The Year of the CATs
INTRODUCTION
Last year was a very active one for natural catastrophes (CATs) that impacted the U.S. and the Caribbean. A report by the National Oceanic and Atmospheric Administration indicates 16 billion-dollar weather and climate disasters occurred in different parts of the country including powerful hurricanes, widespread tornado outbreaks, large hailstorms, massive wildfires, severe flooding events, extreme drought, and a freeze. To put this into perspective, the 2007-2016 10-year average number of U.S. billion-dollar weather and climate disasters was just 9.7, reflecting a 65% increase in 2017.

![U.S. 2017 Billion-Dollar Weather and Climate Disasters](image)
The insured losses for all 2017 CATs combined are greater than $90 billion,¹ making 2017 the second worst year on record in U.S. history (after 2005).

Representing three-quarters of the total CAT insured losses, the dominant events last year were three Category 4 Hurricanes including Harvey ($25.7 billion), Irma ($18.2 billion), and Maria ($24.0 billion). Damages from any one of these hurricanes significantly dwarfs the insured losses of other large 2017 CATs: wildfires ($13.2 billion, total); tornadoes, hail and strong winds ($7.8 billion, total); and drought ($1.9 billion).²

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1 APCIA, based on Insurance Information Institute, Property Claim Services and FEMA; losses include federal flood losses.
2 Property Claim Services and FEMA (hurricane losses) and Aon Benfield (all other losses).
THE YEAR OF THE CATS

Hurricanes Harvey, Irma, and Maria affected roughly 25.8 million people. Based on the latest available data, total insured losses including federal flood losses caused by Harvey, Irma, and Maria are about $67.9 billion. A brief overview of each hurricane follows:

- **HARVEY** (late August). Making landfall twice in Southeast Texas and hovering over the region for four days, this massive hurricane brought more than 60 inches of rainfall, causing major flooding with storm surges up to 7 feet in some areas. About 90 people died from this storm.

- **IRMA** (early September). Considered the most powerful Atlantic hurricane in recent history, this storm had a long path that struck many of the Caribbean Islands before moving to the U.S. mainland. It brought heavy rainfalls and dangerous winds to much of Florida and parts of Georgia, Alabama, and South Carolina. Irma killed nearly 100 people; most of these deaths were in Florida.

- **MARIA** (mid-September). This immense hurricane plowed across the Caribbean, largely impacting the U.S. Virgin Islands and creating a desperate humanitarian crisis in Puerto Rico. Rainfalls up to 18 inches caused life-threatening flash floods and mudslides, leaving Puerto Rico in shambles with demolished homes, destroyed businesses, downed power grids, limited access to clean water and medicine, and an uncertain death toll. Thousands of people have fled the island.

In terms of total insured losses (including federal flood losses), Hurricane Katrina (2005) and Superstorm Sandy (2012) still rank higher than Harvey, Irma, and Maria. The latest available data indicate that Harvey is the 3rd worst hurricane in U.S. history, while Maria and Irma are 5th and 6th respectively.

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FEMA. A fourth hurricane (Nate) took place in early Oct. 2017, making landfall in Louisiana. Nate was a Category 1 storm whose estimated insured losses are less than 1 billion.

APCIA, based on data from Insurance Information Institute, Property Claim Services and Federal Emergency Management Agency
THE WILDFIREs OF 2017
While hurricanes devastated parts of the Atlantic and Gulf coasts, wildfires were pervasive throughout the West and Northwest part of the country, especially California. In October, a historic firestorm damaged or destroyed more than 15,000 homes, businesses, and other structures, mostly in and around Napa and Sonoma Counties. This wildfire caused 44 deaths, and represents the costliest wildfire event on record. In early December, uncommonly large fires burned hundreds of homes in the Los Angeles area. The largest of these was the Thomas fire that consumed over 285,000 acres; it is the largest recorded California wildfire. Drought conditions were a catalyst to these and numerous other wildfires including a Montana wildfire that burned at least 1 million acres were in Montana alone. In total, last year’s U.S. wildfires cost $13.2 billion in insured losses and killed 54 people.

OTHER LARGE CATs OF 2017
In addition to hurricanes and wildfires, many other billion-dollar disasters occurred in the U.S. in 2017 resulting in total insured damages of about $10 billion. These events include:
- Extreme drought caused sizable damage to agriculture in the Dakotas and Montana.
- Severe hail, high winds and tornadoes occurred in the Midwest, Texas and eastern states. Denver’s baseball-sized hail resulted in the most expensive hail storm in Colorado history. In addition, two very large tornado outbreaks occurred in the Central and Southern states – with 70 and 79 tornadoes apiece.
- Heavy rainfall, up to 15 inches, in the Midwest caused historic levels of flooding along many rivers.
- A severe freeze heavily damaged fruit crops in the Southeast.
- Heavy, persistent rains across northern and central California led to substantial property and infrastructure damage from flooding, landslides and erosion.

THE IMPACT OF THE 2017 CATs ON THE P/C INDUSTRY
The 2017 year of the CATs, primarily due to Harvey, Irma, and Maria will have repercussions on the property casualty (p/c) insurance industry. According to A.M. Best, the expected net underwriting loss in 2017 was $29.3 billion, much greater than its 2016 net underwriting loss.
estimation of $6.5 billion. This will affect the pre-tax operating income, causing it to drop dramatically from $41.1 billion in 2016 to $14.8 billion in 2017. As a result, the 2017 combined ratio is expected to weaken from 100.9 in 2016 to 105.1 in 2017.

Despite the unprecedented underwriting losses in 2017, Best does not foresee any instability in the U.S. personal lines segment in 2018. Given the very strong policyholder surplus of $755.4 billion at year-end 2017, the property casualty industry is highly capitalized to withstand the risks of catastrophic events – even those from last year. With 2017 net written premiums of $554.7 billion, the industry’s low premium-to-surplus ratio (0.734) reveals enough of a cushion to absorb large losses. The insured damages caused by 2017 CATs will not likely create a capacity shortage, and most insurers – especially those with sufficient geographical and product diversification – should be able to cope with their losses and remain solvent.