



STATE OF THE PUBLIC ENTITY INSURANCE MARKET & *EMERGING RISKS*

January 2020

Presented by:
Alliant Insurance Services

(THIS INFORMATION HAS BEEN CONSOLIDATED FROM VARIOUS INDUSTRY SOURCES)

Alliant



Presentation Overview

- Highlights
- Property/Casualty Industry Performance
- The New Reality – Emerging & Evolving Risks
- Toward the Future

Highlights

Global insured losses from catastrophes in 2019 are estimated to be \$56 billion, down sharply from \$93 billion in 2018 and well below the annual average of \$75 billion over the previous 10 years, Swiss Re Ltd. said in a year-end report.

Storms wreaked havoc in both hemispheres as Hurricane Dorian devastated the Bahamas and hit North Carolina, causing insured losses of some \$4.5 billion. Japan was twice vexed as Typhoon Faxai hit the Kanto region that includes Tokyo in mid-September, with insured losses estimated to be \$7 billion.

Key Industry Metrics

- Insurers' combined ratio **deteriorated** to 98.0% for the 3rd Qtr 2019 from 97.5% in the prior-year period.
- **Policyholder surplus increased** 9.5% from the end of 2018 to **\$821B** (as of September 30, 2019). A new record high.
- Private U.S. property/casualty insurers' **net income slipped** 0.2% to \$49.5 billion during the first 9 mos. of 2019.

Signs point to a healthy insurance market, however, **weather extremes**, sea level rise, wildfires, catastrophic losses, **social inflation** and **investment earnings** remain areas of **concern for insurers**.



PROPERTY/CASUALTY INDUSTRY PERFORMANCE



Survey shows significant adjustments in Q3 2019 U.S. commercial insurance prices

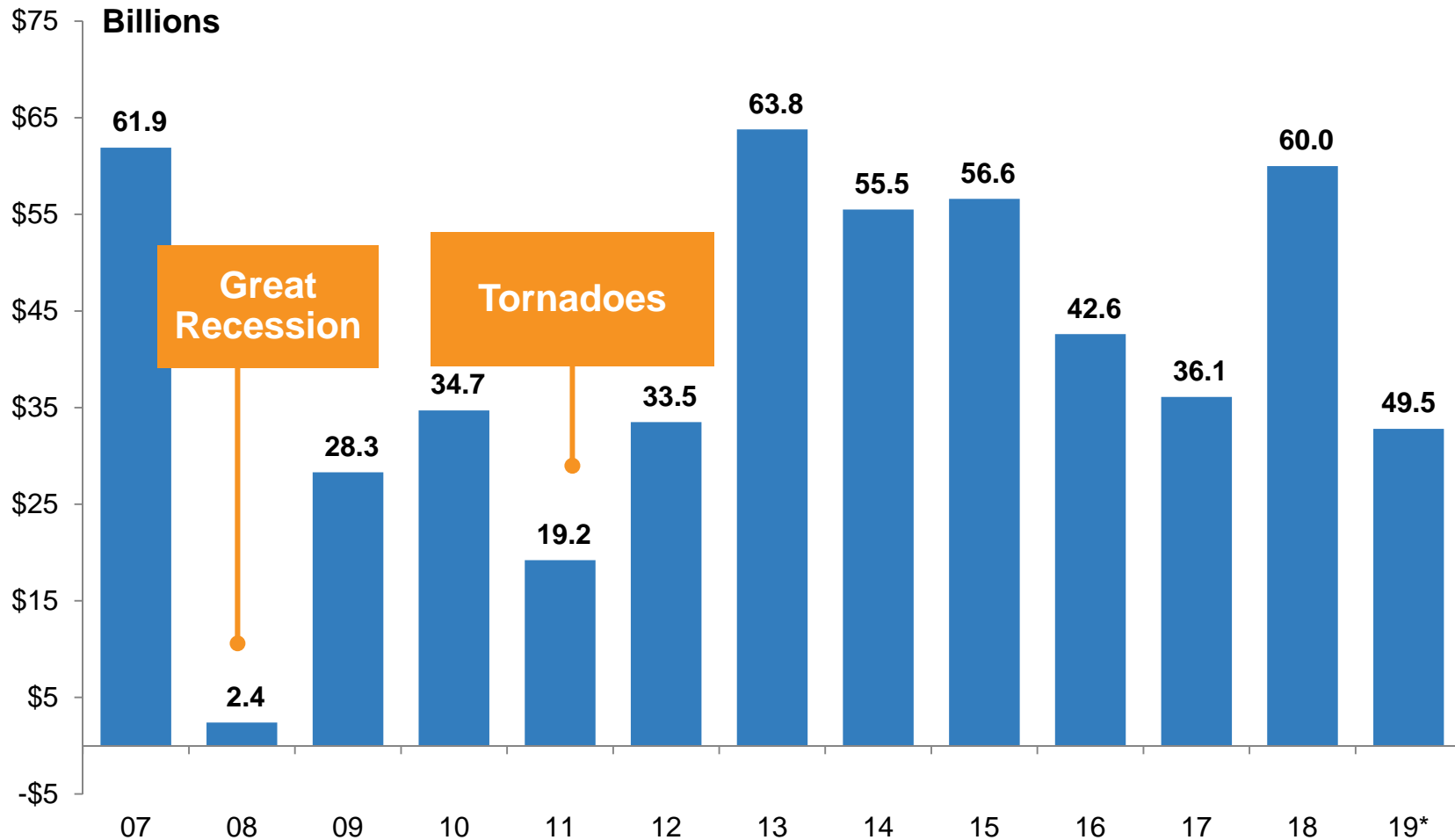
U.S. commercial insurance prices again accelerated in the third quarter of 2019, according to Willis Towers Watson's most recent Commercial Lines Insurance Pricing Survey (CLIPS).

Data for four standard lines indicated significant price increases in the third quarter: commercial auto, commercial property, excess/umbrella liability, and directors and officers liability, as all of these except property exceeded double digit rate increases.

The past outlier in the results, **commercial auto**, saw reported price increases near or above double digits for the eighth consecutive quarter.

CLIPS indicates ongoing material price reductions for workers compensation, in contrast to nearly all other surveyed lines, though the decreases have tempered somewhat.

Are Insurers Making Money? (P/C net income)

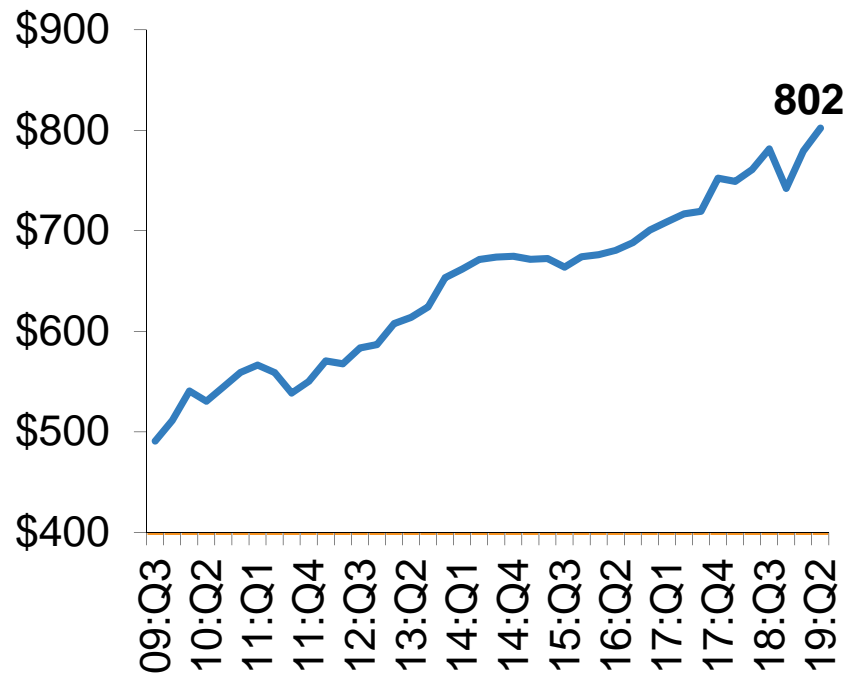


Through third quarter. Adjusted for inflation using the BLS CPI calculator.
Sources: ISO/APCI.

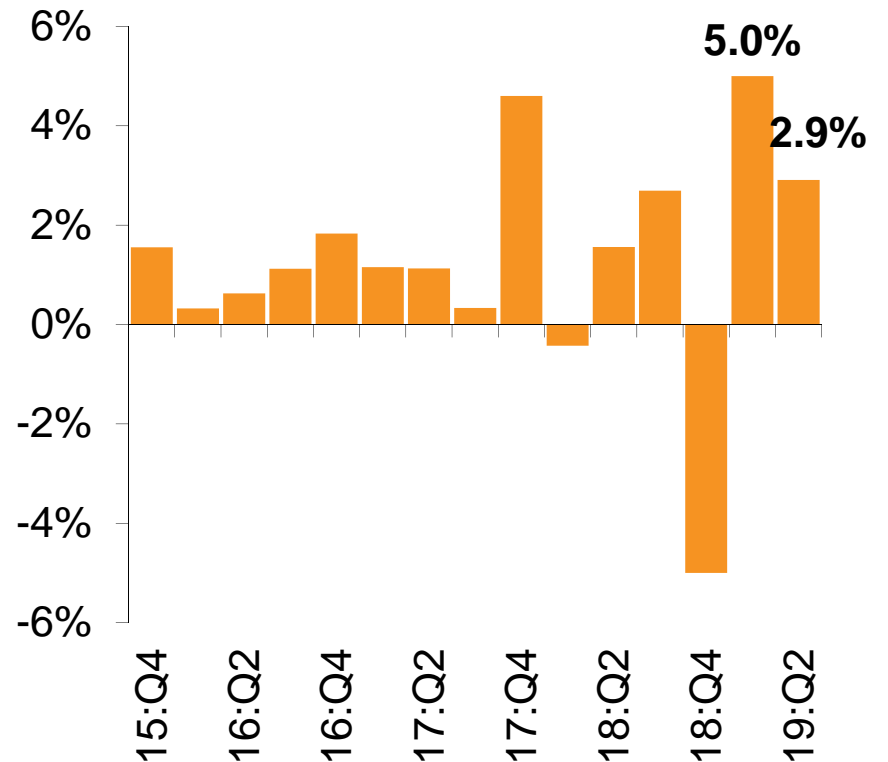
Policyholder Surplus By Quarter

Amount of Surplus

(\$ Billions)



Change from Prior Quarter

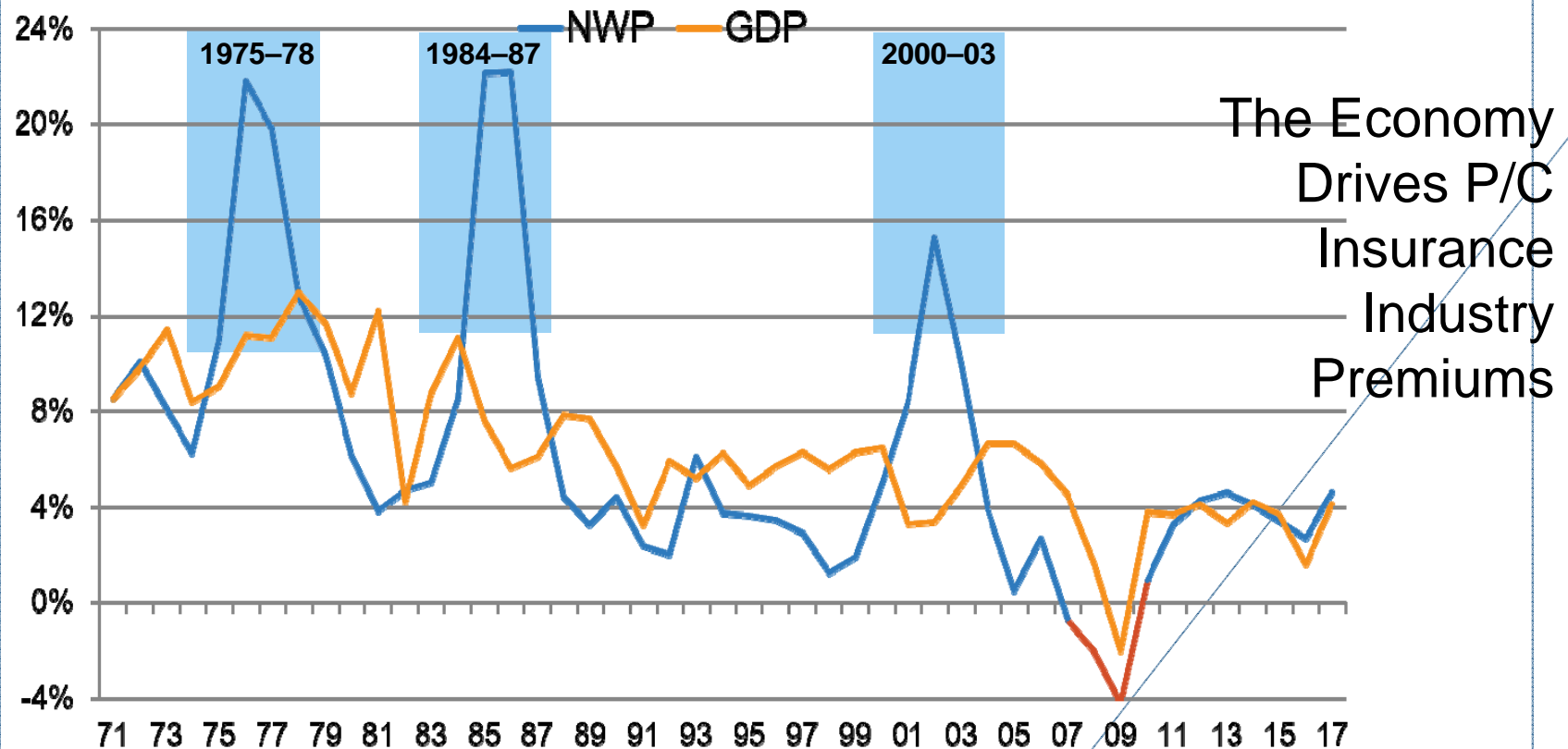


Surplus Has Rebounded from Q4 Decline Caused by Stocks. 78 Cents of Premium per Dollar of Surplus.



Sources: ISO, A.M .Best.

Historical P/C Net Premium Growth vs. Nominal GDP - 1971-2017

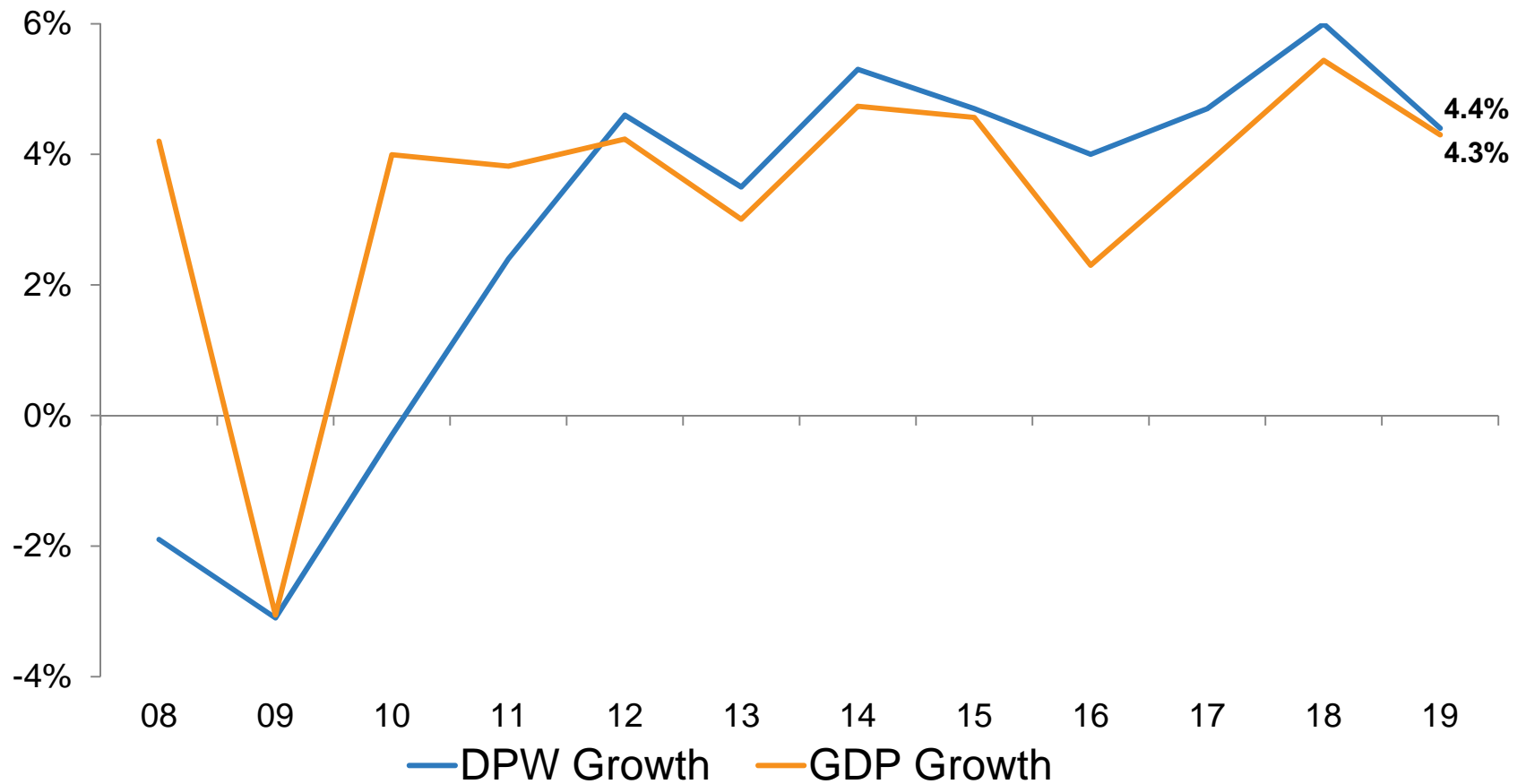


Except for the three “hard markets” in this 47-year period - 1976–77, 1985–86, and 2001–03 - Net Written Premiums track Nominal GDP — not year by year but recently fairly well.

Sources: A.M. Best (1971-2013), ISO (2014-17); U.S. Commerce Dept., Bureau of Economic Analysis; I.I.I.
Shaded areas denote “hard market” periods



Are Insurers Growing? Net P/C Premium Growth v GDP Growth



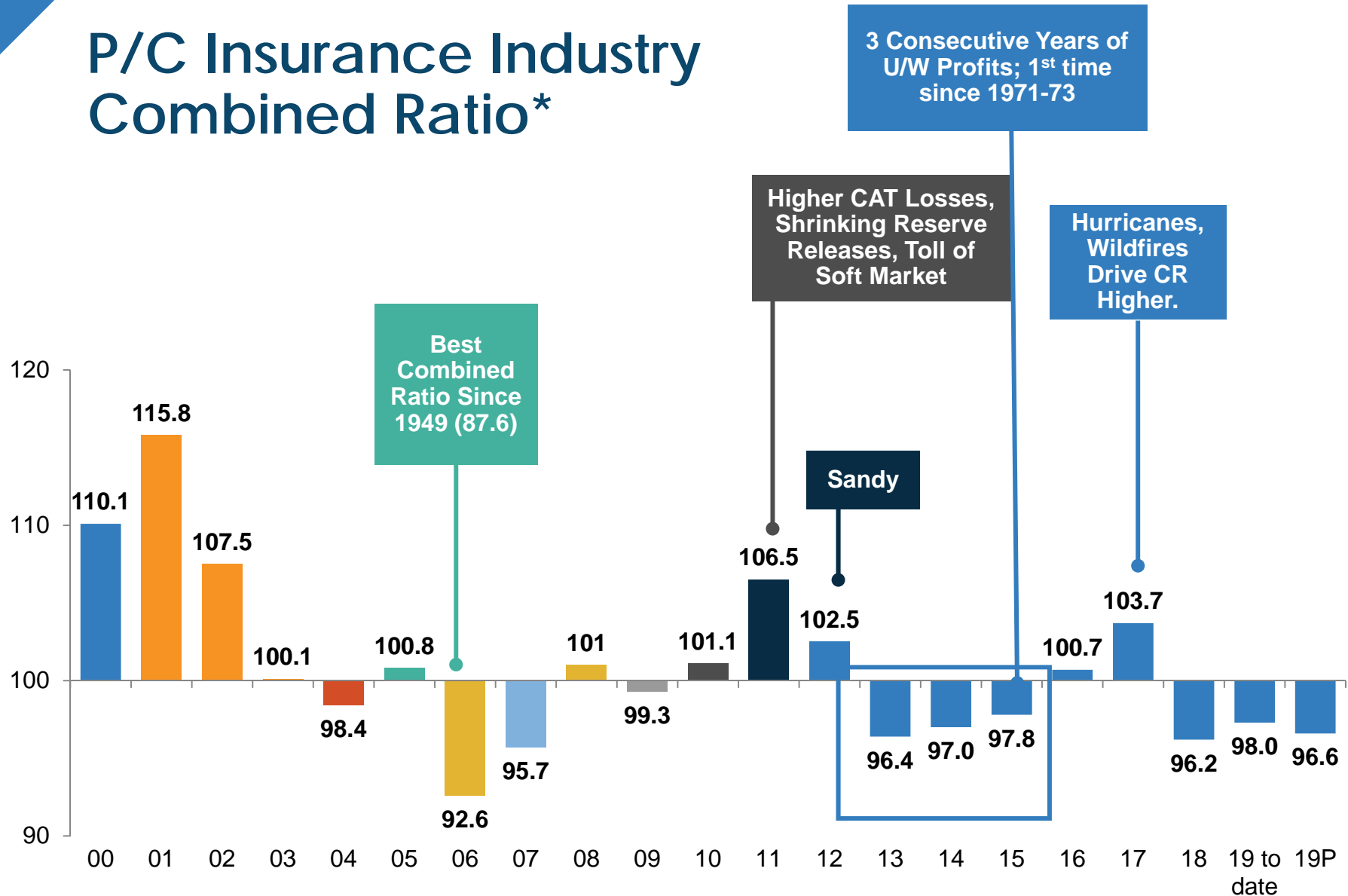
Net Written Premiums - \$474.6B at Third Quarter.



All data through second quarter.

SOURCES: NAIC data sourced through S&P Global Intelligence,⁹ Bureau of Economic Affairs, Insurance Information Institute.

P/C Insurance Industry Combined Ratio*



Through Q3.

*Excludes Mortgage & Financial Guaranty insurers 2008-2014.

Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

Sources: A.M. Best; ISO, a Verisk Analytics company.





Take Aways

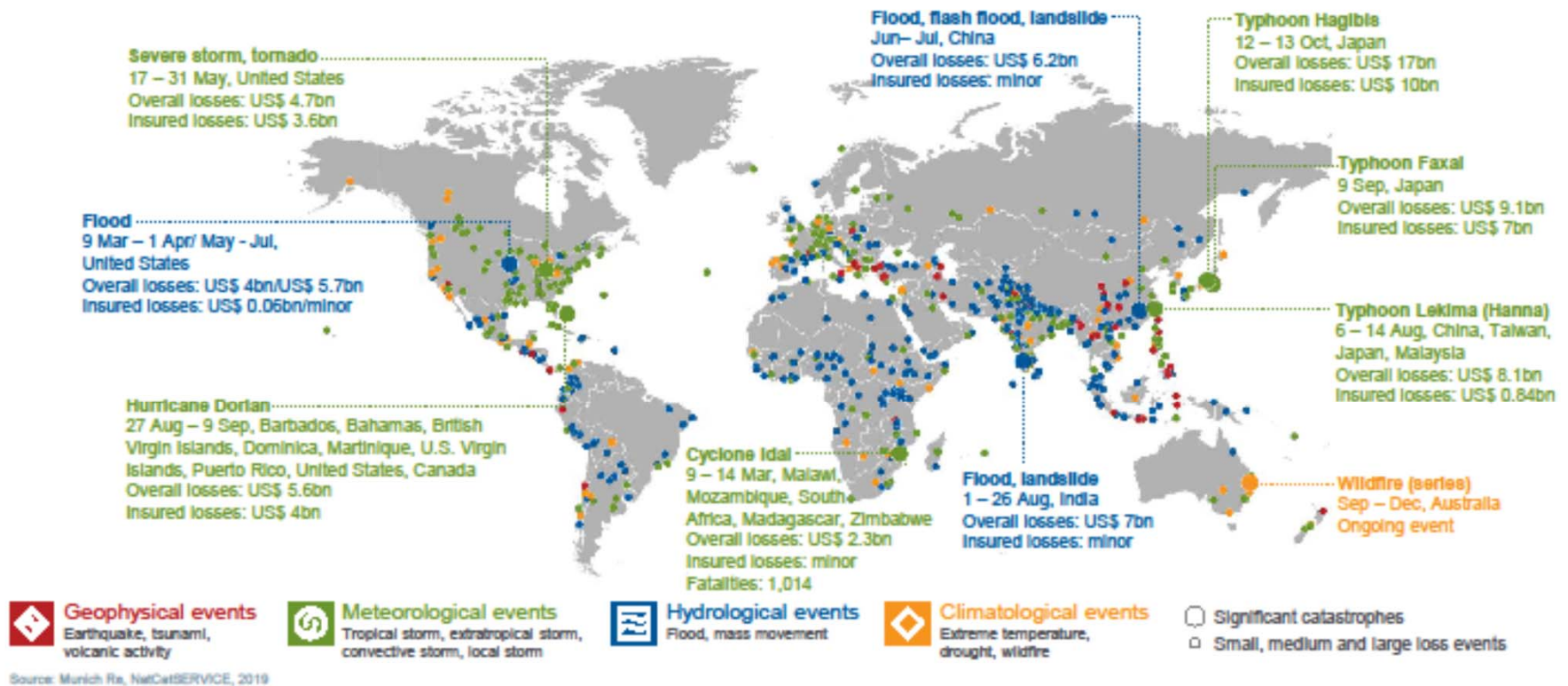
- Despite recent and continued large losses, carriers continue to have near record levels of surplus.
- The Insurance Market continues to be stable, with plenty of assets to pay claims.
- Insurance remains a good investment for transferring risk.
- *However, due to market pressures and underwriting concerns, pricing continues to increase in most areas.*
- California has unique challenges, underwriting scrutiny due to continued loss development.

IMPACT OF NATURAL CATASTROPHES

World Natural Catastrophes, 2019



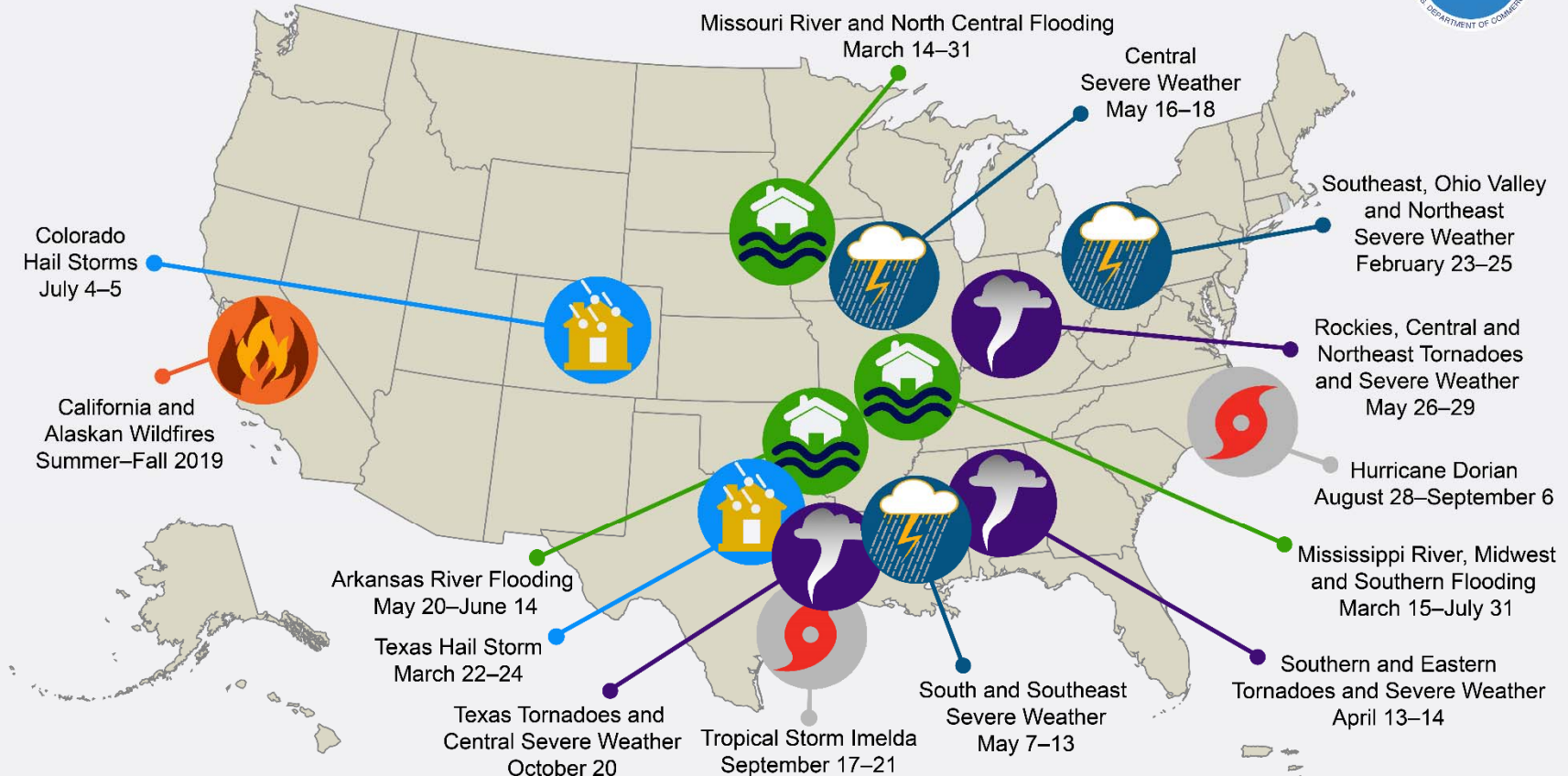
Tropical cyclones, extreme storms and floods caused overall losses of US\$ 150bn



Source: © 2019 Munich Re, NatCatSERVICE

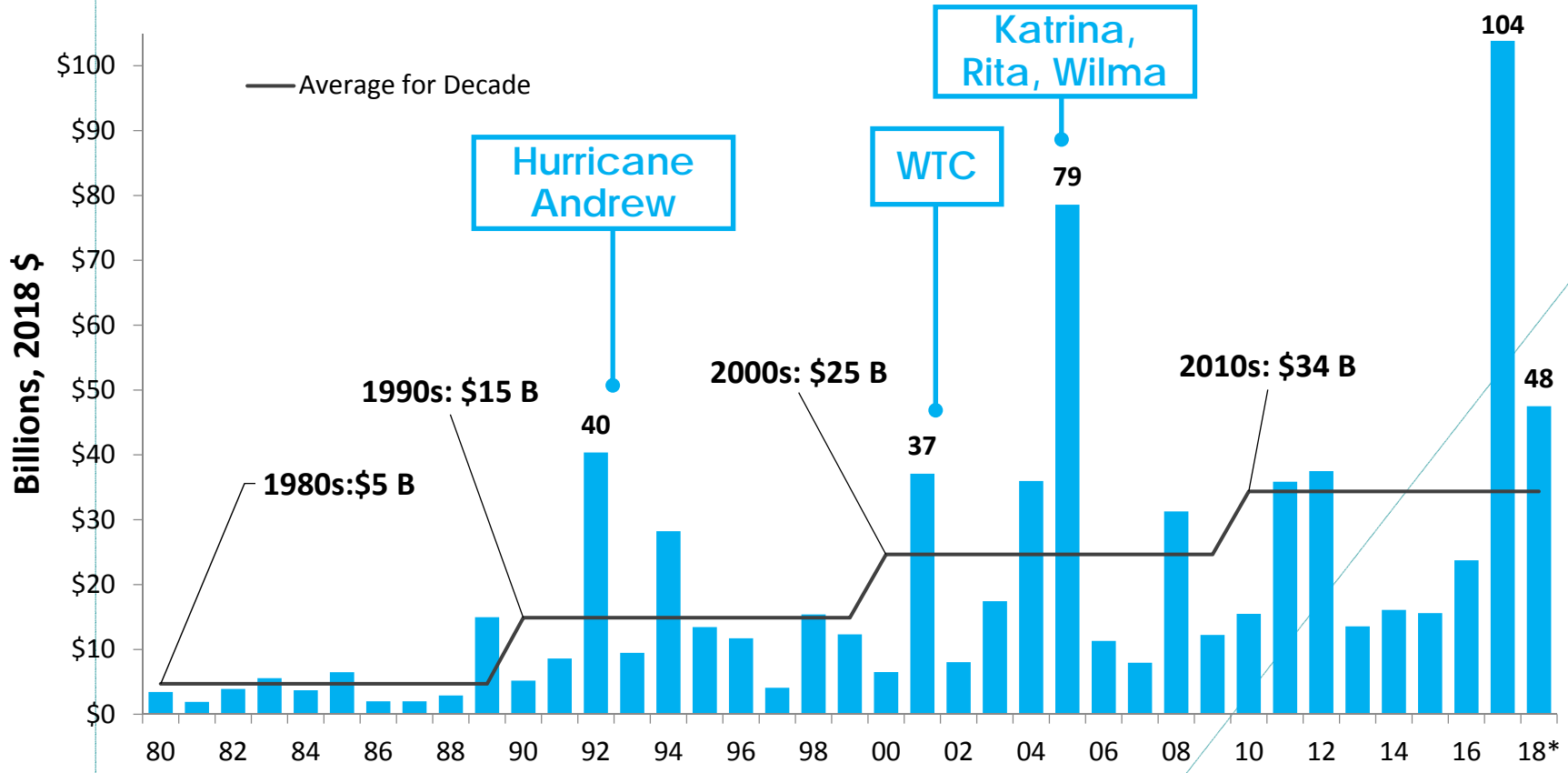
U.S. Natural Catastrophes, 2019

U.S. 2019 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the 14 separate billion-dollar weather and climate disasters that impacted the United States during 2019.

U.S. Inflation-Adjusted Insured Cat Losses



2018 – Third worst year for U.S. Insured Catastrophe Losses. Average Insured Loss per Year for 1980-2018 is \$19.3 B.

*2018: Inflation-adjusted estimate, subject to change. 2010s is average of 2010 to 2018. All losses are Direct. Sources: Property Claims Service, a Verisk Analytics business; Insurance Information Institute.



Extreme Events: A Troubling Trend

Rank	Date	Event	Cause
1	Aug. 2005	Hurricane Katrina	Hurricane
2	Sep. 2017	Hurricane Maria	Hurricane
3	Sep. 2017	Hurricane Irma	Hurricane
4	Sep. 2001	September 11 Events	Terrorism
5	Oct. 2012	Hurricane Sandy	Hurricane
6	Aug. 2017	Hurricane Harvey	Hurricane
7	Aug. 1992	Hurricane Andrew	Hurricane
8	Jan. 1994	Northridge, CA earthquake	Earthquake
9	Sep. 2008	Hurricane Ike	Hurricane
10	Oct. 2005	Hurricane Wilma	Hurricane

Three of 10 Worst US Catastrophes Occurred in 2017.



Source: The Property Claim Services® (PCS®) unit of ISO®, a Verisk Analytics® company.

Hurricanes

Potential threats from hurricanes include powerful winds, heavy rainfall, storm surges, coastal and inland flooding, rip currents, tornadoes, and landslides.



Hurricane Dorian
affecting Bahamas & Eastern Seaboard
September 2019

Convective Storms



Commonly known as *thunderstorms*, intense heating causes a parcel of moist air to rise from the earth's surface into upper levels of the atmosphere, causing weather hazards such as **lightning, heavy rain, hail, flash flooding and tornadoes.**

Heat Waves

We have recently experienced an increase in high heat events around the globe.

Man-made OR Global Warming – Does it really matter? We must take steps to protect ourselves from unforgiving heat.



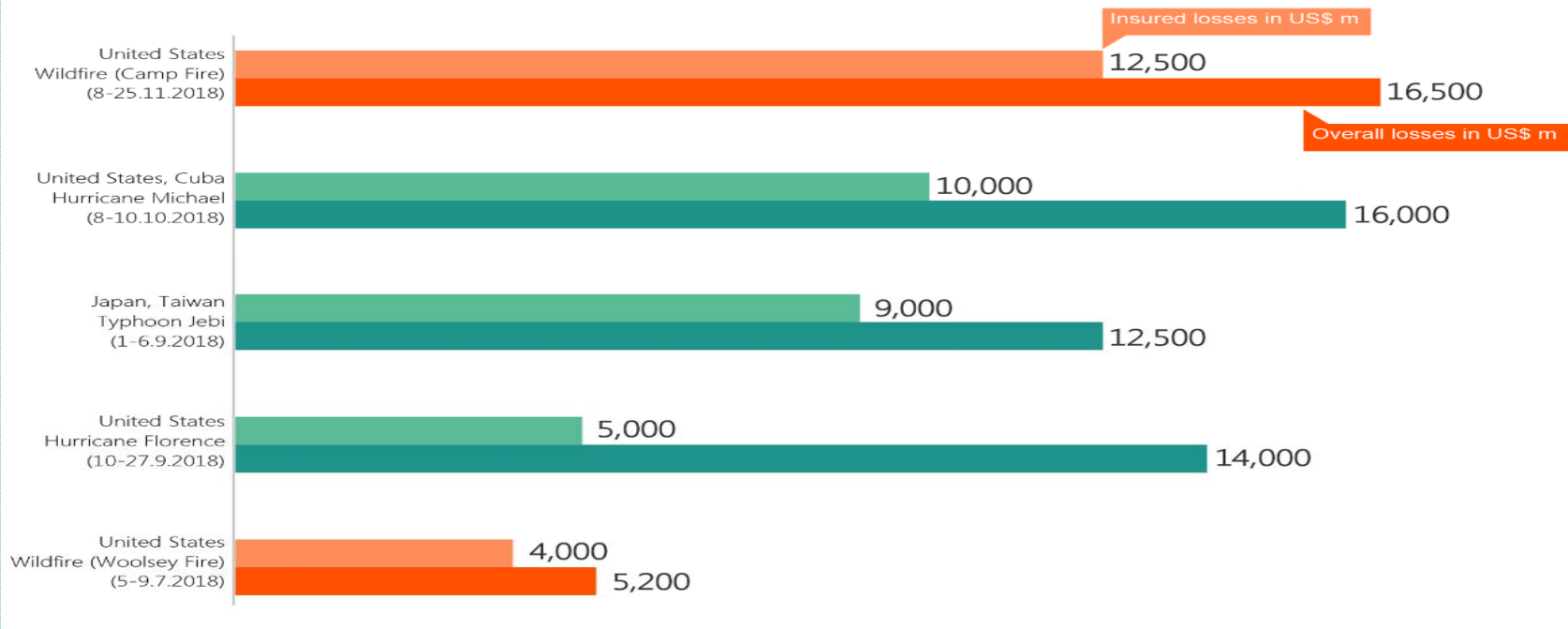
Wildfires



On average, more than 100,000 wildfires, also called wildland fires or forest fires, clear 4 million to 5 million acres (1.6 million to 2 million hectares) of land in the U.S. every year. In recent years, wildfires have burned up to 9 million acres (3.6 million hectares) of land.

An inferno in the Amazon, two-thirds of which is in Brazil, threatens the rainforest ecosystem and also affects the entire globe.

The Camp Fire in California was the costliest natural disaster of 2018 for insurers



The Lights Go Out for Many PG&E Customers



October 9 through 12, 2019, almost 800,000 customers had their power turned off after PG&E reported high winds across the northern part of the state. These wind events have caused some of the most destructive wildfires in California's history.

The shutoffs will continue for many years....

Earthquakes



The banks of the Huallaga River are cracked after an earthquake in Puerto Santa Gema, on the outskirts of Yurimaguas, Peru, Sunday, May 26, 2019.

The Alaska Earthquake of Nov 30, 2018

A magnitude (M) 7.0 earthquake struck north of Anchorage, Alaska, on November 30, 2018.

This is a story of resilience – The Vine Road in Wasilla closed due to earthquake damage on Friday and reopened to traffic the following Tuesday





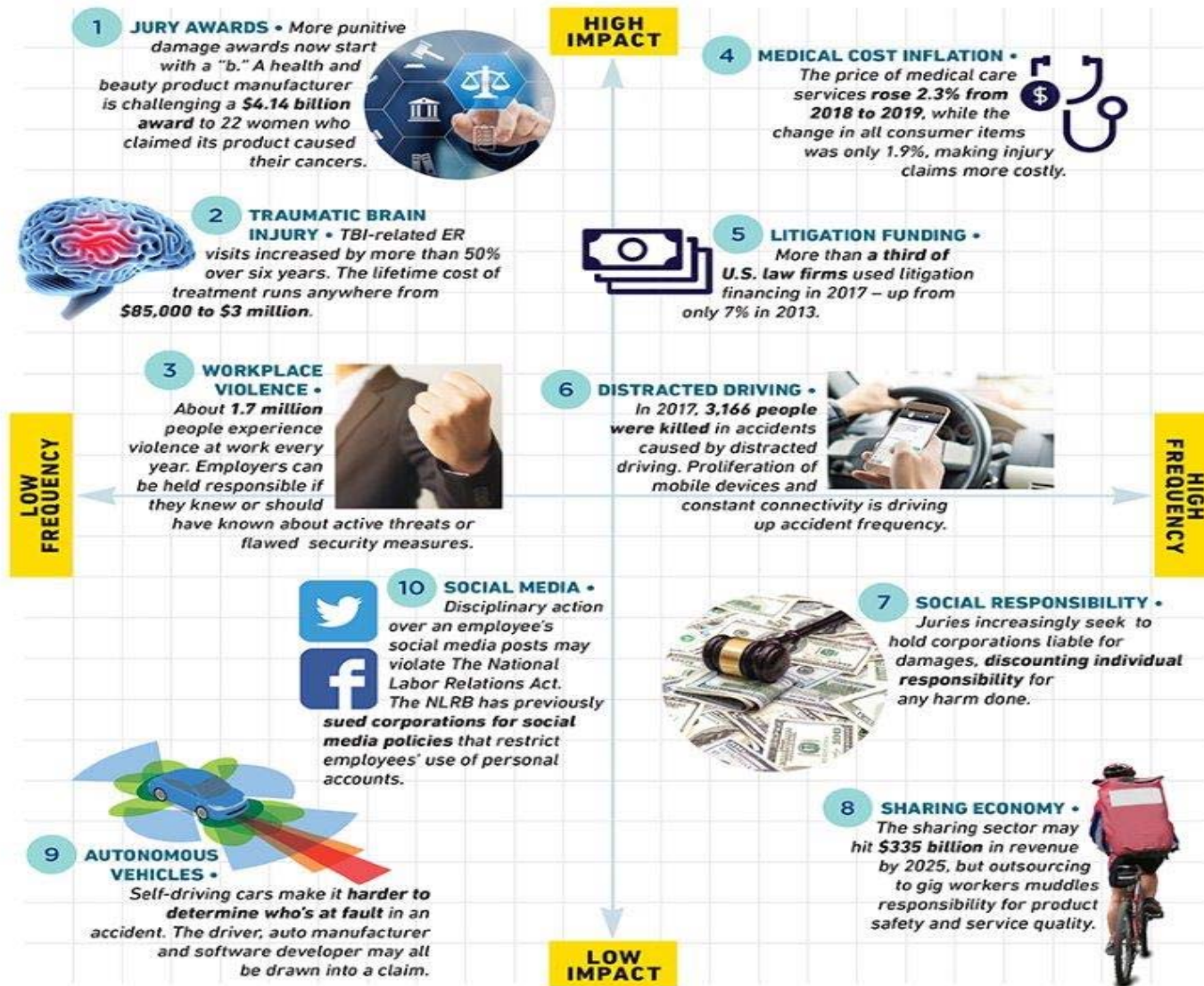
Take Aways

- Are your emergency response plans in place for wildfire, earthquake and flooding?
- Does your entity have a plan for Public Safety Power Shutoffs in your region?
- Are your employees prepared for days without power?
- California's exposure to large property losses from wildfire has changed the property market.
 - Over 350,000 rural homes in California have had their insurance cancelled
 - Public entities seeing increases of 50% or more






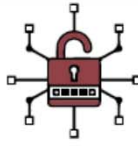
THE NEW REALITY

10 critical risks shaping the liability landscape today



Note: The Risk Matrix is produced by the Risk and Insurance® editorial team. Liberty Mutual Insurance is the presenting sponsor and has no responsibility for the content.

Perceptions of future risks - 10 major emerging risks

1. Climate Change		2. Cybersecurity Risks	
3. Geopolitical Instability		4. Social Discontent and Local Conflicts	
5. Natural Resources Management		6. Artificial Intelligence and Big Data	
7. Pollution		8. Pandemics and Infectious Diseases	
9. New Threats to Security		10. Macroeconomic Risks	

Aging Infrastructure



Data Breaches & Cyber Security

Passwords are the first line of defense

TWO-FACTOR AUTHENTICATION

Is the practice of combining any two of these three types of authentication: something you know, something you have, and something you are. Two-factor authentication is a recommended best-practice for protecting sensitive data and resources, and is required by law when handling some types of information.



PROS

Hackers have two layers of protection to crack, greatly decreasing the chance for a successful attack. Reduces dependence on passwords, improving user experience and ultimately lessening cost.

CONS

Cost and complexity – organizations have to deploy and manage more than one form of authentication. The exception is virtual smart cards, which incorporate a password and therefore only require one deployment to achieve two-factor authentication.

SOMETHING YOU ARE

I.E. a biometric. A user authenticates based on a fingerprint check, voice print, retinal scan, or other unique physical attribute.



PROS

Convenience – nothing to carry or remember.

CONS

Can be spoofed and may give false positives/negatives. Not as widely standardized as other solutions. Require additional readers, scanners, and support. High acquisition and maintenance costs. Impossible to revoke without revoking the user's biometrics.

SOMETHING YOU HAVE

I.E. a smart card, token, virtual smart card – a physical item carried by the user that is unique to them and is presented during the authentication process.



PROS

Usually requires physical access to the smart card or token in order to be hacked. If authenticating based on PKI, there is no password or PIN transmitted over the network. Smart card technology has been in use for over a decade and is a proven and understood strategy.

CONS

Requires users to keep track of additional, unique pieces of hardware for wireless services. Requires IT to replace hardware when lost. Additional costs associated with acquisition and replacement.

VIRTUAL SMART CARD: a subset of "something you have," a virtual smart card functions like a traditional token or smart card, but is embedded into the PC, laptop, tablet or phone.

PROS

Nothing needs to be carried, reducing management costs significantly. Based on an industry-standard piece of hardware already included in most enterprise devices, thus eliminating hardware acquisition costs for smart cards and smart card readers.

CONS

The virtual smart card is tied to a specific device, and can only be used to authenticate from one endpoint.

SOMETHING YOU KNOW

I.E. passwords, PINs, patterns, passcodes, and any other verification based on information only the user should know. Passwords have been the primary means of verifying user identity since the need to protect data emerged.



PROS

Users are accustomed to them; there is no special hardware required; and almost all applications accept them.

CONS

Easily hacked via social engineering, phishing, poor password hygiene, and brute force attacks. Also require users to remember and properly guard highly unique, complex passwords; and IT management to meet when forgotten.

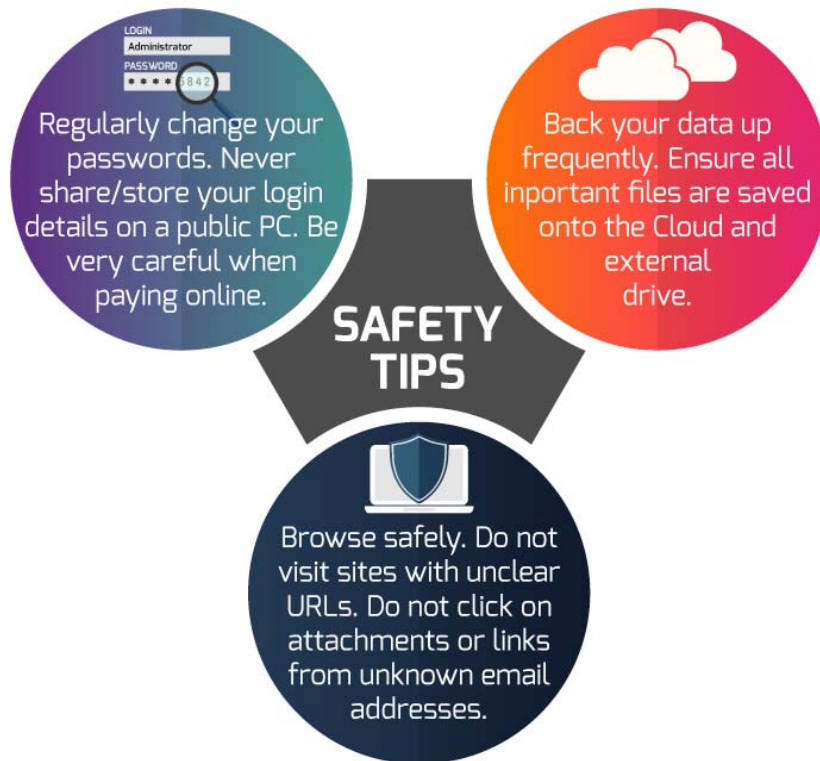
RANSOMWARE

HOW TO KEEP YOUR DATA SAFE

RANSOMWARE IS A MALICIOUS SOFTWARE THAT ATTACKS USERS FILES AND DATA, ENCRYPTING IT WITH A SECRET KEY, AND FORCING THE USER TO PAY A RANSOM.



The ransomware virus is usually disguised as an attachment or link. It can come from visiting unsafe, suspicious websites, clicking on malicious content or applications.



EVOLVING: Ransomware

The ransomware attacks on public entities in Texas, Florida, Maryland, Georgia and elsewhere this year have raised questions not only about paying ransoms but also about the role of insurance in helping these targets get back to serving the public.

The FBI says organizations should never pay ransom and, for the most part, local and state governments hit by ransomware attacks this year appear to have adhered to that policy. According to Barracuda, only three of the 55 government entities attacked this year paid ransoms.

EVOLVING: e-Crime – Fraudulent Instruction

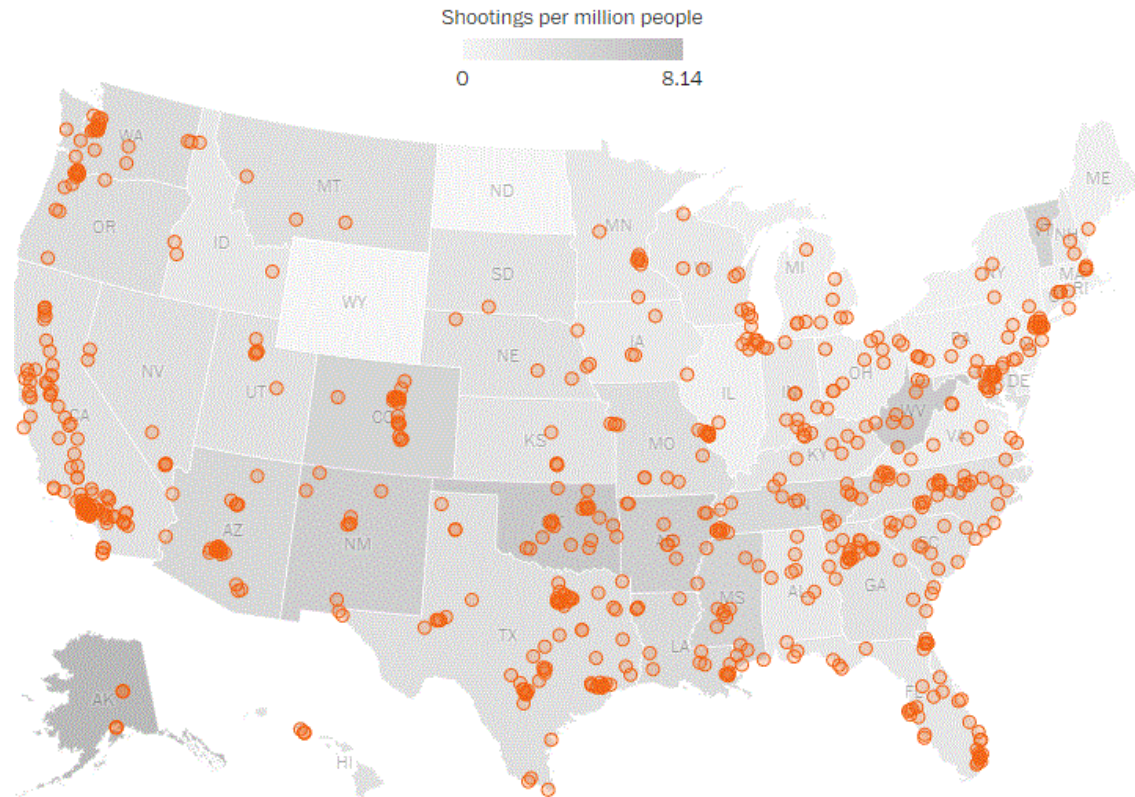
Crime coverage can be extended to cover Wire Transfer Fraud, which is:

- A fraudulent transfer, not authorized by the entity

However, Fraudulent Instruction is different, it is:

- Your employee, in good faith, accidentally authorized a transfer as a result of fraudulent instruction
- This coverage carries a higher retention (\$25k min) and lower limit (\$250,000 typically)
- There is a substantial additional premium to add this coverage, with a supplemental application
 - *Fraudulent Instruction, to the insurance industry, is an “Internal Controls” issue, and applications will focus on safety checks, confirmations, authority levels, etc.*
- Cyber policies can also cover Impersonation Fraud

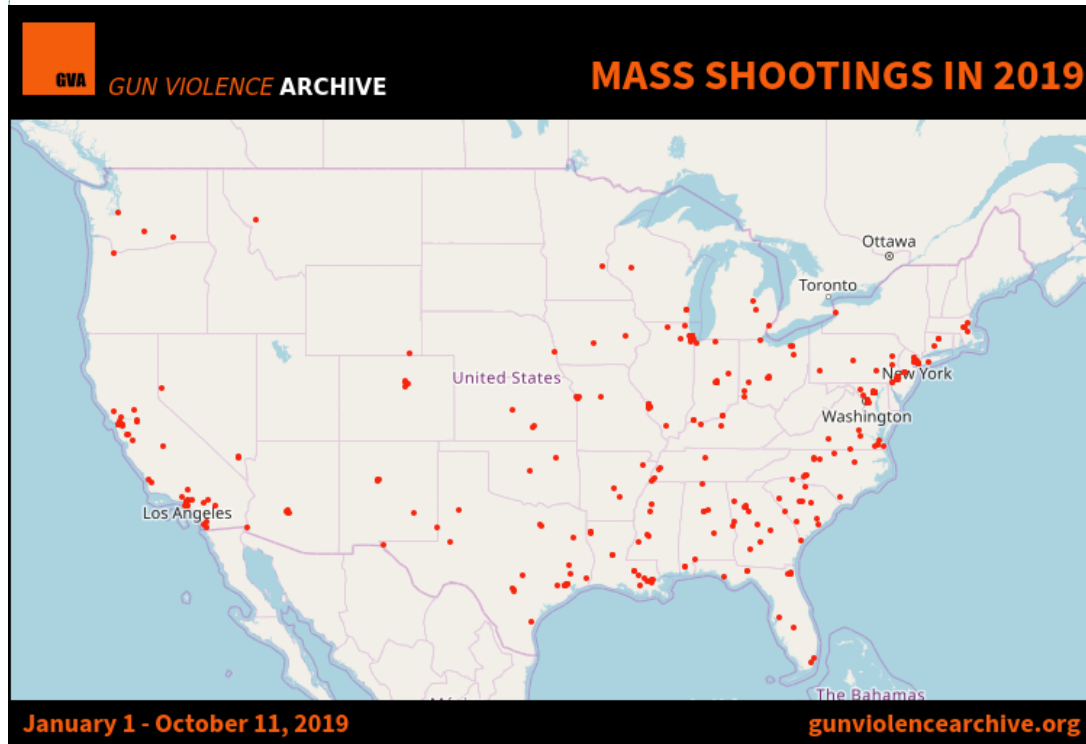
EVOLVING: Officer Involved Shootings 2019



There are 43 shootings with unverified locations that are not shown on the map.

The Washington Post is tracking this national figure best, with 717 thus far in 2019, lagging behind the 992 logged in 2018.

EVOLVING: Mass Shooting Incidents



Since the beginning of calendar year 2019, the Gun Violence Archive (GVA) has logged 340 mass shootings, killing 184 people and injuring 673 more.

GVA uses a purely statistical threshold to define **mass shooting based ONLY on the numeric value of 4 or more shot or killed, not including the shooter**. The FBI does not have a definition of Mass Shooting. They have a definition of Mass Murder which is four or more KILLED. It includes gun violence, bombings or any other incident where four or more are killed. Mass Murder would statistically be a subset of Mass Shooting.

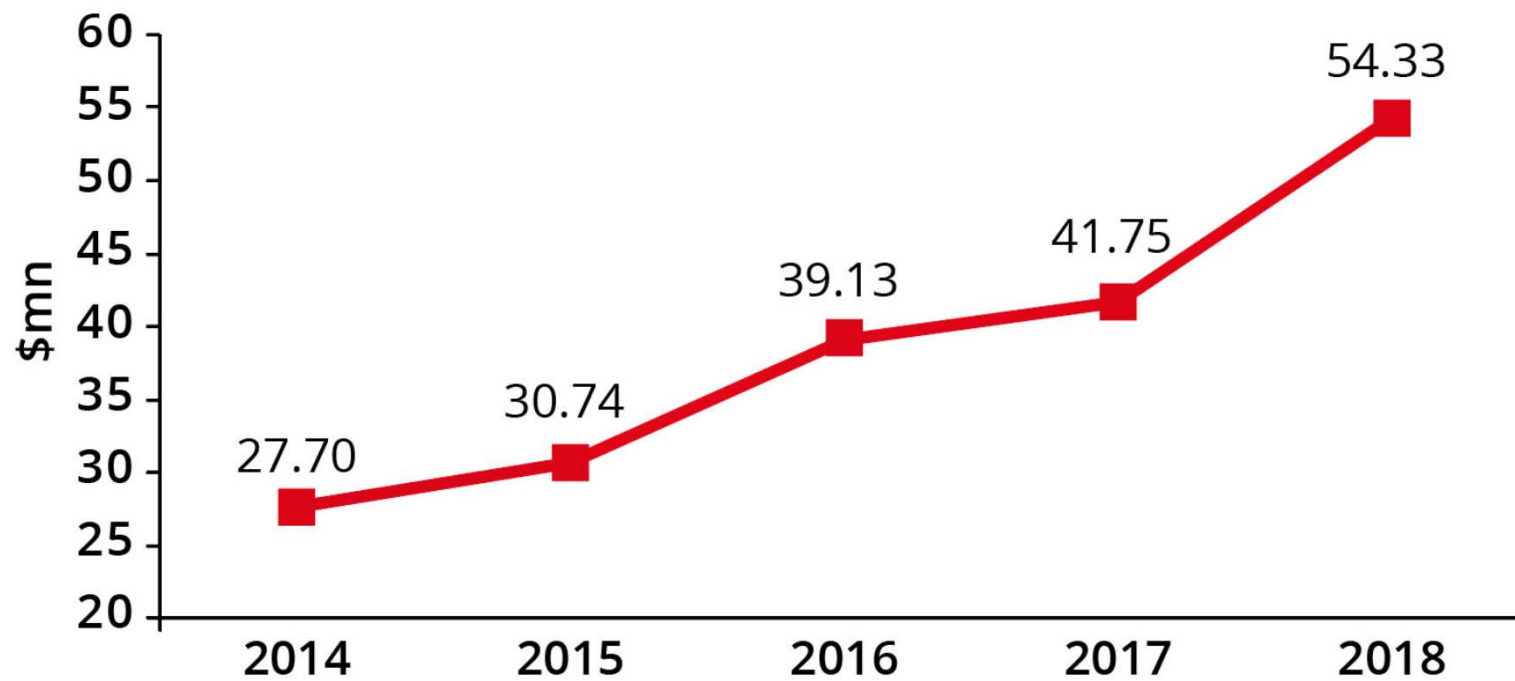
MGM Grand Settlement

- \$800M Settlement
- 58 fatalities, hundreds of injuries
- Lawsuits focused on security & failure to notice stockpile
- MGM was also a victim of the attack, and sustained large economic loss.
- MGM no admission of liability as part of settlement.
- MGM warned investors that the cost to defend cases could exceed settlement value.
- What precedent does this set?



Social Inflation

Median average - top 50 US verdicts



Source: *Shaub, Ahmuty, Citrin & Spratt*



Micromobility – The Last Mile

There are now multiple ways to get around for the last mile of your journey –

- e-Scooters
- Shared Rides
- Dockless Bikes
- Floating Water Bike Rentals
- And soon flying cars

Safety for users and bystanders alike is something to monitor as usage increases.

Scooters

They're multiplying...but are they safe?



...Nearly half of e-scooter injuries involve head trauma, CDC study says

Water Bikes for Rent

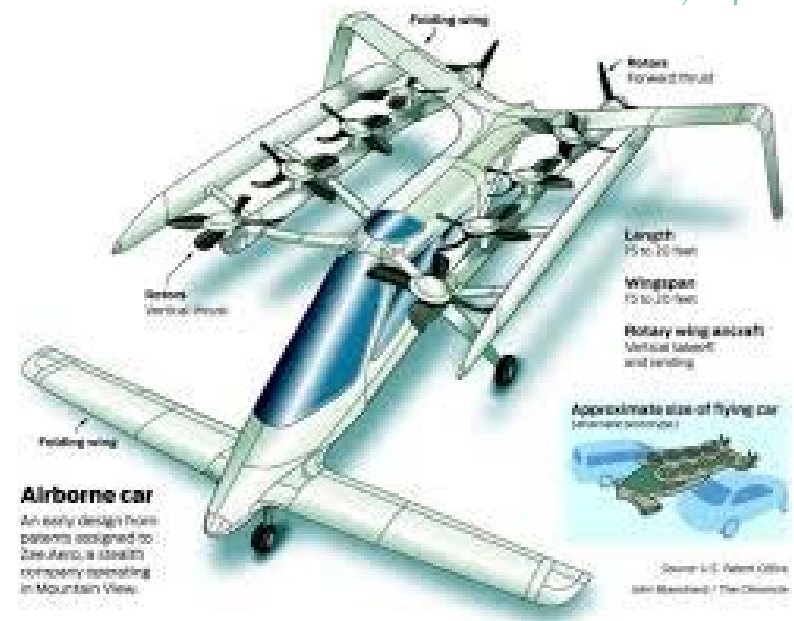
A new way to beat the traffic!



Watch the skies!

Is that a flying car passing you by.....

Maybe it's Google's Larry Page on his way to a meeting





Take Aways

- What's your capital improvement budget?
- Cyber Security: "Not if, but When" your entity will suffer a data breach. Are you prepared?
- Is your entity associated with any large public events (festivals)? What security measures are in place? Should you purchase specific event coverage?
- Micromobility continues to push the boundaries.



TOWARD THE FUTURE



Looking Forward 12-18+ Months . . .

- Drone Flights & Deliveries
- The Internet of Things & Rising Cyber Dependency - "5G"
- Cyber crimes escalate
- 3D Printing (non-metal)
- Aging Infrastructure woes
- Rising income and wealth disparity
- Social Distraction & Wasted Productivity
- Privacy Concerns

Looking Ahead



Although 2019 has seen fewer insured catastrophes than in recent history, expect upward pressure on property rates.

Public agencies that are continuing to see high verdicts and liability settlements will continue to see increases and the marketplace for coverage will continue to retract.

Dramatic price increases and reductions in coverage can be expected for Sexual Abuse and Molestation.

PTSI presumptions will impact public safety Work Comp exposures.



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Thank You!

*Please contact us if you would
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Questions?

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