

Insurance, the "Sharing Economy," Millennials & More

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The "On-Demand" (Sharing) Economy

The On-Demand Economy Will Transform the American Workforce and the P/C Insurance Industry Too

Labor on Demand: Huge Implications for the US Economy, Workers & Insurers



The "On-Demand" World is Not New...



Companies like Angie's List (established in 1995 and going online in 1999) have been around for decades

The Geek Squad has been around since 1994...



Peapod sprouted way back in 1989! - Peapod[®]

Source: Insurance Information Institute.

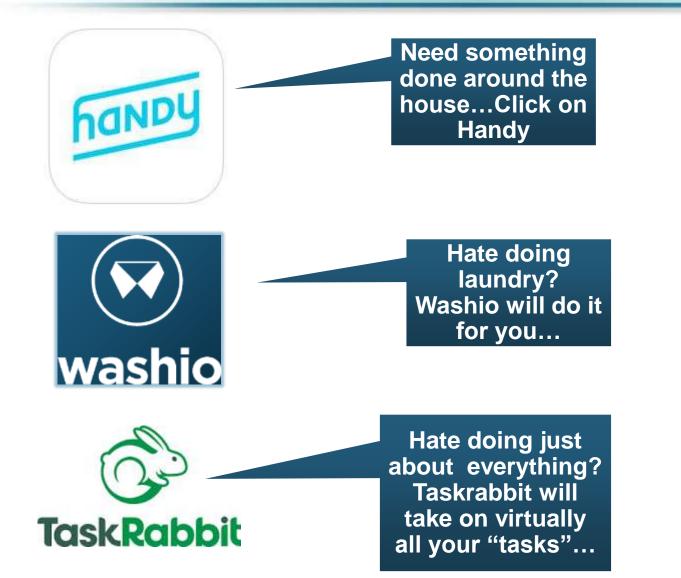
Search the List

Shop Local Offers

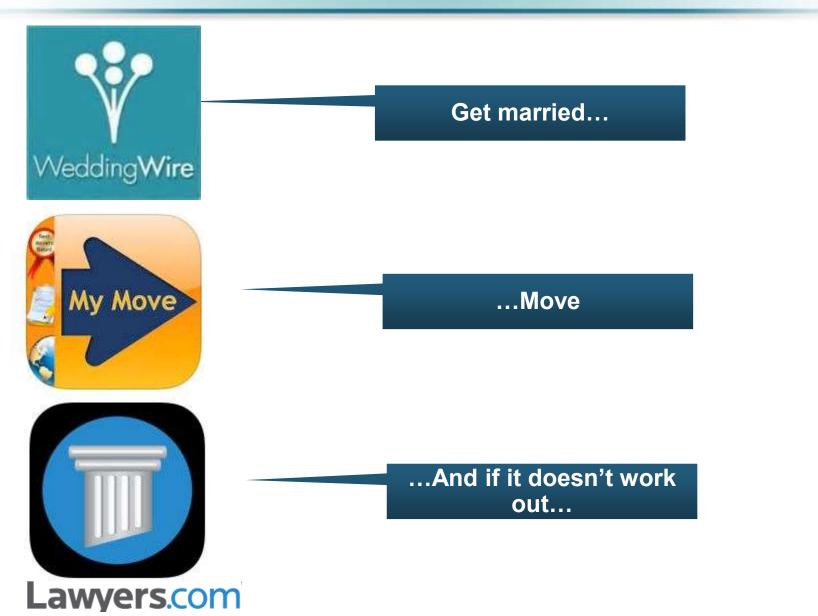
Get exclusive discounts

Send a SnapFix

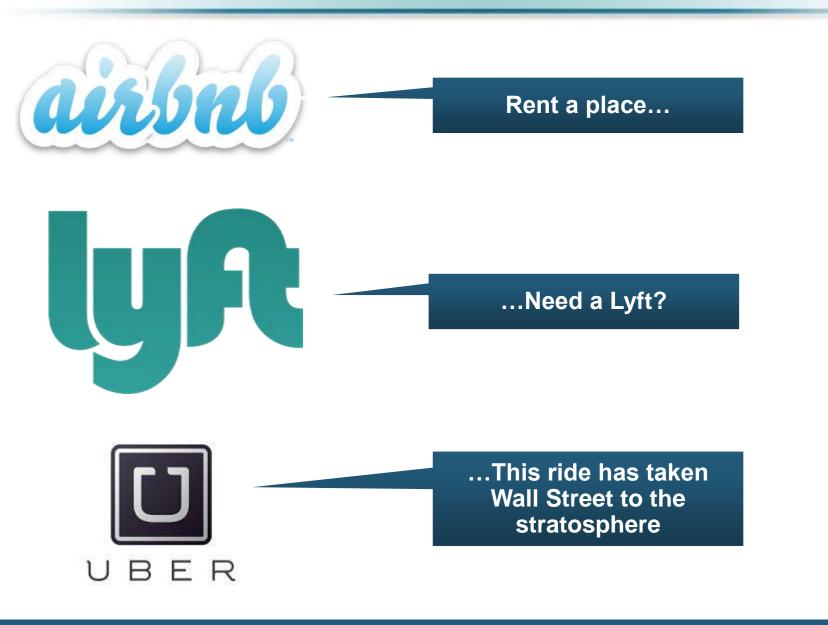
...But the "On-Demand" World is Exploding as Is the Demand for "On-Tap" Workers



You Can Live Your Life with the Swipe of a Finger...



Some Players in the On-Demand Economy Have Become Household Names



On-Demand/Sharing/Peer-to-Peer Economy Impacts Many Lines of Insurance

- The "On-Demand" Economy is or will impact many segments of the economy important to P/C insurers
 - Auto (personal and commercial)
 - Homeowners/Renters
 - Many Liability Coverages
 - Professional Liability
 - Workers Comp
- Many insurance questions arise some fairly simple, some complex
- Insurance solutions are increasingly available to fill the many insurance gaps that arise





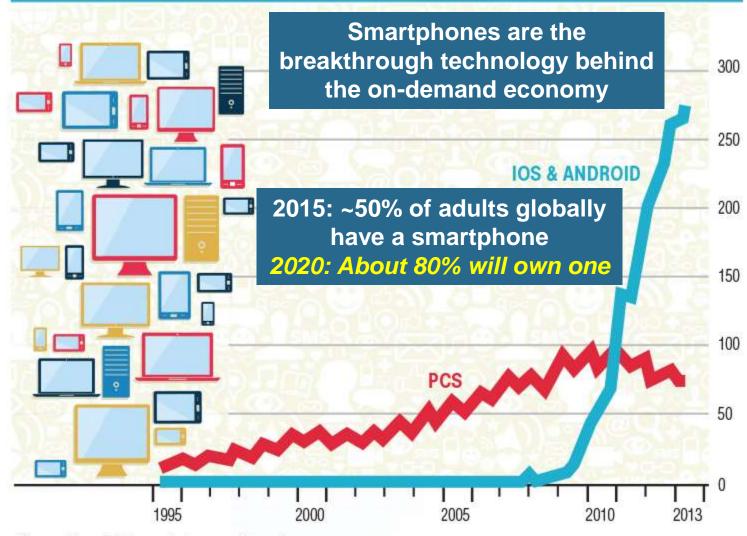


Technology and Employment

What Makes the On-Demand Economy Possible? Why Does It Matter for Insurers?

CHANGING PLATFORMS:

GLOBAL SHIPMENTS OF SMARTPHONES (MILLIONS)

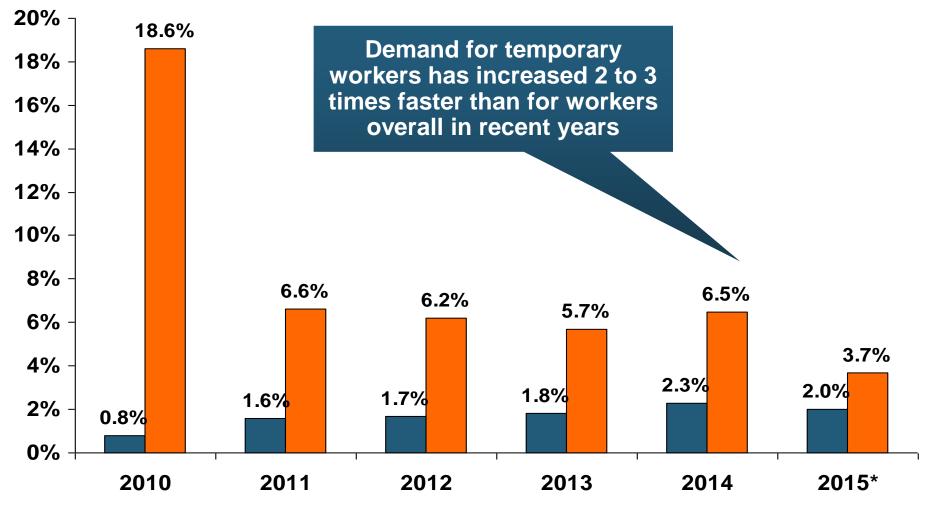


Source: Benedict Evans, Andreessen Horowitz

Growth in Temporary Workers vs. All Nonfarm Employment, 2010-2015*



Annual Percent Change



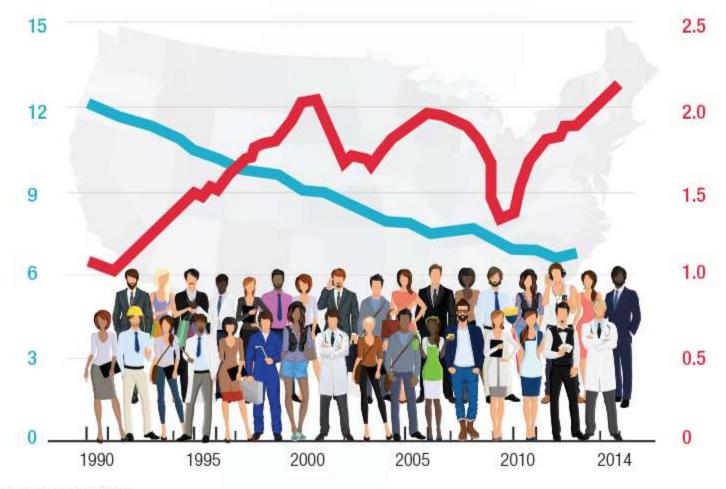
*Through September 2015.

Source: US Bureau of Labor Statistics , Insurance Information Institute.

THE CASUAL LOOK UNITED STATES, % OF EMPLOYED

PRIVATE-SECTOR UNION MEMBERSHIP

TEMPORARY WORKERS



Source: Bureau of Labor Statistics

The On-Demand Economy and American Workers: What Is Happening?

- Technology is Fundamentally Transforming How Resources are Allocated and Used in the Economy
- Labor is No Exception to this Transformation
- Technology Offers New Opportunities to Match Labor to Jobs
 - Owners of spare capacity (workers with time and skill) can be paired at low cost with those with a demand for that time and skill
 - Bringing together labor and those who employ labor is not new
 - BUT: Pairing occurs with a speed and breadth never before possible
- Witnessing the Demise of the Traditional Understanding of What is Meant by a "Good" Job
 - Concept born in the Industrial Age (1880-1980), is eroding
 - Disintermediation of the firm as the place where labor, jobs matched

Accelerating Trends that Started with Labor Strife, Globalization and Automation that Began in the 1970s and 1980s

What's In Store for the American Worker, Labor Force and Workers Comp



OPTIMISTIC OUTLOOK

- Technology frees workers from the bonds of centralized, hierarchical institutions (the firm)
- Enhanced coordination of "haves" with "needs" that bypass firms as intermediaries

Who Benefits?

- "<u>Flexers</u>": People who value or require flexibility in work arrangements (stay-at-home parents, retirees, students, disabled)
- Professionals: People with portable skills that can be offered through online platforms (semi and high-skilled trades, professional services)
- Unemployed/Underemployed: Offers at least some opportunity to offer and utilize skills and generate income

What's In Store for the American Worker, Labor Force and Workers Comp



- On-Demand companies are software-driven marketplaces and position themselves as "platforms" rather than "employers"
- Enormous valuations (e.g., \$40B for Uber on \$2B in earnings) reflect the extraction of resources that otherwise would go to benefits, investments in safety, training, etc.
 - Uber's valuation was greater than that of 72% of the S&P500 at YE 2014
 - Valued more than Delta Airlines, Kraft Foods, CBS, Macy's, Hilton, Aflac...
- Jobs reduced to freelanced, temporary "gigs"
- Low skill workers and those who lack flexibility are left further behind
- Workers treated as independent contractors without intrinsic or basic economic rights
- What Is Potentially Lost or Compromised?
 - Stability, Retirement Benefits, Sick Pay, Maternity Leave, Overtime
 - Health Insurance, Liability Coverage, Workers Comp Coverage

Sources: Wall Street Journal; The Economist; Fortune; Insurance Information Institute research.

Potential Consequences for Insurers



- On-Demand Platforms Have Struggled with Concepts of Liability
- There Has Been a General Resistance to Assuming Liability or Responsibility Unless Compelled to Do So
- Companies Have Sought to Keep as Much Liability as Possible on the Individual Offering their (Contracted) Labor or Resources

Minding the Gap

- Traditional insurance will often not cover a worker engaged in offering labor or resources through these platforms
- E.g., Auto ins. generally won't cover you if you while driving for Uber
- Home ins. won't cover for other than occasional rentals of property
- Unless self-procured, on-demand worker (independent contactors) will generally have no workers comp recourse if injured on the job
- Long Legislative and Court Battles Lie Ahead, Including Determination of Who is an Employee vs. Independent Contractor

Insurance Solutions Becoming More Common



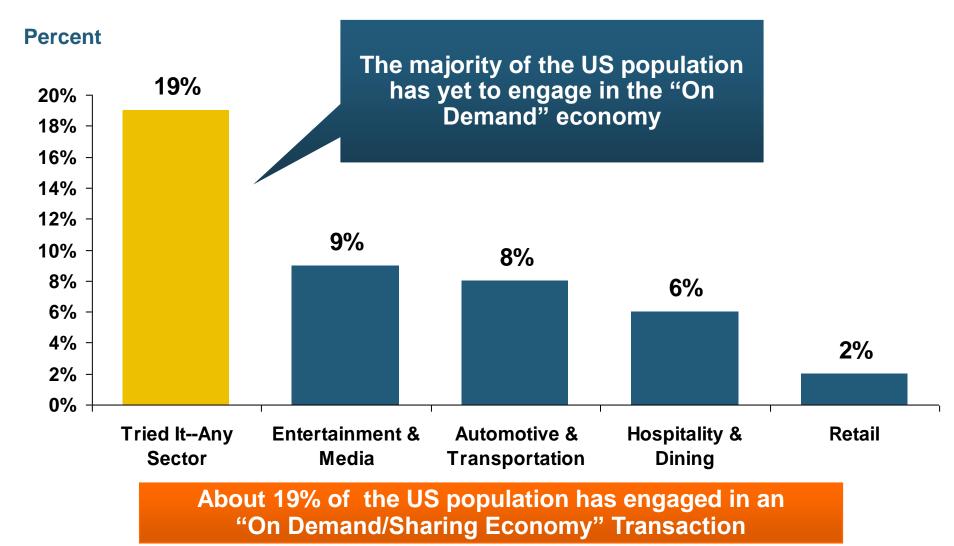
On-Demand Workers

Who Are They?

And Who's Driving Demand for Them?

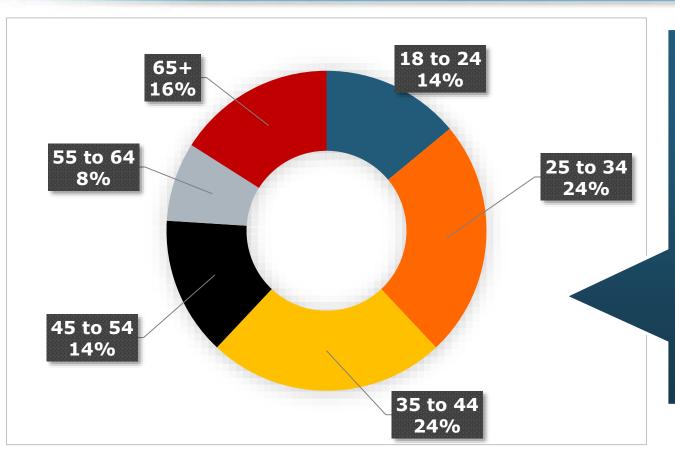
Percent of People Who Have Engaged in an "On Demand/Sharing Economy" Transaction





Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.

Age of People Who are <u>Providing</u> the Sharing/On-Demand Economy



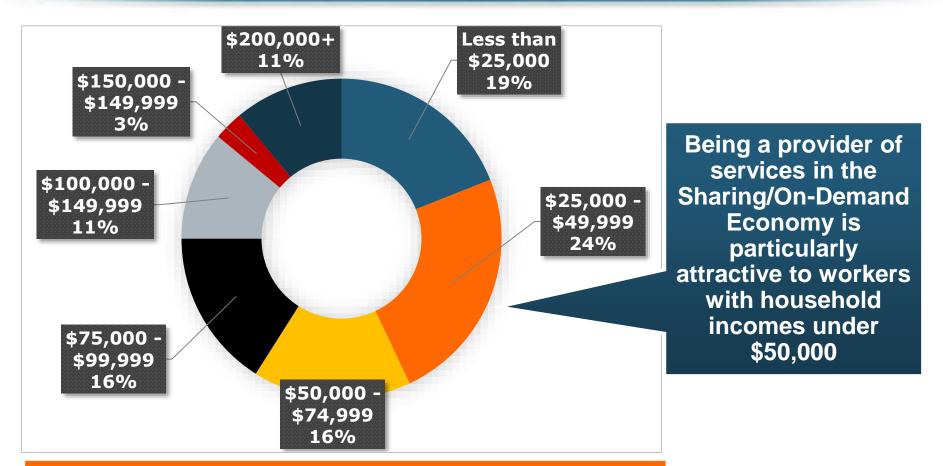
Being a provider of services in the Sharing/On-Demand **Economy is** attractive to workers in the 25-44 age range (who want flexibility in raising families) as well as seniors age 65+ who see the offering their services on-demand as a way to augment retirement income

About 7% of US population are providers in the Sharing Economy, cutting across age and incomes; 51% of those familiar with the concept could see them selves as providers within the next two years.

Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.

Household Income: <u>Providers</u> of the Sharing/On-Demand Economy





About 7% of US population are providers in the Sharing Economy, cutting across age and incomes;
51% of those familiar with the concept could see them selves as providers within the next two years.

Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.



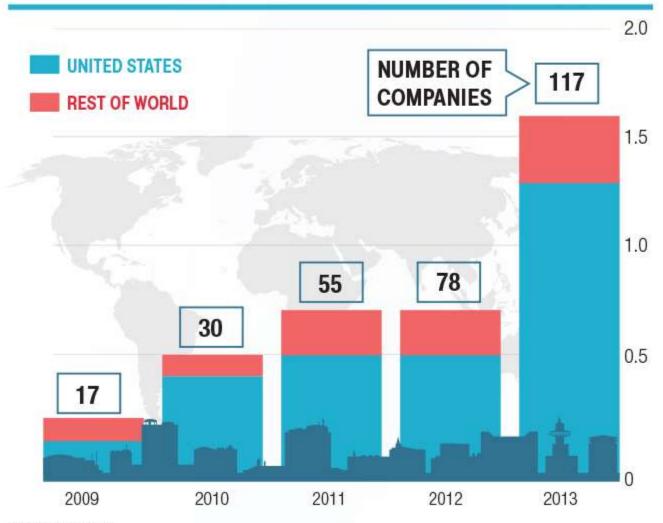
The On-Demand Economy and Wall Street

Wall Street Loves the On-Demand Economy

Labor Markets, Insurance Markets Will Be Impacted

HERE'S AN IDEA

VENTURE-CAPITAL INVESTMENT IN THE ON-DEMAND ECONOMY, \$BN



Source: Crunchbase

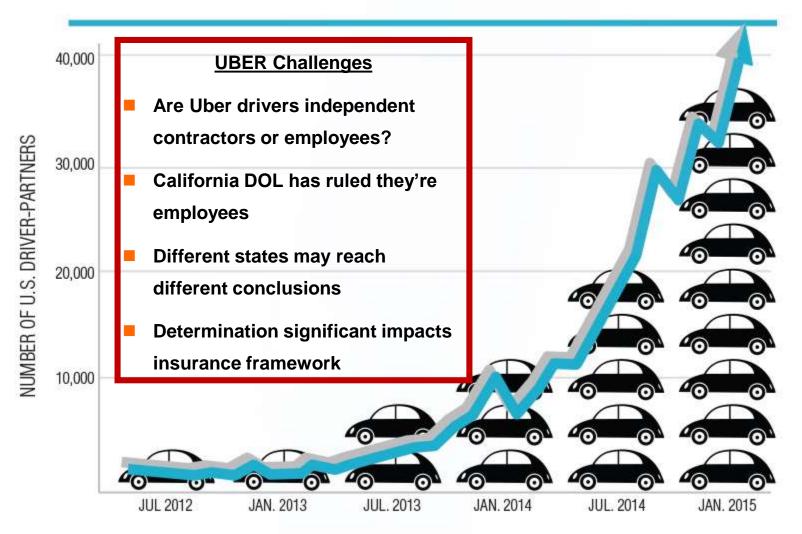


An UBER Case Study

Uber is the Best Known of the On-Demand Companies *Wall Street Loves Uber Vested Interests Hate Uber*

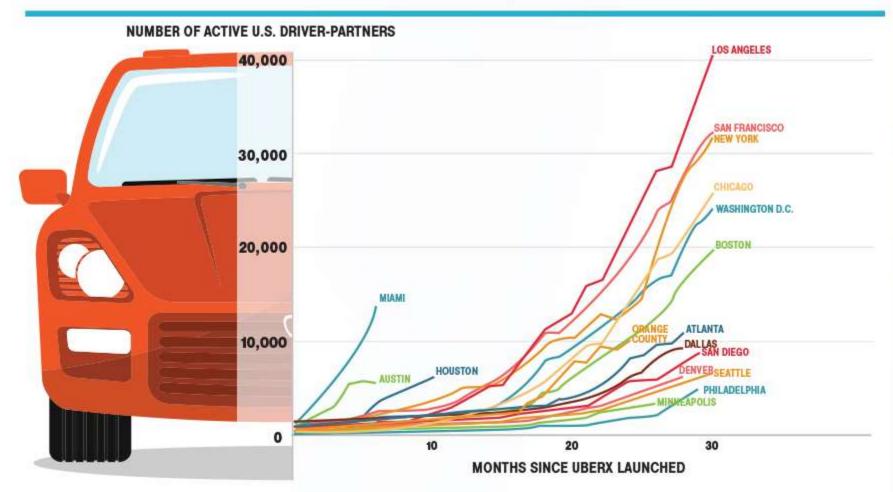


NUMBER OF NEW DRIVER-PARTNERS STARTING EACH MONTH IN THE UNITED STATES



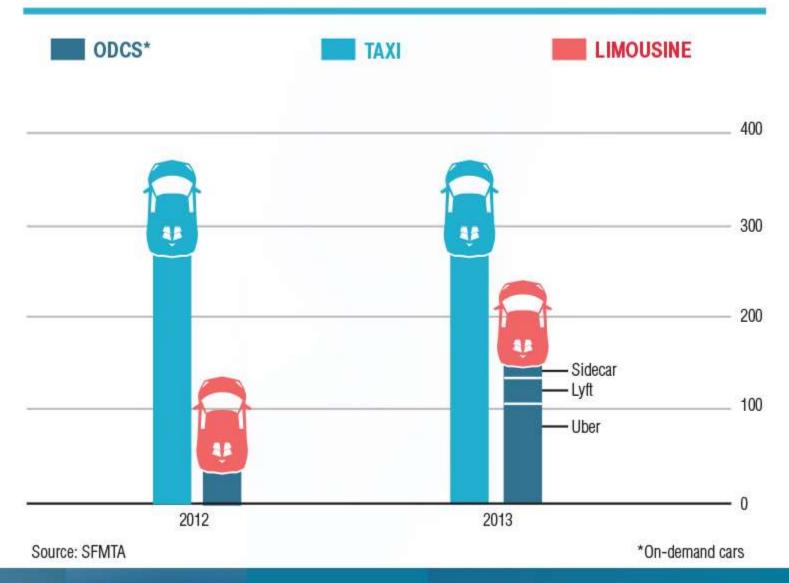
Note: Figure based on U.S. UberBLACK and uberX driver-partners who have joined since June 2012 (303,985 individuals), based on Uber data.

ACTIVE U.S. DRIVER-PARTNERS OVER TIME, BY CITY



Note: Figure reports the number of U.S. UberBLACK and uberX driver-partners making at least one trip in the specified month, indexed to the number of months since Uber began in the city or June 2012, whichever came later.

OVERTAKING DRIVER-SERVICES MARKET IN SAN FRANCISCO, \$M





A NEST Case Study

Nest: A Leader in the "Internet of Things"

Collision Course or Cooperation with the Insurance Industry?



28

Telematics for Your Home: The Internet of Things

- The home is the next frontier for telematics
- Rapidly becoming a crowded space
- How and with whom will insurers partner?
- Can control increasing array of household systems remotely
 - Heat, A/C
 - Fire, CO detection
 - Security Systems
 - Cameras/Monitors
 - Appliances
 - Lighting
 - Technology is adaptive
 - Uses sensors and algorithms to learn about you



Your smart home shouldn't be dumb. When preducts work with Nest, you don't have to toll them how to connect. Or what to do. They just work. In real





Partnerships with Insurers: Selling Safety and Savings Simultaneously



Stay safe. Save money.

Your insurance company knows Nest Protect helps keep you safe. They know it saves lives.

So we've partnered with leading insurance companies to help you get a Nest Protect at no cost. Your insurance provider could also lower your premiums up to 5% because Nest Protect is special - it can connect to Wi-Fi and tell them it's working.

It's their business to know what keeps families safe. And they believe in Nest Protect.

Find out when a Nest insurance partner is coming to your area.

nest.

Nest is actively seeking to partner with insurers. As of Nov. 1, 2015, Nest listed 2 insurance partners offering discounts in a number of states: American Family (MN) and Liberty Mutual (AL, CO, DE, IL, KY, ME, MN, PA, UT and WI)

Source: <u>https://nest.com/insurance-partners/</u> accessed 11/1/15; Insurance Information Institute research.

Partnerships with Insurers

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In just a few minutes, you can:



Get a Nest Protect at no cost.



Get a discount on your insurance premiums.





Insurance companies will send you a Nest Protect. Nest is selling its products via insurance partners

The Nest Protect smoke and CO alarm speaks to tell you what and where the danger is, sends phone alerts, and tests itself to make sure it's working. There's no smoke alarm quite like it.

So our insurance partners will send you a \$99 Nest Protect at no cost.

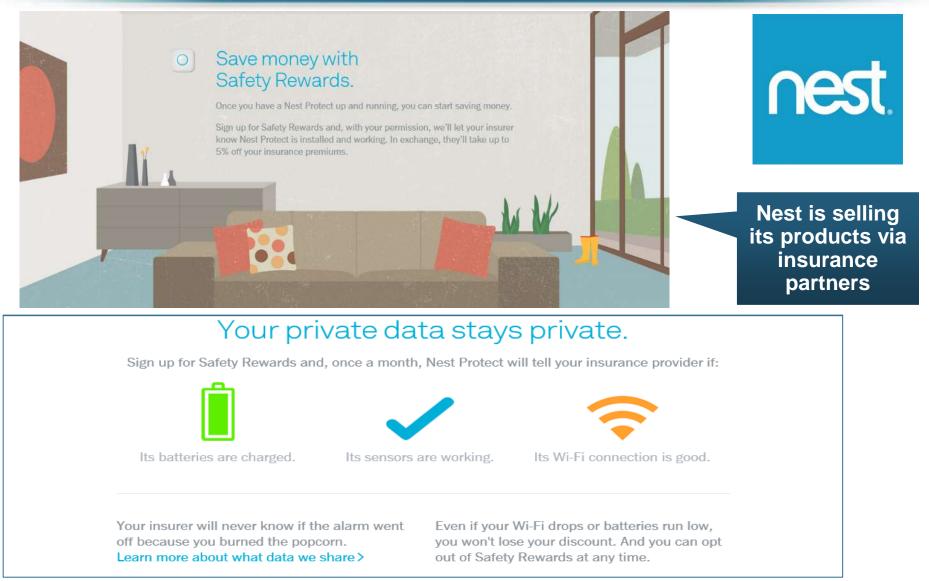
4 out of 5 firefighters would trust Nest Protect to protect their own homes.

Source: <u>https://nest.com/insurance-partners/</u> accessed 11/1/15; Insurance Information Institute research.

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Partnerships with Insurers

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Source: <u>https://nest.com/insurance-partners/</u> accessed 11/1/15; Insurance Information Institute research.

Partnerships with Insurers: Information Collected, Addressing Privacy Concerns

When I enroll in Safety Rewards, what kind of data is shared with my insurance company?

The Safety Rewards data you authorize Nest to share is secure and is limited to basic summarized information that verifies that your Nest Protect is working.

Safety Rewards Information

Nest Protect tests itself to make sure that the batteries have power, that the sensors are working, and that it's connected to Wi-Fi. Nest Protect can also tell you when these tests succeed and when they don't.

When you enroll in Safety Rewards you'll be asked to grant Nest permission to provide basic summarized information about your Nest Protect to your insurance company. This will show they're working to help keep you and your home safe. Each month, Nest will summarize and send your Nest Protect data to your

1 See that Nest Protect is set up and check battery status, WI-FI connection and sensors. Allows closurance Partner 1> to provide policy discounts and products.

Works with Nest

Insurance Partner 1 would like to do the following:

Want Nest to stop working with insurance Partner 17 Go to account settings in the Nest app. At Nest, we take your privacy seriously. And we believe in tioning open and honest about using your data.

Learn more >



Insurance Partner 1 and Nest will use this information in accordance with their respective terms of service and privacy policies.

insurance company. This summary includes status of the batteries, smoke sensor, carbon monoxide sensor, and connection to the Internet. The status report is limited to basic values such as:

Privacy, control of data concerns get significant attention

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"Good" - functioning normally

"Low" - battery charge is low

"Issue" - problem with one or more sensors

"Unknown" - there may be an issue, but Nest Protect cannot diagnose it, or has not checked in because it is offline

The monthly status summary will also include your ZIP or postal code and the names of the rooms where you have your Nest Protects installed. The ZIP or postal code information enables your insurance company to verify that the devices are in a home covered by your insurance policy.

What you won't share

The monthly status summary does not include any smoke or carbon monoxide alarms that may have occurred in your home. In addition, any custom labels that you have given to your Nest Protects will not be shared. Lastly, it does not include any information about how you use the Nest app.

Nest Protect locations, names and labels >

Source: https://nest.com/support/article/When-I-enroll-in-Safety-Rewards-what-kind-of-data-is-shared-withmy-insurance-company accessed 11/1/15; Insurance Information Institute research.

Partnerships with Insurers: Information Collected, Addressing Privacy Concerns

What you won't share

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Nest Protect locations, names and labels >

You're in control of access to these monthly reports

While you're enrolling in Safety Rewards and setting up your connection, you'll be able to review the data requested before you grant permission to share it. If you decide not to grant permission, you won't be able to participate in Safety Rewards, but all your Nest products will continue to work just as before. If you decide to stop participating in Safety Rewards at some point, it's easy and simple to remove your permission. We won't send any more monthly status reports for your account.

I'd like to stop participating in Safety Rewards, how can I cancel it? >

Your data is shared in a limited way

When you're setting up a connection to Nest for Safety Rewards there's no personal information — such as your email address — exchanged. We limit the type of information accessed by Safety Rewards connections, but a connection will request access to basic home and Nest Protect data so it can work.

Privacy, control and security of data get significant attention

Your data is secure

We secure access to data with tokens that use OAuth 2.0 instead of personal information, as well as SSL. These security standards are widely used by many leading technology companies.

You can always change your mind

If you ever change your mind after you grant access to your data for these monthly reports, you can always remove the Safety Rewards connection. Removing the connection will remove you from the program, but your Nest products will continue to work just as before.

How to remove a Safety Rewards connection >

Please read our Privacy Statement for Nest Products and Services

For complete details on how we keep your information private and secure, please see our **Privacy Statement** which describes how we handle personal data, data sharing and access.

Source: <u>https://nest.com/support/article/When-I-enroll-in-Safety-Rewards-what-kind-of-data-is-shared-with-my-insurance-company</u> accessed 11/1/15; Insurance Information Institute research.

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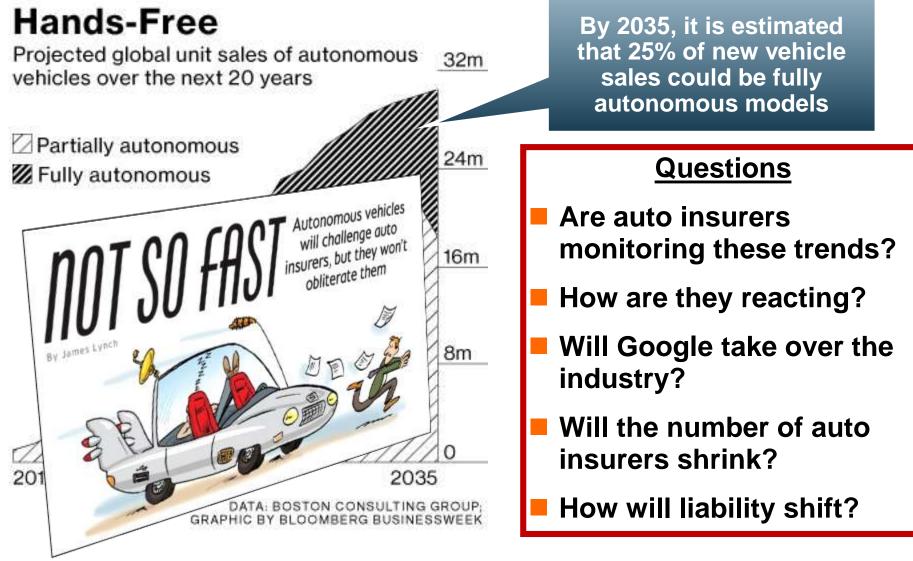
nest.



INDUSTRY DISRUPTORS

Technology, Society and the Economy Are All Changing at a Rapid Pace Thoughts on the Future

Media is Obsessed with Driverless Vehicles: Often Predicting the Demise of Auto Insurance



Source: Boston Consulting Group.

On-Demand/Sharing/Peer-to-Peer Economy Impacts Many Lines of Insurance

- The "On-Demand" Economy is or will impact many segments of the economy important to P/C insurers
 - Auto (personal and commercial)
 - Homeowners/Renters
 - Many Liability Coverages
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 - Workers Comp
- Many unanswered insurance questions
- Insurance solutions are increasingly available to fill the many insurance gaps that arise





TNC Ridesharing Arrangements: Insurance Applicability



Phase	TNC Coverage
 Driver logged into TNC App but not "matched" with a passenger 	Contingent liability coverage IF personal auto coverage declined/not available (\$50/100/25)*
 A "match" is made but passenger is not in the driver's car 	Primary liability, UM/UIM coverage at a higher limit (\$1M)* Contingent comp/collision coverage
3. A passenger is in the driver's car	Same as Phase 2

The concern was that TNCs were seeking to offload risk on to personal auto insurers. An increasing number of personal auto insurers have developed solution to ensure that coverage gaps are minimized

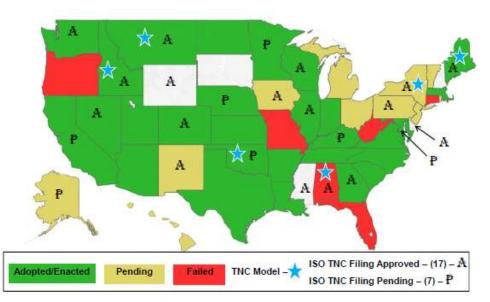
Ridesharing Regulation/Legislation and Status of ISO Filings as of 9/30/15

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Status Ride Sharing Legislation/Regulation



Status of ISO Filings



Homesharing Arrangements: Potential <u>Host</u> Exposure Concerns (Receives Rental Income)



- Property
 - Loss to host's property/furnishings
 - Loss of use
- Liability
 - Damage to property of traveler, traveler's guests
 - Damage to landlord's property/furnishings
 - Bodily injury to traveler, traveler's guests
- Comment
 - A landlord may act as a host (vacant unit)
 - A Homeowners Policy may be issued to the owneroccupant(s) of a 1, 2, 3 or 4 family dwelling

Homesharing Arrangements: Potential <u>Traveler</u> Exposure Concerns



Property

- Loss to traveler's property
- Liability
 - Damage to property/furnishings of host and landlord
 - Bodily injury to traveler's guests, other tenants and visitors to building
 - Personal injury due to poor reviews

Comment

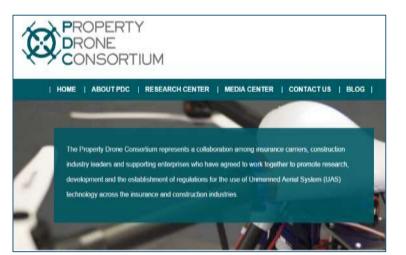
 Similar exposures currently exist for travelers at hotels, B & B's, guest houses

- 1. Policyholder Notice
 - Guidance for policyholder to contact insurer
- 2. Exclusion
 - Explicit exclusion for loss/damage/injury arising out of homesharing
 - Applicable to host, landlord
 - To the extent possible, preserve existing coverage for rentals that do not originate from homesharing, such as that providing for roomers, boarders
- 3. Coverage option
 - Property and liability coverage for loss/damage/injury arising out of homesharing
 - Applicable to host, landlord

Send in the Drones: Drones Will Help Enable the On-Demand Economy







- Drones or Unmanned Aerial Vehicle (UAV) technology is seeing rapid adoption rate in many industries, including insurance
- ~700,000 drones in US by year-end
- FAA granting Section 333 exemptions for commercial use and testing of UAS
- FAA will require most drones to be registered by year-end 2015.
- At least 5 insurers have received permission to test
- Will be adopted for use in many industries where speed of delivery is critical
- Insurers partnering with construction industry to guide R&D and regulation of UAV use via *Property Drone Consortium*: www.propertydrone.org



Millennials and Insurance

Actively Disengaged or the Vanity of Youth?

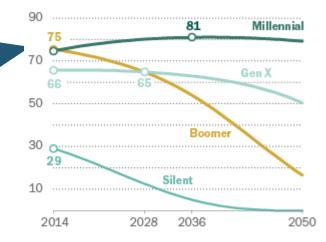
2015: Millennials Overtook Baby Boomers as the Largest Generation



There were 75.3 million Millennials in 2015, overtaking for the first time the Baby Boomers who totaled 74.9 million

Projected Population by Generation

In millions



Note: Millennials refers to the population ages 18 to 34 as of 2015.

Source: Pew Research Center tabulations of U.S. Census Bureau population projections released December 2014

PEW RESEARCH CENTER

The Generations Defined

The Millennial Generation

Born: 1981 to 1997 Age of adults in 2015: 18 to 34*

Generation X

Born: 1965 to 1980 Age in 2015: 35 to 50

The Baby Boom Generation

Born: 1946 to 1964 Age in 2015: 51 to 69

The Silent Generation

Born: 1928 to 1945 Age in 2015: 70 to 87

The Greatest Generation

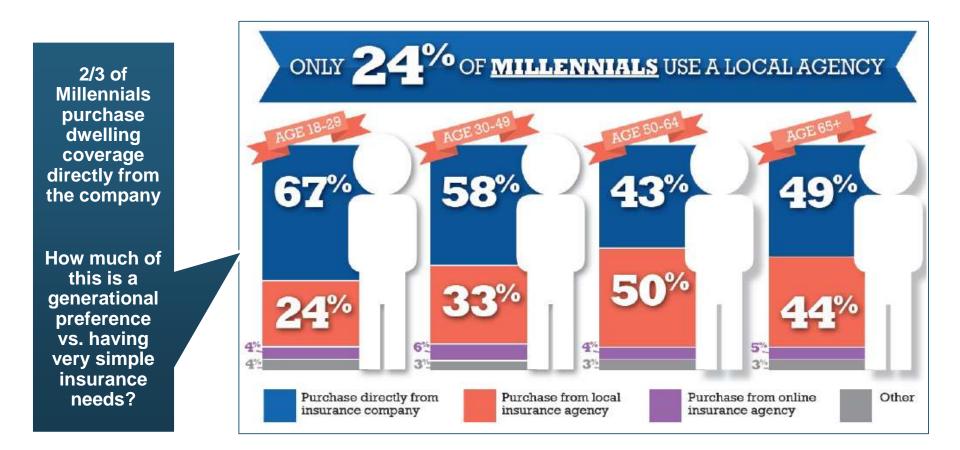
Born: Before 1928 Age in 2015: 88 to 100

* No chronological end point has been set for this group. For the purpose of following a cleanly defined group, Millennials are defined as those ages 18 to 34 in 2015.

PEW RESEARCH CENTER

Source: "This Year Millennials Will Overtake Baby Boomers," Pew Research Center, January 15, 2015 accessed at http://www.pewresearch.org/fact-tank/2015/01/16/this-year-millennials-will-overtake-baby-boomers/.

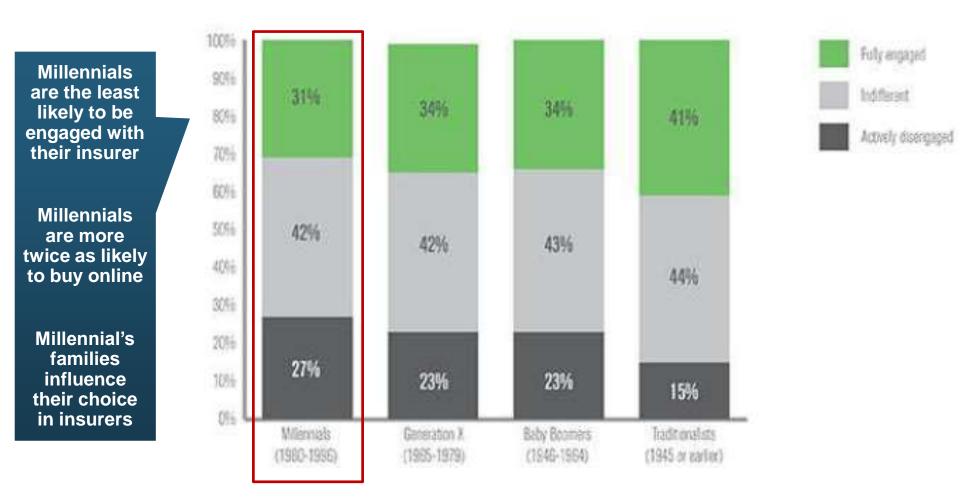
Channel Preference for Home/Rental Insurance, by Age Category



INSURANCE INFORMATION

Sources: "5 Reasons Millennials Aren't Buying Insurance from Local Agents," Eric Narisco, Sept. 16, 2015 from PropertyCasualty360.com based on a study by Effective Coverage and performed by ORC International.

Insurance Customers: Engagement by Generation



INSURANCE INFORMATION

Sources: Gallup: "Insurance Companies Have a Big Problem with Millennials," Daniela Yu and Chris Portera, March 5, 2015

Insurance Customers: Key Drivers of Engagement for Millennials



Data security and ease of making coverage changes are keys to successful engagemen t with Millennial insurance buyers

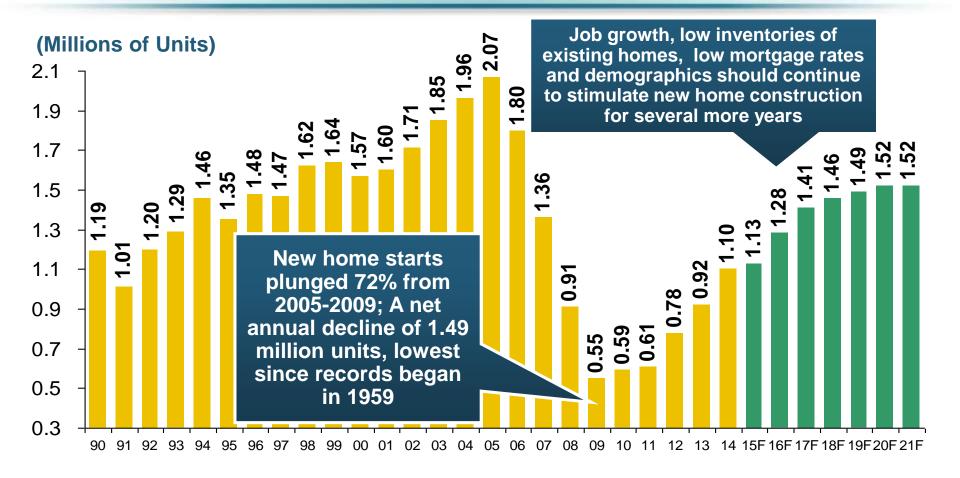
Key Brivers of Millennial Engagement (in Order of Influence on Engagement)	Customers Extremely Satisfied With Driver
Keeping your account and personal information secure	50%
Ease of making changes to your coverage	43%
Finding answers to your insurance questions	35%
Offering the services you need online	40%
Ease of managing your account	4496
Ease of payment features	52%
Ease of access to information about your policies	42%
Ease of navigating the website	34%



Millennials as Drivers & Homeowners

Yes, They Want Their Own Place and a Set of Wheels Too!

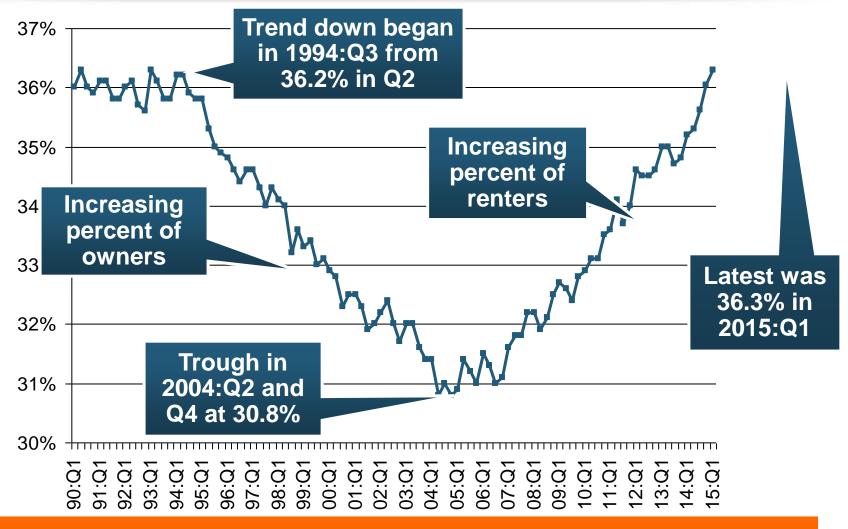
New Private Housing Starts, 1990-2021F



Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the "Great Recession" Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (9/15); Insurance Information Institute.

Rental-Occupied Housing Units as % of Total Occupied Units, Quarterly, 1990:Q1-2015:Q1



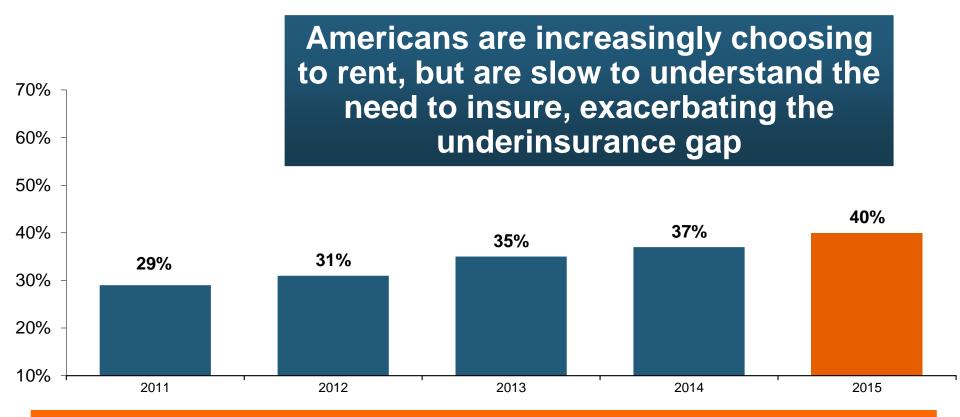
Since the Great Recession ended in June 2009, renters occupied 5.7 million more units (+15.6%).

Sources: US Census Bureau, Residential Vacancies & Home Ownership in the First Quarter of 2015 (released April 28, 2015) and earlier issues; Insurance Information Institute. Next Census Bureau report to be released on July 28, 2015.

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I.I.I. Poll: Renter's Insurance

Q. Do you have renters insurance?¹



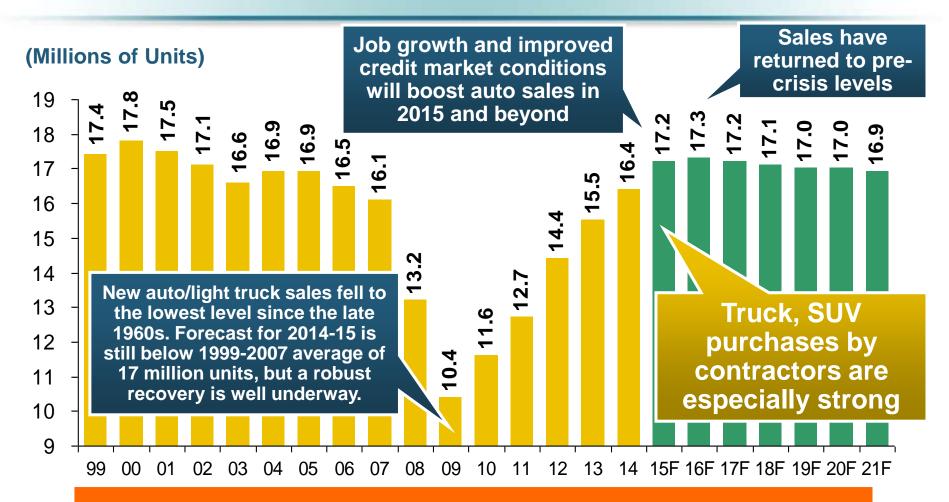
The Percentage of Renters Who Have Renters Insurance Has Been Rising Since 2011.

¹Asked of those who rent their home.

Source: Insurance Information Institute Annual Pulse Survey.

Auto/Light Truck Sales, 1999-2021F

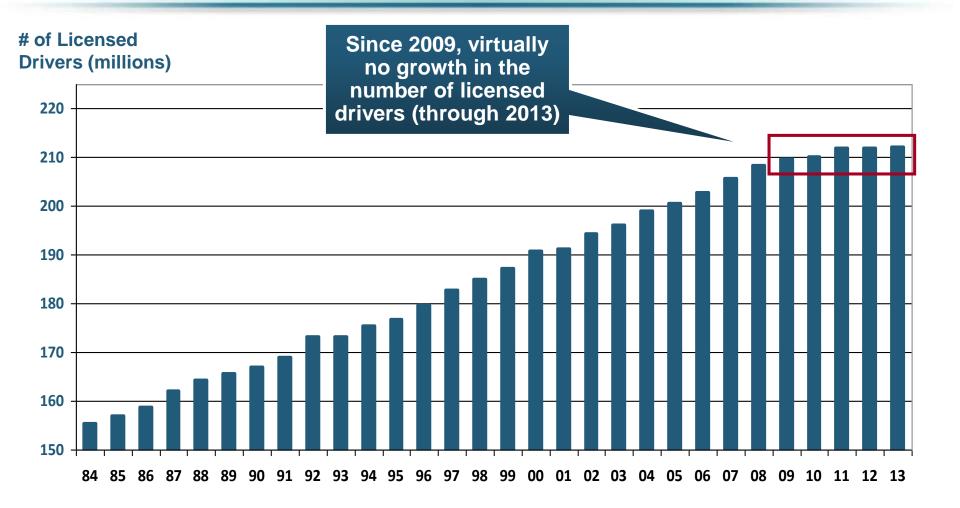
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Yearly car/light truck sales will likely continue at current levels, in part replacing cars that were held onto in 2008-12. PP Auto premium might grow by 3.5% - 5%.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (10/15); Insurance Information Institute.

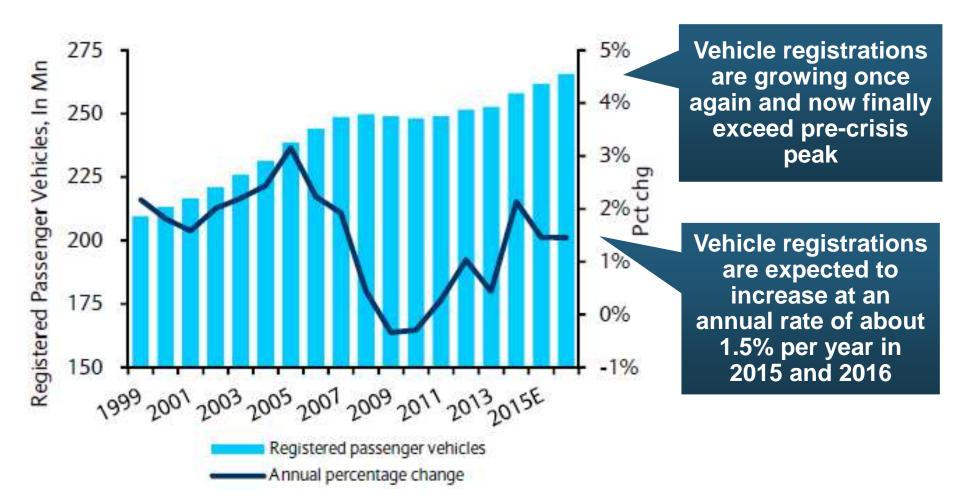
Number of Licensed Drivers, 1984-2013



Sources: 2015 Ward's Motor Vehicle Facts & Figures, p. 53; I I.I.

NSURANCE

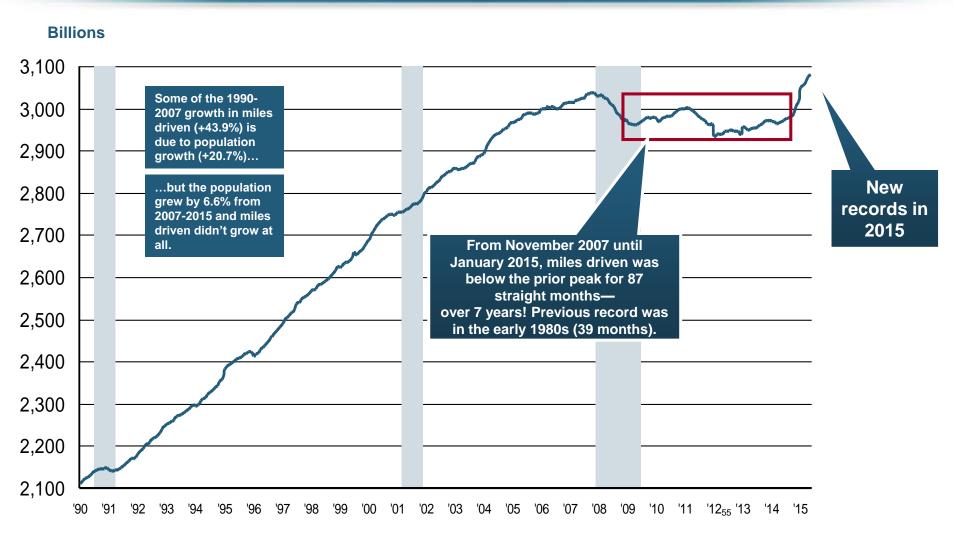
Number of Registered Passenger Vehicles in US, 1999 – 2015E



Sources: Bureau of Transportation Statistics; Barclays Capital estimates, August 2015.

NSURANCE

America is Driving More Again: Total Miles Driven*, 1990–2015



INSURANCE

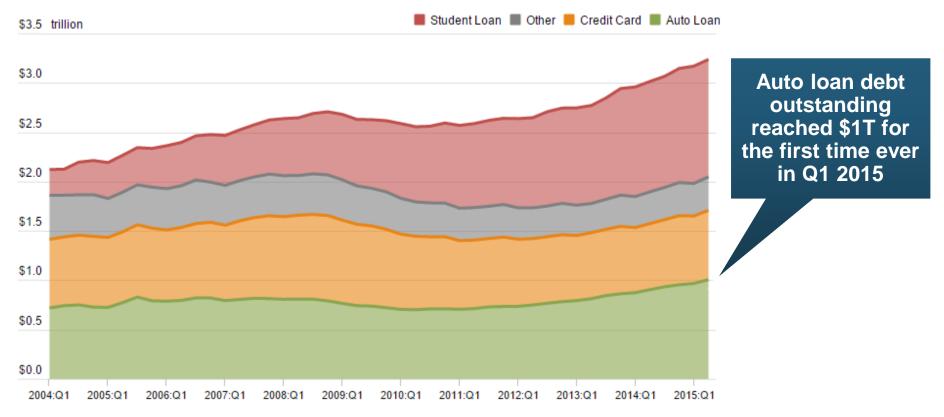
INFORMATION

*Moving 12-month total. The 2015 data are through May 2015, the latest available. Note: Recessions indicated by gray shaded columns.

Sources: Federal Highway Administration (<u>http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm</u>); National Bureau of Economic Research (recession dates); Insurance Information Institute.

Auto Loans and Other Non-Housing Debt, 2004 – 2015:Q1

Non-Housing Debt Balance



Banks are becoming increasingly aggressive in marketing auto loans

Source: Federal Reserve Bank of NY Consumer Credit Panel/Equifax; I. I.I.



Millennials as Employees

A Talent Gap Looms

Insurance Industry Employees Are Older than in Most Industries

Insurance Talents Crisis: Millennials Are the (Only) Solution



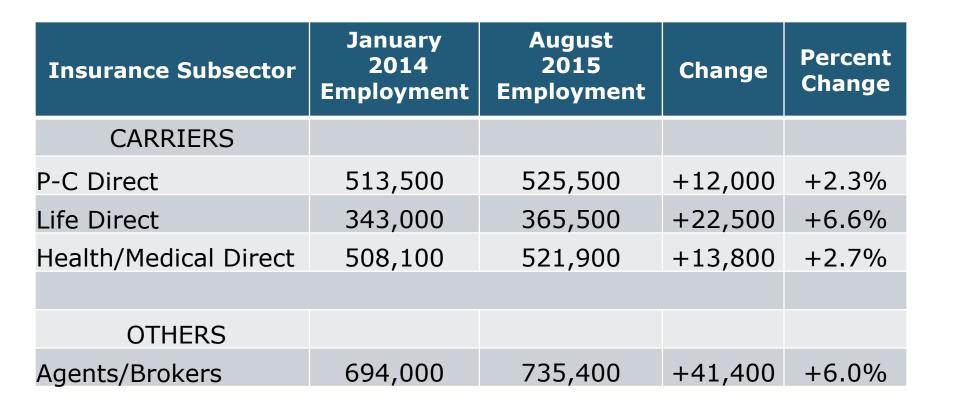
By 2020, insurers will have an estimated <u>400,000 job openings</u>

The number of professionals 55 and older is 30 percent higher in the insurance industry than the rest of the economy

The number of insurance professionals over 55 has risen 74 percent during the past 10 years.

Sources: http://www.propertycasualty360.com/2013/04/17/insurance-industry-crisis-400000-positions-to-fill

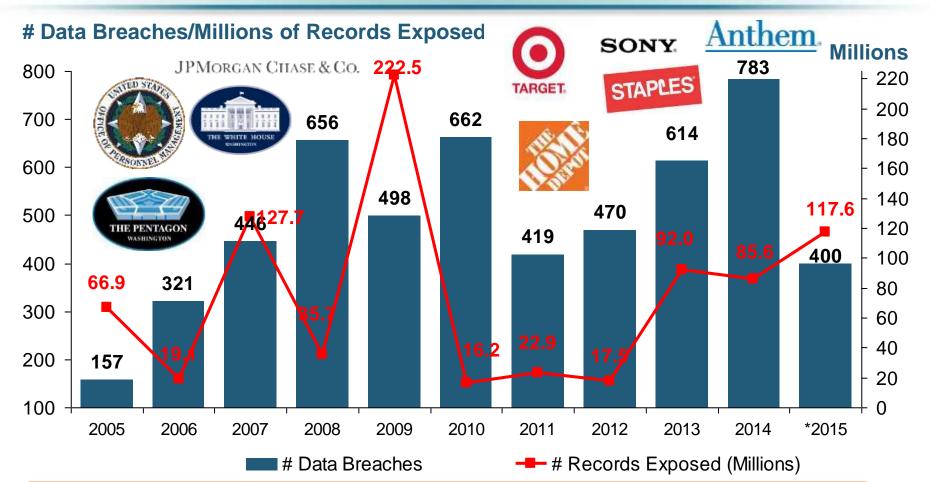
Overview of Insurance Sector Employment Changes, Jan. 2014 – Aug. 2015*



*Data are through August 2015 and are preliminary (i.e., subject to later revision); seasonally adjusted.

Source: US Bureau of Labor Statistics as compiled by the Insurance Information Institute.

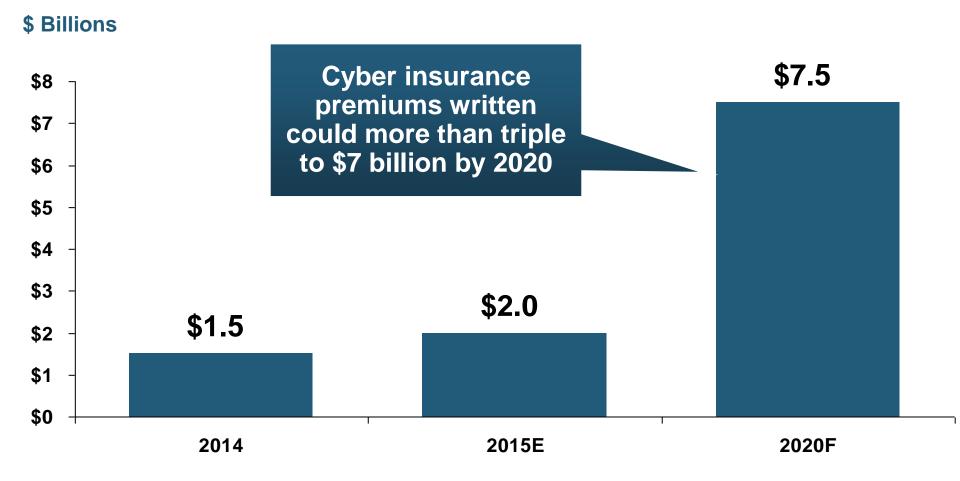
Data Breaches 2005-2015, by Number of Breaches and Records Exposed



The total number of data breaches (+27.5%) hit a record high of 783 in 2014, exposing 85.6 million records. Through June 30, this year has seen 117.6 million records exposed in 400 breaches.*

*Figures as of June 30, 2015, from the Identity Theft Resource Center, http://www.idtheftcenter.org/images/breach/ITRCBreachReport2015.pdf

Estimated Cyber Insurance Premiums Written, 2014 – 2020F



Source: Advisen (2014 est.); PwC (2015, 2020); Insurance Information Institute.



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