NAIC
NATIONAL ASSOCIATION OF INSURANCE COMMISSIONERS

CLIMATE and RESILIENCY TASK FORCE

U.S. Insurance Industry

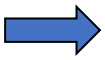
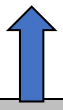
NATURAL CATASTROPHE RISK DASHBOARD

As of December 31, 2024

Published: November, 2025

Table of Contents

Natural Catastrophe Risk Dashboard Summary

Risk Category	Trend	Summary of Assessment
Physical Risk		
Physical-Historical **Frequency** **Insured Losses**		Driven by the high frequency of events and elevated economic and insured losses.
Physical-Prospective **Modeled losses**		The magnitude of modeled losses in terms of dollars is significant, tempered by the insurance industry's capital to absorb potential losses.
Physical-Meteorological **Factors**		The largest temperature increases were observed in 2023 and 2024. Sea levels and GHG continue to rise at a record pace.
Transition Risk		
Investment Concentration		Invested assets are not highly concentrated in any potentially impacted sector
Coverage Trends		
Private market trends **Rates/Premiums** **Protection Gap**		Significant increase in Homeowners insurance rates and reinsurance rates. Continued elevated non-renewal rates.
Flood **FEMA/NFIP** **Private Flood**		NFIP flood coverage gaps continue to increase. The protection gap is significant but stable.
Residual Markets **FAIR & Beach Plans** **Surplus Lines**		Significant increase in residual markets direct premium written, tempered by the low percentage of the private HO market.

Risk Assessment Scale/Legend

	High
	Moderate-High
	Moderate-Low
	Low

Trend Scale (Trend of the risk**)**

Significant Increase	
Increase	
Stable	
Decrease	
Significant Decrease	

Executive Summary

The Climate and Resiliency Task Force of the National Association of Insurance Commissioners (NAIC) led by state regulators adopted the "National Climate Resilience Strategy for Insurance" report in March 2024. Action 1 of the report calls for the launch of a comprehensive NAIC Climate Risk Dashboard and led to the creation of this report. This monitoring tool provides information on an annual basis to regulators on the national metrics related to catastrophe risk and insurance markets. Going forward we shall refer to this report and the corresponding processes, the Natural Catastrophe Risk Dashboard.

Insurance issues (including affordability and availability) have become more prominent in the public and press, with questions coming to U.S. state insurance regulators from local government officials, state officials, Congress and federal agencies. This Dashboard creates a common set of metrics for understanding Natural Catastrophe protection gaps, providing state insurance Commissioners with current information that can be used in press releases and responses to questions from state agencies. This Dashboard also provides access to readily available information when national publications like A.M. Best publish statistics about U.S. insurance markets, which will benefit regulator planning for rapid communications. As insurance regulators look for opportunities to respond quickly and consistently to questions about state insurance markets, this Dashboard is a tool that Commissioners can rely on for understanding and response, and to increase awareness of protection gap challenges nationwide. Additionally, individual state experiences can be put in a broader context for policy decisions.

For insurance regulators, this report and the Natural Catastrophe Risk Dashboard is a reference tool for overall US market indicators being used by banks, insurers, reinsurers and federal governments, putting national metrics in a centralized location for regulators to inform internal and external decision-making, and for discussions with international regulators. The rapid growth in the number of reports and national information could create a strain on individual departments to keep up with national-level information in a standardized way, making this tool valuable for Insurance Commissioners needing national risk information at their fingertips.

For example, when a natural catastrophe occurs in one jurisdiction, it is common for researchers, agencies, and industry groups to put the costs in the context with risk information, past catastrophes, or trends. With this Dashboard, Commissioners will have pre-loaded information to use for communications in the near-term, or long-term planning. With this information, insurance regulators are laying the foundation for better understanding protection gaps, insurance trends, and the economic impact of national catastrophe risk and resilience trends.

Overall, the U.S. insurance industry continues to be challenged by changing environmental and economic conditions. Environmental factors like cycles of drought and deluge, extreme temperatures, both hot and cold, and global economic trends impact local conditions within U.S. jurisdictions. Recent years have demonstrated that catastrophes are a national issue and therefore our understanding of catastrophe risk and ways to reduce that risk is a national priority. With this Dashboard, regulators will continue to be prepared with important information when unanticipated events occur and the public turns to regulators for guidance and response.

Insurers and their state regulators play a key role in U.S. financial stability by providing policyholders the ability to manage natural catastrophe risk. The availability and affordability of insurance and its interconnectedness with other areas of the U.S. economy underscores the importance of a functioning insurance marketplace. We employ several measures in the Coverage trends section in an attempt to

measure availability and affordability. Affordability is a challenge to measure, and we hope to enhance these measures in future versions of this report.

On a positive note, aggregate capital levels in the property insurance industry continue to provide a significant buffer above regulatory capital requirements to absorb natural catastrophe risk.

Several risks drove the regulator's views when conducting the risk assessment:

Physical risk – Increased frequency, elevated catastrophe losses and significantly increasing meteorological measures drove the Moderate-high assessment.

- The number of events, especially severe convective storms, increased significantly and exceeded historical averages. In terms of severity, severe convective storms led the way followed by drought and flooding. Economic and insured losses reached all time highs in 2024 and well above historical averages. Catastrophe losses continue to increase as a percentage of overall insurer losses.

- The magnitude of modeled losses in terms of dollars is significant, tempered by the insurance industry's capital and surplus to absorb potential losses. This risk indicator provides a forward-looking prospective measure for the severity of natural catastrophe risk.

- Large temperature increases were observed in 2023 and 2024. The largest temperature increase since records have been maintained beginning in 1850 was observed in 2024.

Transition risk – Transition risk encompasses transition risk in insurers investment portfolios and is currently limited to stocks and bonds.

This report includes an analysis that uses a common methodology, known as the Battiston methodology, to identify climate-affected investments and estimate the relative percentages of investments, and therefore financial exposure, among major economic sectors.

Coverage trends –

- Most risk and insurance indicators indicate multi-year increases in metrics of concern, such as policyholder rate increases, non-renewals, residual markets and insurer insolvencies due to natural catastrophe related causes. Policyholder rate increases saw double digit growth for a national average of 12.7% and 10.4% in 2023 and 2024 respectively, and over a 20% increase in some states for both years.

- NFIP flood coverage gaps continue to increase. Protection gap measures are stable and the number of NFIP policies continues to decline.

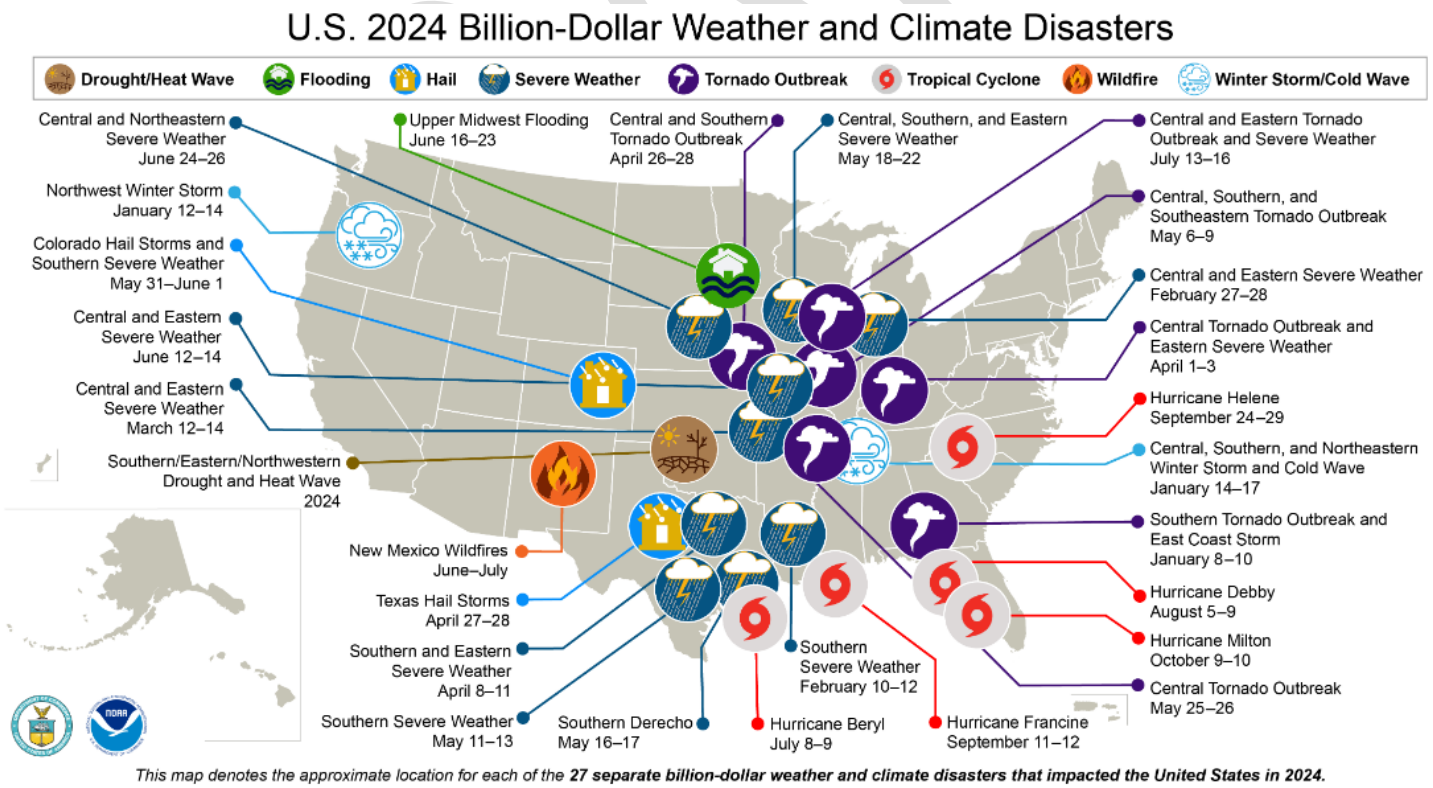
- FAIR and Beach plans and Excess and Surplus Lines experienced premium growth of 6% and 32% respectively in 2024. Additionally, the FAIR and Beach plans and Excess and Surplus Lines market share continued to grow as a percentage of the homeowners insurance market.

Physical Risk Summary

Increased frequency, elevated catastrophe losses and significantly increasing meteorological measures drove the Moderate-High assessment. The number of events, especially severe convective storms, increased significantly and exceeded historical averages. In terms of severity, severe convective storms were responsible for the largest dollar amount of losses followed by drought and flooding. In 2024 economic losses were the third highest since 1999, insured losses were the second highest and well above historical averages. Economic losses as a percentage of U.S. GDP increased significantly and provides some context for the $190 billion in economic losses.

Modeled losses have not varied significantly over the past five years. This risk measure provides a forward-looking prospective outlook for the severity of natural catastrophe risk. We look at modeled losses as a percentage of capital and surplus to provide some perspective on the shear dollar amount of modeled losses.

In terms of meteorological measures, 2024 saw the largest increase in temperatures since 1850, when records began being maintained. Additionally, sea levels continue to rise at record levels. The greenhouse gas index, although elevated, has been somewhat stable. The Actuaries Climate Index (ACI) is also employed as a measure and is elevated in recent years. The ACI is composite index incorporating temperature, rainfall, drought wind and seal level measures.



*This map denotes the approximate location for each of the **27 separate billion-dollar weather and climate disasters that impacted the United States in 2024.***

Physical Risk-Historical

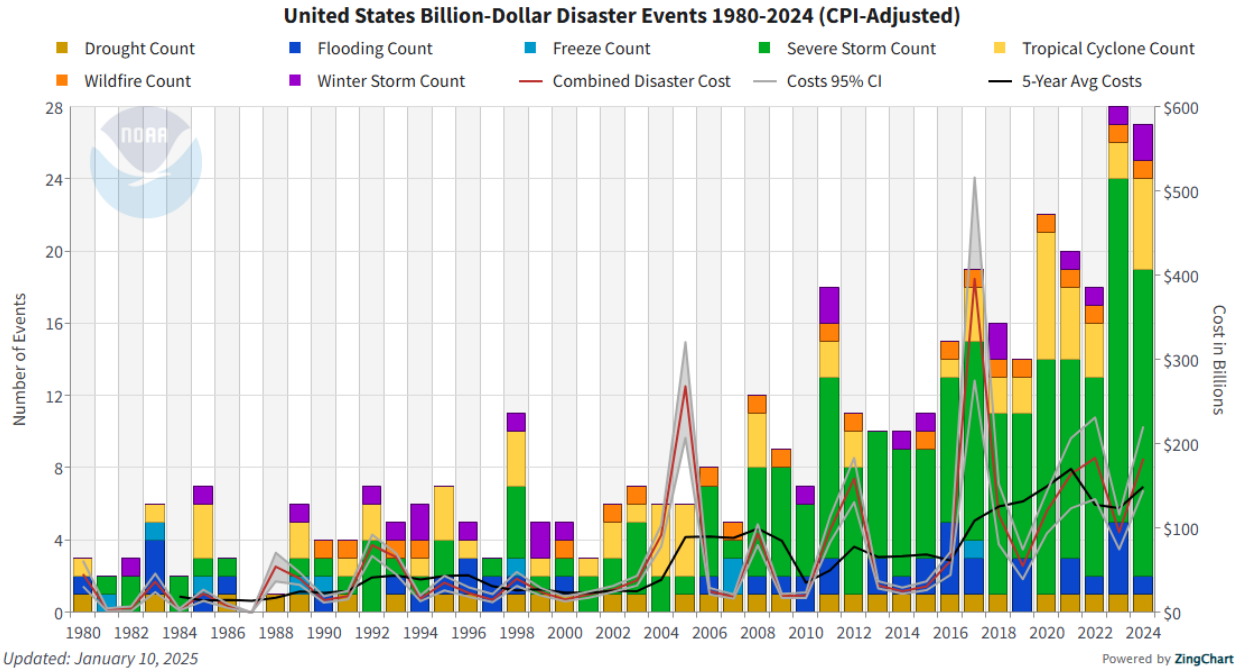
Assessment Level: **Moderate-High**	Trend: **Increasing**

The individual risk indicators that drove the Moderate-High assessment are presented below.

Frequency & Victims

The U.S. has sustained 403 weather and climate disasters since 1980 where overall damages/costs reached or exceeded $1 billion (including CPI adjustment to 2024). The total cost of these 403 events exceeds $2.915 trillion.

In 2024, there were 27 (28 in 2023) confirmed weather/climate disaster events with losses exceeding $1 billion each to affect the United States. These events included 1 drought event, 1 flooding event, 17 severe storm events, 5 tropical cyclone events, 1 wildfire event, and 2 winter storm events. Overall, these events resulted in the deaths of 568 people. The highest number of events (28) since 1980 was recorded in 2023. The 1980–2024 annual average is 9.0 events (CPI-adjusted); the annual average for the most recent 5 years (2020–2024) is 23.0 events (CPI-adjusted) according to NOAA*

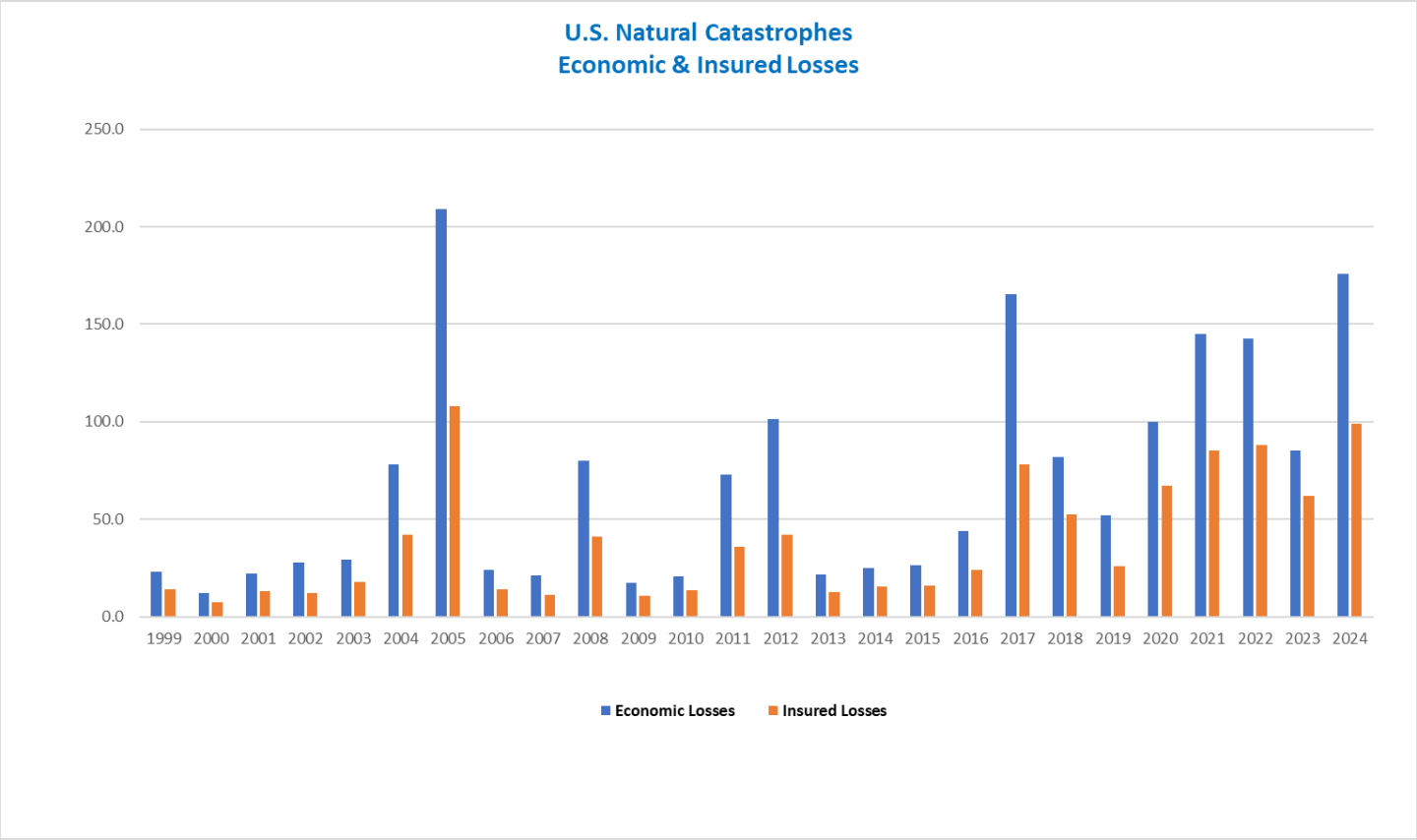


*-NOAA National Centers for Environmental Information (NCEI) U.S. Billion-Dollar Weather and Climate Disasters (2025). https://www.ncei.noaa.gov/access/billions/, DOI: 10.25921/stkw-7w73

The following link will allow one to sort by peril, by state and by region:
https://www.ncei.noaa.gov/access/billions/time-series

Economic and Insured Losses

In 2024 economic losses were the third highest since 1999 at $176B, insured losses were the second highest at $99B and well above historical averages.

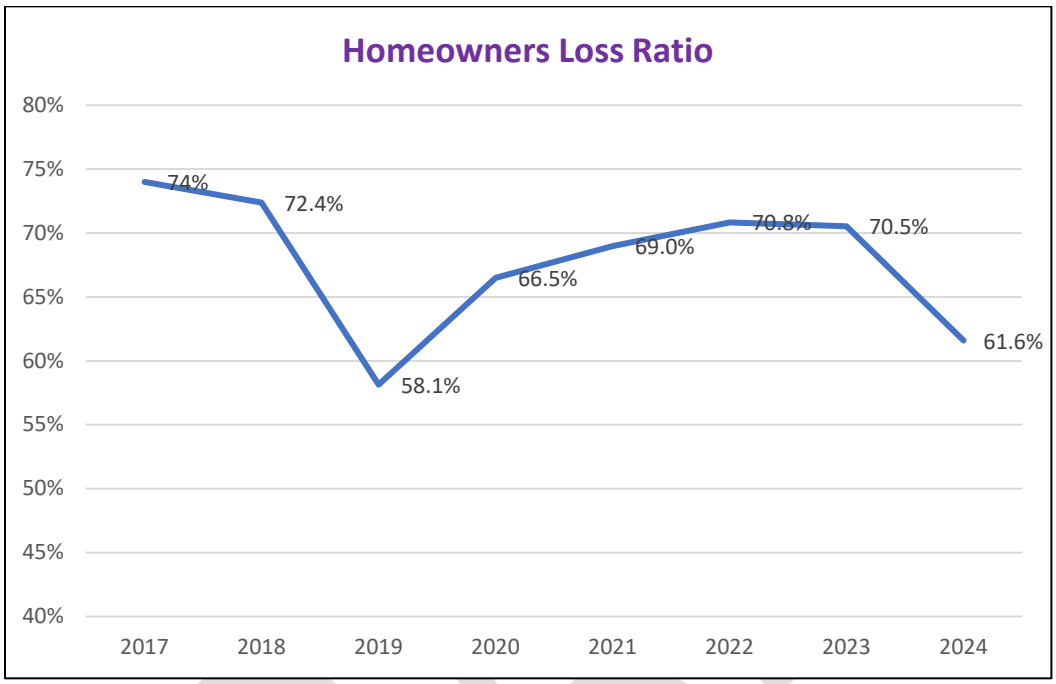


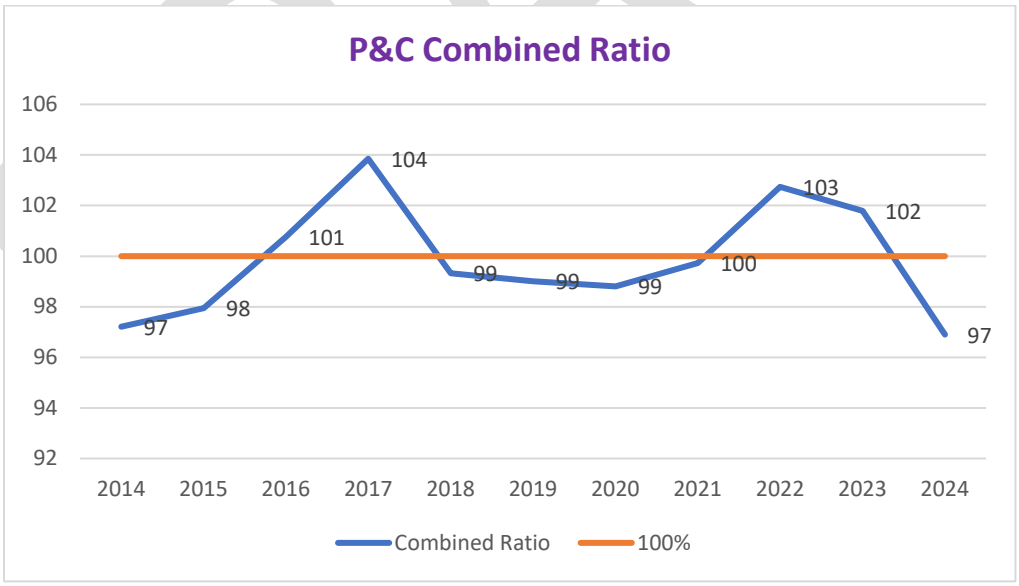
Source: Insurance Information Institute, Munich Re

Note the above data has not been adjusted for inflation or loss development after the initial figures were published.

HO Loss Ratio and P&C Combined Ratio

Although the P&C combined ratio incorporates lines of business that may not be affected by natural catastrophes, the ratio and the HO loss ratio are highly correlated to years with increased natural catastrophes.





Source: NAIC

Modeled/Prospective losses

Modeled losses have not varied significantly over the past five years. This risk measure provides a forward-looking prospective outlook for the severity of natural catastrophe risk.

Assessment Level: **Moderate-Low**	Trend: Stable →

NFIP Model loss below represents the U.S. 1/250 OEP modeled flood loss in billions of dollars, for both Surge/Coastal and Inland (fluvial and pluvial).

The R-CAT 1/100 Net refers to the modeled loss for hurricane Net of reinsurance. A capital charge is applied to insurers for their net 1/100 modeled loss. The risk measure employed here is the aggregate of all insurers who reported a modeled net 1/100 loss as a percentage of the total capital of the same cohort of insurers.

The higher percentage noted in 2022 was driven primarily by the lower capital and surplus, not by an increase in modeled losses. Although the aggregate dollar amount has some utility, we felt best to put the dollar exposure into context by using a percentage of capital and surplus.
The R-CAT 1/100 Ceded % shows the percentage of the Gross 1/100 modeled loss that was ceded to a reinsurer.

	2024	2023	2022	2021
NFIP Model loss-Surge	Not available	$28.4	$26.4	$26.7
NFIP Model loss-Inland	Not available	$8.9	$8.2	$7.4
R-CAT 1/100 Net % C&S	6.7%	7.5%	9.7%	7.5%
R-CAT 1/100 Ceded %	66.7%	66.5%	67.7%	68.8%

Source: NFIP and NAIC

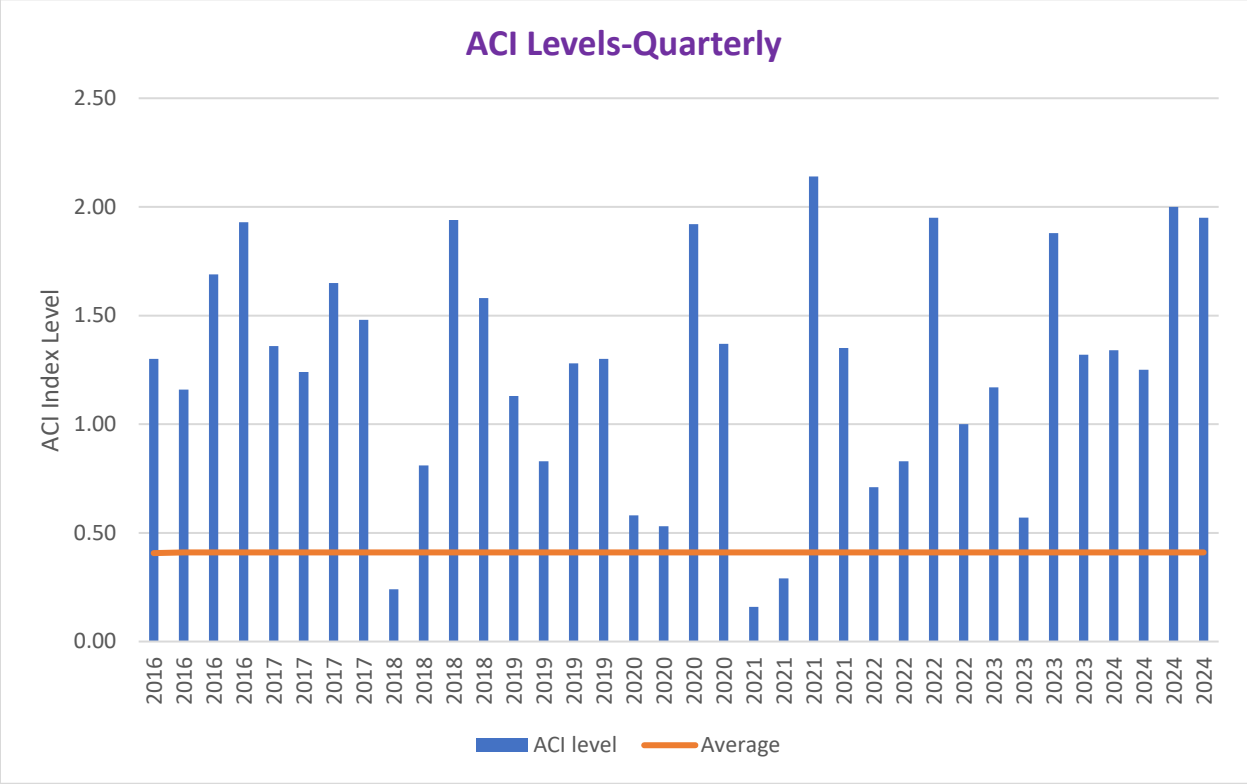
Physical-Meteorological Summary

In 2024, the largest increase in temperature and sea levels were observed since records have been maintained beginning in the late 1800's and is the driver of the High assessment.

Assessment Level: **High**	Trend: **Significant Increase** ↑

ACI Level

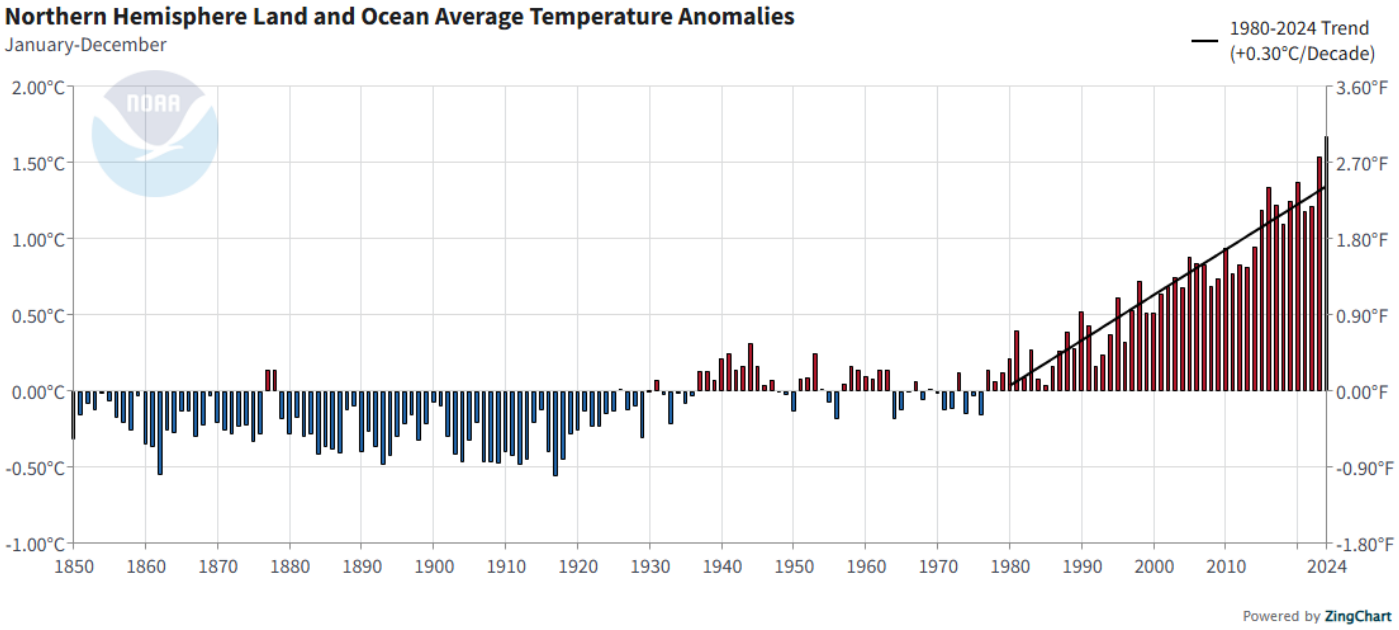
The Actuaries Climate Index (ACI) is intended to provide a useful monitoring tool as an objective indicator of the frequency of extreme weather and the extent of sea level change. Their website provides graphics and data for download for those who wish to explore the Index. The ACI is available for the United States and Canada and 12 subregions thereof and will be released when analysis of data for each meteorological season is complete, on both a monthly and a seasonal basis (months ending February, May, August, and November). The Actuaries Climate Index incorporates temperature, rainfall, drought wind and seal levels.



Source: The Actuary Climate Index (ACI), updated quarterly.

Temperature Change

In 2024 the largest increase in temperature was observed in the Northern Hemisphere, Land and Ocean. The graph below delineates the temperature departure from the average temperature since 1850. In 2024 the average temperature was 1.67^0 C above average. Also, highlighted in the graph is the significant increasing trend from 1980 to the present.



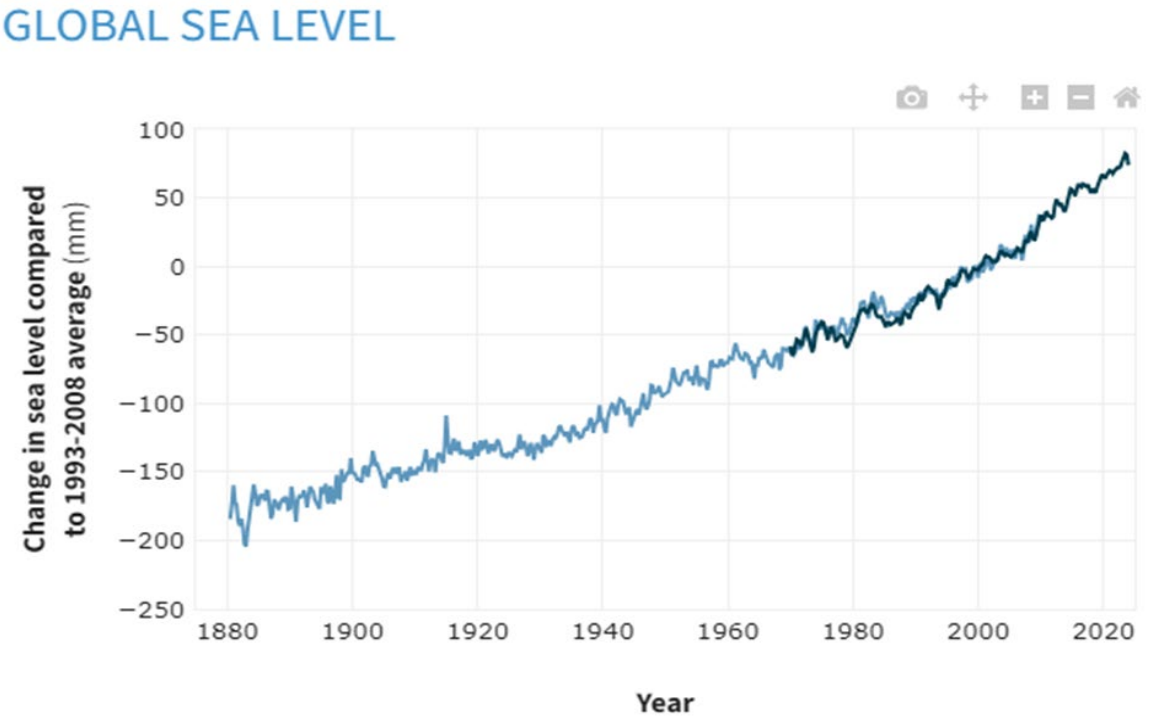
Source: NOAA

Sea Level Change

In 2023, global average sea level set a new record high—101.4 mm (3.99 inches) above 1993 levels. The average sea level from 1993 to 2008 was adopted as the base period for NOAA's calculations. The rate of global sea level rise is accelerating: it has more than doubled from 0.06 inches (1.4 millimeters) per year throughout most of the twentieth century to 0.14 inches (3.6 millimeters) per year from 2006–2015.

The chart below delineates Global Sea Level change. However, in many locations along the U.S. coastline, the rate of local sea level rise is much greater than the global average due to land processes like erosion, oil and groundwater pumping. High tide flooding is now three to nine times more frequent than it was 50 years ago according to NOAA Climate.gov.

By the end of the century, global mean sea levels are likely to rise at least one foot (0.3 meters) above 2000 levels, even if greenhouse gas emissions follow a relatively low pathway in coming decades.



Seasonal (3-month) sea level estimates from Church and White (2011) (light blue line) and University of Hawaii Fast Delivery sea level data (dark blue). The values are shown as change in sea level in millimeters compared to the 1993-2008 average. NOAA Climate.gov image based on analysis and data from Philip Thompson, University of Hawaii Sea Level Center.

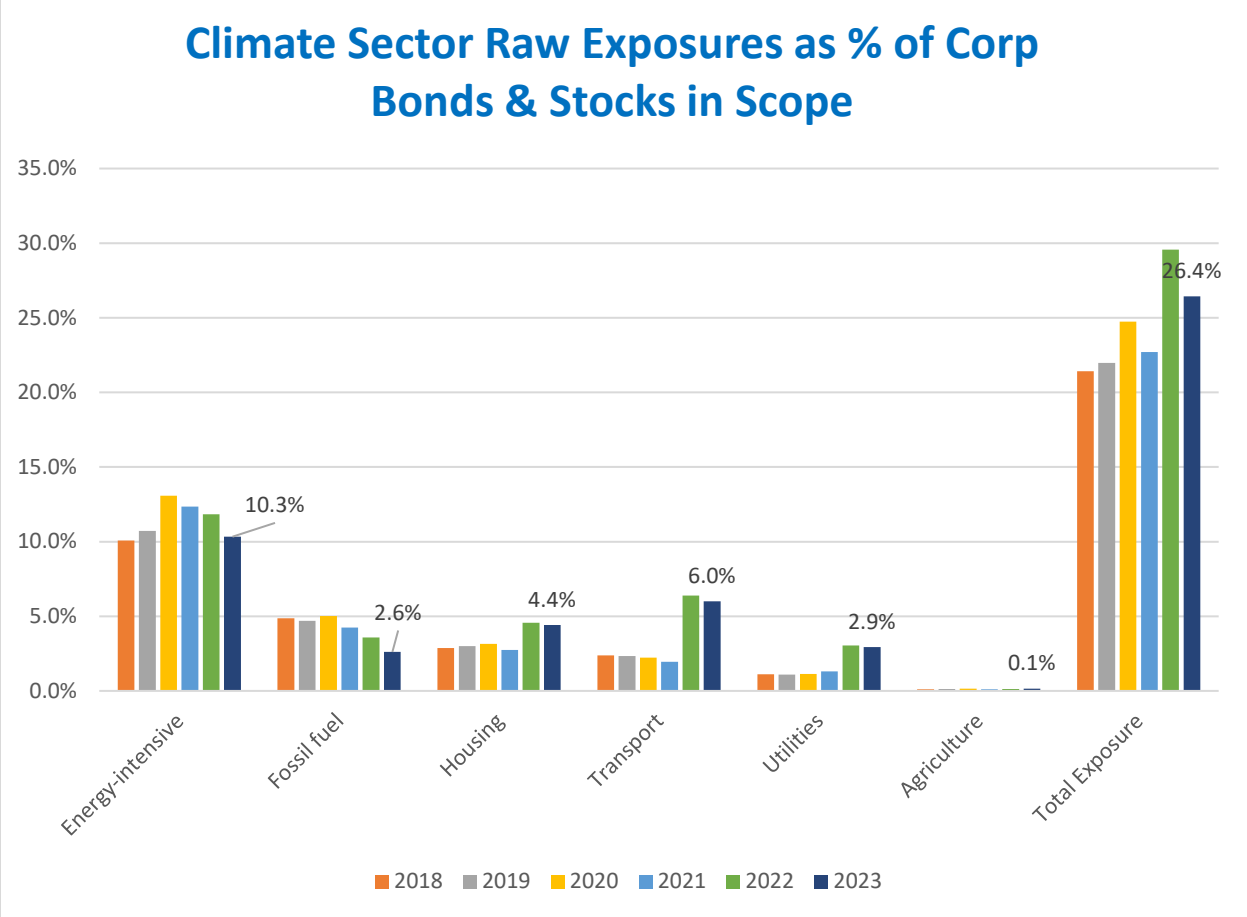
The early part of the time series shown in the graph above comes from the sea level group of CSIRO (Commonwealth Scientific and Industrial Research Organization), Australia's national science agency. They are documented in Church and White (2011). The more recent part of the time series is from the University of Hawaii Sea Level Center (UHSLC). See NOAA link below for more details on the data.
Source: NOAA

Transition Risk Summary

Transition risk encompasses transition risk in insurers investment portfolios and is currently limited to stocks and bonds. This report includes an analysis that uses a common methodology, known as the Battiston methodology, to identify climate-affected investments and estimate the relative percentages of investments, and therefore financial exposure, among major economic sectors. The relatively low proportion of insurer investments in climate-affected industries is a driver of the low rating. Additionally, the perceived slower onset of climate related risk in invested assets and the ability to reallocate investments contributes to the Low assessment.

State regulators may access the U.S. Insurance Industry Climate Affected Investment Analysis dashboard tool in StateNet, Financial Capital Markets page. The tool allows regulators to view investment exposures by individual insurance companies.

Assessment Level: **Low**	**Trend:** Stable



Source: NAIC

Coverage Trends Summary

Most risk indicators in this section continued to increase including policyholder rate increases, non-renewals, residual markets and insurer insolvencies (due to natural catastrophe related causes). Policyholder rate increases saw double digit growth for a national average of 10.4% and in some states increased more than 20% in 2024.

NFIP flood coverage gaps continue to increase. Protections gaps are stable and the number of policies continues to decline.

Metrics for how many policyholders are reliant on residual markets can inform the interpretation of coverage trends in admitted markets. FAIR and Beach plans and Excess & Surplus Lines experienced premium growth of 6% and 32% respectively in 2024. Additionally, the FAIR and Beach plans and Excess & Surplus Lines market share continued to grow as a percentage of the homeowners insurance market.

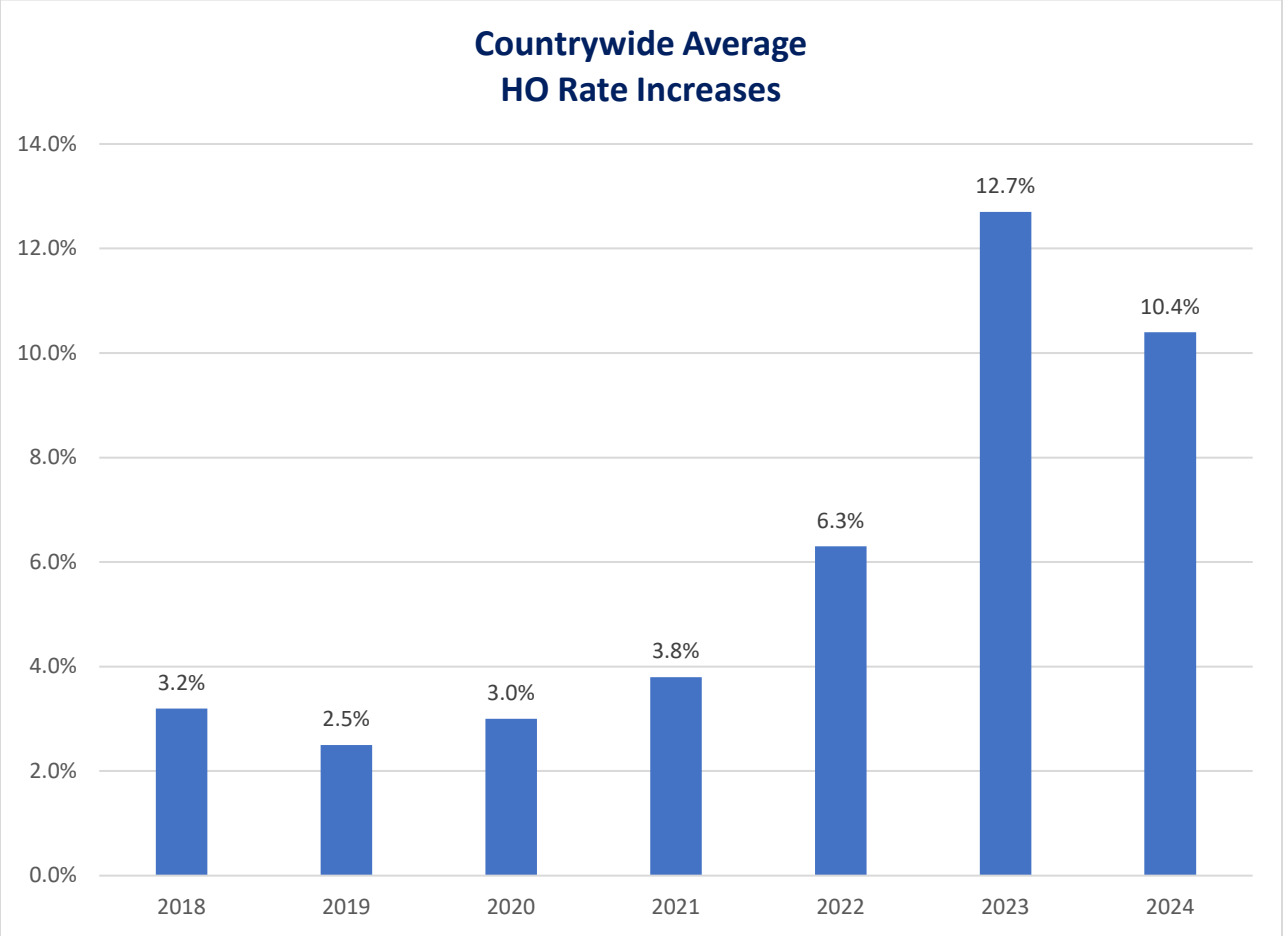
Private Market Trends

Assessment Level: **Moderate-High**	Trend: **Increasing**

Rates/Premiums Summary

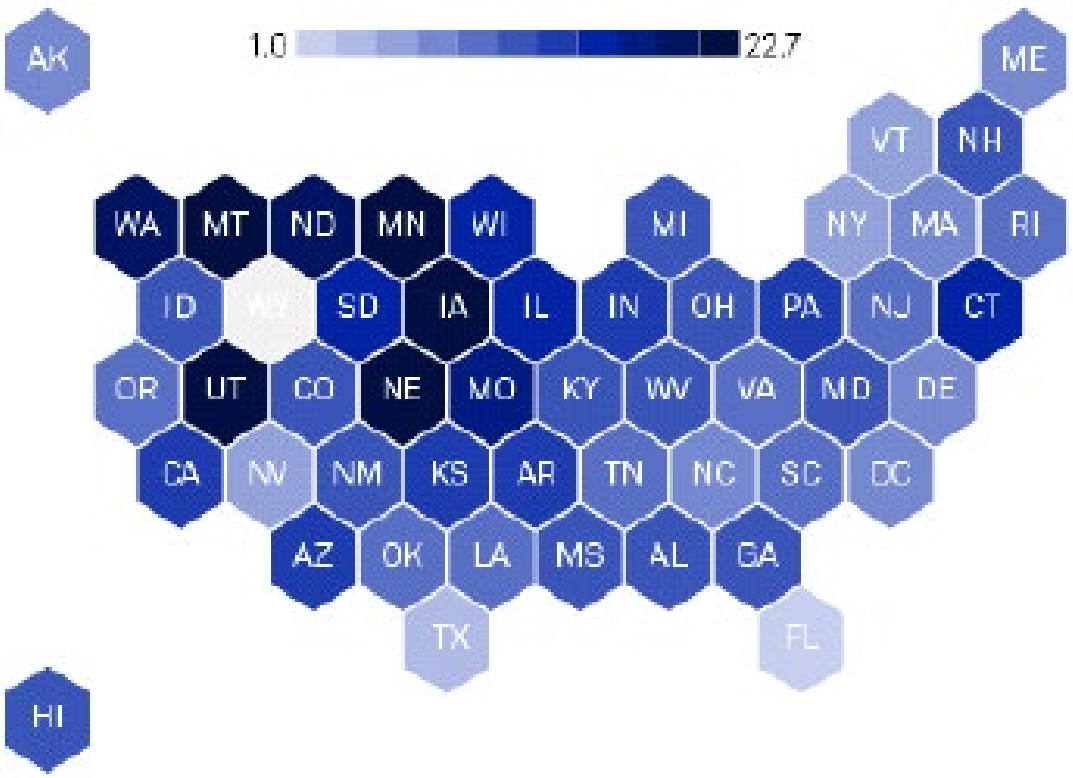
Policyholder rate increases saw double digit growth for a national average of 10.4% in 2024. Additionally, six states had rate increases of more than 20% in 2024. Florida's calculation does not include any changes by Citizens Property Insurance Corp., the state-backed insurer of last resort. Citizens is the largest homeowners underwriter in Florida and is seeking a statewide average increase of 13.5% on its homeowners multiperil policies that would become effective in 2025.

HO Policy Rates



Source: NAIC, S&P

2024 U.S. Homeowners Average Insurance Rate Changes



Source: S&P.

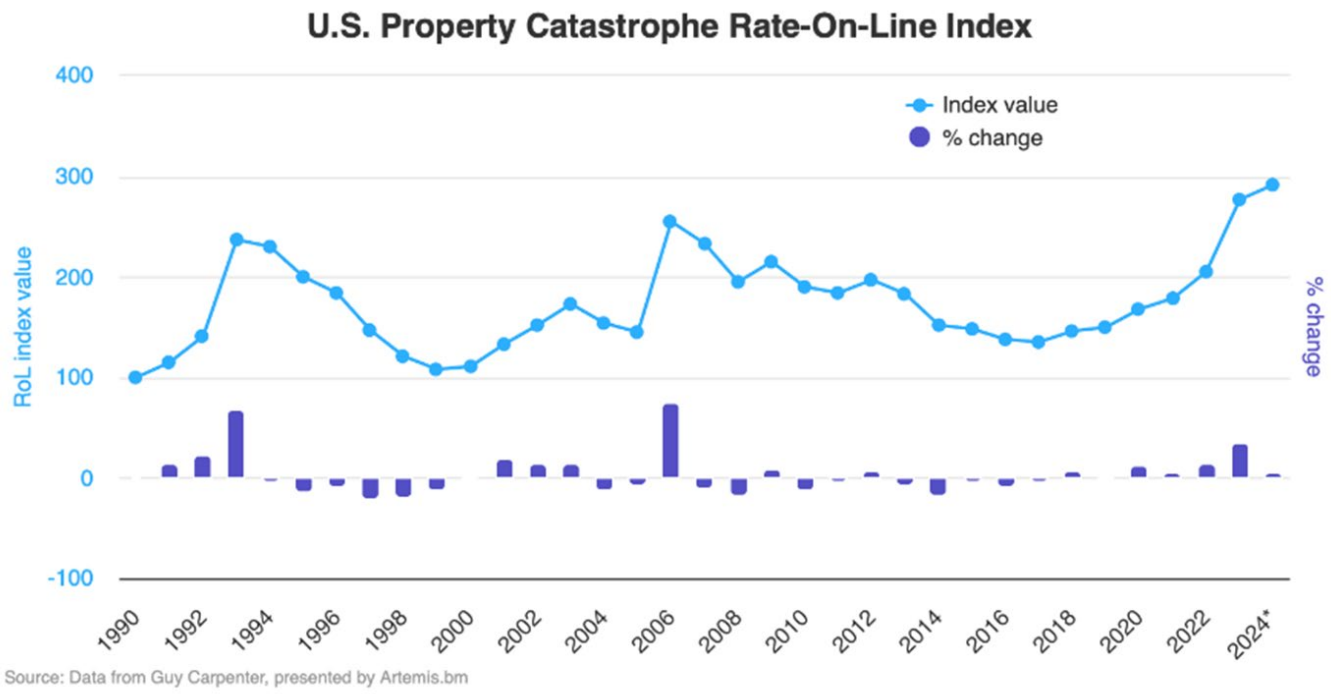
Reinsurance Rates

This Index has fallen by 6.6% as of January 1st 2025, reflecting rate-on-line decreases seen across global property catastrophe reinsurance contracts underwritten by reinsurers at the renewals.

In the prior year, the pace of change slowed considerably in 2024, dropping from the 27.2% gain seen at 1/1 2023 and then 29.3% for full-year 2023, to a gain of only 5.4% at January 1st 2024 and then by the end of the full-year just a gain of 2.3% for 2024.

While rates have now fallen for property catastrophe risks around the globe as the reinsurance market shifts appears to shift to a capacity-heavy softening phase, still rates-on-line remain at historically high levels which implies another profitable year for reinsurers is possible, dependent on loss activity.

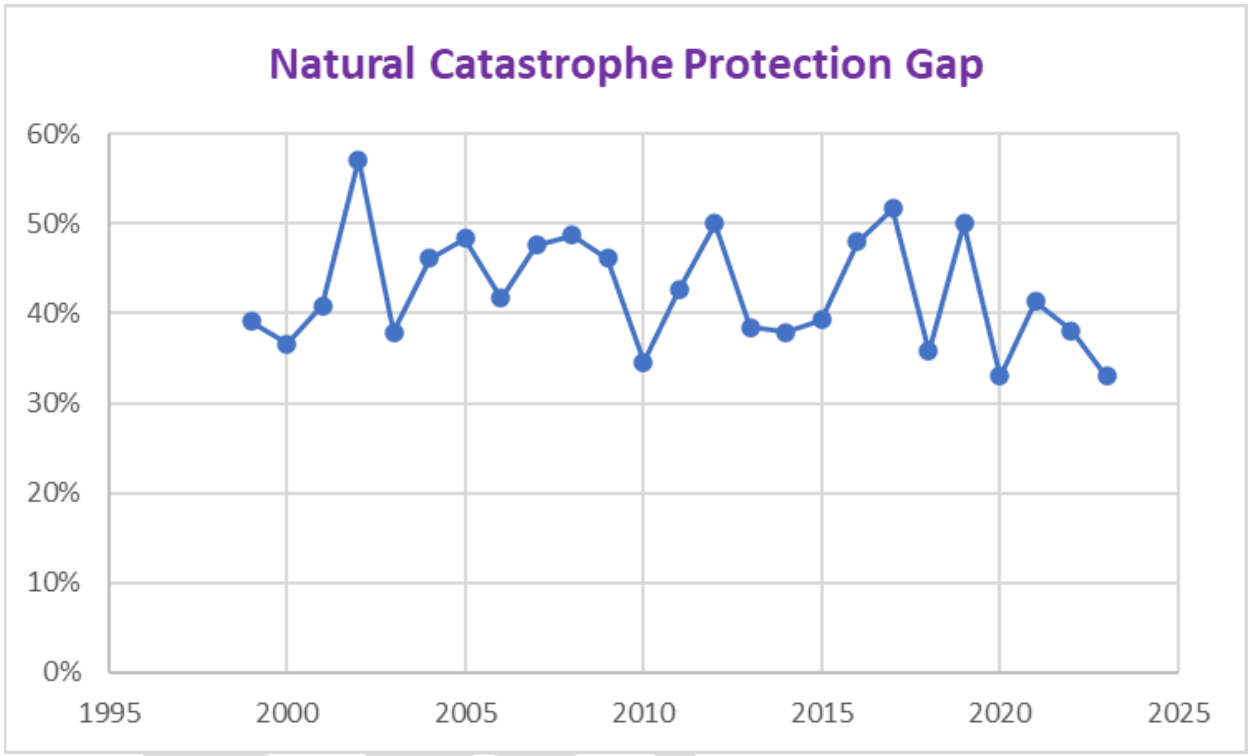
Guy Carpenter noted that strong appetites from traditional reinsurance and alternative capital providers resulted in excess capacity, that served to drive loss-free property catastrophe rates down between 5% and 15% at the January 1st 2025 renewals.



Source: Guy Carpenter via Artemis.

Natural Catastrophe Protection Gap

We define the protection gap for purposes of this measure as the percentage of economic losses that are uninsured using economic and insured loss data from Munich Re.



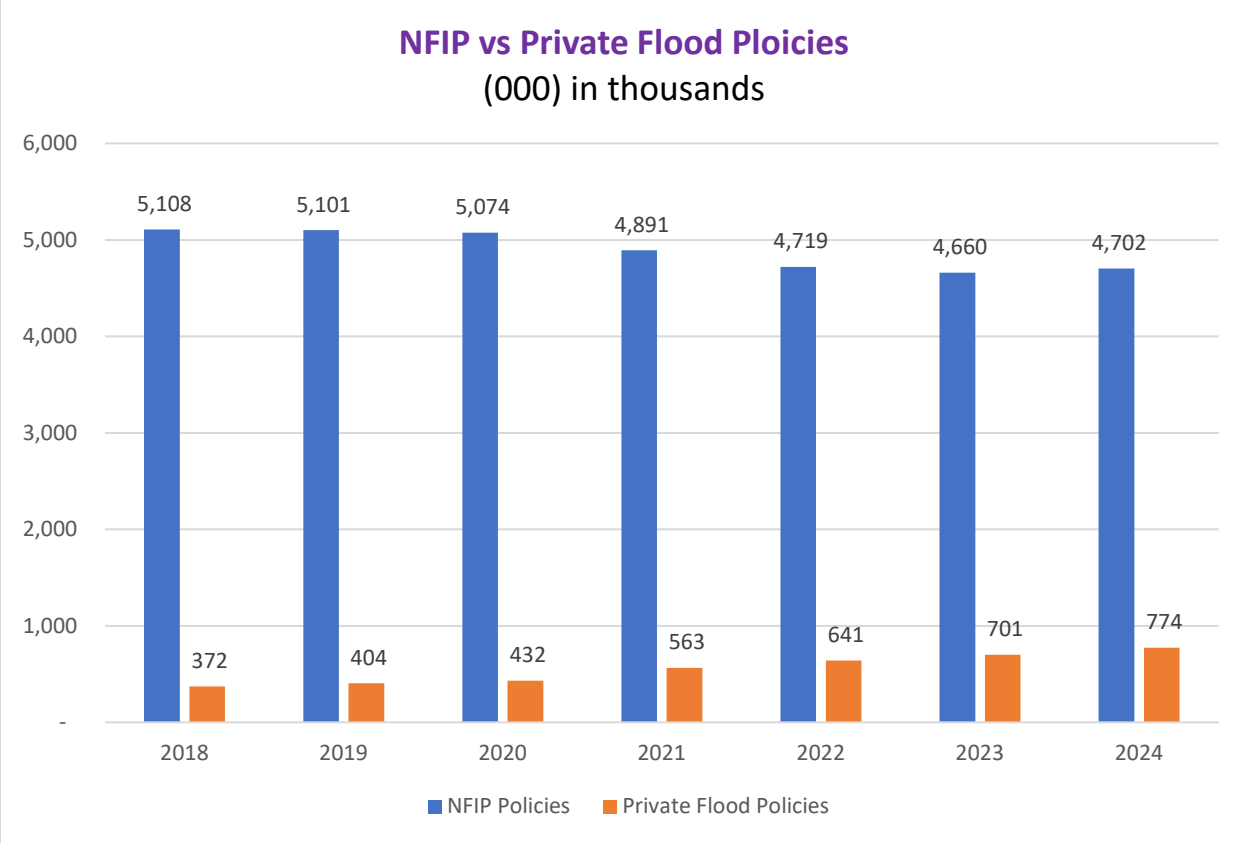
Source: ratio calculated by NAIC using III/Munich Re data

Flood

We track the occurrence of floods as an indicator of natural catastrophe risk, even though the Flood insurance market is predominately covered by the Federal National Flood Insurance Program (NFIP). However, Flood insurance offered by private insurers is increasing and NFIP policies are decreasing as depicted in the graph below. The decline in the number of NFIP policies could have funding consequences if the current premium is not adequate. Also, increasing private sector policies may lead to capacity concerns and other implications.

Assessment Level: **Moderate Low**	Trend: **Stable**

NFIP



Source: NFIP and NAIC

NFIP Coverage Gap

NFIP flood insurance contains two types of underinsured dynamics. NFIP residential building coverage is limited to $250,000. Therefore, home value replacement costs that exceed $250K is not covered and is what we call for purposes of this report a coverage gap. Additionally, there is the protection gap, as we defined above for HO, which is the percentage of economic losses that are uninsured.

The NFIP flood coverage gap continues to increase. Protections gaps are stable although they remain at elevated levels. A protection gap of 53% in 2023 indicates more than half of flood damaged homes did not have flood insurance coverage. These two risk indicators drove the Moderate-Low risk assessment.

	2023	2022	2021
Flood (TIV/limit)	$1.9/$1.2T	$2T/$1.3T	$1.8T/$1.3T
Flood Coverage Gap	39%	34%	27%

TIV=Total Insured Value

NFIP Protection Gap

	2023	2022	2021
Flood Economic/Insured Loss	$9.2/4.3B	$2.8/1.2	$7.5/$2.4B
Flood Protection Gap	53%	58%	68%

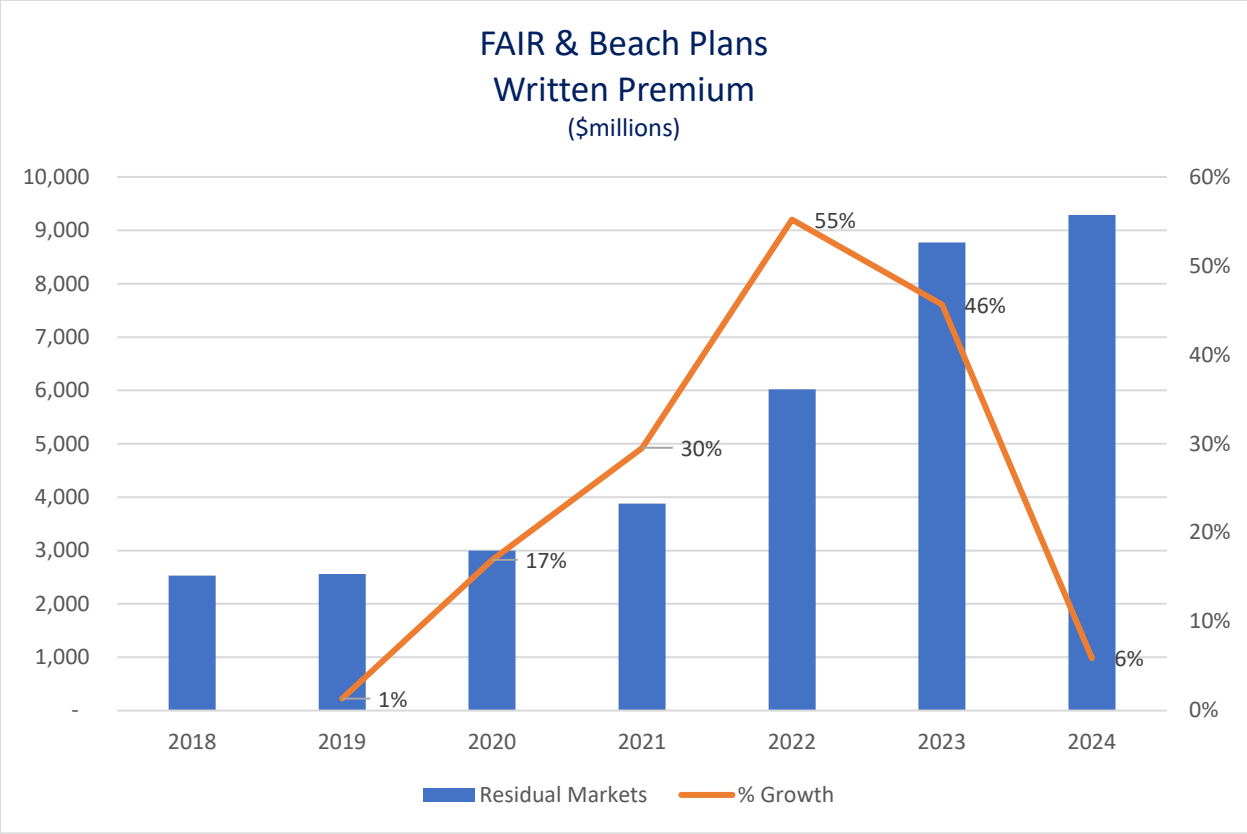
Source: NFIP and NAIC staff calculations

Residual Markets Summary

FAIR and Beach plans and Excess and Surplus Lines experienced premium growth of 6% and 31% respectively in 2024. The FAIR and Beach plan growth slowed but remains at high levels. The Excess and Surplus Lines market share continued to grow, although at slower pace. The elevated levels of DPW and significant growth drove the Moderate-High assessment.

Assessment Level: **Moderate-High**	Trend: **Significant Increase**

FAIR and Beach Plans

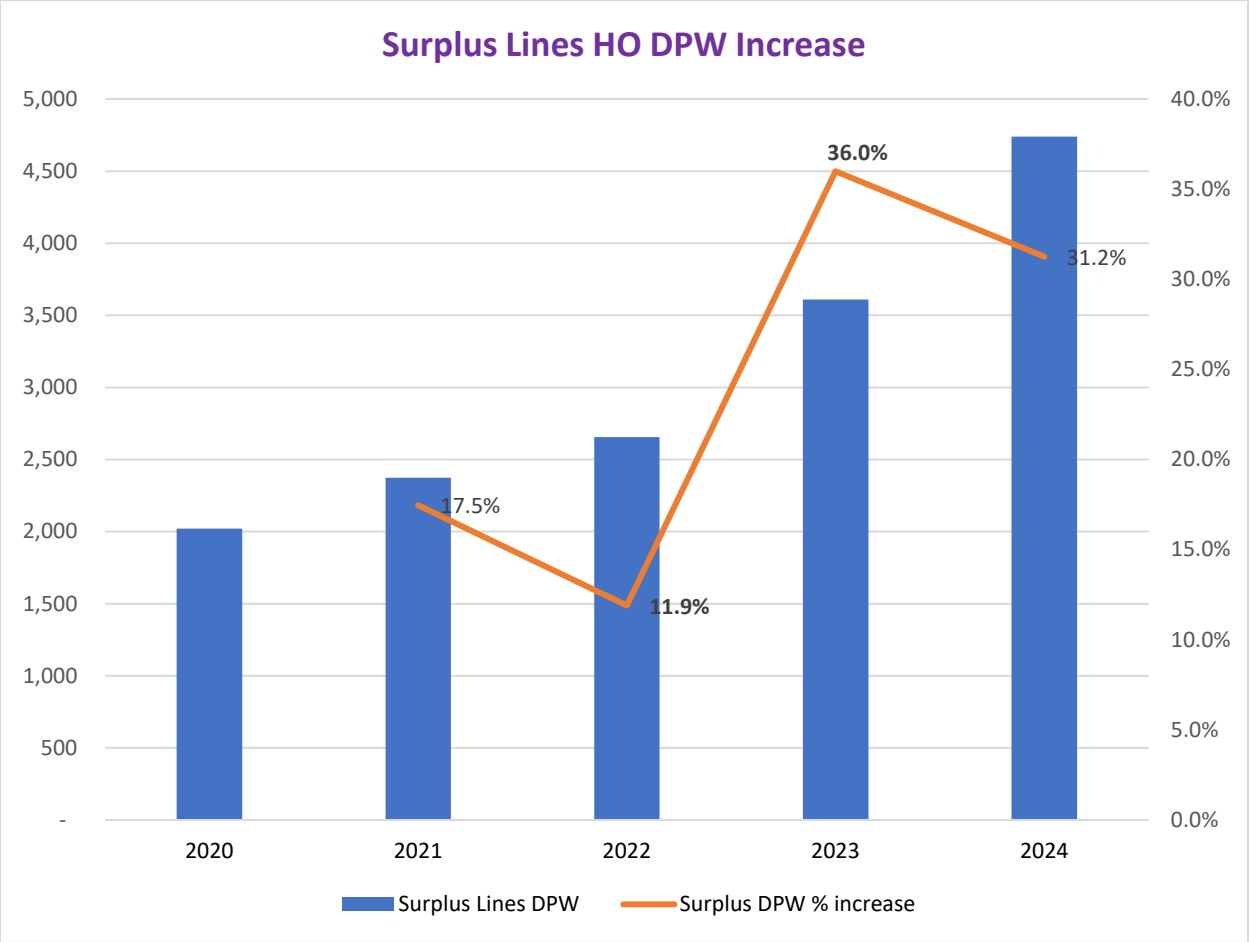


Source: PIPSO

Presented above is an aggregate summary of all FAIR and Beach plans' written premium. For more details by state please see Appendix B. For example, The PROPERTY INSURANCE PLANS COMPILATION OF EXPENSES AND ASSOCIATED RATIOS Report contains data on # of policies issued, premium written, loss and loss adjustment expenses for each state that has a plan. The Compendium report contains data on policy types, limits, rate structure and commission policy.

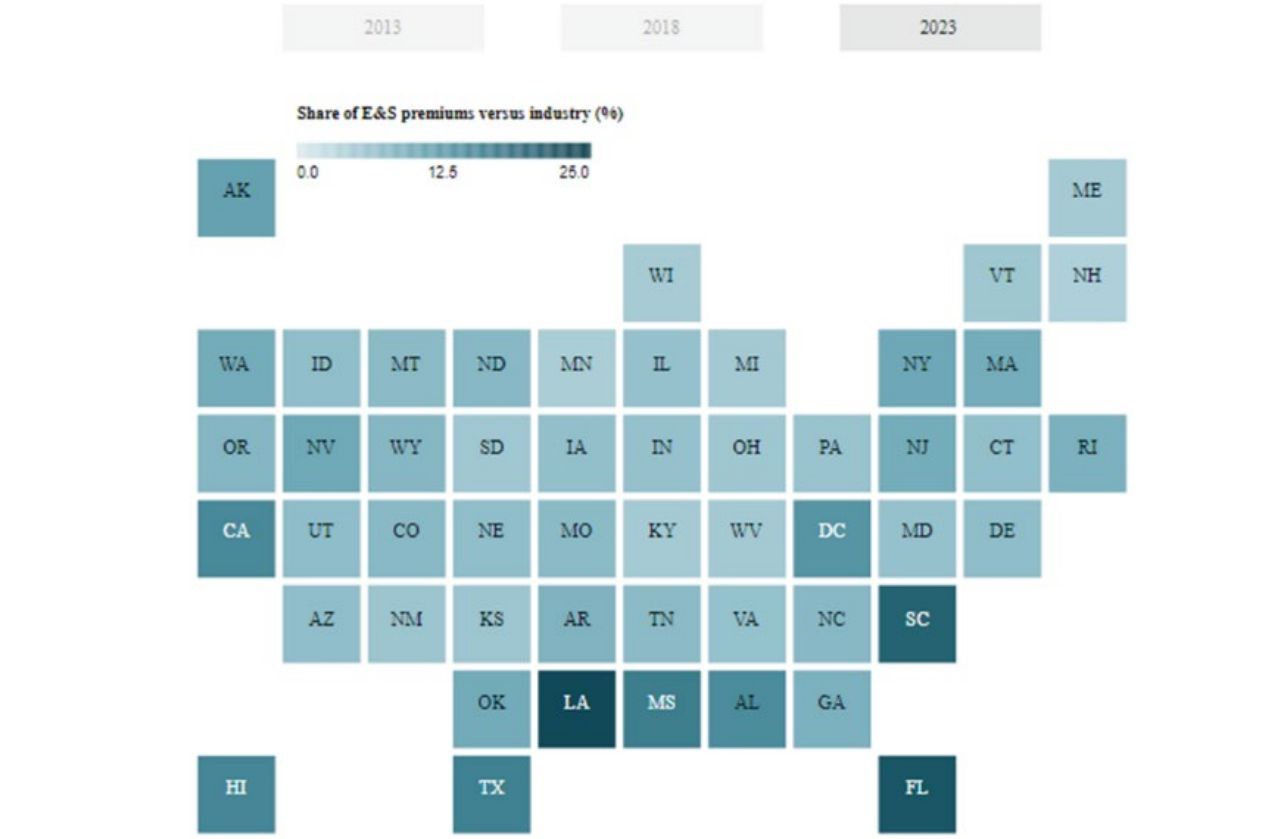
Excess and Surplus Lines

The chart below shows Excess and Surplus Lines, Homeowners insurance line of business, DPW Growth.



Source: NAIC

Share of E&S property premiums compared to state totals (%)

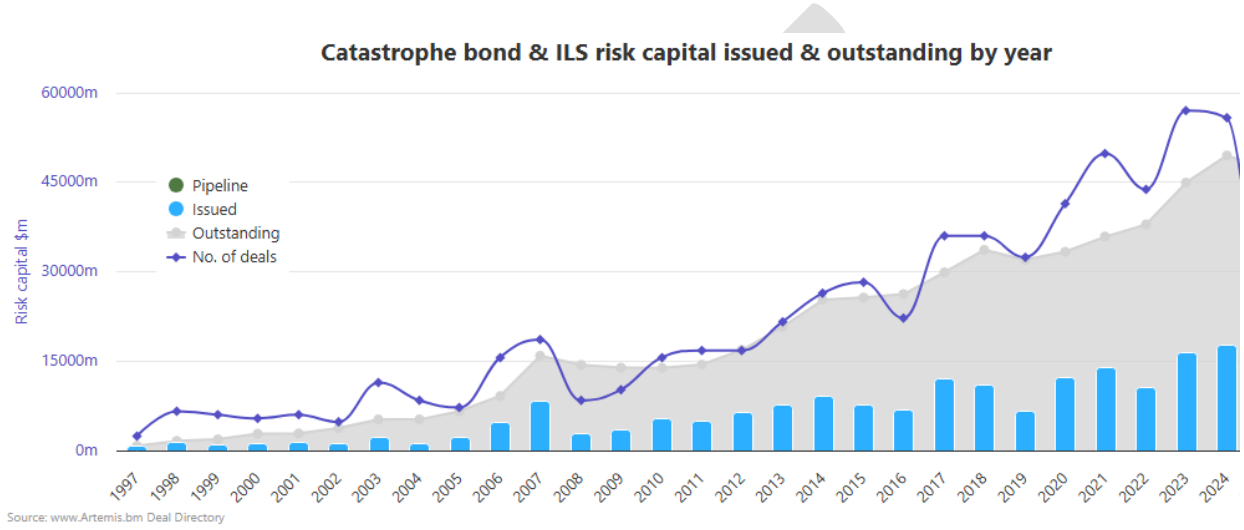


Date compiled April 20, 2024.
E&S = excess and surplus; property = the combination of fire, allied lines, homeowners and nonliability portion of the commercial multiperil business lines.
Entities are deemed excess and surplus writers if it has an active status of not licensed, eligible surplus lines or domestic surplus lines insurer within Schedule T - Exhibit of Premiums Written. Industry data excludes excess and surplus premiums written through Lloyd's of London.
Source: S&P Global Market Intelligence.

The chart above shows the E&S market share of premium totals by state.
Source: NAIC, S&P

ILS and Catastrophe Bonds

The number of Insurance Linked Notes and Catastrophe bonds issued and outstanding continues to rise which may be indicative of increased catastrophe risk and the risk being transferred outside the insurance industry.



Source: Artemis

Mitigation

This report is primarily an assessment of natural catastrophe risks. However, we believe that some mention of the key mitigation initiatives taken by states to reduce the impact of natural catastrophes is appropriate. This section describes some of the key initiatives taken by the NAIC and its member states.

In addition to the existing modeled losses and capital charge for Earthquake and Hurricane, in 2024 state insurance regulators require insurers to report their modeled losses for severe convective storms and wildfire for informational purposes only in the RCAT section. Also new in 2024 is the requirement for insurers to conduct scenario analysis and report the 2040 and 2050 Climate Conditioned modeled losses for hurricane and wildfire perils.

Many states have implemented mitigation programs in the form of fortified homes, strengthening rooves and grant programs to implement such home resilience modifications. Many states have numerous programs both within and outside of a state's insurance department. The programs are continuously evolving and it is a challenge to capture all of them. However, below are a few examples of wind mitigation programs:

States with established wind mitigation grant programs located within a department of insurance

State	***Name of program***	***Program website address***
Alabama	Strengthen Alabama Homes	https://www.strengthenalabamahomes.com/
Louisiana	Louisiana Fortify Homes	https://www.ldi.la.gov/fortifyhomes
Oklahoma	Strengthen Oklahoma Homes	www.strengthenoklahomahomes.com
South Carolina	South Carolina Safe Homes	www.doi.sc.gov/605/SC-Safe-Home/

States with authority to establish an operational wind mitigation grant program within the department of insurance

State	***Name of program***
Kentucky	Strengthen Kentucky Homes
Minnesota	Strengthen Minnesota Homes
Mississippi	Strengthen Mississippi Homes

States with wind mitigation grant programs not operated by a department of insurance

State	***Name of Program***	***Program website address***
Florida	My Safe Florida Home	http://www.mysafeflhome.co
North Carolina	NCIUA Strengthen Your Roof	http://www.strengthenyourroof.co

For more detailed state mitigation information please follow the links below:
Resilience-policy-playbook-addendum

Resilience-policy-resource-guide

The NAIC also has a Catastrophe Modeling Center of Excellence (COE) within the (CIPR), maintaining a neutral perspective to build insights from data in a non-partisan manner. The COE provides regulators with technical training and expertise regarding catastrophe models and information regarding their use within the insurance industry. The COE also conducts research utilizing outputs from catastrophe models to assess the risk of loss from natural hazards. Risk assessment is a foundational tool to identify potential economic and insurance market disruption which can be applied to support policy and legislative action to reduce the risk.

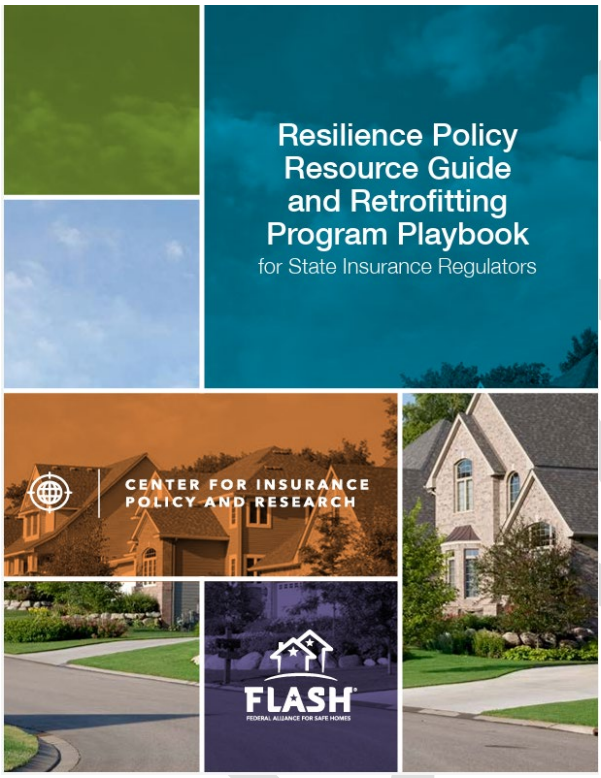
The Resilience HUB within the COE continues to work with States assisting them in the legislative and rule making process, designing, implementing and launching risk transfer programs such as grant programs to retrofit homes to minimize loss due to hurricanes, severe convective storms, hail, tornados and wildfire. For wind related perils, programs like these adopt a retrofitting standard to achieve a level of resilience such as the FORTIFIED™ Standard developed by the Insurance Institute for Business and Home Safety (IBHS). The FORTIFIED™ Standard, based on scientific research, approaches retrofitting using a systems approach, meaning the components that go into building a home are reliant upon each other. This approach ties the components of a structure together, creating a more robust structure and creates a sealed structure from water, wind intrusion and damage from hail. Additionally, departments of insurance are incentivizing consumers to retrofit their home by offering insurance premium discounts on homeowner's policies covering homes that have achieved standards adopted by program.

For states that are addressing mitigation from the destructive force of wildfire, states consider adoption of the IBHS Wildfire Prepared Home. This standard adopts elements of home protection such as creating a defensible space around a structure void of fuels for fire such as combustible shrubbery, wood fences connected to the structure, and the use of protective measures against embers that spread fire such as roofs and ventilation grates. These measures help prevent ember intrusion into a structure.

Departments of Insurance, through the Resilience HUB, work to adopt legislation or exercise authority of insurance commissioners to create additional incentives for consumers to retrofit their homes against loss. State insurance Commissioners are creating incentives to protect consumers as an alternative to retrofitting a home. State regulators across the country are adopting homeowner's policy FORTIFIED™ Roof endorsement to provide for the additional cost to upgrade a roof to the FORTIFIED™ Standard in the event of a roof replacement claim. In conjunction with consumer's using catastrophe savings accounts or other financial options to set funds aside for insurance deductibles or additional mitigation, create a level of resiliency for the consumer that will have lasting effects on the availability and affordability of insurance.

The CAT COE Resilience Hub is engaged with several partners in this space where collaboration is key to the success of establishing viable mitigation programs. The NAIC has a formal memorandum of understanding (MOU) with IBHS. In addition to collaborating on the technical aspects of mitigation programs, the partnership also provides opportunities to train and physically demonstrate to regulators solutions that are being sought after through science. The CAT COE and Resilience HUB in partnership with IBHS hosts trips to the IBHS Research Facility in Richburg, South Carolina, where regulators get insight into the FORTIFIED™ Program and current research that will have an impact on the built environment. Witnessing tests first-hand such as burn demonstrations, hail and wind tests demonstrate the effectiveness and complexity of the research being conducted as well as seeing how solutions are derived from product or building technique improvement.

The CAT COE and Resilience HUB have developed tools that are utilized by regulators regarding mitigation grant programs. Tools to assist regulators with planning and operation of mitigation programs are available through the CAT COE to departments of insurance. An example of one tool available to regulators is a collection of data and maps that help regulators develop an effective distribution strategy of where resources can be deployed geographically to realize the highest rate for potential return by reducing loss with the intent of reducing insurance premiums to consumers. The CAT COE developed a methodology, analysis and reporting format to assist regulators in determining the value of mitigation discounts applied to insurance premiums. This report is also useful in supporting legislative needs to justify the incentive, helping make insurance more affordable for consumers. Additionally, regulators have access to model legislation to assist commissioners developing regulatory authority for their program. Also, published research papers and findings for mitigation are also available to regulators through the CAT COE.



The CAT COE and Resilience HUB in collaboration with IBHS, Smart Home America, and the Federal Alliance of Safe Homes (FLASH), developed the Resilience Policy Resource Guide and Retrofitting Program Playbook (Playbook). Although the Resilience HUB uses and engagement team to work directly with states, providing planning and detailed guidance through the development of a mitigation grant program, this playbook is available to regulators and is designed to provide an overview of mitigation programs across the country. It gives a general understanding of how states approach the development of programs. The playbook highlights established programs, featuring specifics for those programs such as grant amounts and incentives offered for mitigation.

Appendix A: Risk Assessment Scale

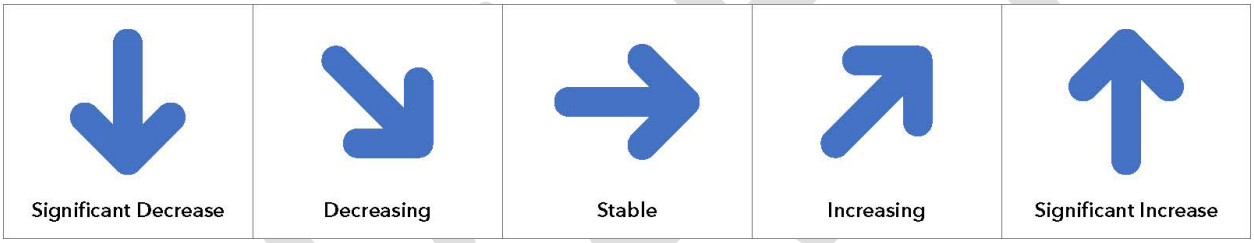
Risk Assessment Scale

Assessment levels are conducted on a four-tier scale consisting of High, Moderate-High, Moderate-Low, and Low. Assessments are based on current and historical risk indicators and expert judgment.

Low	Moderate-Low	Moderate-High	High

Trend Scale

The trend is a historical trend and is indicative of the level of risk. Trend levels are documented on a five-tier scale consisting of Significant Increase, Increasing, Static, Decreasing, or Significant Decrease. Trends are based on the changes in risk indicators and expert judgment.



Appendix B: Fair and Beach Plan PIPSO Data

For more details on Fair and Beach plans by state please follow the links below. For example, The PROPERTY INSURANCE PLANS COMPILATION OF EXPENSES AND ASSOCIATED RATIOS Report contains data on # of policies issued, premium written, loss and loss adjustment expenses for each state that has a plan. The Compendium report contains data on policy types, limits, rate structure and commission policy.

Note these links are on the NAIC's regulator only section of the NAIC's website. Otherwise, these reports are available by subscription.

Compendium of Property Insurance Plans

Compilation of Expenses & Ratios

Directory Property Insurance Plans

Market Penetration Reports

PIPSO Reports

Governing Committee Rosters