

CHUBB®

# Underwater: When Flood Risk Isn't What It Seems

Challenging outdated assumptions and providing a path forward for comprehensive flood protection and resilience

2026 Chubb Flood Risk and Resilience Survey







# Table of Contents

**P3** FOREWORD

---

**P4** FLOOD RISK IN A CHANGING ENVIRONMENT

---

**P5** KEY FINDINGS

---

**P9** **01** BELOW THE SURFACE: FLOOD RISK  
AWARENESS AND UNDERSTANDING

---

**P16** **02** UNLOCKING PROTECTION: FLOOD INSURANCE  
PERCEPTIONS AND PURCHASING BEHAVIOR

---

**P22** **03** PRAGMATIC PLANNING, PREVENTION  
AND INTERVENTION

---

**P28** IMPLICATIONS AND THE PATH FORWARD

# Foreword

## Navigating the New Topography of Flood Risk

By Ben Rockwell and  
Melissa Scheffler



Flood risk has long been tied to proximity to coastlines, rivers, lakes and other bodies of water, and assessed based on historical floodplains and static mapping. In 2026, however, the increase in frequency and intensity of extreme precipitation events across the United States has made flooding an issue no longer confined to certain geographies. As such, many home and business owners now find themselves in uncharted territory, looking for guidance around the new realities of flood risk.

This uncertainty was the driver behind Chubb’s 2026 flood report, “Underwater: When Flood Risk Isn’t What It Seems.” This report offers a granular, data-driven assessment of current perceptions and realities concerning flood exposure. We surveyed more than 1,500 high-net-worth homeowners, commercial businesses, brokers and agents, discovering a major gap in perception and reality: While a significant majority of homeowners and clients acknowledge the heightened frequency and intensity of flooding due to extreme precipitation events, many of them simultaneously believe that this elevated risk does not extend to their own properties. This bias is particularly pronounced among homeowners who cite “low risk of flooding” as a primary reason for not securing flood insurance for their primary residences.

Beyond this perception gap are a number of misconceptions regarding the scope and efficacy of flood insurance. Chubb’s survey reveals that too many uninsured respondents – homeowners and commercial businesses alike – believe that standard property insurance policies provide coverage for natural-catastrophe-related flood damage. This misunderstanding underscores an urgent need for enhanced clarity in policy communication. Furthermore, the report shows a discrepancy between perceived and actual adequacy of coverage. While nine out of ten commercial businesses that carry flood insurance believe their coverage is sufficient, only half of them reported full coverage of damages sustained in recent flood events. Underinsurance, driven by an underestimation of potential remediation costs, is a key vulnerability.

The survey additionally indicates a high level of awareness among homeowners and commercial businesses regarding various resilience strategies, from basic drainage systems to advanced technological solutions such as water sensors and drones. However, it also shows a significant implementation gap: Fewer than a third of homeowners surveyed have implemented these measures, despite their recognized efficacy. This gap presents a clear opportunity for insurance professionals to transition from simply offering their clients coverage to actively fostering a culture of preventative resilience.

“Underwater: When Flood Risk Isn’t What It Seems” ultimately serves as an analytical tool, dismantling outdated assumptions and spotlighting opportunities for enhanced flood preparedness. The data shows that flood risk is no longer a geographically isolated phenomenon, but rather a pervasive challenge that demands a comprehensive, multifaceted response. We must collectively focus on bridging the gaps between awareness and action, between perception and reality, and between information and implementation. By leveraging advanced modeling, fostering transparent communication and championing proactive resilience strategies, we can empower individuals and businesses to navigate ever-evolving flood risk.



**Ben Rockwell**  
Senior Vice President, Chubb Group  
Division President, North America Middle Market



**Melissa Scheffler**  
Vice President, Chubb Group  
Division President, North America Personal Risk Services



# Flood **Risk** in a Changing Environment

Not long ago, flooding events that led to severe property damage were largely associated with hurricane-related storm surge or proximity to bodies of water. That is no longer the case – anyone who lives or works in places where rainfall occurs can experience a severe flooding event. However, this vital fact may not be registering for sizeable segments of the population.

For Chubb's 2026 report on flood risk and resilience, we surveyed more than 1,500 high-net-worth homeowners, commercial businesses, brokers and agents to gauge their understanding of how flood risk has changed in recent years, and to explore how their perceptions have impacted their actions and decisions. The findings reveal a significant gap between the general awareness of heightened and increasing risk – which many respondents profess to have – and mitigative action, which fewer of them have taken. We also identify how certain misconceptions regarding insurance coverage can lead homeowners and business owners to believe that they are protected when they aren't.

Opportunities exist to substantially reduce flood damage through better education, clearer communication and increased resilience. But the time to act is now. Homeowners and business decision makers, as well as their insurance brokers and agents, should be working to seize these opportunities. This report is designed to help all those who may be impacted by flooding understand the new reality of flood risk.

## ABOUT THE SURVEY

Chubb commissioned Savanta, a leading data and market research firm, to survey 1,564 people from across four respondent groups throughout the United States: high-net-worth homeowners (385), commercial business decision makers (385), personal lines brokers and agents (394), and commercial brokers and agents (400). All fieldwork was conducted in April of 2025.



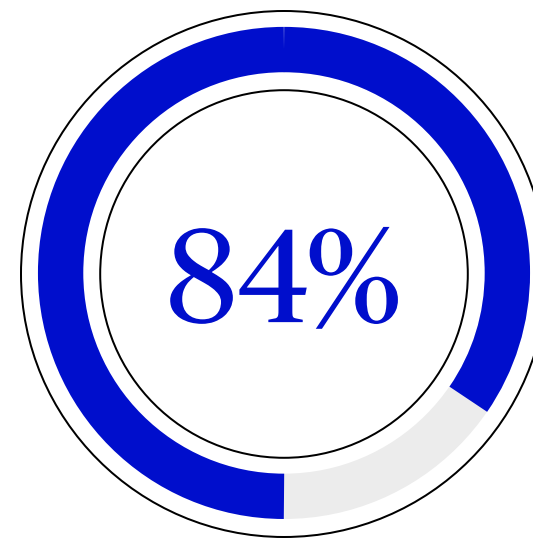


# Key Findings

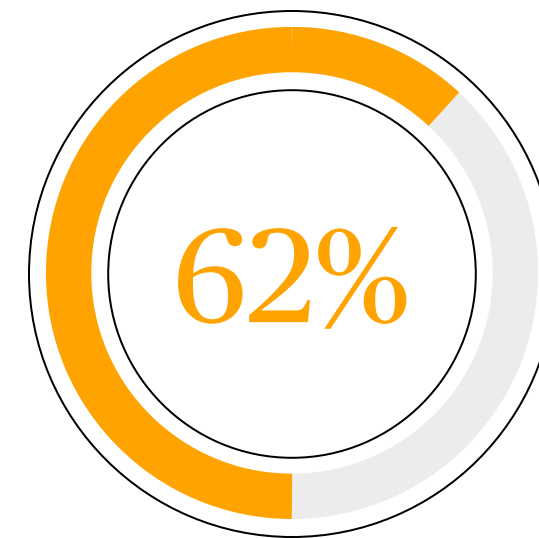
The survey results led us to three broad conclusions, all of which have important implications for both clients and insurers.

## General awareness of heightened flood risk is growing - but many believe that it doesn't extend to them.

Most respondents agree that flooding has become more common, more intense and more expensive to remediate than ever before. But this stipulation comes with an asterisk: Sizeable percentages of homeowners and commercial businesses are not yet convinced that they, themselves, are at a higher risk of sustaining damage and losses due to a flooding event.



**84%** of homeowners said they agree that flooding is more common now than it was five years ago.



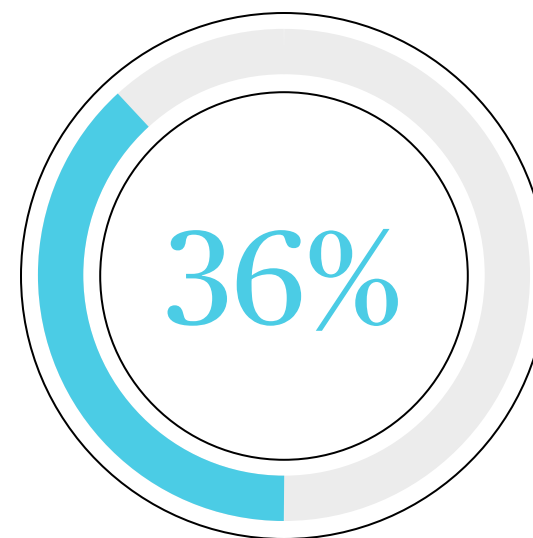
**62%** of homeowners who haven't purchased flood insurance for their primary residence cited "low risk of flooding" as a top reason for going without.

# Key Findings

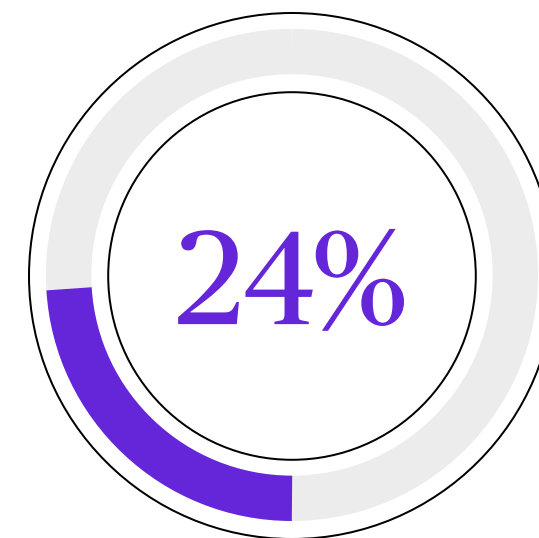
The survey results led us to three broad conclusions, all of which have important implications for both clients and insurers.

Misconceptions about the applicability, availability and affordability of flood insurance may be contributing to underinsurance and higher out-of-pocket expenses for flood losses.

Despite a general increase in flood risk awareness, a significant percentage of respondents may not fully understand or appreciate flood insurance's role in protecting their homes and businesses. Some may be under the mistaken belief that they are already covered; others may not have enough information to make an informed decision about whether or not to purchase flood insurance; still others may over-index the cost of premiums vis-à-vis the value of coverage.



**36%** of commercial businesses that haven't purchased flood insurance cited the cost of premiums as a main reason.



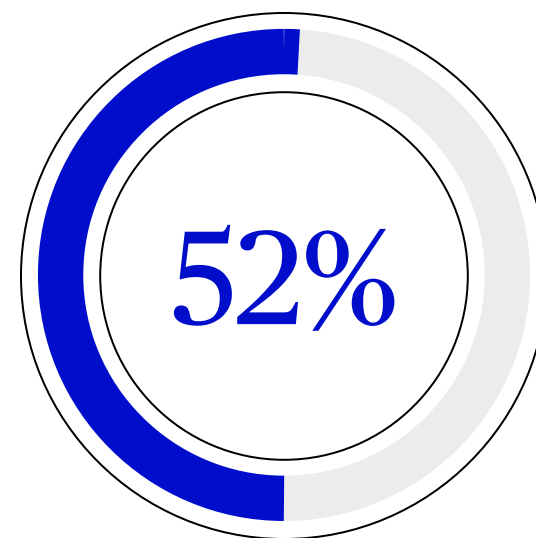
**24%** of commercial businesses said that the "limited availability of policies" was a primary challenge they faced when seeking information about flood insurance.

# Key Findings

The survey results led us to three broad conclusions, all of which have important implications for both clients and insurers.

Those with sufficient flood insurance say that they benefit not only from coverage, but also from risk management services that strengthen resilience.

Homeowners and commercial businesses alike are increasingly turning to trusted advisors, including agents and brokers, for advice about ways to physically protect their property from water intrusion. Incorporating resilience is a highly effective and proactive form of risk management, especially when decisions are informed by the most up-to-date, best-in-class models. Brokers, agents and insurance providers who have taken the time to learn about specific resilience and readiness measures can provide tailored guidance to their clients, giving these clients an added advantage.



**52%** of homeowners said advice from trusted experts influenced their decision to pursue flood prevention and mitigation measures.

# Key Findings

For this report, Chubb explored three aspects of flood awareness to learn how they manifest among high-net-worth homeowners, commercial businesses, and brokers and agents – as well as how these different aspects of awareness interact to influence decision making.

## 01

### AWARENESS OF FLOOD RISK

- How homeowners and businesses are getting their information about flood risk
  - How certain factors – including proximity to bodies of water – can affect their perceptions
- 

## 02

### AWARENESS OF INSURANCE SOLUTIONS

- How homeowners and businesses view insurance as a tool for protecting against flood-related losses
  - Which factors might make them more likely or less likely to purchase or add to a flood insurance policy
- 

## 03

### AWARENESS OF RESILIENCE MEASURES

- Which strategies homeowners and businesses see as being most effective at preventing damage and minimizing losses
- Where they are getting their information on resilience – and what they are doing with it



# 01

Awareness of Flood Risk

## Below the Surface: Flood Risk Awareness and Understanding

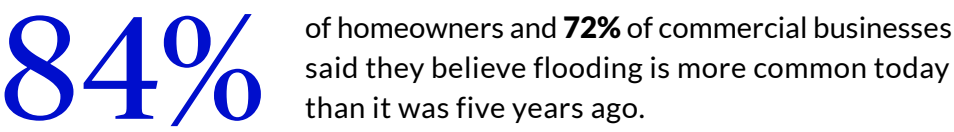


Awareness of Flood Risk

Chubb’s survey reveals that many homeowners and businesses have an outdated mindset when it comes to flood risk, increasing their vulnerability.

The Perception Gap

There has been a documented rise in hurricanes, extreme rainfall and other natural catastrophes for decades now, and overwhelming majorities of homeowners and commercial businesses understand that flooding is now taking place with greater frequency.



But when we asked personal lines brokers and agents to name the biggest challenges in convincing their high-net-worth clients to purchase flood insurance, one challenge topped their list: Many of these homeowners believe that flood insurance is unnecessary for *them*, given their particular set of circumstances.

Primary Challenges in Discussing Flood Insurance

Clients believe it’s not necessary	42%
High cost of premiums	39%
Perception that flood risk is an isolated event	36%
Lack of understanding about coverage	35%
Complexity of flood insurance policies	24%

“Many people underestimate their current flood risk based on a normalcy bias: If it hasn’t happened to them before, they’re assuming it won’t happen to them in the future, even if the risk is objectively high. Combine that with an optimism bias – they understand the risk, but believe it’s someone else’s problem – and the result is a false sense of security and delayed urgency.”

**Louis Hobson**  
Senior Vice President, North America Flood Insurance, Chubb







# 99%

of U.S. counties have been impacted by flooding since 1996, according to U.S. government statistics.

## Heavier Rains, Higher Tides

According to U.S. government statistics, 99% of U.S. counties have been impacted by flooding since 1996.<sup>1</sup> These events come with a staggering price tag: Average annualized U.S. flood losses were more than \$32 billion in 2020, and could rise by more than 26% to \$40.6 billion by 2050.<sup>2</sup>

Communities everywhere can expect more flooding – even those that aren’t located near a body of water. Extreme precipitation events that result in flash floods have been rising steadily in regions across the country since the 1950s.<sup>3</sup> The U.S. Environmental Protection Agency (EPA) has observed that nine of the top ten years for extreme one-day precipitation events have occurred since 1995.<sup>4</sup>

Rising sea levels will continue to be a major factor. The National Oceanic and Atmospheric Administration (NOAA) projects that the U.S. will experience anywhere from 55 to 85 days of high-tide flooding per year, on average, by 2050.<sup>5</sup> By comparison, in recent years the country has experienced fewer than 10 of these days per year, on average.<sup>6</sup> As it grows in both frequency and intensity, high-tide flooding will push more water further inland, expanding the range of damage and losses.<sup>7</sup> NOAA provides and updates a special Storm Surge Risk Map<sup>8</sup> and Sea Level Rise Viewer<sup>9</sup> for those living in coastal areas who want to know more about their specific vulnerability to these threats.

As extreme rainfall events continue to rise in both frequency and severity, it’s more important than ever for people to understand that **most standard homeowners and commercial property insurance policies don’t cover flooding from heavy precipitation.** Even in areas that are generally thought of as low-risk, separate flood coverage is needed to protect homes and businesses.

1. floodsmart.gov
2. nature.com – Inequitable patterns of US flood risk in the Anthropocene
3. c2es.org – Extreme Precipitation and Climate Change
4. epa.gov – Climate Change Indicators: Heavy Precipitation
5. noaa.gov – Annual High Tide Flooding Outlook

6. noaa.gov – 2023 Annual High Tide Flooding Outlook
7. climate.gov – High Tide Flooding
8. experience.arcgis.com – National Hurricane Center Storm Surge Risk Maps
9. noaa.gov – Sea Level Rise Viewer



“Outdated maps don’t accurately account for recent changes in weather patterns, urban development, and the increasing frequency and severity of extreme weather events. Private models incorporate the latest data on flood trends, topography and infrastructure changes to provide a more accurate picture of flood risk – especially when they’re evaluated in consultation with insurers or risk management professionals.”

**Louis Hobson**  
Senior Vice President, North America Flood Insurance, Chubb



Industry-wide estimates are that fewer than four percent of U.S. homeowners carry flood insurance; among Chubb policyholders, the figure is only slightly higher, at five percent. Yet more than 80% of the high-net-worth individuals in the survey reported that their primary residence was insured against flooding.

This discrepancy is too large to be explained by assuming that high-net-worth homeowners, as a group, are so well informed about flood risk that they are purchasing flood insurance at more than 16 times the national average. Instead, it suggests that a significant percentage of survey respondents mistakenly believe their standard homeowners policy covers damage from natural-catastrophe-related flooding – a common misconception that is addressed elsewhere in this report, and that is itself a powerful argument for clearer communication about coverage between brokers, agents and clients.



Nevertheless – whether it accurately reflects reality or not – nearly one in five homeowners in the survey reported not having flood insurance for their primary residence, and within that group, nearly two thirds reported that they didn’t purchase it because they believe their properties to be at “low risk of flooding.”



Of the one in five commercial businesses that haven’t purchased flood insurance, a similar number – **59%** – indicated that a perceived low risk of flooding influenced their decision.

# Meet Maria Flores

**Occupation:** Independent Residential Insurance Agent  
**Specialty:** High-net-worth individuals  
**Main Concern:** Poor understanding of flood risk

A growing portion of Maria’s clientele owns second homes in areas not traditionally associated with flooding: mountain retreats in Colorado, desert oases in Arizona and sprawling ranches in inland Texas. She is constantly battling their perception that flood insurance is unnecessary for these properties.

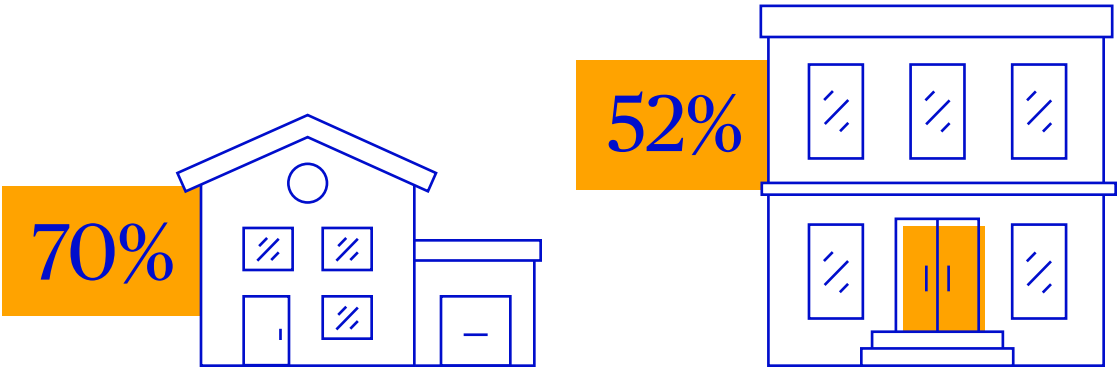
**Solution:** Empower clients with education and evidence

- Leverage the most accurate and up-to-date information on local flood risk to show clients their true, nuanced exposure
- Use real-life examples and statistics to explain that inland flooding can come from many sources, including flash floods, dam failures, overwhelmed drainage systems, an overabundance of impermeable surfaces, local topography, and even neighborhood construction or development
- Partner with a leading insurance carrier that offers flexible and highly tailored private flood insurance options that can address the specific risks of these unique properties

*The persona depicted here, while fictional, is a composite representation of a homeowner, commercial client, broker or agent who responded to Chubb’s survey questionnaire.*



When clients were asked how and where they learned about flood risk, they – along with their brokers and agents – gave a variety of responses, suggesting a fragmented information universe that is delivering mixed messages and possibly creating a false sense of security. High on their list of sources were government-issued flood maps, many of which are outdated and don't accurately reflect the current nature of flooding, such as the significantly increased risk of flooding from intense rainfall events.



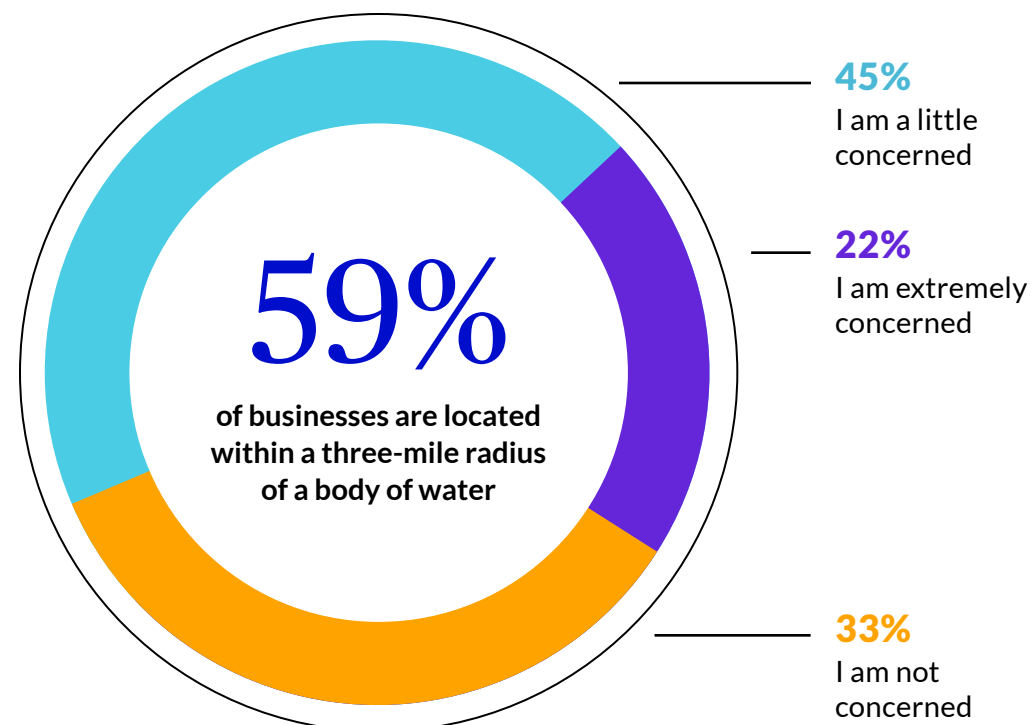
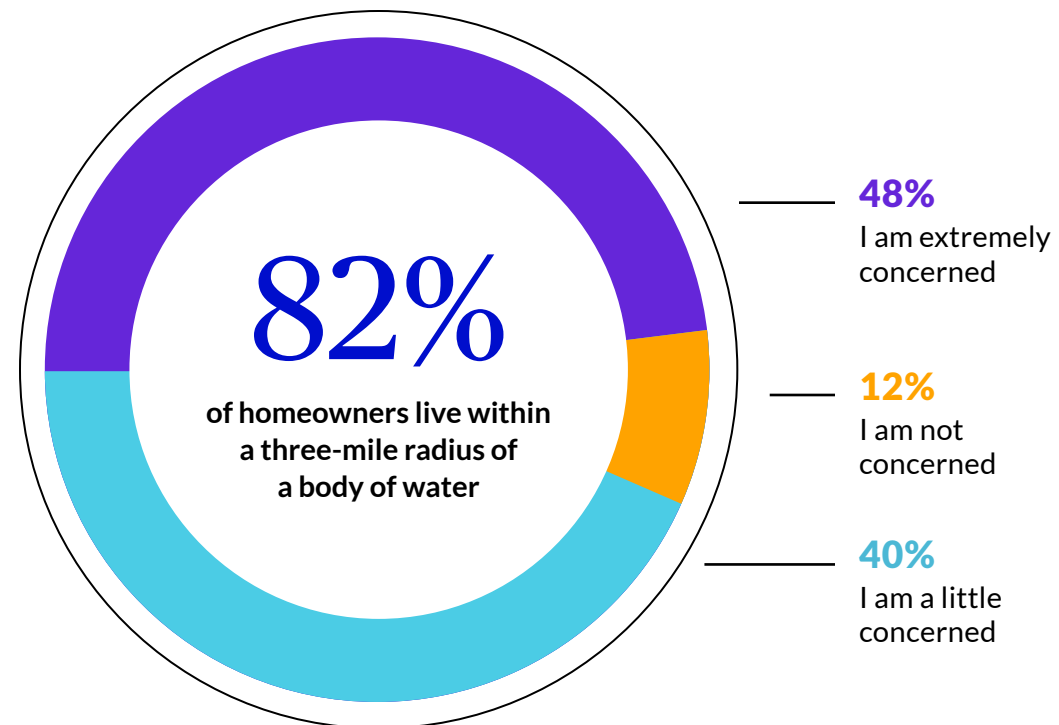
**70% of homeowners** and **52% of commercial businesses** said they relied on government-issued maps to estimate flood risk.

Fortunately, alternatives to outdated flood maps exist: New probabilistic catastrophe models can calculate flood risk with much higher accuracy and are increasingly being used by insurance providers in their assessments for clients. Among their other advantages, these models are more likely to factor intense rainfall events into their analysis, giving clients a more thorough understanding of their unique vulnerability.

**47%** of personal lines brokers and agents say that their clients use commercial models provided by insurers to calculate their flood risk.







## Proximity to Water and Peace of Mind

### Concern Among Homeowners

Even though distance from a body of water is no guarantee of safety from a flooding event, those who happen to live or work near one understandably have special concerns.

The majority of homeowners we surveyed own a primary residence located within three miles of an ocean, lake, river or other body of water – a fact that automatically puts them at a higher risk for flooding than those living outside that radius. Nearly half of them reported feeling extremely concerned about the likelihood of flooding based on this proximity.

- **82%** of homeowners live within a three-mile radius of a body of water; of them, **48%** said they were “extremely concerned” about flooding.
- The remainder of these homeowners (**52%**) reported having little or no concern about their increased flood risk, indicating a significant gap between actual and perceived risk.

### Concern Among Commercial Businesses

Meanwhile, of the nearly six in ten commercial clients whose businesses are located within the same three-mile radius of a body of water, less than one quarter reported that they were extremely concerned about flooding, with a third of them saying they were not concerned at all.

These disparities suggest that many homeowners and commercial businesses are either **underestimating their exposure or overestimating their resilience.** In either case, they represent an opportunity for brokers and agents to educate clients on the relationship between proximity to water and vulnerability to flooding.



## How Nearness to a Coast Affects Homeowner Attitudes and Actions

The survey divided personal lines broker and agent respondents into different tiers, with Tier 1 representing those brokers and agents with **50% to 100%** of clients living in a coastal region. (Tier 2 represented brokers and agents with roughly **30% to 50%** of clients living in a coastal region, and Tier 3 represented those brokers and agents with roughly **30% or less** of clients living in a coastal region.) The numbers tell a story about how living near a coastline dramatically changes one's perception of flood risk.

- Brokers and agents were asked: *What percentage of your clients do you think would say flooding is the most common natural disaster?* Tier 1 brokers and agents estimated that **62%** percent of their clients would say this, whereas Tier 2 brokers and agents reported that only **55%** of their clients would do so.
- The divisions were even more striking when brokers and agents were asked: *What are the primary challenges you face when discussing flood insurance with clients?* While only **29%** of Tier 1 brokers and agents replied, “My clients believe flood risk is an isolated event and not a long-term concern,” **47%** of Tier 3 respondents gave the same reply.

These findings, among others, suggest that the value proposition of flood insurance may be a harder sell for clients who live further away from coastal water. Indeed, clients of Tier 1 brokers and agents purchase flood insurance at significantly higher rates (**60%**) than clients in Tiers 2 and 3 (**50%**). All brokers and agents, however, should aspire to impress upon their clients – wherever they happen to live – that intense rainfall events, which are on the rise, pose a serious flood risk, and that distance from a coastline or body of water is no guarantee of safety.



# 47%

of Tier 3 brokers and agents responded that “My clients believe flood risk is an isolated event and not a long-term concern.”



# 02

Awareness of Insurance Solutions

## Unlocking Protection: Flood Insurance Perceptions and Purchasing Behavior



Awareness of Insurance Solutions

Homeowners and business owners need to be made fully aware of their actual flood risk. They should also be apprised of the available solutions for mitigating this risk – especially flood insurance, about which they may also have misconceptions.

Misconceptions Regarding Coverage

The survey revealed that more than one in ten homeowners who don’t have flood insurance for their primary residence mistakenly believe that standard property insurance policies cover natural-catastrophe-related flood damage.

49%

of personal lines brokers and agents said the mistaken belief that standard homeowners policies cover natural-catastrophe-related flood damage is one of the top misconceptions their clients hold about flood insurance.

Most standard homeowners and commercial property insurance policies do not cover flood damage when the water comes from outside sources, such as overflowing rivers, storm surge or intense rainfall; for this type of water intrusion, flood insurance must almost always be purchased separately. It is incumbent on brokers and agents to correct this misconception when discussing coverage with clients. This knowledge gap continues to put people and properties at serious risk.

It is incumbent on brokers and agents to **correct this misconception** when discussing coverage with clients.

“Clear and direct communication is the most impactful way to counter the common misconception among policyholders and potential clients that natural-catastrophe-related flood damage is covered under a standard property policy. Agents and brokers should be using every channel available – email campaigns, social media platforms, policyholder portals and one-on-one consultations – to drive home this message.”

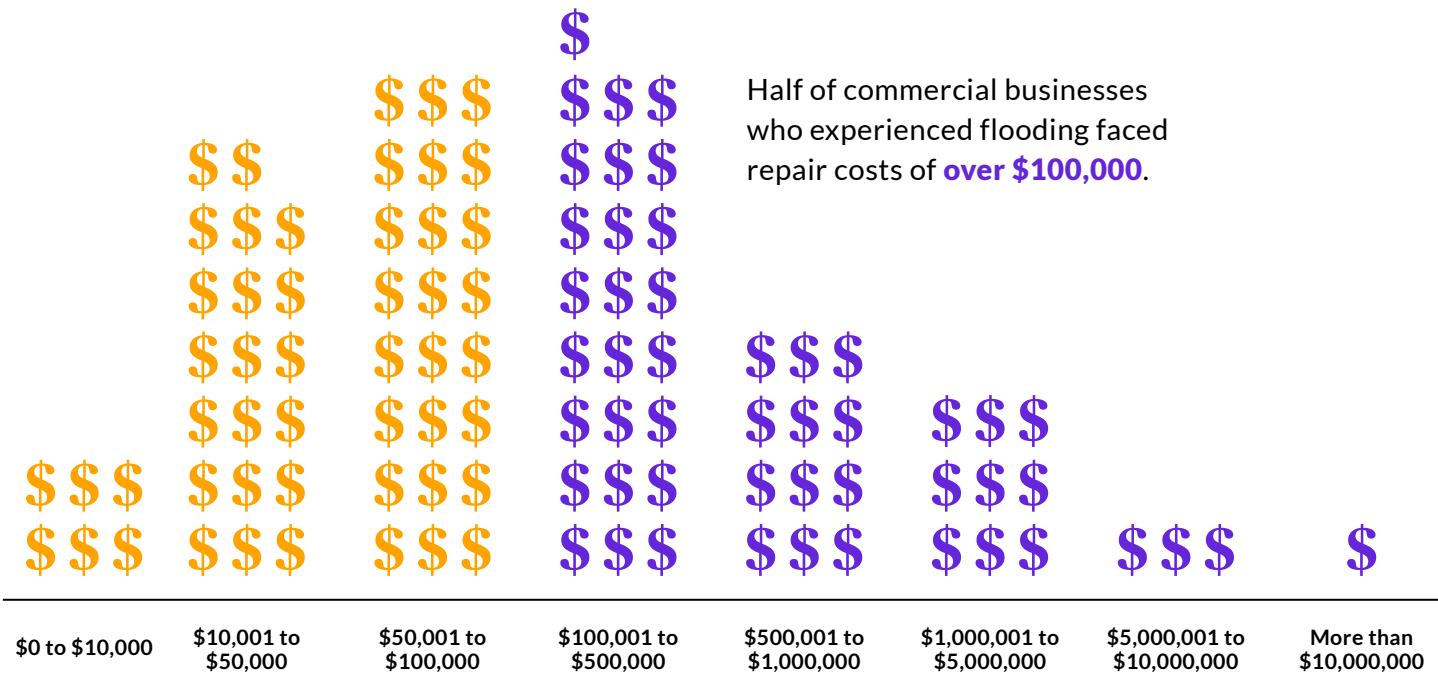
**Louis Hobson**  
Senior Vice President, North America Flood Insurance, Chubb



Additionally, even those who *have* purchased flood insurance may suffer from knowledge gaps: The survey results suggest that some of them may be underestimating how much coverage they actually need. For example, more than nine out of ten commercial businesses with flood insurance told us they believed their amount of coverage to be adequate. Yet when asked how fully flood insurance had covered costs relating to recent flooding events, only **43%** of them reported that insurance covered damages in their entirety – with **56%** reporting that their insurance only covered most or some of the costs.

This discrepancy between clients’ imagined costs for remediation and the actual costs gave them a false sense of security and led them to underinsure. The survey revealed that flood events can carry a steep economic toll for commercial businesses: Nearly three fourths of those who had experienced flooding faced repair bills of over \$50,000, and a quarter of them incurred between \$100,000 and \$500,000 in damages.

**Repair Costs for Recent Flooding Experience:  
Commercial Businesses**



\$ = percentage of respondents who faced post-flooding repair costs in this range.

**Flood Risk at a Glance**

90%

More than **90% of disasters** in the U.S. involve flooding, making flooding the country’s costliest disaster peril.

11.2M

There are at least **11.2 million homes** in the U.S. located in areas – both coastal and inland – that are officially designated as high-risk flood zones.

30M

Nearly **30 million properties** located outside of these high-risk flood zones also face high flood risk.

\$125B+

Estimates of the economic costs of Hurricane Harvey in 2017 range from **\$125 billion to more than \$190 billion**, mostly from flooding.

70%

At least **70% of the estimated losses** associated with Hurricane Harvey were not covered by insurance.

All statistics from the Carnegie Endowment for International Peace. The full article is available here: [Flood Insurance Reform for the U.S. Housing Market](#)

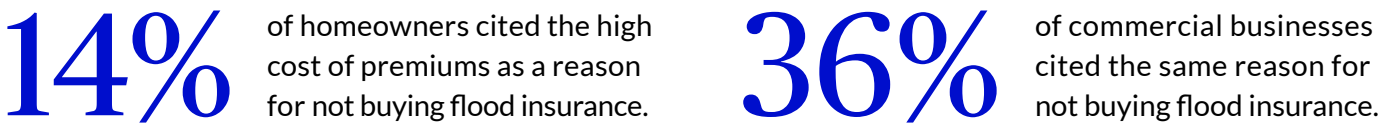




Insurance professionals have an opportunity to bridge information gaps in any discussions regarding coverage.

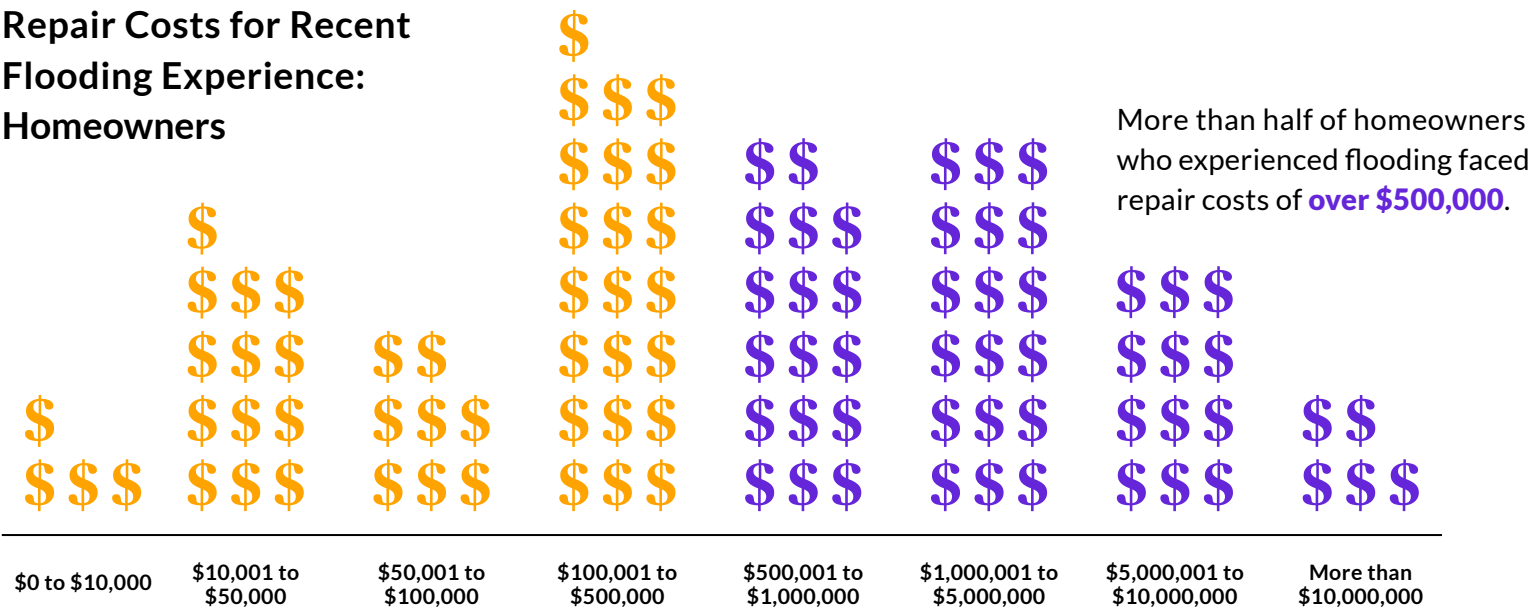
## Misconceptions Regarding Value

When we asked homeowners and commercial businesses why they had chosen not to purchase flood insurance, both groups cited the cost of monthly premiums as one reason – but in markedly different numbers.



Nearly equal percentages of homeowners and commercial businesses believe the costs for repairing wind damage are roughly equal to or greater than those associated with remediation after a flooding event. In the survey, **75%** of homeowners and **71%** of commercial businesses expressed this belief.

In fact, flooding is by far the most expensive natural disaster in the U.S. Floodwaters typically affect the lowest levels of a building, damaging not only floors, walls, furnishings and appliances, but also frequently electrical systems, HVAC systems, gas lines and even foundations. Wind damage, by contrast – with the exception of damage caused by some tornados and hurricanes – is usually less severe and more localized: It most often affects the elements of a building’s exterior, such as roofing, siding or windows, and is generally easier and less costly to repair.



\$ = percentage of respondents who faced post-flooding repair costs in this range.

Most homeowners are open to paying between **10% and 30% more** for enhanced flood protection.

Only **13%** of clients say they would not be interested in paying more at all.

### Clear Communication is Essential

Once people fully understand the nature and value of flood insurance, the data shows that they respond warmly to the idea of purchasing more of it. Nearly three fourths of homeowners who already have flood insurance indicated that they would be willing to pay anywhere between 10% and 30% in additional premiums for expanded coverage or benefits to protect against future flooding.

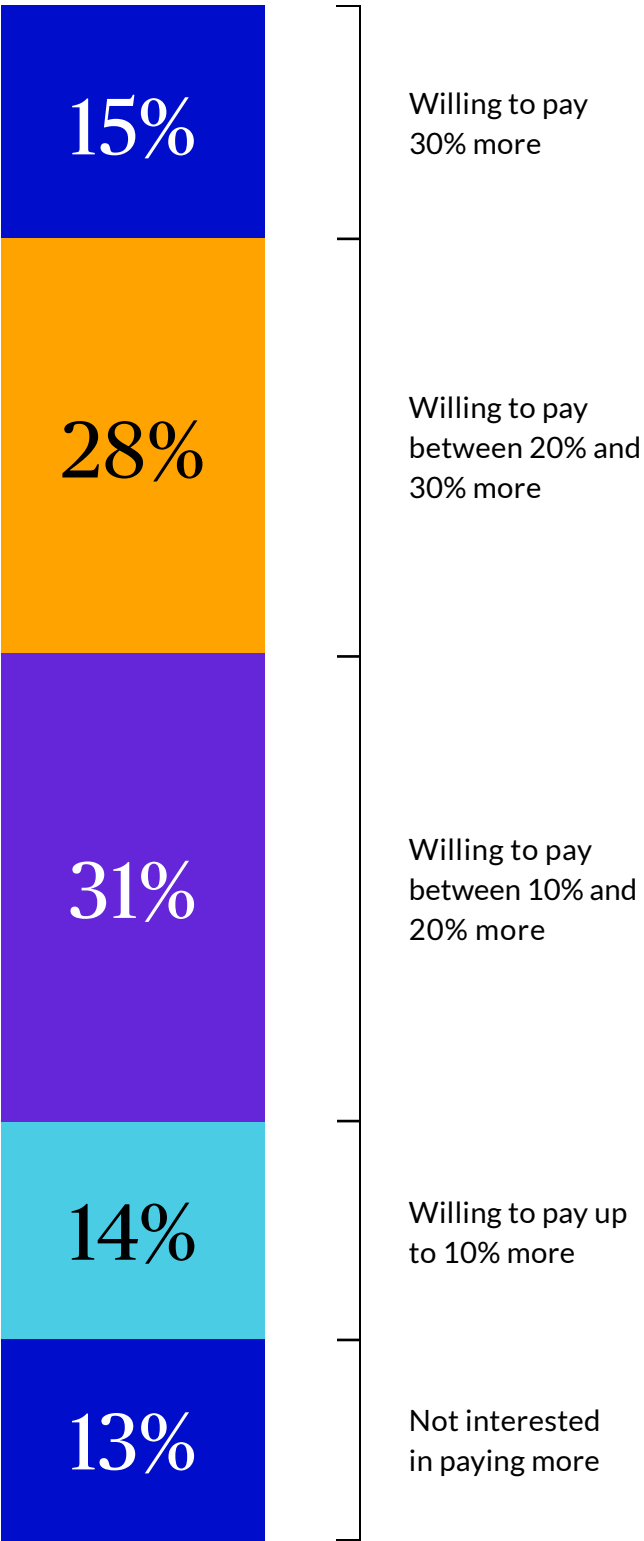
But conflicting data points signify yet another gap in communication between clients and those who are offering them guidance. Roughly equal numbers of homeowners and commercial businesses reported that they have had meaningful discussions with their brokers or agents about flood risk:

**Question: Has your broker or agent taken the time to explain flood risk to you?**

- **82%** of homeowners responded: Yes
- **79%** of commercial businesses responded: Yes

For their part, **97%** of brokers and agents said that they take the time to explain/discuss flood risk with their clients. Nevertheless, these clients are clearly not coming away from these conversations with the information they need: More than one in ten homeowners and one in five commercial businesses cited “advice from broker/agent” as a reason they didn’t purchase flood insurance. Other data points suggest that brokers and agents may actually be advising their clients *against* purchasing flood insurance – or at least that their advice to purchase it is being profoundly misunderstood.

Homeowner Willingness to Pay for Enhanced Flood Protection





Only by understanding the changing nature of flood risk – and by fully absorbing the lesson that flooding can take place anywhere it rains – will brokers and agents be able to communicate this risk to their clients and offer them the best advice for how to mitigate it.

Reasons for not purchasing flood insurance:

11% of homeowners without flood insurance for their primary residence cited “advice from broker/agent” as a reason for their decision not to purchase.

19% For owners of uninsured secondary residences, the percentage was even higher: 19%.

21% of commercial businesses cited broker/agent advice as a reason for not purchasing flood insurance.

Further, a significant percentage of brokers and agents themselves acknowledged that they may be contributing to the problem of underinsurance. When asked to explain why their clients had decided against purchasing flood insurance, 13% of personal lines brokers/agents and 14% of commercial lines brokers/agents cited their own advice as a reason.

Meet James Harrison

**Profile:** Coastal homeowner, net worth \$25 million+  
**Location:** Coral Gables, Florida  
**Main Concern:** Hurricane-related coastal flooding

James is not just worried about the financial costs of dealing with a flood after the fact, but also about the possibility of displacement and the potential for long-term decline in property value. He would be willing to pay more for enhanced protection.

**Solution:** Broad, high-limit flood insurance

- Covers the full replacement cost of his unique home and the valuable collections within it

**Solution:** Personalized risk consulting services

- Risk consulting experts to show him how to incorporate tangible mitigation measures: flood barriers, site drainage systems, lower-level waterproofing and more
- A knowledgeable insurance broker who can steer him toward these experts and explain the nuances of local building codes and regulatory rules

*The persona depicted here, while fictional, is a composite representation of a homeowner, commercial client, broker or agent who responded to the survey questionnaire.*

# 03

Awareness of Resilience Measures

## Pragmatic Planning, Prevention and Intervention





Awareness of Resilience Measures

Once information gaps about risk and insurance have been bridged, brokers and agents can go even further in maximizing their clients’ protection against flood-related losses by emphasizing the importance of adopting resilience measures, including risk consulting services offered by a trusted insurer.

Without this component, no strategy for mitigating flood risk can be considered comprehensive. But here, too, are gaps that require bridging – in this case, between recognition and implementation.

Identifying - and Incorporating - the Best Tools and Practices

Homeowners and commercial businesses alike displayed an impressive knowledge of resilience measures that have been shown to limit flood-related damages. These solutions range from installing basic drainage systems and flood barriers to deploying technology in the form of water sensors, drones and the Internet of Things.

Awareness of Effectiveness of Mitigation Tools (Homeowners)

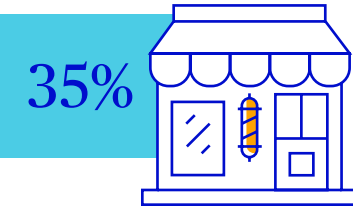
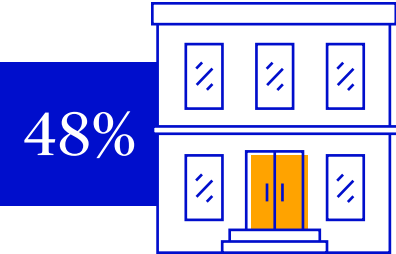
Floor drain covers	<div></div>	47%
Site drainage systems	<div></div>	46%
Waterproofing the basement	<div></div>	45%
Flood barriers	<div></div>	45%
Flood gates	<div></div>	42%
Retaining walls	<div></div>	38%
Installing backwater valves	<div></div>	36%
Elevating the property	<div></div>	35%
Sump pumps	<div></div>	31%
Sandbags	<div></div>	29%
Other	<div></div>	1%

Awareness of Effectiveness of Mitigation Tools (Commercial Businesses)

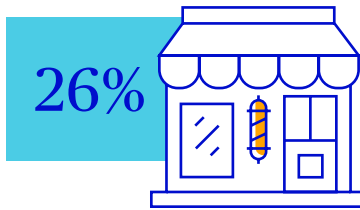
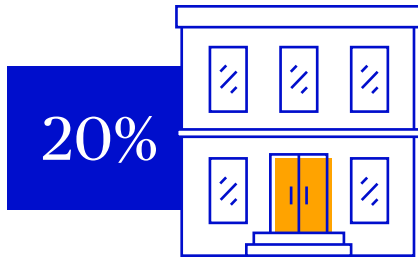
Flood emergency response planning	<div></div>	55%
Landscaping modifications to divert water	<div></div>	45%
Technology (sensors/drones)	<div></div>	42%
Installing backwater valves	<div></div>	36%
Insurance consulting services	<div></div>	35%
Government or community flood risk programs	<div></div>	34%
Real estate assessments	<div></div>	25%
Flood hardening	<div></div>	21%
IOT (Internet of Things)	<div></div>	15%



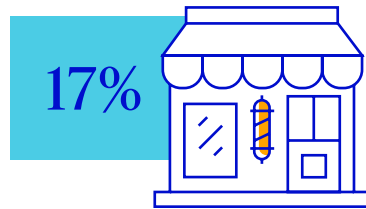
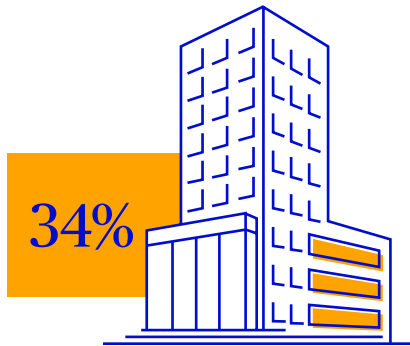
Digging deeper into the responses from commercial businesses, we found noteworthy differences in how company size impacted awareness of these measures.



**48% of middle-market commercial businesses** expressed awareness of high-technology solutions such as drones and sensors, compared to only **35% of smaller businesses**.



**Large companies (47%)** were far more aware of the role played by real estate assessments in mitigating flood risk than their **middle-market (20%)** and **small-business (26%)** counterparts.



**Large businesses (34%)** were twice as likely than **small businesses (17%)** to be aware of how hardening measures – e.g., elevating equipment or even entire buildings, or erecting physical barriers such as levees or floodwalls – can mitigate flood risk.

“Flood risk has evolved dramatically. To help our clients stay ahead of these changes, we’re exploring innovative strategies, including smart home technologies, resilient building materials, improved drainage systems and green spaces that can absorb rainwater. These measures – many of which weren’t widely available 20 or 30 years ago – allow us to provide more education and advice to today’s homeowners.”

**Jennifer Naughton**  
Executive Vice President and Risk Consulting  
Officer, Chubb Personal Risk Services





# Navigating Risk Together

Homeowners that partner with Chubb’s Personal Risk Services team of flood risk consultants gain access to bespoke tools and strategies that empower these clients to safeguard their assets and minimize the disruption caused by natural-catastrophe-related flooding. “We can connect clients to advanced data like LiDAR flood mapping, which creates precise 3-D elevation models for detailed flood risk assessment, to help them identify vulnerabilities,” says Adam Kendall, Vice President and Flood Product Leader, Chubb Personal Risk Services.

Moreover, Chubb’s risk consultants understand that every home is different, which means that every home’s flood risk is different, too. Kendall adds that “Chubb also provides guidance on tailored solutions – including custom flood protection products that go well beyond traditional shutters and panels to innovations like flood boxes that shield critical exterior systems, such as whole home generators, from floodwaters.”

Again, however, the survey revealed a disconnect. Though nearly half of homeowners expressed confidence in a number of measures for increasing flood resilience, fewer than a third had actually implemented them.

## Implementation of Mitigation Tools (Homeowners)

Site drainage systems	<div></div>	33%
Waterproofing the basement	<div></div>	33%
Floor drain covers	<div></div>	31%
Flood barriers	<div></div>	31%
Flood gates	<div></div>	29%
Installing backwater valves	<div></div>	27%
Retaining walls	<div></div>	25%
Sandbags	<div></div>	21%
Elevating the property	<div></div>	20%
Sump pumps	<div></div>	19%

Commercial businesses scored better: Nearly six in ten – **58%** – reported that they had actively sought out tools and services to increase their flood resilience. The discrepancy may be explained by the fact that for businesses, a flooding event is likely to have negative impacts that extend well beyond water damage to a property because operations and business continuity are also jeopardized.

# Meet David Chen

**Occupation:** Risk Manager of a data center  
**Location:** Virginia’s “Data Center Alley”  
**Main Concern:** Intense, sudden downpours that overwhelm local infrastructure

A flood that compromises David’s company’s facility could lead to data loss and business interruption for his clients. David knows that the risks surrounding extreme weather have increased in recent years and he expects to increase his investment in flood mitigation in the next three years. He needs an insurance carrier that can help him protect his business.

**Solution:** Tailored commercial flood insurance policy

- Goes beyond standard property coverage and accounts for the unique, high-value nature of David’s assets and the immense cost of business interruption
- The ideal insurance carrier has a strong reputation and the flexibility to create a policy that addresses David’s vulnerabilities

**Solution:** Personalized risk consulting

- Experts conducting on-site assessments to identify non-obvious water intrusion risks, recommending advanced mitigation techniques (such as the installation of backwater valves and flood hardening for critical infrastructure) and leveraging new technology, such as sensors and drones, for monitoring

*The persona depicted here, while fictional, is a composite representation of a homeowner, commercial client, broker or agent who responded to the survey questionnaire.*

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“Our risk consultants work with clients to apprise and educate them on their true flood risk. We use best-in-class models that show flood depth estimates and flood return periods, and look at fluvial, pluvial and surge estimations. We offer a variety of hardening and mitigation recommendations to get clients started on their journey and then go a step further by providing them with customized, fully dedicated turnkey solutions – giving them a long-term planning roadmap for years into the future.”

**Erik Olsen**  
Senior Vice President and Leader,  
Chubb Property Center of Excellence



## Expert Partners

When we asked homeowners what would be most likely to prompt them to implement flood prevention or mitigation measures, more than half of them – **52%** – cited “expert advice,” making it the top reason given. This roughly corresponds with the percentage of homeowners who indicated that having a clearer understanding of flood risk would motivate them to take more proactive measures to mitigate that risk.

These responses suggest that the many different risk consulting services associated with a comprehensive flood insurance policy are key to client protection. Brokers and agents who highlight this aspect of a policy during discussions with clients can also remind them that taking these measures doesn’t only protect their property – it can also potentially lower their flood insurance premiums.

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The underwriting process for Chubb’s commercial flood insurance is **tailored to reflect the unique exposures present at each insured location.**

**Bespoke Underwriting,  
Resilience and Risk Consulting:**

## The Formula for Comprehensive Coverage

The underwriting process for Chubb’s commercial flood insurance is tailored to reflect the unique exposures present at each insured location. “No two properties face identical vulnerabilities, as factors relating to geography, topography and infrastructure can significantly influence the degree of risk,” says Gregory Tesche, Senior Vice President of Underwriting, Chubb Commercial Insurance. To address these complexities, Chubb employs a sophisticated blend of models to assess potential exposures to surface water and riverine flooding, as well as storm surge risks. “This data-driven approach allows us to customize underwriting decisions regarding coverage limits, pricing and deductibles to align with the specific exposure,” says Tesche.

As the frequency and severity of flooding events continue to rise, many of Chubb’s commercial clients are increasingly eager to identify potential vulnerabilities and implement measures to safeguard their assets. “Chubb’s resilience services are designed to provide these clients with in-depth analysis and actionable recommendations that empower them to enhance the resilience of their facilities and operations,” says Tesche. “The close partnership between our underwriting, risk consulting and resilience experts ensures that clients receive a comprehensive approach to managing their flood risks.”





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More than two thirds of the commercial businesses we surveyed told us that they expect to be impacted by a flooding event in the next three years – doubtless a factor in any decision to increase investment in mitigation and prevention, which half of them said they intend to do during the same time period.

**Commercial businesses and flood preparedness:**

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**68%** of commercial businesses said they expect to experience a flood within the next three years.

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**50%** of them said they plan to increase their investment in flood mitigation and prevention over the next three years.

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**45%** plan to maintain their current investment, and only a fraction said they will decrease investment.

By investing in flood preparedness, businesses aren't just safeguarding their assets and continuity – they're fortifying their reputation, customer trust and long-term viability. Insurers, agents, brokers and risk managers must ensure that these strategies remain comprehensive, up to date and fully aligned with rapidly evolving flood risks.



# Implications and the Path Forward

## Flood risk has changed – for everyone.

The growing frequency and intensity of extreme rainfall events means that flooding can now happen everywhere, even in places that aren't near a body of water.

Despite these facts, too many homeowners and business owners are still either unaware of their increased vulnerability to flood, uncertain about their need for (or the adequacy of) insurance coverage, or unprepared for a flooding event that is today much more likely, statistically, to impact them than it was in years past.

As clients learn more about the changing nature of risk, they're spurring innovations in insurance that are leading to a new wave of comprehensive policies combining minutely tailored underwriting with the promise of personalized risk consulting services at the highest possible level. New technologies in the form of drones, high-level water sensors and advanced modeling systems are joining forces with their tried-and-true ancestors – levees, drainage systems and physical flood barriers – to create unified systems of protection.

Brokers, agents and other insurance professionals have an obligation to fully understand the current face of flooding, and to work with clients and the public to bridge gaps in knowledge and correct misinformation. Frank and open discussions about risk – supported by the latest data, and bolstered by vivid real-world examples and engaging, illustrative hypotheticals – will help clients see the limitations of outdated flood zones and maps, as well as embrace the updated technologies and risk management strategies that will keep their homes and businesses safe.

Awareness, protection, resilience: These are the essential tools that insurers and clients can and must use in the fight against flooding – and all three require a commitment to clear, informed communication. Chubb is dedicated to leading this effort, minimizing flood risk by maximizing understanding.





CHUBB®

Count on Chubb to provide a  
**path forward** for comprehensive  
flood protection and resilience.

Chubb is the marketing name used to refer to subsidiaries of Chubb Limited providing insurance and related services. For a list of these subsidiaries, please visit our website at [www.chubb.com](http://www.chubb.com). Insurance provided by ACE American Insurance Company and its U.S. based Chubb underwriting company affiliates. In Canada, insurance provided by Chubb Insurance Company of Canada or Chubb Life Insurance Company of Canada. All products may not be available in all states, provinces or territories. This material contains product summaries only. Coverage is subject to the language of the policies as actually issued. Surplus lines insurance sold only through licensed surplus lines producers. The material presented herein is advisory in nature and is offered as a resource to be used together with your professional insurance advisors in maintaining a loss prevention program. It is not intended as a substitute for legal, insurance, or other professional advice, but rather is presented for general information only. You should consult knowledgeable legal counsel or other knowledgeable experts as to any legal or technical questions you may have. Chubb, 202 Hall's Mill Road, Whitehouse Station, NJ 08889-1600.