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**Hearing on “Risky Business: How Climate Change is Changing Insurance Markets”  
United States Senate Committee on the Budget  
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Thank you, Chairman Whitehouse, Ranking Member Grassley and members of this Committee for inviting me here today.

My name is Nancy Watkins, and I am an actuary and a principal with Milliman, an independent consulting firm. I serve as an expert on catastrophe risk for insurers, real estate industry groups, and state and federal government agencies. I also volunteer to promote insurance availability and affordability alongside the National Association of Insurance Commissioners, Western Fire Chiefs Association, and the United Nations.

Let’s talk about homeowners’ insurance and how climate change is impacting it.

First: Climate change is not a problem of the distant future; it’s already here.

Across the country, we have insurance protection gaps and crises exacerbated by climate change:

- Flood risk in the U.S. is already very high, increasing rapidly and unsustainable once you factor in sea level rise. The National Oceanic and Atmospheric Administration (NOAA) reports that about 80% of the East and Gulf Coasts are seeing more high-tide flood days,<sup>1</sup> and that this spring about 44% of the U.S. is at risk for flooding.<sup>2</sup> Most flood risk is not covered by the private market; only 4% of U.S. homeowners have flood insurance today, largely through the government-run National Flood Insurance Program (NFIP).<sup>3</sup>
- Unprecedented wildfires have driven insurers to shed high-risk policies in Western states like California, Oregon, and Colorado. In California, homeowners’ insurers lost \$20 billion in 2017 and 2018 due to wildfire, wiping out two times the cumulative profits earned over the prior 26 years.<sup>4</sup>
- Since 2020, Louisiana has been hit by multiple hurricanes, tropical storms, tornadoes and excessive rainfall events. After 20 companies folded or exited the state, more than 100,000 policyholders are now in the state-run insurer of last resort.<sup>5</sup>

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<sup>1</sup> <https://coast.noaa.gov/states/fast-facts/recurrent-tidal-flooding.html>

<sup>2</sup> <https://www.noaa.gov/news-release/spring-outlook-california-drought-cut-by-half-with-more-relief-to-come>

<sup>3</sup> <https://www.milliman.com/en/insight/unpriced-costs-of-flooding-an-emerging-risk-for-homeowners-and-lenders>

<sup>4</sup> <https://us.milliman.com/en/insight/wildfire-catastrophe-models-could-spark-the-changes-california-needs>

<sup>5</sup> <https://www.wtlv.com/article/news/investigations/david-hammer/louisianas-insurance-crisis-what-can-fix-it/289-a9fe2f3c-8701-4f75-959f-6ec7b5e7f380>

Insurance market withdrawals can cause ripple effects that endanger entire communities and create a downward spiral that's difficult to emerge from.<sup>6</sup> This could happen gradually, but it's possible for weakened markets to collapse quickly through a crisis of confidence triggered by one event.

Second: A broken insurance market is not *the* problem; it's a *symptom* of a larger problem – too much risk for the market to bear.

The risks associated with climate change and catastrophes are owned by homeowners and the community, not the insurance industry. Much of that risk can potentially be transferred to insurers if there is a sustainable private market, which rests on three pillars: availability, affordability and reliability.

Climate change is interacting in new ways with other inherent risks, causing cracks in all three of those pillars. The policy actions intended to help can actually backfire and accelerate the collapse of the insurance market. This generally happens because these actions don't address the underlying problem – that the risk is too high.

Often, this occurs when land use policies and building codes don't keep up with risk, resulting in a mismatch between actual vs. perceived risk by homeowners. Because we aren't all actuaries, one way to effectively communicate the actual risk to consumers is to build the true cost of risk into insurance pricing.

Risk-based pricing drives behavior. If you can buy low-cost insurance or aren't even required to insure your home against flooding, you expect this to be a safe place to live. If you can't get affordable insurance, you may act to mitigate the home's risk, or you may decide it is too risky to live there at all.

The obvious downside is that premiums may be unaffordable for some homeowners. The government could decide that it is good policy to subsidize premiums, with the costs ultimately borne by others – generally, current and future policyholders or taxpayers who live in lower-risk areas, often in other states. To reduce premiums and the cost of subsidization, the only effective action we can take is to drive down the risk.

Third: The cost of driving down climate risk is much lower than the cost of inaction.

The choice to ignore climate risk and manage from crisis to crisis puts more families in harm's way, with low-income communities likely to be hit the hardest and suffer the most.<sup>7</sup> Failure to

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<sup>6</sup> For more information on the effects of climate change on the housing and financial markets, see [https://www.mba.org/docs/default-source/research---riha-reports/24981-riha-climate-change-volume-2.pdf?sfvrsn=3df0b2ea\\_1](https://www.mba.org/docs/default-source/research---riha-reports/24981-riha-climate-change-volume-2.pdf?sfvrsn=3df0b2ea_1) and <https://www.milliman.com/en/insight/unpriced-costs-of-flooding-an-emerging-risk-for-homeowners-and-lenders>

<sup>7</sup> For more on the impact of climate change at the community level, including climate displacement or gentrification, see <https://www.milliman.com/en/insight/climate-displacement-in-nyc-making-space-for-our-neighbors> and <https://www.milliman.com/en/insight/climate-gentrification-and-the-role-of-flood-insurance>

act early reduces the number of options available and drives up the costs of reaction at various government levels.

To avoid this we need to work collectively to bend down the risk curve. We need better data, better modeling, higher prioritization of mitigation vs. disaster response, better stakeholder coordination, and resource assistance to those areas most in need. The sooner our society chooses to face the risks associated with climate change, the more options we will have to drive down these risks, and the lower the cost will be.

Climate risks are complex and difficult to understand. The actuarial community is leveraging science and technology and working with other experts to measure these risks and communicate them to important stakeholders like this Committee. We aim to give you the best information available, so that you can make informed decisions.

Thank you.