THE POWER OF COX AUTOMOTIVE

Harnessing the power of connected data for game-changing results
PRESENTERS

Mark Schirmer, Director, Corporate Communications
Jonathan Smoke, Chief Economist
Jeremy Robb, Senior Director, Economic and Industry Insights
Chris Frey, Senior Manager, Economic and Industry Insights
JONATHAN SMOKE
Chief Economist

Cox Automotive
CONSUMER SPENDING SLOWING BUT STILL STRONG IN TRAVEL

Total spending in mid-March was up 12% y/y with strength in travel, dining out, and services.

Y/Y Spending % Change for Week Ending March 18, 2023

Source: Verisk/Equifax
CONSUMER SENTIMENT DECLINED IN MARCH

The Index of Consumer Sentiment increased 3.2% in February but declined 2.2% in March

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

Source: Morning Consult; AAA
CONTINUING CLAIMS AT 1.82 MILLION NATIONALLY

Source: Moody's Analytics, U.S. Department of Labor
RETAIL VEHICLE SALES ESTIMATES

Compared to last year, new sales last week were up 10%, and used sales were down 6%

Retail New Sales

Retail Used Sales

Source: vAuto, Cox Automotive
SUPPLY TIGHTER SO FAR IN 2023

New supply up 21 days y/y and unchanged from February; used supply down 9 days y/y and down 3 days from February

New Days’ Supply

Used Days’ Supply

Source: vAuto, Cox Automotive
TAX REFUND AMOUNTS DOWN SUBSTANTIALLY

9% less has been disbursed compared to last year, and the average refund is down 11%

Cumulative Refunds Issued and Ave Refund Amount by Week
(week 12 was week ending March 24, 2023)

Source: Internal Revenue Service, Cox Automotive Analysis
JEREMY ROBB
Senior Director, Economic and Industry Insights
Through Q1, EV sales are 6.7% of all New Vehicle Sales, rapidly increasing as a segment.
The EV premium continues to decline, as overall new vehicle prices increase.
CONSUMER PURCHASES OF RETAIL USED EVS

Retail EV sales increase rapidly with vast consumer adoption, +32% Y/Y and +120% vs Q1 2021

Source: Cox Automotive
Interest in EV valuations is on the rise as market increases
EV sales at wholesale continue to grow rapidly, +40% Y/Y and +82% vs Q1 2021

Source: Manheim
CHRIS FREY
Senior Manager, 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 RISE IN MARCH, BUT ARE SLOWING

Prices in March increased 1.5% from February but were down 2.4% from March 2022.

Source: Manheim
YEAR-OVER-YEAR PERFORMANCE NEARING PARITY WITH 2022

Year-over-year price differences have been shrinking in 2023 with strong Q1 at auction.

Source: Manheim
While adjusted prices led non-adjusted since December, adjustment impact is narrowing.

Source: Manheim
Divergence in prices began in December and has accelerated this spring.

Source: Manheim, KBB
Spring Market strength a reversal from Q4 2022 declines; Luxury cars have largely lagged other segments.

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>-2.4%</td>
</tr>
<tr>
<td>Compact cars</td>
<td>-2.2%</td>
</tr>
<tr>
<td>Midsize cars</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Luxury cars</td>
<td>-8.0%</td>
</tr>
<tr>
<td>Pickups</td>
<td>0.6%</td>
</tr>
<tr>
<td>SUV / CUV</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Vans</td>
<td>-3.6%</td>
</tr>
</tbody>
</table>

Source: Manheim
Since December, U.S. Index outpacing Canada Index by 0.8% through March.

Source: Manheim
MMR RETENTION & SALES CONVERSION

Sales Conversion peaked in early March as MMR Retention hit a high one week later

Source: Manheim
Values began rising more quickly at the start of the year then tapered.

Weekly Change in Resale Value

Q1 Weekly Trends were higher than average through February then cooled.

Source: Manheim
In 2023, appreciation in the 3YO and 4YO outpace other age groups

**2023 MMR Index by Week**

*By Vehicle Age*

<table>
<thead>
<tr>
<th>Age</th>
<th>Resale Value (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 YO</td>
<td>99.8%</td>
</tr>
<tr>
<td>2 YO</td>
<td>104.5%</td>
</tr>
<tr>
<td>3 YO</td>
<td>106.1%</td>
</tr>
<tr>
<td>4 YO</td>
<td>106.1%</td>
</tr>
<tr>
<td>5 YO</td>
<td>103.1%</td>
</tr>
<tr>
<td>6 YO</td>
<td>103.2%</td>
</tr>
<tr>
<td>7 YO</td>
<td>103.1%</td>
</tr>
<tr>
<td>8 YO</td>
<td>102.7%</td>
</tr>
<tr>
<td>9 YO</td>
<td>102.0%</td>
</tr>
<tr>
<td>10 YO</td>
<td>102.6%</td>
</tr>
</tbody>
</table>

Source: Manheim
Resale Values for the near new unit are higher than any point in history
3YO MMR INDEX & RESALE VALUE TRENDS

3 YO resale values have been rising steadily and are just under 2022 values

Source: Manheim
Lease equity continues to remain very elevated, giving lease customers options.

CALE CLIMBS HIGHER IN Q1 WITH VALUES

CALE Historical View (36-month term)

- 2020 Avg: ($990)
- 2021 Avg: $5,516
- 2023 Avg: $6,376

Source: Manheim & Dealertrack
COMMERCIAL SUPPLY INCREASES

Commercial Check-Ins to Auction continue to run higher Y/Y driven by Repo and Off-Lease

**Repo**
- 13,314
- Yoy%: 27.4%

**Off-Lease**
- 5,274
- Yoy%: 81.8%

**Rental**
- 4,189
- Yoy%: -13.3%

**Other**
- 4,281
- Yoy%: 40.6%
While retention values are below last year, they continue to remain elevated.

Auction Retention Value
(1-3 year old vehicles)

Source: Kelley Blue Book
Prices for units sold in March were up 4.4% year-over-year and up 2.5% from February.

Source: Manheim
Configuration count much higher as de-fleeting of older, auction-purchased units return.

### RENTAL RISK VEHICLE VARIETY REPRESENTED IN SALES

<table>
<thead>
<tr>
<th></th>
<th>2021 Q1</th>
<th>2022 Q1</th>
<th>2023 Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of unique year, make, model, body configurations sold</td>
<td>3,149</td>
<td>2,976</td>
<td>4,263</td>
</tr>
<tr>
<td>Share accounted for top 10 YMMB</td>
<td>12.0%</td>
<td>18.1%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Share accounted for top 25 YMMB</td>
<td>22.6%</td>
<td>30.8%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Number of YMMB to reach 50% share</td>
<td>117</td>
<td>68</td>
<td>145</td>
</tr>
</tbody>
</table>

Source: Manheim
Average mileage in March was up 2.9% from a year ago and up 6.8% from February.

Source: Manheim
Very similar to Q2 of 2022, with little change from Q4 2022 to Q1 2023.

Source: Manheim
Toyota had largest share in Q1 2023, with a big drop in Nissan from Q4 2022.

Source: Manheim
Trend from Q3 2022 remains intact – SUVs down, Vans, Pickups, and Midsize cars gain.

Source: Manheim
MANHEIM INSIGHTS ON TOP VOLUME VEHICLES

Price trends on top-selling vehicles in March at Manheim showed mostly increasing values for the month.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Source(Rank)</th>
<th>Category</th>
<th>Subcategory</th>
<th>Vehicle</th>
<th>3-Apr</th>
<th>Past 30 Days</th>
<th>Last Year</th>
<th>Current Dep</th>
<th>L12M Dep/Mo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2020 FORD EXPLORER 4WD 4C 4D SUV XLT</td>
<td>$32,300</td>
<td>$31,900</td>
<td>$38,400</td>
<td>1.3%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>2</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2020 CHEVROLET EQUINOX FWD 4D SUV 1.5 LT</td>
<td>$21,500</td>
<td>$21,700</td>
<td>$24,300</td>
<td>-0.9%</td>
<td>-1.0%</td>
</tr>
<tr>
<td>3</td>
<td>All</td>
<td>Compact Car</td>
<td>Compact Car Premium</td>
<td>2020 TOYOTA COROLLA 4D SEDAN LE</td>
<td>$17,950</td>
<td>$17,650</td>
<td>$19,850</td>
<td>1.7%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>4</td>
<td>All</td>
<td>Compact Car</td>
<td>Compact Car Premium</td>
<td>2021 TOYOTA COROLLA 4D SEDAN LE</td>
<td>$20,600</td>
<td>$20,300</td>
<td>$22,700</td>
<td>1.5%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>5</td>
<td>All</td>
<td>Compact Car</td>
<td>Compact Car Premium</td>
<td>2020 HYUNDAI ELANTRA 4D SEDAN SEL</td>
<td>$16,250</td>
<td>$16,200</td>
<td>$18,800</td>
<td>0.3%</td>
<td>-1.1%</td>
</tr>
<tr>
<td>1</td>
<td>Dealer</td>
<td>Dealer</td>
<td>Compact Car Premium</td>
<td>2021 TOYOTA COROLLA 4D SEDAN LE</td>
<td>$20,600</td>
<td>$20,300</td>
<td>$22,700</td>
<td>1.5%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>1</td>
<td>Lease</td>
<td>Lease</td>
<td>SUV Midsize</td>
<td>2020 FORD EXPLORER 4WD 4C 4D SUV XLT</td>
<td>$32,300</td>
<td>$31,900</td>
<td>$38,400</td>
<td>1.3%</td>
<td>-1.3%</td>
</tr>
<tr>
<td>1</td>
<td>Rental</td>
<td>Rental</td>
<td>Midsize Car</td>
<td>2020 TOYOTA CAMRY 4C 4D SEDAN LE</td>
<td>$20,100</td>
<td>$19,700</td>
<td>$23,500</td>
<td>2.0%</td>
<td>-1.2%</td>
</tr>
</tbody>
</table>

Source: Manheim, Cox Automotive
WHOLESALE USED PRICES NOW DECLINING, RETAIL INCREASING

The average MY 2020 wholesale price declined 0.2% last week while the average retail price increased 0.3%.

Source: Dealertrack, Manheim, Cox Automotive
WHOLESALE FLOWS BOTTOMED IN 2022

After 13% decline in 2022, the wholesale market should see a slow and gradual recovery to 2018 levels by 2028

Estimated Wholesale Volumes by Inflow Channel (Annual Volume)
ON-SITE PHYSICAL AUCTION MARKET DOES NOT FULLY RECOVER

With gradual shift to more transactions offsite and fully digital, onsite volumes in 2028 expected to be 20% below 2019

Wholesale Onsite/Physical vs. Offsite

Source: Manheim, Cox Automotive
REPOS DIP IN 2020-2021 FOLLOWED BY SLOW RECOVERY

Near term limited by smaller subprime loan base; longer term expects normal default rates by credit tier

Estimated Repossession Volumes

Source: Manheim, Cox Automotive
OFF-LEASE RETURNS COLLAPSED WITH RECORD VALUES

Return rate hit historical low of 11% in 2022 vs. 62% in 2019; now lease maturities are falling

Source: Manheim, Cox Automotive
DEALER VOLUMES PEAKED IN 2021; NOW CHALLENGED BY DECLINE IN OFF-LEASE

Off-lease arbitrage and record retail sales powered 11% jump in dealer consignments in 2021

Source: Manheim, Cox Automotive

Estimated Dealer Volumes

- 2018: 6.6
- 2019: 6.8
- 2020: 6.2
- 2021: 6.9
- 2022: 6.1
- 2023: 6.0
- 2024: 6.0
- 2025: 6.1
- 2026: 6.3
- 2027: 6.4
- 2028: 6.7

Source: Manheim, Cox Automotive
RENTAL VOLUMES RECOVERING WITH IMPROVING SALES INTO FLEET

Total fleet size expected to return to pre-pandemic levels by 2027 as share of new market recovers

Source: Manheim, Cox Automotive
USED VEHICLE VALUE OUTLOOK NOW STRONGER FOR 2023

Strong start followed by weaker spring and summer leads to a close to average year on Manheim Index

Y/Y % Change Manheim Index, As Of December

2.5% 14.2% 46.6% -14.9% 1.6% 2.4%

Dec-19 Dec-20 Dec-21 Dec-22 Dec-23 Dec-24

Source: Manheim, Cox Automotive
FORECAST RANGE NEEDED WITH RECESSION 50/50

Minimal upside potential with most likely outcome between soft landing and recession

New Vehicle Sales
- No Recession
- Recession
- Upside

Used Retail Sales
- No Recession
- Recession
- Upside

Source: Manheim, Cox Automotive
EV & HYBRID VOLUME FORECAST | 4.4 MILLION BEVS BY 2027

Gains in hybrids only temporary as only pure EV growth expected to continue

Source: Cox Automotive analysis of S&P Global Propulsion Forecast June 2022
2023 FORECASTS Q2 Update

14.2M NEW SALES
(Original 2023: 14.1M)

12.0M NEW RETAIL SALES
(Original 2023: 11.9M)

2.2M FLEET SALES
(2022: 1.8M)

2.5M NEW LEASE VOLUME
(2022: 2.3M)

21% LEASE PENETRATION
(2022: 19%)

2.4M CPO SALES
(Original 2023: 2.2M)

2023
FORECASTS
Q2 Update

36.2M USED SALES
(Original 2023: 35.6M)

19.2M USED RETAIL SALES
(Original 2023: 18.9M)

+1.6%
DEC 2023 Y/Y MANHEIM USED VEHICLE VALUE INDEX
(Original 2023: -4.3%)
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: www.coxautoinc.com/marketssnapshot
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!

Contact us with questions or to speak with an expert:

Dara Hailes  
Senior Manager  
Cox Automotive Corporate Communications  
dara.hailes@coxautoinc.com

Mark Schirmer  
Director  
Cox Automotive Corporate Communications  
mark.schirmer@coxautoinc.com