Climate Risks Present a Significant Threat to the U.S. Insurance and Housing Markets

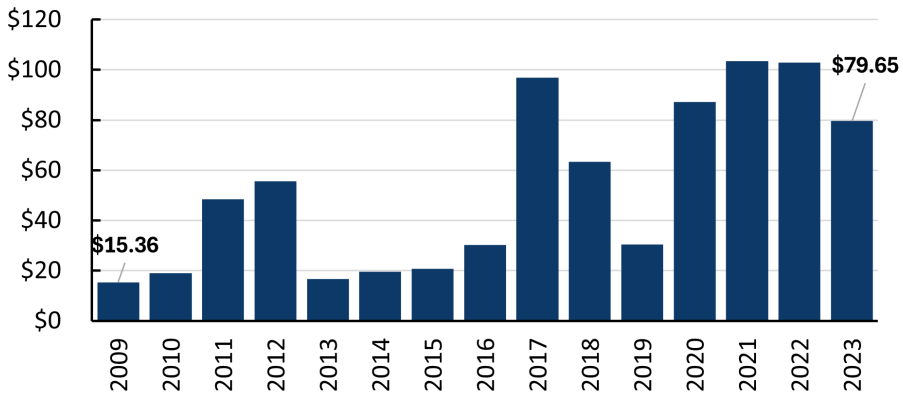
Climate-exacerbated disasters, such as wildfires, hurricanes, floods, drought, and excessive heat, are increasing risk and causing damage to homes across the country. Alongside the physical destruction and loss of life, these disasters are also making home insurance more expensive and are even leading some insurers to stop offering plans altogether in areas like California, Florida, and Louisiana. Rising premiums and this issue of uninsurability could seriously disrupt the housing market and stress state-operated insurance programs, public services, and disaster relief. Given this rising threat, innovations in climate mitigation and adaptation, insurance options, and disaster relief are essential for protecting Americans and their finances.

Across the country, Americans depend on homeowners' insurance

Insurance is a financial contract to reimburse property owners for the costs of repairs that result from events that are predictably rare. While damage to a home from normal and expected wear-and-tear is not covered by home insurance policies, damage from a falling tree or a hailstorm is rare enough to be covered by insurance. However, if disasters grow more frequent or produce damages that are not easily reparable, the existing insurance market stops working: insurance premiums spike and insurers pull out of states. This pattern is already emerging in certain parts of the country, in part because of rising climate disaster risk.

Insured Losses in the United States Have More Than Quintupled Since 2009

Total insured losses from natural disasters, billions of 2023 dollars



Source: Insurance Information Institute, National Oceanic and Atmospheric Administration

Climate change is stressing home insurers' core business model, contributing to rising uninsurability and premium spikes

Disasters like hurricanes and wildfires are now causing more frequent and more significant damage to homes and cars, incurring large recovery and rebuilding costs. Last year, roughly 70% of Americans reported that their community experienced an extreme weather event (such as flooding, extreme heat, water shortage, sea level rise, or wildfire). In the 1980's, the UnitedStates experienced an average of one billion-dollar disaster (adjusted for inflation) every four months; now, these significant disasters occur approximately every three weeks. Because these disasters are no longer predictably rare, the U.S. insurance market is stressed. 2023 was the worst year for home insurers since 2000, with losses reaching $15.2 billion—more than twice the losses reported in 2022.

Growing stress on the fundamental business model of insurers has led to three concurrent scenarios in the insurance market, which impact people in different ways: no insurance, underinsurance, and more expensive insurance.

First, insurers are pulling out of some states with substantial wildfire or hurricane risk—like California, Arizona, Florida, and North Carolina—leaving some areas "uninsurable." Many of these climate-impacted regions remain relatively affordable and are near sought-after landscape features like beaches or mountains, which has led people to move into these areas at a historic rate, increasing the number of people unable to get insurance. Because climate disclosure requirements vary widely, people are sometimes not even aware of their home's risk.

In many regions, even if the homeowner can get insurance, the policy covers less than the actual physical climate risks (for example, rising sea levels or more intense wildfires) that their home faces, leaving them "underinsured." A First Street estimate finds that 39 million US homes are insured at prices incommensurate with the risk they actually face. Some state agencies also cap insurance rate increases, resulting in many homeowners paying significantly less in premiums than their home's risk profile would suggest.

In places where insurers have begun to price in increased risk, homeowners' insurance is becoming more expensive. In 2023, the average U.S. homeowners' insurance rate rose over 11%. JEC Democratic staff calculated that average homeowners' insurance premiums increased 44% from 2011 to 2021 and with novel data have provided state-by-state premium increases from 2020 to 2023 (see table below). Increasing insurance premiums are the result of many factors, including:

- Repair rates for damages, in large part from climate-fueled disasters, are surging due to higher material and labor costs for builders. Structural replacement costs associated with homeowners insurance increased by 55% between 2020-2022.
- Reinsurers (the insurers of insurance companies) are raising rates too—they raised prices on insurers by 37% in 2023, partially to account for higher climate risks.
- Recent research has shown that insurance rate caps in some states push higher costs, partly fueled by climate risks, off to states that regulate insurance less.

- There are also insurance litigation issues; for example, Florida accounts for 9% of home insurance claims but 79% of lawsuits over filed claims.

Disruptions to insurance could destabilize the housing market

Climate change creates significant financial risks to most Americans' largest asset: their home

Uninsurability, underinsurance, and more expensive insurance all present large risks and higher costs for American homeowners. People are struggling with mounting premium costs, and some home sales are falling through as people cannot secure insurance, a requirement to get a mortgage. On the construction side, new affordable apartment buildings or starter homes, which are built with narrow margins, are now even harder to finance because of rising insurance costs. Roughly 7% of homeowners do not have insurance in the United States (New Mexico has the second highest uninsurance rate at 13%), and these numbers may climb without changes to the insurance business model. Renters insurance uptake is even smaller; in 2024, roughly 42% of people were projected to be without renters insurance, which would protect their belongings and financial security in a more focused way than an overall building policy. While less research has focused on renter uninsurability, rising climate risks would also affect it even if the payouts are normally smaller.

Those who do secure insurance are often underinsured from wildfire and flood risks—with American homeowners underinsured by as much as $28.7 billion a year because their policies do not reflect their actual climate risk. This represents more than 17 million homes (nearly 19% of total US home value) and could ultimately represent $1.2 trillion in potential lost value because homeowners do not have enough insurance coverage to rebuild following possible losses. Given recent devastating hurricanes, it is also important to point out that traditional homeowners' policies do not cover flood damage, which is often only covered by an additional plan provided by the National Flood Insurance Program. Estimates suggest that only 4% of U.S. homeowners have flood insurance.

These risks to housing wealth are most acute for communities that are vulnerable due to climate risk (e.g., wildfire, flood, or wind risk), income, poverty rates, education, age, belief in climate change (e.g., people could be less likely to prepare for extreme events), and rural location. If climate risks were properly priced into home values, then the most vulnerable homeowners could lose between 23% to 61% of their home equity depending on the scale of the re-pricing, with the average homeowner losing between 8% to 33.7% of their home equity.

Fragile and costly insurance plans of last resort expose Americans and the market to more risk

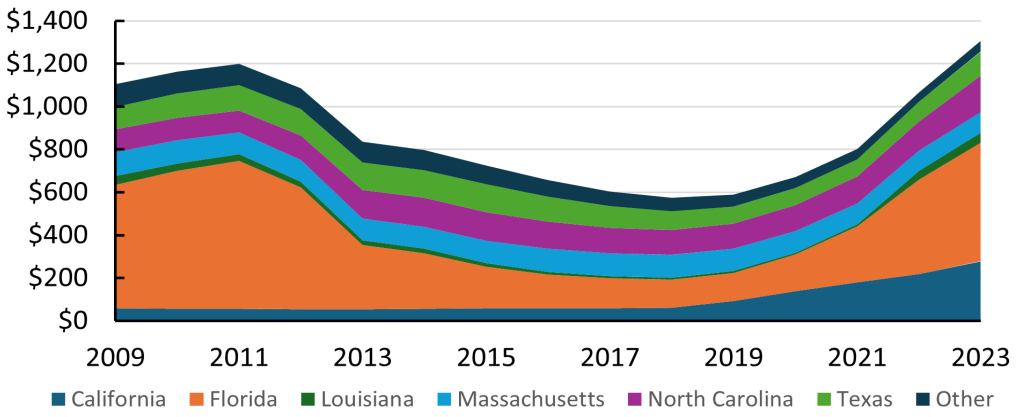
As insurers pull out of areas, more homeowners rely on plans from state-run insurers of last resort, often called Fair Access to Insurance Requirements (FAIR) policies. These insurance plans are available in over 26 states and are designed for homeowners in high-risk areas who have been denied coverage multiple times in the private market. The state-run programs are subsidized by private insurance companies, pooling the risk so individual companies are less

exposed. However, these plans often leave homeowners underinsured and financially strained because they cover less than a standard home policy and usually cost more. The actual coverage that homeowners receive is quite limited—most states' plans only insure homes at actual cash value—not replacement cost, making recovery following disaster more challenging.

The use of FAIR plans has dramatically increased since 2018 and hit a record high in 2023 with the plans safeguarding over $1 trillion in covered value. As more standard insurers decline to renew policies or offer new ones, more Americans are looking to FAIR plans, turning these plans into the insurer of first resort in California and in high-risk areas across the country. FAIR plans can present risks to the broader insurance market because in states like Louisiana, California, and Florida, these carriers can pass along the cost of their losses to all other property insurers in the state. Insurers then pass along these higher costs stemming from losses in high-risk areas to homeowners, driving up premiums for all insured homeowners in these states.

Underwriting for State-Operated Plans Hit Record High in 2023

Total exposure from FAIR and Beach and Wind Plans, millions of dollars, adjusted for inflation



Source: Insurance Information Institute; Fran Moore (Briefing Book) 2024
Note: Beach and Wind plan exposure for 2012 and North Carolina data prior to 2011 are imputed.

In addition to these last resort plans, there has been a growth of fragile property insurance companies, especially in Florida. Across all insurers in Florida between 2009 and 2022, 19% of lower quality insurers became insolvent, while no larger, less risky insurers failed during the same period. Counties where more homeowners are insured by these riskier companies have more mortgage defaults because insurers in financial trouble are slower to pay out claims or may not pay the full amount.

State and local governments will lose tax revenue, and the public sector will be on the hook for increased disaster relief

The public sector also faces significant financial risk as housing and insurance markets falter. For example, as people cannot buy homes—or their homes lose value because of climate risk—state and local governments will lose revenue from property taxes. This could create budget shortfalls, resulting in funding cuts to emergency services, education, and much more.

At the federal level, when homeowners cannot rely on insurance payments to rebuild after disasters, they turn to disaster relief funding from FEMA and the Small Business Administration. However, the fund is often exhausted in the middle of hurricane season. For example, eight days into the 2025 Fiscal Year, FEMA had already exhausted nearly half its annual disaster relief following Hurricanes Helene and Milton—with relief efforts and associated spending likely to accelerate further. In a world of increasing disasters and less insurance coverage, supplemental annual appropriations for the FEMA Disaster Relief Fund are not sustainable.

Innovations in insurance, resilience, and disaster relief are essential to protecting Americans and their finances

The cost of driving down climate risk is much smaller than the costs of extreme weather events like wildfires and flooding that are wreaking havoc across the U.S. housing market. New insurance options can be part of the solution—for example, insurance premium discounts can incentivize homeowners to make their properties more resilient to climate risks.

A previous JEC report on climate financial risks discussed other potential solutions like parametric insurance (a supplemental insurance plan that can pay homeowners faster), community-based catastrophe insurance that incentivizes community-level resilience efforts, and attempts to use risk-pooling, data, and AI to better price risk. JEC Chairman Heinrich introduced the Wildfire Insurance Coverage Study Act of 2024 to address these data needs and study wildfire risk, insurance, and mitigation to help Americans make more informed decisions about the risks to their homes.

To face a changing world, the business model of insurance needs to adapt

Americans will experience climate risk over the next several decades and beyond—much longer than the one-year time frame that insurance policies use to price risk. Insurance policies that are longer than a year can better price the risk that homes face and smooth out the higher costs necessary to account for a changing world. While thirty-year policies that match the length of a conventional mortgage would better align insurance policies with risk to a home, some industry leaders have suggested starting with three-year policies—to begin adapting the business model.

Countries like New Zealand, France, and Japan use public reinsurance programs to support insurance markets facing climate risk. A public reinsurance program could simplify a complicated insurance sector and transfer risks associated with catastrophes to the Federal government. Pairing this with state and local risk reduction measures and insurance market reforms could ensure that the market is still pricing actual climate risk (and not distorting the price signal) but remove the threat of catastrophic risk that is driving insurance premium increases and leading companies to pull out of markets.

Finer scale data on wildfire risk would help identify potential losses and allow insurers to keep operating in regions with more climate risk. A recent study showed that insurers that use more precise data on wildfire risk are more likely to offer plans in high-risk areas and charge lower premiums compared to insurers with less detailed data. The research further suggests that

making better climate risk data available is a much more cost-effective way to address insurance affordability and availability than price caps. Improved data may also incentivize Freddie Mac and Fannie Mae, government agencies that backstop roughly 70% of the mortgage market, to buy better-quality mortgages in high-risk areas.

Increasing resilience would minimize the need for insurance payouts and disaster relief

Improving building codes to better account for climate change and other adaptation actions will increase the resilience of housing and commercial buildings. Cost-effective building code requirements like building above flood elevations or removing brush around a home to limit wildfire risk can save $4–$11 per $1 invested. To help fund the upfront investment costs of these resilience efforts, the Shelter Act would create a new tax credit, allowing taxpayers to deduct 25% of disaster mitigation expenditures. Improvements to several FEMA programs could increase investment before disasters hit. These include:

- Expanding the flagship pre-disaster mitigation grant funding available through FEMA's Building Resilient Infrastructure and Communities (BRIC) program beyond the nearly $3 billion it received in the Bipartisan Infrastructure Law (BIL) to meet growing demand (only 22 states received funding in FY23; although, applications were received from all 50).
- Making it easier for states to apply for FEMA's Hazard Mitigation Grant Program, which gives funds to states hit by a disaster that they can use to protect against future damage. The Biden-Harris administration recently streamlined the program's application process.
- Enacting a National Disaster Safety Board (similar to the National Transportation Safety Board), which would provide data-informed recommendations to help communities become more resilient to disasters.
- Expanding the Community Wildfire Defense Program, created by the BIL.

Insurance innovations would go a long way, but updating disaster relief is also critical

To better account for the magnitude of climate change, Congress should update disaster relief appropriations. Currently, disaster fund appropriations are often calculated from ten-year historical averages, which do not take into account how future climate and other factors will accelerate costs.

Conclusion

Climate change threatens housing markets and requires action from both the private and public sectors to stabilize markets and protect American homes. Though support from the public sector may be harder to rely on in the coming years, Congress can still use its appropriations powers to bolster promising resilience programs and support more transparency in the industry. Innovations in the insurance business model and an increased focus on mitigation and resilience to climate risks will protect homes before disasters hit and help Americans get back on their feet quickly.

Average Insurance Premiums Increased by Hundreds to Thousands of Dollars in the Last Four Years				
State	2020 Annual Average Insurance Premium	2023 Annual Average Insurance Premium	Change in Average Premiums from 2020-2023	Climate Risk Rank
Alabama	$1,961	$2,446	+$486	15
Alaska	$1,684	$1,851	+$167	6
Arizona	$1,255	$1,554	+$299	39
Arkansas	$1,792	$2,150	+$358	28
California	$1,804	$2,398	+$594	16
Colorado	$2,080	$2,972	+$892	10
Connecticut	$1,945	$2,465	+$521	18
Delaware	$1,530	$1,980	+$450	30
District of Columbia	$1,896	$2,867	+$971	50
Florida	$2,274	$3,547	+$1272	1
Georgia	$1,911	$2,451	+$540	31
Hawaii	$2,261	$2,958	+$697	11
Idaho	$1,409	$1,860	+$451	35
Illinois	$1,787	$2,158	+$371	45
Indiana	$1,594	$1,994	+$399	44
Iowa	$1,597	$2,002	+$405	34
Kansas	$2,199	$2,624	+$424	27
Kentucky	$1,873	$2,233	+$360	4
Louisiana	$1,807	$2,793	+$986	3
Maine	$1,242	$1,471	+$228	32
Maryland	$1,777	$2,226	+$450	46
Massachusetts	$2,125	$2,980	+$855	38
Michigan	$1,920	$2,056	+$136	47
Minnesota	$1,866	$2,457	+$591	43

Mississippi	$2,295	$2,787	+$492	14
Missouri	$1,807	$2,262	+$455	36
Montana	$1,739	$2,209	+$470	21
Nebraska	$2,205	$3,055	+$849	23
Nevada	$1,285	$1,497	+$212	51
New Hampshire	$1,665	$1,909	+$244	25
New Jersey	$2,027	$2,506	+$479	33
New Mexico	$1,688	$2,124	+$436	41
New York	$1,937	$2,325	+$388	26
North Carolina	$1,714	$2,091	+$377	22
North Dakota	$1,915	$2,220	+$306	29
Ohio	$1,436	$1,812	+$376	40
Oklahoma	$2,389	$2,990	+$602	20
Oregon	$1,187	$1,561	+$374	24
Pennsylvania	$1,128	$1,567	+$439	7
Rhode Island	$2,298	$2,792	+$494	49
South Carolina	$1,731	$2,133	+$403	5
South Dakota	$1,936	$2,617	+$681	19
Tennessee	$1,638	$2,041	+$404	13
Texas	$2,167	$2,677	+$510	9
Utah	$1,194	$1,701	+$507	48
Vermont	$1,761	$1,947	+$186	12
Virginia	$1,494	$1,902	+$408	37
Washington	$1,513	$1,923	+$410	17
West Virginia	$1,421	$1,690	+$268	2
Wisconsin	$1,403	$1,658	+$256	42
Wyoming	$1,628	$2,291	+$663	8

Source: National Resilience Index, First Street Foundation, and Keys and Mulder 2024

Note: Insurance premium data are from Keys and Mulder 2024. The climate risk ranking is based on data from all three sources above on the current expected annual loss rate due to climate perils (estimated total damages over total replacement value).