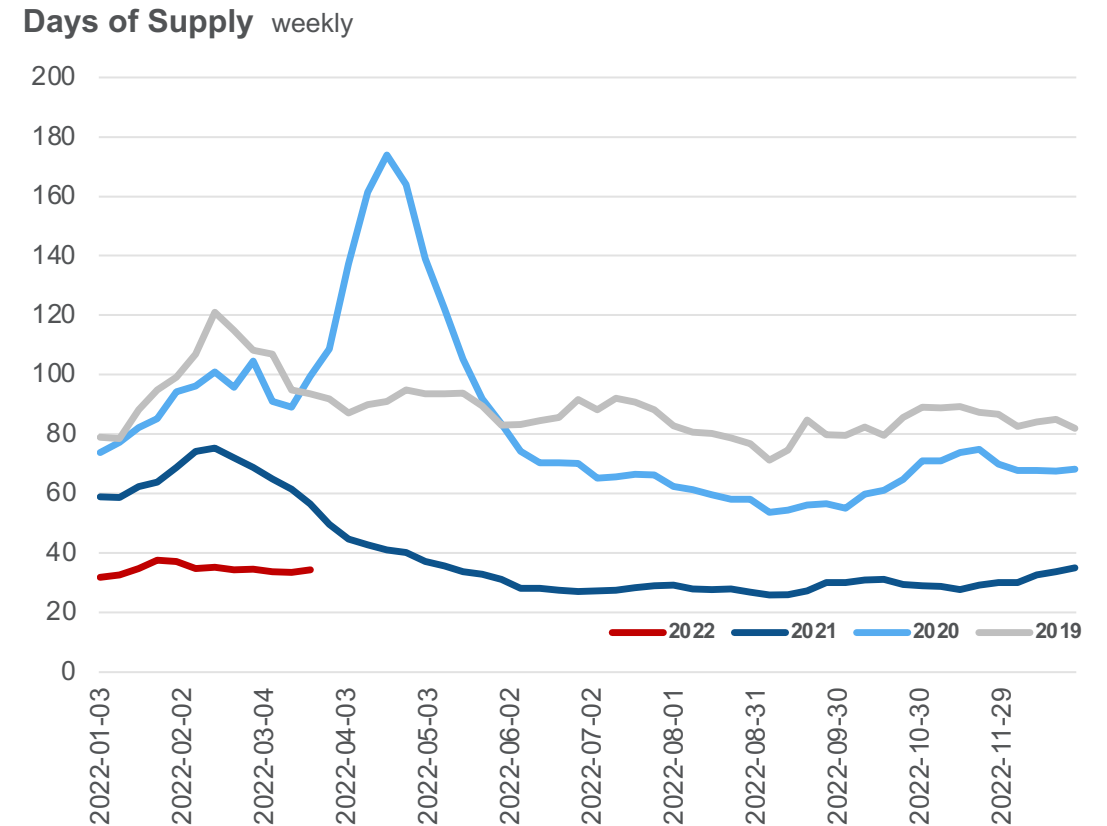
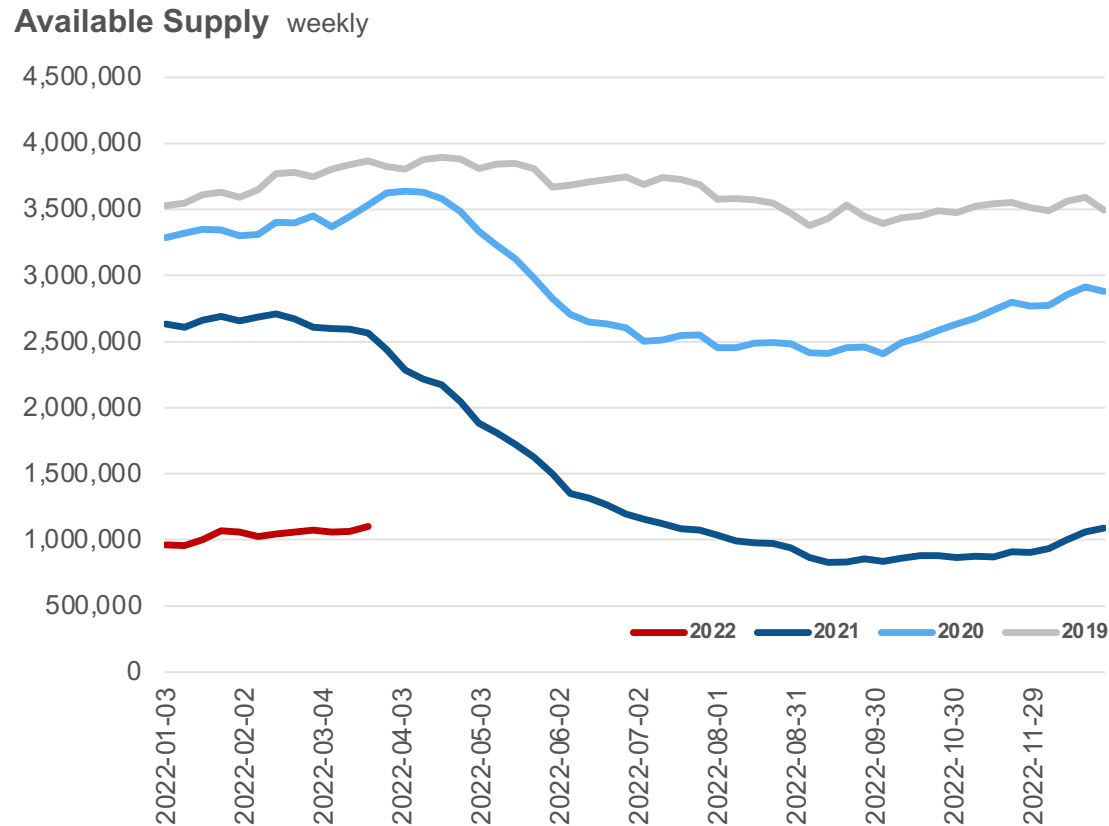


Retail Sales Estimates Show Slow Start to Year



New Supply Tightening Again in March

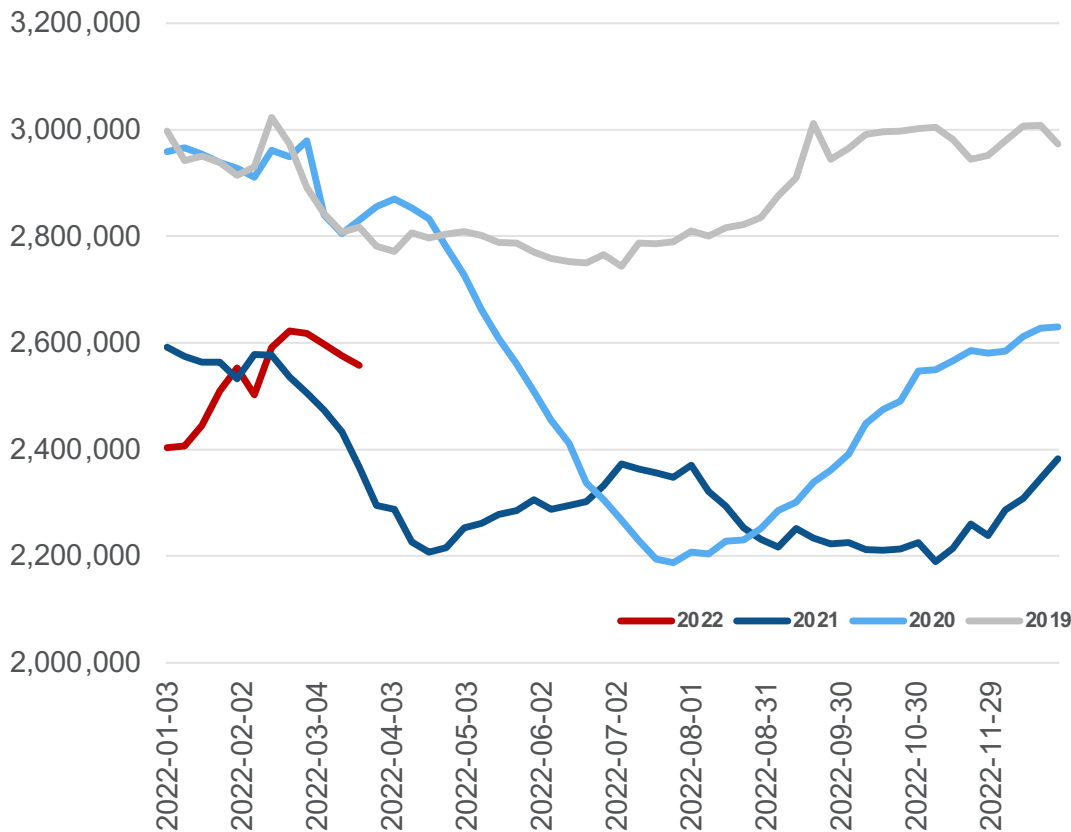
Inventory down 71% vs. 2019 and down 57% from last year



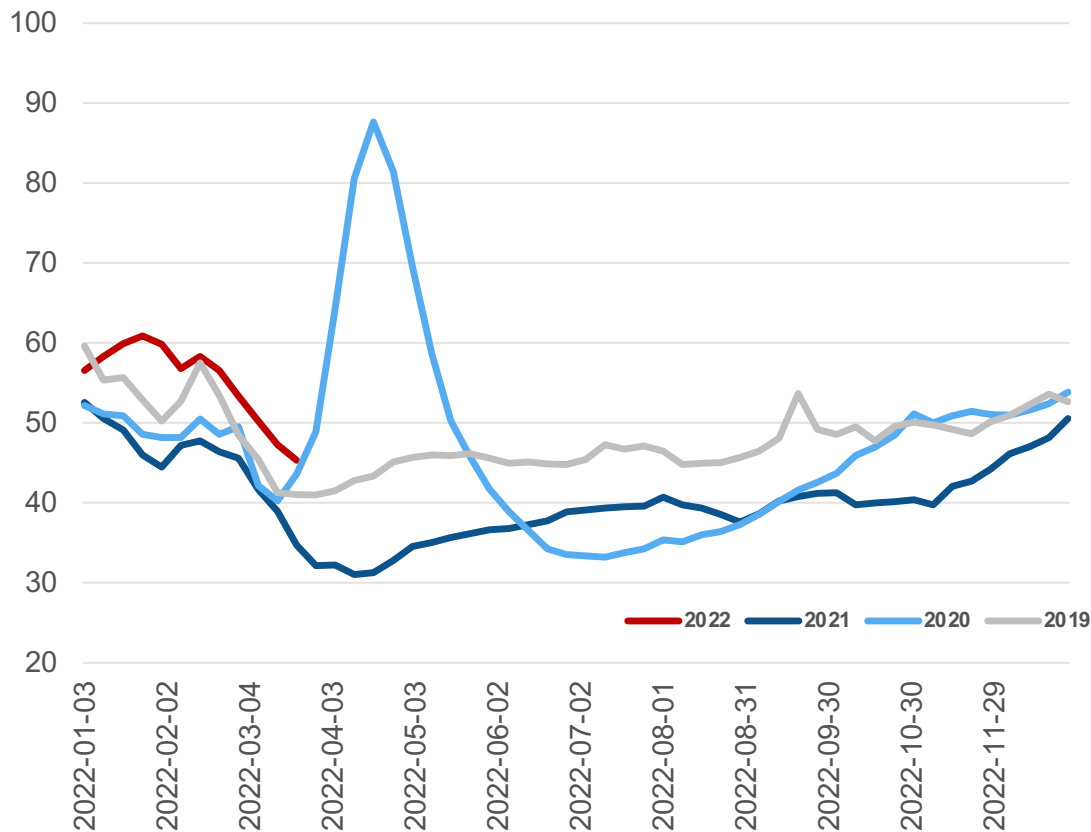
Used Supply Tightening Substantially in March

Days' supply fell 19 days over course of March

Available Supply weekly



Days of Supply weekly





Zach Hallowell

Senior Vice President, Manheim Digital

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MANHEIM IS WELL-POSITIONED

Industry
Experience

75+ Years

Network

111 Physical, Digital
and Mobile Sites

Land

6,500+ Acres

Workforce

11,500+

Population

84% within 100 miles
of a Manheim site

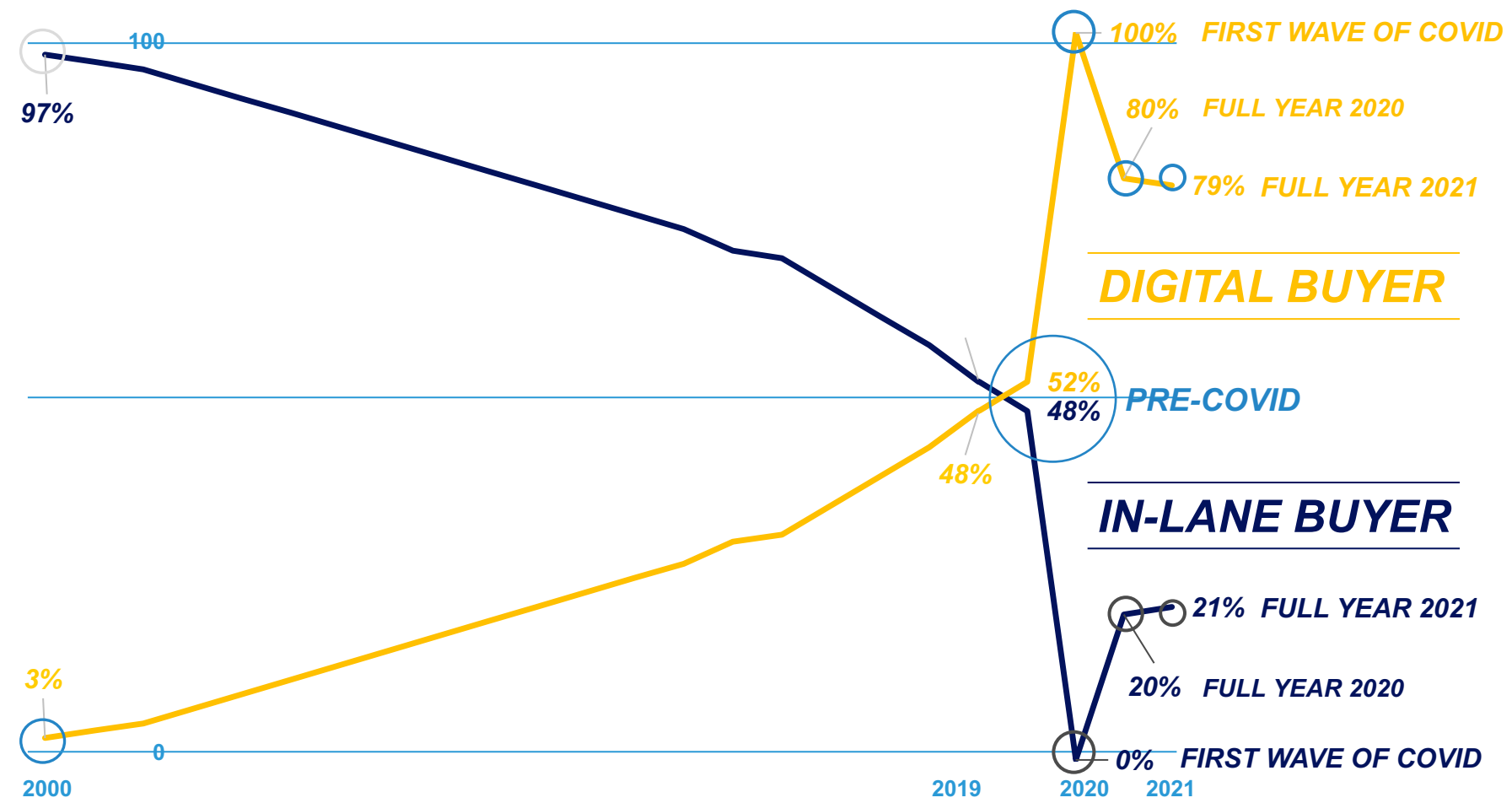
Vehicles
Handled

8M

Infrastructure
Investment

\$100M+

COVID ACCELERATED DIGITAL ADOPTION





THE FUTURE OF WHOLESALE IS CONNECTED ACROSS PHYSICAL + DIGITAL

100K+

Average # of
weekly buyer
attendees;
30K+ in lane

300+

Average # of dealers
in each Simulcast
lane weekly;
105 bidding

~5

Bids per vehicle
offered on
average

~9K

Average # of
sellers offering
vehicles each
week

~270K

Average # of vehicles
listed in the Manheim
Marketplace each
week.

NEW AI-FUELED IMAGING LEADING TO INDUSTRY'S MOST ADVANCED AUTOMATED DAMAGE DETECTION



THE MANHEIM + FYUSION DIFFERENCE

1M+

360° CAPTURES IN
PATENTED. FYUSE
FORMAT; MILLIONS
MORE COMING

94%

ACCURACY IN
AUTOMATICALLY
IDENTIFYING TOP 20
DAMAGE TYPES

80+

ISSUED PATENTS ON
IMAGING AND
DAMAGE DETECTION
TECHNOLOGY

3D

FYUSION'S
TECHNOLOGY IS THE
ONLY IN WHOLESALE
TO USE 3D FOR
IMAGING

OFFSITE WHOLESALE IS SKYROCKETING

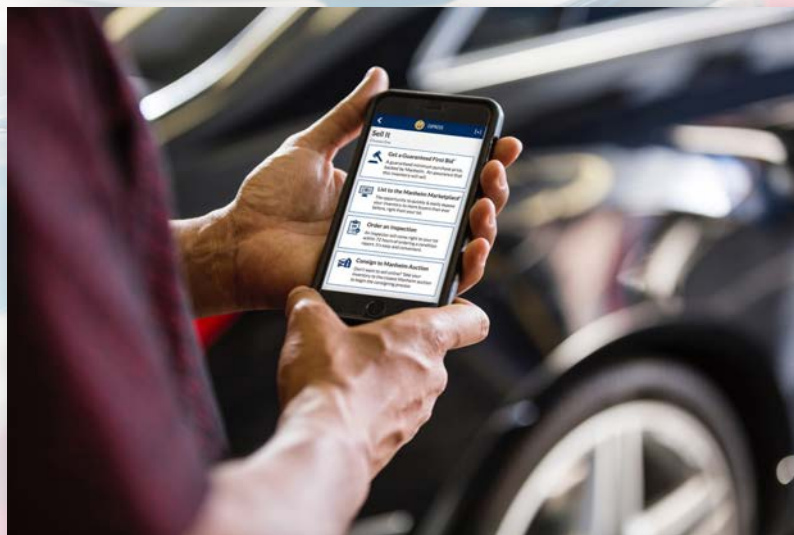
Around HALF of Active Offsite Sellers:

- Say that selling from the lot is more important now to how they do business (more than any other channel)
- Agree that all wholesale sales (from dealers) will come from the dealership lot in the future

What Dealers Tell Us: Top 5 Benefits of Offsite Selling

- 1 Easier than sending to auction
- 2 Saves me time
- 3 Make more money due to lower fees
- 4 Potential to sell the vehicle retail
- 5 Vehicles sell faster

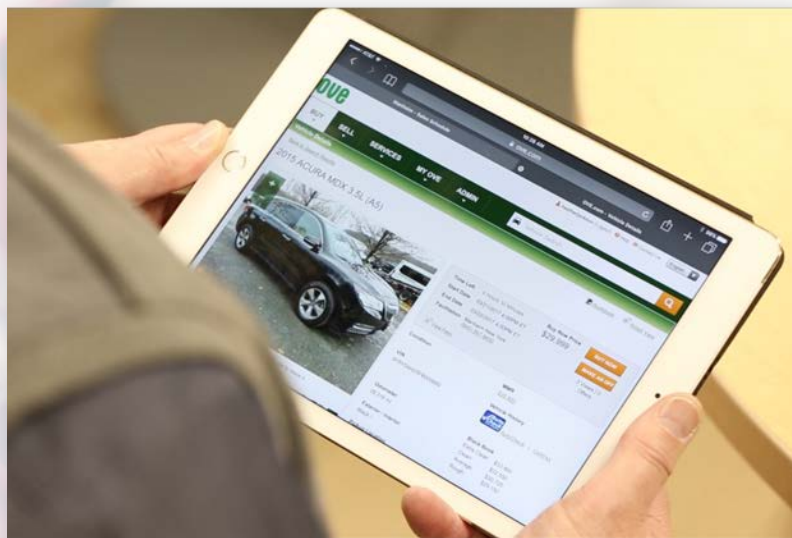
MANY WAYS TO WHOLESALE OFFSITE



Manheim Express



Upside



OVE



Manheim Private Stores



Chris Frey

Senior Manager, Economic and Industry Insights

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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

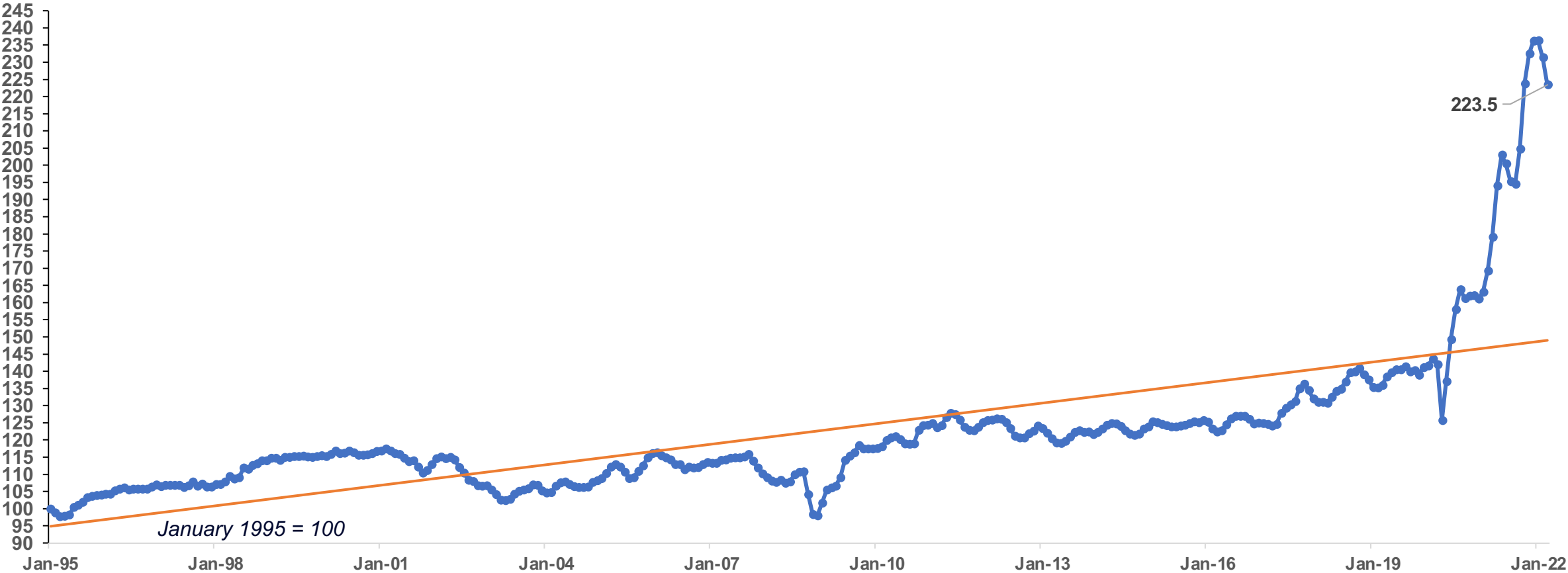
Steps

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



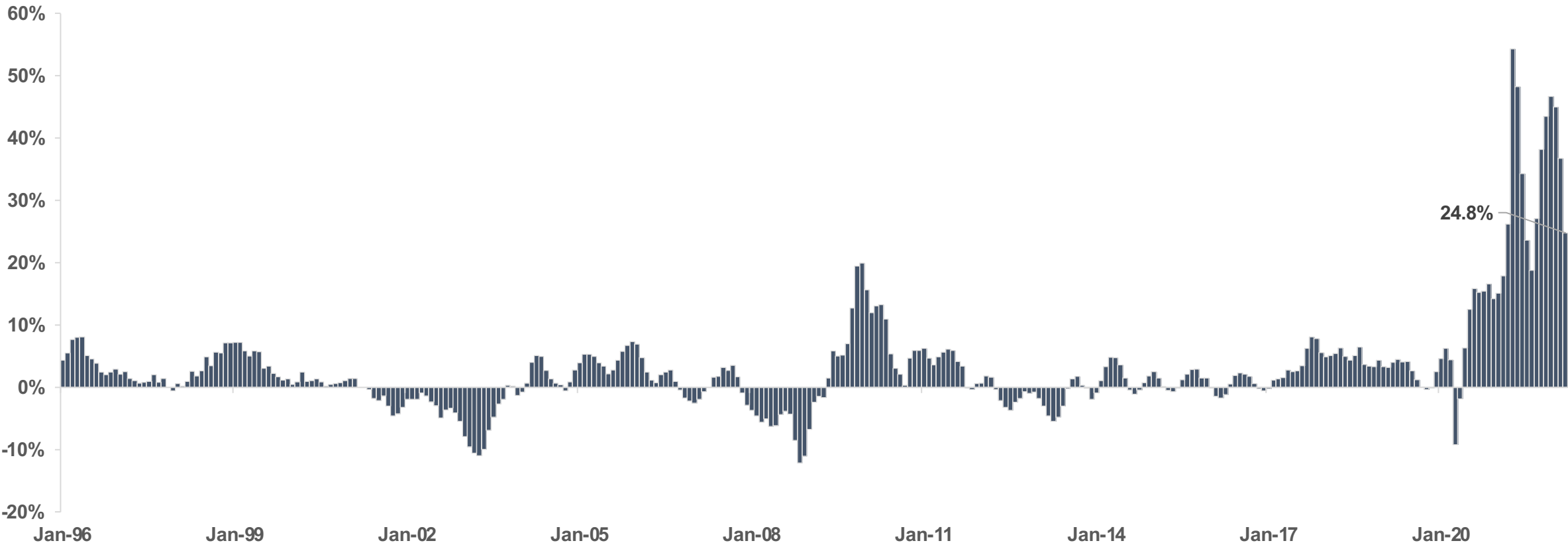
Wholesale Vehicle Values Decrease in March

Prices in March decreased 3.3% from February 2022 but were up 24.8% compared to March 2021



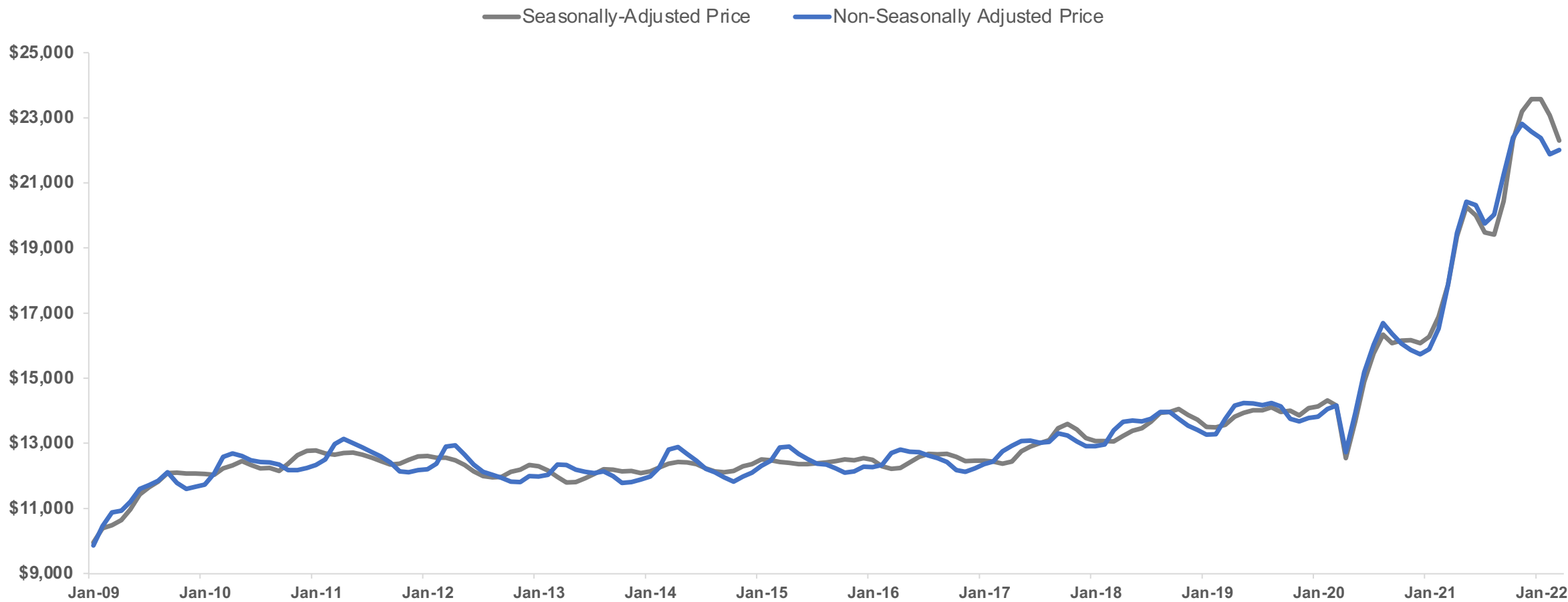
Year-Over-year Performance Remains Elevated

Year-over-year price performance turned lower heading into spring



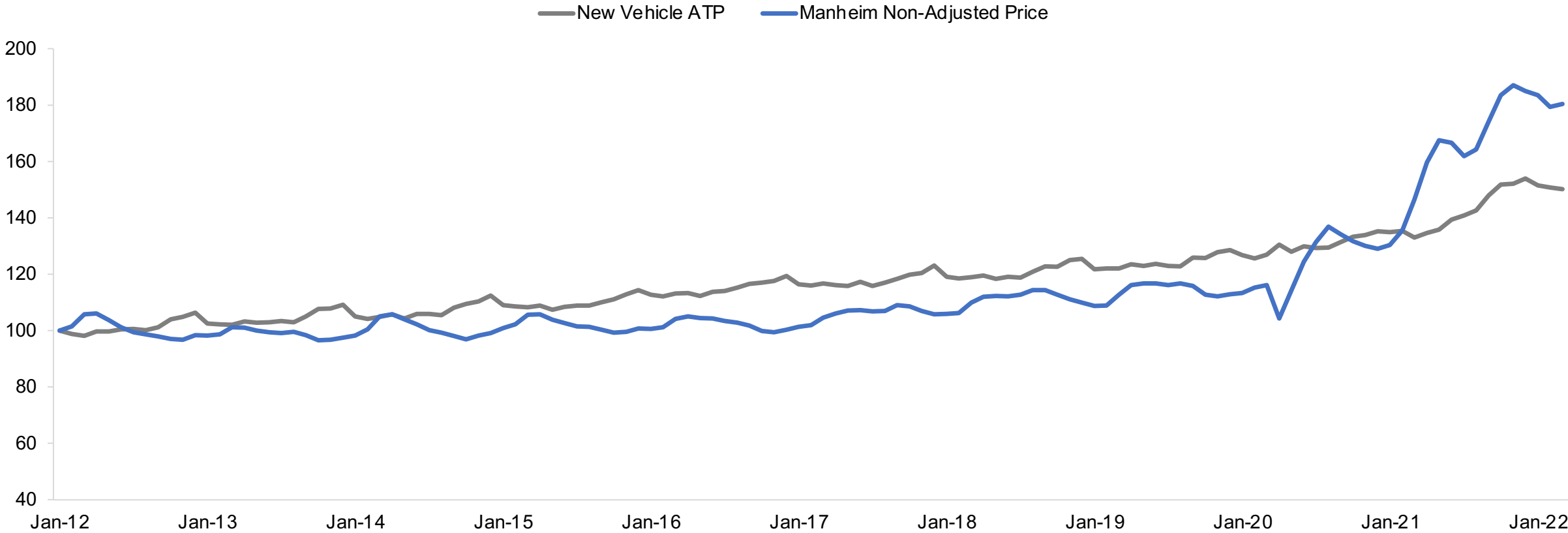
Seasonal Adjustment Expected Positive Tax Season Impact

Adjusted prices continued downward, while non-seasonally adjusted prices increased in March



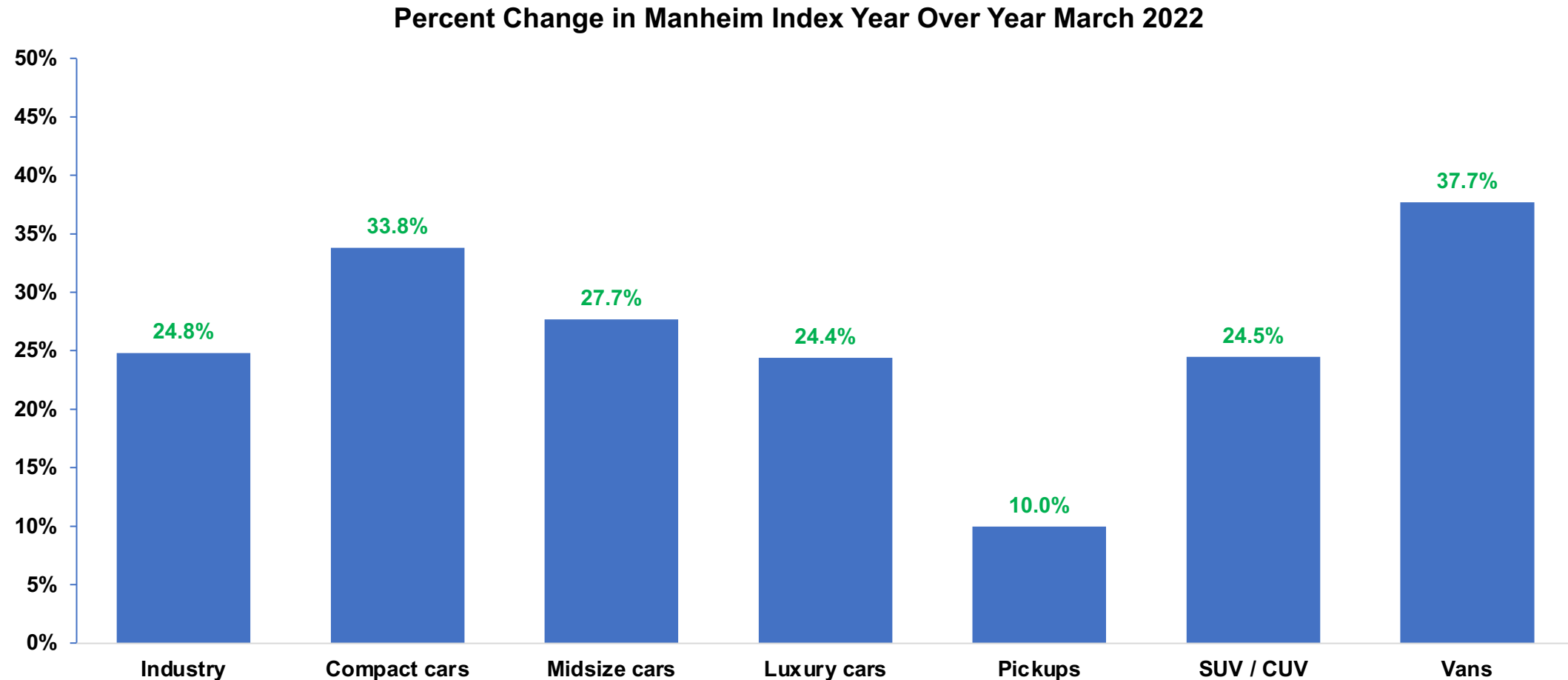
Wholesale Used Vehicle Prices Versus New-Vehicle Prices

New retail prices capped at sticker by OEM, while wholesale prices rose from supply constraints



Vans Continue Outperforming Other Segments

Compared to December 2021 all segments have seen declines, while still being elevated compared to March 2021





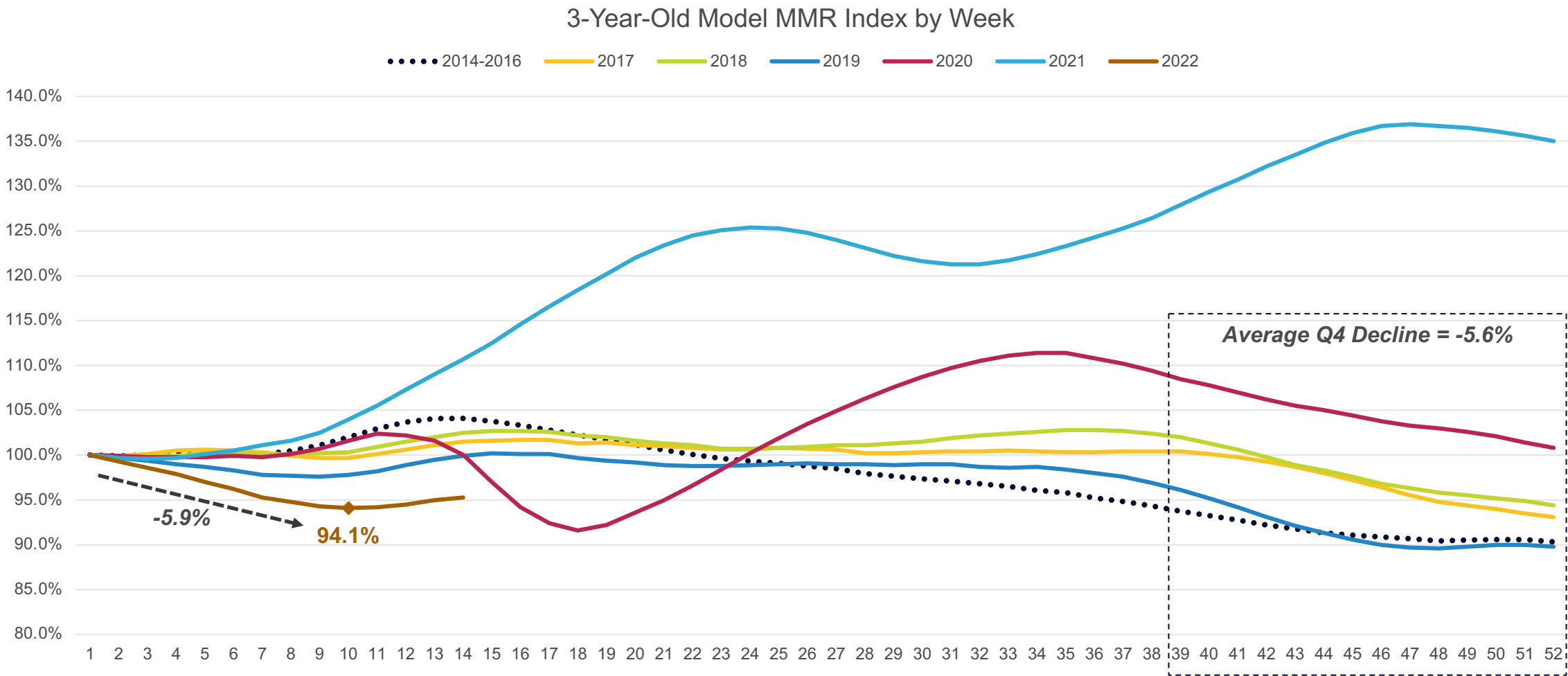
Kevin Chartier

Vice President, Manheim Consulting

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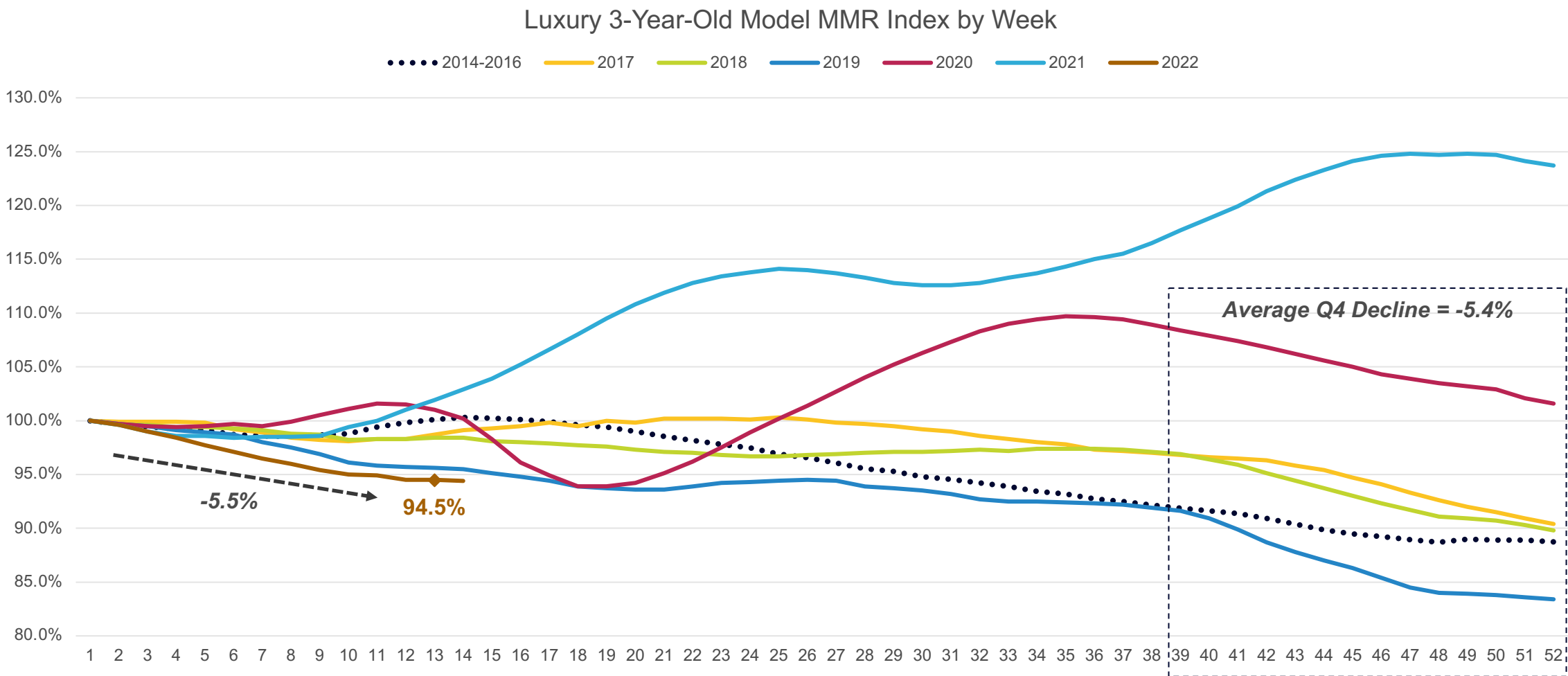
Weaker Than Normal In Q1 And Late Start To Spring Selling Season

Following the incredible run up in Q4-2021, price depreciation in Q1-2022 looked more like a normal Q4



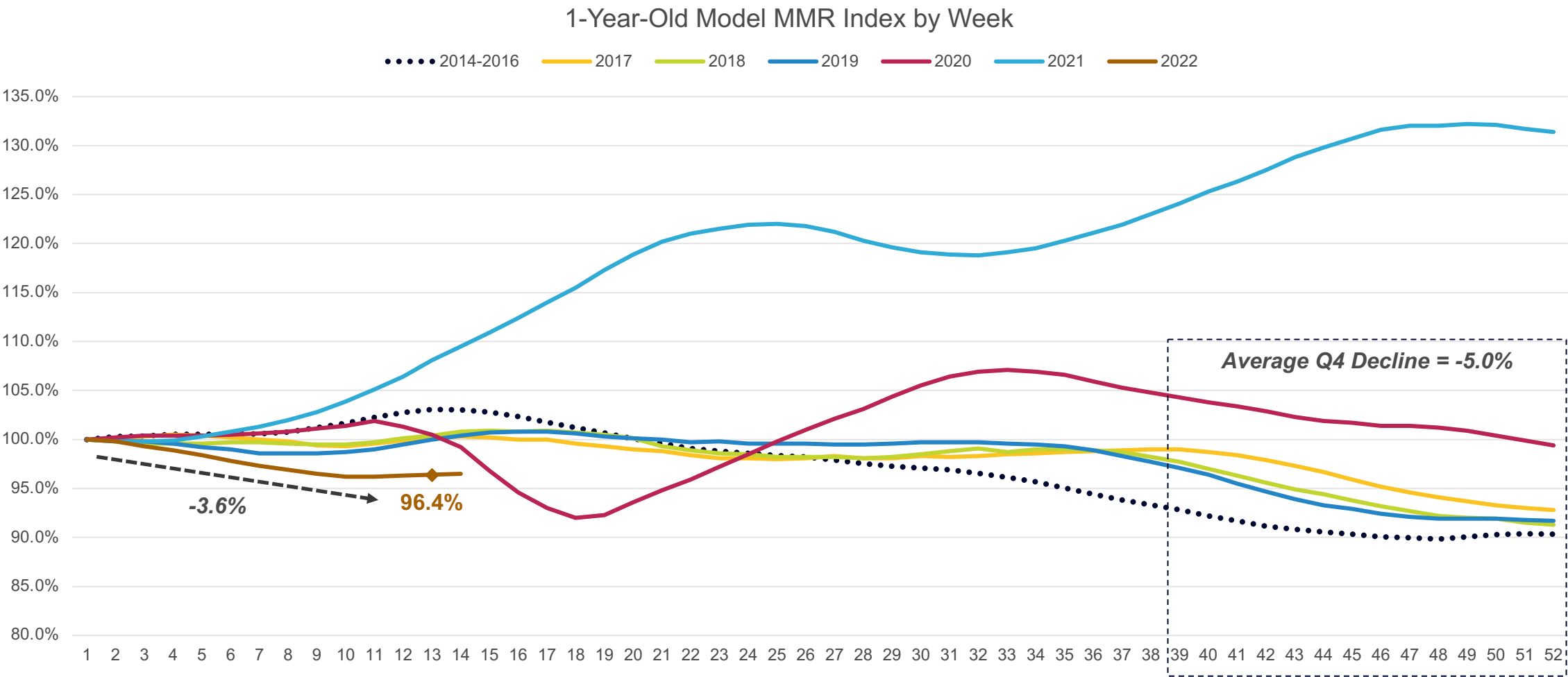
Luxury Prices Also Drifting Lower In Q1

Luxury prices also followed a more typical Q4 pattern



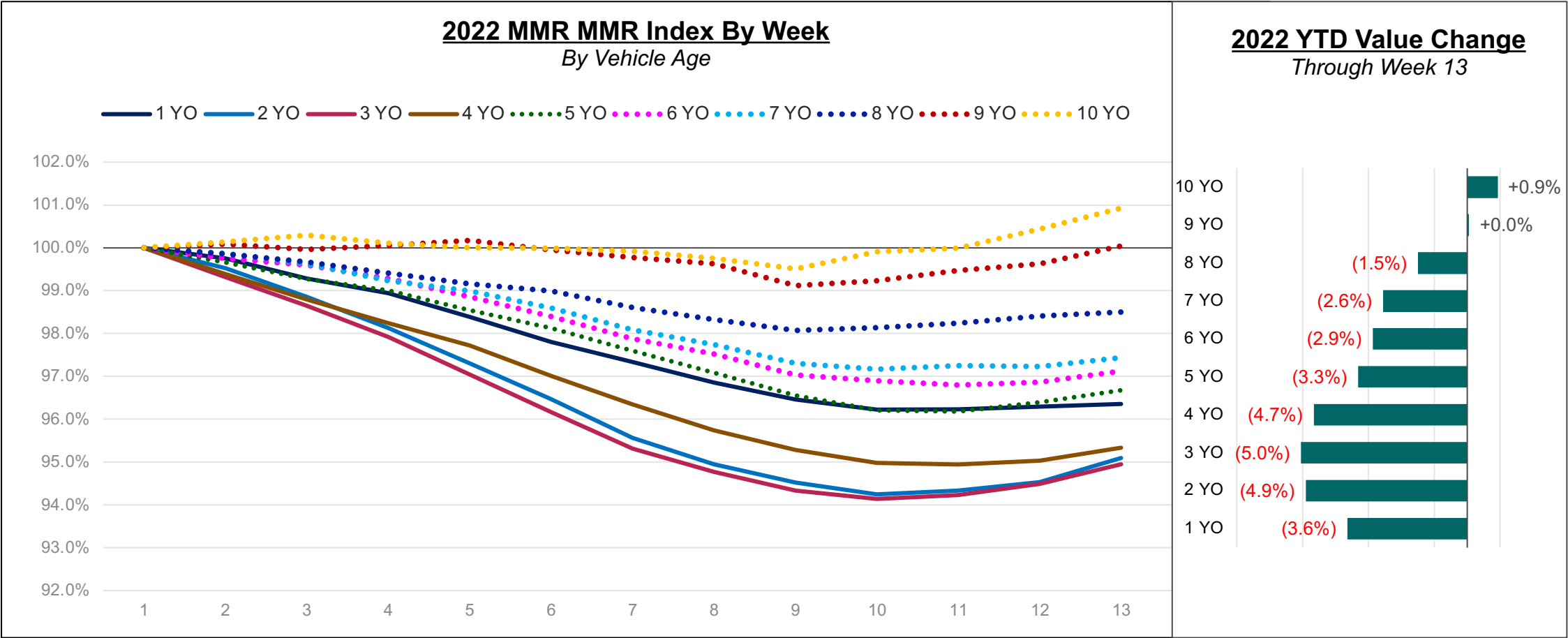
1-Year-Old Prices Also Weaker Than Normal

1-year-old vehicle prices also followed a Q4 pattern but not quite to the same extent and 3-year-olds



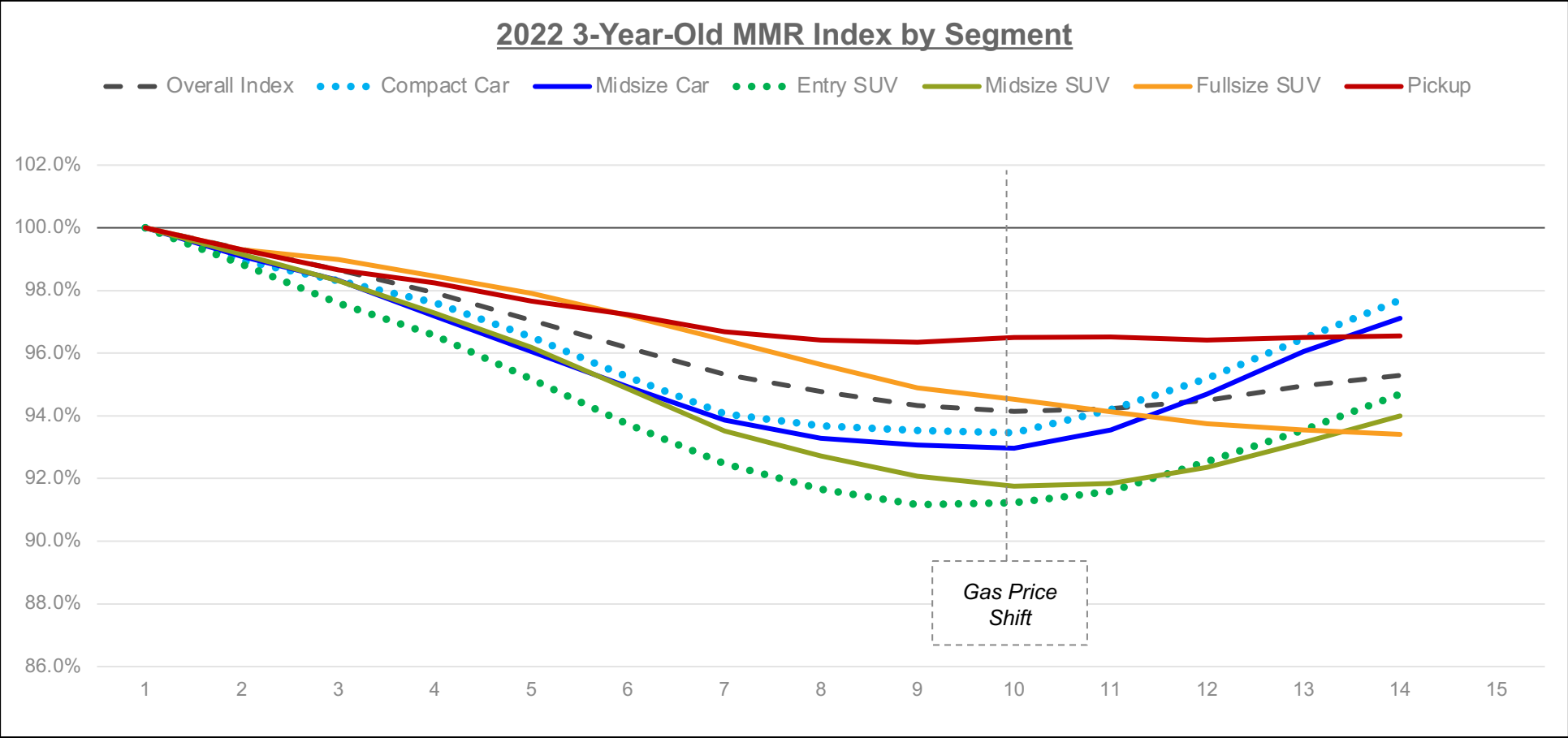
2022 Depreciation Patterns Differ Greatly By Age Group

Oldest vehicles held their value better in Q1 than near-new segments



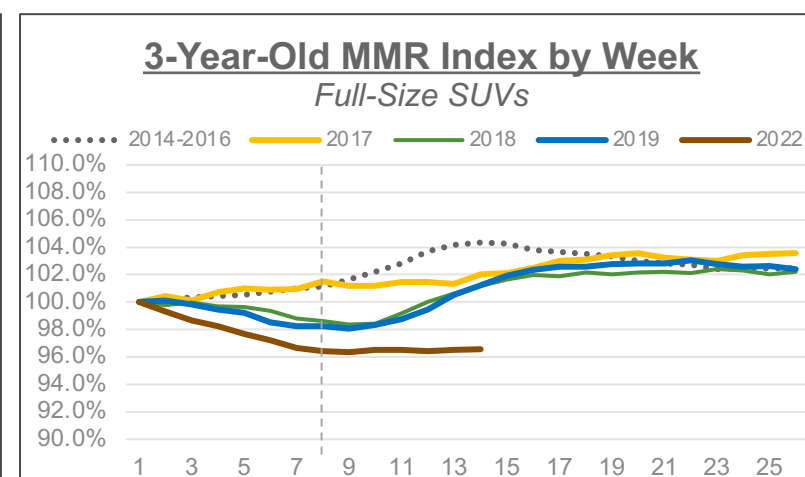
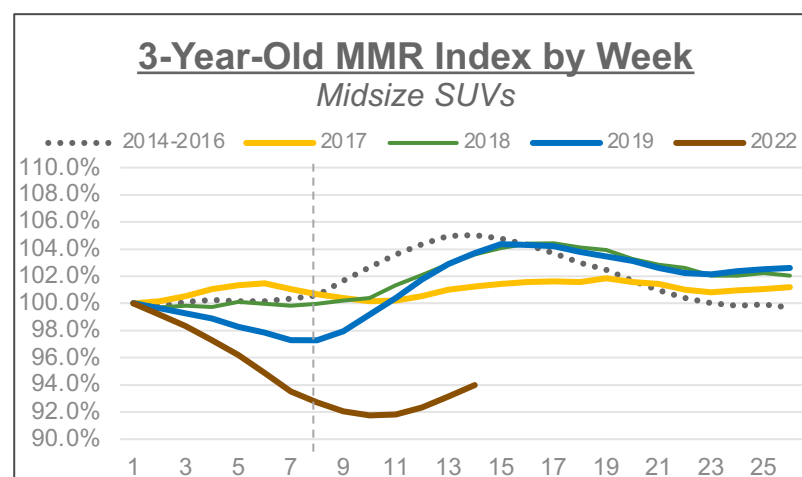
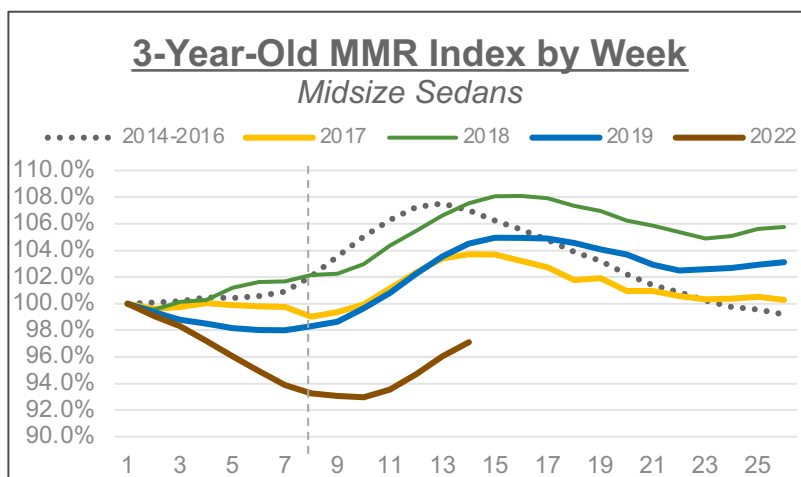
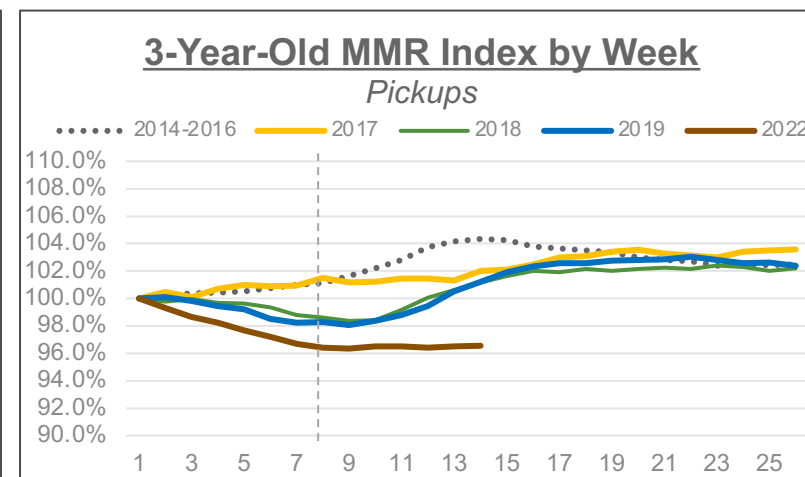
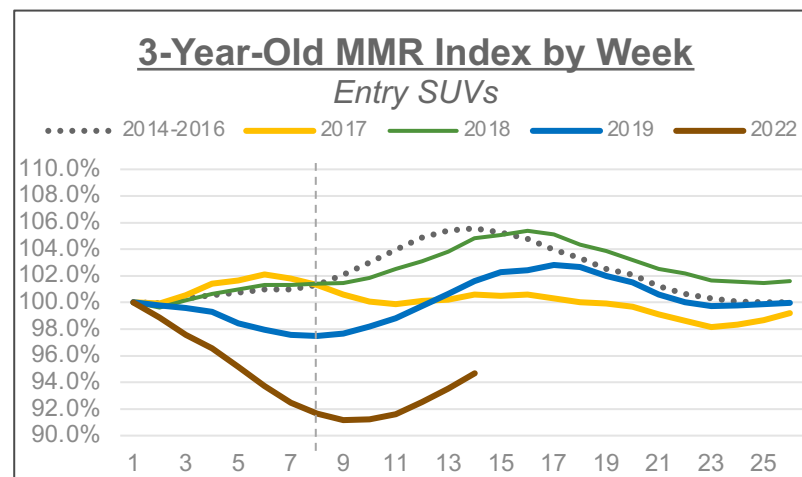
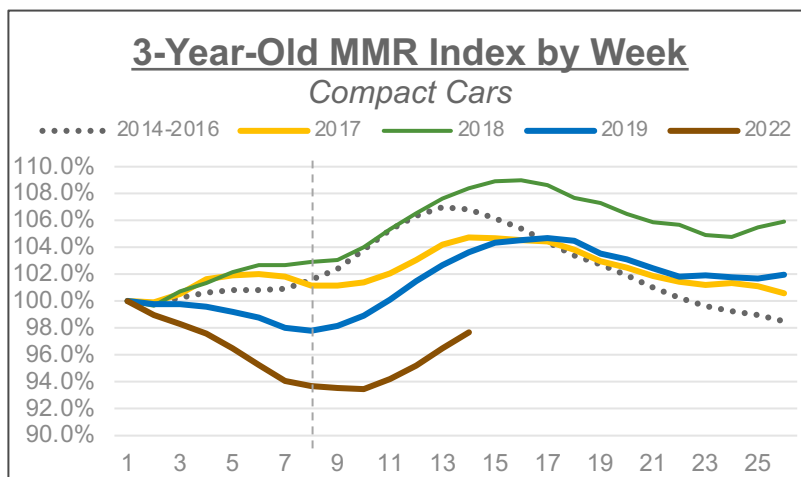
Gas Price Impacts On Demand Hard To See In Spring Market

Gas price jump coinciding with the normal spring market upturn



Sedans Typically Lead The Market Higher In The Spring

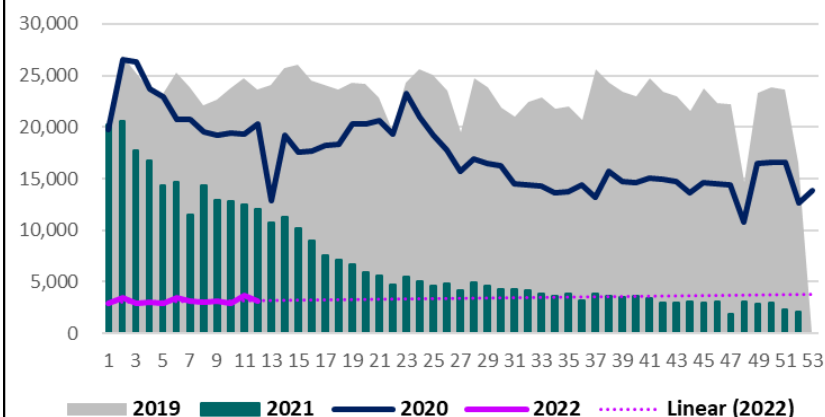
Pickups & Full-Size SUV prices normally turn up later than sedans in the spring



Commercial Supply Sources Remain Well Below Historical Norms

Repos following long, slow recovery path while Off-Lease & Rental remain near all-time lows

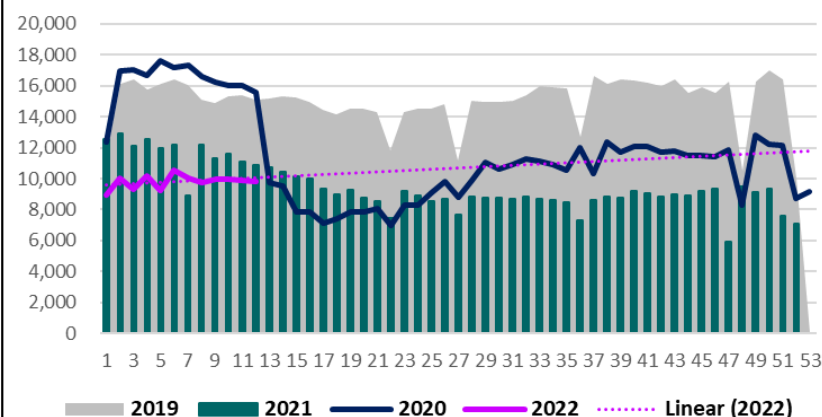
Off-Lease Check-ins Trend



~13% of Normal

*Extremely High Equity Positions
continuing to keep most off-lease
units out of auction*

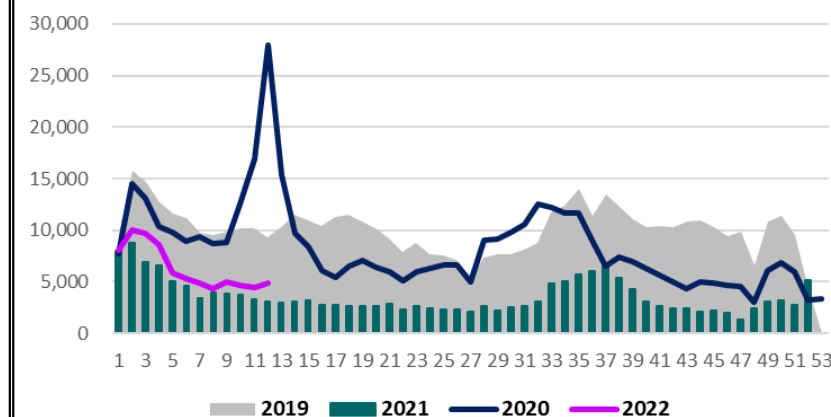
Repo Check-ins Trend



~64% of Normal

*Repo Volumes Slowly Recovering But
Still Well Below Pre-Covid Levels*

Rental Check-ins Trend

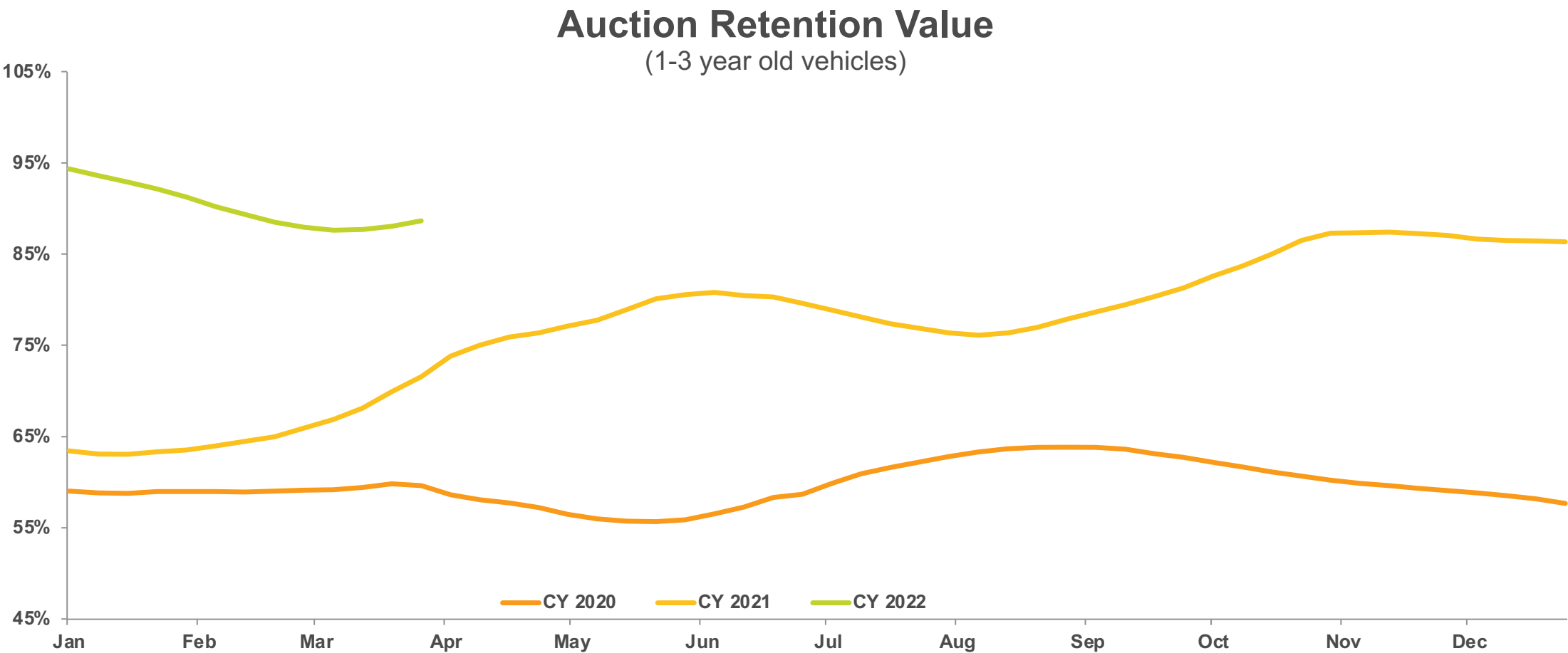


~56% of Normal

Running Slightly Higher Than 2021

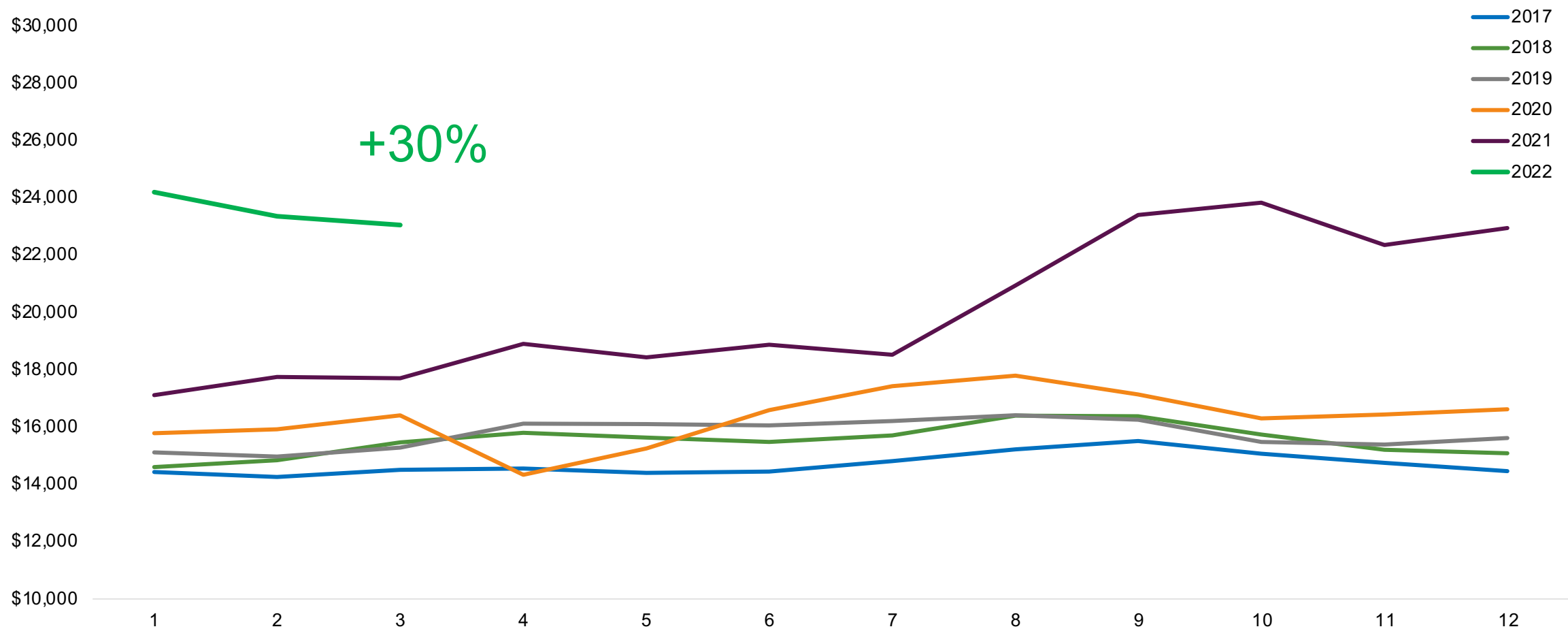
Retention Values Now Higher Than 2021's Record Peak

Retention values peaked at high of 87% in 2021; now at 89%



Rental Risk Average Auction Prices

Average price for rental risk units sold in March up 30% year over year and down 1% month over month



Rental Risk Vehicle Variety Represented in Sales

Configurations declined while share of most populous units increased

	2020 Q1	2021 Q1	2022 Q1
Number of unique year, make, model, body configurations sold	3,390	3,149	2,976
Share accounted for top 10 YMMB	11.8%	12.0%	18.1%
Share accounted for top 25 YMMB	21.4%	22.6%	30.8%
Number of YMMB to reach 50% share	113	117	68

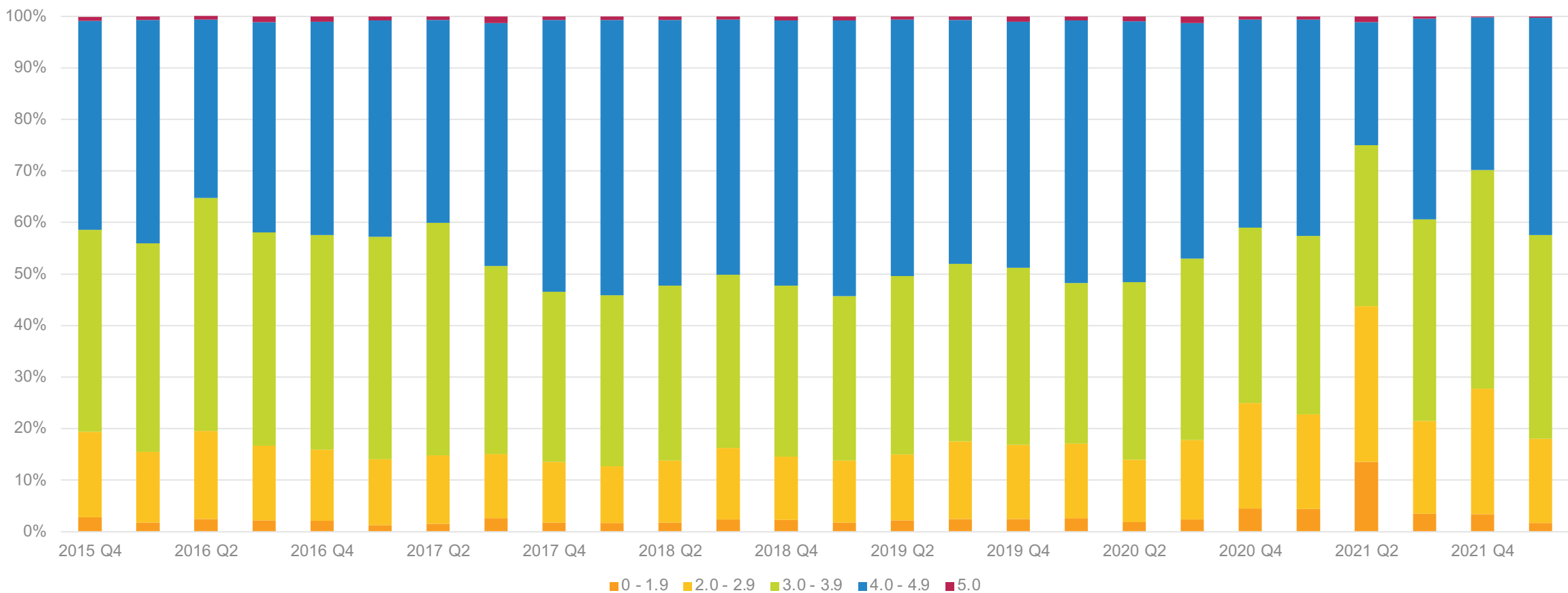
Rental Risk Average Mileage

Average mileage for rental risk units in March was down 6% compared to a year ago but up 6% month over month



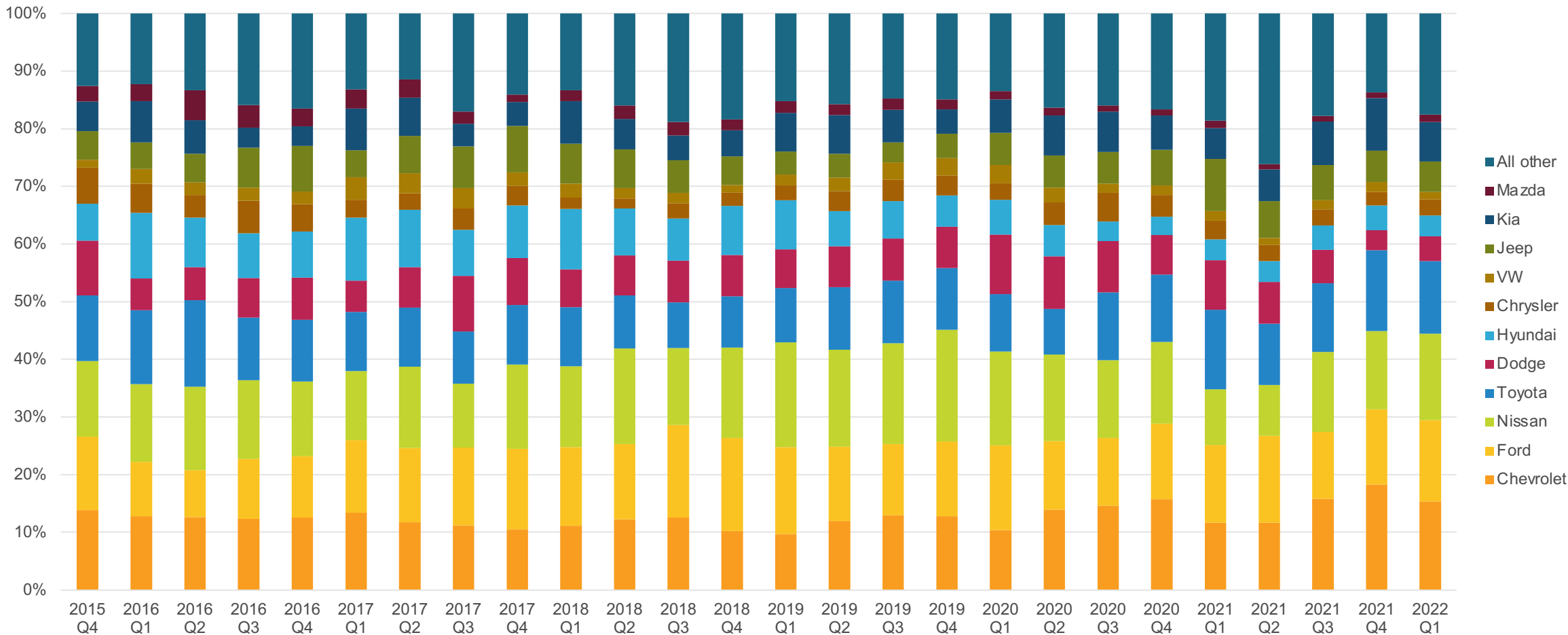
Rental Risk Sales Condition

Q1 2022 distribution very close to that of Q1 2021



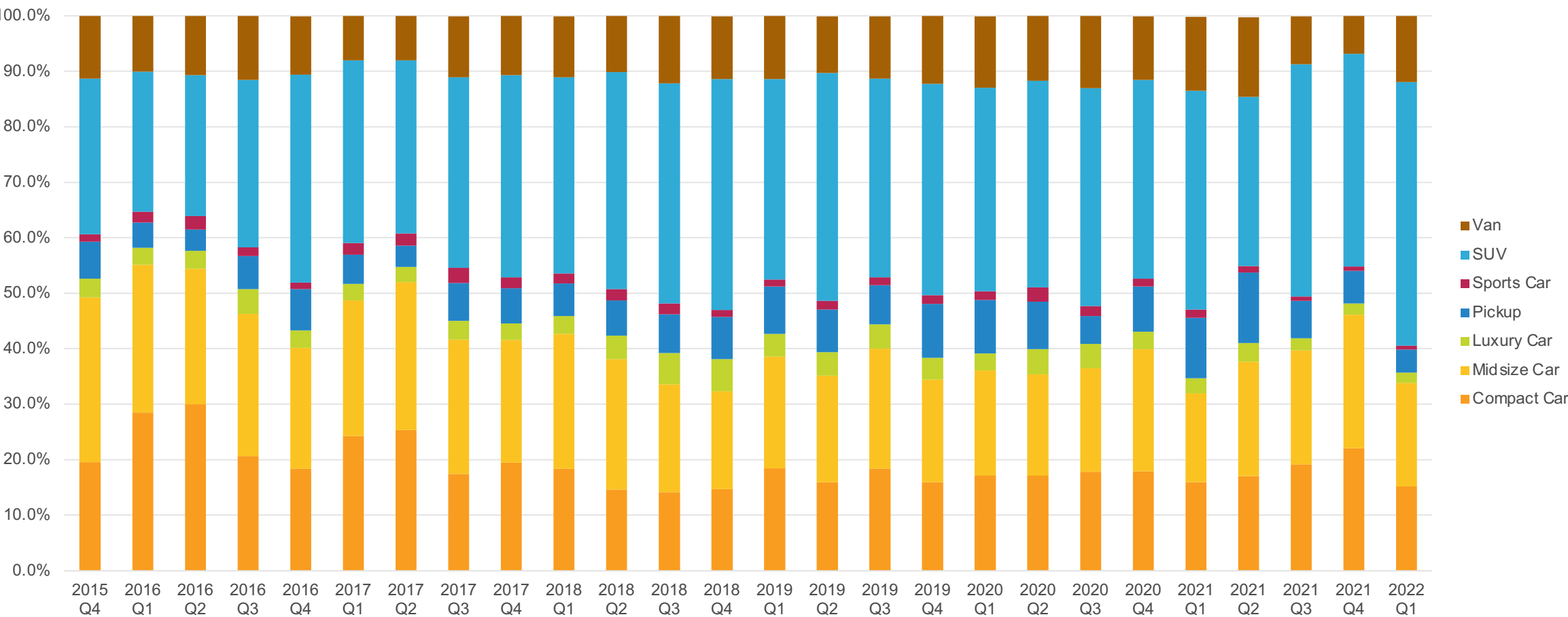
Rental Risk Sales By Make

Chevy, Nissan, Ford, and Toyota remain in the top 4 with a little movement among those players



Rental Risk Sales By Vehicle Segment

SUVs continued to have increased share



Manheim MMR Insights on Top Volume Vehicles

Price trends on top selling vehicles in March at Manheim showed mostly appreciating trends and clear year-over-year gains.

Rank	Source(Rank)	Category	Subcategory	Vehicle	1-Apr	Past 30 Days	Last Year	Current Dep	L12M Dep/Mo
1	All	Midsize Car	Midsize Car Entry	2020 CHEVROLET MALIBU 4D SEDAN LT	\$20,400	\$20,000	\$18,000	2.0%	1.1%
2	All	Compact Car	Compact Car Premium	2020 TOYOTA COROLLA 4D SEDAN LE	\$19,100	\$18,700	\$17,300	2.1%	0.9%
3	All	SUV	SUV Midsize	2019 CHEVROLET EQUINOX FWD 4D SUV 1.5L LT	\$22,900	\$22,400	\$19,550	2.2%	1.4%
4	All	Midsize Car	Midsize Car Premium	2015 NISSAN ALTIMA 4C 4D SEDAN S	\$9,125	\$8,975	\$7,950	1.7%	1.2%
5	All	SUV	SUV Midsize	2019 CHEVROLET EQUINOX AWD 4D SUV 1.5L LT	\$23,000	\$22,800	\$19,400	0.9%	1.5%
1 Dealer	Dealer	SUV	SUV Midsize	2019 CHEVROLET EQUINOX FWD 4D SUV 1.5L LT	\$22,900	\$22,400	\$19,550	2.2%	1.4%
1 Lease	Lease	SUV	SUV Luxury	2019 VOLVO XC90 AWD 4D SUV T6 MOMENTUM	\$43,200	\$43,300	\$41,600	-0.2%	0.3%
1 Rental	Rental	Midsize Car	Midsize Car Entry	2020 CHEVROLET MALIBU 4D SEDAN LT	\$20,400	\$20,000	\$18,000	2.0%	1.1%

Three-Year Old Average Wholesale Price Increases Over Last 3 Weeks



2022 FORECASTS Q2 UPDATE

New
15.3M ↓
NEW SALES

New
13.3M ↓
NEW RETAIL SALES

New
2.0M ↓
FLEET SALES

New
2.9M ↓
NEW LEASE
VOLUME

New
22% ↓
LEASE
PENETRATION

New
2.8M ↓
CPO SALES

39.3M
USED SALES

20.7M
USED RETAIL SALES

-3%
DEC 2022 Y/Y MANHEIM
USED VEHICLE
VALUE INDEX

↓ Indicates decrease from Q1 forecast



Q&A

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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

Manheim Vehicle Value Index (MUVVI): <https://publish.manheim.com/en/services/consulting/used-vehicle-value-index.html>

The official MUVVI is published on the 5th business day each month. A mid-month update covering the first 15 days of the month is published around the 17th of the month.

Auto Market Snapshot: www.coxautoinc.com/marketsnapshot

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

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

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

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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