



# INSIGHTS



Cox  
AUTOMOTIVE™

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January 2017

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## UNMATCHED INSIGHTS FROM AN UNPARALLELED PERSPECTIVE

Cox Automotive provides the broadest, deepest, most complete view of the entire automotive ecosystem through our unique ability to integrate insights from our wholesale, financial, media and fixed operations brands.

Last year, we did a deep dive into emerging industry trends. The result was our first book, ***Harnessing the Power of Insights***. Since then, we followed up by asking more questions about these trends for their potential to reshape our industry. Here's what we can tell you: At this moment, every aspect of the industry is changing — from how cars are designed, produced and built, to how they are moving through the ecosystem — and it's being driven by the connected consumer.

The connected consumer has emerged as the driving force in a world of constant innovation and disruption. With increasing pressures, such as the rise of everyday expenses, consumers are looking to optimize their time, cost and quality of life. For the automotive industry, that means they're using their connectivity to best meet their transportation needs within an affordable monthly budget. While alternative ownership and autonomous vehicles are popular emerging trends, neither will greatly impact our industry in the near term. Instead, it is important that OEMs, dealers and lenders focus on evolving their operations to far more accurately reflect the lives of consumers by providing a connected online-to-offline experience that is transparent, quick and easy.

Likewise, margins for dealers, OEMs, and lenders on new and used car sales are also being squeezed. For dealers, this creates an opportunity to focus on process efficiency across their entire organization to increase revenue from fixed operations, and to find innovative ways to save money with inventory management, marketing and sales.

In the past, wholesale, retail and fixed operations were very distinct and separate entities, seemingly operating in parallel universes. That model has to change. Wholesalers and OEMs want connection to information so they can make better inventory decisions that will help them sell more cars. Retailers want connection to ready-to-buy shoppers and ways to increase customer loyalty and retention after the sale. Consumers want a connected, personalized experience when they're in the market for a car. The connected platform is at the nexus of these overlapping desires.

As we enter this new era of ultra-connectivity, we identified eight key markers that define where we are now as an industry and where we need to go. These insights should help dealers, OEMs and lenders understand what you need to do to build a connected, holistic platform that will break down the barriers between your organization and consumers. In so doing, you should achieve exponentially better outcomes with improved process efficiency, revenue, innovation, customer experiences and brand loyalty.

## ABOUT COX AUTOMOTIVE

Cox Automotive is a family of brands that improve the experience of buying, selling and owning cars. Our brands include familiar names and industry leaders such as Autotrader®, Dealer.com®, Dealertrack®, Kelley Blue Book®, Manheim®, NextGear Capital®, vAuto®, VinSolutions®, Xtime®, incadea® and a host of other brands. Together, our more than 25 brands provide a comprehensive set of services, software and solutions on the lot, in the store and online.

We are involved in some way in three out of every four vehicle transactions in North America, and we are quickly expanding our influence on the increasing number of cars bought and sold around the world.

We don't build cars, but we help our clients and their customers with practically everything else after vehicles roll off the production line or enter the pre-owned marketplace. We help dealers identify, acquire and finance the right inventory; transport and recondition vehicles for sale; plan, price and market cars in the showroom and online; schedule service appointments and follow-up with past customers; and make the in-store sales experience smooth, quick and trustworthy. And we give car buyers the tools they need to shop smarter and find the perfect car.

Cox Automotive is connected to every stage and phase of the automotive ecosystem. We are uniquely able to enhance those experiences for our clients and their customers. Everything we do is to help make our clients more successful and to make the auto industry better by enabling the smart, connected, enjoyable experience all car buyers and sellers expect.



## OUR VISION

Transform the way the world buys,  
sells and owns cars.

# AUTOMOTIVE ECOSYSTEM

**INVENTORY**

- Manheim
- NEXTEAR
- CAIM
- CentralDispatch
- iReady
- vAuto
- REAL SHELF
- Dealer-Auction.com
- MOVE3C
- RMS

**MARKETING**

- Autotrader
- DEALER.COM
- KBB.COM
- vAuto
- Demetrist
- MAV
- INCADIA
- CarsGuide
- Modix
- First Choice
- BEAuto 855
- MOTORS

**SALES**

- vAuto
- Dealertrack
- Manheim
- KBB.COM
- INCADIA

**SERVICE**

- INCADIA
- Dealertrack
- VirtuSolutions
- ∞xtime



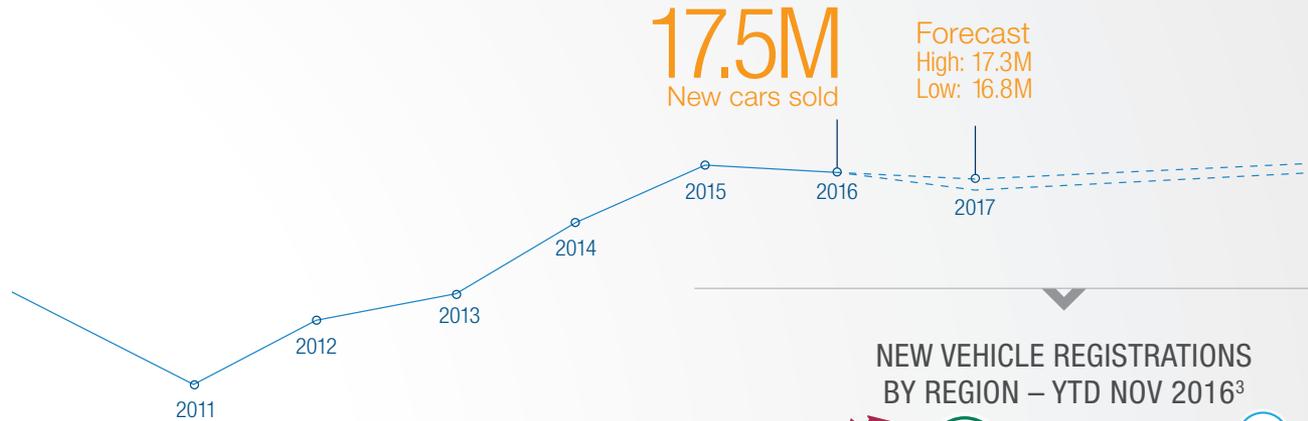
## New Vehicle Forecast

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

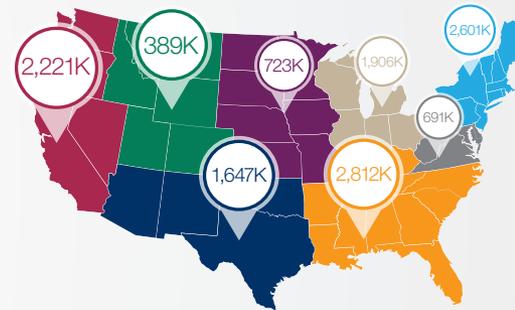
New vehicle sales in 2017 are projected to remain near record levels despite headwinds such as stagnating household income.\* SUVs will continue to lead in market share. And similar to the past year, sales performance will not be equal in regions across the country: In 2016, growth in the West and Southeast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

\*See more on the topic of consumer purchasing power in Lending Trends.

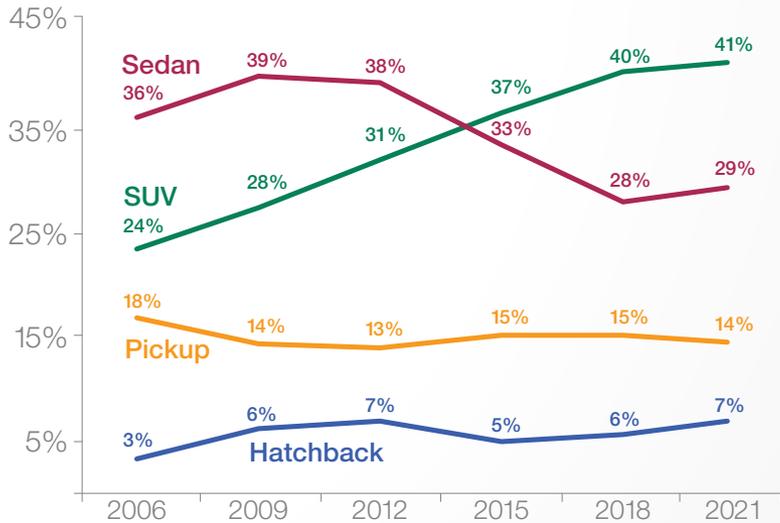
## U.S. NEW CAR SALES BY VOLUME<sup>1</sup>



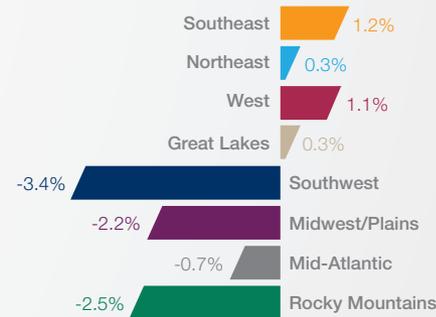
## NEW VEHICLE REGISTRATIONS BY REGION – YTD NOV 2016<sup>3</sup>



## NEW LIGHT VEHICLE SALES AND FORECAST BY VEHICLE SEGMENT<sup>2</sup>



## YEAR-OVER-YEAR VOLUME CHANGE FOR NEW VEHICLE REGISTRATIONS BY REGION – YTD NOV 2016<sup>3</sup>



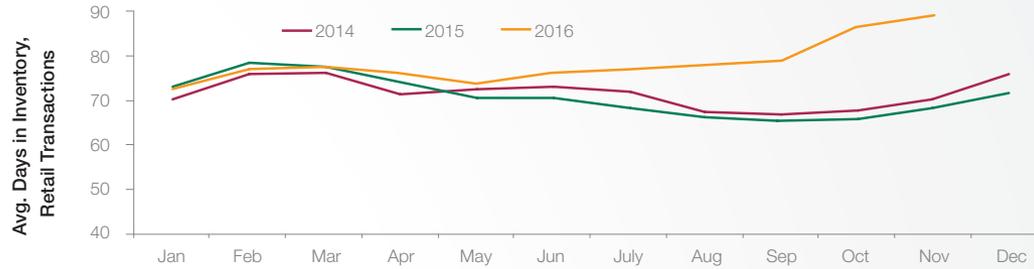
Sources: 1) Kelley Blue Book Light-Vehicle Sales Report (December 2016); 2) IHS Markit (September 2016); 3) Cox Automotive analysis based on Polk data (YTD November 2016)

## Days in Inventory for New Vehicles

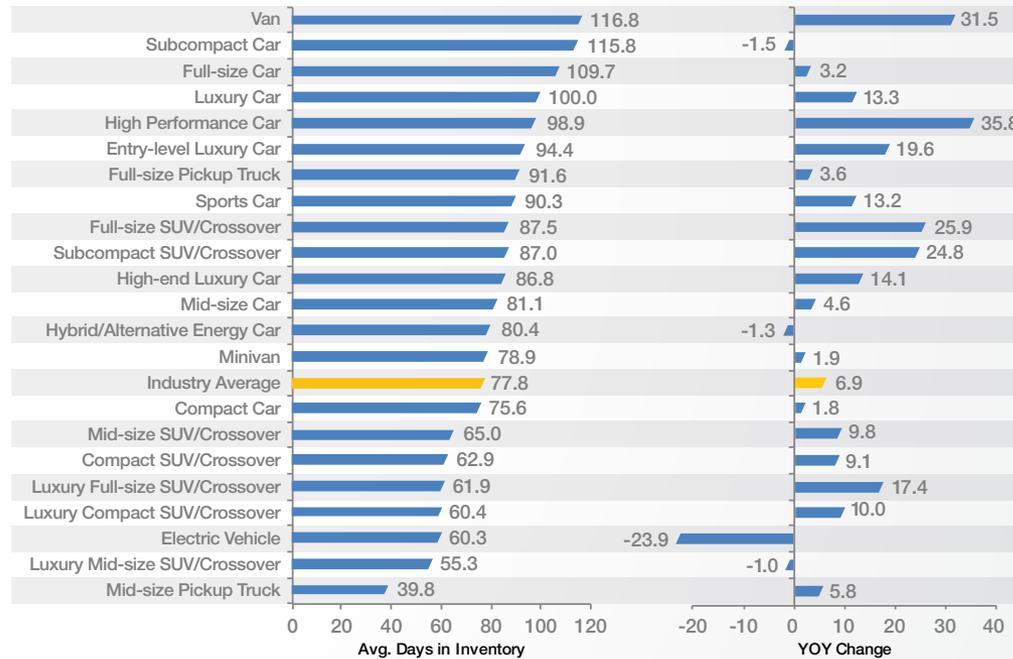
# DECLINING SALES IN KEY SEGMENTS ARE DRIVING HIGH INVENTORY LEVELS

Days in inventory climbed 14 days in 2016 to 87, with year-over-year increases experienced across most vehicle segments. Inventories continue to be over 100 days for luxury, subcompact- and full-size cars, and vans. Most SUV segments are at the opposite end of the spectrum at around 60 days.

### DAYS IN INVENTORY BY MONTH/YEAR



### DAYS IN INVENTORY BY SEGMENT



“OEMs will be challenged to maintain the right inventory for cars as SUVs continue to take significant market share.”

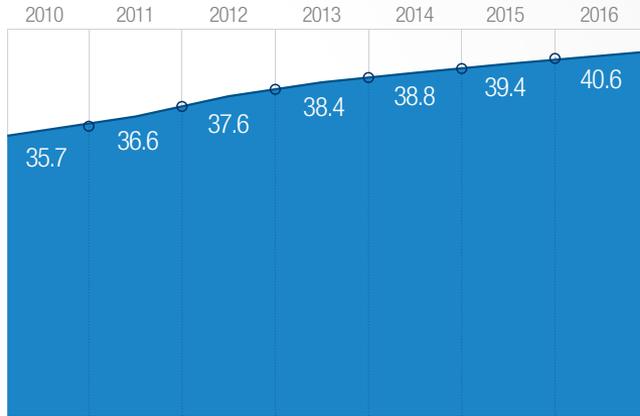
**Tom Webb**  
Chief Economist  
Cox Automotive

## Used Vehicle Forecast

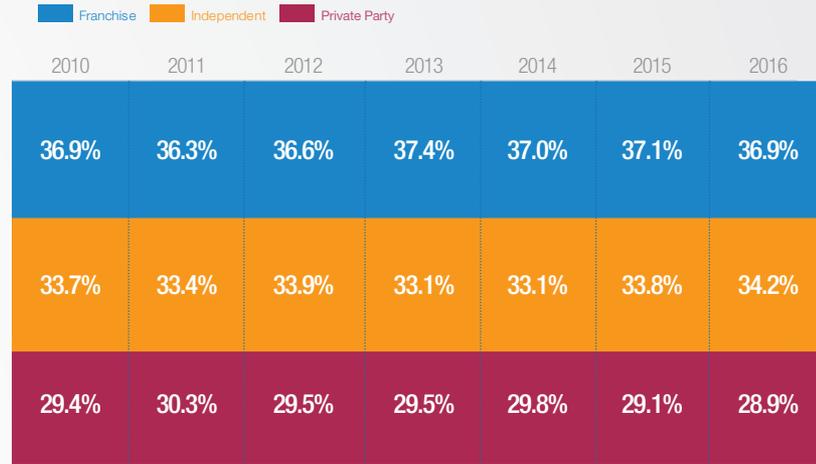
# *STRONG USED VEHICLE GROWTH RATES DISSIPATE, BUT SALES VOLUME REMAINS STRONG*

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.

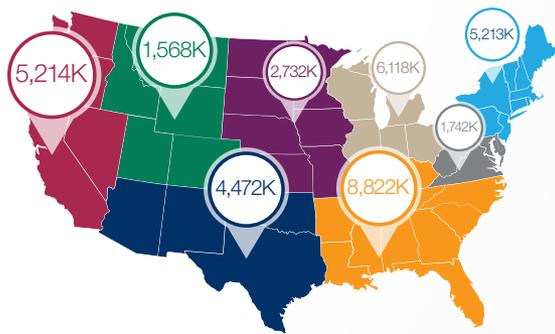
### U.S. USED CAR SALES VOLUMES<sup>1</sup> (IN MILLIONS)



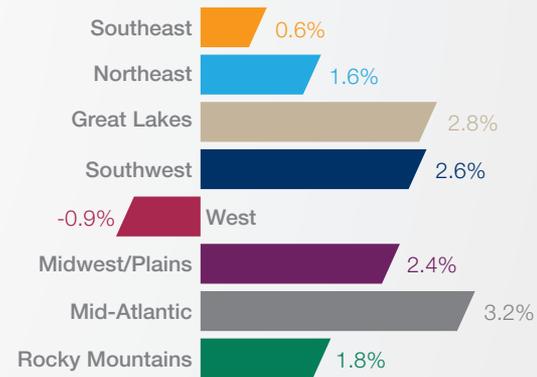
### PERCENTAGE OF TOTAL U.S. USED CAR SALES<sup>1</sup>



### USED VEHICLE REGISTRATIONS BY REGION – YTD NOV 2016<sup>2</sup>



### YEAR-OVER-YEAR VOLUME CHANGE FOR USED VEHICLE REGISTRATIONS BY REGION – YTD NOV 2016<sup>2</sup>



Sources: 1) NADA (December 2016); 2) Cox Automotive analysis based on Polk data (YTD Nov 2016)

## Used Vehicle Valuation Forecast

# *USED VEHICLE VALUES REMAIN STRONG IN 2017, DESPITE INCREASED SUPPLY*

Used vehicle values will remain near record levels despite the mild softening predicted for 2017. Downward pressure comes from higher wholesale supplies due to a surge in off-lease volumes, but we assume economic considerations (most notably credit availability) will remain favorable and do not indicate an impending downturn.\*

\*See more on the topics of off-lease vehicles and credit availability in Lending Trends

USED CAR VALUES 1995–2016



“We expect that growing wholesale supplies will prevent used vehicle valuations from maintaining their current high levels. However, as long as retail demand remains favorable, the easing in residuals should be manageable.”

**Tom Webb**

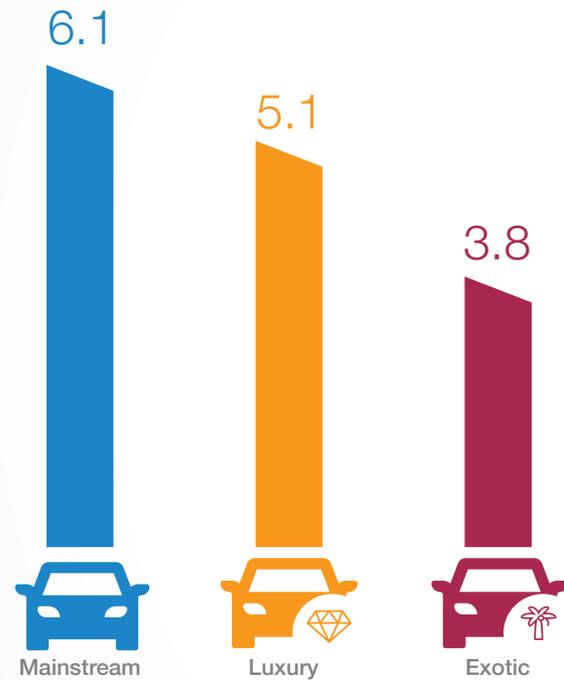
Chief Economist  
Cox Automotive

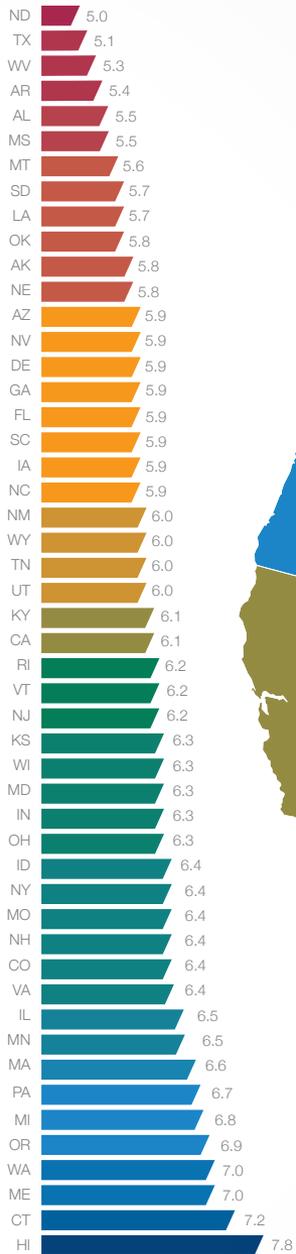
Source: Manheim Used Vehicle Value Index (November 2016)

NEW CAR AVERAGE TRADE AGE (BY CHASSIS)

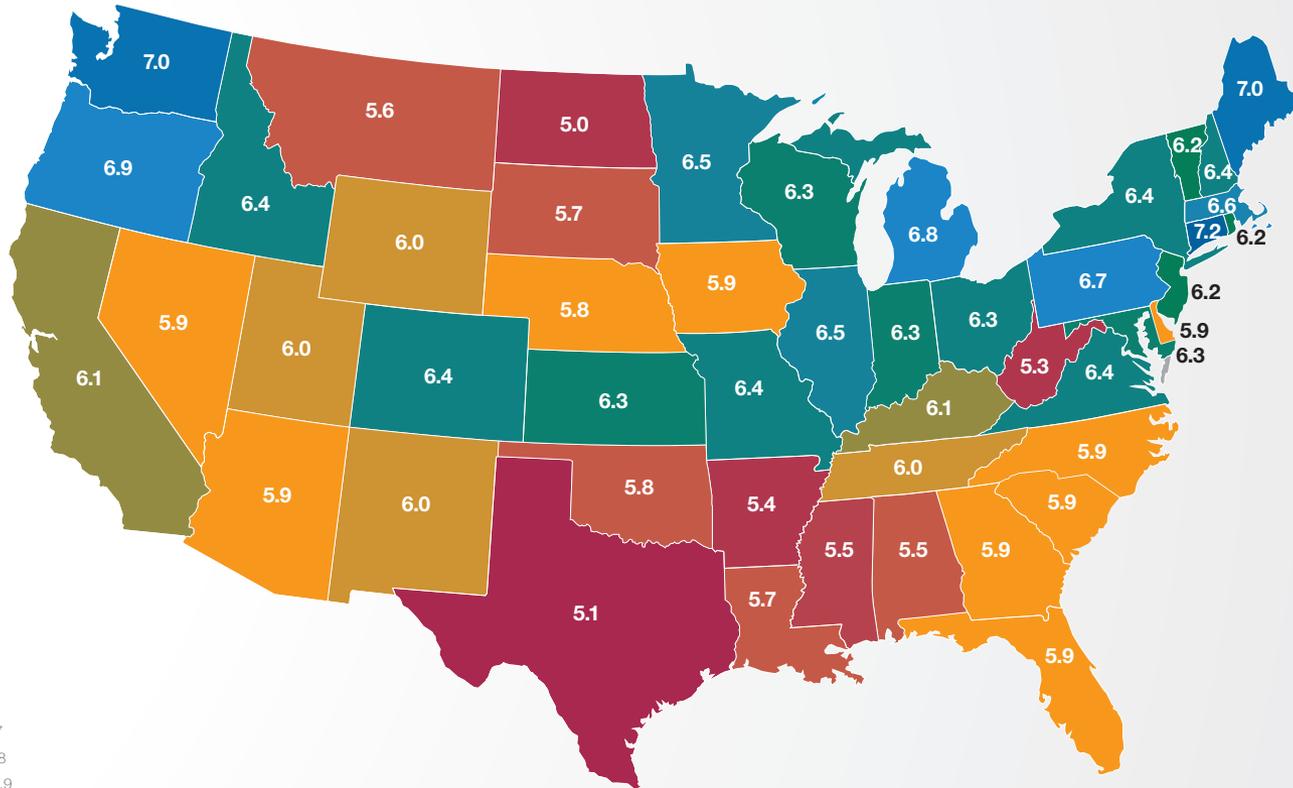


NEW CAR AVERAGE TRADE AGE (BY SEGMENT)





NEW CAR AVERAGE TRADE AGE (BY STATE)



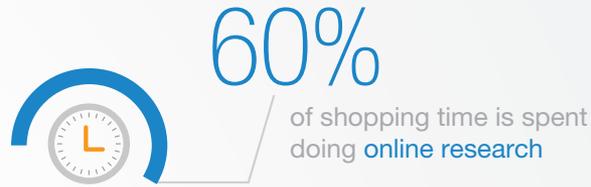
Source: Dealertrack Credit Application Network (December 2016)

## 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



VEHICLE PURCHASE



TECH FEATURES



ONLINE WEBSITE USAGE

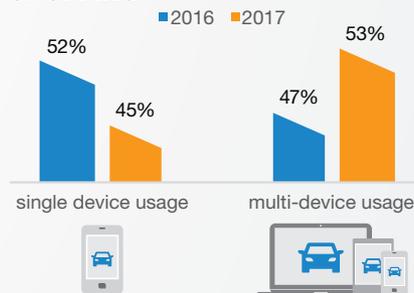
Consumers visit an average of **5.5 sites** during online research



OEM sites and dealer sites are top sources for tech information

MOBILE CAR SHOPPING

Smartphone usage increased





## How Consumers Select a Dealership

# *PRICE TRANSPARENCY IS MOST IMPORTANT, BUT PEACE-OF-MIND BENEFITS CREATE DIFFERENTIATION*

The reasons consumers select a dealership indicate buyers value transparency, confidence and reassurance in their purchase. Dealers should focus on these key differentiators to broaden their appeal to consumers. Dealers who customize their offerings according to their particular market demographics may realize further benefits.

TOP BASE REQUIREMENTS (HIGH IMPORTANCE & MUST-HAVES)



Transparent pricing



Honest/transparent Service Department

TOP DIFFERENTIATORS (HIGH IMPORTANCE & NICE TO HAVE)



Low price guarantee



Free extended warranty



Free maintenance services with purchase



Competitor price match/honor competitor quotes

PRIORITY DEALERSHIP DIFFERENTIATORS BY VEHICLE TYPE

NEW CAR BUYERS



Simple/fast purchase process

USED CAR BUYERS



Exchange or return policy/money-back guarantee



In-depth reconditioning process

LUXURY CAR BUYERS



Transparent pricing



Best inventory to match needs/wants



## Dealership Experience Pain Points

# DEALERSHIPS CAN THRIVE IF THEY EVOLVE

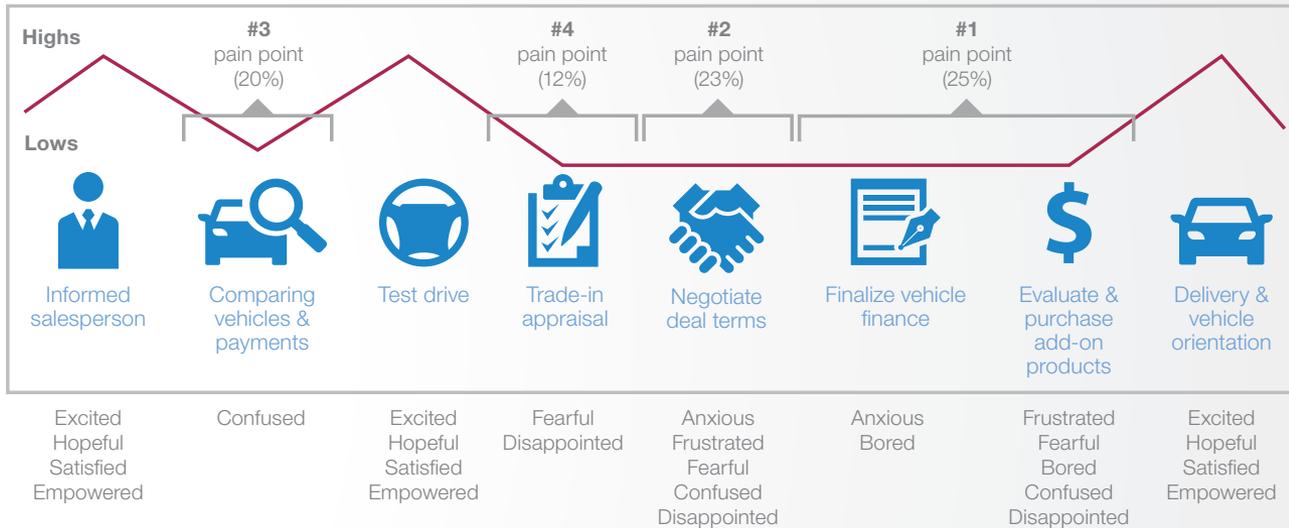
As the automotive industry continues to see disruption, many wonder what the future will be for the dealership model. Fortunately, consumers find value in visiting dealerships, but opportunities exist to evolve the experience and address key pain points. Dealers can capture more value from each of their customers by focusing on improving the retail experience.



### DEALERSHIP VISITS ARE IMPORTANT

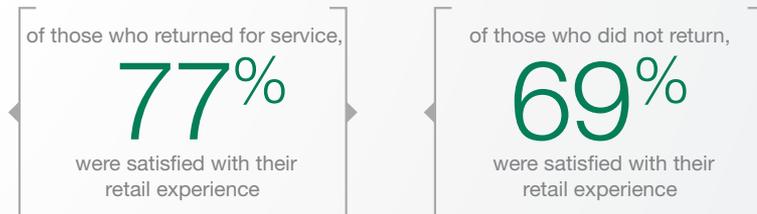


### TOP PAIN POINTS AND EMOTIONS



### IMPROVED EXPERIENCE DRIVES REPEAT BUSINESS

SATISFACTION WITH DEALERSHIP RETAIL EXPERIENCE



Source: 2017 Cox Automotive Car Buyer Journey; 2016 Cox Automotive Emotional Connections Study



## Dealership Defection

# *HANDLE DEALERSHIP WALKOUTS WITH CARE, THEY WILL LIKELY BE BACK*

Most consumers say they are ready to make a purchase by the time they reach the dealership, but instead end up leaving the lot. The good news for dealers is that most of these consumers are willing to return, and quite a few even come back to make a purchase. It's critical for dealers to have a strategy for handling walkouts when they happen as the experience is a key driver in their decision to return.

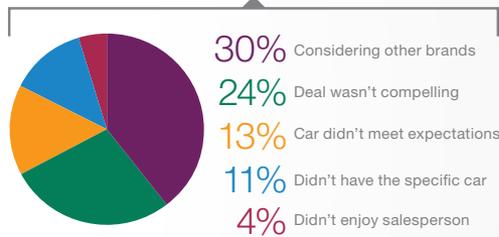


DESPITE BEING READY TO BUY MANY CONSUMERS LEAVE WITHOUT PURCHASING

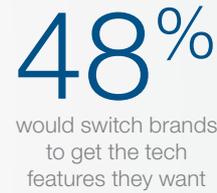


THE RIGHT INVENTORY AND A GOOD PRICING STRATEGY ARE CRITICAL TO PREVENT WALKOUTS

Those who leave after the test-drive do so because:



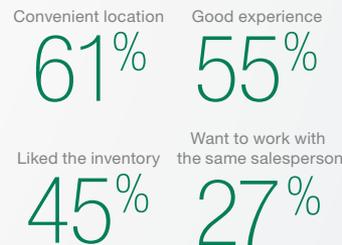
TECHNOLOGY IS ALSO A REASON FOR WALKING AWAY



EXPERIENCE MORE IMPORTANT THAN INVENTORY FOR WALKOUTS TO RETURN



Reasons for returning

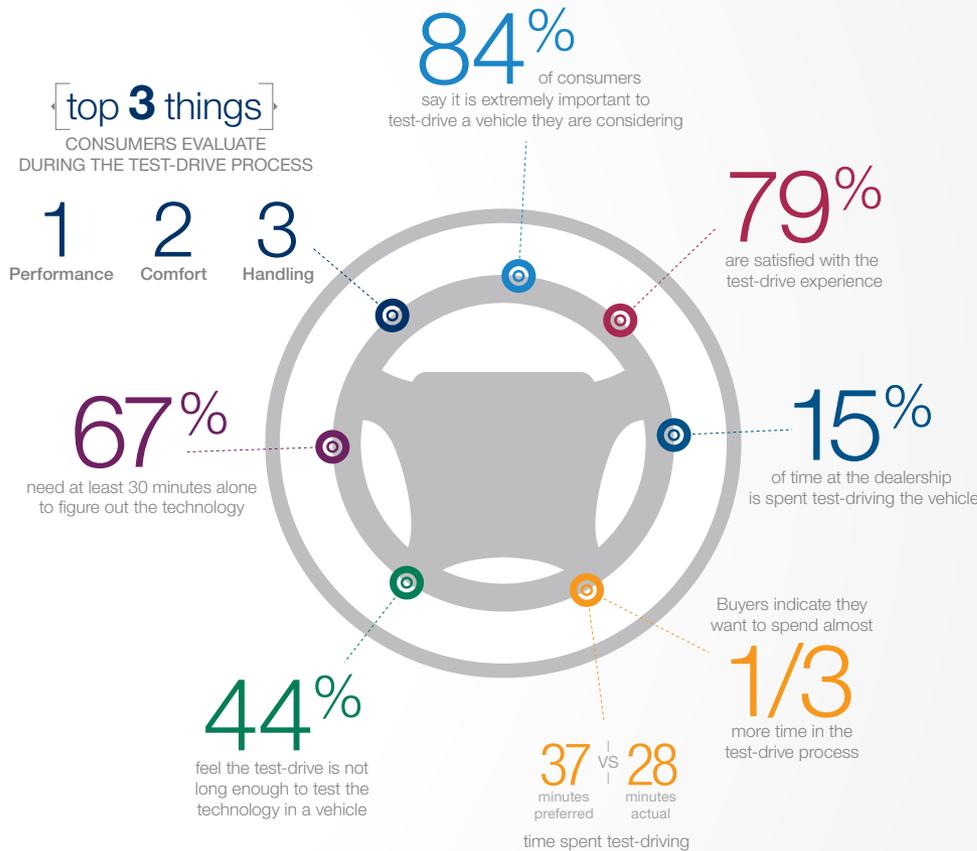


## Test-Drives

# CONSUMERS WANT LONGER TEST-DRIVES TO UNDERSTAND THE CHARACTERISTICS OF A CAR

For the consumer, the test-drive is a very important part of the shopping process and one of the few highlights of the dealership experience. Right now, the test-drive lasts an average of 30 minutes, but consumers say just testing the technology takes that long. Consumers' preference would be to shift time away from other steps of the purchase process and focus more on the test-drive.

TEST-DRIVES



“The more vehicles you try, the more prepared you’ll be to make the right decision when it’s time to buy.”

**BRIAN MOODY**

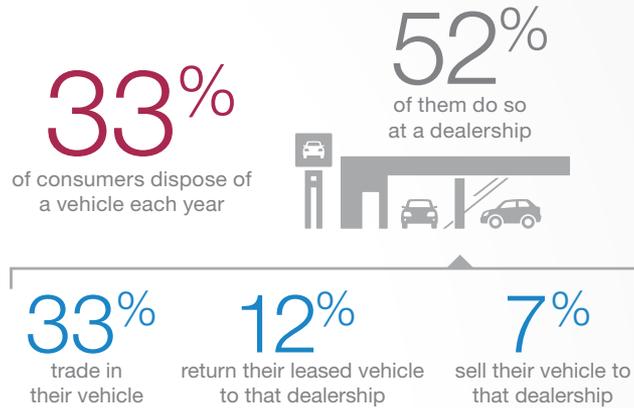
Executive Editor  
Autotrader

## Vehicle Disposal/Trade-In Process

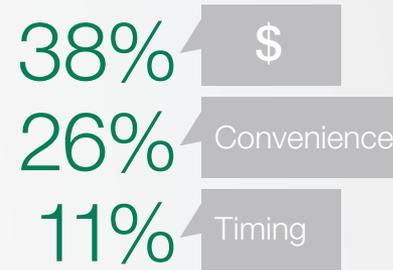
# *AN IMPROVED TRADE-IN PROCESS GIVES ACCESS TO MORE USED INVENTORY AND CAN HELP INCREASE SALES*

A large portion of the population is looking to dispose of a vehicle each year, providing dealers with a good source for used inventory that comes right to their lot. However, the trade-in process is a top pain point for consumers. Many are looking to replace their current vehicle, so the valuation has a huge impact on what vehicle they can afford to buy or if they can afford to buy at all.

VEHICLE DISPOSAL



Getting the most money is the top outcome consumers look for when disposing of their vehicle



8 out of 10 consumers who dispose of a vehicle purchased a replacement vehicle



The amount consumers are able to get for their vehicle impacts





### Negotiations/F&I Process

## *F&I IS TOP PAIN POINT FOR CONSUMERS*

A large portion of time at the dealership is spent negotiating and signing paperwork — activities that consumers associate with very negative emotions. Ideally, dealers would close the deal in 50 minutes or less, and offer the option to at least start the process online for those who want it. Consumers who sign paperwork online tend to be more satisfied with their time spent at the dealership and the overall experience.

TIME NEGOTIATING

Consumers spend on average

1 hour 31 minutes

negotiating (including trade-in appraisal) and signing paperwork (F&I), which makes up

49% of the time spent at the dealership



Consumers want to spend less time negotiating and discussing/signing paperwork

-38 minutes

Wait time accounts for

1/3 of time spent signing paperwork

EMOTIONS

EMOTIONS ASSOCIATED WITH NEGOTIATIONS AND PAPERWORK (F&I)

fearful frustrated  
bored anxious confused  
disappointed

EMOTIONS ASSOCIATED WITH IDLE TIME



frustrated  
bored  
anxious

PAPERWORK

47% want to complete forms online that can be transferred to the dealership

Those who completed paperwork online were significantly more satisfied with how long the process took

59% online vs 51% paper

and had higher overall satisfaction with the dealership experience

80% online vs 74% paper

## Purchasing Power

*CONSUMER INCOME REMAINS FLAT.  
LONGER TERMS ARE BECOMING  
THE NEW NORMAL.*

The average family income has remained relatively flat and is in fact 2% less now than what it was in 1999. This is why it takes millions more Americans to buy the same number of new cars as 15 years ago. Fortunately, spending money on cars is still a priority for all age groups. Consumers are using tools such as longer loan terms and leasing to keep cars within budget requirements.

## PURCHASING POWER IN 2015

INCOME<sup>1</sup>

Real median household income is still down 2.4% from 15 years ago, despite record gains in 2015

EXPENSES<sup>2</sup>

**72%**  
said everyday expenses have increased

**54%**  
said everyday expenses are too costly compared to income

## AUTOMOTIVE INDUSTRY IN 2015

Between 1997–2014, new and used vehicle prices went up<sup>3</sup>

**+35%**  
new

**+25%**  
used

SALES<sup>4</sup>

In 2015, it took **38 million more people** to sell the same number of vehicles as in 2000

FINANCING<sup>5</sup>

**75%**  
% of loans longer than 5 years in 2015

**51%**  
vs  
% of loans longer than 5 years in 2009

Average loan term (in months) on a new vehicle in 2015<sup>5</sup>

**70.2**  
millennials

**69.7**  
gen x

**68.3**  
boomers

*“The implication of longer financing terms will be longer periods between transactions leading to fewer transactions per vehicle, which means less revenue for dealers.”*

**Jose Puente**

Founder  
Flexdrive



## Car Buying Pain Points

# *CONSUMERS WANT FINANCING INFORMATION EARLIER IN THE PROCESS TO UNDERSTAND THEIR OPTIONS*

The timing of when F&I options are presented creates confusion and frustration for buyers who believe they have already finalized their deal/payment. Dealers have an opportunity to differentiate themselves by offering earlier education as well as transparency into how these products factor into the final deal.



AFFORDABILITY



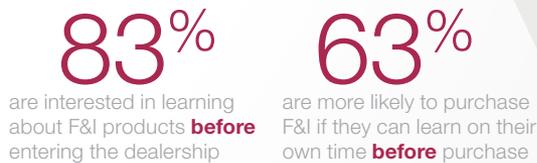
Most important



FINANCE & INSURANCE



feel it is important that dealers allow them to review prices, payments and add-ons **in advance** of starting the F&I process



PRICING RESEARCH

TOP RESEARCH ACTIVITIES BY DEVICE

Desktop/Laptop



Tablet



Smartphone



HOW MOBILE DEVICES ARE USED AT THE DEALERSHIP

{ top 2 mentions }



## Credit Tiers

# APPROVAL RATES FOR SUBPRIME LOANS HAVE GROWN

Subprime has consistently accounted for roughly 1 in 3 automotive loan applications submitted over the last few years, and the approval rate for these loans has increased during that time. While subprime loans continue to make up the largest share of applications submitted for used vehicles, the share of subprime loans submitted for new vehicles is smaller but growing. Millennials continue to make up an increasing portion of subprime loan applications.

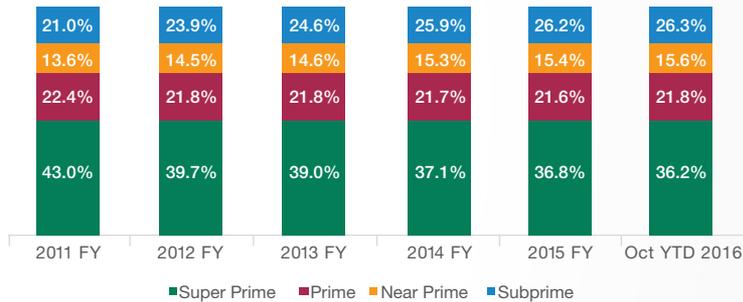
## APPLICATION APPROVALS

SUBPRIME ACCOUNTS FOR  
**34%**  
of total unique credit applications  
(Oct YTD 2016)

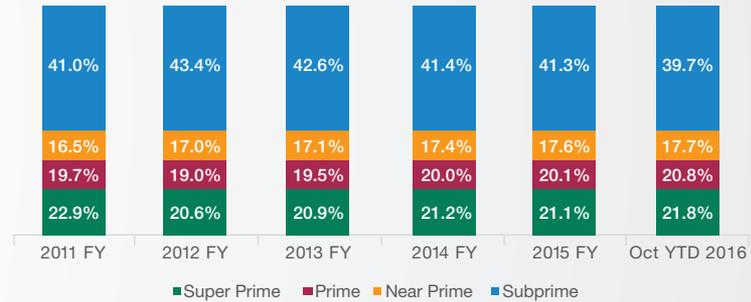
AUTOMOTIVE ORIGINATION RISK/UNIQUE APPLICANT APPROVAL RATES

	Oct YTD 2012	Oct YTD 2016
Super Prime	93%	93%
Prime	79%	80%
Near Prime	67%	69%
Subprime	61%	67%

TOTAL NEW UNIQUE APPS SUBMITTED



TOTAL USED UNIQUE APPS SUBMITTED



Millennials account for

**42%**  
of subprime unique applications  
(versus 31% in 2012)

### MILLENNIALS



Subprime accounts for

**40%**  
of Millennial unique applications  
(versus 18% near prime, 22% prime, 20% super prime)

## New Vehicle Leasing

# THE CONTINUED GROWTH OF LEASING IS TRANSFORMING THE WAY CAR SHOPPERS SEE THE OWNERSHIP PROCESS

More and more consumers are deciding to lease their next vehicle because they get the best of both worlds: a new car every few years with the latest updates at a favorable payment they can afford. While those taking advantage of the leasing option are similar to new vehicle buyers in many ways, they do differ in terms of loyalty and vehicle selection criteria. Dealers and manufacturers need to understand this consumer to better market and sell to them.

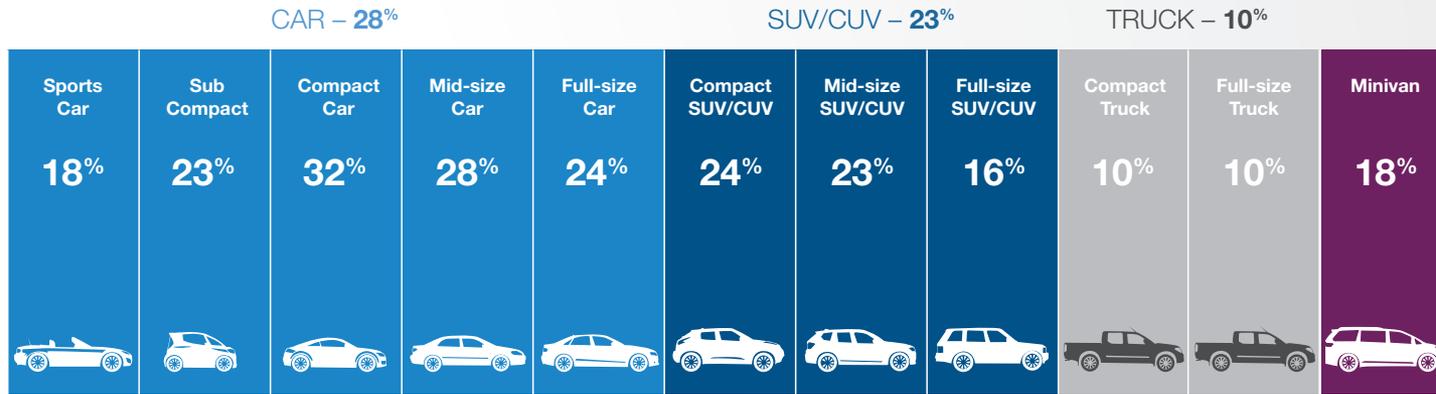
LEASING HAS INCREASED EACH OF THE PAST 5 YEARS, OUTPACING GROWTH IN CPO AND NEW VEHICLE SALES



WHEN SELECTING VEHICLES, LESSEES FOCUS ON THE DEAL<sup>4</sup>



LEASE RATES ARE HIGHER AMONG CAR AND SUV/CUV SEGMENTS<sup>4</sup>



LESSEES ARE SLIGHTLY MORE SATISFIED WITH THE DEALERSHIP EXPERIENCE THAN NEW BUYERS<sup>4</sup>



LESSEES ARE MORE LOYAL THAN NEW BUYERS<sup>4</sup>

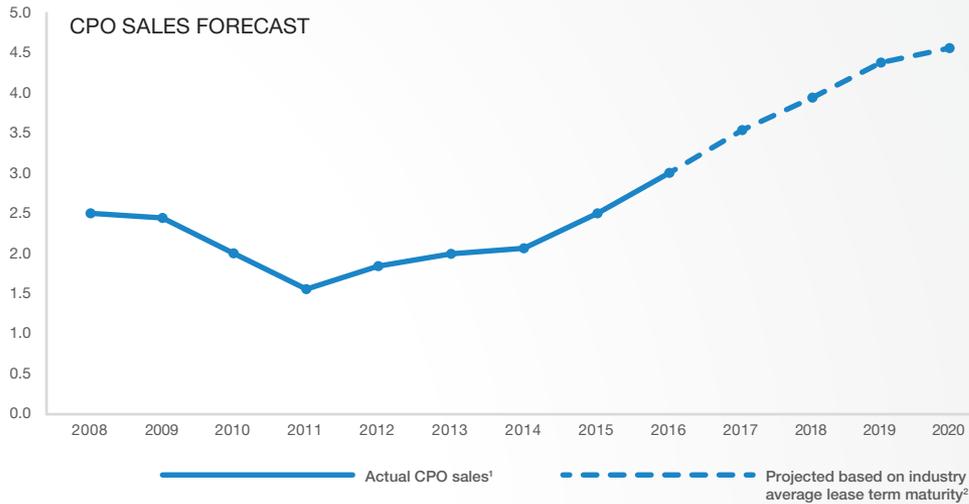


## Certified Pre-Owned

# FERTILE ENVIRONMENT FOR STRONG CPO GROWTH

CPO vehicle sales will continue to grow as increasing consumer demand is met with new supply from surging off-lease volumes. Shoppers see the value of CPO because it allows those who can't afford a new vehicle the opportunity to have similar technology along with peace-of-mind and reassurance from a warranty. For Millennials, CPO is a particularly appealing option.

## CERTIFIED PRE-OWNED



**CPO**  
sells faster<sup>3</sup>

DAYS ON LOT ONCE FRONTLINE-READY

**30** vs **35**  
CPO vs Used non-CPO

**+44%**

Likelihood to purchase CPO increases if vehicle includes a maintenance package (e.g., free oil/fluid changes, cosmetic damage coverage, tire damage coverage)

**\$3K** more

Average value shoppers place on CPO vehicle  
—VS—  
the same non-certified used vehicle



**MECHANICALLY PERFECT**  
**BETTER CONDITION**  
**LATEST TECHNOLOGY**

Items shoppers are willing to pay more for in a CPO vehicle

WILLING TO PAY MORE FOR CPO

**74%** vs **62%**  
Millennials vs non-Millennials

VALUE CPO

**\$3,800** vs **\$2,700**  
Millennials vs non-Millennials

LIKELY TO MAKE NEXT PURCHASE AT SAME DEALERSHIP

**69%** vs **37%**  
CPO owners vs used non-CPO owners

## Maintenance & Repair

# *DEALERS NEED TO SELL SERVICE TO SELL MORE CARS*

When it comes to maintenance and repair services, dealerships are leaving money on the table. In fact, only 30% of total service visits occur at a dealership. Dealers must “sell” their Service Department. The dealership is known to have knowledgeable, skilled technicians. Consumers rely on dealers and manufacturers to notify them of recalls; building the relationship early (at time of purchase) can be a strong tool. Ultimately, a strong experience through service can lead to future sales.

## AN INTRODUCTION FROM SALES TO SERVICE INFLUENCES A CONSUMER'S LIKELIHOOD OF RETURNING FOR SERVICE

**2.3x** MORE LIKELY

Customers more likely to go to dealer they purchased from when introduced to Service Department at time of purchase

**85%**

of customers stated that their experience with the Service Department influenced their likelihood of purchasing another vehicle from that dealership



**41%**

were introduced to Service Department at the time of purchase



**53%**

said it came into play when deciding where to repair the vehicle

**15%**

No influence

**36%**

Somewhat influenced

**49%**

Greatly influenced

### TOP 5 REASONS WHY SERVICE CUSTOMERS GO TO THE DEALER

1. They know my vehicle
2. Certified/highly qualified technicians
3. Knowledgeable staff
4. Use genuine parts, tools and diagnostic equipment
5. Explain services rendered/ comfortable waiting room

**LESS THAN 1 IN 3**

service visits are conducted at a dealership

<b>30%</b>	Dealerships 17% dealership where purchased 13% other dealership
<b>25%</b>	General repair/service station
<b>14%</b>	Quick lube
<b>11%</b>	Tire store
<b>6%</b>	Retail
<b>5%</b>	Specialists
<b>4%</b>	Body shop
<b>5%</b>	Other

### SERVICE SCHEDULES & RECALLS

Over half of customers rely on maintenance/service/recall notifications from the dealership and/or the manufacturer

**32%**

Do not track

**27%**

Notified by manufacturer

**29%**

Notified by dealer

**24%**

Register or search online

*“Dealers that focus on the service experience have the potential to add millions of dollars of revenue.”*

**SANDY SCHWARTZ**

President  
Cox Automotive

## 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 vs are aware of the Zika virus

OF THOSE AWARE

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

32MM vehicles vs 33 brands vs 29MM people

largest 5 recalls in the last 20 years combined

Sources: Takata Recall Study 2016

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

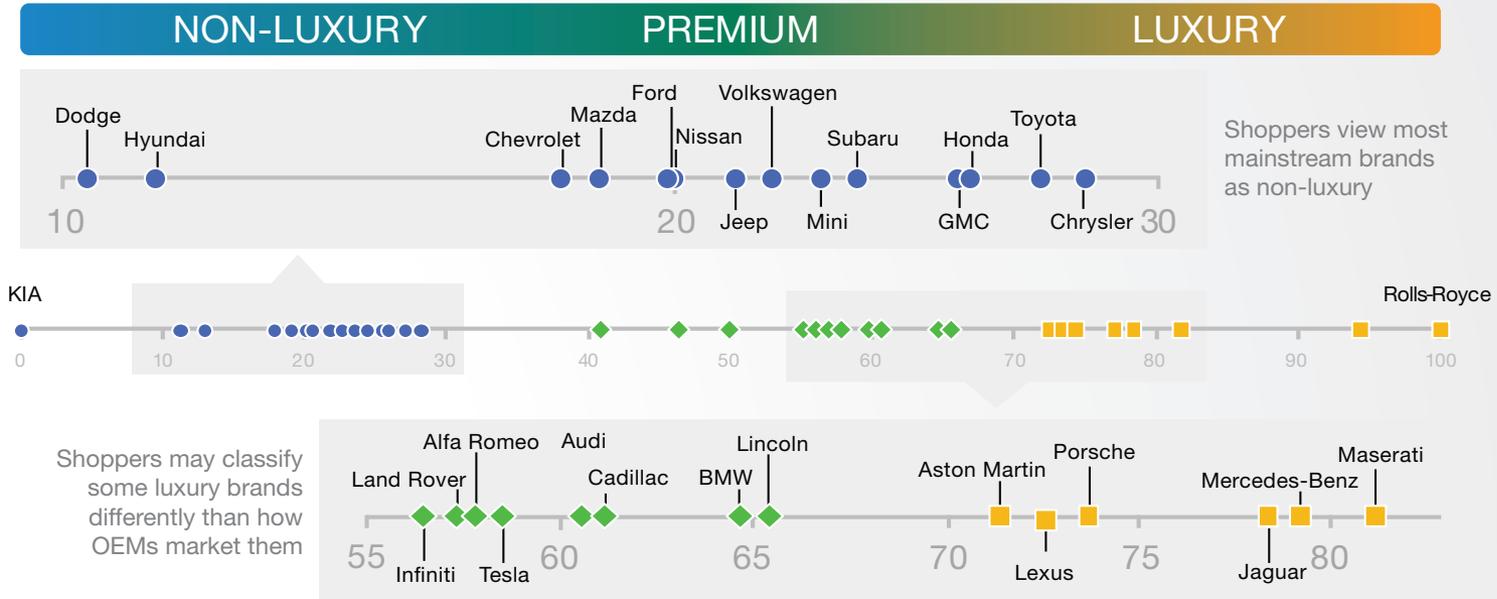
**Mark Williams**  
 Sales Analytics Consulting  
 Cox Automotive

## Luxury

# *THE DEFINITION OF LUXURY IS BEING CHALLENGED*

Today, the choice given to shoppers by marketers is luxury or non-luxury. However, several brands now offer more options, creating a new “premium” space between the two. When premium is a choice, shoppers will classify some brands differently than how they are marketed. At the brand level, OEMs need to approach this shifting world from an appropriate starting point based on shoppers’ current perceptions and equities.

THE LUXURY SPECTRUM<sup>1</sup>



WHERE SHOPPERS PRICE MODELS BY DESIGNATED BRAND CLASS<sup>2</sup>



Brands that shoppers designate as premium are priced lower and at tighter ranges than luxury brands

However, some brands can compete in more than one space as there is an overlap in pricing

Source: 1) 2015 Kelley Blue Book Luxury Study; 2) KBB.com Omniture New Car Fair Purchase Price Analysis (2015)

## Millennials

# *MILLENNIALS RESPOND WELL TO ENGAGEMENT AND EXPECT A PRESSURE-FREE EXPERIENCE*

By the time Millennials walk into a dealership, they have spent more time researching and cross-shopping than other generations. Unfortunately, they tend to leave the dealership with relatively low satisfaction and are the most likely to feel the salesperson was pushy. Still new to vehicle buying, Millennials may require more assistance than others, but it is important that this comes as part of a pressure-free experience.

## MILLENNIAL PURCHASE EXPERIENCE

<p><b>VEHICLE CONSIDERATION</b> MORE LIKELY TO CONSIDER BOTH NEW AND USED VEHICLES</p>	<p>46% Millennials VS 37% Gen X 31% Boomers</p>
<p><b>SHOPPING EXPERIENCE</b> SPENDS LONGER IN-MARKET AND MORE TIME SHOPPING</p>	<p>DAYS IN-MARKET  127 Millennials VS 111 Gen X 109 Boomers</p>
	<p>TIME SPENT SHOPPING  17:29 Millennials VS 14:32 Gen X 14:58 Boomers</p>
<p><b>DEVICE USAGE</b> USES MOBILE DEVICES TO SHOP</p>	<p>Millennials used mobile devices to research and shop  71% VS 69% Gen X 49% Boomers</p>
<p><b>DEALERSHIP EXPERIENCE</b> MORE LIKELY TO FEEL PRESSURED BY SALESPEOPLE AT DEALERSHIP</p>	<p>OVERALL SATISFACTION 66% Millennials VS 67% Gen X 80% Boomers</p>
	<p>Salesperson let them make the decision without being pushy 68% Millennials VS 76% Gen X 81% Boomers</p>

## 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 practicality 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

STYLE

49% VS 57%  
Millennials  
(as teenagers)

BRAND

23% VS 34%  
Millennials  
(as teenagers)

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

WHAT GEN Z WANTS TO HAPPEN  
BY 2025: TOP MENTION

47%

most cars to drive themselves

TOP BENEFITS OF  
AUTONOMOUS VEHICLES

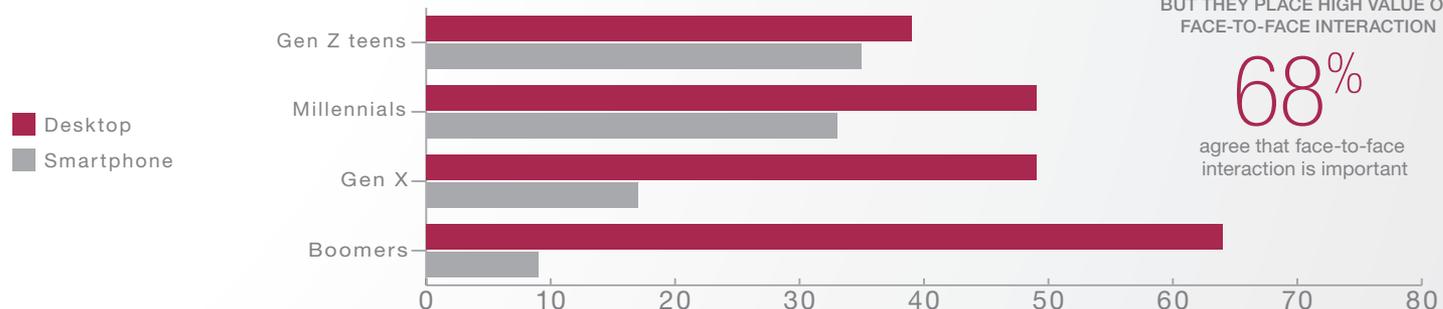
45%  
less concern over  
distracted drivers

41%  
fewer accidents  
on the road

THINK ROADS WOULD BE SAFER IF MOST  
CARS WERE FULLY AUTONOMOUS BY 2025

61%

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



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

## Women

# *PERSONAL INTERACTION AND RISK PROTECTION ARE IMPORTANT TO WOMEN*

For women, interactions with other people are important. They spend more time than men do talking to others during the research process, and those who read online reviews are greatly influenced by them. Once at the dealership, women are more satisfied with their overall experience. They tend to be more favorable about their treatment by the staff, specifically about being made comfortable and confident in their purchase.

MORE DAYS IN MARKET BUT LESS TIME SHOPPING

DAYS IN MARKET

134 VS 95 men

HOURS SHOPPING

13:56 VS 15:38 men

MORE LIKELY TO SEEK INPUT FROM OTHERS



SHOPPING TIME IS SPENT TALKING WITH OTHERS

27% VS 17% men



FEWER WOMEN READ ONLINE REVIEWS

28% VS 34% men

BUT THOSE WHO DID WERE MORE IMPACTED BY THEM

69% VS 58% men

MORE SATISFIED WITH DEALERSHIP EXPERIENCE

DEALERSHIP SATISFACTION

42% VS 32% men

MADE THEM FEEL COMFORTABLE

51% VS 45% men

SALESPERSON LET THEM MAKE THE DECISION WITHOUT BEING PUSHY

55% VS 49% men

HAPPIER WITH INTERACTIONS WITH FINANCE DEPARTMENT

67% VS 61% men

MORE LIKELY TO TRUST THAT THE DEALER GAVE THEM THE BEST DEAL

32% VS 25% men

WANT TO KNOW THEY ARE PROTECTED IN THEIR PURCHASE

LESS OVERALL AWARENESS OF F&I PRODUCTS PRIOR TO DEALERSHIP

61% VS 67% men

MORE LIKELY TO PURCHASE AN F&I PRODUCT

52% VS 45% men

## Hispanic

# HISPANICS CONTINUE TO ACCOUNT FOR AN INCREASING SHARE OF U.S. VEHICLE SALES

Hispanics continue to account for an increasing share of U.S. vehicle sales, and many end up financing that purchase. For lenders, providing education early in the shopping process is important as these buyers are more likely than others to arrive at the dealership already having a vehicle loan through a bank or credit union. Also, nearly 2 in 3 will walk out of the dealership having purchased an additional F&I product — GAP insurance and maintenance plans are popular with these buyers.

SHARE OF NEW VEHICLE SALES <sup>1</sup>	MORE RELIANT ON MOBILE DEVICES FOR SHOPPING <sup>2</sup>	FINANCE PURCHASE DIFFERENTLY <sup>2</sup>	MORE LIKELY TO PURCHASE F&I PRODUCTS <sup>2</sup>
<p>9.5% in 2011</p>	<p>56% used a smartphone for vehicle shopping</p>	<p>22% use cash</p> <p>VS</p> <p>22% non-hispanic</p>	<p>63% purchased F&amp;I products</p> <p>VS</p> <p>48% non-Hispanics</p>
<p>13.6% 2016</p>	<p>28% mobile only</p> <p>VS</p> <p>18% non-Hispanics</p>	<p>42% financed through dealer</p> <p>VS</p> <p>51% non-hispanic</p>	<p>26% purchased GAP insurance</p> <p>VS</p> <p>17% non-Hispanics</p>
<p>14.5% in 2021</p>	<p>69% used smartphone while at dealership</p> <p>VS</p> <p>51% non-Hispanics</p>	<p>31% financed through bank/credit union</p> <p>VS</p> <p>25% non-hispanic</p>	<p>17% purchased maintenance plans</p> <p>VS</p> <p>10% non-Hispanics</p>

Source: 1) IHS Markit; 2) 2017 Cox Automotive Car Buyer Journey

## Brand Snapshots

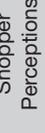
# HOW DOES YOUR BRAND MEASURE UP?

A brand is defined by many things; none are as important as how your consumers perceive it. This section features brand-specific insights from Autotrader and Kelley Blue Book data that offer a snapshot of your brand's health within a given time frame.

Brand health is visualized using these key performance indicators:

- » Brand Consideration – Percentage of in-market shoppers considering a brand for their next vehicle.
- » Shopper Loyalty – An owner of a brand who is shopping the same brand and may purchase again.
- » Shopper Perceptions – How a shopper views a brand in comparison with others.
- » Autotrader and Kelley Blue Book site engagement.

The indicators provide a quick diagnosis if a brand is top of mind, retaining its customer base, how shoppers feel about the brand, the size of audience it attracts and the amount of competitive pressure it faces.

				
 Consideration (of in-market shoppers)	5.7%	0.2%	7.4%	9.8%
 Engagement (of in-market shoppers)	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure	High Shopper Attraction High Competitive Pressure
 Shopper Loyalty (of owners shopping a new car)	46%	42%	47%	45%
 Shopper Perceptions (how shoppers view a brand)	 7.0 Durability  7.2 Reputation  6.9 Safety	 5.3 Durability  5.4 Reputation  6.0 Safety	 6.6 Durability  7.1 Reputation  7.1 Safety	 6.6 Durability  7.3 Reputation  7.1 Safety
 Interactions (of site interactions)	1.2%	0.2%	2.9%	3.5%
 Traffic (of new car retail traffic)	2.2%	0.1%	3.3%	3.9%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	 <b>BUICK</b>	 <i>Cadillac</i>	 <b>CHEVROLET</b>	 <b>CHRYSLER</b>
<b>Consideration</b> <small>(of in-market shoppers)</small>	4.0%	4.8%	20.9%	4.2%
<b>Engagement</b> <small>(of in-market shoppers)</small>	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure
<b>Shopper Loyalty</b> <small>(of owners shopping a new car)</small>	44%	44%	55%	42%
<b>Shopper Perceptions</b> <small>(how shoppers view a brand)</small>	 6.2 Durability  6.0 Reputation  6.6 Safety	 6.1 Durability  6.6 Reputation  6.9 Safety	 5.8 Durability  5.8 Reputation  6.2 Safety	 5.4 Durability  5.5 Reputation  6.4 Safety
 <b>Interactions</b> <small>(of site interactions)</small>	1.0%	1.9%	11.9%	1.3%
 <b>Traffic</b> <small>(of new car retail traffic)</small>	1.5%	1.6%	10.1%	1.3%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	 DODGE			
Consideration (of in-market shoppers)	7.6%	1.2%	31.2%	9.4%
Engagement (of in-market shoppers)	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure	High Shopper Attraction High Competitive Pressure
Shopper Loyalty (of owners shopping a new car)	46%	44%	57%	46%
Shopper Perceptions (how shoppers view a brand)	 5.4 Durability  5.4 Reputation  6.0 Safety	 4.9 Durability  4.8 Reputation  5.0 Safety	 6.1 Durability  6.1 Reputation  6.6 Safety	 6.4 Durability  6.3 Reputation  6.7 Safety
Interactions (of site interactions)	3.7%	0.4%	11.3%	4.6%
Traffic (of new car retail traffic)	2.4%	0.5%	13.7%	2.8%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	 <b>HONDA</b>	 <b>HYUNDAI</b>	 <b>INFINITI.</b>	 <b>JAGUAR</b>
<b>Consideration</b> <small>(of in-market shoppers)</small>	28.8%	11.8%	3.2%	1.7%
<b>Engagement</b> <small>(of in-market shoppers)</small>	High Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure
<b>Shopper Loyalty</b> <small>(of owners shopping a new car)</small>	55%	48%	48%	42%
<b>Shopper Perceptions</b> <small>(how shoppers view a brand)</small>	 7.2 Durability  7.4 Reputation  6.9 Safety	 6.2 Durability  6.0 Reputation  6.5 Safety	 6.6 Durability  6.7 Reputation  7.0 Safety	 5.8 Durability  6.2 Reputation  6.5 Safety
 <b>Interactions</b> <small>(of site interactions)</small>	4.2%	2.7%	1.4%	0.8%
 <b>Traffic</b> <small>(of new car retail traffic)</small>	14.7%	5.3%	1.1%	0.8%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	Jeep	KIA	LAND-ROVER	LEXUS
Consideration (of in-market shoppers)	10.4%	8.7%	2.1%	7.2%
Engagement (of in-market shoppers)	High Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure
Shopper Loyalty (of owners shopping a new car)	52%	49%	45%	48%
Shopper Perceptions (how shoppers view a brand)	 5.7 Durability  5.7 Reputation  5.9 Safety	 5.7 Durability  5.4 Reputation  6.0 Safety	 6.0 Durability  6.5 Reputation  7.0 Safety	 7.3 Durability  7.5 Reputation  7.3 Safety
Interactions (of site interactions)	6.3%	2.0%	1.3%	2.0%
Traffic (of new car retail traffic)	6.0%	5.3%	1.3%	4.0%

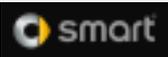
Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	 LINCOLN	 MASERATI	 mazda	 Mercedes-Benz
Consideration <small>(of in-market shoppers)</small>	2.7%	0.2%	8.2%	6.8%
Engagement <small>(of in-market shoppers)</small>	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure
Shopper Loyalty <small>(of owners shopping a new car)</small>	46%	42%	48%	48%
Shopper Perceptions <small>(how shoppers view a brand)</small>	 6.2 Durability  6.3 Reputation  6.9 Safety	 5.6 Durability  6.2 Reputation  5.8 Safety	 6.6 Durability  6.7 Reputation  6.6 Safety	 6.7 Durability  7.4 Reputation  7.4 Safety
 Interactions <small>(of site interactions)</small>	0.8%	0.4%	2.0%	3.6%
 Traffic <small>(of new car retail traffic)</small>	1.1%	0.2%	5.9%	4.0%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

				
Consideration (of in-market shoppers)	2.1%	1.6%	13.8%	2.0%
Engagement (of in-market shoppers)	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	High Shopper Attraction High Competitive Pressure	High Shopper Attraction High Competitive Pressure
Shopper Loyalty (of owners shopping a new car)	41%	41%	48%	44%
Shopper Perceptions (how shoppers view a brand)	 5.3 Durability  5.9 Reputation  5.9 Safety	 5.3 Durability  5.1 Reputation  5.8 Safety	 6.1 Durability  6.0 Reputation  6.2 Safety	 6.2 Durability  7.1 Reputation  6.5 Safety
Interactions (of site interactions)	0.5%	0.9%	4.8%	2.7%
Traffic (of new car retail traffic)	0.7%	0.9%	7.7%	1.2%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

				
<b>Consideration</b> (of in-market shoppers)	4.0%	0.1%	11.8%	1.6%
<b>Engagement</b> (of in-market shoppers)	Low Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure	Low Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure
<b>Shopper Loyalty</b> (of owners shopping a new car)	62%	44%	56%	53%
<b>Shopper Perceptions</b> (how shoppers view a brand)	 6.2 Durability  6.0 Reputation  6.5 Safety	 4.5 Durability  4.1 Reputation  4.9 Safety	 7.2 Durability  7.3 Reputation  7.4 Safety	 6.5 Durability  7.3 Reputation  7.2 Safety
 <b>Interactions</b> (of site interactions)	3.2%	0.1%	2.5%	0.5%
 <b>Traffic</b> (of new car retail traffic)	1.6%	0.1%	6.6%	0.6%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

	 <b>TOYOTA</b>		 <b>VOLVO</b>
<b>Consideration</b> <small>(of in-market shoppers)</small>	32.3%	6.3%	3.4%
<b>Engagement</b> <small>(of in-market shoppers)</small>	High Shopper Attraction High Competitive Pressure	Low Shopper Attraction High Competitive Pressure	Low Shopper Attraction Low Competitive Pressure
<b>Shopper Loyalty</b> <small>(of owners shopping a new car)</small>	56%	42%	44%
<b>Shopper Perceptions</b> <small>(how shoppers view a brand)</small>	 7.2 Durability  7.3 Reputation  6.9 Safety	 6.2 Durability  5.9 Reputation  6.6 Safety	 6.7 Durability  6.9 Reputation  7.8 Safety
 <b>Interactions</b> <small>(of site interactions)</small>	7.2%	2.4%	0.9%
 <b>Traffic</b> <small>(of new car retail traffic)</small>	14.0%	2.6%	1.5%

Sources: 1. KBB.com BrandWatch 3rd quarter 2016 - A) Consideration; B) Shopper Perceptions; 2. KBB.com site traffic 3rd quarter 2016 - A) Shopper Loyalty Analysis; B) Site traffic at the vehicle price detail; 3. Autotrader site traffic 3rd quarter 2016 - A) Quadrant Analysis; B) Site traffic at vehicle pricing detail; \*Brands less than three years old or of insufficient sample size are not shown.

## Worldwide New Vehicle Sales

# GLOBAL NEW VEHICLE SALES HIT RECORD LEVEL

Global new vehicle sales were up year-over-year, and 2016 brought significant shifts in the market rankings. China continued to lead all other countries in sales volume. And with strong growth in the double digits, it has not yet reached a saturation point. Italy and Mexico experienced the strongest growth among the top 12 countries, while Brazil was the weakest market, experiencing significant declines year-over-year.

## GLOBAL SALES 2016



93.5<sup>MM</sup>  
NEW CARS SOLD



UP 4.4%  
YOY



HIGHEST SALES  
VOLUME EVER

	1	2	3	4	5	6
Country	 China	 USA	 Japan	 Germany	 India	 UK
Units Sold (2016)	24,627,038 (YTD Nov)	17,593,302 (FY)	4,572,318 (YTD Nov)	3,088,182 (YTD Nov)	2,964,000 (FY)	2,633,503 (FY)
% Change (2015 vs. 2016)	↑13.3%	↑0.5%	↓2.0%	↑4.6%	↑6.9%	↑2.3%

	7	8	9	10	11	12
Country	 Canada	 Italy	 France	 South Korea	 Brazil	 Mexico
Units Sold (2016)	1,948,000 (FY)	1,826,881 (FY)	1,820,789 (YTD Oct)	1,812,079 (FY)	1,787,850 (YTD Nov)	1,604,759 (FY)
% Change (2015 vs. 2016)	↑2.7%	↑16%	↑5.0%	↓0.7%	↓20.9%	↑18.7%

## GLOBAL AUTO MARKET SHIFTS

(Select Markets)



Political turmoil and a recession, along with the worst economic crisis since the 1930s, slowed the production and sales of new vehicles in Brazil.<sup>2</sup> As a result, auto sales took another dive in 2016 due to increasing unemployment, high interest rates, tight credit and economic uncertainty.<sup>7</sup> Following President Rousseff's impeachment, the government was able to turn its attention to much-needed reforms; however, widespread corruption claims do persist.<sup>6</sup>



Russian new car sales are expected to be down by around 12% in 2016 vs. 2015,<sup>16</sup> resulting from an economic crisis due to lower oil prices and Western sanctions after its annexation of Crimea from Ukraine.<sup>1</sup>



New car sales in France were up, driven by an accelerated economy.<sup>13</sup> In 2016, production was expected to grow 5% as French car makers benefited from the need to meet increased domestic and international demand.<sup>8</sup>



In addition to slow economic growth, natural disasters impacted Japan's automotive industry in 2016.<sup>14</sup> Japan's government is pushing companies to increase investment at home and raise wages to boost demand, stimulate the economy and escape deflation. However, the pace of improvement remains subdued and new car sales for 2016 are expected to fall short of 2015 sales.<sup>9</sup>



India's economy and new vehicle market continued to grow at a fast pace. Around 53,700 vehicles are registered every day, possibly a result of the declining state of the country's public transportation system.<sup>3</sup> Vehicle sales in rural markets could be affected in the coming months by the government's decision to ban Rs 500 and Rs 1,000 notes because a big chunk of the market is driven by cash.<sup>12</sup>



Government incentives on new vehicles purchased by the end of 2016 drove double-digit growth in China's new car industry,<sup>4</sup> resulting in the lowest levels of dealership inventories in years.<sup>15</sup> The government is now limiting subsidies to hybrid and electric vehicles only.<sup>10</sup> Annual growth rate of vehicle sales are expected to drop in half over the next five years due to a slowing economy and changing attitudes toward car ownership.<sup>11</sup>

Sources: 1) <http://europe.autonews.com/article/20160512/ANE/160519948/russia-car-sales-fall-to-10-year-low> 2) <http://www.forbes.com/sites/kenrapoza/2016/01/14/brazils-economy-hasnt-been-this-bad-since-1930/#405122667dba>

3) <http://timesofindia.indiatimes.com/auto/miscellaneous/53700-vehicles-registered-across-country-every-day/articleshow/53747821.cms> 4) <http://focus2move.com/china-autos-industry/> 5) Focus2move

6) <http://www.focus-economics.com/countries/brazil> 7) <http://www.automotive-fleet.com/article/story/2016/10/political-and-economic-turmoil-contracts-auto-market-in-brazil.aspx> 8) <https://atradius.us/reports/market-monitor-automotive-france-2016.html>

9) <https://ig.ft.com/sites/numbers/economies/japan> 10) <https://www.ft.com/content/a55e7d36-db8a-11e5-a72f-1e7744c66818> 11) <http://fortune.com/2016/04/25/mckinsey-says-chinas-car-sales-are-slowing-way-down/>

12) <http://www.autocarindia.com/auto-news/demonetisation-impact-on-auto-industry-403495.aspx> 13) <http://www.yenisafak.com/en/world/life-comes-to-a-halt-as-strikes-grip-france-2475044> 14) <http://fortune.com/2016/04/17/toyota-earthquake-disruptions/>

15) <http://www.chinabusinessreview.com/chinas-auto-retail-market/> 16) <http://www.france24.com/en/20170112-russian-auto-sales-fall-11-2016>

## Worldwide Brand Rankings

# *AMONG WORLDWIDE BRAND RANKINGS, TOYOTA REMAINS THE CLEAR LEADER*

Toyota remained the clear leader in 2016 with a large gap over all other brands. Meanwhile, Ford proved to be a strong contender to take second place, but instead ended the year roughly 300K units shy of Volkswagen. Nissan and Hyundai were neck-and-neck at fourth- and fifth place. Honda moved up to sixth place in market share to overtake Chevrolet, which dropped 4% in sales year-over-year.

	1	2	3	4	5
Country	 TOYOTA				 HYUNDAI
Units Sold (2016)	8,476,885	6,535,093	6,234,726	4,954,002	4,864,222
% Change (2015 vs. 2016)	↑0.8%	↑1.7%	↑2.3%	↑4.7%	↓0.5%

	6	7	8	9	10
Country	 HONDA	 CHEVROLET		 RENAULT	 Mercedes-Benz
Units Sold (2016)	4,774,696	4,168,961	3,314,716	2,412,720	2,327,799
% Change (2015 vs. 2016)	↑6.6%	↓4.4%	↑4.4%	↑13.8%	↑10.5%

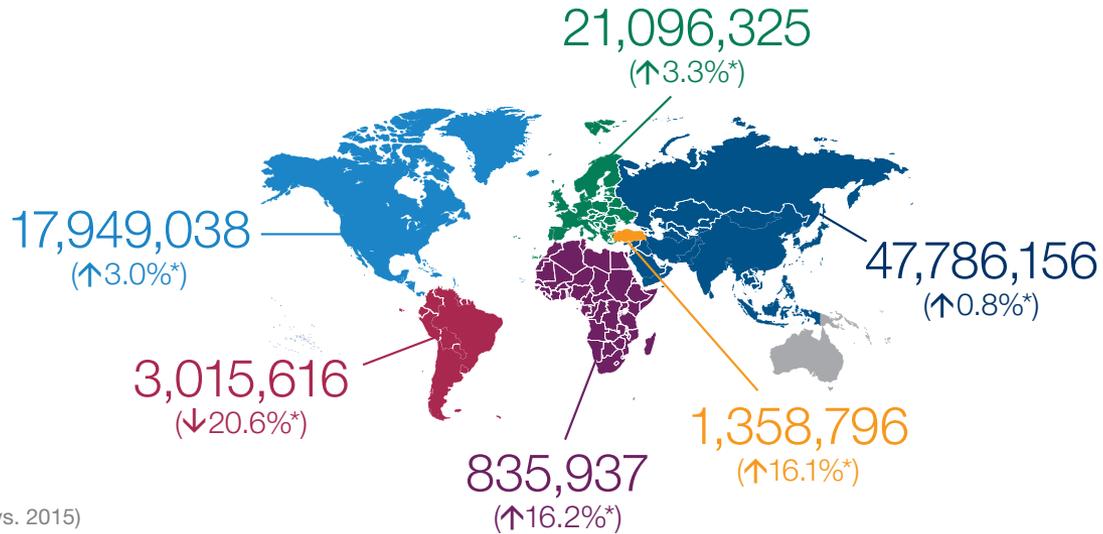
## Worldwide Vehicle Production Rankings

# *OEMs RAMP UP PRODUCTION IN AFRICA*

Asia retains the regional top spot for vehicle production as China is by far the leader in number of units produced. Europe remains in second place, with Spain seeing double-digit growth in production. Africa's contribution of units is relatively small for now, but OEMs continue to invest more in that region, giving it one of the higher growth rates.

### UNITS PRODUCED BY REGION (2015)

- North America
- South America
- Europe
- Africa
- Turkey
- Asia



\*% Change (2014 vs. 2015)

Select Countries	China	USA	Japan	Germany	South Korea	India	Mexico	Spain	Brazil	Canada
Units Produced (2015)	24,503,326	12,100,095	9,278,238	6,033,164	4,555,957	4,125,744	3,565,469	2,733,201	2,429,463	2,283,474
% Change (2014 vs. 2015)	↑3.3%	↑3.8%	↓5.1%	↑2.1%	↑0.7%	↑7.3%	↑5.9%	↑13.7%	↓22.8%	↓4.6%

Source: OICA.net

## In-Vehicle Technology

# CONSUMERS ARE WILLING TO PAY MORE FOR CAR TECHNOLOGY

Consumers are experiencing the benefits of in-vehicle technology, and are more willing than ever before to spend extra for it. Nearly half are even willing to exceed their budget to get the technology they want. Must-have technology is a mix of convenience, safety and connectivity features, with connectivity being especially important to younger generations.

IN-VEHICLE TECHNOLOGY



41%  would never buy a vehicle with outdated technology

Top features consumers feel should be standard 

- STANDARD CRUISE CONTROL
- BLIND SPOT DETECTION
- KEYLESS ENTRY
- BLUETOOTH
- STEERING WHEEL CONTROLS

SAFETY BENEFITS

68% agree that technology features have improved the way they drive



52% Say that the more technology features a car has the safer they feel it is



WILLINGNESS TO PAY

41% of consumers paid extra for technology on their **current** vehicle

VS

64% of consumers willing to pay extra for technology on their **next** vehicle



43% are willing to **exceed** budget for the tech features they want



## Connectivity in Automobiles

# DEMAND FOR CONNECTIVITY CONTINUES TO ACCELERATE

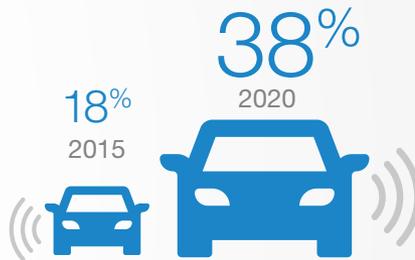
Consumers continue to place increasing importance on connectivity in their vehicles and want a seamless process in doing so. The good news is that vehicles will continue to become connected to meet consumers' desires. However, there are potential threats that come along with more technology, such as hacking. Manufacturers will need to ensure safety as well as seamlessness.

CONNECTIVITY IN AUTOMOBILES



BY 2020

85%  
of new vehicles sold  
will be connected



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

“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  
Adjacent Growth

Sources: Based on the Connected Car Analysis conducted by IHS Automotive commissioned by Cox/Autotrader, 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); 2016 Car Tech Impact Study, Autotrader

## Distracted Driving

# *CONSUMERS ARE AWARE OF DISTRACTED DRIVING, BUT MANY DON'T ACTIVELY PRACTICE SAFE PROCEDURES*

Distracted driving (DWD) has become more prevalent over the years, partially driven by a surge in content, applications and features available within a user's mobile experience. Vehicle technology continues to improve and automakers have taken measures to assist in this battle, yet adoption is slow. It's likely that eliminating DWD will be highly correlated with the industry's push toward autonomous driving.

## 61% MULTITASK ON A PHONE BEHIND THE WHEEL

Of these multitaskers



78%  
are talking on the phone



71%  
are using navigation system



67%  
are texting



47%  
are using music apps



31%  
are using social media

## DRIVERS SELDOM USE THE SAFEST OPTION

Among those who multitask  
behind the wheel

90%  
have speakerphone

only 46%  
use speakerphone



90%  
have Bluetooth built  
into vehicle

only 37%  
use it

“Consumers think an app might be the most effective way to curb distracted driving, but this may be easier said than done.”

**Mark Williams**

Sales Analytics Consulting  
Cox Automotive

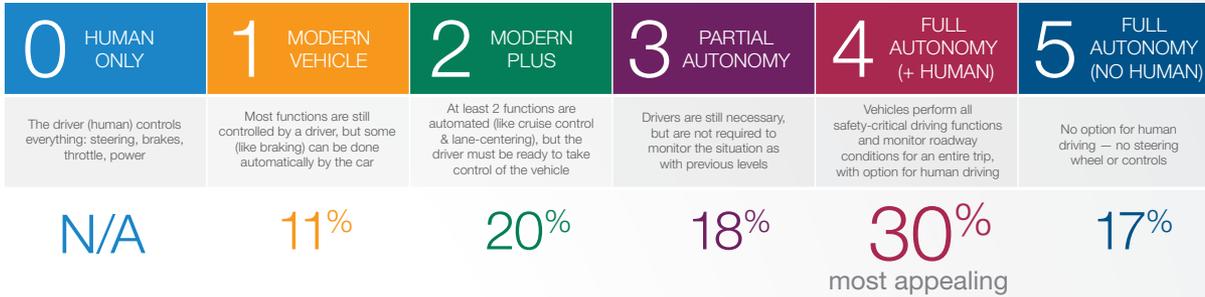
A photograph of two men in business attire looking at a laptop screen in a car. The man on the left is smiling and looking at the screen, while the man on the right, wearing glasses, is also smiling and looking at the screen. The background shows the interior of a car with windows.

## 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.

APPEAL OF AUTONOMOUS



CONSUMERS' VIEW OF AUTONOMOUS VEHICLES

70%<sub>Gen Z</sub> vs 41%<sub>Gen X</sub>  
 70% of Gen Z considers Level 5 autonomy safe, while only 41% of Gen X does (47% gen pop total)



60%  
 of consumers say they know "little or nothing" about vehicle autonomy

51%<sub>control</sub> vs 49%<sub>safety</sub>  
 51% of consumers desire control in their vehicles, even if it isn't as 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

“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—Retail Transformation  
 Cox Automotive

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

## Car/Ride Sharing

# *CAR/RIDE 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/RIDE SHARING

RIDE SHARING

73% awareness  
16% usage

CAR SHARING

43% awareness  
7% usage

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

“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 Director of Content and Executive Publisher  
Cox Automotive

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

## About Cox Automotive

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Cox Automotive, Inc. is transforming the way the world buys, sells and owns cars with industry-leading digital marketing, software, financial, wholesale and e-commerce solutions for consumers, dealers, manufacturers and the overall automotive ecosystem worldwide. Committed to open choice and dedicated to strong partnerships, the Cox Automotive family includes Manheim®, Autotrader®, Kelley Blue Book®, Dealertrack®, vAuto®, Xtime®, NextGear Capital® and a host of other brands. The global company has nearly 30,000 team members in more than 200 locations and is partner to more than 40,000 auto dealers, as well as most major automobile manufacturers, while engaging U.S. consumer car buyers with the most recognized media brands in the industry. Cox Automotive is a subsidiary of Cox Enterprises, Inc., an Atlanta-based company. For more information about Cox Automotive, visit [www.coxautoinc.com](http://www.coxautoinc.com).

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