2021 Trends in Catastrophe Risk

Every year is a record setter

Trends in Catastrophe Risk: Every Year is a Record-Setter

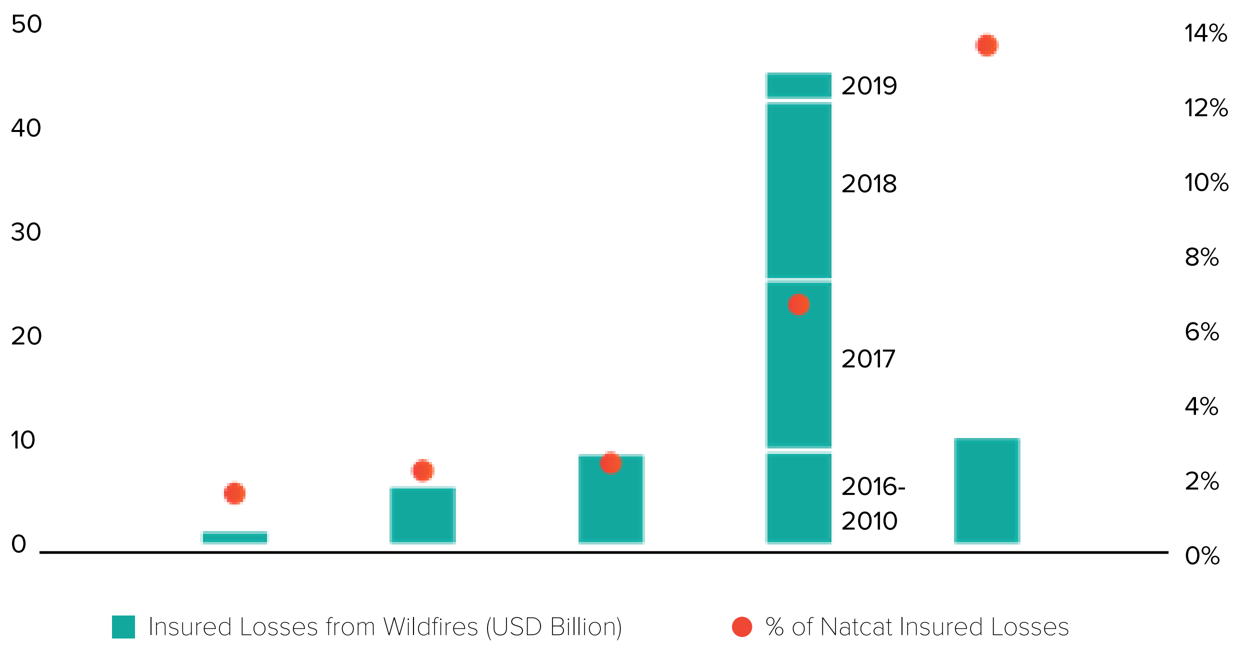
Since 2017, when insured losses spiked, record-setting catastrophe (cat) events have become the new normal. The heightened frequency and severity of perils, such as wildfire and flood, indicate that the past is becoming less reliable as a predictor of future losses. As a result, new forms of third-party hazard data, along with multiple views of risk, are critical to effective underwriting, portfolio management, and claims response.

Insured losses from major cat events totaled $78 billion in 2020—the fourth-largest total since 2011 and about 17% higher than the 10-year average according to a report by Willis Re. Vaughn Jensen, executive vice president, catastrophe analytics, at Willis Re North America, comments, "A record number of North Atlantic hurricanes formed in 2020, but landfalls did not occur in great numbers or touch areas with highly concentrated insured exposures. If they had, the story of 2020 would have been dramatically different. However, the sheer number of storms, and the continued incidence of billion-dollar wildfires in the U.S. and elsewhere, plus the severity of the Iowa derecho event, gives the industry cause to consider new emerging trends."

Secondary Perils Driving Cat Losses

According to Swiss Re, small and mid-size secondary perils accounted for more than 50% of the $152 billion in insured cat losses in 2017, 2018, and 2019.[4] A prime example of such a secondary peril is wildfire. Between 1990 and 2010, the number of houses in the wildland-urban interface (WUI) grew 41%. This increased urbanization combined with rising temperatures and reduced rainfall, contributed to a dramatic increase in wildfire insured losses.[5]

Global Insured Losses from Wildfires Since 1980 by Decade (USD Billion), at 2020 Prices



Source: Swiss Re

Wildfires have become significant loss drivers for the industry. Insured losses totaled less than $10 billion in the period 2000-2009 and then dramatically rose to $45 billion in the next decade.[6]

> “The main underwriting risk for insurers is to underestimate premiums due to reliance on historical loss data or incomplete/outdated models...Many catastrophe models do not fully account for rising exposure from increased value concentration in a rapidly urbanising and more vulnerable world.”
>
> - Swiss Re, “5 lessons in 5 charts: resilience in an age of climate extremes”

The Past is Becoming Less Representative of the Future

From rapidly intensifying hurricanes to wildfires paying little heed to seasonality, historical patterns are becoming less representative of the future. In places like California, Florida, Louisiana, Mississippi, and Texas, insureds are experiencing devastating wildfire and hurricane seasons. As these perils intensify, insureds struggle with non-renewals, rising rates, or lack of coverage—while insurers struggle with how to effectively limit their exposure in high-risk areas and more effectively price for these intensifying risks.

A volatile risk like wildfire, for example, necessitates multiple expert data points to effectively select and price the risk. It's clear that a single score is no longer sufficient. Instead, insurers may need a risk score from one provider that accounts for fire, smoke, and wind-driven embers, along with risk mitigation data from another provider that includes distance to fire station and fire hydrants. Next, it's important to understand current portfolio accumulations in proximity to the perspective risk. Furthermore, there may be other potential risks from other data sources that aid in developing a more holistic view of risk.

The above underwriting report, as shown within Insurity's SpatialKey Underwriting solution, includes critical fire station data from HazardHub along with the relative risk score of the peril itself from Willis Re. This combination of data points helps to contextualize and price risk in a single view.

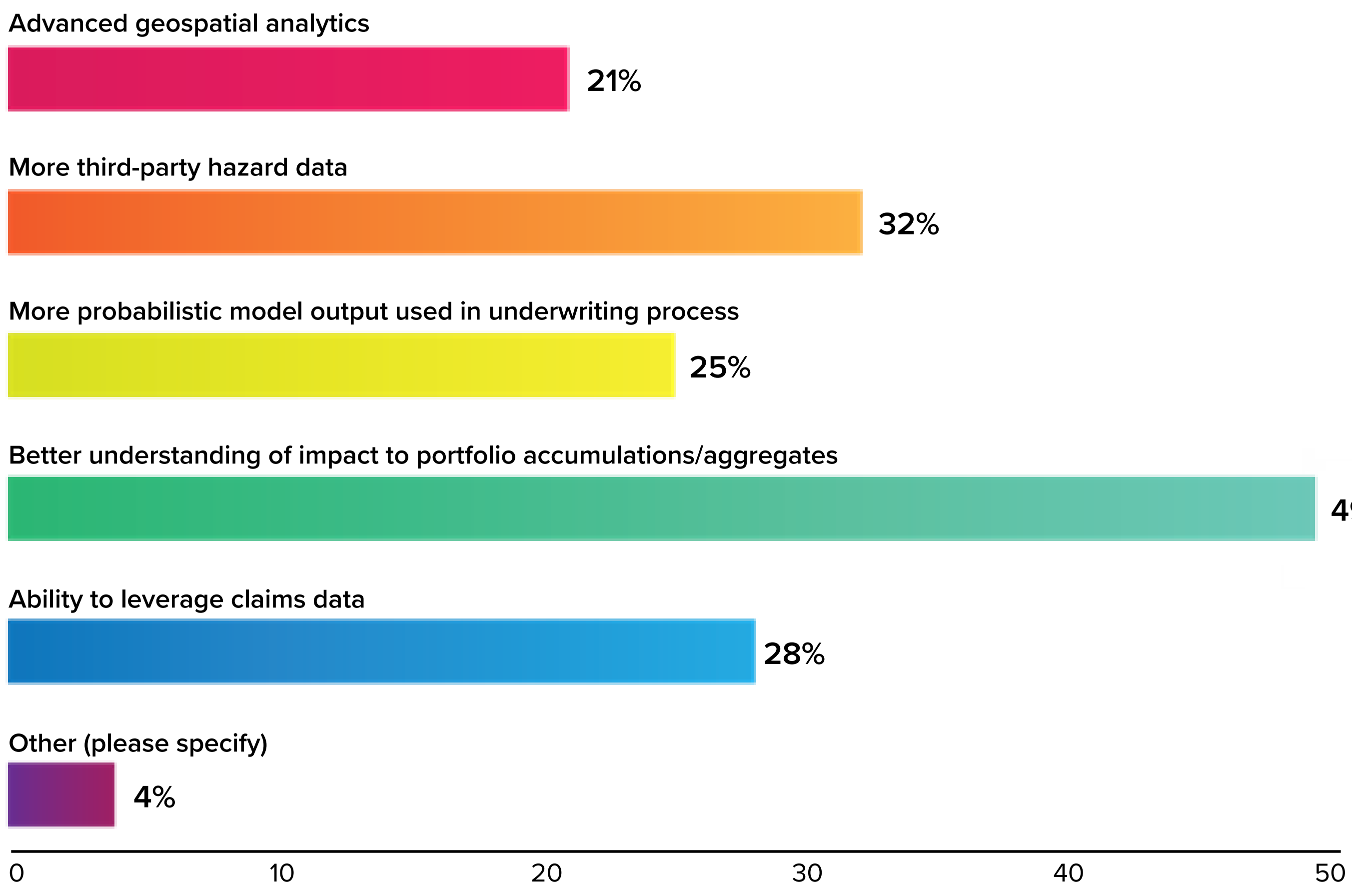
Complete Views of Risk Are Critical

Obtaining a complete view of risk is critical to effective underwriting and portfolio management practices; however, some insurers still struggle to leverage data and analytics that are accessible, easy to comprehend, and actionable.

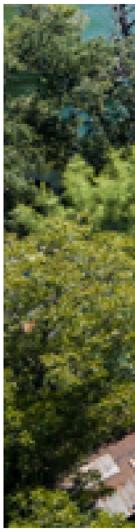
While data choice is abundant, some insurers may find they're still hopping between disparate platforms to access and visualize risk information from multiple sources—from hazard scores to historical cat event exposure, proximity to risk mitigation services, and management of portfolio accumulations. This adversely impacts speed to quote and increases underwriting costs, and for many, underwriting decisions are still ultimately made against incomplete information.

Across all lines of P&C insurance, third-party data enables better-informed decisions and more accurate pricing; yet, as the Insurity Underwriting Survey showed, most insurers still utilize relatively few third-party data sources. That appetite, however, is growing, with 32% of respondents indicating they plan to expand their access to third-party data at the point of quote in 2021.

What are you doing to better understand catastrophe risk and adequately price and select for it at the point of quote?



Source: 2020 Insurity Underwriting Survey



Likewise, 47% of respondents indicated that a better understanding of their accumulations of risk is a priority. This is in line with the need to more effectively manage capacity in high-risk areas and more effectively price for these more frequent and severe risks.

Ideally, underwriters should have the ability to leverage blended views of disparate data and analytics solutions to derive insight. This balanced approach removes dependence on a single input that, on a risk-by-risk basis, could yield an inaccurate underwriting decision.

A holistic view of risk that provides scores, contextual hazard and claims experience information, accumulation analytics, and risk mitigation—all at an underwriters' fingertips—improves risk selection and pricing, enhances speed to quote and differentiation, and reduces downstream reinsurance and claims costs.

Speed of Insight: A Competitive Differentiator

From underwriting to portfolio management to event response, there is more data available to make more informed decisions, but with all that data comes the challenge of quickly deriving value from it. **Insight embedded into workflows—the combination of data and analytics that provides instant, actionable information—is a key competitive differentiator in the next normal.** Both underwriting and claims response depend upon speed: at the point of quote and at the time of a loss.

Automating the delivery of insight is becoming more and more crucial to catastrophe risk, in particular. Not only is the frequency of cat events rising, but there are more providers of catastrophe event data producing higher resolution footprints. This new quantity and quality of data is increasingly difficult for insurers to process fast enough to deploy timely insured response.

As data management needs grow for cat events, a geospatial platform can help insurers rapidly derive insight from all the data. For example, the Insurity team processed over 1,900 individual datasets for wildfires in 2020. Each update needs to be processed and operationalized for actionable insights, which can be a time-consuming and resource draining task. During these business-critical events, insurers don't have the benefit of time – they need complete and current information now. Insurers that try to go it alone, relying on in-house data teams, may find they're spending more time operationalizing data than deriving value from it—while missing out on an opportunity to offer differentiated service to their insureds.

While some insurers still rely heavily on internal GIS and data teams, leading insurers are recognizing the value of a platform that can operationalize all this data for them and quickly turn it into actionable insights. In fact, in the last year alone, we've seen a 34% increase in customer use of Insurity's geospatial analytics and event alerts to understand their potential exposure to cat events as new intelligence becomes available, and to proactively mobilize and manage their response.

With the frequency and intensity of cat events on the rise, speed of insight is sure to be a competitive advantage that hinges on, as Kirstin Marr, Head of Insurity Analytics, states, "delivering the right data to the right people in the right place at the right time"—a simple concept that is quite complex for most insurers to achieve as they grapple with the diverse needs of their operations as well as multiple disparate platforms and sources of data to make informed decisions. "We see our insurance customers insisting on the delivery of more insight in the context of their core business workflows. It's clear that innovation is happening rapidly in data analytics, and insurers who capture that innovation in their core workflows will gain a competitive advantage."

Top Considerations

The next new normal for P&C insurers offers challenging conditions on multiple fronts: continuing economic uncertainty, a shrinking ability to count on investment yields to offset underwriting losses, increased frequency and severity of losses—and all while competitors strive to grow their market share. Finding and holding on to good risks has perhaps never been more difficult—or more important to P&C insurers' profitability. Insurers will need to find ways to rapidly adapt. In the end, "business as usual" is no longer enough. Success will hinge on a level of underwriting excellence not previously tested until today.

Building blocks for next level underwriting:

01

Partner to accelerate digital transformation. Consider complexity and total cost of ownership when deciding what to build internally and what to buy. Partnering enables innovation to be very accessible, but when looking at providers, consider the proprietary nature of their platform: how well do they play with others? The new way of thinking is "better together," not "either/or."

02

Think proactive and preemptive. The pandemic has proven the value of preparation. Those with digital capabilities in place adapted much faster in every capacity. How well prepared is your organization to evolve with the pace of technology and digitally adapt to the next unknown? Are your underwriters prepared to capture opportunities that will emerge in the next new normal?

03

Know what you insure, and actively monitor and manage it. With volatility everywhere, getting a handle on your exposures and a real-time understanding of your accumulations of risk—as well as opportunities for growth—is paramount. Do you know how your book will look in 6 to 12 months? Do you have real-time purview into your future performance?

04

Simplify and speed the delivery of insight. Automation takes on heightened importance especially in the current climate of lower investment returns. Finding areas to streamline the underwriting process while speeding the delivery of insight is paramount. How fast and efficiently can your underwriters get to a good decision? How much business can you underwrite without having to manually touch policies?

05

Keep instilling a data analytics-driven culture. Taking your underwriting and data analytics to the next level is as much about embracing a data analytics-forward mindset as it is about sophisticating the use of analytics. Have your underwriters and actuaries bought into the value of predictive analytics? Are you instilling a drive and an appetite for analytics from the top down?

For more insights like this, download our
2021 Analytics Outlook Report

insurity

Sources

1. "Billion-Dollar Weather and Climate Disasters: Overview," NOAA
2. "Secondary natural catastrophe risks on the front line," Swiss Re sigma 2/2019, April 2019
3. "Yet more fires," Swiss Re, January 2021