New Vehicle Forecast

DESPITE HEADWINDS, NEW VEHICLE SALES WILL REMAIN NEAR ALL-TIME RECORD LEVELS

New vehicle sales in 2017 are projected to remain near record levels despite headwinds such as stagnating household income. SUVs will continue to lead in market share. And similar to the past year, sales performance will not be equal in regions across the country. In 2016, growth in the West and Southeast outpaced that in the Northeast and Great Lakes, while no other region saw an increase.

*Note: sources the topic of consumer purchasing power in Leading Trends.
U.S. NEW CAR SALES & REGISTRATIONS BY VOLUME

Source: BEA, Cox Automotive, IHS Automotive

17.5M
New cars sold

~16.9M
Forecast

SEGMENT SHARE OF NEW VEHICLE SALES

Sedan
36%
39%
38%
37%
40%
41%

SUV/CUV
24%
28%
31%
33%
28%
29%

Pickup
18%
14%
13%
15%
15%
14%

NEW REGISTRATIONS BY REGION – Q1 2017

ROCKY MOUNTAIN
6.8%

GREAT LAKES
3.4%

WEST
3.1%

PLAINS
3.0%

SOUTHEAST
0.0%

MIDWEST
-3.0%

NEW ENGLAND
-3.2%

SOUTHWEST
-4.0%
Used Vehicle Forecast

STRONG USED VEHICLE GROWTH RATES DISSIPATE, BUT SALES VOLUME REMAINS STRONG

The industry celebrated a robust used vehicle sales market in 2016. It is not expected to change going into 2017. Growth rates, however, did slow over the past year. Regardless, nearly all regions across the country still experienced increases in used vehicle sales during 2016, with much higher growth than new vehicle sales.
USED VEHICLE REGISTRATIONS BY REGION – Q1 2017

Source: NADA, IHS Markit
AVERAGE AGE OF VEHICLES IN OPERATION (VIO)

The graph shows the average age of vehicles in operation from 1970 to 2016. The average age has increased over time, with a notable increase in recent years, reaching 11.6 by 2016.
NEW CAR AVERAGE TRADE AGE (BY STATE)

Source: Experian Automotive Network (December 2019)

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Car/Ride Sharing

CAR/RIIDE SHARING SHOWS LIMITED IMPACT TO OWNERSHIP OR LEASING IN THE NEAR- AND MEDIUM TERMS

Ride-sharing services like Uber are used largely in much the same way that taxis are, while car sharing may be attractive in cities where ownership is inhibited by prohibitive real estate, parking costs and gridlock. Neither ride-sharing nor car sharing will have an immediate impact on personal car ownership or leasing.
CAR/RIIDE SHARING

<table>
<thead>
<tr>
<th></th>
<th>RIDE SHARING</th>
<th>CAR SHARING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>73%</td>
<td>43%</td>
</tr>
<tr>
<td>Usage</td>
<td>16%</td>
<td>7%</td>
</tr>
</tbody>
</table>

80% believe owning a vehicle gives you a sense of freedom and independence.

AND

ONLY 5% of those who state they are not likely to buy a vehicle in the future say they will replace ownership with ride sharing.

ONLY 3% of those not likely to buy a vehicle in the future say they will use car sharing.

Source: 2016 Kelley Blue Book: Ride Sharing/Car Sharing Study

The impending arrival of autonomous vehicles adds another variable, making it difficult to predict exactly how car sharing will work over the next 10-plus years.

Karl Brauer
Senior Editor of Content and Executive Publisher
Car Automation

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Vehicle Recalls

A LARGE CHUNK OF CONSUMERS ARE NOT AWARE OF THE BIGGEST RECALL IN AMERICAN HISTORY

Tens of millions of defective airbags made by Takata are under recall. Even a minor fender bender can cause these airbags to rupture, causing serious injuries and even fatalities; yet many consumers are unaware and don’t seem to care.
VEHICLE RECALLS

AWARENESS

52% vs 85%
are aware of the Takata recall
are aware of the Zika virus

OF THOSE AWARE

31% vs 49%
are concerned about the Takata recall
are concerned about Zika

33%
don’t know if they’re affected by the recall

Of those affected, 40%
have not attempted to have it fixed

IMPACT OF RECALL

TAKATA RECALL

32 MM vehicles
33 brands

vs

29 MM people

largest 5 recalls in the last 20 years combined

Source: Takata Recall Study 2016

“The flurry of recalls over the last decade has contributed to the desensitization of consumers’ reactions to these affairs.”

Mark Williams
Sales Analytics Consulting
Cara Automotive
How Consumers Research

ONLINE IS WHERE THE MAJORITY OF CONSUMERS ARE MAKING THEIR CAR-BUYING DECISION

Even though consumers look at a number of options early in the shopping process, buyers are often decided on the vehicle they will purchase before arriving at the dealership. For those wanting to influence the vehicle purchase decision, it is critical to have a presence online that includes third-party sites and dealership sites, and crosses multiple platforms (desktop, smartphone and tablet).
Online Influence

60% of shopping time is spent doing online research.

Vehicle Purchase

68% of consumers are undecided on a vehicle initially.
74% are decided on a vehicle to purchase before visiting dealerships.

Tech Features

12% of consumers know what technology features they want initially.
56% know exactly what technology features they want before visiting a dealer.

Online Website Usage

Consumers visit an average of 5.5 sites during online research.

83% third-party sites
54% dealership sites
35% OEM sites

OEM sites and dealer sites are top sources for tech information.

Mobile Car Shopping

Smartphone usage increased from 46% in 2016 to 56% in 2017.

Source: 2017 Car Automation Car Buyer Journey; 2017 Autotrader Emerging In Vehicle Technology Study
Gen Z

GEN Z IS DIVERSE, CAUTIOUS WITH MONEY, HAS HUGE SPENDING POWER AND IS JUST AROUND THE CORNER

At 80 million strong, Gen Zs aren’t anything to be trifled with. They may be young, but the economic conditions of their time have deeply affected their spending habits. They’re less likely to be influenced by prestige and more likely to be influenced by practically peppered with technology. They’ll never be, go or do without technology. It’s in their DNA.
**GEN Z WANTS TO OWN CARS**

Among those who don't own a vehicle, % who plan to own in the future:

- 92%

**MEANING OF A CAR (TOP MENTIONS)**

- 29% sense of freedom
- 21% something that makes life easier

**WOULD RATHER HAVE A CAR FOR A YEAR THAN...**

- 33% a cell phone
- 72% use social media

**GEN Z IS LESS FOCUSED ON STYLE & BRAND THAN MILLENNIALS**

<table>
<thead>
<tr>
<th>Style</th>
<th>GEN Z</th>
<th>MILLENNIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Style</td>
<td>49%</td>
<td>57% (as teenagers)</td>
</tr>
</tbody>
</table>

**BRAND**

- 23% | 34% (as teenagers)

**SAFETY CONCERNS ARE DRIVING GEN Z INTEREST IN AUTONOMOUS VEHICLES**

- 47% most cars to drive themselves
- 45% less concern over distracted drivers
- 41% fewer accidents on the road
- 61% think roads would be safer if most cars were fully autonomous by 2025

**FIRST GENERATION TO FEEL SMARTPHONES ARE EQUALLY AS IMPORTANT AS DESKTOP IN CAR SHOPPING**

<table>
<thead>
<tr>
<th>Generation</th>
<th>Desktop</th>
<th>Smartphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Z teens</td>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>Millennials</td>
<td>45%</td>
<td>35%</td>
</tr>
<tr>
<td>Gen X</td>
<td>60%</td>
<td>20%</td>
</tr>
<tr>
<td>Boomers</td>
<td>70%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**GEN Z TEENS ARE DIGITAL NATIVES, BUT THEY PLACE HIGH VALUE ON FACE-TO-FACE INTERACTION**

- 68% agree that face-to-face interaction is important

Source: 2016 Gen Z Automotive Study, subgroup ages 15-18

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Connectivity in Automobiles

DEMAND FOR CONNECTIVITY CONTINUES TO ACCELERATE

Consumers continue to place increasing importance on connectivity in their vehicles and want a seamless process in doing so. The good news is that vehicles will continue to become connected to meet consumers’ desires. However, there are potential threats that come along with more technology, such as hacking. Manufacturers will need to ensure safety as well as seamlessness.
Connected car technologies will transform our industry and become an enabler to new business models and capabilities. As more cars become connected, Cox Automotive is focused on what data and products this technology will unlock, and how we can use it to better serve our clients and partners.

David Liniado
Vice President
Adamsen Growth

Connectivity in Automobiles

BY 2020

85% of new vehicles sold will be connected

18% 2015

38% 2020

Percentage of connected vehicles on the road will more than double

52% of consumers feel it is important that their car syncs with other technologies in their lives

57% would prefer OEMs focus on integrating smartphones with a system available in all brands

Sources: Based on the Connected Car Analysis conducted by J.D. Power commissioned by Cox Automotive, December 2015 (a connected vehicle is either an embedded connection capable of two way data exchange or the ability to integrate with a two way connection via an outside device such as a smartphone). J.D Power Car Tech Impact Study, Automotive

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Autonomous Vehicles

CONSUMERS WANT AUTONOMOUS FEATURES, BUT THEY ARE WARY OF FULLY AUTONOMOUS VEHICLES

Consumers are still wary of autonomous vehicles, and a large portion are simply unfamiliar with them. These consumers are especially wary of Level 5 autonomy, though there are hints that younger generations may be more accepting.
The appeal of autonomous vehicles is assessed through a spectrum from Level 0 to Level 5, with Level 5 being full autonomy without a human driver. The chart shows the percentage of people most appealing to each level:

- Level 0: Human Only (11%)
- Level 1: Modern Vehicle (20%)
- Level 2: Modern Plus (18%)
- Level 3: Partial Autonomy (30% - most appealing)
- Level 4: Full Autonomy (± Human) (17%)

**Consumers' View of Autonomous Vehicles**

- 70% of Gen Z vs. 41% of Gen X prefer Level 5 autonomy, with 41% of Gen X considering Level 5 as safe, while only 47% of Gen X do (47% Gen pop total).
- 51% vs. 49% of consumers say control in their vehicles is important, even if it's not safe. 49% would choose safety, even if it means less control.
- 80% of consumers say people should always have the option to drive themselves.
- 70% of consumers are likely to consider a vehicle with autonomous features for their next purchase.

**Future of Mobility**

“Safety systems, infrastructure investments and regulatory policies will need to take shape before fully autonomous vehicles play a major role in transportation. In the meantime, the industry has an excellent opportunity to offer customers semi-automated driving systems on the latest new vehicle models.”

Mike Burgiss
VP, Strategy: Total Transformation
Cox Automotive

Source: 2016 Kelley Blue Book Future Autonomous Vehicle & Driver Study; 2017 Autotrade Emerging In Vehicle Technology Study

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• Automobile sales and finance trends (e.g. increased leasing) may impact DMV transactions and revenues.

• DMVs should look at laws and regulations surrounding titling and registration and consider key changes
  • Electronic signature
  • End-to-end electronic processing
  • Dealer processing regulations
  • Expected changes to laws for AVs and CVs
  • Expected onset of digital retailing

• Increased importance of industry communication and collaboration
For More Information

Contact:

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Director – Economic & Industry Insights | Research & Market Intelligence

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