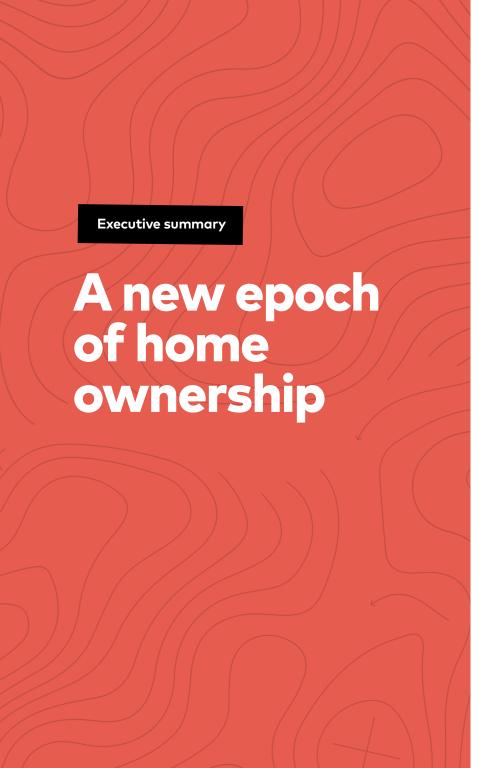


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- **Our Research:** Getting to know today's homeowner
- **Research Insights:** 5 ways homeowners are finding new footing on shifting ground
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"There is probably no industry that is more connected to the impact from and the impact to climate than insurance."

Steven Rothstein, Managing Director of Ceres Accelerator for Sustainable Capital Markets

The relationship between climate change and insurance is obvious; the solutions for the industry are not.

As more and more homeowners experience climaterelated impacts to their homes, what, if anything, can the insurance industry do to rise to the occasion?



Climate change has been on our collective radar for decades. But only in recent years has it come to be seen as an existential threat—not only to our planet and the people who live on it, but more specifically to the insurance industry, which exists to protect individuals from unexpected emergencies and damage to their property, homes, bodies, and more—all which are at greater risk due to climate change.

As climate-related disasters continue to increase year after year, destroying property and causing billions of dollars in damage globally and across the country, insurance companies are raising rates, pulling out of riskier markets, and dropping people from coverage. The fact that systemic changes

are required to truly stabilize the industry—policy and regulatory changes, government intervention, etc.—does not mean the insurance industry is off the hook. As more and more people encounter climate-related emergencies and face possible damage to and even destruction of their homes, what the industry does now—and how it responds to this moment of truth—will set a precedent for years to come.

In this report, we explore how homeowners are currently thinking about and experiencing climate change with regard to their homes and what the implications are for the insurance industry. We spoke with 12 individual homeowners of various ages

across the country to better understand their experiences, how they perceive risks related to climate change, and what role they expect insurance to play in protecting them, outlining our insights and learnings as they pertain to insurance. We conclude with a set of principles for engaging with customers in the new climate reality, alongside a number of practical recommendations for how the industry can deliver more value for their customers in this incredible moment of need.

A new climate epoch

For decades, scientists have agreed not only that the planet is warming at unprecedented rates, but that this warming is human-caused. Just this past summer, a group of scientists chose Crawford Lake in Ontario

to represent the start of the Anthropocene, a new epoch in geological time characterized by "human-induced, planetary-scale changes that are unfinished but very much underway." Science tells us that the unprecedented changes we have seen over the last century are evidence that we are already well into this new epoch.

Rapid and unprecedented changes

800k

Present-day levels of greenhouse gases in the atmosphere are higher than at any time in at least the past 800,000 years, with most of these emissions occurring since 1970.

2000 YEARS

Global temperature has increased faster in the past 50 years than at any time in at least the past 2,000 years.

3000 YEARS

The rate of sea level rise in the 20th century was faster than in any other century in at least the last 3,000 years.

1200 **YEARS**

The current drought in the western US is now the most severe drought in at least 1,200 years and has persisted for decades.

Current climate conditions are unprecedented for thousands of years.

Source: U.S. Global Change Research Program, The Fifth National Climate Assessment, 2023

Believing is seeing

Even as scientists have coalesced around climate change and its causes, the consensus among the general population has been slower and fluctuates year by year. Still, a large majority of Americans finally think global warming is happening, and this number is trending upward. "It's hard not to believe in something when you see it with your own eyes," one of our research participants told us.

And with rising temperatures come rising rates of disaster. The impacts of climate change are being felt across the world as each additional increment of warming leads to greater risk.

The U.S. now experiences, on average, a billion-dollar weather or climate disaster every three weeks, compared to the 1980s when they occurred once every four months (The Fifth National Climate Assessment, 2023). As temperatures rise and disasters become more frequent, people not only believe more in the fact of climate change but are seeing the impact in their communities.

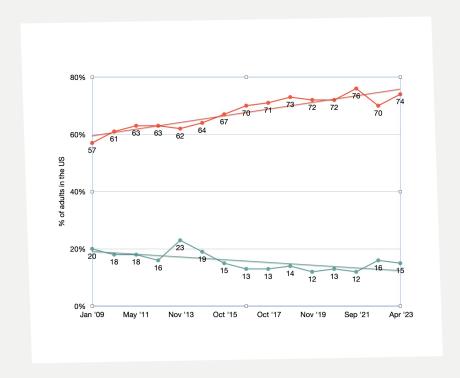
62%

of Americans think climate change is currently having some or a great deal of impact on their local community

Source: PBS Newshour 2023

Most Americans agree that global warming is happening

About three in four Americans (74%) think global warming is happening. By contrast only 15% of Americans think global warming is not happening. 11% say they don't know if global warming is happening.



THINK GLOBAL WARMING IS HAPPENING

THINK GLOBAL WARMING IS NOT HAPPENING

Source: Yale Program on Climate Change Communication; George Mason University Center for Climate Change Communication

A housing market out of step with reality

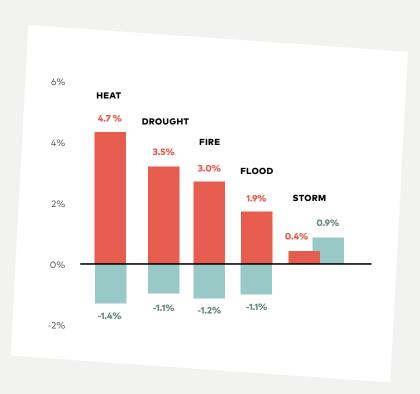
Within this environment of rising risk and awareness, the housing market has been marching to a different tune. As the pandemic years ushered in historically low interest rates, they accelerated in-progress (and dangerous) migration trends: retirees, remote workers, and people in search of more affordable housing fleeing more densely populated regions, inadvertently driving up home prices in areas already deeply at risk of climate catastrophe, including Phoenix, Fort Myers, and Austin, where populations and home prices boomed during the pandemic. Housing shortages across the country are likely to perpetuate this trend, as riskier, more affordable areas continue to attract developers and cost-sensitive buyers (Abrams, 2023).

The problem?

While more and more people move and build homes on risky terrain, housing prices and insurance rates have yet to reflect the actual risk in many places, putting the value of people's homes and the structures themselves at great risk.

America's climate-endangered areas are becoming more populous

Population change due to net migration in countries with certain climate risks, 2016–2020



COUNTIES WITH LARGEST SHARE OF HIGH RISK HOMES

COUNTIES WITH SMALLEST SHARE OF HIGH RISK HOMES

Source: Redfin analysis of data from ClimateCheck, county records, U.S. Census Bureau

Flaws in the market are suppressing home prices

In 2021, researchers found that houses in flood zones around the United States are overvalued by \$44 billion; a year later, the actuarial firm Milliman put that number at \$520 billion. The real figure is likely somewhere in between, but it's undeniably huge—and neither of those studies included homes exposed to potential fire, heat, or drought."

The Sierra Club

The insurance bubble

Over the last year, the insurance industry has finally started to respond. Between May 2022 and May 2023, home insurance policy premiums across the country increased by an average of 21% at renewal, with 94% being quoted a higher premium at renewal (policygenius). Some states are seeing rate increases far greater than the average—68% in Florida, 47% in New Mexico, and 46% in Texas.

Meanwhile, in California, four of the state's largest insurance companies paused or severely limited new home insurance applications and smaller insurers are following suit. Colorado is another state where it's becoming increasingly difficult to insure a home, while in Florida, the majority of homeowners are now insured through the state-sponsored insurance-of-last-resort providers.

Only the beginning

According to a recent report by the non-profit research organization First Street Foundation, 39 million properties across the U.S. are at high risk of climate impacts—risks that have yet to be reflected in the insurance premiums they pay. These

properties are "likely overvalued due to the underpricing or subsidization of climate risk in their insurance products," a phenomenon the report coins the "insurance bubble."

The report concludes that once these changes to insurance are reflected in higher insurance premiums, deductibles, and

non-renewed policies, millions of people across the country may be at risk of defaulting on mortgages and/or losing their homes. Many more will have no choice but to purchase insurance-of-last-resort policies, which could have devastating impacts on states, lenders, and homeowners themselves.

Properties at risk of insurance increases/	non-renewals

Peril	Number of properties already impacted by insurance adjustments	Number of properties at risk of future insurance-related corrections
Flood	4,711,479	11,972,823
Wind	1,709,834	23,912,789
Wildfire	336,473	4,414,900
Unique Properties with Flood, Wind, or Wildfire Risk	6,757,786	39,007,490
		Source First Street Foundation, the 9th National Risk Assessment, 2023

What does it all mean for homeowners?

Homeowners and prospective buyers are increasingly aware of and concerned about the risks. 83% of those shopping for a home consider climate risk (Zillow). Still, the same report found that affordability remains the greatest hurdle to prospective homeowners who "tend to accept what they can afford."

While homeowners can do their part to mitigate these risks, without insurance rates and risk factored into prices, buyers will continue to buy what they can afford—most would still choose homeownership in risky areas over not owning a home at all.

This means that many are at great risk—both physical and financial. Some are also unwittingly underinsured and may soon be uninsurable, making their homes less valuable. Until the markets, the regulation, and the policies around development adjust, more and more will continue to put themselves at risk.

And while nine out of the 12 people we spoke with did not believe climate change had diminished the value of their homes, only one of 12 agreed that their homeowners insurance made them feel safe and protected from climate-related emergencies, revealing a

discrepancy between how they see the value of their home and the risk to it.

In the following pages we explore what insurance can do now to help policyholders mitigate some of these risks, increase their confidence in insurance, and weather the future effects of climate change.

A discrepancy between percieved value and percieved risk



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people did not believe that climate change had diminished the value of their homes

Source: Cake & Arrow Research, 2023



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people agreed that their homeowners insurance made them feel safe and protected from climate-related risk to their home



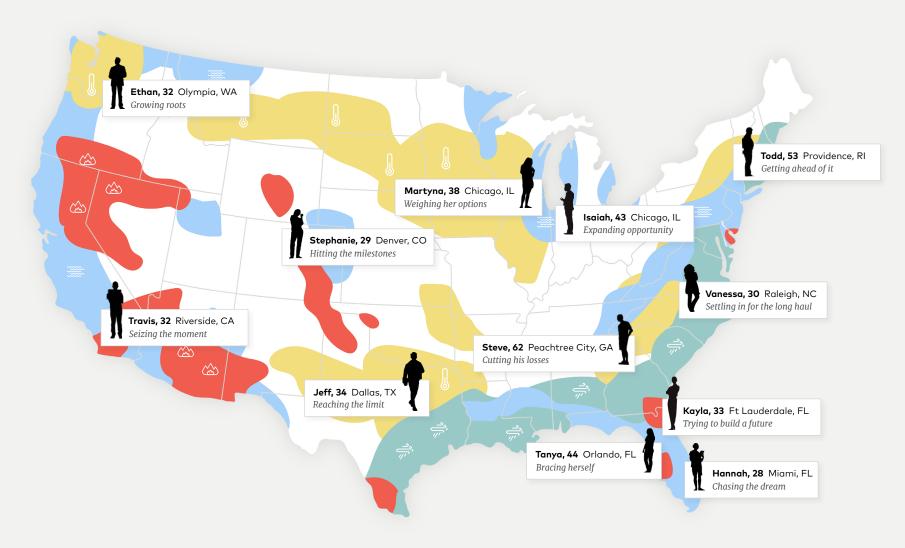
Getting to know today's homeowner

At Cake & Arrow, our human-centered design research always puts people first. We use exploratory methods, such as the qualitative interviews we conducted for this report, to capture real-life stories and uncover insights. These stories shape our work — ensuring we meet people where they're at and design solutions that truly serve their needs.

We believe this kind of research sets the stage for meaningful transformation and innovation that tangibly improves people's lives. Applying user-centered research methods to check in with homeowners, we were able to surface latent needs, identify emerging opportunities, and articulate deeper insights—all of which can act as a launch pad for insurance organizations looking to better support homeowners.

For this research study, we recruited a representative sample of 12 homeowners from across the United States, conducting 1:1 qualitative interviews with each to better understand how climate change is impacting their ideas around homeownership, insurance, and the future.

Our interview subjects





WILDFIRES EVERYWHERE

The number of wildfires across the U.S. doubled between 1984-2015



HOTTER HIGHS & LOWER LOWS

2023 was the hottest summer on record



SCARIER STORMS

The East Coast has experienced more frequent and more intense storm activity



URBAN DELUGE

City infrastructures overwhelmed by more frequent and more intense rainfall

Research insights

5 ways homeowners are finding new footing on shifting ground

Every one of the homeowners we interviewed has been touched by climate change—some in large and others in small ways. Each has responded to their unique circumstances in differently.

One Long Island man we spoke to lost his home in Hurricane Sandy and had to rebuild, only to find that to insure his newly rebuilt home he'd have to raise the foundation by eight feet. He cut his losses, sold the house, and moved to Georgia. A Miami woman saw her condo's insurance premium triple in a year. That, along with skyrocketing HOA fees, has made owning the condo less practical financially. She is now planning to move permanently to Denver where she and her husband recently purchased a home. Meanwhile, the roof on a native North Carolina woman's house has been damaged multiple times by tornados—weather phenomena that were once unheard of in her hometown and have become near yearly occurrences. She's now figuring out how to prepare for a future where tornados are the norm.

Through this research, we uncovered five qualities that are characteristic of these responses. These qualities each reveal specific patterns and mindsets common among homeowners, which, in turn, surface opportunities for how insurance companies can better support and engage with policyholders as they are increasingly impacted by climate change.

1. Staying grounded

WHEN LEAVING ISN'T AN OPTION

For some of us, it might be tempting to question why people living in some of the most climate-impacted regions choose to remain. Our research with homeowners made it clear that for many people living across the United States, home isn't a place they can easily pick up and leave.

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said they'd seen direct effects of climate change in their community

Several of the homeowners we spoke with have lived in the same city or town for their entire lives. They intentionally bought homes close to extended family members and old friends, they are deeply connected to their communities, and plan to stay put (maybe not in the same house, but in the same area) for the the rest of their lives, regardless of what happens with the climate. For these homeowners, leaving isn't an option.

Among the homeowners we spoke with for whom "rootedness" was a defining characteristic of their relationship to home, we noticed several patterns:

Taken aback by (and unprepared for) changing weather phenomena

Most of the people we spoke with who grew up in the place they live or had lived for a long time had certain expectations around extreme weather. Those from Chicago expected winter storms but were blindsided by recent flooding. Those from Florida knew there would be occasional hurricanes, but were unprepared for the frequency and intensity at which they have occurred in recent years.

One North Carolina woman described experiencing a tornado the year she bought her house:

"I knew how to prep my home and our property for a hurricane—but a tornado? We don't get tornadoes here, or so I thought."

ADAPTING IN PLACE

Vanessa, 30 Raleigh, NC



"This will always be home for so many reasons, but it doesn't feel like the place where I grew up anymore."

As a young mother rooted in her hometown, Vanessa grapples with climate change. Raleigh, familiar with hurricanes, now has tornados to add complexity. Determined to provide stability, she adapts to the evolving challenges, navigating a transformed landscape for her family in the place she holds dear.

As she thinks about how she can do more to protect her home and her family, she wonders if there is more her insurance company might do to help her feel better prepared to face a future where tornadoes—in addition to hurricanes—are run of the mill.



BRACING HERSELF

Tanya, 44 Orlando, FL



I know the hurricane situation will only get worse, but I grew up here. My mother lives here, my kids live here. I'm just trying to be prepared for whatever comes next so I can stay here long-term.

A third-generation Orlando native, Tanya was inspired by seeing her mother and her grandmother combine their resources to buy her childhood home. She followed in their footsteps, buying her first home in Orlando more than 20 years ago.

Recently remarried, Tanya and her husband sold their respective houses in 2019 to buy something together. Seeing hurricanes worsen, finding a place safe from flooding and other impacts of hurricanes was a top priority.

As they have watched the insurance industry around them "go berserk," Tanya feels lucky they've seen only minimal increases to their premium, and sometimes wonder if their long-standing relationship with their agent has anything to do with it.

Rely on their personal knowledge and observations to assess risks

Surprised by new weather phenomena and lacking reliable sources to help them better understand the risk, some of the homeowners we spoke with felt they have no choice but to use their own judgment—based on experience, what they've heard from others, and their own observations—to make decisions about where and where not to live.

When Tanya, an Orlando native bought a home with her husband a few years back, they chose to play it safe and buy in the exact subdivision where she already lived:

"Having lived here for several years and seeing a few hurricanes, I knew it was an area that wasn't prone to floods and that was enough for me."



Deep community connections make them feel more insulated from risk

Whether it was having a guy from the neighborhood as your insurance adjuster, an insurance agent referred by your in-laws, or a landlord who likes you and wants to help you buy his house, deep community connections in the places they live gave some of the homeowners we spoke with a sense of resilience in the face of climate change. While no homeowners felt that these kinds of connections meant they would be untouched in the future, they did feel slightly more insulated from risk knowing that people in their communities would have their backs.

One homeowner we spoke with explained what she felt were her surprisingly reasonable insurance premiums this way:

"We kind of lucked out. My husband has this personal broker. He's been doing business with him for a long time. His parents did business with him. So he had kind of built that relationship."

What insurance can do now

Increase climate risk awareness

Educate policyholders about changing weather patterns in their area. If hurricanes are on the rise, communicate this to them so they aren't blindsided.

Leverage existing community bonds

Partner with local businesses, service providers, and professional networks to educate policyholders and incentivize climate risk mitigation.

Help homeowners prepare for new risks

Offer policyholders tools and resources to prepare for new risks they don't expect or fully understand. Think playbooks, safety or survival guides, or care packages delivered or distribued at just the right time.

^{2.} Replanting

FINDING A NEW PLACE TO CALL HOME

While some homeowners are doubling down, committed to staying put, others see the writing on the wall and are trying to grow roots in new, ideally less impacted regions of the country. These homeowners are looking to establish the same kind of rootedness they may (or may not have had but desired) in the places they left behind. They aren't necessarily seeking out the next hot real estate market, but a place to call home, where they can ground themselves—perhaps raise their families, perhaps retire.

For these homeowners, it's not just about staying put, but about finding a safe place insulated from climate risk in the first place and establishing a home as well-protected as possible where they can feel confident putting down roots.

Among the homeowners we spoke with for whom "replanting" was either a future goal or a current endeavor, we observed several commonalities:

Ready and willing to invest in risk mitigation

Because these homeowners are consciously relocating (or looking to relocate) due to climate-related risk, sometimes uprooting their lives to do so, they want to do it right. Not only are they paying attention to past weather patterns, flood and fire zones, etc., but they are often ready and willing to invest in their homes—replacing roofs and windows, installing pumps in their basements—to mitigate the risk.

One homeowner we spoke with who had recently moved from Miami to Rhode Island described his thought process when buying his current home:

"We bought this house knowing full well that we needed to reinforce the basement and add a pump system. Rhode Island is prone to flooding and we really want to make sure we protect ourselves and our investment."

PUTTING DOWN ROOTS

Ethan, 32 Olympia, WA



"Growing up, my living situation was pretty unstable. When I started a family of my own, I wanted to move somewhere I knew we could stay long-term."

A child of undocumented immigrants in Chicago, Ethan constantly moved around, often squatting in the commercial space above his parent's flower shop. Knowing what it's like to grow up in a family that has been displaced, Ethan is determined not to let the same thing happen to his own family.

He chose to buy his home in Washington state due to the region's mild temperatures, buying inland away from the coasts to avoid flood risk. Even so, since buying his home in Olympia, wildfires have struck the region every summer, keeping his kids indoors and making him secondguess if Washington was a safe bet after all.



GETTING AHEAD OF IT

Todd, 53 Providence, RI



When the pandemic hit and we had an opportunity to move and get a great return on our investment, we took it. Living in Miami, I knew a tipping point was coming and people would eventually start abandoning the market. I wanted to get ahead of that.

Since he first bought his home in Miami 10 years ago, climate change had been on Todd's radar. But it wasn't until he was no longer able to insure his home for what it was worth that he realized he needed to leave and that "owning a home in Miami had become incredibly risky."

Having recently relocated to Providence, where he grew up, Todd and his wife bought a historic home in a desirable neighborhood that they are now renovating to mitigate the effects of climate risk. Having previously worked at an Al firm that did climate risk analysis, Ted is vigilant about understanding his own climate risk and doing everything he can to mitigate it.

Higher-than-average risk awareness

Not surprisingly, homeowners who have chosen to relocate in search of safer terrain often tend to be more aware and more afraid of the risks related to climate change. We spoke to several homeowners who worked in climate-adjacent fields: A renewable energy sales professional, a consultant for an AI firm that does climate risk analysis, and an environmental engineer who explained:

"I'm very in tune with the frequency of floods and fires and their environmental impact—especially on people's water. What's concerning is that we are seeing more of both. Having this perspective has 100% influenced where I want to raise my family, but has also made me more aware of the risks we all face."

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said they have or are considering relocating due to climate-related concerns

Looking for more data to inform risk assessment

While they tend to be more risk-aware than the average homeowner, those who already have or are considering relocating want to make informed decisions about where they are putting down roots and investing and are looking for more data and information and for help accessing it. One homeowner and real estate investor in Florida we spoke with told us:

"I'd like to have more information about the climate risks in the areas we are buying but honestly I wouldn't really even know where to look for that."



What insurance can do now



Incentivize and enable risk mitigation

Offering discounts to homeowners who invest in climate mitigation efforts can keep both premiums and risks down. Consider going beyond discounts to help homeowners connect with and leverage government grant programs and local service providers that can help them make upgrades to their homes.

Empower homeowners and buyers with data to assess risk

Finding ways to make actuarial data accessible to homeowners (and potential buyers) and integrating third-party data sources into your products and services will create trust with policyholders while helping them feel more informed about their risk and in control over their futures.

3. Plowing ahead

TURNING A BLIND EYE

Every one of the homeowners we spoke with was aware of climate change and almost all of them had started to see the impact on their communities. Still, despite witnessing the effects around them, many, even those in high-impact areas, saw the risk as more general and less personal—and they're plowing ahead with their plans: making home purchases and investing in real estate, even in high-risk areas.

Among the homeowners, we observed these patterns and commonalities:

Exceptionalist thinking

Despite acknowledging concerns about climate change, these homeowners (often attempting to rationalize their decisions) see themselves as the exception. While climate change might come for others, they are smart enough, educated enough, or well-resourced enough to be insulated from the worst of it

TRYING TO BUILD A FUTURE

Kayla, 32 Fort Lauderdale, FL



"Eventually we'd like to sell our house and buy a bigger one nearby. Because we aren't interested in being on the coast, I don't see the climate situation impacting us too much."

Kayla and her fiance bought her first home during the height of the real estate frenzy in 2020, making offers on 75 houses before finally having one accepted.

They now own eight homes together, including the home they share in Fort Lauderdale and are about to make buying real estate their full time job.

Living in South Florida, Kayla is the first to admit that climate change is hard to ignore. Still, when buying their current home, she was undeterred by the fact that it is in a flood zone. "It's never flooded, so we felt ok about it." Still, she understands there's a risk and recently took advantage

of a government grant to buy hurricane-proof windows after her insurance company threatened to drop her. She plans to replace the roof next.

Kayla sees the doggedness required to buy her first home as a leg up when it comes to dealing with insurance.

"If something did happen, I feel confident in my ability to fight with our insurance company. I'm a really diligent person and I've gotten good at fighting the system."



SEIZING THE MOMENT

Travis, 32 Riverside, CA



We had our reservations about buying in California but it was just one of those things. We stumbled upon a house we loved in a neighborhood we loved and were like ... let's seize the moment. We can make this work."

A California transplant from Chicago, Travis moved to Riverside with his wife to attend graduate school five years ago and never left. They were delighted to stumble upon a for-sale sign on their dream home while on a walk in their neighborhood one day last spring. Despite reservations about interest rates and climate risk, they decided to seize the moment and put an offer on the house.

The home buying process went smooth-ly—until it came time to buy insurance. Because so many insurers were pulling out of Californiaa at the time, they ran into some serious customer service issues along the way that delayed closing on their house and made Travis uneasy about what it will be like should they ever have to file a claim.

One new homeowner we spoke to in Riverside, California discussed at length his concerns about climate change and how he and his wife had considered moving out of California because they were worried about wildfires and droughts, but just recently purchased a home they hope to live in "for a long time." He explained:

"We're obviously in the process of aridification and I wonder—when is the water going to run out? Are we going to be in some Mad Max-type situation? But after researching it, I came to the conclusion that we can make this work. We have good incomes. Even if water does get expensive I think we'll be fine."

Focused on the here and now

While long-term, more general concerns about climate change and the impact it might have on their communities were a hallmark of all homeowners we spoke to, these particular homeowners are more focused on what's in front of them and how they can leverage present circumstances (a reliable income, a good deal on a house, or low-interest rates) to fortify their financial futures. Believing the adage that real estate is "always a good investment," they can set their climate change concerns aside.

Several of the homeowners we interviewed spoke to us about how, despite their reservations they couldn't say no when a good opportunity presented itself.

"We saw this house. It was a pretty good price and exactly what we were looking for. It's a historic house in a historic neighborhood; completely remodeled. So we thought ... if we can afford this house, even with the higher interest rate, it's worth it and we'll have an easier time getting a house now than we will when interest rates do come down."



What insurance can do now

1

Help homeowners (and buyers) understand and compare risk factors

Seeing climate-related risks and costs in comparison to other homeowners and regions can help homeowners and buyers make more informed decisions about where to live and take ownership over the risks.

2

Leverage partners to create climate risk awareness early in the buying process

Partner with local businesses, service providers, and professional networks to educate policyholders and incentivize climate risk mitigation. 3

Help homeowners think ahead and plan for the future

Give prospective buyers and policyholders tools to understand how climate will impact their premiums in the future so they can think outside of the "here and now' and anticipate and plan for the future.

4. Turning with the tides

FOLLOWING THE MARKET

Generations of Americans have embraced a more free-wheeling approach to finding a place to call home. Young, educated, and unencumbered, they launch themselves into appealing cities and states, chasing careers or moving on in search of an elusive sense of place—community, opportunity, great restaurants, and a solid, if short-term, real estate investment.

Even as higher interest rates and an increasingly challenging housing market in many desirable areas have pushed home ownership out of reach for many, a few persistent (or lucky) young professionals still manage to pursue this path. And for them, it seems, climate change concerns have not dampened their urge to establish themselves in a culturally vibrant city or other location that answers dreams of independence and lifestyle fulfillment.

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say owning a home makes them feel more financially secure

Feeling their good fortune

We spoke with several first-time homeowners who were confident in their decisions to purchase in areas with the potential to be impacted by climate change. They were pleased and proud to achieve the homeownership milestone while so many of their peers still struggle—even if some compromises were necessary, and even if they might see some clouds on the horizon. Any missteps today were just part of the real estate game, and should not have a long-term impact on their ability to roll their investment elsewhere in the future.

Perhaps because they are first-time buyers and have not yet encountered major challenges in their home-owning journeys, these homeowners still feel free to follow the aspirational script written by previous generations.

A Bay Area native was delighted to find a home she could afford hundreds of miles away in Denver. Despite the nearby forest fires that contributed to her homeowners

CHASING THE DREAM

Hannah, 28 Miami, FL



'Climate change is there. It's coming. But it's never really directly impacted me or any of the decisions that I've made until the whole homebuying process."

Growing up, Hannah's parents encouraged her to take calculated risks with her investments. Following this entreprenurial spirit, Hannah and her husband have not hesitated to jump into real estate, buying property in Miami and Denver, areas that have recently seen great returns.

But but the climate risk is real in both locations—flooding in Florida and wildfires in Colorado—threatening their investments in ways that they hadn't fully anticipated.

Today, they're thinking it will soon be time to exit the Miami market, but they're not too worried, yet...



HITTING THE MILESTONES

Stephanie, 29 Denver, CO



I was taught that to build wealth and be secure, longterm, you need to buy a house.

During the pandemic, Stephanie, a Bay Area native, spent time as a couch-surfing digital nomad, happily landing in Denver. Soon after, she received a sizable equity payout from an old job.

Fortunes aligned and Stephanie bought an apartment with a bit of the "grandeur" she craved but couldn't afford in the Bay Area. And 18 months later, she doubled her luck by moving in with her partner. They now live in the house he owns and rent out her apartment.

Stephanie is clear-eyed about the fires that have troubled the Denver area. "I know it's coming. I love the mountains and I know they're gonna get ruined." But she believes her more urban location will protect her from the worst.

This faith persists, even though she lost landlord coverage on the apartment when her insurer left the market, and now pays double her previous premium and loses money on the rental. It's not ideal, but she'll trust her luck that her investment will pay off before too much smoke gets in her eyes.

insurance carrier's decision to leave the market—leaving her uninsured for several months, she felt sure that her new home, and her investment, would be sound. And if not? She had faith she was building equity that could help her pick up and move to less smokey pastures.

"I was surprised when I found out my insurance wasn't getting renewed... I was like, it's in the middle of a city. It's surrounded by concrete, I'm safe."

Faith in an OK-enough future

Although it wasn't necessarily a deciding factor in choosing where to buy, these homeowners share others' concern about the growing threat of climate change to their investments. Generally progressive and community-minded, they believe that climate

change is a reality, and they believe that individual and collective action is necessary to combat it. But so far, it hasn't loomed large enough to keep them from investing.

And while the impact of climate change is obvious in the areas where they've moved fires, freak hail, floods—they have enough latent trust in external forces to keep them, and their investments above water long enough to get to the next thing. Things may get bad, but government will take steps, insurance will adapt, and there will still be opportunity for people like them. The system should hold, mostly. They see themselves as realistic about the future, but not packing it in yet.

We spoke with a bold 28-year-old woman who, with her husband, was reckoning with the outlook on their Miami condo as they moved to purchase a second home in Denver.

"This city is going to sink, you see it. Why are they still developing these insane amounts of community homes and condos—and they're all luxury as well? It's been great because our value of our home has risen, but we're not banking on making a lot of money in the long-term future..."



What insurance can do now

Educate prospective homeowners about climate-related financial risks to their investments

Ensuring that prospective homeowners understand the true climate-related financial risks of homeownership—skyrocketing premiums, loss of coverage, diminishing home value—can help them make better, more informed financial decisions when buying and deter financially savvy buyers and investors from purchasing homes in

Offer "early warnings" to urge more mobile homeowners to cut their losses earlier

For those who see their homes as much as investments or their financial security as places to live, using data to warn them of impending financial risks related to climate that will impact the value of their home (ie. new climate-related zoning, policy changes, or potential loss of coverage) can spur them to act to protect their homes and investments sooner.

5. Uprooting

WHEN LEAVING IS THE ONLY OPTION

For some, the impact of climate change has already fully upended their ideas of stability and homeownership. Natural disasters like hurricanes, forest fires, and flooding have always been understood as threats in some areas. But in recent decades those threats have jumped their historical boundaries and affected parts of the country unaccustomed to dealing with them and their aftermath.

Navigating an underprepared and overburdened system

An unfortunate subset of homeowners living in the paths of increasingly destructive fires in the West or more intense hurricanes in the East have seen their homes—which they'd been accustomed to seeing as safe—devastated by unanticipated climate phenomena. They've faced down flames, smoke damage, wind, and flooding without the necessary material, social, and psychic infrastructures in place to weather these storms. Government wasn't prepared. Social services weren't prepared. Citizens weren't prepared. And insurance was not prepared.

With neighborhoods ravaged and unrecognizable and resources stretched beyond their limits, salvaging or rebuilding homes in these areas became a years-long slog, or an impossibility.

REACHING THE LIMIT

Jeff, 34 Dallas, TX



"My insurance costs are through the roof and it's just so hot in the summer, it was literally unbearable this last year... So we need to move further North."

Not long ago, Jeff, a father of twin toddlers and Chicago native, left the Texas oil and gas industry to work in renewable energy. He'd seen the climate change writing on the wall. "The moral sense and the business sense combined to make it feel like it was a better move to be in renewables."

Through both professional and lived experience, Jeff knows the score when it comes to the impact of extreme weather and global warming on everyday life. He's lived with his wife and kids in Dallas since 2018, but as a "four seasons kind of guy," he's been overwhelmed by the intense, record-breaking heat and "miserable" summers.

The last straw? A demoralizing tugof-war with his homeowners insurance carrier over a climate-change triggered hail damage claim. "We pay a lot of money ... and then they just refuse to help us. It's horrible. I hate them."

They've built equity through savvy, fortunately timed real estate buys in Texas, and have little doubt that their investment would continue to pay if they stayed. But when weighed against insurance premiums that have increased alongside the temperature, and the unsteady Texas energy grid, they're ready to call it. Jeff and his family are planning their escape.



Searching for empathy when all else fails

The experiences of these homeowners serve as sobering harbingers for the rest of us. Their struggles to navigate FEMA services, submit and win insurance claims, collect timely payouts, and meet new construction standards highlight how thin the protections really are.

We spoke with a Long Island homeowner displaced by Hurricane Sandy in 2012.

After fighting to get his share of help from unsympathetic FEMA workers, watching insurance adjusters come and go, and bearing the costs and the lengthy inconveniences of rebuilding his longtime family home, he was shattered to learn that during the course of reconstruction, the rules had changed. To avoid a prohibitive, flood–zone related increase in insurance premiums, the structure would need to be rebuilt again, several feet higher off the ground.

Through it all, this homeowner maintained a realistic view of what was possible to expect from insurance companies and other services. He understood the magnitude of the disaster, the numbers impacted, and the overall stress to the system. He didn't expect miracles, but he did have a simple suggestion that would have made all the difference to him at the time:

2 of 12

say their homeowners insurance policy is worth every penny

"Just be polite, compassionate, and understand what people are going through. Understand that when you give somebody a claim check, it should be what you tell them and not adjusted in nine different directions." In this case, the challenges proved too much, and the homeowner abandoned another Long Island rebuild—cutting his losses to relocate to what he saw as a safer location in Georgia. With extreme natural disasters becoming a more widely experienced fact of life, these stories of homeowner displacement will become more common. What can we learn from these early victims?



What insurance can do now

Treat people like more than a number. Treat them like humans.

Having your home damaged in a climate emergency is often a traumatizing experience. Finding even small ways to humanize the claims process—creating more transparency, being available when they call, or just making it easier to understand, are low-effort investments can go a long way alleviating stress and making policyholders feel more supported during challening times.

Do what you say you are going to dobe a partner, not an adversary.

Many homeowners spend years paying insurance premiums on their homes without ever filing a claim. When they do file claims, they are somtimes treated not like the failthful customers they are but like criminals filing fraudulent claims. Finding ways to get better at fraud detection and resolve simple claims in simple, more standardized ways can free you up to put more time, energy, and money into making good on your promises when it comes to more complex claims.



Supporting homeowners through climate change

Listening to homeowners tell their stories, it is clear that when it comes to insurance, they aren't asking for the moon. Their expectations are simple. They want their insurance companies to follow through on their promises—to pay their claims, to do so in timely manner, and to treat them like humans. Beyond this, they are just looking for more support understanding how they can avoid losses in the first place. As one research participant put it,

"I wish they would just be more transparent about the climate in our area. What do they know that we don't know? I want to be more aware so I know what I can do to protect my home."

In the following pages we'll explore five simple opportunities we uncovered through our interviews for how the insurance industry can better support homeowners through climate change.

Create awareness around unfamiliar climate phenomena and help policyholders prepare

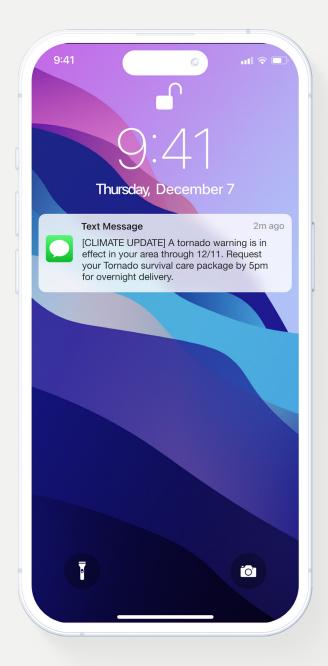
Several homeowners we interviewed recounted experiencing freak weather phenomena they were totally unprepared for—flash flooding outside of flood zones and tornadoes in hurricane territory. Finding ways to create awareness around changing weather patterns will help homeowners feel better equipped to weather unfamiliar climate phenomena.

How might we?

- Offer reliable, just-in-time, climate alerts and warnings that meet the needs of the moment?
- Offer expert guidance and thoughtful resources to help homeowners feel prepared?
- Meet homeowners where they are at?

Concept

Climate alert: What if an insurance company warned policyholders about weather phenomena before they happen and offer valuable, just-in-time resources to make them feel like someone has their back and help them mitigate risk?



Make claims statuses human, transparent, and easy to follow in real-time

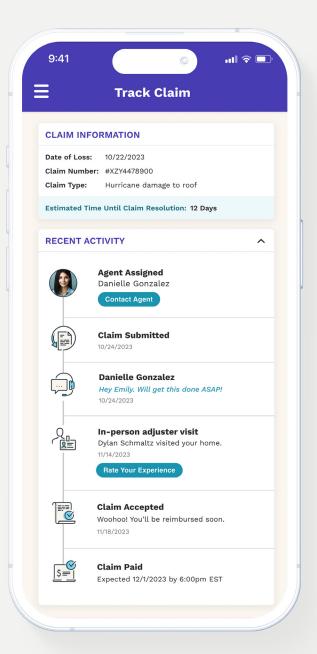
Homeowners who had filed claims all reported complicated, frustrating experiences, requiring constant follow up to get information about their claims. Making the claims experience transparent and easy to follow is a simple way to ease the burden on policyholders and provide a sense of predictability amid what can often be a scary, uncertain time.

How might we?

- Ease the burden on homeowners experiencing a loss?
- Make homeowners believe in the promise of insurance?
- Meet modern-day user experience expectations?

Concept

Claims status progress tracker: What if filing a claim was like ordering a package? By allowing policyholders to track their claims status in real-time, much like their packages, they'd know down to the hour when their claim will be resolved.



Provide an extra layer of compassionate support to policyholders with more severe claims

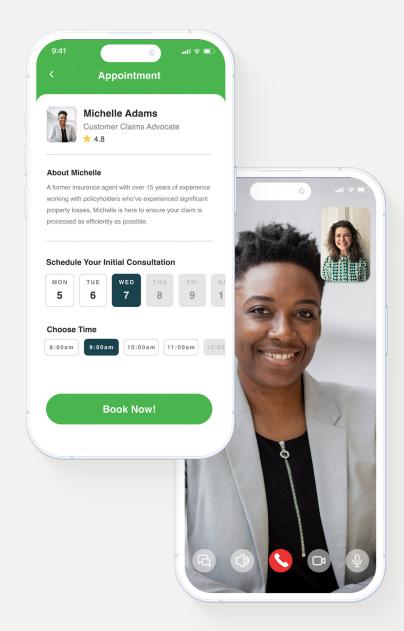
Several homeowners we interviewed had filed serious claims and reported feeling completely abandoned by their insurers, with adjusters going MIA, records disappearing, and no one returning their calls. Finding ways to build compassion and empathy into how the most severe claims are managed will humanize insurance companies and the industry at large in the eyes of policyholders.

How might we?

- Treat people like humans?
- Provide more support for more serious claims?
- Humanize insurance?

Concept

Claims ombudsman: A special coach that helps homeowners with the most severe claims (like total losses) navigate the claims process with compassion and empathy.





Empower home buyers with transparency around their unique climate risks early on

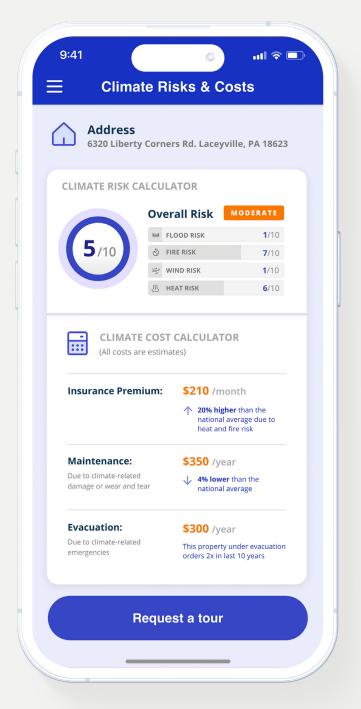
While every homeowner we spoke to was generally aware of the dangers of climate change, most had little understanding of their unique risks, and very few understood the financial implications. Finding ways to create awareness early on will empower buyers to make better financial decisions and ultimately make them a safer bet for you as a customer.

How might we?

- Help homeowners and buyers draw a line between climate risk and financial risk?
- Foreground climate risk early in the home-buying process?
- Deter home buying in risky, harder to insure areas?

Concept

Climate risk calculator: Imagine shopping for a home online and not only being able to evaluate district schools and calculate mortgage premiums, but understand a property's unique climate risk and anticipated climate-related costs.





Show homeowners you're all in it together

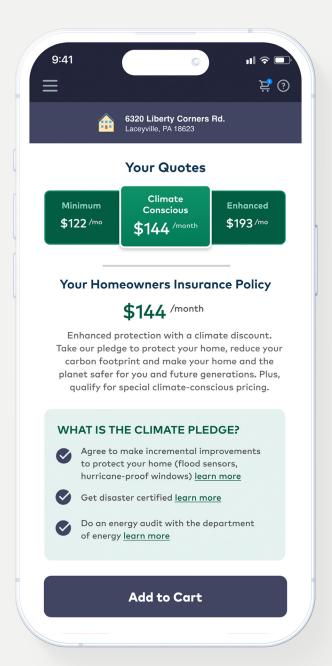
Many homeowners were genuinely perplexed as to why insurance companies didn't do more to help them mitigate their climate risk. They saw clearly the ways that doing so would benefit them and their insurance companies. Finding ways to partner to homeowners to protect their homes is a win-win for you and your policyholders.

How might we?

- Show solidarity with homeowners in their fight to protect their homes and the planet?
- Incentivize risk mitigation?
- Protect your customer and your business at the same time?

Concept

Climate-conscious homeowners insurance: Imagine a homeowners insurance product that builds solidarity with policyholders, works to protect their homes and the planet, and incentivizes climate risk mitigation at the same time.





At what point does the threat of climate change become so strong that the benefits of living in one of the best towns in the state with one of the strongest school systems stop mattering?"

Todd, Rhode Island homeowner and Cake & Arrow research participant

Cultivating climate resilliance is key to survival for homeowners—and for the insurance industry itself.

As climate change guietly reshapes the housing market, becoming an undeniable fact of homeownership, it's past time the insurance industry shifted its focus from simply covering losses to joining forces with homeowners in cultivating climate resilience.



Our research revealed a spectrum of homeowner responses to climate change. Some are actively trying to mitigate risks by either moving or climate-proofing their homes, often with incomplete data or information. Others turn a blind eye to the risks and charge forward with their plans, thinking only of the here and now, or of more immediate financial benefits, despite their own misigivings. And then there are those who've already experienced the worst of it. They're cutting their losses and placing their future bets not on insurance companies with whom they've lost faith, but on their communities, their wits, and for one Chicago homeowner whose home was damaged in a neighborhood shooting only to flood a few months later, in God.

When it comes to insurance, these homeowners are realists. They understand that insurance is a business, and that to remain financially viable, companies must do things like raise premiums, drop coverage, and exit riskier states (as paying customers, they are rightfully less sympathetic to claims denials).

What they don't understand is why their insurance companies don't do more to help them avoid risk in the first place. Nothing could ring more true for Steve, who lost his home during Hurricane Sandy and unwittingly rebuilt a house—with the insurance company's money—that was uninsurable.

"What people don't realize is that insurance companies can destroy your life."

Many are looking for data to help them make more informed decisions about where to live, or for information about how to invest in climate-proofing their homes or to prepare for a natural disaster. No one wants a homeowner to lose their home in a hurricane—not the homeowner themself, not the insurance company. Homeowners are looking for a partner, not only to protect their losses but to protect their homes and their investments.

Ultimately this is where our research uncovered the most opportunity—in partnering with homeowners to better mititgate risk in the first place and cultivate climate resiliance. This is effort requires collaboration—between homeowners, governement entities, communities, foundations, and private industry, such as insurance.

Joining forces

There are exciting examples of this kind of collaboration happening already—where governments and institutions are coming together to help communities become more climate resilient.

In San Diego, for instance, the local government is leveraging data from First Street Foundation (referenced earlier in this report) to "adopt a more proactive approach by identifying risks, developing climate action plans, and implementing strategies that limit the harms of both chronic and acute climate stresses, from intense storms to wildfires to extreme heat."

And while many insurance companies are throwing up their hands, claiming there is nothing they can do until regulators take action, others are taking a cue and pursuing a different course of action, looking for ways to help individual homeowners bcome more climate resilient. Allstate and American Family, for example, both recently also announced partnerships with First Street Foundation, with plans to leverage their climate data to empower better decision making among agents and customers.

How these partnerships will shake out in terms of customer experience is yet to be seen, but it is certainly a step in the right direction—a direction the entire industry must move in should it survive climate change.

And, as the industry moves in this direction, it would do well to be guided by the words of Steve from Long Island, whose life was "destroyed" by his insurance company. In a better, more just, more climate-resilient future, perhaps a homeowner like Steve might have a different story to tell, one in which insurance didn't destory his life, but saved it.

Principles for cultivating climate resilience among homeowners

Be a partner, not an adversary

Spend the time and money wasted fighting claims payouts on finding ways to foreground climate data, incentivize risk mitigation, and prevent losses before they happen.

Draw a line between climate risk and financial risk

While most understand there is climate risk, many don't know what this means for them financially, and that even if nothing happens to their home, they could suffer financial losses.

Be generous

Don't expect the worst of the homeowners you insure. Make good faith efforts to work with your policyholders and pay out their claims.

Treat homeowners like humans

Experiencing a climate-related emergency is scary. Total losses are traumatizing. Be a force for good during these difficult times and treat homeowners with the empathy and compassion they deserve, whatever the outcome.

Be hyperlocal

Take personalization to the next level. Offer hyperlocal insights into climate risk, mitigation opportunities, and local business and vendors to partner with.

Level with policyholders

Your customers understand the limitations of your business. Don't sugarcoat climate risk and don't make promises you can't keep.

Remember: A little solidarity goes a long way. When it comes to expectations around insurance, homeowners have a low bar. Showing you're on their side, even in small ways, can mean the world, especially in difficult times.

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About Cake & Arrow

UX Design and Product Innovation for Insurance

We believe empathy sparks opportunity. Our human-centered design approach helps carriers, distributors, and service providers create breakthrough digital experiences that drive results. For more than 20 years, we've helped the insurance industry make buying, selling, and servicing insurance better for everyone, by design.

Contact us to learn more about how we can support your business.

- → <u>cakeandarrow.com</u>
- → newbiz@cakeandarrow.com