WELCOME!
Transforming the way the world buys, sells, owns and uses vehicles
AGENDA

**The Economy** – Jonathan Smoke, Chief Economist

**New-Vehicle Sales** – Charlie Chesbrough, Senior Economist

**Used-Vehicle Sales** – Zo Rahim, Manager of Economic & Industry Insights

**2021 Outlook and Playlist** – Michelle Krebs, Executive Analyst and Jonathan Smoke, Resident DJ

**Wholesale Marketplace** – Zach Hallowell, Senior Vice President, Manheim Digital

**Manheim Used Vehicle Value Index** – Jonathan Smoke and Zo Rahim

**Q&A**
THE ECONOMY
JONATHAN SMOKE
CHIEF ECONOMIST
COVID-19 PANDEMIC: The Backdrop of 2020
GOVERNMENT SET: President-Elect Joe Biden and the Light Blue Hue

- Stimulus
- Infrastructure
- Regulation
- Taxes?
# THE ECONOMY: Partial Recovery in GDP and Jobs

## Overall Economy

<table>
<thead>
<tr>
<th></th>
<th>GDP Growth / FRBNY</th>
<th>3.1% (Q4 ’19)</th>
<th>+33.4% (Q3 ’20)</th>
<th>+4.0% (Q4 ’20 F)</th>
</tr>
</thead>
</table>

## Employment Conditions

<table>
<thead>
<tr>
<th></th>
<th>U3 Unemployment Rate</th>
<th>3.5% (Dec ’19)</th>
<th>6.7% (Nov ’20)</th>
<th>6.7% (Dec ’20 )</th>
</tr>
</thead>
</table>

## Buyer Confidence

<table>
<thead>
<tr>
<th></th>
<th>UofM Consumer Sentiment</th>
<th>99.3 (Dec ’19)</th>
<th>80.7 (Dec ’20)</th>
</tr>
</thead>
</table>

## Wages

<table>
<thead>
<tr>
<th></th>
<th>Earnings Growth</th>
<th>3.0% (Dec ’19)</th>
<th>5.1% (Dec ’20)</th>
</tr>
</thead>
</table>

## Buyer Ability

<table>
<thead>
<tr>
<th></th>
<th>Disposable Income Y/Y</th>
<th>3.6% (Nov ’19)</th>
<th>4.3% (Nov ’20)</th>
</tr>
</thead>
</table>
## THE ECONOMY: Cost of Funds and Fuel Remain Very Low

<table>
<thead>
<tr>
<th>Category</th>
<th>FRBNY</th>
<th>Q3 '19</th>
<th>Q3 '20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto Finance</td>
<td>$159.1 billion</td>
<td></td>
<td>$168 billion</td>
</tr>
<tr>
<td>Interest Rates</td>
<td>Effective Fed Funds Rate</td>
<td>1.55%</td>
<td>0.09%</td>
</tr>
<tr>
<td></td>
<td>(Dec ’19)</td>
<td>(Dec ’20)</td>
<td></td>
</tr>
<tr>
<td>Borrowing Costs</td>
<td>Average New Auto Loan Rate</td>
<td>5.83%</td>
<td>4.29%</td>
</tr>
<tr>
<td></td>
<td>(Dec ’19)</td>
<td>(Dec ’20)</td>
<td></td>
</tr>
<tr>
<td>Mobility Costs</td>
<td>Average Retail Unleaded Gasoline Price</td>
<td>$2.59</td>
<td>$2.25</td>
</tr>
<tr>
<td></td>
<td>(Dec ’19)</td>
<td>(Dec ’20)</td>
<td></td>
</tr>
</tbody>
</table>
How would you describe the current market for vehicles in the areas where you operate?

Dealer Sentiment Index

FOURTH QUARTER 2020

Note: Scale 1 - 100
How would you describe your profits over the past 3 months?

Note: Scale 1 - 100
NEW-VEHICLE SALES
NEW-VEHICLE SALES SAAR: Return to Recovery Path in December

We had a strong retail sales finish – lots of good “buying” news in December – but can the momentum continue in 2021?

Monthly Light Vehicle Sales SAAR (millions sold)

<table>
<thead>
<tr>
<th>Sales (millions)</th>
<th>Pass Car</th>
<th>Light Trucks</th>
<th>Total</th>
<th>Car Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>CY2019</td>
<td>4.7</td>
<td>12.2</td>
<td>17.0</td>
<td>27.8%</td>
</tr>
<tr>
<td>CY2020</td>
<td>3.4</td>
<td>11.1</td>
<td>14.5</td>
<td>23.6%</td>
</tr>
<tr>
<td>Change</td>
<td>-27.7%</td>
<td>-9.7%</td>
<td>-14.8%</td>
<td>-4.2%</td>
</tr>
</tbody>
</table>

Source: Cox Automotive, BEA Vehicle Sales
NEW-VEHICLE SALES: Surprisingly Strong After Spring Doomsday Scenarios

Forecasts varied greatly during spring shutdowns – *Hope for the best, plan for the worst* – became guidance.

**Cox Sales Forecast**

2020: 14.5M  -15%
2021: 15.7M  +9%

Source: Cox Automotive, BEA Vehicle Sales
### SALES CHANNELS: Retail Purchasing Saved the Market, Fleet Did Not

Fleet recovery, stronger leasing is likely in 2021, but vehicle buyers remain key to market success.

<table>
<thead>
<tr>
<th>As of October 2020</th>
<th>Total</th>
<th>Retail Purchase</th>
<th>Retail Lease</th>
<th>Fleet Rental</th>
<th>Fleet Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Volume</td>
<td>-15.3%</td>
<td>-7.6%</td>
<td>-21.2%</td>
<td>-57.8%</td>
<td>-20.9%</td>
</tr>
<tr>
<td>Share 2020</td>
<td>100.0%</td>
<td>60.5%</td>
<td>24.1%</td>
<td>7.3%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Change</td>
<td>0.0%</td>
<td>7.5%</td>
<td>-0.6%</td>
<td>-6.7%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>Volume Loss Share</td>
<td>100.0%</td>
<td>21.3%</td>
<td>27.4%</td>
<td>42.2%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

Government stimulus/infrastructure spending, more certainty lifts consumer demand

Vaccines/economic recovery, and 2017 tax reform lifts commercial demand

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
Government closures, virus fear contributed to sales declines, but the situation is now similar across the country.

YOY Change
Retail Sales
Nationally -11%

Based on Cox captured data

Source: Cox Automotive, Dealertrack Vehicle Sales
## OEM SALES VOLUME: Many Challenges Impacted Performance

BMW, Volvo, Tesla had strong second half performances while Nissan, Mitsubishi, Tata lagged.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BMW</td>
<td>100,738</td>
<td>107,299</td>
<td>6.5%</td>
<td>186,895</td>
<td>185,933</td>
<td>-0.5%</td>
<td>360,918</td>
<td>303,654</td>
<td>-15.9%</td>
<td>117,721</td>
<td>185,933</td>
<td>57.9%</td>
</tr>
<tr>
<td>Tesla</td>
<td>53,750</td>
<td>68,200</td>
<td>26.9%</td>
<td>108,450</td>
<td>123,900</td>
<td>14.2%</td>
<td>192,325</td>
<td>205,600</td>
<td>6.9%</td>
<td>81,700</td>
<td>123,900</td>
<td>51.7%</td>
</tr>
<tr>
<td>Volvo</td>
<td>30,802</td>
<td>34,017</td>
<td>10.4%</td>
<td>57,971</td>
<td>64,366</td>
<td>11.0%</td>
<td>108,091</td>
<td>107,102</td>
<td>-0.9%</td>
<td>42,736</td>
<td>64,366</td>
<td>50.6%</td>
</tr>
<tr>
<td>Toyota</td>
<td>604,017</td>
<td>660,715</td>
<td>9.4%</td>
<td>1,231,211</td>
<td>1,219,164</td>
<td>-1.0%</td>
<td>2,383,319</td>
<td>2,112,940</td>
<td>-11.3%</td>
<td>893,776</td>
<td>1,219,164</td>
<td>36.4%</td>
</tr>
<tr>
<td>Daimler</td>
<td>104,672</td>
<td>92,320</td>
<td>-11.8%</td>
<td>194,438</td>
<td>165,188</td>
<td>-15.0%</td>
<td>358,355</td>
<td>290,722</td>
<td>-18.9%</td>
<td>125,534</td>
<td>165,188</td>
<td>31.6%</td>
</tr>
<tr>
<td>VW</td>
<td>167,313</td>
<td>172,025</td>
<td>2.8%</td>
<td>332,696</td>
<td>319,520</td>
<td>-4.0%</td>
<td>649,001</td>
<td>563,627</td>
<td>-13.2%</td>
<td>244,107</td>
<td>319,520</td>
<td>30.9%</td>
</tr>
<tr>
<td>GM</td>
<td>732,618</td>
<td>767,444</td>
<td>4.8%</td>
<td>1,468,269</td>
<td>1,429,587</td>
<td>-2.6%</td>
<td>2,877,590</td>
<td>2,535,283</td>
<td>-11.9%</td>
<td>1,105,696</td>
<td>1,429,587</td>
<td>29.3%</td>
</tr>
<tr>
<td>Subaru</td>
<td>174,788</td>
<td>175,382</td>
<td>0.3%</td>
<td>360,592</td>
<td>344,828</td>
<td>-4.4%</td>
<td>700,118</td>
<td>611,937</td>
<td>-12.6%</td>
<td>267,109</td>
<td>344,828</td>
<td>29.1%</td>
</tr>
<tr>
<td>Honda</td>
<td>401,961</td>
<td>366,068</td>
<td>-8.9%</td>
<td>831,175</td>
<td>754,501</td>
<td>-9.2%</td>
<td>1,608,170</td>
<td>1,346,788</td>
<td>-16.3%</td>
<td>592,287</td>
<td>754,501</td>
<td>27.4%</td>
</tr>
<tr>
<td>Hyundai</td>
<td>340,482</td>
<td>341,698</td>
<td>0.4%</td>
<td>677,166</td>
<td>681,284</td>
<td>0.6%</td>
<td>1,325,277</td>
<td>1,224,758</td>
<td>-7.6%</td>
<td>543,474</td>
<td>681,284</td>
<td>25.4%</td>
</tr>
<tr>
<td>FCA</td>
<td>542,519</td>
<td>499,431</td>
<td>-7.9%</td>
<td>1,107,553</td>
<td>1,006,782</td>
<td>-9.1%</td>
<td>2,203,593</td>
<td>1,820,636</td>
<td>-17.4%</td>
<td>813,854</td>
<td>1,006,782</td>
<td>23.7%</td>
</tr>
<tr>
<td>Mazda</td>
<td>70,385</td>
<td>75,796</td>
<td>7.7%</td>
<td>139,997</td>
<td>150,207</td>
<td>7.3%</td>
<td>278,552</td>
<td>279,076</td>
<td>0.2%</td>
<td>128,869</td>
<td>150,207</td>
<td>16.6%</td>
</tr>
<tr>
<td>Ford</td>
<td>598,728</td>
<td>538,643</td>
<td>-10.0%</td>
<td>1,174,734</td>
<td>1,087,777</td>
<td>-7.4%</td>
<td>2,406,188</td>
<td>2,034,708</td>
<td>-15.4%</td>
<td>946,931</td>
<td>1,087,777</td>
<td>14.9%</td>
</tr>
<tr>
<td>Tata</td>
<td>36,716</td>
<td>31,023</td>
<td>-15.5%</td>
<td>63,382</td>
<td>52,764</td>
<td>-16.8%</td>
<td>125,787</td>
<td>101,108</td>
<td>-19.6%</td>
<td>48,344</td>
<td>52,764</td>
<td>9.1%</td>
</tr>
<tr>
<td>Nissan</td>
<td>301,291</td>
<td>243,133</td>
<td>-19.3%</td>
<td>628,645</td>
<td>464,283</td>
<td>-26.1%</td>
<td>1,345,681</td>
<td>899,217</td>
<td>-33.2%</td>
<td>434,934</td>
<td>464,283</td>
<td>6.7%</td>
</tr>
<tr>
<td>Mitsubishi</td>
<td>25,475</td>
<td>16,796</td>
<td>-34.1%</td>
<td>49,949</td>
<td>35,559</td>
<td>-28.8%</td>
<td>121,049</td>
<td>83,319</td>
<td>-31.2%</td>
<td>47,760</td>
<td>35,559</td>
<td>-25.5%</td>
</tr>
</tbody>
</table>

* Sorted by H2 Recovery Change

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
BRAND NEW VEHICLE SALES: Everyone is Down in 2020, Almost

Old/new products, channel recovery pace, and geography are having varied impacts across the marketplace.

2020 Brand Sales

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
BRAND MARKET SHARE: Some Winning, Some Losing in Volatile 2020

It’s hard to declare victory in this environment with so many moving parts contributing.

Gain/Loss Share Of Total Light Vehicle Sales

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
TOP SELLING VEHICLES: F-Series Wins but Competitors Gain

Lots of change in 2020, but at least one constant: We are a pickup truck market.
SEGMENT NEW VEHICLE SALES: Subcompact Crossovers Win the Year

Subcompact and compact cars are two of the lowest priced products and should be doing better in a recession.

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
VEHICLE PRICING: Higher Price Trend Accelerated in 2020

In 2020, 24% nameplates were priced below $30,000, down from 54% in 2012 and down from 28% last year.

Share of Market by MSRP Price Range 2012 – 2020

Source: Cox Automotive, Kelley Blue Book Vehicle Sales
NEW-VEHICLE INVENTORY: Tight Inventories Slowly Improving

The supply situation is now stabilizing but remains well below last year’s levels.

Available Supply weekly, last 12 months

Days of Supply weekly, last 12 months
BRAND INVENTORY: Supply Situation Varies Significantly

Toyota and many imported luxury brands have tight inventories.

Days of Supply

Source: Cox Automotive VMA Database
SEGMENT INVENTORY: Supply Situation Varies Significantly

Pickups, luxury CUVs are relatively tight inventories while relatively inexpensive segments have too much.

Days of Supply
PRICE CATEGORY INVENTORY: Lower Prices May Be Over Supplied

Lowest price categories have the highest days of supply, and the lowest share of next MY products.
PURCHASE INTEREST RATES: Massive Shift Towards Lower Rate

Market share of purchasers paying 4% rate or less jumped 15% in April and has maintained share since.

Average Purchase Contract Interest Rate

Source: Cox Automotive Market Rate Monitor
SEGMENT INTEREST RATES: Some Vulnerable in 2020, Now Opportunities?

Recession hit some customers harder than others – Does economic recovery do the same?

Segment Average Purchase Interest Rate year to date
USED-VEHICLE SALES
USED-VEHICLE SALES OUTLOOK (MILLIONS)

<table>
<thead>
<tr>
<th>Year</th>
<th>Used-Vehicle Sales Volume</th>
<th>Used-Retail Sales Volume</th>
<th>Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>40.0</td>
<td>20.8</td>
<td></td>
</tr>
<tr>
<td>2002</td>
<td>36.7</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>39.3</td>
<td>21.2</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>40.2</td>
<td>22.1</td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>39.8</td>
<td>22.4</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
USED-VEHICLE SUPPLY: Inventory of Unsold Used Vehicles Stabilizes

Days of Retail Supply Available

Days of Wholesale Supply Available

Source: Cox Automotive
USED-VEHICLE PRICES: Decline Continues in December

MY 2017 RETAIL AND WHOLESALE PRICE INDICES (wk1=100)

- 2019 Retail Index
- 2020 Retail Index
- 2019 Wholesale Index
- 2020 Wholesale Index

Source: Cox Automotive
CPO SALES: Impressive Recovery

Source: Cox Automotive Analysis of Motor Intelligence
2021 OUTLOOK & PLAYLIST
MICHELLE KREBS
Executive Analyst

JONATHAN SMOKE
Resident DJ
#1: Even with a vaccine, things won’t “return to normal” in 2021.

#2: Auto industry will emerge stronger from the pandemic.

#3: Inventory will remain tight through 2021.

#4: 2021 is the tipping point for digital retailing.

#5: New competition will slow Tesla’s growth.

#6: In 2021, vehicle ownership increases, ride-sharing and ride-hailing declines.
LOOKING AHEAD: Awesome Songs for an Awesome Year

- **Hit Me with Your Best Shot** by Pat Benatar
  - Vaccines Begin to Change Things

- **Don’t Stop Me Now** by Queen
  - Supply Improves But Will Still Be Constrained

- **Turn Down for What** by DJ Snake and Lil Jon
  - Credit Will Flow But Will Remain Relatively Tight

- **Electric Avenue** by Eddie Grant
  - EVs Start to Take Center Stage
ZACH HALLOWELL
SENIOR VICE PRESIDENT, MANHEIM DIGITAL
Manheim Digital by the Numbers

605
TOTAL DIGITAL LANES

3.25M
SOLD IN DIGITAL CHANNELS YTD

2.3M
VEHICLES IMAGED

190%
GROWTH IN DIGITAL DEALER SALES

30%
INCREASE IN SIMULCAST BUYERS

740k
OVE SALES YTD (+18% YOY)
Digital Attendance Remains Strong

Combined Unique Attendees at Each Auction
(Total US Auctions Only)
More Digital Bids Per Offering

Average Bids per Offer per Lane - Inlane vs. Simulcast

Report Week

- Inlane Bids/Offer
- Simulcast Bids/Offer
In 2021: Client-Focused Outcomes

CONNECTED CLIENT EXPERIENCE
Deliver a client experience that moves Digital from Possible to Preferred

TRUSTED • INTUITIVE • COHESIVE

INSTINCTIVE CHOICES
CONFIDENT DECISIONS
FRICITIONLESS BUY & SELL CAPABILITIES
HASSLE-FREE PROCESSES
TRUSTED, CLEAR POLICIES

FLEXIBLE AND MODERN TECHNOLOGY PLATFORM
Recent Vehicle Imaging Deployments

Smart Approve

15+3 Image Package

Undercarriage Imaging
2021 Vehicle Imaging Focus Areas

Automated Imaging

Damage Image Labeling
Fyusion Acquisition

FYUSION

+

Cox AUTOMOTIVE™
JONATHAN SMOKE & ZO RAHIM
Economic & Industry Insights

@SmokeonCars
@autosanalyst

Cox Automotive
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:**
- All Manheim U.S. sales
- Classify by market segment
- Account for differences in mileage
- Weight to provide smoother segment mix
- Seasonally adjust
Wholesale Prices Decline in December

Prices in December decreased 0.59% month-over-month and were up 14.2% compared to December 2019
Used-Vehicle Values Show Continued Strength

Source: Cox Automotive
Manheim Index Versus Mix & Quality Adjusted New Vehicle Price with 3 ½ year Lag

Source: Cox Automotive
2020 Weekly Price Trend Saw Steady Fall Decline

After 16 weeks of price appreciation, weekly values started to decline, and fall price declines were steady.
Retention Values Remain Up Strongly

Retention values are up 4 percentage points compared to last year at the end of December
Percent Change in Wholesale Prices for Major Market Segments

Most major segments saw year-over-year gains in December

- Compact cars: 2.1%
- Midsize cars: -0.7%
- Luxury cars: 20.8%
- Pickups: 28.2%
- SUV/CUV: 11.3%
- Vans: 4.1%

Source: Cox Automotive
Average Auction Price – Rental Risk Units

Average price for rental risk units sold in December was up 6.4% y/y and up 1% m/m

Source: Cox Automotive
## Distribution of Rental Risk Vehicles

<table>
<thead>
<tr>
<th></th>
<th>2018 Q4</th>
<th>2019 Q4</th>
<th>2020 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of unique year, make, model, body configurations sold</td>
<td>2,623</td>
<td>3,054</td>
<td>3,792</td>
</tr>
<tr>
<td>Share accounted for top 10 YMMB</td>
<td>12.0%</td>
<td>13.3%</td>
<td>13.9%</td>
</tr>
<tr>
<td>Share accounted for top 25 YMMB</td>
<td>23.7%</td>
<td>23.1%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Number of YMMB to reach 50% share</td>
<td>112</td>
<td>109</td>
<td>125</td>
</tr>
</tbody>
</table>
Average Mileage – Rental Risk Units Sold at Auction

Average mileage for rental risk units in December was up 1% compared to a year ago and down 4% m/m
Rental Risk Units Sold by Condition
Rental Risk Units Sold by Make

Source: Cox Automotive
Rental Risk Units Sold by Segment

Compact Car  | Midsize Car  | Luxury Car  | Pickup  | Sports Car  | SUV  | Van


Source: Cox Automotive
Price trends on top selling vehicles in December at Manheim was quite varied over the last 30 days (December 5 – January 4). Prices year-over-year saw appreciation and depreciation while depreciation was evident in the last 30 days for most, but some saw appreciation.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Source(Rank)</th>
<th>Category</th>
<th>Subcategory</th>
<th>Vehicle</th>
<th>4-Jan</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>2017 NISSAN ROGUE AWD 4D SUV 2.5L SV</td>
<td>$13,750</td>
<td>$14,000</td>
<td>$14,800</td>
<td>-1.8%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>2</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2017 FORD EXPLORER 4WD V6 4D SUV XLT</td>
<td>$22,300</td>
<td>$22,600</td>
<td>$22,800</td>
<td>-1.3%</td>
<td>-0.2%</td>
</tr>
<tr>
<td>3</td>
<td>All</td>
<td>SUV</td>
<td>Pickup Lite Duty Full</td>
<td>2018 FORD F150 4WD V6 CREW CAB 2.7L XLT</td>
<td>$32,200</td>
<td>$31,900</td>
<td>$28,000</td>
<td>0.9%</td>
<td>1.3%</td>
</tr>
<tr>
<td>4</td>
<td>All</td>
<td>Compact Car</td>
<td>Compact Car Premium</td>
<td>2017 NISSAN SENTRA 4D SEDAN SV</td>
<td>$8,475</td>
<td>$8,675</td>
<td>$9,100</td>
<td>-2.3%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>5</td>
<td>All</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2018 NISSAN ROGUE AWD 4D SUV SV</td>
<td>$15,100</td>
<td>$15,300</td>
<td>$15,150</td>
<td>-1.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>1 Dealer</td>
<td>Dealer</td>
<td>Midsize Car</td>
<td>Midsize Car Premium</td>
<td>2015 NISSAN ALTIMA 4C 4D SEDAN S</td>
<td>$5,975</td>
<td>$5,950</td>
<td>$6,300</td>
<td>0.4%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>1 Lease</td>
<td>Lease</td>
<td>SUV</td>
<td>SUV Midsize</td>
<td>2017 NISSAN ROGUE AWD 4D SUV 2.5L SV</td>
<td>$13,750</td>
<td>$14,000</td>
<td>$14,800</td>
<td>-1.8%</td>
<td>-0.6%</td>
</tr>
<tr>
<td>1 Rental</td>
<td>Rental</td>
<td>Midsize Car</td>
<td>Midsize Car Entry</td>
<td>2020 CHEVROLET MALIBU 4D SEDAN LT</td>
<td>$13,900</td>
<td>$14,050</td>
<td>$15,900</td>
<td>-1.1%</td>
<td>-1.0%</td>
</tr>
</tbody>
</table>
Total Wholesale Volumes Estimated To Have Declined By 1.6 Million Units

Wholesale volumes tightened from delayed repossessions, decline in rental dispositions, and fewer dealer trades

Estimated Wholesale Volumes by Inflow Channel (Annual Volume)

<table>
<thead>
<tr>
<th>Year</th>
<th>Dealer</th>
<th>Off Lease</th>
<th>Repo</th>
<th>Rental Risk</th>
<th>Factory/Other</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>8.0</td>
<td>2.2</td>
<td>1.2</td>
<td>0.9</td>
<td>1.2</td>
<td>13.8</td>
</tr>
<tr>
<td>2015</td>
<td>8.5</td>
<td>2.5</td>
<td>1.3</td>
<td>1.4</td>
<td>1.0</td>
<td>14.7</td>
</tr>
<tr>
<td>2016</td>
<td>8.7</td>
<td>3.0</td>
<td>1.5</td>
<td>1.6</td>
<td>1.4</td>
<td>15.5</td>
</tr>
<tr>
<td>2017</td>
<td>8.9</td>
<td>3.4</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
<td>16.1</td>
</tr>
<tr>
<td>2018</td>
<td>8.8</td>
<td>3.9</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
<td>16.6</td>
</tr>
<tr>
<td>2019</td>
<td>8.7</td>
<td>4.1</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>16.9</td>
</tr>
<tr>
<td>2020</td>
<td>7.7</td>
<td>4.0</td>
<td>1.4</td>
<td>1.4</td>
<td>2.1</td>
<td>15.3</td>
</tr>
<tr>
<td>2021</td>
<td>8.2</td>
<td>4.0</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>16.2</td>
</tr>
<tr>
<td>2022</td>
<td>8.7</td>
<td>3.4</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>16.4</td>
</tr>
<tr>
<td>2023</td>
<td>8.5</td>
<td>3.4</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>15.7</td>
</tr>
</tbody>
</table>

Source: Cox Automotive
Appendix
2020 Non-Luxury Weekly Price Trend Very Similar

Slightly stronger declines followed by stronger recovery and then steady fall declines

Non-Luxury 3-Year-Old Model MMR Index by Week

Source: Cox Automotive
2020 Luxury Weekly Price Trend Less Severe

Luxury vehicles have outperformed by not declining as much and then seeing smaller declines in the fall

Luxury 3-Year-Old Model MMR Index by Week

Source: Cox Automotive
2020 Weekly Price Trend Was More Severe For One-Year-Old Vehicles

One-year-old vehicle prices fell more in March and April but then saw periods of smaller and then larger declines in fall.
THANK YOU!

Contact Information:

Dara Hailes  
Manager, Public Relations  
Cox Automotive  
dara.hailes@coxautoinc.com

Mark Schirmer  
Director, Public Relations  
Cox Automotive  
mark.schirmer@coxautoinc.com

For additional content from Cox Automotive, visit the Newsroom at http://www.coxautoinc.com/newsroom and sign up for From the Newsroom, our biweekly newsletter: http://eepurl.com/gHs8OH